

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: P488414

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1STD-30-120-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: P488414
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-30-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

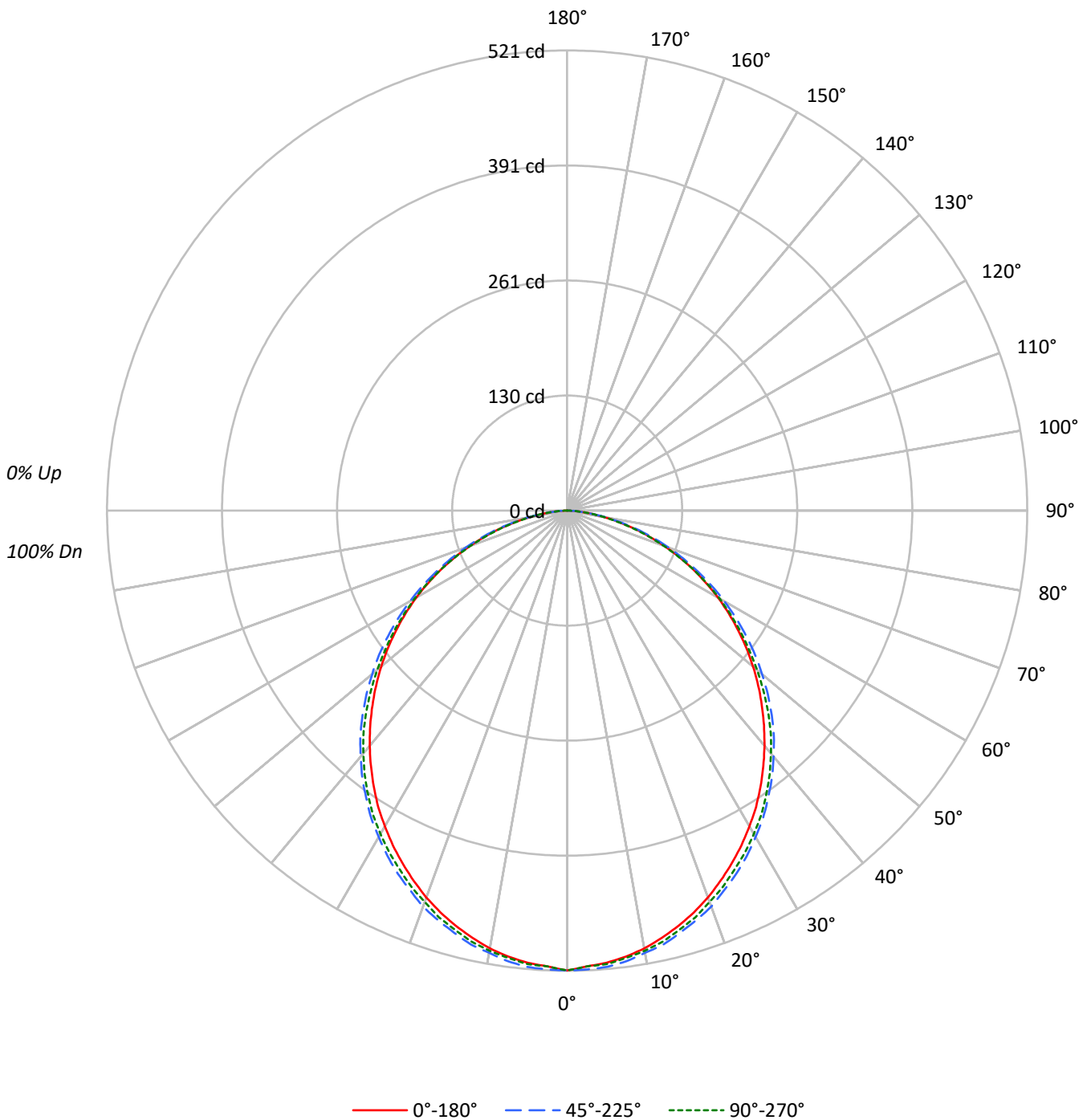
Lumens per Lamp: N/A
Luminaire Lumens: 1368.7 lumens
Efficiency: N/A
Efficacy: 82.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	2802	2802	2802
5°	2776	2802	2785
10°	2751	2778	2765
15°	2712	2756	2737
20°	2670	2733	2700
25°	2618	2694	2663
30°	2565	2652	2628
35°	2507	2606	2582
40°	2442	2555	2522
45°	2373	2493	2446
50°	2302	2413	2350
55°	2218	2322	2251
60°	2124	2212	2144
65°	2002	2078	2003
70°	1843	1917	1822
75°	1622	1695	1597
80°	1317	1376	1302
85°	920	976	957



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.0	3.6
10°-20°	138.9	10.2
20°-30°	207.2	15.1
30°-40°	245.6	17.9
40°-50°	248.5	18.2
50°-60°	217.0	15.9
60°-70°	158.6	11.6
70°-80°	84.4	6.2
80°-90°	19.5	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°	395.2	28.9
0°-40°	640.8	46.8
0°-60°	1106.2	80.8
0°-90°	1368.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1368.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	514	515	519	520	516	49
15°	487	490	495	498	491	137
25°	441	446	454	455	448	203
35°	382	388	397	400	393	239
45°	312	317	328	328	321	241
55°	236	241	248	244	240	211
65°	157	160	163	160	157	156
75°	78	80	82	78	77	83
85°	15	15	16	16	16	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	520.6	520.6	520.6	520.6	520.6
2.5°	516.5	518.2	520.0	520.7	516.5
5°	513.8	514.8	518.7	519.8	515.5
7.5°	509.4	510.8	514.6	515.1	510.9
10°	503.3	505.9	508.4	511.1	506.0
12.5°	495.5	499.1	503.3	503.8	499.9
15°	486.8	490.1	494.7	497.7	491.2
17.5°	477.0	480.2	486.2	486.7	482.8
20°	466.1	470.1	477.2	478.5	471.5
22.5°	453.8	459.0	465.0	466.2	461.0
25°	440.8	446.2	453.6	455.3	448.4
27.5°	427.3	432.5	440.8	442.0	436.2
30°	412.7	417.6	426.7	428.7	422.8
32.5°	398.0	402.8	412.9	414.6	408.9
35°	381.6	387.6	396.7	399.5	393.0
37.5°	364.9	370.7	381.1	383.6	376.6
40°	347.6	353.3	363.6	365.6	359.0
42.5°	329.9	335.6	346.6	346.9	341.4
45°	311.8	317.4	327.6	327.8	321.4
47.5°	293.5	299.1	308.2	307.2	301.1
50°	274.9	280.3	288.2	286.2	280.7
52.5°	255.7	260.9	268.4	265.1	259.9
55°	236.4	241.2	247.5	243.9	239.9
57.5°	217.0	221.8	226.6	223.0	219.5
60°	197.3	201.6	205.5	201.8	199.2
62.5°	177.4	181.0	184.4	180.9	178.4
65°	157.2	160.4	163.2	160.0	157.3
67.5°	137.1	139.8	142.4	139.1	136.3
70°	117.1	119.4	121.8	118.3	115.8
72.5°	97.3	99.3	101.4	98.1	95.8
75°	78.0	79.8	81.5	78.5	76.8
77.5°	59.6	61.1	62.3	60.4	58.7
80°	42.5	43.7	44.4	43.6	42.0
82.5°	27.3	28.2	28.5	28.5	27.4
85°	14.9	15.1	15.8	16.0	15.5
87.5°	5.7	6.1	6.3	6.8	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)