

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: P237877

Luminaire Tested: **4VRVT2-LD5-8-DR-W-UNV-L850-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237877
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-14)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4VRVT2-LD5-8-DR-W-UNV-L850-CD1-WL-U
Description: METALUX VRVT2 LED LUMINAIRE
INTERNAL PRISMATIC LENS/15% DR HIGH IMPACT ADDITIVE WIDE DISTRIBUTION
4FT FIXTURE
Light Source: (224) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8075.0 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.59 / 1.58
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Direct

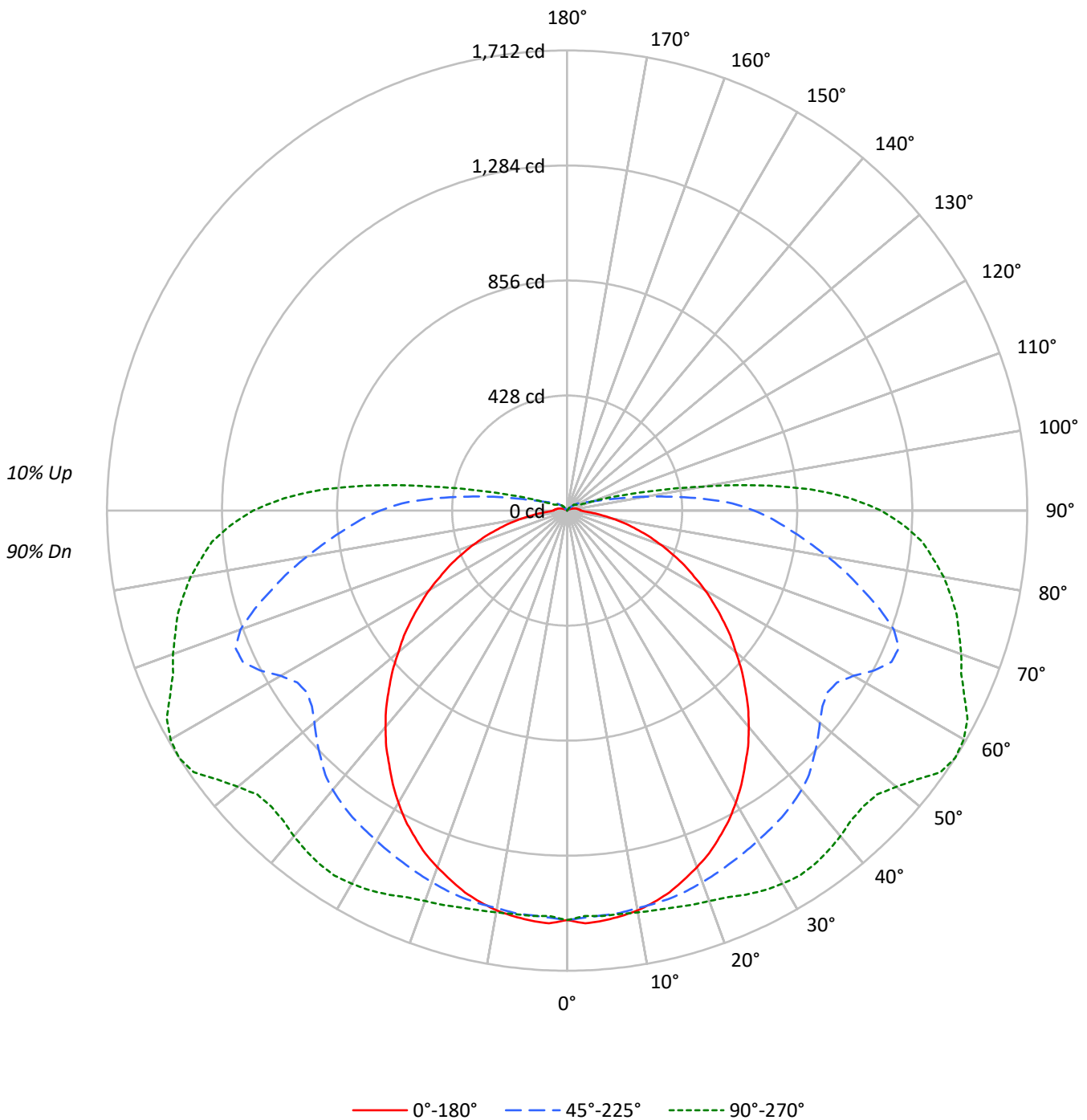
Input Watts (W): 58.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	101	94	88	83	97	91	85	80	85	80	76	79	75	72	74	71	68	65
2	90	79	71	63	86	77	69	62	71	64	59	66	61	56	62	57	53	50
3	81	68	58	50	77	66	57	49	61	53	47	57	50	45	53	47	43	40
4	73	59	49	41	70	57	48	40	53	45	39	50	43	37	46	40	35	33
5	67	52	42	35	64	51	41	34	47	39	33	44	37	31	41	35	30	27
6	62	47	37	30	59	45	36	29	42	34	28	40	32	27	37	31	26	23
7	57	42	33	26	55	41	32	25	38	30	24	36	29	24	34	27	23	20
8	53	38	29	23	51	37	28	22	35	27	22	33	26	21	31	25	20	18
9	49	35	26	20	47	34	26	20	32	24	19	30	23	19	28	22	18	16
10	46	32	24	18	44	31	23	18	30	22	17	28	21	17	26	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7870	7870	7870
5°	7916	7663	7628
10°	7869	7530	7522
15°	7781	7456	7506
20°	7652	7380	7578
25°	7504	7334	7777
30°	7319	7342	8019
35°	7083	7415	8212
40°	6862	7492	8336
45°	6584	7501	8534
50°	6287	7505	9196
55°	6016	7725	10350
60°	5727	8719	11160
65°	5407	10393	11623
70°	5036	11323	12304
75°	4622	11437	13353
80°	4140	11696	14644
85°	3665	12295	16343



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.8	1.8
10°-20°	423.8	5.2
20°-30°	672.5	8.3
30°-40°	870.2	10.8
40°-50°	985.0	12.2
50°-60°	1081.5	13.4
60°-70°	1147.6	14.2
70°-80°	1075.9	13.3
80°-90°	870.2	10.8
90°-100°	539.1	6.7
100°-110°	169.1	2.1
110°-120°	53.8	0.7
120°-130°	27.9	0.3
130°-140°	11.7	0.1
140°-150°	1.8	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1241.1	15.4
0°-40°	2111.3	26.1
0°-60°	4177.8	51.7
0°-90°	7271.5	90.0
90°-120°	762.0	9.4
90°-150°	803.5	10.0
90°-180°	803.0	9.9
0°-180°	8075.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1523	1523	1523	1523	1523	
5°	1532	1526	1512	1518	1514	145
15°	1470	1477	1492	1525	1529	414
25°	1341	1372	1445	1541	1576	618
35°	1154	1229	1393	1558	1606	723
45°	937	1054	1298	1484	1557	724
55°	706	861	1181	1574	1696	632
65°	480	685	1331	1588	1630	475
75°	266	667	1137	1393	1501	284
85°	90	450	833	1198	1326	91
90°	51	336	695	1039	1168	29
95°	44	233	507	793	907	35
105°	30	83	159	210	228	32
115°	15	38	72	62	53	15
125°	5	13	44	44	38	5
135°	2	0	18	26	25	2
145°	1	0	0	5	5	1
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



TEST NUMBER: P237877

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1523.3	1523.3	1523.3	1523.3	1523.3	1523.3	1523.3	1523.3	1523.3	1523.3	1523.3
2.5°	1537.0	1534.9	1531.7	1530.7	1529.6	1529.6	1530.7	1528.6	1525.4	1520.1	1515.8
5°	1531.7	1529.6	1526.4	1524.3	1526.4	1526.4	1527.5	1525.4	1521.1	1516.9	1511.6
7.5°	1522.2	1520.1	1516.9	1516.9	1515.8	1516.9	1516.9	1516.9	1514.8	1512.7	1509.5
10°	1510.5	1507.4	1506.3	1505.2	1506.3	1508.4	1508.4	1509.5	1507.4	1504.2	1502.1
12.5°	1492.5	1491.5	1488.3	1489.3	1490.4	1493.6	1495.7	1497.8	1498.9	1497.8	1497.8
15°	1470.3	1468.1	1467.1	1469.2	1475.6	1476.6	1478.7	1484.0	1486.2	1490.4	1492.5
17.5°	1441.6	1441.6	1441.6	1445.9	1453.3	1455.4	1459.7	1465.0	1470.3	1475.6	1483.0
20°	1412.0	1412.0	1412.0	1417.3	1425.7	1432.1	1436.3	1443.8	1452.2	1463.9	1471.3
22.5°	1380.2	1378.0	1378.0	1383.3	1396.1	1399.2	1407.7	1422.6	1435.3	1449.1	1458.6
25°	1340.9	1338.8	1342.0	1349.4	1364.3	1371.7	1381.2	1398.2	1410.9	1430.0	1444.8
27.5°	1301.7	1298.5	1302.8	1312.3	1332.5	1340.9	1352.6	1372.7	1387.6	1408.8	1432.1
30°	1255.1	1255.1	1260.4	1273.1	1293.2	1304.9	1317.6	1342.0	1362.1	1388.6	1418.3
32.5°	1207.4	1205.3	1214.8	1228.6	1255.1	1268.9	1282.6	1310.2	1335.6	1369.6	1405.6
35°	1154.4	1155.4	1165.0	1183.0	1214.8	1228.6	1243.4	1275.2	1309.1	1350.5	1392.9
37.5°	1105.6	1103.5	1116.2	1140.6	1171.3	1187.2	1203.1	1242.4	1280.5	1327.2	1375.9
40°	1051.5	1052.6	1064.3	1091.8	1123.6	1141.7	1159.7	1205.3	1250.8	1300.7	1356.8
42.5°	996.4	997.5	1013.4	1043.1	1078.1	1098.2	1120.5	1168.2	1220.1	1275.2	1332.5
45°	937.1	939.2	958.3	993.2	1028.2	1053.7	1078.1	1130.0	1188.3	1243.4	1297.5
47.5°	880.9	884.1	908.4	940.2	980.5	1007.0	1033.5	1092.9	1150.1	1206.3	1263.6
50°	819.4	828.9	850.1	886.2	931.8	957.2	986.9	1048.4	1108.8	1169.2	1227.5
52.5°	765.3	769.6	796.1	831.1	879.8	909.5	937.1	1002.8	1066.4	1128.9	1196.8
55°	706.0	712.3	741.0	777.0	827.9	860.7	891.5	957.2	1027.2	1097.1	1180.9
57.5°	647.7	655.1	685.8	722.9	779.1	808.8	844.8	913.7	990.1	1080.2	1190.4
60°	592.6	597.9	626.5	668.9	727.2	761.1	798.2	877.7	971.0	1091.8	1229.6
62.5°	533.2	542.7	569.2	616.9	683.7	718.7	761.1	854.4	978.4	1130.0	1287.9
65°	480.2	487.6	517.3	570.3	641.3	684.8	733.5	855.4	1013.4	1180.9	1331.4
67.5°	424.0	436.7	467.5	525.8	609.5	661.5	724.0	877.7	1056.8	1218.0	1335.6
70°	370.0	382.7	421.9	490.8	590.4	656.2	731.4	911.6	1084.4	1212.7	1293.2
72.5°	319.1	331.8	381.6	462.2	584.1	661.5	747.3	927.5	1068.5	1154.4	1219.0
75°	266.1	284.1	345.6	443.1	583.0	666.8	753.7	901.0	1003.8	1075.9	1137.4
77.5°	220.5	242.7	313.8	425.1	574.5	650.9	717.6	832.1	920.1	991.1	1062.1
80°	170.7	201.4	285.1	401.8	535.3	595.7	650.9	744.1	831.1	906.3	981.6
82.5°	127.2	165.4	251.2	363.6	472.8	523.7	574.5	661.5	743.1	821.5	906.3
85°	90.1	129.3	215.2	311.6	406.0	450.5	496.1	580.9	661.5	745.2	833.2
87.5°	63.6	100.7	177.0	262.9	347.7	384.8	427.2	507.8	592.6	675.2	767.5
90°	50.9	80.6	147.3	221.5	296.8	336.0	374.2	451.6	529.0	609.5	695.4
92.5°	48.8	66.8	121.9	186.6	252.3	286.2	320.1	390.1	461.1	533.2	614.8
95°	44.5	54.1	94.3	149.5	204.6	233.2	262.9	319.1	380.6	441.0	506.7
97.5°	41.3	44.5	73.1	116.6	161.1	181.3	203.5	251.2	294.7	341.3	392.2
100°	37.1	38.2	55.1	86.9	123.0	141.0	160.1	191.9	224.7	261.8	296.8
102.5°	33.9	33.9	43.5	65.7	92.2	106.0	119.8	147.3	170.7	195.0	215.2
105°	29.7	29.7	35.0	49.8	71.0	82.7	93.3	112.4	131.4	147.3	159.0
107.5°	26.5	25.4	27.6	40.3	57.2	65.7	75.3	90.1	103.9	114.5	124.0
110°	22.3	22.3	22.3	32.9	46.6	54.1	61.5	74.2	85.9	93.3	97.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	18.0	18.0	18.0	26.5	38.2	45.6	51.9	63.6	73.1	79.5	82.7
115°	14.8	14.8	13.8	20.1	31.8	38.2	43.5	55.1	63.6	68.9	72.1
117.5°	11.7	11.7	11.7	14.8	25.4	30.7	37.1	46.6	56.2	61.5	64.7
120°	9.5	9.5	8.5	9.5	19.1	24.4	29.7	40.3	48.8	54.1	57.2
122.5°	7.4	7.4	6.4	6.4	13.8	18.0	23.3	32.9	41.3	46.6	50.9
125°	5.3	5.3	5.3	4.2	8.5	12.7	18.0	26.5	33.9	40.3	44.5
127.5°	4.2	4.2	4.2	3.2	4.2	7.4	11.7	20.1	27.6	32.9	37.1
130°	3.2	3.2	3.2	2.1	2.1	4.2	7.4	13.8	20.1	25.4	30.7
132.5°	3.2	3.2	2.1	2.1	1.1	1.1	3.2	8.5	14.8	19.1	23.3
135°	2.1	2.1	2.1	1.1	1.1	0.0	0.0	4.2	9.5	13.8	18.0
137.5°	2.1	2.1	1.1	1.1	0.0	0.0	0.0	1.1	5.3	8.5	11.7
140°	2.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	1.1	4.2	7.4
142.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
145°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.1	1.1	1.1	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°	1523.3	1523.3	1523.3	1523.3	1523.3	1523.3	1523.3	1523.3	1523.3	1523.3
2.5°	1513.7	1514.8	1516.9	1516.9	1515.8	1515.8	1514.8	1513.7	1511.6	1509.5
5°	1511.6	1513.7	1516.9	1518.0	1518.0	1516.9	1516.9	1516.9	1515.8	1513.7
7.5°	1510.5	1513.7	1516.9	1518.0	1519.0	1519.0	1518.0	1516.9	1514.8	1513.7
10°	1505.2	1511.6	1514.8	1518.0	1520.1	1520.1	1521.1	1521.1	1519.0	1518.0
12.5°	1503.1	1510.5	1515.8	1520.1	1523.3	1523.3	1525.4	1527.5	1521.1	1522.2
15°	1498.9	1509.5	1518.0	1523.3	1525.4	1526.4	1528.6	1529.6	1527.5	1528.6
17.5°	1493.6	1507.4	1515.8	1523.3	1524.3	1527.5	1533.9	1537.0	1537.0	1538.1
20°	1486.2	1502.1	1513.7	1525.4	1529.6	1532.8	1539.2	1545.5	1543.4	1545.5
22.5°	1477.7	1495.7	1512.7	1526.4	1531.7	1538.1	1548.7	1555.1	1558.2	1557.2
25°	1470.3	1493.6	1513.7	1534.9	1541.3	1549.8	1562.5	1571.0	1574.1	1576.3
27.5°	1461.8	1490.4	1518.0	1541.3	1551.9	1562.5	1578.4	1587.9	1591.1	1592.2
30°	1455.4	1491.5	1520.1	1547.6	1559.3	1571.0	1587.9	1597.5	1601.7	1602.8
32.5°	1449.1	1487.2	1520.1	1549.8	1561.4	1572.0	1592.2	1607.0	1610.2	1610.2
35°	1440.6	1478.7	1515.8	1546.6	1558.2	1569.9	1592.2	1603.8	1607.0	1605.9
37.5°	1425.7	1468.1	1506.3	1533.9	1545.5	1556.1	1578.4	1591.1	1596.4	1595.3
40°	1404.5	1448.0	1485.1	1515.8	1526.4	1538.1	1561.4	1572.0	1579.4	1581.6
42.5°	1379.1	1422.6	1459.7	1490.4	1504.2	1518.0	1541.3	1552.9	1561.4	1563.5
45°	1347.3	1391.8	1432.1	1468.1	1484.0	1497.8	1526.4	1546.6	1555.1	1557.2
47.5°	1314.4	1365.3	1410.9	1454.4	1474.5	1495.7	1527.5	1552.9	1564.6	1563.5
50°	1283.7	1345.2	1402.4	1459.7	1486.2	1510.5	1550.8	1578.4	1592.2	1598.5
52.5°	1268.9	1345.2	1421.5	1489.3	1520.1	1546.6	1594.3	1626.1	1642.0	1642.0
55°	1276.3	1374.9	1462.8	1541.3	1574.1	1602.8	1644.1	1674.8	1688.6	1696.0
57.5°	1310.2	1424.7	1519.0	1593.2	1624.0	1648.3	1686.5	1701.3	1716.2	1711.9
60°	1367.4	1476.6	1560.4	1625.0	1646.2	1658.9	1683.3	1696.0	1703.5	1703.5
62.5°	1415.1	1513.7	1572.0	1610.2	1629.3	1639.9	1660.0	1669.5	1679.1	1679.1
65°	1436.3	1501.0	1545.5	1579.4	1587.9	1600.6	1614.4	1624.0	1632.4	1630.3
67.5°	1410.9	1457.5	1492.5	1523.3	1533.9	1546.6	1563.5	1577.3	1584.7	1586.9
70°	1347.3	1391.8	1424.7	1462.8	1478.7	1494.6	1524.3	1544.5	1556.1	1560.4
72.5°	1273.1	1319.7	1370.6	1414.1	1438.5	1456.5	1489.3	1510.5	1526.4	1528.6
75°	1196.8	1255.1	1313.4	1368.5	1392.9	1418.3	1455.4	1479.8	1497.8	1501.0
77.5°	1127.9	1194.7	1266.7	1326.1	1355.8	1378.0	1418.3	1441.6	1460.7	1461.8
80°	1059.0	1137.4	1210.6	1272.0	1301.7	1330.3	1368.5	1399.2	1415.1	1422.6
82.5°	992.2	1072.8	1151.2	1222.2	1248.7	1276.3	1319.7	1349.4	1367.4	1373.8
85°	926.5	1014.4	1096.1	1165.0	1197.8	1225.4	1272.0	1299.6	1320.8	1326.1
87.5°	857.6	943.4	1025.0	1092.9	1126.8	1151.2	1198.9	1227.5	1248.7	1253.0
90°	783.4	863.9	943.4	1007.0	1038.8	1065.3	1116.2	1142.7	1158.6	1168.2
92.5°	691.1	768.5	841.7	904.2	937.1	956.1	1003.8	1032.5	1049.4	1053.7
95°	576.7	642.4	708.1	764.3	792.9	821.5	853.3	880.9	904.2	907.4
97.5°	445.2	500.3	554.4	609.5	627.5	644.5	671.0	699.6	720.8	719.8
100°	331.8	363.6	401.8	430.4	444.2	463.2	488.7	505.6	507.8	514.1
102.5°	238.5	260.8	276.7	297.9	304.2	321.2	329.7	341.3	343.4	348.7
105°	172.8	184.4	196.1	204.6	209.9	210.9	217.3	225.8	227.9	227.9
107.5°	129.3	135.7	136.7	139.9	142.0	143.1	147.3	148.4	149.5	149.5
110°	101.8	102.8	100.7	100.7	99.6	99.6	98.6	97.5	96.5	96.5



TEST NUMBER: P237877

CATALOG NUMBER: 4VRVT2-LD5-8-DR-W-UNV-L850-CD1-WL-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	82.7	82.7	80.6	77.4	75.3	74.2	71.0	68.9	67.8	67.8
115°	72.1	70.0	67.8	64.7	62.5	61.5	58.3	56.2	54.1	53.0
117.5°	64.7	63.6	60.4	58.3	56.2	55.1	51.9	48.8	47.7	46.6
120°	58.3	57.2	56.2	53.0	51.9	50.9	47.7	45.6	43.5	43.5
122.5°	51.9	51.9	50.9	48.8	47.7	46.6	44.5	42.4	41.3	40.3
125°	46.6	46.6	46.6	45.6	44.5	43.5	41.3	40.3	39.2	38.2
127.5°	39.2	41.3	41.3	41.3	40.3	40.3	39.2	37.1	36.0	36.0
130°	32.9	35.0	36.0	36.0	36.0	36.0	35.0	33.9	32.9	32.9
132.5°	26.5	29.7	30.7	31.8	31.8	31.8	30.7	30.7	29.7	29.7
135°	21.2	23.3	25.4	26.5	26.5	26.5	26.5	26.5	25.4	25.4
137.5°	15.9	17.0	19.1	20.1	21.2	21.2	21.2	21.2	21.2	21.2
140°	9.5	11.7	13.8	14.8	15.9	15.9	15.9	15.9	15.9	15.9
142.5°	5.3	6.4	8.5	9.5	10.6	10.6	10.6	10.6	10.6	10.6
145°	1.1	2.1	4.2	5.3	5.3	5.3	5.3	5.3	5.3	5.3
147.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	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)