

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: P488442

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2LO-40-120-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: P488442
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-LD4-2LO-40-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

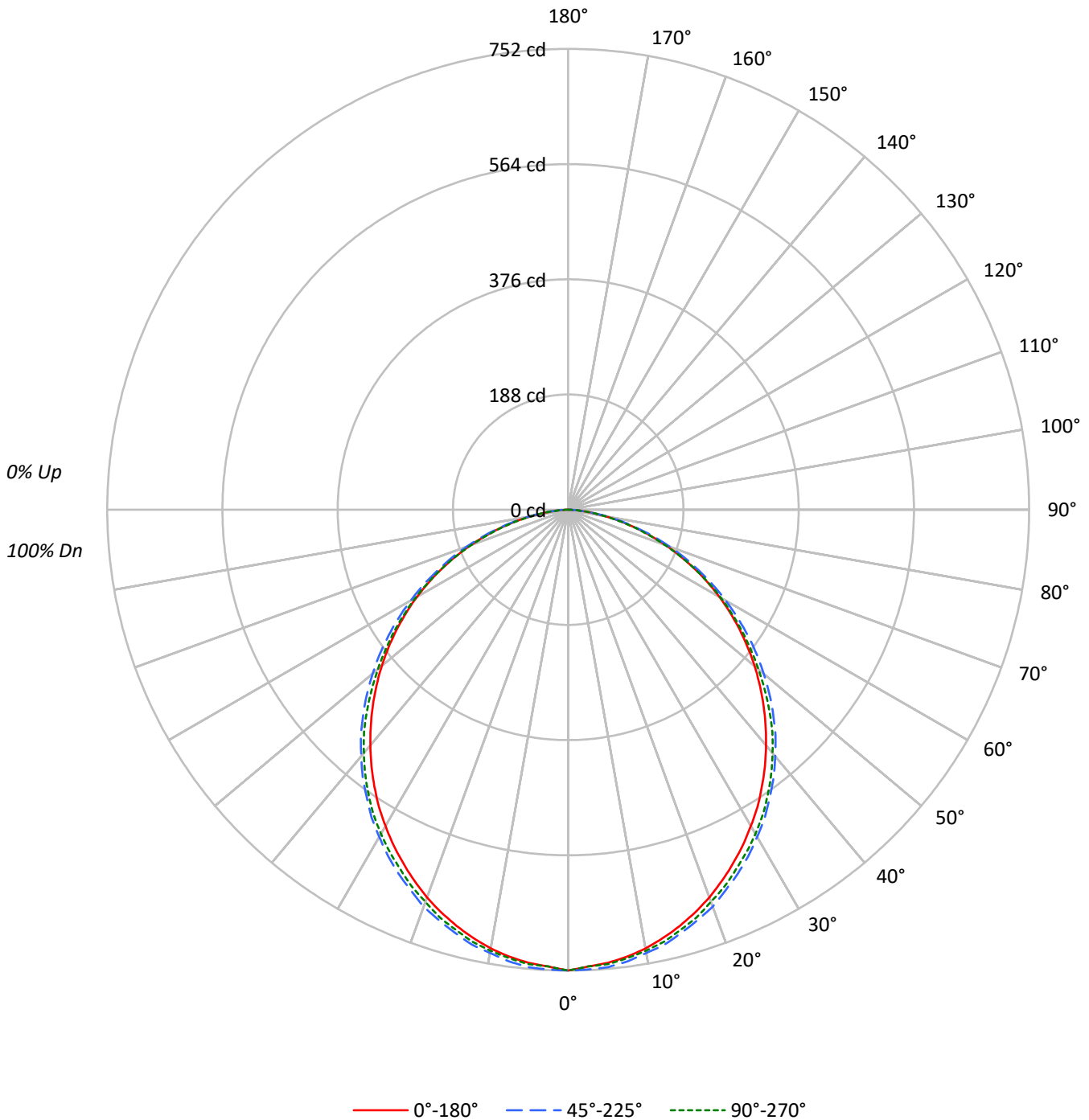
Lumens per Lamp: N/A
Luminaire Lumens: 1977.0 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	4047	4047	4047
5°	4010	4048	4022
10°	3973	4013	3994
15°	3918	3981	3953
20°	3856	3948	3900
25°	3781	3891	3846
30°	3704	3831	3795
35°	3621	3765	3730
40°	3528	3690	3643
45°	3428	3601	3533
50°	3325	3486	3394
55°	3204	3354	3251
60°	3068	3196	3097
65°	2892	3002	2893
70°	2661	2768	2631
75°	2344	2450	2306
80°	1903	1987	1881
85°	1328	1414	1377



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.8	3.6
10°-20°	200.7	10.2
20°-30°	299.3	15.1
30°-40°	354.7	17.9
40°-50°	358.9	18.2
50°-60°	313.4	15.9
60°-70°	229.1	11.6
70°-80°	121.9	6.2
80°-90°	28.2	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°	570.8	28.9
0°-40°	925.6	46.8
0°-60°	1597.9	80.8
0°-90°	1977.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1977.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	752	752	752	752	752	
5°	742	744	749	751	744	70
15°	703	708	714	719	710	198
25°	637	645	655	658	648	293
35°	551	560	573	577	568	345
45°	450	458	473	474	464	347
55°	342	348	358	352	346	305
65°	227	232	236	231	227	225
75°	113	115	118	113	111	120
85°	22	22	23	23	22	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	752.0	752.0	752.0	752.0	752.0
2.5°	746.1	748.5	751.0	752.1	746.0
5°	742.2	743.6	749.2	750.9	744.5
7.5°	735.8	737.9	743.3	744.1	738.0
10°	727.0	730.7	734.4	738.3	730.8
12.5°	715.8	720.9	727.0	727.7	722.1
15°	703.2	707.9	714.5	718.8	709.5
17.5°	689.1	693.6	702.2	703.0	697.4
20°	673.3	679.0	689.3	691.1	681.0
22.5°	655.5	663.1	671.7	673.4	666.0
25°	636.7	644.6	655.2	657.6	647.7
27.5°	617.1	624.7	636.7	638.4	630.0
30°	596.1	603.2	616.4	619.3	610.7
32.5°	574.8	581.9	596.5	598.9	590.6
35°	551.2	559.8	573.0	577.0	567.7
37.5°	527.0	535.4	550.5	554.1	544.0
40°	502.1	510.4	525.2	528.1	518.5
42.5°	476.5	484.8	500.6	501.1	493.1
45°	450.4	458.4	473.1	473.5	464.2
47.5°	423.9	432.0	445.2	443.7	434.9
50°	397.1	404.8	416.3	413.4	405.4
52.5°	369.4	376.9	387.7	382.9	375.4
55°	341.5	348.4	357.5	352.3	346.5
57.5°	313.4	320.4	327.3	322.1	317.1
60°	285.0	291.1	296.9	291.5	287.7
62.5°	256.2	261.4	266.4	261.3	257.7
65°	227.1	231.7	235.7	231.0	227.2
67.5°	198.1	202.0	205.7	200.9	196.9
70°	169.1	172.4	175.9	170.9	167.2
72.5°	140.5	143.5	146.5	141.7	138.4
75°	112.7	115.2	117.8	113.4	110.9
77.5°	86.1	88.3	90.0	87.3	84.9
80°	61.4	63.1	64.1	63.0	60.7
82.5°	39.5	40.7	41.2	41.1	39.6
85°	21.5	21.9	22.9	23.1	22.3
87.5°	8.3	8.9	9.1	9.8	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)