

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: P333572-935

Luminaire Tested: **S125RDIP-S850D1035U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333572-935  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,  
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-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5881.6 lumens  
Efficiency: N/A  
Efficacy: 113.1 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

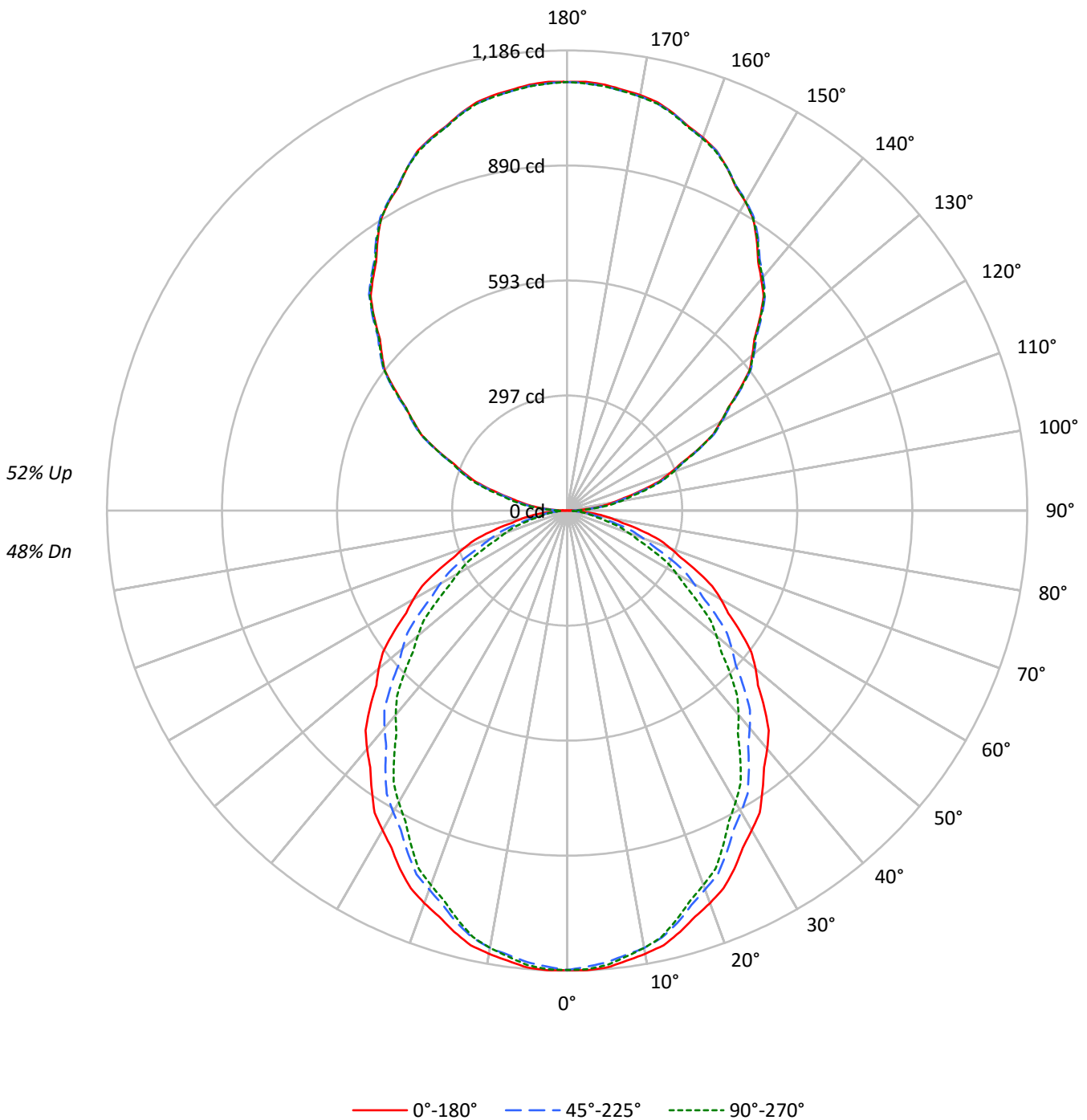
Input Watts (W): 52  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41
2	89	82	76	71	82	75	70	66	63	60	56	53	50	47	42	41	39	34
3	81	72	65	59	74	66	60	55	56	51	48	47	43	40	38	35	33	29
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29	25
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	27	28	25	22	19
7	58	46	38	33	53	43	36	31	37	31	27	31	27	24	25	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18	16
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	18	16	14
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15	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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.3	1.9
10°-20°	311.1	5.3
20°-30°	451.2	7.7
30°-40°	514.2	8.7
40°-50°	501.2	8.5
50°-60°	421.9	7.2
60°-70°	295.7	5.0
70°-80°	152.0	2.6
80°-90°	40.8	0.7
90°-100°	74.0	1.3
100°-110°	218.5	3.7
110°-120°	370.0	6.3
120°-130°	487.0	8.3
130°-140°	545.7	9.3
140°-150°	534.8	9.1
150°-160°	449.2	7.6
160°-170°	298.6	5.1
170°-180°	104.5	1.8
0°-30°	873.6	14.9
0°-40°	1387.8	23.6
0°-60°	2310.8	39.3
0°-90°	2799.4	47.6
90°-120°	662.5	11.3
90°-150°	2229.9	37.9
90°-180°	3082.0	52.4
0°-180°	5881.6	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	5
95°	56	58	66	72	74	60
105°	196	200	205	210	213	209
115°	370	374	376	375	374	366
125°	541	546	547	545	544	484
135°	703	708	709	709	706	542
145°	852	855	858	858	855	532
155°	975	975	976	979	975	449
165°	1060	1058	1059	1062	1057	299
175°	1102	1099	1098	1103	1098	105
180°	1105	1105	1105	1105	1105	



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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°	20.8	21.9	22.9	24.0	25.1	26.4	28.1	29.7	31.3	33.0	34.3
95°	55.9	56.2	56.7	57.0	57.4	58.5	60.4	62.3	64.3	66.2	67.5
97.5°	92.8	93.0	93.2	93.3	93.4	94.9	97.5	100.1	102.7	105.4	106.7
100°	120.4	120.4	120.4	120.4	120.4	121.6	124.1	126.6	129.1	131.5	133.2
102.5°	149.9	150.7	151.4	152.2	153.0	153.9	155.2	156.5	157.7	159.0	160.9
105°	196.0	196.9	197.9	198.9	199.8	200.9	202.0	203.1	204.3	205.4	206.6
107.5°	246.8	247.8	248.7	249.8	250.7	251.6	252.4	253.4	254.3	255.1	255.7
110°	282.0	282.9	283.9	284.8	285.8	286.5	287.1	287.7	288.3	288.8	289.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	317.7	318.2	318.7	319.2	319.7	320.3	321.1	321.8	322.4	323.2	323.5
115°	370.5	371.3	372.0	372.8	373.5	374.1	374.4	374.9	375.2	375.7	375.5
117.5°	423.4	423.8	424.1	424.5	424.8	425.2	425.5	425.9	426.2	426.5	426.7
120°	456.4	457.4	458.3	459.3	460.3	460.8	461.0	461.2	461.4	461.6	461.6
122.5°	492.2	492.6	492.9	493.3	493.6	494.0	494.5	495.0	495.5	495.9	495.8
125°	540.7	541.8	542.9	544.2	545.3	546.0	546.1	546.3	546.5	546.7	546.3
127.5°	592.3	592.9	593.6	594.2	594.9	595.3	595.6	595.7	596.0	596.2	596.0
130°	623.2	624.1	625.1	626.0	627.0	627.7	628.1	628.4	628.8	629.2	629.0
132.5°	654.1	655.7	657.3	658.8	660.4	661.2	661.1	661.0	660.9	660.8	660.6
135°	703.2	704.3	705.4	706.5	707.7	708.4	708.6	708.8	708.9	709.1	709.1
137.5°	749.2	750.3	751.4	752.5	753.6	754.4	754.8	755.3	755.7	756.0	756.3
140°	778.8	779.7	780.7	781.6	782.6	783.3	783.9	784.5	785.1	785.7	786.0
142.5°	808.3	809.2	809.9	810.7	811.6	812.4	813.0	813.8	814.5	815.2	815.5
145°	851.9	852.6	853.3	854.1	854.9	855.6	856.2	856.7	857.3	857.9	857.9
147.5°	892.1	892.5	892.9	893.4	893.7	894.2	894.7	895.1	895.5	896.0	896.5
150°	918.9	918.7	918.5	918.3	918.2	918.4	919.2	920.0	920.7	921.4	921.4
152.5°	940.9	941.2	941.4	941.7	941.9	942.3	942.5	942.9	943.1	943.5	943.9
155°	974.7	974.7	974.7	974.7	974.7	974.8	975.1	975.3	975.4	975.6	976.4
157.5°	1005.0	1004.6	1004.2	1003.8	1003.3	1003.2	1003.4	1003.6	1003.8	1004.0	1004.8
160°	1022.9	1022.4	1021.7	1021.1	1020.6	1020.5	1020.6	1020.8	1021.0	1021.1	1021.9
162.5°	1038.7	1038.3	1037.8	1037.4	1037.1	1036.8	1036.9	1036.9	1037.0	1037.0	1037.9
165°	1059.9	1059.5	1059.1	1058.7	1058.3	1058.3	1058.4	1058.6	1058.8	1059.0	1059.8
167.5°	1077.7	1076.9	1076.2	1075.5	1074.7	1074.3	1074.3	1074.3	1074.3	1074.3	1075.5
170°	1087.4	1086.6	1085.8	1085.1	1084.3	1083.9	1083.9	1083.9	1083.9	1083.9	1085.1
172.5°	1094.2	1093.5	1092.7	1091.9	1091.2	1090.8	1090.8	1090.8	1090.8	1090.8	1091.9
175°	1102.0	1101.2	1100.4	1099.7	1098.9	1098.5	1098.5	1098.5	1098.5	1098.5	1099.7
177.5°	1106.0	1105.4	1104.7	1104.1	1103.5	1103.1	1102.9	1102.8	1102.7	1102.5	1103.5
180°	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6



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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°	35.6	36.8	38.1	38.9	39.3	39.7	40.1	40.6
95°	68.9	70.2	71.5	72.4	72.8	73.2	73.5	74.0
97.5°	107.9	109.2	110.5	111.2	111.4	111.7	111.8	112.1
100°	134.9	136.6	138.4	139.5	139.8	140.2	140.6	140.9
102.5°	162.7	164.6	166.5	167.7	168.2	168.8	169.4	169.9
105°	207.8	208.9	210.0	210.9	211.5	212.1	212.6	213.2
107.5°	256.2	256.8	257.4	257.7	257.6	257.6	257.6	257.5
110°	290.0	290.5	291.1	291.3	291.1	290.9	290.8	290.5





TEST NUMBER: P333572-935

CATALOG NUMBER: S125RDIP-S850D1035U935-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	323.7	324.0	324.3	324.3	323.9	323.6	323.2	322.9
115°	375.2	375.1	374.9	374.7	374.4	374.3	374.1	373.9
117.5°	426.8	427.0	427.1	426.8	426.0	425.3	424.6	423.8
120°	461.6	461.6	461.6	461.2	460.5	459.7	458.9	458.1
122.5°	495.7	495.5	495.3	495.0	494.4	493.8	493.2	492.6
125°	546.0	545.5	545.2	544.8	544.7	544.5	544.3	544.2
127.5°	595.8	595.6	595.5	595.1	594.8	594.3	594.0	593.7
130°	628.8	628.6	628.4	628.2	627.8	627.4	627.0	626.6
132.5°	660.5	660.3	660.0	659.7	659.2	658.7	658.1	657.5
135°	709.1	709.1	709.1	708.8	708.0	707.2	706.5	705.7
137.5°	756.6	756.7	757.0	756.6	755.7	754.8	753.8	752.9
140°	786.4	786.8	787.2	786.9	785.9	785.0	784.0	783.1
142.5°	815.7	815.9	816.1	815.8	814.9	813.9	813.0	811.9
145°	857.9	857.9	857.9	857.6	857.0	856.4	855.8	855.3
147.5°	896.9	897.4	897.9	897.4	896.1	894.8	893.5	892.3
150°	921.4	921.4	921.4	921.3	920.9	920.5	920.2	919.7
152.5°	944.4	944.9	945.3	945.2	944.5	943.8	943.1	942.5
155°	977.1	977.9	978.7	978.6	977.7	976.6	975.7	974.7
157.5°	1005.5	1006.3	1007.0	1006.8	1005.6	1004.3	1003.0	1001.8
160°	1022.7	1023.5	1024.2	1024.2	1023.2	1022.3	1021.3	1020.3
162.5°	1038.8	1039.7	1040.7	1040.6	1039.5	1038.4	1037.2	1036.1
165°	1060.5	1061.3	1062.0	1061.9	1060.8	1059.5	1058.4	1057.3
167.5°	1076.6	1077.7	1078.9	1078.8	1077.7	1076.5	1075.3	1074.1
170°	1086.2	1087.4	1088.5	1088.4	1087.1	1085.7	1084.4	1083.1
172.5°	1093.1	1094.2	1095.4	1095.4	1094.2	1093.0	1091.8	1090.6
175°	1100.9	1102.0	1103.1	1103.0	1101.7	1100.4	1099.0	1097.7
177.5°	1104.3	1105.3	1106.1	1106.1	1105.0	1104.0	1102.9	1101.8
180°	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6

(END OF REPORT)