

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: P553896

Luminaire Tested: **FUSL-12-2-LD4-1HI-30-UNV-93-88-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: P553896
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-30-UNV-93-88-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

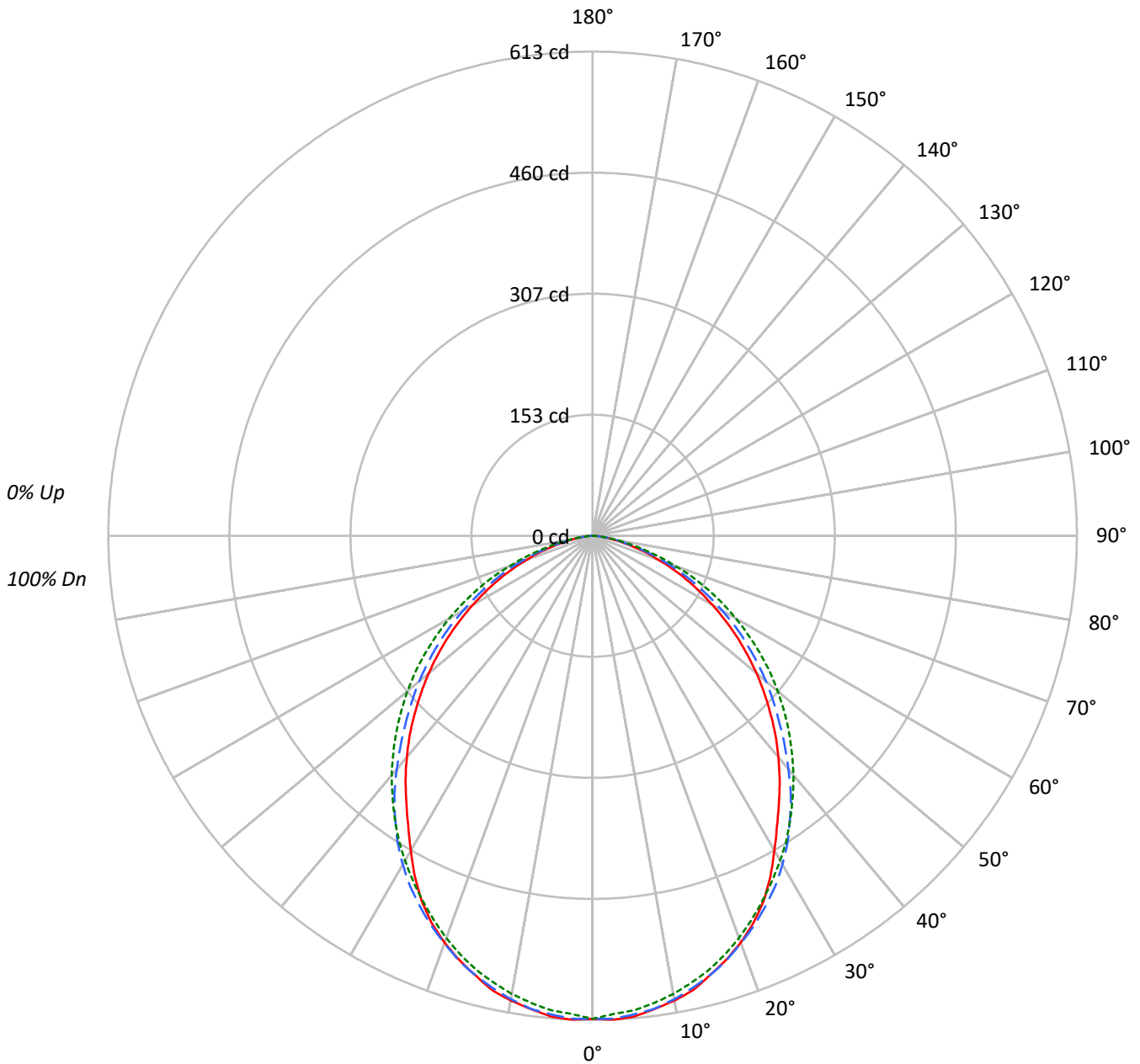
Lumens per Lamp: N/A
Luminaire Lumens: 1414.0 lumens
Efficiency: N/A
Efficacy: 65.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	3291	3291	3291
5°	3300	3286	3258
10°	3265	3256	3219
15°	3207	3207	3170
20°	3139	3143	3103
25°	3036	3073	3024
30°	2859	2987	2951
35°	2701	2863	2868
40°	2570	2708	2779
45°	2423	2544	2675
50°	2268	2398	2561
55°	2092	2230	2423
60°	1884	2035	2253
65°	1663	1810	2049
70°	1386	1542	1742
75°	1090	1231	1362
80°	778	868	961
85°	506	506	482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.6	4.1
10°-20°	161.8	11.4
20°-30°	236.4	16.7
30°-40°	268.3	19.0
40°-50°	259.0	18.3
50°-60°	213.7	15.1
60°-70°	142.3	10.1
70°-80°	63.7	4.5
80°-90°	11.4	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°	455.7	32.2
0°-40°	724.0	51.2
0°-60°	1196.7	84.6
0°-90°	1414.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1414.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	611	611	608	605	603	58
15°	576	577	576	573	569	162
25°	511	515	518	514	509	234
35°	411	417	436	438	436	258
45°	318	324	334	350	352	246
55°	223	227	238	251	258	199
65°	131	134	142	152	161	130
75°	52	55	59	62	66	57
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°	611.5	611.5	611.5	611.5	611.5
2.5°	613.2	613.4	612.0	608.2	605.9
5°	610.8	610.6	608.2	604.9	603.1
7.5°	604.0	604.5	603.8	599.1	596.5
10°	597.4	597.7	595.8	592.0	589.0
12.5°	589.0	588.7	586.1	584.3	579.3
15°	575.6	577.0	575.6	573.0	569.0
17.5°	562.7	562.7	563.6	559.1	556.1
20°	548.1	548.8	548.8	545.3	541.7
22.5°	531.2	533.3	534.0	530.2	526.0
25°	511.2	515.2	517.5	513.8	509.3
27.5°	487.0	493.1	500.2	497.3	492.4
30°	460.0	468.9	480.7	478.3	474.8
32.5°	434.4	443.3	459.5	458.6	456.7
35°	411.1	416.8	435.8	438.1	436.5
37.5°	389.0	394.2	412.1	417.5	416.1
40°	365.8	371.4	385.5	395.1	395.6
42.5°	342.8	348.2	359.7	373.5	373.5
45°	318.3	323.7	334.3	349.6	351.5
47.5°	294.4	300.0	310.3	325.6	328.7
50°	270.9	276.0	286.4	301.2	305.9
52.5°	246.4	252.1	262.2	275.8	282.6
55°	222.9	226.7	237.7	250.9	258.2
57.5°	198.5	202.0	214.5	225.8	233.3
60°	175.0	179.5	189.1	200.6	209.3
62.5°	152.5	157.2	165.4	175.5	185.4
65°	130.6	134.1	142.1	152.2	160.9
67.5°	109.5	112.5	120.5	127.6	136.7
70°	88.1	92.1	98.0	104.8	110.7
72.5°	70.9	72.6	77.5	82.5	88.6
75°	52.4	55.2	59.2	62.0	65.5
77.5°	37.6	39.2	41.6	43.9	47.2
80°	25.1	25.8	28.0	28.4	31.0
82.5°	15.3	15.7	16.2	16.4	17.4
85°	8.2	8.2	8.2	7.8	7.8
87.5°	4.7	4.7	4.0	3.3	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)