

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: P333238-940

Luminaire Tested: **S125DIP-S850D1035U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333238-940
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: S125DIP-S850D1035U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6736.9 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

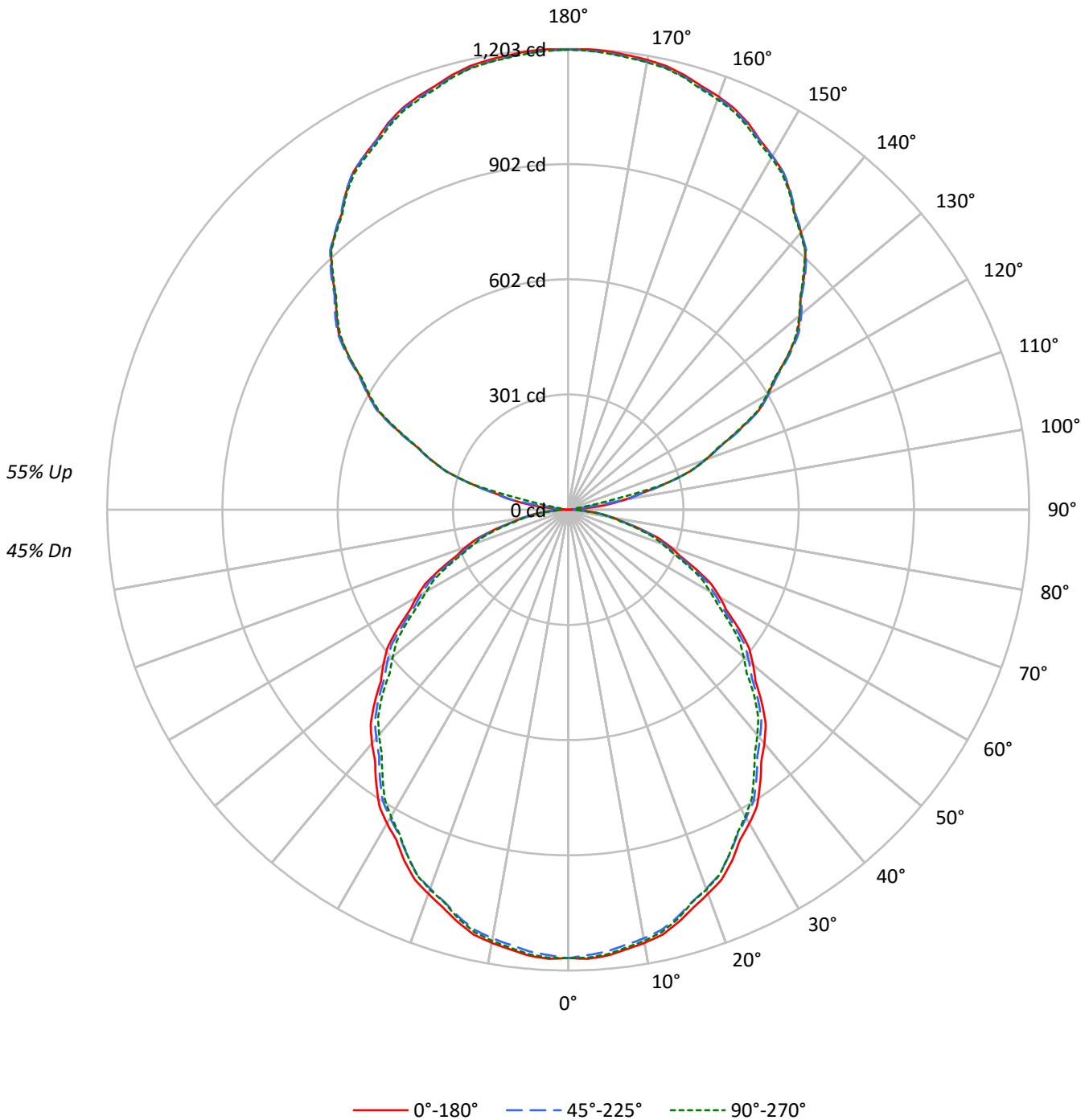
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333238-940

CATALOG NUMBER: S125DIP-S850D1035U940-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P333238-940

CATALOG NUMBER: S125DIP-S850D1035U940-4F0-1E-UDD-F

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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	88	85	88	85	81	78	71	68	66	58	56	54	46	45	44	38
2	88	81	74	69	80	74	69	64	62	58	55	51	48	45	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	21	18
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14
9	49	37	30	25	45	35	28	23	29	24	20	25	21	18	20	17	15	13
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7559	7559	7559
5°	7577	7505	7553
10°	7531	7452	7494
15°	7449	7362	7393
20°	7332	7236	7249
25°	7207	7088	7081
30°	7052	6927	6893
35°	6885	6754	6659
40°	6715	6566	6473
45°	6530	6395	6268
50°	6327	6187	6002
55°	6132	5954	5788
60°	5898	5717	5515
65°	5619	5434	5251
70°	5351	5108	4932
75°	4876	4716	4551
80°	4340	4273	4169
85°	3772	3846	3631



TEST NUMBER: P333238-940

CATALOG NUMBER: S125DIP-S850D1035U940-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	1.6
10°-20°	311.8	4.6
20°-30°	460.3	6.8
30°-40°	537.2	8.0
40°-50°	539.5	8.0
50°-60°	473.6	7.0
60°-70°	352.9	5.2
70°-80°	201.8	3.0
80°-90°	61.2	0.9
90°-100°	43.6	0.6
100°-110°	269.0	4.0
110°-120°	487.9	7.2
120°-130°	626.1	9.3
130°-140°	673.4	10.0
140°-150°	632.1	9.4
150°-160°	511.3	7.6
160°-170°	330.7	4.9
170°-180°	114.1	1.7
0°-30°	882.5	13.1
0°-40°	1419.6	21.1
0°-60°	2432.7	36.1
0°-90°	3048.6	45.3
90°-120°	800.5	11.9
90°-150°	2732.2	40.6
90°-180°	3688.0	54.7
0°-180°	6736.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1169	1166	1158	1165	1165	111
15°	1114	1111	1101	1106	1106	314
25°	1011	1006	995	996	994	465
35°	873	869	857	852	845	546
45°	715	711	700	690	686	551
55°	545	541	529	521	514	486
65°	368	365	356	348	344	365
75°	195	193	189	186	182	208
85°	51	52	52	51	49	57
90°	1	8	14	19	21	5
95°	51	46	14	18	19	65
105°	262	265	265	265	264	277
115°	492	496	497	493	488	487
125°	699	705	705	702	699	624
135°	872	877	875	873	868	672
145°	1011	1012	1012	1013	1008	632
155°	1113	1108	1109	1112	1105	513
165°	1174	1169	1170	1175	1168	332
175°	1201	1196	1197	1203	1196	114
180°	1201	1201	1201	1201	1201	



TEST NUMBER: P333238-940

CATALOG NUMBER: S125DIP-S850D1035U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5
2.5°	1173.6	1173.0	1172.6	1172.1	1171.5	1170.5	1168.9	1167.2	1165.6	1164.0	1165.6
5°	1168.8	1168.3	1167.9	1167.5	1167.1	1165.8	1163.8	1161.7	1159.7	1157.6	1159.5
7.5°	1158.0	1157.6	1157.2	1156.7	1156.4	1155.0	1152.7	1150.5	1148.3	1145.9	1147.7
10°	1148.3	1148.0	1147.5	1147.1	1146.7	1145.4	1143.1	1140.9	1138.6	1136.3	1138.0
12.5°	1136.5	1135.8	1135.1	1134.3	1133.5	1132.1	1130.1	1127.9	1125.8	1123.7	1125.1
15°	1114.1	1113.5	1112.9	1112.2	1111.6	1110.2	1108.0	1105.6	1103.4	1101.1	1102.2
17.5°	1088.3	1087.4	1086.5	1085.7	1084.8	1083.1	1080.8	1078.4	1076.0	1073.7	1075.0
20°	1066.8	1066.5	1066.0	1065.6	1065.2	1063.6	1061.0	1058.3	1055.6	1052.9	1054.4
22.5°	1045.4	1044.6	1043.9	1043.1	1042.4	1040.8	1038.3	1035.7	1033.2	1030.7	1031.7
25°	1011.3	1010.3	1009.2	1008.2	1007.2	1005.3	1002.6	1000.0	997.3	994.6	995.1
27.5°	971.4	970.9	970.3	969.6	969.0	967.3	964.6	961.8	959.0	956.3	956.4
30°	945.6	944.9	944.3	943.7	943.1	941.2	938.2	935.0	931.9	928.9	928.4
32.5°	917.4	916.4	915.5	914.5	913.6	911.8	909.0	906.2	903.5	900.7	900.0
35°	873.3	872.4	871.6	870.8	870.0	868.2	865.3	862.4	859.5	856.7	855.6
37.5°	827.6	826.5	825.5	824.5	823.4	821.5	818.9	816.1	813.4	810.7	809.1
40°	796.5	795.4	794.4	793.4	792.3	790.4	787.5	784.6	781.8	778.8	777.0
42.5°	763.1	762.2	761.3	760.5	759.6	757.8	754.9	752.0	749.1	746.3	744.6
45°	715.0	714.1	713.3	712.5	711.7	710.0	707.6	705.1	702.6	700.2	697.7
47.5°	663.1	663.2	663.2	663.2	663.3	661.8	658.8	655.9	652.9	650.0	647.4
50°	629.7	629.1	628.5	627.9	627.3	625.7	623.3	620.8	618.3	615.8	613.1
52.5°	595.7	595.2	594.8	594.3	593.9	592.3	589.7	587.0	584.4	581.8	579.4
55°	544.6	543.9	543.3	542.7	542.1	540.3	537.4	534.6	531.6	528.8	526.9
57.5°	490.6	490.4	490.0	489.6	489.4	487.9	485.5	483.1	480.6	478.2	475.8
60°	456.6	455.8	455.0	454.1	453.3	451.7	449.4	447.2	445.0	442.6	440.6
62.5°	421.0	420.4	419.7	419.0	418.4	417.1	415.2	413.2	411.3	409.3	407.2
65°	367.7	367.2	366.8	366.4	366.0	364.7	362.4	360.2	357.8	355.6	353.7
67.5°	316.0	315.1	314.2	313.3	312.5	311.2	309.6	307.9	306.2	304.5	302.9
70°	283.4	282.3	281.3	280.3	279.3	277.9	276.0	274.1	272.2	270.5	269.2
72.5°	247.8	247.1	246.4	245.8	245.0	244.1	242.9	241.7	240.5	239.3	237.9
75°	195.4	195.0	194.6	194.2	193.8	193.1	192.0	191.0	189.9	189.0	188.3
77.5°	147.0	146.9	146.8	146.6	146.4	146.1	145.4	144.9	144.3	143.7	143.4
80°	116.7	116.7	116.7	116.7	116.7	116.5	116.1	115.7	115.2	114.9	114.7
82.5°	90.0	89.7	89.3	89.0	88.7	88.5	88.4	88.4	88.3	88.2	87.8
85°	50.9	51.2	51.4	51.5	51.7	51.9	51.9	51.9	51.9	51.9	51.6
87.5°	20.2	20.5	20.8	21.1	21.5	21.7	21.8	21.8	22.0	22.1	22.3
90°	0.9	2.5	4.0	5.6	7.2	8.7	10.1	11.5	12.8	14.3	15.2
92.5°	13.7	12.6	11.5	10.3	9.3	9.4	10.5	11.8	13.0	14.3	15.2
95°	50.7	50.1	49.6	49.0	48.4	44.3	36.8	29.2	21.8	14.3	15.2
97.5°	105.9	107.0	108.1	109.1	110.2	103.3	88.5	73.6	58.7	43.8	38.3
100°	148.6	149.3	149.9	150.4	151.1	151.8	152.6	153.4	154.1	154.9	125.5
102.5°	192.2	192.9	193.7	194.4	195.1	195.7	196.3	196.7	197.2	197.7	192.1
105°	261.7	262.5	263.3	264.1	264.9	265.3	265.3	265.3	265.3	265.3	265.3
107.5°	334.0	334.0	334.0	334.0	334.0	334.2	334.7	335.0	335.5	335.8	335.9
110°	381.0	381.0	381.0	381.0	381.0	381.3	381.7	382.1	382.5	382.8	382.3



TEST NUMBER: P333238-940

CATALOG NUMBER: S125DIP-S850D1035U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	425.3	425.7	426.1	426.7	427.1	427.5	427.8	427.9	428.2	428.5	427.7
115°	491.5	492.5	493.5	494.5	495.4	496.1	496.2	496.4	496.6	496.8	496.1
117.5°	560.0	560.0	559.9	559.9	559.9	560.3	561.0	561.7	562.5	563.2	562.2
120°	602.8	602.5	602.4	602.2	602.0	602.2	602.8	603.3	604.0	604.6	604.1
122.5°	640.5	641.2	642.0	642.7	643.5	644.0	644.4	644.6	644.9	645.2	644.7
125°	698.9	700.3	701.7	703.1	704.5	705.2	705.2	705.2	705.2	705.2	704.4
127.5°	754.7	755.6	756.6	757.6	758.6	759.0	758.9	758.8	758.7	758.6	758.1
130°	788.8	789.9	790.9	791.8	792.8	793.4	793.6	793.8	794.0	794.2	793.6
132.5°	823.0	824.2	825.4	826.4	827.6	828.0	827.5	827.2	826.7	826.3	826.1
135°	871.6	872.8	874.1	875.2	876.4	876.8	876.4	876.0	875.6	875.2	874.8
137.5°	916.3	917.4	918.4	919.4	920.4	920.8	920.4	920.1	919.7	919.4	919.4
140°	945.6	945.9	946.4	946.7	947.1	947.3	947.0	946.8	946.6	946.5	946.8
142.5°	971.9	972.1	972.4	972.6	972.9	973.1	973.4	973.7	973.9	974.2	974.3
145°	1010.6	1010.9	1011.3	1011.7	1012.1	1012.4	1012.4	1012.4	1012.4	1012.4	1012.5
147.5°	1044.4	1044.3	1044.2	1044.1	1044.0	1044.1	1044.4	1044.6	1044.8	1045.1	1045.4
150°	1065.8	1065.3	1065.0	1064.5	1064.2	1064.2	1064.5	1065.0	1065.3	1065.8	1066.1
152.5°	1086.4	1085.6	1084.7	1083.8	1082.9	1082.7	1083.1	1083.4	1083.9	1084.2	1084.7
155°	1112.9	1111.8	1110.5	1109.4	1108.2	1107.8	1108.2	1108.6	1108.9	1109.4	1110.0
157.5°	1133.4	1132.7	1132.0	1131.3	1130.6	1130.2	1130.2	1130.3	1130.3	1130.4	1131.0
160°	1147.6	1146.5	1145.3	1144.1	1142.9	1142.4	1142.6	1142.8	1143.0	1143.2	1144.0
162.5°	1159.0	1157.9	1156.6	1155.5	1154.3	1153.8	1154.0	1154.2	1154.4	1154.6	1155.7
165°	1174.4	1173.1	1172.0	1170.8	1169.7	1169.1	1169.3	1169.5	1169.7	1169.9	1171.1
167.5°	1185.8	1184.5	1183.3	1182.1	1180.9	1180.4	1180.5	1180.7	1180.9	1181.2	1182.6
170°	1192.1	1190.8	1189.4	1188.0	1186.6	1186.1	1186.2	1186.4	1186.6	1186.9	1188.4
172.5°	1196.4	1195.1	1193.6	1192.3	1190.9	1190.4	1190.7	1191.1	1191.4	1191.8	1193.2
175°	1201.0	1199.9	1198.7	1197.5	1196.3	1195.9	1196.1	1196.2	1196.4	1196.6	1198.2
177.5°	1203.2	1202.3	1201.3	1200.3	1199.4	1199.0	1199.2	1199.4	1199.5	1199.6	1200.8
180°	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0



TEST NUMBER: P333238-940

CATALOG NUMBER: S125DIP-S850D1035U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5
2.5°	1167.2	1168.9	1170.5	1171.3	1171.1	1170.9	1170.7	1170.5
5°	1161.4	1163.1	1165.0	1165.8	1165.6	1165.5	1165.2	1165.0
7.5°	1149.6	1151.4	1153.2	1154.0	1153.8	1153.6	1153.3	1153.2
10°	1139.6	1141.3	1142.9	1143.6	1143.4	1143.2	1143.0	1142.8
12.5°	1126.3	1127.7	1129.0	1129.6	1129.6	1129.5	1129.5	1129.4
15°	1103.2	1104.2	1105.3	1105.7	1105.7	1105.7	1105.7	1105.7
17.5°	1076.3	1077.5	1078.8	1079.0	1077.9	1076.9	1075.8	1074.9
20°	1055.9	1057.3	1058.7	1058.9	1057.9	1056.9	1055.9	1054.8
22.5°	1032.6	1033.6	1034.6	1034.7	1033.9	1033.2	1032.5	1031.9
25°	995.4	995.9	996.3	996.1	995.6	995.0	994.3	993.7
27.5°	956.4	956.5	956.6	956.4	955.7	955.1	954.5	953.9
30°	928.1	927.6	927.2	926.8	926.1	925.5	924.9	924.3
32.5°	899.2	898.5	897.8	896.8	895.7	894.6	893.5	892.4
35°	854.6	853.5	852.6	851.2	849.5	847.9	846.2	844.6
37.5°	807.6	806.1	804.6	803.3	802.5	801.5	800.6	799.6
40°	775.2	773.3	771.4	770.2	769.5	769.0	768.4	767.8
42.5°	742.9	741.2	739.5	738.2	737.3	736.3	735.3	734.4
45°	695.2	692.7	690.3	688.7	688.1	687.5	686.9	686.3
47.5°	644.9	642.4	639.9	637.9	636.5	635.1	633.6	632.1
50°	610.5	607.8	605.1	603.1	601.6	600.2	598.8	597.4
52.5°	577.1	574.7	572.4	570.4	568.8	567.2	565.6	564.0
55°	525.1	523.3	521.4	519.8	518.3	516.8	515.4	514.0
57.5°	473.5	471.1	468.7	467.1	466.3	465.6	464.8	464.0
60°	438.5	436.5	434.4	432.7	431.2	429.8	428.4	427.0
62.5°	404.9	402.7	400.5	398.8	397.7	396.5	395.5	394.3
65°	352.0	350.1	348.2	346.9	346.1	345.3	344.4	343.6
67.5°	301.4	299.8	298.3	297.2	296.8	296.2	295.7	295.2
70°	268.0	266.7	265.5	264.5	263.6	262.8	262.0	261.2
72.5°	236.5	235.1	233.7	232.6	231.8	231.0	230.2	229.3
75°	187.7	187.1	186.5	185.7	184.9	184.0	183.2	182.4
77.5°	143.0	142.6	142.2	141.8	141.2	140.6	140.1	139.5
80°	114.4	114.2	114.0	113.7	113.3	112.9	112.4	112.1
82.5°	87.4	87.0	86.7	86.5	86.4	86.3	86.2	86.1
85°	51.5	51.3	51.0	50.7	50.3	49.9	49.5	49.0
87.5°	22.5	22.7	22.9	22.9	22.6	22.5	22.3	22.0
90°	16.2	17.2	18.2	19.0	19.6	20.2	20.8	21.4
92.5°	16.2	17.2	18.2	18.8	19.1	19.4	19.7	20.0
95°	16.2	17.2	18.2	18.7	18.7	18.7	18.7	18.7
97.5°	32.6	27.1	21.5	18.7	18.7	18.7	18.7	18.7
100°	95.9	66.5	37.0	21.8	21.0	20.2	19.5	18.7
102.5°	186.5	180.9	175.3	165.9	152.4	138.9	125.5	112.0
105°	265.3	265.3	265.3	265.2	265.0	264.8	264.7	264.4
107.5°	335.9	336.0	336.0	335.7	335.1	334.6	333.9	333.3
110°	381.7	381.0	380.5	380.3	380.5	380.7	380.8	381.0



TEST NUMBER: P333238-940

CATALOG NUMBER: S125DIP-S850D1035U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	427.0	426.1	425.4	424.9	424.6	424.4	424.1	423.8
115°	495.3	494.5	493.7	492.7	491.5	490.3	489.1	487.9
117.5°	561.2	560.2	559.1	558.3	557.9	557.3	556.8	556.2
120°	603.8	603.3	603.0	602.3	601.3	600.3	599.3	598.3
122.5°	644.4	644.0	643.5	642.7	641.7	640.5	639.4	638.2
125°	703.6	702.8	702.0	701.3	700.7	700.1	699.5	698.9
127.5°	757.7	757.2	756.8	755.9	754.4	753.0	751.5	750.0
130°	793.0	792.4	791.8	791.0	790.1	789.1	788.1	787.0
132.5°	826.0	825.9	825.7	825.2	824.2	823.2	822.2	821.3
135°	874.4	874.1	873.6	872.8	871.6	870.5	869.2	868.1
137.5°	919.5	919.6	919.7	919.2	918.2	917.1	916.1	915.1
140°	947.3	947.6	948.0	947.6	946.5	945.2	944.1	942.9
142.5°	974.4	974.5	974.6	974.0	972.8	971.6	970.4	969.2
145°	1012.7	1012.9	1013.1	1012.6	1011.5	1010.2	1009.1	1007.9
147.5°	1045.5	1045.8	1046.1	1045.4	1044.0	1042.6	1041.2	1039.7
150°	1066.6	1066.9	1067.3	1066.8	1065.1	1063.5	1061.9	1060.4
152.5°	1085.0	1085.5	1085.8	1085.3	1083.9	1082.4	1081.0	1079.6
155°	1110.5	1111.2	1111.8	1111.3	1109.6	1108.0	1106.5	1104.9
157.5°	1131.7	1132.3	1132.9	1132.5	1130.9	1129.3	1127.7	1126.1
160°	1144.8	1145.6	1146.4	1145.9	1144.4	1142.8	1141.2	1139.6
162.5°	1156.8	1157.9	1159.0	1158.7	1157.0	1155.2	1153.5	1151.7
165°	1172.2	1173.5	1174.7	1174.5	1172.9	1171.3	1169.7	1168.1
167.5°	1184.0	1185.4	1186.9	1186.7	1184.9	1183.1	1181.3	1179.6
170°	1190.0	1191.6	1193.2	1193.0	1191.2	1189.5	1187.8	1186.0
172.5°	1194.6	1196.1	1197.5	1197.3	1195.5	1193.7	1191.9	1190.3
175°	1199.8	1201.4	1202.9	1202.8	1201.0	1199.3	1197.5	1195.7
177.5°	1201.8	1203.0	1204.1	1204.0	1202.7	1201.5	1200.2	1198.9
180°	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0

(END OF REPORT)