

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: P333633-840

Luminaire Tested: **S125RDIP-S1270D1035U840-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333633-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S1270D1035U840-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8677.4 lumens
Efficiency: N/A
Efficacy: 129.9 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

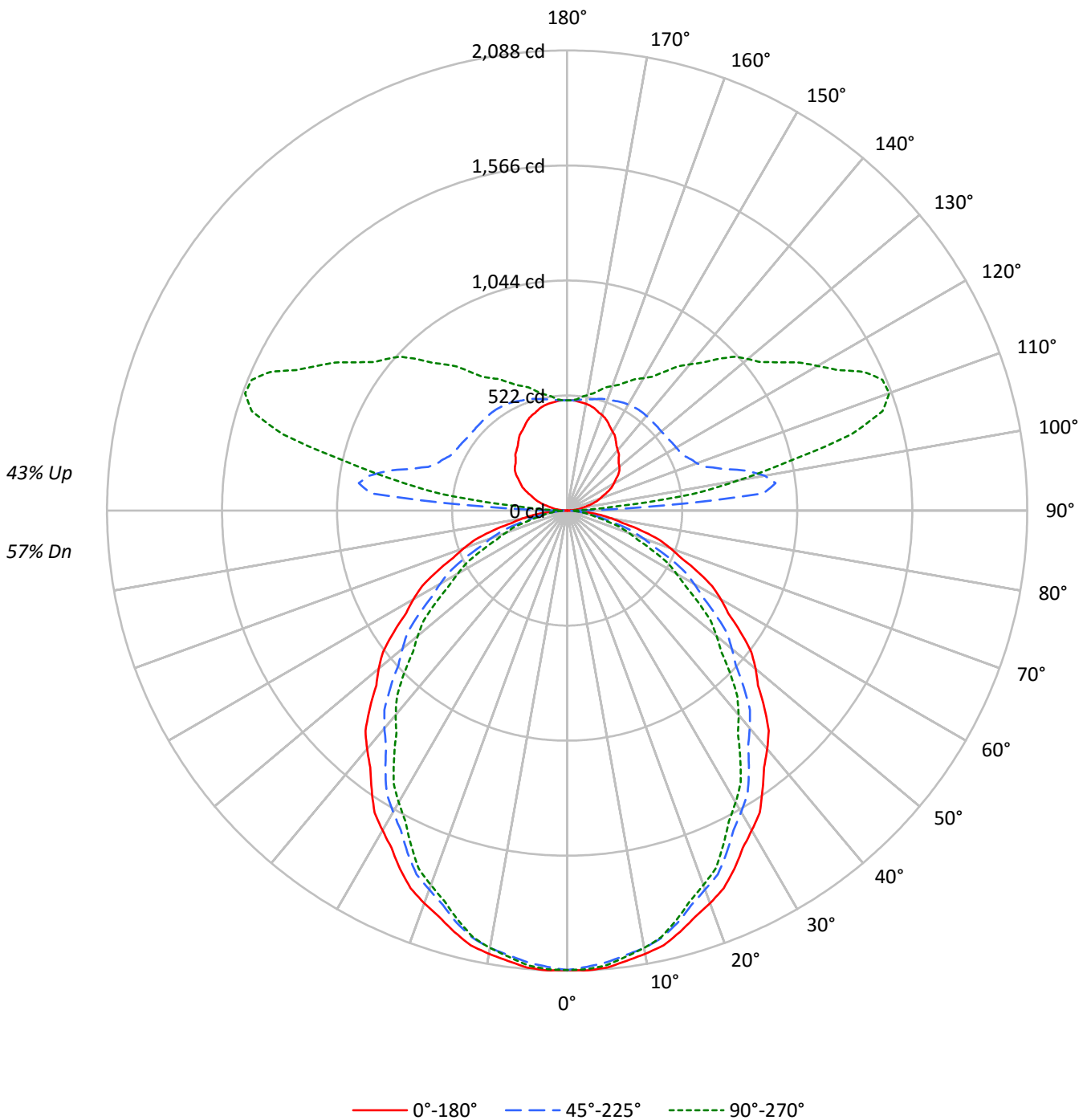
Input Watts (W): 66.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333633-840

CATALOG NUMBER: S125RDIP-S1270D1035U840-4F0-1E-UDD-F4

Luminous Intensity Polar Plot





TEST NUMBER: P333633-840

CATALOG NUMBER: S125RDIP-S1270D1035U840-4F0-1E-UDD-F4

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	100	95	91	88	93	89	86	83	77	74	72	66	64	62	56	54	53	48
2	91	83	77	72	84	78	73	68	68	64	60	58	55	52	49	47	45	41
3	83	74	66	60	77	69	62	57	60	55	51	51	48	45	44	41	39	35
4	76	65	57	51	71	61	54	49	53	48	44	46	42	38	39	36	34	30
5	70	58	50	44	65	55	47	42	48	42	38	41	37	33	35	32	29	26
6	65	52	44	39	60	49	42	37	43	37	33	38	33	29	32	29	26	23
7	60	47	39	34	56	45	37	32	39	33	29	34	30	26	29	26	23	21
8	55	43	35	30	52	41	34	29	36	30	26	31	27	23	27	24	21	19
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	17
10	48	36	29	24	45	34	28	23	30	25	21	27	22	19	23	20	17	15

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



TEST NUMBER: P333633-840

CATALOG NUMBER: S125RDIP-S1270D1035U840-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.0	2.3
10°-20°	547.8	6.3
20°-30°	794.4	9.2
30°-40°	905.3	10.4
40°-50°	882.5	10.2
50°-60°	742.8	8.6
60°-70°	520.7	6.0
70°-80°	267.7	3.1
80°-90°	70.4	0.8
90°-100°	362.4	4.2
100°-110°	779.1	9.0
110°-120°	731.2	8.4
120°-130°	592.6	6.8
130°-140°	475.6	5.5
140°-150°	358.9	4.1
150°-160°	252.6	2.9
160°-170°	148.9	1.7
170°-180°	48.4	0.6
0°-30°	1538.2	17.7
0°-40°	2443.5	28.2
0°-60°	4068.9	46.9
0°-90°	4927.6	56.8
90°-120°	1872.8	21.6
90°-150°	3299.8	38.0
90°-180°	3750.0	43.2
0°-180°	8677.4	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	9	16	21	23	6
95°	33	98	893	405	237	35
105°	114	159	731	1439	1336	120
115°	204	246	587	1265	1488	200
125°	282	331	562	1006	1172	250
135°	331	398	558	843	974	257
145°	385	441	560	698	768	241
155°	440	473	546	618	644	202
165°	480	493	524	556	564	135
175°	499	499	503	509	507	47
180°	500	500	500	500	500	



TEST NUMBER: P333633-840

CATALOG NUMBER: S125RDIP-S1270D1035U840-4F0-1E-UDD-F4

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	27.4	25.9	24.3	22.7	22.0	21.9	22.1	22.0	22.1	22.3
90°	1.0	2.0	4.0	6.1	8.1	10.1	11.1	13.1	14.1	16.2	17.2
92.5°	12.3	14.9	23.4	35.9	53.2	82.7	137.7	230.0	330.2	325.0	263.1
95°	33.2	34.2	42.3	53.4	75.6	121.0	228.8	450.6	728.9	893.2	874.0
97.5°	55.2	56.5	62.1	73.2	93.1	125.8	197.2	359.7	650.9	953.9	1105.9
100°	70.6	72.6	76.6	87.7	106.8	137.1	195.6	326.6	580.7	910.3	1162.4
102.5°	87.6	88.7	91.9	103.8	121.4	150.8	202.9	313.0	527.5	833.7	1128.5
105°	113.9	113.9	119.0	129.1	145.2	173.4	217.7	307.5	475.8	730.8	1020.3
107.5°	139.8	141.8	146.5	154.8	171.6	197.0	239.9	316.8	454.0	660.1	909.7
110°	158.2	160.3	164.3	173.4	188.5	214.7	256.1	325.6	447.6	627.0	846.8



TEST NUMBER: P333633-840

CATALOG NUMBER: S125RDIP-S1270D1035U840-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	176.8	178.8	182.1	191.2	206.2	231.7	271.4	336.9	447.6	607.7	800.0
115°	203.7	205.6	208.6	217.7	232.9	258.1	295.4	353.9	450.6	586.7	749.0
117.5°	227.8	230.9	234.1	243.2	260.3	284.7	320.0	373.2	457.3	576.4	718.6
120°	244.0	247.0	251.1	260.1	277.2	302.5	337.7	386.1	463.7	571.6	701.7
122.5°	260.9	263.1	266.3	275.4	294.2	319.4	354.7	400.6	469.4	567.5	687.1
125°	282.3	284.3	289.3	298.4	317.6	343.8	377.1	420.4	478.9	562.5	667.4
127.5°	299.0	302.1	308.5	320.0	340.3	366.6	398.6	438.5	489.6	560.1	649.2
130°	309.5	312.6	320.6	333.7	354.9	381.0	412.3	450.6	496.0	558.5	637.1
132.5°	317.6	321.3	331.0	345.8	367.8	393.9	425.3	461.1	503.2	558.5	627.4
135°	330.6	334.7	346.8	362.9	384.1	411.3	442.5	475.8	513.1	558.5	615.9
137.5°	347.2	350.2	361.5	377.7	398.4	426.5	454.8	486.8	522.2	559.7	605.7
140°	356.9	359.9	372.0	388.1	407.3	434.5	463.7	494.0	526.2	560.5	600.9
142.5°	368.2	370.4	381.6	397.8	416.2	441.7	469.4	498.0	528.7	561.3	596.8
145°	385.1	387.1	397.2	411.3	429.5	452.6	478.9	504.0	531.3	560.5	590.8
147.5°	402.8	404.0	412.7	425.9	441.5	461.9	484.9	507.7	532.3	557.8	584.5
150°	413.3	415.4	422.4	435.6	449.6	466.8	489.0	510.1	532.3	555.4	579.7
152.5°	424.6	425.9	432.1	443.5	456.9	472.4	493.0	511.7	531.5	552.3	574.0
155°	439.5	439.5	445.6	455.7	465.7	479.9	497.0	513.1	529.3	546.4	564.5
157.5°	452.8	452.6	457.5	466.2	475.0	485.7	500.4	514.1	526.6	540.4	555.6
160°	461.7	460.7	464.7	471.8	479.9	489.0	502.0	514.1	524.2	536.3	548.5
162.5°	469.0	468.0	472.0	478.3	484.7	492.2	503.6	513.3	521.8	531.5	542.0
165°	479.9	477.9	480.9	485.9	490.0	496.0	504.0	512.1	518.2	524.2	532.3
167.5°	487.2	486.1	488.0	490.8	493.6	497.4	504.0	509.7	512.5	517.2	522.8
170°	492.0	491.0	492.0	494.0	496.0	499.0	504.0	508.1	510.1	513.1	517.2
172.5°	495.2	493.4	494.4	496.3	497.6	499.0	503.2	506.4	506.9	508.3	511.5
175°	499.0	497.0	498.0	499.0	499.0	499.0	502.0	504.0	503.0	503.0	504.0
177.5°	500.8	499.2	499.2	500.0	499.2	499.2	500.8	501.6	500.0	500.0	500.8
180°	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0



TEST NUMBER: P333633-840

CATALOG NUMBER: S125RDIP-S1270D1035U840-4F0-1E-UDD-F4

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°	22.5	22.7	22.9	23.2	22.9	22.6	22.5	22.3
90°	18.2	19.2	20.2	22.2	22.2	22.2	23.2	23.2
92.5°	178.6	129.7	97.6	82.7	69.8	67.4	65.9	64.3
95°	724.9	571.6	447.6	362.9	291.3	261.2	253.1	236.9
97.5°	1079.5	972.0	851.2	733.5	671.3	614.7	585.5	572.6
100°	1240.0	1190.6	1086.7	981.9	912.3	839.8	802.4	786.4
102.5°	1294.0	1324.4	1274.7	1203.7	1129.3	1077.7	1037.1	1025.0
105°	1262.1	1400.3	1444.6	1433.5	1401.3	1368.1	1347.9	1335.7
107.5°	1148.4	1332.7	1446.6	1499.2	1515.6	1515.4	1508.7	1500.7
110°	1064.6	1256.1	1398.3	1484.0	1529.3	1548.4	1555.5	1555.5



TEST NUMBER: P333633-840

CATALOG NUMBER: S125RDIP-S1270D1035U840-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	998.5	1180.3	1324.0	1425.1	1491.4	1524.3	1541.9	1549.0
115°	915.3	1071.7	1209.7	1319.6	1398.3	1446.6	1474.9	1488.0
117.5°	861.7	996.4	1115.4	1216.2	1294.8	1344.8	1372.8	1380.9
120°	832.7	953.7	1064.6	1153.3	1227.9	1276.3	1303.5	1311.6
122.5°	810.9	923.0	1021.8	1104.9	1171.4	1215.8	1243.0	1250.3
125°	779.3	882.1	969.8	1042.4	1098.8	1140.1	1162.4	1172.5
127.5°	747.0	843.0	924.8	992.8	1044.0	1080.5	1101.5	1105.9
130°	726.9	815.6	894.2	959.8	1010.2	1043.4	1063.6	1069.6
132.5°	706.7	789.7	861.1	924.2	974.6	1007.9	1026.4	1033.3
135°	680.4	750.0	814.6	872.0	916.4	949.7	967.8	973.8
137.5°	658.3	714.6	768.2	817.0	856.7	887.0	903.7	910.3
140°	646.2	693.6	739.9	782.3	819.6	845.9	860.9	866.0
142.5°	635.7	675.8	715.8	752.5	784.2	806.3	820.6	824.9
145°	622.0	653.3	684.5	711.8	735.9	753.1	764.2	768.2
147.5°	609.2	634.5	658.5	679.0	698.2	712.0	718.4	720.2
150°	601.9	624.0	643.2	661.4	676.4	688.5	692.6	693.6
152.5°	593.8	613.5	631.1	645.2	657.9	667.6	671.6	672.6
155°	581.7	597.8	612.0	623.0	633.1	640.2	643.2	644.2
157.5°	569.6	582.9	593.8	602.5	610.4	616.1	618.9	618.7
160°	561.5	571.6	581.7	588.8	595.8	600.9	602.9	601.9
162.5°	552.7	561.9	570.4	576.6	582.1	586.3	586.7	586.5
165°	540.4	547.4	553.5	558.5	562.5	564.5	564.5	564.5
167.5°	528.7	533.3	538.0	541.6	543.6	545.4	544.6	544.4
170°	522.2	525.2	528.3	530.3	532.3	533.3	533.3	532.3
172.5°	514.9	518.0	520.2	521.4	521.8	523.6	522.0	521.0
175°	507.1	507.1	509.1	509.1	509.1	510.1	508.1	507.1
177.5°	501.6	502.4	502.4	502.4	501.6	502.4	500.0	500.0
180°	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0

(END OF REPORT)