

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: P580471

Luminaire Tested: **HVSL4-2-LD4-1HI-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580471
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-90
Description: 2 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

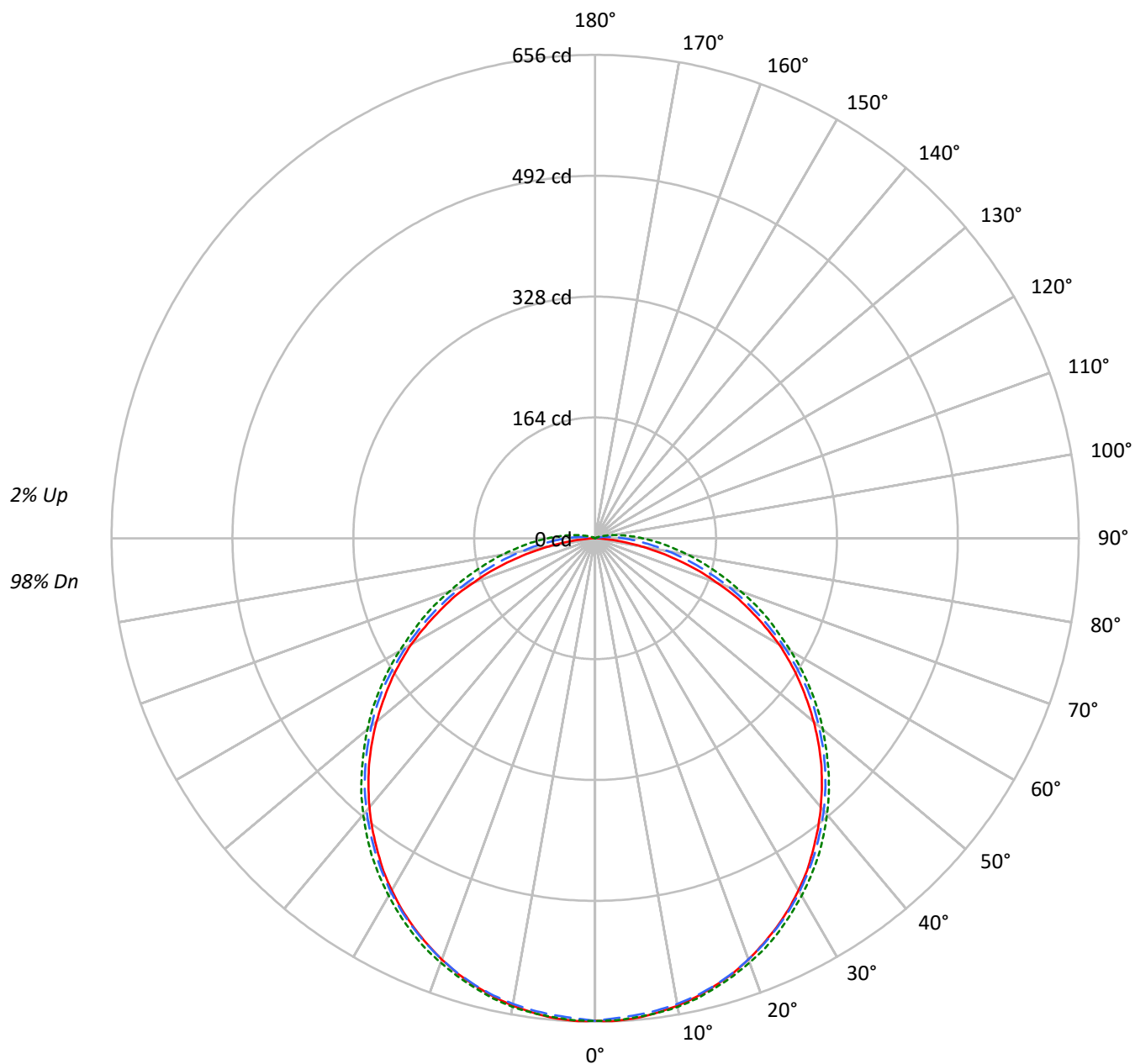
Lumens per Lamp: N/A
Luminaire Lumens: 1980.0 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.17')
CIE Type: Direct

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: P580471

CATALOG NUMBER: HVSL4-2-LD4-1HI-40-UNV-O-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P580471

CATALOG NUMBER: HVSL4-2-LD4-1HI-40-UNV-O-EDD-90

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°	10574	10574	10574
5°	10515	10157	10131
10°	10407	9807	9730
15°	10278	9452	9307
20°	10142	9084	8906
25°	9989	8718	8515
30°	9813	8345	8103
35°	9602	7954	7701
40°	9383	7553	7266
45°	9143	7132	6815
50°	8843	6670	6346
55°	8515	6180	5851
60°	8130	5594	5305
65°	7539	4962	4767
70°	6726	4259	4176
75°	5605	3520	3621
80°	4015	2804	3095
85°	1935	2097	2568



TEST NUMBER: P580471

CATALOG NUMBER: HVSL4-2-LD4-1HI-40-UNV-O-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.0	3.1
10°-20°	177.8	9.0
20°-30°	269.7	13.6
30°-40°	326.1	16.5
40°-50°	340.3	17.2
50°-60°	311.1	15.7
60°-70°	242.5	12.2
70°-80°	151.7	7.7
80°-90°	68.9	3.5
90°-100°	23.1	1.2
100°-110°	5.8	0.3
110°-120°	0.9	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°	509.4	25.7
0°-40°	835.6	42.2
0°-60°	1487.0	75.1
0°-90°	1950.2	98.5
90°-120°	29.8	1.5
90°-150°	29.8	1.5
90°-180°	30.0	1.5
0°-180°	1980.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	655	655	655	655	655	
5°	654	652	649	652	652	62
15°	629	630	628	632	631	177
25°	582	583	584	588	589	268
35°	516	518	520	525	528	323
45°	434	438	441	446	448	334
55°	338	343	349	354	356	302
65°	233	237	245	255	259	230
75°	118	125	143	160	166	126
85°	20	38	65	86	93	26
90°	0	14	38	57	64	1
95°	0	4	20	36	41	0
105°	0	0	3	10	13	0
115°	0	0	1	2	2	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: P580471

CATALOG NUMBER: HVSL4-2-LD4-1HI-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	654.9	654.9	654.9	654.9	654.9
2.5°	655.6	654.7	651.8	654.7	654.6
5°	653.5	652.2	649.3	652.4	652.4
7.5°	649.2	648.7	646.1	649.6	649.6
10°	644.1	643.9	641.7	645.6	645.8
12.5°	637.0	637.6	635.6	639.3	639.7
15°	628.6	629.7	628.0	631.6	631.4
17.5°	619.5	620.1	618.9	622.9	622.8
20°	608.2	609.0	608.1	612.3	612.7
22.5°	595.7	596.8	596.7	601.0	602.2
25°	582.5	582.9	583.5	588.5	589.4
27.5°	567.8	568.6	569.6	574.1	575.1
30°	551.7	553.0	554.2	558.8	560.1
32.5°	534.8	536.0	537.5	543.6	544.2
35°	515.6	517.9	520.1	525.3	527.5
37.5°	496.5	499.4	501.4	507.0	508.7
40°	476.3	479.2	482.4	488.3	489.4
42.5°	455.1	458.5	462.4	467.6	469.5
45°	433.8	437.7	441.2	445.5	447.7
47.5°	410.8	414.7	419.0	423.9	425.3
50°	387.0	391.5	396.1	400.8	403.2
52.5°	362.6	368.0	373.3	378.2	380.5
55°	338.5	342.6	348.9	354.0	356.3
57.5°	313.5	316.9	322.6	331.0	332.2
60°	288.1	291.2	297.0	303.8	306.6
62.5°	260.0	264.1	270.3	279.0	281.4
65°	232.6	236.7	244.8	254.6	258.6
67.5°	206.2	207.6	218.1	228.3	234.8
70°	175.1	180.3	192.5	205.0	210.0
72.5°	148.2	153.5	166.9	181.5	187.7
75°	117.8	125.0	143.3	160.4	166.4
77.5°	91.1	99.1	121.6	138.9	145.9
80°	63.6	76.1	100.7	120.1	127.7
82.5°	40.0	55.4	81.7	102.0	108.7
85°	20.4	37.7	64.7	85.5	93.1
87.5°	5.4	24.4	50.3	70.2	78.0
90°	0.2	14.0	38.1	57.3	64.2
92.5°	0.2	7.9	28.4	45.5	52.6
95°	0.2	3.7	19.8	35.8	41.4
97.5°	0.2	1.5	13.6	27.0	32.6
100°	0.2	0.8	8.6	19.6	24.4
102.5°	0.3	0.5	5.4	14.0	17.9
105°	0.3	0.5	3.2	9.6	12.8



TEST NUMBER: P580471

CATALOG NUMBER: HVSL4-2-LD4-1HI-40-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	0.5	0.6	2.6	3.9
115°	0.5	0.5	0.6	1.7	2.5
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°	0.3	0.5	1.9	6.5	8.8
110°	0.5	0.5	1.1	4.0	5.9



(END OF REPORT)