

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: P333240-935

Luminaire Tested: **S125DIP-S850D1035U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333240-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D1035U935-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6140.5 lumens
Efficiency: N/A
Efficacy: 118.1 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

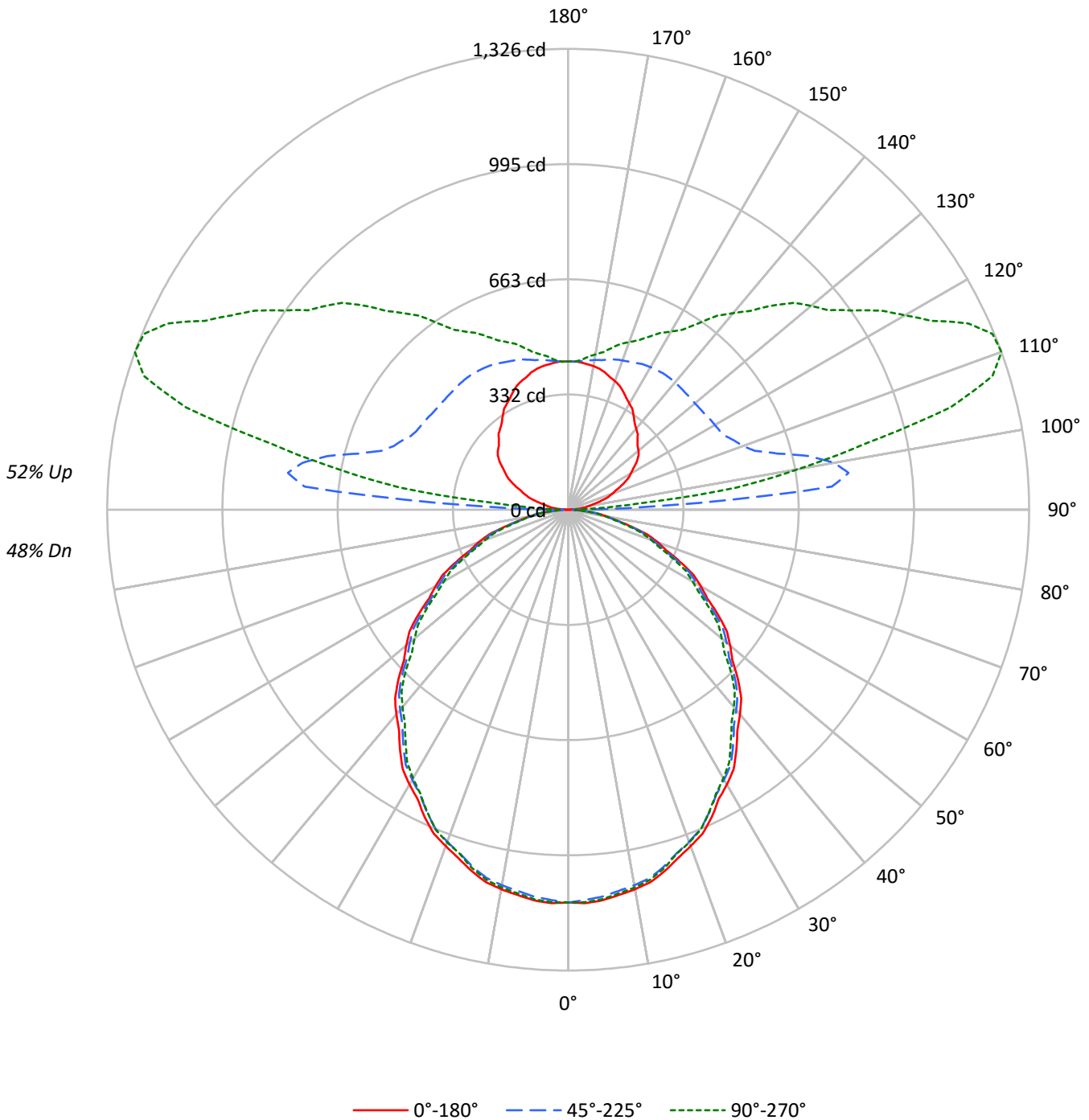
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333240-935

CATALOG NUMBER: S125DIP-S850D1035U935-4F0-1E-UDD-F4

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	68	68	68	54	54	54	48
1	97	93	89	85	89	86	82	79	72	70	67	59	58	56	48	47	46	40
2	89	81	75	70	81	75	69	65	63	59	56	52	49	47	42	40	38	34
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	28
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24
5	68	56	48	42	62	52	45	39	44	39	34	37	33	29	30	27	24	21
6	62	50	42	36	57	47	39	34	40	34	30	33	29	26	27	24	22	19
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	25	22	19	16
8	54	41	33	28	49	38	31	27	33	27	23	28	23	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15	13
10	47	34	27	22	43	32	26	21	28	22	19	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7299	7299	7299
5°	7316	7247	7293
10°	7271	7195	7237
15°	7192	7109	7138
20°	7080	6988	7000
25°	6959	6844	6837
30°	6809	6689	6655
35°	6649	6522	6430
40°	6483	6340	6250
45°	6305	6175	6052
50°	6109	5974	5795
55°	5920	5749	5588
60°	5694	5521	5324
65°	5425	5248	5069
70°	5166	4930	4762
75°	4706	4551	4397
80°	4192	4125	4024
85°	3646	3712	3512



TEST NUMBER: P333240-935

CATALOG NUMBER: S125DIP-S850D1035U935-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.6	1.7
10°-20°	301.0	4.9
20°-30°	444.5	7.2
30°-40°	518.7	8.4
40°-50°	520.9	8.5
50°-60°	457.3	7.4
60°-70°	340.7	5.5
70°-80°	194.8	3.2
80°-90°	59.1	1.0
90°-100°	309.0	5.0
100°-110°	664.3	10.8
110°-120°	623.4	10.2
120°-130°	505.2	8.2
130°-140°	405.5	6.6
140°-150°	306.0	5.0
150°-160°	215.4	3.5
160°-170°	126.9	2.1
170°-180°	41.3	0.7
0°-30°	852.1	13.9
0°-40°	1370.8	22.3
0°-60°	2348.9	38.3
0°-90°	2943.5	47.9
90°-120°	1596.7	26.0
90°-150°	2813.4	45.8
90°-180°	3197.0	52.1
0°-180°	6140.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1128	1126	1118	1125	1125	107
15°	1076	1073	1063	1067	1068	303
25°	976	972	960	962	960	449
35°	843	839	827	823	816	527
45°	690	686	676	666	663	532
55°	526	523	511	503	496	469
65°	355	353	343	336	332	352
75°	189	187	182	180	176	201
85°	49	50	50	49	47	55
90°	1	8	14	18	20	4
95°	28	84	762	346	202	30
105°	97	136	623	1227	1139	102
115°	174	209	500	1078	1269	171
125°	241	282	480	858	1000	213
135°	282	339	476	719	830	219
145°	328	376	478	595	655	206
155°	375	403	466	526	549	173
165°	409	420	447	474	481	115
175°	425	425	429	434	432	40
180°	426	426	426	426	426	



TEST NUMBER: P333240-935

CATALOG NUMBER: S125DIP-S850D1035U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1130.2	1130.2	1130.2	1130.2	1130.2	1130.2	1130.2	1130.2	1130.2	1130.2	1130.2
2.5°	1133.2	1132.6	1132.2	1131.7	1131.2	1130.1	1128.6	1127.0	1125.4	1123.9	1125.4
5°	1128.5	1128.1	1127.7	1127.3	1126.9	1125.7	1123.7	1121.7	1119.7	1117.8	1119.6
7.5°	1118.1	1117.8	1117.3	1116.9	1116.5	1115.3	1113.0	1110.9	1108.7	1106.5	1108.2
10°	1108.8	1108.5	1108.0	1107.6	1107.2	1106.0	1103.7	1101.6	1099.4	1097.2	1098.8
12.5°	1097.3	1096.7	1096.0	1095.2	1094.5	1093.1	1091.1	1089.1	1087.0	1085.0	1086.3
15°	1075.7	1075.1	1074.5	1073.9	1073.3	1071.9	1069.8	1067.6	1065.4	1063.2	1064.2
17.5°	1050.9	1050.0	1049.1	1048.3	1047.4	1045.8	1043.5	1041.3	1039.0	1036.7	1037.9
20°	1030.1	1029.8	1029.3	1028.9	1028.6	1027.0	1024.4	1021.8	1019.3	1016.7	1018.1
22.5°	1009.4	1008.7	1008.0	1007.2	1006.5	1005.0	1002.5	1000.1	997.6	995.2	996.2
25°	976.5	975.5	974.5	973.4	972.5	970.7	968.1	965.5	962.9	960.4	960.8
27.5°	938.0	937.5	936.9	936.3	935.6	934.0	931.3	928.7	926.0	923.3	923.4
30°	913.0	912.4	911.8	911.2	910.6	908.8	905.9	902.8	899.8	896.9	896.5
32.5°	885.8	884.8	884.0	883.0	882.2	880.4	877.7	875.0	872.4	869.7	869.0
35°	843.3	842.4	841.6	840.9	840.1	838.3	835.5	832.7	829.9	827.2	826.1
37.5°	799.1	798.1	797.0	796.1	795.0	793.2	790.7	788.0	785.4	782.8	781.3
40°	769.0	768.0	767.1	766.0	765.0	763.2	760.3	757.6	754.8	752.0	750.3
42.5°	736.8	736.0	735.1	734.3	733.5	731.7	728.9	726.1	723.3	720.6	718.9
45°	690.3	689.5	688.7	687.9	687.2	685.5	683.2	680.8	678.4	676.1	673.6
47.5°	640.2	640.3	640.3	640.3	640.4	639.0	636.1	633.3	630.4	627.6	625.1
50°	608.0	607.4	606.8	606.2	605.7	604.2	601.8	599.4	597.0	594.6	592.0
52.5°	575.1	574.7	574.3	573.9	573.4	571.9	569.4	566.8	564.3	561.7	559.5
55°	525.8	525.2	524.6	524.0	523.4	521.7	518.9	516.2	513.3	510.6	508.8
57.5°	473.7	473.5	473.1	472.8	472.5	471.1	468.8	466.5	464.1	461.8	459.4
60°	440.8	440.1	439.3	438.4	437.6	436.2	433.9	431.8	429.6	427.4	425.4
62.5°	406.5	405.9	405.3	404.6	404.0	402.7	400.9	399.0	397.1	395.2	393.1
65°	355.0	354.6	354.2	353.8	353.4	352.1	349.9	347.8	345.5	343.4	341.6
67.5°	305.1	304.3	303.4	302.6	301.8	300.5	298.9	297.3	295.7	294.0	292.5
70°	273.6	272.6	271.6	270.6	269.7	268.3	266.5	264.7	262.9	261.1	259.9
72.5°	239.3	238.6	237.9	237.3	236.6	235.7	234.5	233.3	232.2	231.1	229.7
75°	188.6	188.3	187.9	187.5	187.1	186.4	185.4	184.4	183.4	182.4	181.8
77.5°	142.0	141.8	141.7	141.5	141.4	141.0	140.4	139.9	139.3	138.8	138.4
80°	112.7	112.7	112.7	112.7	112.7	112.4	112.1	111.7	111.2	110.9	110.7
82.5°	86.9	86.6	86.3	85.9	85.7	85.4	85.3	85.3	85.2	85.2	84.8
85°	49.2	49.4	49.6	49.8	49.9	50.1	50.1	50.1	50.1	50.1	49.9
87.5°	19.5	19.6	20.0	20.3	20.7	20.9	21.0	21.2	21.2	21.4	21.5
90°	0.9	1.7	3.4	5.2	6.9	8.6	9.5	11.2	12.1	13.8	14.6
92.5°	10.5	12.7	20.0	30.6	45.4	70.5	117.4	196.1	281.5	277.1	224.3
95°	28.3	29.2	36.1	45.5	64.5	103.1	195.1	384.2	621.5	761.6	745.2
97.5°	47.1	48.1	53.0	62.4	79.4	107.3	168.2	306.7	554.9	813.3	942.9
100°	60.2	61.9	65.3	74.7	91.1	116.9	166.8	278.4	495.1	776.1	991.0
102.5°	74.6	75.6	78.4	88.5	103.5	128.5	173.0	266.8	449.7	710.8	962.2
105°	97.1	97.1	101.4	110.0	123.8	147.8	185.6	262.2	405.7	623.1	869.9
107.5°	119.2	120.9	124.9	132.0	146.3	168.0	204.6	270.1	387.1	562.8	775.6
110°	134.9	136.6	140.1	147.8	160.7	183.0	218.3	277.6	381.6	534.6	721.9



TEST NUMBER: P333240-935

CATALOG NUMBER: S125DIP-S850D1035U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	150.8	152.5	155.2	163.0	175.8	197.5	231.4	287.2	381.6	518.1	682.1
115°	173.7	175.3	177.9	185.6	198.5	220.1	251.8	301.7	384.2	500.2	638.6
117.5°	194.2	196.8	199.6	207.3	222.0	242.7	272.9	318.2	389.9	491.5	612.7
120°	208.0	210.6	214.0	221.8	236.3	257.9	287.9	329.2	395.4	487.3	598.2
122.5°	222.5	224.3	227.0	234.8	250.8	272.3	302.4	341.6	400.2	483.9	585.8
125°	240.6	242.4	246.7	254.4	270.8	293.1	321.5	358.4	408.3	479.6	569.0
127.5°	254.9	257.5	263.0	272.9	290.2	312.5	339.8	373.8	417.4	477.5	553.5
130°	263.9	266.5	273.4	284.5	302.6	324.9	351.5	384.2	422.9	476.1	543.2
132.5°	270.8	274.0	282.2	294.8	313.6	335.9	362.6	393.1	429.0	476.1	534.9
135°	281.9	285.3	295.7	309.4	327.4	350.7	377.3	405.7	437.5	476.1	525.1
137.5°	296.0	298.6	308.2	322.0	339.7	363.6	387.8	415.0	445.2	477.2	516.4
140°	304.3	306.9	317.2	330.9	347.2	370.5	395.4	421.2	448.7	477.9	512.3
142.5°	313.9	315.8	325.4	339.1	354.8	376.6	400.2	424.6	450.7	478.5	508.9
145°	328.3	330.0	338.6	350.7	366.2	385.9	408.3	429.7	453.0	477.9	503.7
147.5°	343.5	344.5	351.9	363.1	376.4	393.8	413.5	432.8	453.8	475.6	498.3
150°	352.4	354.1	360.2	371.3	383.3	398.0	416.9	434.9	453.8	473.6	494.2
152.5°	362.1	363.1	368.4	378.2	389.5	402.8	420.3	436.3	453.1	470.9	489.4
155°	374.7	374.7	379.9	388.5	397.1	409.1	423.7	437.5	451.3	465.9	481.3
157.5°	386.1	385.9	390.0	397.4	405.0	414.1	426.6	438.3	449.0	460.7	473.7
160°	393.6	392.8	396.2	402.3	409.1	416.9	428.0	438.3	446.9	457.3	467.6
162.5°	399.8	399.0	402.4	407.8	413.3	419.7	429.4	437.6	444.9	453.1	462.1
165°	409.1	407.4	410.0	414.3	417.8	422.9	429.7	436.6	441.8	446.9	453.8
167.5°	415.3	414.5	416.0	418.4	420.9	424.0	429.7	434.5	437.0	440.9	445.7
170°	419.5	418.6	419.5	421.2	422.9	425.4	429.7	433.2	434.9	437.5	440.9
172.5°	422.2	420.7	421.5	423.2	424.2	425.4	429.0	431.8	432.1	433.3	436.1
175°	425.4	423.7	424.6	425.4	425.4	425.4	428.0	429.7	428.9	428.9	429.7
177.5°	427.0	425.6	425.6	426.3	425.6	425.6	427.0	427.7	426.3	426.3	427.0
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3



TEST NUMBER: P333240-935

CATALOG NUMBER: S125DIP-S850D1035U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1130.2	1130.2	1130.2	1130.2	1130.2	1130.2	1130.2	1130.2
2.5°	1127.0	1128.6	1130.1	1130.9	1130.8	1130.6	1130.4	1130.2
5°	1121.4	1123.1	1124.9	1125.7	1125.5	1125.3	1125.1	1124.9
7.5°	1110.0	1111.7	1113.4	1114.2	1114.0	1113.9	1113.6	1113.4
10°	1100.4	1102.0	1103.5	1104.2	1104.1	1103.8	1103.6	1103.5
12.5°	1087.5	1088.8	1090.1	1090.7	1090.7	1090.6	1090.6	1090.5
15°	1065.2	1066.2	1067.2	1067.6	1067.6	1067.6	1067.6	1067.6
17.5°	1039.2	1040.4	1041.6	1041.8	1040.8	1039.8	1038.8	1037.8
20°	1019.5	1020.9	1022.3	1022.4	1021.5	1020.5	1019.5	1018.5
22.5°	997.0	998.0	998.9	999.0	998.3	997.6	997.0	996.3
25°	961.1	961.6	962.0	961.8	961.3	960.7	960.1	959.5
27.5°	923.5	923.6	923.7	923.4	922.8	922.2	921.6	921.0
30°	896.1	895.7	895.3	894.8	894.2	893.6	893.0	892.4
32.5°	868.2	867.5	866.9	865.9	864.9	863.8	862.7	861.7
35°	825.2	824.1	823.2	821.9	820.3	818.7	817.1	815.5
37.5°	779.8	778.3	776.9	775.7	774.8	773.9	773.0	772.1
40°	748.5	746.7	744.9	743.6	743.0	742.5	741.9	741.3
42.5°	717.3	715.7	714.0	712.7	711.9	710.9	710.0	709.1
45°	671.2	668.8	666.5	665.0	664.4	663.8	663.2	662.6
47.5°	622.7	620.3	617.9	616.0	614.6	613.2	611.7	610.4
50°	589.4	586.9	584.3	582.3	580.9	579.5	578.2	576.8
52.5°	557.2	554.9	552.7	550.8	549.2	547.7	546.1	544.6
55°	507.0	505.2	503.4	501.9	500.4	499.0	497.7	496.3
57.5°	457.2	454.9	452.5	451.0	450.2	449.5	448.8	448.0
60°	423.4	421.5	419.5	417.8	416.4	415.0	413.6	412.2
62.5°	391.0	388.8	386.7	385.0	384.0	382.9	381.9	380.7
65°	339.8	338.0	336.2	334.9	334.2	333.4	332.5	331.7
67.5°	291.0	289.5	288.0	287.0	286.5	286.0	285.5	285.1
70°	258.7	257.5	256.3	255.4	254.5	253.7	253.0	252.2
72.5°	228.3	227.0	225.7	224.5	223.8	223.0	222.2	221.4
75°	181.2	180.6	180.0	179.3	178.6	177.7	176.9	176.2
77.5°	138.1	137.7	137.3	136.9	136.3	135.8	135.3	134.7
80°	110.5	110.3	110.1	109.8	109.4	109.0	108.6	108.2
82.5°	84.4	84.0	83.7	83.5	83.4	83.3	83.3	83.2
85°	49.7	49.5	49.2	49.0	48.6	48.2	47.8	47.4
87.5°	21.7	21.9	22.0	22.2	21.9	21.6	21.4	21.1
90°	15.5	16.4	17.2	18.9	18.9	18.9	19.8	19.8
92.5°	152.3	110.6	83.2	70.5	59.5	57.4	56.2	54.8
95°	618.0	487.3	381.6	309.4	248.4	222.7	215.8	202.0
97.5°	920.4	828.7	725.7	625.3	572.3	524.1	499.2	488.2
100°	1057.2	1015.1	926.5	837.2	777.8	716.0	684.2	670.5
102.5°	1103.3	1129.2	1086.8	1026.2	962.9	918.9	884.2	873.9
105°	1076.1	1193.9	1231.7	1222.2	1194.7	1166.4	1149.2	1138.8
107.5°	979.1	1136.3	1233.4	1278.2	1292.2	1292.0	1286.3	1279.4
110°	907.7	1070.9	1192.1	1265.2	1303.9	1320.2	1326.2	1326.2



TEST NUMBER: P333240-935

CATALOG NUMBER: S125DIP-S850D1035U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	851.3	1006.3	1128.9	1215.0	1271.5	1299.6	1314.6	1320.7
115°	780.4	913.7	1031.4	1125.1	1192.1	1233.4	1257.5	1268.7
117.5°	734.7	849.5	951.0	1036.9	1104.0	1146.6	1170.4	1177.3
120°	710.0	813.1	907.7	983.3	1046.9	1088.1	1111.4	1118.3
122.5°	691.4	787.0	871.2	942.0	998.8	1036.6	1059.8	1066.0
125°	664.4	752.1	826.8	888.7	936.9	972.1	991.0	999.6
127.5°	636.9	718.8	788.5	846.4	890.1	921.2	939.1	942.9
130°	619.7	695.3	762.4	818.3	861.3	889.6	906.8	912.0
132.5°	602.5	673.3	734.2	788.0	831.0	859.4	875.1	881.0
135°	580.1	639.5	694.5	743.5	781.3	809.7	825.1	830.3
137.5°	561.3	609.2	655.0	696.5	730.4	756.2	770.5	776.1
140°	551.0	591.3	630.9	667.0	698.8	721.2	734.0	738.3
142.5°	542.0	576.2	610.3	641.5	668.6	687.4	699.6	703.3
145°	530.3	557.0	583.6	606.8	627.4	642.0	651.5	655.0
147.5°	519.4	541.0	561.5	578.9	595.3	607.0	612.5	614.1
150°	513.2	532.0	548.4	563.9	576.7	587.0	590.5	591.3
152.5°	506.3	523.1	538.0	550.1	560.9	569.2	572.6	573.4
155°	495.9	509.7	521.8	531.2	539.8	545.8	548.4	549.2
157.5°	485.6	497.0	506.3	513.7	520.4	525.3	527.7	527.5
160°	478.7	487.3	495.9	502.0	508.0	512.3	514.0	513.2
162.5°	471.2	479.1	486.3	491.6	496.3	499.9	500.2	500.1
165°	460.7	466.7	471.9	476.1	479.6	481.3	481.3	481.3
167.5°	450.7	454.7	458.7	461.8	463.5	465.0	464.3	464.2
170°	445.2	447.8	450.4	452.1	453.8	454.7	454.7	453.8
172.5°	439.0	441.6	443.5	444.5	444.9	446.4	445.1	444.2
175°	432.3	432.3	434.0	434.0	434.0	434.9	433.2	432.3
177.5°	427.7	428.3	428.3	428.3	427.7	428.3	426.3	426.3
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3

(END OF REPORT)