

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: P333573-935

Luminaire Tested: **S125RDIP-S850D1035U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333573-935
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-S850D1035U935-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5996.3 lumens
Efficiency: N/A
Efficacy: 115.3 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

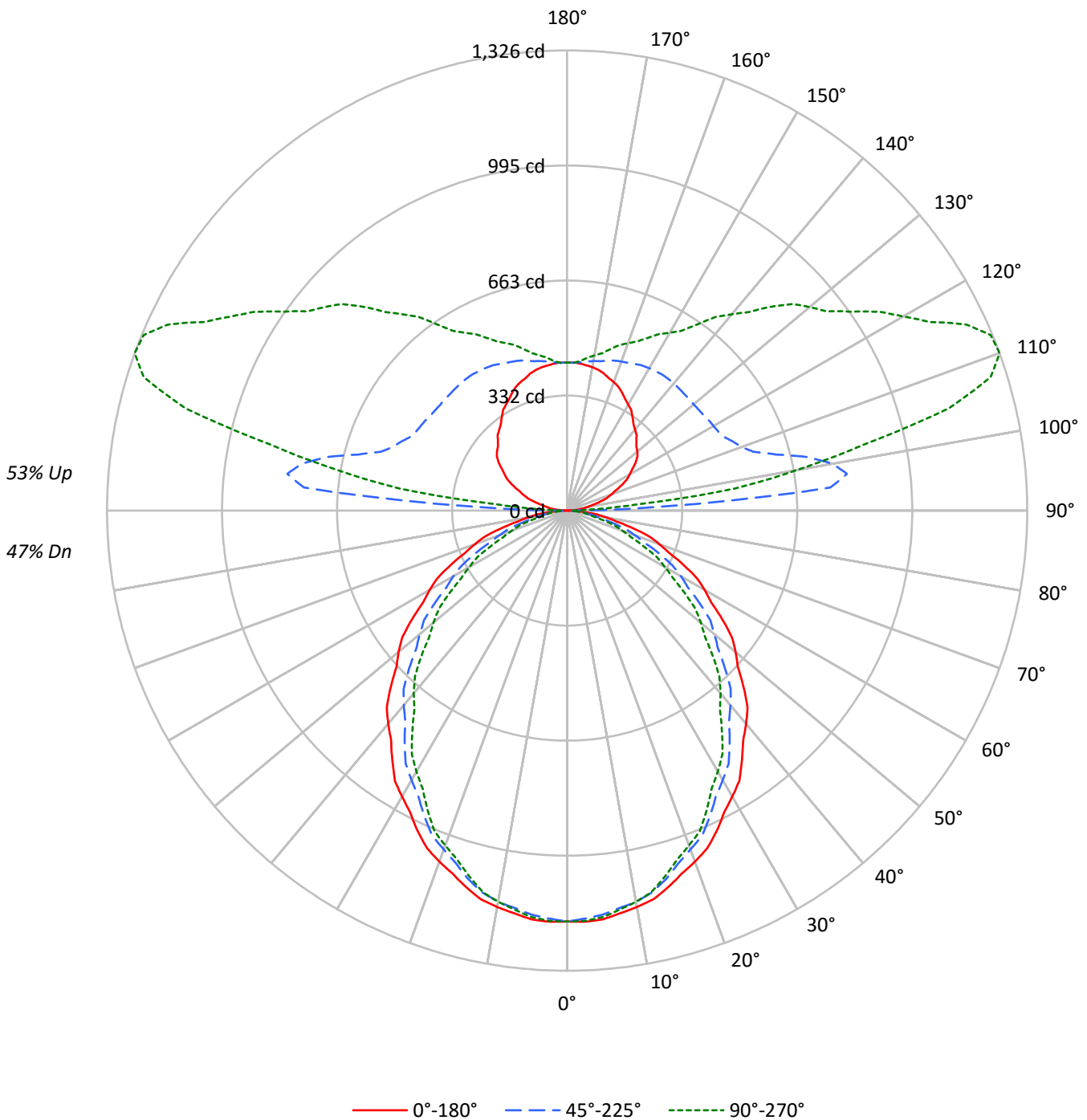
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333573-935

CATALOG NUMBER: S125RDIP-S850D1035U935-4F0-1E-UDD-F4

Luminous Intensity Polar Plot





TEST NUMBER: P333573-935

CATALOG NUMBER: S125RDIP-S850D1035U935-4F0-1E-UDD-F4

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	50	30	10	0	
RCR																						
0	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53	47				47
1	97	93	89	86	89	86	82	79	72	69	67	59	57	56	47	46	45				40	
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38				34	
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	35	33				29	
4	74	64	56	50	68	59	52	47	50	45	40	41	37	34	33	31	28				25	
5	68	57	49	43	62	52	45	40	44	39	35	37	33	30	30	27	25				22	
6	63	51	43	37	58	47	40	35	40	35	31	34	29	26	27	24	22				19	
7	58	46	38	33	53	43	36	31	36	31	27	31	26	23	25	22	20				17	
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18				15	
9	50	38	31	26	46	35	29	24	30	25	21	26	22	19	21	18	16				14	
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	14				13	

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



TEST NUMBER: P333573-935

CATALOG NUMBER: S125RDIP-S850D1035U935-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.3	1.9
10°-20°	311.1	5.2
20°-30°	451.2	7.5
30°-40°	514.2	8.6
40°-50°	501.2	8.4
50°-60°	421.9	7.0
60°-70°	295.7	4.9
70°-80°	152.0	2.5
80°-90°	40.8	0.7
90°-100°	309.0	5.2
100°-110°	664.3	11.1
110°-120°	623.4	10.4
120°-130°	505.2	8.4
130°-140°	405.5	6.8
140°-150°	306.0	5.1
150°-160°	215.4	3.6
160°-170°	126.9	2.1
170°-180°	41.3	0.7
0°-30°	873.6	14.6
0°-40°	1387.8	23.1
0°-60°	2310.8	38.5
0°-90°	2799.3	46.7
90°-120°	1596.7	26.6
90°-150°	2813.4	46.9
90°-180°	3197.0	53.3
0°-180°	5996.3	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	20	4
95°	28	84	762	346	202	30
105°	97	136	623	1227	1139	102
115°	174	209	500	1078	1269	171
125°	241	282	480	858	1000	213
135°	282	339	476	719	830	219
145°	328	376	478	595	655	206
155°	375	403	466	526	549	173
165°	409	420	447	474	481	115
175°	425	425	429	434	432	40
180°	426	426	426	426	426	



TEST NUMBER: P333573-935

CATALOG NUMBER: S125RDIP-S850D1035U935-4F0-1E-UDD-F4

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	15.7	14.9	14.1	13.3	13.1	13.1	13.3	13.3	13.5	13.7
90°	0.9	1.7	3.4	5.2	6.9	8.6	9.5	11.2	12.1	13.8	14.6
92.5°	10.5	12.7	20.0	30.6	45.4	70.5	117.4	196.1	281.5	277.1	224.3
95°	28.3	29.2	36.1	45.5	64.5	103.1	195.1	384.2	621.5	761.6	745.2
97.5°	47.1	48.1	53.0	62.4	79.4	107.3	168.2	306.7	554.9	813.3	942.9
100°	60.2	61.9	65.3	74.7	91.1	116.9	166.8	278.4	495.1	776.1	991.0
102.5°	74.6	75.6	78.4	88.5	103.5	128.5	173.0	266.8	449.7	710.8	962.2
105°	97.1	97.1	101.4	110.0	123.8	147.8	185.6	262.2	405.7	623.1	869.9
107.5°	119.2	120.9	124.9	132.0	146.3	168.0	204.6	270.1	387.1	562.8	775.6
110°	134.9	136.6	140.1	147.8	160.7	183.0	218.3	277.6	381.6	534.6	721.9



TEST NUMBER: P333573-935

CATALOG NUMBER: S125RDIP-S850D1035U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	150.8	152.5	155.2	163.0	175.8	197.5	231.4	287.2	381.6	518.1	682.1
115°	173.7	175.3	177.9	185.6	198.5	220.1	251.8	301.7	384.2	500.2	638.6
117.5°	194.2	196.8	199.6	207.3	222.0	242.7	272.9	318.2	389.9	491.5	612.7
120°	208.0	210.6	214.0	221.8	236.3	257.9	287.9	329.2	395.4	487.3	598.2
122.5°	222.5	224.3	227.0	234.8	250.8	272.3	302.4	341.6	400.2	483.9	585.8
125°	240.6	242.4	246.7	254.4	270.8	293.1	321.5	358.4	408.3	479.6	569.0
127.5°	254.9	257.5	263.0	272.9	290.2	312.5	339.8	373.8	417.4	477.5	553.5
130°	263.9	266.5	273.4	284.5	302.6	324.9	351.5	384.2	422.9	476.1	543.2
132.5°	270.8	274.0	282.2	294.8	313.6	335.9	362.6	393.1	429.0	476.1	534.9
135°	281.9	285.3	295.7	309.4	327.4	350.7	377.3	405.7	437.5	476.1	525.1
137.5°	296.0	298.6	308.2	322.0	339.7	363.6	387.8	415.0	445.2	477.2	516.4
140°	304.3	306.9	317.2	330.9	347.2	370.5	395.4	421.2	448.7	477.9	512.3
142.5°	313.9	315.8	325.4	339.1	354.8	376.6	400.2	424.6	450.7	478.5	508.9
145°	328.3	330.0	338.6	350.7	366.2	385.9	408.3	429.7	453.0	477.9	503.7
147.5°	343.5	344.5	351.9	363.1	376.4	393.8	413.5	432.8	453.8	475.6	498.3
150°	352.4	354.1	360.2	371.3	383.3	398.0	416.9	434.9	453.8	473.6	494.2
152.5°	362.1	363.1	368.4	378.2	389.5	402.8	420.3	436.3	453.1	470.9	489.4
155°	374.7	374.7	379.9	388.5	397.1	409.1	423.7	437.5	451.3	465.9	481.3
157.5°	386.1	385.9	390.0	397.4	405.0	414.1	426.6	438.3	449.0	460.7	473.7
160°	393.6	392.8	396.2	402.3	409.1	416.9	428.0	438.3	446.9	457.3	467.6
162.5°	399.8	399.0	402.4	407.8	413.3	419.7	429.4	437.6	444.9	453.1	462.1
165°	409.1	407.4	410.0	414.3	417.8	422.9	429.7	436.6	441.8	446.9	453.8
167.5°	415.3	414.5	416.0	418.4	420.9	424.0	429.7	434.5	437.0	440.9	445.7
170°	419.5	418.6	419.5	421.2	422.9	425.4	429.7	433.2	434.9	437.5	440.9
172.5°	422.2	420.7	421.5	423.2	424.2	425.4	429.0	431.8	432.1	433.3	436.1
175°	425.4	423.7	424.6	425.4	425.4	425.4	428.0	429.7	428.9	428.9	429.7
177.5°	427.0	425.6	425.6	426.3	425.6	425.6	427.0	427.7	426.3	426.3	427.0
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3



TEST NUMBER: P333573-935

CATALOG NUMBER: S125RDIP-S850D1035U935-4F0-1E-UDD-F4

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	14.5	14.3	14.1	14.1	13.9
90°	15.5	16.4	17.2	18.9	18.9	18.9	19.8	19.8
92.5°	152.3	110.6	83.2	70.5	59.5	57.4	56.2	54.8
95°	618.0	487.3	381.6	309.4	248.4	222.7	215.8	202.0
97.5°	920.4	828.7	725.7	625.3	572.3	524.1	499.2	488.2
100°	1057.2	1015.1	926.5	837.2	777.8	716.0	684.2	670.5
102.5°	1103.3	1129.2	1086.8	1026.2	962.9	918.9	884.2	873.9
105°	1076.1	1193.9	1231.7	1222.2	1194.7	1166.4	1149.2	1138.8
107.5°	979.1	1136.3	1233.4	1278.2	1292.2	1292.0	1286.3	1279.4
110°	907.7	1070.9	1192.1	1265.2	1303.9	1320.2	1326.2	1326.2



TEST NUMBER: P333573-935

CATALOG NUMBER: S125RDIP-S850D1035U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	851.3	1006.3	1128.9	1215.0	1271.5	1299.6	1314.6	1320.7
115°	780.4	913.7	1031.4	1125.1	1192.1	1233.4	1257.5	1268.7
117.5°	734.7	849.5	951.0	1036.9	1104.0	1146.6	1170.4	1177.3
120°	710.0	813.1	907.7	983.3	1046.9	1088.1	1111.4	1118.3
122.5°	691.4	787.0	871.2	942.0	998.8	1036.6	1059.8	1066.0
125°	664.4	752.1	826.8	888.7	936.9	972.1	991.0	999.6
127.5°	636.9	718.8	788.5	846.4	890.1	921.2	939.1	942.9
130°	619.7	695.3	762.4	818.3	861.3	889.6	906.8	912.0
132.5°	602.5	673.3	734.2	788.0	831.0	859.4	875.1	881.0
135°	580.1	639.5	694.5	743.5	781.3	809.7	825.1	830.3
137.5°	561.3	609.2	655.0	696.5	730.4	756.2	770.5	776.1
140°	551.0	591.3	630.9	667.0	698.8	721.2	734.0	738.3
142.5°	542.0	576.2	610.3	641.5	668.6	687.4	699.6	703.3
145°	530.3	557.0	583.6	606.8	627.4	642.0	651.5	655.0
147.5°	519.4	541.0	561.5	578.9	595.3	607.0	612.5	614.1
150°	513.2	532.0	548.4	563.9	576.7	587.0	590.5	591.3
152.5°	506.3	523.1	538.0	550.1	560.9	569.2	572.6	573.4
155°	495.9	509.7	521.8	531.2	539.8	545.8	548.4	549.2
157.5°	485.6	497.0	506.3	513.7	520.4	525.3	527.7	527.5
160°	478.7	487.3	495.9	502.0	508.0	512.3	514.0	513.2
162.5°	471.2	479.1	486.3	491.6	496.3	499.9	500.2	500.1
165°	460.7	466.7	471.9	476.1	479.6	481.3	481.3	481.3
167.5°	450.7	454.7	458.7	461.8	463.5	465.0	464.3	464.2
170°	445.2	447.8	450.4	452.1	453.8	454.7	454.7	453.8
172.5°	439.0	441.6	443.5	444.5	444.9	446.4	445.1	444.2
175°	432.3	432.3	434.0	434.0	434.0	434.9	433.2	432.3
177.5°	427.7	428.3	428.3	428.3	427.7	428.3	426.3	426.3
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3

(END OF REPORT)