

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: P333637-930

Luminaire Tested: **S125RDIP-S1270D1205U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333637-930  
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-S1270D1205U930-4F0-1E-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: 7903.8 lumens  
Efficiency: N/A  
Efficacy: 110.2 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

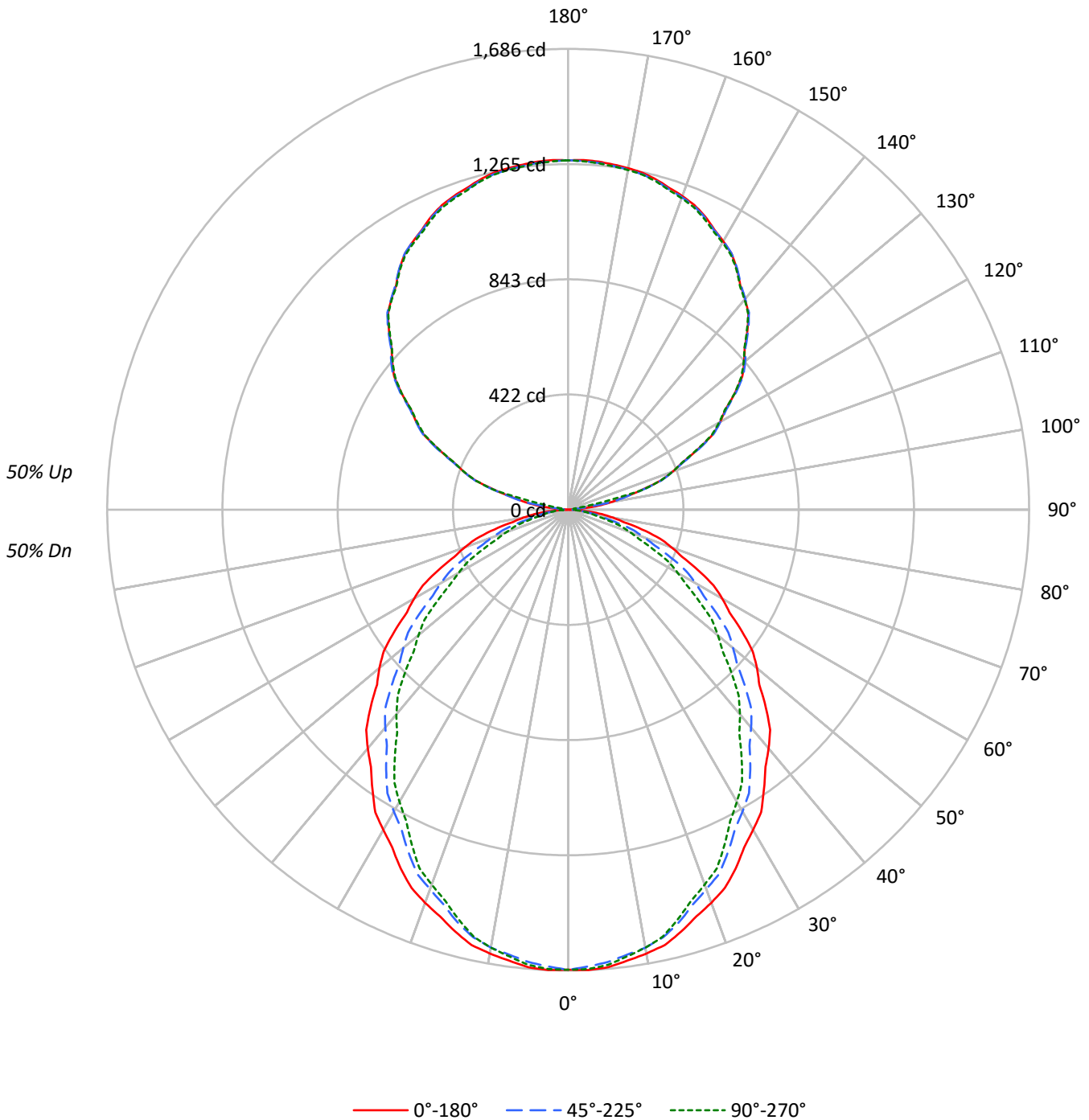
Input Watts (W): 71.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	10869	10869	10869
5°	10895	10771	10836
10°	10812	10670	10670
15°	10683	10454	10369
20°	10519	10152	10030
25°	10326	9855	9638
30°	10086	9508	9205
35°	9842	9150	8719
40°	9613	8777	8241
45°	9334	8360	7721
50°	9055	7905	7178
55°	8731	7472	6598
60°	8407	6945	5977
65°	8023	6333	5265
70°	7585	5569	4538
75°	6977	4694	3773
80°	6148	3686	3169
85°	5187	3016	2831



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.3	2.0
10°-20°	442.3	5.6
20°-30°	641.3	8.1
30°-40°	730.9	9.2
40°-50°	712.5	9.0
50°-60°	599.7	7.6
60°-70°	420.4	5.3
70°-80°	216.1	2.7
80°-90°	57.2	0.7
90°-100°	46.5	0.6
100°-110°	286.3	3.6
110°-120°	519.2	6.6
120°-130°	666.3	8.4
130°-140°	716.7	9.1
140°-150°	672.7	8.5
150°-160°	544.2	6.9
160°-170°	351.9	4.5
170°-180°	121.4	1.5
0°-30°	1241.9	15.7
0°-40°	1972.8	25.0
0°-60°	3284.9	41.6
0°-90°	3978.7	50.3
90°-120°	851.9	10.8
90°-150°	2907.7	36.8
90°-180°	3925.0	49.7
0°-180°	7903.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1683	1683	1683	1683	1683	
5°	1680	1675	1661	1673	1672	159
15°	1598	1589	1564	1562	1551	450
25°	1449	1428	1383	1367	1352	666
35°	1248	1216	1161	1125	1106	781
45°	1022	983	915	866	845	788
55°	775	733	664	608	586	693
65°	525	480	414	365	344	520
75°	280	241	188	161	151	296
85°	70	48	41	39	38	79
90°	1	8	15	20	23	6
95°	54	49	15	20	20	69
105°	279	282	282	282	281	295
115°	523	528	529	525	519	518
125°	744	750	750	747	744	664
135°	928	933	931	929	924	715
145°	1076	1077	1077	1078	1073	672
155°	1184	1179	1181	1183	1176	545
165°	1250	1244	1245	1250	1243	353
175°	1278	1273	1274	1280	1272	122
180°	1278	1278	1278	1278	1278	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0
2.5°	1686.0	1685.4	1684.7	1684.0	1683.3	1681.9	1679.6	1677.3	1675.1	1672.8	1675.1
5°	1680.5	1679.4	1678.2	1677.1	1675.9	1673.8	1670.7	1667.6	1664.5	1661.4	1664.2
7.5°	1663.9	1662.9	1661.8	1660.7	1659.6	1657.3	1653.5	1649.8	1646.1	1642.3	1644.3
10°	1648.7	1647.8	1647.0	1646.2	1645.3	1642.9	1638.9	1635.0	1631.0	1627.1	1627.9
12.5°	1631.4	1630.4	1629.2	1628.2	1627.1	1623.9	1618.6	1613.3	1607.9	1602.6	1603.3
15°	1597.8	1596.1	1594.5	1592.8	1591.1	1587.2	1581.3	1575.4	1569.5	1563.5	1563.3
17.5°	1559.9	1557.4	1554.8	1552.2	1549.6	1544.5	1537.1	1529.6	1522.2	1514.7	1513.3
20°	1530.5	1527.6	1524.8	1522.0	1519.1	1513.2	1504.2	1495.2	1486.1	1477.1	1475.7
22.5°	1497.9	1495.1	1492.2	1489.5	1486.6	1480.5	1471.0	1461.5	1452.0	1442.5	1439.7
25°	1449.1	1444.9	1440.6	1436.4	1432.2	1424.8	1414.4	1403.9	1393.4	1383.0	1379.3
27.5°	1393.2	1388.0	1382.9	1377.8	1372.6	1364.5	1353.2	1342.1	1330.9	1319.7	1314.6
30°	1352.5	1347.1	1341.7	1336.4	1331.1	1322.4	1310.5	1298.7	1286.8	1275.0	1268.4
32.5°	1312.9	1306.6	1300.3	1294.0	1287.8	1278.6	1266.5	1254.4	1242.3	1230.2	1223.0
35°	1248.3	1241.5	1234.7	1227.9	1221.2	1211.4	1198.7	1186.0	1173.3	1160.6	1152.3
37.5°	1185.0	1176.7	1168.5	1160.3	1151.9	1141.3	1128.2	1115.1	1102.0	1088.8	1079.0
40°	1140.2	1131.7	1123.2	1114.8	1106.4	1095.3	1081.7	1068.2	1054.6	1041.1	1030.4
42.5°	1093.5	1084.8	1076.0	1067.3	1058.7	1047.3	1033.3	1019.3	1005.3	991.2	981.0
45°	1022.0	1013.8	1005.6	997.4	989.2	977.4	961.8	946.3	930.7	915.3	903.9
47.5°	948.0	939.4	930.7	922.1	913.5	901.3	885.7	870.0	854.4	838.7	827.0
50°	901.2	891.9	882.6	873.3	864.0	851.3	835.1	819.0	802.9	786.8	774.9
52.5°	850.4	840.8	831.3	821.7	812.2	799.8	784.6	769.5	754.2	739.1	726.3
55°	775.4	766.4	757.3	748.3	739.2	726.8	711.0	695.2	679.4	663.6	650.9
57.5°	699.6	690.0	680.3	670.7	661.0	648.6	633.3	618.0	602.8	587.5	575.1
60°	650.9	640.9	631.0	621.2	611.3	598.7	583.4	568.2	552.9	537.7	525.3
62.5°	599.0	589.5	580.1	570.6	561.3	548.8	533.3	517.8	502.3	486.8	475.3
65°	525.0	515.4	505.8	496.2	486.6	474.3	459.3	444.3	429.3	414.4	403.1
67.5°	451.5	441.9	432.3	422.7	413.1	401.1	386.8	372.4	358.1	343.7	333.4
70°	401.7	392.1	382.5	372.8	363.3	351.4	337.3	323.2	309.0	294.9	286.2
72.5°	352.9	343.5	334.1	324.7	315.4	304.0	290.8	277.6	264.4	251.2	243.1
75°	279.6	271.2	262.7	254.2	245.7	235.6	223.7	211.9	200.0	188.1	181.9
77.5°	206.9	200.2	193.4	186.6	179.9	171.7	162.2	152.7	143.2	133.7	129.4
80°	165.3	158.5	151.7	144.9	138.1	130.8	122.9	115.0	107.0	99.1	96.6
82.5°	124.6	118.5	112.3	106.2	100.2	94.4	88.9	83.6	78.1	72.7	71.5
85°	70.0	64.8	59.8	54.6	49.6	46.3	44.9	43.5	42.1	40.7	40.4
87.5°	23.6	22.3	21.1	19.8	18.6	18.0	18.1	18.2	18.2	18.3	18.5
90°	1.0	2.6	4.3	6.0	7.7	9.3	10.8	12.2	13.7	15.2	16.2
92.5°	14.6	13.5	12.2	11.1	9.9	9.9	11.3	12.6	13.9	15.2	16.2
95°	54.0	53.4	52.7	52.1	51.4	47.2	39.1	31.1	23.2	15.2	16.2
97.5°	112.8	113.9	115.0	116.2	117.3	110.0	94.1	78.3	62.5	46.6	40.7
100°	158.2	158.9	159.5	160.1	160.8	161.5	162.3	163.2	164.0	164.9	133.5
102.5°	204.5	205.3	206.1	206.8	207.7	208.3	208.8	209.4	209.9	210.3	204.4
105°	278.6	279.4	280.2	281.1	281.9	282.3	282.3	282.3	282.3	282.3	282.3
107.5°	355.6	355.6	355.6	355.6	355.6	355.7	356.1	356.5	357.0	357.4	357.4
110°	405.5	405.5	405.5	405.5	405.5	405.8	406.2	406.6	407.0	407.4	406.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	452.6	453.1	453.6	454.0	454.5	454.9	455.2	455.4	455.7	455.9	455.2
115°	523.0	524.1	525.1	526.2	527.3	527.9	528.1	528.3	528.5	528.7	527.9
117.5°	596.0	596.0	595.9	595.9	595.8	596.2	597.0	597.8	598.6	599.4	598.3
120°	641.5	641.2	641.1	640.8	640.7	640.8	641.5	642.1	642.7	643.4	642.9
122.5°	681.7	682.5	683.2	684.0	684.9	685.4	685.7	686.0	686.3	686.6	686.2
125°	743.8	745.3	746.7	748.2	749.7	750.4	750.4	750.4	750.4	750.4	749.6
127.5°	803.2	804.2	805.2	806.2	807.3	807.8	807.6	807.6	807.4	807.3	806.8
130°	839.5	840.6	841.6	842.7	843.8	844.3	844.6	844.8	845.0	845.2	844.6
132.5°	875.9	877.1	878.3	879.5	880.8	881.2	880.7	880.2	879.8	879.3	879.2
135°	927.6	928.9	930.2	931.4	932.7	933.1	932.7	932.3	931.8	931.4	931.0
137.5°	975.2	976.3	977.4	978.4	979.6	979.9	979.6	979.2	978.8	978.4	978.5
140°	1006.2	1006.7	1007.1	1007.5	1008.0	1008.0	1007.9	1007.6	1007.5	1007.2	1007.6
142.5°	1034.3	1034.5	1034.9	1035.1	1035.3	1035.6	1035.9	1036.2	1036.5	1036.8	1036.9
145°	1075.5	1075.9	1076.3	1076.7	1077.1	1077.3	1077.3	1077.3	1077.3	1077.3	1077.6
147.5°	1111.4	1111.3	1111.3	1111.2	1111.1	1111.2	1111.4	1111.7	1112.0	1112.2	1112.5
150°	1134.2	1133.8	1133.3	1132.9	1132.5	1132.5	1132.9	1133.3	1133.8	1134.2	1134.6
152.5°	1156.2	1155.3	1154.3	1153.4	1152.4	1152.2	1152.7	1153.1	1153.5	1153.9	1154.3
155°	1184.4	1183.2	1181.9	1180.6	1179.3	1178.9	1179.3	1179.7	1180.2	1180.6	1181.3
157.5°	1206.2	1205.4	1204.7	1204.0	1203.1	1202.8	1202.9	1202.9	1203.0	1203.0	1203.6
160°	1221.4	1220.1	1218.9	1217.6	1216.3	1215.8	1216.0	1216.2	1216.4	1216.6	1217.5
162.5°	1233.5	1232.2	1230.9	1229.7	1228.4	1227.9	1228.1	1228.3	1228.6	1228.7	1230.0
165°	1249.8	1248.5	1247.2	1246.0	1244.7	1244.2	1244.4	1244.6	1244.8	1245.0	1246.3
167.5°	1261.9	1260.6	1259.3	1258.0	1256.7	1256.1	1256.4	1256.5	1256.8	1257.0	1258.5
170°	1268.8	1267.3	1265.8	1264.3	1262.8	1262.2	1262.4	1262.7	1262.8	1263.1	1264.8
172.5°	1273.3	1271.8	1270.3	1268.9	1267.4	1266.8	1267.2	1267.6	1268.0	1268.4	1269.9
175°	1278.2	1276.9	1275.7	1274.4	1273.2	1272.6	1272.8	1273.1	1273.3	1273.5	1275.1
177.5°	1280.5	1279.4	1278.5	1277.5	1276.4	1276.0	1276.2	1276.4	1276.5	1276.7	1277.9
180°	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0
2.5°	1677.3	1679.6	1681.9	1682.9	1682.7	1682.5	1682.2	1682.0
5°	1667.0	1669.9	1672.7	1673.8	1673.2	1672.7	1672.1	1671.5
7.5°	1646.3	1648.3	1650.2	1650.9	1650.2	1649.7	1649.0	1648.5
10°	1628.7	1629.6	1630.4	1630.4	1629.6	1628.7	1627.9	1627.1
12.5°	1603.9	1604.5	1605.2	1604.8	1603.5	1602.2	1600.9	1599.6
15°	1562.9	1562.7	1562.4	1561.0	1558.4	1555.9	1553.3	1550.8
17.5°	1511.9	1510.4	1509.0	1507.3	1505.2	1503.1	1501.0	1498.9
20°	1474.2	1472.8	1471.5	1469.4	1466.9	1464.4	1461.8	1459.3
22.5°	1437.0	1434.2	1431.4	1429.0	1426.9	1424.8	1422.7	1420.7
25°	1375.7	1372.0	1368.3	1364.9	1361.8	1358.7	1355.6	1352.5
27.5°	1309.5	1304.3	1299.2	1295.1	1292.1	1289.1	1286.1	1283.1
30°	1262.0	1255.5	1249.0	1244.5	1241.9	1239.3	1236.8	1234.3
32.5°	1215.9	1208.7	1201.5	1196.3	1193.1	1189.8	1186.7	1183.4
35°	1144.2	1136.0	1127.8	1121.7	1117.8	1113.8	1109.9	1105.9
37.5°	1069.2	1059.4	1049.5	1042.7	1038.9	1035.0	1031.2	1027.4
40°	1019.6	1008.9	998.2	991.1	987.7	984.3	980.9	977.5
42.5°	970.7	960.4	950.1	942.5	937.5	932.5	927.6	922.6
45°	892.6	881.3	870.0	862.3	858.0	853.8	849.5	845.3
47.5°	815.5	803.8	792.1	784.0	779.3	774.6	769.9	765.2
50°	763.1	751.2	739.4	731.3	727.1	722.8	718.6	714.4
52.5°	713.5	700.7	687.9	679.5	675.2	671.0	666.8	662.5
55°	638.1	625.4	612.7	604.1	599.6	595.0	590.5	586.0
57.5°	562.6	550.2	537.8	529.6	525.5	521.5	517.6	513.6
60°	512.8	500.4	488.0	479.6	475.4	471.2	466.9	462.7
62.5°	463.8	452.2	440.8	432.8	428.6	424.4	420.1	415.9
65°	391.8	380.5	369.2	361.4	357.2	352.9	348.7	344.5
67.5°	323.0	312.7	302.4	295.5	292.1	288.7	285.4	281.9
70°	277.4	268.6	259.9	253.8	250.4	247.0	243.6	240.3
72.5°	235.1	227.0	218.8	213.7	211.4	209.2	206.9	204.6
75°	175.7	169.5	163.3	159.1	157.2	155.2	153.3	151.2
77.5°	125.0	120.7	116.3	113.4	111.9	110.5	109.0	107.5
80°	94.1	91.6	88.9	87.4	86.8	86.3	85.8	85.2
82.5°	70.4	69.1	68.0	67.2	66.9	66.5	66.2	65.9
85°	40.1	39.9	39.5	39.3	39.0	38.7	38.4	38.2
87.5°	18.7	18.9	19.2	19.2	19.1	19.0	18.9	18.8
90°	17.3	18.3	19.4	20.2	20.9	21.4	22.1	22.7
92.5°	17.3	18.3	19.4	20.1	20.3	20.6	21.0	21.2
95°	17.3	18.3	19.4	19.9	19.9	19.9	19.9	19.9
97.5°	34.7	28.8	22.8	19.9	19.9	19.9	19.9	19.9
100°	102.2	70.8	39.4	23.2	22.4	21.6	20.7	19.9
102.5°	198.4	192.6	186.6	176.5	162.2	147.8	133.5	119.2
105°	282.3	282.3	282.3	282.3	282.0	281.8	281.6	281.4
107.5°	357.5	357.5	357.6	357.3	356.6	356.0	355.4	354.7
110°	406.2	405.5	404.9	404.7	404.9	405.1	405.4	405.5





TEST NUMBER: P333637-930

CATALOG NUMBER: S125RDIP-S1270D1205U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	454.4	453.6	452.7	452.2	451.9	451.6	451.3	451.0
115°	527.0	526.2	525.4	524.3	523.0	521.8	520.5	519.3
117.5°	597.2	596.1	595.0	594.2	593.6	593.1	592.6	592.0
120°	642.5	642.1	641.7	641.0	639.9	638.9	637.8	636.7
122.5°	685.7	685.3	684.9	684.0	682.8	681.6	680.4	679.2
125°	748.8	747.9	747.1	746.3	745.7	745.1	744.4	743.8
127.5°	806.3	805.9	805.4	804.5	802.9	801.3	799.7	798.2
130°	843.9	843.3	842.7	841.8	840.7	839.8	838.7	837.6
132.5°	879.1	878.9	878.8	878.2	877.2	876.1	875.1	874.0
135°	930.6	930.2	929.8	928.9	927.6	926.3	925.1	923.8
137.5°	978.6	978.7	978.8	978.3	977.1	976.1	974.9	973.9
140°	1008.0	1008.4	1008.9	1008.4	1007.2	1006.0	1004.7	1003.5
142.5°	1037.0	1037.1	1037.1	1036.6	1035.3	1034.0	1032.7	1031.5
145°	1077.7	1078.0	1078.2	1077.7	1076.4	1075.1	1073.8	1072.6
147.5°	1112.7	1113.0	1113.2	1112.6	1111.1	1109.5	1108.1	1106.5
150°	1135.1	1135.5	1135.9	1135.2	1133.6	1131.9	1130.2	1128.5
152.5°	1154.7	1155.2	1155.6	1155.0	1153.5	1152.0	1150.5	1149.0
155°	1181.9	1182.5	1183.2	1182.6	1181.0	1179.2	1177.5	1175.9
157.5°	1204.4	1205.0	1205.7	1205.2	1203.5	1201.8	1200.1	1198.4
160°	1218.3	1219.1	1220.0	1219.6	1217.9	1216.2	1214.6	1212.8
162.5°	1231.1	1232.3	1233.5	1233.1	1231.3	1229.4	1227.6	1225.7
165°	1247.6	1248.9	1250.1	1249.9	1248.2	1246.5	1244.8	1243.2
167.5°	1260.0	1261.5	1263.1	1262.9	1260.9	1259.1	1257.2	1255.3
170°	1266.4	1268.1	1269.8	1269.7	1267.8	1265.9	1264.0	1262.1
172.5°	1271.4	1272.9	1274.4	1274.2	1272.4	1270.5	1268.5	1266.6
175°	1276.8	1278.6	1280.2	1280.1	1278.2	1276.4	1274.4	1272.5
177.5°	1279.0	1280.3	1281.4	1281.3	1280.0	1278.6	1277.2	1275.9
180°	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2

(END OF REPORT)