

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: P488401

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1LO-27-120-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: P488401
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-27-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

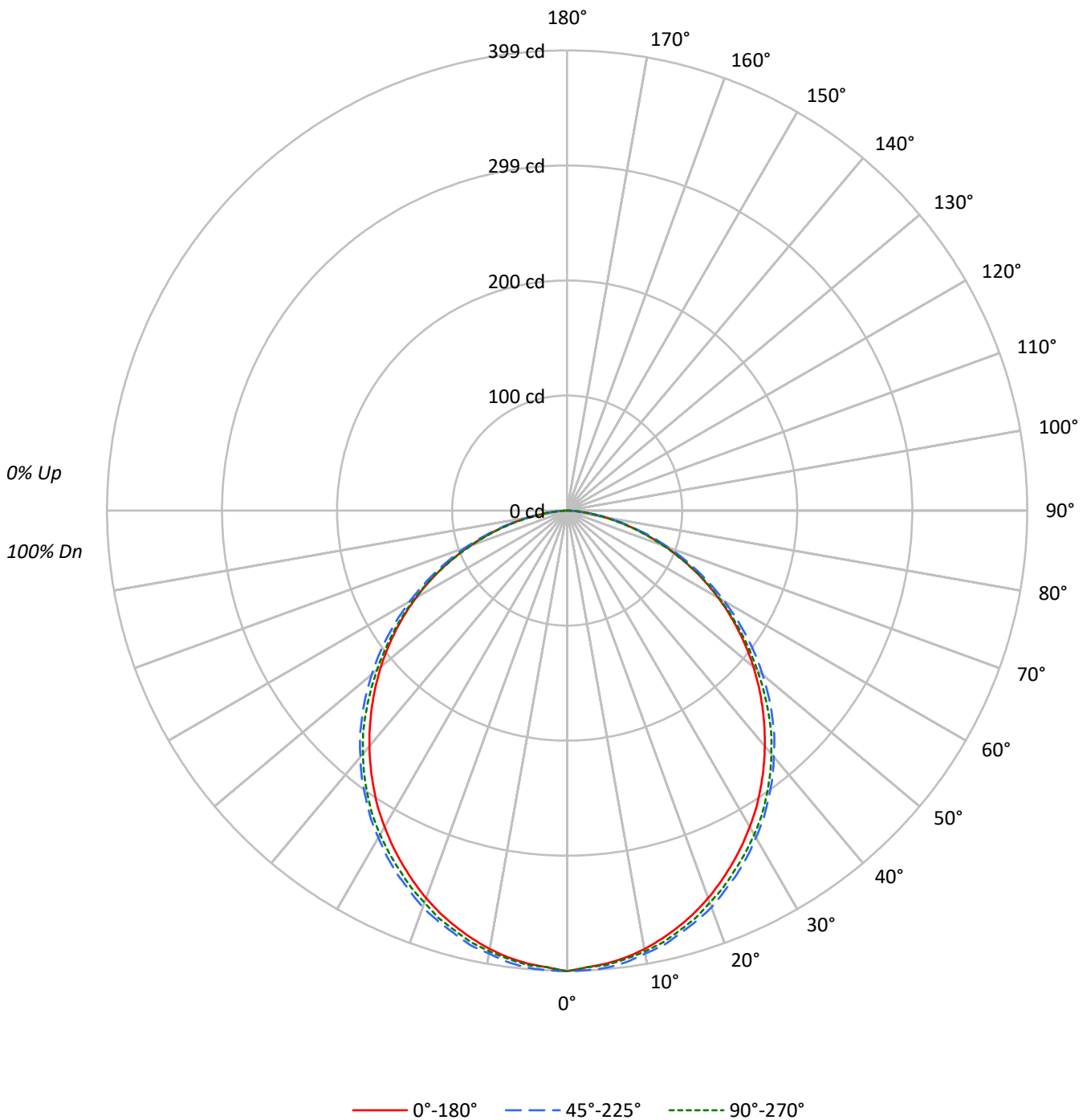
Lumens per Lamp: N/A
Luminaire Lumens: 1050.1 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	2150	2150	2150
5°	2130	2150	2137
10°	2110	2132	2122
15°	2081	2115	2100
20°	2048	2097	2072
25°	2008	2067	2043
30°	1968	2035	2016
35°	1924	2000	1981
40°	1874	1959	1935
45°	1821	1913	1877
50°	1766	1851	1804
55°	1702	1782	1727
60°	1630	1697	1645
65°	1536	1594	1537
70°	1413	1470	1397
75°	1243	1300	1225
80°	1010	1054	1001
85°	704	753	735



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	3.6
10°-20°	106.6	10.2
20°-30°	159.0	15.1
30°-40°	188.4	17.9
40°-50°	190.6	18.2
50°-60°	166.5	15.9
60°-70°	121.7	11.6
70°-80°	64.7	6.2
80°-90°	15.0	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°	303.2	28.9
0°-40°	491.6	46.8
0°-60°	848.7	80.8
0°-90°	1050.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1050.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	399	399	399	399	399	
5°	394	395	398	399	396	37
15°	374	376	380	382	377	105
25°	338	342	348	349	344	156
35°	293	297	304	306	302	183
45°	239	244	251	252	247	185
55°	181	185	190	187	184	162
65°	121	123	125	123	121	119
75°	60	61	62	60	59	64
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°	399.4	399.4	399.4	399.4	399.4
2.5°	396.3	397.6	398.9	399.5	396.3
5°	394.2	395.0	397.9	398.8	395.5
7.5°	390.8	391.9	394.8	395.2	392.0
10°	386.1	388.1	390.1	392.1	388.2
12.5°	380.2	382.9	386.1	386.5	383.5
15°	373.5	376.0	379.5	381.8	376.9
17.5°	366.0	368.4	373.0	373.4	370.4
20°	357.6	360.6	366.1	367.1	361.7
22.5°	348.2	352.2	356.8	357.7	353.7
25°	338.2	342.4	348.0	349.3	344.0
27.5°	327.8	331.8	338.2	339.1	334.6
30°	316.6	320.4	327.4	328.9	324.4
32.5°	305.3	309.1	316.8	318.1	313.7
35°	292.8	297.3	304.4	306.5	301.5
37.5°	279.9	284.4	292.4	294.3	289.0
40°	266.7	271.1	278.9	280.5	275.4
42.5°	253.1	257.5	265.9	266.2	261.9
45°	239.2	243.5	251.3	251.5	246.6
47.5°	225.2	229.5	236.5	235.7	231.0
50°	210.9	215.0	221.1	219.6	215.4
52.5°	196.2	200.2	206.0	203.4	199.4
55°	181.4	185.1	189.9	187.1	184.1
57.5°	166.5	170.2	173.9	171.1	168.4
60°	151.4	154.6	157.7	154.8	152.8
62.5°	136.1	138.9	141.5	138.8	136.9
65°	120.6	123.1	125.2	122.7	120.7
67.5°	105.2	107.3	109.3	106.7	104.6
70°	89.8	91.6	93.4	90.8	88.8
72.5°	74.6	76.2	77.8	75.2	73.5
75°	59.8	61.2	62.5	60.3	58.9
77.5°	45.7	46.9	47.8	46.4	45.1
80°	32.6	33.5	34.0	33.5	32.3
82.5°	21.0	21.6	21.9	21.8	21.1
85°	11.4	11.6	12.2	12.3	11.9
87.5°	4.4	4.7	4.8	5.2	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)