

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: P488396

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1HI-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: P488396
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-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

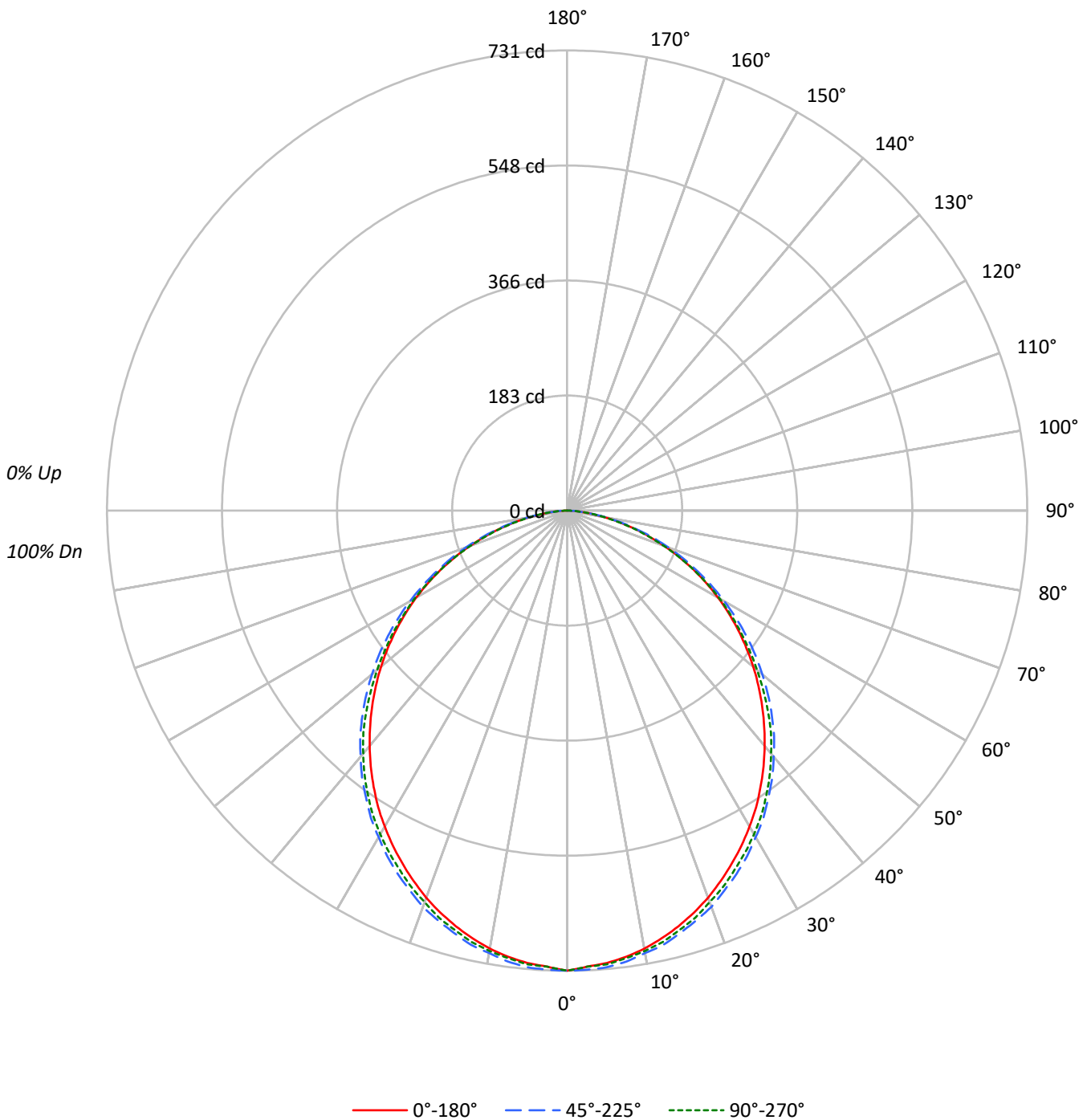
Lumens per Lamp: N/A
Luminaire Lumens: 1921.7 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	3934	3934	3934
5°	3897	3934	3910
10°	3862	3901	3882
15°	3808	3870	3843
20°	3749	3837	3791
25°	3675	3782	3739
30°	3601	3723	3689
35°	3520	3660	3625
40°	3429	3587	3541
45°	3332	3500	3434
50°	3232	3388	3300
55°	3115	3261	3160
60°	2983	3106	3010
65°	2811	2919	2813
70°	2585	2691	2557
75°	2277	2381	2242
80°	1850	1931	1829
85°	1291	1371	1340



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.8	3.6
10°-20°	195.1	10.2
20°-30°	291.0	15.1
30°-40°	344.8	17.9
40°-50°	348.9	18.2
50°-60°	304.7	15.9
60°-70°	222.7	11.6
70°-80°	118.5	6.2
80°-90°	27.4	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°	554.9	28.9
0°-40°	899.7	46.8
0°-60°	1553.2	80.8
0°-90°	1921.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1921.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	731	731	731	731	731	
5°	721	723	728	730	724	68
15°	684	688	694	699	690	193
25°	619	626	637	639	630	285
35°	536	544	557	561	552	335
45°	438	446	460	460	451	338
55°	332	339	348	342	337	297
65°	221	225	229	225	221	218
75°	110	112	114	110	108	116
85°	21	21	22	22	22	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	730.9	730.9	730.9	730.9	730.9
2.5°	725.2	727.6	730.0	731.1	725.2
5°	721.4	722.8	728.2	729.9	723.7
7.5°	715.2	717.2	722.5	723.3	717.3
10°	706.7	710.3	713.8	717.6	710.4
12.5°	695.8	700.7	706.7	707.3	701.9
15°	683.5	688.1	694.5	698.7	689.7
17.5°	669.8	674.2	682.6	683.3	677.9
20°	654.5	660.0	670.0	671.8	661.9
22.5°	637.1	644.5	652.9	654.6	647.3
25°	618.9	626.5	636.9	639.3	629.6
27.5°	599.9	607.2	618.8	620.5	612.4
30°	579.5	586.3	599.1	601.9	593.6
32.5°	558.8	565.6	579.8	582.1	574.1
35°	535.8	544.1	557.0	560.9	551.8
37.5°	512.3	520.5	535.1	538.6	528.8
40°	488.0	496.1	510.5	513.4	504.0
42.5°	463.2	471.3	486.6	487.1	479.3
45°	437.8	445.6	459.9	460.3	451.2
47.5°	412.1	419.9	432.7	431.3	422.7
50°	386.0	393.5	404.7	401.8	394.1
52.5°	359.1	366.3	376.9	372.2	364.9
55°	332.0	338.7	347.5	342.5	336.8
57.5°	304.6	311.4	318.2	313.1	308.2
60°	277.1	283.0	288.6	283.4	279.6
62.5°	249.0	254.1	258.9	254.0	250.5
65°	220.7	225.2	229.2	224.6	220.9
67.5°	192.5	196.3	200.0	195.3	191.4
70°	164.3	167.6	171.0	166.1	162.5
72.5°	136.5	139.4	142.4	137.7	134.6
75°	109.5	112.0	114.5	110.3	107.8
77.5°	83.7	85.8	87.5	84.8	82.5
80°	59.7	61.3	62.3	61.2	59.0
82.5°	38.4	39.5	40.1	40.0	38.5
85°	20.9	21.2	22.2	22.5	21.7
87.5°	8.1	8.6	8.8	9.5	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)