

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: P489641

Luminaire Tested: **CLM-24-4-INS-A19156-LD4-2STD-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: P489641
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-24-4-INS-A19156-LD4-2STD-35-120-EDD
Description: 2X4 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

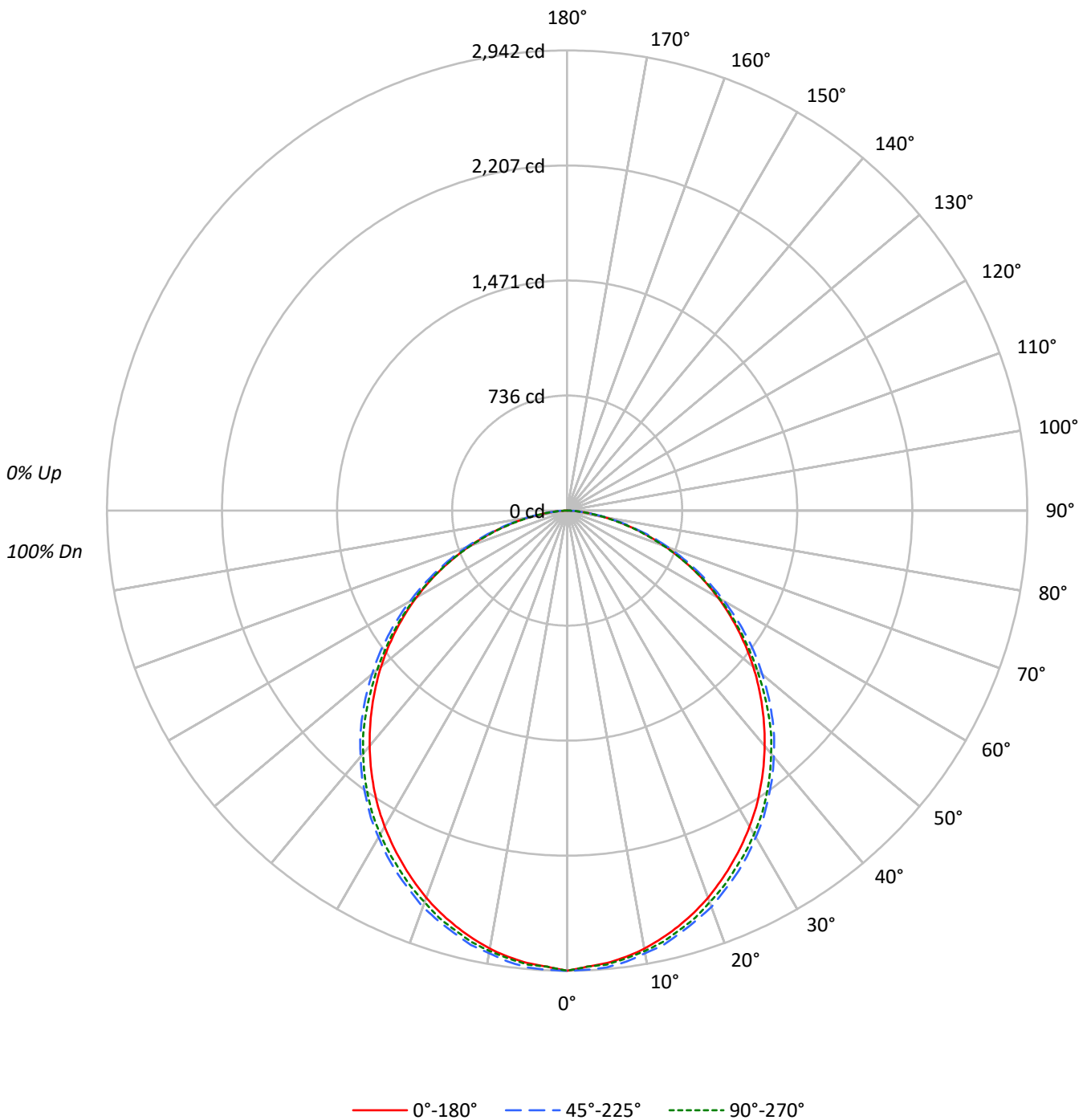
Lumens per Lamp: N/A
Luminaire Lumens: 7735.1 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	3959	3959	3959
5°	3922	3959	3934
10°	3886	3925	3907
15°	3832	3894	3867
20°	3772	3862	3815
25°	3698	3806	3762
30°	3624	3747	3712
35°	3542	3683	3648
40°	3450	3609	3563
45°	3353	3522	3456
50°	3252	3410	3320
55°	3134	3281	3180
60°	3001	3126	3029
65°	2828	2937	2830
70°	2602	2707	2574
75°	2292	2395	2257
80°	1862	1943	1841
85°	1297	1382	1349



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.1	3.6
10°-20°	785.2	10.2
20°-30°	1171.1	15.1
30°-40°	1387.8	17.9
40°-50°	1404.2	18.2
50°-60°	1226.4	15.9
60°-70°	896.2	11.6
70°-80°	476.9	6.2
80°-90°	110.2	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°	2233.4	28.9
0°-40°	3621.2	46.8
0°-60°	6251.9	80.8
0°-90°	7735.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7735.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2942	2942	2942	2942	2942	
5°	2904	2909	2931	2938	2913	275
15°	2751	2770	2796	2812	2776	776
25°	2491	2522	2564	2573	2534	1148
35°	2156	2190	2242	2258	2221	1349
45°	1762	1794	1851	1853	1816	1360
55°	1336	1363	1399	1378	1356	1194
65°	888	906	922	904	889	879
75°	441	451	461	444	434	469
85°	84	86	90	90	87	106
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2942.2	2942.2	2942.2	2942.2	2942.2
2.5°	2919.2	2928.7	2938.5	2942.8	2918.9
5°	2903.8	2909.4	2931.1	2937.9	2913.0
7.5°	2878.7	2887.0	2908.1	2911.2	2887.3
10°	2844.4	2859.1	2873.2	2888.5	2859.4
12.5°	2800.5	2820.5	2844.4	2847.1	2825.1
15°	2751.2	2769.6	2795.6	2812.5	2776.0
17.5°	2696.0	2713.8	2747.5	2750.6	2728.5
20°	2634.4	2656.5	2696.9	2704.0	2664.4
22.5°	2564.5	2594.2	2628.0	2634.7	2605.6
25°	2491.2	2521.9	2563.6	2573.1	2534.2
27.5°	2414.6	2444.0	2490.9	2497.7	2464.9
30°	2332.5	2360.0	2411.5	2422.9	2389.5
32.5°	2249.1	2276.7	2333.7	2343.2	2310.7
35°	2156.5	2190.2	2242.0	2257.7	2221.2
37.5°	2062.1	2094.9	2153.7	2167.8	2128.6
40°	1964.3	1996.8	2054.7	2066.4	2028.7
42.5°	1864.4	1896.9	1958.8	1960.6	1929.4
45°	1762.3	1793.6	1851.2	1852.7	1816.2
47.5°	1658.7	1690.3	1741.8	1735.9	1701.6
50°	1553.8	1583.9	1628.9	1617.3	1586.3
52.5°	1445.3	1474.5	1517.1	1498.1	1468.9
55°	1336.2	1363.2	1398.7	1378.5	1355.8
57.5°	1226.2	1253.4	1280.7	1260.2	1240.6
60°	1115.2	1139.1	1161.5	1140.6	1125.6
62.5°	1002.4	1022.9	1042.2	1022.3	1008.2
65°	888.3	906.4	922.4	904.0	889.0
67.5°	774.9	790.3	805.0	786.0	770.3
70°	661.5	674.7	688.2	668.6	654.2
72.5°	549.6	561.3	573.2	554.2	541.7
75°	440.8	450.9	460.7	443.9	434.1
77.5°	336.9	345.5	352.2	341.5	332.0
80°	240.3	246.8	250.7	246.5	237.6
82.5°	154.5	159.1	161.2	160.9	155.1
85°	84.0	85.5	89.5	90.4	87.4
87.5°	32.5	34.6	35.6	38.3	35.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)