

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: P580456

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

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580456
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-LD4-2LO-40-UNV-O-EDD
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

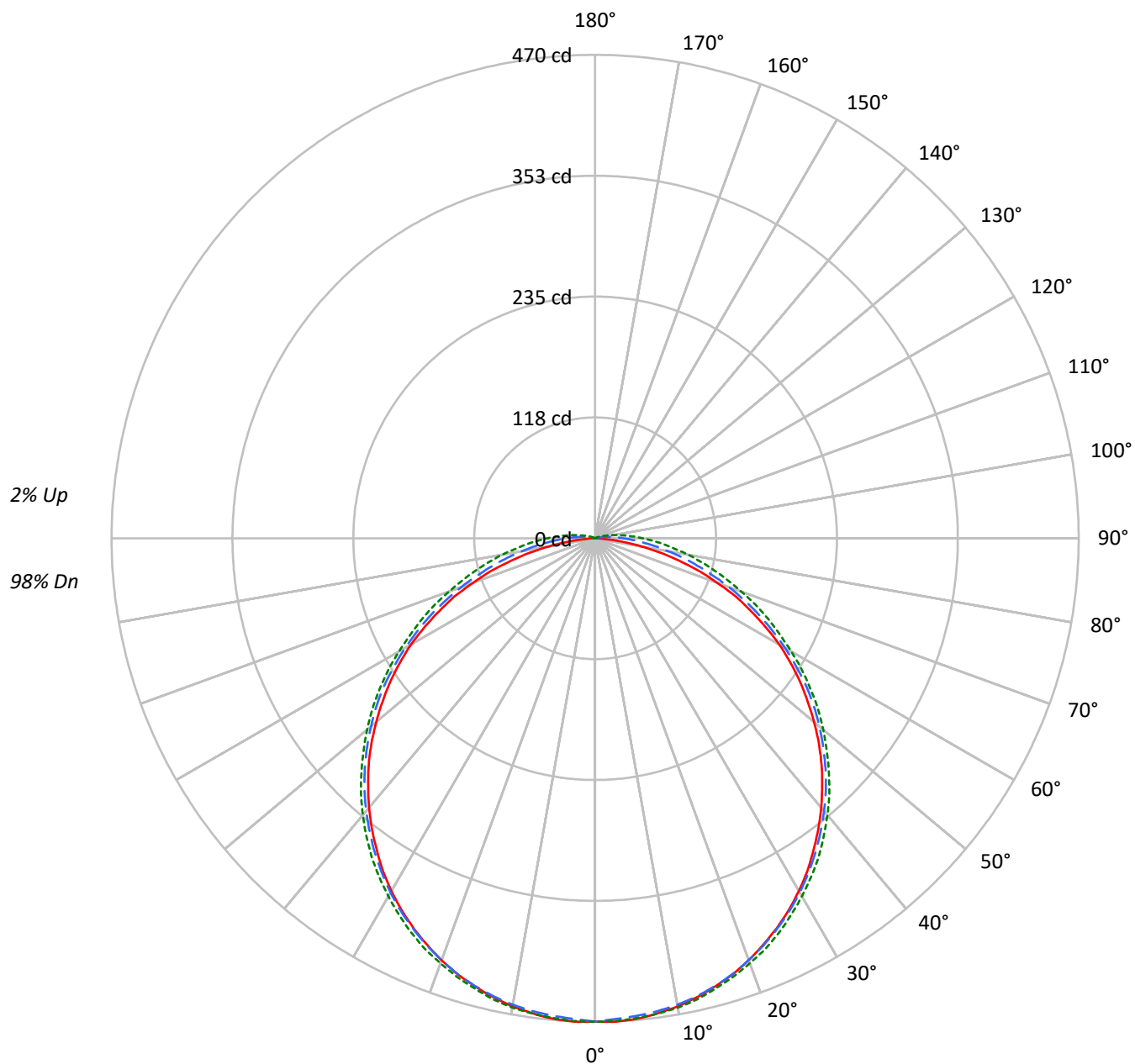
Lumens per Lamp: N/A
Luminaire Lumens: 1421.0 lumens
Efficiency: N/A
Efficacy: 122.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 11.6
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

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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			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°	15177	15177	15177
5°	14984	14507	14541
10°	14723	13944	13964
15°	14436	13377	13358
20°	14142	12800	12783
25°	13819	12232	12221
30°	13469	11656	11631
35°	13061	11063	11054
40°	12640	10457	10428
45°	12185	9826	9781
50°	11643	9144	9109
55°	11050	8424	8398
60°	10359	7579	7614
65°	9400	6675	6843
70°	8133	5684	5993
75°	6499	4648	5197
80°	4359	3654	4440
85°	1862	2691	3685



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.5	3.1
10°-20°	127.6	9.0
20°-30°	193.6	13.6
30°-40°	234.1	16.5
40°-50°	244.2	17.2
50°-60°	223.3	15.7
60°-70°	174.1	12.2
70°-80°	108.9	7.7
80°-90°	49.5	3.5
90°-100°	16.6	1.2
100°-110°	4.2	0.3
110°-120°	0.6	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°	365.6	25.7
0°-40°	599.7	42.2
0°-60°	1067.2	75.1
0°-90°	1399.6	98.5
90°-120°	21.4	1.5
90°-150°	21.4	1.5
90°-180°	21.0	1.5
0°-180°	1421.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	469	468	466	468	468	45
15°	451	452	451	453	453	127
25°	418	418	419	422	423	193
35°	370	372	373	377	379	232
45°	311	314	317	320	321	240
55°	243	246	250	254	256	217
65°	167	170	176	183	186	165
75°	84	90	103	115	119	90
85°	15	27	46	61	67	18
90°	0	10	27	41	46	1
95°	0	3	14	26	30	0
105°	0	0	2	7	9	0
115°	0	0	0	1	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	470.0	470.0	470.0	470.0	470.0
2.5°	470.5	469.9	467.8	469.9	469.8
5°	469.0	468.1	466.0	468.2	468.2
7.5°	465.9	465.5	463.7	466.2	466.2
10°	462.2	462.1	460.6	463.3	463.4
12.5°	457.1	457.6	456.1	458.8	459.1
15°	451.1	451.9	450.7	453.3	453.1
17.5°	444.6	445.1	444.2	447.0	446.9
20°	436.5	437.1	436.4	439.4	439.7
22.5°	427.5	428.3	428.2	431.3	432.2
25°	418.0	418.4	418.8	422.3	423.0
27.5°	407.5	408.0	408.8	412.0	412.7
30°	396.0	396.9	397.7	401.1	402.0
32.5°	383.8	384.7	385.8	390.1	390.5
35°	370.0	371.7	373.3	377.0	378.6
37.5°	356.3	358.4	359.9	363.8	365.1
40°	341.8	343.9	346.2	350.4	351.2
42.5°	326.6	329.1	331.8	335.6	336.9
45°	311.3	314.1	316.6	319.7	321.3
47.5°	294.8	297.6	300.7	304.2	305.2
50°	277.8	281.0	284.3	287.6	289.4
52.5°	260.3	264.1	267.9	271.4	273.1
55°	243.0	245.8	250.4	254.0	255.7
57.5°	225.0	227.5	231.6	237.5	238.4
60°	206.7	209.0	213.2	218.0	220.0
62.5°	186.6	189.6	194.0	200.2	202.0
65°	167.0	169.8	175.7	182.7	185.6
67.5°	148.0	149.0	156.5	163.9	168.5
70°	125.6	129.4	138.2	147.1	150.7
72.5°	106.4	110.1	119.8	130.3	134.7
75°	84.5	89.7	102.8	115.1	119.4
77.5°	65.4	71.1	87.3	99.7	104.7
80°	45.6	54.6	72.2	86.2	91.6
82.5°	28.7	39.8	58.6	73.2	78.0
85°	14.6	27.0	46.4	61.4	66.8
87.5°	3.9	17.5	36.1	50.4	56.0
90°	0.1	10.1	27.4	41.1	46.1
92.5°	0.1	5.7	20.4	32.7	37.8
95°	0.1	2.7	14.2	25.7	29.7
97.5°	0.1	1.1	9.7	19.4	23.4
100°	0.1	0.6	6.2	14.1	17.5
102.5°	0.2	0.3	3.9	10.1	12.9
105°	0.2	0.3	2.3	6.9	9.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.3	0.3	0.4	1.9	2.8
115°	0.3	0.3	0.4	1.2	1.8
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°	0.2	0.3	1.3	4.7	6.3
110°	0.3	0.3	0.8	2.9	4.2



(END OF REPORT)