

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: P580472

Luminaire Tested: **HVSL4-2-LD4-1HI-40-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580472
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: HVSL4-2-LD4-1HI-40-UNV-O-EDD
Description: 2 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

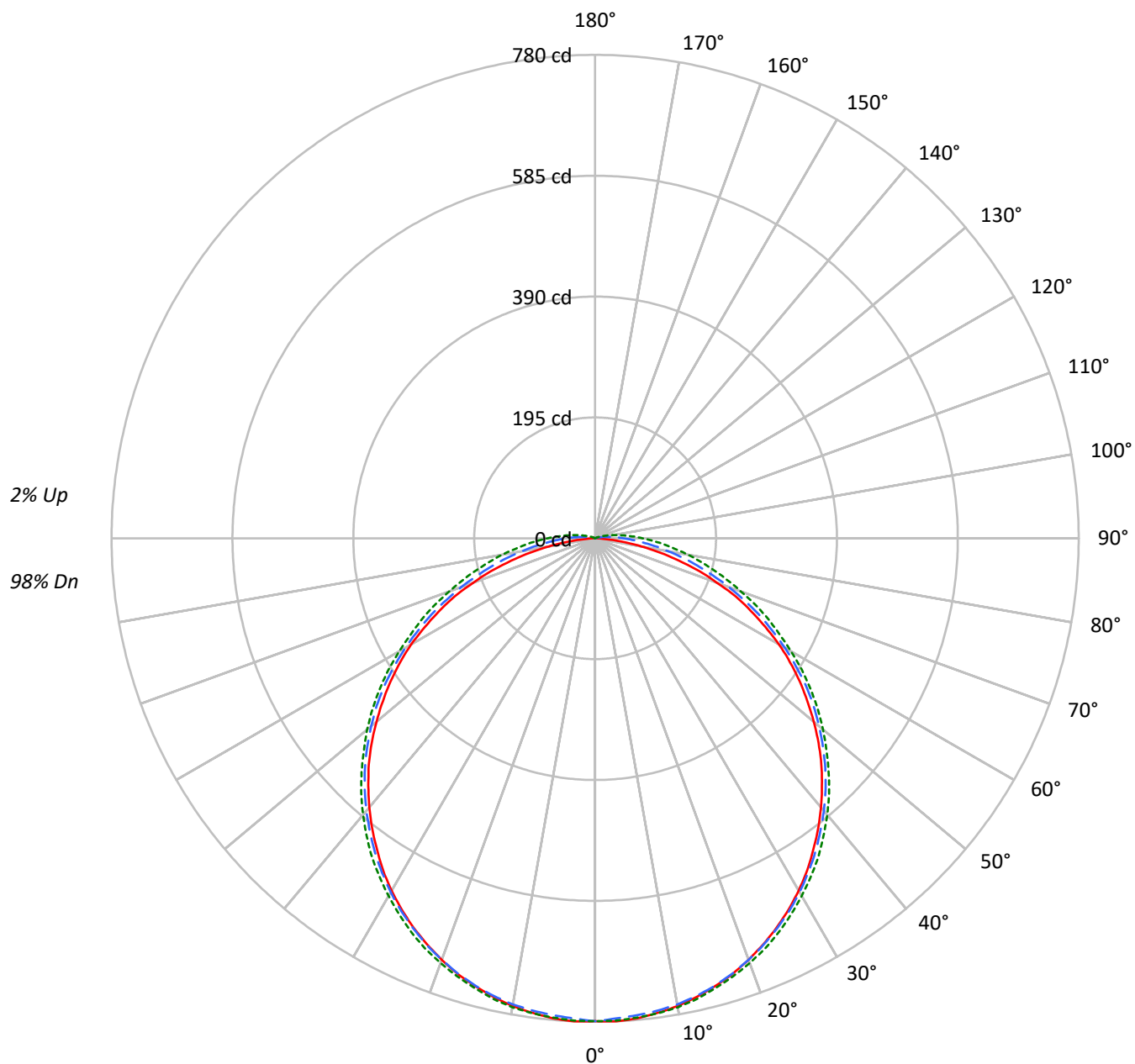
Lumens per Lamp: N/A
Luminaire Lumens: 2356.0 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.17')
CIE Type: Direct

Input Watts (W): 21.6
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

TEST NUMBER: P580472

CATALOG NUMBER: HVSL4-2-LD4-1HI-40-UNV-O-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P580472

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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°	12581	12581	12581
5°	12512	12086	12054
10°	12383	11670	11577
15°	12230	11248	11074
20°	12069	10810	10598
25°	11886	10375	10131
30°	11678	9930	9641
35°	11426	9465	9163
40°	11164	8987	8645
45°	10880	8486	8108
50°	10522	7938	7551
55°	10132	7353	6963
60°	9673	6656	6312
65°	8971	5905	5672
70°	8001	5069	4967
75°	6671	4188	4309
80°	4779	3335	3682
85°	2296	2496	3056



TEST NUMBER: P580472

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.7	3.1
10°-20°	211.5	9.0
20°-30°	320.9	13.6
30°-40°	388.1	16.5
40°-50°	404.9	17.2
50°-60°	370.2	15.7
60°-70°	288.6	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°	606.2	25.7
0°-40°	994.3	42.2
0°-60°	1769.4	75.1
0°-90°	2320.5	98.5
90°-120°	35.5	1.5
90°-150°	35.5	1.5
90°-180°	35.0	1.5
0°-180°	2356.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	779	779	779	779	779	
5°	778	776	773	776	776	74
15°	748	749	747	752	751	211
25°	693	694	694	700	701	319
35°	614	616	619	625	628	384
45°	516	521	525	530	533	398
55°	403	408	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	



TEST NUMBER: P580472

CATALOG NUMBER: HVSL4-2-LD4-1HI-40-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	779.2	779.2	779.2	779.2	779.2
2.5°	780.1	779.0	775.5	779.0	778.9
5°	777.6	776.1	772.6	776.3	776.3
7.5°	772.4	771.9	768.8	773.0	773.0
10°	766.4	766.2	763.6	768.2	768.4
12.5°	757.9	758.6	756.3	760.7	761.2
15°	748.0	749.3	747.3	751.5	751.3
17.5°	737.2	737.9	736.4	741.2	741.0
20°	723.7	724.7	723.6	728.5	729.1
22.5°	708.9	710.2	710.0	715.1	716.6
25°	693.1	693.6	694.4	700.2	701.3
27.5°	675.6	676.5	677.8	683.2	684.3
30°	656.5	658.0	659.5	665.0	666.4
32.5°	636.3	637.8	639.6	646.8	647.5
35°	613.5	616.3	618.9	625.1	627.7
37.5°	590.8	594.2	596.6	603.2	605.3
40°	566.7	570.2	574.0	581.0	582.3
42.5°	541.5	545.6	550.2	556.4	558.6
45°	516.2	520.8	525.0	530.1	532.7
47.5°	488.8	493.4	498.5	504.4	506.1
50°	460.5	465.8	471.4	476.9	479.8
52.5°	431.5	437.9	444.2	450.0	452.8
55°	402.8	407.6	415.1	421.2	424.0
57.5°	373.1	377.1	383.9	393.8	395.3
60°	342.8	346.4	353.4	361.5	364.8
62.5°	309.3	314.3	321.6	331.9	334.9
65°	276.8	281.6	291.3	302.9	307.7
67.5°	245.4	247.1	259.6	271.7	279.4
70°	208.3	214.6	229.1	243.9	249.8
72.5°	176.3	182.6	198.6	216.0	223.4
75°	140.2	148.8	170.5	190.9	198.0
77.5°	108.4	117.9	144.7	165.3	173.6
80°	75.7	90.6	119.8	142.9	151.9
82.5°	47.6	65.9	97.2	121.4	129.3
85°	24.2	44.8	77.0	101.8	110.8
87.5°	6.4	29.0	59.9	83.6	92.8
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	38.8
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: P580472

CATALOG NUMBER: HVSL4-2-LD4-1HI-40-UNV-O-EDD

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)