

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: P580435

Luminaire Tested: **HVSL4-1-LD4-1STD-30-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580435
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-LD4-1STD-30-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

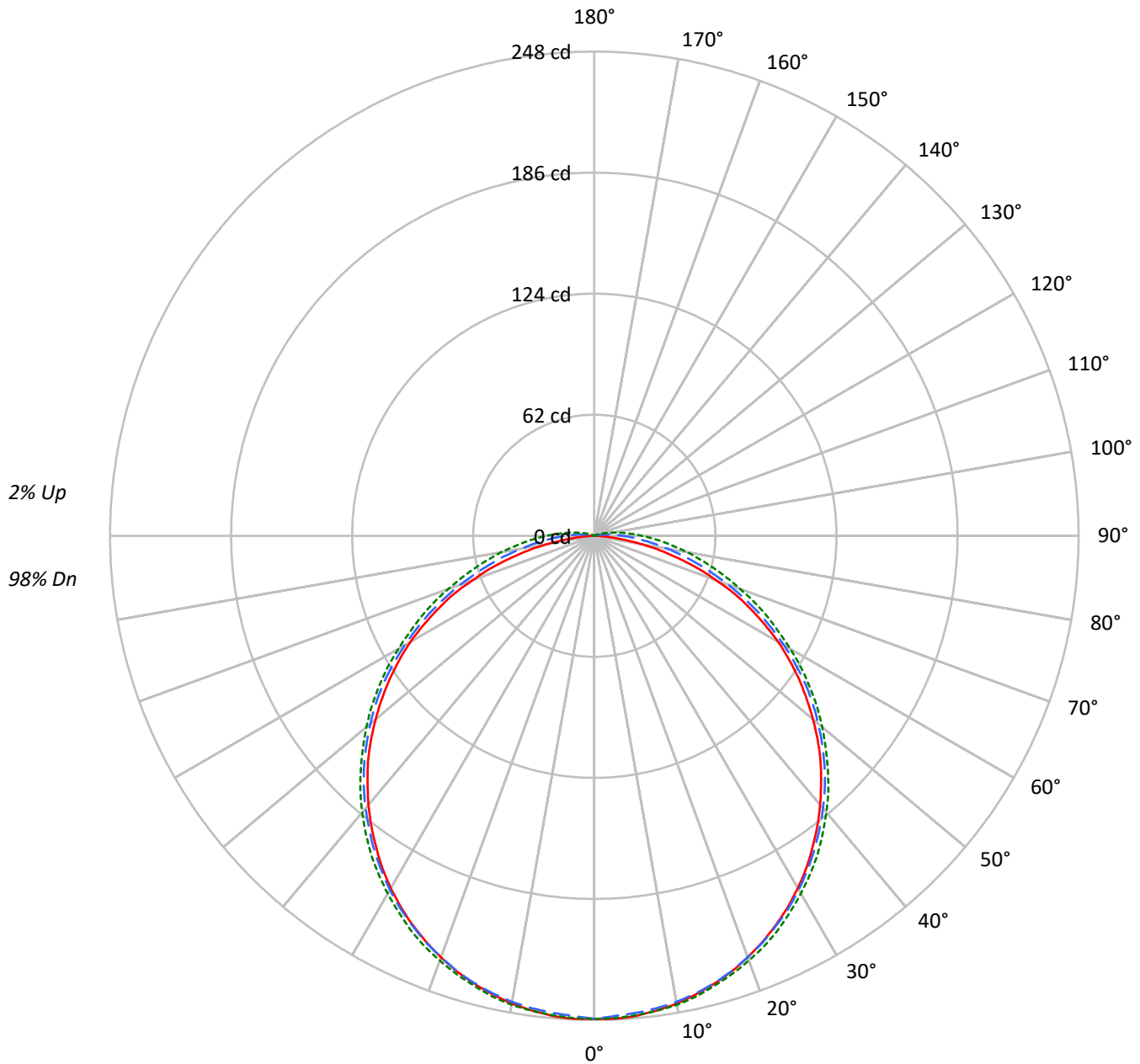
Lumens per Lamp: N/A
Luminaire Lumens: 748.0 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 8.2
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: P580435

CATALOG NUMBER: HVSL4-1-LD4-1STD-30-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°	7989	7989	7989
5°	7888	7636	7655
10°	7750	7338	7352
15°	7600	7040	7031
20°	7445	6737	6730
25°	7273	6437	6434
30°	7088	6137	6122
35°	6877	5824	5819
40°	6653	5503	5490
45°	6415	5173	5148
50°	6127	4812	4794
55°	5816	4434	4421
60°	5452	3989	4007
65°	4948	3514	3602
70°	4280	2990	3154
75°	3423	2446	2738
80°	2294	1923	2337
85°	982	1415	1942



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.4	3.1
10°-20°	67.2	9.0
20°-30°	101.9	13.6
30°-40°	123.2	16.5
40°-50°	128.6	17.2
50°-60°	117.5	15.7
60°-70°	91.6	12.2
70°-80°	57.3	7.7
80°-90°	26.0	3.5
90°-100°	8.7	1.2
100°-110°	2.2	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°	192.5	25.7
0°-40°	315.7	42.2
0°-60°	561.8	75.1
0°-90°	736.7	98.5
90°-120°	11.3	1.5
90°-150°	11.3	1.5
90°-180°	11.0	1.5
0°-180°	748.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	247	247	247	247	247	
5°	247	246	245	246	246	23
15°	238	238	237	239	238	67
25°	220	220	220	222	223	101
35°	195	196	196	198	199	122
45°	164	165	167	168	169	126
55°	128	129	132	134	135	114
65°	88	89	92	96	98	87
75°	44	47	54	61	63	47
85°	8	14	24	32	35	10
90°	0	5	14	22	24	0
95°	0	1	8	14	16	0
105°	0	0	1	4	5	0
115°	0	0	0	1	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	247.4	247.4	247.4	247.4	247.4
2.5°	247.7	247.3	246.2	247.3	247.3
5°	246.9	246.4	245.3	246.5	246.5
7.5°	245.2	245.1	244.1	245.4	245.4
10°	243.3	243.3	242.4	243.9	244.0
12.5°	240.6	240.9	240.1	241.5	241.7
15°	237.5	237.9	237.2	238.6	238.5
17.5°	234.0	234.3	233.8	235.3	235.3
20°	229.8	230.1	229.7	231.3	231.5
22.5°	225.1	225.5	225.4	227.0	227.5
25°	220.0	220.2	220.4	222.3	222.7
27.5°	214.5	214.8	215.2	216.9	217.2
30°	208.4	208.9	209.4	211.1	211.6
32.5°	202.0	202.5	203.1	205.3	205.6
35°	194.8	195.7	196.5	198.5	199.3
37.5°	187.6	188.7	189.4	191.5	192.2
40°	179.9	181.0	182.2	184.5	184.9
42.5°	171.9	173.2	174.7	176.7	177.4
45°	163.9	165.3	166.7	168.3	169.1
47.5°	155.2	156.6	158.3	160.1	160.7
50°	146.2	147.9	149.6	151.4	152.3
52.5°	137.0	139.0	141.0	142.9	143.8
55°	127.9	129.4	131.8	133.7	134.6
57.5°	118.4	119.7	121.9	125.0	125.5
60°	108.8	110.0	112.2	114.8	115.8
62.5°	98.2	99.8	102.1	105.4	106.3
65°	87.9	89.4	92.5	96.2	97.7
67.5°	77.9	78.4	82.4	86.3	88.7
70°	66.1	68.1	72.7	77.4	79.3
72.5°	56.0	58.0	63.0	68.6	70.9
75°	44.5	47.2	54.1	60.6	62.9
77.5°	34.4	37.4	46.0	52.5	55.1
80°	24.0	28.8	38.0	45.4	48.2
82.5°	15.1	20.9	30.9	38.5	41.1
85°	7.7	14.2	24.4	32.3	35.2
87.5°	2.0	9.2	19.0	26.5	29.5
90°	0.1	5.3	14.4	21.6	24.3
92.5°	0.1	3.0	10.7	17.2	19.9
95°	0.1	1.4	7.5	13.5	15.6
97.5°	0.1	0.6	5.1	10.2	12.3
100°	0.1	0.3	3.3	7.4	9.2
102.5°	0.1	0.2	2.0	5.3	6.8
105°	0.1	0.2	1.2	3.6	4.8



TEST NUMBER: P580435

CATALOG NUMBER: HVSL4-1-LD4-1STD-30-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.2	0.2	0.2	1.0	1.5
115°	0.2	0.2	0.2	0.6	0.9
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°	0.1	0.2	0.7	2.4	3.3
110°	0.2	0.2	0.4	1.5	2.2



(END OF REPORT)