

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: P333482-840

Luminaire Tested: **S125DIW-S1270D1340U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333482-840  
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-S1270D1340U840-4F0-1E-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**

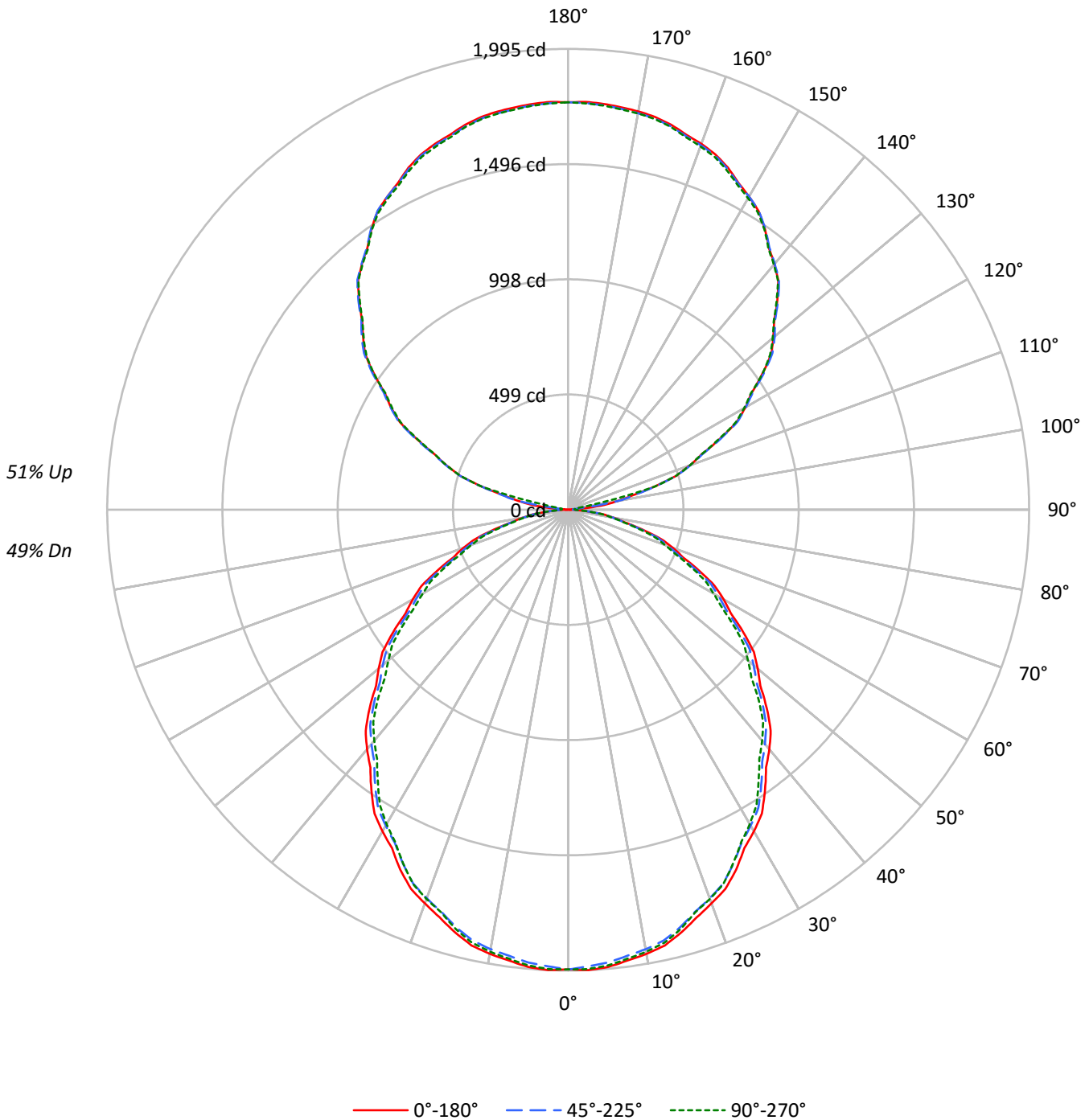
Lumens per Lamp: N/A  
Luminaire Lumens: 10598.9 lumens  
Efficiency: N/A  
Efficacy: 139.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 76.2  
Input Voltage (V): 120  
Input Current (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



TEST NUMBER: P333482-840

CATALOG NUMBER: S125DIW-S1270D1340U840-4F0-1E-UDD-F

### Luminous Intensity Polar Plot





TEST NUMBER: P333482-840

CATALOG NUMBER: S125DIW-S1270D1340U840-4F0-1E-UDD-F

**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	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°	12853	12853	12853
5°	12882	12759	12841
10°	12804	12669	12742
15°	12664	12517	12570
20°	12466	12304	12325
25°	12252	12050	12039
30°	11989	11777	11718
35°	11706	11483	11321
40°	11415	11163	11005
45°	11102	10872	10656
50°	10758	10520	10203
55°	10424	10124	9839
60°	10026	9722	9376
65°	9553	9239	8926
70°	9098	8682	8384
75°	8289	8015	7738
80°	7375	7260	7089
85°	6417	6536	6180



TEST NUMBER: P333482-840

CATALOG NUMBER: S125DIW-S1270D1340U840-4F0-1E-UDD-F

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.6	1.8
10°-20°	530.1	5.0
20°-30°	782.7	7.4
30°-40°	913.3	8.6
40°-50°	917.2	8.7
50°-60°	805.1	7.6
60°-70°	599.9	5.7
70°-80°	343.0	3.2
80°-90°	103.5	1.0
90°-100°	64.1	0.6
100°-110°	395.0	3.7
110°-120°	716.5	6.8
120°-130°	919.5	8.7
130°-140°	989.0	9.3
140°-150°	928.3	8.8
150°-160°	750.9	7.1
160°-170°	485.7	4.6
170°-180°	167.5	1.6
0°-30°	1500.4	14.2
0°-40°	2413.6	22.8
0°-60°	4136.0	39.0
0°-90°	5182.4	48.9
90°-120°	1175.6	11.1
90°-150°	4012.4	37.9
90°-180°	5416.0	51.1
0°-180°	10598.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1990	1990	1990	1990	1990	
5°	1987	1983	1968	1981	1981	188
15°	1894	1889	1872	1880	1880	534
25°	1719	1711	1691	1694	1689	791
35°	1485	1478	1456	1448	1436	928
45°	1216	1208	1190	1172	1167	936
55°	926	920	899	885	874	826
65°	625	621	605	591	584	620
75°	332	329	321	316	310	354
85°	87	88	88	86	83	97
90°	1	12	21	27	31	8
95°	74	68	21	27	28	95
105°	384	389	390	390	388	408
115°	722	728	730	724	716	715
125°	1026	1035	1036	1030	1026	916
135°	1280	1287	1285	1282	1275	986
145°	1484	1486	1487	1487	1480	928
155°	1634	1627	1629	1632	1623	753
165°	1725	1717	1718	1725	1716	487
175°	1764	1757	1757	1767	1756	168
180°	1764	1764	1764	1764	1764	



TEST NUMBER: P333482-840

CATALOG NUMBER: S125DIW-S1270D1340U840-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1
2.5°	1995.2	1994.4	1993.6	1992.7	1991.9	1990.0	1987.2	1984.4	1981.7	1978.8	1981.7
5°	1987.0	1986.3	1985.6	1984.9	1984.2	1982.2	1978.6	1975.1	1971.7	1968.1	1971.3
7.5°	1968.7	1968.0	1967.3	1966.6	1965.9	1963.7	1959.8	1956.0	1952.2	1948.3	1951.4
10°	1952.4	1951.7	1951.0	1950.3	1949.5	1947.3	1943.5	1939.6	1935.7	1931.9	1934.7
12.5°	1932.2	1931.0	1929.8	1928.4	1927.2	1924.8	1921.2	1917.6	1914.1	1910.5	1912.8
15°	1894.1	1893.1	1892.0	1891.0	1890.0	1887.4	1883.6	1879.8	1875.9	1872.1	1873.8
17.5°	1850.4	1848.9	1847.2	1845.7	1844.2	1841.4	1837.4	1833.4	1829.5	1825.4	1827.7
20°	1813.8	1813.1	1812.4	1811.7	1811.0	1808.4	1803.8	1799.3	1794.7	1790.2	1792.6
22.5°	1777.3	1776.0	1774.7	1773.5	1772.2	1769.5	1765.2	1761.0	1756.7	1752.4	1754.0
25°	1719.4	1717.6	1715.9	1714.1	1712.3	1709.2	1704.7	1700.1	1695.6	1691.0	1691.7
27.5°	1651.6	1650.6	1649.5	1648.5	1647.5	1644.6	1639.9	1635.2	1630.5	1625.8	1626.0
30°	1607.6	1606.5	1605.5	1604.4	1603.4	1600.2	1595.0	1589.7	1584.5	1579.2	1578.5
32.5°	1559.7	1558.1	1556.5	1554.9	1553.3	1550.1	1545.4	1540.8	1536.0	1531.4	1530.1
35°	1484.7	1483.4	1482.0	1480.6	1479.1	1476.0	1471.1	1466.2	1461.3	1456.4	1454.7
37.5°	1406.9	1405.2	1403.5	1401.7	1400.0	1396.7	1392.2	1387.6	1382.9	1378.4	1375.7
40°	1354.0	1352.3	1350.6	1348.8	1347.1	1343.7	1338.9	1333.9	1329.1	1324.1	1321.0
42.5°	1297.4	1296.0	1294.4	1292.9	1291.5	1288.3	1283.4	1278.5	1273.6	1268.7	1265.9
45°	1215.5	1214.2	1212.7	1211.3	1209.9	1207.1	1203.0	1198.7	1194.6	1190.3	1186.1
47.5°	1127.3	1127.4	1127.5	1127.5	1127.6	1125.1	1120.1	1115.1	1110.0	1105.0	1100.8
50°	1070.7	1069.6	1068.5	1067.5	1066.4	1063.8	1059.7	1055.4	1051.3	1047.0	1042.5
52.5°	1012.7	1012.0	1011.2	1010.4	1009.7	1007.0	1002.5	998.0	993.6	989.1	985.1
55°	925.8	924.7	923.7	922.6	921.6	918.7	913.7	908.9	903.9	899.1	895.9
57.5°	834.1	833.6	833.0	832.5	831.9	829.6	825.5	821.3	817.2	813.0	809.0
60°	776.2	774.9	773.5	772.0	770.6	768.0	764.2	760.3	756.5	752.7	749.1
62.5°	715.8	714.7	713.6	712.4	711.2	709.1	705.8	702.5	699.2	695.9	692.2
65°	625.1	624.4	623.7	623.0	622.3	620.0	616.1	612.3	608.4	604.6	601.5
67.5°	537.2	535.7	534.3	532.8	531.4	529.2	526.3	523.4	520.6	517.7	515.0
70°	481.8	480.1	478.3	476.6	474.8	472.3	469.2	466.1	462.9	459.8	457.7
72.5°	421.3	420.1	419.0	417.8	416.6	415.0	412.9	410.9	408.9	406.9	404.5
75°	332.2	331.5	330.8	330.1	329.4	328.2	326.5	324.7	323.0	321.2	320.1
77.5°	250.0	249.7	249.4	249.2	248.9	248.3	247.3	246.3	245.3	244.4	243.8
80°	198.3	198.3	198.3	198.3	198.3	198.0	197.3	196.6	195.9	195.2	194.9
82.5°	153.0	152.5	151.9	151.4	150.8	150.5	150.3	150.2	150.1	149.9	149.3
85°	86.6	86.9	87.3	87.7	88.0	88.2	88.2	88.2	88.2	88.2	87.9
87.5°	34.2	34.7	35.2	35.6	36.2	36.5	36.6	36.7	36.8	37.0	37.3
90°	1.3	3.6	6.0	8.3	10.6	12.8	14.8	16.9	18.9	20.9	22.4
92.5°	20.1	18.5	16.9	15.2	13.6	13.7	15.6	17.3	19.1	20.9	22.4
95°	74.5	73.6	72.8	71.9	71.0	65.0	54.0	43.0	31.9	20.9	22.4
97.5°	155.6	157.1	158.8	160.3	161.9	151.7	129.9	108.1	86.1	64.3	56.1
100°	218.3	219.2	220.0	221.0	221.9	222.9	224.0	225.2	226.3	227.5	184.2
102.5°	282.2	283.3	284.4	285.5	286.6	287.5	288.2	288.9	289.5	290.2	282.1
105°	384.5	385.6	386.8	387.9	389.1	389.6	389.6	389.6	389.6	389.6	389.6
107.5°	490.6	490.6	490.6	490.6	490.6	490.9	491.5	492.0	492.6	493.2	493.2
110°	559.7	559.7	559.7	559.7	559.7	559.9	560.5	561.1	561.7	562.2	561.4



TEST NUMBER: P333482-840

CATALOG NUMBER: S125DIW-S1270D1340U840-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	624.5	625.2	625.9	626.5	627.2	627.8	628.1	628.4	628.8	629.1	628.0
115°	721.8	723.2	724.7	726.1	727.6	728.4	728.7	729.0	729.3	729.6	728.4
117.5°	822.4	822.3	822.3	822.2	822.2	822.7	823.8	825.0	826.1	827.2	825.7
120°	885.1	884.9	884.6	884.3	884.0	884.3	885.1	886.1	887.0	887.8	887.3
122.5°	940.6	941.7	942.8	943.9	945.0	945.8	946.2	946.6	947.1	947.5	946.8
125°	1026.4	1028.4	1030.5	1032.5	1034.5	1035.5	1035.5	1035.5	1035.5	1035.5	1034.4
127.5°	1108.2	1109.7	1111.2	1112.6	1114.1	1114.7	1114.5	1114.4	1114.2	1114.0	1113.4
130°	1158.4	1159.9	1161.3	1162.9	1164.3	1165.2	1165.5	1165.7	1166.0	1166.3	1165.5
132.5°	1208.7	1210.3	1212.0	1213.8	1215.4	1216.0	1215.3	1214.7	1214.1	1213.4	1213.3
135°	1280.1	1281.8	1283.5	1285.3	1287.1	1287.6	1287.1	1286.5	1285.9	1285.3	1284.8
137.5°	1345.7	1347.2	1348.7	1350.2	1351.7	1352.2	1351.7	1351.2	1350.7	1350.2	1350.3
140°	1388.6	1389.2	1389.8	1390.3	1390.9	1391.1	1390.8	1390.5	1390.2	1389.9	1390.5
142.5°	1427.2	1427.6	1427.9	1428.4	1428.7	1429.1	1429.5	1429.9	1430.3	1430.7	1430.8
145°	1484.0	1484.6	1485.2	1485.8	1486.3	1486.6	1486.6	1486.6	1486.6	1486.6	1486.9
147.5°	1533.7	1533.6	1533.5	1533.4	1533.3	1533.4	1533.7	1534.1	1534.4	1534.8	1535.1
150°	1565.1	1564.5	1564.0	1563.4	1562.8	1562.8	1563.4	1564.0	1564.5	1565.1	1565.7
152.5°	1595.4	1594.2	1592.9	1591.6	1590.3	1589.9	1590.5	1591.1	1591.7	1592.3	1592.9
155°	1634.4	1632.6	1630.9	1629.2	1627.4	1626.9	1627.4	1628.0	1628.6	1629.2	1630.0
157.5°	1664.5	1663.4	1662.3	1661.3	1660.3	1659.8	1659.8	1659.9	1660.0	1660.0	1660.9
160°	1685.4	1683.6	1681.9	1680.1	1678.4	1677.7	1678.0	1678.3	1678.6	1678.9	1680.0
162.5°	1702.1	1700.4	1698.6	1696.9	1695.2	1694.5	1694.8	1695.1	1695.3	1695.6	1697.2
165°	1724.6	1722.8	1721.1	1719.4	1717.7	1716.9	1717.2	1717.5	1717.8	1718.1	1719.8
167.5°	1741.3	1739.6	1737.8	1736.0	1734.1	1733.4	1733.6	1733.9	1734.2	1734.5	1736.7
170°	1750.8	1748.8	1746.7	1744.6	1742.6	1741.7	1742.0	1742.3	1742.6	1742.9	1745.2
172.5°	1757.1	1755.0	1753.0	1750.9	1748.9	1748.2	1748.7	1749.2	1749.7	1750.2	1752.3
175°	1763.8	1762.1	1760.4	1758.6	1756.9	1756.2	1756.5	1756.8	1757.1	1757.3	1759.6
177.5°	1767.0	1765.5	1764.2	1762.8	1761.4	1760.8	1761.1	1761.3	1761.5	1761.7	1763.4
180°	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8



TEST NUMBER: P333482-840

CATALOG NUMBER: S125DIW-S1270D1340U840-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1	1990.1
2.5°	1984.4	1987.2	1990.0	1991.3	1991.0	1990.7	1990.4	1990.1
5°	1974.4	1977.6	1980.7	1982.2	1981.8	1981.5	1981.1	1980.7
7.5°	1954.4	1957.5	1960.6	1962.0	1961.7	1961.3	1961.0	1960.6
10°	1937.5	1940.4	1943.1	1944.3	1944.0	1943.6	1943.3	1943.0
12.5°	1915.0	1917.2	1919.5	1920.6	1920.5	1920.4	1920.4	1920.3
15°	1875.6	1877.3	1879.1	1880.0	1880.0	1880.0	1880.0	1880.0
17.5°	1829.8	1832.0	1834.1	1834.3	1832.6	1830.9	1829.1	1827.4
20°	1795.1	1797.6	1800.0	1800.4	1798.6	1796.9	1795.1	1793.3
22.5°	1755.7	1757.3	1758.9	1759.1	1757.9	1756.7	1755.4	1754.3
25°	1692.4	1693.1	1693.8	1693.6	1692.6	1691.5	1690.5	1689.4
27.5°	1626.1	1626.3	1626.4	1625.9	1624.9	1623.9	1622.8	1621.7
30°	1577.8	1577.1	1576.4	1575.6	1574.5	1573.5	1572.4	1571.3
32.5°	1528.8	1527.6	1526.3	1524.7	1522.9	1521.0	1519.0	1517.2
35°	1452.9	1451.2	1449.5	1447.1	1444.3	1441.6	1438.8	1435.9
37.5°	1373.1	1370.6	1368.0	1365.8	1364.2	1362.6	1361.0	1359.4
40°	1317.9	1314.7	1311.5	1309.5	1308.4	1307.4	1306.3	1305.3
42.5°	1263.0	1260.1	1257.3	1255.1	1253.4	1251.8	1250.2	1248.6
45°	1181.9	1177.7	1173.6	1170.9	1169.8	1168.8	1167.7	1166.7
47.5°	1096.4	1092.2	1087.9	1084.6	1082.1	1079.6	1077.2	1074.8
50°	1037.9	1033.4	1028.9	1025.3	1022.9	1020.5	1018.0	1015.5
52.5°	981.1	977.1	973.1	969.8	967.0	964.3	961.6	958.9
55°	892.7	889.6	886.5	883.6	881.2	878.8	876.3	873.8
57.5°	805.0	800.9	796.9	794.2	792.8	791.5	790.1	788.8
60°	745.6	742.1	738.6	735.7	733.2	730.7	728.3	725.9
62.5°	688.3	684.6	680.9	678.0	676.1	674.2	672.3	670.4
65°	598.3	595.1	592.0	589.8	588.3	586.9	585.5	584.1
67.5°	512.4	509.7	507.1	505.3	504.4	503.6	502.8	501.9
70°	455.6	453.4	451.3	449.6	448.2	446.8	445.5	444.0
72.5°	402.1	399.7	397.4	395.5	394.0	392.6	391.2	389.8
75°	319.1	318.0	317.0	315.8	314.4	313.0	311.5	310.1
77.5°	243.1	242.5	241.9	241.1	240.0	239.0	238.1	237.1
80°	194.5	194.2	193.8	193.3	192.6	191.9	191.2	190.6
82.5°	148.7	148.0	147.3	147.0	146.8	146.7	146.5	146.4
85°	87.5	87.2	86.7	86.2	85.5	84.8	84.1	83.4
87.5°	37.5	37.8	38.1	38.1	37.7	37.3	36.9	36.5
90°	23.8	25.2	26.8	27.9	28.8	29.6	30.5	31.4
92.5°	23.8	25.2	26.8	27.7	28.1	28.5	28.9	29.3
95°	23.8	25.2	26.8	27.5	27.5	27.5	27.5	27.5
97.5°	48.0	39.8	31.5	27.5	27.5	27.5	27.5	27.5
100°	140.9	97.7	54.3	32.1	30.9	29.8	28.6	27.5
102.5°	273.9	265.7	257.5	243.5	223.8	204.0	184.2	164.5
105°	389.6	389.6	389.6	389.5	389.2	388.9	388.6	388.3
107.5°	493.3	493.4	493.4	493.0	492.1	491.3	490.4	489.6
110°	560.5	559.7	558.8	558.5	558.8	559.1	559.4	559.7





TEST NUMBER: P333482-840

CATALOG NUMBER: S125DIW-S1270D1340U840-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	626.9	625.9	624.8	624.0	623.6	623.2	622.8	622.4
115°	727.3	726.1	725.0	723.5	721.8	720.0	718.2	716.5
117.5°	824.2	822.6	821.1	819.9	819.2	818.5	817.7	817.0
120°	886.7	886.1	885.4	884.4	883.0	881.5	880.1	878.7
122.5°	946.2	945.6	945.1	943.9	942.3	940.6	938.9	937.3
125°	1033.2	1032.1	1030.9	1029.9	1029.1	1028.1	1027.2	1026.4
127.5°	1112.8	1112.1	1111.5	1110.0	1107.9	1105.8	1103.6	1101.5
130°	1164.6	1163.7	1162.9	1161.6	1160.2	1158.7	1157.3	1155.9
132.5°	1213.0	1212.8	1212.6	1211.8	1210.4	1209.0	1207.5	1206.1
135°	1284.1	1283.5	1282.9	1281.8	1280.1	1278.3	1276.6	1274.9
137.5°	1350.4	1350.5	1350.6	1349.9	1348.4	1346.9	1345.3	1343.8
140°	1391.1	1391.6	1392.2	1391.6	1389.9	1388.2	1386.4	1384.6
142.5°	1430.9	1431.1	1431.2	1430.4	1428.6	1426.8	1425.1	1423.4
145°	1487.2	1487.5	1487.8	1487.1	1485.3	1483.6	1481.9	1480.2
147.5°	1535.5	1535.8	1536.2	1535.3	1533.2	1531.1	1529.0	1526.9
150°	1566.3	1566.8	1567.4	1566.5	1564.2	1561.9	1559.5	1557.2
152.5°	1593.5	1594.1	1594.6	1593.9	1591.7	1589.7	1587.6	1585.5
155°	1630.9	1631.7	1632.6	1631.9	1629.6	1627.3	1625.0	1622.7
157.5°	1661.9	1662.8	1663.8	1663.0	1660.7	1658.4	1656.1	1653.8
160°	1681.2	1682.3	1683.5	1682.9	1680.6	1678.3	1676.0	1673.6
162.5°	1698.8	1700.5	1702.1	1701.6	1699.1	1696.5	1693.9	1691.4
165°	1721.5	1723.3	1725.1	1724.7	1722.4	1720.1	1717.8	1715.5
167.5°	1738.8	1740.8	1742.9	1742.6	1740.0	1737.5	1734.8	1732.2
170°	1747.6	1749.9	1752.2	1752.1	1749.5	1746.9	1744.2	1741.6
172.5°	1754.4	1756.6	1758.6	1758.4	1755.8	1753.1	1750.5	1747.9
175°	1761.9	1764.2	1766.6	1766.5	1763.8	1761.2	1758.6	1756.0
177.5°	1765.0	1766.7	1768.3	1768.2	1766.3	1764.4	1762.5	1760.7
180°	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8	1763.8

(END OF REPORT)