

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: P580443

Luminaire Tested: **HVSL4-1-LD4-2HI-30-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580443
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-LD4-2HI-30-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

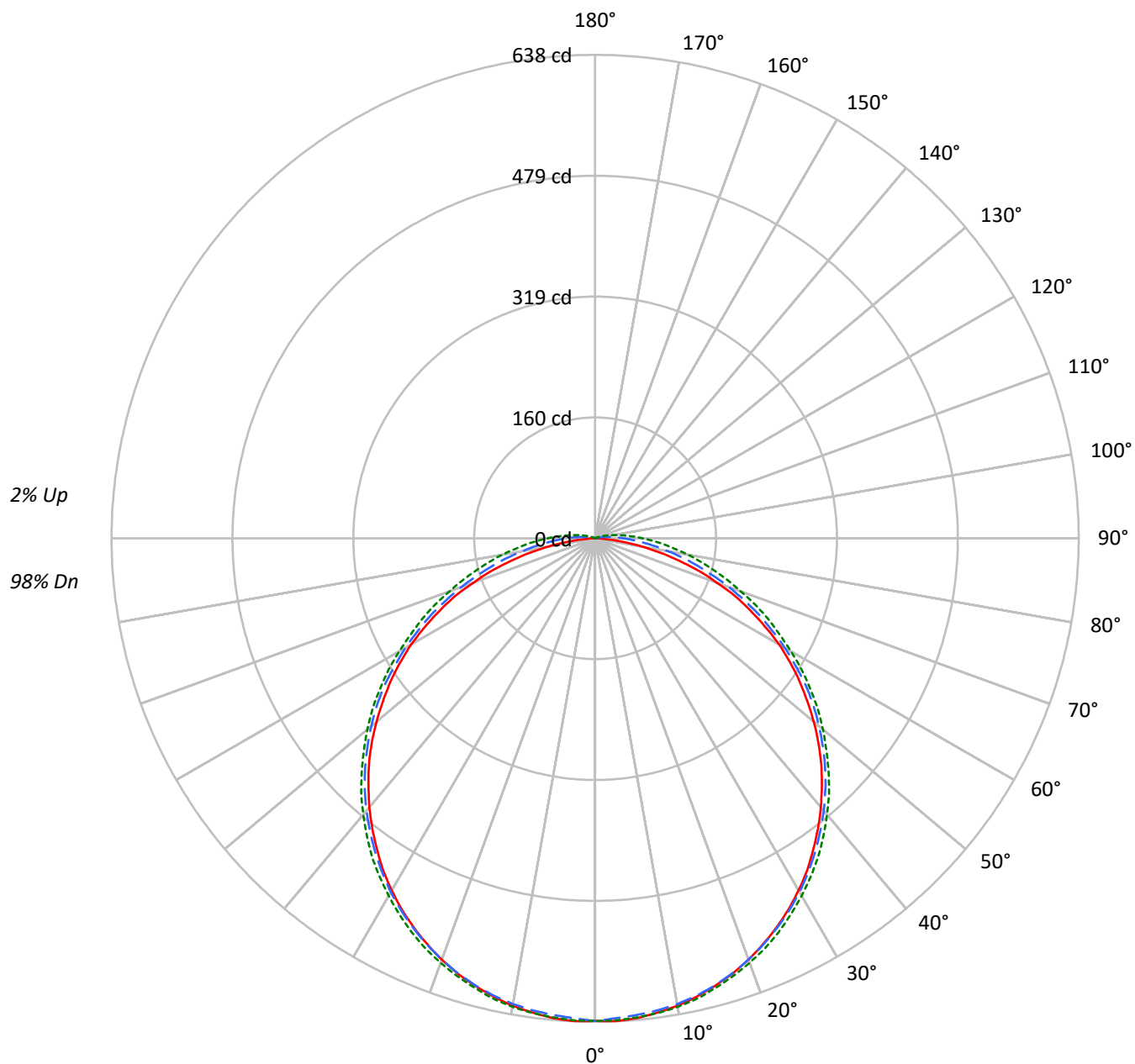
Lumens per Lamp: N/A
Luminaire Lumens: 1926.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 21.6
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°	20570	20570	20570
5°	20310	19662	19708
10°	19956	18896	18926
15°	19569	18132	18107
20°	19170	17349	17327
25°	18732	16579	16564
30°	18255	15800	15763
35°	17707	14993	14981
40°	17133	14175	14134
45°	16518	13320	13258
50°	15779	12393	12345
55°	14974	11419	11383
60°	14042	10271	10320
65°	12738	9050	9272
70°	11028	7704	8121
75°	8814	6302	7047
80°	5917	4955	6021
85°	2525	3648	4998



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.3	3.1
10°-20°	172.9	9.0
20°-30°	262.4	13.6
30°-40°	317.2	16.5
40°-50°	331.0	17.2
50°-60°	302.6	15.7
60°-70°	235.9	12.2
70°-80°	147.6	7.7
80°-90°	67.0	3.5
90°-100°	22.5	1.2
100°-110°	5.7	0.3
110°-120°	0.9	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°	495.6	25.7
0°-40°	812.8	42.2
0°-60°	1446.5	75.1
0°-90°	1897.0	98.5
90°-120°	29.0	1.5
90°-150°	29.0	1.5
90°-180°	29.0	1.5
0°-180°	1926.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	636	634	632	635	635	60
15°	612	612	611	614	614	173
25°	567	567	568	572	573	261
35°	502	504	506	511	513	314
45°	422	426	429	433	436	325
55°	329	333	339	344	347	294
65°	226	230	238	248	252	224
75°	115	122	139	156	162	122
85°	20	37	63	83	91	25
90°	0	14	37	56	62	1
95°	0	4	19	35	40	0
105°	0	0	3	9	12	0
115°	0	0	1	2	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°	637.0	637.0	637.0	637.0	637.0
2.5°	637.8	636.9	634.0	636.9	636.7
5°	635.7	634.5	631.6	634.6	634.6
7.5°	631.4	631.0	628.4	631.9	631.9
10°	626.5	626.3	624.2	628.0	628.1
12.5°	619.6	620.2	618.2	621.8	622.3
15°	611.5	612.5	610.9	614.3	614.2
17.5°	602.6	603.2	602.0	605.9	605.8
20°	591.7	592.4	591.5	595.6	596.0
22.5°	579.5	580.5	580.4	584.6	585.8
25°	566.6	567.0	567.6	572.4	573.3
27.5°	552.3	553.1	554.1	558.5	559.4
30°	536.7	537.9	539.1	543.6	544.8
32.5°	520.2	521.4	522.9	528.7	529.3
35°	501.6	503.8	505.9	511.0	513.1
37.5°	482.9	485.8	487.7	493.1	494.8
40°	463.3	466.1	469.3	475.0	476.0
42.5°	442.7	446.0	449.7	454.9	456.7
45°	422.0	425.7	429.2	433.4	435.5
47.5°	399.6	403.3	407.6	412.4	413.7
50°	376.5	380.8	385.3	389.8	392.2
52.5°	352.7	358.0	363.1	367.9	370.2
55°	329.3	333.2	339.4	344.3	346.6
57.5°	305.0	308.3	313.8	322.0	323.2
60°	280.2	283.2	288.9	295.5	298.2
62.5°	252.9	256.9	262.9	271.4	273.8
65°	226.3	230.2	238.2	247.6	251.5
67.5°	200.6	202.0	212.2	222.1	228.4
70°	170.3	175.4	187.3	199.4	204.2
72.5°	144.2	149.3	162.3	176.6	182.6
75°	114.6	121.6	139.4	156.0	161.9
77.5°	88.6	96.4	118.3	135.1	141.9
80°	61.9	74.0	97.9	116.8	124.2
82.5°	38.9	53.9	79.4	99.3	105.7
85°	19.8	36.6	62.9	83.2	90.6
87.5°	5.3	23.7	49.0	68.3	75.8
90°	0.2	13.7	37.1	55.7	62.5
92.5°	0.2	7.7	27.6	44.3	51.2
95°	0.2	3.6	19.2	34.8	40.2
97.5°	0.2	1.5	13.2	26.3	31.7
100°	0.2	0.8	8.4	19.1	23.7
102.5°	0.3	0.5	5.3	13.7	17.4
105°	0.3	0.5	3.2	9.3	12.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	0.5	0.6	2.6	3.8
115°	0.5	0.5	0.6	1.7	2.4
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°	0.3	0.5	1.8	6.3	8.6
110°	0.5	0.5	1.1	3.9	5.7



(END OF REPORT)