

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: P580592

Luminaire Tested: **HVSL4-4-LD4-2HI-40-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580592
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-40-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

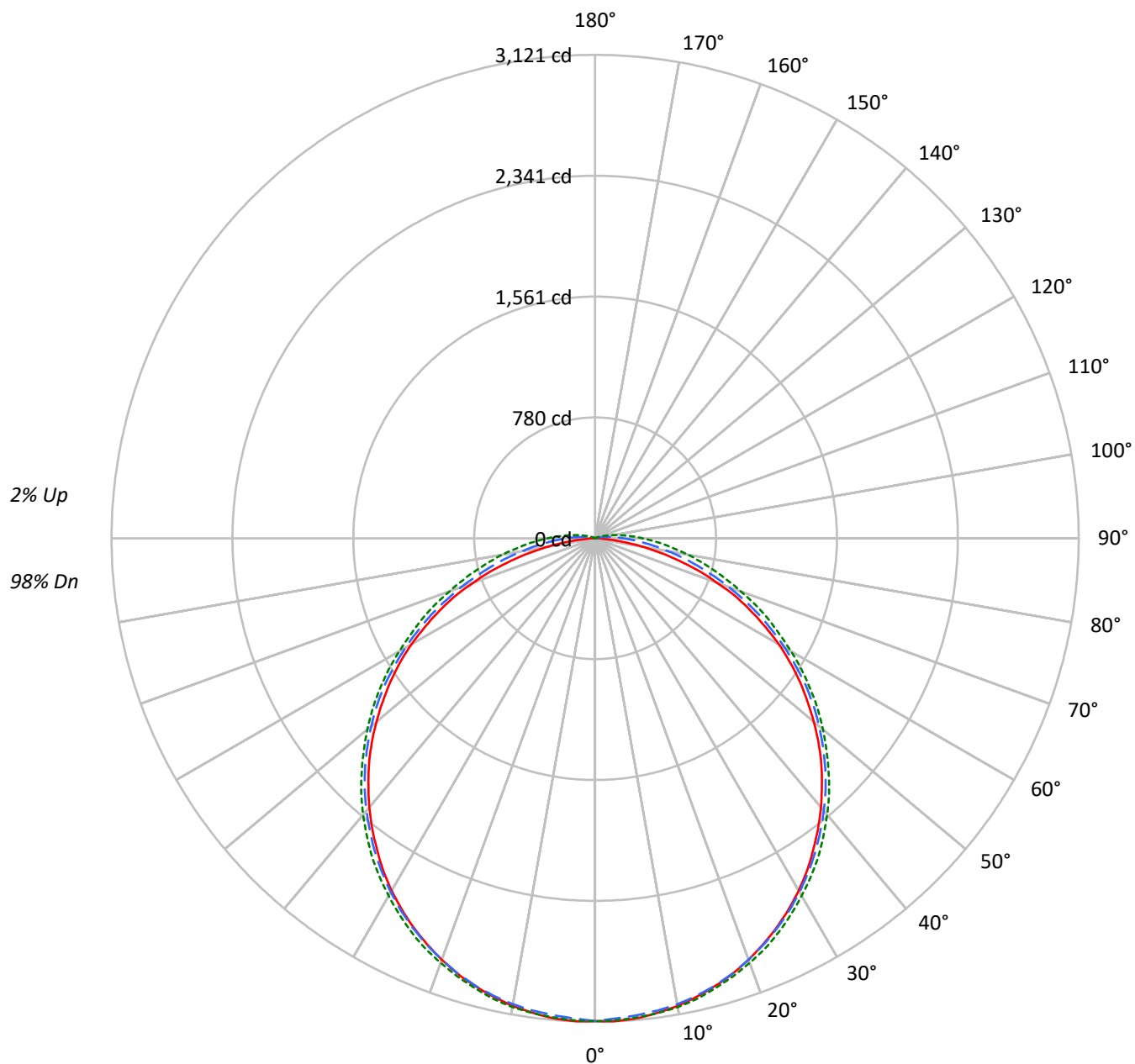
Lumens per Lamp: N/A
Luminaire Lumens: 9425.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

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°	25165	25165	25165
5°	25116	24235	24111
10°	24948	23457	23156
15°	24733	22659	22151
20°	24502	21825	21198
25°	24226	20992	20265
30°	23907	20138	19284
35°	23503	19238	18328
40°	23083	18314	17293
45°	22631	17336	16219
50°	22043	16259	15104
55°	21407	15109	13925
60°	20649	13722	12626
65°	19418	12222	11345
70°	17648	10538	9937
75°	15135	8754	8621
80°	11386	7021	7365
85°	6086	5302	6111



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	295.0	3.1
10°-20°	846.2	9.0
20°-30°	1283.9	13.6
30°-40°	1552.4	16.5
40°-50°	1619.9	17.2
50°-60°	1481.0	15.7
60°-70°	1154.5	12.2
70°-80°	722.2	7.7
80°-90°	328.0	3.5
90°-100°	109.9	1.2
100°-110°	27.6	0.3
110°-120°	4.3	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°	2425.0	25.7
0°-40°	3977.5	42.2
0°-60°	7078.3	75.1
0°-90°	9283.1	98.5
90°-120°	141.9	1.5
90°-150°	141.9	1.5
90°-180°	142.0	1.5
0°-180°	9425.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3117	3117	3117	3117	3117	
5°	3111	3105	3091	3106	3106	295
15°	2992	2997	2989	3006	3006	845
25°	2773	2775	2778	2801	2806	1278
35°	2454	2465	2476	2501	2511	1536
45°	2065	2083	2100	2121	2131	1591
55°	1612	1631	1661	1685	1696	1440
65°	1107	1126	1166	1212	1231	1096
75°	561	595	682	764	792	598
85°	97	179	308	407	443	123
90°	1	67	182	273	306	4
95°	1	18	94	170	197	1
105°	2	2	15	46	61	2
115°	2	2	3	8	12	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: P580592

CATALOG NUMBER: HVSL4-4-LD4-2HI-40-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3117.2	3117.2	3117.2	3117.2	3117.2
2.5°	3120.9	3116.5	3102.5	3116.5	3115.8
5°	3110.6	3104.7	3090.8	3105.5	3105.5
7.5°	3090.0	3087.8	3075.3	3092.2	3092.2
10°	3065.8	3065.0	3054.8	3073.1	3073.9
12.5°	3032.0	3034.9	3025.4	3043.0	3045.2
15°	2992.3	2997.4	2989.4	3006.3	3005.5
17.5°	2948.9	2951.9	2946.0	2965.1	2964.4
20°	2895.3	2899.0	2894.6	2914.4	2916.6
22.5°	2835.8	2840.9	2840.2	2860.8	2866.6
25°	2772.6	2774.8	2777.7	2801.2	2805.6
27.5°	2702.8	2706.4	2711.6	2732.9	2737.3
30°	2626.3	2632.2	2638.1	2660.1	2666.0
32.5°	2545.5	2551.4	2558.7	2587.4	2590.3
35°	2454.4	2465.4	2475.7	2500.7	2511.0
37.5°	2363.3	2377.2	2386.8	2413.2	2421.3
40°	2267.0	2281.0	2296.4	2324.3	2329.5
42.5°	2166.3	2182.5	2200.9	2225.9	2234.7
45°	2064.9	2083.3	2100.2	2120.8	2131.1
47.5°	1955.4	1973.8	1994.4	2017.9	2024.5
50°	1842.3	1863.6	1885.6	1907.7	1919.4
52.5°	1726.2	1751.9	1776.9	1800.4	1811.4
55°	1611.5	1630.6	1660.8	1685.0	1696.0
57.5°	1492.5	1508.6	1535.8	1575.5	1581.4
60°	1371.2	1385.9	1413.8	1446.2	1459.4
62.5°	1237.5	1257.3	1286.7	1327.9	1339.6
65°	1107.4	1126.5	1165.5	1211.8	1230.9
67.5°	981.8	988.4	1038.3	1086.8	1117.7
70°	833.3	858.3	916.4	975.9	999.4
72.5°	705.5	730.4	794.4	864.2	893.6
75°	560.7	595.2	681.9	763.5	792.2
77.5°	433.6	471.8	579.1	661.4	694.4
80°	302.8	362.3	479.1	571.7	607.7
82.5°	190.3	263.8	388.7	485.7	517.3
85°	97.0	179.3	307.9	407.1	443.1
87.5°	25.7	116.1	239.6	334.4	371.1
90°	0.7	66.9	181.5	272.6	305.7
92.5°	0.7	37.5	135.2	216.8	250.6
95°	0.7	17.6	94.1	170.5	196.9
97.5°	0.7	7.3	64.7	128.6	155.1
100°	0.7	3.7	41.2	93.3	116.1
102.5°	1.5	2.2	25.7	66.9	85.2
105°	1.5	2.2	15.4	45.6	61.0



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CATALOG NUMBER: HVSL4-4-LD4-2HI-40-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.2	2.2	2.9	12.5	18.4
115°	2.2	2.2	2.9	8.1	11.8
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°	1.5	2.2	8.8	30.9	41.9
110°	2.2	2.2	5.1	19.1	27.9



(END OF REPORT)