

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1212250

Luminaire Tested: 4VT3-LD5-8-W-UNV-L830-CD1-U

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2019
Report Number: P1212250
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
Product Line: METALUX
Catalog Number: 4VT3-LD5-8-W-UNV-L830-CD1-U
Description: 4FT VT3 WIDE APPLICATION, 8000LM
Light Source: (392) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

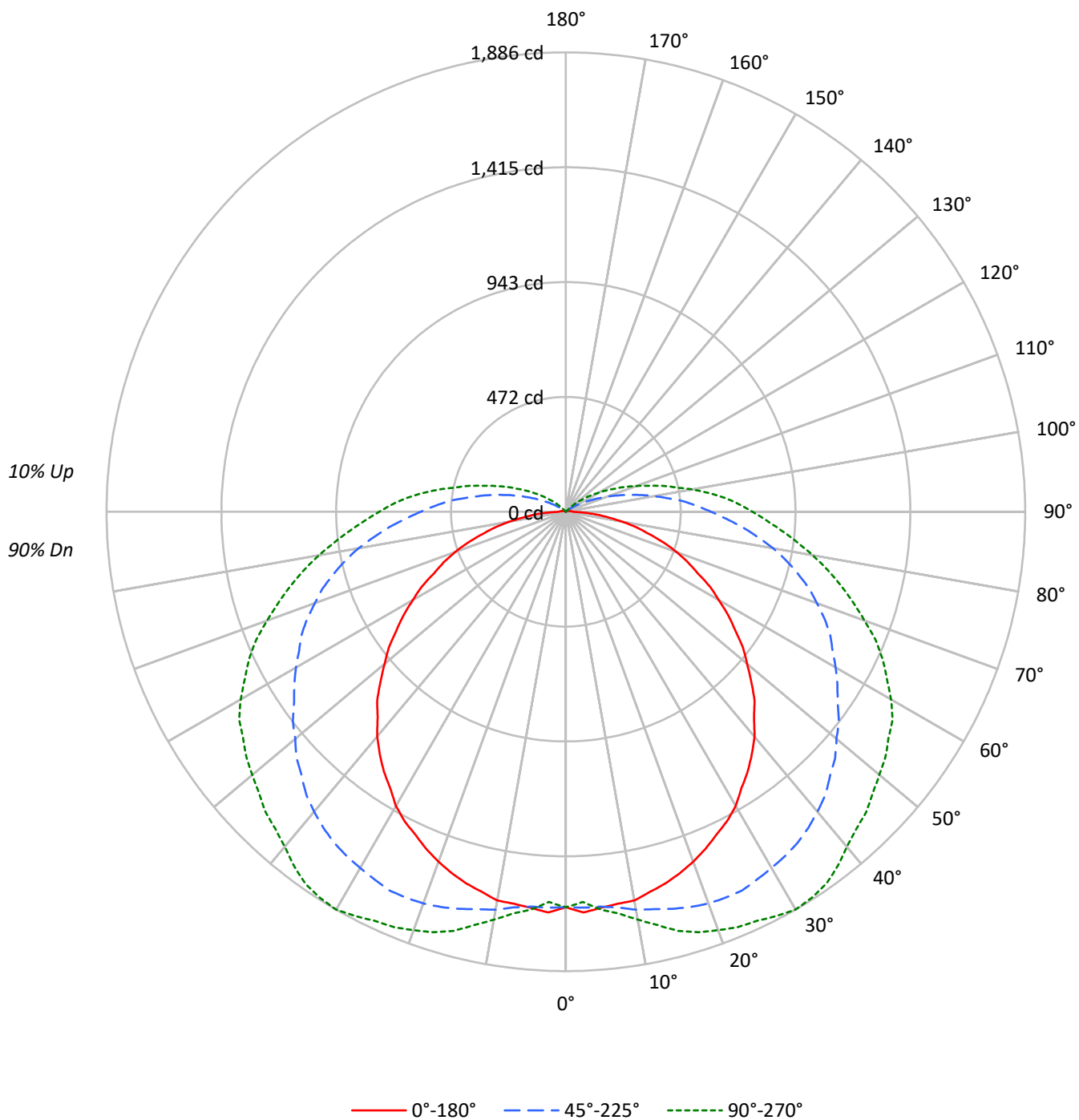
Lumens per Lamp: N/A
Luminaire Lumens: 8292.8 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.67 / 1.66
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 69
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: 24 FT

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CATALOG NUMBER: 4VT3-LD5-8-W-UNV-L830-CD1-U

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
RCR																	
0	117	117	117	117	113	113	113	113	105	105	105	99	99	99	93	93	93
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46
4	75	62	52	44	72	60	51	44	56	48	42	52	46	40	49	43	38
5	69	55	45	38	66	53	44	37	50	42	35	46	40	34	43	38	33
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	33	26	22
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10484	10484	10484
5°	10546	10267	10268
10°	10550	10311	10413
15°	10444	10413	10756
20°	10352	10560	10966
25°	10224	10666	11129
30°	10155	10670	11424
35°	9974	10732	11482
40°	9815	10738	11331
45°	9606	10674	11376
50°	9298	10621	11433
55°	9023	10604	11593
60°	8732	10726	11766
65°	8372	10959	11809
70°	8197	11143	11738
75°	7645	11375	11696
80°	7082	11608	11712
85°	6049	11799	11825

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 90°

Luminance: 12366 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.7	1.9
10°-20°	477.6	5.8
20°-30°	779.7	9.4
30°-40°	1016.1	12.3
40°-50°	1140.6	13.8
50°-60°	1166.1	14.1
60°-70°	1095.1	13.2
70°-80°	925.6	11.2
80°-90°	685.5	8.3
90°-100°	448.6	5.4
100°-110°	247.4	3.0
110°-120°	112.0	1.4
120°-130°	37.3	0.5
130°-140°	4.5	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°	1414.0	17.1
0°-40°	2430.1	29.3
0°-60°	4736.8	57.1
0°-90°	7443.0	89.8
90°-120°	808.0	9.7
90°-150°	849.8	10.2
90°-180°	850.0	10.2
0°-180°	8292.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1623	1623	1623	1623	1623	
5°	1633	1631	1627	1640	1639	155
15°	1579	1617	1688	1762	1781	446
25°	1463	1555	1715	1827	1853	676
35°	1302	1431	1659	1832	1864	814
45°	1096	1259	1534	1696	1744	842
55°	849	1049	1362	1561	1618	761
65°	597	824	1197	1392	1436	597
75°	354	620	987	1138	1168	378
85°	120	418	728	863	889	121
90°	31	312	596	732	766	21
95°	23	223	487	611	655	18
105°	12	69	267	377	411	13
115°	6	6	112	204	226	6
125°	2	2	23	83	102	2
135°	1	0	0	6	16	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°	1623.3	1623.3	1623.3	1623.3	1623.3	1623.3	1623.3	1623.3	1623.3	1623.3	1623.3
2.5°	1646.6	1627.0	1628.0	1625.2	1625.2	1636.4	1633.6	1626.1	1628.0	1624.2	1627.0
5°	1632.6	1623.3	1624.2	1629.8	1628.9	1630.8	1632.6	1628.0	1636.4	1633.6	1627.0
7.5°	1623.3	1615.8	1617.7	1610.2	1625.2	1628.9	1628.9	1626.1	1634.5	1637.3	1638.2
10°	1620.5	1606.5	1612.1	1600.9	1615.8	1632.6	1629.8	1640.1	1646.6	1653.2	1658.8
12.5°	1598.1	1592.5	1589.7	1598.1	1618.6	1631.7	1623.3	1630.8	1648.5	1660.7	1670.9
15°	1579.4	1577.5	1576.6	1585.0	1594.3	1616.8	1619.6	1639.2	1663.5	1670.0	1687.7
17.5°	1556.0	1550.4	1554.2	1560.7	1590.6	1604.6	1617.7	1631.7	1665.3	1678.4	1701.7
20°	1529.0	1525.2	1537.4	1545.8	1573.8	1590.6	1606.5	1628.9	1654.1	1685.9	1711.1
22.5°	1498.1	1496.3	1506.5	1523.4	1559.8	1575.7	1586.9	1617.7	1656.9	1683.1	1714.8
25°	1462.6	1462.6	1473.9	1500.9	1543.9	1555.1	1572.9	1599.9	1636.4	1670.0	1714.8
27.5°	1432.8	1432.8	1443.0	1470.1	1505.6	1535.5	1557.9	1577.5	1625.2	1662.5	1701.7
30°	1394.5	1399.1	1407.5	1432.8	1476.7	1502.8	1523.4	1561.6	1607.4	1648.5	1688.7
32.5°	1343.1	1345.0	1366.4	1397.3	1442.1	1468.2	1496.3	1534.6	1594.3	1619.6	1675.6
35°	1302.0	1302.0	1321.6	1353.4	1411.3	1430.9	1458.0	1502.8	1556.0	1601.8	1658.8
37.5°	1254.4	1255.3	1281.4	1324.4	1370.2	1395.4	1421.5	1471.1	1524.3	1571.9	1635.4
40°	1204.9	1212.3	1225.4	1268.4	1322.5	1353.4	1375.8	1431.8	1500.0	1546.7	1607.4
42.5°	1143.2	1151.6	1175.0	1218.9	1271.2	1314.1	1341.2	1390.7	1454.2	1516.8	1577.5
45°	1095.6	1100.3	1122.7	1166.6	1225.4	1259.0	1286.1	1348.7	1415.0	1476.7	1533.6
47.5°	1032.1	1042.3	1064.8	1114.3	1176.8	1214.2	1237.6	1299.2	1370.2	1429.0	1499.1
50°	971.4	979.8	1011.5	1056.4	1125.5	1157.2	1189.0	1250.6	1331.0	1393.5	1450.5
52.5°	916.3	922.8	950.8	1004.0	1064.8	1106.8	1132.0	1203.9	1283.3	1345.9	1413.1
55°	849.0	864.9	892.9	946.1	1015.3	1048.9	1073.2	1148.8	1229.1	1302.0	1361.8
57.5°	790.2	806.0	835.0	891.0	958.3	990.0	1028.3	1103.1	1176.8	1253.4	1321.6
60°	724.8	741.6	774.3	835.9	903.2	935.9	968.6	1049.8	1129.2	1201.1	1279.6
62.5°	667.8	680.0	719.2	770.6	839.7	878.0	914.4	994.7	1089.0	1162.8	1234.7
65°	596.8	622.0	657.5	718.2	786.4	823.8	864.0	946.1	1030.2	1112.4	1197.4
67.5°	542.7	557.6	599.6	656.6	729.5	774.3	810.7	903.2	988.2	1069.4	1149.8
70°	483.8	497.8	538.9	599.6	676.2	715.4	764.9	852.7	947.1	1023.7	1096.5
72.5°	422.2	439.0	478.2	540.8	624.8	670.6	712.6	807.0	904.1	974.2	1047.0
75°	354.0	379.2	425.0	485.7	571.6	620.2	662.2	762.1	849.0	920.9	987.2
77.5°	297.0	316.6	368.0	442.7	529.6	573.5	618.3	713.6	799.5	865.8	927.5
80°	235.4	262.5	308.2	386.7	474.5	520.2	566.9	656.6	738.8	805.1	864.9
82.5°	174.7	198.9	255.9	337.2	426.8	470.7	510.0	597.8	677.2	743.5	794.8
85°	120.5	142.9	206.4	288.6	373.6	417.5	456.7	545.5	617.4	672.5	727.6
87.5°	67.2	97.1	162.5	240.0	324.1	366.1	401.6	484.7	552.0	610.8	658.5
90°	30.8	61.6	119.6	194.3	271.8	312.0	349.3	424.0	493.2	544.5	595.9
92.5°	26.2	37.4	88.7	156.0	230.7	267.1	304.5	374.5	435.2	493.2	538.9
95°	23.4	25.2	57.9	120.5	186.8	223.2	256.8	324.1	382.0	436.2	486.6
97.5°	20.5	20.5	35.5	85.0	148.5	178.4	210.2	275.5	329.7	381.1	425.0
100°	16.8	17.7	20.5	55.1	107.4	136.4	168.1	225.1	279.3	327.8	367.1
102.5°	14.9	14.9	15.9	33.6	73.8	99.9	128.0	178.4	232.6	275.5	317.6
105°	12.1	13.1	13.1	17.7	49.5	69.1	92.5	141.0	185.9	228.8	267.1
107.5°	10.3	10.3	10.3	11.2	29.9	44.8	63.5	102.7	145.7	186.8	222.3
110°	8.4	8.4	8.4	9.3	14.0	26.2	41.1	72.9	110.2	149.4	180.3

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	6.5	7.5	7.5	7.5	8.4	12.1	23.4	52.3	80.3	113.9	142.9
115°	5.6	5.6	5.6	5.6	6.5	6.5	9.3	30.8	57.9	84.1	112.1
117.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	14.9	38.3	60.7	84.1
120°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	5.6	20.5	42.0	60.7
122.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	5.6	23.4	41.1
125°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	7.5	23.4
127.5°	1.9	1.9	1.9	1.9	0.9	0.9	0.9	0.9	0.9	1.9	8.4
130°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.9
132.5°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.9	0.9	0.9	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°	1623.3	1623.3	1623.3	1623.3	1623.3	1623.3	1623.3	1623.3	1623.3	1623.3
2.5°	1611.2	1618.6	1628.0	1631.7	1624.2	1630.8	1630.8	1621.4	1622.4	1603.7
5°	1619.6	1633.6	1646.6	1639.2	1640.1	1639.2	1649.4	1642.0	1639.2	1639.2
7.5°	1642.0	1654.1	1656.9	1665.3	1664.4	1673.7	1665.3	1672.8	1670.0	1663.5
10°	1665.3	1670.9	1678.4	1700.8	1702.7	1698.9	1713.0	1701.7	1702.7	1699.9
12.5°	1676.5	1708.3	1709.2	1731.6	1727.0	1741.0	1742.8	1746.6	1747.5	1738.2
15°	1703.6	1726.0	1743.8	1762.5	1762.5	1773.7	1783.9	1783.0	1783.9	1781.1
17.5°	1721.4	1755.9	1768.1	1783.9	1790.5	1802.6	1808.2	1817.6	1814.8	1810.1
20°	1734.4	1760.6	1787.7	1804.5	1801.7	1816.6	1831.6	1816.6	1826.9	1827.8
22.5°	1730.7	1771.8	1791.4	1812.9	1821.3	1826.9	1839.0	1850.3	1850.3	1845.6
25°	1733.5	1769.0	1798.9	1820.4	1826.9	1840.0	1855.9	1859.6	1865.2	1853.1
27.5°	1728.8	1769.9	1801.7	1825.0	1825.0	1853.1	1859.6	1875.5	1880.1	1871.7
30°	1730.7	1767.1	1797.0	1834.4	1842.8	1857.7	1874.5	1885.7	1883.9	1885.7
32.5°	1717.6	1759.7	1794.2	1834.4	1847.5	1855.9	1875.5	1877.3	1875.5	1879.2
35°	1695.2	1746.6	1798.9	1820.4	1831.6	1848.4	1853.1	1862.4	1878.3	1864.3
37.5°	1681.2	1731.6	1759.7	1793.3	1805.4	1819.4	1829.7	1831.6	1834.4	1833.4
40°	1655.0	1702.7	1727.9	1762.5	1767.1	1789.5	1783.0	1792.3	1800.8	1795.1
42.5°	1627.0	1665.3	1698.9	1723.2	1734.4	1740.0	1757.8	1761.5	1771.8	1765.3
45°	1583.1	1624.2	1660.7	1686.8	1696.1	1714.8	1723.2	1729.8	1740.0	1743.8
47.5°	1547.6	1588.7	1626.1	1664.4	1662.5	1684.0	1699.9	1697.1	1705.5	1709.2
50°	1500.0	1550.4	1596.2	1623.3	1632.6	1653.2	1659.7	1678.4	1686.8	1680.3
52.5°	1461.7	1516.8	1545.8	1590.6	1601.8	1618.6	1637.3	1639.2	1656.9	1654.1
55°	1422.5	1472.0	1518.7	1547.6	1560.7	1582.2	1595.3	1602.7	1610.2	1617.7
57.5°	1373.0	1436.5	1475.7	1512.1	1526.2	1540.2	1559.8	1569.1	1585.0	1590.6
60°	1334.7	1400.1	1432.8	1474.8	1488.8	1504.7	1518.7	1527.1	1539.2	1542.0
62.5°	1293.6	1352.4	1392.6	1431.8	1444.9	1458.0	1473.9	1487.9	1492.5	1486.0
65°	1246.0	1305.7	1342.2	1381.4	1391.7	1416.9	1412.2	1426.2	1431.8	1435.6
67.5°	1201.1	1267.4	1295.5	1318.8	1343.1	1340.3	1359.0	1358.0	1369.2	1376.7
70°	1147.9	1200.2	1226.3	1260.9	1267.4	1275.8	1290.8	1294.5	1301.1	1304.8
72.5°	1092.8	1147.0	1170.3	1194.6	1210.5	1209.5	1219.8	1227.3	1235.7	1236.6
75°	1038.6	1074.1	1103.1	1126.4	1138.5	1140.4	1153.5	1151.6	1171.2	1168.4
77.5°	976.0	1015.3	1033.9	1057.3	1067.6	1077.8	1084.4	1090.0	1092.8	1100.3
80°	902.2	948.9	963.0	988.2	995.6	1006.9	1009.7	1021.8	1026.5	1029.3
82.5°	839.7	870.5	892.0	917.2	934.0	932.1	944.3	951.7	957.4	957.4
85°	769.6	805.1	824.7	847.1	863.0	865.8	878.0	878.0	885.4	889.2
87.5°	696.8	739.7	755.6	779.9	797.6	794.8	803.2	814.4	818.2	824.7
90°	632.3	666.9	693.0	716.4	732.3	734.1	743.5	752.8	754.7	765.9
92.5°	580.0	609.0	637.0	661.3	666.9	674.3	682.8	697.7	700.5	711.7
95°	519.3	554.8	577.2	601.5	610.8	616.4	625.8	637.0	646.3	654.7
97.5°	464.2	496.0	520.2	538.9	552.0	555.7	567.9	575.3	581.9	591.2
100°	405.4	433.4	459.5	481.0	491.3	494.1	507.2	512.8	518.4	526.8
102.5°	351.2	384.8	399.8	423.1	431.5	436.2	445.5	457.7	458.6	461.4
105°	296.1	328.8	350.2	367.1	377.3	381.1	390.4	403.5	404.4	411.0
107.5°	253.1	281.1	302.6	320.4	330.6	334.4	341.8	346.5	353.1	354.9
110°	211.1	236.3	257.8	272.7	281.1	288.6	297.0	304.5	308.2	309.2

TEST NUMBER: P1212250

CATALOG NUMBER: 4VT3-LD5-8-W-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	170.9	195.2	213.9	232.6	240.0	245.6	254.0	263.4	268.1	268.1
115°	137.3	159.7	179.3	194.3	204.5	207.3	214.8	222.3	226.0	226.0
117.5°	105.5	128.9	146.6	159.7	167.2	170.9	180.3	187.7	190.5	192.4
120°	80.3	99.0	115.8	129.8	134.5	141.0	147.6	154.1	157.8	157.8
122.5°	58.8	75.7	87.8	99.9	108.3	110.2	118.6	126.1	128.0	129.8
125°	40.2	54.2	66.3	76.6	83.1	85.0	91.5	98.1	99.9	101.8
127.5°	20.5	34.6	45.8	56.0	60.7	64.4	70.0	75.7	77.5	78.5
130°	5.6	15.9	27.1	36.4	40.2	43.0	49.5	53.2	57.0	56.0
132.5°	0.0	2.8	9.3	17.7	20.5	24.3	29.9	33.6	35.5	37.4
135°	0.0	0.0	0.9	3.7	5.6	7.5	11.2	15.9	15.9	15.9
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)