

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: P580604

Luminaire Tested: **HVSL4-4-LD4-2STD-30-UNV-O-EDD**

Issue Date: 12/16/2022



Test Information

Test Method: LM-79-08
Report Number: P580604
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: HVSL4-4-LD4-2STD-30-UNV-O-EDD
Description: 4 FOOT, 4INCH WIDE, HVSL LED LUMINAIRE, WITH 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

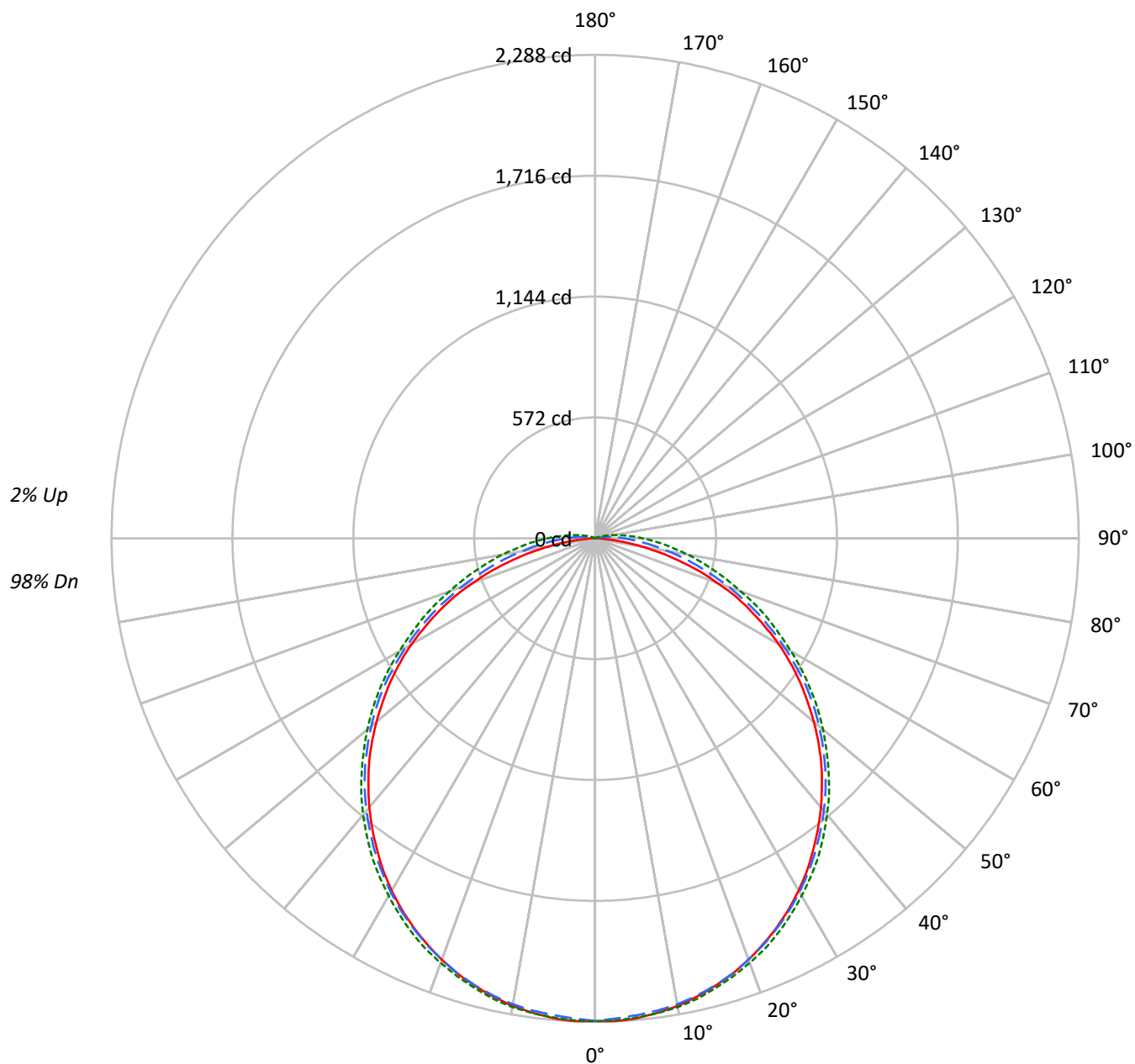
Lumens per Lamp: N/A
Luminaire Lumens: 6909.0 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 65.4
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

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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°	18447	18447	18447
5°	18411	17765	17675
10°	18289	17195	16975
15°	18130	16609	16238
20°	17961	15999	15539
25°	17758	15388	14856
30°	17525	14762	14136
35°	17229	14102	13436
40°	16921	13425	12676
45°	16590	12708	11889
50°	16159	11919	11072
55°	15692	11075	10208
60°	15137	10059	9256
65°	14235	8959	8317
70°	12938	7724	7284
75°	11094	6417	6319
80°	8344	5146	5399
85°	4461	3887	4480



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.2	3.1
10°-20°	620.3	9.0
20°-30°	941.2	13.6
30°-40°	1138.0	16.5
40°-50°	1187.4	17.2
50°-60°	1085.7	15.7
60°-70°	846.3	12.2
70°-80°	529.4	7.7
80°-90°	240.5	3.5
90°-100°	80.6	1.2
100°-110°	20.2	0.3
110°-120°	3.2	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°	1777.7	25.7
0°-40°	2915.7	42.2
0°-60°	5188.8	75.1
0°-90°	6805.0	98.5
90°-120°	104.0	1.5
90°-150°	104.0	1.5
90°-180°	104.0	1.5
0°-180°	6909.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2285	2285	2285	2285	2285	
5°	2280	2276	2266	2276	2276	217
15°	2194	2197	2191	2204	2203	619
25°	2032	2034	2036	2053	2057	937
35°	1799	1807	1815	1833	1841	1126
45°	1514	1527	1540	1555	1562	1166
55°	1181	1195	1217	1235	1243	1055
65°	812	826	854	888	902	803
75°	411	436	500	560	581	438
85°	71	131	226	298	325	90
90°	0	49	133	200	224	3
95°	0	13	69	125	144	0
105°	1	2	11	33	45	1
115°	2	2	2	6	9	1
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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CATALOG NUMBER: HVSL4-4-LD4-2STD-30-UNV-O-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2285.1	2285.1	2285.1	2285.1	2285.1
2.5°	2287.8	2284.5	2274.3	2284.5	2284.0
5°	2280.2	2275.9	2265.7	2276.5	2276.5
7.5°	2265.1	2263.5	2254.4	2266.8	2266.8
10°	2247.4	2246.8	2239.3	2252.8	2253.3
12.5°	2222.6	2224.7	2217.7	2230.7	2232.3
15°	2193.5	2197.3	2191.3	2203.7	2203.2
17.5°	2161.7	2163.9	2159.6	2173.6	2173.0
20°	2122.4	2125.1	2121.9	2136.4	2138.0
22.5°	2078.8	2082.5	2082.0	2097.1	2101.4
25°	2032.4	2034.1	2036.2	2053.4	2056.7
27.5°	1981.3	1984.0	1987.7	2003.4	2006.6
30°	1925.2	1929.6	1933.9	1950.0	1954.3
32.5°	1866.0	1870.3	1875.7	1896.7	1898.8
35°	1799.2	1807.3	1814.8	1833.1	1840.7
37.5°	1732.4	1742.6	1749.6	1769.0	1775.0
40°	1661.8	1672.1	1683.4	1703.8	1707.6
42.5°	1588.0	1599.9	1613.3	1631.7	1638.1
45°	1513.7	1527.2	1539.5	1554.6	1562.2
47.5°	1433.4	1446.9	1462.0	1479.2	1484.1
50°	1350.5	1366.1	1382.3	1398.4	1407.0
52.5°	1265.4	1284.2	1302.5	1319.8	1327.8
55°	1181.3	1195.3	1217.4	1235.2	1243.3
57.5°	1094.1	1105.9	1125.8	1154.9	1159.2
60°	1005.2	1016.0	1036.4	1060.1	1069.8
62.5°	907.1	921.7	943.2	973.4	982.0
65°	811.8	825.8	854.3	888.3	902.3
67.5°	719.7	724.5	761.2	796.7	819.3
70°	610.9	629.2	671.7	715.4	732.6
72.5°	517.1	535.4	582.3	633.5	655.0
75°	411.0	436.3	499.9	559.7	580.7
77.5°	317.8	345.8	424.5	484.8	509.1
80°	221.9	265.6	351.2	419.1	445.5
82.5°	139.5	193.4	285.0	356.1	379.2
85°	71.1	131.4	225.7	298.4	324.8
87.5°	18.9	85.1	175.6	245.1	272.0
90°	0.5	49.0	133.1	199.9	224.1
92.5°	0.5	27.5	99.1	158.9	183.7
95°	0.5	12.9	69.0	125.0	144.4
97.5°	0.5	5.4	47.4	94.3	113.7
100°	0.5	2.7	30.2	68.4	85.1
102.5°	1.1	1.6	18.9	49.0	62.5
105°	1.1	1.6	11.3	33.4	44.7



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CATALOG NUMBER: HVSL4-4-LD4-2STD-30-UNV-O-EDD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.6	1.6	2.2	9.2	13.5
115°	1.6	1.6	2.2	5.9	8.6
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°	1.1	1.6	6.5	22.6	30.7
110°	1.6	1.6	3.8	14.0	20.5



(END OF REPORT)