

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: P233300

Luminaire Tested: **4VT3-LD5-8-W-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P233300
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: 4VT3-LD5-8-W-UNV-L850-CD1-U
Description: 4FT VT3 WIDE APPLICATION, 8000LM
Light Source: (392) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

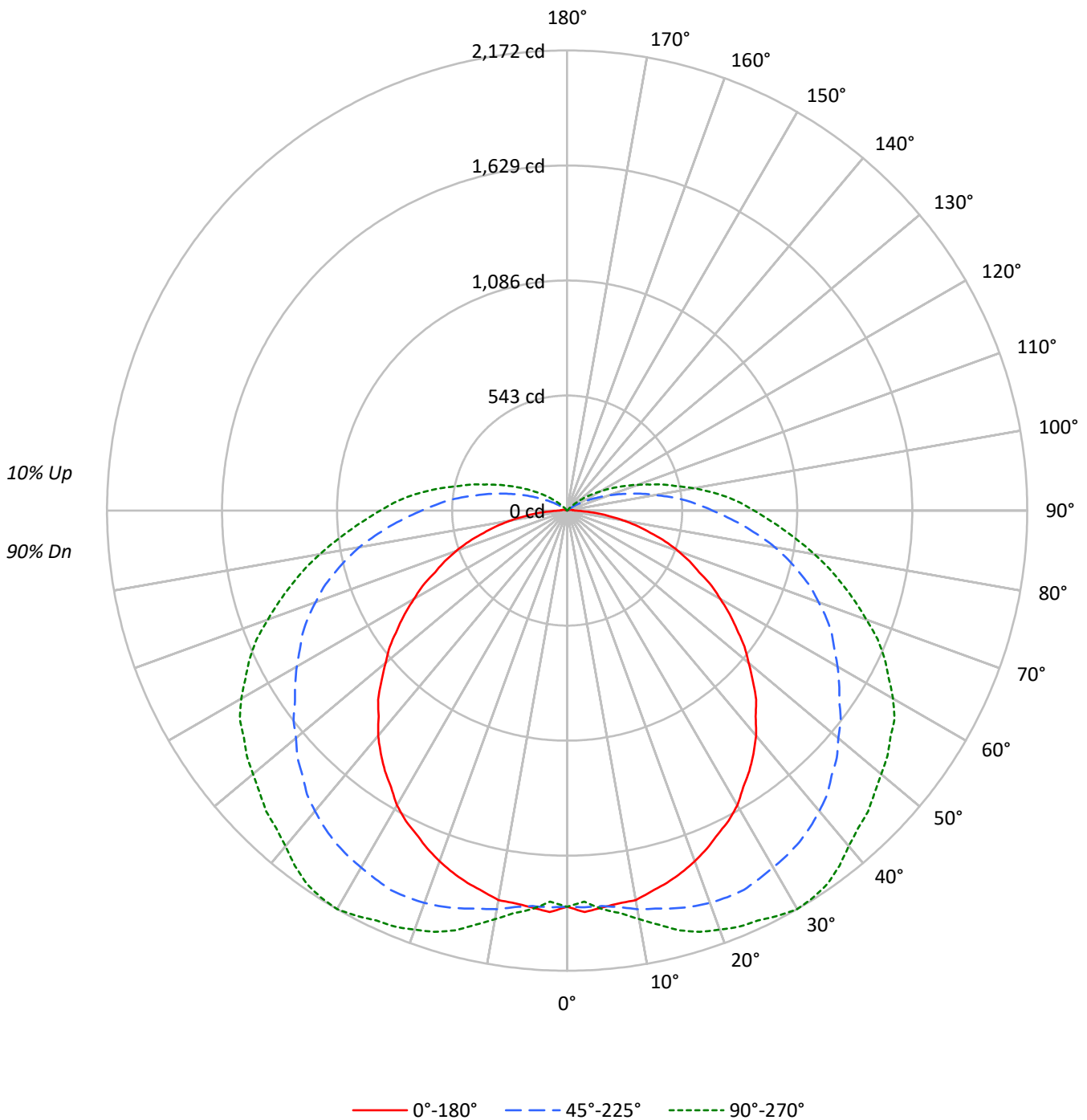
Lumens per Lamp: N/A
Luminaire Lumens: 9552.0 lumens
Efficiency: N/A
Efficacy: 138.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.67 / 1.66
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 69.05
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	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	105	105	105	99	99	99	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	46	40	49	43	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	40	34	43	38	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	33	26	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12076	12076	12076
5°	12147	11827	11827
10°	12151	11876	11995
15°	12029	11994	12389
20°	11923	12163	12631
25°	11776	12286	12819
30°	11697	12290	13159
35°	11489	12361	13225
40°	11305	12368	13052
45°	11065	12295	13103
50°	10709	12233	13168
55°	10393	12214	13353
60°	10057	12355	13553
65°	9643	12623	13601
70°	9442	12836	13520
75°	8804	13103	13471
80°	8156	13370	13491
85°	6967	13591	13621



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.5	1.9
10°-20°	550.1	5.8
20°-30°	898.1	9.4
30°-40°	1170.3	12.3
40°-50°	1313.8	13.8
50°-60°	1343.2	14.1
60°-70°	1261.4	13.2
70°-80°	1066.1	11.2
80°-90°	789.6	8.3
90°-100°	516.7	5.4
100°-110°	285.0	3.0
110°-120°	129.0	1.4
120°-130°	43.0	0.5
130°-140°	5.2	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°	1628.7	17.1
0°-40°	2799.0	29.3
0°-60°	5456.0	57.1
0°-90°	8573.1	89.8
90°-120°	930.6	9.7
90°-150°	978.9	10.2
90°-180°	979.0	10.2
0°-180°	9552.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1870	1870	1870	1870	1870	
5°	1880	1878	1874	1889	1888	179
15°	1819	1862	1944	2030	2052	513
25°	1685	1791	1975	2104	2134	778
35°	1500	1648	1911	2110	2147	938
45°	1262	1450	1766	1954	2008	969
55°	978	1208	1568	1798	1863	877
65°	687	949	1379	1603	1654	688
75°	408	714	1137	1311	1346	435
85°	139	481	838	994	1024	140
90°	36	359	686	843	882	24
95°	27	257	560	704	754	21
105°	14	80	308	435	473	15
115°	6	8	129	236	260	7
125°	2	2	27	96	117	2
135°	1	0	0	6	18	1
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°	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8
2.5°	1896.7	1874.1	1875.1	1871.9	1871.9	1884.8	1881.6	1873.0	1875.1	1870.8	1874.1
5°	1880.5	1869.8	1870.8	1877.3	1876.2	1878.4	1880.5	1875.1	1884.8	1881.6	1874.1
7.5°	1869.8	1861.2	1863.3	1854.7	1871.9	1876.2	1876.2	1873.0	1882.7	1885.9	1887.0
10°	1866.5	1850.4	1856.9	1843.9	1861.2	1880.5	1877.3	1889.1	1896.7	1904.2	1910.7
12.5°	1840.7	1834.3	1831.0	1840.7	1864.4	1879.5	1869.8	1878.4	1898.8	1912.8	1924.6
15°	1819.2	1817.1	1816.0	1825.7	1836.4	1862.2	1865.5	1888.1	1916.0	1923.6	1944.0
17.5°	1792.3	1785.9	1790.2	1797.7	1832.1	1848.3	1863.3	1879.5	1918.2	1933.2	1960.1
20°	1761.1	1756.8	1770.8	1780.5	1812.8	1832.1	1850.4	1876.2	1905.3	1941.8	1970.9
22.5°	1725.6	1723.5	1735.3	1754.7	1796.6	1814.9	1827.8	1863.3	1908.5	1938.6	1975.2
25°	1684.7	1684.7	1697.6	1728.8	1778.3	1791.2	1811.7	1842.9	1884.8	1923.6	1975.2
27.5°	1650.3	1650.3	1662.1	1693.3	1734.2	1768.6	1794.5	1817.1	1871.9	1915.0	1960.1
30°	1606.2	1611.6	1621.3	1650.3	1700.9	1731.0	1754.7	1798.8	1851.5	1898.8	1945.1
32.5°	1547.0	1549.2	1573.9	1609.4	1661.1	1691.2	1723.5	1767.6	1836.4	1865.5	1930.0
35°	1499.7	1499.7	1522.3	1558.9	1625.6	1648.2	1679.3	1731.0	1792.3	1845.0	1910.7
37.5°	1444.8	1445.9	1476.0	1525.5	1578.2	1607.3	1637.4	1694.4	1755.7	1810.6	1883.8
40°	1387.8	1396.4	1411.5	1461.0	1523.4	1558.9	1584.7	1649.2	1727.8	1781.6	1851.5
42.5°	1316.8	1326.5	1353.4	1403.9	1464.2	1513.7	1544.9	1601.9	1675.0	1747.1	1817.1
45°	1261.9	1267.3	1293.1	1343.7	1411.5	1450.2	1481.4	1553.5	1629.9	1700.9	1766.5
47.5°	1188.8	1200.6	1226.4	1283.4	1355.5	1398.6	1425.5	1496.5	1578.2	1646.0	1726.7
50°	1118.8	1128.5	1165.1	1216.7	1296.4	1332.9	1369.5	1440.5	1533.0	1605.1	1670.7
52.5°	1055.4	1062.9	1095.2	1156.5	1226.4	1274.8	1303.9	1386.7	1478.2	1550.3	1627.7
55°	977.9	996.2	1028.5	1089.8	1169.4	1208.1	1236.1	1323.3	1415.8	1499.7	1568.5
57.5°	910.1	928.4	961.8	1026.3	1103.8	1140.4	1184.5	1270.5	1355.5	1443.7	1522.3
60°	834.8	854.2	891.9	962.9	1040.3	1078.0	1115.6	1209.2	1300.7	1383.5	1473.9
62.5°	769.2	783.2	828.4	887.5	967.2	1011.3	1053.2	1145.7	1254.4	1339.4	1422.2
65°	687.4	716.5	757.4	827.3	905.8	948.9	995.1	1089.8	1186.6	1281.3	1379.2
67.5°	625.0	642.3	690.7	756.3	840.2	891.9	933.8	1040.3	1138.2	1231.8	1324.3
70°	557.3	573.4	620.7	690.7	778.9	824.1	881.1	982.2	1090.9	1179.1	1263.0
72.5°	486.3	505.6	550.8	622.9	719.7	772.4	820.8	929.5	1041.4	1122.1	1206.0
75°	407.7	436.8	489.5	559.4	658.4	714.3	762.8	877.9	977.9	1060.8	1137.1
77.5°	342.1	364.7	423.9	509.9	610.0	660.6	712.2	821.9	920.9	997.3	1068.3
80°	271.1	302.3	355.0	445.4	546.5	599.2	653.0	756.3	851.0	927.4	996.2
82.5°	201.2	229.1	294.8	388.4	491.6	542.2	587.4	688.5	780.0	856.4	915.5
85°	138.8	164.6	237.8	332.4	430.3	480.9	526.1	628.3	711.1	774.6	838.1
87.5°	77.5	111.9	187.2	276.5	373.3	421.7	462.6	558.3	635.8	703.6	758.5
90°	35.5	71.0	137.7	223.8	313.1	359.3	402.4	488.4	568.0	627.2	686.4
92.5°	30.1	43.0	102.2	179.7	265.7	307.7	350.7	431.4	501.3	568.0	620.7
95°	26.9	29.0	66.7	138.8	215.2	257.1	295.8	373.3	440.0	502.4	560.5
97.5°	23.7	23.7	40.9	97.9	171.1	205.5	242.1	317.4	379.8	438.9	489.5
100°	19.4	20.4	23.7	63.5	123.7	157.1	193.6	259.3	321.7	377.6	422.8
102.5°	17.2	17.2	18.3	38.7	85.0	115.1	147.4	205.5	267.9	317.4	365.8
105°	14.0	15.1	15.1	20.4	57.0	79.6	106.5	162.4	214.1	263.6	307.7
107.5°	11.8	11.8	11.8	12.9	34.4	51.6	73.2	118.3	167.8	215.2	256.0
110°	9.7	9.7	9.7	10.8	16.1	30.1	47.3	83.9	126.9	172.1	207.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	7.5	8.6	8.6	8.6	9.7	14.0	26.9	60.2	92.5	131.2	164.6
115°	6.5	6.5	6.5	6.5	7.5	7.5	10.8	35.5	66.7	96.8	129.1
117.5°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	17.2	44.1	69.9	96.8
120°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	6.5	23.7	48.4	69.9
122.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	6.5	26.9	47.3
125°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	8.6	26.9
127.5°	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	2.2	9.7
130°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	1.1
132.5°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.1	1.1	1.1	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°	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8
2.5°	1855.8	1864.4	1875.1	1879.5	1870.8	1878.4	1878.4	1867.6	1868.7	1847.2
5°	1865.5	1881.6	1896.7	1888.1	1889.1	1888.1	1899.9	1891.3	1888.1	1888.1
7.5°	1891.3	1905.3	1908.5	1918.2	1917.1	1927.9	1918.2	1926.8	1923.6	1916.0
10°	1918.2	1924.6	1933.2	1959.1	1961.2	1956.9	1973.0	1960.1	1961.2	1958.0
12.5°	1931.1	1967.7	1968.7	1994.6	1989.2	2005.3	2007.5	2011.8	2012.9	2002.1
15°	1962.3	1988.1	2008.5	2030.1	2030.1	2043.0	2054.8	2053.7	2054.8	2051.6
17.5°	1982.7	2022.5	2036.5	2054.8	2062.3	2076.3	2082.8	2093.5	2090.3	2084.9
20°	1997.8	2027.9	2059.1	2078.5	2075.3	2092.5	2109.7	2092.5	2104.3	2105.4
22.5°	1993.5	2040.8	2063.4	2088.2	2097.8	2104.3	2118.3	2131.2	2131.2	2125.8
25°	1996.7	2037.6	2072.0	2096.8	2104.3	2119.4	2137.6	2142.0	2148.4	2134.4
27.5°	1991.3	2038.7	2075.3	2102.1	2102.1	2134.4	2142.0	2160.2	2165.6	2155.9
30°	1993.5	2035.4	2069.9	2112.9	2122.6	2139.8	2159.2	2172.1	2169.9	2172.1
32.5°	1978.4	2026.8	2066.6	2112.9	2128.0	2137.6	2160.2	2162.4	2160.2	2164.5
35°	1952.6	2011.8	2072.0	2096.8	2109.7	2129.0	2134.4	2145.2	2163.5	2147.3
37.5°	1936.5	1994.6	2026.8	2065.6	2079.6	2095.7	2107.5	2109.7	2112.9	2111.8
40°	1906.3	1961.2	1990.3	2030.1	2035.4	2061.3	2053.7	2064.5	2074.2	2067.7
42.5°	1874.1	1918.2	1956.9	1984.9	1997.8	2004.2	2024.7	2029.0	2040.8	2033.3
45°	1823.5	1870.8	1912.8	1942.9	1953.7	1975.2	1984.9	1992.4	2004.2	2008.5
47.5°	1782.6	1830.0	1873.0	1917.1	1915.0	1939.7	1958.0	1954.8	1964.4	1968.7
50°	1727.8	1785.9	1838.6	1869.8	1880.5	1904.2	1911.7	1933.2	1942.9	1935.4
52.5°	1683.7	1747.1	1780.5	1832.1	1845.0	1864.4	1885.9	1888.1	1908.5	1905.3
55°	1638.5	1695.5	1749.3	1782.6	1797.7	1822.4	1837.5	1846.1	1854.7	1863.3
57.5°	1581.5	1654.6	1699.8	1741.7	1757.9	1774.0	1796.6	1807.4	1825.7	1832.1
60°	1537.3	1612.6	1650.3	1698.7	1714.9	1733.1	1749.3	1759.0	1772.9	1776.2
62.5°	1490.0	1557.8	1604.0	1649.2	1664.3	1679.3	1697.6	1713.8	1719.2	1711.6
65°	1435.1	1504.0	1545.9	1591.1	1603.0	1632.0	1626.6	1642.8	1649.2	1653.5
67.5°	1383.5	1459.9	1492.2	1519.1	1547.0	1543.8	1565.3	1564.2	1577.1	1585.8
70°	1322.2	1382.4	1412.5	1452.4	1459.9	1469.6	1486.8	1491.1	1498.6	1502.9
72.5°	1258.7	1321.1	1348.0	1376.0	1394.3	1393.2	1405.0	1413.6	1423.3	1424.4
75°	1196.3	1237.2	1270.5	1297.4	1311.4	1313.6	1328.6	1326.5	1349.1	1345.8
77.5°	1124.2	1169.4	1190.9	1217.8	1229.7	1241.5	1249.0	1255.5	1258.7	1267.3
80°	1039.2	1093.0	1109.2	1138.2	1146.8	1159.7	1163.0	1176.9	1182.3	1185.6
82.5°	967.2	1002.7	1027.4	1056.5	1075.8	1073.7	1087.7	1096.3	1102.7	1102.7
85°	886.5	927.4	949.9	975.8	994.1	997.3	1011.3	1011.3	1019.9	1024.2
87.5°	802.6	852.0	870.3	898.3	918.7	915.5	925.2	938.1	942.4	949.9
90°	728.3	768.1	798.3	825.2	843.4	845.6	856.4	867.1	869.3	882.2
92.5°	668.1	701.4	733.7	761.7	768.1	776.7	786.4	803.6	806.9	819.8
95°	598.2	639.0	664.9	692.8	703.6	710.0	720.8	733.7	744.5	754.1
97.5°	534.7	571.3	599.2	620.7	635.8	640.1	654.1	662.7	670.2	681.0
100°	466.9	499.2	529.3	554.0	565.9	569.1	584.2	590.6	597.1	606.8
102.5°	404.5	443.2	460.4	487.3	497.0	502.4	513.2	527.2	528.2	531.5
105°	341.0	378.7	403.4	422.8	434.6	438.9	449.7	464.8	465.8	473.4
107.5°	291.5	323.8	348.6	369.0	380.8	385.1	393.7	399.1	406.7	408.8
110°	243.1	272.2	296.9	314.1	323.8	332.4	342.1	350.7	355.0	356.1



TEST NUMBER: P233300

CATALOG NUMBER: 4VT3-LD5-8-W-UNV-L850-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	196.9	224.8	246.4	267.9	276.5	282.9	292.6	303.4	308.8	308.8
115°	158.1	184.0	206.6	223.8	235.6	238.8	247.4	256.0	260.3	260.3
117.5°	121.6	148.5	168.9	184.0	192.6	196.9	207.6	216.2	219.5	221.6
120°	92.5	114.0	133.4	149.5	154.9	162.4	170.0	177.5	181.8	181.8
122.5°	67.8	87.1	101.1	115.1	124.8	126.9	136.6	145.2	147.4	149.5
125°	46.3	62.4	76.4	88.2	95.7	97.9	105.4	113.0	115.1	117.3
127.5°	23.7	39.8	52.7	64.5	69.9	74.2	80.7	87.1	89.3	90.4
130°	6.5	18.3	31.2	42.0	46.3	49.5	57.0	61.3	65.6	64.5
132.5°	0.0	3.2	10.8	20.4	23.7	28.0	34.4	38.7	40.9	43.0
135°	0.0	0.0	1.1	4.3	6.5	8.6	12.9	18.3	18.3	18.3
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)