

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

Luminaire Tested: **S125DIP-S850D1035U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333235
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-S850D1035U835-4F0-1E-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: 7420.1 lumens
Efficiency: N/A
Efficacy: 142.7 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

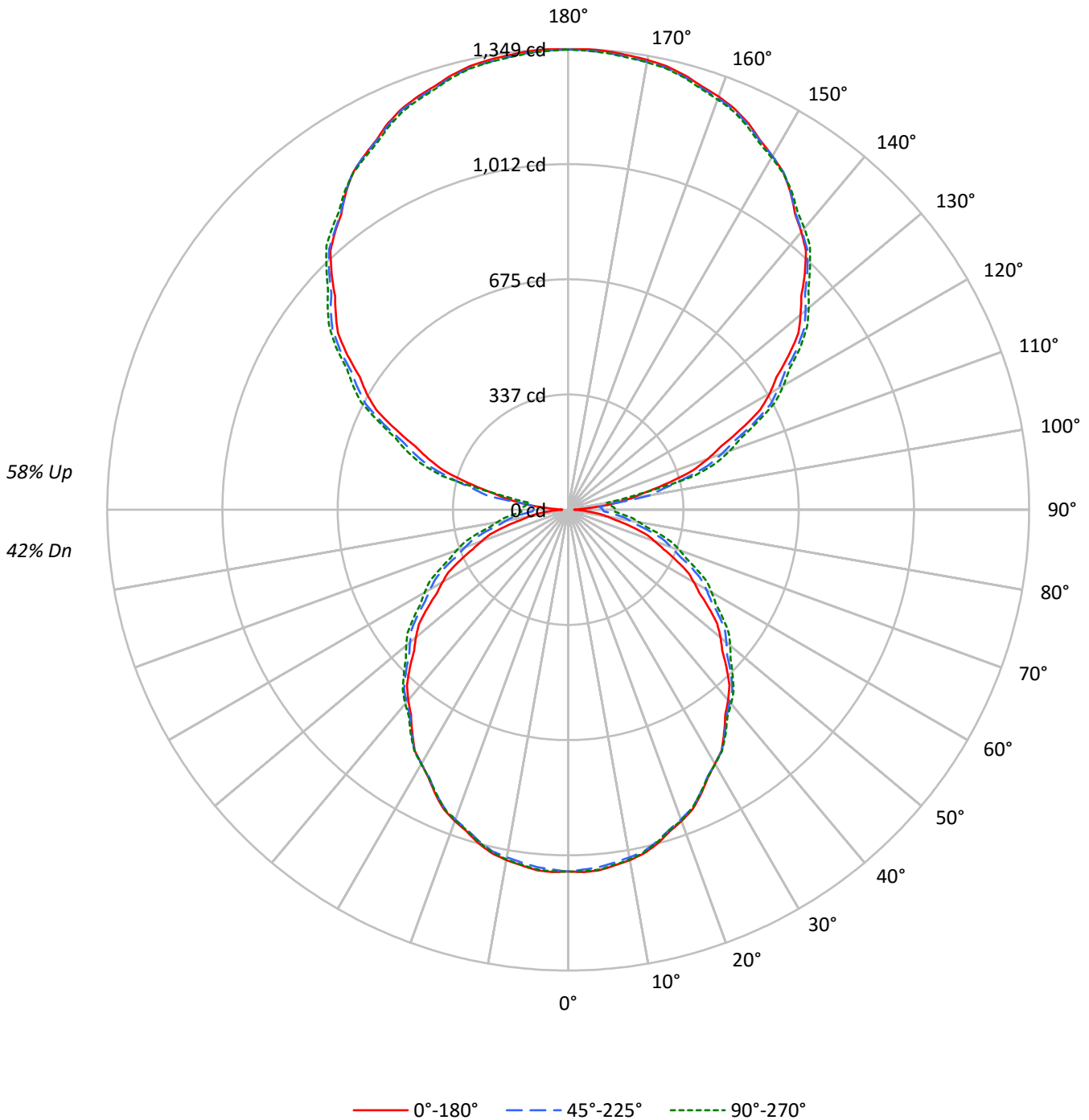
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333235

CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P333235

CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-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	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°	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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CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.2	1.4
10°-20°	284.4	3.8
20°-30°	422.9	5.7
30°-40°	500.9	6.8
40°-50°	517.9	7.0
50°-60°	477.1	6.4
60°-70°	385.7	5.2
70°-80°	258.3	3.5
80°-90°	136.7	1.8
90°-100°	124.1	1.7
100°-110°	357.1	4.8
110°-120°	584.2	7.9
120°-130°	723.2	9.7
130°-140°	764.4	10.3
140°-150°	710.8	9.6
150°-160°	573.4	7.7
160°-170°	370.9	5.0
170°-180°	127.9	1.7
0°-30°	807.4	10.9
0°-40°	1308.3	17.6
0°-60°	2303.3	31.0
0°-90°	3084.0	41.6
90°-120°	1065.4	14.4
90°-150°	3263.9	44.0
90°-180°	4336.0	58.4
0°-180°	7420.1	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	59	101	129	140	13
95°	70	93	92	118	127	83
105°	303	324	355	375	382	321
115°	557	571	598	612	613	552
125°	788	795	815	827	830	703
135°	980	985	990	1001	1000	755
145°	1134	1135	1135	1141	1140	709
155°	1248	1243	1244	1246	1239	575
165°	1317	1311	1312	1317	1310	372
175°	1347	1341	1342	1349	1341	128
180°	1347	1347	1347	1347	1347	



TEST NUMBER: P333235

CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-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	40.3	48.1	55.8	63.6	71.5	79.7	87.8	96.0	104.1	109.7
90°	17.6	26.8	35.9	45.1	54.3	63.5	72.9	82.3	91.7	101.1	107.6
92.5°	30.3	35.9	41.5	47.1	52.7	60.2	69.6	79.0	88.4	97.8	104.0
95°	70.4	75.7	81.1	86.4	91.8	94.1	93.5	93.0	92.4	91.8	98.0
97.5°	131.1	137.7	144.3	150.9	157.5	156.2	147.1	138.0	128.9	119.7	118.3
100°	178.2	183.7	189.2	194.7	200.2	207.1	215.4	223.7	231.9	240.2	212.0
102.5°	226.1	231.4	236.7	242.0	247.3	253.9	261.6	269.3	277.1	284.8	283.2
105°	302.9	307.5	312.1	316.6	321.2	327.0	333.9	340.8	347.7	354.7	359.3
107.5°	382.7	385.9	389.0	392.1	395.3	400.4	407.5	414.6	421.7	428.8	433.4
110°	434.6	437.4	440.2	442.9	445.7	450.5	457.4	464.3	471.2	478.2	481.9



TEST NUMBER: P333235

CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	484.1	486.9	489.6	492.4	495.1	499.8	506.3	512.9	519.4	526.0	529.3
115°	557.4	560.1	562.8	565.6	568.3	572.8	579.0	585.2	591.4	597.6	600.9
117.5°	633.2	634.2	635.3	636.3	637.3	641.1	647.6	654.1	660.6	667.1	669.9
120°	681.2	681.6	682.1	682.6	683.0	686.3	692.2	698.2	704.2	710.2	713.6
122.5°	722.7	723.8	725.0	726.2	727.3	730.6	736.1	741.5	746.9	752.4	755.7
125°	788.0	789.3	790.6	791.9	793.2	796.2	800.8	805.4	810.1	814.7	817.5
127.5°	849.4	850.3	851.2	852.1	852.9	855.2	858.8	862.5	866.2	869.8	872.7
130°	887.8	888.6	889.5	890.4	891.3	893.4	896.9	900.3	903.8	907.2	909.8
132.5°	925.3	926.5	927.7	929.0	930.2	931.9	933.9	935.9	937.9	939.9	943.0
135°	979.6	980.7	981.8	982.9	984.0	985.1	986.3	987.5	988.6	989.8	992.4
137.5°	1029.5	1030.5	1031.4	1032.4	1033.4	1034.0	1034.4	1034.8	1035.2	1035.6	1038.4
140°	1061.4	1061.9	1062.3	1062.7	1063.2	1063.4	1063.4	1063.4	1063.4	1063.4	1066.4
142.5°	1091.0	1091.0	1091.1	1091.2	1091.3	1091.5	1091.9	1092.2	1092.6	1092.9	1095.2
145°	1134.3	1134.5	1134.7	1134.9	1135.2	1135.3	1135.3	1135.3	1135.3	1135.3	1136.6
147.5°	1171.2	1171.1	1171.0	1170.9	1170.8	1170.9	1171.2	1171.5	1171.7	1172.0	1172.6
150°	1195.2	1194.7	1194.3	1193.8	1193.4	1193.4	1193.8	1194.3	1194.7	1195.2	1195.6
152.5°	1218.3	1217.4	1216.4	1215.4	1214.4	1214.2	1214.6	1215.0	1215.5	1215.9	1216.4
155°	1248.1	1246.8	1245.4	1244.1	1242.8	1242.3	1242.8	1243.2	1243.6	1244.1	1244.8
157.5°	1271.0	1270.2	1269.5	1268.7	1267.9	1267.5	1267.5	1267.6	1267.6	1267.7	1268.4
160°	1287.0	1285.7	1284.4	1283.0	1281.7	1281.1	1281.4	1281.6	1281.8	1282.0	1282.9
162.5°	1299.8	1298.5	1297.1	1295.8	1294.5	1293.9	1294.1	1294.4	1294.6	1294.8	1296.1
165°	1317.0	1315.6	1314.3	1313.0	1311.7	1311.1	1311.3	1311.5	1311.8	1312.0	1313.3
167.5°	1329.8	1328.4	1327.0	1325.6	1324.3	1323.7	1323.9	1324.1	1324.3	1324.6	1326.2
170°	1336.9	1335.4	1333.8	1332.3	1330.7	1330.1	1330.3	1330.5	1330.7	1331.0	1332.7
172.5°	1341.7	1340.2	1338.6	1337.1	1335.5	1335.0	1335.3	1335.7	1336.1	1336.5	1338.1
175°	1346.9	1345.6	1344.3	1342.9	1341.6	1341.1	1341.3	1341.5	1341.7	1341.9	1343.7
177.5°	1349.3	1348.3	1347.2	1346.1	1345.1	1344.6	1344.8	1345.0	1345.2	1345.3	1346.6
180°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9



TEST NUMBER: P333235

CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-UDD-D

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°	115.2	120.7	126.3	129.9	131.7	133.4	135.1	136.9
90°	114.0	120.4	126.8	131.2	133.4	135.7	138.0	140.3
92.5°	110.3	116.5	122.7	126.8	128.8	130.7	132.6	134.5
95°	104.2	110.4	116.5	120.4	122.1	123.7	125.3	126.9
97.5°	116.9	115.5	114.1	114.2	115.8	117.3	118.9	120.5
100°	183.8	155.6	127.3	113.5	114.0	114.5	115.0	115.5
102.5°	281.6	280.0	278.4	270.8	257.1	243.4	229.7	216.0
105°	363.9	368.5	373.1	376.1	377.5	378.9	380.3	381.7
107.5°	438.0	442.6	447.2	449.9	450.7	451.4	452.2	453.0
110°	485.6	489.3	493.0	495.8	497.6	499.5	501.3	503.2



TEST NUMBER: P333235

CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	532.7	536.0	539.4	541.7	543.0	544.3	545.6	546.9
115°	604.2	607.4	610.7	612.4	612.4	612.5	612.5	612.6
117.5°	672.7	675.5	678.2	680.1	681.1	682.1	683.1	684.1
120°	717.1	720.6	724.1	726.0	726.2	726.5	726.8	727.1
122.5°	759.0	762.2	765.5	767.2	767.3	767.4	767.5	767.6
125°	820.3	823.1	825.9	827.5	828.0	828.5	829.0	829.5
127.5°	875.7	878.6	881.5	882.8	882.5	882.2	881.9	881.6
130°	912.4	914.9	917.5	918.8	918.9	918.9	918.9	919.0
132.5°	946.1	949.2	952.3	953.7	953.6	953.5	953.3	953.2
135°	994.9	997.5	1000.0	1001.2	1001.0	1000.9	1000.7	1000.5
137.5°	1041.2	1044.0	1046.8	1048.1	1047.9	1047.7	1047.4	1047.2
140°	1069.4	1072.4	1075.4	1076.7	1076.3	1075.8	1075.4	1075.0
142.5°	1097.5	1099.7	1102.0	1102.9	1102.5	1102.1	1101.7	1101.3
145°	1138.0	1139.4	1140.8	1141.2	1140.8	1140.4	1140.0	1139.6
147.5°	1173.3	1173.9	1174.5	1174.3	1173.1	1171.9	1170.7	1169.5
150°	1196.1	1196.5	1196.9	1196.4	1194.8	1193.3	1191.8	1190.2
152.5°	1216.8	1217.3	1217.7	1217.2	1215.6	1214.1	1212.5	1210.9
155°	1245.4	1246.1	1246.8	1246.2	1244.4	1242.6	1240.9	1239.1
157.5°	1269.1	1269.8	1270.5	1270.0	1268.2	1266.4	1264.6	1262.9
160°	1283.8	1284.7	1285.6	1285.1	1283.4	1281.6	1279.8	1278.0
162.5°	1297.3	1298.5	1299.8	1299.4	1297.5	1295.5	1293.6	1291.6
165°	1314.6	1316.0	1317.3	1317.1	1315.3	1313.5	1311.8	1310.0
167.5°	1327.8	1329.4	1331.0	1330.8	1328.8	1326.8	1324.8	1322.8
170°	1334.5	1336.3	1338.1	1337.9	1335.9	1334.0	1332.0	1330.0
172.5°	1339.7	1341.3	1342.9	1342.7	1340.7	1338.7	1336.7	1334.8
175°	1345.5	1347.3	1349.0	1348.9	1346.9	1344.9	1342.9	1340.9
177.5°	1347.8	1349.1	1350.3	1350.2	1348.8	1347.4	1346.0	1344.5
180°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9

(END OF REPORT)