

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: P488421

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1STD-50-120-EDD**

Issue Date: 3/11/2021

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: P488421
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-115-8)
Test Lab: INNOVATION CENTER
Issue Date: 3/11/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: CLM-12-2-INS-A19156-LD4-1STD-50-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

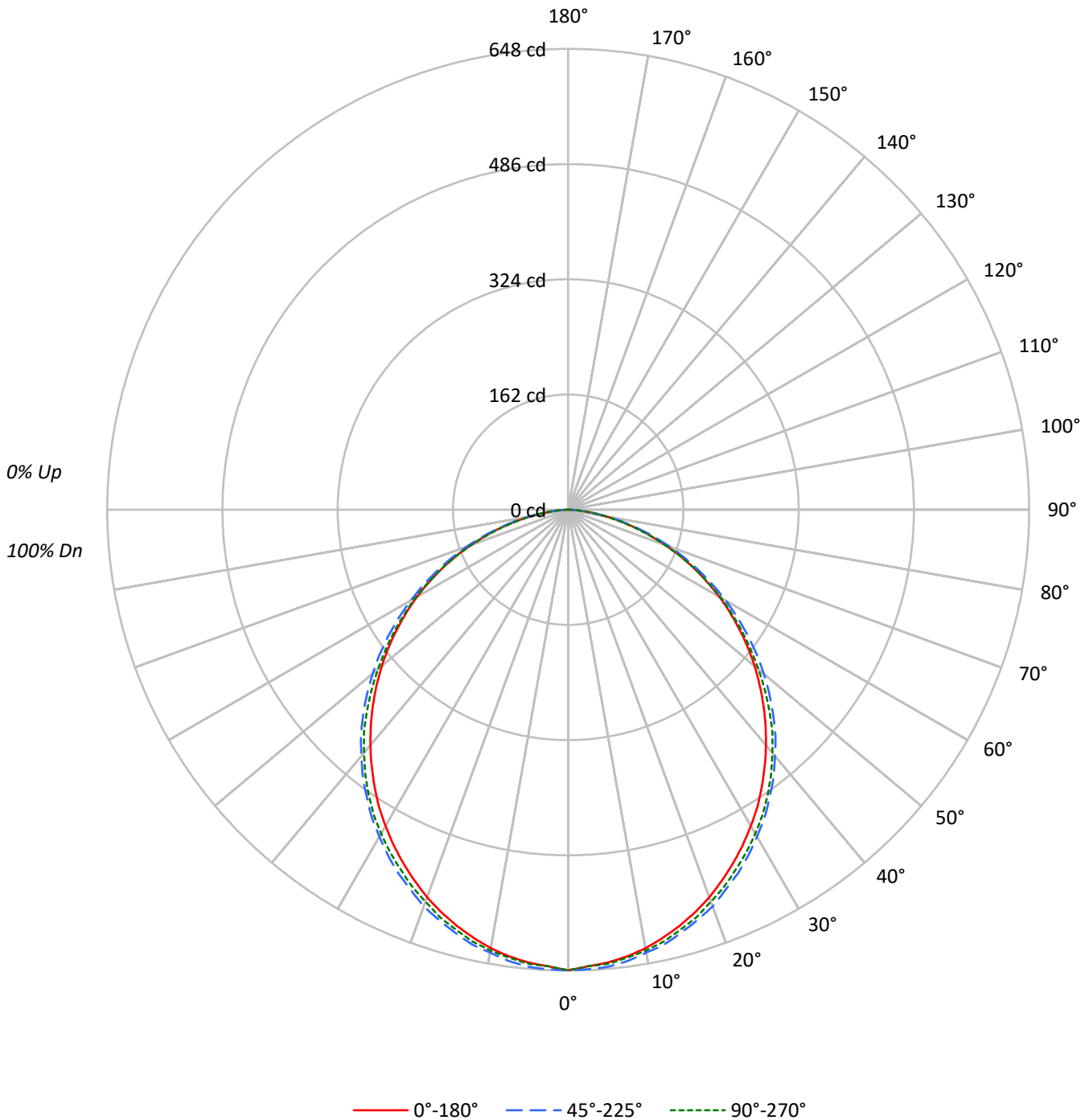
Lumens per Lamp: N/A
Luminaire Lumens: 1702.6 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
Input Voltage (V): NR
Input Current (Ain): 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				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	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	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3485	3485	3485
5°	3453	3486	3464
10°	3422	3456	3440
15°	3374	3429	3404
20°	3321	3400	3359
25°	3257	3351	3312
30°	3191	3299	3269
35°	3119	3242	3212
40°	3038	3178	3137
45°	2952	3102	3043
50°	2864	3003	2924
55°	2760	2889	2800
60°	2643	2752	2667
65°	2490	2585	2492
70°	2291	2384	2266
75°	2017	2109	1986
80°	1640	1711	1621
85°	1142	1216	1186



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.0	3.6
10°-20°	172.8	10.2
20°-30°	257.8	15.1
30°-40°	305.5	17.9
40°-50°	309.1	18.2
50°-60°	269.9	15.9
60°-70°	197.3	11.6
70°-80°	105.0	6.2
80°-90°	24.2	1.4
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°	491.6	28.9
0°-40°	797.1	46.8
0°-60°	1376.1	80.8
0°-90°	1702.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1702.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	648	648	648	648	648	
5°	639	640	645	647	641	61
15°	606	610	615	619	611	171
25°	548	555	564	566	558	253
35°	475	482	494	497	489	297
45°	388	395	408	408	400	299
55°	294	300	308	303	298	263
65°	196	200	203	199	196	193
75°	97	99	101	98	96	103
85°	18	19	20	20	19	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	647.6	647.6	647.6	647.6	647.6
2.5°	642.5	644.6	646.8	647.7	642.5
5°	639.2	640.4	645.2	646.7	641.2
7.5°	633.6	635.5	640.1	640.8	635.5
10°	626.1	629.3	632.4	635.8	629.4
12.5°	616.4	620.8	626.1	626.7	621.8
15°	605.6	609.6	615.4	619.1	611.0
17.5°	593.4	597.3	604.8	605.4	600.6
20°	579.9	584.7	593.6	595.2	586.5
22.5°	564.5	571.0	578.4	579.9	573.5
25°	548.4	555.1	564.3	566.4	557.8
27.5°	531.5	538.0	548.3	549.8	542.6
30°	513.4	519.5	530.8	533.3	526.0
32.5°	495.1	501.1	513.7	515.8	508.6
35°	474.7	482.1	493.5	496.9	488.9
37.5°	453.9	461.1	474.1	477.2	468.5
40°	432.4	439.5	452.3	454.8	446.5
42.5°	410.4	417.5	431.2	431.6	424.7
45°	387.9	394.8	407.5	407.8	399.8
47.5°	365.1	372.0	383.4	382.1	374.5
50°	342.0	348.6	358.6	356.0	349.2
52.5°	318.1	324.5	333.9	329.7	323.3
55°	294.1	300.1	307.9	303.4	298.4
57.5°	269.9	275.9	281.9	277.4	273.1
60°	245.5	250.7	255.7	251.1	247.8
62.5°	220.6	225.2	229.4	225.0	221.9
65°	195.5	199.5	203.0	199.0	195.7
67.5°	170.6	173.9	177.2	173.0	169.6
70°	145.6	148.5	151.5	147.2	144.0
72.5°	121.0	123.5	126.2	122.0	119.2
75°	97.0	99.3	101.4	97.7	95.5
77.5°	74.2	76.0	77.5	75.2	73.1
80°	52.9	54.3	55.2	54.2	52.3
82.5°	34.0	35.0	35.5	35.4	34.1
85°	18.5	18.8	19.7	19.9	19.2
87.5°	7.2	7.6	7.8	8.4	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)