

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: P333602-830

Luminaire Tested: **S125RDIP-S1090D1035U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333602-830
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-S1090D1035U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 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: 7356.7 lumens
Efficiency: N/A
Efficacy: 121.6 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

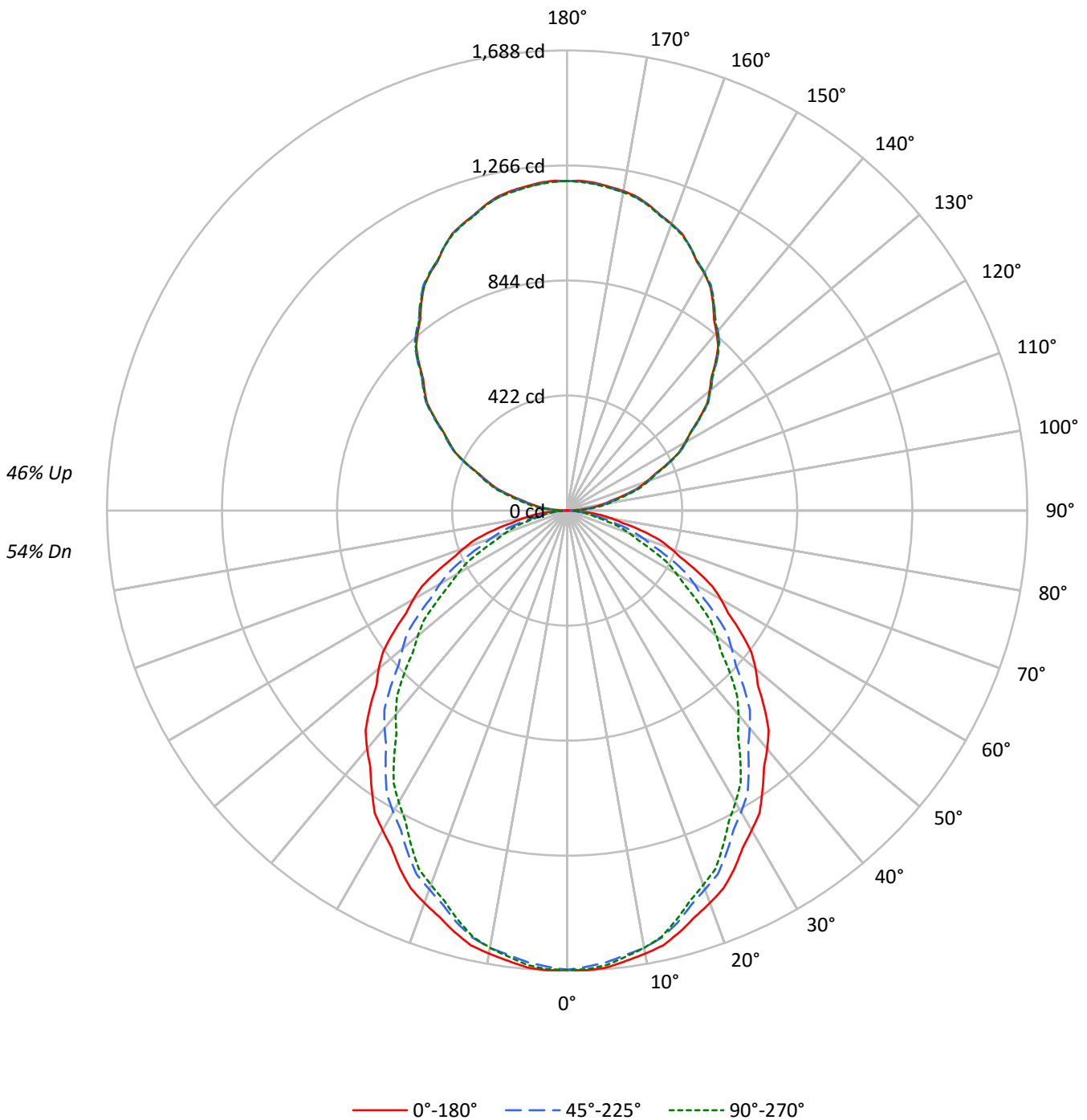
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54
1	99	95	91	87	92	88	85	82	75	73	71	64	62	61	53	52	51	46
2	90	83	77	72	84	77	72	67	66	62	59	56	54	51	47	45	43	39
3	83	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37	33
4	76	65	57	51	70	61	54	48	52	47	43	45	41	37	38	35	32	29
5	69	58	50	44	64	54	47	42	47	41	37	40	36	33	34	31	28	25
6	64	52	44	38	59	49	41	36	42	37	32	36	32	29	31	28	25	22
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22	20
8	55	43	35	30	51	40	33	28	35	30	25	30	26	23	26	23	20	18
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10880	10880	10880
5°	10906	10781	10847
10°	10823	10681	10681
15°	10694	10465	10380
20°	10529	10162	10040
25°	10337	9865	9648
30°	10097	9517	9214
35°	9851	9159	8728
40°	9622	8786	8250
45°	9344	8368	7728
50°	9064	7913	7185
55°	8740	7479	6604
60°	8415	6952	5983
65°	8031	6339	5269
70°	7593	5574	4539
75°	6984	4699	3778
80°	6152	3689	3169
85°	5180	3016	2831



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.4	2.2
10°-20°	442.7	6.0
20°-30°	642.0	8.7
30°-40°	731.6	9.9
40°-50°	713.2	9.7
50°-60°	600.3	8.2
60°-70°	420.8	5.7
70°-80°	216.3	2.9
80°-90°	57.3	0.8
90°-100°	81.0	1.1
100°-110°	239.1	3.3
110°-120°	405.1	5.5
120°-130°	533.1	7.2
130°-140°	597.3	8.1
140°-150°	585.5	8.0
150°-160°	491.7	6.7
160°-170°	326.9	4.4
170°-180°	114.4	1.6
0°-30°	1243.1	16.9
0°-40°	1974.7	26.8
0°-60°	3288.2	44.7
0°-90°	3982.6	54.1
90°-120°	725.2	9.9
90°-150°	2441.1	33.2
90°-180°	3374.0	45.9
0°-180°	7356.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1685	1685	1685	1685	1685	
5°	1682	1677	1663	1675	1673	159
15°	1599	1591	1565	1563	1552	451
25°	1451	1430	1384	1368	1354	667
35°	1250	1218	1162	1126	1107	782
45°	1023	984	916	867	846	789
55°	776	734	664	609	586	694
65°	526	481	415	366	345	520
75°	280	241	188	161	151	296
85°	70	48	41	39	38	79
90°	1	8	15	20	23	7
95°	61	64	72	79	81	65
105°	214	219	225	230	233	229
115°	406	409	411	410	409	401
125°	592	597	598	597	596	530
135°	770	775	776	776	772	593
145°	933	936	939	939	936	583
155°	1067	1067	1068	1071	1067	491
165°	1160	1159	1159	1162	1157	327
175°	1206	1203	1203	1208	1202	115
180°	1209	1209	1209	1209	1209	



TEST NUMBER: P333602-830

CATALOG NUMBER: S125RDIP-S1090D1035U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1684.7	1684.7	1684.7	1684.7	1684.7	1684.7	1684.7	1684.7	1684.7	1684.7	1684.7
2.5°	1687.7	1687.1	1686.4	1685.6	1685.0	1683.6	1681.3	1679.0	1676.8	1674.5	1676.8
5°	1682.2	1681.0	1679.9	1678.8	1677.6	1675.5	1672.4	1669.2	1666.1	1663.0	1665.8
7.5°	1665.6	1664.5	1663.4	1662.4	1661.2	1658.9	1655.1	1651.4	1647.7	1644.0	1646.0
10°	1650.3	1649.4	1648.6	1647.8	1646.9	1644.5	1640.6	1636.6	1632.7	1628.7	1629.6
12.5°	1633.0	1631.9	1630.9	1629.8	1628.7	1625.5	1620.2	1614.9	1609.6	1604.2	1604.9
15°	1599.4	1597.7	1596.0	1594.3	1592.6	1588.8	1582.9	1577.0	1571.0	1565.1	1564.8
17.5°	1561.5	1558.9	1556.3	1553.7	1551.0	1546.1	1538.6	1531.2	1523.6	1516.2	1514.8
20°	1532.0	1529.2	1526.4	1523.5	1520.7	1514.8	1505.7	1496.7	1487.6	1478.6	1477.2
22.5°	1499.4	1496.6	1493.7	1490.9	1488.1	1482.0	1472.4	1462.9	1453.4	1443.9	1441.1
25°	1450.6	1446.3	1442.1	1437.8	1433.6	1426.3	1415.8	1405.3	1394.9	1384.4	1380.7
27.5°	1394.6	1389.4	1384.2	1379.1	1373.9	1365.8	1354.6	1343.4	1332.2	1321.0	1315.9
30°	1353.9	1348.5	1343.1	1337.8	1332.4	1323.7	1311.8	1300.0	1288.1	1276.2	1269.7
32.5°	1314.1	1307.9	1301.6	1295.3	1289.0	1279.9	1267.7	1255.7	1243.5	1231.4	1224.3
35°	1249.5	1242.7	1236.0	1229.2	1222.4	1212.6	1199.9	1187.1	1174.4	1161.7	1153.5
37.5°	1186.1	1177.9	1169.6	1161.4	1153.1	1142.5	1129.3	1116.2	1103.1	1090.0	1080.1
40°	1141.3	1132.8	1124.4	1115.9	1107.4	1096.4	1082.8	1069.2	1055.6	1042.1	1031.3
42.5°	1094.5	1085.8	1077.1	1068.4	1059.7	1048.3	1034.3	1020.3	1006.3	992.2	981.9
45°	1023.0	1014.8	1006.6	998.4	990.2	978.4	962.8	947.3	931.7	916.2	904.8
47.5°	949.0	940.3	931.6	923.0	914.4	902.2	886.6	870.8	855.2	839.5	827.8
50°	902.1	892.8	883.4	874.1	864.8	852.1	835.9	819.8	803.7	787.6	775.7
52.5°	851.2	841.7	832.1	822.6	813.0	800.6	785.4	770.2	755.0	739.8	727.0
55°	776.2	767.1	758.1	749.0	740.0	727.5	711.7	695.9	680.0	664.2	651.5
57.5°	700.3	690.7	681.0	671.3	661.7	649.2	634.0	618.7	603.4	588.1	575.7
60°	651.5	641.6	631.7	621.8	611.9	599.3	584.0	568.7	553.5	538.2	525.8
62.5°	599.6	590.1	580.7	571.2	561.8	549.3	533.9	518.3	502.8	487.3	475.8
65°	525.5	515.9	506.2	496.6	487.0	474.8	459.8	444.8	429.8	414.8	403.5
67.5°	451.9	442.3	432.7	423.1	413.5	401.5	387.1	372.8	358.4	344.0	333.8
70°	402.1	392.5	382.9	373.2	363.6	351.8	337.6	323.5	309.3	295.2	286.4
72.5°	353.3	343.8	334.4	325.1	315.7	304.3	291.2	277.9	264.7	251.5	243.4
75°	279.9	271.5	263.0	254.5	246.0	235.8	223.9	212.1	200.2	188.3	182.1
77.5°	207.2	200.4	193.6	186.8	180.0	171.8	162.4	152.9	143.4	133.8	129.5
80°	165.4	158.6	151.8	145.1	138.3	130.9	123.0	115.1	107.2	99.2	96.7
82.5°	124.7	118.6	112.4	106.4	100.3	94.5	89.1	83.6	78.2	72.8	71.6
85°	69.9	64.8	59.8	54.7	49.6	46.4	45.0	43.5	42.1	40.7	40.4
87.5°	23.6	22.3	21.1	19.9	18.6	18.0	18.1	18.2	18.2	18.3	18.5
90°	0.9	2.6	4.2	5.9	7.6	9.2	10.7	12.2	13.6	15.1	16.1
92.5°	22.8	23.9	25.1	26.3	27.4	28.9	30.7	32.5	34.3	36.1	37.5
95°	61.2	61.5	62.0	62.4	62.9	64.1	66.2	68.2	70.4	72.5	73.9
97.5°	101.6	101.8	102.0	102.2	102.3	103.9	106.7	109.6	112.4	115.4	116.8
100°	131.8	131.8	131.8	131.8	131.8	133.1	135.8	138.6	141.3	143.9	145.8
102.5°	164.1	164.9	165.8	166.6	167.5	168.5	169.9	171.4	172.7	174.1	176.2
105°	214.5	215.6	216.6	217.7	218.8	219.9	221.1	222.3	223.7	224.9	226.1
107.5°	270.2	271.3	272.3	273.4	274.5	275.4	276.4	277.4	278.3	279.3	279.9
110°	308.7	309.7	310.8	311.8	312.8	313.7	314.2	314.9	315.6	316.1	316.8



TEST NUMBER: P333602-830

CATALOG NUMBER: S125RDIP-S1090D1035U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	347.8	348.4	348.8	349.4	350.0	350.6	351.5	352.2	353.0	353.8	354.1
115°	405.6	406.4	407.3	408.1	408.9	409.5	409.9	410.4	410.8	411.2	411.0
117.5°	463.5	463.9	464.3	464.7	465.1	465.4	465.8	466.2	466.6	466.9	467.1
120°	499.6	500.7	501.7	502.8	503.9	504.4	504.6	504.9	505.1	505.3	505.3
122.5°	538.9	539.2	539.6	540.0	540.4	540.7	541.3	541.9	542.4	542.9	542.8
125°	591.9	593.1	594.4	595.7	596.9	597.7	597.9	598.0	598.2	598.5	598.0
127.5°	648.4	649.0	649.8	650.4	651.2	651.7	652.0	652.1	652.4	652.7	652.4
130°	682.2	683.2	684.3	685.3	686.4	687.1	687.6	688.0	688.3	688.8	688.6
132.5°	716.0	717.8	719.5	721.2	722.9	723.8	723.7	723.6	723.5	723.4	723.2
135°	769.8	771.0	772.2	773.5	774.8	775.5	775.7	775.9	776.1	776.3	776.3
137.5°	820.2	821.3	822.6	823.8	825.0	825.9	826.3	826.8	827.3	827.6	827.9
140°	852.5	853.6	854.6	855.6	856.7	857.5	858.2	858.8	859.4	860.1	860.4
142.5°	884.9	885.8	886.6	887.5	888.4	889.3	890.0	890.9	891.6	892.4	892.7
145°	932.6	933.4	934.2	935.0	935.9	936.6	937.3	937.8	938.5	939.1	939.1
147.5°	976.6	977.0	977.5	978.0	978.4	978.9	979.4	979.9	980.3	980.9	981.4
150°	1005.9	1005.7	1005.5	1005.3	1005.1	1005.4	1006.3	1007.1	1007.9	1008.7	1008.7
152.5°	1030.0	1030.3	1030.6	1030.9	1031.1	1031.5	1031.8	1032.2	1032.5	1032.8	1033.3
155°	1067.1	1067.1	1067.1	1067.1	1067.1	1067.1	1067.4	1067.6	1067.8	1068.0	1068.8
157.5°	1100.2	1099.8	1099.3	1098.8	1098.3	1098.3	1098.4	1098.6	1098.9	1099.1	1099.9
160°	1119.7	1119.2	1118.5	1117.9	1117.3	1117.1	1117.3	1117.5	1117.7	1117.9	1118.7
162.5°	1137.1	1136.6	1136.1	1135.7	1135.3	1135.0	1135.1	1135.1	1135.2	1135.2	1136.2
165°	1160.3	1159.8	1159.4	1159.0	1158.6	1158.5	1158.7	1158.9	1159.0	1159.3	1160.2
167.5°	1179.8	1178.9	1178.2	1177.3	1176.5	1176.0	1176.0	1176.0	1176.0	1176.0	1177.3
170°	1190.3	1189.5	1188.6	1187.9	1187.0	1186.6	1186.6	1186.6	1186.6	1186.6	1187.9
172.5°	1197.9	1197.0	1196.2	1195.3	1194.6	1194.1	1194.1	1194.1	1194.1	1194.1	1195.3
175°	1206.4	1205.5	1204.7	1203.8	1203.0	1202.6	1202.6	1202.6	1202.6	1202.6	1203.8
177.5°	1210.7	1210.0	1209.4	1208.6	1208.0	1207.6	1207.4	1207.2	1207.1	1206.9	1208.0
180°	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2



TEST NUMBER: P333602-830

CATALOG NUMBER: S125RDIP-S1090D1035U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1684.7	1684.7	1684.7	1684.7	1684.7	1684.7	1684.7	1684.7
2.5°	1679.0	1681.3	1683.6	1684.5	1684.3	1684.1	1683.9	1683.7
5°	1668.7	1671.5	1674.3	1675.5	1674.9	1674.3	1673.8	1673.2
7.5°	1647.9	1649.9	1651.9	1652.6	1651.9	1651.3	1650.7	1650.0
10°	1630.4	1631.3	1632.1	1632.1	1631.3	1630.4	1629.6	1628.7
12.5°	1605.5	1606.1	1606.8	1606.4	1605.1	1603.8	1602.5	1601.2
15°	1564.5	1564.2	1564.0	1562.5	1560.0	1557.5	1554.9	1552.4
17.5°	1513.3	1511.9	1510.5	1508.8	1506.7	1504.6	1502.5	1500.4
20°	1475.7	1474.3	1472.9	1470.9	1468.4	1465.8	1463.3	1460.8
22.5°	1438.4	1435.6	1432.9	1430.4	1428.3	1426.3	1424.1	1422.0
25°	1377.1	1373.4	1369.7	1366.3	1363.2	1360.1	1357.0	1353.9
27.5°	1310.7	1305.6	1300.4	1296.4	1293.4	1290.3	1287.3	1284.4
30°	1263.2	1256.7	1250.2	1245.7	1243.1	1240.6	1238.0	1235.5
32.5°	1217.1	1209.8	1202.7	1197.5	1194.3	1191.1	1187.8	1184.6
35°	1145.3	1137.1	1128.9	1122.9	1118.9	1114.9	1111.0	1107.0
37.5°	1070.3	1060.5	1050.6	1043.8	1039.9	1036.0	1032.2	1028.3
40°	1020.6	1009.8	999.1	992.0	988.6	985.2	981.8	978.5
42.5°	971.7	961.3	951.0	943.4	938.4	933.5	928.5	923.5
45°	893.5	882.2	870.9	863.1	858.8	854.6	850.4	846.1
47.5°	816.2	804.6	793.0	784.8	780.0	775.3	770.7	766.0
50°	763.8	752.0	740.1	732.1	727.8	723.6	719.3	715.1
52.5°	714.3	701.4	688.6	680.1	675.9	671.7	667.4	663.2
55°	638.8	626.0	613.3	604.6	600.1	595.6	591.1	586.5
57.5°	563.3	550.8	538.4	530.1	526.1	522.1	518.0	514.1
60°	513.3	500.9	488.4	480.1	475.9	471.6	467.4	463.2
62.5°	464.3	452.7	441.2	433.3	429.0	424.8	420.6	416.3
65°	392.2	380.9	369.6	361.7	357.5	353.3	349.0	344.8
67.5°	323.4	313.0	302.7	295.8	292.4	289.0	285.6	282.2
70°	277.7	268.9	260.1	254.0	250.6	247.2	243.8	240.4
72.5°	235.3	227.2	219.0	213.9	211.6	209.3	207.1	204.8
75°	175.9	169.7	163.4	159.3	157.3	155.3	153.4	151.4
77.5°	125.2	120.8	116.4	113.5	112.1	110.6	109.1	107.6
80°	94.2	91.6	89.1	87.5	86.9	86.3	85.8	85.2
82.5°	70.4	69.2	68.1	67.3	66.9	66.5	66.3	65.9
85°	40.2	39.9	39.6	39.3	39.0	38.7	38.5	38.2
87.5°	18.7	18.9	19.1	19.1	19.0	18.9	18.9	18.8
90°	17.2	18.2	19.2	20.1	20.7	21.3	22.0	22.6
92.5°	38.9	40.2	41.7	42.6	43.1	43.5	43.9	44.4
95°	75.4	76.8	78.3	79.3	79.6	80.1	80.5	81.0
97.5°	118.1	119.5	120.9	121.7	122.0	122.2	122.4	122.7
100°	147.7	149.6	151.5	152.7	153.1	153.4	153.9	154.3
102.5°	178.1	180.2	182.3	183.6	184.2	184.7	185.4	186.0
105°	227.4	228.7	229.9	230.8	231.5	232.1	232.7	233.4
107.5°	280.5	281.2	281.8	282.1	282.0	282.0	282.0	281.9
110°	317.4	318.0	318.7	318.9	318.7	318.5	318.3	318.0



TEST NUMBER: P333602-830

CATALOG NUMBER: S125RDIP-S1090D1035U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	354.4	354.7	355.0	355.0	354.6	354.2	353.8	353.5
115°	410.8	410.6	410.4	410.2	409.9	409.7	409.5	409.3
117.5°	467.2	467.4	467.6	467.2	466.4	465.6	464.8	463.9
120°	505.3	505.3	505.3	504.9	504.1	503.2	502.4	501.5
122.5°	542.6	542.4	542.2	541.9	541.2	540.5	539.9	539.2
125°	597.7	597.2	596.8	596.4	596.3	596.1	595.9	595.7
127.5°	652.2	652.1	651.9	651.5	651.1	650.6	650.3	649.9
130°	688.3	688.2	688.0	687.7	687.2	686.8	686.4	686.0
132.5°	723.0	722.8	722.6	722.2	721.6	721.0	720.5	719.8
135°	776.3	776.3	776.3	775.9	775.1	774.2	773.4	772.5
137.5°	828.2	828.4	828.7	828.3	827.3	826.2	825.2	824.2
140°	860.9	861.3	861.8	861.4	860.4	859.3	858.3	857.2
142.5°	893.0	893.2	893.4	893.1	892.0	891.0	889.9	888.8
145°	939.1	939.1	939.1	938.8	938.2	937.5	936.9	936.3
147.5°	981.8	982.4	982.9	982.4	981.0	979.6	978.2	976.8
150°	1008.7	1008.7	1008.7	1008.5	1008.1	1007.7	1007.3	1006.8
152.5°	1033.9	1034.3	1034.8	1034.7	1034.0	1033.2	1032.5	1031.7
155°	1069.7	1070.5	1071.4	1071.3	1070.3	1069.1	1068.1	1067.1
157.5°	1100.7	1101.5	1102.4	1102.1	1100.8	1099.4	1098.0	1096.6
160°	1119.6	1120.4	1121.2	1121.2	1120.1	1119.1	1118.0	1116.9
162.5°	1137.2	1138.2	1139.3	1139.2	1137.9	1136.7	1135.5	1134.3
165°	1160.9	1161.8	1162.6	1162.4	1161.2	1159.9	1158.7	1157.4
167.5°	1178.6	1179.8	1181.1	1181.0	1179.8	1178.5	1177.1	1175.8
170°	1189.1	1190.3	1191.6	1191.5	1190.1	1188.5	1187.1	1185.6
172.5°	1196.7	1197.9	1199.1	1199.1	1197.8	1196.6	1195.2	1193.9
175°	1205.1	1206.4	1207.6	1207.5	1206.1	1204.6	1203.1	1201.6
177.5°	1208.9	1209.9	1210.9	1210.9	1209.7	1208.5	1207.3	1206.2
180°	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2	1209.2

(END OF REPORT)