

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: P488403

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1LO-30-120-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: P488403
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-30-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

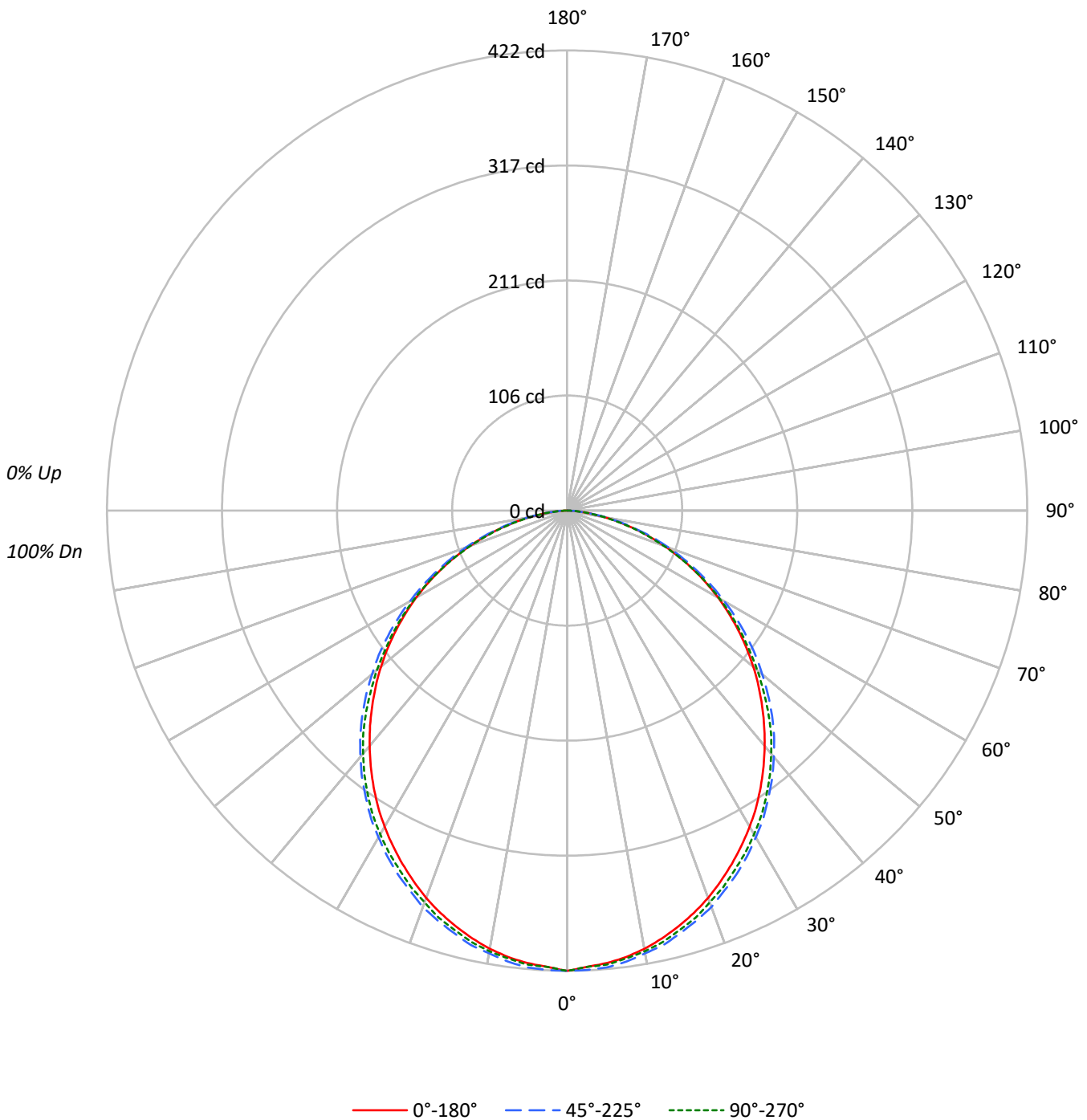
Lumens per Lamp: N/A
Luminaire Lumens: 1109.8 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	2272	2272	2272
5°	2251	2272	2258
10°	2230	2253	2242
15°	2199	2235	2219
20°	2165	2216	2190
25°	2122	2184	2159
30°	2080	2150	2130
35°	2033	2114	2094
40°	1980	2071	2045
45°	1924	2022	1983
50°	1866	1957	1906
55°	1799	1883	1825
60°	1722	1793	1738
65°	1624	1685	1624
70°	1493	1553	1478
75°	1314	1375	1295
80°	1069	1116	1057
85°	747	790	772



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.8	3.6
10°-20°	112.7	10.2
20°-30°	168.0	15.1
30°-40°	199.1	17.9
40°-50°	201.5	18.2
50°-60°	176.0	15.9
60°-70°	128.6	11.6
70°-80°	68.4	6.2
80°-90°	15.8	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°	320.4	28.9
0°-40°	519.6	46.8
0°-60°	897.0	80.8
0°-90°	1109.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1109.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	422	422	422	422	422	
5°	417	417	420	422	418	40
15°	395	397	401	404	398	111
25°	357	362	368	369	364	165
35°	309	314	322	324	319	194
45°	253	257	266	266	261	195
55°	192	196	201	198	194	171
65°	128	130	132	130	128	126
75°	63	65	66	64	62	67
85°	12	12	13	13	12	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	422.1	422.1	422.1	422.1	422.1
2.5°	418.8	420.2	421.6	422.2	418.8
5°	416.6	417.4	420.5	421.5	418.0
7.5°	413.0	414.2	417.2	417.7	414.3
10°	408.1	410.2	412.2	414.4	410.3
12.5°	401.8	404.7	408.1	408.5	405.3
15°	394.7	397.4	401.1	403.5	398.3
17.5°	386.8	389.4	394.2	394.6	391.5
20°	378.0	381.1	386.9	388.0	382.3
22.5°	367.9	372.2	377.0	378.0	373.8
25°	357.4	361.8	367.8	369.2	363.6
27.5°	346.4	350.7	357.4	358.4	353.7
30°	334.7	338.6	346.0	347.6	342.8
32.5°	322.7	326.6	334.8	336.2	331.5
35°	309.4	314.2	321.7	323.9	318.7
37.5°	295.9	300.6	309.0	311.0	305.4
40°	281.8	286.5	294.8	296.5	291.1
42.5°	267.5	272.2	281.0	281.3	276.8
45°	252.8	257.3	265.6	265.8	260.6
47.5°	238.0	242.5	249.9	249.1	244.1
50°	222.9	227.2	233.7	232.0	227.6
52.5°	207.4	211.5	217.7	214.9	210.8
55°	191.7	195.6	200.7	197.8	194.5
57.5°	175.9	179.8	183.8	180.8	178.0
60°	160.0	163.4	166.6	163.7	161.5
62.5°	143.8	146.8	149.5	146.7	144.7
65°	127.5	130.1	132.3	129.7	127.5
67.5°	111.2	113.4	115.5	112.8	110.5
70°	94.9	96.8	98.7	95.9	93.9
72.5°	78.9	80.5	82.2	79.5	77.7
75°	63.2	64.7	66.1	63.7	62.3
77.5°	48.3	49.6	50.5	49.0	47.6
80°	34.5	35.4	36.0	35.4	34.1
82.5°	22.2	22.8	23.1	23.1	22.3
85°	12.1	12.3	12.8	13.0	12.5
87.5°	4.7	5.0	5.1	5.5	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)