

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: P333577-940

Luminaire Tested: **S125RDIP-S850D1205U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333577-940
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-S850D1205U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 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: 7192.7 lumens
Efficiency: N/A
Efficacy: 126.4 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

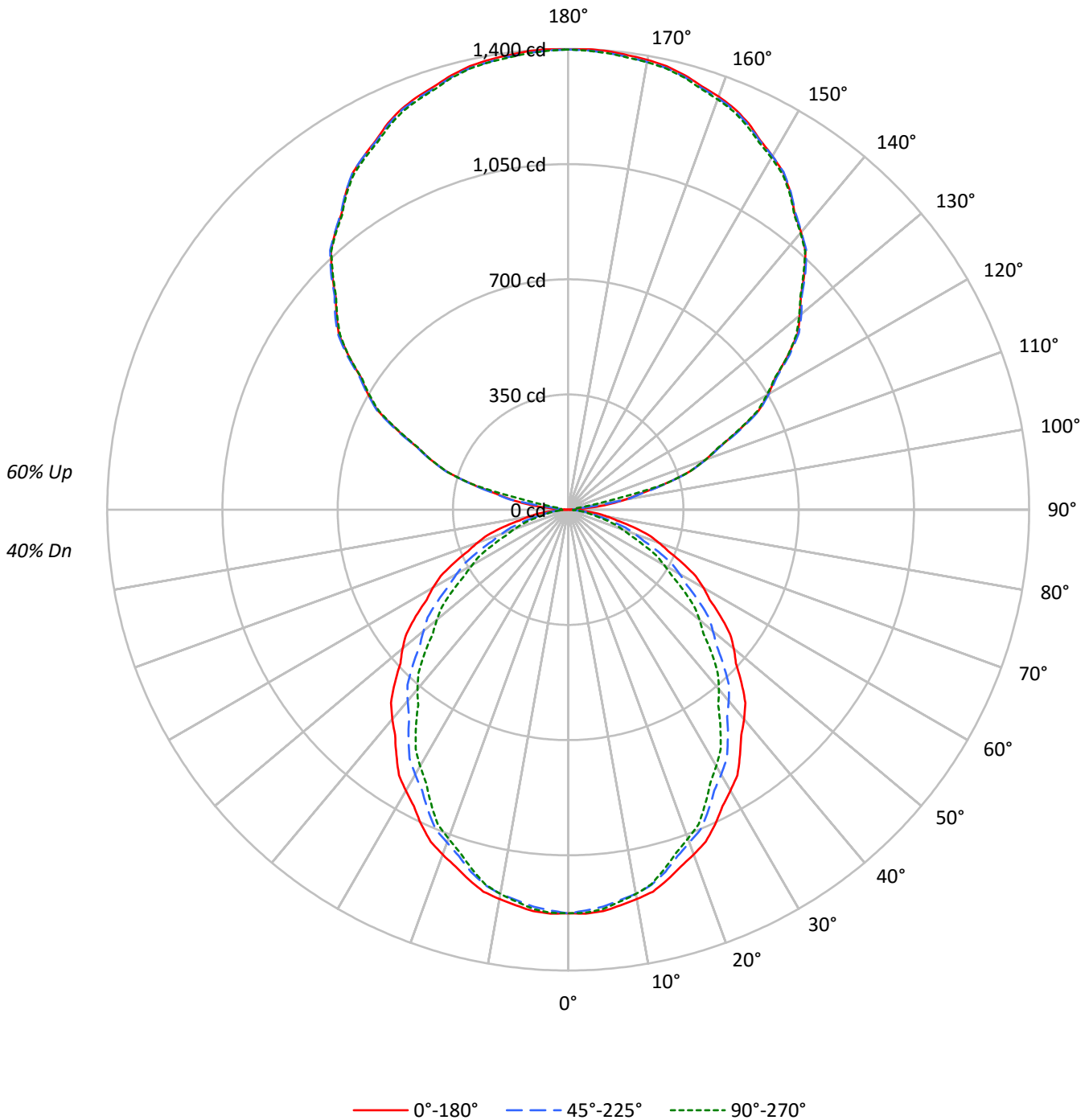
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	92	88	84	87	84	80	78	69	66	64	55	53	52	42	41	40	34
2	87	80	74	69	79	73	68	64	60	57	53	48	46	44	37	36	34	29
3	80	71	63	58	72	65	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	55	49	66	57	51	45	47	42	38	38	35	32	30	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16
7	57	45	37	32	52	41	35	30	35	29	26	28	24	21	22	19	17	15
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	20	18	16	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	17	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7919	7919	7919
5°	7937	7847	7895
10°	7877	7774	7774
15°	7783	7616	7554
20°	7663	7396	7307
25°	7524	7180	7021
30°	7348	6927	6706
35°	7171	6666	6352
40°	7003	6395	6004
45°	6801	6090	5624
50°	6597	5760	5230
55°	6361	5443	4808
60°	6124	5059	4354
65°	5845	4614	3834
70°	5527	4056	3305
75°	5085	3421	2750
80°	4478	2685	2310
85°	3772	2193	2060



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.6
10°-20°	322.2	4.5
20°-30°	467.2	6.5
30°-40°	532.5	7.4
40°-50°	519.1	7.2
50°-60°	436.9	6.1
60°-70°	306.3	4.3
70°-80°	157.4	2.2
80°-90°	42.7	0.6
90°-100°	50.8	0.7
100°-110°	313.1	4.4
110°-120°	567.9	7.9
120°-130°	728.8	10.1
130°-140°	783.9	10.9
140°-150°	735.8	10.2
150°-160°	595.2	8.3
160°-170°	384.9	5.4
170°-180°	132.8	1.8
0°-30°	904.7	12.6
0°-40°	1437.3	20.0
0°-60°	2393.2	33.3
0°-90°	2899.6	40.3
90°-120°	931.8	13.0
90°-150°	3180.2	44.2
90°-180°	4293.0	59.7
0°-180°	7192.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1226	1226	1226	1226	1226	
5°	1224	1220	1210	1219	1218	116
15°	1164	1158	1139	1138	1130	328
25°	1056	1041	1008	996	985	486
35°	910	886	846	819	806	569
45°	745	716	667	631	616	574
55°	565	534	483	443	427	505
65°	382	350	302	266	251	379
75°	204	175	137	118	110	216
85°	51	35	30	29	28	57
90°	1	9	17	22	25	5
95°	59	54	17	22	22	75
105°	305	309	309	309	308	323
115°	572	577	578	574	568	567
125°	814	820	821	817	814	726
135°	1015	1020	1019	1016	1010	782
145°	1176	1178	1178	1179	1173	735
155°	1295	1290	1291	1294	1286	597
165°	1367	1361	1362	1367	1360	386
175°	1398	1392	1393	1400	1392	133
180°	1398	1398	1398	1398	1398	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2
2.5°	1228.3	1227.9	1227.4	1226.9	1226.4	1225.3	1223.7	1222.0	1220.4	1218.7	1220.4
5°	1224.3	1223.5	1222.6	1221.8	1221.0	1219.5	1217.2	1215.0	1212.6	1210.4	1212.5
7.5°	1212.3	1211.5	1210.7	1209.9	1209.2	1207.4	1204.7	1201.9	1199.3	1196.5	1197.9
10°	1201.1	1200.5	1199.9	1199.3	1198.6	1196.9	1194.1	1191.1	1188.3	1185.4	1186.0
12.5°	1188.6	1187.8	1187.0	1186.2	1185.4	1183.1	1179.2	1175.4	1171.5	1167.6	1168.1
15°	1164.1	1162.9	1161.6	1160.4	1159.1	1156.4	1152.1	1147.7	1143.4	1139.1	1138.9
17.5°	1136.5	1134.6	1132.7	1130.9	1128.9	1125.2	1119.8	1114.4	1108.9	1103.5	1102.5
20°	1115.0	1112.9	1110.9	1108.8	1106.8	1102.4	1095.9	1089.3	1082.7	1076.1	1075.1
22.5°	1091.3	1089.2	1087.2	1085.1	1083.1	1078.6	1071.7	1064.8	1057.8	1051.0	1048.9
25°	1055.8	1052.7	1049.5	1046.5	1043.4	1038.0	1030.5	1022.8	1015.2	1007.6	1005.0
27.5°	1015.0	1011.3	1007.5	1003.8	1000.1	994.1	986.0	977.8	969.6	961.4	957.7
30°	985.3	981.4	977.6	973.7	969.7	963.4	954.8	946.2	937.5	928.9	924.2
32.5°	956.4	951.9	947.4	942.8	938.2	931.5	922.7	913.9	905.1	896.3	891.1
35°	909.5	904.5	899.6	894.6	889.7	882.5	873.3	864.1	854.8	845.5	839.5
37.5°	863.3	857.3	851.3	845.3	839.3	831.5	822.0	812.3	802.8	793.3	786.1
40°	830.7	824.6	818.3	812.2	806.0	798.0	788.1	778.2	768.4	758.5	750.6
42.5°	796.7	790.3	784.0	777.6	771.2	763.0	752.8	742.6	732.4	722.2	714.7
45°	744.6	738.6	732.6	726.7	720.7	712.0	700.7	689.5	678.1	666.8	658.5
47.5°	690.7	684.4	678.1	671.8	665.5	656.7	645.2	633.8	622.4	611.0	602.5
50°	656.6	649.8	643.0	636.2	629.5	620.2	608.4	596.7	585.0	573.3	564.6
52.5°	619.6	612.6	605.6	598.7	591.7	582.7	571.7	560.6	549.5	538.4	529.1
55°	564.9	558.3	551.8	545.2	538.6	529.5	518.0	506.5	495.0	483.4	474.1
57.5°	509.7	502.7	495.6	488.6	481.6	472.5	461.4	450.2	439.2	428.0	419.0
60°	474.1	467.0	459.8	452.5	445.3	436.2	425.1	413.9	402.9	391.7	382.7
62.5°	436.4	429.5	422.7	415.7	408.8	399.8	388.5	377.3	366.0	354.7	346.3
65°	382.5	375.5	368.5	361.5	354.5	345.5	334.7	323.7	312.8	301.9	293.6
67.5°	329.0	321.9	315.0	308.0	301.0	292.2	281.8	271.3	260.9	250.4	242.9
70°	292.7	285.6	278.7	271.6	264.7	256.0	245.8	235.4	225.2	214.8	208.5
72.5°	257.1	250.2	243.4	236.6	229.8	221.5	211.9	202.2	192.6	183.0	177.1
75°	203.8	197.6	191.4	185.2	179.1	171.7	163.0	154.4	145.7	137.1	132.5
77.5°	150.8	145.8	140.9	136.0	131.0	125.1	118.2	111.3	104.3	97.5	94.3
80°	120.4	115.5	110.5	105.6	100.7	95.3	89.5	83.7	78.0	72.2	70.4
82.5°	90.8	86.3	81.9	77.4	72.9	68.8	64.8	60.9	56.9	53.0	52.1
85°	50.9	47.3	43.5	39.9	36.1	33.7	32.7	31.7	30.7	29.6	29.4
87.5°	17.2	16.5	15.7	14.9	14.1	13.8	14.0	14.1	14.3	14.4	14.6
90°	1.1	2.9	4.7	6.6	8.4	10.2	11.8	13.4	15.0	16.6	17.7
92.5°	16.0	14.7	13.4	12.1	10.8	10.9	12.3	13.7	15.2	16.6	17.7
95°	59.0	58.4	57.7	57.0	56.3	51.6	42.8	34.1	25.3	16.6	17.7
97.5°	123.3	124.6	125.8	127.1	128.3	120.3	102.9	85.6	68.3	51.0	44.5
100°	173.1	173.8	174.4	175.1	175.8	176.6	177.5	178.5	179.4	180.3	146.0
102.5°	223.6	224.5	225.4	226.2	227.1	227.8	228.4	229.0	229.5	230.1	223.6
105°	304.7	305.6	306.5	307.5	308.4	308.8	308.8	308.8	308.8	308.8	308.8
107.5°	388.9	388.9	388.9	388.9	388.9	389.1	389.5	389.9	390.5	390.9	390.9
110°	443.5	443.5	443.5	443.5	443.5	443.8	444.3	444.7	445.1	445.6	445.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	495.0	495.5	496.1	496.6	497.1	497.6	497.8	498.1	498.4	498.6	497.8
115°	572.0	573.2	574.4	575.5	576.7	577.4	577.6	577.8	578.0	578.3	577.4
117.5°	651.8	651.8	651.8	651.8	651.7	652.1	653.0	653.8	654.7	655.6	654.4
120°	701.6	701.3	701.2	700.9	700.7	700.9	701.6	702.3	702.9	703.6	703.2
122.5°	745.6	746.5	747.3	748.1	749.0	749.7	749.9	750.3	750.6	750.9	750.5
125°	813.5	815.1	816.7	818.3	819.9	820.7	820.7	820.7	820.7	820.7	819.8
127.5°	878.4	879.6	880.7	881.8	883.0	883.5	883.3	883.2	883.1	883.0	882.4
130°	918.2	919.4	920.5	921.7	922.8	923.5	923.7	924.0	924.2	924.4	923.7
132.5°	958.0	959.3	960.6	962.0	963.3	963.8	963.2	962.7	962.2	961.7	961.6
135°	1014.6	1015.9	1017.4	1018.7	1020.1	1020.6	1020.1	1019.7	1019.1	1018.7	1018.2
137.5°	1066.6	1067.8	1069.0	1070.1	1071.4	1071.7	1071.4	1070.9	1070.5	1070.1	1070.2
140°	1100.5	1101.1	1101.5	1102.0	1102.4	1102.5	1102.3	1102.1	1101.9	1101.6	1102.1
142.5°	1131.2	1131.5	1131.8	1132.1	1132.4	1132.7	1133.0	1133.3	1133.6	1134.0	1134.1
145°	1176.3	1176.7	1177.1	1177.6	1178.0	1178.3	1178.3	1178.3	1178.3	1178.3	1178.6
147.5°	1215.6	1215.5	1215.4	1215.3	1215.2	1215.3	1215.6	1215.8	1216.2	1216.5	1216.7
150°	1240.5	1240.0	1239.6	1239.1	1238.7	1238.7	1239.1	1239.6	1240.0	1240.5	1240.9
152.5°	1264.5	1263.6	1262.5	1261.5	1260.4	1260.2	1260.7	1261.1	1261.6	1262.0	1262.5
155°	1295.4	1294.1	1292.6	1291.3	1289.9	1289.4	1289.9	1290.3	1290.8	1291.3	1292.0
157.5°	1319.3	1318.4	1317.6	1316.8	1315.9	1315.5	1315.6	1315.6	1315.7	1315.7	1316.4
160°	1335.9	1334.4	1333.1	1331.7	1330.3	1329.7	1330.0	1330.2	1330.4	1330.6	1331.6
162.5°	1349.1	1347.7	1346.3	1345.0	1343.5	1343.0	1343.2	1343.5	1343.7	1343.9	1345.2
165°	1366.9	1365.6	1364.1	1362.8	1361.4	1360.8	1361.0	1361.3	1361.5	1361.7	1363.2
167.5°	1380.2	1378.8	1377.3	1375.9	1374.5	1373.9	1374.1	1374.3	1374.6	1374.8	1376.4
170°	1387.7	1386.1	1384.4	1382.8	1381.2	1380.5	1380.7	1381.0	1381.2	1381.4	1383.3
172.5°	1392.6	1391.0	1389.4	1387.8	1386.2	1385.5	1386.0	1386.4	1386.8	1387.2	1388.9
175°	1398.0	1396.6	1395.3	1393.8	1392.5	1391.9	1392.1	1392.4	1392.6	1392.9	1394.6
177.5°	1400.5	1399.4	1398.3	1397.2	1396.1	1395.6	1395.8	1396.0	1396.2	1396.3	1397.7
180°	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2
2.5°	1222.0	1223.7	1225.3	1226.1	1225.9	1225.7	1225.6	1225.4
5°	1214.5	1216.6	1218.6	1219.5	1219.1	1218.6	1218.3	1217.8
7.5°	1199.4	1200.9	1202.3	1202.7	1202.3	1201.8	1201.4	1201.0
10°	1186.6	1187.2	1187.8	1187.8	1187.2	1186.6	1186.0	1185.4
12.5°	1168.5	1168.9	1169.4	1169.2	1168.2	1167.2	1166.4	1165.4
15°	1138.7	1138.4	1138.3	1137.3	1135.4	1133.5	1131.7	1129.8
17.5°	1101.4	1100.5	1099.4	1098.1	1096.6	1095.1	1093.6	1092.1
20°	1074.1	1073.0	1072.0	1070.6	1068.7	1066.8	1065.0	1063.2
22.5°	1046.9	1044.9	1042.9	1041.1	1039.6	1038.0	1036.5	1035.0
25°	1002.3	999.6	996.9	994.4	992.1	989.9	987.7	985.3
27.5°	954.0	950.2	946.5	943.5	941.4	939.1	937.0	934.8
30°	919.4	914.7	909.9	906.7	904.8	902.9	901.1	899.2
32.5°	885.8	880.6	875.4	871.6	869.2	866.9	864.5	862.2
35°	833.6	827.6	821.6	817.3	814.3	811.5	808.6	805.7
37.5°	779.0	771.8	764.6	759.6	756.9	754.0	751.3	748.5
40°	742.8	735.0	727.2	722.0	719.6	717.1	714.6	712.2
42.5°	707.2	699.7	692.2	686.6	683.1	679.4	675.7	672.2
45°	650.3	642.1	633.8	628.2	625.1	622.1	618.9	615.8
47.5°	594.1	585.6	577.1	571.1	567.8	564.4	560.9	557.5
50°	556.0	547.3	538.7	532.8	529.8	526.6	523.5	520.5
52.5°	519.9	510.5	501.2	495.0	492.0	488.8	485.8	482.7
55°	464.9	455.7	446.4	440.1	436.8	433.5	430.3	427.0
57.5°	409.9	400.9	391.8	385.8	382.9	380.0	377.1	374.2
60°	373.6	364.5	355.5	349.5	346.3	343.3	340.2	337.1
62.5°	337.9	329.5	321.1	315.4	312.3	309.2	306.1	303.0
65°	285.4	277.2	268.9	263.3	260.2	257.2	254.0	250.9
67.5°	235.3	227.8	220.3	215.3	212.9	210.4	207.9	205.5
70°	202.1	195.7	189.3	184.9	182.4	179.9	177.5	175.0
72.5°	171.2	165.3	159.4	155.7	154.0	152.4	150.8	149.1
75°	128.0	123.5	119.0	116.0	114.5	113.1	111.6	110.2
77.5°	91.0	87.9	84.7	82.7	81.6	80.5	79.5	78.4
80°	68.6	66.7	64.8	63.7	63.3	62.9	62.4	62.1
82.5°	51.3	50.4	49.5	49.0	48.7	48.5	48.2	48.0
85°	29.2	29.0	28.8	28.6	28.4	28.2	28.0	27.8
87.5°	14.9	15.2	15.3	15.4	15.4	15.4	15.3	15.3
90°	18.9	20.1	21.2	22.1	22.8	23.5	24.2	24.9
92.5°	18.9	20.1	21.2	21.9	22.2	22.6	22.9	23.2
95°	18.9	20.1	21.2	21.8	21.8	21.8	21.8	21.8
97.5°	38.0	31.5	25.0	21.8	21.8	21.8	21.8	21.8
100°	111.7	77.4	43.1	25.4	24.5	23.6	22.6	21.8
102.5°	217.0	210.6	204.1	193.1	177.4	161.7	146.1	130.4
105°	308.8	308.8	308.8	308.7	308.4	308.3	308.0	307.8
107.5°	391.0	391.0	391.1	390.7	390.0	389.4	388.7	388.0
110°	444.3	443.5	442.8	442.6	442.8	443.1	443.4	443.5



TEST NUMBER: P333577-940

CATALOG NUMBER: S125RDIP-S850D1205U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	497.0	496.1	495.2	494.5	494.3	493.9	493.7	493.3
115°	576.4	575.5	574.6	573.5	572.0	570.7	569.3	567.9
117.5°	653.2	652.0	650.8	649.9	649.3	648.7	648.1	647.5
120°	702.8	702.3	701.9	701.1	699.9	698.7	697.6	696.4
122.5°	750.0	749.6	749.1	748.1	746.8	745.5	744.2	742.9
125°	818.9	818.0	817.1	816.3	815.6	814.9	814.2	813.5
127.5°	881.9	881.5	880.9	879.9	878.2	876.4	874.7	873.0
130°	923.0	922.3	921.7	920.7	919.5	918.5	917.3	916.1
132.5°	961.4	961.3	961.2	960.6	959.4	958.2	957.1	955.9
135°	1017.8	1017.4	1016.9	1015.9	1014.6	1013.2	1011.8	1010.4
137.5°	1070.3	1070.4	1070.5	1070.0	1068.7	1067.6	1066.3	1065.1
140°	1102.5	1103.0	1103.5	1103.0	1101.6	1100.3	1098.9	1097.5
142.5°	1134.2	1134.3	1134.3	1133.7	1132.3	1131.0	1129.5	1128.2
145°	1178.8	1179.0	1179.2	1178.7	1177.2	1175.9	1174.5	1173.1
147.5°	1217.0	1217.3	1217.5	1216.8	1215.2	1213.5	1211.9	1210.2
150°	1241.4	1241.9	1242.3	1241.6	1239.8	1238.0	1236.1	1234.3
152.5°	1262.9	1263.5	1263.9	1263.3	1261.6	1260.0	1258.3	1256.7
155°	1292.6	1293.3	1294.1	1293.4	1291.6	1289.8	1287.9	1286.1
157.5°	1317.2	1317.9	1318.7	1318.1	1316.3	1314.5	1312.6	1310.7
160°	1332.5	1333.4	1334.4	1333.9	1332.0	1330.2	1328.4	1326.5
162.5°	1346.5	1347.8	1349.1	1348.7	1346.7	1344.6	1342.6	1340.6
165°	1364.5	1365.9	1367.3	1367.0	1365.2	1363.3	1361.5	1359.7
167.5°	1378.1	1379.7	1381.4	1381.3	1379.1	1377.1	1375.0	1373.0
170°	1385.1	1387.0	1388.8	1388.7	1386.6	1384.6	1382.5	1380.4
172.5°	1390.5	1392.2	1393.8	1393.7	1391.6	1389.6	1387.4	1385.4
175°	1396.5	1398.4	1400.2	1400.1	1398.0	1396.0	1393.8	1391.8
177.5°	1398.9	1400.3	1401.5	1401.4	1400.0	1398.5	1397.0	1395.5
180°	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0

(END OF REPORT)