

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: P333235-830

Luminaire Tested: **S125DIP-S850D1035U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333235-830
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-S850D1035U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6993.8 lumens
Efficiency: N/A
Efficacy: 134.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

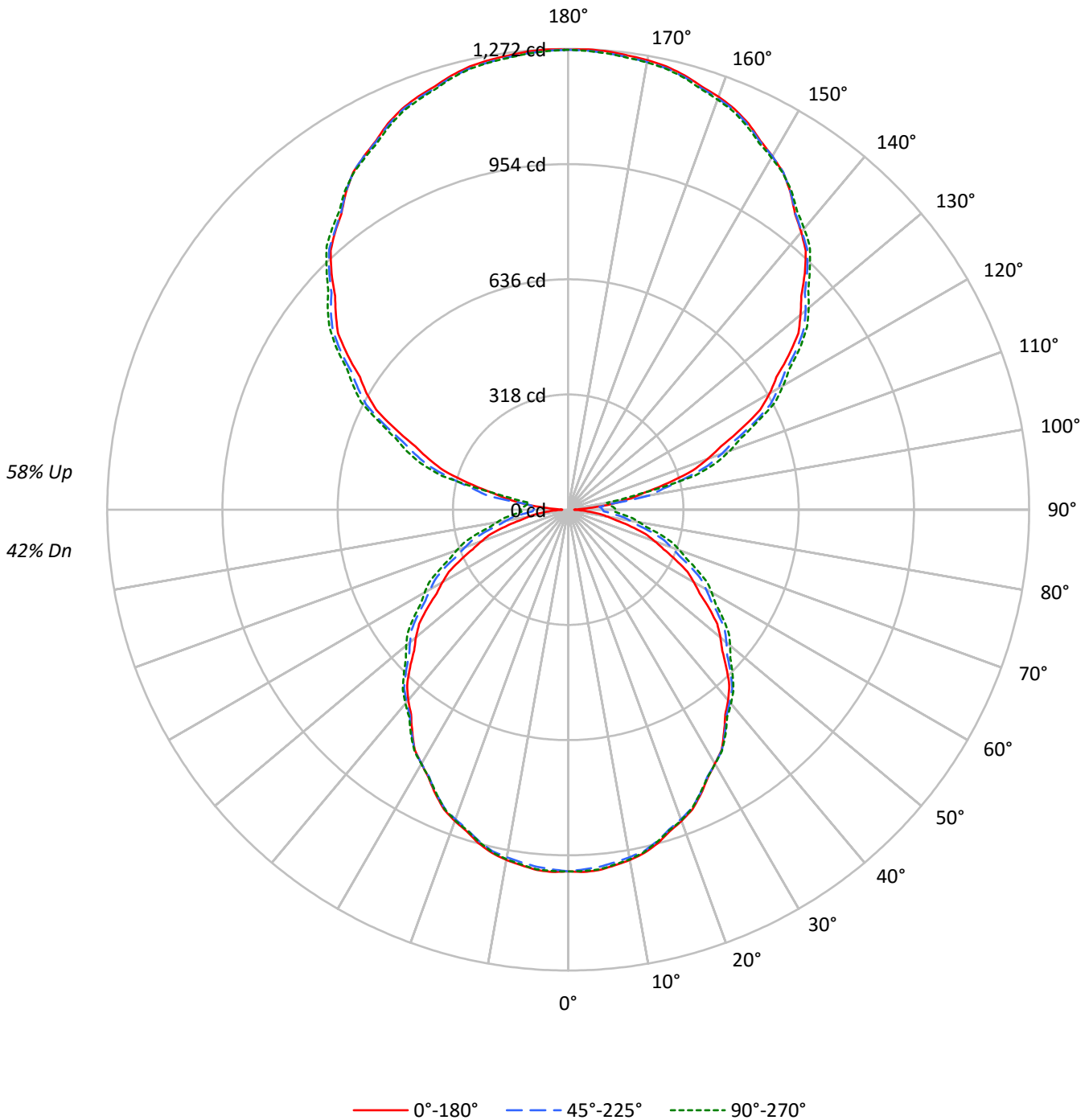
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333235-830

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Luminous Intensity Polar Plot





TEST NUMBER: P333235-830

CATALOG NUMBER: S125DIP-S850D1035U830-4F0-1E-UDD-D

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	105	105	105	105	96	96	96	96	79	79	79		63	63	63		48	48	48	42
1	95	91	87	83	87	83	79	76	68	65	63		54	53	51		42	41	40	34
2	86	79	73	67	79	72	67	62	59	55	52		47	45	42		36	35	33	28
3	79	69	62	56	71	63	57	51	52	47	43		42	38	35		32	30	28	23
4	72	61	53	47	65	56	49	43	46	41	37		37	33	30		28	26	24	20
5	66	54	46	40	60	50	42	37	41	36	31		33	29	26		26	23	21	17
6	61	48	40	34	55	44	37	32	37	31	27		30	26	23		23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24		27	23	20		21	18	16	13
8	52	40	32	26	47	36	29	25	30	25	21		25	21	18		19	16	14	12
9	48	36	29	23	44	33	27	22	28	23	19		23	19	16		18	15	13	11
10	45	33	26	21	41	30	24	20	26	20	17		21	17	14		17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6448	6448	6448
5°	6461	6330	6350
10°	6415	6216	6207
15°	6340	6081	6026
20°	6237	5914	5845
25°	6114	5735	5621
30°	5965	5538	5419
35°	5827	5357	5233
40°	5686	5166	5046
45°	5526	5003	4880
50°	5375	4826	4733
55°	5192	4659	4561
60°	4992	4468	4385
65°	4783	4270	4187
70°	4546	3997	3985
75°	4170	3735	3735
80°	3682	3416	3463
85°	3220	3204	3378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.4	1.4
10°-20°	268.0	3.8
20°-30°	398.6	5.7
30°-40°	472.1	6.8
40°-50°	488.1	7.0
50°-60°	449.7	6.4
60°-70°	363.5	5.2
70°-80°	243.4	3.5
80°-90°	128.9	1.8
90°-100°	117.0	1.7
100°-110°	336.6	4.8
110°-120°	550.7	7.9
120°-130°	681.7	9.7
130°-140°	720.5	10.3
140°-150°	669.9	9.6
150°-160°	540.5	7.7
160°-170°	349.6	5.0
170°-180°	120.6	1.7
0°-30°	761.0	10.9
0°-40°	1233.2	17.6
0°-60°	2171.0	31.0
0°-90°	2906.8	41.6
90°-120°	1004.2	14.4
90°-150°	3076.3	44.0
90°-180°	4087.0	58.4
0°-180°	6993.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	998	996	990	997	997	95
15°	954	954	948	953	950	268
25°	866	869	863	867	862	399
35°	750	756	754	757	757	469
45°	618	628	633	640	641	477
55°	475	490	506	516	521	424
65°	327	349	373	387	392	324
75°	180	206	237	256	261	191
85°	54	86	120	141	150	57
90°	17	56	95	122	132	13
95°	66	88	86	112	120	78
105°	286	305	334	353	360	303
115°	525	538	563	576	577	521
125°	743	749	768	779	782	663
135°	923	928	933	943	943	711
145°	1069	1070	1070	1075	1074	668
155°	1176	1171	1173	1175	1168	542
165°	1241	1236	1237	1242	1235	351
175°	1270	1264	1265	1271	1264	121
180°	1270	1270	1270	1270	1270	



TEST NUMBER: P333235-830

CATALOG NUMBER: S125DIP-S850D1035U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4
2.5°	1000.8	1000.5	1000.1	999.8	999.4	998.6	997.4	996.2	994.9	993.7	994.9
5°	998.4	998.1	997.6	997.1	996.7	995.7	994.2	992.7	991.2	989.7	991.4
7.5°	989.7	989.5	989.3	989.1	988.9	988.1	986.6	985.0	983.4	981.8	983.4
10°	981.8	981.8	981.8	981.8	981.8	981.0	979.2	977.5	975.7	974.0	975.5
12.5°	970.8	971.0	971.2	971.4	971.6	970.9	969.6	968.2	966.8	965.4	966.6
15°	953.5	953.7	953.9	954.0	954.3	953.7	952.2	950.6	949.0	947.5	948.9
17.5°	930.8	931.1	931.6	932.0	932.5	931.9	930.4	928.9	927.4	925.9	926.8
20°	914.3	914.7	915.1	915.6	916.1	915.5	914.0	912.5	910.9	909.4	910.0
22.5°	895.5	896.3	897.0	897.9	898.6	898.1	896.5	894.8	893.1	891.4	892.2
25°	866.3	867.0	867.6	868.3	868.9	868.6	867.3	866.0	864.7	863.4	864.2
27.5°	833.8	834.8	835.8	836.7	837.6	837.4	835.9	834.4	832.9	831.5	832.1
30°	809.5	810.9	812.2	813.4	814.7	814.7	813.4	812.2	810.9	809.5	810.0
32.5°	787.6	788.7	789.9	791.0	792.1	792.2	791.3	790.3	789.4	788.4	788.8
35°	749.8	751.4	752.9	754.4	755.9	756.4	755.7	755.1	754.4	753.8	754.4
37.5°	712.0	713.4	714.8	716.2	717.7	718.2	717.9	717.7	717.6	717.4	718.2
40°	686.2	688.0	689.7	691.4	693.1	693.9	693.7	693.5	693.2	693.1	693.9
42.5°	658.0	660.3	662.5	664.8	667.0	668.5	668.9	669.4	669.9	670.3	671.4
45°	617.6	620.1	622.5	624.8	627.3	629.0	630.1	631.1	632.3	633.3	634.9
47.5°	576.4	578.6	580.8	583.1	585.2	587.3	589.2	591.1	592.9	594.7	597.0
50°	548.2	550.5	553.0	555.3	557.7	560.2	562.5	565.0	567.3	569.7	572.1
52.5°	518.4	521.3	524.2	527.2	530.1	533.0	535.9	538.9	541.8	544.7	547.2
55°	474.8	478.2	481.7	485.2	488.7	492.2	495.7	499.2	502.6	506.1	508.5
57.5°	430.1	434.3	438.5	442.6	446.9	450.9	455.0	458.9	462.9	466.9	469.7
60°	400.4	404.7	409.1	413.4	417.7	422.2	426.5	430.8	435.2	439.5	442.8
62.5°	371.4	375.7	380.1	384.5	388.8	393.3	398.0	402.7	407.4	412.1	415.8
65°	327.0	332.0	337.0	342.0	346.9	352.0	357.3	362.5	367.8	373.0	376.3
67.5°	285.0	289.9	294.7	299.5	304.3	309.4	314.7	320.1	325.4	330.6	334.6
70°	254.5	259.5	264.5	269.6	274.6	279.8	285.5	291.2	296.8	302.5	306.6
72.5°	224.8	229.9	235.1	240.3	245.4	251.1	257.3	263.5	269.7	275.9	280.3
75°	180.1	185.8	191.4	197.1	202.7	209.1	216.0	223.0	229.9	236.9	241.2
77.5°	137.2	143.7	150.3	156.8	163.3	169.9	176.6	183.3	190.0	196.8	201.5
80°	110.7	117.2	123.7	130.2	136.8	143.6	151.1	158.4	165.9	173.2	178.0
82.5°	86.3	93.2	100.1	107.0	113.9	121.0	128.7	136.2	143.7	151.4	156.0
85°	53.8	61.0	68.2	75.4	82.6	89.9	97.6	105.2	112.8	120.4	125.2
87.5°	30.7	38.0	45.3	52.6	59.9	67.4	75.1	82.8	90.5	98.1	103.4
90°	16.6	25.3	33.8	42.5	51.2	59.9	68.7	77.6	86.4	95.3	101.4
92.5°	28.6	33.8	39.1	44.4	49.7	56.7	65.6	74.5	83.3	92.2	98.0
95°	66.4	71.4	76.4	81.4	86.5	88.7	88.1	87.7	87.1	86.5	92.4
97.5°	123.6	129.8	136.0	142.2	148.5	147.2	138.6	130.1	121.5	112.8	111.5
100°	168.0	173.1	178.3	183.5	188.7	195.2	203.0	210.8	218.6	226.4	199.8
102.5°	213.1	218.1	223.1	228.1	233.1	239.3	246.6	253.8	261.2	268.4	266.9
105°	285.5	289.8	294.2	298.4	302.7	308.2	314.7	321.2	327.7	334.3	338.7
107.5°	360.7	363.7	366.6	369.6	372.6	377.4	384.1	390.8	397.5	404.2	408.5
110°	409.6	412.3	414.9	417.5	420.1	424.6	431.1	437.6	444.1	450.7	454.2



TEST NUMBER: P333235-830

CATALOG NUMBER: S125DIP-S850D1035U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	456.3	458.9	461.5	464.1	466.7	471.1	477.2	483.4	489.6	495.8	498.9
115°	525.4	527.9	530.5	533.1	535.6	539.9	545.7	551.6	557.4	563.3	566.4
117.5°	596.8	597.8	598.8	599.7	600.7	604.3	610.4	616.5	622.6	628.8	631.4
120°	642.1	642.4	642.9	643.4	643.8	646.9	652.4	658.1	663.7	669.4	672.6
122.5°	681.2	682.2	683.3	684.5	685.5	688.6	693.8	698.9	704.0	709.2	712.3
125°	742.7	743.9	745.2	746.4	747.6	750.5	754.8	759.1	763.6	767.9	770.5
127.5°	800.6	801.4	802.3	803.1	803.9	806.1	809.5	812.9	816.4	819.8	822.6
130°	836.8	837.5	838.4	839.2	840.1	842.1	845.4	848.6	851.9	855.1	857.5
132.5°	872.1	873.3	874.4	875.6	876.8	878.4	880.2	882.1	884.0	885.9	888.8
135°	923.3	924.4	925.4	926.4	927.5	928.5	929.6	930.8	931.8	932.9	935.4
137.5°	970.3	971.3	972.1	973.1	974.0	974.6	975.0	975.3	975.7	976.1	978.7
140°	1000.4	1000.9	1001.3	1001.6	1002.1	1002.3	1002.3	1002.3	1002.3	1002.3	1005.1
142.5°	1028.3	1028.3	1028.4	1028.5	1028.6	1028.8	1029.2	1029.4	1029.8	1030.1	1032.3
145°	1069.1	1069.3	1069.5	1069.7	1070.0	1070.1	1070.1	1070.1	1070.1	1070.1	1071.3
147.5°	1103.9	1103.8	1103.7	1103.6	1103.5	1103.6	1103.9	1104.2	1104.4	1104.7	1105.2
150°	1126.5	1126.1	1125.7	1125.2	1124.8	1124.8	1125.2	1125.7	1126.1	1126.5	1126.9
152.5°	1148.3	1147.5	1146.5	1145.6	1144.6	1144.4	1144.8	1145.2	1145.7	1146.0	1146.5
155°	1176.4	1175.2	1173.8	1172.6	1171.4	1170.9	1171.4	1171.8	1172.1	1172.6	1173.3
157.5°	1198.0	1197.2	1196.6	1195.8	1195.0	1194.7	1194.7	1194.8	1194.8	1194.9	1195.5
160°	1213.1	1211.8	1210.6	1209.3	1208.1	1207.5	1207.8	1208.0	1208.2	1208.3	1209.2
162.5°	1225.1	1223.9	1222.6	1221.3	1220.1	1219.6	1219.7	1220.0	1220.2	1220.4	1221.6
165°	1241.3	1240.0	1238.8	1237.6	1236.3	1235.8	1236.0	1236.1	1236.4	1236.6	1237.8
167.5°	1253.4	1252.1	1250.8	1249.4	1248.2	1247.6	1247.8	1248.0	1248.2	1248.5	1250.0
170°	1260.1	1258.7	1257.2	1255.7	1254.2	1253.7	1253.9	1254.1	1254.2	1254.5	1256.1
172.5°	1264.6	1263.2	1261.7	1260.3	1258.8	1258.3	1258.6	1259.0	1259.3	1259.7	1261.2
175°	1269.5	1268.3	1267.1	1265.7	1264.5	1264.0	1264.2	1264.4	1264.6	1264.8	1266.5
177.5°	1271.8	1270.8	1269.8	1268.8	1267.8	1267.3	1267.5	1267.7	1267.9	1268.0	1269.2
180°	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5



TEST NUMBER: P333235-830

CATALOG NUMBER: S125DIP-S850D1035U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4
2.5°	996.2	997.4	998.6	999.2	999.0	998.8	998.6	998.4
5°	993.2	994.9	996.6	997.4	997.1	996.9	996.7	996.6
7.5°	984.9	986.4	987.9	988.5	988.4	988.2	987.9	987.7
10°	977.0	978.5	980.1	980.7	980.5	980.3	980.1	979.9
12.5°	967.7	968.9	970.1	970.3	969.8	969.2	968.7	968.1
15°	950.2	951.5	952.8	953.0	952.2	951.2	950.4	949.5
17.5°	927.8	928.9	929.8	930.1	929.5	929.1	928.5	928.0
20°	910.7	911.3	912.0	912.3	912.3	912.3	912.3	912.3
22.5°	893.1	893.8	894.7	894.8	894.3	893.8	893.2	892.8
25°	865.2	866.0	866.9	866.8	865.6	864.6	863.5	862.4
27.5°	832.6	833.3	833.9	834.1	833.6	833.2	832.8	832.5
30°	810.4	810.9	811.2	811.4	811.2	811.0	810.8	810.5
32.5°	789.3	789.7	790.1	790.2	790.0	789.9	789.6	789.4
35°	755.1	755.7	756.4	756.7	756.7	756.7	756.7	756.7
37.5°	719.1	719.9	720.8	721.2	721.1	721.0	721.0	720.9
40°	694.7	695.7	696.5	697.2	697.6	698.0	698.5	698.9
42.5°	672.4	673.4	674.5	675.0	675.1	675.2	675.3	675.4
45°	636.4	637.9	639.4	640.3	640.6	640.7	640.9	641.2
47.5°	599.2	601.4	603.6	605.0	605.5	606.0	606.4	606.9
50°	574.5	576.9	579.3	580.8	581.5	582.1	582.8	583.4
52.5°	549.8	552.3	554.9	556.5	556.9	557.4	557.9	558.4
55°	510.9	513.3	515.7	517.3	518.1	519.1	519.9	520.8
57.5°	472.4	475.1	477.9	479.6	480.2	480.9	481.5	482.2
60°	446.0	449.3	452.6	454.5	455.2	455.8	456.5	457.1
62.5°	419.3	422.9	426.6	428.8	429.6	430.5	431.2	432.1
65°	379.5	382.8	386.0	388.0	389.0	389.8	390.7	391.5
67.5°	338.6	342.5	346.5	349.0	350.2	351.3	352.4	353.5
70°	310.8	314.9	319.1	321.7	323.0	324.3	325.6	327.0
72.5°	284.8	289.3	293.8	296.5	297.5	298.4	299.4	300.3
75°	245.6	250.0	254.3	257.0	258.1	259.2	260.2	261.4
77.5°	206.3	211.1	215.9	218.8	219.6	220.5	221.3	222.3
80°	182.9	187.7	192.4	195.2	196.1	197.0	197.8	198.7
82.5°	160.5	165.1	169.8	172.9	174.5	176.0	177.6	179.2
85°	130.0	134.8	139.6	142.8	144.6	146.3	148.1	149.8
87.5°	108.6	113.8	119.0	122.4	124.1	125.7	127.3	129.0
90°	107.4	113.5	119.5	123.7	125.7	127.9	130.1	132.2
92.5°	104.0	109.8	115.6	119.5	121.4	123.2	125.0	126.8
95°	98.2	104.1	109.8	113.5	115.1	116.6	118.1	119.6
97.5°	110.2	108.9	107.5	107.6	109.1	110.6	112.1	113.6
100°	173.2	146.7	120.0	107.0	107.4	107.9	108.4	108.9
102.5°	265.4	263.9	262.4	255.2	242.3	229.4	216.5	203.6
105°	343.0	347.3	351.7	354.5	355.8	357.1	358.4	359.8
107.5°	412.8	417.2	421.5	424.0	424.8	425.5	426.2	427.0
110°	457.7	461.2	464.7	467.3	469.0	470.8	472.5	474.3



TEST NUMBER: P333235-830

CATALOG NUMBER: S125DIP-S850D1035U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	502.1	505.2	508.4	510.6	511.8	513.0	514.3	515.5
115°	569.5	572.5	575.6	577.2	577.2	577.3	577.3	577.4
117.5°	634.0	636.7	639.2	641.0	642.0	642.9	643.9	644.8
120°	675.9	679.2	682.5	684.3	684.5	684.8	685.0	685.3
122.5°	715.4	718.4	721.5	723.1	723.2	723.3	723.4	723.5
125°	773.2	775.8	778.4	780.0	780.4	780.9	781.4	781.8
127.5°	825.4	828.1	830.9	832.1	831.8	831.5	831.2	830.9
130°	860.0	862.3	864.8	866.0	866.1	866.1	866.1	866.2
132.5°	891.7	894.7	897.6	898.9	898.8	898.7	898.5	898.4
135°	937.7	940.2	942.5	943.7	943.5	943.4	943.2	943.0
137.5°	981.4	984.0	986.7	987.9	987.7	987.5	987.2	987.0
140°	1008.0	1010.8	1013.6	1014.8	1014.5	1014.0	1013.6	1013.2
142.5°	1034.4	1036.5	1038.7	1039.5	1039.2	1038.8	1038.4	1038.0
145°	1072.6	1073.9	1075.3	1075.6	1075.3	1074.9	1074.5	1074.1
147.5°	1105.9	1106.5	1107.0	1106.8	1105.7	1104.6	1103.4	1102.3
150°	1127.4	1127.8	1128.1	1127.7	1126.1	1124.7	1123.3	1121.8
152.5°	1146.9	1147.4	1147.7	1147.3	1145.8	1144.3	1142.8	1141.3
155°	1173.8	1174.5	1175.2	1174.6	1172.9	1171.2	1169.6	1167.9
157.5°	1196.2	1196.8	1197.5	1197.0	1195.3	1193.6	1191.9	1190.3
160°	1210.0	1210.9	1211.7	1211.3	1209.7	1208.0	1206.3	1204.6
162.5°	1222.8	1223.9	1225.1	1224.7	1222.9	1221.1	1219.3	1217.4
165°	1239.1	1240.4	1241.6	1241.4	1239.7	1238.0	1236.4	1234.7
167.5°	1251.5	1253.0	1254.5	1254.3	1252.5	1250.6	1248.7	1246.8
170°	1257.8	1259.5	1261.2	1261.0	1259.1	1257.4	1255.5	1253.6
172.5°	1262.7	1264.2	1265.7	1265.6	1263.7	1261.8	1259.9	1258.1
175°	1268.2	1269.9	1271.5	1271.4	1269.5	1267.6	1265.7	1263.9
177.5°	1270.4	1271.6	1272.7	1272.6	1271.3	1270.0	1268.7	1267.2
180°	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5

(END OF REPORT)