

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: P333238-930

Luminaire Tested: **S125DIP-S850D1035U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333238-930
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: S125DIP-S850D1035U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6159.6 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

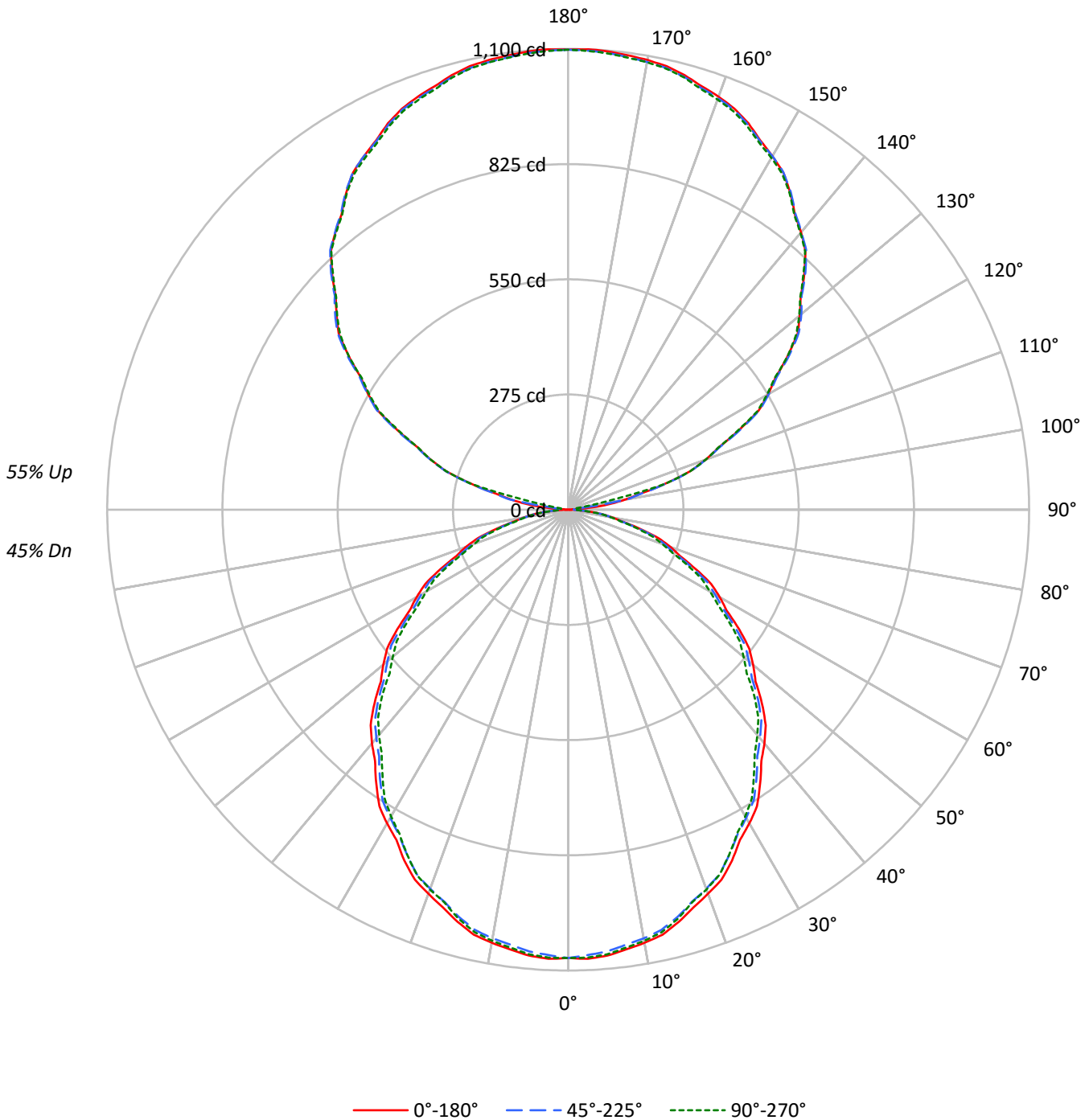
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	81	81	81		66	66	66		52	52	52	45
1	97	92	88	85	88	85	81	78	71	68	66		58	56	54		46	45	44	38
2	88	81	74	69	80	74	69	64	62	58	55		51	48	45		40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46		45	41	38		36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39		40	36	33		32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34		36	32	28		29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29		32	28	25		26	23	21	18
7	57	45	37	32	52	42	35	30	35	30	26		29	25	22		24	21	18	16
8	53	41	33	28	49	38	31	26	32	27	23		27	23	20		22	19	16	14
9	49	37	30	25	45	35	28	23	29	24	20		25	21	18		20	17	15	13
10	46	34	27	22	42	32	25	21	27	22	18		23	19	16		19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6912	6912	6912
5°	6928	6862	6906
10°	6885	6813	6852
15°	6811	6731	6760
20°	6704	6616	6628
25°	6589	6480	6475
30°	6447	6334	6302
35°	6296	6176	6089
40°	6139	6004	5918
45°	5971	5847	5731
50°	5785	5657	5488
55°	5606	5444	5291
60°	5391	5227	5043
65°	5136	4968	4800
70°	4893	4670	4509
75°	4457	4312	4162
80°	3968	3905	3812
85°	3453	3520	3320



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	1.6
10°-20°	285.1	4.6
20°-30°	420.9	6.8
30°-40°	491.1	8.0
40°-50°	493.3	8.0
50°-60°	433.0	7.0
60°-70°	322.6	5.2
70°-80°	184.5	3.0
80°-90°	56.0	0.9
90°-100°	39.9	0.6
100°-110°	245.9	4.0
110°-120°	446.1	7.2
120°-130°	572.5	9.3
130°-140°	615.7	10.0
140°-150°	578.0	9.4
150°-160°	467.5	7.6
160°-170°	302.4	4.9
170°-180°	104.3	1.7
0°-30°	806.9	13.1
0°-40°	1298.0	21.1
0°-60°	2224.3	36.1
0°-90°	2787.3	45.3
90°-120°	731.9	11.9
90°-150°	2498.1	40.6
90°-180°	3372.0	54.7
0°-180°	6159.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1069	1066	1058	1066	1065	101
15°	1019	1016	1007	1011	1011	287
25°	925	920	909	911	909	425
35°	798	795	783	779	772	499
45°	654	650	640	630	628	504
55°	498	495	484	476	470	444
65°	336	334	325	318	314	333
75°	179	177	173	170	167	190
85°	47	47	48	46	45	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°	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2
2.5°	1073.0	1072.5	1072.1	1071.6	1071.1	1070.2	1068.7	1067.2	1065.7	1064.2	1065.7
5°	1068.6	1068.2	1067.8	1067.5	1067.1	1065.9	1064.0	1062.2	1060.3	1058.4	1060.1
7.5°	1058.7	1058.4	1058.0	1057.6	1057.3	1056.1	1053.9	1051.9	1049.9	1047.7	1049.4
10°	1049.9	1049.6	1049.2	1048.8	1048.5	1047.3	1045.1	1043.1	1041.1	1038.9	1040.5
12.5°	1039.1	1038.4	1037.8	1037.1	1036.4	1035.1	1033.2	1031.3	1029.3	1027.4	1028.7
15°	1018.6	1018.1	1017.5	1016.9	1016.4	1015.0	1013.0	1010.9	1008.9	1006.7	1007.7
17.5°	995.1	994.3	993.4	992.6	991.8	990.3	988.1	986.0	983.8	981.7	982.8
20°	975.4	975.1	974.7	974.3	974.0	972.5	970.0	967.6	965.2	962.7	964.1
22.5°	955.8	955.1	954.5	953.7	953.1	951.6	949.3	947.0	944.7	942.4	943.3
25°	924.6	923.7	922.8	921.8	920.9	919.2	916.7	914.3	911.8	909.4	909.8
27.5°	888.2	887.7	887.1	886.6	886.0	884.4	881.9	879.4	876.9	874.3	874.4
30°	864.5	864.0	863.4	862.8	862.3	860.5	857.8	854.9	852.1	849.3	848.9
32.5°	838.8	837.9	837.1	836.2	835.4	833.6	831.1	828.6	826.1	823.5	822.9
35°	798.5	797.7	797.0	796.2	795.5	793.8	791.2	788.5	785.9	783.3	782.3
37.5°	756.7	755.7	754.7	753.8	752.8	751.1	748.7	746.2	743.7	741.3	739.8
40°	728.2	727.2	726.4	725.4	724.4	722.7	720.0	717.4	714.8	712.1	710.5
42.5°	697.7	696.9	696.1	695.4	694.6	692.8	690.2	687.5	684.9	682.3	680.8
45°	653.7	652.9	652.2	651.4	650.7	649.1	646.9	644.7	642.4	640.2	637.9
47.5°	606.3	606.3	606.3	606.3	606.4	605.1	602.3	599.7	597.0	594.3	591.9
50°	575.8	575.2	574.6	574.1	573.6	572.1	569.9	567.6	565.3	563.0	560.6
52.5°	544.6	544.2	543.8	543.4	543.0	541.5	539.2	536.7	534.3	531.9	529.8
55°	497.9	497.3	496.8	496.2	495.6	494.0	491.4	488.8	486.1	483.5	481.8
57.5°	448.6	448.3	448.0	447.7	447.4	446.1	443.9	441.7	439.4	437.2	435.0
60°	417.4	416.7	416.0	415.2	414.4	413.0	410.9	408.9	406.8	404.7	402.8
62.5°	384.9	384.3	383.8	383.1	382.5	381.3	379.6	377.8	376.0	374.2	372.3
65°	336.1	335.7	335.4	335.0	334.7	333.5	331.3	329.3	327.2	325.1	323.4
67.5°	288.9	288.1	287.3	286.5	285.8	284.5	283.1	281.5	280.0	278.4	277.0
70°	259.1	258.1	257.2	256.2	255.4	254.0	252.3	250.6	248.9	247.3	246.1
72.5°	226.6	225.9	225.3	224.7	224.0	223.1	222.1	220.9	219.9	218.8	217.5
75°	178.6	178.3	177.9	177.6	177.2	176.5	175.5	174.6	173.7	172.8	172.2
77.5°	134.4	134.3	134.2	134.0	133.9	133.5	133.0	132.5	131.9	131.4	131.1
80°	106.7	106.7	106.7	106.7	106.7	106.5	106.2	105.7	105.3	105.0	104.8
82.5°	82.3	82.0	81.7	81.4	81.1	80.9	80.8	80.8	80.7	80.6	80.3
85°	46.6	46.8	47.0	47.1	47.3	47.5	47.5	47.5	47.5	47.5	47.2
87.5°	18.4	18.8	19.0	19.3	19.6	19.8	19.9	20.0	20.1	20.2	20.4
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°	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2
2.5°	1067.2	1068.7	1070.2	1070.9	1070.7	1070.6	1070.4	1070.2
5°	1061.8	1063.5	1065.2	1065.9	1065.8	1065.6	1065.4	1065.2
7.5°	1051.1	1052.7	1054.3	1055.1	1054.9	1054.8	1054.5	1054.3
10°	1042.0	1043.5	1045.0	1045.6	1045.5	1045.2	1045.1	1044.9
12.5°	1029.8	1031.0	1032.3	1032.8	1032.8	1032.7	1032.7	1032.7
15°	1008.7	1009.6	1010.6	1011.0	1011.0	1011.0	1011.0	1011.0
17.5°	984.1	985.2	986.3	986.5	985.5	984.6	983.7	982.8
20°	965.4	966.7	968.0	968.2	967.3	966.3	965.4	964.4
22.5°	944.1	945.0	945.9	946.0	945.3	944.7	944.0	943.5
25°	910.1	910.5	910.9	910.8	910.3	909.7	909.1	908.6
27.5°	874.5	874.6	874.7	874.4	873.8	873.3	872.7	872.1
30°	848.6	848.2	847.7	847.3	846.8	846.2	845.6	845.1
32.5°	822.1	821.5	820.8	819.9	819.0	817.9	816.9	816.0
35°	781.4	780.4	779.5	778.3	776.7	775.3	773.7	772.3
37.5°	738.4	737.0	735.6	734.5	733.7	732.8	732.0	731.1
40°	708.7	707.0	705.3	704.2	703.6	703.1	702.5	702.0
42.5°	679.2	677.7	676.1	674.9	674.1	673.2	672.3	671.5
45°	635.6	633.3	631.1	629.7	629.2	628.6	628.0	627.5
47.5°	589.6	587.3	585.1	583.3	582.0	580.7	579.3	578.0
50°	558.2	555.7	553.3	551.4	550.1	548.8	547.5	546.2
52.5°	527.7	525.5	523.3	521.5	520.1	518.6	517.1	515.7
55°	480.1	478.4	476.7	475.2	473.9	472.5	471.2	469.9
57.5°	432.9	430.7	428.5	427.1	426.3	425.7	424.9	424.2
60°	401.0	399.1	397.2	395.6	394.3	393.0	391.7	390.4
62.5°	370.2	368.2	366.2	364.6	363.6	362.6	361.6	360.5
65°	321.8	320.1	318.4	317.2	316.4	315.7	314.9	314.1
67.5°	275.6	274.1	272.7	271.7	271.3	270.8	270.4	269.9
70°	245.0	243.9	242.7	241.8	241.0	240.3	239.5	238.8
72.5°	216.2	215.0	213.7	212.6	211.9	211.2	210.4	209.6
75°	171.6	171.0	170.5	169.8	169.1	168.3	167.5	166.8
77.5°	130.8	130.4	130.0	129.6	129.1	128.6	128.1	127.5
80°	104.6	104.4	104.3	104.0	103.6	103.2	102.8	102.5
82.5°	79.9	79.6	79.2	79.1	79.0	78.9	78.8	78.8
85°	47.0	46.9	46.6	46.4	46.0	45.7	45.2	44.8
87.5°	20.5	20.8	21.0	21.0	20.7	20.5	20.4	20.1
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: P333238-930

CATALOG NUMBER: S125DIP-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)