

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: NEO-RAY

Report Number: P333739

Luminaire Tested: **S125RDIW-S1270D1560U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333739
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIW-S1270D1560U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10288.8 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

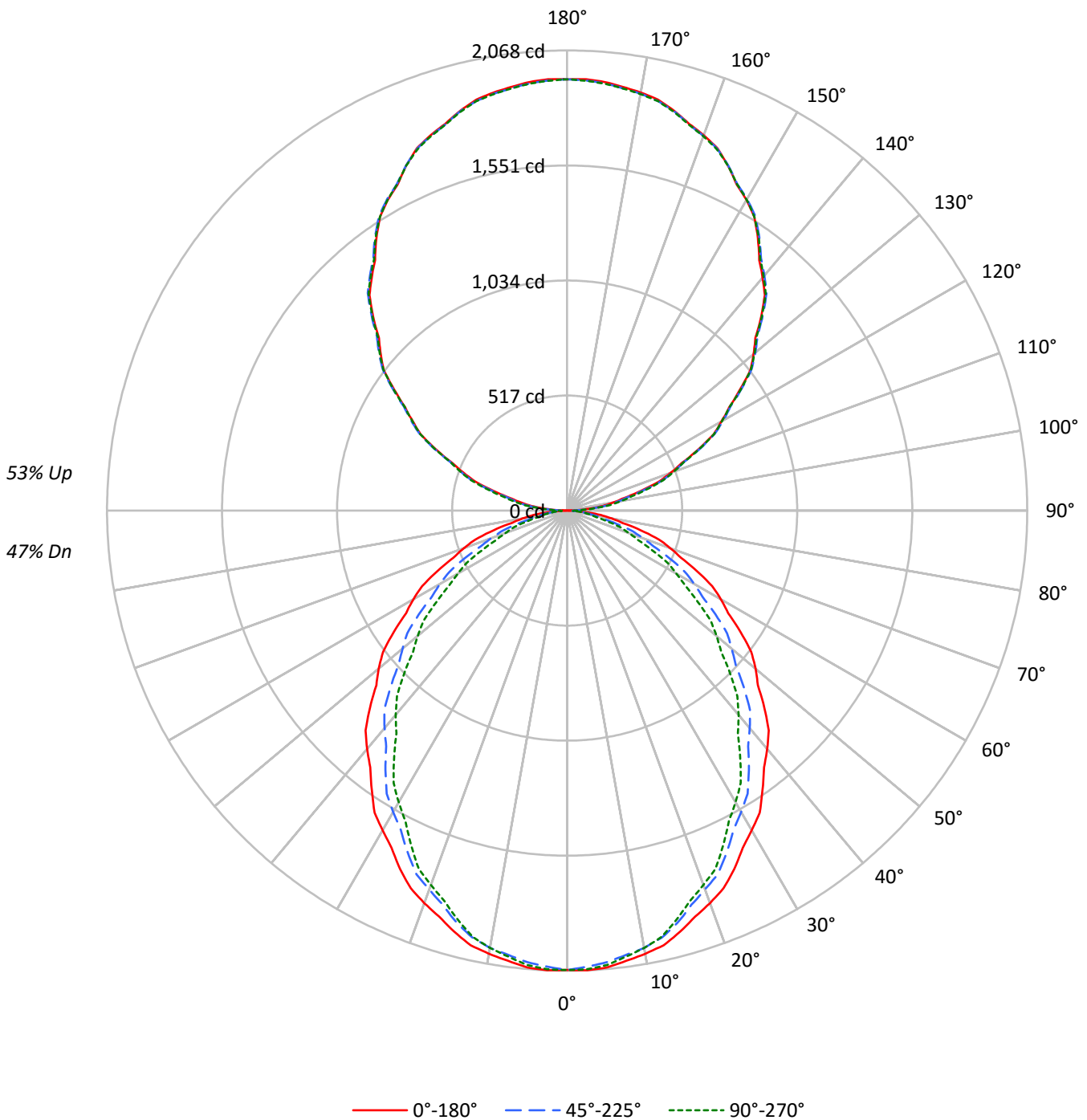
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47
1	97	93	89	86	89	86	83	80	72	70	68	59	58	56	48	47	46	40
2	89	82	76	71	81	75	70	66	63	60	56	52	50	47	42	41	39	34
3	81	72	65	59	74	66	60	55	56	51	48	47	43	40	38	35	33	29
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29	25
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22	19
7	58	46	38	33	53	43	36	31	37	31	27	31	27	23	25	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18	15
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	18	16	14
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13332	13332	13332
5°	13363	13211	13291
10°	13262	13088	13088
15°	13104	12822	12718
20°	12902	12451	12302
25°	12666	12088	11821
30°	12371	11662	11290
35°	12071	11223	10694
40°	11790	10765	10108
45°	11449	10253	9470
50°	11106	9697	8804
55°	10709	9164	8094
60°	10311	8519	7330
65°	9840	7768	6457
70°	9304	6830	5565
75°	8559	5757	4629
80°	7539	4523	3887
85°	6358	3698	3468



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.1	1.9
10°-20°	542.5	5.3
20°-30°	786.6	7.6
30°-40°	896.5	8.7
40°-50°	873.9	8.5
50°-60°	735.6	7.1
60°-70°	515.6	5.0
70°-80°	265.0	2.6
80°-90°	71.2	0.7
90°-100°	129.8	1.3
100°-110°	383.3	3.7
110°-120°	649.2	6.3
120°-130°	854.4	8.3
130°-140°	957.4	9.3
140°-150°	938.3	9.1
150°-160°	788.1	7.7
160°-170°	523.9	5.1
170°-180°	183.3	1.8
0°-30°	1523.2	14.8
0°-40°	2419.7	23.5
0°-60°	4029.1	39.2
0°-90°	4881.0	47.4
90°-120°	1162.3	11.3
90°-150°	3912.5	38.0
90°-180°	5408.0	52.6
0°-180°	10288.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2064	2064	2064	2064	2064	
5°	2061	2054	2038	2052	2050	195
15°	1960	1949	1918	1915	1902	552
25°	1777	1752	1696	1676	1659	817
35°	1531	1492	1424	1380	1356	958
45°	1254	1206	1123	1062	1037	967
55°	951	899	814	746	719	850
65°	644	589	508	448	422	638
75°	343	295	231	198	186	363
85°	86	59	50	48	47	96
90°	2	13	24	32	36	9
95°	98	102	116	126	130	105
105°	344	352	360	369	374	367
115°	650	656	659	658	656	643
125°	949	957	959	956	955	849
135°	1234	1242	1244	1244	1238	951
145°	1495	1501	1505	1505	1501	934
155°	1710	1710	1712	1717	1710	787
165°	1860	1857	1858	1863	1855	524
175°	1934	1928	1927	1935	1926	184
180°	1938	1938	1938	1938	1938	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3
2.5°	2068.0	2067.2	2066.3	2065.5	2064.7	2062.9	2060.1	2057.3	2054.6	2051.8	2054.6
5°	2061.2	2059.8	2058.4	2057.0	2055.6	2053.0	2049.2	2045.4	2041.6	2037.8	2041.2
7.5°	2040.9	2039.6	2038.3	2036.9	2035.6	2032.7	2028.1	2023.5	2019.0	2014.4	2016.8
10°	2022.2	2021.1	2020.1	2019.1	2018.0	2015.1	2010.2	2005.4	2000.5	1995.7	1996.7
12.5°	2001.0	1999.7	1998.3	1997.0	1995.7	1991.8	1985.3	1978.8	1972.2	1965.7	1966.5
15°	1959.8	1957.7	1955.7	1953.6	1951.5	1946.8	1939.5	1932.3	1925.0	1917.7	1917.4
17.5°	1913.3	1910.2	1907.0	1903.8	1900.6	1894.4	1885.3	1876.1	1867.0	1857.8	1856.1
20°	1877.2	1873.7	1870.2	1866.8	1863.3	1856.0	1845.0	1833.9	1822.8	1811.7	1810.0
22.5°	1837.3	1833.8	1830.3	1826.9	1823.4	1815.9	1804.2	1792.6	1780.9	1769.3	1765.9
25°	1777.4	1772.2	1767.0	1761.8	1756.6	1747.6	1734.8	1722.0	1709.1	1696.3	1691.8
27.5°	1708.8	1702.5	1696.2	1689.9	1683.6	1673.6	1659.8	1646.1	1632.4	1618.7	1612.4
30°	1658.9	1652.3	1645.7	1639.2	1632.6	1622.0	1607.4	1592.9	1578.3	1563.8	1555.8
32.5°	1610.3	1602.6	1594.9	1587.2	1579.5	1568.2	1553.4	1538.6	1523.7	1508.9	1500.1
35°	1531.1	1522.7	1514.4	1506.1	1497.8	1485.8	1470.2	1454.7	1439.1	1423.5	1413.4
37.5°	1453.4	1443.3	1433.2	1423.1	1412.9	1399.8	1383.8	1367.7	1351.6	1335.5	1323.5
40°	1398.5	1388.1	1377.7	1367.3	1357.0	1343.4	1326.8	1310.2	1293.5	1276.9	1263.8
42.5°	1341.2	1330.5	1319.8	1309.1	1298.5	1284.5	1267.4	1250.2	1233.0	1215.8	1203.2
45°	1253.5	1243.5	1233.4	1223.4	1213.3	1198.8	1179.7	1160.7	1141.6	1122.6	1108.7
47.5°	1162.8	1152.2	1141.6	1131.0	1120.4	1105.5	1086.3	1067.1	1047.9	1028.7	1014.4
50°	1105.4	1094.0	1082.5	1071.1	1059.7	1044.1	1024.3	1004.6	984.8	965.1	950.5
52.5°	1043.0	1031.3	1019.6	1007.9	996.2	981.0	962.4	943.8	925.1	906.5	890.8
55°	951.1	940.0	928.9	917.8	906.7	891.5	872.1	852.7	833.3	813.9	798.3
57.5°	858.1	846.3	834.4	822.6	810.7	795.5	776.8	758.0	739.3	720.6	705.4
60°	798.3	786.1	774.0	761.9	749.8	734.3	715.6	696.9	678.2	659.5	644.3
62.5°	734.7	723.1	711.5	699.9	688.4	673.1	654.1	635.1	616.1	597.1	583.0
65°	643.9	632.1	620.4	608.6	596.8	581.7	563.4	545.0	526.6	508.3	494.4
67.5°	553.8	542.0	530.2	518.5	506.7	492.0	474.4	456.8	439.2	421.6	408.9
70°	492.7	480.9	469.1	457.3	445.6	431.0	413.7	396.4	379.0	361.7	351.0
72.5°	432.8	421.3	409.8	398.3	386.8	372.9	356.7	340.5	324.3	308.1	298.2
75°	343.0	332.6	322.2	311.8	301.4	289.0	274.4	259.9	245.3	230.7	223.1
77.5°	253.8	245.5	237.2	228.9	220.6	210.6	198.9	187.3	175.7	164.0	158.7
80°	202.7	194.4	186.1	177.7	169.4	160.4	150.7	141.0	131.3	121.6	118.5
82.5°	152.8	145.3	137.8	130.3	122.9	115.8	109.1	102.5	95.8	89.2	87.7
85°	85.8	79.5	73.3	67.0	60.8	56.8	55.1	53.4	51.6	49.9	49.5
87.5°	29.0	27.6	26.2	24.8	23.4	22.8	23.0	23.2	23.3	23.5	23.9
90°	1.5	4.2	6.9	9.6	12.2	14.7	17.1	19.4	21.8	24.1	25.8
92.5°	36.5	38.4	40.3	42.1	44.0	46.4	49.3	52.1	55.0	57.9	60.1
95°	98.0	98.7	99.4	100.0	100.7	102.7	106.1	109.4	112.8	116.1	118.5
97.5°	162.9	163.1	163.4	163.7	164.0	166.4	171.0	175.7	180.3	184.9	187.1
100°	211.1	211.1	211.1	211.1	211.1	213.3	217.7	222.0	226.4	230.7	233.8
102.5°	263.0	264.4	265.7	267.0	268.4	270.2	272.4	274.6	276.8	279.0	282.3
105°	343.9	345.5	347.2	348.9	350.6	352.4	354.4	356.4	358.4	360.5	362.5
107.5°	433.1	434.8	436.5	438.2	439.8	441.5	443.0	444.5	446.1	447.6	448.6
110°	494.7	496.4	498.0	499.7	501.4	502.7	503.7	504.7	505.7	506.7	507.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	557.4	558.3	559.2	560.0	560.9	562.0	563.2	564.5	565.8	567.1	567.5
115°	650.0	651.4	652.7	654.0	655.4	656.4	657.1	657.7	658.4	659.1	658.7
117.5°	742.9	743.5	744.1	744.7	745.3	745.9	746.5	747.1	747.7	748.4	748.6
120°	800.8	802.5	804.2	805.9	807.5	808.5	808.9	809.2	809.5	809.9	809.9
122.5°	863.6	864.2	864.8	865.4	866.0	866.7	867.6	868.5	869.3	870.2	869.9
125°	948.6	950.6	952.7	954.7	956.7	957.9	958.2	958.5	958.9	959.2	958.5
127.5°	1039.1	1040.3	1041.4	1042.5	1043.7	1044.5	1044.9	1045.3	1045.7	1046.1	1045.7
130°	1093.4	1095.1	1096.8	1098.4	1100.1	1101.3	1102.0	1102.6	1103.3	1104.0	1103.6
132.5°	1147.7	1150.5	1153.2	1156.0	1158.7	1160.0	1159.9	1159.7	1159.6	1159.5	1159.1
135°	1233.7	1235.7	1237.7	1239.7	1241.7	1242.9	1243.2	1243.6	1243.9	1244.2	1244.2
137.5°	1314.5	1316.5	1318.4	1320.3	1322.3	1323.6	1324.4	1325.1	1325.8	1326.6	1327.0
140°	1366.4	1368.1	1369.7	1371.4	1373.1	1374.4	1375.4	1376.5	1377.5	1378.5	1379.1
142.5°	1418.3	1419.7	1421.1	1422.5	1423.9	1425.2	1426.5	1427.8	1429.1	1430.3	1430.7
145°	1494.6	1495.9	1497.3	1498.6	1500.0	1501.1	1502.1	1503.1	1504.1	1505.1	1505.1
147.5°	1565.2	1565.9	1566.6	1567.4	1568.1	1568.9	1569.7	1570.5	1571.3	1572.1	1572.9
150°	1612.2	1611.9	1611.6	1611.2	1610.9	1611.4	1612.7	1614.1	1615.4	1616.8	1616.8
152.5°	1650.8	1651.3	1651.8	1652.2	1652.7	1653.2	1653.8	1654.3	1654.8	1655.4	1656.2
155°	1710.3	1710.3	1710.3	1710.3	1710.3	1710.4	1710.8	1711.1	1711.4	1711.8	1713.1
157.5°	1763.3	1762.6	1761.9	1761.1	1760.4	1760.2	1760.5	1760.9	1761.2	1761.5	1762.9
160°	1794.7	1793.7	1792.7	1791.7	1790.7	1790.4	1790.7	1791.0	1791.4	1791.7	1793.0
162.5°	1822.5	1821.7	1821.0	1820.3	1819.5	1819.2	1819.2	1819.3	1819.4	1819.4	1821.1
165°	1859.6	1858.9	1858.2	1857.6	1856.9	1856.7	1857.1	1857.4	1857.7	1858.1	1859.4
167.5°	1890.9	1889.6	1888.3	1886.9	1885.6	1884.9	1884.9	1884.9	1884.9	1884.9	1886.9
170°	1907.8	1906.5	1905.1	1903.8	1902.5	1901.8	1901.8	1901.8	1901.8	1901.8	1903.8
172.5°	1919.9	1918.6	1917.2	1915.9	1914.5	1913.9	1913.9	1913.9	1913.9	1913.9	1915.9
175°	1933.5	1932.1	1930.8	1929.4	1928.1	1927.4	1927.4	1927.4	1927.4	1927.4	1929.4
177.5°	1940.4	1939.3	1938.3	1937.2	1936.1	1935.4	1935.2	1934.9	1934.6	1934.4	1936.0
180°	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3
2.5°	2057.3	2060.1	2062.9	2064.1	2063.9	2063.6	2063.3	2063.0
5°	2044.7	2048.2	2051.6	2053.0	2052.3	2051.6	2050.9	2050.2
7.5°	2019.2	2021.7	2024.1	2024.9	2024.1	2023.4	2022.6	2021.9
10°	1997.7	1998.8	1999.8	1999.8	1998.8	1997.7	1996.7	1995.7
12.5°	1967.3	1968.0	1968.8	1968.4	1966.8	1965.2	1963.6	1962.0
15°	1917.0	1916.7	1916.3	1914.6	1911.5	1908.4	1905.2	1902.1
17.5°	1854.4	1852.6	1850.9	1848.8	1846.2	1843.6	1841.1	1838.5
20°	1808.2	1806.5	1804.8	1802.3	1799.2	1796.1	1793.0	1789.9
22.5°	1762.5	1759.1	1755.7	1752.7	1750.2	1747.6	1745.0	1742.5
25°	1687.3	1682.8	1678.3	1674.1	1670.3	1666.5	1662.7	1658.9
27.5°	1606.1	1599.8	1593.5	1588.5	1584.8	1581.1	1577.4	1573.8
30°	1547.9	1539.9	1531.9	1526.4	1523.3	1520.1	1517.0	1513.9
32.5°	1491.3	1482.5	1473.7	1467.3	1463.4	1459.4	1455.5	1451.5
35°	1403.4	1393.3	1383.3	1375.8	1371.0	1366.1	1361.3	1356.4
37.5°	1311.4	1299.4	1287.3	1278.9	1274.2	1269.5	1264.8	1260.1
40°	1250.6	1237.4	1224.3	1215.6	1211.4	1207.3	1203.1	1199.0
42.5°	1190.6	1178.0	1165.4	1156.0	1149.9	1143.8	1137.7	1131.6
45°	1094.8	1081.0	1067.1	1057.6	1052.4	1047.2	1042.0	1036.8
47.5°	1000.2	985.9	971.6	961.6	955.8	950.1	944.3	938.6
50°	936.0	921.4	906.9	897.0	891.8	886.6	881.4	876.2
52.5°	875.1	859.5	843.8	833.4	828.2	823.0	817.8	812.6
55°	782.7	767.1	751.5	740.9	735.4	729.8	724.3	718.8
57.5°	690.1	674.9	659.6	649.6	644.6	639.7	634.8	629.9
60°	629.0	613.8	598.5	588.3	583.1	577.9	572.7	567.5
62.5°	568.9	554.7	540.6	530.9	525.7	520.5	515.3	510.1
65°	480.6	466.7	452.8	443.3	438.1	432.9	427.7	422.5
67.5°	396.2	383.5	370.9	362.4	358.3	354.1	350.0	345.8
70°	340.2	329.5	318.8	311.3	307.1	303.0	298.8	294.7
72.5°	288.3	278.4	268.4	262.1	259.3	256.6	253.8	251.0
75°	215.5	207.9	200.3	195.2	192.8	190.4	188.0	185.5
77.5°	153.3	148.0	142.7	139.1	137.3	135.5	133.7	131.9
80°	115.4	112.3	109.1	107.2	106.5	105.8	105.2	104.5
82.5°	86.3	84.8	83.4	82.4	82.0	81.6	81.2	80.8
85°	49.2	48.9	48.5	48.2	47.8	47.5	47.1	46.8
87.5°	24.2	24.5	24.9	25.0	24.9	24.9	24.8	24.7
90°	27.5	29.2	30.8	32.2	33.2	34.2	35.2	36.2
92.5°	62.3	64.5	66.8	68.2	69.0	69.7	70.4	71.2
95°	120.8	123.2	125.5	127.0	127.7	128.4	129.0	129.7
97.5°	189.3	191.5	193.7	195.1	195.5	195.9	196.3	196.7
100°	236.8	239.8	242.8	244.7	245.3	246.0	246.7	247.3
102.5°	285.6	288.9	292.1	294.3	295.2	296.1	297.1	298.0
105°	364.5	366.5	368.5	370.0	371.0	372.0	373.0	374.0
107.5°	449.6	450.6	451.6	452.1	452.0	452.0	451.9	451.8
110°	508.8	509.8	510.8	511.1	510.8	510.4	510.1	509.8



TEST NUMBER: P333739

CATALOG NUMBER: S125RDIW-S1270D1560U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	568.0	568.5	568.9	568.9	568.3	567.7	567.1	566.5
115°	658.4	658.1	657.7	657.4	657.1	656.7	656.4	656.1
117.5°	748.9	749.2	749.4	748.9	747.5	746.2	744.9	743.5
120°	809.9	809.9	809.9	809.2	807.9	806.5	805.2	803.9
122.5°	869.7	869.4	869.1	868.5	867.4	866.3	865.2	864.2
125°	957.9	957.2	956.5	956.0	955.7	955.3	955.0	954.7
127.5°	1045.4	1045.1	1044.7	1044.2	1043.5	1042.9	1042.2	1041.5
130°	1103.3	1103.0	1102.6	1102.1	1101.5	1100.8	1100.1	1099.5
132.5°	1158.8	1158.5	1158.1	1157.5	1156.6	1155.6	1154.7	1153.7
135°	1244.2	1244.2	1244.2	1243.6	1242.2	1240.9	1239.5	1238.2
137.5°	1327.4	1327.8	1328.2	1327.6	1325.9	1324.2	1322.5	1320.8
140°	1379.8	1380.5	1381.1	1380.6	1379.0	1377.3	1375.6	1373.9
142.5°	1431.1	1431.5	1432.0	1431.3	1429.6	1428.0	1426.3	1424.6
145°	1505.1	1505.1	1505.1	1504.6	1503.6	1502.6	1501.6	1500.6
147.5°	1573.7	1574.5	1575.3	1574.6	1572.3	1570.0	1567.8	1565.5
150°	1616.8	1616.8	1616.8	1616.4	1615.7	1615.1	1614.4	1613.7
152.5°	1657.0	1657.8	1658.6	1658.4	1657.2	1656.0	1654.8	1653.6
155°	1714.4	1715.8	1717.1	1717.0	1715.3	1713.6	1711.9	1710.3
157.5°	1764.2	1765.6	1766.9	1766.5	1764.2	1762.0	1759.8	1757.6
160°	1794.4	1795.7	1797.1	1796.9	1795.2	1793.5	1791.9	1790.2
162.5°	1822.7	1824.3	1825.9	1825.7	1823.8	1821.8	1819.9	1817.9
165°	1860.7	1862.1	1863.4	1863.1	1861.1	1859.1	1857.1	1855.0
167.5°	1888.9	1890.9	1892.9	1892.9	1890.8	1888.8	1886.7	1884.6
170°	1905.8	1907.8	1909.8	1909.7	1907.3	1905.0	1902.6	1900.3
172.5°	1917.9	1919.9	1921.9	1921.9	1919.8	1917.7	1915.6	1913.6
175°	1931.5	1933.5	1935.5	1935.3	1933.0	1930.6	1928.3	1925.9
177.5°	1937.6	1939.2	1940.8	1940.7	1938.8	1936.9	1935.0	1933.2
180°	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0	1938.0

(END OF REPORT)