

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: P333571-940

Luminaire Tested: **S125RDIP-S850D1035U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333571-940
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-S850D1035U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6587.5 lumens
Efficiency: N/A
Efficacy: 126.7 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

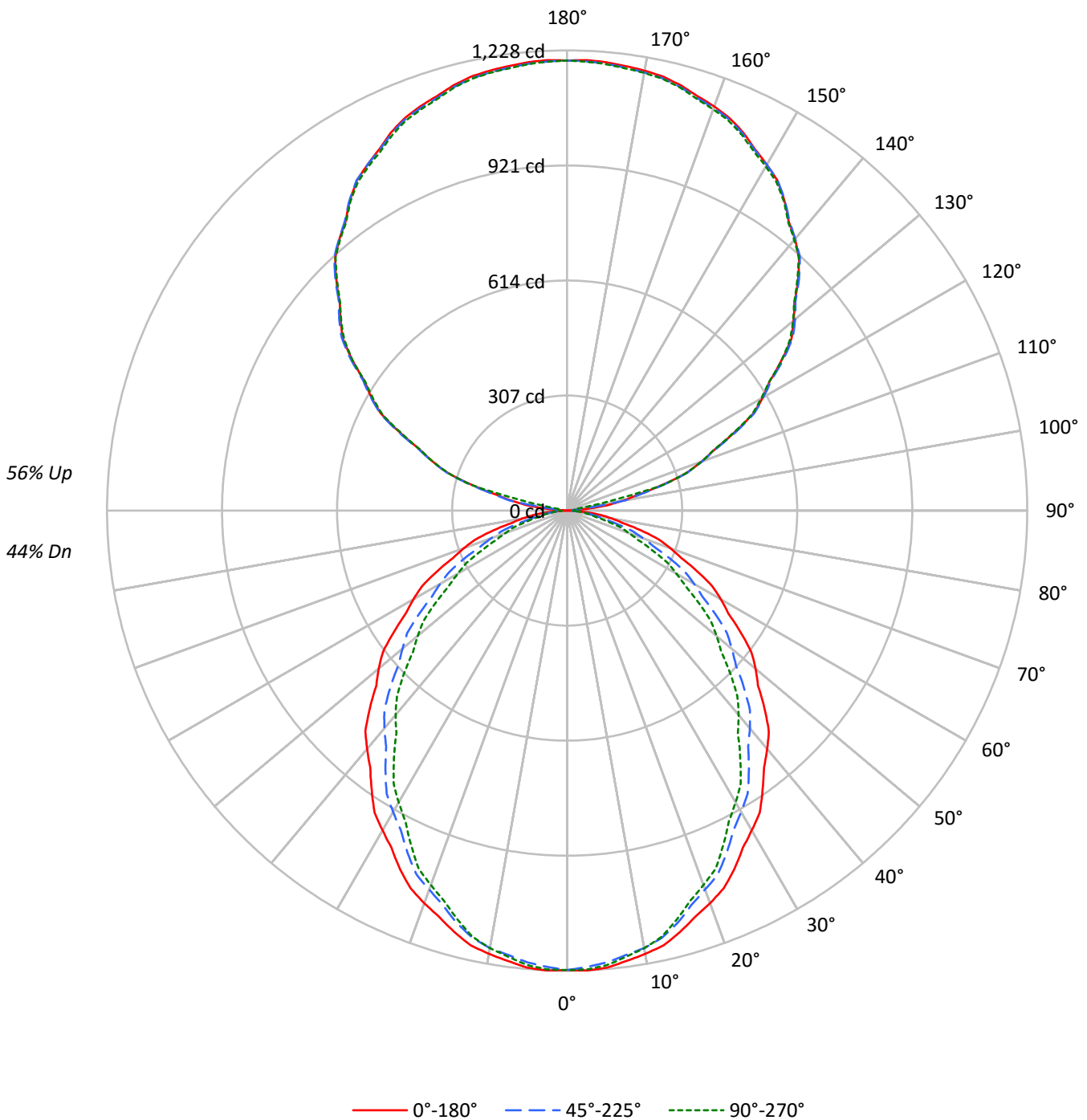
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	37
2	88	81	75	70	80	74	69	65	62	58	55	50	48	46	40	38	37	32
3	80	71	64	58	73	66	59	54	55	50	46	45	41	39	35	33	31	27
4	74	63	55	49	67	58	51	46	49	44	40	40	36	33	32	29	27	23
5	68	56	48	42	62	52	45	40	44	38	34	36	32	29	29	26	24	20
6	62	50	43	37	57	47	40	34	39	34	30	32	28	25	26	23	21	18
7	58	46	38	32	53	42	35	30	36	30	26	30	26	22	24	21	19	16
8	53	41	34	29	49	38	32	27	33	27	23	27	23	20	22	19	17	14
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	20	17	15	13
10	46	35	28	23	43	32	26	21	27	22	19	23	19	16	19	16	14	12

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	1.8
10°-20°	322.2	4.9
20°-30°	467.2	7.1
30°-40°	532.5	8.1
40°-50°	519.1	7.9
50°-60°	436.9	6.6
60°-70°	306.3	4.6
70°-80°	157.4	2.4
80°-90°	42.3	0.6
90°-100°	43.6	0.7
100°-110°	269.0	4.1
110°-120°	487.9	7.4
120°-130°	626.1	9.5
130°-140°	673.4	10.2
140°-150°	632.1	9.6
150°-160°	511.3	7.8
160°-170°	330.7	5.0
170°-180°	114.1	1.7
0°-30°	904.7	13.7
0°-40°	1437.3	21.8
0°-60°	2393.2	36.3
0°-90°	2899.2	44.0
90°-120°	800.5	12.2
90°-150°	2732.2	41.5
90°-180°	3688.0	56.0
0°-180°	6587.5	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	8	14	19	21	4
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	



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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	16.4	15.5	14.7	13.9	13.6	13.6	13.7	13.8	14.0	14.2
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



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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



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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°	14.4	14.5	14.7	14.8	14.8	14.7	14.7	14.6
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: P333571-940

CATALOG NUMBER: S125RDIP-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)