

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: P580601

Luminaire Tested: **HVSL4-4-LD4-2LO-50-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580601
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-LD4-2LO-50-UNV-O-EDD-90
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

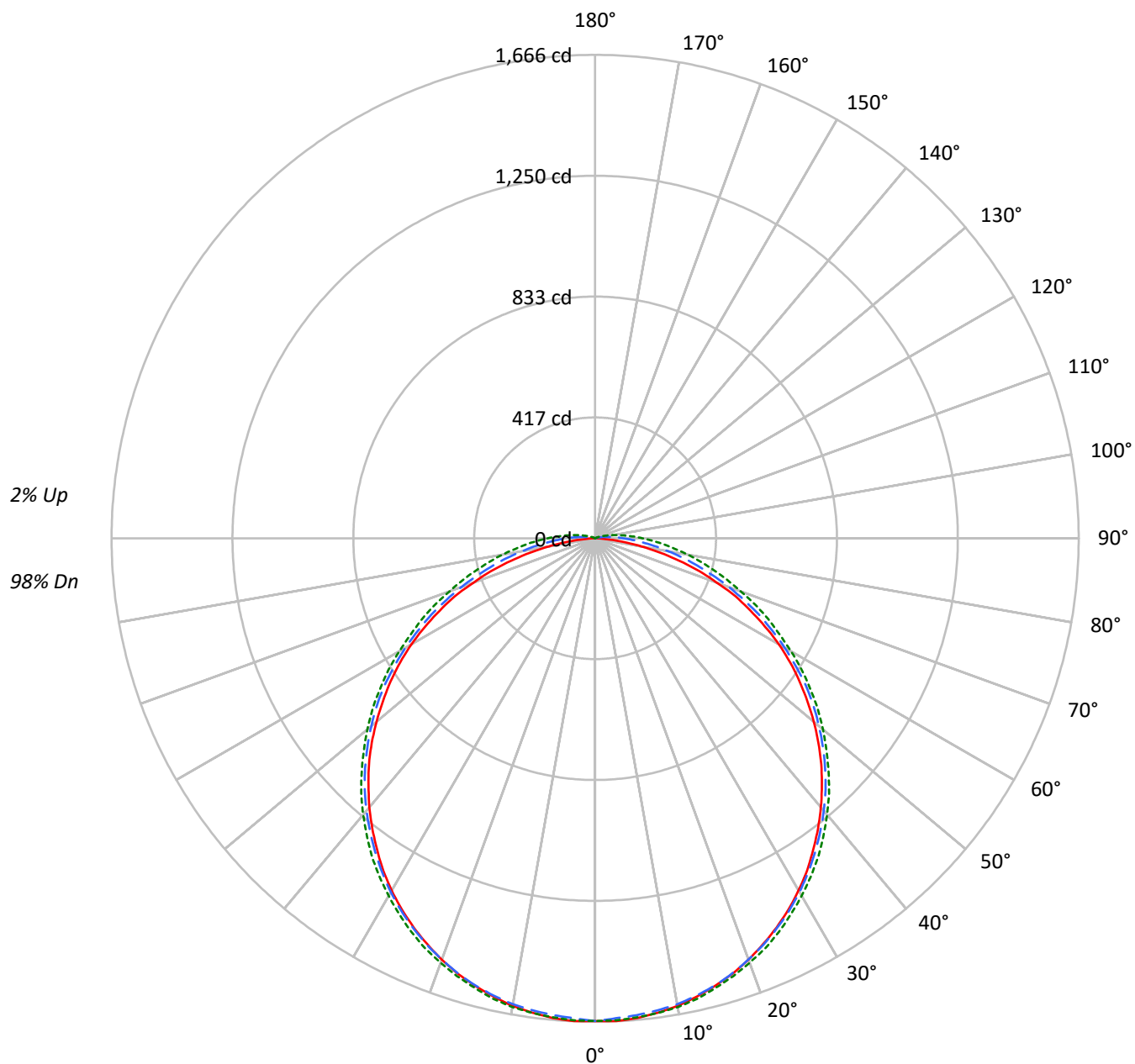
Lumens per Lamp: N/A
Luminaire Lumens: 5030.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 46.2
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°	13430	13430	13430
5°	13404	12934	12867
10°	13315	12519	12358
15°	13199	12093	11822
20°	13077	11647	11314
25°	12929	11203	10815
30°	12758	10747	10292
35°	12543	10267	9782
40°	12320	9774	9229
45°	12078	9252	8656
50°	11764	8677	8061
55°	11424	8063	7431
60°	11020	7324	6739
65°	10363	6523	6055
70°	9418	5623	5303
75°	8076	4672	4601
80°	6077	3747	3930
85°	3250	2829	3262



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.4	3.1
10°-20°	451.6	9.0
20°-30°	685.2	13.6
30°-40°	828.5	16.5
40°-50°	864.5	17.2
50°-60°	790.4	15.7
60°-70°	616.2	12.2
70°-80°	385.4	7.7
80°-90°	175.1	3.5
90°-100°	58.7	1.2
100°-110°	14.7	0.3
110°-120°	2.3	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°	1294.2	25.7
0°-40°	2122.7	42.2
0°-60°	3777.6	75.1
0°-90°	4954.3	98.5
90°-120°	75.7	1.5
90°-150°	75.7	1.5
90°-180°	76.0	1.5
0°-180°	5030.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1664	1664	1664	1664	1664	
5°	1660	1657	1650	1657	1657	158
15°	1597	1600	1595	1604	1604	451
25°	1480	1481	1482	1495	1497	682
35°	1310	1316	1321	1335	1340	820
45°	1102	1112	1121	1132	1137	849
55°	860	870	886	899	905	768
65°	591	601	622	647	657	585
75°	299	318	364	408	423	319
85°	52	96	164	217	236	66
90°	0	36	97	146	163	2
95°	0	9	50	91	105	0
105°	1	1	8	24	33	1
115°	1	1	2	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1663.6	1663.6	1663.6	1663.6	1663.6
2.5°	1665.6	1663.2	1655.8	1663.2	1662.8
5°	1660.1	1657.0	1649.5	1657.3	1657.3
7.5°	1649.1	1647.9	1641.3	1650.3	1650.3
10°	1636.2	1635.8	1630.3	1640.1	1640.5
12.5°	1618.1	1619.7	1614.6	1624.0	1625.2
15°	1596.9	1599.7	1595.4	1604.4	1604.0
17.5°	1573.8	1575.4	1572.2	1582.4	1582.0
20°	1545.2	1547.1	1544.8	1555.4	1556.6
22.5°	1513.4	1516.2	1515.8	1526.7	1529.9
25°	1479.7	1480.9	1482.4	1495.0	1497.3
27.5°	1442.4	1444.4	1447.1	1458.5	1460.9
30°	1401.6	1404.8	1407.9	1419.7	1422.8
32.5°	1358.5	1361.6	1365.6	1380.9	1382.4
35°	1309.9	1315.8	1321.2	1334.6	1340.1
37.5°	1261.2	1268.7	1273.8	1287.9	1292.2
40°	1209.9	1217.3	1225.6	1240.5	1243.2
42.5°	1156.1	1164.8	1174.6	1187.9	1192.6
45°	1102.0	1111.8	1120.8	1131.8	1137.3
47.5°	1043.6	1053.4	1064.4	1076.9	1080.5
50°	983.2	994.6	1006.3	1018.1	1024.4
52.5°	921.2	935.0	948.3	960.8	966.7
55°	860.0	870.2	886.3	899.3	905.1
57.5°	796.5	805.1	819.7	840.8	844.0
60°	731.8	739.6	754.6	771.8	778.9
62.5°	660.4	671.0	686.7	708.7	714.9
65°	591.0	601.2	622.0	646.7	656.9
67.5°	524.0	527.5	554.1	580.0	596.5
70°	444.7	458.1	489.0	520.8	533.4
72.5°	376.5	389.8	423.9	461.2	476.9
75°	299.2	317.7	363.9	407.5	422.8
77.5°	231.4	251.8	309.0	353.0	370.6
80°	161.6	193.3	255.7	305.1	324.3
82.5°	101.6	140.8	207.5	259.2	276.1
85°	51.8	95.7	164.3	217.3	236.5
87.5°	13.7	62.0	127.9	178.4	198.1
90°	0.4	35.7	96.9	145.5	163.1
92.5°	0.4	20.0	72.2	115.7	133.7
95°	0.4	9.4	50.2	91.0	105.1
97.5°	0.4	3.9	34.5	68.6	82.7
100°	0.4	2.0	22.0	49.8	62.0
102.5°	0.8	1.2	13.7	35.7	45.5
105°	0.8	1.2	8.2	24.3	32.6



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CATALOG NUMBER: HVSL4-4-LD4-2LO-50-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.2	1.2	1.6	6.7	9.8
115°	1.2	1.2	1.6	4.3	6.3
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°	0.8	1.2	4.7	16.5	22.4
110°	1.2	1.2	2.7	10.2	14.9



(END OF REPORT)