

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: P488436

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2LO-27-120-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: P488436
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-LD4-2LO-27-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

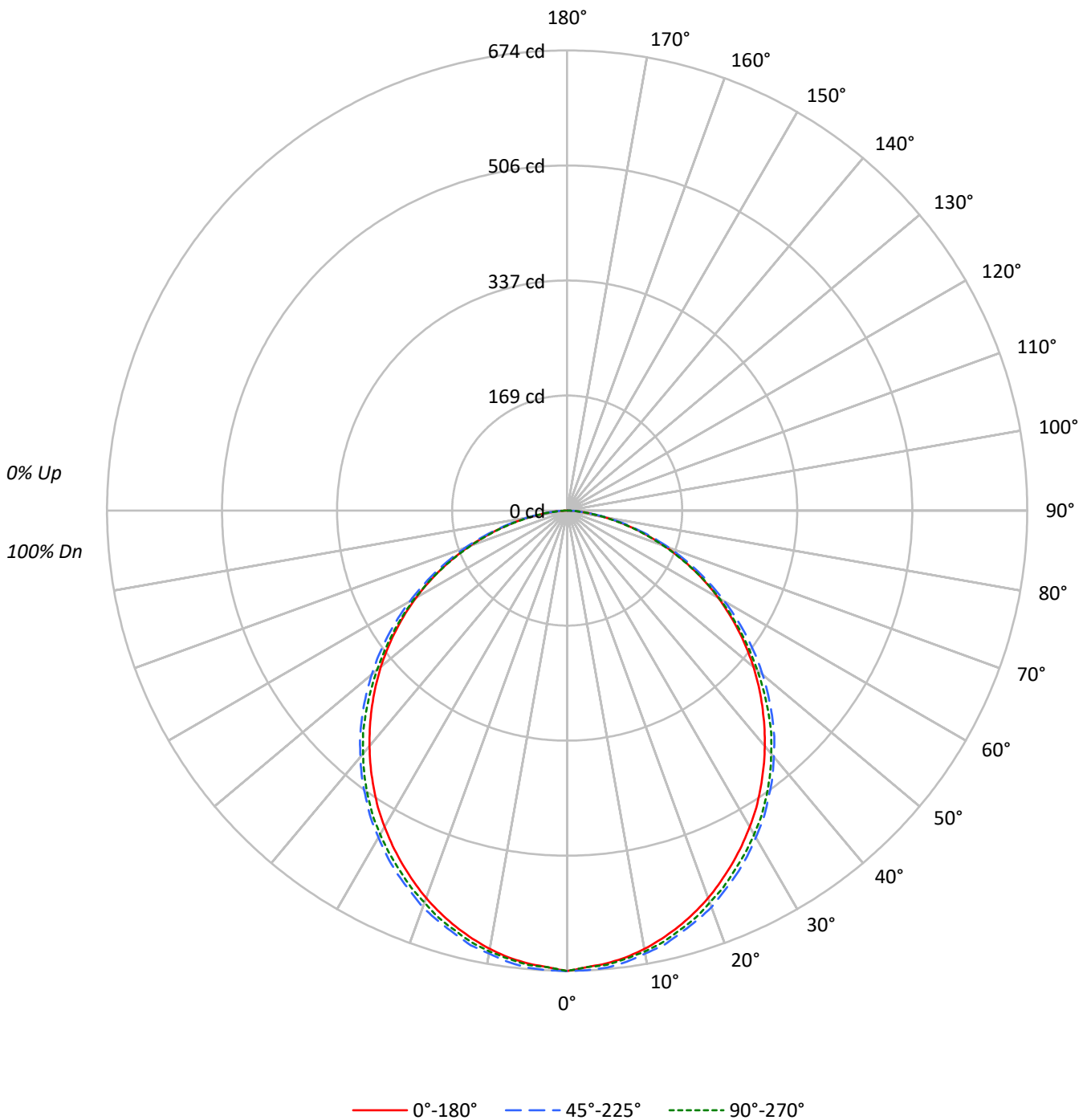
Lumens per Lamp: N/A
Luminaire Lumens: 1773.4 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	3630	3630	3630
5°	3597	3630	3608
10°	3564	3600	3583
15°	3515	3571	3546
20°	3459	3541	3499
25°	3392	3490	3450
30°	3324	3436	3404
35°	3248	3377	3346
40°	3164	3310	3268
45°	3075	3230	3169
50°	2982	3127	3045
55°	2874	3009	2916
60°	2752	2866	2778
65°	2594	2693	2595
70°	2387	2483	2360
75°	2102	2196	2069
80°	1708	1782	1689
85°	1192	1266	1235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.5	3.6
10°-20°	180.0	10.2
20°-30°	268.5	15.1
30°-40°	318.2	17.9
40°-50°	321.9	18.2
50°-60°	281.2	15.9
60°-70°	205.5	11.6
70°-80°	109.3	6.2
80°-90°	25.3	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°	512.0	28.9
0°-40°	830.2	46.8
0°-60°	1433.3	80.8
0°-90°	1773.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1773.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	666	667	672	674	668	63
15°	631	635	641	645	636	178
25°	571	578	588	590	581	263
35°	494	502	514	518	509	309
45°	404	411	424	425	416	312
55°	306	312	321	316	311	274
65°	204	208	212	207	204	202
75°	101	103	106	102	100	107
85°	19	20	20	21	20	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	674.5	674.5	674.5	674.5	674.5
2.5°	669.3	671.4	673.7	674.7	669.2
5°	665.8	667.0	672.0	673.6	667.9
7.5°	660.0	661.9	666.7	667.4	662.0
10°	652.1	655.5	658.7	662.2	655.6
12.5°	642.1	646.6	652.1	652.8	647.7
15°	630.8	635.0	640.9	644.8	636.4
17.5°	618.1	622.2	629.9	630.6	625.6
20°	604.0	609.0	618.3	619.9	610.9
22.5°	588.0	594.8	602.5	604.0	597.4
25°	571.2	578.2	587.7	589.9	581.0
27.5°	553.6	560.3	571.1	572.6	565.1
30°	534.8	541.1	552.9	555.5	547.8
32.5°	515.6	522.0	535.0	537.2	529.8
35°	494.4	502.1	514.0	517.6	509.2
37.5°	472.8	480.3	493.8	497.0	488.0
40°	450.3	457.8	471.1	473.8	465.1
42.5°	427.4	434.9	449.1	449.5	442.3
45°	404.0	411.2	424.4	424.8	416.4
47.5°	380.3	387.5	399.3	398.0	390.1
50°	356.2	363.1	373.5	370.8	363.7
52.5°	331.4	338.0	347.8	343.5	336.8
55°	306.3	312.5	320.7	316.0	310.8
57.5°	281.1	287.4	293.6	288.9	284.4
60°	255.7	261.2	266.3	261.5	258.1
62.5°	229.8	234.5	238.9	234.4	231.1
65°	203.7	207.8	211.5	207.3	203.8
67.5°	177.7	181.2	184.6	180.2	176.6
70°	151.7	154.7	157.8	153.3	150.0
72.5°	126.0	128.7	131.4	127.1	124.2
75°	101.1	103.4	105.6	101.8	99.5
77.5°	77.2	79.2	80.8	78.3	76.1
80°	55.1	56.6	57.5	56.5	54.5
82.5°	35.4	36.5	37.0	36.9	35.6
85°	19.3	19.6	20.5	20.7	20.0
87.5°	7.4	7.9	8.2	8.8	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)