

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: P333579-935

Luminaire Tested: **S125RDIP-S850D1205U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333579-935  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDIP-S850D1205U935-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6520.9 lumens  
Efficiency: N/A  
Efficacy: 114.6 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

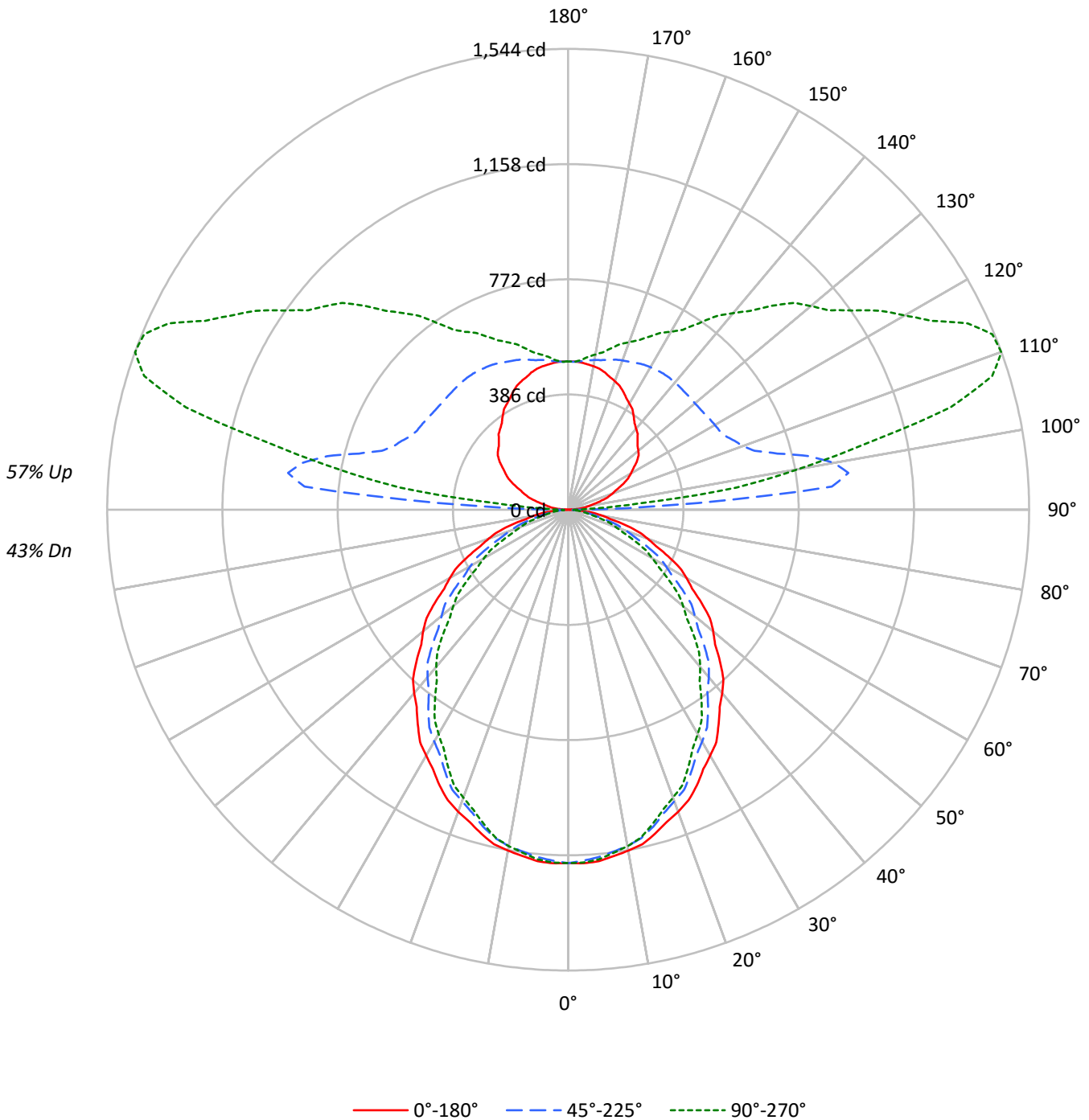
Input Watts (W): 56.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20										
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	50	30	10	0														
RCR																																						
0	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50	43																				
1	96	92	88	85	88	84	81	78	70	68	66	56	55	54	44	43	42	37																				
2	88	81	75	70	80	74	69	65	61	58	55	50	47	45	39	37	36	31																				
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	35	33	31	26																				
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	29	27	23																				
5	67	56	48	42	61	52	45	39	43	38	34	35	32	29	28	25	23	20																				
6	62	50	42	37	57	46	39	34	39	34	30	32	28	25	26	23	21	18																				
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18	16																				
8	53	41	34	28	49	38	31	27	32	27	23	27	23	20	21	19	16	14																				
9	50	38	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13																				
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	18	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	1.7
10°-20°	311.1	4.8
20°-30°	451.2	6.9
30°-40°	514.2	7.9
40°-50°	501.2	7.7
50°-60°	421.9	6.5
60°-70°	295.7	4.5
70°-80°	152.0	2.3
80°-90°	41.1	0.6
90°-100°	359.7	5.5
100°-110°	773.2	11.9
110°-120°	725.6	11.1
120°-130°	588.1	9.0
130°-140°	471.9	7.2
140°-150°	356.1	5.5
150°-160°	250.7	3.8
160°-170°	147.8	2.3
170°-180°	48.1	0.7
0°-30°	873.6	13.4
0°-40°	1387.8	21.3
0°-60°	2310.8	35.4
0°-90°	2799.7	42.9
90°-120°	1858.5	28.5
90°-150°	3274.7	50.2
90°-180°	3721.0	57.1
0°-180°	6520.9	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	9	16	21	23	4
95°	33	98	886	402	235	35
105°	113	158	725	1428	1326	119
115°	202	244	582	1255	1477	199
125°	280	328	558	998	1164	248
135°	328	395	554	837	966	255
145°	382	438	556	693	762	239
155°	436	469	542	613	639	201
165°	476	489	520	552	560	134
175°	495	495	499	505	503	47
180°	496	496	496	496	496	



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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	15.1	14.3	13.6	13.3	13.4	13.7	13.7	13.9	14.1
90°	1.0	2.0	4.0	6.0	8.0	10.0	11.0	13.0	14.0	16.0	17.0
92.5°	12.2	14.8	23.2	35.6	52.9	82.1	136.6	228.3	327.8	322.5	261.1
95°	33.0	34.0	42.0	53.0	75.0	120.0	227.1	447.2	723.3	886.4	867.4
97.5°	54.8	56.1	61.6	72.7	92.5	124.8	195.7	357.0	645.9	946.6	1097.5
100°	70.0	72.1	76.0	87.0	106.1	136.0	194.1	324.2	576.3	903.4	1153.5
102.5°	86.9	88.1	91.3	103.1	120.5	149.6	201.3	310.6	523.4	827.3	1119.9
105°	113.0	113.0	118.0	128.0	144.0	172.1	216.1	305.1	472.2	725.3	1012.4
107.5°	138.6	140.7	145.4	153.7	170.3	195.4	238.1	314.4	450.6	655.0	902.8
110°	157.0	159.1	163.1	172.1	187.1	213.1	254.1	323.1	444.2	622.2	840.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	175.5	177.5	180.6	189.7	204.7	229.9	269.3	334.3	444.2	603.0	793.9
115°	202.1	204.1	207.1	216.1	231.1	256.1	293.2	351.1	447.2	582.3	743.3
117.5°	226.1	229.1	232.3	241.3	258.3	282.5	317.5	370.4	453.8	572.0	713.1
120°	242.1	245.1	249.1	258.1	275.1	300.1	335.2	383.1	460.2	567.2	696.3
122.5°	258.9	261.1	264.3	273.3	292.0	316.9	352.0	397.6	465.8	563.3	681.9
125°	280.1	282.1	287.1	296.1	315.1	341.1	374.2	417.2	475.2	558.3	662.3
127.5°	296.7	299.7	306.2	317.5	337.8	363.8	395.5	435.2	485.8	555.9	644.3
130°	307.1	310.1	318.1	331.1	352.1	378.2	409.1	447.2	492.2	554.2	632.3
132.5°	315.1	318.9	328.6	343.2	365.0	391.0	422.0	457.6	499.4	554.2	622.7
135°	328.1	332.2	344.1	360.2	381.2	408.2	439.2	472.2	509.2	554.2	611.3
137.5°	344.6	347.6	358.8	374.8	395.4	423.2	451.4	483.0	518.2	555.4	601.1
140°	354.1	357.1	369.2	385.2	404.2	431.2	460.2	490.3	522.2	556.2	596.2
142.5°	365.3	367.6	378.8	394.8	413.0	438.4	465.8	494.2	524.6	557.1	592.3
145°	382.2	384.2	394.2	408.2	426.2	449.2	475.2	500.2	527.3	556.2	586.3
147.5°	399.8	401.0	409.6	422.6	438.2	458.4	481.2	503.9	528.2	553.6	580.1
150°	410.2	412.2	419.2	432.2	446.2	463.2	485.2	506.3	528.2	551.2	575.2
152.5°	421.4	422.6	428.8	440.2	453.4	468.8	489.2	507.8	527.4	548.0	569.6
155°	436.2	436.2	442.2	452.2	462.2	476.2	493.2	509.2	525.2	542.3	560.3
157.5°	449.4	449.2	454.0	462.6	471.4	482.0	496.6	510.2	522.6	536.2	551.5
160°	458.2	457.2	461.2	468.2	476.2	485.2	498.3	510.2	520.2	532.3	544.2
162.5°	465.4	464.4	468.4	474.6	481.0	488.4	499.8	509.5	517.8	527.4	537.9
165°	476.2	474.2	477.3	482.2	486.2	492.2	500.2	508.2	514.2	520.2	528.2
167.5°	483.5	482.4	484.2	487.0	489.8	493.6	500.2	505.8	508.6	513.2	518.8
170°	488.2	487.2	488.2	490.3	492.2	495.2	500.2	504.2	506.3	509.2	513.2
172.5°	491.5	489.7	490.6	492.6	493.8	495.2	499.4	502.7	503.0	504.5	507.6
175°	495.2	493.2	494.2	495.2	495.2	495.2	498.3	500.2	499.2	499.2	500.2
177.5°	497.1	495.4	495.4	496.2	495.4	495.4	497.1	497.8	496.2	496.2	497.1
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2



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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°	14.3	14.6	14.7	15.1	14.9	14.7	14.8	14.6
90°	18.0	19.0	20.0	22.0	22.0	22.0	23.0	23.0
92.5°	177.3	128.6	96.9	82.1	69.2	66.8	65.4	63.8
95°	719.3	567.2	444.2	360.2	289.1	259.1	251.2	235.1
97.5°	1071.3	964.7	844.8	727.9	666.1	610.1	581.1	568.3
100°	1230.5	1181.6	1078.5	974.4	905.4	833.4	796.3	780.3
102.5°	1284.2	1314.4	1265.0	1194.6	1120.7	1069.4	1029.2	1017.3
105°	1252.6	1389.7	1433.7	1422.6	1390.6	1357.6	1337.6	1325.6
107.5°	1139.7	1322.6	1435.6	1487.9	1504.1	1503.9	1497.3	1489.3
110°	1056.4	1246.6	1387.6	1472.7	1517.7	1536.7	1543.7	1543.7





TEST NUMBER: P333579-935

CATALOG NUMBER: S125RDIP-S850D1205U935-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	990.8	1171.3	1314.0	1414.2	1480.1	1512.7	1530.1	1537.3
115°	908.4	1063.5	1200.5	1309.6	1387.6	1435.6	1463.6	1476.6
117.5°	855.1	988.9	1106.9	1206.9	1285.0	1334.6	1362.4	1370.4
120°	826.4	946.4	1056.4	1144.5	1218.6	1266.5	1293.6	1301.6
122.5°	804.8	916.0	1014.1	1096.5	1162.5	1206.5	1233.6	1240.8
125°	773.4	875.4	962.4	1034.5	1090.5	1131.5	1153.5	1163.6
127.5°	741.3	836.5	917.8	985.2	1036.0	1072.3	1093.1	1097.5
130°	721.3	809.3	887.4	952.4	1002.5	1035.4	1055.5	1061.4
132.5°	701.3	783.8	854.5	917.2	967.2	1000.2	1018.6	1025.5
135°	675.3	744.3	808.4	865.4	909.4	942.5	960.4	966.5
137.5°	653.3	709.1	762.3	810.8	850.2	880.2	896.8	903.4
140°	641.3	688.3	734.3	776.4	813.4	839.4	854.4	859.4
142.5°	630.9	670.7	710.3	746.7	778.2	800.1	814.3	818.6
145°	617.3	648.2	679.3	706.3	730.3	747.3	758.4	762.3
147.5°	604.5	629.6	653.5	673.9	692.9	706.5	712.9	714.7
150°	597.3	619.3	638.3	656.3	671.3	683.3	687.3	688.3
152.5°	589.3	608.9	626.3	640.3	652.9	662.5	666.5	667.5
155°	577.2	593.2	607.3	618.3	628.3	635.2	638.3	639.3
157.5°	565.2	578.4	589.3	597.9	605.6	611.5	614.2	614.1
160°	557.2	567.2	577.2	584.3	591.2	596.2	598.3	597.3
162.5°	548.5	557.7	566.0	572.2	577.6	581.9	582.3	582.0
165°	536.2	543.2	549.2	554.2	558.3	560.3	560.3	560.3
167.5°	524.6	529.3	533.8	537.4	539.4	541.2	540.4	540.3
170°	518.2	521.2	524.3	526.2	528.2	529.3	529.3	528.2
172.5°	511.0	514.0	516.3	517.5	517.8	519.6	518.1	517.0
175°	503.3	503.3	505.2	505.2	505.2	506.3	504.2	503.3
177.5°	497.8	498.6	498.6	498.6	497.8	498.6	496.2	496.2
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2

(END OF REPORT)