

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: P333632-840

Luminaire Tested: **S125RDIP-S1270D1035U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333632-840  
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: S125RDIP-S1270D1035U840-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8542.8 lumens  
Efficiency: N/A  
Efficacy: 127.9 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

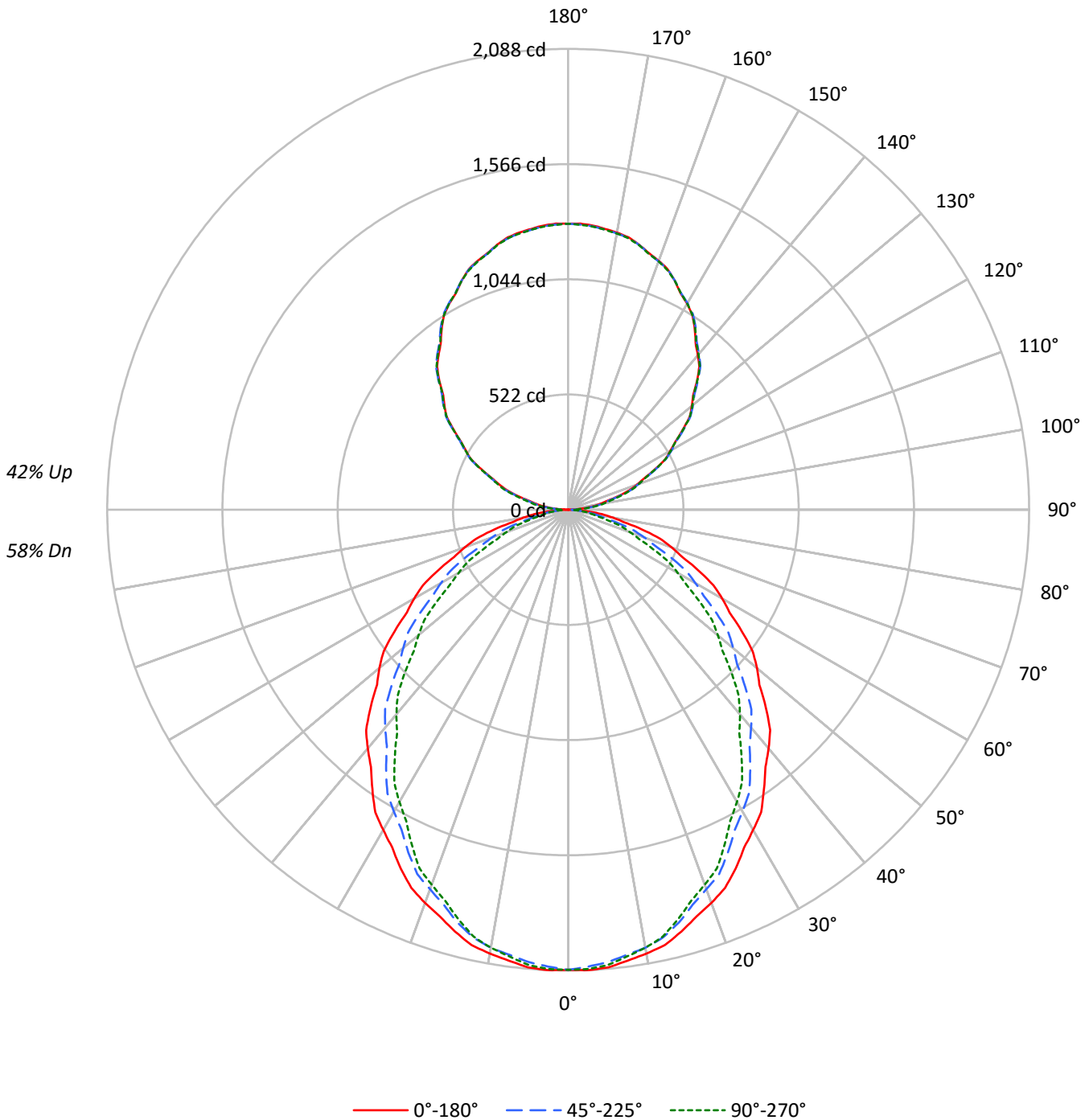
Input Watts (W): 66.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58				
1	100	95	92	88	93	89	86	83	77	75	73	66	65	63	56	55	54	49				
2	91	84	78	72	85	78	73	68	68	64	60	59	56	53	50	48	46	42				
3	83	74	66	61	77	69	63	57	60	55	51	52	48	45	44	42	39	35				
4	76	65	58	52	71	61	54	49	54	48	44	46	42	39	40	37	34	31				
5	70	58	50	44	65	55	48	42	48	42	38	42	37	34	36	32	30	27				
6	65	53	44	39	60	49	42	37	43	38	33	38	33	30	33	29	26	24				
7	60	48	40	34	56	45	38	32	39	34	29	35	30	26	30	26	23	21				
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	27	24	21	19				
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	25	22	19	17				
10	49	36	29	24	45	34	28	23	31	25	21	27	23	19	24	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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	196.0	2.3
10°-20°	547.8	6.4
20°-30°	794.4	9.3
30°-40°	905.3	10.6
40°-50°	882.5	10.3
50°-60°	742.8	8.7
60°-70°	520.7	6.1
70°-80°	267.7	3.1
80°-90°	70.4	0.8
90°-100°	86.8	1.0
100°-110°	256.2	3.0
110°-120°	434.0	5.1
120°-130°	571.2	6.7
130°-140°	640.0	7.5
140°-150°	627.3	7.3
150°-160°	526.9	6.2
160°-170°	350.2	4.1
170°-180°	122.6	1.4
0°-30°	1538.2	18.0
0°-40°	2443.5	28.6
0°-60°	4068.9	47.6
0°-90°	4927.7	57.7
90°-120°	777.0	9.1
90°-150°	2615.5	30.6
90°-180°	3615.0	42.3
0°-180°	8542.8	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	24	8
95°	66	68	78	84	87	70
105°	230	235	241	247	250	245
115°	434	438	441	440	439	430
125°	634	640	641	639	638	568
135°	825	830	832	832	828	635
145°	999	1003	1006	1006	1003	624
155°	1143	1143	1144	1148	1143	526
165°	1243	1241	1242	1246	1240	351
175°	1292	1289	1288	1294	1288	123
180°	1296	1296	1296	1296	1296	



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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	27.6	26.0	24.3	22.7	22.0	22.0	22.0	22.1	22.1	22.3
90°	1.0	2.8	4.5	6.4	8.2	9.9	11.4	13.0	14.5	16.2	17.3
92.5°	24.4	25.7	26.9	28.2	29.4	31.0	32.9	34.8	36.8	38.7	40.2
95°	65.5	65.9	66.4	66.9	67.4	68.7	70.9	73.1	75.4	77.7	79.2
97.5°	108.9	109.1	109.3	109.5	109.6	111.3	114.3	117.4	120.5	123.6	125.1
100°	141.2	141.2	141.2	141.2	141.2	142.6	145.5	148.5	151.4	154.2	156.2
102.5°	175.8	176.7	177.6	178.5	179.5	180.6	182.1	183.6	185.0	186.5	188.7
105°	229.8	231.0	232.1	233.3	234.4	235.6	236.9	238.2	239.6	241.0	242.3
107.5°	289.5	290.6	291.8	293.0	294.1	295.1	296.1	297.2	298.2	299.2	299.9
110°	330.7	331.8	333.0	334.1	335.2	336.1	336.7	337.4	338.1	338.7	339.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	372.6	373.2	373.8	374.4	375.0	375.7	376.6	377.4	378.2	379.1	379.4
115°	434.5	435.5	436.4	437.3	438.1	438.8	439.2	439.7	440.1	440.6	440.4
117.5°	496.7	497.1	497.5	497.9	498.3	498.7	499.1	499.5	499.9	500.3	500.5
120°	535.3	536.4	537.6	538.8	539.9	540.5	540.7	541.0	541.2	541.4	541.4
122.5°	577.3	577.7	578.1	578.6	579.0	579.4	580.0	580.6	581.2	581.7	581.6
125°	634.2	635.5	636.8	638.2	639.5	640.4	640.6	640.8	641.0	641.3	640.8
127.5°	694.7	695.4	696.2	696.9	697.7	698.2	698.5	698.7	699.0	699.3	699.0
130°	730.9	732.1	733.2	734.3	735.4	736.2	736.7	737.1	737.5	738.0	737.8
132.5°	767.2	769.1	770.9	772.7	774.6	775.5	775.4	775.3	775.2	775.1	774.9
135°	824.8	826.1	827.4	828.7	830.1	830.9	831.1	831.3	831.5	831.7	831.7
137.5°	878.8	880.0	881.3	882.6	883.9	884.8	885.3	885.9	886.4	886.8	887.1
140°	913.4	914.5	915.6	916.8	917.9	918.8	919.5	920.2	920.8	921.5	921.9
142.5°	948.1	949.1	950.0	950.9	951.9	952.8	953.6	954.5	955.3	956.1	956.4
145°	999.2	1000.1	1000.9	1001.8	1002.7	1003.5	1004.2	1004.8	1005.5	1006.2	1006.2
147.5°	1046.3	1046.8	1047.3	1047.8	1048.2	1048.8	1049.4	1049.9	1050.4	1051.0	1051.5
150°	1077.7	1077.5	1077.3	1077.1	1076.9	1077.2	1078.1	1079.0	1079.8	1080.8	1080.8
152.5°	1103.6	1103.9	1104.2	1104.5	1104.8	1105.2	1105.5	1105.9	1106.2	1106.6	1107.1
155°	1143.3	1143.3	1143.3	1143.3	1143.3	1143.4	1143.7	1143.9	1144.1	1144.3	1145.2
157.5°	1178.8	1178.3	1177.8	1177.3	1176.8	1176.7	1176.9	1177.1	1177.4	1177.6	1178.5
160°	1199.7	1199.1	1198.4	1197.7	1197.1	1196.9	1197.1	1197.3	1197.5	1197.7	1198.6
162.5°	1218.3	1217.8	1217.3	1216.8	1216.4	1216.1	1216.2	1216.2	1216.3	1216.3	1217.4
165°	1243.1	1242.6	1242.2	1241.7	1241.3	1241.2	1241.4	1241.6	1241.8	1242.1	1243.0
167.5°	1264.0	1263.1	1262.3	1261.4	1260.5	1260.0	1260.0	1260.0	1260.0	1260.0	1261.4
170°	1275.4	1274.4	1273.5	1272.7	1271.8	1271.3	1271.3	1271.3	1271.3	1271.3	1272.7
172.5°	1283.4	1282.5	1281.6	1280.7	1279.9	1279.4	1279.4	1279.4	1279.4	1279.4	1280.7
175°	1292.5	1291.6	1290.7	1289.8	1288.9	1288.5	1288.5	1288.5	1288.5	1288.5	1289.8
177.5°	1297.2	1296.5	1295.8	1294.9	1294.2	1293.8	1293.6	1293.4	1293.3	1293.1	1294.2
180°	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6



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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°	22.5	22.8	23.0	23.0	22.9	22.7	22.6	22.5
90°	18.4	19.5	20.6	21.5	22.2	22.8	23.5	24.2
92.5°	41.7	43.1	44.6	45.6	46.2	46.6	47.1	47.6
95°	80.8	82.3	83.9	84.9	85.3	85.8	86.2	86.7
97.5°	126.5	128.1	129.6	130.4	130.7	131.0	131.2	131.5
100°	158.2	160.3	162.3	163.6	164.0	164.4	164.9	165.3
102.5°	190.9	193.1	195.3	196.7	197.3	197.9	198.6	199.2
105°	243.7	245.0	246.3	247.3	248.0	248.7	249.3	250.0
107.5°	300.5	301.2	301.9	302.3	302.2	302.2	302.2	302.1
110°	340.1	340.7	341.4	341.6	341.4	341.2	341.0	340.7





TEST NUMBER: P333632-840

CATALOG NUMBER: S125RDIP-S1270D1035U840-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	379.7	380.0	380.3	380.3	379.9	379.5	379.1	378.7
115°	440.1	439.9	439.7	439.5	439.2	439.0	438.8	438.6
117.5°	500.6	500.8	501.0	500.6	499.7	498.9	498.0	497.1
120°	541.4	541.4	541.4	541.0	540.1	539.2	538.3	537.3
122.5°	581.4	581.2	581.0	580.6	579.9	579.2	578.5	577.7
125°	640.4	639.9	639.4	639.0	638.8	638.6	638.4	638.2
127.5°	698.8	698.6	698.4	698.0	697.6	697.1	696.7	696.3
130°	737.5	737.3	737.1	736.8	736.3	735.9	735.4	735.0
132.5°	774.7	774.5	774.2	773.8	773.2	772.5	771.9	771.2
135°	831.7	831.7	831.7	831.3	830.4	829.5	828.6	827.7
137.5°	887.4	887.6	887.9	887.5	886.4	885.2	884.1	883.0
140°	922.4	922.8	923.3	922.9	921.8	920.7	919.6	918.5
142.5°	956.7	956.9	957.3	956.8	955.7	954.6	953.5	952.3
145°	1006.2	1006.2	1006.2	1005.8	1005.2	1004.5	1003.8	1003.2
147.5°	1052.0	1052.6	1053.1	1052.6	1051.1	1049.6	1048.0	1046.5
150°	1080.8	1080.8	1080.8	1080.6	1080.2	1079.6	1079.2	1078.7
152.5°	1107.7	1108.2	1108.7	1108.6	1107.8	1107.0	1106.2	1105.4
155°	1146.1	1147.0	1147.9	1147.8	1146.7	1145.5	1144.4	1143.3
157.5°	1179.3	1180.2	1181.1	1180.8	1179.4	1177.9	1176.4	1175.0
160°	1199.5	1200.4	1201.3	1201.2	1200.1	1199.0	1197.9	1196.7
162.5°	1218.4	1219.5	1220.6	1220.5	1219.2	1217.9	1216.6	1215.3
165°	1243.9	1244.8	1245.7	1245.5	1244.2	1242.7	1241.4	1240.1
167.5°	1262.7	1264.0	1265.5	1265.4	1264.0	1262.6	1261.2	1259.8
170°	1274.0	1275.4	1276.7	1276.6	1275.1	1273.4	1271.9	1270.3
172.5°	1282.1	1283.4	1284.8	1284.8	1283.3	1282.0	1280.6	1279.2
175°	1291.2	1292.5	1293.8	1293.7	1292.2	1290.6	1289.0	1287.5
177.5°	1295.3	1296.4	1297.4	1297.4	1296.1	1294.8	1293.5	1292.3
180°	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6

(END OF REPORT)