

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: P333734

Luminaire Tested: **S125RDIW-S1270D1340U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333734
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIW-S1270D1340U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10243.9 lumens
Efficiency: N/A
Efficacy: 134.4 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

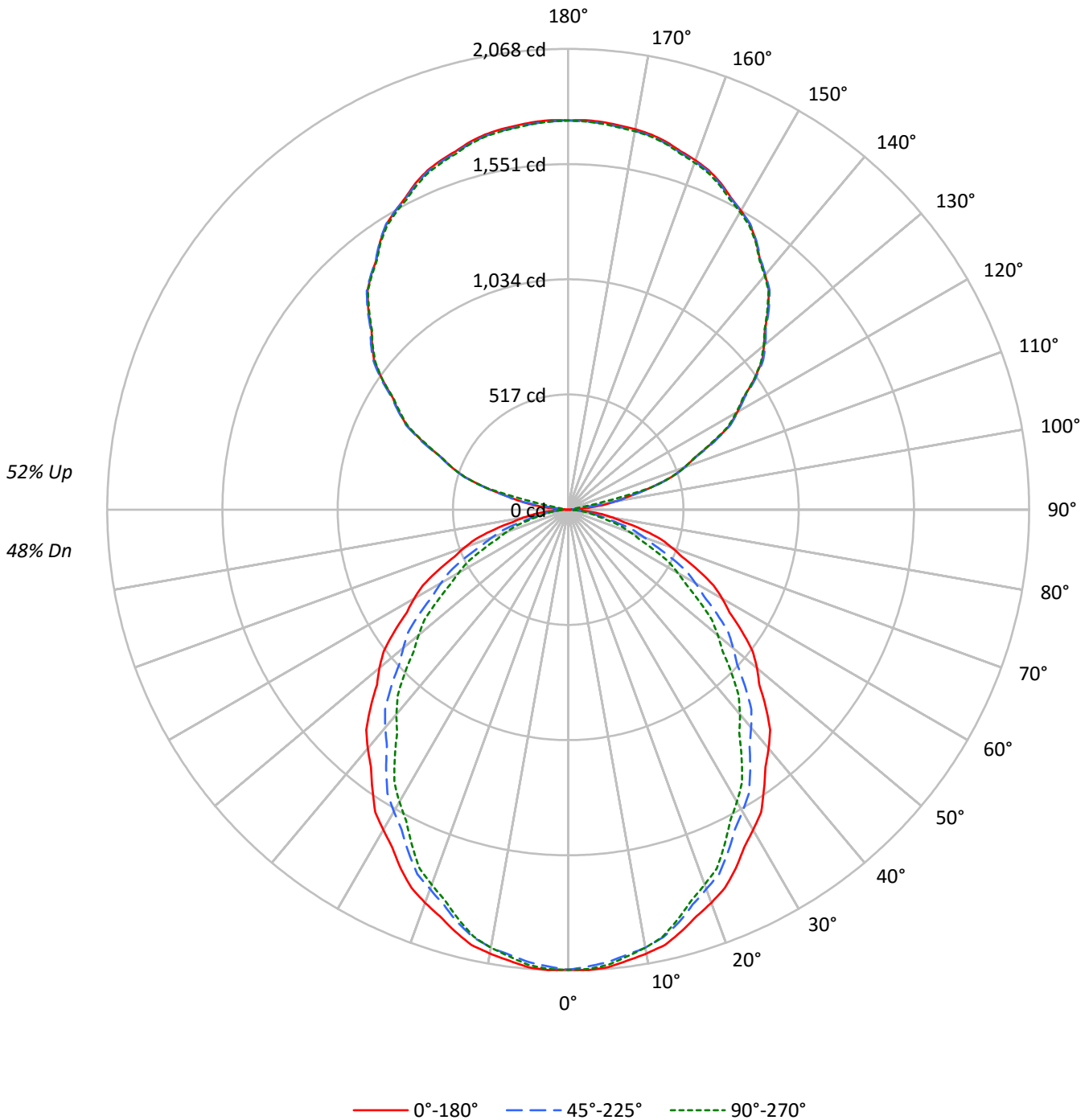
Input Watts (W): 76.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48				48
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46				41	
2	89	82	76	71	82	75	70	66	64	60	56	53	50	48	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	27	28	25	22				19	
7	58	46	38	33	53	43	36	31	37	31	27	31	27	24	25	22	20				17	
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18				16	
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	7.7
30°-40°	896.5	8.8
40°-50°	873.9	8.5
50°-60°	735.6	7.2
60°-70°	515.6	5.0
70°-80°	265.0	2.6
80°-90°	70.6	0.7
90°-100°	63.5	0.6
100°-110°	391.2	3.8
110°-120°	709.5	6.9
120°-130°	910.5	8.9
130°-140°	979.3	9.6
140°-150°	919.2	9.0
150°-160°	743.6	7.3
160°-170°	480.9	4.7
170°-180°	165.9	1.6
0°-30°	1523.2	14.9
0°-40°	2419.7	23.6
0°-60°	4029.1	39.3
0°-90°	4880.4	47.6
90°-120°	1164.1	11.4
90°-150°	3973.2	38.8
90°-180°	5364.0	52.4
0°-180°	10243.9	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°	1	12	21	27	31	7
95°	74	67	21	27	27	94
105°	381	386	386	386	384	404
115°	715	721	722	717	710	708
125°	1016	1025	1025	1020	1016	907
135°	1268	1275	1273	1270	1262	977
145°	1470	1472	1472	1473	1466	919
155°	1618	1611	1613	1616	1607	745
165°	1708	1700	1701	1708	1699	482
175°	1747	1739	1740	1749	1739	166
180°	1747	1747	1747	1747	1747	



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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°	28.9	27.5	26.0	24.5	23.0	22.4	22.5	22.6	22.7	22.9	23.1
90°	1.3	3.6	5.9	8.2	10.5	12.7	14.7	16.7	18.7	20.7	22.2
92.5°	19.9	18.3	16.7	15.1	13.5	13.6	15.4	17.1	18.9	20.7	22.2
95°	73.8	72.9	72.1	71.2	70.3	64.4	53.5	42.6	31.6	20.7	22.2
97.5°	154.1	155.6	157.2	158.7	160.3	150.2	128.6	107.0	85.3	63.7	55.6
100°	216.2	217.1	217.9	218.8	219.7	220.7	221.8	223.0	224.1	225.3	182.4
102.5°	279.4	280.5	281.6	282.7	283.8	284.7	285.4	286.1	286.7	287.4	279.3
105°	380.7	381.8	383.0	384.1	385.3	385.8	385.8	385.8	385.8	385.8	385.8
107.5°	485.8	485.8	485.8	485.8	485.8	486.1	486.7	487.2	487.8	488.4	488.4
110°	554.2	554.2	554.2	554.2	554.2	554.4	555.0	555.6	556.2	556.7	555.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	618.4	619.1	619.8	620.4	621.1	621.7	622.0	622.3	622.7	623.0	621.9
115°	714.7	716.1	717.6	719.0	720.5	721.3	721.6	721.9	722.2	722.5	721.3
117.5°	814.4	814.3	814.3	814.2	814.2	814.7	815.8	816.9	818.0	819.1	817.6
120°	876.5	876.3	876.0	875.7	875.4	875.7	876.5	877.4	878.3	879.1	878.6
122.5°	931.4	932.5	933.6	934.7	935.8	936.6	937.0	937.4	937.8	938.2	937.6
125°	1016.4	1018.4	1020.4	1022.4	1024.4	1025.4	1025.4	1025.4	1025.4	1025.4	1024.3
127.5°	1097.4	1098.9	1100.3	1101.7	1103.2	1103.8	1103.6	1103.5	1103.3	1103.1	1102.5
130°	1147.1	1148.6	1150.0	1151.5	1152.9	1153.8	1154.1	1154.3	1154.6	1154.9	1154.1
132.5°	1196.9	1198.5	1200.2	1201.9	1203.5	1204.1	1203.4	1202.8	1202.2	1201.5	1201.4
135°	1267.6	1269.3	1271.0	1272.7	1274.5	1275.0	1274.5	1273.9	1273.3	1272.7	1272.2
137.5°	1332.6	1334.0	1335.5	1337.0	1338.5	1339.0	1338.5	1338.0	1337.5	1337.0	1337.1
140°	1375.0	1375.6	1376.2	1376.7	1377.3	1377.5	1377.2	1376.9	1376.6	1376.3	1376.9
142.5°	1413.3	1413.7	1414.0	1414.4	1414.7	1415.1	1415.5	1415.9	1416.3	1416.7	1416.8
145°	1469.5	1470.1	1470.7	1471.3	1471.8	1472.1	1472.1	1472.1	1472.1	1472.1	1472.4
147.5°	1518.7	1518.6	1518.5	1518.4	1518.3	1518.4	1518.7	1519.1	1519.4	1519.8	1520.1
150°	1549.8	1549.2	1548.7	1548.1	1547.5	1547.5	1548.1	1548.7	1549.2	1549.8	1550.4
152.5°	1579.8	1578.6	1577.3	1576.1	1574.8	1574.4	1575.0	1575.6	1576.2	1576.7	1577.3
155°	1618.4	1616.7	1615.0	1613.3	1611.5	1611.0	1611.5	1612.1	1612.7	1613.3	1614.1
157.5°	1648.2	1647.2	1646.1	1645.1	1644.1	1643.6	1643.6	1643.7	1643.8	1643.8	1644.7
160°	1668.9	1667.2	1665.5	1663.7	1662.0	1661.3	1661.6	1661.9	1662.2	1662.5	1663.6
162.5°	1685.5	1683.8	1682.0	1680.3	1678.6	1677.9	1678.2	1678.5	1678.7	1679.0	1680.6
165°	1707.8	1706.0	1704.3	1702.6	1700.9	1700.1	1700.4	1700.7	1701.0	1701.3	1703.0
167.5°	1724.3	1722.6	1720.8	1719.0	1717.2	1716.5	1716.7	1717.0	1717.3	1717.6	1719.7
170°	1733.7	1731.7	1729.6	1727.6	1725.6	1724.7	1725.0	1725.3	1725.6	1725.9	1728.2
172.5°	1739.9	1737.9	1735.9	1733.8	1731.8	1731.1	1731.6	1732.1	1732.6	1733.1	1735.2
175°	1746.6	1744.9	1743.2	1741.4	1739.7	1739.0	1739.3	1739.6	1739.9	1740.1	1742.4
177.5°	1749.7	1748.3	1747.0	1745.6	1744.2	1743.6	1743.9	1744.1	1744.3	1744.5	1746.2
180°	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6



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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°	23.4	23.7	24.0	24.1	24.0	23.9	23.8	23.7
90°	23.6	25.0	26.5	27.6	28.5	29.3	30.2	31.1
92.5°	23.6	25.0	26.5	27.4	27.8	28.2	28.6	29.0
95°	23.6	25.0	26.5	27.2	27.2	27.2	27.2	27.2
97.5°	47.5	39.4	31.2	27.2	27.2	27.2	27.2	27.2
100°	139.5	96.7	53.8	31.8	30.6	29.5	28.3	27.2
102.5°	271.2	263.1	255.0	241.1	221.6	202.0	182.4	162.9
105°	385.8	385.8	385.8	385.7	385.4	385.1	384.8	384.5
107.5°	488.5	488.6	488.6	488.2	487.3	486.5	485.6	484.8
110°	555.0	554.2	553.3	553.0	553.3	553.6	553.9	554.2



TEST NUMBER: P333734

CATALOG NUMBER: S125RDIW-S1270D1340U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	620.8	619.8	618.7	617.9	617.5	617.1	616.7	616.3
115°	720.2	719.0	717.9	716.4	714.7	713.0	711.2	709.5
117.5°	816.1	814.6	813.1	811.9	811.2	810.5	809.7	809.0
120°	878.0	877.4	876.8	875.8	874.4	872.9	871.5	870.1
122.5°	937.0	936.4	935.9	934.7	933.1	931.4	929.7	928.1
125°	1023.1	1022.0	1020.8	1019.8	1019.0	1018.1	1017.2	1016.4
127.5°	1101.9	1101.2	1100.6	1099.2	1097.1	1095.0	1092.8	1090.7
130°	1153.2	1152.3	1151.5	1150.3	1148.9	1147.4	1146.0	1144.6
132.5°	1201.2	1201.0	1200.8	1200.0	1198.6	1197.2	1195.7	1194.3
135°	1271.6	1271.0	1270.4	1269.3	1267.6	1265.8	1264.1	1262.4
137.5°	1337.2	1337.3	1337.4	1336.7	1335.2	1333.7	1332.2	1330.7
140°	1377.5	1378.0	1378.6	1378.0	1376.3	1374.6	1372.9	1371.1
142.5°	1416.9	1417.1	1417.2	1416.4	1414.6	1412.9	1411.2	1409.5
145°	1472.7	1473.0	1473.3	1472.6	1470.8	1469.1	1467.4	1465.7
147.5°	1520.5	1520.8	1521.2	1520.3	1518.2	1516.1	1514.1	1512.0
150°	1551.0	1551.5	1552.1	1551.2	1548.9	1546.6	1544.3	1542.0
152.5°	1577.9	1578.5	1579.0	1578.3	1576.2	1574.2	1572.1	1570.0
155°	1615.0	1615.8	1616.7	1616.0	1613.7	1611.4	1609.1	1606.8
157.5°	1645.7	1646.6	1647.5	1646.8	1644.5	1642.2	1639.9	1637.6
160°	1664.8	1665.9	1667.1	1666.5	1664.2	1661.9	1659.6	1657.3
162.5°	1682.2	1683.9	1685.5	1685.0	1682.5	1679.9	1677.4	1674.9
165°	1704.7	1706.5	1708.2	1707.9	1705.6	1703.3	1701.0	1698.7
167.5°	1721.8	1723.8	1725.9	1725.6	1723.0	1720.5	1717.9	1715.3
170°	1730.5	1732.8	1735.1	1735.0	1732.4	1729.8	1727.2	1724.6
172.5°	1737.3	1739.4	1741.4	1741.2	1738.6	1736.0	1733.4	1730.8
175°	1744.7	1747.0	1749.3	1749.2	1746.6	1744.0	1741.4	1738.8
177.5°	1747.8	1749.4	1751.0	1750.9	1749.0	1747.2	1745.3	1743.5
180°	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6

(END OF REPORT)