

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: P580573

Luminaire Tested: **HVSL4-4-LD4-1LO-35-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580573
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-LD4-1LO-35-UNV-O-EDD-90
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

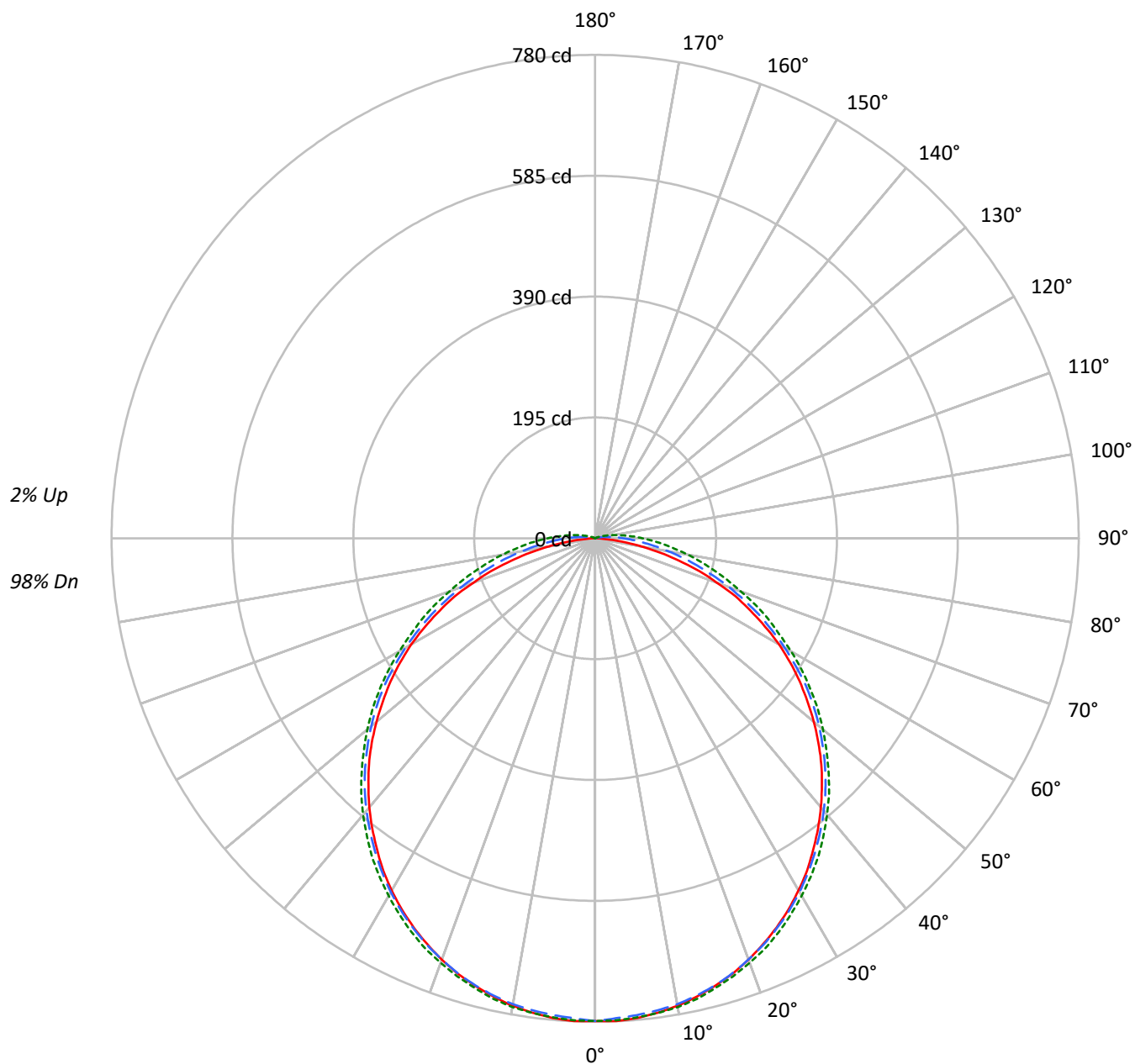
Lumens per Lamp: N/A
Luminaire Lumens: 2355.0 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 23.1
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

TEST NUMBER: P580573

CATALOG NUMBER: HVSL4-4-LD4-1LO-35-UNV-O-EDD-90

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°	6288	6288	6288
5°	6275	6056	6025
10°	6233	5861	5786
15°	6180	5661	5535
20°	6122	5453	5297
25°	6053	5246	5063
30°	5973	5032	4819
35°	5873	4807	4580
40°	5768	4576	4321
45°	5655	4332	4053
50°	5507	4063	3774
55°	5350	3775	3480
60°	5159	3429	3155
65°	4852	3054	2835
70°	4409	2633	2483
75°	3782	2188	2153
80°	2843	1754	1840
85°	1518	1324	1527



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.7	3.1
10°-20°	211.4	9.0
20°-30°	320.8	13.6
30°-40°	387.9	16.5
40°-50°	404.7	17.2
50°-60°	370.1	15.7
60°-70°	288.5	12.2
70°-80°	180.5	7.7
80°-90°	82.0	3.5
90°-100°	27.5	1.2
100°-110°	6.9	0.3
110°-120°	1.1	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°	605.9	25.7
0°-40°	993.8	42.2
0°-60°	1768.7	75.1
0°-90°	2319.6	98.5
90°-120°	35.5	1.5
90°-150°	35.5	1.5
90°-180°	35.0	1.5
0°-180°	2355.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	779	779	779	779	779	
5°	777	776	772	776	776	74
15°	748	749	747	751	751	211
25°	693	693	694	700	701	319
35°	613	616	619	625	627	384
45°	516	520	525	530	532	398
55°	403	407	415	421	424	360
65°	277	282	291	303	308	274
75°	140	149	170	191	198	149
85°	24	45	77	102	111	31
90°	0	17	45	68	76	1
95°	0	4	24	43	49	0
105°	0	1	4	11	15	0
115°	1	1	1	2	3	0
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	778.9	778.9	778.9	778.9	778.9
2.5°	779.8	778.7	775.2	778.7	778.5
5°	777.2	775.8	772.3	776.0	776.0
7.5°	772.1	771.5	768.4	772.6	772.6
10°	766.0	765.9	763.3	767.9	768.1
12.5°	757.6	758.3	755.9	760.3	760.9
15°	747.7	749.0	746.9	751.2	751.0
17.5°	736.8	737.6	736.1	740.9	740.7
20°	723.4	724.4	723.3	728.2	728.8
22.5°	708.6	709.9	709.7	714.8	716.3
25°	692.8	693.3	694.1	699.9	701.0
27.5°	675.3	676.3	677.5	682.9	684.0
30°	656.2	657.7	659.2	664.7	666.2
32.5°	636.0	637.5	639.3	646.5	647.2
35°	613.3	616.0	618.6	624.8	627.4
37.5°	590.5	594.0	596.4	603.0	605.0
40°	566.5	569.9	573.8	580.8	582.1
42.5°	541.3	545.3	549.9	556.2	558.4
45°	516.0	520.5	524.8	529.9	532.5
47.5°	488.6	493.2	498.3	504.2	505.9
50°	460.3	465.6	471.2	476.7	479.6
52.5°	431.3	437.7	444.0	449.9	452.6
55°	402.7	407.4	415.0	421.0	423.8
57.5°	372.9	377.0	383.8	393.7	395.1
60°	342.6	346.3	353.3	361.4	364.7
62.5°	309.2	314.2	321.5	331.8	334.7
65°	276.7	281.5	291.2	302.8	307.6
67.5°	245.3	247.0	259.4	271.6	279.3
70°	208.2	214.5	229.0	243.8	249.7
72.5°	176.3	182.5	198.5	215.9	223.3
75°	140.1	148.7	170.4	190.8	197.9
77.5°	108.3	117.9	144.7	165.3	173.5
80°	75.6	90.5	119.7	142.9	151.8
82.5°	47.6	65.9	97.1	121.4	129.3
85°	24.2	44.8	76.9	101.7	110.7
87.5°	6.4	29.0	59.9	83.5	92.7
90°	0.2	16.7	45.4	68.1	76.4
92.5°	0.2	9.4	33.8	54.2	62.6
95°	0.2	4.4	23.5	42.6	49.2
97.5°	0.2	1.8	16.2	32.1	38.7
100°	0.2	0.9	10.3	23.3	29.0
102.5°	0.4	0.6	6.4	16.7	21.3
105°	0.4	0.6	3.9	11.4	15.2



TEST NUMBER: P580573

CATALOG NUMBER: HVSL4-4-LD4-1LO-35-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.6	0.6	0.7	3.1	4.6
115°	0.6	0.6	0.7	2.0	2.9
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°	0.4	0.6	2.2	7.7	10.5
110°	0.6	0.6	1.3	4.8	7.0



(END OF REPORT)