

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: P580584

Luminaire Tested: **HVSL4-4-LD4-1STD-40-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580584
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: HVSL4-4-LD4-1STD-40-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

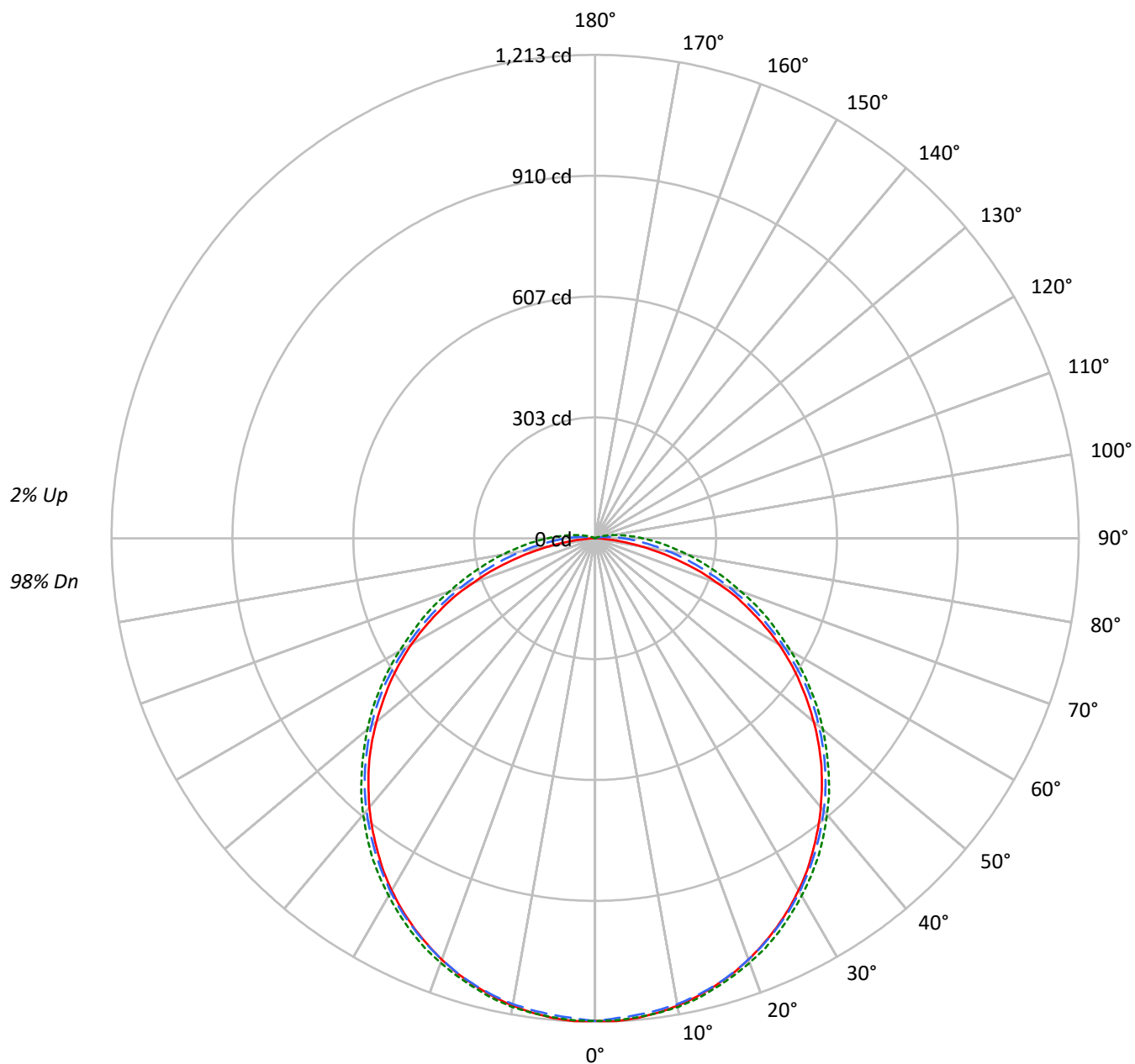
Lumens per Lamp: N/A
Luminaire Lumens: 3662.0 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 32.7
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°	9778	9778	9778
5°	9759	9416	9368
10°	9694	9114	8997
15°	9609	8804	8607
20°	9520	8480	8236
25°	9413	8157	7874
30°	9288	7824	7493
35°	9131	7475	7121
40°	8969	7115	6719
45°	8793	6736	6302
50°	8565	6317	5869
55°	8317	5871	5411
60°	8023	5331	4906
65°	7545	4748	4408
70°	6858	4094	3861
75°	5882	3402	3349
80°	4422	2728	2861
85°	2365	2060	2375



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.6	3.1
10°-20°	328.8	9.0
20°-30°	498.8	13.6
30°-40°	603.2	16.5
40°-50°	629.4	17.2
50°-60°	575.4	15.7
60°-70°	448.6	12.2
70°-80°	280.6	7.7
80°-90°	127.4	3.5
90°-100°	42.7	1.2
100°-110°	10.7	0.3
110°-120°	1.7	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°	942.2	25.7
0°-40°	1545.4	42.2
0°-60°	2750.2	75.1
0°-90°	3606.9	98.5
90°-120°	55.1	1.5
90°-150°	55.1	1.5
90°-180°	55.0	1.5
0°-180°	3662.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1211	1211	1211	1211	1211	
5°	1209	1206	1201	1207	1207	115
15°	1163	1165	1162	1168	1168	328
25°	1077	1078	1079	1088	1090	496
35°	954	958	962	972	976	597
45°	802	809	816	824	828	618
55°	626	634	645	655	659	559
65°	430	438	453	471	478	426
75°	218	231	265	297	308	232
85°	38	70	120	158	172	48
90°	0	26	70	106	119	1
95°	0	7	36	66	76	0
105°	1	1	6	18	24	1
115°	1	1	1	3	5	1
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	



TEST NUMBER: P580584

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1211.2	1211.2	1211.2	1211.2	1211.2
2.5°	1212.6	1210.9	1205.5	1210.9	1210.6
5°	1208.6	1206.3	1200.9	1206.6	1206.6
7.5°	1200.6	1199.7	1194.9	1201.5	1201.5
10°	1191.2	1190.9	1186.9	1194.0	1194.3
12.5°	1178.0	1179.2	1175.5	1182.3	1183.2
15°	1162.6	1164.6	1161.5	1168.1	1167.8
17.5°	1145.8	1146.9	1144.6	1152.1	1151.8
20°	1124.9	1126.4	1124.7	1132.4	1133.2
22.5°	1101.8	1103.8	1103.5	1111.5	1113.8
25°	1077.3	1078.1	1079.3	1088.4	1090.1
27.5°	1050.1	1051.6	1053.6	1061.8	1063.6
30°	1020.4	1022.7	1025.0	1033.6	1035.9
32.5°	989.0	991.3	994.2	1005.3	1006.5
35°	953.6	957.9	961.9	971.6	975.6
37.5°	918.2	923.7	927.4	937.6	940.8
40°	880.8	886.2	892.2	903.1	905.1
42.5°	841.7	848.0	855.1	864.8	868.3
45°	802.3	809.4	816.0	824.0	828.0
47.5°	759.8	766.9	774.9	784.0	786.6
50°	715.8	724.1	732.6	741.2	745.8
52.5°	670.7	680.7	690.4	699.5	703.8
55°	626.1	633.6	645.3	654.7	659.0
57.5°	579.9	586.2	596.7	612.2	614.4
60°	532.8	538.5	549.3	561.9	567.0
62.5°	480.8	488.5	499.9	515.9	520.5
65°	430.3	437.7	452.8	470.8	478.2
67.5°	381.5	384.0	403.4	422.3	434.3
70°	323.8	333.5	356.0	379.2	388.3
72.5°	274.1	283.8	308.6	335.8	347.2
75°	217.9	231.3	265.0	296.7	307.8
77.5°	168.5	183.3	225.0	257.0	269.8
80°	117.6	140.8	186.2	222.1	236.1
82.5°	73.9	102.5	151.0	188.7	201.0
85°	37.7	69.7	119.6	158.2	172.2
87.5°	10.0	45.1	93.1	129.9	144.2
90°	0.3	26.0	70.5	105.9	118.8
92.5°	0.3	14.6	52.5	84.2	97.4
95°	0.3	6.9	36.5	66.2	76.5
97.5°	0.3	2.9	25.1	50.0	60.2
100°	0.3	1.4	16.0	36.3	45.1
102.5°	0.6	0.9	10.0	26.0	33.1
105°	0.6	0.9	6.0	17.7	23.7



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CATALOG NUMBER: HVSL4-4-LD4-1STD-40-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	1.1	4.9	7.1
115°	0.9	0.9	1.1	3.1	4.6
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°	0.6	0.9	3.4	12.0	16.3
110°	0.9	0.9	2.0	7.4	10.8



(END OF REPORT)