

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: P333578-930

Luminaire Tested: **S125RDIP-S850D1205U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333578-930  
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-S850D1205U930-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6048.3 lumens  
Efficiency: N/A  
Efficacy: 106.3 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

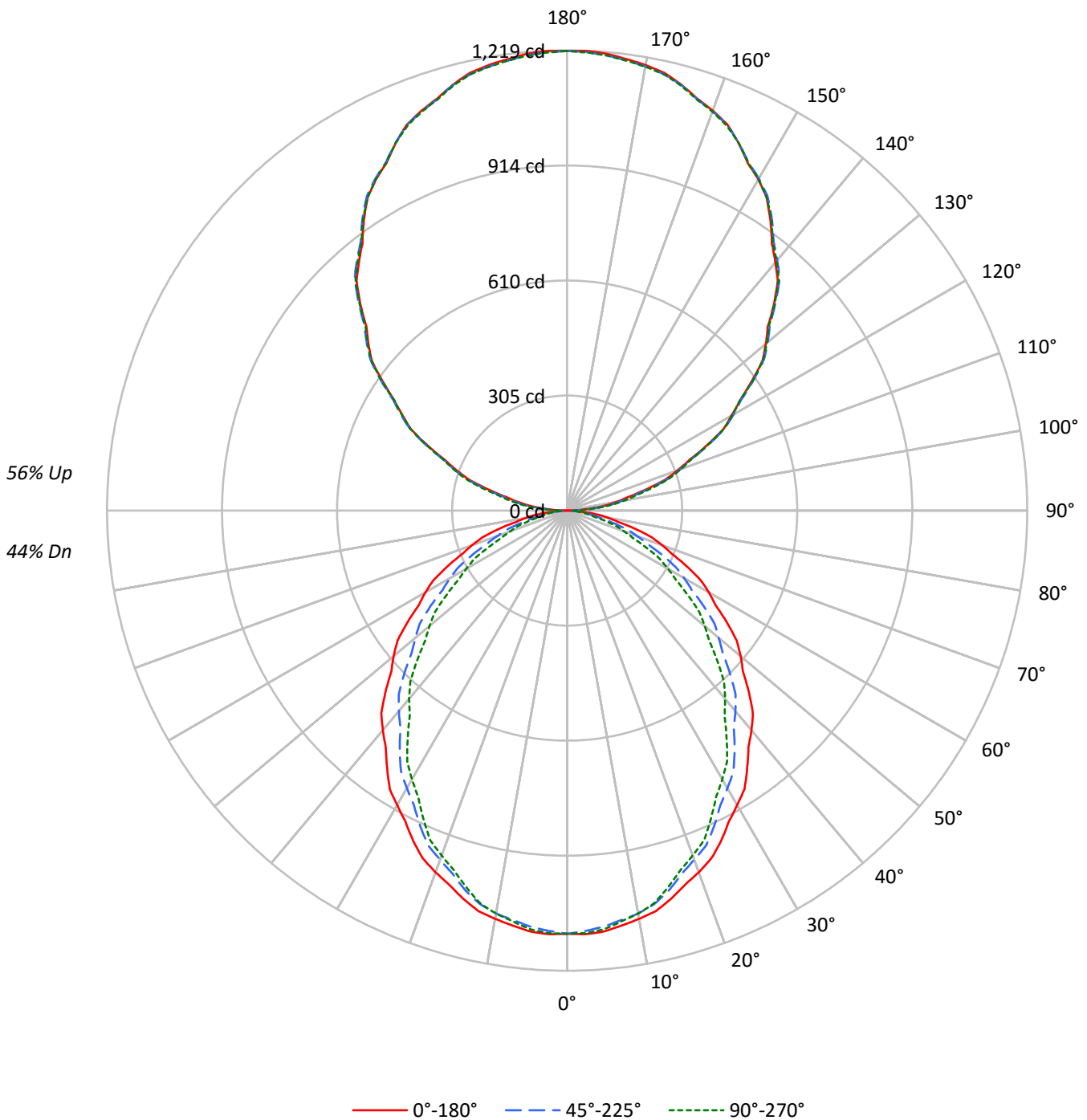
Input Watts (W): 56.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	50	50	50	44
1	97	92	89	85	88	85	81	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	45	40	38	36	32
3	80	71	64	58	73	65	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	29	25	22	24	21	19	16
8	53	41	34	29	49	38	32	27	32	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°	7240	7240	7240
5°	7257	7175	7219
10°	7202	7108	7108
15°	7117	6964	6907
20°	7007	6762	6681
25°	6879	6565	6420
30°	6718	6334	6131
35°	6556	6095	5807
40°	6403	5847	5490
45°	6218	5569	5142
50°	6031	5267	4782
55°	5816	4977	4396
60°	5599	4627	3981
65°	5344	4219	3506
70°	5053	3709	3021
75°	4649	3127	2515
80°	4095	2455	2109
85°	3453	2008	1882



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.4	1.7
10°-20°	294.6	4.9
20°-30°	427.2	7.1
30°-40°	486.9	8.0
40°-50°	474.6	7.8
50°-60°	399.5	6.6
60°-70°	280.0	4.6
70°-80°	143.9	2.4
80°-90°	39.0	0.6
90°-100°	81.5	1.3
100°-110°	240.8	4.0
110°-120°	407.8	6.7
120°-130°	536.7	8.9
130°-140°	601.4	9.9
140°-150°	589.4	9.7
150°-160°	495.1	8.2
160°-170°	329.1	5.4
170°-180°	115.2	1.9
0°-30°	827.2	13.7
0°-40°	1314.1	21.7
0°-60°	2188.2	36.2
0°-90°	2651.2	43.8
90°-120°	730.2	12.1
90°-150°	2457.8	40.6
90°-180°	3397.0	56.2
0°-180°	6048.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1121	1121	1121	1121	1121	
5°	1119	1116	1107	1115	1114	106
15°	1064	1059	1042	1040	1033	300
25°	965	952	921	910	901	444
35°	832	810	773	749	737	520
45°	681	655	610	577	563	525
55°	516	488	442	405	390	462
65°	350	320	276	243	229	346
75°	186	160	125	107	101	197
85°	47	32	27	26	25	52
90°	1	8	15	20	23	6
95°	62	64	73	79	81	66
105°	216	221	226	232	235	231
115°	408	412	414	413	412	404
125°	596	601	603	601	600	533
135°	775	780	782	781	778	597
145°	939	943	946	945	943	587
155°	1074	1074	1075	1079	1074	495
165°	1168	1166	1167	1170	1165	329
175°	1215	1211	1211	1216	1210	115
180°	1217	1217	1217	1217	1217	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1
2.5°	1123.1	1122.7	1122.2	1121.8	1121.3	1120.3	1118.8	1117.3	1115.8	1114.3	1115.8
5°	1119.4	1118.7	1117.9	1117.1	1116.4	1115.0	1112.9	1110.8	1108.7	1106.7	1108.6
7.5°	1108.4	1107.7	1106.9	1106.2	1105.5	1103.9	1101.5	1098.9	1096.5	1094.0	1095.3
10°	1098.2	1097.6	1097.1	1096.5	1095.9	1094.4	1091.8	1089.1	1086.5	1083.9	1084.3
12.5°	1086.7	1086.0	1085.2	1084.6	1083.9	1081.7	1078.2	1074.6	1071.1	1067.6	1068.0
15°	1064.4	1063.2	1062.1	1060.9	1059.8	1057.3	1053.4	1049.4	1045.5	1041.5	1041.3
17.5°	1039.1	1037.4	1035.7	1034.0	1032.2	1028.8	1023.9	1018.9	1013.9	1008.9	1008.0
20°	1019.5	1017.6	1015.7	1013.8	1011.9	1008.0	1002.0	996.0	989.9	983.9	983.0
22.5°	997.8	995.9	994.0	992.1	990.3	986.2	979.8	973.5	967.2	960.9	959.0
25°	965.3	962.5	959.6	956.8	954.0	949.1	942.2	935.1	928.2	921.3	918.8
27.5°	928.1	924.6	921.2	917.8	914.4	908.9	901.5	894.0	886.6	879.1	875.6
30°	900.9	897.3	893.8	890.2	886.6	880.8	873.0	865.1	857.2	849.3	845.0
32.5°	874.5	870.3	866.2	862.0	857.8	851.7	843.7	835.6	827.5	819.5	814.7
35°	831.5	827.0	822.5	817.9	813.4	806.9	798.5	790.0	781.5	773.1	767.6
37.5°	789.3	783.8	778.4	772.8	767.4	760.3	751.5	742.7	734.0	725.3	718.8
40°	759.5	753.9	748.2	742.6	736.9	729.6	720.6	711.5	702.5	693.5	686.3
42.5°	728.4	722.6	716.8	710.9	705.2	697.7	688.3	679.0	669.6	660.3	653.5
45°	680.8	675.3	669.8	664.4	658.9	651.0	640.7	630.4	620.0	609.7	602.1
47.5°	631.5	625.7	620.0	614.2	608.5	600.4	590.0	579.5	569.1	558.6	550.9
50°	600.3	594.1	587.9	581.7	575.5	567.0	556.3	545.6	534.8	524.2	516.2
52.5°	566.5	560.1	553.8	547.4	541.0	532.8	522.7	512.6	502.4	492.3	483.8
55°	516.5	510.5	504.5	498.5	492.4	484.1	473.6	463.1	452.6	442.0	433.5
57.5°	466.0	459.6	453.1	446.7	440.3	432.0	421.8	411.6	401.5	391.3	383.1
60°	433.5	427.0	420.4	413.8	407.2	398.8	388.7	378.5	368.4	358.2	349.9
62.5°	399.0	392.7	386.5	380.1	373.8	365.6	355.2	345.0	334.6	324.3	316.7
65°	349.7	343.3	336.9	330.5	324.1	315.9	306.0	296.0	286.0	276.1	268.5
67.5°	300.8	294.3	288.0	281.6	275.2	267.2	257.6	248.1	238.6	228.9	222.1
70°	267.6	261.1	254.8	248.3	242.0	234.1	224.7	215.2	205.9	196.4	190.6
72.5°	235.1	228.8	222.6	216.3	210.1	202.5	193.7	184.9	176.1	167.3	161.9
75°	186.3	180.7	175.0	169.3	163.7	156.9	149.0	141.1	133.2	125.3	121.2
77.5°	137.9	133.3	128.8	124.3	119.8	114.4	108.0	101.7	95.4	89.1	86.2
80°	110.1	105.6	101.0	96.5	92.0	87.2	81.9	76.6	71.3	66.0	64.3
82.5°	83.0	78.9	74.8	70.8	66.7	62.9	59.3	55.7	52.0	48.4	47.6
85°	46.6	43.2	39.8	36.4	33.0	30.8	29.9	28.9	28.0	27.1	26.9
87.5°	15.7	15.1	14.3	13.6	12.9	12.6	12.8	12.9	13.0	13.2	13.4
90°	1.0	2.6	4.3	6.0	7.7	9.3	10.8	12.2	13.7	15.2	16.2
92.5°	22.9	24.1	25.3	26.5	27.6	29.1	31.0	32.8	34.6	36.4	37.7
95°	61.6	62.0	62.5	62.9	63.3	64.5	66.6	68.7	70.8	73.0	74.4
97.5°	102.3	102.5	102.6	102.8	103.0	104.5	107.5	110.3	113.2	116.2	117.6
100°	132.6	132.6	132.6	132.6	132.6	134.0	136.7	139.5	142.2	145.0	146.8
102.5°	165.3	166.1	166.9	167.8	168.6	169.7	171.1	172.5	173.9	175.3	177.3
105°	216.0	217.0	218.1	219.2	220.2	221.4	222.7	223.9	225.2	226.4	227.7
107.5°	272.1	273.1	274.2	275.2	276.3	277.3	278.3	279.2	280.2	281.2	281.8
110°	310.8	311.8	312.8	313.9	315.0	315.8	316.4	317.1	317.7	318.3	318.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	350.2	350.7	351.2	351.8	352.4	353.0	353.8	354.7	355.4	356.2	356.5
115°	408.3	409.2	410.0	410.8	411.7	412.3	412.8	413.2	413.6	414.0	413.8
117.5°	466.7	467.1	467.5	467.8	468.2	468.6	469.0	469.4	469.7	470.1	470.3
120°	503.0	504.1	505.2	506.2	507.3	507.9	508.1	508.3	508.6	508.7	508.7
122.5°	542.5	542.9	543.2	543.6	544.0	544.5	545.0	545.6	546.1	546.7	546.5
125°	595.9	597.2	598.4	599.7	601.0	601.7	601.9	602.1	602.3	602.6	602.1
127.5°	652.8	653.5	654.2	654.9	655.7	656.2	656.4	656.6	656.9	657.1	656.9
130°	686.9	687.9	689.0	690.1	691.0	691.9	692.3	692.7	693.1	693.5	693.3
132.5°	721.0	722.7	724.5	726.2	727.9	728.7	728.6	728.6	728.5	728.4	728.1
135°	775.0	776.2	777.6	778.8	780.1	780.8	781.0	781.2	781.4	781.6	781.6
137.5°	825.7	827.0	828.2	829.4	830.6	831.5	831.9	832.4	832.9	833.3	833.6
140°	858.3	859.4	860.5	861.5	862.6	863.4	864.1	864.7	865.3	865.9	866.3
142.5°	891.0	891.9	892.8	893.6	894.5	895.4	896.1	896.9	897.7	898.5	898.8
145°	938.9	939.7	940.6	941.4	942.2	943.0	943.6	944.3	944.9	945.5	945.5
147.5°	983.3	983.7	984.1	984.6	985.0	985.5	986.1	986.6	987.1	987.6	988.1
150°	1012.8	1012.6	1012.4	1012.2	1011.9	1012.3	1013.1	1013.9	1014.8	1015.6	1015.6
152.5°	1037.1	1037.3	1037.6	1038.0	1038.2	1038.5	1038.9	1039.2	1039.6	1039.9	1040.4
155°	1074.4	1074.4	1074.4	1074.4	1074.4	1074.5	1074.7	1074.9	1075.1	1075.3	1076.2
157.5°	1107.7	1107.3	1106.8	1106.4	1105.9	1105.7	1106.0	1106.2	1106.4	1106.6	1107.4
160°	1127.4	1126.8	1126.2	1125.5	1124.9	1124.7	1124.9	1125.1	1125.4	1125.5	1126.3
162.5°	1144.8	1144.4	1143.9	1143.5	1143.0	1142.8	1142.8	1142.9	1142.9	1143.0	1143.9
165°	1168.2	1167.8	1167.3	1166.9	1166.4	1166.4	1166.6	1166.8	1167.0	1167.2	1168.1
167.5°	1187.9	1187.0	1186.2	1185.4	1184.5	1184.1	1184.1	1184.1	1184.1	1184.1	1185.4
170°	1198.5	1197.7	1196.8	1196.0	1195.1	1194.7	1194.7	1194.7	1194.7	1194.7	1196.0
172.5°	1206.1	1205.3	1204.4	1203.5	1202.7	1202.2	1202.2	1202.2	1202.2	1202.2	1203.5
175°	1214.6	1213.7	1212.9	1212.0	1211.2	1210.8	1210.8	1210.8	1210.8	1210.8	1212.0
177.5°	1219.0	1218.3	1217.6	1216.9	1216.3	1215.9	1215.7	1215.5	1215.3	1215.1	1216.2
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1
2.5°	1117.3	1118.8	1120.3	1121.0	1120.9	1120.7	1120.5	1120.4
5°	1110.4	1112.3	1114.2	1115.0	1114.6	1114.2	1113.9	1113.5
7.5°	1096.7	1098.0	1099.3	1099.7	1099.3	1098.9	1098.5	1098.0
10°	1084.9	1085.5	1086.1	1086.1	1085.5	1084.9	1084.3	1083.9
12.5°	1068.4	1068.8	1069.2	1069.0	1068.1	1067.2	1066.4	1065.5
15°	1041.1	1040.9	1040.7	1039.8	1038.1	1036.4	1034.7	1033.0
17.5°	1007.1	1006.2	1005.2	1004.0	1002.7	1001.3	999.9	998.5
20°	982.0	981.0	980.2	978.8	977.1	975.4	973.7	972.1
22.5°	957.2	955.4	953.5	951.9	950.5	949.1	947.7	946.3
25°	916.4	914.0	911.5	909.2	907.1	905.1	903.0	900.9
27.5°	872.2	868.8	865.4	862.7	860.7	858.7	856.7	854.7
30°	840.7	836.3	831.9	829.0	827.3	825.6	823.9	822.1
32.5°	809.9	805.1	800.4	796.9	794.8	792.6	790.4	788.3
35°	762.1	756.7	751.2	747.2	744.5	741.9	739.3	736.6
37.5°	712.2	705.6	699.1	694.6	692.0	689.4	686.9	684.4
40°	679.1	672.1	664.9	660.1	657.9	655.7	653.4	651.2
42.5°	646.6	639.8	632.9	627.8	624.5	621.2	617.8	614.6
45°	594.6	587.1	579.5	574.4	571.5	568.8	565.9	563.0
47.5°	543.2	535.4	527.7	522.2	519.1	516.0	512.8	509.7
50°	508.3	500.4	492.5	487.1	484.4	481.5	478.7	475.9
52.5°	475.3	466.8	458.3	452.6	449.8	446.9	444.2	441.3
55°	425.1	416.6	408.1	402.4	399.4	396.4	393.4	390.4
57.5°	374.8	366.6	358.2	352.8	350.1	347.4	344.8	342.1
60°	341.6	333.3	325.1	319.5	316.7	313.9	311.0	308.2
62.5°	308.9	301.3	293.6	288.4	285.5	282.7	279.9	277.0
65°	261.0	253.5	245.9	240.8	237.9	235.1	232.3	229.4
67.5°	215.2	208.3	201.4	196.8	194.6	192.3	190.0	187.8
70°	184.7	179.0	173.1	169.1	166.8	164.5	162.3	160.0
72.5°	156.5	151.2	145.8	142.4	140.8	139.3	137.9	136.3
75°	117.1	112.9	108.8	106.1	104.7	103.4	102.1	100.8
77.5°	83.2	80.4	77.5	75.6	74.6	73.6	72.6	71.7
80°	62.7	61.0	59.3	58.2	57.9	57.5	57.1	56.7
82.5°	46.9	46.1	45.2	44.8	44.5	44.4	44.1	43.9
85°	26.7	26.5	26.3	26.2	25.9	25.8	25.6	25.4
87.5°	13.6	13.9	14.0	14.1	14.1	14.1	14.0	14.0
90°	17.3	18.3	19.4	20.2	20.9	21.4	22.1	22.7
92.5°	39.1	40.5	41.9	42.9	43.3	43.8	44.3	44.7
95°	75.9	77.4	78.8	79.8	80.2	80.6	81.0	81.4
97.5°	119.0	120.3	121.7	122.5	122.8	123.0	123.3	123.5
100°	148.7	150.7	152.5	153.7	154.1	154.5	155.0	155.4
102.5°	179.4	181.5	183.5	184.8	185.5	186.1	186.6	187.2
105°	228.9	230.2	231.5	232.4	233.1	233.7	234.3	235.0
107.5°	282.4	283.1	283.7	284.1	284.0	284.0	283.9	283.8
110°	319.6	320.2	320.8	321.1	320.8	320.7	320.4	320.2





TEST NUMBER: P333578-930

CATALOG NUMBER: S125RDIP-S850D1205U930-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	356.9	357.1	357.4	357.3	357.0	356.6	356.2	355.9
115°	413.6	413.4	413.2	412.9	412.8	412.5	412.3	412.1
117.5°	470.4	470.6	470.8	470.4	469.6	468.8	467.9	467.1
120°	508.7	508.7	508.7	508.3	507.5	506.6	505.8	505.0
122.5°	546.3	546.2	546.0	545.6	544.9	544.2	543.6	542.9
125°	601.7	601.3	600.9	600.5	600.4	600.1	599.9	599.7
127.5°	656.7	656.5	656.3	656.0	655.6	655.1	654.7	654.3
130°	693.1	692.8	692.7	692.4	691.9	691.5	691.0	690.6
132.5°	728.0	727.7	727.5	727.2	726.5	725.9	725.4	724.8
135°	781.6	781.6	781.6	781.2	780.3	779.5	778.7	777.8
137.5°	833.9	834.1	834.4	834.0	832.9	831.8	830.8	829.7
140°	866.7	867.2	867.6	867.3	866.3	865.2	864.1	863.1
142.5°	899.0	899.3	899.5	899.1	898.1	897.1	896.0	895.0
145°	945.5	945.5	945.5	945.2	944.6	944.0	943.3	942.6
147.5°	988.6	989.1	989.6	989.1	987.7	986.3	984.9	983.4
150°	1015.6	1015.6	1015.6	1015.5	1015.0	1014.6	1014.2	1013.7
152.5°	1040.9	1041.4	1041.9	1041.8	1041.1	1040.2	1039.5	1038.8
155°	1077.0	1077.8	1078.7	1078.6	1077.5	1076.4	1075.5	1074.4
157.5°	1108.2	1109.1	1109.9	1109.7	1108.3	1106.9	1105.5	1104.2
160°	1127.2	1128.0	1128.9	1128.8	1127.7	1126.7	1125.6	1124.6
162.5°	1145.0	1146.0	1147.0	1146.9	1145.7	1144.4	1143.2	1142.0
165°	1168.9	1169.7	1170.6	1170.4	1169.1	1167.8	1166.6	1165.3
167.5°	1186.6	1187.9	1189.1	1189.1	1187.8	1186.5	1185.2	1183.9
170°	1197.2	1198.5	1199.7	1199.6	1198.2	1196.7	1195.2	1193.8
172.5°	1204.8	1206.1	1207.3	1207.3	1206.0	1204.7	1203.4	1202.1
175°	1213.3	1214.6	1215.9	1215.8	1214.3	1212.8	1211.3	1209.8
177.5°	1217.2	1218.2	1219.2	1219.1	1218.0	1216.8	1215.6	1214.4
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4

(END OF REPORT)