

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: P554400

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-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: P554400
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-93-84-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 3000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

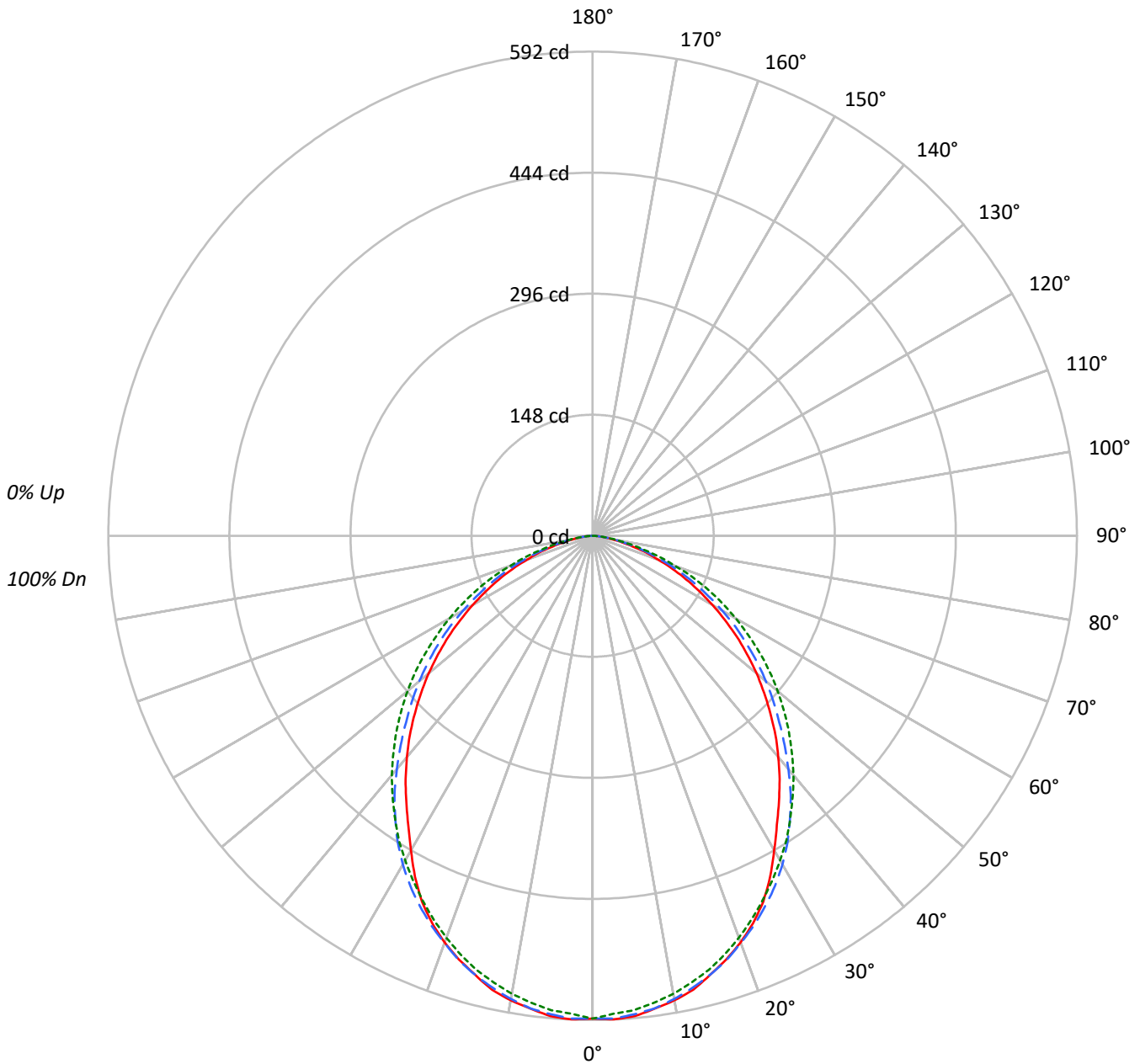
Lumens per Lamp: N/A
Luminaire Lumens: 1365.0 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	3177	3177	3177
5°	3185	3172	3145
10°	3152	3143	3107
15°	3096	3096	3061
20°	3030	3034	2995
25°	2931	2967	2920
30°	2759	2884	2848
35°	2608	2764	2769
40°	2481	2615	2683
45°	2339	2456	2582
50°	2189	2315	2472
55°	2019	2153	2338
60°	1819	1965	2175
65°	1606	1747	1978
70°	1338	1489	1681
75°	1052	1189	1316
80°	753	837	927
85°	488	488	463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	4.1
10°-20°	156.1	11.4
20°-30°	228.2	16.7
30°-40°	259.0	19.0
40°-50°	250.0	18.3
50°-60°	206.2	15.1
60°-70°	137.3	10.1
70°-80°	61.5	4.5
80°-90°	11.0	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°	439.9	32.2
0°-40°	698.9	51.2
0°-60°	1155.2	84.6
0°-90°	1365.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1365.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	590	589	587	584	582	56
15°	556	557	556	553	549	157
25°	494	497	500	496	492	226
35°	397	402	421	423	421	249
45°	307	312	323	338	339	237
55°	215	219	230	242	249	192
65°	126	130	137	147	155	125
75°	51	53	57	60	63	55
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°	590.3	590.3	590.3	590.3	590.3
2.5°	591.9	592.1	590.8	587.2	584.9
5°	589.6	589.4	587.2	584.0	582.2
7.5°	583.1	583.5	582.8	578.3	575.8
10°	576.7	576.9	575.1	571.5	568.6
12.5°	568.6	568.3	565.8	564.0	559.3
15°	555.6	557.0	555.6	553.1	549.3
17.5°	543.2	543.2	544.1	539.8	536.8
20°	529.1	529.8	529.8	526.4	523.0
22.5°	512.8	514.8	515.5	511.9	507.8
25°	493.5	497.3	499.6	496.0	491.7
27.5°	470.1	476.0	482.8	480.1	475.3
30°	444.0	452.7	464.0	461.7	458.3
32.5°	419.3	427.9	443.6	442.7	440.9
35°	396.9	402.3	420.7	423.0	421.4
37.5°	375.6	380.5	397.8	403.0	401.6
40°	353.1	358.6	372.2	381.5	381.9
42.5°	330.9	336.1	347.2	360.6	360.6
45°	307.3	312.5	322.7	337.5	339.3
47.5°	284.2	289.6	299.6	314.3	317.3
50°	261.5	266.5	276.5	290.7	295.3
52.5°	237.9	243.3	253.1	266.2	272.8
55°	215.2	218.8	229.5	242.2	249.2
57.5°	191.6	195.0	207.1	217.9	225.2
60°	169.0	173.3	182.6	193.7	202.1
62.5°	147.2	151.7	159.7	169.4	178.9
65°	126.1	129.5	137.2	147.0	155.3
67.5°	105.7	108.6	116.3	123.1	132.0
70°	85.0	88.9	94.6	101.1	106.8
72.5°	68.5	70.1	74.8	79.6	85.5
75°	50.6	53.3	57.2	59.9	63.3
77.5°	36.3	37.9	40.1	42.4	45.6
80°	24.3	24.9	27.0	27.4	29.9
82.5°	14.7	15.2	15.6	15.9	16.8
85°	7.9	7.9	7.9	7.5	7.5
87.5°	4.5	4.5	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)