

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: P333571-935

Luminaire Tested: **S125RDIP-S850D1035U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333571-935  
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-S850D1035U935-4F0-1E-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: 6360.6 lumens  
Efficiency: N/A  
Efficacy: 122.3 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

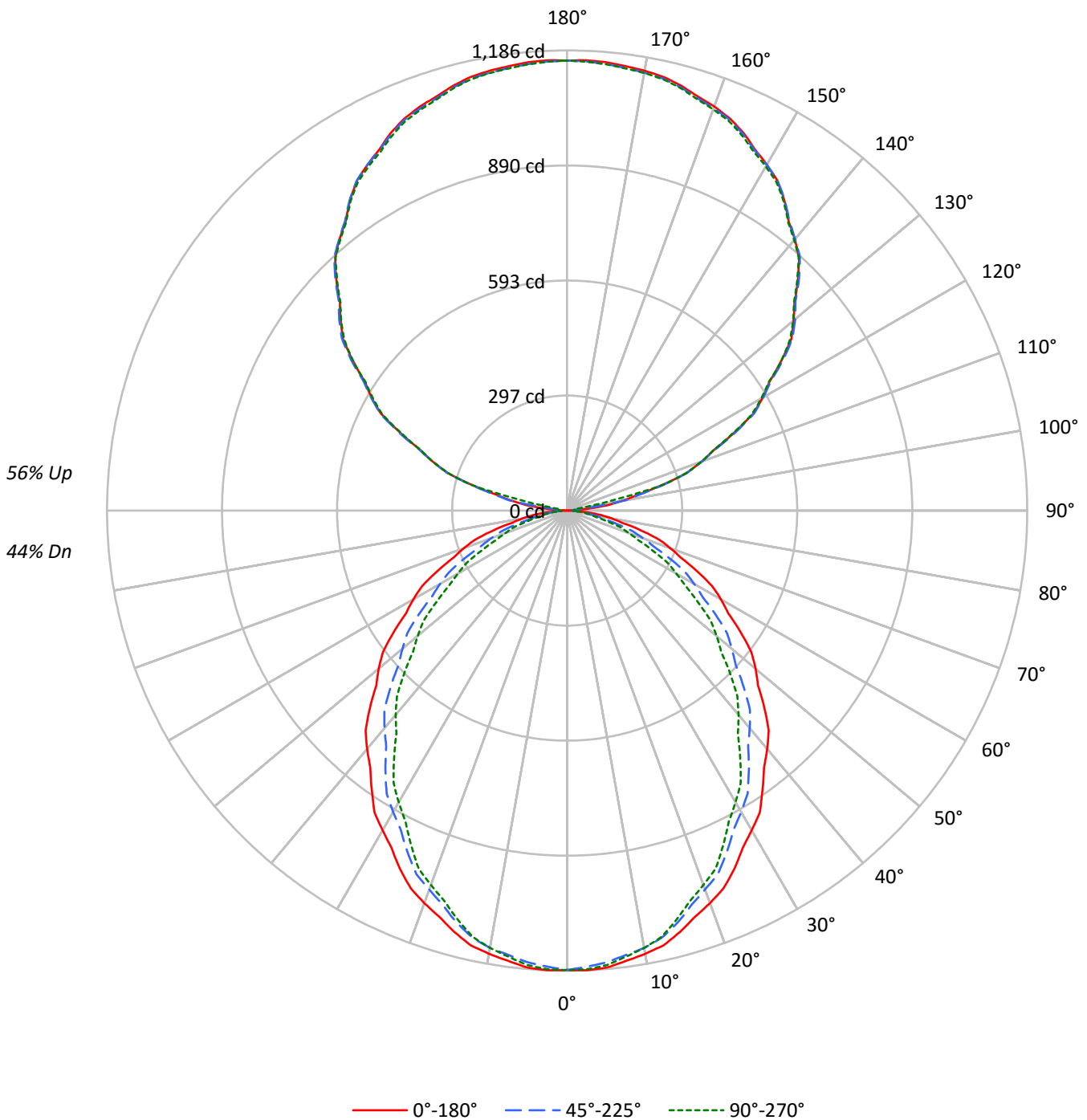
Input Watts (W): 52  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	7647	7647	7647
5°	7664	7577	7623
10°	7606	7506	7506
15°	7515	7353	7294
20°	7399	7142	7056
25°	7264	6933	6780
30°	7095	6689	6475
35°	6923	6437	6133
40°	6762	6175	5798
45°	6566	5881	5431
50°	6370	5561	5050
55°	6141	5255	4641
60°	5913	4885	4204
65°	5644	4455	3703
70°	5336	3916	3191
75°	4908	3301	2655
80°	4322	2592	2228
85°	3646	2119	1993



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.3	1.8
10°-20°	311.1	4.9
20°-30°	451.2	7.1
30°-40°	514.2	8.1
40°-50°	501.2	7.9
50°-60°	421.9	6.6
60°-70°	295.7	4.6
70°-80°	152.0	2.4
80°-90°	40.8	0.6
90°-100°	42.2	0.7
100°-110°	259.7	4.1
110°-120°	471.1	7.4
120°-130°	604.6	9.5
130°-140°	650.2	10.2
140°-150°	610.3	9.6
150°-160°	493.7	7.8
160°-170°	319.3	5.0
170°-180°	110.1	1.7
0°-30°	873.6	13.7
0°-40°	1387.8	21.8
0°-60°	2310.8	36.3
0°-90°	2799.4	44.0
90°-120°	772.9	12.2
90°-150°	2638.1	41.5
90°-180°	3561.0	56.0
0°-180°	6360.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1182	1178	1169	1177	1176	112
15°	1124	1118	1100	1099	1091	317
25°	1019	1005	973	961	951	469
35°	878	856	816	791	778	550
45°	719	692	644	609	595	554
55°	545	516	467	428	412	488
65°	369	338	292	257	242	366
75°	197	169	132	113	106	208
85°	49	34	29	28	27	55
90°	1	8	14	18	21	4
95°	49	45	14	18	18	62
105°	253	256	256	256	255	268
115°	475	479	480	476	471	470
125°	675	681	681	678	675	603
135°	842	846	845	843	838	649
145°	976	977	978	978	973	610
155°	1075	1070	1071	1073	1067	495
165°	1134	1129	1130	1134	1128	320
175°	1160	1155	1155	1161	1154	110
180°	1160	1160	1160	1160	1160	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0
2.5°	1186.0	1185.6	1185.1	1184.6	1184.1	1183.1	1181.6	1179.9	1178.4	1176.7	1178.4
5°	1182.2	1181.4	1180.5	1179.7	1179.0	1177.5	1175.3	1173.1	1170.9	1168.7	1170.7
7.5°	1170.5	1169.8	1169.0	1168.2	1167.5	1165.8	1163.2	1160.5	1158.0	1155.3	1156.7
10°	1159.8	1159.2	1158.6	1158.0	1157.4	1155.7	1153.0	1150.1	1147.4	1144.6	1145.1
12.5°	1147.6	1146.9	1146.1	1145.4	1144.6	1142.4	1138.6	1134.9	1131.2	1127.4	1127.8
15°	1124.0	1122.8	1121.6	1120.4	1119.2	1116.5	1112.4	1108.2	1104.1	1099.8	1099.7
17.5°	1097.3	1095.5	1093.7	1091.9	1090.0	1086.5	1081.2	1076.0	1070.7	1065.5	1064.5
20°	1076.6	1074.6	1072.6	1070.7	1068.7	1064.5	1058.2	1051.8	1045.4	1039.1	1038.1
22.5°	1053.7	1051.7	1049.7	1047.8	1045.8	1041.5	1034.7	1028.1	1021.4	1014.8	1012.8
25°	1019.4	1016.4	1013.4	1010.5	1007.5	1002.3	995.0	987.6	980.2	972.9	970.3
27.5°	980.1	976.5	972.8	969.2	965.6	959.8	952.0	944.1	936.3	928.3	924.7
30°	951.4	947.6	943.9	940.1	936.3	930.2	922.0	913.6	905.3	896.9	892.3
32.5°	923.5	919.1	914.7	910.3	905.9	899.4	891.0	882.4	873.9	865.4	860.4
35°	878.1	873.3	868.6	863.8	859.0	852.1	843.3	834.3	825.4	816.4	810.6
37.5°	833.5	827.8	822.0	816.1	810.4	802.9	793.7	784.4	775.2	765.9	759.1
40°	802.1	796.2	790.1	784.2	778.3	770.5	761.0	751.4	741.9	732.4	724.8
42.5°	769.2	763.1	757.0	750.8	744.7	736.8	726.9	717.0	707.1	697.3	690.1
45°	718.9	713.2	707.4	701.6	695.9	687.5	676.6	665.7	654.8	643.9	635.8
47.5°	666.9	660.8	654.7	648.7	642.6	634.0	623.0	612.0	601.0	590.0	581.8
50°	634.0	627.4	620.9	614.3	607.8	598.8	587.5	576.2	564.8	553.5	545.2
52.5°	598.2	591.5	584.8	578.1	571.4	562.7	552.0	541.3	530.5	519.9	510.9
55°	545.4	539.1	532.8	526.4	520.0	511.3	500.2	489.0	477.9	466.7	457.8
57.5°	492.1	485.3	478.5	471.7	465.0	456.2	445.5	434.7	424.0	413.3	404.6
60°	457.8	450.9	443.9	437.0	430.0	421.2	410.4	399.7	389.0	378.2	369.5
62.5°	421.4	414.7	408.1	401.4	394.8	386.1	375.1	364.3	353.4	342.5	334.4
65°	369.3	362.6	355.8	349.0	342.2	333.6	323.1	312.5	302.0	291.5	283.5
67.5°	317.6	310.8	304.1	297.4	290.6	282.1	272.1	262.0	251.9	241.8	234.5
70°	282.6	275.8	269.1	262.3	255.5	247.2	237.3	227.3	217.4	207.4	201.3
72.5°	248.2	241.6	235.1	228.4	221.9	213.9	204.6	195.3	186.0	176.7	171.0
75°	196.7	190.8	184.8	178.8	172.9	165.7	157.4	149.0	140.7	132.3	127.9
77.5°	145.6	140.8	136.0	131.3	126.5	120.8	114.1	107.5	100.7	94.1	91.0
80°	116.2	111.5	106.7	101.9	97.2	92.0	86.4	80.8	75.3	69.7	67.9
82.5°	87.6	83.3	79.0	74.7	70.4	66.4	62.6	58.8	54.9	51.1	50.3
85°	49.2	45.6	42.0	38.5	34.9	32.5	31.6	30.6	29.6	28.6	28.4
87.5°	16.6	15.8	15.0	14.2	13.4	13.1	13.2	13.3	13.3	13.5	13.7
90°	0.9	2.4	3.9	5.4	7.0	8.4	9.7	11.1	12.4	13.8	14.7
92.5°	13.3	12.1	11.1	10.0	9.0	9.0	10.2	11.4	12.6	13.8	14.7
95°	49.0	48.4	47.9	47.3	46.8	42.8	35.6	28.2	21.0	13.8	14.7
97.5°	102.3	103.3	104.4	105.4	106.4	99.8	85.4	71.0	56.7	42.3	36.9
100°	143.5	144.1	144.7	145.3	145.9	146.5	147.3	148.1	148.8	149.6	121.1
102.5°	185.5	186.2	187.0	187.7	188.4	189.0	189.5	189.9	190.4	190.9	185.5
105°	252.7	253.5	254.3	255.0	255.8	256.1	256.1	256.1	256.1	256.1	256.1
107.5°	322.5	322.5	322.5	322.5	322.5	322.7	323.1	323.5	323.9	324.3	324.3
110°	367.9	367.9	367.9	367.9	367.9	368.2	368.5	368.9	369.3	369.6	369.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	410.6	411.0	411.5	412.0	412.4	412.8	413.0	413.2	413.5	413.7	412.9
115°	474.6	475.5	476.5	477.4	478.4	479.0	479.1	479.3	479.5	479.7	479.0
117.5°	540.7	540.7	540.6	540.6	540.6	541.0	541.7	542.3	543.1	543.8	542.9
120°	582.0	581.8	581.6	581.4	581.3	581.4	582.0	582.6	583.2	583.8	583.3
122.5°	618.5	619.1	619.9	620.6	621.4	621.8	622.2	622.4	622.7	622.9	622.5
125°	674.9	676.1	677.5	678.9	680.2	680.9	680.9	680.9	680.9	680.9	680.1
127.5°	728.7	729.6	730.6	731.5	732.5	732.9	732.8	732.7	732.5	732.5	732.0
130°	761.6	762.7	763.6	764.6	765.5	766.0	766.3	766.5	766.6	766.8	766.3
132.5°	794.7	795.8	796.9	798.0	799.1	799.4	799.0	798.7	798.2	797.8	797.6
135°	841.6	842.7	844.0	845.1	846.2	846.6	846.2	845.8	845.4	845.1	844.6
137.5°	884.8	885.8	886.7	887.8	888.7	889.1	888.7	888.4	888.0	887.7	887.8
140°	913.0	913.3	913.8	914.1	914.5	914.6	914.4	914.2	914.0	913.9	914.2
142.5°	938.4	938.7	938.9	939.1	939.4	939.6	939.9	940.1	940.4	940.6	940.7
145°	975.8	976.1	976.5	976.9	977.2	977.5	977.5	977.5	977.5	977.5	977.7
147.5°	1008.4	1008.3	1008.2	1008.1	1008.1	1008.1	1008.4	1008.7	1008.8	1009.1	1009.4
150°	1029.1	1028.6	1028.3	1027.9	1027.5	1027.5	1027.9	1028.3	1028.6	1029.1	1029.4
152.5°	1049.0	1048.2	1047.3	1046.5	1045.6	1045.4	1045.8	1046.1	1046.5	1046.9	1047.3
155°	1074.6	1073.5	1072.3	1071.2	1070.1	1069.6	1070.1	1070.4	1070.7	1071.2	1071.8
157.5°	1094.3	1093.6	1093.0	1092.4	1091.7	1091.3	1091.3	1091.4	1091.4	1091.5	1092.1
160°	1108.1	1107.0	1105.9	1104.7	1103.5	1103.0	1103.3	1103.5	1103.6	1103.8	1104.6
162.5°	1119.1	1118.0	1116.8	1115.7	1114.6	1114.0	1114.2	1114.5	1114.7	1114.8	1115.9
165°	1133.9	1132.7	1131.6	1130.5	1129.4	1128.9	1129.0	1129.2	1129.5	1129.6	1130.8
167.5°	1145.0	1143.8	1142.5	1141.3	1140.2	1139.7	1139.9	1140.1	1140.2	1140.5	1141.9
170°	1151.1	1149.8	1148.4	1147.1	1145.7	1145.2	1145.4	1145.6	1145.7	1146.0	1147.5
172.5°	1155.2	1153.9	1152.5	1151.2	1149.9	1149.4	1149.7	1150.0	1150.4	1150.7	1152.1
175°	1159.7	1158.6	1157.4	1156.2	1155.1	1154.7	1154.9	1155.0	1155.2	1155.4	1156.9
177.5°	1161.7	1160.9	1159.9	1159.0	1158.1	1157.7	1157.9	1158.0	1158.2	1158.3	1159.4
180°	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0	1184.0
2.5°	1179.9	1181.6	1183.1	1183.9	1183.7	1183.5	1183.4	1183.2
5°	1172.7	1174.7	1176.6	1177.5	1177.1	1176.6	1176.3	1175.9
7.5°	1158.1	1159.5	1160.9	1161.3	1160.9	1160.5	1160.0	1159.6
10°	1145.7	1146.3	1146.9	1146.9	1146.3	1145.7	1145.1	1144.6
12.5°	1128.3	1128.7	1129.1	1128.9	1128.0	1127.0	1126.2	1125.2
15°	1099.5	1099.2	1099.1	1098.1	1096.3	1094.5	1092.7	1090.9
17.5°	1063.5	1062.6	1061.5	1060.3	1058.9	1057.4	1055.9	1054.5
20°	1037.1	1036.0	1035.1	1033.7	1031.9	1030.1	1028.3	1026.6
22.5°	1010.8	1008.9	1006.9	1005.2	1003.8	1002.3	1000.8	999.4
25°	967.8	965.2	962.6	960.2	957.9	955.8	953.6	951.4
27.5°	921.1	917.5	913.9	911.0	909.0	906.8	904.7	902.6
30°	887.8	883.2	878.6	875.5	873.7	871.8	870.0	868.2
32.5°	855.3	850.2	845.2	841.5	839.3	837.1	834.7	832.5
35°	804.9	799.1	793.3	789.1	786.3	783.5	780.8	777.9
37.5°	752.2	745.2	738.3	733.5	730.8	728.1	725.4	722.7
40°	717.2	709.7	702.1	697.2	694.8	692.4	690.0	687.7
42.5°	682.9	675.6	668.4	663.0	659.5	656.0	652.5	649.0
45°	627.9	620.0	612.0	606.6	603.6	600.6	597.6	594.6
47.5°	573.6	565.4	557.2	551.5	548.2	544.9	541.6	538.3
50°	536.8	528.5	520.1	514.4	511.5	508.5	505.5	502.6
52.5°	502.0	492.9	484.0	477.9	475.0	472.0	469.1	466.1
55°	448.9	440.0	431.0	424.9	421.8	418.6	415.4	412.2
57.5°	395.8	387.1	378.3	372.6	369.7	366.9	364.1	361.3
60°	360.8	352.0	343.3	337.4	334.4	331.5	328.5	325.5
62.5°	326.2	318.1	310.0	304.5	301.5	298.5	295.6	292.6
65°	275.6	267.7	259.7	254.3	251.2	248.3	245.3	242.3
67.5°	227.2	220.0	212.7	207.8	205.5	203.1	200.7	198.4
70°	195.1	189.0	182.8	178.6	176.2	173.7	171.4	169.0
72.5°	165.3	159.6	153.9	150.3	148.7	147.1	145.6	144.0
75°	123.6	119.2	114.9	112.0	110.6	109.2	107.8	106.4
77.5°	87.9	84.9	81.8	79.8	78.8	77.7	76.7	75.7
80°	66.2	64.4	62.6	61.5	61.1	60.7	60.3	59.9
82.5°	49.5	48.6	47.8	47.3	47.0	46.8	46.6	46.3
85°	28.2	28.0	27.8	27.6	27.4	27.2	27.0	26.9
87.5°	13.9	14.0	14.2	14.3	14.3	14.2	14.2	14.1
90°	15.7	16.6	17.6	18.3	18.9	19.5	20.1	20.7
92.5°	15.7	16.6	17.6	18.2	18.4	18.7	19.0	19.3
95°	15.7	16.6	17.6	18.1	18.1	18.1	18.1	18.1
97.5°	31.5	26.2	20.8	18.1	18.1	18.1	18.1	18.1
100°	92.6	64.2	35.7	21.1	20.3	19.5	18.9	18.1
102.5°	180.0	174.7	169.3	160.1	147.1	134.1	121.1	108.1
105°	256.1	256.1	256.1	256.1	255.9	255.7	255.5	255.3
107.5°	324.3	324.4	324.4	324.2	323.6	323.0	322.4	321.8
110°	368.5	367.9	367.4	367.2	367.4	367.6	367.7	367.9





TEST NUMBER: P333571-935

CATALOG NUMBER: S125RDIP-S850D1035U935-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	412.2	411.5	410.8	410.3	410.0	409.7	409.5	409.2
115°	478.2	477.4	476.6	475.7	474.6	473.4	472.3	471.1
117.5°	541.8	540.9	539.8	539.1	538.6	538.1	537.6	537.1
120°	583.0	582.6	582.2	581.5	580.6	579.6	578.7	577.7
122.5°	622.2	621.8	621.4	620.6	619.6	618.5	617.3	616.2
125°	679.3	678.6	677.8	677.2	676.6	676.0	675.5	674.9
127.5°	731.6	731.2	730.7	729.9	728.4	727.0	725.7	724.2
130°	765.7	765.1	764.6	763.8	762.8	761.9	761.0	759.9
132.5°	797.5	797.5	797.3	796.8	795.8	794.9	793.9	793.0
135°	844.3	844.0	843.5	842.7	841.6	840.5	839.3	838.2
137.5°	887.9	887.9	888.0	887.5	886.6	885.5	884.6	883.6
140°	914.6	915.0	915.3	915.0	913.9	912.7	911.5	910.4
142.5°	940.8	940.9	941.0	940.5	939.3	938.1	937.0	935.8
145°	977.8	978.0	978.2	977.8	976.6	975.4	974.3	973.2
147.5°	1009.5	1009.8	1010.0	1009.4	1008.1	1006.7	1005.3	1003.9
150°	1029.8	1030.2	1030.5	1030.0	1028.5	1026.9	1025.4	1023.9
152.5°	1047.7	1048.1	1048.4	1047.9	1046.5	1045.2	1043.8	1042.4
155°	1072.3	1072.9	1073.5	1073.0	1071.4	1069.9	1068.4	1066.9
157.5°	1092.7	1093.3	1093.9	1093.5	1091.9	1090.4	1088.8	1087.4
160°	1105.4	1106.1	1106.9	1106.5	1105.0	1103.5	1101.9	1100.4
162.5°	1117.0	1118.0	1119.1	1118.8	1117.1	1115.4	1113.8	1112.1
165°	1131.9	1133.1	1134.2	1134.0	1132.5	1130.9	1129.5	1127.9
167.5°	1143.2	1144.6	1146.0	1145.8	1144.1	1142.4	1140.7	1138.9
170°	1149.0	1150.6	1152.1	1151.9	1150.2	1148.6	1146.9	1145.1
172.5°	1153.5	1154.9	1156.2	1156.1	1154.3	1152.6	1150.9	1149.3
175°	1158.5	1160.0	1161.5	1161.4	1159.7	1158.0	1156.2	1154.5
177.5°	1160.5	1161.6	1162.6	1162.5	1161.3	1160.1	1158.9	1157.6
180°	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7

(END OF REPORT)