

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: P580535

Luminaire Tested: **HVSL4-3-LD4-1STD-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580535
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: HVSL4-3-LD4-1STD-40-UNV-O-EDD-90
Description: 3 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

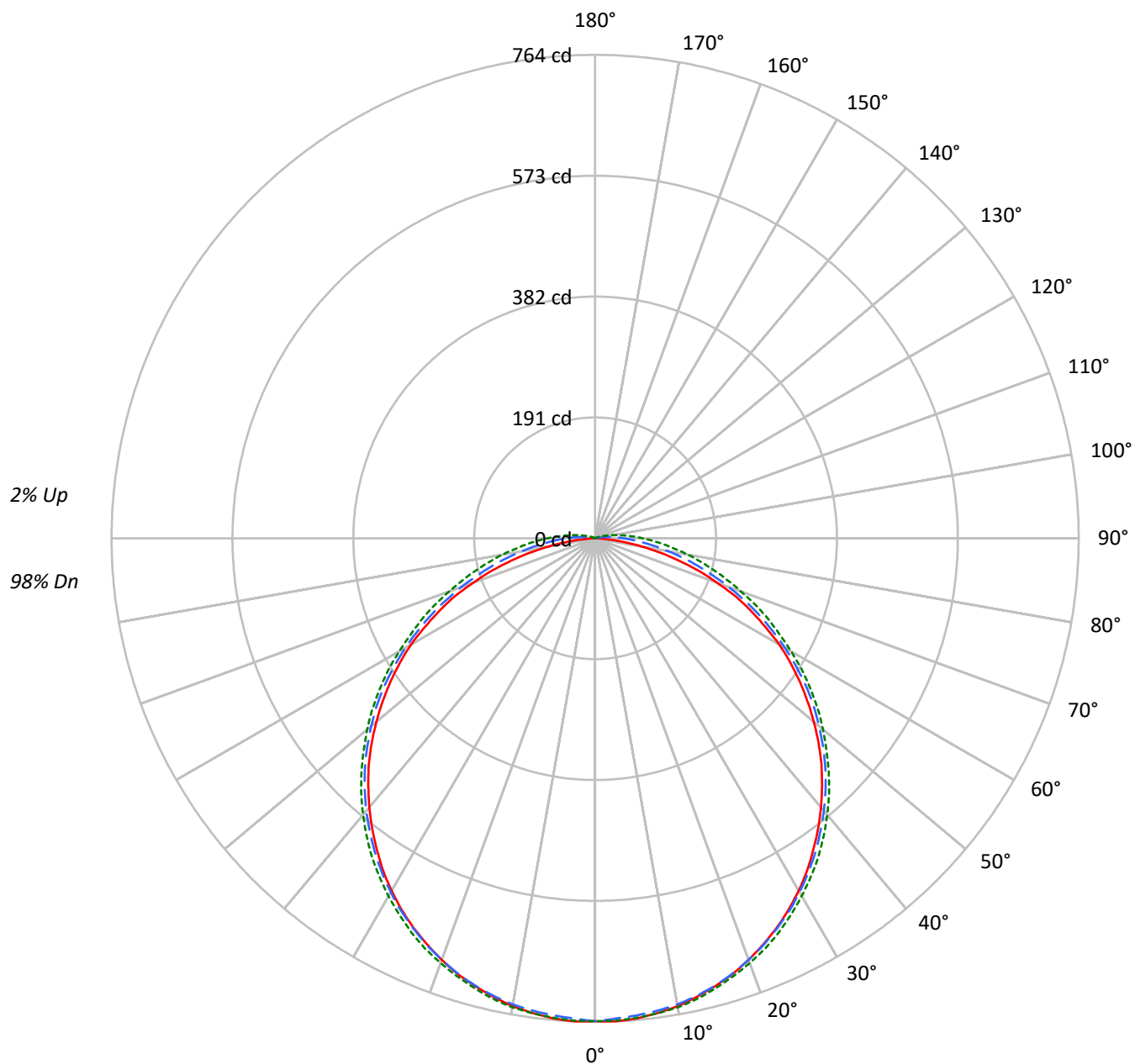
Lumens per Lamp: N/A
Luminaire Lumens: 2308.0 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 3' x H: 0.17')
CIE Type: Direct

Input Watts (W): 24.5
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°	8216	8216	8216
5°	8190	7907	7873
10°	8127	7647	7560
15°	8046	7380	7233
20°	7960	7103	6921
25°	7861	6828	6616
30°	7745	6545	6297
35°	7602	6248	5984
40°	7452	5942	5646
45°	7293	5621	5296
50°	7085	5267	4931
55°	6861	4889	4546
60°	6594	4435	4123
65°	6172	3945	3704
70°	5573	3396	3244
75°	4729	2816	2815
80°	3493	2252	2404
85°	1798	1696	1995



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.2	3.1
10°-20°	207.2	9.0
20°-30°	314.4	13.6
30°-40°	380.2	16.5
40°-50°	396.7	17.2
50°-60°	362.7	15.7
60°-70°	282.7	12.2
70°-80°	176.9	7.7
80°-90°	80.3	3.5
90°-100°	26.9	1.2
100°-110°	6.8	0.3
110°-120°	1.1	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°	593.8	25.7
0°-40°	974.0	42.2
0°-60°	1733.3	75.1
0°-90°	2273.3	98.5
90°-120°	34.8	1.5
90°-150°	34.8	1.5
90°-180°	35.0	1.5
0°-180°	2308.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	763	763	763	763	763	
5°	762	760	757	760	760	72
15°	733	734	732	736	736	207
25°	679	680	680	686	687	313
35°	601	604	606	612	615	376
45°	506	510	514	519	522	390
55°	395	399	407	413	415	353
65°	271	276	285	297	301	268
75°	137	146	167	187	194	146
85°	24	44	75	100	108	30
90°	0	16	44	67	75	1
95°	0	4	23	42	48	0
105°	0	0	4	11	15	0
115°	0	0	1	2	3	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°	763.3	763.3	763.3	763.3	763.3
2.5°	764.2	763.2	759.7	763.2	763.0
5°	761.7	760.3	756.9	760.5	760.5
7.5°	756.7	756.1	753.1	757.2	757.2
10°	750.8	750.6	748.1	752.5	752.7
12.5°	742.5	743.2	740.9	745.2	745.7
15°	732.8	734.0	732.0	736.2	736.0
17.5°	722.1	722.9	721.4	726.1	725.9
20°	709.0	709.9	708.8	713.7	714.2
22.5°	694.4	695.7	695.5	700.5	702.0
25°	679.0	679.5	680.2	686.0	687.0
27.5°	661.9	662.8	664.0	669.2	670.3
30°	643.1	644.6	646.0	651.4	652.9
32.5°	623.3	624.8	626.6	633.6	634.3
35°	601.0	603.7	606.3	612.4	614.9
37.5°	578.7	582.1	584.5	591.0	592.9
40°	555.1	558.6	562.3	569.2	570.4
42.5°	530.5	534.5	538.9	545.1	547.2
45°	505.7	510.2	514.3	519.3	521.9
47.5°	478.8	483.3	488.4	494.1	495.8
50°	451.1	456.4	461.8	467.1	470.0
52.5°	422.7	429.0	435.1	440.9	443.6
55°	394.6	399.3	406.7	412.6	415.3
57.5°	365.5	369.4	376.1	385.8	387.3
60°	335.8	339.4	346.2	354.1	357.4
62.5°	303.0	307.9	315.1	325.2	328.0
65°	271.2	275.9	285.4	296.7	301.4
67.5°	240.4	242.0	254.3	266.1	273.7
70°	204.1	210.2	224.4	239.0	244.7
72.5°	172.8	178.9	194.5	211.6	218.8
75°	137.3	145.8	167.0	187.0	194.0
77.5°	106.2	115.5	141.8	162.0	170.1
80°	74.1	88.7	117.3	140.0	148.8
82.5°	46.6	64.6	95.2	118.9	126.7
85°	23.8	43.9	75.4	99.7	108.5
87.5°	6.3	28.4	58.7	81.9	90.9
90°	0.2	16.4	44.4	66.8	74.9
92.5°	0.2	9.2	33.1	53.1	61.4
95°	0.2	4.3	23.0	41.7	48.2
97.5°	0.2	1.8	15.8	31.5	38.0
100°	0.2	0.9	10.1	22.9	28.4
102.5°	0.4	0.5	6.3	16.4	20.9
105°	0.4	0.5	3.8	11.2	14.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	0.5	0.7	3.1	4.5
115°	0.5	0.5	0.7	2.0	2.9
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°	0.4	0.5	2.2	7.6	10.3
110°	0.5	0.5	1.3	4.7	6.8



(END OF REPORT)