

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: P333608-935

Luminaire Tested: **S125RDIP-S1090D1205U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333608-935
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-S1090D1205U935-4F0-1E-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: 7226.0 lumens
Efficiency: N/A
Efficacy: 110.5 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

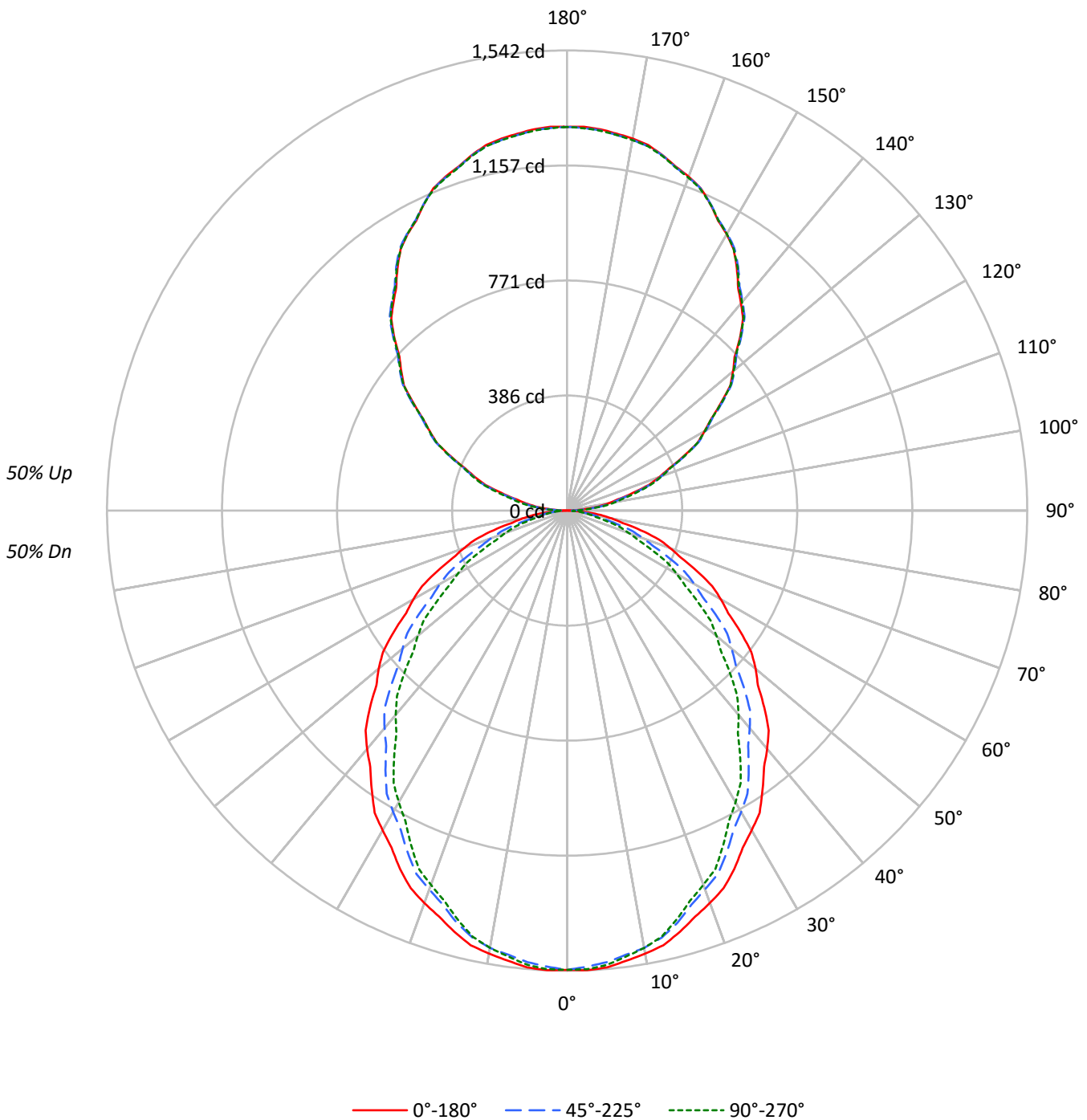
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	9939	9939	9939
5°	9962	9848	9909
10°	9886	9757	9757
15°	9768	9559	9482
20°	9619	9283	9171
25°	9443	9012	8813
30°	9223	8694	8416
35°	8999	8367	7972
40°	8790	8025	7535
45°	8535	7644	7059
50°	8280	7229	6563
55°	7983	6831	6033
60°	7687	6350	5465
65°	7335	5790	4814
70°	6936	5093	4147
75°	6381	4292	3451
80°	5620	3373	2894
85°	4735	2757	2586



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.7	2.0
10°-20°	404.4	5.6
20°-30°	586.4	8.1
30°-40°	668.3	9.2
40°-50°	651.5	9.0
50°-60°	548.4	7.6
60°-70°	384.4	5.3
70°-80°	197.6	2.7
80°-90°	52.7	0.7
90°-100°	86.1	1.2
100°-110°	254.3	3.5
110°-120°	430.7	6.0
120°-130°	566.8	7.8
130°-140°	635.1	8.8
140°-150°	622.5	8.6
150°-160°	522.8	7.2
160°-170°	347.5	4.8
170°-180°	121.6	1.7
0°-30°	1135.5	15.7
0°-40°	1803.9	25.0
0°-60°	3003.7	41.6
0°-90°	3638.4	50.4
90°-120°	771.1	10.7
90°-150°	2595.6	35.9
90°-180°	3588.0	49.7
0°-180°	7226.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1539	1539	1539	1539	1539	
5°	1537	1532	1519	1530	1528	146
15°	1461	1453	1430	1428	1418	412
25°	1325	1306	1265	1250	1237	609
35°	1141	1112	1061	1028	1011	714
45°	934	899	837	792	773	721
55°	709	670	607	556	536	634
65°	480	439	379	334	315	475
75°	256	220	172	147	138	271
85°	64	44	37	36	35	72
90°	1	9	16	21	24	7
95°	65	67	77	84	86	69
105°	228	233	239	245	248	244
115°	431	435	437	436	435	426
125°	629	635	636	634	633	563
135°	818	824	825	825	821	631
145°	992	995	998	998	996	620
155°	1135	1135	1136	1139	1135	522
165°	1234	1232	1233	1236	1231	348
175°	1283	1279	1279	1284	1278	122
180°	1286	1286	1286	1286	1286	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0
2.5°	1541.7	1541.1	1540.5	1539.8	1539.2	1537.9	1535.9	1533.8	1531.7	1529.7	1531.7
5°	1536.6	1535.6	1534.6	1533.5	1532.5	1530.5	1527.7	1524.8	1522.0	1519.1	1521.7
7.5°	1521.5	1520.5	1519.5	1518.5	1517.5	1515.4	1511.9	1508.6	1505.1	1501.8	1503.6
10°	1507.5	1506.8	1506.0	1505.2	1504.4	1502.3	1498.7	1495.0	1491.4	1487.8	1488.6
12.5°	1491.7	1490.7	1489.8	1488.8	1487.8	1484.9	1480.1	1475.2	1470.3	1465.4	1466.0
15°	1461.0	1459.5	1457.9	1456.4	1454.8	1451.4	1446.0	1440.5	1435.1	1429.7	1429.4
17.5°	1426.4	1424.0	1421.7	1419.3	1416.9	1412.3	1405.5	1398.7	1391.8	1385.0	1383.7
20°	1399.5	1396.9	1394.3	1391.7	1389.1	1383.7	1375.4	1367.2	1358.9	1350.7	1349.4
22.5°	1369.7	1367.1	1364.5	1361.9	1359.3	1353.8	1345.1	1336.4	1327.7	1319.0	1316.5
25°	1325.1	1321.2	1317.3	1313.5	1309.6	1302.9	1293.3	1283.8	1274.2	1264.6	1261.3
27.5°	1273.9	1269.2	1264.5	1259.8	1255.1	1247.7	1237.4	1227.2	1216.9	1206.7	1202.0
30°	1236.7	1231.8	1226.9	1222.0	1217.1	1209.2	1198.3	1187.5	1176.6	1165.8	1159.9
32.5°	1200.4	1194.7	1189.0	1183.3	1177.5	1169.2	1158.0	1147.0	1135.9	1124.9	1118.4
35°	1141.4	1135.2	1129.0	1122.8	1116.6	1107.7	1096.1	1084.4	1072.8	1061.2	1053.7
37.5°	1083.5	1076.0	1068.4	1060.9	1053.3	1043.6	1031.6	1019.6	1007.6	995.7	986.6
40°	1042.6	1034.8	1027.1	1019.3	1011.6	1001.5	989.1	976.7	964.3	951.9	942.1
42.5°	999.8	991.9	984.0	975.9	968.0	957.6	944.8	932.0	919.2	906.4	897.0
45°	934.5	927.0	919.5	912.1	904.6	893.7	879.5	865.3	851.1	836.9	826.6
47.5°	866.9	858.9	851.0	843.2	835.3	824.1	809.9	795.5	781.2	766.9	756.2
50°	824.1	815.5	807.0	798.5	790.0	778.3	763.6	748.9	734.2	719.5	708.6
52.5°	777.6	768.9	760.1	751.4	742.7	731.3	717.5	703.5	689.7	675.8	664.1
55°	709.0	700.8	692.5	684.2	676.0	664.6	650.1	635.7	621.2	606.7	595.1
57.5°	639.7	630.9	622.1	613.2	604.4	593.1	579.1	565.2	551.2	537.3	525.9
60°	595.1	586.1	577.0	568.0	559.0	547.4	533.5	519.5	505.6	491.6	480.3
62.5°	547.7	539.1	530.5	521.8	513.2	501.8	487.7	473.5	459.3	445.1	434.6
65°	480.0	471.2	462.4	453.7	444.9	433.7	420.0	406.3	392.6	378.9	368.6
67.5°	412.8	404.1	395.3	386.5	377.7	366.8	353.6	340.5	327.4	314.3	304.9
70°	367.3	358.5	349.7	341.0	332.2	321.3	308.4	295.5	282.6	269.7	261.7
72.5°	322.7	314.1	305.5	297.0	288.3	278.0	266.0	253.8	241.8	229.7	222.3
75°	255.7	248.0	240.2	232.5	224.7	215.4	204.6	193.7	182.9	172.0	166.3
77.5°	189.2	183.0	176.8	170.7	164.5	157.0	148.4	139.7	131.0	122.3	118.3
80°	151.1	144.9	138.7	132.5	126.3	119.6	112.4	105.1	97.9	90.7	88.3
82.5°	113.9	108.3	102.7	97.2	91.6	86.4	81.4	76.4	71.5	66.5	65.4
85°	63.9	59.2	54.6	49.9	45.3	42.4	41.1	39.8	38.5	37.2	36.9
87.5°	21.6	20.5	19.4	18.3	17.2	16.7	16.9	17.0	17.0	17.1	17.4
90°	1.0	2.8	4.6	6.4	8.1	9.8	11.4	12.9	14.5	16.0	17.1
92.5°	24.2	25.5	26.7	28.0	29.2	30.7	32.7	34.6	36.5	38.4	39.9
95°	65.0	65.4	66.0	66.4	66.8	68.1	70.3	72.6	74.8	77.1	78.6
97.5°	108.1	108.2	108.4	108.6	108.7	110.4	113.5	116.5	119.6	122.7	124.2
100°	140.1	140.1	140.1	140.1	140.1	141.5	144.4	147.3	150.2	153.1	155.1
102.5°	174.5	175.4	176.2	177.2	178.1	179.3	180.7	182.2	183.7	185.1	187.3
105°	228.1	229.2	230.3	231.4	232.6	233.8	235.1	236.4	237.8	239.1	240.5
107.5°	287.3	288.4	289.6	290.7	291.8	292.8	293.9	294.9	295.9	297.0	297.6
110°	328.2	329.2	330.4	331.5	332.6	333.5	334.2	334.8	335.5	336.1	336.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	369.8	370.4	370.9	371.5	372.1	372.8	373.7	374.5	375.3	376.2	376.5
115°	431.2	432.1	433.0	433.9	434.8	435.4	435.9	436.4	436.8	437.2	437.0
117.5°	492.8	493.3	493.7	494.0	494.5	494.8	495.2	495.7	496.0	496.5	496.6
120°	531.2	532.4	533.5	534.6	535.7	536.4	536.6	536.8	537.1	537.3	537.3
122.5°	572.9	573.3	573.7	574.1	574.5	575.0	575.6	576.2	576.7	577.3	577.1
125°	629.3	630.7	632.0	633.4	634.6	635.4	635.7	635.8	636.1	636.4	635.8
127.5°	689.4	690.1	690.9	691.6	692.4	692.9	693.2	693.4	693.7	694.0	693.7
130°	725.4	726.5	727.6	728.8	729.8	730.6	731.1	731.5	731.9	732.4	732.2
132.5°	761.4	763.2	765.1	766.9	768.7	769.6	769.5	769.4	769.3	769.2	769.0
135°	818.5	819.8	821.1	822.4	823.8	824.6	824.8	825.0	825.2	825.4	825.4
137.5°	872.0	873.3	874.6	875.9	877.2	878.1	878.6	879.1	879.6	880.0	880.3
140°	906.5	907.6	908.7	909.8	910.9	911.8	912.5	913.2	913.8	914.5	914.9
142.5°	940.9	941.8	942.8	943.7	944.6	945.6	946.3	947.2	948.0	948.9	949.2
145°	991.5	992.4	993.3	994.2	995.1	995.8	996.5	997.2	997.8	998.5	998.5
147.5°	1038.4	1038.8	1039.3	1039.8	1040.3	1040.8	1041.4	1041.9	1042.4	1042.9	1043.4
150°	1069.5	1069.4	1069.1	1068.9	1068.7	1069.0	1069.9	1070.7	1071.7	1072.5	1072.5
152.5°	1095.2	1095.5	1095.8	1096.1	1096.4	1096.7	1097.1	1097.4	1097.9	1098.2	1098.7
155°	1134.6	1134.6	1134.6	1134.6	1134.6	1134.7	1135.0	1135.1	1135.4	1135.6	1136.5
157.5°	1169.8	1169.3	1168.8	1168.4	1167.9	1167.7	1167.9	1168.2	1168.4	1168.6	1169.5
160°	1190.6	1190.0	1189.3	1188.6	1187.9	1187.7	1187.9	1188.2	1188.4	1188.6	1189.5
162.5°	1209.0	1208.6	1208.1	1207.6	1207.0	1206.9	1206.9	1206.9	1206.9	1207.0	1208.1
165°	1233.6	1233.2	1232.8	1232.3	1231.8	1231.7	1232.0	1232.2	1232.4	1232.6	1233.6
167.5°	1254.5	1253.5	1252.7	1251.8	1250.9	1250.4	1250.4	1250.4	1250.4	1250.4	1251.8
170°	1265.7	1264.8	1263.9	1263.0	1262.1	1261.6	1261.6	1261.6	1261.6	1261.6	1263.0
172.5°	1273.7	1272.8	1271.9	1271.0	1270.1	1269.6	1269.6	1269.6	1269.6	1269.6	1271.0
175°	1282.6	1281.8	1280.9	1280.0	1279.1	1278.7	1278.7	1278.7	1278.7	1278.7	1280.0
177.5°	1287.3	1286.6	1285.8	1285.1	1284.4	1284.0	1283.8	1283.7	1283.4	1283.2	1284.4
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0
2.5°	1533.8	1535.9	1537.9	1538.8	1538.6	1538.4	1538.2	1538.0
5°	1524.3	1526.9	1529.5	1530.5	1530.0	1529.5	1529.0	1528.4
7.5°	1505.4	1507.2	1509.0	1509.6	1509.0	1508.5	1507.9	1507.3
10°	1489.4	1490.1	1490.9	1490.9	1490.1	1489.4	1488.6	1487.8
12.5°	1466.6	1467.1	1467.7	1467.4	1466.2	1465.1	1463.9	1462.7
15°	1429.2	1428.9	1428.7	1427.4	1425.0	1422.7	1420.4	1418.1
17.5°	1382.4	1381.1	1379.8	1378.3	1376.3	1374.4	1372.5	1370.6
20°	1348.1	1346.8	1345.5	1343.7	1341.4	1339.0	1336.7	1334.4
22.5°	1314.0	1311.4	1308.9	1306.7	1304.8	1302.9	1300.9	1299.0
25°	1257.9	1254.6	1251.2	1248.1	1245.3	1242.4	1239.6	1236.7
27.5°	1197.3	1192.7	1187.9	1184.2	1181.5	1178.7	1176.0	1173.3
30°	1153.9	1148.0	1142.0	1137.9	1135.6	1133.2	1130.9	1128.6
32.5°	1111.8	1105.2	1098.6	1093.9	1091.0	1088.0	1085.0	1082.1
35°	1046.2	1038.7	1031.2	1025.7	1022.1	1018.5	1014.9	1011.2
37.5°	977.7	968.7	959.7	953.5	949.9	946.4	942.9	939.4
40°	932.3	922.5	912.7	906.2	903.1	900.0	896.9	893.8
42.5°	887.6	878.1	868.7	861.8	857.2	852.7	848.2	843.6
45°	816.2	805.9	795.6	788.4	784.5	780.7	776.8	772.9
47.5°	745.6	734.9	724.4	716.9	712.6	708.3	704.0	699.7
50°	697.8	686.9	676.1	668.7	664.9	661.0	657.1	653.2
52.5°	652.5	640.8	629.0	621.3	617.4	613.5	609.7	605.8
55°	583.5	571.9	560.3	552.3	548.2	544.1	539.9	535.8
57.5°	514.5	503.2	491.8	484.2	480.6	476.9	473.2	469.6
60°	468.9	457.5	446.2	438.6	434.7	430.8	427.0	423.1
62.5°	424.1	413.5	403.0	395.8	391.9	388.1	384.2	380.3
65°	358.3	347.9	337.6	330.5	326.6	322.7	318.8	315.0
67.5°	295.4	285.9	276.5	270.2	267.1	264.0	260.9	257.8
70°	253.7	245.6	237.6	232.0	228.9	225.8	222.7	219.6
72.5°	214.9	207.5	200.1	195.4	193.3	191.2	189.2	187.1
75°	160.7	155.0	149.3	145.5	143.7	141.9	140.1	138.3
77.5°	114.3	110.4	106.3	103.7	102.4	101.0	99.7	98.3
80°	86.0	83.7	81.4	79.9	79.4	78.9	78.4	77.8
82.5°	64.3	63.2	62.2	61.5	61.1	60.8	60.5	60.2
85°	36.7	36.4	36.2	35.9	35.6	35.4	35.1	34.9
87.5°	17.6	17.8	18.1	18.1	18.1	18.0	17.9	17.8
90°	18.3	19.4	20.5	21.4	22.0	22.6	23.3	24.0
92.5°	41.3	42.8	44.3	45.3	45.7	46.2	46.8	47.2
95°	80.2	81.7	83.3	84.3	84.7	85.2	85.6	86.0
97.5°	125.6	127.1	128.5	129.4	129.7	129.9	130.2	130.4
100°	157.0	159.1	161.1	162.3	162.7	163.2	163.7	164.1
102.5°	189.4	191.7	193.8	195.2	195.9	196.5	197.1	197.7
105°	241.8	243.1	244.4	245.5	246.2	246.8	247.5	248.1
107.5°	298.3	298.9	299.6	300.0	299.9	299.9	299.8	299.7
110°	337.5	338.2	338.8	339.1	338.8	338.6	338.4	338.2



TEST NUMBER: P333608-935

CATALOG NUMBER: S125RDIP-S1090D1205U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	376.9	377.1	377.5	377.4	377.0	376.6	376.2	375.8
115°	436.8	436.5	436.4	436.1	435.9	435.7	435.4	435.2
117.5°	496.8	497.0	497.1	496.8	495.9	495.1	494.1	493.3
120°	537.3	537.3	537.3	536.8	536.0	535.0	534.2	533.3
122.5°	577.0	576.8	576.6	576.2	575.4	574.7	574.0	573.3
125°	635.4	635.0	634.6	634.2	634.0	633.8	633.5	633.4
127.5°	693.5	693.3	693.1	692.8	692.3	691.8	691.4	691.0
130°	731.9	731.7	731.5	731.2	730.7	730.3	729.8	729.4
132.5°	768.8	768.5	768.3	767.9	767.2	766.6	766.0	765.4
135°	825.4	825.4	825.4	825.0	824.1	823.2	822.3	821.4
137.5°	880.6	880.9	881.1	880.7	879.6	878.5	877.4	876.2
140°	915.3	915.8	916.3	915.9	914.8	913.7	912.6	911.5
142.5°	949.4	949.7	949.9	949.5	948.4	947.4	946.2	945.1
145°	998.5	998.5	998.5	998.2	997.6	996.9	996.2	995.5
147.5°	1044.0	1044.6	1045.1	1044.6	1043.1	1041.6	1040.1	1038.5
150°	1072.5	1072.5	1072.5	1072.4	1071.9	1071.4	1071.0	1070.6
152.5°	1099.2	1099.8	1100.3	1100.2	1099.4	1098.5	1097.8	1097.0
155°	1137.4	1138.2	1139.2	1139.0	1137.9	1136.8	1135.7	1134.6
157.5°	1170.4	1171.3	1172.2	1171.9	1170.4	1169.0	1167.5	1166.1
160°	1190.4	1191.3	1192.1	1192.1	1190.9	1189.8	1188.7	1187.7
162.5°	1209.2	1210.2	1211.3	1211.2	1209.9	1208.6	1207.3	1206.0
165°	1234.4	1235.3	1236.2	1236.0	1234.7	1233.3	1232.0	1230.6
167.5°	1253.1	1254.5	1255.8	1255.8	1254.4	1253.0	1251.6	1250.3
170°	1264.3	1265.7	1267.0	1266.9	1265.3	1263.8	1262.2	1260.7
172.5°	1272.3	1273.7	1275.0	1275.0	1273.6	1272.2	1270.8	1269.5
175°	1281.3	1282.6	1284.0	1283.9	1282.4	1280.8	1279.2	1277.6
177.5°	1285.4	1286.5	1287.5	1287.5	1286.2	1285.0	1283.8	1282.5
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6

(END OF REPORT)