

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: P233297

Luminaire Tested: **4VRVT3-LD5-6-W-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233297
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-9)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4VRVT3-LD5-6-W-UNV-L850-CD1-U
Description: 4FT VRVT3 WIDE APPLICATION, 6000LM
Light Source: (392) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7159.0 lumens
Efficiency: N/A
Efficacy: 145.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.67 / 1.66
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.17')
CIE Type: Semi-Direct

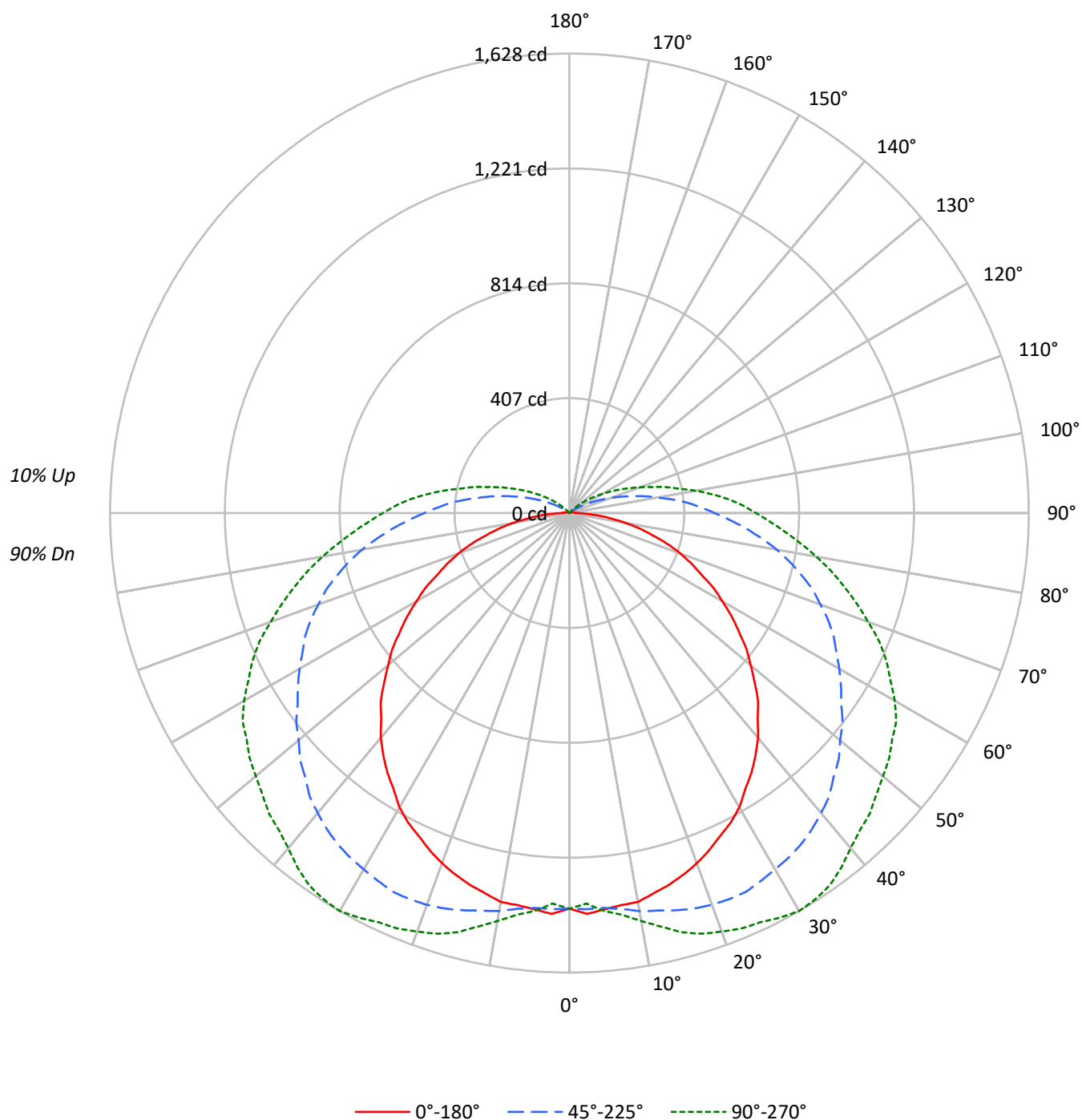
Input Watts (W): 49.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																	
0	117	117	117	117	113	113	113	113	105	105	105		99	99	99		93
1	103	96	91	86	99	93	88	83	87	83	79		81	78	74		76
2	92	82	74	67	88	79	72	65	74	67	62		69	64	59		64
3	83	71	61	54	79	68	60	53	64	56	50		59	53	48		55
4	75	62	52	44	72	60	51	44	56	48	42		52	46	40		49
5	69	55	45	38	66	53	44	37	50	42	35		46	40	34		43
6	63	49	39	32	61	47	38	32	44	36	31		42	35	29		39
7	58	44	35	28	56	43	34	28	40	32	27		38	31	26		36
8	54	40	31	25	52	39	30	24	37	29	24		34	28	23		33
9	51	36	28	22	49	35	27	22	33	26	21		32	25	20		30
10	47	33	25	20	45	33	25	19	31	24	19		29	23	18		28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9050	9050	9050
5°	9104	8864	8864
10°	9107	8901	8990
15°	9016	8989	9285
20°	8936	9116	9466
25°	8826	9208	9607
30°	8766	9211	9862
35°	8611	9264	9912
40°	8473	9269	9782
45°	8293	9214	9821
50°	8027	9169	9869
55°	7789	9154	10007
60°	7538	9259	10157
65°	7227	9461	10194
70°	7077	9620	10133
75°	6599	9821	10097
80°	6113	10020	10110
85°	5220	10185	10208



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.3	1.9
10°-20°	412.3	5.8
20°-30°	673.1	9.4
30°-40°	877.1	12.3
40°-50°	984.7	13.8
50°-60°	1006.7	14.1
60°-70°	945.4	13.2
70°-80°	799.1	11.2
80°-90°	591.8	8.3
90°-100°	387.2	5.4
100°-110°	213.6	3.0
110°-120°	96.7	1.4
120°-130°	32.2	0.5
130°-140°	3.9	0.1
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°	1220.7	17.1
0°-40°	2097.8	29.3
0°-60°	4089.2	57.1
0°-90°	6425.4	89.8
90°-120°	697.5	9.7
90°-150°	733.6	10.2
90°-180°	734.0	10.3
0°-180°	7159.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1401	1401	1401	1401	1401	
5°	1409	1408	1405	1416	1415	134
15°	1364	1396	1457	1522	1538	385
25°	1263	1342	1480	1577	1600	583
35°	1124	1235	1432	1581	1609	703
45°	946	1087	1324	1464	1505	726
55°	733	906	1176	1347	1396	657
65°	515	711	1034	1201	1239	515
75°	306	535	852	983	1009	326
85°	104	360	628	745	768	105
90°	27	269	514	632	661	18
95°	20	193	420	527	565	15
105°	10	60	231	326	355	11
115°	5	6	97	177	195	5
125°	2	2	20	72	88	2
135°	1	0	0	5	14	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	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1401.3	1401.3	1401.3	1401.3	1401.3	1401.3	1401.3	1401.3	1401.3	1401.3	1401.3
2.5°	1421.5	1404.6	1405.4	1403.0	1403.0	1412.6	1410.2	1403.8	1405.4	1402.2	1404.6
5°	1409.4	1401.3	1402.2	1407.0	1406.2	1407.8	1409.4	1405.4	1412.6	1410.2	1404.6
7.5°	1401.3	1394.9	1396.5	1390.1	1403.0	1406.2	1406.2	1403.8	1411.0	1413.4	1414.2
10°	1398.9	1386.8	1391.7	1382.0	1394.9	1409.4	1407.0	1415.9	1421.5	1427.1	1432.0
12.5°	1379.6	1374.7	1372.3	1379.6	1397.3	1408.6	1401.3	1407.8	1423.1	1433.6	1442.5
15°	1363.5	1361.8	1361.0	1368.3	1376.4	1395.7	1398.1	1415.1	1436.0	1441.7	1457.0
17.5°	1343.3	1338.5	1341.7	1347.3	1373.1	1385.2	1396.5	1408.6	1437.6	1448.9	1469.1
20°	1319.9	1316.7	1327.2	1334.4	1358.6	1373.1	1386.8	1406.2	1428.0	1455.4	1477.1
22.5°	1293.3	1291.7	1300.6	1315.1	1346.5	1360.2	1369.9	1396.5	1430.4	1453.0	1480.4
25°	1262.7	1262.7	1272.3	1295.7	1332.8	1342.5	1357.8	1381.2	1412.6	1441.7	1480.4
27.5°	1236.9	1236.9	1245.7	1269.1	1299.8	1325.6	1344.9	1361.8	1403.0	1435.2	1469.1
30°	1203.8	1207.8	1215.1	1236.9	1274.8	1297.3	1315.1	1348.1	1387.6	1423.1	1457.8
32.5°	1159.5	1161.1	1179.6	1206.2	1244.9	1267.5	1291.7	1324.7	1376.4	1398.1	1446.5
35°	1124.0	1124.0	1140.9	1168.3	1218.3	1235.3	1258.6	1297.3	1343.3	1382.8	1432.0
37.5°	1082.9	1083.7	1106.2	1143.3	1182.8	1204.6	1227.2	1269.9	1315.9	1357.0	1411.8
40°	1040.1	1046.6	1057.9	1095.0	1141.7	1168.3	1187.7	1236.1	1294.9	1335.2	1387.6
42.5°	986.9	994.2	1014.3	1052.2	1097.4	1134.5	1157.8	1200.6	1255.4	1309.4	1361.8
45°	945.8	949.8	969.2	1007.1	1057.9	1086.9	1110.3	1164.3	1221.5	1274.8	1323.9
47.5°	891.0	899.8	919.2	961.9	1015.9	1048.2	1068.3	1121.6	1182.8	1233.6	1294.1
50°	838.6	845.8	873.2	911.9	971.6	999.0	1026.4	1079.6	1149.0	1203.0	1252.2
52.5°	791.0	796.6	820.8	866.8	919.2	955.5	977.2	1039.3	1107.9	1161.9	1219.9
55°	732.9	746.6	770.8	816.8	876.4	905.5	926.4	991.7	1061.1	1124.0	1175.6
57.5°	682.1	695.8	720.8	769.2	827.3	854.7	887.7	952.2	1015.9	1082.1	1140.9
60°	625.7	640.2	668.4	721.6	779.7	807.9	836.1	906.3	974.8	1036.9	1104.6
62.5°	576.5	587.0	620.9	665.2	724.9	757.9	789.4	858.7	940.1	1003.8	1065.9
65°	515.2	537.0	567.6	620.0	678.9	711.2	745.8	816.8	889.3	960.3	1033.7
67.5°	468.5	481.4	517.6	566.8	629.7	668.4	699.9	779.7	853.1	923.2	992.6
70°	417.7	429.8	465.2	517.6	583.8	617.6	660.4	736.2	817.6	883.7	946.6
72.5°	364.4	379.0	412.8	466.8	539.4	578.9	615.2	696.6	780.5	841.0	903.9
75°	305.6	327.4	366.9	419.3	493.5	535.4	571.7	657.9	732.9	795.0	852.3
77.5°	256.4	273.3	317.7	382.2	457.2	495.1	533.8	616.0	690.2	747.4	800.7
80°	203.2	226.6	266.1	333.8	409.6	449.1	489.4	566.8	637.8	695.0	746.6
82.5°	150.8	171.7	220.9	291.1	368.5	406.4	440.2	516.0	584.6	641.8	686.2
85°	104.0	123.4	178.2	249.1	322.5	360.4	394.3	470.9	533.0	580.5	628.1
87.5°	58.1	83.9	140.3	207.2	279.8	316.1	346.7	418.5	476.5	527.3	568.4
90°	26.6	53.2	103.2	167.7	234.6	269.3	301.6	366.1	425.7	470.1	514.4
92.5°	22.6	32.3	76.6	134.7	199.2	230.6	262.9	323.3	375.7	425.7	465.2
95°	20.2	21.8	50.0	104.0	161.3	192.7	221.7	279.8	329.8	376.5	420.1
97.5°	17.7	17.7	30.6	73.4	128.2	154.0	181.4	237.9	284.6	329.0	366.9
100°	14.5	15.3	17.7	47.6	92.7	117.7	145.1	194.3	241.1	283.0	316.9
102.5°	12.9	12.9	13.7	29.0	63.7	86.3	110.5	154.0	200.8	237.9	274.1
105°	10.5	11.3	11.3	15.3	42.7	59.7	79.8	121.8	160.5	197.5	230.6
107.5°	8.9	8.9	8.9	9.7	25.8	38.7	54.8	88.7	125.8	161.3	191.9
110°	7.3	7.3	7.3	8.1	12.1	22.6	35.5	62.9	95.1	129.0	155.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	5.6	6.5	6.5	6.5	7.3	10.5	20.2	45.2	69.3	98.4	123.4
115°	4.8	4.8	4.8	4.8	5.6	5.6	8.1	26.6	50.0	72.6	96.8
117.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	12.9	33.1	52.4	72.6
120°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	4.8	17.7	36.3	52.4
122.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	4.8	20.2	35.5
125°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	6.5	20.2
127.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	0.8	1.6	7.3
130°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.8
132.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1401.3	1401.3	1401.3	1401.3	1401.3	1401.3	1401.3	1401.3	1401.3	1401.3
2.5°	1390.9	1397.3	1405.4	1408.6	1402.2	1407.8	1407.8	1399.7	1400.5	1384.4
5°	1398.1	1410.2	1421.5	1415.1	1415.9	1415.1	1423.9	1417.5	1415.1	1415.1
7.5°	1417.5	1428.0	1430.4	1437.6	1436.8	1444.9	1437.6	1444.1	1441.7	1436.0
10°	1437.6	1442.5	1448.9	1468.3	1469.9	1466.7	1478.8	1469.1	1469.9	1467.5
12.5°	1447.3	1474.7	1475.5	1494.9	1490.8	1502.9	1504.6	1507.8	1508.6	1500.5
15°	1470.7	1490.0	1505.4	1521.5	1521.5	1531.2	1540.0	1539.2	1540.0	1537.6
17.5°	1486.0	1515.8	1526.3	1540.0	1545.7	1556.2	1561.0	1569.1	1566.6	1562.6
20°	1497.3	1519.9	1543.3	1557.8	1555.4	1568.3	1581.2	1568.3	1577.1	1577.9
22.5°	1494.1	1529.6	1546.5	1565.0	1572.3	1577.1	1587.6	1597.3	1597.3	1593.2
25°	1496.5	1527.1	1552.9	1571.5	1577.1	1588.4	1602.1	1605.3	1610.2	1599.7
27.5°	1492.5	1527.9	1555.4	1575.5	1575.5	1599.7	1605.3	1619.0	1623.1	1615.8
30°	1494.1	1525.5	1551.3	1583.6	1590.8	1603.7	1618.2	1627.9	1626.3	1627.9
32.5°	1482.8	1519.1	1548.9	1583.6	1594.9	1602.1	1619.0	1620.7	1619.0	1622.3
35°	1463.4	1507.8	1552.9	1571.5	1581.2	1595.7	1599.7	1607.8	1621.5	1609.4
37.5°	1451.3	1494.9	1519.1	1548.1	1558.6	1570.7	1579.5	1581.2	1583.6	1582.8
40°	1428.8	1469.9	1491.7	1521.5	1525.5	1544.9	1539.2	1547.3	1554.5	1549.7
42.5°	1404.6	1437.6	1466.7	1487.6	1497.3	1502.1	1517.5	1520.7	1529.6	1523.9
45°	1366.7	1402.2	1433.6	1456.2	1464.2	1480.4	1487.6	1493.3	1502.1	1505.4
47.5°	1336.0	1371.5	1403.8	1436.8	1435.2	1453.8	1467.5	1465.0	1472.3	1475.5
50°	1294.9	1338.5	1378.0	1401.3	1409.4	1427.1	1432.8	1448.9	1456.2	1450.5
52.5°	1261.9	1309.4	1334.4	1373.1	1382.8	1397.3	1413.4	1415.1	1430.4	1428.0
55°	1228.0	1270.7	1311.0	1336.0	1347.3	1365.9	1377.2	1383.6	1390.1	1396.5
57.5°	1185.3	1240.1	1274.0	1305.4	1317.5	1329.6	1346.5	1354.6	1368.3	1373.1
60°	1152.2	1208.6	1236.9	1273.1	1285.2	1298.9	1311.0	1318.3	1328.8	1331.2
62.5°	1116.7	1167.5	1202.2	1236.1	1247.3	1258.6	1272.3	1284.4	1288.5	1282.8
65°	1075.6	1127.2	1158.7	1192.5	1201.4	1223.2	1219.1	1231.2	1236.1	1239.3
67.5°	1036.9	1094.1	1118.3	1138.5	1159.5	1157.0	1173.2	1172.4	1182.0	1188.5
70°	990.9	1036.1	1058.7	1088.5	1094.1	1101.4	1114.3	1117.5	1123.2	1126.4
72.5°	943.4	990.1	1010.3	1031.3	1045.0	1044.2	1053.0	1059.5	1066.7	1067.5
75°	896.6	927.2	952.2	972.4	982.9	984.5	995.8	994.2	1011.1	1008.7
77.5°	842.6	876.4	892.6	912.7	921.6	930.5	936.1	941.0	943.4	949.8
80°	778.9	819.2	831.3	853.1	859.5	869.2	871.6	882.1	886.1	888.5
82.5°	724.9	751.5	770.0	791.8	806.3	804.7	815.2	821.6	826.5	826.5
85°	664.4	695.0	712.0	731.3	745.0	747.4	757.9	757.9	764.4	767.6
87.5°	601.5	638.6	652.3	673.3	688.6	686.2	693.4	703.1	706.3	712.0
90°	545.9	575.7	598.3	618.4	632.1	633.8	641.8	649.9	651.5	661.2
92.5°	500.7	525.7	549.9	570.9	575.7	582.1	589.4	602.3	604.7	614.4
95°	448.3	478.9	498.3	519.3	527.3	532.2	540.2	549.9	558.0	565.2
97.5°	400.7	428.1	449.1	465.2	476.5	479.7	490.2	496.7	502.3	510.4
100°	349.9	374.1	396.7	415.2	424.1	426.5	437.8	442.7	447.5	454.8
102.5°	303.2	332.2	345.1	365.3	372.5	376.5	384.6	395.1	395.9	398.3
105°	255.6	283.8	302.4	316.9	325.7	329.0	337.0	348.3	349.1	354.8
107.5°	218.5	242.7	261.2	276.6	285.4	288.7	295.1	299.1	304.8	306.4
110°	182.2	204.0	222.5	235.4	242.7	249.1	256.4	262.9	266.1	266.9



TEST NUMBER: P233297

CATALOG NUMBER: 4VRVT3-LD5-6-W-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	147.6	168.5	184.6	200.8	207.2	212.1	219.3	227.4	231.4	231.4
115°	118.5	137.9	154.8	167.7	176.6	179.0	185.4	191.9	195.1	195.1
117.5°	91.1	111.3	126.6	137.9	144.3	147.6	155.6	162.1	164.5	166.1
120°	69.3	85.5	100.0	112.1	116.1	121.8	127.4	133.0	136.3	136.3
122.5°	50.8	65.3	75.8	86.3	93.5	95.1	102.4	108.9	110.5	112.1
125°	34.7	46.8	57.2	66.1	71.8	73.4	79.0	84.7	86.3	87.9
127.5°	17.7	29.8	39.5	48.4	52.4	55.6	60.5	65.3	66.9	67.7
130°	4.8	13.7	23.4	31.4	34.7	37.1	42.7	46.0	49.2	48.4
132.5°	0.0	2.4	8.1	15.3	17.7	21.0	25.8	29.0	30.6	32.3
135°	0.0	0.0	0.8	3.2	4.8	6.5	9.7	13.7	13.7	13.7
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)