

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: P333482

Luminaire Tested: **S125DIW-S1270D1340U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333482  
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: S125DIW-S1270D1340U835-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1340 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10495.4 lumens  
Efficiency: N/A  
Efficacy: 137.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: General Diffuse

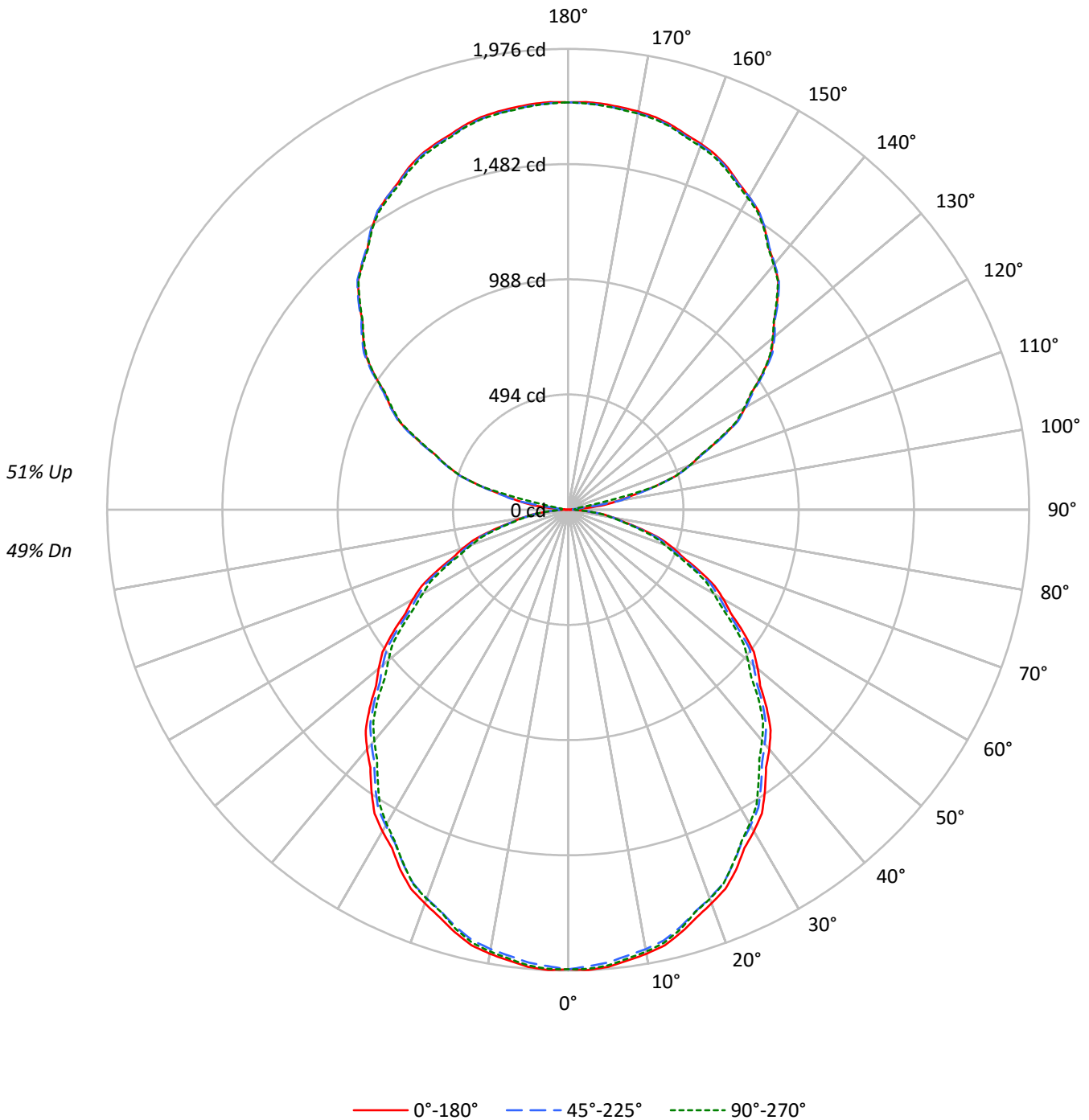
Input Watts (W): 76.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
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	50	30	10	0														
RCR																																						
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49																				
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41																				
2	89	81	75	70	81	75	70	65	63	59	56	53	50	47	43	41	39	34																				
3	81	71	64	58	74	66	60	54	56	51	47	47	43	40	38	35	33	29																				
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	34	31	29	25																				
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	22																				
6	63	50	42	37	57	47	40	34	40	34	30	34	29	26	28	24	22	19																				
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	19	17																				
8	54	41	34	28	49	38	32	27	33	28	24	28	24	20	23	20	17	15																				
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14																				
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14	12																				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12727	12727	12727
5°	12756	12635	12716
10°	12679	12545	12618
15°	12541	12395	12447
20°	12344	12183	12205
25°	12133	11932	11921
30°	11872	11662	11604
35°	11591	11371	11211
40°	11304	11054	10897
45°	10993	10766	10552
50°	10652	10417	10104
55°	10323	10025	9743
60°	9928	9627	9285
65°	9459	9149	8839
70°	9009	8597	8303
75°	8210	7938	7663
80°	7305	7189	7018
85°	6358	6469	6121



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.8	1.8
10°-20°	524.9	5.0
20°-30°	775.0	7.4
30°-40°	904.3	8.6
40°-50°	908.3	8.7
50°-60°	797.3	7.6
60°-70°	594.1	5.7
70°-80°	339.7	3.2
80°-90°	102.5	1.0
90°-100°	63.5	0.6
100°-110°	391.2	3.7
110°-120°	709.5	6.8
120°-130°	910.5	8.7
130°-140°	979.3	9.3
140°-150°	919.2	8.8
150°-160°	743.6	7.1
160°-170°	480.9	4.6
170°-180°	165.9	1.6
0°-30°	1485.7	14.2
0°-40°	2390.0	22.8
0°-60°	4095.6	39.0
0°-90°	5131.8	48.9
90°-120°	1164.1	11.1
90°-150°	3973.2	37.9
90°-180°	5364.0	51.1
0°-180°	10495.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1971	1971	1971	1971	1971	
5°	1968	1964	1949	1962	1961	187
15°	1876	1870	1854	1861	1862	528
25°	1703	1694	1674	1677	1673	783
35°	1470	1463	1442	1434	1422	919
45°	1204	1197	1179	1161	1155	927
55°	917	911	890	876	865	818
65°	619	615	599	585	578	614
75°	329	326	318	313	307	351
85°	86	87	87	86	83	96
90°	1	12	21	27	31	8
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°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1975.7	1974.9	1974.1	1973.2	1972.4	1970.6	1967.8	1965.0	1962.3	1959.5	1962.3
5°	1967.6	1966.9	1966.2	1965.5	1964.8	1962.8	1959.3	1955.8	1952.4	1948.9	1952.0
7.5°	1949.5	1948.8	1948.1	1947.4	1946.7	1944.5	1940.7	1936.9	1933.1	1929.3	1932.3
10°	1933.3	1932.6	1931.9	1931.2	1930.5	1928.3	1924.5	1920.7	1916.8	1913.0	1915.8
12.5°	1913.3	1912.1	1910.9	1909.6	1908.4	1906.0	1902.4	1898.9	1895.4	1891.8	1894.1
15°	1875.6	1874.6	1873.5	1872.5	1871.5	1869.0	1865.2	1861.4	1857.6	1853.8	1855.5
17.5°	1832.3	1830.8	1829.2	1827.7	1826.2	1823.4	1819.5	1815.5	1811.6	1807.6	1809.8
20°	1796.1	1795.4	1794.7	1794.0	1793.3	1790.7	1786.2	1781.7	1777.2	1772.7	1775.1
22.5°	1759.9	1758.7	1757.4	1756.2	1754.9	1752.2	1748.0	1743.8	1739.5	1735.3	1736.9
25°	1702.6	1700.8	1699.1	1697.4	1695.6	1692.5	1688.0	1683.5	1679.0	1674.5	1675.2
27.5°	1635.5	1634.5	1633.4	1632.4	1631.4	1628.5	1623.9	1619.2	1614.6	1609.9	1610.1
30°	1591.9	1590.8	1589.8	1588.7	1587.7	1584.6	1579.4	1574.2	1569.0	1563.8	1563.1
32.5°	1544.5	1542.9	1541.3	1539.7	1538.1	1535.0	1530.3	1525.7	1521.0	1516.4	1515.2
35°	1470.2	1468.9	1467.5	1466.1	1464.7	1461.6	1456.7	1451.9	1447.0	1442.2	1440.5
37.5°	1393.2	1391.5	1389.8	1388.0	1386.3	1383.1	1378.6	1374.0	1369.4	1364.9	1362.3
40°	1340.8	1339.1	1337.4	1335.6	1333.9	1330.6	1325.8	1320.9	1316.1	1311.2	1308.1
42.5°	1284.7	1283.3	1281.8	1280.3	1278.9	1275.7	1270.9	1266.0	1261.2	1256.3	1253.5
45°	1203.6	1202.3	1200.9	1199.5	1198.1	1195.3	1191.2	1187.0	1182.9	1178.7	1174.5
47.5°	1116.3	1116.4	1116.5	1116.5	1116.6	1114.1	1109.2	1104.2	1099.2	1094.2	1090.0
50°	1060.2	1059.2	1058.1	1057.1	1056.0	1053.4	1049.3	1045.1	1041.0	1036.8	1032.3
52.5°	1002.8	1002.1	1001.3	1000.5	999.8	997.2	992.7	988.3	983.9	979.4	975.5
55°	916.8	915.7	914.7	913.6	912.6	909.7	904.8	900.0	895.1	890.3	887.1
57.5°	826.0	825.5	824.9	824.4	823.8	821.5	817.4	813.3	809.2	805.1	801.1
60°	768.6	767.3	765.9	764.5	763.1	760.5	756.7	752.9	749.1	745.3	741.8
62.5°	708.8	707.7	706.6	705.4	704.3	702.2	698.9	695.6	692.4	689.1	685.4
65°	619.0	618.3	617.6	616.9	616.2	613.9	610.1	606.3	602.5	598.7	595.6
67.5°	532.0	530.5	529.1	527.6	526.2	524.0	521.2	518.3	515.5	512.6	510.0
70°	477.1	475.4	473.6	471.9	470.2	467.7	464.6	461.5	458.4	455.3	453.2
72.5°	417.2	416.0	414.9	413.7	412.5	410.9	408.9	406.9	404.9	402.9	400.5
75°	329.0	328.3	327.6	326.9	326.2	325.0	323.3	321.5	319.8	318.1	317.0
77.5°	247.6	247.3	247.0	246.8	246.5	245.9	244.9	243.9	242.9	242.0	241.4
80°	196.4	196.4	196.4	196.4	196.4	196.1	195.4	194.7	194.0	193.3	193.0
82.5°	151.5	151.0	150.4	149.9	149.3	149.0	148.8	148.7	148.6	148.4	147.8
85°	85.8	86.1	86.4	86.8	87.1	87.3	87.3	87.3	87.3	87.3	87.0
87.5°	33.9	34.4	34.9	35.3	35.8	36.1	36.2	36.3	36.4	36.6	36.9
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°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1965.0	1967.8	1970.6	1971.8	1971.6	1971.3	1971.0	1970.7
5°	1955.1	1958.3	1961.4	1962.8	1962.4	1962.1	1961.7	1961.4
7.5°	1935.3	1938.4	1941.4	1942.8	1942.5	1942.1	1941.8	1941.4
10°	1918.6	1921.4	1924.1	1925.3	1925.0	1924.6	1924.3	1924.0
12.5°	1896.3	1898.5	1900.7	1901.8	1901.7	1901.6	1901.6	1901.5
15°	1857.3	1859.0	1860.7	1861.6	1861.6	1861.6	1861.6	1861.6
17.5°	1811.9	1814.1	1816.2	1816.4	1814.7	1813.0	1811.2	1809.5
20°	1777.6	1780.0	1782.4	1782.8	1781.0	1779.3	1777.6	1775.8
22.5°	1738.5	1740.1	1741.7	1741.9	1740.7	1739.5	1738.3	1737.2
25°	1675.9	1676.6	1677.3	1677.1	1676.1	1675.0	1674.0	1672.9
27.5°	1610.2	1610.4	1610.5	1610.0	1609.0	1608.0	1606.9	1605.9
30°	1562.4	1561.7	1561.0	1560.2	1559.1	1558.1	1557.0	1556.0
32.5°	1513.9	1512.7	1511.4	1509.8	1508.0	1506.1	1504.2	1502.4
35°	1438.7	1437.0	1435.3	1433.0	1430.2	1427.5	1424.7	1421.9
37.5°	1359.7	1357.2	1354.6	1352.5	1350.9	1349.3	1347.7	1346.1
40°	1305.0	1301.9	1298.7	1296.7	1295.6	1294.6	1293.5	1292.5
42.5°	1250.7	1247.8	1245.0	1242.8	1241.2	1239.6	1238.0	1236.4
45°	1170.4	1166.2	1162.1	1159.5	1158.4	1157.4	1156.3	1155.3
47.5°	1085.7	1081.5	1077.3	1074.0	1071.5	1069.1	1066.7	1064.3
50°	1027.8	1023.3	1018.8	1015.3	1012.9	1010.5	1008.1	1005.6
52.5°	971.5	967.6	963.6	960.3	957.6	954.9	952.2	949.5
55°	884.0	880.9	877.8	875.0	872.6	870.2	867.7	865.3
57.5°	797.1	793.1	789.1	786.4	785.1	783.8	782.4	781.1
60°	738.3	734.9	731.4	728.5	726.0	723.6	721.2	718.8
62.5°	681.6	677.9	674.2	671.4	669.5	667.6	665.7	663.9
65°	592.5	589.3	586.2	584.0	582.6	581.2	579.8	578.4
67.5°	507.4	504.7	502.1	500.4	499.5	498.7	497.9	497.0
70°	451.1	449.0	446.9	445.2	443.8	442.4	441.1	439.7
72.5°	398.2	395.8	393.5	391.6	390.2	388.8	387.4	386.0
75°	316.0	314.9	313.9	312.7	311.3	309.9	308.5	307.1
77.5°	240.7	240.1	239.5	238.7	237.7	236.7	235.8	234.8
80°	192.6	192.3	191.9	191.4	190.7	190.0	189.3	188.7
82.5°	147.2	146.6	145.9	145.6	145.4	145.3	145.1	145.0
85°	86.6	86.3	85.9	85.4	84.7	84.0	83.3	82.6
87.5°	37.1	37.4	37.7	37.7	37.3	36.9	36.5	36.1
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: P333482

CATALOG NUMBER: S125DIW-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)