

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: P580461

Luminaire Tested: **HVSL4-1-LD4-2STD-35-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580461
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-LD4-2STD-35-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

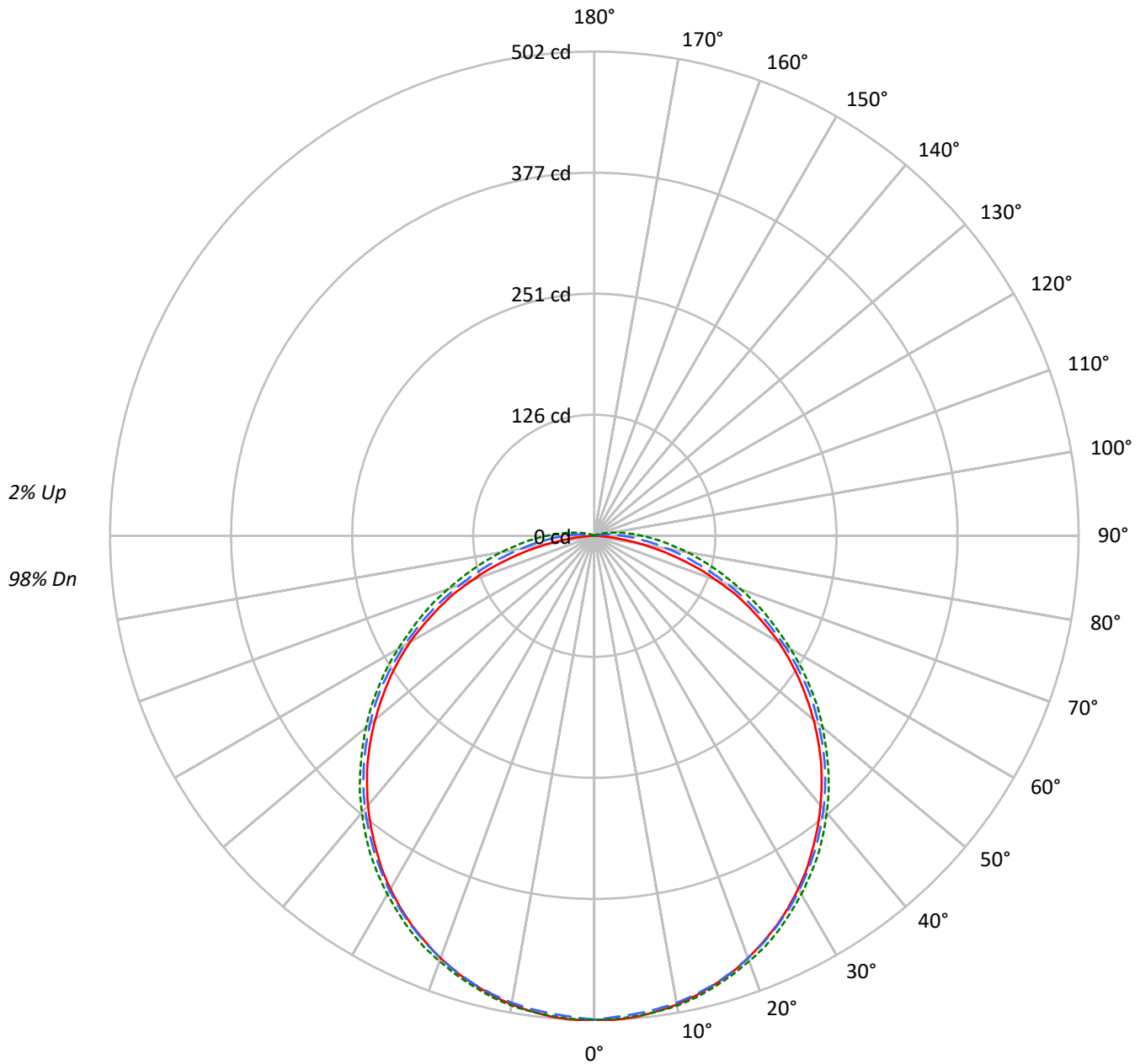
Lumens per Lamp: N/A
Luminaire Lumens: 1517.0 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 16.4
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°	16201	16201	16201
5°	15997	15488	15522
10°	15720	14885	14910
15°	15412	14283	14263
20°	15098	13665	13647
25°	14755	13059	13048
30°	14378	12445	12415
35°	13944	11810	11801
40°	13494	11163	11132
45°	13011	10490	10442
50°	12427	9762	9723
55°	11796	8993	8966
60°	11060	8091	8129
65°	10030	7127	7304
70°	8684	6067	6399
75°	6938	4964	5550
80°	4655	3902	4741
85°	1989	2876	3933



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.5	3.1
10°-20°	136.2	9.0
20°-30°	206.6	13.6
30°-40°	249.9	16.5
40°-50°	260.7	17.2
50°-60°	238.4	15.7
60°-70°	185.8	12.2
70°-80°	116.2	7.7
80°-90°	52.8	3.5
90°-100°	17.7	1.2
100°-110°	4.4	0.3
110°-120°	0.7	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°	390.3	25.7
0°-40°	640.2	42.2
0°-60°	1139.3	75.1
0°-90°	1494.2	98.5
90°-120°	22.8	1.5
90°-150°	22.8	1.5
90°-180°	23.0	1.5
0°-180°	1517.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	502	502	502	502	502	
5°	501	500	498	500	500	48
15°	482	482	481	484	484	136
25°	446	447	447	451	452	206
35°	395	397	398	402	404	247
45°	332	335	338	341	343	256
55°	259	262	267	271	273	232
65°	178	181	188	195	198	176
75°	90	96	110	123	128	96
85°	16	29	50	66	71	20
90°	0	11	29	44	49	1
95°	0	3	15	27	32	0
105°	0	0	2	7	10	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°	501.7	501.7	501.7	501.7	501.7
2.5°	502.3	501.6	499.4	501.6	501.5
5°	500.7	499.7	497.5	499.8	499.8
7.5°	497.4	497.0	495.0	497.7	497.7
10°	493.5	493.3	491.7	494.6	494.8
12.5°	488.0	488.5	486.9	489.8	490.1
15°	481.6	482.5	481.2	483.9	483.8
17.5°	474.6	475.1	474.2	477.2	477.1
20°	466.0	466.6	465.9	469.1	469.4
22.5°	456.4	457.3	457.1	460.5	461.4
25°	446.3	446.6	447.1	450.9	451.6
27.5°	435.0	435.6	436.4	439.9	440.6
30°	422.7	423.7	424.6	428.2	429.1
32.5°	409.7	410.7	411.8	416.5	416.9
35°	395.0	396.8	398.5	402.5	404.2
37.5°	380.4	382.6	384.2	388.4	389.7
40°	364.9	367.1	369.6	374.1	374.9
42.5°	348.7	351.3	354.2	358.3	359.7
45°	332.4	335.3	338.0	341.3	343.0
47.5°	314.7	317.7	321.0	324.8	325.9
50°	296.5	300.0	303.5	307.0	308.9
52.5°	277.8	282.0	286.0	289.8	291.6
55°	259.4	262.5	267.3	271.2	273.0
57.5°	240.2	242.8	247.2	253.6	254.5
60°	220.7	223.1	227.6	232.8	234.9
62.5°	199.2	202.4	207.1	213.7	215.6
65°	178.2	181.3	187.6	195.0	198.1
67.5°	158.0	159.1	167.1	174.9	179.9
70°	134.1	138.1	147.5	157.1	160.9
72.5°	113.5	117.6	127.9	139.1	143.8
75°	90.2	95.8	109.8	122.9	127.5
77.5°	69.8	75.9	93.2	106.4	111.8
80°	48.7	58.3	77.1	92.0	97.8
82.5°	30.6	42.5	62.6	78.2	83.3
85°	15.6	28.9	49.6	65.5	71.3
87.5°	4.1	18.7	38.6	53.8	59.7
90°	0.1	10.8	29.2	43.9	49.2
92.5°	0.1	6.0	21.8	34.9	40.3
95°	0.1	2.8	15.1	27.4	31.7
97.5°	0.1	1.2	10.4	20.7	25.0
100°	0.1	0.6	6.6	15.0	18.7
102.5°	0.2	0.4	4.1	10.8	13.7
105°	0.2	0.4	2.5	7.3	9.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.4	0.4	0.5	2.0	3.0
115°	0.4	0.4	0.5	1.3	1.9
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°	0.2	0.4	1.4	5.0	6.7
110°	0.4	0.4	0.8	3.1	4.5



(END OF REPORT)