

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: P580527

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

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580527
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-LD4-1LO-40-UNV-O-EDD-90
Description: 3 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

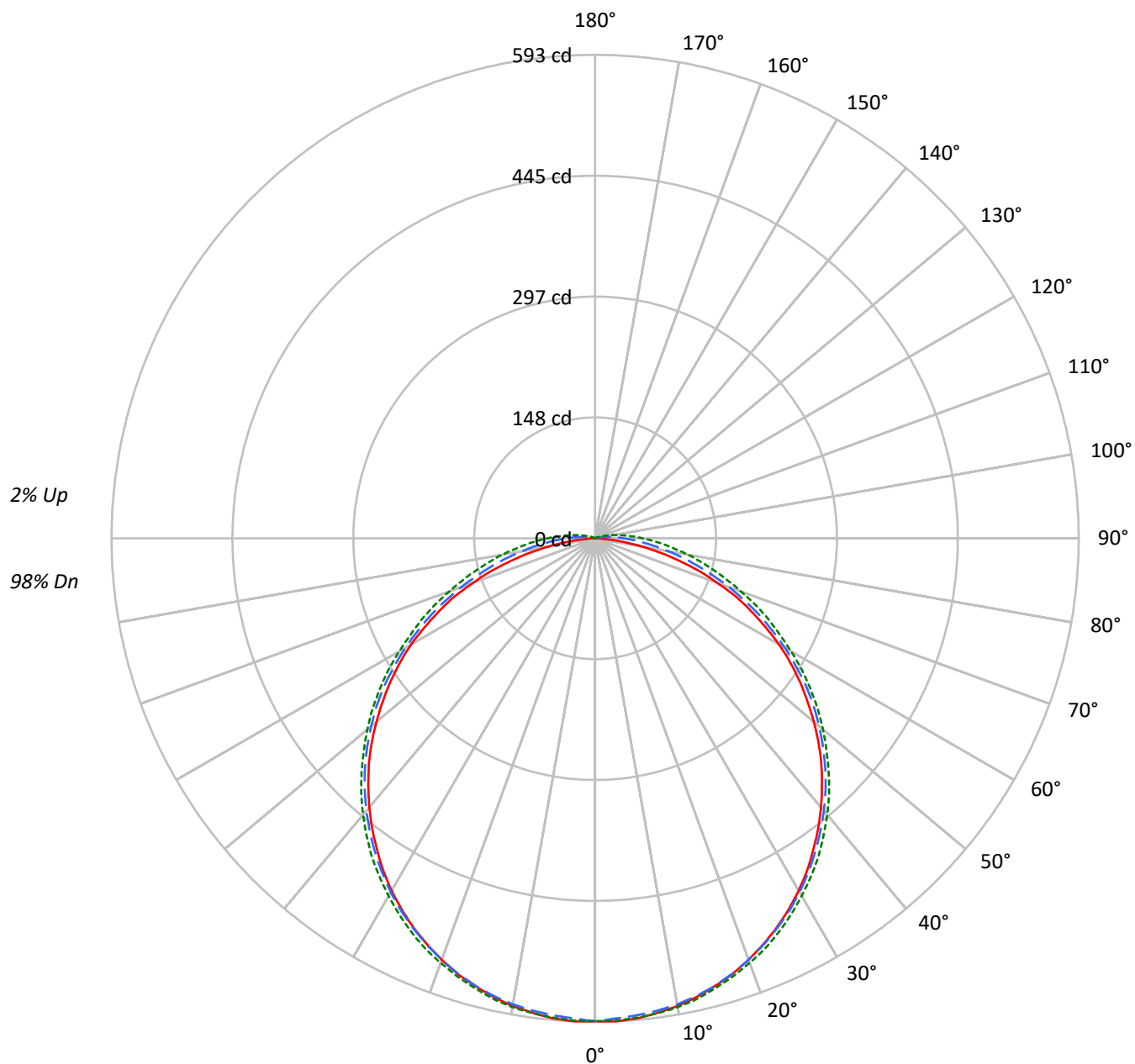
Lumens per Lamp: N/A
Luminaire Lumens: 1791.0 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 3' x H: 0.17')
CIE Type: Direct

Input Watts (W): 17.3
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°	6377	6377	6377
5°	6356	6135	6109
10°	6306	5934	5867
15°	6243	5728	5612
20°	6177	5512	5371
25°	6100	5298	5134
30°	6011	5079	4886
35°	5899	4848	4644
40°	5784	4612	4382
45°	5659	4362	4110
50°	5499	4086	3827
55°	5324	3794	3528
60°	5118	3442	3199
65°	4788	3062	2875
70°	4325	2635	2517
75°	3668	2185	2184
80°	2710	1747	1866
85°	1390	1316	1548



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.1	3.1
10°-20°	160.8	9.0
20°-30°	244.0	13.6
30°-40°	295.0	16.5
40°-50°	307.8	17.2
50°-60°	281.4	15.7
60°-70°	219.4	12.2
70°-80°	137.2	7.7
80°-90°	62.3	3.5
90°-100°	20.9	1.2
100°-110°	5.2	0.3
110°-120°	0.8	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°	460.8	25.7
0°-40°	755.8	42.2
0°-60°	1345.1	75.1
0°-90°	1764.0	98.5
90°-120°	27.0	1.5
90°-150°	27.0	1.5
90°-180°	27.0	1.5
0°-180°	1791.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	592	592	592	592	592	
5°	591	590	587	590	590	56
15°	569	570	568	571	571	161
25°	527	527	528	532	533	243
35°	466	468	470	475	477	292
45°	392	396	399	403	405	302
55°	306	310	316	320	322	274
65°	210	214	222	230	234	208
75°	106	113	130	145	150	114
85°	18	34	58	77	84	23
90°	0	13	34	52	58	1
95°	0	3	18	32	37	0
105°	0	0	3	9	12	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°	592.4	592.4	592.4	592.4	592.4
2.5°	593.1	592.2	589.6	592.2	592.1
5°	591.1	590.0	587.3	590.1	590.1
7.5°	587.2	586.8	584.4	587.6	587.6
10°	582.6	582.4	580.5	584.0	584.1
12.5°	576.2	576.7	574.9	578.3	578.7
15°	568.6	569.6	568.1	571.3	571.1
17.5°	560.4	560.9	559.8	563.4	563.3
20°	550.2	550.9	550.0	553.8	554.2
22.5°	538.9	539.8	539.7	543.6	544.7
25°	526.9	527.3	527.8	532.3	533.1
27.5°	513.6	514.3	515.3	519.3	520.2
30°	499.1	500.2	501.3	505.5	506.6
32.5°	483.7	484.8	486.2	491.7	492.2
35°	466.4	468.5	470.4	475.2	477.2
37.5°	449.1	451.7	453.6	458.6	460.1
40°	430.8	433.4	436.4	441.7	442.7
42.5°	411.7	414.7	418.2	423.0	424.6
45°	392.4	395.9	399.1	403.0	405.0
47.5°	371.6	375.1	379.0	383.5	384.7
50°	350.1	354.1	358.3	362.5	364.7
52.5°	328.0	332.9	337.7	342.1	344.2
55°	306.2	309.9	315.6	320.2	322.3
57.5°	283.6	286.7	291.8	299.4	300.5
60°	260.6	263.4	268.7	274.8	277.3
62.5°	235.2	238.9	244.5	252.3	254.6
65°	210.4	214.1	221.5	230.3	233.9
67.5°	186.6	187.8	197.3	206.5	212.4
70°	158.4	163.1	174.1	185.4	189.9
72.5°	134.1	138.8	151.0	164.2	169.8
75°	106.5	113.1	129.6	145.1	150.5
77.5°	82.4	89.6	110.0	125.7	132.0
80°	57.5	68.8	91.0	108.6	115.5
82.5°	36.2	50.1	73.9	92.3	98.3
85°	18.4	34.1	58.5	77.4	84.2
87.5°	4.9	22.1	45.5	63.5	70.5
90°	0.1	12.7	34.5	51.8	58.1
92.5°	0.1	7.1	25.7	41.2	47.6
95°	0.1	3.4	17.9	32.4	37.4
97.5°	0.1	1.4	12.3	24.4	29.5
100°	0.1	0.7	7.8	17.7	22.1
102.5°	0.3	0.4	4.9	12.7	16.2
105°	0.3	0.4	2.9	8.7	11.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.4	0.4	0.6	2.4	3.5
115°	0.4	0.4	0.6	1.5	2.2
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	0.4	1.7	5.9	8.0
110°	0.4	0.4	1.0	3.6	5.3



(END OF REPORT)