

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: P490360

Luminaire Tested: **CLP-12-4-INS-A19156-LD4-3STD-35-120-EDD-90**

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: P490360
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-LD4-3STD-35-120-EDD-90
Description: 1X4 CLP LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

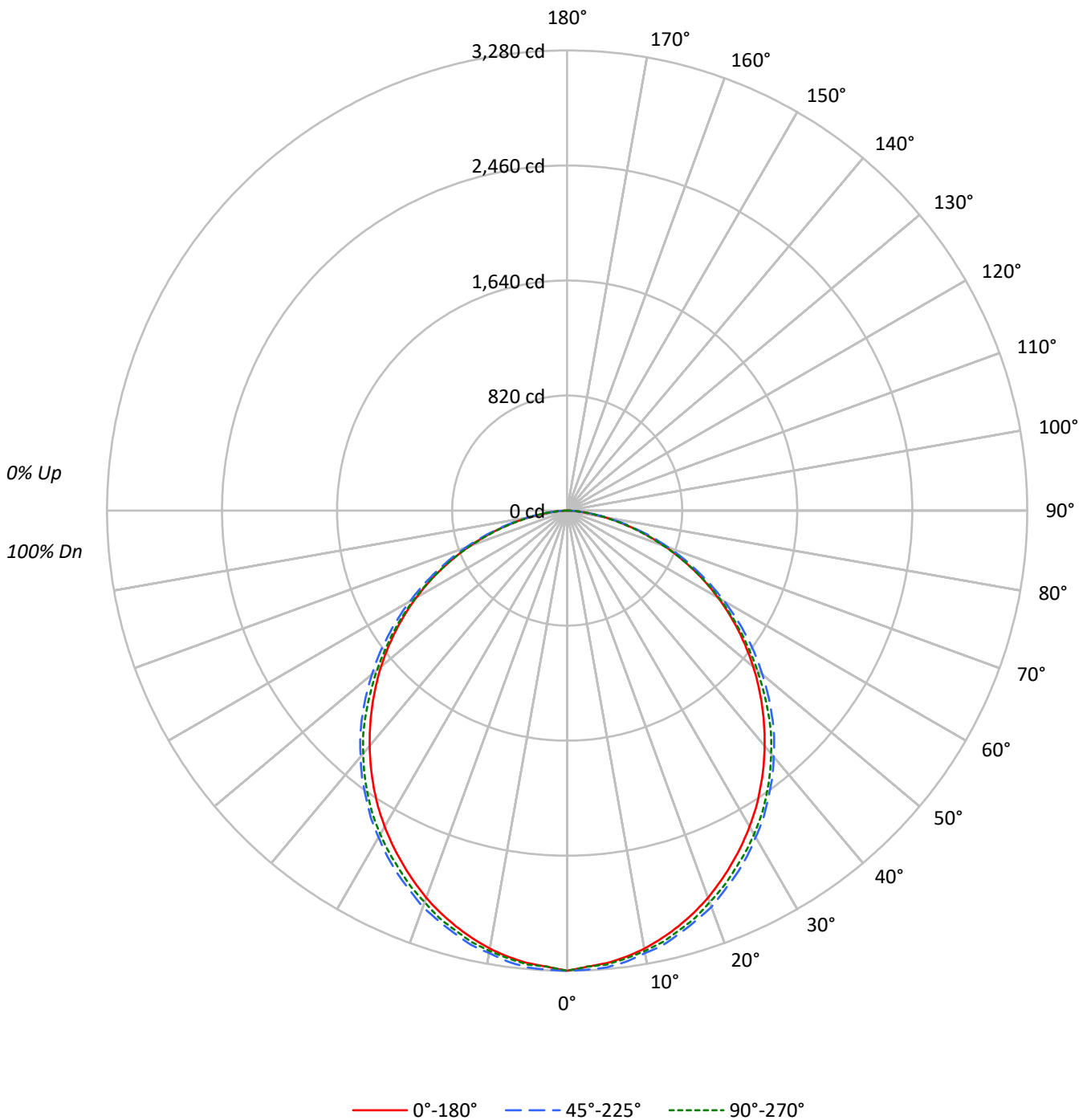
Lumens per Lamp: N/A
Luminaire Lumens: 8623.6 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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°	8827	8827	8827
5°	8745	8827	8773
10°	8665	8753	8711
15°	8545	8683	8622
20°	8411	8610	8507
25°	8247	8486	8388
30°	8080	8354	8277
35°	7898	8211	8135
40°	7693	8047	7945
45°	7477	7854	7706
50°	7252	7603	7404
55°	6989	7316	7092
60°	6691	6969	6754
65°	6306	6548	6311
70°	5803	6036	5738
75°	5109	5340	5031
80°	4152	4333	4105
85°	2890	3081	3007



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.9	3.6
10°-20°	875.4	10.2
20°-30°	1305.6	15.1
30°-40°	1547.2	17.9
40°-50°	1565.5	18.2
50°-60°	1367.3	15.9
60°-70°	999.1	11.6
70°-80°	531.6	6.2
80°-90°	122.9	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°	2490.0	28.9
0°-40°	4037.2	46.8
0°-60°	6970.0	80.8
0°-90°	8623.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8623.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3280	3280	3280	3280	3280	
5°	3237	3244	3268	3275	3248	307
15°	3067	3088	3117	3136	3095	865
25°	2777	2812	2858	2869	2825	1280
35°	2404	2442	2500	2517	2476	1504
45°	1965	2000	2064	2066	2025	1516
55°	1490	1520	1559	1537	1512	1332
65°	990	1011	1028	1008	991	980
75°	491	503	514	495	484	523
85°	94	95	100	101	97	119
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3280.1	3280.1	3280.1	3280.1	3280.1
2.5°	3254.5	3265.1	3276.0	3280.8	3254.1
5°	3237.4	3243.5	3267.8	3275.3	3247.6
7.5°	3209.4	3218.6	3242.2	3245.6	3218.9
10°	3171.1	3187.5	3203.2	3220.3	3187.8
12.5°	3122.2	3144.4	3171.1	3174.2	3149.6
15°	3067.2	3087.7	3116.8	3135.6	3094.9
17.5°	3005.7	3025.5	3063.1	3066.5	3041.9
20°	2937.0	2961.6	3006.7	3014.6	2970.5
22.5°	2859.1	2892.2	2929.8	2937.3	2904.9
25°	2777.4	2811.6	2858.1	2868.6	2825.2
27.5°	2692.0	2724.8	2777.1	2784.6	2748.0
30°	2600.4	2631.1	2688.5	2701.2	2663.9
32.5°	2507.4	2538.2	2601.7	2612.3	2576.1
35°	2404.2	2441.8	2499.6	2517.0	2476.3
37.5°	2298.9	2335.5	2401.1	2416.9	2373.1
40°	2189.9	2226.2	2290.7	2303.7	2261.7
42.5°	2078.5	2114.7	2183.8	2185.8	2151.0
45°	1964.7	1999.6	2063.8	2065.5	2024.9
47.5°	1849.2	1884.4	1941.8	1935.3	1897.1
50°	1732.3	1765.8	1816.1	1803.1	1768.6
52.5°	1611.3	1643.8	1691.3	1670.1	1637.7
55°	1489.7	1519.8	1559.4	1536.8	1511.6
57.5°	1367.0	1397.4	1427.8	1404.9	1383.1
60°	1243.3	1269.9	1294.9	1271.6	1254.9
62.5°	1117.5	1140.4	1161.9	1139.7	1124.0
65°	990.4	1010.6	1028.3	1007.8	991.1
67.5°	863.9	881.0	897.4	876.2	858.8
70°	737.5	752.2	767.2	745.4	729.3
72.5°	612.8	625.7	639.1	617.9	603.9
75°	491.4	502.7	513.6	494.9	483.9
77.5°	375.6	385.2	392.7	380.7	370.1
80°	267.9	275.1	279.6	274.8	264.9
82.5°	172.2	177.4	179.8	179.4	172.9
85°	93.6	95.3	99.8	100.8	97.4
87.5°	36.2	38.6	39.6	42.7	39.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)