

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: P488435

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2LO-20-120-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: P488435
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-20-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

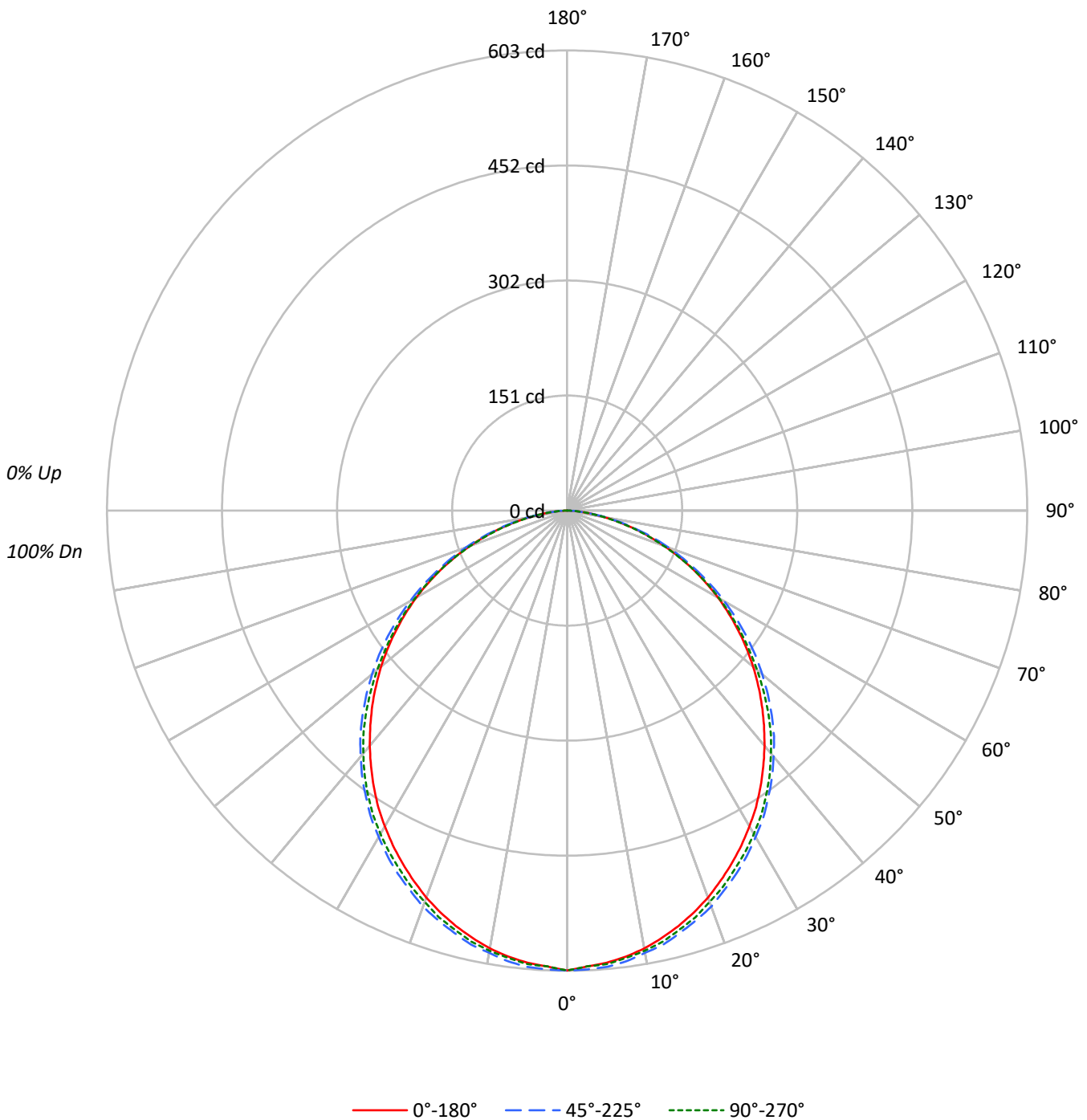
Lumens per Lamp: N/A
Luminaire Lumens: 1584.2 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P488435

CATALOG NUMBER: CLM-12-2-INS-A19156-LD4-2LO-20-120-EDD

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°	3243	3243	3243
5°	3213	3243	3223
10°	3183	3216	3200
15°	3140	3190	3168
20°	3090	3163	3125
25°	3030	3118	3082
30°	2969	3069	3041
35°	2902	3017	2989
40°	2826	2956	2919
45°	2747	2885	2831
50°	2664	2793	2720
55°	2568	2688	2606
60°	2458	2561	2481
65°	2316	2406	2319
70°	2132	2217	2109
75°	1878	1963	1849
80°	1525	1593	1509
85°	1062	1130	1105



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	3.6
10°-20°	160.8	10.2
20°-30°	239.9	15.1
30°-40°	284.2	17.9
40°-50°	287.6	18.2
50°-60°	251.2	15.9
60°-70°	183.5	11.6
70°-80°	97.7	6.2
80°-90°	22.6	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°	457.4	28.9
0°-40°	741.7	46.8
0°-60°	1280.4	80.8
0°-90°	1584.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1584.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	603	603	603	603	603	
5°	595	596	600	602	597	56
15°	564	567	573	576	568	159
25°	510	516	525	527	519	235
35°	442	449	459	462	455	276
45°	361	367	379	379	372	278
55°	274	279	286	282	278	245
65°	182	186	189	185	182	180
75°	90	92	94	91	89	96
85°	17	18	18	18	18	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	602.6	602.6	602.6	602.6	602.6
2.5°	597.9	599.8	601.8	602.7	597.8
5°	594.7	595.9	600.3	601.7	596.6
7.5°	589.6	591.3	595.6	596.2	591.3
10°	582.5	585.6	588.4	591.6	585.6
12.5°	573.6	577.6	582.5	583.1	578.6
15°	563.5	567.2	572.6	576.0	568.5
17.5°	552.2	555.8	562.7	563.3	558.8
20°	539.5	544.1	552.3	553.8	545.7
22.5°	525.2	531.3	538.2	539.6	533.6
25°	510.2	516.5	525.0	527.0	519.0
27.5°	494.5	500.6	510.2	511.5	504.8
30°	477.7	483.4	493.9	496.2	489.4
32.5°	460.6	466.3	478.0	479.9	473.2
35°	441.7	448.6	459.2	462.4	454.9
37.5°	422.3	429.0	441.1	444.0	436.0
40°	402.3	409.0	420.8	423.2	415.5
42.5°	381.8	388.5	401.2	401.5	395.1
45°	360.9	367.3	379.1	379.4	372.0
47.5°	339.7	346.2	356.7	355.5	348.5
50°	318.2	324.4	333.6	331.2	324.9
52.5°	296.0	302.0	310.7	306.8	300.8
55°	273.7	279.2	286.5	282.3	277.7
57.5°	251.1	256.7	262.3	258.1	254.1
60°	228.4	233.3	237.9	233.6	230.5
62.5°	205.3	209.5	213.5	209.4	206.5
65°	181.9	185.6	188.9	185.1	182.1
67.5°	158.7	161.8	164.9	161.0	157.8
70°	135.5	138.2	140.9	136.9	134.0
72.5°	112.6	115.0	117.4	113.5	110.9
75°	90.3	92.4	94.4	90.9	88.9
77.5°	69.0	70.8	72.1	69.9	68.0
80°	49.2	50.5	51.4	50.5	48.7
82.5°	31.6	32.6	33.0	33.0	31.8
85°	17.2	17.5	18.3	18.5	17.9
87.5°	6.7	7.1	7.3	7.8	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)