

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: P333249-935

Luminaire Tested: **S125DIP-S850D1205U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333249-935
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-S850D1205U935-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6665.1 lumens
Efficiency: N/A
Efficacy: 117.1 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

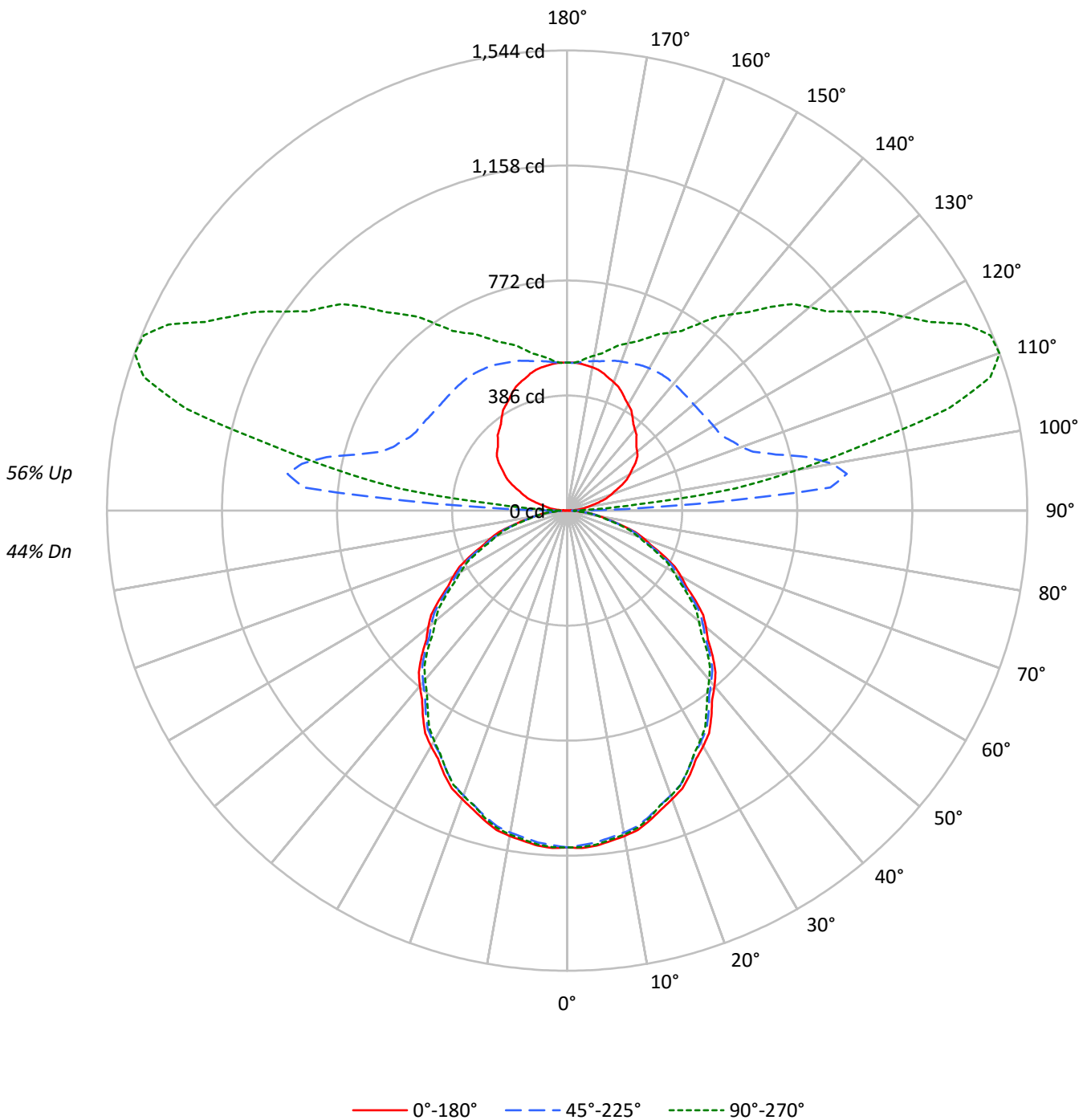
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	80	80	80	65	65	65	51	51	51	44
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	44	43	37
2	88	80	74	69	80	74	69	64	61	58	54	50	47	45	39	38	36	31
3	80	71	63	58	73	65	59	53	54	49	46	44	41	38	35	33	31	26
4	73	62	55	49	67	57	51	45	48	43	39	39	35	32	31	28	26	22
5	67	56	48	42	61	51	44	39	43	38	33	35	31	28	28	25	23	20
6	62	50	42	36	56	46	39	34	39	33	29	32	28	25	25	22	20	17
7	57	45	37	31	52	41	34	29	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	14	12
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13	11

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.6	1.6
10°-20°	301.0	4.5
20°-30°	444.5	6.7
30°-40°	518.7	7.8
40°-50°	520.9	7.8
50°-60°	457.3	6.9
60°-70°	340.7	5.1
70°-80°	194.8	2.9
80°-90°	59.4	0.9
90°-100°	359.7	5.4
100°-110°	773.2	11.6
110°-120°	725.6	10.9
120°-130°	588.1	8.8
130°-140°	471.9	7.1
140°-150°	356.1	5.3
150°-160°	250.7	3.8
160°-170°	147.8	2.2
170°-180°	48.1	0.7
0°-30°	852.1	12.8
0°-40°	1370.8	20.6
0°-60°	2348.9	35.2
0°-90°	2943.9	44.2
90°-120°	1858.5	27.9
90°-150°	3274.7	49.1
90°-180°	3721.0	55.8
0°-180°	6665.1	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	9	16	21	23	5
95°	33	98	886	402	235	35
105°	113	158	725	1428	1326	119
115°	202	244	582	1255	1477	199
125°	280	328	558	998	1164	248
135°	328	395	554	837	966	255
145°	382	438	556	693	762	239
155°	436	469	542	613	639	201
165°	476	489	520	552	560	134
175°	495	495	499	505	503	47
180°	496	496	496	496	496	



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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	19.7	20.1	20.5	20.9	21.3	21.3	21.5	21.5	21.8	22.0
90°	1.0	2.0	4.0	6.0	8.0	10.0	11.0	13.0	14.0	16.0	17.0
92.5°	12.2	14.8	23.2	35.6	52.9	82.1	136.6	228.3	327.8	322.5	261.1
95°	33.0	34.0	42.0	53.0	75.0	120.0	227.1	447.2	723.3	886.4	867.4
97.5°	54.8	56.1	61.6	72.7	92.5	124.8	195.7	357.0	645.9	946.6	1097.5
100°	70.0	72.1	76.0	87.0	106.1	136.0	194.1	324.2	576.3	903.4	1153.5
102.5°	86.9	88.1	91.3	103.1	120.5	149.6	201.3	310.6	523.4	827.3	1119.9
105°	113.0	113.0	118.0	128.0	144.0	172.1	216.1	305.1	472.2	725.3	1012.4
107.5°	138.6	140.7	145.4	153.7	170.3	195.4	238.1	314.4	450.6	655.0	902.8
110°	157.0	159.1	163.1	172.1	187.1	213.1	254.1	323.1	444.2	622.2	840.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	175.5	177.5	180.6	189.7	204.7	229.9	269.3	334.3	444.2	603.0	793.9
115°	202.1	204.1	207.1	216.1	231.1	256.1	293.2	351.1	447.2	582.3	743.3
117.5°	226.1	229.1	232.3	241.3	258.3	282.5	317.5	370.4	453.8	572.0	713.1
120°	242.1	245.1	249.1	258.1	275.1	300.1	335.2	383.1	460.2	567.2	696.3
122.5°	258.9	261.1	264.3	273.3	292.0	316.9	352.0	397.6	465.8	563.3	681.9
125°	280.1	282.1	287.1	296.1	315.1	341.1	374.2	417.2	475.2	558.3	662.3
127.5°	296.7	299.7	306.2	317.5	337.8	363.8	395.5	435.2	485.8	555.9	644.3
130°	307.1	310.1	318.1	331.1	352.1	378.2	409.1	447.2	492.2	554.2	632.3
132.5°	315.1	318.9	328.6	343.2	365.0	391.0	422.0	457.6	499.4	554.2	622.7
135°	328.1	332.2	344.1	360.2	381.2	408.2	439.2	472.2	509.2	554.2	611.3
137.5°	344.6	347.6	358.8	374.8	395.4	423.2	451.4	483.0	518.2	555.4	601.1
140°	354.1	357.1	369.2	385.2	404.2	431.2	460.2	490.3	522.2	556.2	596.2
142.5°	365.3	367.6	378.8	394.8	413.0	438.4	465.8	494.2	524.6	557.1	592.3
145°	382.2	384.2	394.2	408.2	426.2	449.2	475.2	500.2	527.3	556.2	586.3
147.5°	399.8	401.0	409.6	422.6	438.2	458.4	481.2	503.9	528.2	553.6	580.1
150°	410.2	412.2	419.2	432.2	446.2	463.2	485.2	506.3	528.2	551.2	575.2
152.5°	421.4	422.6	428.8	440.2	453.4	468.8	489.2	507.8	527.4	548.0	569.6
155°	436.2	436.2	442.2	452.2	462.2	476.2	493.2	509.2	525.2	542.3	560.3
157.5°	449.4	449.2	454.0	462.6	471.4	482.0	496.6	510.2	522.6	536.2	551.5
160°	458.2	457.2	461.2	468.2	476.2	485.2	498.3	510.2	520.2	532.3	544.2
162.5°	465.4	464.4	468.4	474.6	481.0	488.4	499.8	509.5	517.8	527.4	537.9
165°	476.2	474.2	477.3	482.2	486.2	492.2	500.2	508.2	514.2	520.2	528.2
167.5°	483.5	482.4	484.2	487.0	489.8	493.6	500.2	505.8	508.6	513.2	518.8
170°	488.2	487.2	488.2	490.3	492.2	495.2	500.2	504.2	506.3	509.2	513.2
172.5°	491.5	489.7	490.6	492.6	493.8	495.2	499.4	502.7	503.0	504.5	507.6
175°	495.2	493.2	494.2	495.2	495.2	495.2	498.3	500.2	499.2	499.2	500.2
177.5°	497.1	495.4	495.4	496.2	495.4	495.4	497.1	497.8	496.2	496.2	497.1
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2



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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°	22.2	22.4	22.6	22.8	22.6	22.2	22.1	21.8
90°	18.0	19.0	20.0	22.0	22.0	22.0	23.0	23.0
92.5°	177.3	128.6	96.9	82.1	69.2	66.8	65.4	63.8
95°	719.3	567.2	444.2	360.2	289.1	259.1	251.2	235.1
97.5°	1071.3	964.7	844.8	727.9	666.1	610.1	581.1	568.3
100°	1230.5	1181.6	1078.5	974.4	905.4	833.4	796.3	780.3
102.5°	1284.2	1314.4	1265.0	1194.6	1120.7	1069.4	1029.2	1017.3
105°	1252.6	1389.7	1433.7	1422.6	1390.6	1357.6	1337.6	1325.6
107.5°	1139.7	1322.6	1435.6	1487.9	1504.1	1503.9	1497.3	1489.3
110°	1056.4	1246.6	1387.6	1472.7	1517.7	1536.7	1543.7	1543.7



TEST NUMBER: P333249-935

CATALOG NUMBER: S125DIP-S850D1205U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	990.8	1171.3	1314.0	1414.2	1480.1	1512.7	1530.1	1537.3
115°	908.4	1063.5	1200.5	1309.6	1387.6	1435.6	1463.6	1476.6
117.5°	855.1	988.9	1106.9	1206.9	1285.0	1334.6	1362.4	1370.4
120°	826.4	946.4	1056.4	1144.5	1218.6	1266.5	1293.6	1301.6
122.5°	804.8	916.0	1014.1	1096.5	1162.5	1206.5	1233.6	1240.8
125°	773.4	875.4	962.4	1034.5	1090.5	1131.5	1153.5	1163.6
127.5°	741.3	836.5	917.8	985.2	1036.0	1072.3	1093.1	1097.5
130°	721.3	809.3	887.4	952.4	1002.5	1035.4	1055.5	1061.4
132.5°	701.3	783.8	854.5	917.2	967.2	1000.2	1018.6	1025.5
135°	675.3	744.3	808.4	865.4	909.4	942.5	960.4	966.5
137.5°	653.3	709.1	762.3	810.8	850.2	880.2	896.8	903.4
140°	641.3	688.3	734.3	776.4	813.4	839.4	854.4	859.4
142.5°	630.9	670.7	710.3	746.7	778.2	800.1	814.3	818.6
145°	617.3	648.2	679.3	706.3	730.3	747.3	758.4	762.3
147.5°	604.5	629.6	653.5	673.9	692.9	706.5	712.9	714.7
150°	597.3	619.3	638.3	656.3	671.3	683.3	687.3	688.3
152.5°	589.3	608.9	626.3	640.3	652.9	662.5	666.5	667.5
155°	577.2	593.2	607.3	618.3	628.3	635.2	638.3	639.3
157.5°	565.2	578.4	589.3	597.9	605.6	611.5	614.2	614.1
160°	557.2	567.2	577.2	584.3	591.2	596.2	598.3	597.3
162.5°	548.5	557.7	566.0	572.2	577.6	581.9	582.3	582.0
165°	536.2	543.2	549.2	554.2	558.3	560.3	560.3	560.3
167.5°	524.6	529.3	533.8	537.4	539.4	541.2	540.4	540.3
170°	518.2	521.2	524.3	526.2	528.2	529.3	529.3	528.2
172.5°	511.0	514.0	516.3	517.5	517.8	519.6	518.1	517.0
175°	503.3	503.3	505.2	505.2	505.2	506.3	504.2	503.3
177.5°	497.8	498.6	498.6	498.6	497.8	498.6	496.2	496.2
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2

(END OF REPORT)