

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: P333571-930

Luminaire Tested: **S125RDIP-S850D1035U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333571-930
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-S850D1035U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6023.0 lumens
Efficiency: N/A
Efficacy: 115.8 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

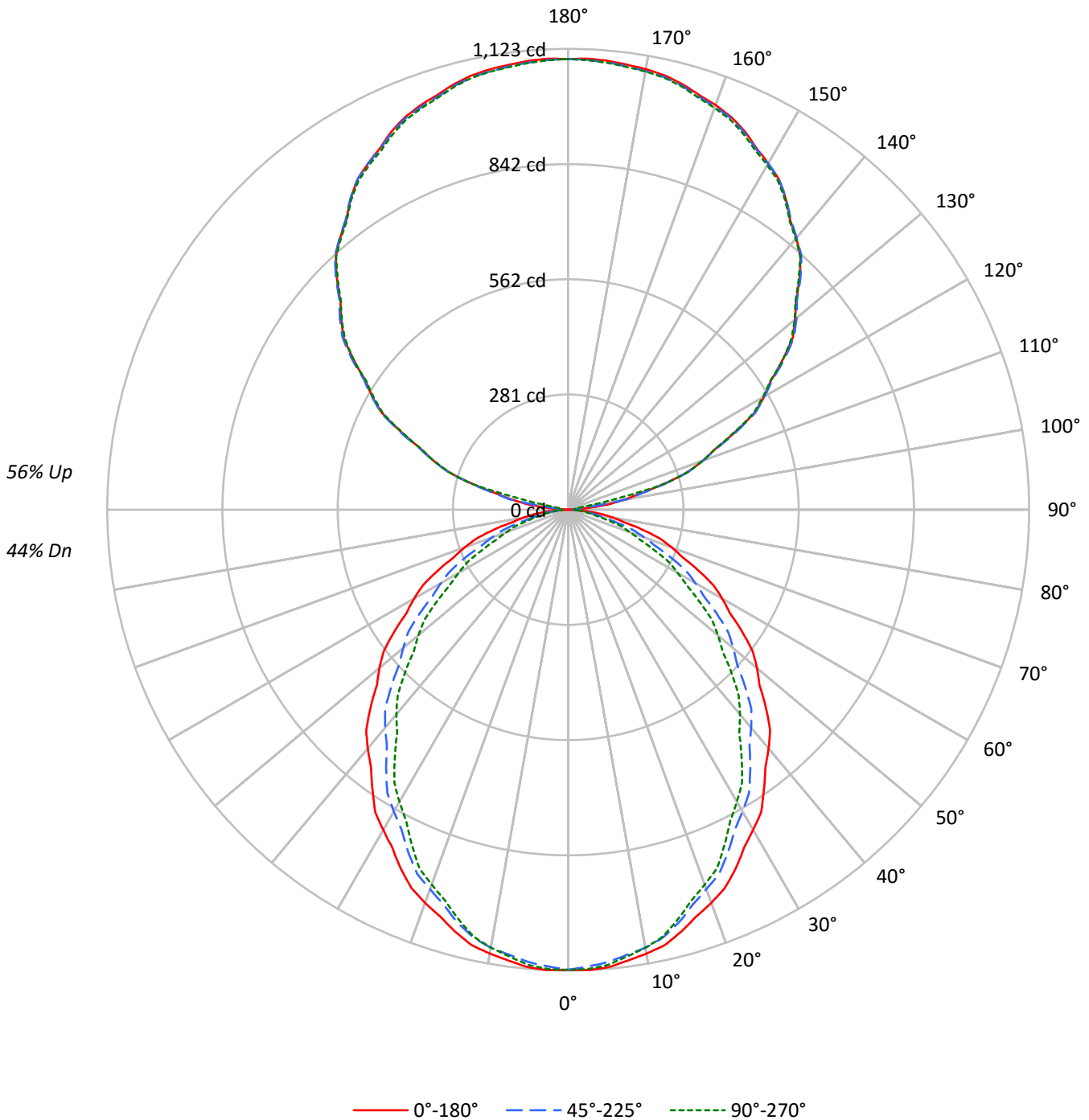
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	51	51	51	44
1	97	92	89	85	88	85	82	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	46	40	38	37	32
3	80	71	64	58	73	66	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	30	26	22	24	21	19	16
8	53	41	34	29	49	38	32	27	33	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	1.8
10°-20°	294.6	4.9
20°-30°	427.2	7.1
30°-40°	486.9	8.1
40°-50°	474.6	7.9
50°-60°	399.5	6.6
60°-70°	280.0	4.6
70°-80°	143.9	2.4
80°-90°	38.6	0.6
90°-100°	39.9	0.7
100°-110°	245.9	4.1
110°-120°	446.1	7.4
120°-130°	572.5	9.5
130°-140°	615.7	10.2
140°-150°	578.0	9.6
150°-160°	467.5	7.8
160°-170°	302.4	5.0
170°-180°	104.3	1.7
0°-30°	827.2	13.7
0°-40°	1314.1	21.8
0°-60°	2188.2	36.3
0°-90°	2650.8	44.0
90°-120°	731.9	12.2
90°-150°	2498.1	41.5
90°-180°	3372.0	56.0
0°-180°	6023.0	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	7	13	17	20	4
95°	46	42	13	17	17	59
105°	239	242	243	243	242	254
115°	449	453	454	451	446	445
125°	639	644	645	642	639	571
135°	797	802	800	798	794	614
145°	924	926	926	926	922	578
155°	1018	1013	1014	1016	1010	469
165°	1074	1069	1070	1074	1068	303
175°	1098	1094	1094	1100	1093	105
180°	1098	1098	1098	1098	1098	



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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	15.0	14.2	13.5	12.7	12.4	12.5	12.6	12.6	12.8	13.0
90°	0.8	2.3	3.7	5.1	6.6	8.0	9.2	10.5	11.7	13.0	13.9
92.5°	12.6	11.5	10.5	9.5	8.5	8.6	9.6	10.8	11.9	13.0	13.9
95°	46.4	45.8	45.3	44.8	44.3	40.5	33.7	26.7	19.9	13.0	13.9
97.5°	96.9	97.8	98.8	99.8	100.8	94.5	80.9	67.3	53.6	40.0	35.0
100°	135.9	136.5	137.1	137.5	138.1	138.8	139.5	140.2	140.9	141.6	114.7
102.5°	175.7	176.3	177.1	177.7	178.4	179.0	179.4	179.9	180.3	180.8	175.6
105°	239.3	240.0	240.8	241.5	242.2	242.6	242.6	242.6	242.6	242.6	242.6
107.5°	305.4	305.4	305.4	305.4	305.4	305.6	306.0	306.3	306.7	307.0	307.1
110°	348.4	348.4	348.4	348.4	348.4	348.6	348.9	349.4	349.7	350.0	349.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	388.8	389.2	389.6	390.1	390.5	390.9	391.1	391.3	391.5	391.8	391.0
115°	449.4	450.3	451.2	452.1	453.0	453.6	453.7	453.9	454.0	454.2	453.6
117.5°	512.0	512.0	511.9	511.9	511.9	512.3	512.9	513.6	514.3	514.9	514.0
120°	551.1	550.9	550.7	550.6	550.4	550.6	551.1	551.6	552.2	552.8	552.4
122.5°	585.6	586.3	587.0	587.7	588.4	588.8	589.1	589.4	589.6	589.9	589.5
125°	639.0	640.3	641.6	642.9	644.1	644.7	644.7	644.7	644.7	644.7	644.0
127.5°	690.0	690.9	691.8	692.7	693.6	694.0	693.9	693.8	693.7	693.6	693.2
130°	721.2	722.2	723.1	724.0	724.9	725.4	725.6	725.8	725.9	726.1	725.6
132.5°	752.5	753.6	754.6	755.6	756.7	757.0	756.6	756.3	755.9	755.5	755.3
135°	797.0	798.0	799.2	800.2	801.3	801.7	801.3	801.0	800.5	800.2	799.8
137.5°	837.8	838.8	839.7	840.7	841.6	841.9	841.6	841.2	840.9	840.6	840.7
140°	864.5	864.9	865.3	865.6	865.9	866.1	865.8	865.7	865.5	865.4	865.7
142.5°	888.6	888.8	889.1	889.2	889.5	889.7	890.0	890.2	890.5	890.7	890.8
145°	924.0	924.3	924.6	925.0	925.4	925.6	925.6	925.6	925.6	925.6	925.8
147.5°	954.9	954.8	954.7	954.6	954.6	954.6	954.9	955.1	955.3	955.5	955.8
150°	974.4	974.0	973.7	973.3	973.0	973.0	973.3	973.7	974.0	974.4	974.8
152.5°	993.3	992.5	991.7	990.9	990.1	989.9	990.3	990.6	991.0	991.3	991.7
155°	1017.6	1016.5	1015.4	1014.3	1013.3	1012.8	1013.3	1013.6	1013.9	1014.3	1014.9
157.5°	1036.2	1035.6	1035.0	1034.4	1033.7	1033.4	1033.4	1033.5	1033.5	1033.6	1034.1
160°	1049.3	1048.2	1047.2	1046.0	1045.0	1044.5	1044.7	1044.9	1045.1	1045.2	1045.9
162.5°	1059.7	1058.7	1057.5	1056.5	1055.4	1054.9	1055.1	1055.3	1055.5	1055.6	1056.7
165°	1073.7	1072.6	1071.5	1070.5	1069.4	1068.9	1069.1	1069.3	1069.5	1069.7	1070.7
167.5°	1084.2	1083.0	1081.9	1080.8	1079.7	1079.2	1079.4	1079.5	1079.7	1079.9	1081.2
170°	1090.0	1088.8	1087.4	1086.2	1084.9	1084.4	1084.6	1084.8	1084.9	1085.2	1086.5
172.5°	1093.9	1092.7	1091.4	1090.1	1088.8	1088.4	1088.7	1089.0	1089.3	1089.6	1091.0
175°	1098.1	1097.1	1096.0	1094.9	1093.8	1093.4	1093.6	1093.7	1093.9	1094.1	1095.5
177.5°	1100.1	1099.3	1098.4	1097.5	1096.7	1096.3	1096.4	1096.6	1096.7	1096.8	1097.9
180°	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1



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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°	13.1	13.3	13.5	13.5	13.5	13.5	13.5	13.4
90°	14.8	15.7	16.6	17.4	17.9	18.4	19.0	19.6
92.5°	14.8	15.7	16.6	17.2	17.4	17.7	18.0	18.3
95°	14.8	15.7	16.6	17.1	17.1	17.1	17.1	17.1
97.5°	29.8	24.8	19.6	17.1	17.1	17.1	17.1	17.1
100°	87.7	60.8	33.8	20.0	19.2	18.5	17.9	17.1
102.5°	170.5	165.4	160.3	151.6	139.3	127.0	114.7	102.4
105°	242.6	242.6	242.6	242.5	242.3	242.1	242.0	241.7
107.5°	307.1	307.2	307.2	307.0	306.4	305.9	305.3	304.8
110°	348.9	348.4	347.9	347.7	347.9	348.1	348.2	348.4



TEST NUMBER: P333571-930

CATALOG NUMBER: S125RDIP-S850D1035U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	390.4	389.6	389.0	388.5	388.2	388.0	387.8	387.5
115°	452.8	452.1	451.3	450.5	449.4	448.3	447.2	446.1
117.5°	513.1	512.2	511.2	510.5	510.1	509.6	509.1	508.6
120°	552.0	551.6	551.3	550.7	549.8	548.9	548.0	547.1
122.5°	589.1	588.8	588.4	587.7	586.7	585.6	584.6	583.5
125°	643.3	642.5	641.8	641.2	640.7	640.1	639.6	639.0
127.5°	692.8	692.4	691.9	691.1	689.7	688.4	687.1	685.7
130°	725.0	724.5	724.0	723.3	722.4	721.5	720.6	719.6
132.5°	755.2	755.1	755.0	754.5	753.6	752.7	751.8	750.9
135°	799.5	799.2	798.7	798.0	797.0	795.9	794.8	793.7
137.5°	840.7	840.8	840.9	840.4	839.5	838.5	837.6	836.7
140°	866.1	866.4	866.7	866.4	865.4	864.2	863.2	862.1
142.5°	890.9	891.0	891.0	890.6	889.4	888.4	887.3	886.1
145°	925.9	926.1	926.3	925.9	924.8	923.7	922.6	921.5
147.5°	955.9	956.2	956.4	955.9	954.6	953.2	951.9	950.6
150°	975.2	975.5	975.8	975.3	973.9	972.4	970.9	969.6
152.5°	992.1	992.5	992.8	992.3	991.0	989.7	988.4	987.1
155°	1015.4	1015.9	1016.5	1016.0	1014.6	1013.1	1011.7	1010.2
157.5°	1034.7	1035.3	1035.8	1035.4	1034.0	1032.5	1031.0	1029.6
160°	1046.7	1047.4	1048.1	1047.7	1046.4	1044.9	1043.4	1042.0
162.5°	1057.7	1058.7	1059.7	1059.4	1057.9	1056.2	1054.7	1053.0
165°	1071.8	1072.9	1074.0	1073.8	1072.4	1070.9	1069.5	1068.0
167.5°	1082.6	1083.9	1085.2	1085.0	1083.4	1081.7	1080.1	1078.5
170°	1088.0	1089.5	1091.0	1090.8	1089.2	1087.6	1086.0	1084.3
172.5°	1092.3	1093.6	1094.9	1094.7	1093.1	1091.4	1089.8	1088.3
175°	1097.0	1098.5	1099.8	1099.8	1098.1	1096.5	1094.9	1093.2
177.5°	1098.9	1099.9	1100.9	1100.8	1099.7	1098.5	1097.4	1096.2
180°	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1

(END OF REPORT)