

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: P490319

Luminaire Tested: **CLP-12-4-INS-A19156-LD4-2STD-20-120-EDD**

Issue Date: 3/12/2021

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: P490319  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-115-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/12/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: CLP-12-4-INS-A19156-LD4-2STD-20-120-EDD  
Description: 1X4 CLP LED LUMINAIRE WITH A19156 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

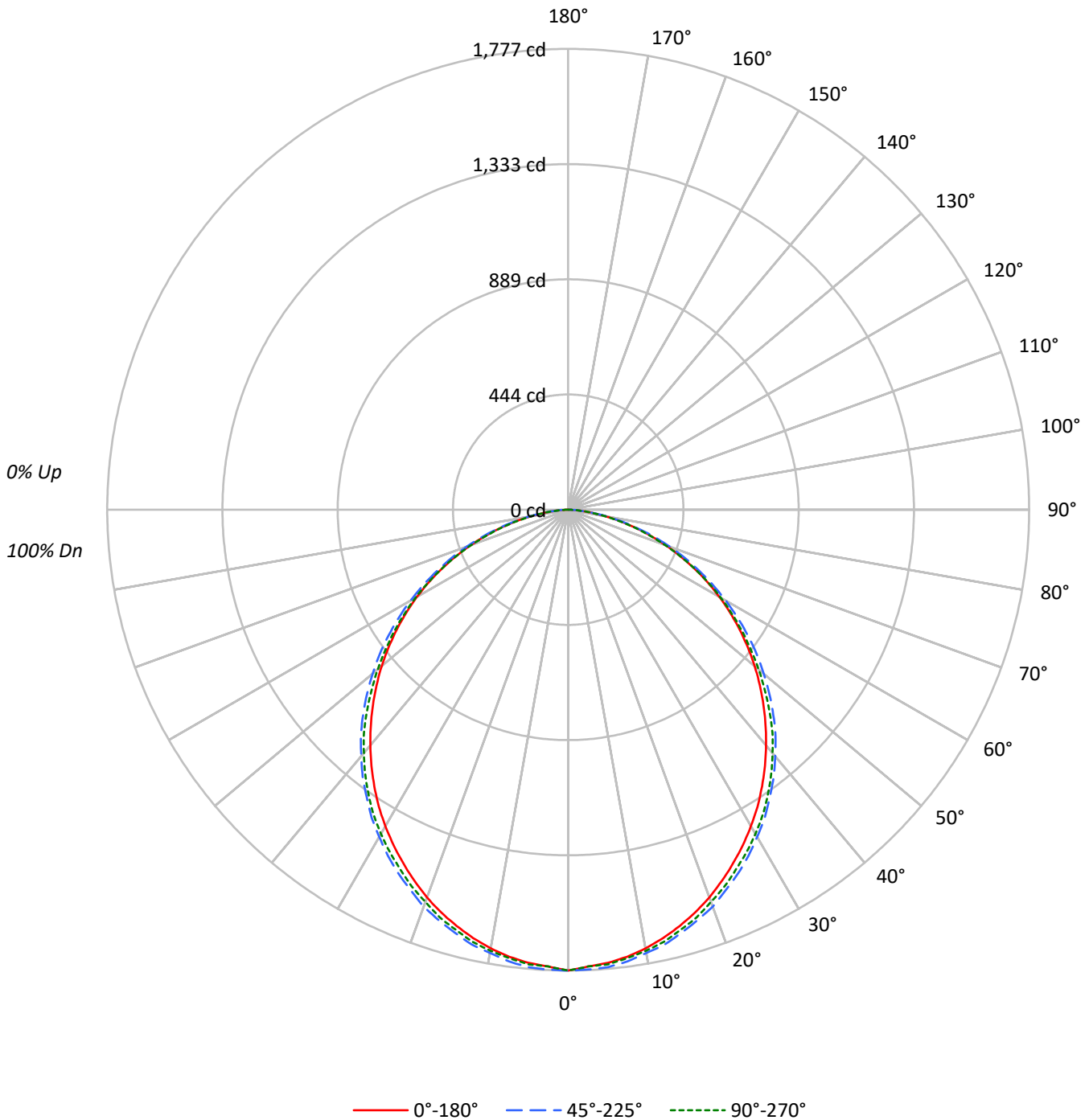
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4672.1 lumens  
Efficiency: N/A  
Efficacy: 70.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 66.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	4782	4782	4782
5°	4738	4782	4753
10°	4694	4742	4719
15°	4630	4704	4671
20°	4557	4665	4609
25°	4468	4597	4545
30°	4378	4526	4485
35°	4279	4449	4407
40°	4168	4360	4304
45°	4051	4255	4175
50°	3929	4119	4011
55°	3787	3964	3842
60°	3625	3775	3659
65°	3417	3547	3419
70°	3144	3271	3109
75°	2769	2894	2726
80°	2250	2348	2224
85°	1565	1670	1630



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.4	3.6
10°-20°	474.3	10.2
20°-30°	707.4	15.1
30°-40°	838.2	17.9
40°-50°	848.2	18.2
50°-60°	740.8	15.9
60°-70°	541.3	11.6
70°-80°	288.0	6.2
80°-90°	66.6	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°	1349.0	28.9
0°-40°	2187.3	46.8
0°-60°	3776.2	80.8
0°-90°	4672.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4672.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1777	1777	1777	1777	1777	
5°	1754	1757	1770	1774	1760	166
15°	1662	1673	1689	1699	1677	468
25°	1505	1523	1548	1554	1531	693
35°	1303	1323	1354	1364	1342	815
45°	1064	1083	1118	1119	1097	821
55°	807	823	845	833	819	721
65°	537	548	557	546	537	531
75°	266	272	278	268	262	283
85°	51	52	54	55	53	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1777.1	1777.1	1777.1	1777.1	1777.1
2.5°	1763.2	1769.0	1774.9	1777.5	1763.0
5°	1754.0	1757.3	1770.4	1774.5	1759.5
7.5°	1738.8	1743.8	1756.5	1758.4	1744.0
10°	1718.0	1726.9	1735.4	1744.7	1727.1
12.5°	1691.6	1703.6	1718.0	1719.7	1706.4
15°	1661.8	1672.9	1688.6	1698.8	1676.7
17.5°	1628.4	1639.2	1659.5	1661.4	1648.0
20°	1591.2	1604.5	1629.0	1633.2	1609.4
22.5°	1549.0	1567.0	1587.3	1591.4	1573.8
25°	1504.7	1523.3	1548.4	1554.2	1530.7
27.5°	1458.5	1476.2	1504.6	1508.6	1488.8
30°	1408.8	1425.5	1456.6	1463.5	1443.3
32.5°	1358.5	1375.1	1409.6	1415.3	1395.7
35°	1302.6	1322.9	1354.2	1363.7	1341.6
37.5°	1245.5	1265.3	1300.9	1309.4	1285.7
40°	1186.5	1206.1	1241.1	1248.1	1225.3
42.5°	1126.1	1145.7	1183.1	1184.2	1165.4
45°	1064.4	1083.3	1118.1	1119.1	1097.0
47.5°	1001.9	1020.9	1052.0	1048.5	1027.8
50°	938.5	956.7	983.9	976.9	958.2
52.5°	873.0	890.6	916.3	904.8	887.3
55°	807.1	823.4	844.9	832.6	818.9
57.5°	740.6	757.1	773.6	761.2	749.3
60°	673.6	688.0	701.5	689.0	679.9
62.5°	605.5	617.9	629.5	617.5	609.0
65°	536.6	547.5	557.1	546.0	536.9
67.5°	468.1	477.3	486.2	474.7	465.3
70°	399.6	407.5	415.7	403.8	395.1
72.5°	332.0	339.0	346.2	334.8	327.2
75°	266.3	272.4	278.3	268.1	262.2
77.5°	203.5	208.7	212.7	206.3	200.5
80°	145.2	149.0	151.5	148.9	143.5
82.5°	93.3	96.1	97.4	97.2	93.7
85°	50.7	51.7	54.1	54.6	52.8
87.5°	19.6	20.9	21.5	23.1	21.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)