

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: P580201

Luminaire Tested: **HVSL12-4-LD4-1STD-50-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580201
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: HVSL12-4-LD4-1STD-50-UNV-O-EDD-90
Description: 4 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

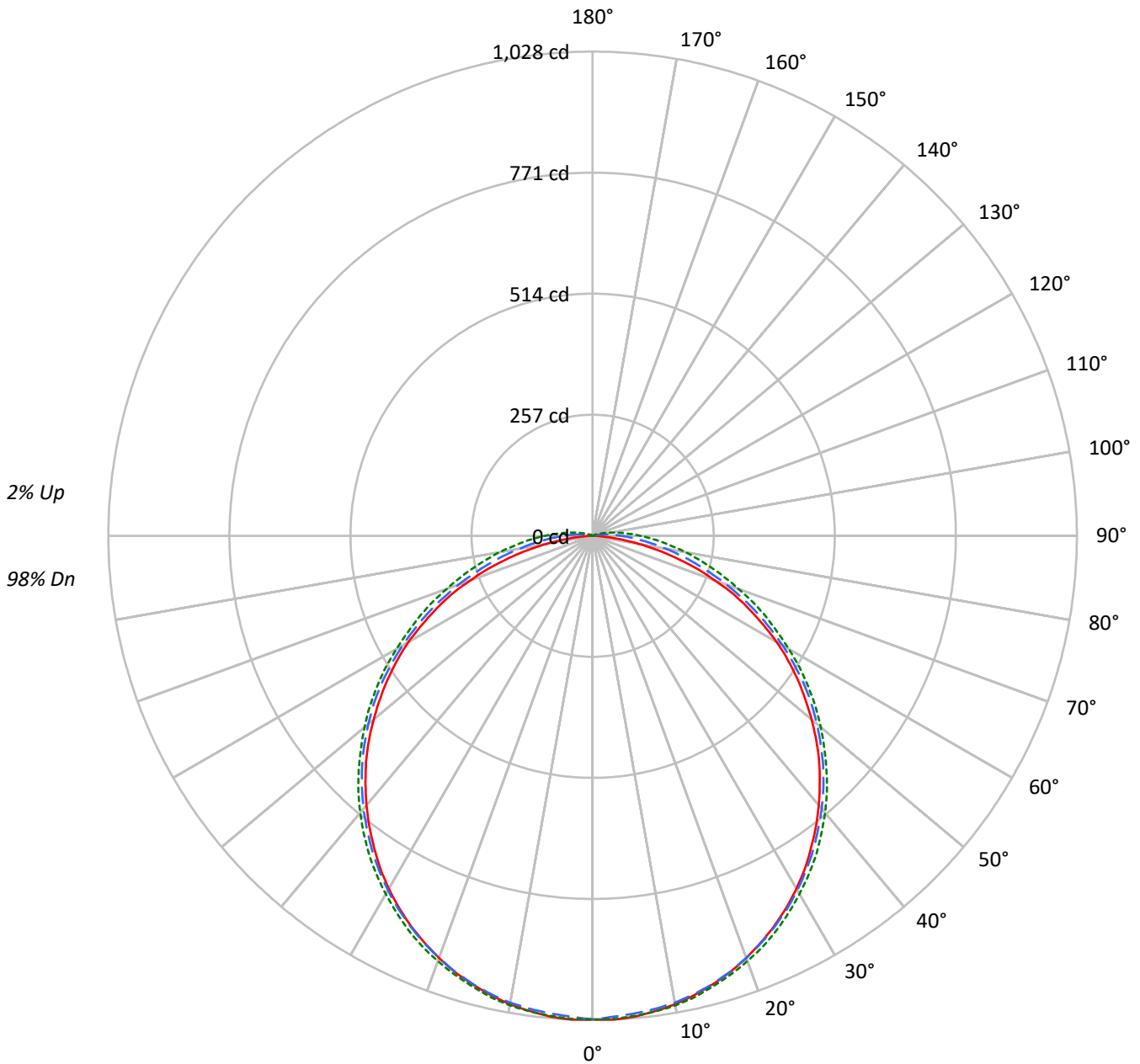
Lumens per Lamp: N/A
Luminaire Lumens: 3105.0 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 34.5
Input Voltage (V): NR
Input Current (A_{in}): 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: P580201

CATALOG NUMBER: HVSL12-4-LD4-1STD-50-UNV-O-EDD-90

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
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°	2763	2763	2763
5°	2758	2715	2724
10°	2740	2680	2688
15°	2716	2639	2640
20°	2691	2592	2594
25°	2660	2542	2546
30°	2625	2489	2490
35°	2581	2429	2433
40°	2535	2365	2365
45°	2485	2295	2290
50°	2421	2212	2208
55°	2351	2121	2117
60°	2267	1997	2008
65°	2132	1858	1902
70°	1938	1691	1776
75°	1662	1507	1673
80°	1250	1332	1595
85°	669	1166	1552



TEST NUMBER: P580201

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.2	3.1
10°-20°	278.8	9.0
20°-30°	423.0	13.6
30°-40°	511.4	16.5
40°-50°	533.7	17.2
50°-60°	487.9	15.7
60°-70°	380.4	12.2
70°-80°	237.9	7.7
80°-90°	108.1	3.5
90°-100°	36.2	1.2
100°-110°	9.1	0.3
110°-120°	1.4	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°	798.9	25.7
0°-40°	1310.3	42.2
0°-60°	2331.9	75.1
0°-90°	3058.3	98.5
90°-120°	46.7	1.5
90°-150°	46.7	1.5
90°-180°	47.0	1.5
0°-180°	3105.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1027	1027	1027	1027	1027	
5°	1025	1023	1018	1023	1023	97
15°	986	988	985	990	990	278
25°	913	914	915	923	924	421
35°	809	812	816	824	827	506
45°	680	686	692	699	702	524
55°	531	537	547	555	559	474
65°	365	371	384	399	406	361
75°	185	196	225	252	261	197
85°	32	59	101	134	146	40
90°	0	22	60	90	101	1
95°	0	6	31	56	65	0
105°	0	1	5	15	20	1
115°	1	1	1	3	4	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	0



TEST NUMBER: P580201

CATALOG NUMBER: HVSL12-4-LD4-1STD-50-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1026.9	1026.9	1026.9	1026.9	1026.9
2.5°	1028.2	1026.7	1022.1	1026.7	1026.5
5°	1024.8	1022.8	1018.2	1023.1	1023.1
7.5°	1018.0	1017.3	1013.1	1018.7	1018.7
10°	1010.0	1009.8	1006.4	1012.4	1012.7
12.5°	998.9	999.8	996.7	1002.5	1003.2
15°	985.8	987.5	984.8	990.4	990.1
17.5°	971.5	972.5	970.5	976.8	976.6
20°	953.8	955.0	953.6	960.1	960.9
22.5°	934.2	935.9	935.7	942.5	944.4
25°	913.4	914.1	915.1	922.8	924.3
27.5°	890.4	891.6	893.3	900.3	901.8
30°	865.2	867.2	869.1	876.4	878.3
32.5°	838.6	840.5	843.0	852.4	853.4
35°	808.6	812.2	815.6	823.8	827.2
37.5°	778.6	783.2	786.3	795.0	797.7
40°	746.8	751.4	756.5	765.7	767.4
42.5°	713.7	719.0	725.1	733.3	736.2
45°	680.3	686.3	691.9	698.7	702.1
47.5°	644.2	650.3	657.0	664.8	667.0
50°	606.9	613.9	621.2	628.5	632.3
52.5°	568.7	577.1	585.4	593.1	596.8
55°	530.9	537.2	547.1	555.1	558.7
57.5°	491.7	497.0	506.0	519.0	521.0
60°	451.7	456.6	465.8	476.4	480.8
62.5°	407.7	414.2	423.9	437.5	441.3
65°	364.8	371.1	384.0	399.2	405.5
67.5°	323.4	325.6	342.1	358.1	368.2
70°	274.5	282.8	301.9	321.5	329.2
72.5°	232.4	240.6	261.7	284.7	294.4
75°	184.7	196.1	224.7	251.5	261.0
77.5°	142.8	155.4	190.8	217.9	228.8
80°	99.7	119.4	157.8	188.3	200.2
82.5°	62.7	86.9	128.1	160.0	170.4
85°	32.0	59.1	101.4	134.1	146.0
87.5°	8.5	38.3	78.9	110.2	122.3
90°	0.2	22.0	59.8	89.8	100.7
92.5°	0.2	12.3	44.5	71.4	82.6
95°	0.2	5.8	31.0	56.2	64.9
97.5°	0.2	2.4	21.3	42.4	51.1
100°	0.2	1.2	13.6	30.7	38.3
102.5°	0.5	0.7	8.5	22.0	28.1
105°	0.5	0.7	5.1	15.0	20.1



TEST NUMBER: P580201

CATALOG NUMBER: HVSL12-4-LD4-1STD-50-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.7	0.7	1.0	4.1	6.1
115°	0.7	0.7	1.0	2.7	3.9
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°	0.5	0.7	2.9	10.2	13.8
110°	0.7	0.7	1.7	6.3	9.2



(END OF REPORT)