

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: METALUX

Report Number: P571814

Luminaire Tested: **4APVTLD-40L850**

Issue Date: 9/28/2021

Test Information

Test Method: LM-79-08
Report Number: P571814
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2108-352-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4APVTLTD-40L850
Description: 4FT VAPORTIGHT
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

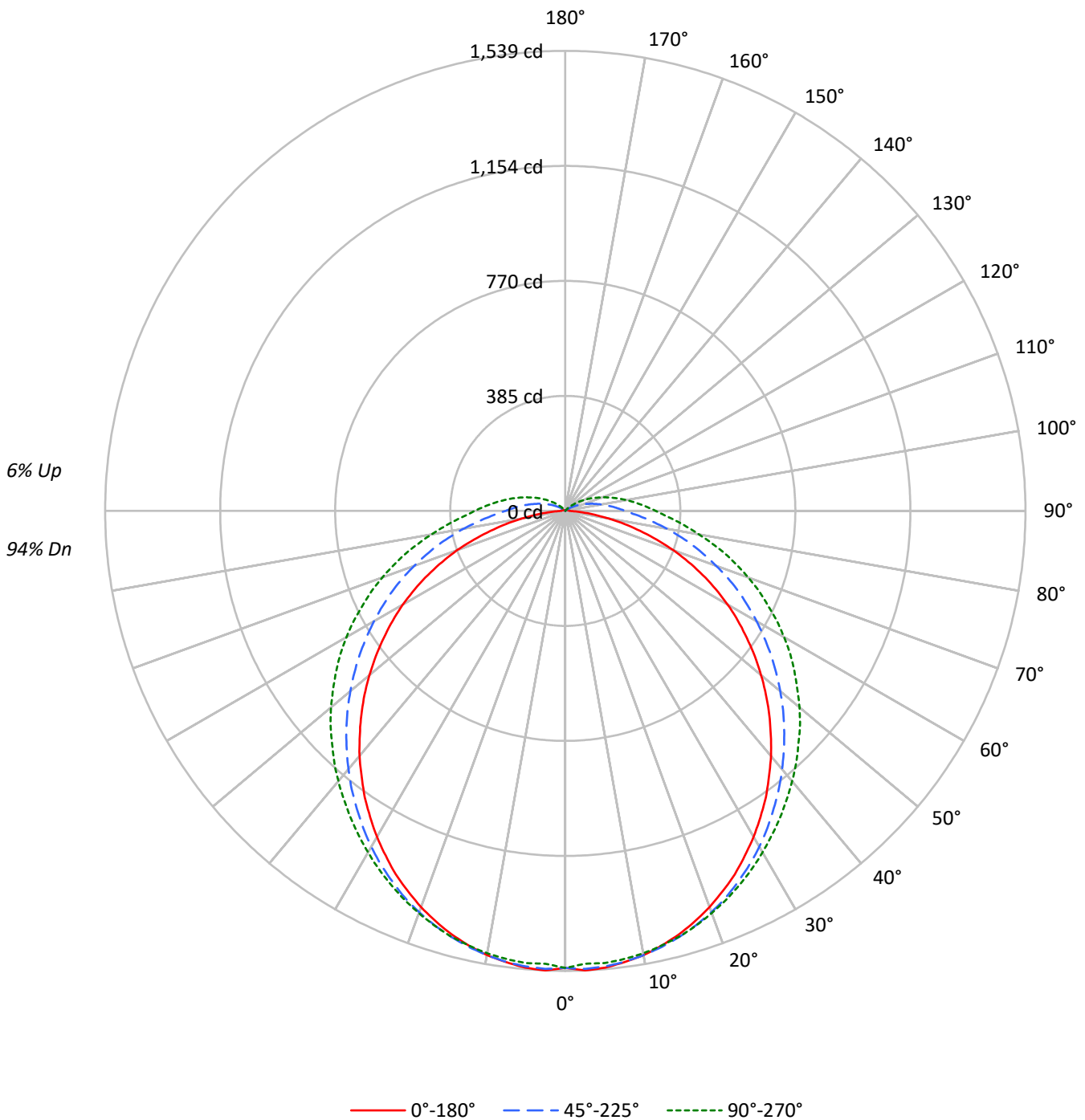
Lumens per Lamp: N/A
Luminaire Lumens: 5156.0 lumens
Efficiency: N/A
Efficacy: 132.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 39
Input Voltage (V): 120
Input Current (A_{in}): 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: 28.75 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				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	96	96	96	94
1	106	100	95	91	102	97	93	89	92	88	85	87	84	81	82	80	77	77	77	77	75
2	95	86	79	73	92	84	77	71	79	73	68	75	70	66	71	67	64	64	64	64	61
3	87	75	67	60	83	73	65	59	69	62	57	66	60	55	62	57	53	53	53	53	51
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	45	45	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	50	44	39	39	39	39	37
6	67	53	44	37	65	52	43	37	49	42	36	47	40	35	45	39	34	34	34	34	32
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	30	30	30	28
8	58	44	35	29	56	43	35	29	41	34	28	39	33	28	38	32	27	27	27	27	25
9	54	40	32	26	52	39	31	26	38	30	25	36	30	25	35	29	24	24	24	24	23
10	50	37	29	24	49	36	29	23	35	28	23	33	27	23	32	26	22	22	22	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9872	9872	9872
5°	9907	9653	9510
10°	9824	9380	9207
15°	9700	9102	8903
20°	9549	8819	8592
25°	9379	8512	8286
30°	9173	8199	7992
35°	8958	7864	7714
40°	8722	7537	7452
45°	8461	7209	7193
50°	8185	6870	6957
55°	7877	6539	6702
60°	7556	6195	6447
65°	7114	5854	6147
70°	6523	5456	5856
75°	5608	5063	5539
80°	4446	4644	5175
85°	2936	4262	4915



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.7	2.8
10°-20°	414.1	8.0
20°-30°	626.2	12.1
30°-40°	756.4	14.7
40°-50°	796.0	15.4
50°-60°	748.6	14.5
60°-70°	626.0	12.1
70°-80°	448.7	8.7
80°-90°	268.4	5.2
90°-100°	160.3	3.1
100°-110°	94.7	1.8
110°-120°	48.1	0.9
120°-130°	19.0	0.4
130°-140°	4.6	0.1
140°-150°	0.1	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1185.1	23.0
0°-40°	1941.5	37.7
0°-60°	3486.0	67.6
0°-90°	4829.2	93.7
90°-120°	303.1	5.9
90°-150°	326.8	6.3
90°-180°	327.0	6.3
0°-180°	5156.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1529	1529	1529	1529	1529	
5°	1534	1518	1530	1517	1518	146
15°	1467	1456	1475	1470	1474	414
25°	1342	1337	1368	1370	1380	618
35°	1169	1173	1216	1235	1252	731
45°	965	979	1036	1076	1102	744
55°	741	765	840	903	935	663
65°	507	543	640	718	747	501
75°	260	328	439	522	553	276
85°	58	149	263	342	370	67
90°	14	94	199	276	302	10
95°	13	64	159	227	252	10
105°	10	25	92	149	168	11
115°	6	7	44	85	102	7
125°	4	4	13	38	49	4
135°	2	2	2	9	14	2
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	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1528.6	1528.6	1528.6	1528.6	1528.6
2.5°	1538.8	1523.4	1533.7	1522.4	1516.3
5°	1533.7	1518.3	1529.6	1517.3	1518.3
7.5°	1522.4	1508.0	1521.4	1510.1	1512.2
10°	1509.1	1494.7	1509.1	1499.8	1502.9
12.5°	1489.6	1477.2	1493.7	1485.5	1489.6
15°	1467.0	1455.7	1475.2	1470.1	1474.2
17.5°	1440.3	1430.0	1453.6	1450.6	1454.7
20°	1410.5	1402.3	1429.0	1424.9	1432.1
22.5°	1376.6	1371.5	1401.3	1398.2	1407.4
25°	1341.7	1336.6	1368.4	1369.5	1379.7
27.5°	1300.7	1298.6	1334.6	1337.6	1351.0
30°	1259.6	1259.6	1297.6	1304.8	1319.2
32.5°	1214.4	1217.5	1257.6	1270.9	1286.3
35°	1169.3	1173.4	1215.5	1235.0	1252.4
37.5°	1119.0	1127.2	1173.4	1197.0	1216.5
40°	1070.7	1078.9	1128.2	1157.0	1180.6
42.5°	1017.3	1029.7	1082.0	1116.9	1143.6
45°	965.0	979.4	1035.8	1075.9	1102.5
47.5°	910.6	927.0	987.6	1033.8	1064.6
50°	855.1	874.6	938.3	990.6	1022.5
52.5°	798.7	820.2	889.0	947.5	978.3
55°	741.2	764.8	839.7	903.4	935.2
57.5°	684.7	711.4	788.4	858.2	892.1
60°	627.2	657.0	739.1	811.0	844.9
62.5°	567.7	600.5	688.8	765.8	797.7
65°	507.1	543.1	639.6	717.6	747.3
67.5°	445.5	488.7	589.3	669.3	701.2
70°	385.0	434.2	536.9	618.0	650.9
72.5°	320.3	379.8	487.6	570.8	601.6
75°	259.7	328.5	439.4	522.5	553.3
77.5°	202.2	280.3	391.1	473.3	502.0
80°	147.8	230.0	346.0	427.1	454.8
82.5°	98.6	186.8	301.8	382.9	410.6
85°	58.5	148.9	262.8	341.9	369.6
87.5°	27.7	118.1	226.9	304.9	331.6
90°	14.4	94.4	199.2	276.1	301.8
92.5°	13.3	78.0	178.6	251.5	276.1
95°	13.3	63.6	159.1	226.9	252.5
97.5°	12.3	51.3	140.6	207.4	228.9
100°	11.3	41.1	123.2	185.8	207.4
102.5°	11.3	31.8	106.8	166.3	187.9
105°	10.3	24.6	92.4	148.9	168.4
107.5°	9.2	18.5	78.0	131.4	149.9
110°	8.2	14.4	65.7	115.0	132.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	7.2	10.3	54.4	99.6	116.0
115°	6.2	7.2	44.1	85.2	101.6
117.5°	6.2	6.2	33.9	71.9	87.3
120°	5.1	5.1	25.7	59.5	73.9
122.5°	5.1	4.1	19.5	48.2	60.6
125°	4.1	4.1	13.3	38.0	49.3
127.5°	3.1	3.1	8.2	28.7	39.0
130°	3.1	3.1	5.1	21.6	29.8
132.5°	2.1	2.1	2.1	15.4	21.6
135°	2.1	2.1	2.1	9.2	14.4
137.5°	2.1	1.0	1.0	5.1	9.2
140°	1.0	1.0	1.0	2.1	4.1
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

(END OF REPORT)