

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: P580454

Luminaire Tested: **HVSL4-1-LD4-2LO-35-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580454
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: HVSL4-1-LD4-2LO-35-UNV-O-EDD
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

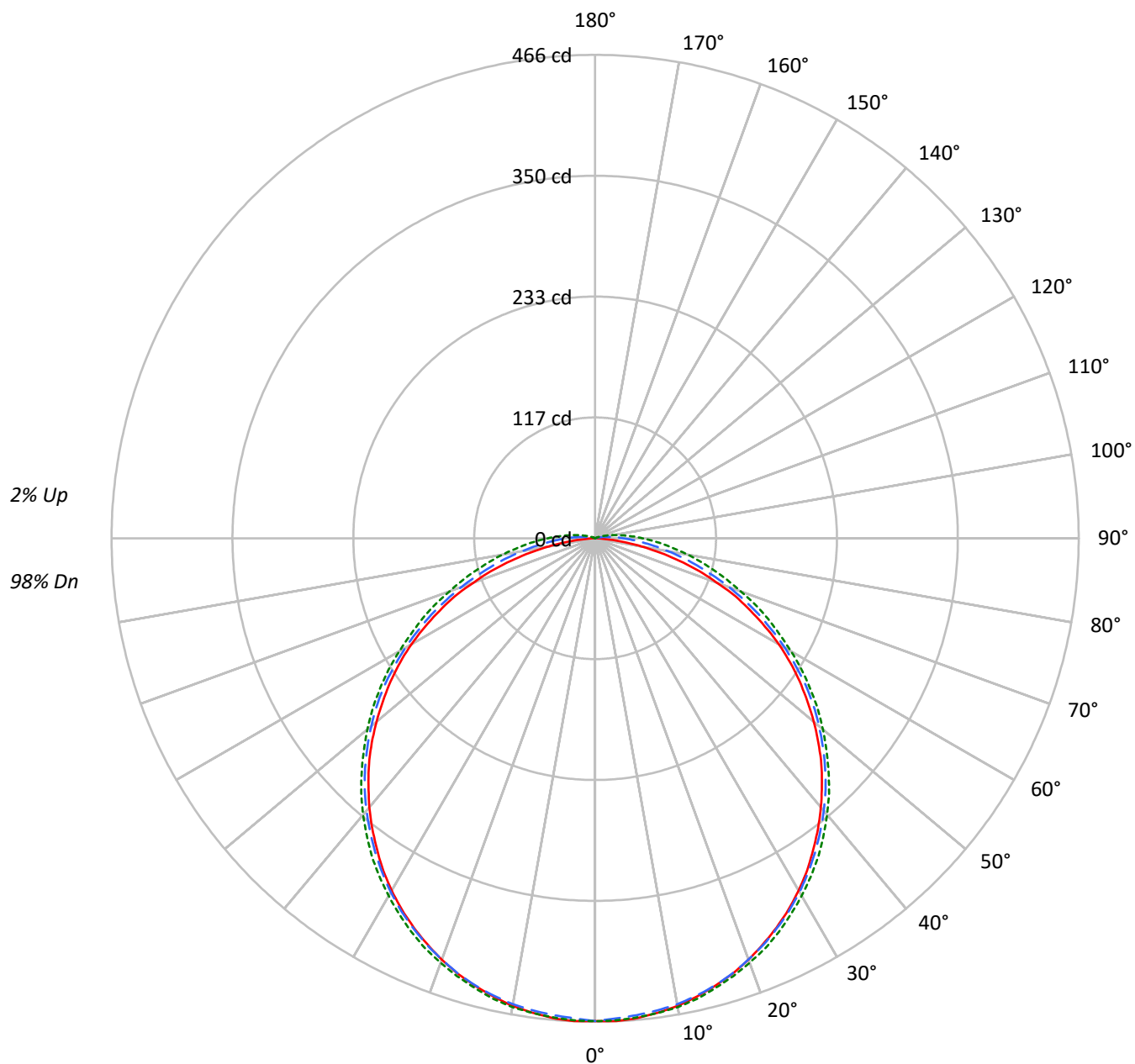
Lumens per Lamp: N/A
Luminaire Lumens: 1407.0 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 11.6
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: P580454

CATALOG NUMBER: HVSL4-1-LD4-2LO-35-UNV-O-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P580454

CATALOG NUMBER: HVSL4-1-LD4-2LO-35-UNV-O-EDD

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°	15029	15029	15029
5°	14837	14364	14398
10°	14579	13805	13828
15°	14295	13247	13228
20°	14003	12674	12658
25°	13684	12113	12100
30°	13337	11542	11515
35°	12934	10954	10943
40°	12514	10354	10327
45°	12068	9729	9684
50°	11525	9054	9018
55°	10941	8340	8316
60°	10258	7505	7541
65°	9304	6611	6773
70°	8056	5627	5934
75°	6438	4602	5149
80°	4321	3619	4397
85°	1849	2667	3646



TEST NUMBER: P580454

CATALOG NUMBER: HVSL4-1-LD4-2LO-35-UNV-O-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.0	3.1
10°-20°	126.3	9.0
20°-30°	191.7	13.6
30°-40°	231.8	16.5
40°-50°	241.8	17.2
50°-60°	221.1	15.7
60°-70°	172.4	12.2
70°-80°	107.8	7.7
80°-90°	49.0	3.5
90°-100°	16.4	1.2
100°-110°	4.1	0.3
110°-120°	0.6	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°	362.0	25.7
0°-40°	593.8	42.2
0°-60°	1056.7	75.1
0°-90°	1385.8	98.5
90°-120°	21.2	1.5
90°-150°	21.2	1.5
90°-180°	21.0	1.5
0°-180°	1407.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	465	465	465	465	465	
5°	464	464	461	464	464	44
15°	447	448	446	449	449	126
25°	414	414	415	418	419	191
35°	366	368	370	373	375	229
45°	308	311	314	317	318	238
55°	241	243	248	252	253	215
65°	165	168	174	181	184	164
75°	84	89	102	114	118	89
85°	14	27	46	61	66	18
90°	0	10	27	41	46	1
95°	0	3	14	26	29	0
105°	0	0	2	7	9	0
115°	0	0	0	1	2	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	



TEST NUMBER: P580454

CATALOG NUMBER: HVSL4-1-LD4-2LO-35-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	465.4	465.4	465.4	465.4	465.4
2.5°	465.9	465.2	463.2	465.2	465.1
5°	464.4	463.5	461.4	463.6	463.6
7.5°	461.3	461.0	459.1	461.6	461.6
10°	457.7	457.6	456.0	458.8	458.9
12.5°	452.6	453.1	451.6	454.3	454.6
15°	446.7	447.5	446.3	448.8	448.7
17.5°	440.2	440.7	439.8	442.6	442.5
20°	432.2	432.8	432.1	435.1	435.4
22.5°	423.3	424.1	424.0	427.1	427.9
25°	413.9	414.2	414.7	418.2	418.8
27.5°	403.5	404.0	404.8	408.0	408.6
30°	392.1	392.9	393.8	397.1	398.0
32.5°	380.0	380.9	382.0	386.3	386.7
35°	366.4	368.0	369.6	373.3	374.8
37.5°	352.8	354.9	356.3	360.3	361.5
40°	338.4	340.5	342.8	347.0	347.8
42.5°	323.4	325.8	328.6	332.3	333.6
45°	308.3	311.0	313.5	316.6	318.1
47.5°	291.9	294.7	297.7	301.2	302.2
50°	275.0	278.2	281.5	284.8	286.5
52.5°	257.7	261.5	265.3	268.8	270.4
55°	240.6	243.4	247.9	251.5	253.2
57.5°	222.8	225.2	229.3	235.2	236.1
60°	204.7	206.9	211.1	215.9	217.9
62.5°	184.7	187.7	192.1	198.2	200.0
65°	165.3	168.2	174.0	180.9	183.7
67.5°	146.6	147.5	155.0	162.2	166.9
70°	124.4	128.1	136.8	145.7	149.2
72.5°	105.3	109.0	118.6	129.0	133.4
75°	83.7	88.9	101.8	114.0	118.3
77.5°	64.7	70.4	86.4	98.7	103.7
80°	45.2	54.1	71.5	85.3	90.7
82.5°	28.4	39.4	58.0	72.5	77.2
85°	14.5	26.8	46.0	60.8	66.1
87.5°	3.8	17.3	35.8	49.9	55.4
90°	0.1	10.0	27.1	40.7	45.6
92.5°	0.1	5.6	20.2	32.4	37.4
95°	0.1	2.6	14.0	25.5	29.4
97.5°	0.1	1.1	9.7	19.2	23.1
100°	0.1	0.5	6.1	13.9	17.3
102.5°	0.2	0.3	3.8	10.0	12.7
105°	0.2	0.3	2.3	6.8	9.1



TEST NUMBER: P580454

CATALOG NUMBER: HVSL4-1-LD4-2LO-35-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.3	0.3	0.4	1.9	2.7
115°	0.3	0.3	0.4	1.2	1.8
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°	0.2	0.3	1.3	4.6	6.3
110°	0.3	0.3	0.8	2.9	4.2



(END OF REPORT)