

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: P333572-930

Luminaire Tested: **S125RDIP-S850D1035U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333572-930
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-S850D1035U930-4F0-1E-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: 5569.4 lumens
Efficiency: N/A
Efficacy: 107.1 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

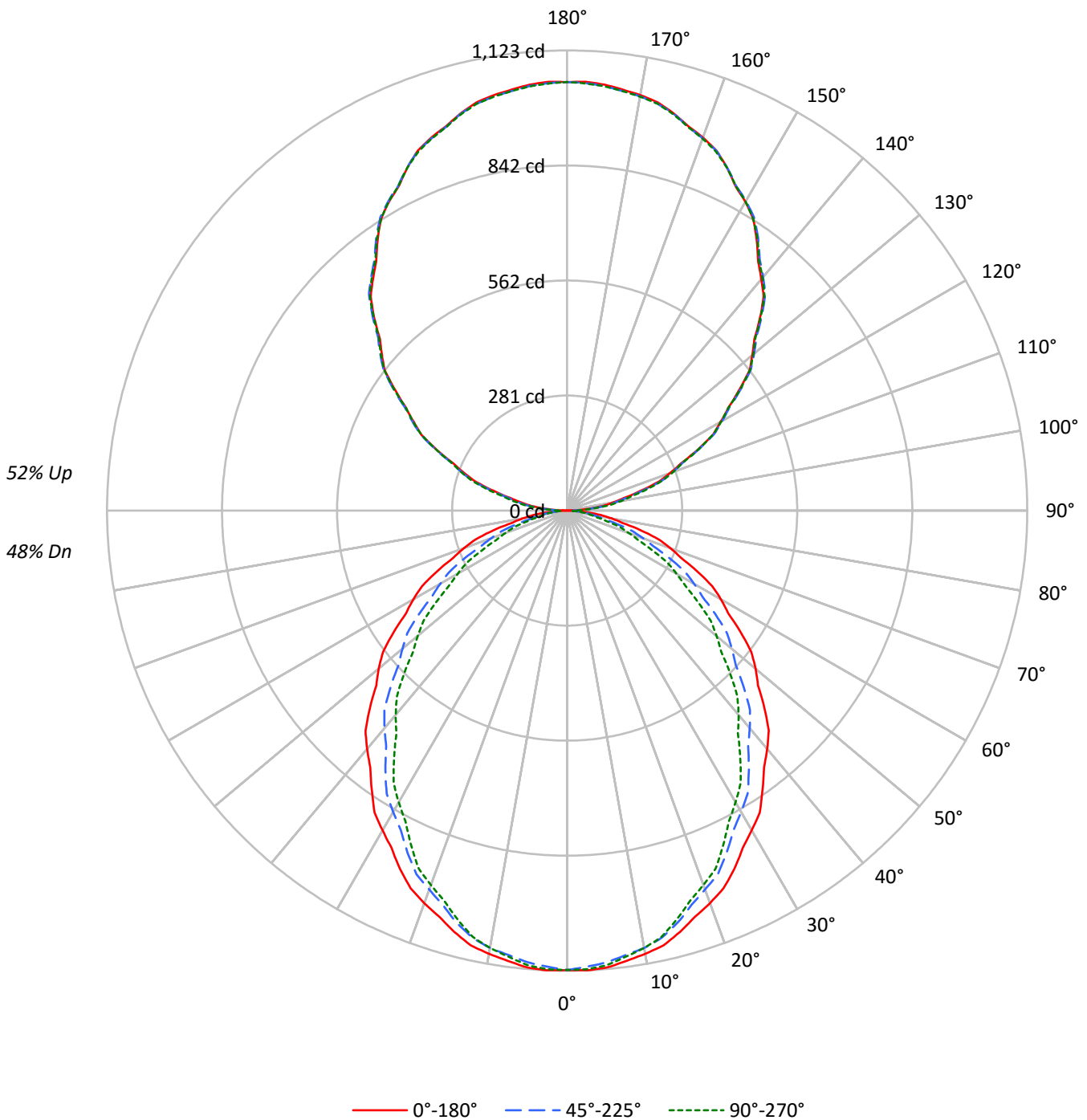
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	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	1.9
10°-20°	294.6	5.3
20°-30°	427.2	7.7
30°-40°	486.9	8.7
40°-50°	474.6	8.5
50°-60°	399.5	7.2
60°-70°	280.0	5.0
70°-80°	143.9	2.6
80°-90°	38.6	0.7
90°-100°	70.1	1.3
100°-110°	206.9	3.7
110°-120°	350.4	6.3
120°-130°	461.1	8.3
130°-140°	516.7	9.3
140°-150°	506.4	9.1
150°-160°	425.3	7.6
160°-170°	282.7	5.1
170°-180°	98.9	1.8
0°-30°	827.2	14.9
0°-40°	1314.1	23.6
0°-60°	2188.2	39.3
0°-90°	2650.8	47.6
90°-120°	627.3	11.3
90°-150°	2111.6	37.9
90°-180°	2919.0	52.4
0°-180°	5569.4	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	5
95°	53	55	63	68	70	56
105°	186	190	194	199	202	198
115°	351	354	356	355	354	347
125°	512	517	518	516	515	458
135°	666	670	672	671	668	513
145°	807	810	812	812	810	504
155°	923	923	924	927	923	425
165°	1004	1002	1003	1006	1001	283
175°	1044	1040	1040	1045	1039	99
180°	1046	1046	1046	1046	1046	



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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°	19.7	20.7	21.7	22.7	23.7	25.0	26.6	28.1	29.7	31.2	32.4
95°	52.9	53.2	53.6	54.0	54.4	55.4	57.2	59.0	60.9	62.7	63.9
97.5°	87.9	88.1	88.2	88.4	88.5	89.8	92.3	94.8	97.3	99.8	101.0
100°	114.0	114.0	114.0	114.0	114.0	115.1	117.5	119.8	122.2	124.5	126.1
102.5°	141.9	142.7	143.4	144.1	144.9	145.8	147.0	148.2	149.4	150.6	152.4
105°	185.6	186.5	187.4	188.3	189.2	190.2	191.3	192.3	193.5	194.5	195.6
107.5°	233.7	234.6	235.5	236.5	237.4	238.2	239.0	239.9	240.8	241.6	242.1
110°	267.0	267.9	268.8	269.7	270.6	271.3	271.8	272.4	273.0	273.5	274.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	300.8	301.3	301.7	302.2	302.7	303.3	304.0	304.7	305.3	306.1	306.3
115°	350.8	351.6	352.3	353.0	353.7	354.2	354.6	355.0	355.3	355.7	355.6
117.5°	401.0	401.3	401.6	401.9	402.3	402.6	402.9	403.2	403.6	403.9	404.1
120°	432.2	433.1	434.0	435.0	435.9	436.3	436.5	436.8	436.9	437.1	437.1
122.5°	466.1	466.4	466.8	467.1	467.4	467.7	468.2	468.7	469.2	469.6	469.5
125°	512.0	513.1	514.1	515.3	516.3	517.0	517.1	517.3	517.5	517.7	517.3
127.5°	560.8	561.4	562.1	562.6	563.3	563.7	563.9	564.1	564.4	564.6	564.4
130°	590.1	591.0	591.9	592.8	593.7	594.4	594.8	595.1	595.4	595.8	595.7
132.5°	619.4	620.9	622.4	623.9	625.3	626.1	626.0	625.9	625.8	625.7	625.6
135°	665.9	666.9	668.0	669.0	670.2	670.8	671.0	671.2	671.3	671.5	671.5
137.5°	709.5	710.5	711.5	712.6	713.6	714.4	714.8	715.2	715.6	715.9	716.2
140°	737.4	738.3	739.2	740.1	741.0	741.8	742.3	742.9	743.4	744.0	744.3
142.5°	765.4	766.2	767.0	767.7	768.5	769.2	769.9	770.6	771.3	771.9	772.2
145°	806.7	807.4	808.0	808.8	809.5	810.2	810.7	811.2	811.8	812.4	812.4
147.5°	844.7	845.1	845.5	846.0	846.3	846.8	847.2	847.6	848.0	848.5	848.9
150°	870.1	869.9	869.8	869.6	869.4	869.7	870.4	871.1	871.8	872.5	872.5
152.5°	891.0	891.2	891.4	891.7	891.9	892.3	892.5	892.8	893.1	893.4	893.8
155°	923.0	923.0	923.0	923.0	923.0	923.1	923.3	923.5	923.7	923.8	924.5
157.5°	951.7	951.3	950.9	950.5	950.1	950.0	950.1	950.3	950.6	950.7	951.5
160°	968.6	968.1	967.5	966.9	966.5	966.3	966.5	966.6	966.8	966.9	967.7
162.5°	983.6	983.2	982.8	982.4	982.0	981.8	981.9	981.9	981.9	981.9	982.8
165°	1003.6	1003.2	1002.9	1002.5	1002.2	1002.1	1002.2	1002.4	1002.6	1002.8	1003.6
167.5°	1020.5	1019.8	1019.1	1018.4	1017.7	1017.2	1017.2	1017.2	1017.2	1017.2	1018.4
170°	1029.6	1028.9	1028.2	1027.5	1026.8	1026.4	1026.4	1026.4	1026.4	1026.4	1027.5
172.5°	1036.2	1035.4	1034.7	1034.0	1033.3	1032.9	1032.9	1032.9	1032.9	1032.9	1034.0
175°	1043.5	1042.8	1042.0	1041.3	1040.6	1040.2	1040.2	1040.2	1040.2	1040.2	1041.3
177.5°	1047.3	1046.7	1046.1	1045.5	1044.9	1044.6	1044.4	1044.2	1044.2	1044.0	1044.9
180°	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9



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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°	33.7	34.8	36.0	36.9	37.3	37.6	38.0	38.4
95°	65.2	66.4	67.8	68.6	68.9	69.3	69.6	70.0
97.5°	102.2	103.4	104.6	105.3	105.5	105.7	105.9	106.2
100°	127.8	129.4	131.0	132.1	132.4	132.7	133.1	133.5
102.5°	154.1	155.9	157.7	158.8	159.3	159.8	160.4	160.9
105°	196.7	197.8	198.9	199.7	200.2	200.8	201.3	201.9
107.5°	242.6	243.2	243.8	244.0	243.9	243.9	243.9	243.9
110°	274.6	275.1	275.7	275.8	275.7	275.5	275.3	275.1



TEST NUMBER: P333572-930

CATALOG NUMBER: S125RDIP-S850D1035U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	306.6	306.8	307.0	307.0	306.7	306.4	306.1	305.7
115°	355.3	355.1	355.0	354.8	354.6	354.4	354.2	354.1
117.5°	404.1	404.3	404.5	404.1	403.4	402.8	402.0	401.3
120°	437.1	437.1	437.1	436.8	436.0	435.3	434.6	433.8
122.5°	469.4	469.2	469.0	468.7	468.1	467.6	467.0	466.4
125°	517.0	516.6	516.2	515.9	515.8	515.6	515.4	515.3
127.5°	564.2	564.0	563.9	563.5	563.2	562.8	562.5	562.1
130°	595.4	595.3	595.1	594.8	594.4	594.1	593.7	593.4
132.5°	625.4	625.3	625.0	624.7	624.2	623.7	623.2	622.6
135°	671.5	671.5	671.5	671.2	670.4	669.7	669.0	668.2
137.5°	716.4	716.6	716.8	716.5	715.6	714.7	713.8	712.9
140°	744.7	745.0	745.4	745.1	744.2	743.3	742.4	741.5
142.5°	772.4	772.6	772.8	772.5	771.6	770.7	769.8	768.8
145°	812.4	812.4	812.4	812.0	811.5	811.0	810.4	809.9
147.5°	849.3	849.8	850.2	849.8	848.6	847.3	846.1	844.9
150°	872.5	872.5	872.5	872.4	872.0	871.6	871.3	870.9
152.5°	894.3	894.7	895.1	895.0	894.4	893.7	893.1	892.4
155°	925.3	926.0	926.8	926.7	925.8	924.8	923.9	923.0
157.5°	952.1	952.8	953.6	953.3	952.2	951.0	949.7	948.6
160°	968.4	969.1	969.9	969.8	968.9	968.0	967.1	966.1
162.5°	983.7	984.6	985.5	985.4	984.3	983.3	982.2	981.1
165°	1004.2	1004.9	1005.7	1005.5	1004.4	1003.3	1002.2	1001.2
167.5°	1019.5	1020.5	1021.7	1021.6	1020.5	1019.4	1018.2	1017.1
170°	1028.6	1029.6	1030.7	1030.6	1029.4	1028.1	1026.9	1025.6
172.5°	1035.1	1036.2	1037.2	1037.2	1036.1	1035.0	1033.9	1032.7
175°	1042.4	1043.5	1044.6	1044.5	1043.3	1042.0	1040.6	1039.4
177.5°	1045.7	1046.6	1047.4	1047.4	1046.4	1045.4	1044.3	1043.3
180°	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9

(END OF REPORT)