

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

Luminaire Tested: **S125DIP-S850D1205U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333244
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-S850D1205U835-4F0-1E-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: 8098.8 lumens
Efficiency: N/A
Efficacy: 142.3 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

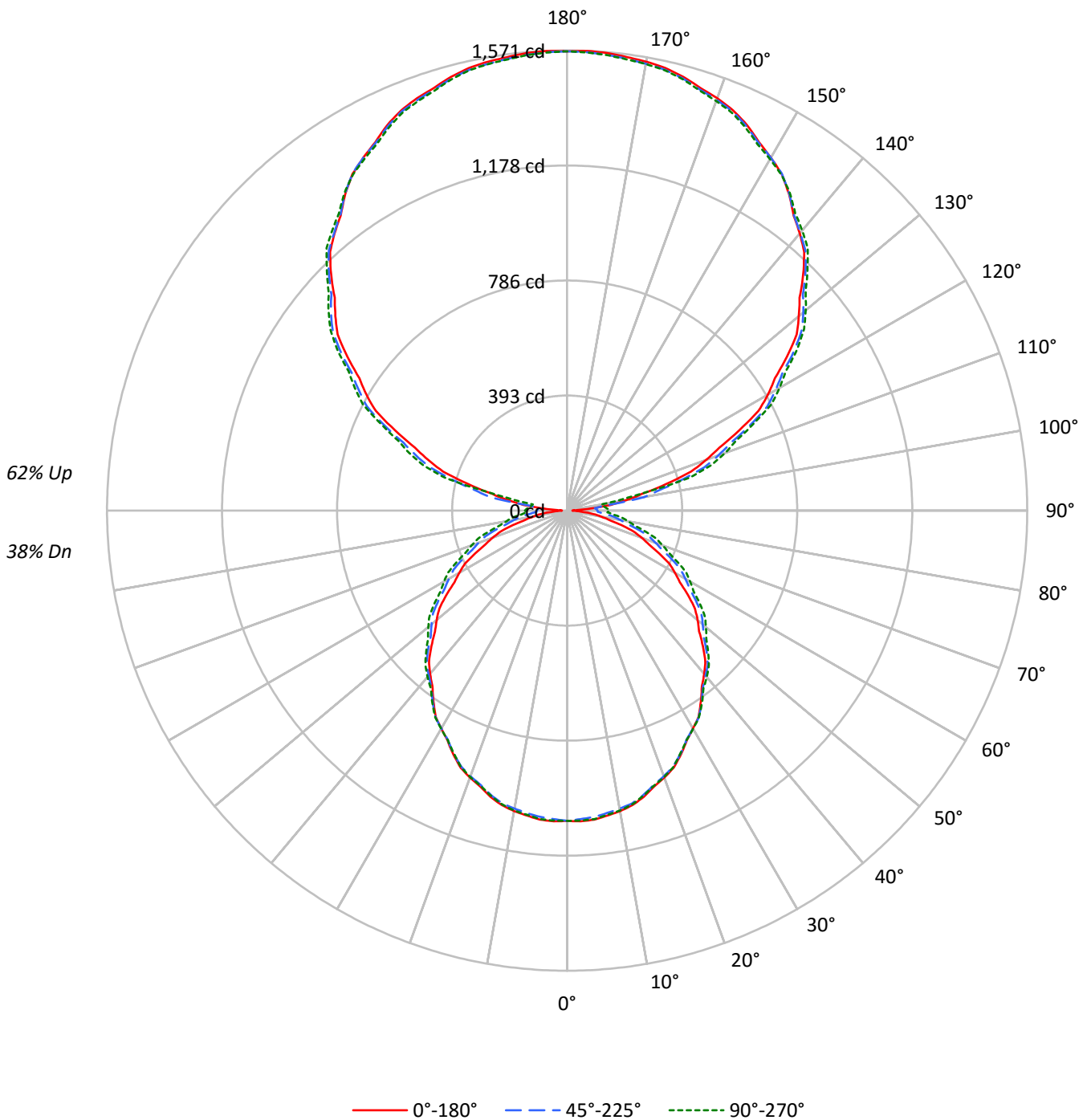
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333244

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Luminous Intensity Polar Plot





TEST NUMBER: P333244

CATALOG NUMBER: S125DIP-S850D1205U835-4F0-1E-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°	6841	6841	6841
5°	6855	6715	6737
10°	6806	6595	6585
15°	6726	6452	6393
20°	6616	6274	6201
25°	6486	6084	5964
30°	6329	5876	5749
35°	6182	5684	5552
40°	6032	5481	5353
45°	5863	5308	5178
50°	5702	5120	5022
55°	5508	4943	4839
60°	5296	4741	4653
65°	5075	4530	4443
70°	4822	4240	4228
75°	4425	3962	3962
80°	3905	3625	3673
85°	3417	3398	3583



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.2	1.2
10°-20°	284.4	3.5
20°-30°	422.9	5.2
30°-40°	500.9	6.2
40°-50°	517.9	6.4
50°-60°	477.1	5.9
60°-70°	385.7	4.8
70°-80°	258.3	3.2
80°-90°	137.2	1.7
90°-100°	132.1	1.6
100°-110°	406.6	5.0
110°-120°	674.0	8.3
120°-130°	838.4	10.4
130°-140°	888.3	11.0
140°-150°	827.0	10.2
150°-160°	667.5	8.2
160°-170°	431.7	5.3
170°-180°	148.9	1.8
0°-30°	807.4	10.0
0°-40°	1308.3	16.2
0°-60°	2303.3	28.4
0°-90°	3084.5	38.1
90°-120°	1212.6	15.0
90°-150°	3766.3	46.5
90°-180°	5014.0	61.9
0°-180°	8098.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1059	1057	1050	1058	1057	100
15°	1012	1012	1005	1011	1007	285
25°	919	922	916	920	915	423
35°	796	802	800	803	803	498
45°	655	666	672	679	680	506
55°	504	520	537	548	552	450
65°	347	371	396	411	415	344
75°	191	218	251	271	277	203
85°	57	92	128	150	159	61
90°	18	60	104	132	144	14
95°	80	101	94	122	130	95
105°	351	373	404	423	430	372
115°	648	662	689	702	702	642
125°	916	924	944	956	958	818
135°	1140	1146	1151	1161	1160	878
145°	1320	1321	1321	1327	1325	825
155°	1453	1446	1448	1451	1442	669
165°	1533	1526	1527	1533	1525	433
175°	1568	1561	1562	1570	1561	149
180°	1568	1568	1568	1568	1568	



TEST NUMBER: P333244

CATALOG NUMBER: S125DIP-S850D1205U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1061.8	1061.5	1061.1	1060.7	1060.3	1059.5	1058.2	1056.9	1055.6	1054.3	1055.6
5°	1059.3	1058.9	1058.4	1057.9	1057.5	1056.4	1054.8	1053.2	1051.6	1050.0	1051.8
7.5°	1050.0	1049.8	1049.6	1049.4	1049.2	1048.3	1046.7	1045.0	1043.3	1041.7	1043.3
10°	1041.7	1041.7	1041.7	1041.7	1041.7	1040.8	1038.9	1037.1	1035.2	1033.4	1035.0
12.5°	1030.0	1030.2	1030.4	1030.6	1030.8	1030.1	1028.7	1027.2	1025.7	1024.2	1025.5
15°	1011.6	1011.8	1012.0	1012.2	1012.5	1011.8	1010.2	1008.6	1006.9	1005.3	1006.7
17.5°	987.5	987.9	988.4	988.8	989.3	988.7	987.1	985.5	983.9	982.3	983.3
20°	970.0	970.5	970.9	971.4	971.9	971.3	969.7	968.1	966.4	964.8	965.5
22.5°	950.1	950.9	951.7	952.6	953.4	952.9	951.1	949.3	947.5	945.7	946.6
25°	919.1	919.8	920.5	921.2	921.9	921.5	920.2	918.8	917.4	916.0	916.9
27.5°	884.6	885.7	886.7	887.7	888.7	888.4	886.9	885.3	883.7	882.2	882.8
30°	858.9	860.3	861.7	863.0	864.4	864.4	863.0	861.7	860.3	858.9	859.4
32.5°	835.6	836.8	838.0	839.2	840.4	840.5	839.5	838.5	837.5	836.5	836.9
35°	795.5	797.2	798.8	800.4	802.0	802.5	801.8	801.1	800.4	799.7	800.4
37.5°	755.4	756.9	758.4	759.9	761.4	762.0	761.7	761.5	761.3	761.1	762.0
40°	728.0	729.9	731.7	733.6	735.4	736.2	736.0	735.8	735.5	735.3	736.2
42.5°	698.1	700.5	702.9	705.3	707.7	709.2	709.7	710.2	710.7	711.2	712.3
45°	655.3	657.9	660.4	662.9	665.5	667.3	668.5	669.6	670.8	671.9	673.6
47.5°	611.5	613.9	616.2	618.6	620.9	623.1	625.1	627.1	629.0	631.0	633.4
50°	581.6	584.1	586.7	589.2	591.7	594.3	596.8	599.4	601.9	604.4	607.0
52.5°	550.0	553.1	556.2	559.3	562.4	565.5	568.6	571.7	574.8	577.9	580.6
55°	503.7	507.4	511.1	514.8	518.5	522.2	525.9	529.6	533.2	536.9	539.5
57.5°	456.3	460.8	465.2	469.6	474.1	478.4	482.7	486.9	491.1	495.4	498.3
60°	424.8	429.4	434.0	438.6	443.2	447.9	452.5	457.1	461.7	466.3	469.8
62.5°	394.0	398.6	403.3	407.9	412.5	417.3	422.3	427.3	432.2	437.2	441.1
65°	346.9	352.2	357.5	362.8	368.1	373.5	379.1	384.6	390.2	395.7	399.2
67.5°	302.4	307.6	312.7	317.8	322.9	328.3	333.9	339.6	345.2	350.8	355.0
70°	270.0	275.3	280.6	286.0	291.3	296.9	302.9	308.9	314.9	320.9	325.3
72.5°	238.5	243.9	249.4	254.9	260.4	266.4	273.0	279.6	286.1	292.7	297.4
75°	191.1	197.1	203.1	209.1	215.1	221.8	229.2	236.6	243.9	251.3	255.9
77.5°	145.6	152.5	159.5	166.4	173.3	180.3	187.4	194.5	201.6	208.8	213.8
80°	117.4	124.3	131.2	138.1	145.1	152.4	160.3	168.1	176.0	183.8	188.9
82.5°	91.6	98.9	106.2	113.5	120.8	128.4	136.5	144.5	152.5	160.6	165.5
85°	57.1	64.7	72.4	80.0	87.6	95.4	103.5	111.6	119.7	127.7	132.8
87.5°	32.6	40.4	48.2	56.0	63.8	71.8	80.0	88.3	96.5	104.7	110.2
90°	17.8	27.2	36.7	46.1	55.6	65.1	74.8	84.4	94.1	103.8	110.4
92.5°	32.9	38.2	43.6	49.0	54.4	61.9	71.5	81.2	90.8	100.4	106.8
95°	79.7	85.0	90.2	95.4	100.6	102.3	100.3	98.3	96.4	94.4	100.8
97.5°	150.6	157.3	164.1	170.9	177.7	175.2	163.4	151.5	139.7	127.8	125.4
100°	205.5	211.1	216.8	222.4	228.0	235.0	243.4	251.9	260.3	268.7	235.1
102.5°	261.4	266.9	272.3	277.8	283.2	289.9	297.7	305.5	313.3	321.1	318.5
105°	351.0	355.8	360.5	365.2	369.9	375.8	382.7	389.6	396.5	403.5	408.1
107.5°	444.2	447.3	450.4	453.6	456.7	461.9	469.0	476.2	483.3	490.5	495.1
110°	504.7	507.5	510.2	513.0	515.8	520.6	527.6	534.6	541.6	548.6	552.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	562.3	565.2	568.0	570.8	573.7	578.4	585.0	591.6	598.1	604.7	608.0
115°	647.8	650.7	653.6	656.5	659.4	664.0	670.2	676.5	682.7	689.0	692.1
117.5°	736.2	737.2	738.2	739.2	740.2	744.1	750.7	757.4	764.1	770.7	773.3
120°	792.0	792.4	792.9	793.3	793.7	797.0	803.1	809.2	815.2	821.3	824.7
122.5°	840.4	841.7	843.0	844.3	845.7	849.0	854.5	860.0	865.5	871.0	874.2
125°	916.5	918.0	919.6	921.2	922.8	925.9	930.5	935.1	939.7	944.3	947.0
127.5°	988.2	989.2	990.3	991.4	992.4	994.8	998.4	1002.0	1005.7	1009.3	1012.1
130°	1032.8	1033.9	1034.9	1036.0	1037.1	1039.3	1042.8	1046.3	1049.8	1053.3	1055.7
132.5°	1076.6	1078.1	1079.5	1081.0	1082.4	1084.1	1086.0	1088.0	1089.9	1091.8	1094.9
135°	1139.9	1141.2	1142.5	1143.8	1145.1	1146.3	1147.4	1148.5	1149.6	1150.7	1153.2
137.5°	1198.0	1199.1	1200.3	1201.5	1202.6	1203.4	1203.7	1204.0	1204.3	1204.6	1207.5
140°	1235.3	1235.8	1236.3	1236.8	1237.3	1237.6	1237.6	1237.5	1237.5	1237.5	1240.5
142.5°	1269.7	1269.8	1269.9	1270.1	1270.2	1270.4	1270.9	1271.3	1271.7	1272.1	1274.3
145°	1320.1	1320.4	1320.7	1321.0	1321.3	1321.4	1321.4	1321.4	1321.4	1321.4	1322.8
147.5°	1363.2	1363.1	1363.0	1362.9	1362.8	1362.9	1363.2	1363.5	1363.9	1364.2	1364.8
150°	1391.1	1390.6	1390.1	1389.6	1389.1	1389.1	1389.6	1390.1	1390.6	1391.1	1391.6
152.5°	1418.1	1417.0	1415.8	1414.7	1413.5	1413.2	1413.8	1414.3	1414.8	1415.3	1415.8
155°	1452.7	1451.2	1449.6	1448.1	1446.5	1446.0	1446.5	1447.0	1447.6	1448.1	1448.9
157.5°	1479.5	1478.5	1477.6	1476.7	1475.7	1475.3	1475.4	1475.4	1475.5	1475.5	1476.3
160°	1498.1	1496.5	1495.0	1493.4	1491.9	1491.2	1491.5	1491.7	1492.0	1492.2	1493.3
162.5°	1512.9	1511.4	1509.8	1508.3	1506.7	1506.1	1506.3	1506.6	1506.9	1507.1	1508.6
165°	1532.9	1531.4	1529.8	1528.3	1526.7	1526.1	1526.3	1526.6	1526.8	1527.1	1528.7
167.5°	1547.8	1546.2	1544.6	1543.0	1541.4	1540.7	1541.0	1541.2	1541.5	1541.8	1543.6
170°	1556.2	1554.4	1552.5	1550.7	1548.9	1548.2	1548.4	1548.7	1548.9	1549.2	1551.3
172.5°	1561.7	1559.9	1558.1	1556.3	1554.5	1553.8	1554.3	1554.8	1555.2	1555.7	1557.6
175°	1567.8	1566.2	1564.7	1563.1	1561.6	1560.9	1561.2	1561.5	1561.7	1562.0	1564.0
177.5°	1570.6	1569.3	1568.1	1566.9	1565.6	1565.1	1565.3	1565.5	1565.7	1565.9	1567.4
180°	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1056.9	1058.2	1059.5	1060.1	1059.9	1059.7	1059.5	1059.3
5°	1053.7	1055.5	1057.4	1058.2	1057.9	1057.7	1057.5	1057.3
7.5°	1044.9	1046.5	1048.1	1048.8	1048.6	1048.4	1048.1	1047.9
10°	1036.6	1038.2	1039.8	1040.5	1040.3	1040.1	1039.8	1039.6
12.5°	1026.7	1028.0	1029.2	1029.5	1028.9	1028.3	1027.7	1027.1
15°	1008.1	1009.5	1010.9	1011.1	1010.2	1009.2	1008.3	1007.4
17.5°	984.4	985.5	986.5	986.8	986.2	985.7	985.1	984.6
20°	966.2	966.9	967.6	967.9	967.9	967.9	967.9	967.9
22.5°	947.5	948.3	949.2	949.4	948.8	948.3	947.7	947.2
25°	917.9	918.8	919.7	919.6	918.4	917.3	916.1	915.0
27.5°	883.4	884.1	884.7	884.9	884.4	884.0	883.6	883.2
30°	859.8	860.3	860.7	860.9	860.6	860.4	860.2	859.9
32.5°	837.4	837.8	838.3	838.4	838.2	838.0	837.7	837.5
35°	801.1	801.8	802.5	802.8	802.8	802.8	802.8	802.8
37.5°	762.9	763.8	764.7	765.2	765.1	765.0	764.9	764.8
40°	737.1	738.1	739.0	739.7	740.1	740.6	741.1	741.5
42.5°	713.4	714.5	715.6	716.2	716.3	716.4	716.5	716.6
45°	675.2	676.8	678.4	679.3	679.6	679.8	680.0	680.3
47.5°	635.7	638.1	640.4	641.9	642.4	642.9	643.4	643.9
50°	609.5	612.1	614.6	616.2	616.9	617.6	618.3	619.0
52.5°	583.3	586.0	588.7	590.4	590.9	591.4	591.9	592.4
55°	542.0	544.6	547.1	548.8	549.7	550.7	551.6	552.5
57.5°	501.2	504.1	507.0	508.8	509.5	510.2	510.9	511.6
60°	473.2	476.7	480.2	482.2	482.9	483.6	484.3	485.0
62.5°	444.9	448.7	452.6	454.9	455.8	456.7	457.5	458.4
65°	402.6	406.1	409.5	411.7	412.7	413.6	414.5	415.4
67.5°	359.2	363.4	367.6	370.3	371.5	372.7	373.9	375.1
70°	329.7	334.1	338.5	341.3	342.7	344.1	345.5	346.9
72.5°	302.2	306.9	311.7	314.6	315.6	316.6	317.6	318.6
75°	260.6	265.2	269.8	272.7	273.8	275.0	276.1	277.3
77.5°	218.9	224.0	229.1	232.1	233.0	233.9	234.8	235.8
80°	194.0	199.1	204.1	207.1	208.1	209.0	209.9	210.8
82.5°	170.3	175.2	180.1	183.4	185.1	186.7	188.4	190.1
85°	137.9	143.0	148.1	151.5	153.4	155.2	157.1	158.9
87.5°	115.8	121.4	126.9	130.6	132.4	134.1	135.9	137.7
90°	117.0	123.6	130.2	134.6	137.0	139.4	141.8	144.2
92.5°	113.3	119.7	126.1	130.3	132.3	134.2	136.2	138.2
95°	107.1	113.5	119.9	123.9	125.5	127.1	128.7	130.3
97.5°	122.9	120.5	118.1	117.6	119.2	120.8	122.3	123.9
100°	201.4	167.8	134.1	117.5	117.9	118.2	118.6	118.9
102.5°	315.9	313.3	310.7	301.3	285.1	268.9	252.7	236.6
105°	412.7	417.3	421.9	424.9	426.3	427.6	429.0	430.3
107.5°	499.8	504.4	509.0	511.6	512.3	512.9	513.6	514.3
110°	555.8	559.4	563.0	565.7	567.6	569.5	571.4	573.2



TEST NUMBER: P333244

CATALOG NUMBER: S125DIP-S850D1205U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	611.2	614.4	617.6	619.8	621.1	622.4	623.6	624.9
115°	695.2	698.4	701.5	703.0	702.8	702.6	702.5	702.3
117.5°	775.9	778.5	781.0	782.8	783.7	784.6	785.5	786.4
120°	828.1	831.5	834.9	836.7	836.8	836.9	837.0	837.1
122.5°	877.4	880.7	883.9	885.4	885.3	885.2	885.1	885.0
125°	949.7	952.3	955.0	956.5	956.9	957.3	957.6	958.0
127.5°	1015.0	1017.8	1020.7	1021.8	1021.2	1020.7	1020.1	1019.5
130°	1058.2	1060.7	1063.1	1064.3	1064.1	1064.0	1063.9	1063.7
132.5°	1098.0	1101.0	1104.1	1105.5	1105.2	1104.8	1104.5	1104.2
135°	1155.7	1158.2	1160.7	1161.7	1161.3	1160.9	1160.5	1160.1
137.5°	1210.3	1213.1	1215.9	1217.1	1216.7	1216.3	1215.9	1215.5
140°	1243.6	1246.6	1249.7	1250.9	1250.3	1249.7	1249.0	1248.4
142.5°	1276.6	1278.9	1281.2	1282.0	1281.4	1280.7	1280.1	1279.5
145°	1324.2	1325.6	1327.1	1327.4	1326.8	1326.2	1325.6	1324.9
147.5°	1365.5	1366.2	1366.9	1366.5	1365.1	1363.6	1362.2	1360.7
150°	1392.2	1392.7	1393.2	1392.5	1390.7	1388.9	1387.0	1385.2
152.5°	1416.3	1416.9	1417.4	1416.7	1414.9	1413.1	1411.3	1409.5
155°	1449.6	1450.4	1451.2	1450.5	1448.5	1446.4	1444.3	1442.3
157.5°	1477.2	1478.0	1478.8	1478.2	1476.1	1474.1	1472.0	1469.9
160°	1494.3	1495.3	1496.4	1495.9	1493.8	1491.7	1489.7	1487.6
162.5°	1510.0	1511.5	1512.9	1512.5	1510.2	1507.9	1505.7	1503.4
165°	1530.2	1531.8	1533.3	1533.0	1531.0	1528.9	1526.8	1524.8
167.5°	1545.5	1547.3	1549.2	1549.0	1546.6	1544.3	1542.0	1539.7
170°	1553.3	1555.4	1557.5	1557.3	1555.0	1552.7	1550.4	1548.0
172.5°	1559.4	1561.3	1563.1	1562.9	1560.6	1558.3	1555.9	1553.6
175°	1566.1	1568.2	1570.2	1570.1	1567.8	1565.5	1563.1	1560.8
177.5°	1568.8	1570.3	1571.7	1571.6	1570.0	1568.3	1566.6	1565.0
180°	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8

(END OF REPORT)