

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: P580489

Luminaire Tested: **HVSL4-2-LD4-1STD-50-UNV-O-EDD-90**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580489
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: HVSL4-2-LD4-1STD-50-UNV-O-EDD-90
Description: 2 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 5000K, 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

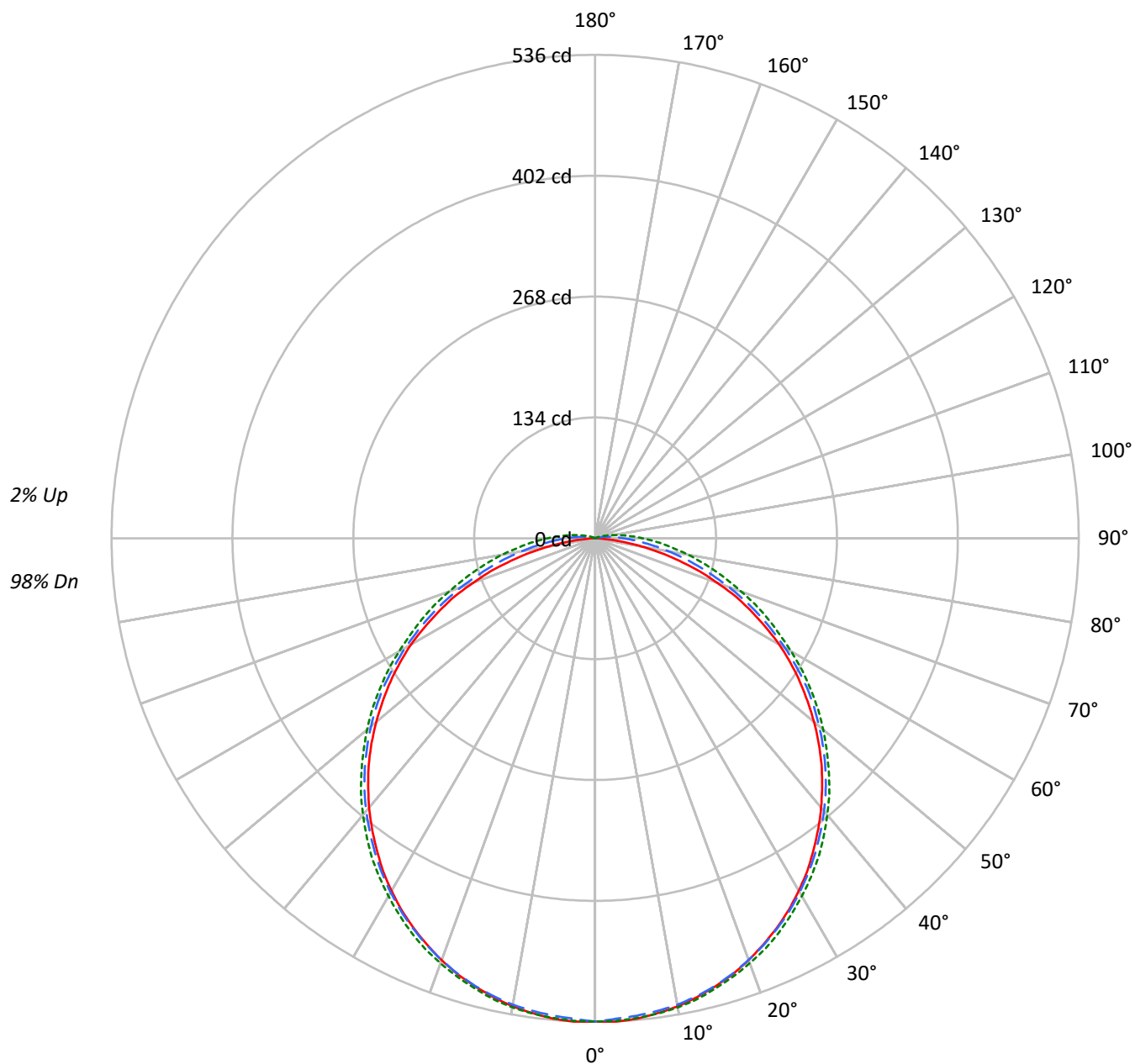
Lumens per Lamp: N/A
Luminaire Lumens: 1620.0 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.17')
CIE Type: Direct

Input Watts (W): 16.4
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: P580489

CATALOG NUMBER: HVSL4-2-LD4-1STD-50-UNV-O-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P580489

CATALOG NUMBER: HVSL4-2-LD4-1STD-50-UNV-O-EDD-90

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°	8651	8651	8651
5°	8603	8311	8289
10°	8515	8025	7960
15°	8409	7733	7615
20°	8300	7432	7287
25°	8173	7133	6966
30°	8029	6827	6629
35°	7857	6507	6301
40°	7677	6180	5945
45°	7480	5835	5576
50°	7236	5458	5192
55°	6968	5057	4787
60°	6651	4577	4340
65°	6168	4060	3901
70°	5500	3485	3416
75°	4587	2879	2964
80°	3283	2294	2533
85°	1584	1715	2102



TEST NUMBER: P580489

CATALOG NUMBER: HVSL4-2-LD4-1STD-50-UNV-O-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.7	3.1
10°-20°	145.4	9.0
20°-30°	220.7	13.6
30°-40°	266.8	16.5
40°-50°	278.4	17.2
50°-60°	254.6	15.7
60°-70°	198.4	12.2
70°-80°	124.1	7.7
80°-90°	56.4	3.5
90°-100°	18.9	1.2
100°-110°	4.8	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°	416.8	25.7
0°-40°	683.6	42.2
0°-60°	1216.6	75.1
0°-90°	1595.6	98.5
90°-120°	24.4	1.5
90°-150°	24.4	1.5
90°-180°	24.0	1.5
0°-180°	1620.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	536	536	536	536	536	
5°	535	534	531	534	534	51
15°	514	515	514	517	517	145
25°	477	477	477	482	482	220
35°	422	424	426	430	432	264
45°	355	358	361	364	366	274
55°	277	280	286	290	292	247
65°	190	194	200	208	212	188
75°	96	102	117	131	136	103
85°	17	31	53	70	76	21
90°	0	12	31	47	52	1
95°	0	3	16	29	34	0
105°	0	0	3	8	10	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: P580489

CATALOG NUMBER: HVSL4-2-LD4-1STD-50-UNV-O-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	535.8	535.8	535.8	535.8	535.8
2.5°	536.4	535.7	533.3	535.7	535.5
5°	534.7	533.7	531.3	533.8	533.8
7.5°	531.1	530.7	528.6	531.5	531.5
10°	527.0	526.8	525.1	528.2	528.3
12.5°	521.1	521.7	520.0	523.0	523.4
15°	514.3	515.2	513.8	516.7	516.6
17.5°	506.9	507.4	506.4	509.7	509.5
20°	497.7	498.3	497.5	500.9	501.3
22.5°	487.4	488.3	488.2	491.7	492.7
25°	476.6	476.9	477.4	481.5	482.2
27.5°	464.6	465.2	466.1	469.7	470.5
30°	451.4	452.4	453.4	457.2	458.2
32.5°	437.5	438.5	439.8	444.7	445.2
35°	421.9	423.8	425.5	429.8	431.6
37.5°	406.2	408.6	410.2	414.8	416.2
40°	389.7	392.1	394.7	399.5	400.4
42.5°	372.4	375.1	378.3	382.6	384.1
45°	354.9	358.1	361.0	364.5	366.3
47.5°	336.1	339.3	342.8	346.8	348.0
50°	316.7	320.3	324.1	327.9	329.9
52.5°	296.7	301.1	305.4	309.5	311.3
55°	277.0	280.3	285.5	289.6	291.5
57.5°	256.5	259.3	264.0	270.8	271.8
60°	235.7	238.2	243.0	248.6	250.8
62.5°	212.7	216.1	221.2	228.2	230.3
65°	190.3	193.6	200.3	208.3	211.6
67.5°	168.7	169.9	178.5	186.8	192.1
70°	143.2	147.5	157.5	167.7	171.8
72.5°	121.3	125.6	136.5	148.5	153.6
75°	96.4	102.3	117.2	131.2	136.2
77.5°	74.5	81.1	99.5	113.7	119.4
80°	52.0	62.3	82.4	98.3	104.5
82.5°	32.7	45.3	66.8	83.5	88.9
85°	16.7	30.8	52.9	70.0	76.2
87.5°	4.4	20.0	41.2	57.5	63.8
90°	0.1	11.5	31.2	46.9	52.5
92.5°	0.1	6.4	23.2	37.3	43.1
95°	0.1	3.0	16.2	29.3	33.9
97.5°	0.1	1.3	11.1	22.1	26.7
100°	0.1	0.6	7.1	16.0	20.0
102.5°	0.3	0.4	4.4	11.5	14.7
105°	0.3	0.4	2.7	7.8	10.5



TEST NUMBER: P580489

CATALOG NUMBER: HVSL4-2-LD4-1STD-50-UNV-O-EDD-90

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.4	0.4	0.5	2.1	3.2
115°	0.4	0.4	0.5	1.4	2.0
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	1.5	5.3	7.2
110°	0.4	0.4	0.9	3.3	4.8



(END OF REPORT)