

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: P333637

Luminaire Tested: **S125RDIP-S1270D1205U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333637
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: S125RDIP-S1270D1205U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9694.4 lumens
Efficiency: N/A
Efficacy: 135.2 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

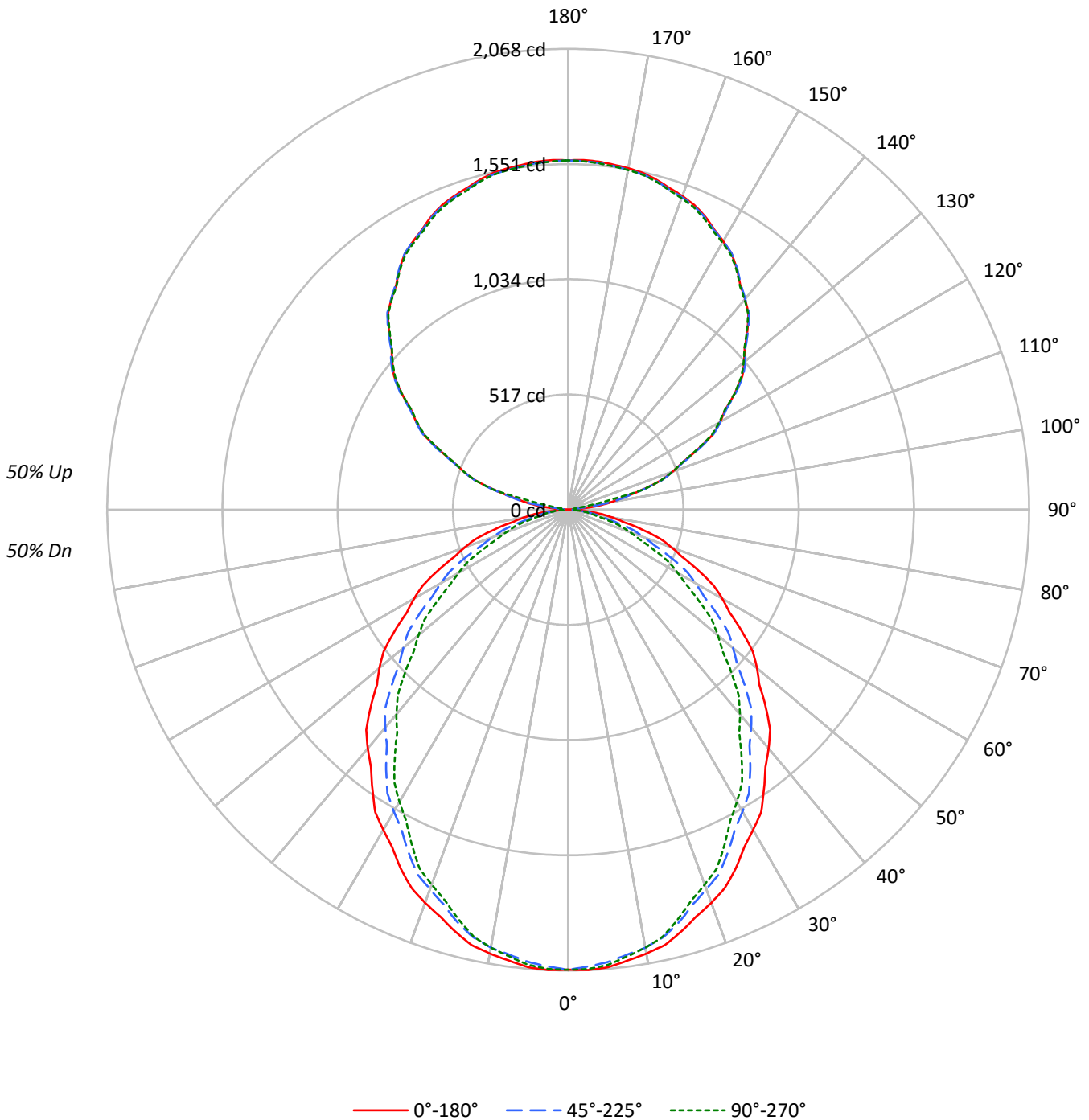
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	99	99	99	99	84	84	84	69	69	69	56	56	56	50																				
1	98	94	90	87	90	87	84	81	74	71	69	61	60	58	50	49	48	43																				
2	89	82	76	71	82	76	71	66	65	61	58	54	51	49	44	43	41	36																				
3	82	72	65	59	75	67	61	56	57	52	49	48	45	42	40	37	35	31																				
4	75	64	56	50	69	60	53	47	51	46	42	43	39	36	35	33	30	27																				
5	69	57	49	43	63	53	46	41	46	40	36	39	34	31	32	29	26	23																				
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	21																				
7	59	47	39	33	54	43	36	31	37	32	28	32	28	24	27	23	21	18																				
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16																				
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	23	19	17	15																				
10	47	35	28	24	44	33	27	22	29	24	20	25	21	18	21	18	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	2.0
10°-20°	542.5	5.6
20°-30°	786.6	8.1
30°-40°	896.5	9.2
40°-50°	873.9	9.0
50°-60°	735.6	7.6
60°-70°	515.6	5.3
70°-80°	265.0	2.7
80°-90°	70.2	0.7
90°-100°	57.0	0.6
100°-110°	351.1	3.6
110°-120°	636.8	6.6
120°-130°	817.3	8.4
130°-140°	879.1	9.1
140°-150°	825.1	8.5
150°-160°	667.5	6.9
160°-170°	431.7	4.5
170°-180°	148.9	1.5
0°-30°	1523.2	15.7
0°-40°	2419.7	25.0
0°-60°	4029.1	41.6
0°-90°	4880.0	50.3
90°-120°	1044.9	10.8
90°-150°	3566.4	36.8
90°-180°	4814.0	49.7
0°-180°	9694.4	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	10	19	24	28	7
95°	66	60	19	24	24	84
105°	342	346	346	346	345	362
115°	642	647	648	644	637	636
125°	912	920	920	916	912	815
135°	1138	1144	1142	1140	1133	877
145°	1319	1321	1321	1322	1316	825
155°	1453	1446	1448	1451	1442	669
165°	1533	1526	1527	1533	1525	433
175°	1568	1561	1562	1570	1561	149
180°	1568	1568	1568	1568	1568	



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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	27.4	25.9	24.3	22.8	22.1	22.2	22.3	22.3	22.4	22.7
90°	1.2	3.2	5.3	7.4	9.4	11.4	13.2	15.0	16.8	18.6	19.9
92.5°	17.9	16.5	15.0	13.6	12.1	12.2	13.8	15.4	17.0	18.6	19.9
95°	66.2	65.5	64.7	63.9	63.1	57.9	48.0	38.2	28.4	18.6	19.9
97.5°	138.3	139.7	141.1	142.5	143.9	134.9	115.4	96.0	76.6	57.2	49.9
100°	194.1	194.9	195.6	196.4	197.2	198.1	199.1	200.2	201.2	202.2	163.7
102.5°	250.8	251.8	252.8	253.7	254.7	255.5	256.1	256.8	257.4	258.0	250.7
105°	341.7	342.7	343.7	344.8	345.8	346.3	346.3	346.3	346.3	346.3	346.3
107.5°	436.1	436.1	436.1	436.1	436.1	436.3	436.8	437.3	437.9	438.4	438.4
110°	497.4	497.4	497.4	497.4	497.4	497.7	498.2	498.7	499.2	499.7	499.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	555.1	555.7	556.3	556.9	557.5	558.0	558.3	558.6	558.9	559.2	558.3
115°	641.5	642.8	644.1	645.4	646.7	647.5	647.7	648.0	648.2	648.5	647.5
117.5°	731.0	731.0	730.9	730.9	730.8	731.3	732.3	733.2	734.2	735.2	733.9
120°	786.8	786.5	786.3	786.0	785.8	786.0	786.8	787.6	788.3	789.1	788.6
122.5°	836.1	837.1	838.0	839.0	840.0	840.7	841.0	841.4	841.8	842.1	841.6
125°	912.3	914.1	915.9	917.7	919.5	920.4	920.4	920.4	920.4	920.4	919.4
127.5°	985.1	986.4	987.6	988.9	990.2	990.8	990.6	990.5	990.3	990.2	989.6
130°	1029.7	1031.0	1032.3	1033.6	1034.9	1035.6	1035.9	1036.2	1036.4	1036.7	1035.9
132.5°	1074.3	1075.8	1077.3	1078.8	1080.3	1080.8	1080.2	1079.6	1079.1	1078.5	1078.4
135°	1137.8	1139.3	1140.9	1142.4	1144.0	1144.5	1144.0	1143.5	1142.9	1142.4	1141.9
137.5°	1196.1	1197.5	1198.8	1200.1	1201.5	1201.9	1201.5	1201.0	1200.5	1200.1	1200.2
140°	1234.2	1234.8	1235.3	1235.8	1236.3	1236.4	1236.2	1235.9	1235.7	1235.4	1235.9
142.5°	1268.6	1268.9	1269.3	1269.6	1269.9	1270.2	1270.6	1270.9	1271.3	1271.7	1271.8
145°	1319.1	1319.6	1320.1	1320.6	1321.1	1321.4	1321.4	1321.4	1321.4	1321.4	1321.7
147.5°	1363.2	1363.1	1363.0	1362.9	1362.8	1362.9	1363.2	1363.5	1363.9	1364.2	1364.5
150°	1391.1	1390.6	1390.1	1389.6	1389.1	1389.1	1389.6	1390.1	1390.6	1391.1	1391.6
152.5°	1418.1	1417.0	1415.8	1414.7	1413.5	1413.2	1413.8	1414.3	1414.8	1415.3	1415.8
155°	1452.7	1451.2	1449.6	1448.1	1446.5	1446.0	1446.5	1447.0	1447.6	1448.1	1448.9
157.5°	1479.5	1478.5	1477.6	1476.7	1475.7	1475.3	1475.4	1475.4	1475.5	1475.5	1476.3
160°	1498.1	1496.5	1495.0	1493.4	1491.9	1491.2	1491.5	1491.7	1492.0	1492.2	1493.3
162.5°	1512.9	1511.4	1509.8	1508.3	1506.7	1506.1	1506.3	1506.6	1506.9	1507.1	1508.6
165°	1532.9	1531.4	1529.8	1528.3	1526.7	1526.1	1526.3	1526.6	1526.8	1527.1	1528.7
167.5°	1547.8	1546.2	1544.6	1543.0	1541.4	1540.7	1541.0	1541.2	1541.5	1541.8	1543.6
170°	1556.2	1554.4	1552.5	1550.7	1548.9	1548.2	1548.4	1548.7	1548.9	1549.2	1551.3
172.5°	1561.7	1559.9	1558.1	1556.3	1554.5	1553.8	1554.3	1554.8	1555.2	1555.7	1557.6
175°	1567.8	1566.2	1564.7	1563.1	1561.6	1560.9	1561.2	1561.5	1561.7	1562.0	1564.0
177.5°	1570.6	1569.3	1568.1	1566.9	1565.6	1565.1	1565.3	1565.5	1565.7	1565.9	1567.4
180°	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8



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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°	22.9	23.2	23.5	23.5	23.4	23.3	23.2	23.0
90°	21.2	22.5	23.8	24.8	25.6	26.3	27.1	27.9
92.5°	21.2	22.5	23.8	24.6	24.9	25.3	25.7	26.0
95°	21.2	22.5	23.8	24.4	24.4	24.4	24.4	24.4
97.5°	42.6	35.3	28.0	24.4	24.4	24.4	24.4	24.4
100°	125.3	86.8	48.3	28.5	27.5	26.5	25.4	24.4
102.5°	243.4	236.2	228.9	216.5	198.9	181.3	163.8	146.2
105°	346.3	346.3	346.3	346.2	345.9	345.7	345.4	345.2
107.5°	438.5	438.5	438.6	438.2	437.4	436.7	435.9	435.1
110°	498.2	497.4	496.6	496.4	496.6	496.9	497.2	497.4



TEST NUMBER: P333637

CATALOG NUMBER: S125RDIP-S1270D1205U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	557.3	556.3	555.3	554.6	554.3	553.9	553.6	553.2
115°	646.4	645.4	644.4	643.1	641.5	640.0	638.4	636.9
117.5°	732.5	731.2	729.8	728.8	728.1	727.5	726.8	726.1
120°	788.1	787.6	787.1	786.2	784.9	783.6	782.3	781.0
122.5°	841.1	840.6	840.1	839.0	837.5	836.0	834.6	833.1
125°	918.4	917.3	916.3	915.4	914.6	913.9	913.1	912.3
127.5°	989.0	988.5	987.9	986.7	984.8	982.8	980.9	979.0
130°	1035.1	1034.3	1033.6	1032.5	1031.2	1030.0	1028.7	1027.4
132.5°	1078.2	1078.0	1077.9	1077.2	1075.9	1074.6	1073.3	1072.0
135°	1141.4	1140.9	1140.4	1139.3	1137.8	1136.2	1134.7	1133.1
137.5°	1200.3	1200.4	1200.5	1199.9	1198.5	1197.2	1195.8	1194.5
140°	1236.4	1236.9	1237.5	1236.9	1235.4	1233.9	1232.3	1230.8
142.5°	1271.9	1272.0	1272.1	1271.4	1269.8	1268.3	1266.7	1265.2
145°	1321.9	1322.2	1322.4	1321.8	1320.2	1318.7	1317.1	1315.6
147.5°	1364.8	1365.1	1365.4	1364.6	1362.8	1360.9	1359.1	1357.2
150°	1392.2	1392.7	1393.2	1392.4	1390.4	1388.3	1386.2	1384.2
152.5°	1416.3	1416.9	1417.4	1416.7	1414.8	1413.0	1411.1	1409.3
155°	1449.6	1450.4	1451.2	1450.5	1448.5	1446.4	1444.3	1442.3
157.5°	1477.2	1478.0	1478.8	1478.2	1476.1	1474.1	1472.0	1469.9
160°	1494.3	1495.3	1496.4	1495.9	1493.8	1491.7	1489.7	1487.6
162.5°	1510.0	1511.5	1512.9	1512.5	1510.2	1507.9	1505.7	1503.4
165°	1530.2	1531.8	1533.3	1533.0	1531.0	1528.9	1526.8	1524.8
167.5°	1545.5	1547.3	1549.2	1549.0	1546.6	1544.3	1542.0	1539.7
170°	1553.3	1555.4	1557.5	1557.3	1555.0	1552.7	1550.4	1548.0
172.5°	1559.4	1561.3	1563.1	1562.9	1560.6	1558.3	1555.9	1553.6
175°	1566.1	1568.2	1570.2	1570.1	1567.8	1565.5	1563.1	1560.8
177.5°	1568.8	1570.3	1571.7	1571.6	1570.0	1568.3	1566.6	1565.0
180°	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8

(END OF REPORT)