

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: P580445

Luminaire Tested: **HVSL4-1-LD4-2HI-35-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580445
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-LD4-2HI-35-UNV-O-EDD-90
Description: 1 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

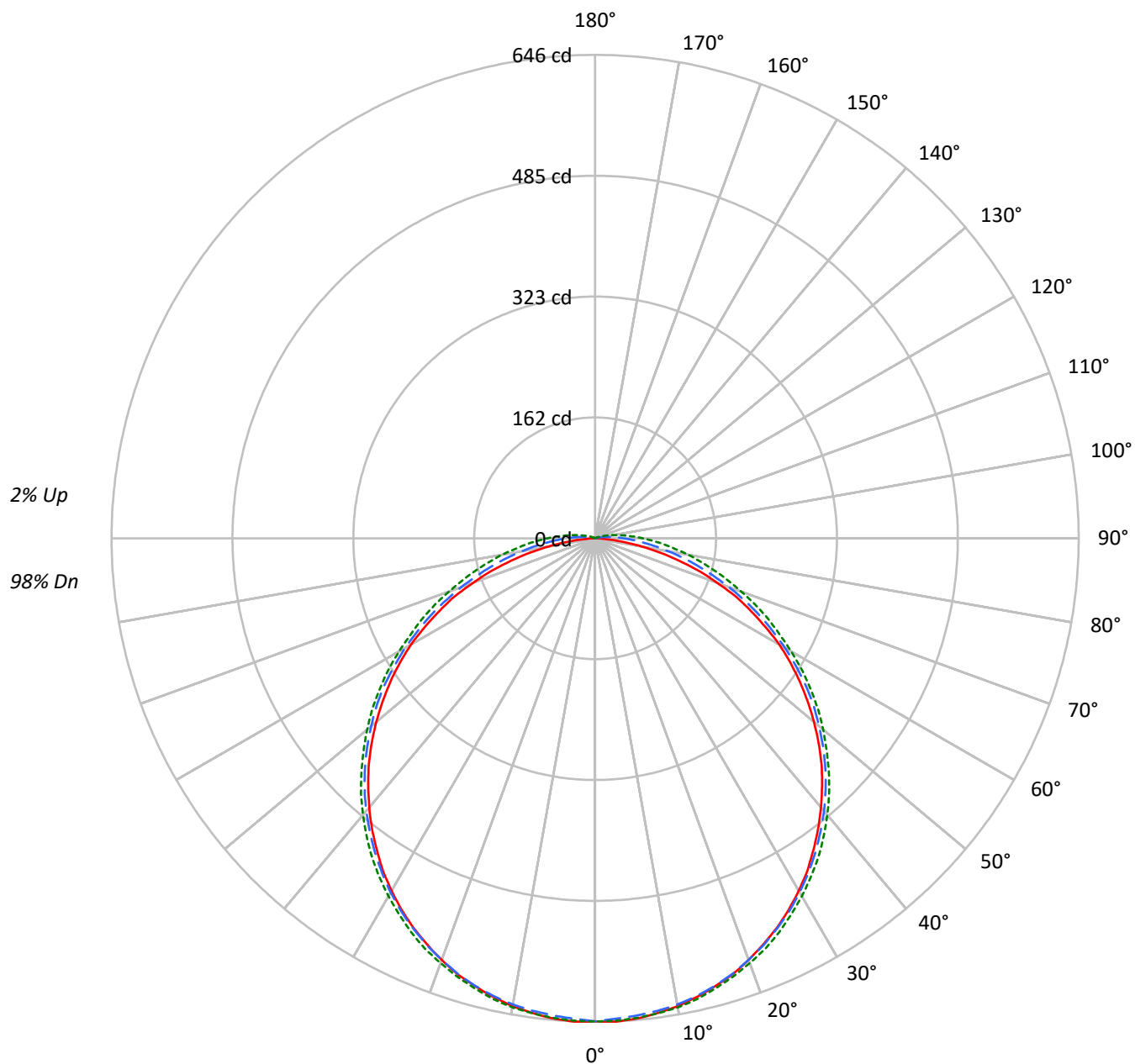
Lumens per Lamp: N/A
Luminaire Lumens: 1952.0 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.17')
CIE Type: Direct

Input Watts (W): 21.6
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

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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°	20848	20848	20848
5°	20582	19927	19975
10°	20227	19154	19183
15°	19831	18376	18352
20°	19426	17584	17563
25°	18983	16803	16789
30°	18500	16014	15977
35°	17943	15195	15182
40°	17363	14365	14327
45°	16741	13500	13438
50°	15989	12560	12512
55°	15179	11574	11538
60°	14232	10409	10462
65°	12912	9171	9398
70°	11177	7807	8232
75°	8930	6384	7143
80°	5993	5021	6103
85°	2563	3700	5064



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.1	3.1
10°-20°	175.2	9.0
20°-30°	265.9	13.6
30°-40°	321.5	16.5
40°-50°	335.5	17.2
50°-60°	306.7	15.7
60°-70°	239.1	12.2
70°-80°	149.6	7.7
80°-90°	67.9	3.5
90°-100°	22.8	1.2
100°-110°	5.7	0.3
110°-120°	0.9	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°	502.2	25.7
0°-40°	823.8	42.2
0°-60°	1466.0	75.1
0°-90°	1922.6	98.5
90°-120°	29.4	1.5
90°-150°	29.4	1.5
90°-180°	29.0	1.5
0°-180°	1952.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	646	646	646	646	646	
5°	644	643	640	643	643	61
15°	620	621	619	623	622	175
25°	574	575	575	580	581	265
35°	508	511	513	518	520	318
45°	428	432	435	439	441	330
55°	334	338	344	349	351	298
65°	229	233	241	251	255	227
75°	116	123	141	158	164	124
85°	20	37	64	84	92	25
90°	0	14	38	56	63	1
95°	0	4	20	35	41	0
105°	0	0	3	9	13	0
115°	0	0	1	2	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	645.6	645.6	645.6	645.6	645.6
2.5°	646.4	645.5	642.6	645.5	645.3
5°	644.2	643.0	640.1	643.2	643.2
7.5°	640.0	639.5	636.9	640.4	640.4
10°	635.0	634.8	632.7	636.5	636.6
12.5°	627.9	628.6	626.6	630.2	630.7
15°	619.7	620.8	619.1	622.6	622.5
17.5°	610.8	611.4	610.1	614.1	613.9
20°	599.6	600.4	599.5	603.6	604.1
22.5°	587.3	588.4	588.2	592.5	593.7
25°	574.2	574.7	575.3	580.2	581.1
27.5°	559.8	560.5	561.6	566.0	566.9
30°	543.9	545.2	546.4	550.9	552.2
32.5°	527.2	528.4	529.9	535.9	536.5
35°	508.3	510.6	512.7	517.9	520.0
37.5°	489.5	492.3	494.3	499.8	501.5
40°	469.5	472.4	475.6	481.4	482.5
42.5°	448.7	452.0	455.8	461.0	462.8
45°	427.7	431.5	435.0	439.2	441.4
47.5°	405.0	408.8	413.1	417.9	419.3
50°	381.5	386.0	390.5	395.1	397.5
52.5°	357.5	362.8	368.0	372.9	375.2
55°	333.8	337.7	344.0	349.0	351.3
57.5°	309.1	312.5	318.1	326.3	327.5
60°	284.0	287.0	292.8	299.5	302.3
62.5°	256.3	260.4	266.5	275.0	277.4
65°	229.4	233.3	241.4	251.0	254.9
67.5°	203.3	204.7	215.0	225.1	231.5
70°	172.6	177.8	189.8	202.1	207.0
72.5°	146.1	151.3	164.5	179.0	185.1
75°	116.1	123.3	141.2	158.1	164.1
77.5°	89.8	97.7	119.9	137.0	143.8
80°	62.7	75.0	99.2	118.4	125.9
82.5°	39.4	54.6	80.5	100.6	107.1
85°	20.1	37.1	63.8	84.3	91.8
87.5°	5.3	24.0	49.6	69.2	76.9
90°	0.2	13.8	37.6	56.5	63.3
92.5°	0.2	7.8	28.0	44.9	51.9
95°	0.2	3.7	19.5	35.3	40.8
97.5°	0.2	1.5	13.4	26.6	32.1
100°	0.2	0.8	8.5	19.3	24.0
102.5°	0.3	0.5	5.3	13.8	17.7
105°	0.3	0.5	3.2	9.4	12.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.5	0.5	0.6	2.6	3.8
115°	0.5	0.5	0.6	1.7	2.4
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°	0.3	0.5	1.8	6.4	8.7
110°	0.5	0.5	1.1	4.0	5.8



(END OF REPORT)