

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: P489586

Luminaire Tested: **CLM-24-4-INS-A19156-LD4-1LO-20-120-EDD-90**

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: P489586
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-24-4-INS-A19156-LD4-1LO-20-120-EDD-90
Description: 2X4 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

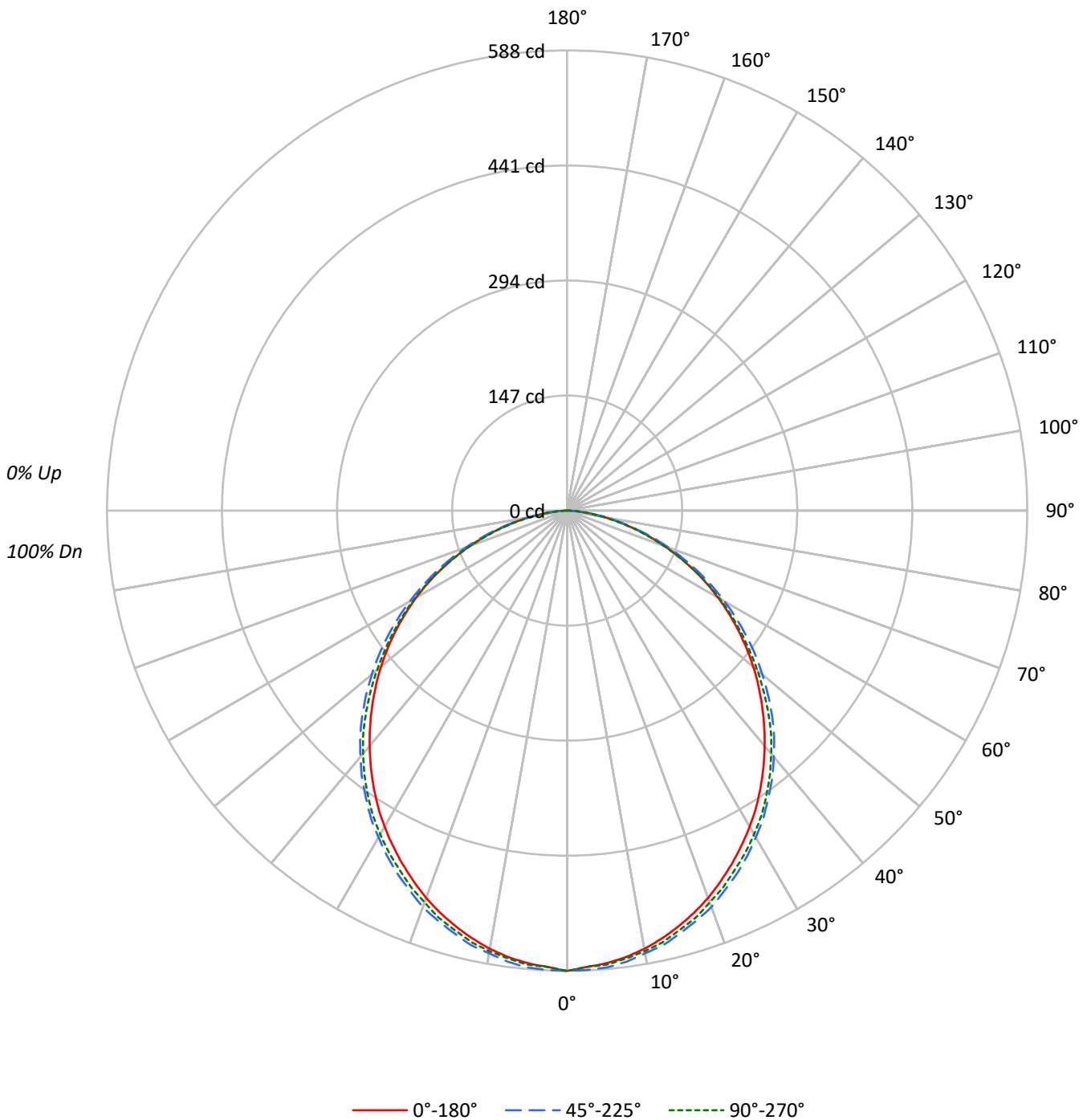
Lumens per Lamp: N/A
Luminaire Lumens: 1546.4 lumens
Efficiency: N/A
Efficacy: 66.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	791	791	791
5°	784	791	787
10°	777	785	781
15°	766	779	773
20°	754	772	763
25°	739	761	752
30°	724	749	742
35°	708	736	729
40°	690	722	712
45°	670	704	691
50°	650	682	664
55°	627	656	636
60°	600	625	605
65°	565	587	566
70°	520	541	515
75°	458	479	451
80°	372	388	368
85°	259	276	270



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	3.6
10°-20°	157.0	10.2
20°-30°	234.1	15.1
30°-40°	277.4	17.9
40°-50°	280.7	18.2
50°-60°	245.2	15.9
60°-70°	179.2	11.6
70°-80°	95.3	6.2
80°-90°	22.0	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°	446.5	28.9
0°-40°	724.0	46.8
0°-60°	1249.9	80.8
0°-90°	1546.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1546.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	588	588	588	588	588	
5°	580	582	586	587	582	55
15°	550	554	559	562	555	155
25°	498	504	512	514	507	229
35°	431	438	448	451	444	270
45°	352	359	370	370	363	272
55°	267	272	280	276	271	239
65°	178	181	184	181	178	176
75°	88	90	92	89	87	94
85°	17	17	18	18	18	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	588.2	588.2	588.2	588.2	588.2
2.5°	583.6	585.5	587.5	588.3	583.5
5°	580.5	581.6	586.0	587.3	582.4
7.5°	575.5	577.2	581.4	582.0	577.2
10°	568.6	571.6	574.4	577.5	571.6
12.5°	559.9	563.9	568.6	569.2	564.8
15°	550.0	553.7	558.9	562.3	555.0
17.5°	539.0	542.5	549.3	549.9	545.5
20°	526.7	531.1	539.2	540.6	532.7
22.5°	512.7	518.6	525.4	526.7	520.9
25°	498.0	504.2	512.5	514.4	506.6
27.5°	482.7	488.6	498.0	499.3	492.8
30°	466.3	471.8	482.1	484.4	477.7
32.5°	449.6	455.1	466.5	468.4	462.0
35°	431.1	437.9	448.2	451.4	444.1
37.5°	412.3	418.8	430.6	433.4	425.6
40°	392.7	399.2	410.8	413.1	405.6
42.5°	372.7	379.2	391.6	392.0	385.7
45°	352.3	358.6	370.1	370.4	363.1
47.5°	331.6	337.9	348.2	347.0	340.2
50°	310.6	316.6	325.7	323.3	317.1
52.5°	288.9	294.8	303.3	299.5	293.7
55°	267.1	272.5	279.6	275.6	271.1
57.5°	245.1	250.6	256.0	251.9	248.0
60°	222.9	227.7	232.2	228.0	225.0
62.5°	200.4	204.5	208.4	204.4	201.6
65°	177.6	181.2	184.4	180.7	177.7
67.5°	154.9	158.0	160.9	157.1	154.0
70°	132.2	134.9	137.6	133.7	130.8
72.5°	109.9	112.2	114.6	110.8	108.3
75°	88.1	90.1	92.1	88.7	86.8
77.5°	67.4	69.1	70.4	68.3	66.4
80°	48.0	49.3	50.1	49.3	47.5
82.5°	30.9	31.8	32.2	32.2	31.0
85°	16.8	17.1	17.9	18.1	17.5
87.5°	6.5	6.9	7.1	7.7	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)