

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: P488393

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1HI-35-120-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: P488393  
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-35-120-EDD  
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

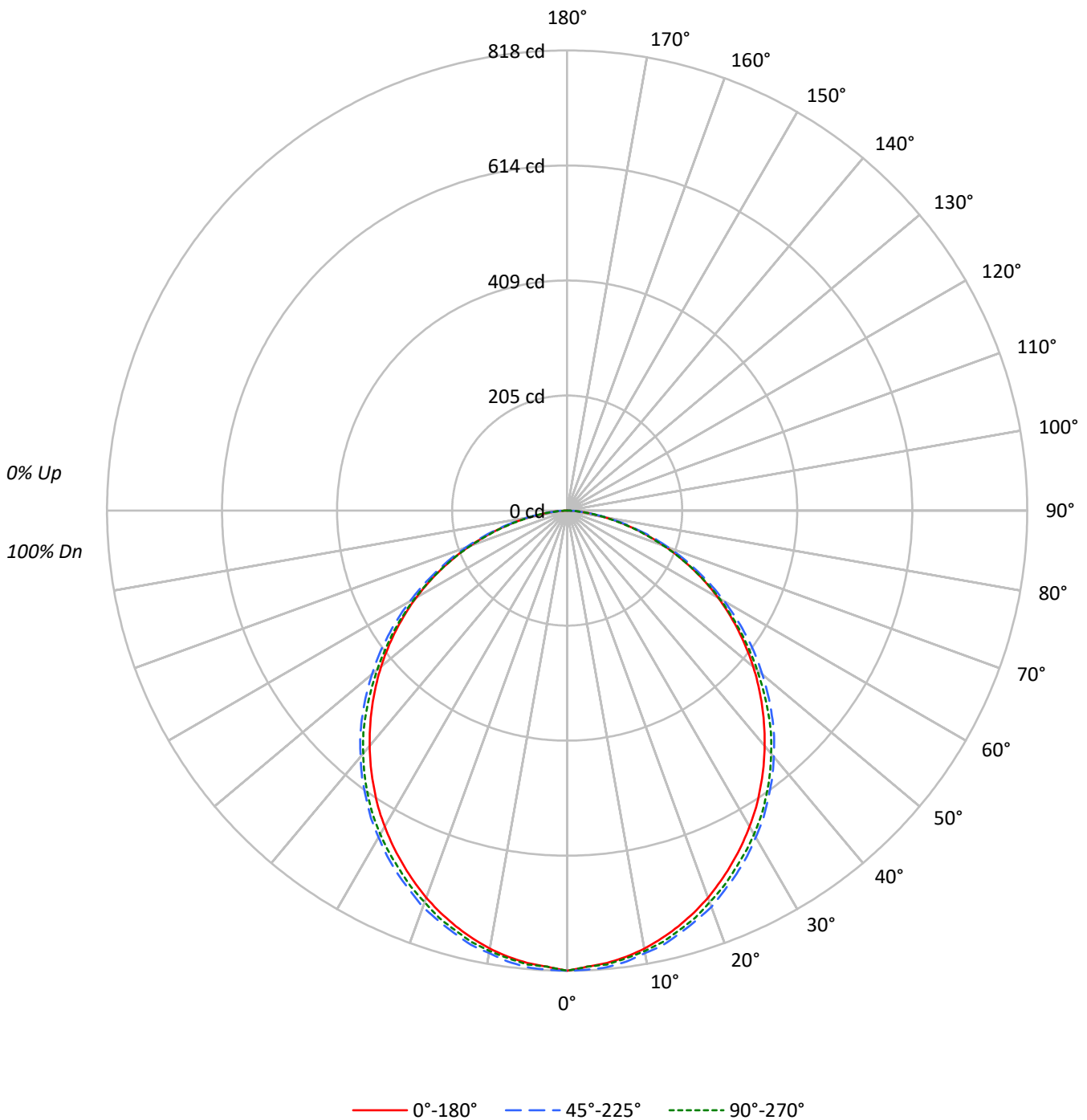
Lumens per Lamp: N/A  
Luminaire Lumens: 2150.5 lumens  
Efficiency: N/A  
Efficacy: 99.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	4402	4402	4402
5°	4361	4403	4375
10°	4322	4365	4345
15°	4262	4330	4300
20°	4195	4294	4243
25°	4113	4232	4184
30°	4030	4167	4128
35°	3939	4095	4057
40°	3837	4014	3962
45°	3729	3918	3843
50°	3617	3792	3692
55°	3486	3649	3537
60°	3337	3476	3368
65°	3145	3265	3147
70°	2894	3010	2862
75°	2549	2664	2510
80°	2070	2160	2046
85°	1445	1538	1501



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.0	3.6
10°-20°	218.3	10.2
20°-30°	325.6	15.1
30°-40°	385.8	17.9
40°-50°	390.4	18.2
50°-60°	341.0	15.9
60°-70°	249.2	11.6
70°-80°	132.6	6.2
80°-90°	30.6	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°	620.9	28.9
0°-40°	1006.8	46.8
0°-60°	1738.1	80.8
0°-90°	2150.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2150.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	807	809	815	817	810	77
15°	765	770	777	782	772	216
25°	693	701	713	715	704	319
35°	600	609	623	628	618	375
45°	490	499	515	515	505	378
55°	372	379	389	383	377	332
65°	247	252	256	251	247	244
75°	123	125	128	123	121	130
85°	23	24	25	25	24	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	818.0	818.0	818.0	818.0	818.0
2.5°	811.6	814.2	817.0	818.1	811.5
5°	807.3	808.9	814.9	816.8	809.9
7.5°	800.3	802.6	808.5	809.4	802.7
10°	790.8	794.9	798.8	803.1	795.0
12.5°	778.6	784.1	790.8	791.6	785.4
15°	764.9	770.0	777.2	781.9	771.8
17.5°	749.5	754.5	763.9	764.7	758.6
20°	732.4	738.5	749.8	751.8	740.8
22.5°	713.0	721.2	730.6	732.5	724.4
25°	692.6	701.1	712.7	715.4	704.5
27.5°	671.3	679.5	692.5	694.4	685.3
30°	648.5	656.1	670.5	673.6	664.3
32.5°	625.3	633.0	648.8	651.4	642.4
35°	599.5	608.9	623.3	627.7	617.5
37.5°	573.3	582.4	598.8	602.7	591.8
40°	546.1	555.1	571.3	574.5	564.0
42.5°	518.3	527.4	544.6	545.1	536.4
45°	489.9	498.6	514.7	515.1	504.9
47.5°	461.1	469.9	484.2	482.6	473.1
50°	432.0	440.3	452.9	449.6	441.0
52.5°	401.8	409.9	421.8	416.5	408.4
55°	371.5	379.0	388.9	383.2	376.9
57.5°	340.9	348.5	356.1	350.4	344.9
60°	310.0	316.7	322.9	317.1	312.9
62.5°	278.7	284.4	289.8	284.2	280.3
65°	247.0	252.0	256.4	251.3	247.1
67.5°	215.4	219.7	223.8	218.5	214.2
70°	183.9	187.6	191.3	185.9	181.9
72.5°	152.8	156.0	159.4	154.1	150.6
75°	122.6	125.4	128.1	123.4	120.7
77.5°	93.7	96.0	97.9	94.9	92.3
80°	66.8	68.6	69.7	68.5	66.0
82.5°	43.0	44.2	44.8	44.7	43.1
85°	23.4	23.8	24.9	25.1	24.3
87.5°	9.0	9.6	9.9	10.7	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)