

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: P333608-830

Luminaire Tested: **S125RDIP-S1090D1205U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333608-830  
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-S1090D1205U830-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7910.4 lumens  
Efficiency: N/A  
Efficacy: 121.0 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

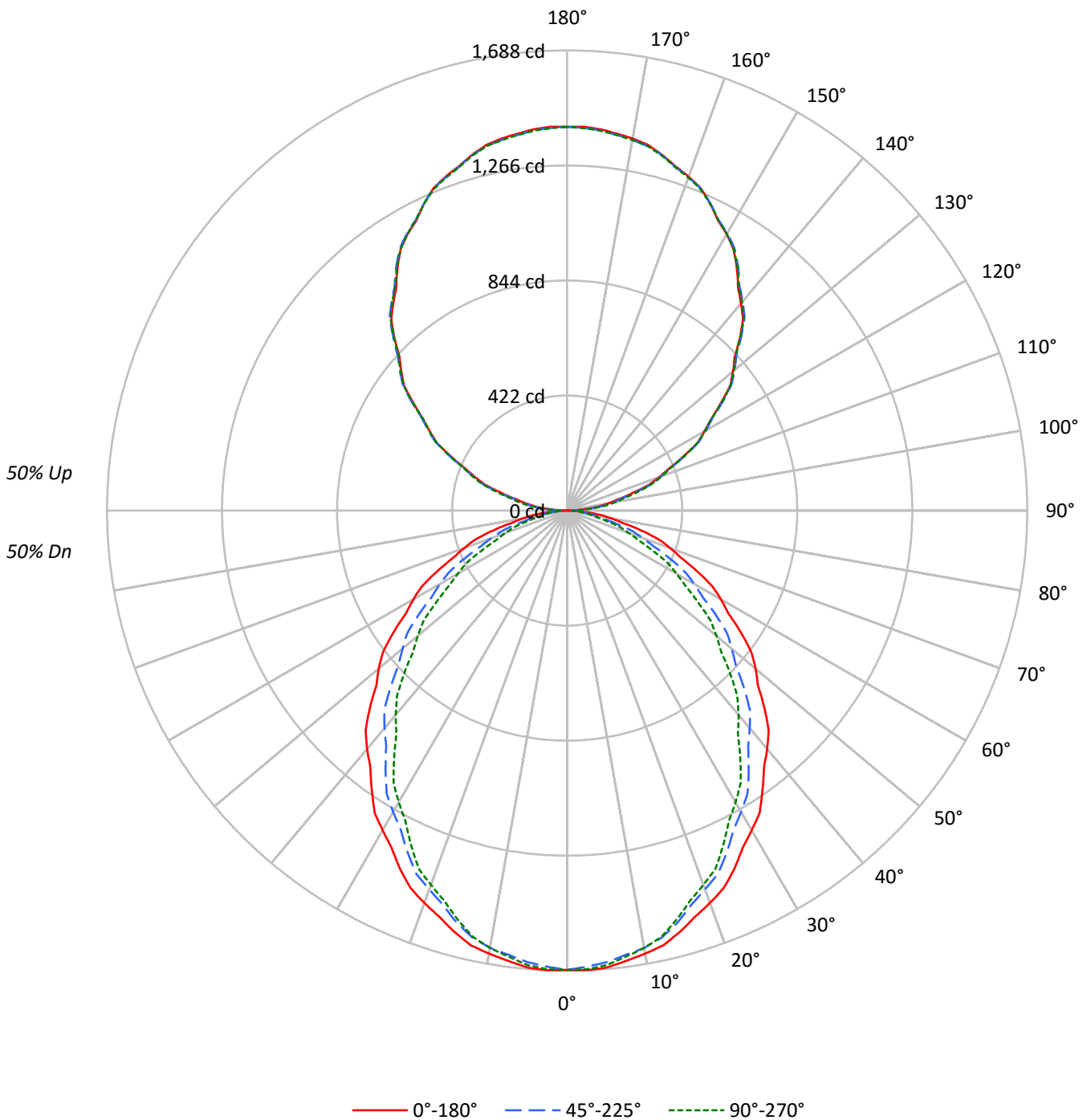
Input Watts (W): 65.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	25	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	14

**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	2.0
10°-20°	442.7	5.6
20°-30°	642.0	8.1
30°-40°	731.6	9.2
40°-50°	713.2	9.0
50°-60°	600.3	7.6
60°-70°	420.8	5.3
70°-80°	216.3	2.7
80°-90°	57.7	0.7
90°-100°	94.3	1.2
100°-110°	278.4	3.5
110°-120°	471.5	6.0
120°-130°	620.5	7.8
130°-140°	695.3	8.8
140°-150°	681.4	8.6
150°-160°	572.4	7.2
160°-170°	380.5	4.8
170°-180°	133.1	1.7
0°-30°	1243.1	15.7
0°-40°	1974.7	25.0
0°-60°	3288.2	41.6
0°-90°	3983.0	50.4
90°-120°	844.1	10.7
90°-150°	2841.4	35.9
90°-180°	3927.0	49.6
0°-180°	7910.4	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	10	18	23	26	7
95°	71	74	84	92	94	76
105°	250	255	262	268	272	267
115°	472	476	479	478	476	467
125°	689	695	697	694	693	617
135°	896	902	904	903	899	690
145°	1085	1090	1093	1093	1090	678
155°	1242	1242	1243	1247	1242	572
165°	1350	1348	1349	1353	1347	381
175°	1404	1400	1400	1406	1399	133
180°	1407	1407	1407	1407	1407	



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**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°	23.7	22.4	21.2	20.1	18.9	18.3	18.5	18.6	18.7	18.8	19.0
90°	1.1	3.0	5.0	7.0	8.9	10.7	12.4	14.1	15.8	17.5	18.8
92.5°	26.5	27.9	29.2	30.6	32.0	33.6	35.8	37.9	40.0	42.0	43.6
95°	71.2	71.6	72.2	72.7	73.1	74.6	77.0	79.5	81.9	84.4	86.1
97.5°	118.3	118.5	118.7	118.9	119.0	120.8	124.2	127.5	130.9	134.3	135.9
100°	153.4	153.4	153.4	153.4	153.4	155.0	158.1	161.3	164.4	167.6	169.8
102.5°	191.1	192.0	192.9	194.0	194.9	196.2	197.8	199.4	201.0	202.6	205.0
105°	249.7	250.9	252.1	253.4	254.6	255.9	257.4	258.8	260.3	261.7	263.3
107.5°	314.5	315.8	317.0	318.2	319.4	320.6	321.7	322.8	324.0	325.1	325.8
110°	359.3	360.4	361.7	362.9	364.1	365.0	365.8	366.6	367.3	368.0	368.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	404.8	405.5	406.0	406.7	407.4	408.1	409.1	410.0	410.9	411.8	412.2
115°	472.0	473.1	474.0	474.9	476.0	476.6	477.2	477.7	478.2	478.6	478.4
117.5°	539.5	540.0	540.5	540.8	541.3	541.7	542.2	542.6	543.0	543.5	543.7
120°	581.5	582.8	584.0	585.2	586.4	587.2	587.4	587.7	588.0	588.1	588.1
122.5°	627.2	627.6	628.0	628.5	628.9	629.4	630.1	630.7	631.3	632.0	631.8
125°	688.9	690.4	691.8	693.3	694.7	695.6	695.9	696.1	696.4	696.6	696.1
127.5°	754.7	755.4	756.3	757.1	758.0	758.6	758.8	759.1	759.4	759.7	759.4
130°	794.1	795.3	796.5	797.8	798.9	799.8	800.3	800.8	801.3	801.7	801.5
132.5°	833.5	835.5	837.5	839.5	841.5	842.4	842.4	842.3	842.2	842.1	841.8
135°	896.0	897.4	898.9	900.3	901.8	902.7	902.9	903.1	903.3	903.6	903.6
137.5°	954.6	956.0	957.4	958.8	960.3	961.3	961.8	962.3	962.9	963.4	963.7
140°	992.3	993.5	994.8	996.0	997.2	998.2	998.9	999.7	1000.3	1001.1	1001.5
142.5°	1030.0	1031.0	1032.1	1033.0	1034.1	1035.1	1035.9	1036.9	1037.8	1038.8	1039.1
145°	1085.4	1086.4	1087.4	1088.4	1089.3	1090.1	1090.9	1091.7	1092.3	1093.1	1093.1
147.5°	1136.7	1137.2	1137.7	1138.3	1138.8	1139.3	1140.0	1140.6	1141.1	1141.7	1142.3
150°	1170.8	1170.6	1170.4	1170.2	1169.9	1170.3	1171.2	1172.1	1173.2	1174.1	1174.1
152.5°	1198.9	1199.2	1199.6	1200.0	1200.2	1200.6	1201.0	1201.4	1201.8	1202.2	1202.8
155°	1242.1	1242.1	1242.1	1242.1	1242.1	1242.2	1242.5	1242.6	1242.9	1243.1	1244.2
157.5°	1280.6	1280.1	1279.5	1279.0	1278.5	1278.3	1278.6	1278.8	1279.0	1279.3	1280.3
160°	1303.3	1302.7	1301.9	1301.2	1300.4	1300.2	1300.4	1300.7	1301.0	1301.2	1302.1
162.5°	1323.5	1323.0	1322.5	1321.9	1321.4	1321.2	1321.2	1321.3	1321.3	1321.4	1322.5
165°	1350.5	1350.0	1349.5	1349.1	1348.5	1348.4	1348.7	1348.9	1349.2	1349.3	1350.4
167.5°	1373.3	1372.2	1371.3	1370.4	1369.3	1368.9	1368.9	1368.9	1368.9	1368.9	1370.4
170°	1385.5	1384.6	1383.6	1382.6	1381.7	1381.1	1381.1	1381.1	1381.1	1381.1	1382.6
172.5°	1394.3	1393.4	1392.3	1391.4	1390.4	1389.9	1389.9	1389.9	1389.9	1389.9	1391.4
175°	1404.1	1403.2	1402.2	1401.2	1400.2	1399.8	1399.8	1399.8	1399.8	1399.8	1401.2
177.5°	1409.2	1408.4	1407.6	1406.8	1406.1	1405.6	1405.4	1405.2	1405.0	1404.8	1406.0
180°	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4



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**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°	19.2	19.5	19.8	19.8	19.8	19.7	19.6	19.5
90°	20.0	21.2	22.4	23.4	24.1	24.8	25.5	26.3
92.5°	45.2	46.8	48.4	49.6	50.0	50.6	51.2	51.7
95°	87.8	89.4	91.1	92.3	92.7	93.2	93.7	94.2
97.5°	137.5	139.1	140.7	141.7	141.9	142.2	142.5	142.8
100°	171.9	174.2	176.3	177.7	178.1	178.6	179.2	179.6
102.5°	207.4	209.8	212.2	213.7	214.4	215.1	215.7	216.4
105°	264.7	266.2	267.6	268.7	269.5	270.1	270.9	271.6
107.5°	326.5	327.3	328.0	328.4	328.3	328.3	328.2	328.1
110°	369.5	370.2	370.9	371.2	370.9	370.7	370.4	370.2





TEST NUMBER: P333608-830

CATALOG NUMBER: S125RDIP-S1090D1205U830-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	412.6	412.8	413.2	413.1	412.7	412.3	411.8	411.4
115°	478.2	477.9	477.7	477.4	477.2	476.9	476.6	476.5
117.5°	543.8	544.0	544.2	543.8	542.9	542.0	540.9	540.0
120°	588.1	588.1	588.1	587.7	586.7	585.7	584.8	583.8
122.5°	631.6	631.4	631.2	630.7	629.9	629.1	628.4	627.6
125°	695.6	695.1	694.7	694.3	694.1	693.8	693.5	693.3
127.5°	759.2	758.9	758.7	758.4	757.9	757.3	756.9	756.4
130°	801.3	801.0	800.8	800.4	799.9	799.5	798.9	798.4
132.5°	841.6	841.3	841.0	840.7	839.9	839.2	838.6	837.9
135°	903.6	903.6	903.6	903.1	902.1	901.2	900.2	899.2
137.5°	964.0	964.3	964.6	964.1	962.9	961.7	960.5	959.2
140°	1002.0	1002.6	1003.1	1002.7	1001.5	1000.2	999.0	997.8
142.5°	1039.3	1039.6	1039.9	1039.4	1038.2	1037.1	1035.9	1034.6
145°	1093.1	1093.1	1093.1	1092.7	1092.0	1091.3	1090.5	1089.8
147.5°	1142.9	1143.5	1144.1	1143.5	1141.9	1140.2	1138.6	1136.9
150°	1174.1	1174.1	1174.1	1173.9	1173.4	1172.9	1172.4	1172.0
152.5°	1203.3	1203.9	1204.5	1204.4	1203.5	1202.6	1201.7	1200.9
155°	1245.1	1246.0	1247.1	1246.9	1245.7	1244.4	1243.3	1242.1
157.5°	1281.2	1282.2	1283.2	1282.9	1281.3	1279.7	1278.1	1276.5
160°	1303.2	1304.1	1305.0	1305.0	1303.7	1302.5	1301.3	1300.1
162.5°	1323.7	1324.8	1326.1	1325.9	1324.5	1323.0	1321.6	1320.2
165°	1351.3	1352.3	1353.3	1353.0	1351.6	1350.1	1348.7	1347.2
167.5°	1371.8	1373.3	1374.7	1374.7	1373.2	1371.7	1370.2	1368.7
170°	1384.0	1385.5	1387.0	1386.9	1385.2	1383.5	1381.8	1380.1
172.5°	1392.8	1394.3	1395.7	1395.7	1394.2	1392.7	1391.2	1389.7
175°	1402.7	1404.1	1405.6	1405.5	1403.8	1402.1	1400.3	1398.6
177.5°	1407.1	1408.3	1409.5	1409.4	1408.1	1406.7	1405.3	1403.9
180°	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4

(END OF REPORT)