

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: P333239-935

Luminaire Tested: **S125DIP-S850D1035U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333239-935  
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: S125DIP-S850D1035U935-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6025.8 lumens  
Efficiency: N/A  
Efficacy: 115.9 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

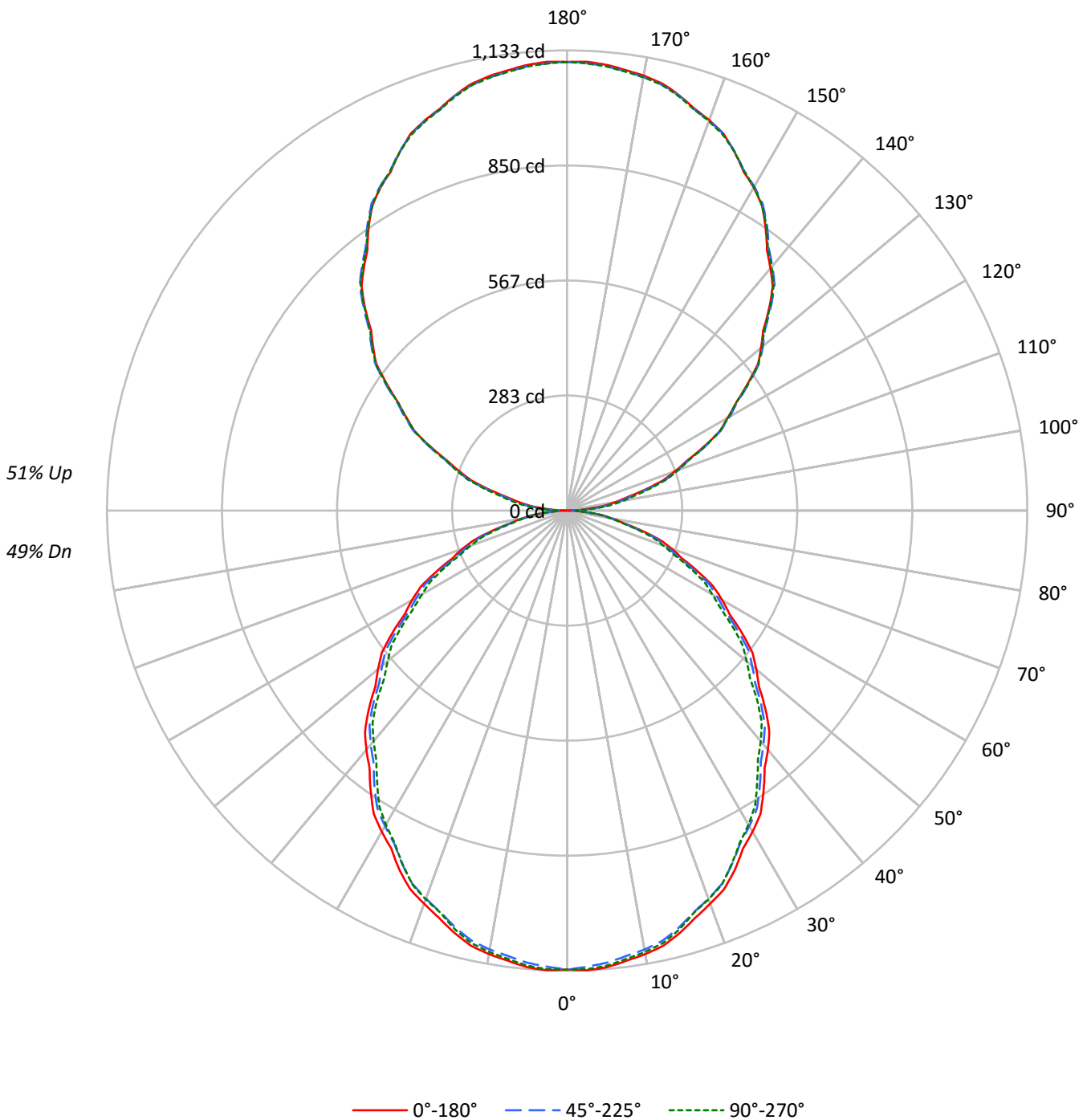
Input Watts (W): 52  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	83	83	83	68	68	68	55	55	55	49
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41
2	89	81	75	70	81	75	70	65	63	59	56	53	50	47	43	41	39	34
3	81	71	64	58	74	66	60	54	56	51	47	47	43	40	38	35	33	29
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	34	31	29	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	22
6	63	50	42	37	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	19	17
8	54	41	34	28	49	38	32	27	33	27	24	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.6	1.8
10°-20°	301.0	5.0
20°-30°	444.5	7.4
30°-40°	518.7	8.6
40°-50°	520.9	8.6
50°-60°	457.3	7.6
60°-70°	340.7	5.7
70°-80°	194.8	3.2
80°-90°	59.1	1.0
90°-100°	74.0	1.2
100°-110°	218.5	3.6
110°-120°	370.0	6.1
120°-130°	487.0	8.1
130°-140°	545.7	9.1
140°-150°	534.8	8.9
150°-160°	449.2	7.5
160°-170°	298.6	5.0
170°-180°	104.5	1.7
0°-30°	852.1	14.1
0°-40°	1370.8	22.7
0°-60°	2348.9	39.0
0°-90°	2943.6	48.8
90°-120°	662.5	11.0
90°-150°	2229.9	37.0
90°-180°	3082.0	51.1
0°-180°	6025.8	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	21	6
95°	56	58	66	72	74	60
105°	196	200	205	210	213	209
115°	370	374	376	375	374	366
125°	541	546	547	545	544	484
135°	703	708	709	709	706	542
145°	852	855	858	858	855	532
155°	975	975	976	979	975	449
165°	1060	1058	1059	1062	1057	299
175°	1102	1099	1098	1103	1098	105
180°	1105	1105	1105	1105	1105	



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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	19.8	20.1	20.4	20.8	20.9	21.0	21.1	21.3	21.4	21.5
90°	0.9	2.4	3.9	5.4	7.0	8.4	9.7	11.1	12.4	13.8	14.7
92.5°	20.8	21.9	22.9	24.0	25.1	26.4	28.1	29.7	31.3	33.0	34.3
95°	55.9	56.2	56.7	57.0	57.4	58.5	60.4	62.3	64.3	66.2	67.5
97.5°	92.8	93.0	93.2	93.3	93.4	94.9	97.5	100.1	102.7	105.4	106.7
100°	120.4	120.4	120.4	120.4	120.4	121.6	124.1	126.6	129.1	131.5	133.2
102.5°	149.9	150.7	151.4	152.2	153.0	153.9	155.2	156.5	157.7	159.0	160.9
105°	196.0	196.9	197.9	198.9	199.8	200.9	202.0	203.1	204.3	205.4	206.6
107.5°	246.8	247.8	248.7	249.8	250.7	251.6	252.4	253.4	254.3	255.1	255.7
110°	282.0	282.9	283.9	284.8	285.8	286.5	287.1	287.7	288.3	288.8	289.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	317.7	318.2	318.7	319.2	319.7	320.3	321.1	321.8	322.4	323.2	323.5
115°	370.5	371.3	372.0	372.8	373.5	374.1	374.4	374.9	375.2	375.7	375.5
117.5°	423.4	423.8	424.1	424.5	424.8	425.2	425.5	425.9	426.2	426.5	426.7
120°	456.4	457.4	458.3	459.3	460.3	460.8	461.0	461.2	461.4	461.6	461.6
122.5°	492.2	492.6	492.9	493.3	493.6	494.0	494.5	495.0	495.5	495.9	495.8
125°	540.7	541.8	542.9	544.2	545.3	546.0	546.1	546.3	546.5	546.7	546.3
127.5°	592.3	592.9	593.6	594.2	594.9	595.3	595.6	595.7	596.0	596.2	596.0
130°	623.2	624.1	625.1	626.0	627.0	627.7	628.1	628.4	628.8	629.2	629.0
132.5°	654.1	655.7	657.3	658.8	660.4	661.2	661.1	661.0	660.9	660.8	660.6
135°	703.2	704.3	705.4	706.5	707.7	708.4	708.6	708.8	708.9	709.1	709.1
137.5°	749.2	750.3	751.4	752.5	753.6	754.4	754.8	755.3	755.7	756.0	756.3
140°	778.8	779.7	780.7	781.6	782.6	783.3	783.9	784.5	785.1	785.7	786.0
142.5°	808.3	809.2	809.9	810.7	811.6	812.4	813.0	813.8	814.5	815.2	815.5
145°	851.9	852.6	853.3	854.1	854.9	855.6	856.2	856.7	857.3	857.9	857.9
147.5°	892.1	892.5	892.9	893.4	893.7	894.2	894.7	895.1	895.5	896.0	896.5
150°	918.9	918.7	918.5	918.3	918.2	918.4	919.2	920.0	920.7	921.4	921.4
152.5°	940.9	941.2	941.4	941.7	941.9	942.3	942.5	942.9	943.1	943.5	943.9
155°	974.7	974.7	974.7	974.7	974.7	974.8	975.1	975.3	975.4	975.6	976.4
157.5°	1005.0	1004.6	1004.2	1003.8	1003.3	1003.2	1003.4	1003.6	1003.8	1004.0	1004.8
160°	1022.9	1022.4	1021.7	1021.1	1020.6	1020.5	1020.6	1020.8	1021.0	1021.1	1021.9
162.5°	1038.7	1038.3	1037.8	1037.4	1037.1	1036.8	1036.9	1036.9	1037.0	1037.0	1037.9
165°	1059.9	1059.5	1059.1	1058.7	1058.3	1058.3	1058.4	1058.6	1058.8	1059.0	1059.8
167.5°	1077.7	1076.9	1076.2	1075.5	1074.7	1074.3	1074.3	1074.3	1074.3	1074.3	1075.5
170°	1087.4	1086.6	1085.8	1085.1	1084.3	1083.9	1083.9	1083.9	1083.9	1083.9	1085.1
172.5°	1094.2	1093.5	1092.7	1091.9	1091.2	1090.8	1090.8	1090.8	1090.8	1090.8	1091.9
175°	1102.0	1101.2	1100.4	1099.7	1098.9	1098.5	1098.5	1098.5	1098.5	1098.5	1099.7
177.5°	1106.0	1105.4	1104.7	1104.1	1103.5	1103.1	1102.9	1102.8	1102.7	1102.5	1103.5
180°	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6



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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°	21.7	22.0	22.1	22.1	21.9	21.7	21.5	21.3
90°	15.7	16.6	17.6	18.3	18.9	19.5	20.1	20.7
92.5°	35.6	36.8	38.1	38.9	39.3	39.7	40.1	40.6
95°	68.9	70.2	71.5	72.4	72.8	73.2	73.5	74.0
97.5°	107.9	109.2	110.5	111.2	111.4	111.7	111.8	112.1
100°	134.9	136.6	138.4	139.5	139.8	140.2	140.6	140.9
102.5°	162.7	164.6	166.5	167.7	168.2	168.8	169.4	169.9
105°	207.8	208.9	210.0	210.9	211.5	212.1	212.6	213.2
107.5°	256.2	256.8	257.4	257.7	257.6	257.6	257.6	257.5
110°	290.0	290.5	291.1	291.3	291.1	290.9	290.8	290.5





TEST NUMBER: P333239-935

CATALOG NUMBER: S125DIP-S850D1035U935-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	323.7	324.0	324.3	324.3	323.9	323.6	323.2	322.9
115°	375.2	375.1	374.9	374.7	374.4	374.3	374.1	373.9
117.5°	426.8	427.0	427.1	426.8	426.0	425.3	424.6	423.8
120°	461.6	461.6	461.6	461.2	460.5	459.7	458.9	458.1
122.5°	495.7	495.5	495.3	495.0	494.4	493.8	493.2	492.6
125°	546.0	545.5	545.2	544.8	544.7	544.5	544.3	544.2
127.5°	595.8	595.6	595.5	595.1	594.8	594.3	594.0	593.7
130°	628.8	628.6	628.4	628.2	627.8	627.4	627.0	626.6
132.5°	660.5	660.3	660.0	659.7	659.2	658.7	658.1	657.5
135°	709.1	709.1	709.1	708.8	708.0	707.2	706.5	705.7
137.5°	756.6	756.7	757.0	756.6	755.7	754.8	753.8	752.9
140°	786.4	786.8	787.2	786.9	785.9	785.0	784.0	783.1
142.5°	815.7	815.9	816.1	815.8	814.9	813.9	813.0	811.9
145°	857.9	857.9	857.9	857.6	857.0	856.4	855.8	855.3
147.5°	896.9	897.4	897.9	897.4	896.1	894.8	893.5	892.3
150°	921.4	921.4	921.4	921.3	920.9	920.5	920.2	919.7
152.5°	944.4	944.9	945.3	945.2	944.5	943.8	943.1	942.5
155°	977.1	977.9	978.7	978.6	977.7	976.6	975.7	974.7
157.5°	1005.5	1006.3	1007.0	1006.8	1005.6	1004.3	1003.0	1001.8
160°	1022.7	1023.5	1024.2	1024.2	1023.2	1022.3	1021.3	1020.3
162.5°	1038.8	1039.7	1040.7	1040.6	1039.5	1038.4	1037.2	1036.1
165°	1060.5	1061.3	1062.0	1061.9	1060.8	1059.5	1058.4	1057.3
167.5°	1076.6	1077.7	1078.9	1078.8	1077.7	1076.5	1075.3	1074.1
170°	1086.2	1087.4	1088.5	1088.4	1087.1	1085.7	1084.4	1083.1
172.5°	1093.1	1094.2	1095.4	1095.4	1094.2	1093.0	1091.8	1090.6
175°	1100.9	1102.0	1103.1	1103.0	1101.7	1100.4	1099.0	1097.7
177.5°	1104.3	1105.3	1106.1	1106.1	1105.0	1104.0	1102.9	1101.8
180°	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6

(END OF REPORT)