

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: P580431

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

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580431
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-40-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

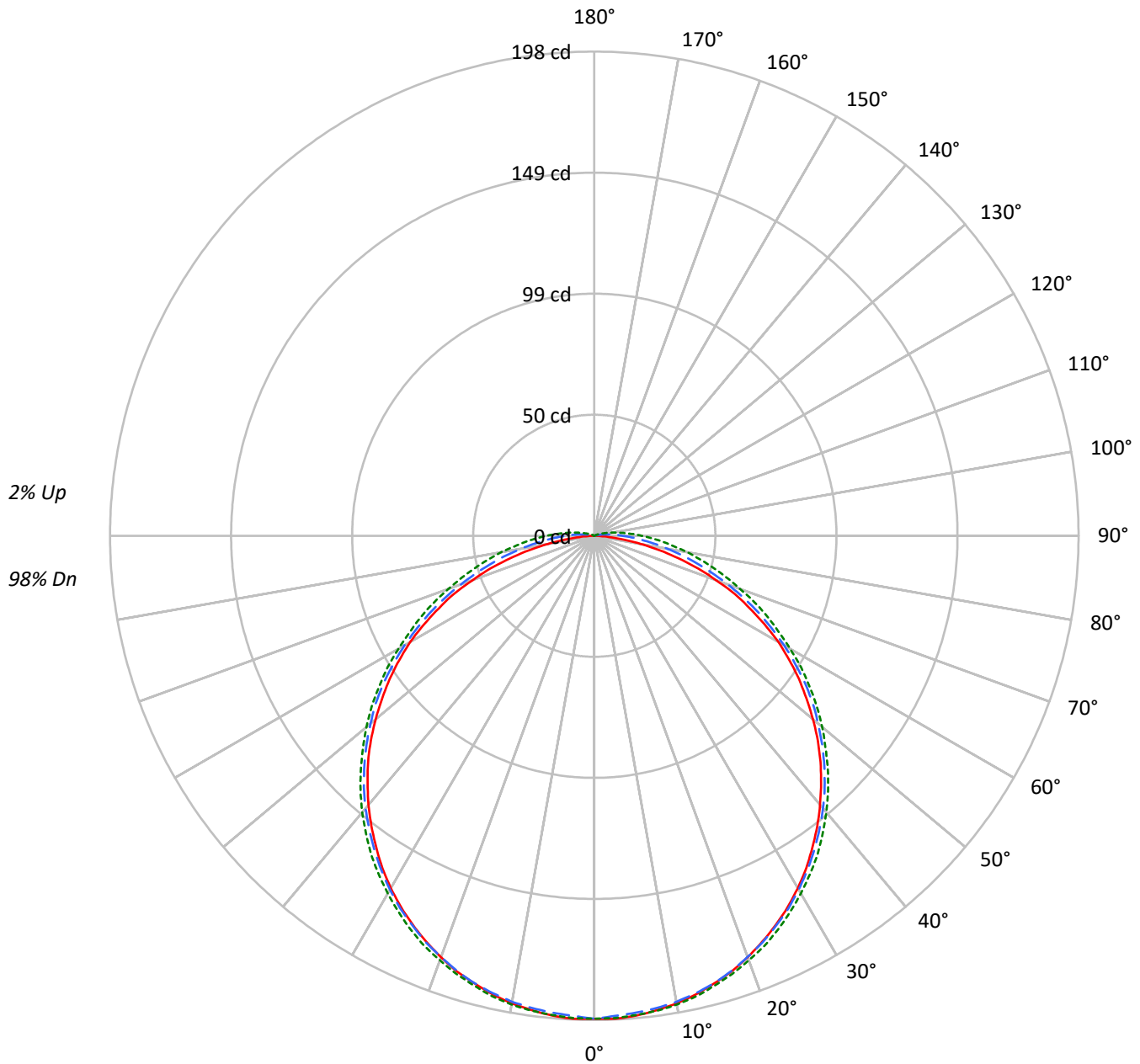
Lumens per Lamp: N/A
Luminaire Lumens: 597.0 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

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
RCR																				
0	119	119	119	119	116	116	116	116		110	110	110		105	105	105		101	101	101
1	108	102	98	94	105	100	96	92		95	92	89		91	88	86		87	85	83
2	98	89	82	76	95	87	80	75		83	77	73		79	75	71		76	72	69
3	89	78	69	63	86	76	68	62		73	66	61		70	64	59		67	62	58
4	81	69	60	53	79	67	59	52		65	57	52		62	56	51		60	54	50
5	75	61	52	45	72	60	52	45		58	50	44		56	49	44		54	48	43
6	69	55	46	40	67	54	46	39		52	45	39		50	44	38		49	43	38
7	64	50	41	35	62	49	41	35		47	40	34		46	39	34		44	38	34
8	59	46	37	31	58	45	37	31		43	36	31		42	35	30		41	35	30
9	55	42	34	28	54	41	33	28		40	33	28		39	32	27		38	32	27
10	52	39	31	25	51	38	30	25		37	30	25		36	29	25		35	29	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6378	6378	6378
5°	6294	6095	6109
10°	6186	5858	5867
15°	6064	5622	5613
20°	5942	5376	5370
25°	5805	5138	5134
30°	5660	4898	4887
35°	5489	4647	4645
40°	5310	4395	4383
45°	5120	4128	4110
50°	4891	3840	3828
55°	4643	3539	3527
60°	4355	3185	3198
65°	3946	2804	2876
70°	3419	2386	2517
75°	2730	1953	2185
80°	1835	1534	1866
85°	778	1131	1550



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.7	3.1
10°-20°	53.6	9.0
20°-30°	81.3	13.6
30°-40°	98.3	16.5
40°-50°	102.6	17.2
50°-60°	93.8	15.7
60°-70°	73.1	12.3
70°-80°	45.7	7.7
80°-90°	20.8	3.5
90°-100°	7.0	1.2
100°-110°	1.7	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°	153.6	25.7
0°-40°	251.9	42.2
0°-60°	448.4	75.1
0°-90°	588.0	98.5
90°-120°	9.0	1.5
90°-150°	9.0	1.5
90°-180°	9.0	1.5
0°-180°	597.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	198	198	198	198	198	
5°	197	197	196	197	197	19
15°	190	190	189	190	190	54
25°	176	176	176	177	178	81
35°	156	156	157	158	159	97
45°	131	132	133	134	135	101
55°	102	103	105	107	107	91
65°	70	71	74	77	78	69
75°	36	38	43	48	50	38
85°	6	11	20	26	28	8
90°	0	4	12	17	19	0
95°	0	1	6	11	12	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	197.5	197.5	197.5	197.5	197.5
2.5°	197.7	197.4	196.5	197.4	197.4
5°	197.0	196.7	195.8	196.7	196.7
7.5°	195.7	195.6	194.8	195.9	195.9
10°	194.2	194.1	193.5	194.7	194.7
12.5°	192.1	192.2	191.6	192.8	192.9
15°	189.5	189.9	189.4	190.4	190.4
17.5°	186.8	187.0	186.6	187.8	187.8
20°	183.4	183.6	183.3	184.6	184.7
22.5°	179.6	179.9	179.9	181.2	181.6
25°	175.6	175.8	175.9	177.4	177.7
27.5°	171.2	171.4	171.8	173.1	173.4
30°	166.4	166.7	167.1	168.5	168.9
32.5°	161.2	161.6	162.1	163.9	164.1
35°	155.5	156.2	156.8	158.4	159.1
37.5°	149.7	150.6	151.2	152.9	153.4
40°	143.6	144.5	145.5	147.2	147.6
42.5°	137.2	138.2	139.4	141.0	141.5
45°	130.8	132.0	133.0	134.3	135.0
47.5°	123.9	125.0	126.3	127.8	128.2
50°	116.7	118.0	119.4	120.8	121.6
52.5°	109.3	111.0	112.6	114.0	114.7
55°	102.1	103.3	105.2	106.7	107.4
57.5°	94.5	95.6	97.3	99.8	100.2
60°	86.9	87.8	89.6	91.6	92.4
62.5°	78.4	79.6	81.5	84.1	84.9
65°	70.1	71.4	73.8	76.8	78.0
67.5°	62.2	62.6	65.8	68.8	70.8
70°	52.8	54.4	58.0	61.8	63.3
72.5°	44.7	46.3	50.3	54.7	56.6
75°	35.5	37.7	43.2	48.4	50.2
77.5°	27.5	29.9	36.7	41.9	44.0
80°	19.2	22.9	30.3	36.2	38.5
82.5°	12.1	16.7	24.6	30.8	32.8
85°	6.1	11.4	19.5	25.8	28.1
87.5°	1.6	7.4	15.2	21.2	23.5
90°	0.0	4.2	11.5	17.3	19.4
92.5°	0.0	2.4	8.6	13.7	15.9
95°	0.0	1.1	6.0	10.8	12.5
97.5°	0.0	0.5	4.1	8.1	9.8
100°	0.0	0.2	2.6	5.9	7.4
102.5°	0.1	0.1	1.6	4.2	5.4
105°	0.1	0.1	1.0	2.9	3.9



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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	0.7
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	2.0	2.7
110°	0.1	0.1	0.3	1.2	1.8



(END OF REPORT)