

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: P333608-927

Luminaire Tested: **S125RDIP-S1090D1205U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333608-927
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-S1090D1205U927-4F0-1E-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: 6648.4 lumens
Efficiency: N/A
Efficacy: 101.7 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

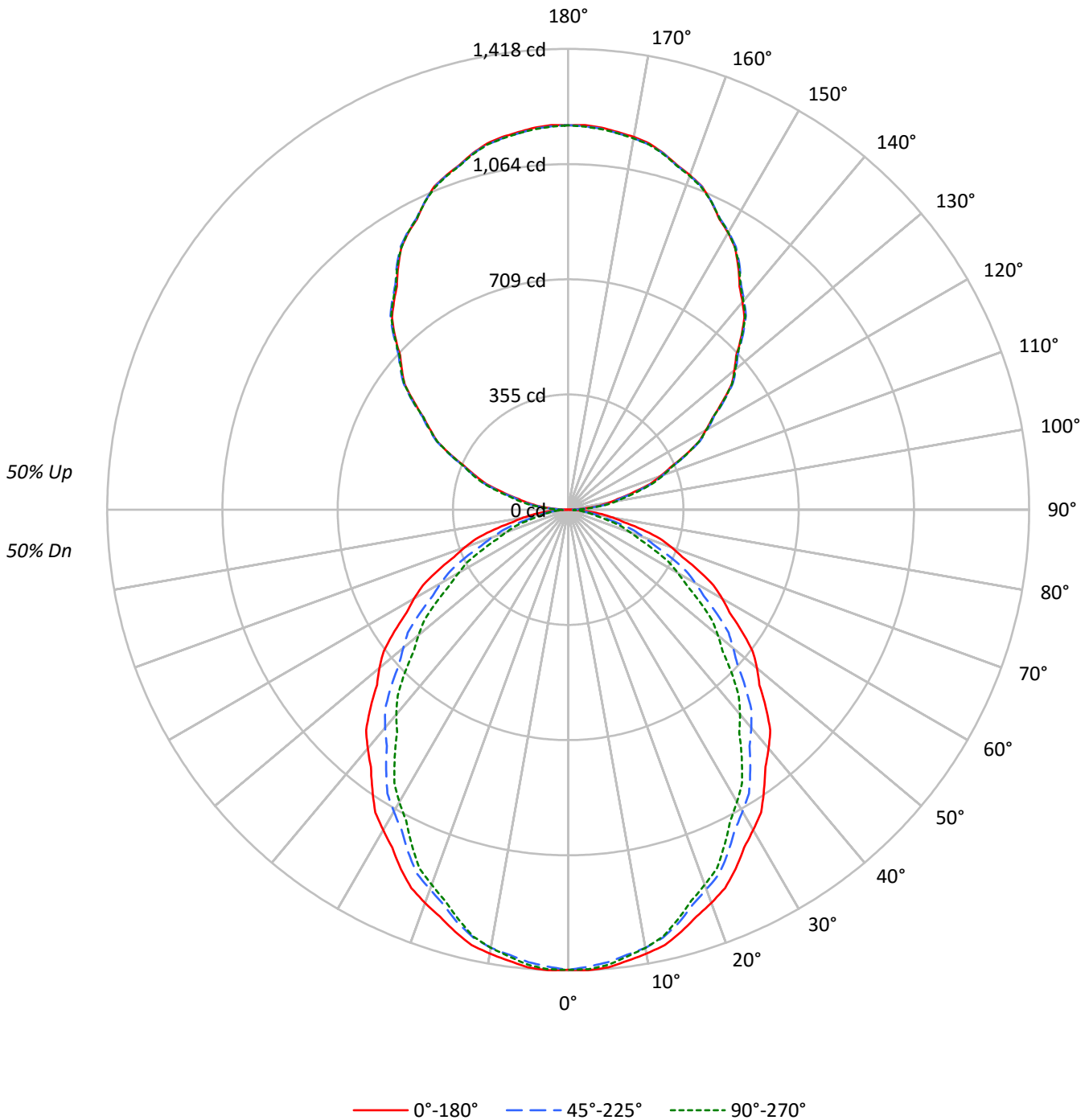
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333608-927

CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333608-927

CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F1

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	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°	9144	9144	9144
5°	9166	9061	9117
10°	9096	8977	8977
15°	8988	8795	8723
20°	8849	8541	8438
25°	8688	8292	8109
30°	8486	7999	7744
35°	8280	7698	7335
40°	8088	7384	6933
45°	7853	7033	6495
50°	7618	6650	6038
55°	7346	6286	5551
60°	7073	5842	5028
65°	6748	5327	4429
70°	6381	4685	3816
75°	5871	3950	3174
80°	5170	3102	2663
85°	4357	2534	2379



TEST NUMBER: P333608-927

CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	2.0
10°-20°	372.1	5.6
20°-30°	539.6	8.1
30°-40°	614.9	9.2
40°-50°	599.4	9.0
50°-60°	504.6	7.6
60°-70°	353.7	5.3
70°-80°	181.8	2.7
80°-90°	48.5	0.7
90°-100°	79.2	1.2
100°-110°	234.0	3.5
110°-120°	396.3	6.0
120°-130°	521.5	7.8
130°-140°	584.4	8.8
140°-150°	572.7	8.6
150°-160°	481.1	7.2
160°-170°	319.8	4.8
170°-180°	111.9	1.7
0°-30°	1044.8	15.7
0°-40°	1659.7	25.0
0°-60°	2763.6	41.6
0°-90°	3347.6	50.4
90°-120°	709.5	10.7
90°-150°	2388.1	35.9
90°-180°	3301.0	49.7
0°-180°	6648.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1414	1409	1398	1408	1406	134
15°	1344	1337	1315	1314	1305	379
25°	1219	1202	1164	1150	1138	561
35°	1050	1023	976	946	930	657
45°	860	827	770	729	711	663
55°	652	617	558	512	493	583
65°	442	404	349	307	290	437
75°	235	202	158	136	127	249
85°	59	40	34	33	32	66
90°	1	8	15	19	22	6
95°	60	62	71	77	79	64
105°	210	215	220	225	228	224
115°	397	400	402	401	400	392
125°	579	584	586	584	583	518
135°	753	758	760	759	756	580
145°	912	916	919	919	916	570
155°	1044	1044	1045	1048	1044	481
165°	1135	1133	1134	1137	1132	320
175°	1180	1177	1176	1181	1176	112
180°	1183	1183	1183	1183	1183	



TEST NUMBER: P333608-927

CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1418.5	1417.9	1417.4	1416.7	1416.2	1415.0	1413.1	1411.2	1409.3	1407.4	1409.3
5°	1413.8	1412.9	1411.9	1411.0	1410.0	1408.2	1405.6	1403.0	1400.3	1397.7	1400.1
7.5°	1399.9	1399.0	1398.0	1397.2	1396.2	1394.2	1391.1	1388.0	1384.8	1381.7	1383.4
10°	1387.0	1386.3	1385.6	1384.9	1384.2	1382.2	1378.9	1375.5	1372.2	1368.9	1369.6
12.5°	1372.5	1371.6	1370.7	1369.8	1368.9	1366.2	1361.8	1357.2	1352.8	1348.3	1348.8
15°	1344.3	1342.8	1341.4	1340.0	1338.6	1335.4	1330.4	1325.4	1320.4	1315.4	1315.2
17.5°	1312.4	1310.2	1308.1	1305.8	1303.6	1299.4	1293.2	1286.9	1280.6	1274.3	1273.1
20°	1287.6	1285.2	1282.9	1280.5	1278.1	1273.1	1265.5	1257.9	1250.3	1242.7	1241.5
22.5°	1260.2	1257.8	1255.5	1253.1	1250.7	1245.5	1237.5	1229.5	1221.5	1213.5	1211.2
25°	1219.2	1215.6	1212.0	1208.5	1204.9	1198.7	1189.9	1181.1	1172.4	1163.6	1160.5
27.5°	1172.1	1167.8	1163.4	1159.1	1154.8	1148.0	1138.5	1129.1	1119.7	1110.2	1106.0
30°	1137.9	1133.4	1128.9	1124.3	1119.8	1112.5	1102.6	1092.6	1082.6	1072.6	1067.1
32.5°	1104.5	1099.2	1093.9	1088.7	1083.4	1075.7	1065.5	1055.3	1045.1	1035.0	1029.0
35°	1050.2	1044.5	1038.8	1033.1	1027.4	1019.1	1008.4	997.8	987.1	976.4	969.5
37.5°	996.9	990.0	983.0	976.1	969.2	960.2	949.1	938.1	927.1	916.1	907.8
40°	959.3	952.1	945.0	937.9	930.7	921.5	910.1	898.7	887.2	875.8	866.8
42.5°	919.9	912.6	905.3	897.9	890.7	881.1	869.3	857.5	845.7	833.9	825.3
45°	859.8	852.9	846.1	839.2	832.3	822.3	809.2	796.1	783.1	770.0	760.5
47.5°	797.6	790.3	783.0	775.8	768.5	758.3	745.1	731.9	718.7	705.6	695.8
50°	758.2	750.4	742.5	734.7	726.8	716.1	702.6	689.0	675.5	661.9	652.0
52.5°	715.4	707.4	699.3	691.3	683.3	672.9	660.1	647.3	634.5	621.8	611.0
55°	652.4	644.8	637.2	629.5	621.9	611.5	598.2	584.9	571.6	558.3	547.6
57.5°	588.6	580.5	572.4	564.2	556.1	545.7	532.8	520.0	507.2	494.3	483.9
60°	547.6	539.2	530.9	522.6	514.3	503.7	490.8	478.0	465.2	452.3	441.9
62.5°	503.9	496.0	488.1	480.1	472.1	461.7	448.7	435.6	422.6	409.6	399.9
65°	441.6	433.6	425.5	417.4	409.3	399.0	386.4	373.8	361.2	348.6	339.1
67.5°	379.9	371.8	363.7	355.6	347.5	337.5	325.3	313.3	301.3	289.1	280.5
70°	337.9	329.9	321.8	313.7	305.6	295.6	283.8	271.9	260.0	248.1	240.7
72.5°	296.9	289.0	281.1	273.2	265.3	255.8	244.7	233.5	222.4	211.4	204.5
75°	235.3	228.1	221.0	213.9	206.8	198.2	188.2	178.2	168.3	158.3	153.0
77.5°	174.1	168.4	162.7	157.0	151.3	144.4	136.5	128.5	120.5	112.5	108.8
80°	139.0	133.3	127.6	121.9	116.2	110.0	103.4	96.7	90.1	83.4	81.3
82.5°	104.8	99.7	94.5	89.4	84.3	79.5	74.9	70.3	65.8	61.2	60.2
85°	58.8	54.5	50.2	45.9	41.7	39.0	37.8	36.6	35.4	34.2	34.0
87.5°	19.9	18.9	17.8	16.9	15.8	15.4	15.5	15.6	15.7	15.8	16.0
90°	1.0	2.5	4.2	5.9	7.4	9.0	10.5	11.9	13.3	14.7	15.8
92.5°	22.3	23.4	24.6	25.7	26.9	28.3	30.1	31.8	33.6	35.3	36.7
95°	59.8	60.2	60.7	61.1	61.5	62.7	64.7	66.8	68.8	70.9	72.3
97.5°	99.4	99.6	99.7	99.9	100.1	101.6	104.4	107.2	110.0	112.9	114.2
100°	128.9	128.9	128.9	128.9	128.9	130.2	132.8	135.5	138.2	140.9	142.7
102.5°	160.6	161.4	162.2	163.0	163.8	164.9	166.3	167.6	169.0	170.3	172.3
105°	209.8	210.9	211.9	212.9	214.0	215.1	216.3	217.5	218.8	220.0	221.3
107.5°	264.4	265.4	266.4	267.4	268.5	269.4	270.4	271.3	272.3	273.2	273.9
110°	302.0	302.9	304.0	305.0	306.0	306.8	307.4	308.1	308.7	309.3	309.9



TEST NUMBER: P333608-927

CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	340.2	340.8	341.3	341.8	342.4	343.0	343.8	344.6	345.3	346.1	346.4
115°	396.7	397.6	398.4	399.2	400.1	400.6	401.1	401.5	401.9	402.3	402.1
117.5°	453.4	453.8	454.2	454.6	455.0	455.3	455.7	456.1	456.4	456.8	456.9
120°	488.8	489.8	490.8	491.9	492.9	493.5	493.7	493.9	494.2	494.3	494.3
122.5°	527.1	527.5	527.8	528.2	528.5	529.0	529.6	530.1	530.6	531.2	531.0
125°	579.0	580.3	581.5	582.7	583.9	584.6	584.9	585.0	585.3	585.5	585.0
127.5°	634.3	634.9	635.6	636.4	637.1	637.5	637.8	638.0	638.3	638.5	638.3
130°	667.4	668.4	669.5	670.5	671.5	672.2	672.6	673.0	673.4	673.8	673.7
132.5°	700.5	702.2	703.9	705.6	707.3	708.1	708.0	707.9	707.8	707.7	707.5
135°	753.0	754.2	755.5	756.7	758.0	758.7	758.8	759.1	759.2	759.5	759.5
137.5°	802.3	803.5	804.7	805.9	807.1	807.9	808.3	808.8	809.3	809.7	809.9
140°	834.0	835.0	836.1	837.1	838.1	838.9	839.6	840.2	840.7	841.4	841.8
142.5°	865.7	866.6	867.4	868.2	869.1	870.0	870.7	871.5	872.3	873.1	873.3
145°	912.3	913.1	913.9	914.7	915.5	916.2	916.9	917.5	918.1	918.7	918.7
147.5°	955.4	955.8	956.2	956.7	957.1	957.6	958.1	958.6	959.1	959.6	960.0
150°	984.0	983.9	983.7	983.5	983.3	983.6	984.4	985.2	986.0	986.8	986.8
152.5°	1007.7	1007.9	1008.2	1008.5	1008.8	1009.1	1009.4	1009.7	1010.1	1010.4	1010.9
155°	1043.9	1043.9	1043.9	1043.9	1043.9	1044.0	1044.3	1044.4	1044.7	1044.8	1045.7
157.5°	1076.3	1075.9	1075.4	1075.0	1074.5	1074.4	1074.6	1074.8	1075.0	1075.2	1076.0
160°	1095.4	1094.9	1094.2	1093.6	1093.0	1092.8	1093.0	1093.2	1093.4	1093.6	1094.4
162.5°	1112.4	1112.0	1111.5	1111.0	1110.6	1110.4	1110.4	1110.5	1110.5	1110.6	1111.5
165°	1135.0	1134.6	1134.2	1133.9	1133.4	1133.3	1133.5	1133.7	1133.9	1134.1	1135.0
167.5°	1154.2	1153.3	1152.5	1151.8	1150.9	1150.5	1150.5	1150.5	1150.5	1150.5	1151.8
170°	1164.5	1163.7	1162.8	1162.1	1161.3	1160.8	1160.8	1160.8	1160.8	1160.8	1162.1
172.5°	1171.9	1171.1	1170.2	1169.4	1168.6	1168.2	1168.2	1168.2	1168.2	1168.2	1169.4
175°	1180.1	1179.3	1178.5	1177.7	1176.9	1176.5	1176.5	1176.5	1176.5	1176.5	1177.7
177.5°	1184.4	1183.8	1183.0	1182.4	1181.8	1181.4	1181.2	1181.1	1180.8	1180.7	1181.7
180°	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9



TEST NUMBER: P333608-927

CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1411.2	1413.1	1415.0	1415.8	1415.6	1415.5	1415.2	1415.1
5°	1402.5	1404.9	1407.2	1408.2	1407.7	1407.2	1406.8	1406.3
7.5°	1385.1	1386.7	1388.4	1388.9	1388.4	1387.9	1387.3	1386.8
10°	1370.3	1371.0	1371.7	1371.7	1371.0	1370.3	1369.6	1368.9
12.5°	1349.4	1349.9	1350.4	1350.1	1349.0	1348.0	1346.9	1345.8
15°	1314.9	1314.7	1314.5	1313.3	1311.1	1309.0	1306.9	1304.7
17.5°	1271.9	1270.7	1269.6	1268.1	1266.3	1264.6	1262.8	1261.1
20°	1240.3	1239.1	1237.9	1236.3	1234.1	1232.0	1229.9	1227.7
22.5°	1208.9	1206.6	1204.3	1202.2	1200.5	1198.7	1196.9	1195.2
25°	1157.4	1154.3	1151.2	1148.3	1145.7	1143.1	1140.5	1137.9
27.5°	1101.6	1097.3	1093.0	1089.6	1087.0	1084.5	1082.0	1079.5
30°	1061.7	1056.2	1050.8	1046.9	1044.8	1042.7	1040.5	1038.4
32.5°	1022.9	1016.8	1010.8	1006.5	1003.8	1001.1	998.3	995.6
35°	962.6	955.7	948.8	943.7	940.4	937.1	933.7	930.4
37.5°	899.5	891.3	883.0	877.3	874.0	870.8	867.5	864.3
40°	857.8	848.7	839.7	833.8	830.9	828.1	825.2	822.4
42.5°	816.7	807.9	799.3	792.9	788.7	784.6	780.4	776.2
45°	751.0	741.5	732.0	725.4	721.8	718.3	714.7	711.1
47.5°	686.0	676.2	666.5	659.6	655.6	651.6	647.8	643.8
50°	642.0	632.0	622.0	615.3	611.7	608.2	604.6	601.0
52.5°	600.3	589.5	578.8	571.6	568.1	564.5	560.9	557.4
55°	536.9	526.2	515.5	508.2	504.4	500.6	496.8	493.0
57.5°	473.4	463.0	452.5	445.5	442.2	438.8	435.4	432.1
60°	431.4	421.0	410.5	403.5	400.0	396.4	392.8	389.3
62.5°	390.2	380.5	370.8	364.2	360.6	357.0	353.5	349.9
65°	329.6	320.1	310.6	304.0	300.5	296.9	293.3	289.8
67.5°	271.8	263.1	254.4	248.6	245.7	242.9	240.0	237.2
70°	233.4	226.0	218.6	213.5	210.6	207.8	204.9	202.1
72.5°	197.7	190.9	184.1	179.7	177.8	175.9	174.0	172.1
75°	147.8	142.6	137.4	133.9	132.2	130.6	128.9	127.2
77.5°	105.2	101.6	97.8	95.4	94.2	92.9	91.7	90.5
80°	79.1	77.0	74.9	73.5	73.0	72.6	72.1	71.6
82.5°	59.2	58.1	57.2	56.6	56.2	55.9	55.7	55.4
85°	33.7	33.5	33.3	33.0	32.8	32.6	32.3	32.1
87.5°	16.2	16.4	16.6	16.6	16.6	16.6	16.5	16.4
90°	16.8	17.8	18.9	19.6	20.3	20.8	21.5	22.1
92.5°	38.0	39.4	40.7	41.7	42.1	42.5	43.0	43.4
95°	73.8	75.2	76.6	77.6	78.0	78.3	78.7	79.1
97.5°	115.6	116.9	118.3	119.1	119.3	119.5	119.8	120.0
100°	144.5	146.4	148.2	149.3	149.7	150.1	150.6	151.0
102.5°	174.3	176.3	178.3	179.6	180.2	180.8	181.3	181.9
105°	222.4	223.7	224.9	225.9	226.5	227.0	227.7	228.3
107.5°	274.4	275.0	275.7	276.0	275.9	275.9	275.8	275.8
110°	310.5	311.2	311.7	312.0	311.7	311.6	311.3	311.2



TEST NUMBER: P333608-927

CATALOG NUMBER: S125RDIP-S1090D1205U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	346.7	347.0	347.3	347.2	346.9	346.5	346.1	345.8
115°	401.9	401.6	401.5	401.2	401.1	400.8	400.6	400.4
117.5°	457.1	457.2	457.4	457.1	456.3	455.5	454.6	453.8
120°	494.3	494.3	494.3	493.9	493.1	492.3	491.5	490.7
122.5°	530.8	530.7	530.5	530.1	529.4	528.8	528.1	527.5
125°	584.6	584.2	583.8	583.5	583.4	583.1	582.9	582.7
127.5°	638.1	637.9	637.7	637.4	637.0	636.5	636.1	635.7
130°	673.4	673.2	673.0	672.7	672.3	671.9	671.5	671.1
132.5°	707.3	707.1	706.9	706.5	705.9	705.4	704.8	704.3
135°	759.5	759.5	759.5	759.1	758.2	757.4	756.6	755.7
137.5°	810.2	810.5	810.7	810.3	809.3	808.3	807.2	806.2
140°	842.2	842.6	843.0	842.7	841.7	840.7	839.6	838.6
142.5°	873.5	873.8	874.0	873.6	872.6	871.6	870.6	869.6
145°	918.7	918.7	918.7	918.4	917.8	917.2	916.6	915.9
147.5°	960.6	961.1	961.6	961.1	959.7	958.3	957.0	955.5
150°	986.8	986.8	986.8	986.7	986.2	985.8	985.4	985.0
152.5°	1011.4	1011.9	1012.3	1012.3	1011.5	1010.7	1010.0	1009.3
155°	1046.5	1047.3	1048.1	1048.0	1046.9	1045.9	1045.0	1043.9
157.5°	1076.8	1077.7	1078.5	1078.2	1076.9	1075.5	1074.2	1072.9
160°	1095.3	1096.1	1096.9	1096.8	1095.7	1094.7	1093.7	1092.7
162.5°	1112.5	1113.5	1114.5	1114.4	1113.2	1112.0	1110.8	1109.6
165°	1135.8	1136.5	1137.4	1137.2	1136.0	1134.7	1133.5	1132.3
167.5°	1152.9	1154.2	1155.4	1155.4	1154.1	1152.9	1151.6	1150.3
170°	1163.2	1164.5	1165.7	1165.6	1164.2	1162.8	1161.3	1159.9
172.5°	1170.6	1171.9	1173.1	1173.1	1171.8	1170.5	1169.3	1168.0
175°	1178.9	1180.1	1181.4	1181.3	1179.9	1178.5	1176.9	1175.5
177.5°	1182.6	1183.7	1184.6	1184.6	1183.4	1182.3	1181.1	1180.0
180°	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9

(END OF REPORT)