

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: P333734-840

Luminaire Tested: **S125RDIW-S1270D1340U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333734-840
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: S125RDIW-S1270D1340U840-4F0-1E-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: 10345.0 lumens
Efficiency: N/A
Efficacy: 135.8 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

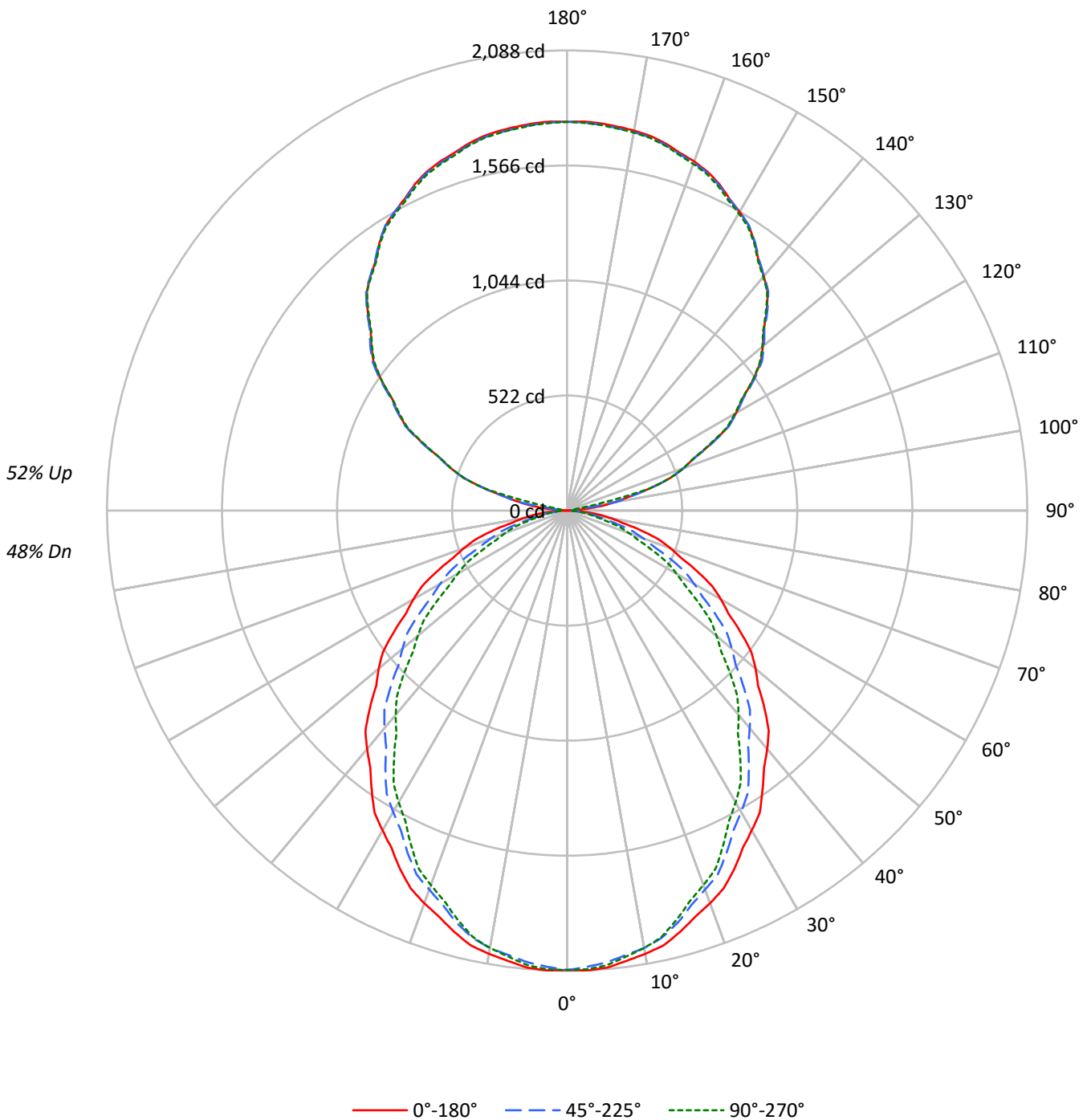
Input Watts (W): 76.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	13464	13464	13464
5°	13494	13341	13422
10°	13392	13217	13217
15°	13233	12948	12843
20°	13029	12575	12423
25°	12790	12207	11938
30°	12493	11777	11401
35°	12191	11334	10800
40°	11907	10871	10208
45°	11562	10355	9563
50°	11216	9792	8890
55°	10815	9254	8173
60°	10413	8603	7403
65°	9938	7844	6521
70°	9396	6898	5620
75°	8644	5814	4674
80°	7613	4567	3924
85°	6417	3735	3505



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.0	1.9
10°-20°	547.8	5.3
20°-30°	794.4	7.7
30°-40°	905.3	8.8
40°-50°	882.5	8.5
50°-60°	742.8	7.2
60°-70°	520.7	5.0
70°-80°	267.7	2.6
80°-90°	71.3	0.7
90°-100°	64.1	0.6
100°-110°	395.0	3.8
110°-120°	716.5	6.9
120°-130°	919.5	8.9
130°-140°	989.0	9.6
140°-150°	928.3	9.0
150°-160°	750.9	7.3
160°-170°	485.7	4.7
170°-180°	167.5	1.6
0°-30°	1538.2	14.9
0°-40°	2443.5	23.6
0°-60°	4068.9	39.3
0°-90°	4928.5	47.6
90°-120°	1175.6	11.4
90°-150°	4012.4	38.8
90°-180°	5416.0	52.4
0°-180°	10345.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2085	2085	2085	2085	2085	
5°	2082	2075	2058	2073	2070	197
15°	1979	1968	1937	1934	1921	558
25°	1795	1769	1713	1693	1675	826
35°	1546	1507	1438	1393	1370	968
45°	1266	1218	1134	1073	1047	976
55°	960	908	822	754	726	859
65°	650	595	513	452	427	644
75°	346	298	233	200	187	367
85°	87	59	50	49	47	97
90°	1	12	21	27	31	7
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	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7
2.5°	2088.4	2087.6	2086.7	2085.9	2085.1	2083.3	2080.4	2077.6	2074.9	2072.0	2074.9
5°	2081.5	2080.1	2078.7	2077.3	2075.9	2073.3	2069.4	2065.6	2061.7	2057.9	2061.3
7.5°	2061.0	2059.7	2058.4	2057.0	2055.7	2052.8	2048.1	2043.5	2038.9	2034.3	2036.7
10°	2042.1	2041.0	2040.0	2039.0	2037.9	2035.0	2030.0	2025.2	2020.2	2015.4	2016.4
12.5°	2020.7	2019.4	2018.0	2016.7	2015.4	2011.4	2004.9	1998.3	1991.7	1985.1	1985.9
15°	1979.1	1977.0	1975.0	1972.9	1970.8	1966.0	1958.6	1951.4	1944.0	1936.6	1936.3
17.5°	1932.2	1929.0	1925.8	1922.6	1919.3	1913.1	1903.9	1894.6	1885.4	1876.1	1874.4
20°	1895.7	1892.2	1888.6	1885.2	1881.7	1874.3	1863.2	1852.0	1840.8	1829.6	1827.9
22.5°	1855.4	1851.9	1848.4	1844.9	1841.4	1833.8	1822.0	1810.3	1798.5	1786.8	1783.3
25°	1794.9	1789.7	1784.4	1779.2	1773.9	1764.8	1751.9	1739.0	1726.0	1713.0	1708.5
27.5°	1725.7	1719.3	1712.9	1706.6	1700.2	1690.1	1676.2	1662.3	1648.5	1634.7	1628.3
30°	1675.3	1668.6	1661.9	1655.4	1648.7	1638.0	1623.3	1608.6	1593.9	1579.2	1571.1
32.5°	1626.2	1618.4	1610.6	1602.9	1595.1	1583.7	1568.7	1553.8	1538.7	1523.8	1514.9
35°	1546.2	1537.7	1529.3	1521.0	1512.6	1500.5	1484.7	1469.1	1453.3	1437.5	1427.3
37.5°	1467.7	1457.5	1447.3	1437.1	1426.8	1413.6	1397.5	1381.2	1364.9	1348.7	1336.6
40°	1412.3	1401.8	1391.3	1380.8	1370.4	1356.7	1339.9	1323.1	1306.3	1289.5	1276.3
42.5°	1354.4	1343.6	1332.8	1322.0	1311.3	1297.2	1279.9	1262.5	1245.2	1227.8	1215.1
45°	1265.9	1255.8	1245.6	1235.5	1225.3	1210.6	1191.3	1172.2	1152.9	1133.7	1119.6
47.5°	1174.3	1163.6	1152.9	1142.2	1131.5	1116.4	1097.0	1077.6	1058.2	1038.8	1024.4
50°	1116.3	1104.8	1093.2	1081.7	1070.2	1054.4	1034.4	1014.5	994.5	974.6	959.9
52.5°	1053.3	1041.5	1029.7	1017.8	1006.0	990.7	971.9	953.1	934.2	915.4	899.6
55°	960.5	949.3	938.1	926.9	915.6	900.3	880.7	861.1	841.5	821.9	806.2
57.5°	866.6	854.6	842.6	830.7	818.7	803.3	784.5	765.5	746.6	727.7	712.4
60°	806.2	793.9	781.6	769.4	757.2	741.5	722.7	703.8	684.9	666.0	650.7
62.5°	741.9	730.2	718.5	706.8	695.2	679.7	660.6	641.4	622.2	603.0	588.8
65°	650.3	638.3	626.5	614.6	602.7	587.4	569.0	550.4	531.8	513.3	499.3
67.5°	559.3	547.3	535.4	523.6	511.7	496.9	479.1	461.3	443.5	425.8	412.9
70°	497.6	485.6	473.7	461.8	450.0	435.3	417.8	400.3	382.7	365.3	354.5
72.5°	437.1	425.5	413.8	402.2	390.6	376.6	360.2	343.9	327.5	311.1	301.1
75°	346.4	335.9	325.4	314.9	304.4	291.9	277.1	262.5	247.7	233.0	225.3
77.5°	256.3	247.9	239.5	231.2	222.8	212.7	200.9	189.1	177.4	165.6	160.3
80°	204.7	196.3	187.9	179.5	171.1	162.0	152.2	142.4	132.6	122.8	119.7
82.5°	154.3	146.7	139.2	131.6	124.1	116.9	110.2	103.5	96.7	90.1	88.6
85°	86.6	80.3	74.0	67.7	61.4	57.4	55.6	53.9	52.1	50.4	50.0
87.5°	29.2	27.8	26.3	24.7	23.2	22.6	22.7	22.8	22.9	23.1	23.3
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



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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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7
2.5°	2077.6	2080.4	2083.3	2084.5	2084.3	2084.0	2083.7	2083.4
5°	2064.9	2068.4	2071.8	2073.3	2072.5	2071.8	2071.1	2070.4
7.5°	2039.1	2041.6	2044.1	2044.9	2044.1	2043.4	2042.6	2041.8
10°	2017.4	2018.5	2019.5	2019.5	2018.5	2017.4	2016.4	2015.4
12.5°	1986.7	1987.4	1988.2	1987.8	1986.2	1984.6	1983.0	1981.4
15°	1935.9	1935.6	1935.2	1933.5	1930.4	1927.2	1924.0	1920.9
17.5°	1872.7	1870.9	1869.2	1867.0	1864.4	1861.8	1859.3	1856.6
20°	1826.0	1824.3	1822.6	1820.1	1816.9	1813.8	1810.7	1807.6
22.5°	1779.9	1776.5	1773.0	1770.0	1767.5	1764.8	1762.2	1759.7
25°	1703.9	1699.4	1694.9	1690.6	1686.8	1682.9	1679.1	1675.3
27.5°	1621.9	1615.6	1609.2	1604.2	1600.4	1596.7	1593.0	1589.3
30°	1563.2	1555.1	1547.0	1541.5	1538.3	1535.1	1532.0	1528.8
32.5°	1506.0	1497.1	1488.2	1481.8	1477.8	1473.8	1469.9	1465.8
35°	1417.2	1407.0	1396.9	1389.4	1384.5	1379.6	1374.7	1369.8
37.5°	1324.3	1312.2	1300.0	1291.5	1286.8	1282.0	1277.3	1272.5
40°	1262.9	1249.6	1236.4	1227.6	1223.4	1219.2	1215.0	1210.8
42.5°	1202.3	1189.6	1176.9	1167.4	1161.2	1155.1	1148.9	1142.8
45°	1105.6	1091.7	1077.6	1068.0	1062.8	1057.5	1052.3	1047.0
47.5°	1010.1	995.6	981.2	971.1	965.2	959.5	953.6	947.9
50°	945.2	930.5	915.8	905.8	900.6	895.3	890.1	884.8
52.5°	883.7	868.0	852.1	841.6	836.4	831.1	825.9	820.6
55°	790.4	774.7	758.9	748.2	742.7	737.0	731.4	725.9
57.5°	696.9	681.6	666.1	656.0	651.0	646.0	641.1	636.1
60°	635.2	619.9	604.4	594.1	588.9	583.6	578.3	573.1
62.5°	574.5	560.2	545.9	536.1	530.9	525.6	520.4	515.1
65°	485.3	471.3	457.3	447.7	442.4	437.2	431.9	426.7
67.5°	400.1	387.3	374.6	366.0	361.8	357.6	353.5	349.2
70°	343.6	332.8	321.9	314.4	310.1	306.0	301.7	297.6
72.5°	291.1	281.1	271.0	264.7	261.9	259.1	256.3	253.5
75°	217.6	210.0	202.3	197.1	194.7	192.3	189.9	187.3
77.5°	154.8	149.5	144.1	140.5	138.7	136.8	135.0	133.2
80°	116.5	113.4	110.2	108.3	107.6	106.8	106.2	105.5
82.5°	87.2	85.6	84.2	83.2	82.8	82.4	82.0	81.6
85°	49.7	49.4	49.0	48.7	48.3	48.0	47.6	47.3
87.5°	23.6	23.9	24.2	24.3	24.2	24.1	24.0	23.9
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: P333734-840

CATALOG NUMBER: S125RDIW-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)