

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: P333577-935

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333577-935
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-S850D1205U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6945.0 lumens
Efficiency: N/A
Efficacy: 122.1 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

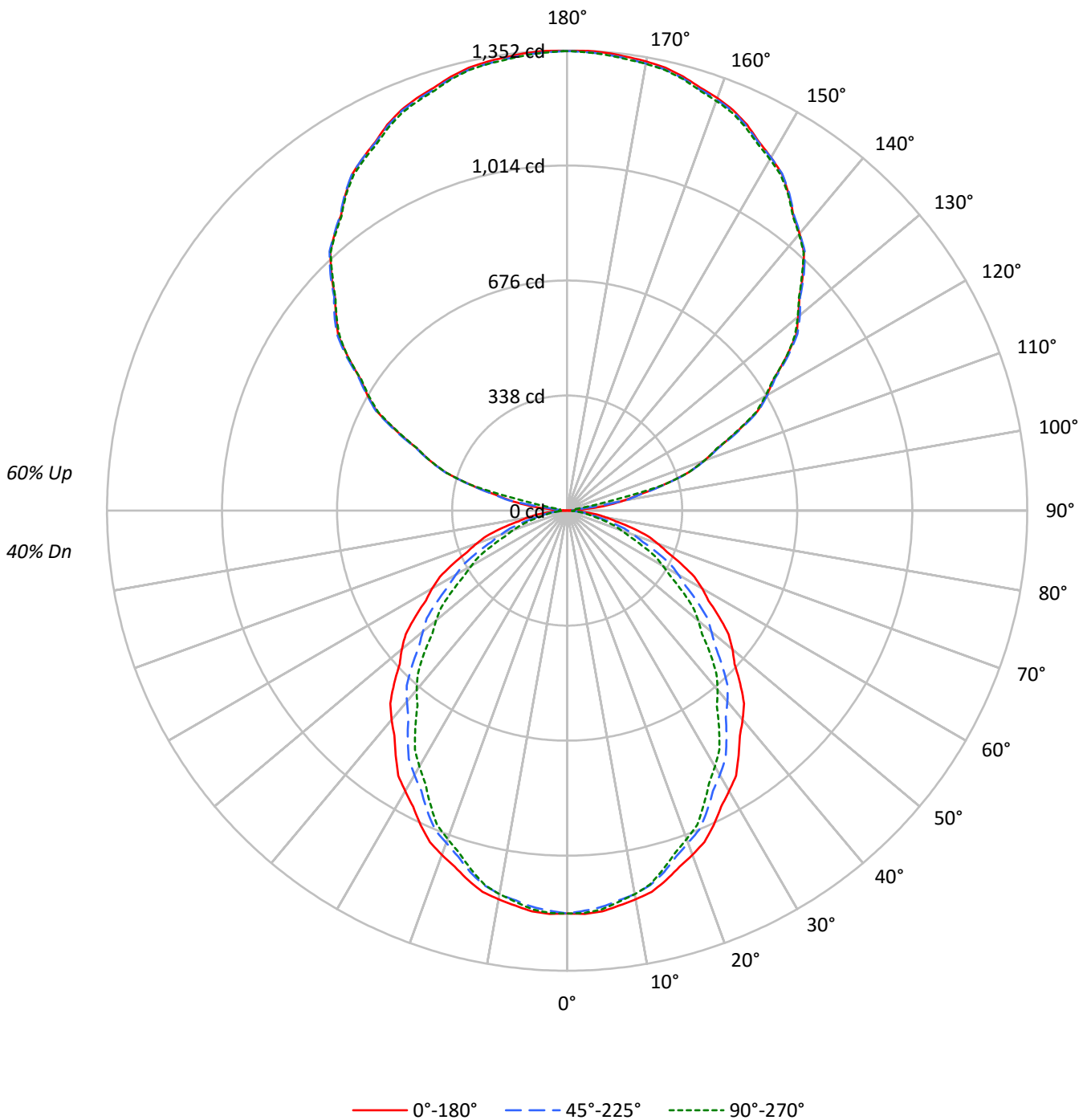
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	92	88	84	87	84	80	78	69	66	64	55	53	52	42	41	40	34
2	87	80	74	69	79	73	68	64	60	57	53	48	46	44	37	36	34	29
3	80	71	63	58	72	65	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	55	49	66	57	51	45	47	42	38	38	35	32	30	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16
7	57	45	37	32	52	41	35	30	35	29	26	28	24	21	22	19	17	15
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	20	18	16	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	17	15	13	11

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	1.6
10°-20°	311.1	4.5
20°-30°	451.2	6.5
30°-40°	514.2	7.4
40°-50°	501.2	7.2
50°-60°	421.9	6.1
60°-70°	295.7	4.3
70°-80°	152.0	2.2
80°-90°	41.2	0.6
90°-100°	49.1	0.7
100°-110°	302.3	4.4
110°-120°	548.3	7.9
120°-130°	703.7	10.1
130°-140°	756.9	10.9
140°-150°	710.4	10.2
150°-160°	574.7	8.3
160°-170°	371.7	5.4
170°-180°	128.2	1.8
0°-30°	873.6	12.6
0°-40°	1387.8	20.0
0°-60°	2310.8	33.3
0°-90°	2799.7	40.3
90°-120°	899.7	13.0
90°-150°	3070.7	44.2
90°-180°	4145.0	59.7
0°-180°	6945.0	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	24	5
95°	57	52	16	21	21	73
105°	294	298	298	298	297	312
115°	552	557	558	554	548	547
125°	786	792	792	789	786	701
135°	980	985	984	981	976	755
145°	1136	1138	1138	1138	1133	710
155°	1251	1245	1247	1249	1242	576
165°	1320	1314	1315	1320	1313	373
175°	1350	1344	1345	1352	1344	128
180°	1350	1350	1350	1350	1350	



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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	15.9	15.2	14.4	13.6	13.3	13.5	13.6	13.8	13.9	14.1
90°	1.0	2.8	4.6	6.4	8.1	9.8	11.4	12.9	14.5	16.0	17.1
92.5°	15.4	14.2	12.9	11.7	10.4	10.5	11.9	13.3	14.6	16.0	17.1
95°	57.0	56.4	55.7	55.0	54.3	49.9	41.3	32.9	24.5	16.0	17.1
97.5°	119.1	120.3	121.5	122.7	123.9	116.1	99.4	82.7	66.0	49.2	43.0
100°	167.1	167.8	168.4	169.1	169.8	170.6	171.4	172.4	173.2	174.1	140.9
102.5°	215.9	216.8	217.7	218.4	219.3	220.0	220.5	221.1	221.6	222.1	215.9
105°	294.2	295.1	295.9	296.9	297.7	298.2	298.2	298.2	298.2	298.2	298.2
107.5°	375.5	375.5	375.5	375.5	375.5	375.7	376.1	376.5	377.0	377.5	377.5
110°	428.3	428.3	428.3	428.3	428.3	428.5	429.0	429.4	429.8	430.2	429.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	477.9	478.5	479.0	479.5	480.0	480.4	480.7	481.0	481.2	481.5	480.7
115°	552.3	553.5	554.6	555.7	556.8	557.5	557.7	557.9	558.1	558.4	557.5
117.5°	629.4	629.4	629.3	629.3	629.2	629.6	630.5	631.3	632.1	633.0	631.9
120°	677.4	677.2	677.0	676.7	676.6	676.7	677.4	678.1	678.7	679.4	679.0
122.5°	719.9	720.7	721.5	722.4	723.2	723.8	724.1	724.4	724.8	725.0	724.6
125°	785.5	787.0	788.6	790.1	791.7	792.5	792.5	792.5	792.5	792.5	791.6
127.5°	848.2	849.3	850.3	851.4	852.6	853.1	852.9	852.8	852.6	852.6	852.0
130°	886.6	887.7	888.8	889.9	891.0	891.7	891.9	892.2	892.3	892.6	891.9
132.5°	925.0	926.3	927.6	928.8	930.1	930.6	930.1	929.5	929.1	928.6	928.5
135°	979.6	980.9	982.3	983.6	985.0	985.4	985.0	984.6	984.0	983.6	983.2
137.5°	1029.8	1031.0	1032.2	1033.3	1034.5	1034.8	1034.5	1034.1	1033.6	1033.3	1033.4
140°	1062.6	1063.2	1063.6	1064.0	1064.5	1064.5	1064.4	1064.1	1063.9	1063.7	1064.1
142.5°	1092.3	1092.5	1092.9	1093.1	1093.4	1093.6	1094.0	1094.2	1094.6	1094.9	1095.0
145°	1135.7	1136.2	1136.6	1137.0	1137.5	1137.7	1137.7	1137.7	1137.7	1137.7	1138.0
147.5°	1173.7	1173.6	1173.5	1173.5	1173.4	1173.5	1173.7	1174.0	1174.3	1174.6	1174.8
150°	1197.7	1197.3	1196.9	1196.4	1196.0	1196.0	1196.4	1196.9	1197.3	1197.7	1198.2
152.5°	1221.0	1220.0	1219.0	1218.1	1217.0	1216.8	1217.3	1217.7	1218.1	1218.6	1219.0
155°	1250.8	1249.5	1248.1	1246.8	1245.4	1245.0	1245.4	1245.9	1246.4	1246.8	1247.5
157.5°	1273.8	1273.0	1272.2	1271.4	1270.6	1270.2	1270.3	1270.3	1270.4	1270.4	1271.1
160°	1289.9	1288.5	1287.2	1285.8	1284.5	1283.9	1284.2	1284.4	1284.6	1284.8	1285.7
162.5°	1302.6	1301.3	1299.9	1298.6	1297.3	1296.8	1296.9	1297.2	1297.4	1297.6	1298.9
165°	1319.8	1318.5	1317.2	1315.9	1314.5	1314.0	1314.1	1314.4	1314.6	1314.8	1316.2
167.5°	1332.7	1331.3	1329.9	1328.5	1327.1	1326.5	1326.8	1327.0	1327.2	1327.5	1329.0
170°	1339.9	1338.3	1336.7	1335.2	1333.6	1333.0	1333.2	1333.4	1333.6	1333.9	1335.7
172.5°	1344.6	1343.1	1341.5	1340.0	1338.4	1337.8	1338.3	1338.7	1339.0	1339.5	1341.1
175°	1349.9	1348.5	1347.2	1345.8	1344.5	1343.9	1344.2	1344.5	1344.6	1344.9	1346.6
177.5°	1352.3	1351.2	1350.1	1349.1	1348.0	1347.6	1347.7	1347.9	1348.1	1348.2	1349.5
180°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9



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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°	14.4	14.6	14.8	14.9	14.9	14.9	14.8	14.8
90°	18.3	19.4	20.5	21.4	22.0	22.6	23.3	24.0
92.5°	18.3	19.4	20.5	21.2	21.4	21.8	22.1	22.4
95°	18.3	19.4	20.5	21.0	21.0	21.0	21.0	21.0
97.5°	36.7	30.4	24.1	21.0	21.0	21.0	21.0	21.0
100°	107.9	74.7	41.6	24.5	23.7	22.8	21.9	21.0
102.5°	209.6	203.4	197.1	186.4	171.3	156.1	141.0	125.9
105°	298.2	298.2	298.2	298.1	297.8	297.6	297.4	297.2
107.5°	377.5	377.5	377.6	377.3	376.6	376.0	375.3	374.6
110°	429.0	428.3	427.6	427.4	427.6	427.8	428.1	428.3



TEST NUMBER: P333577-935

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	479.8	479.0	478.1	477.5	477.3	476.9	476.6	476.3
115°	556.6	555.7	554.8	553.7	552.3	551.0	549.7	548.4
117.5°	630.7	629.6	628.4	627.5	626.9	626.4	625.8	625.2
120°	678.6	678.1	677.7	676.9	675.8	674.7	673.6	672.4
122.5°	724.2	723.8	723.3	722.4	721.1	719.8	718.6	717.3
125°	790.7	789.8	788.9	788.2	787.5	786.9	786.2	785.5
127.5°	851.5	851.1	850.6	849.5	847.9	846.2	844.6	842.9
130°	891.2	890.5	889.9	889.0	887.9	886.8	885.7	884.6
132.5°	928.3	928.2	928.1	927.5	926.3	925.2	924.1	923.0
135°	982.7	982.3	981.9	980.9	979.6	978.3	977.0	975.6
137.5°	1033.5	1033.5	1033.6	1033.1	1031.9	1030.8	1029.6	1028.5
140°	1064.5	1065.0	1065.5	1065.0	1063.7	1062.4	1061.0	1059.7
142.5°	1095.1	1095.2	1095.3	1094.7	1093.3	1092.0	1090.6	1089.3
145°	1138.2	1138.4	1138.6	1138.1	1136.7	1135.4	1134.0	1132.7
147.5°	1175.1	1175.4	1175.6	1174.9	1173.4	1171.7	1170.2	1168.5
150°	1198.7	1199.1	1199.5	1198.9	1197.1	1195.3	1193.5	1191.8
152.5°	1219.4	1220.0	1220.4	1219.8	1218.1	1216.6	1215.0	1213.4
155°	1248.1	1248.8	1249.5	1248.9	1247.2	1245.4	1243.5	1241.8
157.5°	1271.9	1272.6	1273.2	1272.7	1270.9	1269.2	1267.4	1265.6
160°	1286.6	1287.5	1288.4	1288.0	1286.2	1284.4	1282.6	1280.8
162.5°	1300.1	1301.4	1302.6	1302.3	1300.3	1298.3	1296.4	1294.4
165°	1317.5	1318.9	1320.2	1319.9	1318.2	1316.4	1314.6	1312.9
167.5°	1330.7	1332.2	1333.9	1333.7	1331.6	1329.6	1327.7	1325.7
170°	1337.4	1339.2	1341.0	1340.8	1338.9	1336.9	1334.9	1332.8
172.5°	1342.6	1344.3	1345.8	1345.7	1343.7	1341.7	1339.6	1337.6
175°	1348.4	1350.2	1351.9	1351.9	1349.9	1347.9	1345.8	1343.8
177.5°	1350.7	1352.0	1353.2	1353.1	1351.8	1350.3	1348.8	1347.5
180°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9

(END OF REPORT)