

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: P580564

Luminaire Tested: **HVSL4-4-LD4-1HI-30-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580564
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-LD4-1HI-30-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

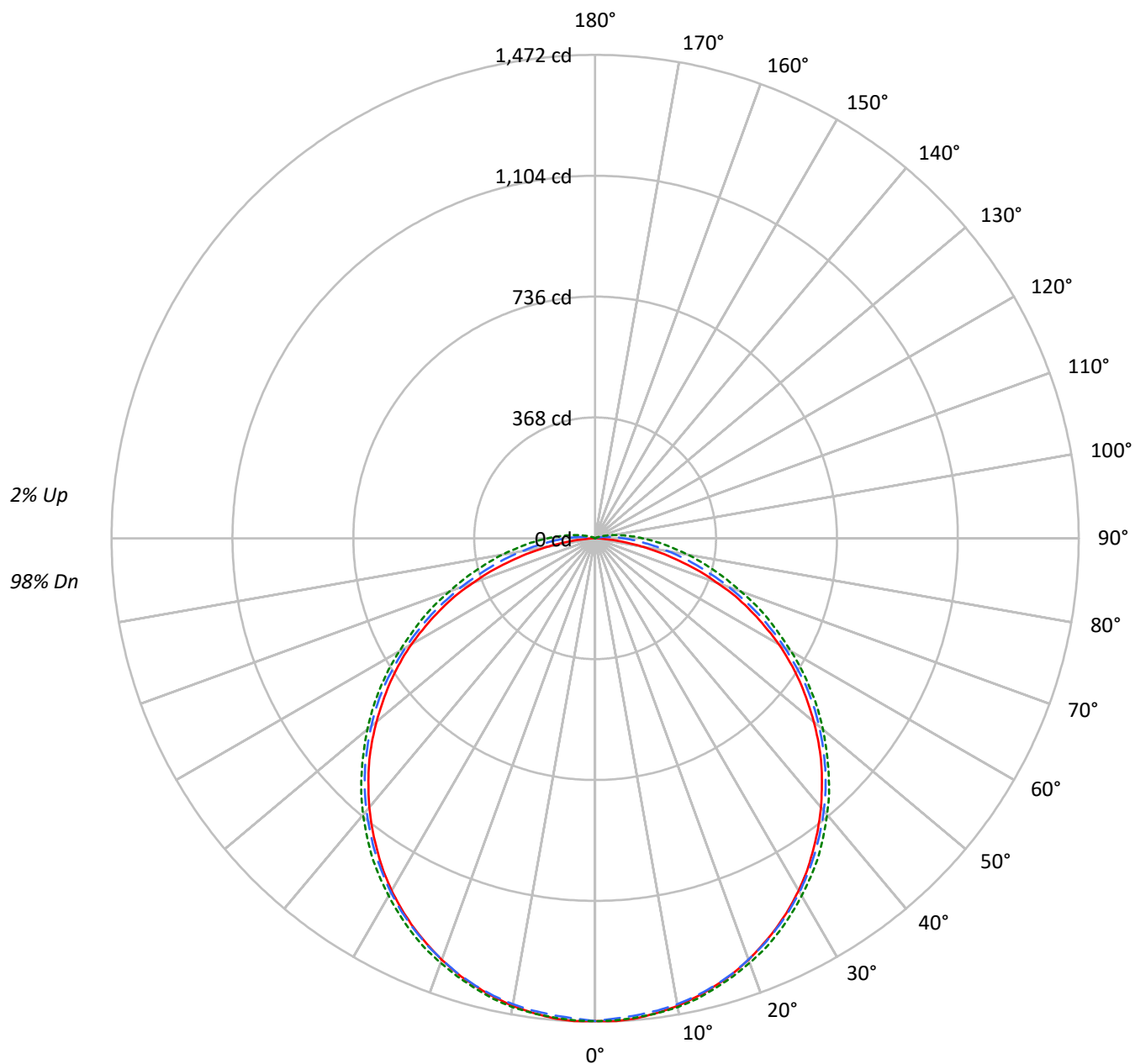
Lumens per Lamp: N/A
Luminaire Lumens: 4445.0 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 43.1
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

TEST NUMBER: P580564

CATALOG NUMBER: HVSL4-4-LD4-1HI-30-UNV-O-EDD

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°	11868	11868	11868
5°	11845	11430	11371
10°	11766	11063	10921
15°	11664	10686	10447
20°	11556	10292	9997
25°	11425	9900	9558
30°	11275	9498	9094
35°	11084	9073	8644
40°	10887	8637	8155
45°	10674	8176	7649
50°	10395	7668	7123
55°	10096	7125	6568
60°	9739	6472	5955
65°	9159	5765	5351
70°	8323	4970	4686
75°	7137	4129	4065
80°	5370	3312	3473
85°	2867	2500	2882



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.1	3.1
10°-20°	399.1	9.0
20°-30°	605.5	13.6
30°-40°	732.2	16.5
40°-50°	764.0	17.2
50°-60°	698.5	15.7
60°-70°	544.5	12.2
70°-80°	340.6	7.7
80°-90°	154.7	3.5
90°-100°	51.8	1.2
100°-110°	13.0	0.3
110°-120°	2.0	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°	1143.7	25.7
0°-40°	1875.8	42.2
0°-60°	3338.3	75.1
0°-90°	4378.1	98.5
90°-120°	66.9	1.5
90°-150°	66.9	1.5
90°-180°	67.0	1.5
0°-180°	4445.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1470	1470	1470	1470	1470	
5°	1467	1464	1458	1465	1465	139
15°	1411	1414	1410	1418	1418	398
25°	1308	1309	1310	1321	1323	603
35°	1158	1163	1168	1179	1184	725
45°	974	982	990	1000	1005	750
55°	760	769	783	795	800	679
65°	522	531	550	572	580	517
75°	264	281	322	360	374	282
85°	46	85	145	192	209	58
90°	0	32	86	129	144	2
95°	0	8	44	80	93	0
105°	1	1	7	22	29	1
115°	1	1	1	4	6	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: P580564

CATALOG NUMBER: HVSL4-4-LD4-1HI-30-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1470.1	1470.1	1470.1	1470.1	1470.1
2.5°	1471.9	1469.8	1463.2	1469.8	1469.4
5°	1467.0	1464.2	1457.7	1464.6	1464.6
7.5°	1457.3	1456.3	1450.4	1458.4	1458.4
10°	1445.9	1445.5	1440.7	1449.3	1449.7
12.5°	1429.9	1431.3	1426.8	1435.1	1436.2
15°	1411.2	1413.6	1409.8	1417.8	1417.5
17.5°	1390.8	1392.2	1389.4	1398.4	1398.1
20°	1365.5	1367.2	1365.1	1374.5	1375.5
22.5°	1337.4	1339.8	1339.5	1349.2	1352.0
25°	1307.6	1308.6	1310.0	1321.1	1323.2
27.5°	1274.7	1276.4	1278.8	1288.9	1291.0
30°	1238.6	1241.4	1244.2	1254.6	1257.3
32.5°	1200.5	1203.3	1206.7	1220.3	1221.6
35°	1157.5	1162.7	1167.6	1179.4	1184.2
37.5°	1114.6	1121.1	1125.6	1138.1	1141.9
40°	1069.2	1075.7	1083.0	1096.2	1098.6
42.5°	1021.7	1029.3	1038.0	1049.8	1053.9
45°	973.9	982.5	990.5	1000.2	1005.0
47.5°	922.2	930.9	940.6	951.7	954.8
50°	868.8	878.9	889.3	899.7	905.2
52.5°	814.1	826.2	838.0	849.1	854.3
55°	760.0	769.0	783.2	794.7	799.9
57.5°	703.9	711.5	724.3	743.0	745.8
60°	646.7	653.6	666.8	682.0	688.3
62.5°	583.6	593.0	606.8	626.2	631.8
65°	522.3	531.3	549.7	571.5	580.5
67.5°	463.0	466.1	489.7	512.6	527.1
70°	393.0	404.8	432.2	460.2	471.3
72.5°	332.7	344.5	374.6	407.6	421.4
75°	264.4	280.7	321.6	360.1	373.6
77.5°	204.5	222.5	273.1	311.9	327.5
80°	142.8	170.9	226.0	269.6	286.6
82.5°	89.8	124.4	183.3	229.1	244.0
85°	45.7	84.6	145.2	192.0	209.0
87.5°	12.1	54.8	113.0	157.7	175.0
90°	0.3	31.5	85.6	128.6	144.2
92.5°	0.3	17.7	63.8	102.2	118.2
95°	0.3	8.3	44.4	80.4	92.9
97.5°	0.3	3.5	30.5	60.6	73.1
100°	0.3	1.7	19.4	44.0	54.8
102.5°	0.7	1.0	12.1	31.5	40.2
105°	0.7	1.0	7.3	21.5	28.8



TEST NUMBER: P580564

CATALOG NUMBER: HVSL4-4-LD4-1HI-30-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.0	1.0	1.4	5.9	8.7
115°	1.0	1.0	1.4	3.8	5.5
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°	0.7	1.0	4.2	14.6	19.8
110°	1.0	1.0	2.4	9.0	13.2



(END OF REPORT)