

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: P580586

Luminaire Tested: **HVSL4-4-LD4-1STD-50-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580586
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-50-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

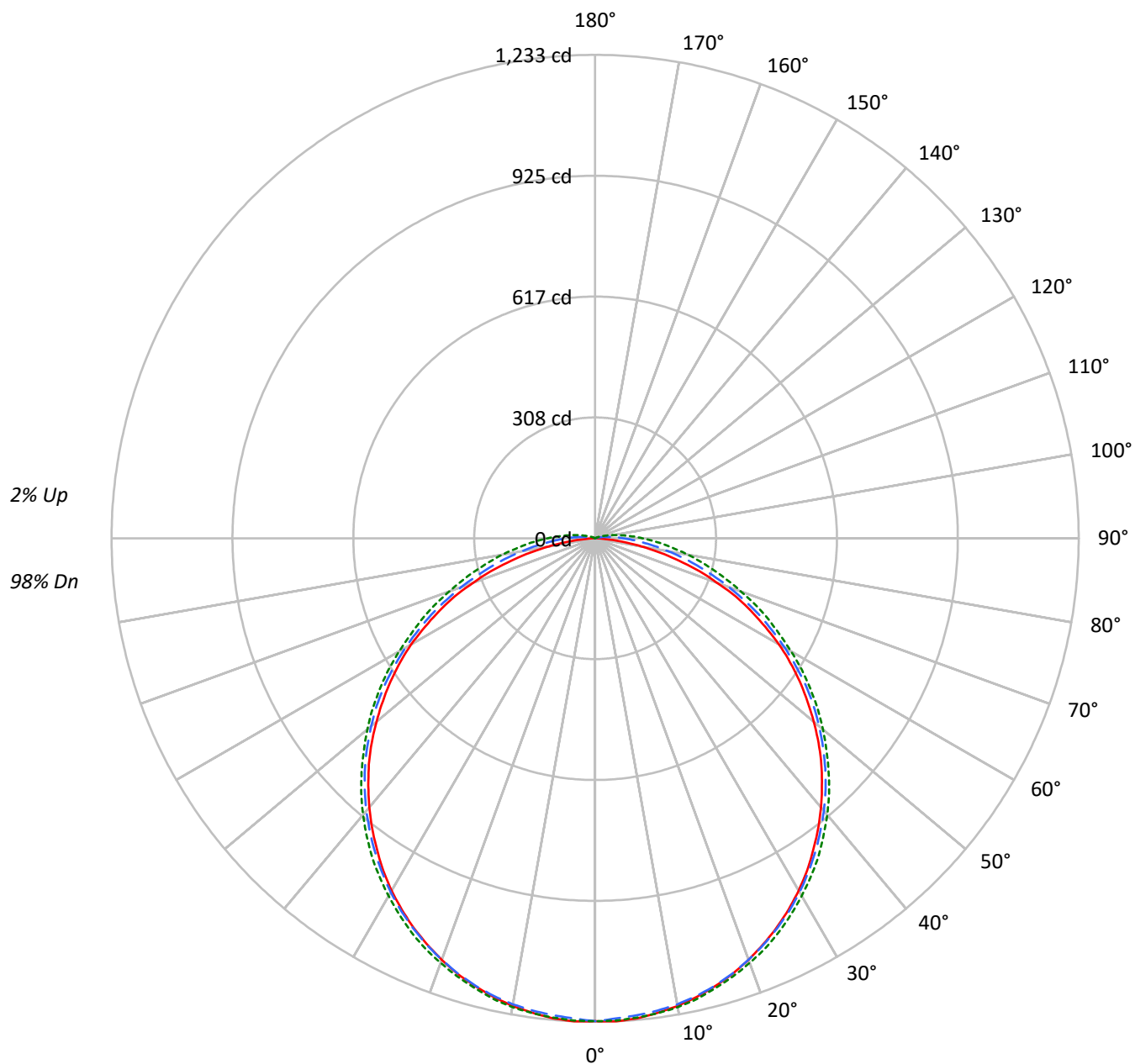
Lumens per Lamp: N/A
Luminaire Lumens: 3724.0 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 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°	9943	9943	9943
5°	9924	9575	9527
10°	9857	9268	9149
15°	9772	8953	8752
20°	9681	8623	8376
25°	9572	8294	8008
30°	9446	7957	7620
35°	9287	7601	7242
40°	9120	7236	6832
45°	8942	6850	6408
50°	8709	6424	5968
55°	8458	5970	5502
60°	8159	5422	4989
65°	7673	4829	4482
70°	6974	4164	3926
75°	5979	3458	3406
80°	4497	2774	2910
85°	2403	2096	2415



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.6	3.1
10°-20°	334.3	9.0
20°-30°	507.3	13.6
30°-40°	613.4	16.5
40°-50°	640.0	17.2
50°-60°	585.2	15.7
60°-70°	456.2	12.2
70°-80°	285.4	7.7
80°-90°	129.6	3.5
90°-100°	43.5	1.2
100°-110°	10.9	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°	958.2	25.7
0°-40°	1571.6	42.2
0°-60°	2796.8	75.1
0°-90°	3667.9	98.5
90°-120°	56.1	1.5
90°-150°	56.1	1.5
90°-180°	56.0	1.5
0°-180°	3724.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1229	1227	1221	1227	1227	117
15°	1182	1184	1181	1188	1188	334
25°	1096	1096	1098	1107	1109	505
35°	970	974	978	988	992	607
45°	816	823	830	838	842	629
55°	637	644	656	666	670	569
65°	438	445	460	479	486	433
75°	222	235	269	302	313	236
85°	38	71	122	161	175	48
90°	0	26	72	108	121	2
95°	0	7	37	67	78	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1231.7	1231.7	1231.7	1231.7	1231.7
2.5°	1233.1	1231.4	1225.9	1231.4	1231.1
5°	1229.1	1226.7	1221.2	1227.0	1227.0
7.5°	1220.9	1220.1	1215.1	1221.8	1221.8
10°	1211.3	1211.1	1207.0	1214.3	1214.5
12.5°	1198.0	1199.2	1195.4	1202.3	1203.2
15°	1182.3	1184.3	1181.2	1187.8	1187.5
17.5°	1165.2	1166.3	1164.0	1171.6	1171.3
20°	1144.0	1145.4	1143.7	1151.5	1152.4
22.5°	1120.5	1122.5	1122.2	1130.3	1132.7
25°	1095.5	1096.4	1097.5	1106.8	1108.6
27.5°	1067.9	1069.4	1071.4	1079.8	1081.6
30°	1037.7	1040.0	1042.4	1051.1	1053.4
32.5°	1005.8	1008.1	1011.0	1022.3	1023.5
35°	969.8	974.1	978.2	988.1	992.1
37.5°	933.8	939.3	943.1	953.5	956.7
40°	895.7	901.3	907.4	918.4	920.4
42.5°	856.0	862.3	869.6	879.5	883.0
45°	815.9	823.1	829.8	838.0	842.0
47.5°	772.6	779.9	788.0	797.3	799.9
50°	727.9	736.3	745.0	753.8	758.4
52.5°	682.0	692.2	702.1	711.4	715.7
55°	636.7	644.3	656.2	665.8	670.1
57.5°	589.7	596.1	606.8	622.5	624.8
60°	541.8	547.6	558.6	571.4	576.6
62.5°	489.0	496.8	508.4	524.7	529.3
65°	437.6	445.1	460.5	478.8	486.3
67.5°	387.9	390.5	410.3	429.4	441.6
70°	329.3	339.1	362.1	385.6	394.9
72.5°	278.7	288.6	313.9	341.5	353.1
75°	221.5	235.2	269.4	301.7	313.0
77.5°	171.3	186.4	228.8	261.3	274.4
80°	119.6	143.1	189.3	225.9	240.1
82.5°	75.2	104.2	153.6	191.9	204.4
85°	38.3	70.8	121.7	160.9	175.1
87.5°	10.2	45.9	94.7	132.1	146.6
90°	0.3	26.4	71.7	107.7	120.8
92.5°	0.3	14.8	53.4	85.7	99.0
95°	0.3	7.0	37.2	67.4	77.8
97.5°	0.3	2.9	25.6	50.8	61.3
100°	0.3	1.5	16.3	36.9	45.9
102.5°	0.6	0.9	10.2	26.4	33.7
105°	0.6	0.9	6.1	18.0	24.1



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CATALOG NUMBER: HVSL4-4-LD4-1STD-50-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	1.2	4.9	7.3
115°	0.9	0.9	1.2	3.2	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	3.5	12.2	16.6
110°	0.9	0.9	2.0	7.5	11.0



(END OF REPORT)