

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: P333735

Luminaire Tested: **S125RDIW-S1270D1340U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333735  
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-S1270D1340U835-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9531.6 lumens  
Efficiency: N/A  
Efficacy: 125.1 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

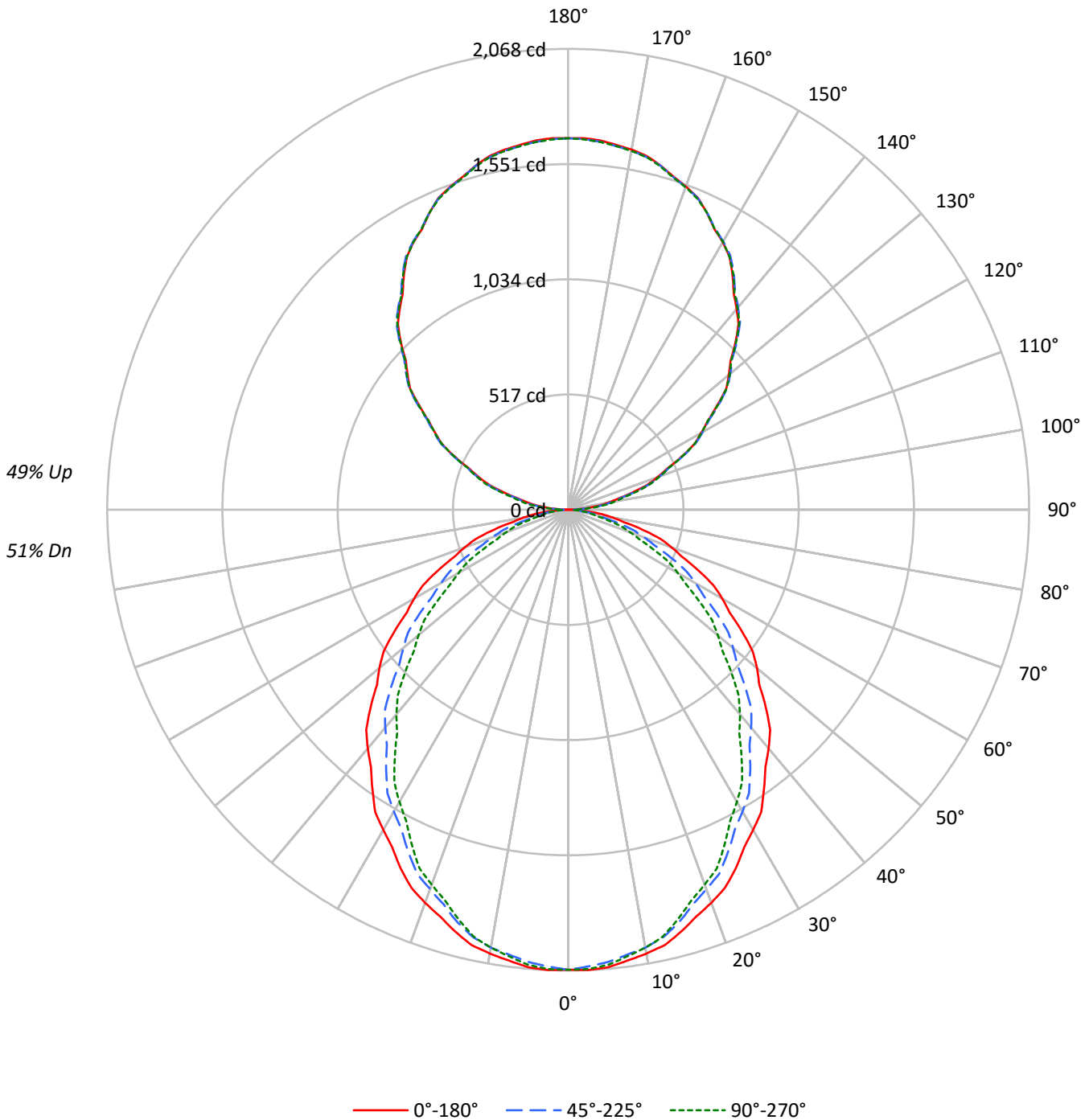
Input Watts (W): 76.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	98	94	90	87	91	87	84	81	74	72	69	62	60	59	51	50	49	44
2	90	82	76	71	83	76	71	67	65	61	58	55	52	49	45	43	41	37
3	82	73	65	60	75	67	61	56	58	53	49	49	45	42	40	38	35	31
4	75	64	57	51	69	60	53	48	51	46	42	43	39	36	36	33	31	27
5	69	57	49	43	64	53	46	41	46	40	36	39	35	31	32	29	27	24
6	64	52	44	38	59	48	41	36	41	36	32	35	31	28	30	26	24	21
7	59	47	39	33	54	44	36	31	38	32	28	32	28	25	27	24	21	19
8	55	42	35	29	50	40	33	28	34	29	25	29	25	22	25	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	27	23	20	23	20	17	15
10	48	36	28	24	44	33	27	22	29	24	20	25	21	18	21	18	16	14

**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	2.0
10°-20°	542.5	5.7
20°-30°	786.6	8.3
30°-40°	896.5	9.4
40°-50°	873.9	9.2
50°-60°	735.6	7.7
60°-70°	515.6	5.4
70°-80°	265.0	2.8
80°-90°	70.6	0.7
90°-100°	111.6	1.2
100°-110°	329.7	3.5
110°-120°	558.4	5.9
120°-130°	734.9	7.7
130°-140°	823.5	8.6
140°-150°	807.1	8.5
150°-160°	677.9	7.1
160°-170°	450.6	4.7
170°-180°	157.7	1.7
0°-30°	1523.2	16.0
0°-40°	2419.7	25.4
0°-60°	4029.1	42.3
0°-90°	4880.4	51.2
90°-120°	999.7	10.5
90°-150°	3365.1	35.3
90°-180°	4651.0	48.8
0°-180°	9531.6	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	9
95°	84	88	100	109	112	90
105°	296	302	310	318	322	316
115°	559	564	567	566	564	553
125°	816	823	825	822	821	730
135°	1061	1068	1070	1070	1065	818
145°	1286	1291	1295	1294	1291	803
155°	1471	1471	1472	1477	1471	677
165°	1599	1597	1598	1603	1596	451
175°	1663	1658	1658	1665	1656	158
180°	1667	1667	1667	1667	1667	



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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	20.8	22.2
92.5°	31.4	33.0	34.6	36.2	37.8	39.9	42.4	44.9	47.3	49.8	51.7
95°	84.3	84.9	85.5	86.0	86.6	88.4	91.2	94.1	97.0	99.9	101.9
97.5°	140.1	140.3	140.6	140.8	141.0	143.1	147.1	151.1	155.1	159.0	160.9
100°	181.6	181.6	181.6	181.6	181.6	183.5	187.2	191.0	194.7	198.5	201.1
102.5°	226.2	227.4	228.5	229.7	230.8	232.4	234.3	236.2	238.1	240.0	242.8
105°	295.8	297.2	298.6	300.1	301.5	303.1	304.8	306.6	308.3	310.0	311.8
107.5°	372.5	374.0	375.4	376.9	378.3	379.7	381.0	382.3	383.7	385.0	385.9
110°	425.5	426.9	428.4	429.8	431.2	432.4	433.3	434.1	435.0	435.8	436.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	479.4	480.2	480.9	481.7	482.4	483.4	484.4	485.5	486.6	487.7	488.1
115°	559.1	560.2	561.4	562.5	563.7	564.6	565.1	565.7	566.3	566.9	566.6
117.5°	639.0	639.5	640.0	640.5	641.1	641.6	642.1	642.6	643.1	643.7	643.9
120°	688.8	690.2	691.7	693.1	694.6	695.4	695.7	696.0	696.3	696.6	696.6
122.5°	742.8	743.3	743.8	744.3	744.8	745.5	746.2	747.0	747.7	748.5	748.2
125°	815.9	817.6	819.4	821.1	822.8	823.8	824.1	824.4	824.7	825.0	824.4
127.5°	893.7	894.7	895.7	896.7	897.7	898.3	898.7	899.0	899.4	899.7	899.4
130°	940.4	941.9	943.3	944.8	946.2	947.2	947.8	948.4	948.9	949.5	949.2
132.5°	987.1	989.5	991.9	994.2	996.6	997.7	997.6	997.5	997.4	997.3	997.0
135°	1061.1	1062.8	1064.5	1066.3	1068.0	1069.0	1069.3	1069.6	1069.9	1070.2	1070.2
137.5°	1130.6	1132.3	1134.0	1135.6	1137.3	1138.4	1139.1	1139.7	1140.4	1141.0	1141.3
140°	1175.2	1176.7	1178.1	1179.6	1181.0	1182.1	1183.0	1183.9	1184.7	1185.6	1186.2
142.5°	1219.9	1221.1	1222.3	1223.5	1224.7	1225.8	1226.9	1228.0	1229.1	1230.2	1230.6
145°	1285.5	1286.6	1287.8	1288.9	1290.1	1291.1	1292.0	1292.8	1293.7	1294.6	1294.6
147.5°	1346.2	1346.8	1347.5	1348.1	1348.7	1349.4	1350.1	1350.8	1351.5	1352.2	1352.9
150°	1386.7	1386.4	1386.1	1385.8	1385.5	1385.9	1387.1	1388.3	1389.4	1390.6	1390.6
152.5°	1419.9	1420.3	1420.7	1421.1	1421.5	1421.9	1422.4	1422.8	1423.3	1423.8	1424.5
155°	1471.0	1471.0	1471.0	1471.0	1471.0	1471.1	1471.4	1471.7	1472.0	1472.3	1473.4
157.5°	1516.6	1516.0	1515.4	1514.7	1514.1	1513.9	1514.2	1514.5	1514.8	1515.1	1516.2
160°	1543.6	1542.8	1541.9	1541.0	1540.2	1539.9	1540.2	1540.5	1540.7	1541.0	1542.2
162.5°	1567.5	1566.9	1566.2	1565.6	1565.0	1564.7	1564.7	1564.8	1564.8	1564.9	1566.3
165°	1599.4	1598.8	1598.2	1597.7	1597.1	1597.0	1597.2	1597.5	1597.8	1598.1	1599.3
167.5°	1626.4	1625.2	1624.1	1622.9	1621.8	1621.2	1621.2	1621.2	1621.2	1621.2	1622.9
170°	1640.9	1639.8	1638.6	1637.5	1636.3	1635.7	1635.7	1635.7	1635.7	1635.7	1637.5
172.5°	1651.3	1650.1	1649.0	1647.8	1646.7	1646.1	1646.1	1646.1	1646.1	1646.1	1647.8
175°	1663.0	1661.8	1660.7	1659.5	1658.4	1657.8	1657.8	1657.8	1657.8	1657.8	1659.5
177.5°	1668.9	1668.0	1667.1	1666.2	1665.2	1664.7	1664.4	1664.2	1664.0	1663.7	1665.1
180°	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9



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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	25.1	26.5	27.7	28.5	29.4	30.3	31.1
92.5°	53.6	55.5	57.4	58.7	59.3	60.0	60.6	61.2
95°	103.9	105.9	108.0	109.2	109.8	110.4	111.0	111.6
97.5°	162.8	164.7	166.6	167.8	168.1	168.5	168.8	169.2
100°	203.7	206.2	208.8	210.4	211.0	211.6	212.2	212.7
102.5°	245.6	248.4	251.3	253.1	253.9	254.7	255.5	256.3
105°	313.5	315.2	316.9	318.2	319.1	320.0	320.8	321.7
107.5°	386.7	387.6	388.5	388.9	388.8	388.7	388.7	388.6
110°	437.6	438.4	439.3	439.6	439.3	439.0	438.7	438.4





TEST NUMBER: P333735

CATALOG NUMBER: S125RDIW-S1270D1340U835-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	488.5	488.9	489.3	489.3	488.8	488.3	487.7	487.2
115°	566.3	566.0	565.7	565.4	565.1	564.8	564.6	564.3
117.5°	644.1	644.3	644.6	644.1	643.0	641.8	640.7	639.5
120°	696.6	696.6	696.6	696.0	694.8	693.7	692.5	691.4
122.5°	748.0	747.8	747.5	747.0	746.0	745.1	744.2	743.3
125°	823.8	823.3	822.7	822.3	822.0	821.7	821.4	821.1
127.5°	899.1	898.8	898.6	898.1	897.6	897.0	896.4	895.8
130°	948.9	948.7	948.4	947.9	947.4	946.8	946.2	945.6
132.5°	996.7	996.4	996.1	995.6	994.8	993.9	993.1	992.3
135°	1070.2	1070.2	1070.2	1069.6	1068.4	1067.3	1066.1	1065.0
137.5°	1141.7	1142.0	1142.4	1141.8	1140.4	1138.9	1137.5	1136.1
140°	1186.8	1187.3	1187.9	1187.5	1186.0	1184.6	1183.2	1181.7
142.5°	1230.9	1231.3	1231.6	1231.1	1229.6	1228.2	1226.7	1225.3
145°	1294.6	1294.6	1294.6	1294.1	1293.3	1292.4	1291.5	1290.7
147.5°	1353.5	1354.2	1354.9	1354.3	1352.3	1350.4	1348.4	1346.5
150°	1390.6	1390.6	1390.6	1390.3	1389.7	1389.1	1388.5	1388.0
152.5°	1425.1	1425.8	1426.5	1426.4	1425.3	1424.3	1423.2	1422.2
155°	1474.6	1475.7	1476.9	1476.7	1475.3	1473.9	1472.4	1471.0
157.5°	1517.4	1518.5	1519.7	1519.3	1517.4	1515.5	1513.6	1511.7
160°	1543.3	1544.5	1545.6	1545.5	1544.1	1542.6	1541.2	1539.7
162.5°	1567.7	1569.0	1570.4	1570.3	1568.6	1566.9	1565.3	1563.6
165°	1600.4	1601.6	1602.7	1602.4	1600.7	1599.0	1597.2	1595.5
167.5°	1624.7	1626.4	1628.1	1628.1	1626.3	1624.5	1622.7	1620.9
170°	1639.2	1640.9	1642.6	1642.5	1640.5	1638.5	1636.4	1634.4
172.5°	1649.6	1651.3	1653.0	1653.0	1651.2	1649.4	1647.6	1645.8
175°	1661.2	1663.0	1664.7	1664.5	1662.5	1660.5	1658.5	1656.5
177.5°	1666.5	1667.9	1669.3	1669.2	1667.5	1665.9	1664.3	1662.7
180°	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9

(END OF REPORT)