

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: P490313

Luminaire Tested: **CLP-12-4-INS-A19156-LD4-2LO-35-120-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: P490313
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-LD4-2LO-35-120-EDD
Description: 1X4 CLP LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

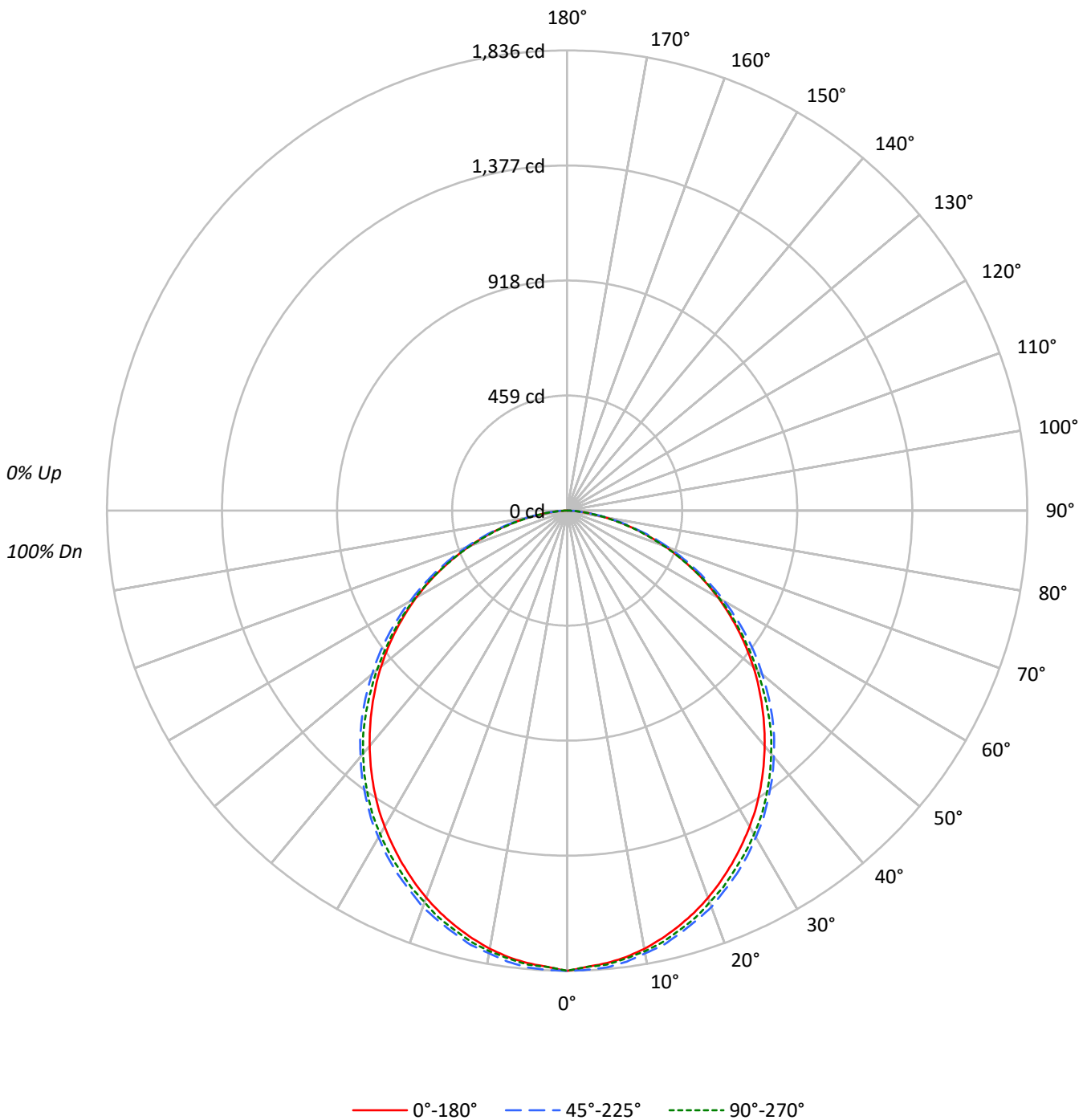
Lumens per Lamp: N/A
Luminaire Lumens: 4828.1 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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°	4942	4942	4942
5°	4896	4942	4912
10°	4851	4900	4877
15°	4784	4861	4827
20°	4709	4821	4763
25°	4617	4751	4697
30°	4524	4677	4635
35°	4422	4597	4554
40°	4307	4505	4448
45°	4186	4397	4314
50°	4060	4257	4145
55°	3913	4096	3970
60°	3746	3902	3781
65°	3531	3666	3533
70°	3249	3379	3212
75°	2860	2990	2817
80°	2325	2425	2298
85°	1618	1726	1683



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.0	3.6
10°-20°	490.1	10.2
20°-30°	731.0	15.1
30°-40°	866.2	17.9
40°-50°	876.5	18.2
50°-60°	765.5	15.9
60°-70°	559.4	11.6
70°-80°	297.6	6.2
80°-90°	68.8	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°	1394.1	28.9
0°-40°	2260.3	46.8
0°-60°	3902.3	80.8
0°-90°	4828.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4828.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1836	1836	1836	1836	1836	
5°	1812	1816	1830	1834	1818	172
15°	1717	1729	1745	1756	1733	484
25°	1555	1574	1600	1606	1582	716
35°	1346	1367	1399	1409	1386	842
45°	1100	1120	1156	1156	1134	849
55°	834	851	873	860	846	746
65°	554	566	576	564	555	549
75°	275	282	288	277	271	293
85°	52	53	56	56	54	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1836.4	1836.4	1836.4	1836.4	1836.4
2.5°	1822.1	1828.0	1834.1	1836.8	1821.9
5°	1812.5	1816.0	1829.5	1833.8	1818.3
7.5°	1796.8	1802.0	1815.2	1817.1	1802.2
10°	1775.4	1784.6	1793.4	1803.0	1784.8
12.5°	1748.0	1760.5	1775.4	1777.1	1763.3
15°	1717.2	1728.7	1745.0	1755.5	1732.7
17.5°	1682.8	1693.9	1714.9	1716.9	1703.1
20°	1644.3	1658.1	1683.4	1687.8	1663.1
22.5°	1600.7	1619.3	1640.3	1644.5	1626.4
25°	1555.0	1574.1	1600.1	1606.1	1581.8
27.5°	1507.1	1525.5	1554.8	1559.0	1538.5
30°	1455.9	1473.1	1505.2	1512.3	1491.5
32.5°	1403.8	1421.0	1456.6	1462.6	1442.3
35°	1346.0	1367.1	1399.4	1409.2	1386.4
37.5°	1287.1	1307.6	1344.3	1353.1	1328.6
40°	1226.1	1246.4	1282.5	1289.8	1266.3
42.5°	1163.7	1184.0	1222.6	1223.8	1204.3
45°	1100.0	1119.5	1155.5	1156.4	1133.7
47.5°	1035.3	1055.0	1087.2	1083.5	1062.1
50°	969.9	988.6	1016.8	1009.5	990.2
52.5°	902.1	920.3	946.9	935.1	916.9
55°	834.0	850.9	873.1	860.4	846.3
57.5°	765.3	782.4	799.4	786.6	774.3
60°	696.1	711.0	725.0	712.0	702.6
62.5°	625.7	638.5	650.5	638.1	629.3
65°	554.5	565.8	575.7	564.2	554.9
67.5°	483.7	493.3	502.4	490.6	480.8
70°	412.9	421.1	429.5	417.3	408.3
72.5°	343.1	350.3	357.8	345.9	338.1
75°	275.1	281.5	287.6	277.1	270.9
77.5°	210.3	215.6	219.8	213.1	207.2
80°	150.0	154.0	156.5	153.8	148.3
82.5°	96.4	99.3	100.6	100.5	96.8
85°	52.4	53.4	55.9	56.4	54.5
87.5°	20.3	21.6	22.2	23.9	22.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)