

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: P580588

Luminaire Tested: **HVSL4-4-LD4-2HI-30-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580588
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-6)
Test Lab: INNOVATION CENTER
Issue Date: 12/16/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: HVSL4-4-LD4-2HI-30-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

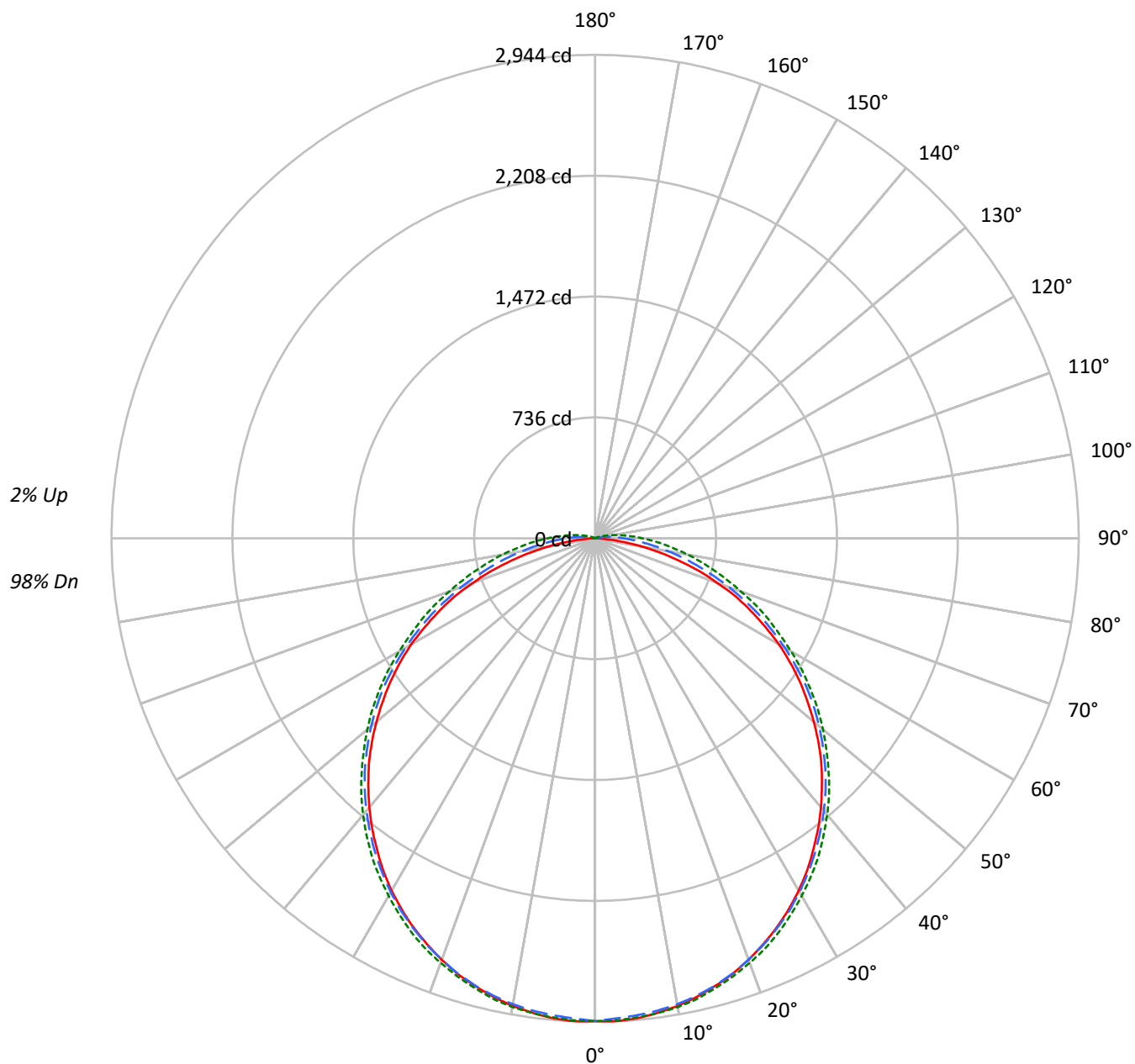
Lumens per Lamp: N/A
Luminaire Lumens: 8891.0 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 86.2
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101			98
1	108	102	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83			81
2	98	89	82	76	95	87	80	75	83	77	73	79	75	71	76	72	69			67
3	89	78	69	63	86	76	68	62	73	66	61	70	64	59	67	62	58			56
4	81	69	60	53	79	67	59	52	65	57	52	62	56	51	60	54	50			47
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	43			41
6	69	55	46	40	67	54	46	39	52	45	39	50	44	38	49	43	38			36
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	34			32
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	35	30			28
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27			25
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25			23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23739	23739	23739
5°	23693	22862	22745
10°	23535	22128	21844
15°	23332	21375	20896
20°	23114	20588	19997
25°	22853	19803	19117
30°	22552	18997	18192
35°	22171	18148	17290
40°	21776	17276	16313
45°	21349	16354	15300
50°	20794	15338	14249
55°	20194	14253	13136
60°	19479	12945	11911
65°	18319	11529	10702
70°	16649	9940	9374
75°	14277	8258	8132
80°	10739	6623	6948
85°	5741	5003	5765



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.3	3.1
10°-20°	798.2	9.0
20°-30°	1211.1	13.6
30°-40°	1464.5	16.5
40°-50°	1528.1	17.2
50°-60°	1397.1	15.7
60°-70°	1089.1	12.2
70°-80°	681.3	7.7
80°-90°	309.4	3.5
90°-100°	103.7	1.2
100°-110°	26.0	0.3
110°-120°	4.1	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°	2287.6	25.7
0°-40°	3752.1	42.2
0°-60°	6677.3	75.1
0°-90°	8757.2	98.5
90°-120°	133.9	1.5
90°-150°	133.9	1.5
90°-180°	134.0	1.5
0°-180°	8891.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2941	2941	2941	2941	2941	
5°	2934	2929	2916	2930	2930	279
15°	2823	2828	2820	2836	2835	797
25°	2616	2618	2620	2642	2647	1205
35°	2315	2326	2335	2359	2369	1449
45°	1948	1965	1981	2001	2010	1501
55°	1520	1538	1567	1590	1600	1358
65°	1045	1063	1099	1143	1161	1034
75°	529	562	643	720	747	564
85°	92	169	290	384	418	116
90°	1	63	171	257	288	4
95°	1	17	89	161	186	1
105°	1	2	15	43	58	1
115°	2	2	3	8	11	1
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P580588

CATALOG NUMBER: HVSL4-4-LD4-2HI-30-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2940.6	2940.6	2940.6	2940.6	2940.6
2.5°	2944.1	2939.9	2926.7	2939.9	2939.2
5°	2934.4	2928.8	2915.7	2929.5	2929.5
7.5°	2915.0	2912.9	2901.1	2917.0	2917.0
10°	2892.1	2891.4	2881.7	2899.0	2899.7
12.5°	2860.2	2863.0	2854.0	2870.6	2872.7
15°	2822.8	2827.6	2820.0	2835.9	2835.2
17.5°	2781.9	2784.6	2779.1	2797.1	2796.4
20°	2731.3	2734.7	2730.6	2749.3	2751.4
22.5°	2675.1	2680.0	2679.3	2698.7	2704.2
25°	2615.5	2617.6	2620.3	2642.5	2646.7
27.5°	2549.6	2553.1	2558.0	2578.1	2582.2
30°	2477.5	2483.1	2488.6	2509.4	2515.0
32.5°	2401.3	2406.8	2413.8	2440.8	2443.6
35°	2315.3	2325.7	2335.4	2359.0	2368.7
37.5°	2229.4	2242.5	2251.6	2276.5	2284.1
40°	2138.6	2151.7	2166.3	2192.6	2197.5
42.5°	2043.6	2058.8	2076.2	2099.7	2108.1
45°	1947.9	1965.3	1981.2	2000.6	2010.3
47.5°	1844.6	1862.0	1881.4	1903.6	1909.8
50°	1737.9	1758.0	1778.8	1799.6	1810.7
52.5°	1628.4	1652.6	1676.2	1698.4	1708.8
55°	1520.2	1538.2	1566.7	1589.5	1599.9
57.5°	1407.9	1423.2	1448.8	1486.2	1491.8
60°	1293.5	1307.4	1333.7	1364.2	1376.7
62.5°	1167.4	1186.1	1213.8	1252.6	1263.7
65°	1044.7	1062.7	1099.4	1143.1	1161.1
67.5°	926.1	932.4	979.5	1025.3	1054.4
70°	786.1	809.7	864.4	920.6	942.8
72.5°	665.5	689.1	749.4	815.2	842.9
75°	528.9	561.5	643.3	720.2	747.3
77.5°	409.0	445.0	546.3	623.9	655.1
80°	285.6	341.8	452.0	539.3	573.3
82.5°	179.5	248.9	366.7	458.2	488.0
85°	91.5	169.1	290.5	384.0	418.0
87.5°	24.3	109.5	226.0	315.4	350.1
90°	0.7	63.1	171.2	257.2	288.4
92.5°	0.7	35.4	127.6	204.5	236.4
95°	0.7	16.6	88.7	160.8	185.8
97.5°	0.7	6.9	61.0	121.3	146.3
100°	0.7	3.5	38.8	88.0	109.5
102.5°	1.4	2.1	24.3	63.1	80.4
105°	1.4	2.1	14.6	43.0	57.5



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CATALOG NUMBER: HVSL4-4-LD4-2HI-30-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.1	2.1	2.8	11.8	17.3
115°	2.1	2.1	2.8	7.6	11.1
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - 90°-270°







107.5°	1.4	2.1	8.3	29.1	39.5
110°	2.1	2.1	4.9	18.0	26.3



(END OF REPORT)