

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: P488437

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2LO-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: P488437  
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-27-120-EDD  
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

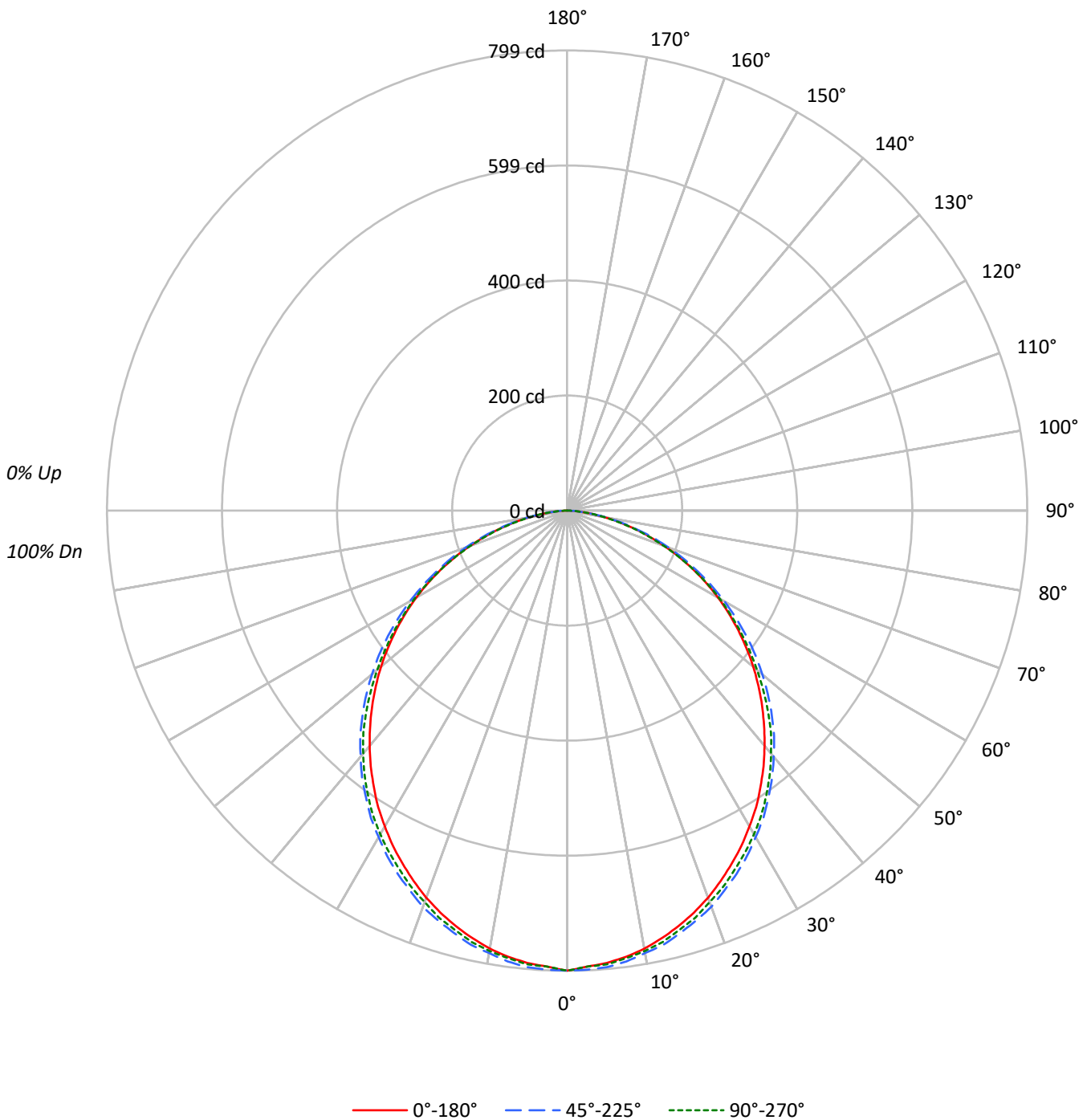
Lumens per Lamp: N/A  
Luminaire Lumens: 2100.2 lumens  
Efficiency: N/A  
Efficacy: 89.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	4299	4299	4299
5°	4259	4299	4273
10°	4221	4263	4243
15°	4162	4230	4199
20°	4097	4194	4143
25°	4017	4134	4086
30°	3936	4069	4032
35°	3847	3999	3962
40°	3747	3920	3870
45°	3642	3825	3753
50°	3533	3703	3606
55°	3404	3564	3454
60°	3259	3395	3289
65°	3072	3189	3074
70°	2826	2941	2795
75°	2489	2601	2452
80°	2024	2111	1999
85°	1408	1501	1463



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.2	3.6
10°-20°	213.2	10.2
20°-30°	318.0	15.1
30°-40°	376.8	17.9
40°-50°	381.3	18.2
50°-60°	333.0	15.9
60°-70°	243.3	11.6
70°-80°	129.5	6.2
80°-90°	29.9	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°	606.4	28.9
0°-40°	983.2	46.8
0°-60°	1697.5	80.8
0°-90°	2100.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2100.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	799	799	799	799	799	
5°	788	790	796	798	791	75
15°	747	752	759	764	754	211
25°	676	685	696	699	688	312
35°	586	595	609	613	603	366
45°	478	487	503	503	493	369
55°	363	370	380	374	368	324
65°	241	246	250	245	241	239
75°	120	122	125	120	118	127
85°	23	23	24	25	24	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	798.8	798.8	798.8	798.8	798.8
2.5°	792.6	795.2	797.8	799.0	792.5
5°	788.4	789.9	795.8	797.7	790.9
7.5°	781.6	783.9	789.6	790.4	783.9
10°	772.3	776.3	780.1	784.3	776.4
12.5°	760.4	765.8	772.3	773.0	767.0
15°	747.0	752.0	759.1	763.6	753.7
17.5°	732.0	736.8	746.0	746.8	740.8
20°	715.3	721.3	732.3	734.2	723.4
22.5°	696.3	704.4	713.5	715.4	707.5
25°	676.4	684.7	696.1	698.6	688.1
27.5°	655.6	663.6	676.3	678.2	669.3
30°	633.3	640.8	654.8	657.8	648.8
32.5°	610.7	618.1	633.6	636.2	627.4
35°	585.5	594.7	608.7	613.0	603.1
37.5°	559.9	568.8	584.8	588.6	577.9
40°	533.3	542.2	557.9	561.1	550.8
42.5°	506.2	515.0	531.8	532.3	523.8
45°	478.5	487.0	502.6	503.0	493.1
47.5°	450.4	458.9	472.9	471.3	462.0
50°	421.9	430.0	442.3	439.1	430.7
52.5°	392.4	400.3	411.9	406.7	398.8
55°	362.8	370.1	379.8	374.3	368.1
57.5°	332.9	340.3	347.7	342.2	336.8
60°	302.8	309.3	315.4	309.7	305.6
62.5°	272.2	277.7	283.0	277.6	273.7
65°	241.2	246.1	250.4	245.4	241.4
67.5°	210.4	214.6	218.6	213.4	209.2
70°	179.6	183.2	186.9	181.5	177.6
72.5°	149.2	152.4	155.6	150.5	147.1
75°	119.7	122.4	125.1	120.5	117.9
77.5°	91.5	93.8	95.6	92.7	90.1
80°	65.3	67.0	68.1	66.9	64.5
82.5°	41.9	43.2	43.8	43.7	42.1
85°	22.8	23.2	24.3	24.6	23.7
87.5°	8.8	9.4	9.7	10.4	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)