

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: P488397

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1HI-50-120-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: P488397
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-LD4-1HI-50-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

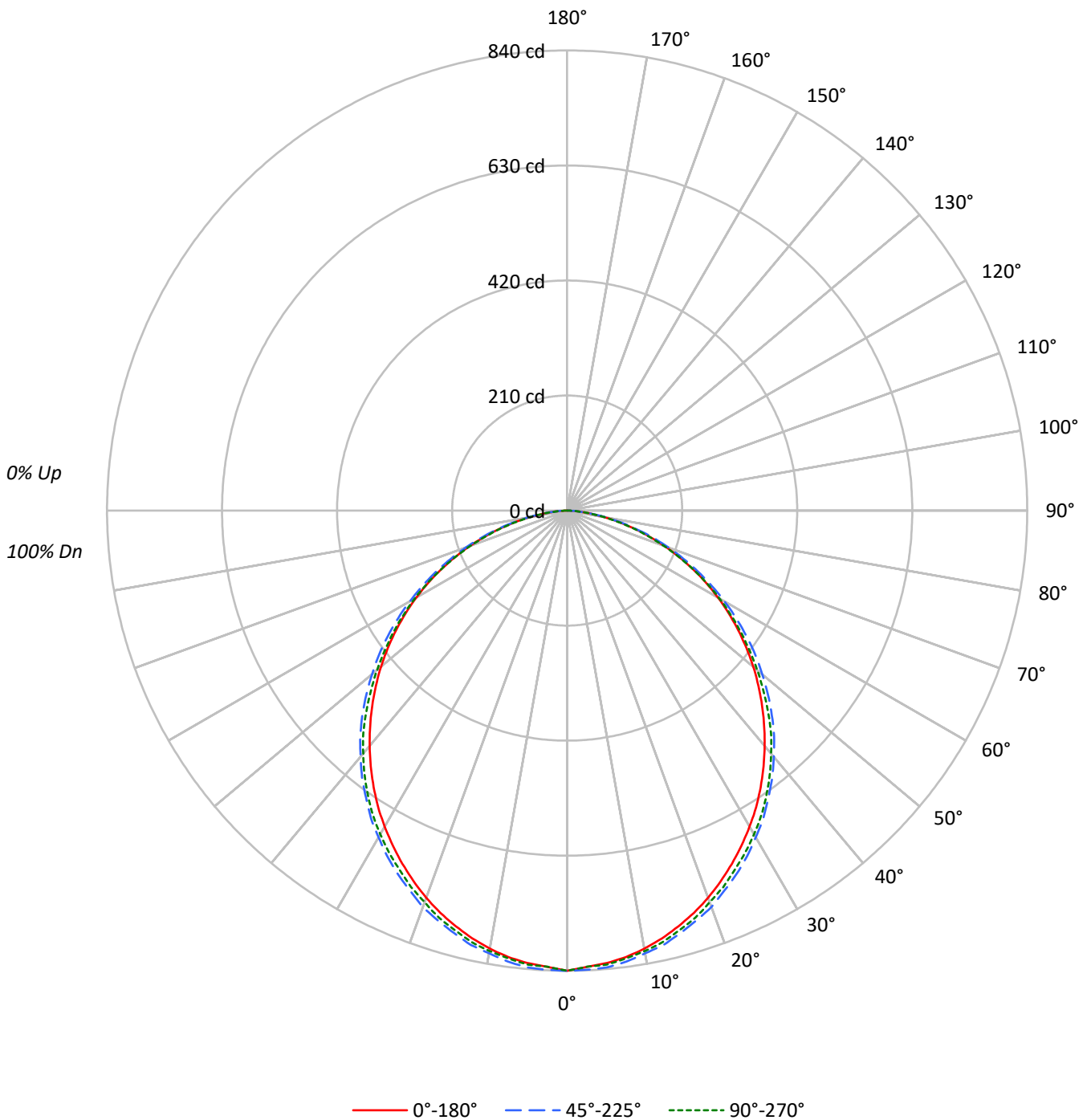
Lumens per Lamp: N/A
Luminaire Lumens: 2208.8 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	4521	4521	4521
5°	4480	4522	4494
10°	4439	4484	4462
15°	4377	4448	4417
20°	4309	4411	4357
25°	4225	4347	4297
30°	4139	4279	4240
35°	4046	4206	4167
40°	3941	4122	4070
45°	3830	4023	3947
50°	3715	3895	3793
55°	3581	3748	3633
60°	3427	3570	3460
65°	3231	3354	3232
70°	2972	3092	2939
75°	2618	2737	2576
80°	2126	2219	2101
85°	1482	1581	1538



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.1	3.6
10°-20°	224.2	10.2
20°-30°	334.4	15.1
30°-40°	396.3	17.9
40°-50°	401.0	18.2
50°-60°	350.2	15.9
60°-70°	255.9	11.6
70°-80°	136.2	6.2
80°-90°	31.5	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°	637.8	28.9
0°-40°	1034.0	46.8
0°-60°	1785.2	80.8
0°-90°	2208.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2208.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	840	840	840	840	840	
5°	829	831	837	839	832	79
15°	786	791	798	803	793	221
25°	711	720	732	735	724	328
35°	616	625	640	645	634	385
45°	503	512	529	529	519	388
55°	382	389	399	394	387	341
65°	254	259	263	258	254	251
75°	126	129	132	127	124	134
85°	24	24	26	26	25	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	840.1	840.1	840.1	840.1	840.1
2.5°	833.6	836.3	839.1	840.3	833.5
5°	829.2	830.8	837.0	838.9	831.8
7.5°	822.0	824.4	830.4	831.3	824.5
10°	812.2	816.4	820.5	824.8	816.5
12.5°	799.7	805.4	812.2	813.0	806.7
15°	785.6	790.9	798.3	803.1	792.7
17.5°	769.9	774.9	784.6	785.4	779.1
20°	752.3	758.6	770.1	772.1	760.8
22.5°	732.3	740.8	750.4	752.4	744.0
25°	711.4	720.1	732.0	734.8	723.6
27.5°	689.5	697.9	711.3	713.2	703.9
30°	666.0	673.9	688.6	691.9	682.3
32.5°	642.2	650.1	666.4	669.1	659.8
35°	615.8	625.4	640.2	644.7	634.3
37.5°	588.8	598.2	615.0	619.0	607.8
40°	560.9	570.2	586.7	590.1	579.3
42.5°	532.4	541.7	559.3	559.9	550.9
45°	503.2	512.2	528.6	529.1	518.6
47.5°	473.6	482.7	497.4	495.7	485.9
50°	443.7	452.3	465.2	461.8	453.0
52.5°	412.7	421.0	433.2	427.8	419.5
55°	381.6	389.3	399.4	393.6	387.2
57.5°	350.1	357.9	365.7	359.9	354.2
60°	318.4	325.3	331.7	325.7	321.4
62.5°	286.2	292.1	297.6	291.9	287.9
65°	253.7	258.8	263.4	258.1	253.8
67.5°	221.3	225.7	229.9	224.4	220.0
70°	188.9	192.7	196.5	190.9	186.8
72.5°	156.9	160.3	163.7	158.3	154.7
75°	125.9	128.8	131.6	126.7	123.9
77.5°	96.2	98.7	100.6	97.5	94.8
80°	68.6	70.5	71.6	70.4	67.8
82.5°	44.1	45.4	46.0	46.0	44.3
85°	24.0	24.4	25.6	25.8	24.9
87.5°	9.3	9.9	10.2	10.9	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)