

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: P333244-830

Luminaire Tested: **S125DIP-S850D1205U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333244-830
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-S850D1205U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7633.5 lumens
Efficiency: N/A
Efficacy: 134.2 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: Semi-Indirect

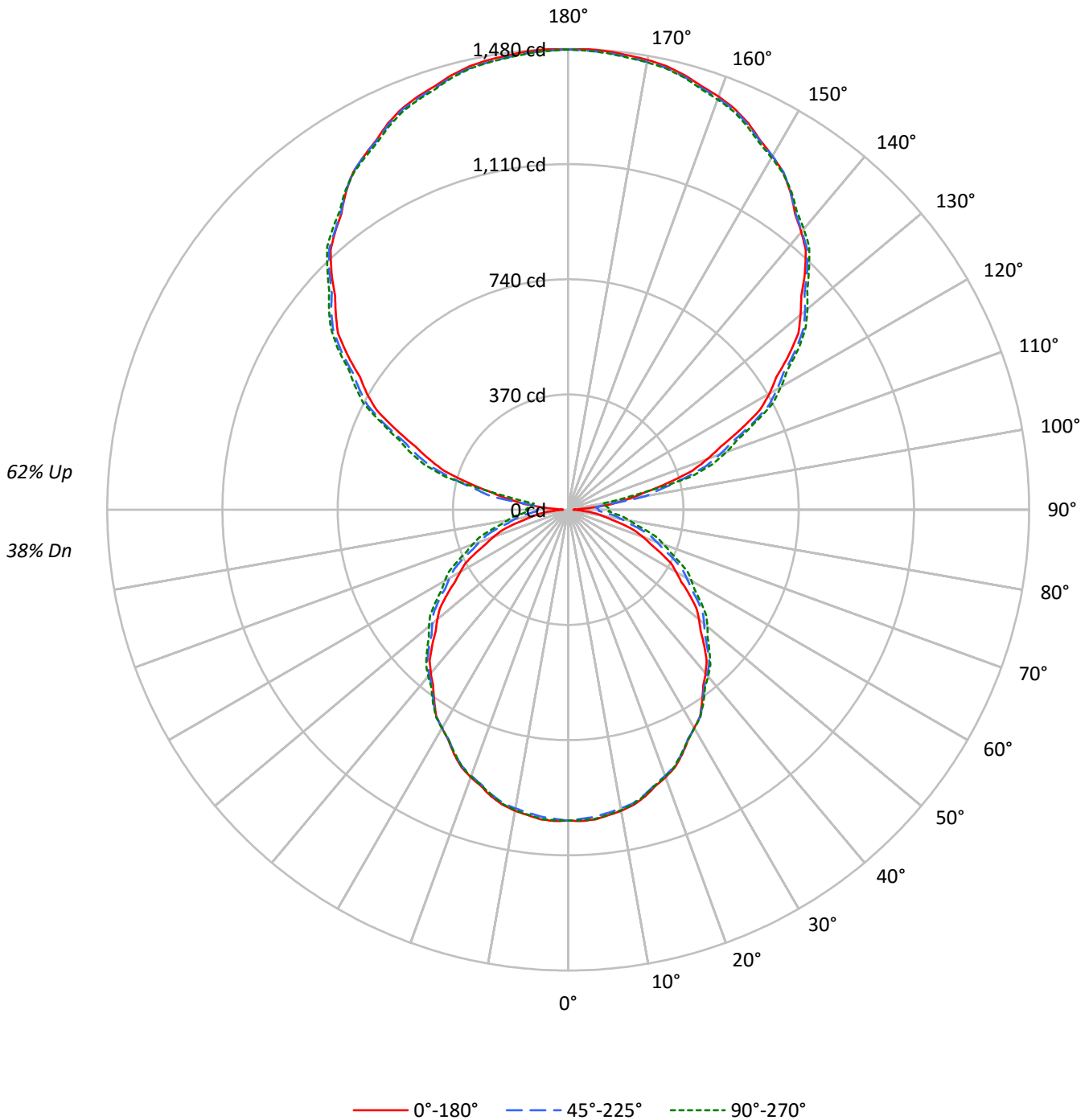
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333244-830

CATALOG NUMBER: S125DIP-S850D1205U830-4F0-1E-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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	95	90	86	82	86	82	78	75	66	64	62	52	50	49	39	38	37	31
2	86	78	72	67	78	71	66	61	58	54	51	45	43	40	34	32	31	25
3	78	69	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21
4	71	61	53	47	64	55	48	43	45	40	36	35	32	29	27	24	22	18
5	65	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	55	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	51	39	31	26	46	36	29	24	30	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	25	21	40	30	24	19	25	20	16	20	16	14	15	13	11	9

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	1.2
10°-20°	268.0	3.5
20°-30°	398.6	5.2
30°-40°	472.1	6.2
40°-50°	488.1	6.4
50°-60°	449.7	5.9
60°-70°	363.5	4.8
70°-80°	243.4	3.2
80°-90°	129.3	1.7
90°-100°	124.5	1.6
100°-110°	383.2	5.0
110°-120°	635.2	8.3
120°-130°	790.2	10.4
130°-140°	837.2	11.0
140°-150°	779.5	10.2
150°-160°	629.1	8.2
160°-170°	406.9	5.3
170°-180°	140.3	1.8
0°-30°	761.0	10.0
0°-40°	1233.2	16.2
0°-60°	2171.0	28.4
0°-90°	2907.3	38.1
90°-120°	1143.0	15.0
90°-150°	3549.9	46.5
90°-180°	4726.0	61.9
0°-180°	7633.5	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	57	98	125	136	13
95°	75	96	89	115	123	90
105°	331	351	380	399	406	351
115°	611	624	649	662	662	605
125°	864	871	890	901	903	771
135°	1074	1080	1085	1094	1093	828
145°	1244	1245	1246	1251	1249	778
155°	1369	1363	1365	1368	1359	631
165°	1445	1439	1439	1445	1437	408
175°	1478	1472	1472	1480	1471	141
180°	1478	1478	1478	1478	1478	



TEST NUMBER: P333244-830

CATALOG NUMBER: S125DIP-S850D1205U830-4F0-1E-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	38.1	45.4	52.8	60.1	67.7	75.4	83.2	91.0	98.7	103.9
90°	16.8	25.6	34.6	43.5	52.4	61.4	70.5	79.6	88.7	97.8	104.1
92.5°	31.0	36.0	41.1	46.2	51.3	58.3	67.4	76.5	85.6	94.6	100.7
95°	75.1	80.1	85.0	89.9	94.8	96.4	94.5	92.7	90.9	89.0	95.0
97.5°	141.9	148.3	154.7	161.1	167.5	165.1	154.0	142.8	131.7	120.5	118.2
100°	193.7	199.0	204.3	209.6	214.9	221.5	229.4	237.4	245.3	253.3	221.6
102.5°	246.4	251.6	256.7	261.8	266.9	273.2	280.6	287.9	295.3	302.7	300.2
105°	330.8	335.4	339.8	344.2	348.6	354.2	360.7	367.2	373.7	380.3	384.7
107.5°	418.7	421.6	424.5	427.5	430.5	435.4	442.1	448.8	455.5	462.3	466.7
110°	475.7	478.3	480.9	483.5	486.2	490.7	497.3	503.9	510.5	517.1	520.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	530.0	532.7	535.4	538.0	540.7	545.2	551.4	557.6	563.7	570.0	573.1
115°	610.6	613.3	616.0	618.8	621.5	625.8	631.7	637.6	643.5	649.4	652.3
117.5°	693.9	694.8	695.8	696.7	697.7	701.3	707.6	713.9	720.2	726.4	728.9
120°	746.5	746.9	747.3	747.7	748.1	751.2	757.0	762.7	768.4	774.1	777.3
122.5°	792.1	793.3	794.6	795.8	797.1	800.2	805.4	810.6	815.8	821.0	824.0
125°	863.8	865.3	866.8	868.3	869.8	872.7	877.0	881.4	885.7	890.0	892.6
127.5°	931.4	932.4	933.4	934.4	935.4	937.6	941.0	944.4	947.9	951.3	953.9
130°	973.5	974.5	975.4	976.5	977.5	979.6	982.9	986.2	989.5	992.8	995.0
132.5°	1014.7	1016.2	1017.5	1018.9	1020.2	1021.8	1023.6	1025.5	1027.3	1029.1	1032.0
135°	1074.4	1075.6	1076.9	1078.1	1079.3	1080.4	1081.5	1082.5	1083.5	1084.6	1086.9
137.5°	1129.2	1130.2	1131.3	1132.5	1133.5	1134.3	1134.5	1134.8	1135.1	1135.4	1138.1
140°	1164.3	1164.8	1165.3	1165.7	1166.2	1166.5	1166.5	1166.4	1166.4	1166.4	1169.2
142.5°	1196.7	1196.8	1196.9	1197.1	1197.2	1197.4	1197.9	1198.3	1198.6	1199.0	1201.1
145°	1244.3	1244.5	1244.8	1245.1	1245.4	1245.5	1245.5	1245.5	1245.5	1245.5	1246.8
147.5°	1284.9	1284.8	1284.7	1284.6	1284.5	1284.6	1284.9	1285.2	1285.5	1285.8	1286.4
150°	1311.2	1310.7	1310.2	1309.8	1309.3	1309.3	1309.8	1310.2	1310.7	1311.2	1311.6
152.5°	1336.6	1335.6	1334.5	1333.4	1332.3	1332.0	1332.6	1333.0	1333.5	1334.0	1334.5
155°	1369.2	1367.8	1366.3	1364.9	1363.4	1362.9	1363.4	1363.9	1364.4	1364.9	1365.6
157.5°	1394.5	1393.5	1392.7	1391.9	1390.9	1390.5	1390.6	1390.6	1390.7	1390.7	1391.5
160°	1412.0	1410.5	1409.1	1407.6	1406.2	1405.5	1405.8	1406.0	1406.3	1406.5	1407.5
162.5°	1426.0	1424.6	1423.1	1421.6	1420.1	1419.6	1419.8	1420.0	1420.3	1420.5	1421.9
165°	1444.8	1443.4	1441.9	1440.5	1439.0	1438.4	1438.6	1438.9	1439.1	1439.4	1440.9
167.5°	1458.9	1457.4	1455.9	1454.3	1452.8	1452.2	1452.5	1452.6	1452.9	1453.2	1454.9
170°	1466.8	1465.1	1463.3	1461.6	1459.9	1459.2	1459.4	1459.7	1459.9	1460.2	1462.2
172.5°	1472.0	1470.3	1468.6	1466.9	1465.2	1464.5	1465.0	1465.5	1465.8	1466.3	1468.1
175°	1477.7	1476.2	1474.8	1473.3	1471.9	1471.2	1471.5	1471.8	1472.0	1472.3	1474.1
177.5°	1480.4	1479.1	1478.0	1476.9	1475.6	1475.2	1475.4	1475.6	1475.7	1475.9	1477.3
180°	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7



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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°	109.1	114.4	119.6	123.1	124.8	126.4	128.1	129.8
90°	110.3	116.5	122.7	126.9	129.1	131.4	133.7	135.9
92.5°	106.8	112.8	118.9	122.8	124.7	126.5	128.4	130.3
95°	100.9	107.0	113.0	116.8	118.3	119.8	121.3	122.8
97.5°	115.8	113.6	111.3	110.8	112.4	113.9	115.3	116.8
100°	189.8	158.2	126.4	110.7	111.1	111.4	111.8	112.1
102.5°	297.7	295.3	292.8	284.0	268.7	253.4	238.2	223.0
105°	389.0	393.3	397.7	400.5	401.8	403.0	404.4	405.6
107.5°	471.1	475.4	479.8	482.2	482.9	483.4	484.1	484.7
110°	523.9	527.3	530.7	533.2	535.0	536.8	538.6	540.3



TEST NUMBER: P333244-830

CATALOG NUMBER: S125DIP-S850D1205U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	576.1	579.1	582.1	584.2	585.4	586.6	587.8	589.0
115°	655.3	658.3	661.2	662.6	662.4	662.2	662.1	661.9
117.5°	731.3	733.8	736.1	737.8	738.7	739.5	740.4	741.2
120°	780.5	783.7	786.9	788.6	788.7	788.8	788.9	789.0
122.5°	827.0	830.1	833.1	834.5	834.4	834.3	834.2	834.2
125°	895.1	897.6	900.1	901.5	901.9	902.3	902.6	903.0
127.5°	956.7	959.3	962.1	963.1	962.5	962.1	961.5	960.9
130°	997.4	999.8	1002.0	1003.1	1003.0	1002.9	1002.8	1002.6
132.5°	1034.9	1037.7	1040.7	1042.0	1041.7	1041.3	1041.0	1040.8
135°	1089.3	1091.7	1094.0	1095.0	1094.6	1094.2	1093.8	1093.4
137.5°	1140.8	1143.4	1146.0	1147.2	1146.8	1146.4	1146.0	1145.7
140°	1172.1	1175.0	1177.9	1179.0	1178.5	1177.9	1177.2	1176.7
142.5°	1203.2	1205.4	1207.6	1208.3	1207.8	1207.1	1206.5	1206.0
145°	1248.1	1249.4	1250.8	1251.1	1250.6	1250.0	1249.4	1248.8
147.5°	1287.0	1287.7	1288.4	1288.0	1286.7	1285.3	1283.9	1282.5
150°	1312.2	1312.7	1313.2	1312.5	1310.8	1309.1	1307.3	1305.6
152.5°	1334.9	1335.5	1336.0	1335.3	1333.6	1331.9	1330.2	1328.5
155°	1366.3	1367.1	1367.8	1367.2	1365.3	1363.3	1361.3	1359.4
157.5°	1392.3	1393.1	1393.8	1393.3	1391.3	1389.4	1387.4	1385.4
160°	1408.4	1409.4	1410.4	1409.9	1408.0	1406.0	1404.1	1402.1
162.5°	1423.2	1424.7	1426.0	1425.6	1423.4	1421.3	1419.2	1417.0
165°	1442.3	1443.8	1445.2	1444.9	1443.0	1441.1	1439.1	1437.2
167.5°	1456.7	1458.4	1460.2	1460.0	1457.7	1455.6	1453.4	1451.2
170°	1464.1	1466.0	1468.0	1467.8	1465.7	1463.5	1461.3	1459.1
172.5°	1469.8	1471.6	1473.3	1473.1	1470.9	1468.8	1466.5	1464.3
175°	1476.1	1478.1	1480.0	1479.9	1477.7	1475.6	1473.3	1471.1
177.5°	1478.7	1480.1	1481.4	1481.3	1479.8	1478.2	1476.6	1475.1
180°	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7

(END OF REPORT)