

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: P580433

Luminaire Tested: **HVSL4-1-LD4-1LO-50-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580433
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: HVSL4-1-LD4-1LO-50-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

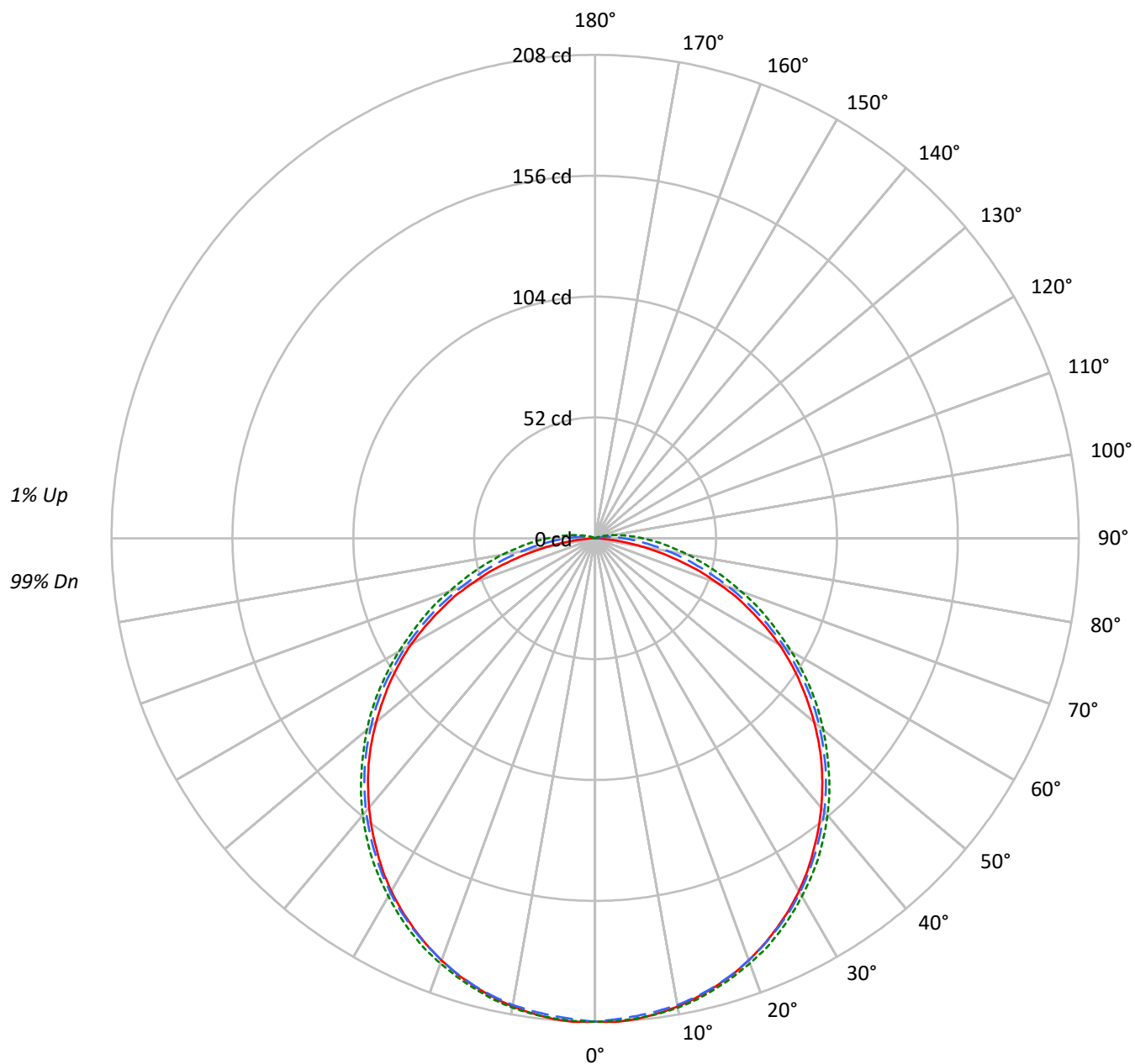
Lumens per Lamp: N/A
Luminaire Lumens: 629.0 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 5.8
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			99
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°	6717	6717	6717
5°	6633	6422	6438
10°	6517	6173	6180
15°	6391	5921	5914
20°	6259	5667	5657
25°	6116	5415	5409
30°	5963	5161	5147
35°	5782	4896	4893
40°	5595	4630	4617
45°	5394	4351	4329
50°	5151	4046	4032
55°	4888	3728	3718
60°	4585	3356	3371
65°	4160	2956	3027
70°	3600	2517	2653
75°	2877	2057	2303
80°	1931	1620	1968
85°	829	1189	1633



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.7	3.1
10°-20°	56.5	9.0
20°-30°	85.7	13.6
30°-40°	103.6	16.5
40°-50°	108.1	17.2
50°-60°	98.8	15.7
60°-70°	77.1	12.3
70°-80°	48.2	7.7
80°-90°	21.9	3.5
90°-100°	7.3	1.2
100°-110°	1.8	0.3
110°-120°	0.3	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°	161.8	25.7
0°-40°	265.5	42.2
0°-60°	472.4	75.1
0°-90°	619.5	98.5
90°-120°	9.4	1.5
90°-150°	9.4	1.5
90°-180°	9.0	1.4
0°-180°	629.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	208	208	208	208	208	
5°	208	207	206	207	207	20
15°	200	200	200	201	201	56
25°	185	185	185	187	187	85
35°	164	164	165	167	168	103
45°	138	139	140	142	142	106
55°	108	109	111	112	113	96
65°	74	75	78	81	82	73
75°	37	40	46	51	53	40
85°	6	12	20	27	30	8
90°	0	4	12	18	20	0
95°	0	1	6	11	13	0
105°	0	0	1	3	4	0
115°	0	0	0	0	1	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: P580433

CATALOG NUMBER: HVSL4-1-LD4-1LO-50-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	208.0	208.0	208.0	208.0	208.0
2.5°	208.3	208.0	207.1	208.0	207.9
5°	207.6	207.2	206.3	207.3	207.3
7.5°	206.2	206.1	205.2	206.4	206.4
10°	204.6	204.6	203.9	205.1	205.1
12.5°	202.3	202.5	201.9	203.1	203.2
15°	199.7	200.0	199.5	200.6	200.6
17.5°	196.8	197.0	196.6	197.9	197.8
20°	193.2	193.5	193.2	194.5	194.6
22.5°	189.3	189.6	189.5	190.9	191.3
25°	185.0	185.2	185.4	186.9	187.2
27.5°	180.4	180.6	181.0	182.4	182.7
30°	175.3	175.7	176.1	177.5	177.9
32.5°	169.9	170.3	170.8	172.7	172.9
35°	163.8	164.5	165.2	166.9	167.6
37.5°	157.7	158.7	159.3	161.1	161.6
40°	151.3	152.2	153.3	155.1	155.5
42.5°	144.6	145.7	146.9	148.5	149.1
45°	137.8	139.0	140.2	141.5	142.2
47.5°	130.5	131.7	133.1	134.7	135.1
50°	122.9	124.4	125.8	127.3	128.1
52.5°	115.2	116.9	118.6	120.2	120.9
55°	107.5	108.8	110.8	112.5	113.2
57.5°	99.6	100.7	102.5	105.1	105.5
60°	91.5	92.5	94.4	96.5	97.4
62.5°	82.6	83.9	85.9	88.6	89.4
65°	73.9	75.2	77.8	80.9	82.1
67.5°	65.5	66.0	69.3	72.5	74.6
70°	55.6	57.3	61.2	65.1	66.7
72.5°	47.1	48.7	53.0	57.7	59.6
75°	37.4	39.7	45.5	51.0	52.9
77.5°	28.9	31.5	38.6	44.1	46.3
80°	20.2	24.2	32.0	38.2	40.6
82.5°	12.7	17.6	25.9	32.4	34.5
85°	6.5	12.0	20.5	27.2	29.6
87.5°	1.7	7.7	16.0	22.3	24.8
90°	0.0	4.5	12.1	18.2	20.4
92.5°	0.0	2.5	9.0	14.5	16.7
95°	0.0	1.2	6.3	11.4	13.1
97.5°	0.0	0.5	4.3	8.6	10.3
100°	0.0	0.2	2.7	6.2	7.7
102.5°	0.1	0.1	1.7	4.5	5.7
105°	0.1	0.1	1.0	3.0	4.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.1	0.1	0.2	0.8	1.2
115°	0.1	0.1	0.2	0.5	0.8
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°	0.1	0.1	0.6	2.1	2.8
110°	0.1	0.1	0.3	1.3	1.9



(END OF REPORT)