

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: P488408

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1LO-50-120-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: P488408
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-LD4-1LO-50-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

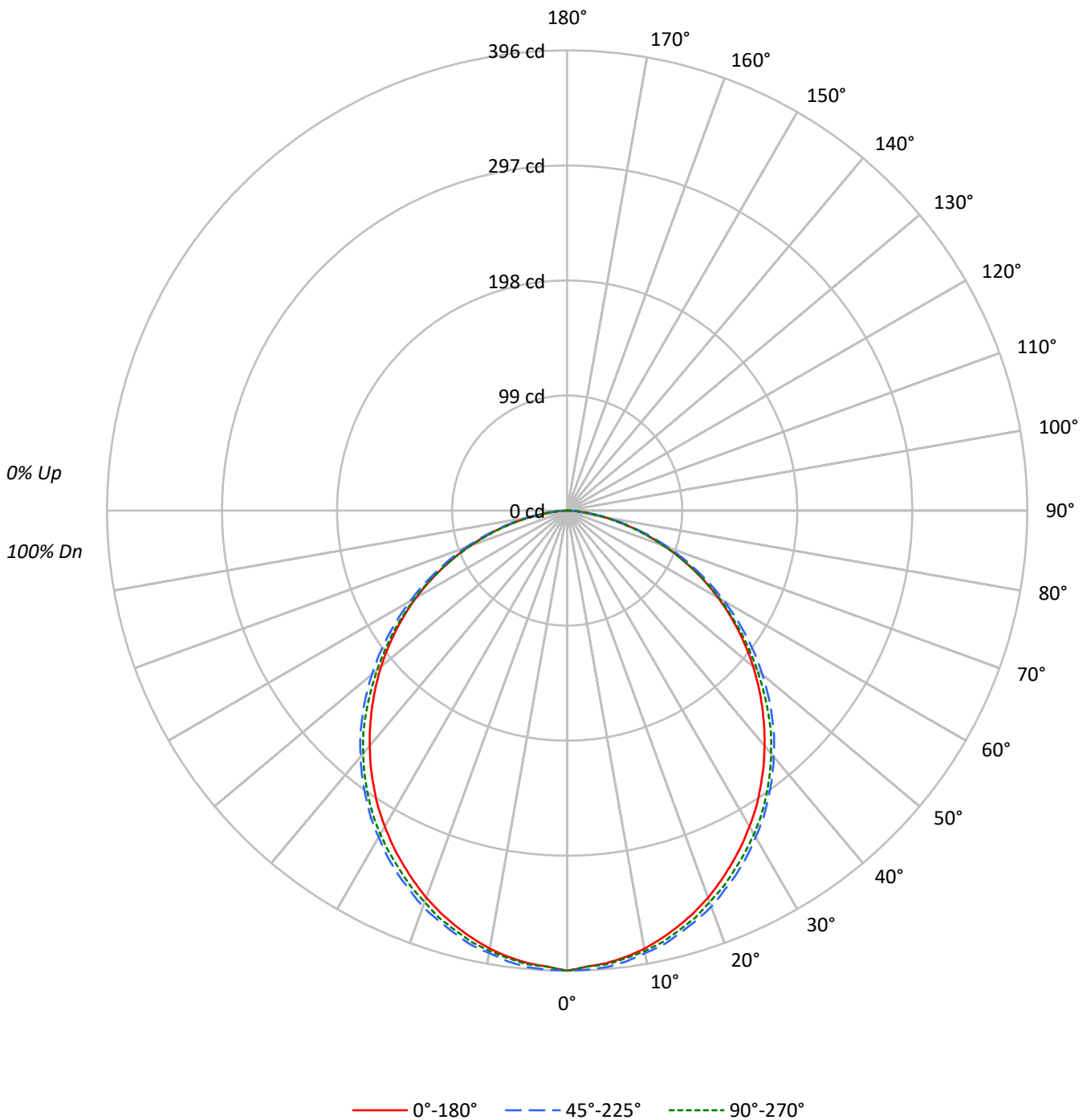
Lumens per Lamp: N/A
Luminaire Lumens: 1040.9 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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°	2131	2131	2131
5°	2111	2131	2118
10°	2092	2113	2103
15°	2063	2096	2082
20°	2030	2078	2053
25°	1991	2049	2025
30°	1951	2017	1998
35°	1907	1982	1964
40°	1857	1943	1918
45°	1805	1896	1860
50°	1751	1835	1788
55°	1687	1766	1712
60°	1616	1682	1631
65°	1522	1580	1523
70°	1400	1457	1385
75°	1233	1289	1214
80°	1001	1044	992
85°	698	741	729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.3	3.6
10°-20°	105.7	10.2
20°-30°	157.6	15.1
30°-40°	186.7	17.9
40°-50°	189.0	18.2
50°-60°	165.0	15.9
60°-70°	120.6	11.6
70°-80°	64.2	6.2
80°-90°	14.8	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°	300.5	28.9
0°-40°	487.3	46.8
0°-60°	841.3	80.8
0°-90°	1040.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1040.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	391	392	394	395	392	37
15°	370	373	376	378	374	104
25°	335	339	345	346	341	154
35°	290	295	302	304	299	181
45°	237	241	249	249	244	183
55°	180	183	188	186	182	161
65°	120	122	124	122	120	118
75°	59	61	62	60	58	63
85°	11	12	12	12	12	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	395.9	395.9	395.9	395.9	395.9
2.5°	392.8	394.1	395.4	396.0	392.8
5°	390.8	391.5	394.4	395.3	392.0
7.5°	387.4	388.5	391.3	391.8	388.5
10°	382.8	384.7	386.6	388.7	384.8
12.5°	376.9	379.5	382.8	383.1	380.2
15°	370.2	372.7	376.2	378.5	373.6
17.5°	362.8	365.2	369.7	370.1	367.2
20°	354.5	357.5	362.9	363.9	358.5
22.5°	345.1	349.1	353.6	354.5	350.6
25°	335.2	339.4	345.0	346.3	341.0
27.5°	324.9	328.9	335.2	336.1	331.7
30°	313.9	317.6	324.5	326.0	321.5
32.5°	302.7	306.4	314.0	315.3	310.9
35°	290.2	294.7	301.7	303.8	298.9
37.5°	277.5	281.9	289.8	291.7	286.4
40°	264.3	268.7	276.5	278.1	273.0
42.5°	250.9	255.3	263.6	263.8	259.6
45°	237.1	241.4	249.1	249.3	244.4
47.5°	223.2	227.5	234.4	233.6	229.0
50°	209.1	213.1	219.2	217.6	213.5
52.5°	194.5	198.4	204.1	201.6	197.7
55°	179.8	183.4	188.2	185.5	182.5
57.5°	165.0	168.7	172.3	169.6	166.9
60°	150.1	153.3	156.3	153.5	151.5
62.5°	134.9	137.7	140.3	137.6	135.7
65°	119.5	122.0	124.1	121.6	119.6
67.5°	104.3	106.3	108.3	105.8	103.7
70°	89.0	90.8	92.6	90.0	88.0
72.5°	74.0	75.5	77.1	74.6	72.9
75°	59.3	60.7	62.0	59.7	58.4
77.5°	45.3	46.5	47.4	46.0	44.7
80°	32.3	33.2	33.7	33.2	32.0
82.5°	20.8	21.4	21.7	21.7	20.9
85°	11.3	11.5	12.0	12.2	11.8
87.5°	4.4	4.7	4.8	5.2	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)