

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: P333244-840

Luminaire Tested: **S125DIP-S850D1205U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333244-840
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-S850D1205U840-4F0-1E-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: 8178.7 lumens
Efficiency: N/A
Efficacy: 143.7 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: Semi-Indirect

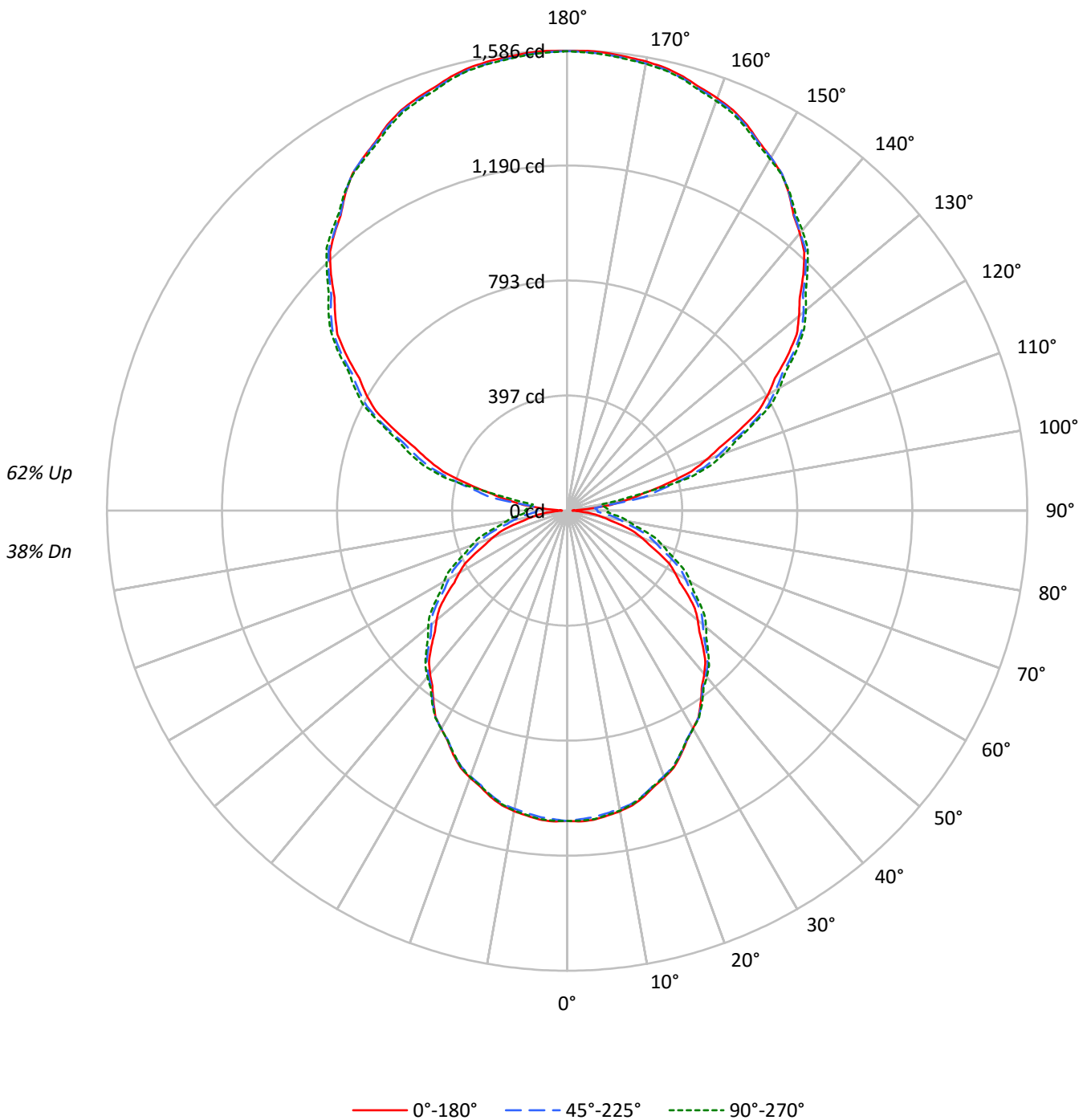
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333244-840

CATALOG NUMBER: S125DIP-S850D1205U840-4F0-1E-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°	6909	6909	6909
5°	6923	6782	6803
10°	6874	6661	6651
15°	6793	6515	6456
20°	6682	6336	6262
25°	6551	6144	6023
30°	6392	5934	5806
35°	6242	5740	5607
40°	6092	5535	5406
45°	5921	5360	5229
50°	5758	5171	5072
55°	5562	4992	4887
60°	5348	4788	4699
65°	5124	4575	4486
70°	4871	4283	4269
75°	4469	4001	4001
80°	3945	3661	3710
85°	3453	3433	3619



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.2	1.2
10°-20°	287.2	3.5
20°-30°	427.1	5.2
30°-40°	505.9	6.2
40°-50°	523.0	6.4
50°-60°	481.8	5.9
60°-70°	389.5	4.8
70°-80°	260.8	3.2
80°-90°	138.6	1.7
90°-100°	133.4	1.6
100°-110°	410.6	5.0
110°-120°	680.6	8.3
120°-130°	846.6	10.4
130°-140°	897.0	11.0
140°-150°	835.1	10.2
150°-160°	674.1	8.2
160°-170°	435.9	5.3
170°-180°	150.4	1.8
0°-30°	815.4	10.0
0°-40°	1321.2	16.2
0°-60°	2326.0	28.4
0°-90°	3114.9	38.1
90°-120°	1224.6	15.0
90°-150°	3803.4	46.5
90°-180°	5064.0	61.9
0°-180°	8178.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1070	1067	1060	1068	1068	101
15°	1022	1022	1015	1021	1017	288
25°	928	931	925	929	924	427
35°	803	810	808	811	811	503
45°	662	673	678	686	687	511
55°	509	526	542	553	558	455
65°	350	374	400	415	420	347
75°	193	221	254	274	280	205
85°	58	92	129	151	160	61
90°	18	61	105	134	146	14
95°	80	102	95	123	132	96
105°	354	376	408	428	434	376
115°	654	668	696	709	709	648
125°	926	933	954	965	968	826
135°	1151	1157	1162	1173	1172	887
145°	1333	1334	1334	1340	1338	833
155°	1467	1461	1462	1465	1456	676
165°	1548	1542	1542	1548	1540	437
175°	1583	1577	1577	1586	1576	151
180°	1583	1583	1583	1583	1583	



TEST NUMBER: P333244-840

CATALOG NUMBER: S125DIP-S850D1205U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8
2.5°	1072.3	1072.0	1071.6	1071.2	1070.8	1070.0	1068.6	1067.3	1066.0	1064.7	1066.0
5°	1069.8	1069.3	1068.8	1068.3	1067.9	1066.8	1065.2	1063.6	1062.0	1060.4	1062.2
7.5°	1060.4	1060.2	1060.0	1059.8	1059.6	1058.6	1057.0	1055.3	1053.6	1052.0	1053.6
10°	1052.0	1052.0	1052.0	1052.0	1052.0	1051.1	1049.1	1047.3	1045.4	1043.6	1045.2
12.5°	1040.2	1040.4	1040.6	1040.8	1041.0	1040.3	1038.8	1037.3	1035.8	1034.3	1035.6
15°	1021.6	1021.8	1022.0	1022.2	1022.5	1021.8	1020.2	1018.5	1016.8	1015.2	1016.6
17.5°	997.2	997.6	998.2	998.6	999.1	998.5	996.8	995.2	993.6	992.0	993.0
20°	979.6	980.1	980.5	981.0	981.5	980.9	979.3	977.7	975.9	974.3	975.0
22.5°	959.5	960.3	961.1	962.0	962.8	962.3	960.5	958.7	956.8	955.0	955.9
25°	928.2	928.9	929.6	930.3	931.0	930.6	929.3	927.9	926.5	925.0	925.9
27.5°	893.3	894.4	895.4	896.5	897.5	897.2	895.6	894.0	892.4	890.9	891.5
30°	867.4	868.8	870.2	871.5	872.9	872.9	871.5	870.2	868.8	867.4	867.9
32.5°	843.8	845.1	846.3	847.5	848.7	848.8	847.8	846.8	845.8	844.8	845.2
35°	803.3	805.1	806.7	808.3	809.9	810.4	809.7	809.0	808.3	807.6	808.3
37.5°	762.9	764.4	765.9	767.4	768.9	769.5	769.2	769.0	768.8	768.6	769.5
40°	735.2	737.1	738.9	740.8	742.7	743.5	743.3	743.1	742.8	742.6	743.5
42.5°	705.0	707.4	709.8	712.3	714.7	716.2	716.7	717.2	717.7	718.2	719.3
45°	661.8	664.4	666.9	669.4	672.1	673.9	675.1	676.2	677.4	678.5	680.2
47.5°	617.5	620.0	622.3	624.7	627.0	629.2	631.3	633.3	635.2	637.2	639.6
50°	587.3	589.9	592.5	595.0	597.5	600.2	602.7	605.3	607.8	610.4	613.0
52.5°	555.4	558.6	561.7	564.8	567.9	571.1	574.2	577.3	580.5	583.6	586.3
55°	508.7	512.4	516.1	519.9	523.6	527.4	531.1	534.8	538.5	542.2	544.8
57.5°	460.8	465.3	469.8	474.2	478.8	483.1	487.5	491.7	495.9	500.3	503.2
60°	429.0	433.6	438.3	442.9	447.6	452.3	457.0	461.6	466.3	470.9	474.4
62.5°	397.9	402.5	407.3	411.9	416.6	421.4	426.5	431.5	436.5	441.5	445.5
65°	350.3	355.7	361.0	366.4	371.7	377.2	382.8	388.4	394.0	399.6	403.1
67.5°	305.4	310.6	315.8	320.9	326.1	331.5	337.2	343.0	348.6	354.3	358.5
70°	272.7	278.0	283.4	288.8	294.2	299.8	305.9	311.9	318.0	324.1	328.5
72.5°	240.9	246.3	251.9	257.4	263.0	269.0	275.7	282.4	288.9	295.6	300.3
75°	193.0	199.0	205.1	211.2	217.2	224.0	231.5	238.9	246.3	253.8	258.4
77.5°	147.0	154.0	161.1	168.0	175.0	182.1	189.2	196.4	203.6	210.9	215.9
80°	118.6	125.5	132.5	139.5	146.5	153.9	161.9	169.8	177.7	185.6	190.8
82.5°	92.5	99.9	107.2	114.6	122.0	129.7	137.8	145.9	154.0	162.2	167.1
85°	57.7	65.3	73.1	80.8	88.5	96.3	104.5	112.7	120.9	129.0	134.1
87.5°	32.9	40.8	48.7	56.6	64.4	72.5	80.8	89.2	97.5	105.7	111.3
90°	18.0	27.5	37.1	46.6	56.1	65.7	75.5	85.2	95.0	104.8	111.5
92.5°	33.2	38.6	44.0	49.5	54.9	62.5	72.2	82.0	91.7	101.4	107.9
95°	80.5	85.8	91.1	96.3	101.6	103.3	101.3	99.3	97.4	95.3	101.8
97.5°	152.1	158.9	165.7	172.6	179.5	176.9	165.0	153.0	141.1	129.1	126.6
100°	207.5	213.2	218.9	224.6	230.2	237.3	245.8	254.4	262.9	271.4	237.4
102.5°	264.0	269.5	275.0	280.5	286.0	292.8	300.6	308.5	316.4	324.3	321.6
105°	354.5	359.3	364.1	368.8	373.5	379.5	386.5	393.4	400.4	407.5	412.1
107.5°	448.6	451.7	454.8	458.1	461.2	466.5	473.6	480.9	488.1	495.3	500.0
110°	509.7	512.5	515.2	518.1	520.9	525.7	532.8	539.9	546.9	554.0	557.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	567.8	570.8	573.6	576.4	579.4	584.1	590.8	597.4	604.0	610.7	614.0
115°	654.2	657.1	660.0	663.0	665.9	670.6	676.8	683.2	689.4	695.8	698.9
117.5°	743.5	744.5	745.5	746.5	747.5	751.4	758.1	764.9	771.6	778.3	780.9
120°	799.8	800.2	800.7	801.1	801.5	804.9	811.0	817.2	823.2	829.4	832.8
122.5°	848.7	850.0	851.3	852.6	854.0	857.4	862.9	868.5	874.0	879.6	882.8
125°	925.5	927.1	928.7	930.3	931.9	935.0	939.7	944.3	949.0	953.6	956.3
127.5°	997.9	999.0	1000.1	1001.2	1002.2	1004.6	1008.2	1011.9	1015.6	1019.3	1022.1
130°	1043.0	1044.1	1045.1	1046.2	1047.3	1049.6	1053.1	1056.6	1060.2	1063.7	1066.1
132.5°	1087.2	1088.7	1090.1	1091.7	1093.1	1094.8	1096.7	1098.7	1100.7	1102.6	1105.7
135°	1151.1	1152.5	1153.8	1155.1	1156.4	1157.6	1158.7	1159.8	1160.9	1162.1	1164.6
137.5°	1209.8	1210.9	1212.1	1213.4	1214.5	1215.3	1215.6	1215.9	1216.2	1216.5	1219.4
140°	1247.5	1248.0	1248.5	1249.0	1249.5	1249.8	1249.8	1249.7	1249.7	1249.7	1252.7
142.5°	1282.2	1282.3	1282.4	1282.6	1282.7	1282.9	1283.4	1283.8	1284.2	1284.6	1286.9
145°	1333.1	1333.4	1333.7	1334.0	1334.3	1334.4	1334.4	1334.4	1334.4	1334.4	1335.8
147.5°	1376.6	1376.5	1376.4	1376.3	1376.2	1376.3	1376.6	1377.0	1377.4	1377.7	1378.3
150°	1404.8	1404.3	1403.8	1403.3	1402.8	1402.8	1403.3	1403.8	1404.3	1404.8	1405.3
152.5°	1432.1	1431.0	1429.8	1428.7	1427.4	1427.1	1427.7	1428.3	1428.8	1429.3	1429.8
155°	1467.0	1465.5	1463.9	1462.4	1460.8	1460.3	1460.8	1461.3	1461.9	1462.4	1463.2
157.5°	1494.1	1493.1	1492.2	1491.3	1490.3	1489.9	1490.0	1490.0	1490.1	1490.1	1490.9
160°	1512.9	1511.3	1509.7	1508.1	1506.6	1505.9	1506.2	1506.4	1506.7	1506.9	1508.0
162.5°	1527.8	1526.3	1524.7	1523.2	1521.6	1521.0	1521.2	1521.5	1521.8	1522.0	1523.5
165°	1548.0	1546.5	1544.9	1543.4	1541.8	1541.2	1541.4	1541.7	1541.9	1542.2	1543.8
167.5°	1563.1	1561.5	1559.8	1558.2	1556.6	1555.9	1556.2	1556.4	1556.7	1557.0	1558.8
170°	1571.6	1569.7	1567.8	1566.0	1564.2	1563.5	1563.7	1564.0	1564.2	1564.5	1566.6
172.5°	1577.1	1575.3	1573.5	1571.7	1569.8	1569.1	1569.6	1570.1	1570.5	1571.0	1573.0
175°	1583.3	1581.7	1580.1	1578.5	1577.0	1576.3	1576.6	1576.9	1577.1	1577.4	1579.4
177.5°	1586.1	1584.8	1583.6	1582.4	1581.0	1580.5	1580.7	1580.9	1581.1	1581.3	1582.9
180°	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8	1069.8
2.5°	1067.3	1068.6	1070.0	1070.6	1070.4	1070.2	1070.0	1069.8
5°	1064.1	1065.9	1067.8	1068.6	1068.3	1068.1	1067.9	1067.7
7.5°	1055.2	1056.8	1058.4	1059.1	1058.9	1058.7	1058.4	1058.2
10°	1046.8	1048.4	1050.1	1050.8	1050.6	1050.4	1050.1	1049.9
12.5°	1036.8	1038.1	1039.4	1039.7	1039.1	1038.4	1037.8	1037.2
15°	1018.0	1019.5	1020.9	1021.1	1020.2	1019.2	1018.2	1017.3
17.5°	994.1	995.2	996.2	996.5	995.9	995.4	994.8	994.3
20°	975.7	976.4	977.1	977.4	977.4	977.4	977.4	977.4
22.5°	956.8	957.7	958.6	958.8	958.2	957.7	957.0	956.5
25°	927.0	927.9	928.8	928.7	927.5	926.3	925.1	924.0
27.5°	892.1	892.8	893.4	893.6	893.1	892.7	892.3	891.9
30°	868.3	868.8	869.2	869.4	869.1	868.9	868.7	868.4
32.5°	845.7	846.1	846.6	846.7	846.5	846.3	846.0	845.8
35°	809.0	809.7	810.4	810.7	810.7	810.7	810.7	810.7
37.5°	770.4	771.3	772.2	772.7	772.6	772.5	772.4	772.3
40°	744.4	745.4	746.3	747.0	747.4	747.9	748.4	748.8
42.5°	720.4	721.5	722.7	723.3	723.4	723.5	723.6	723.7
45°	681.9	683.5	685.1	686.0	686.3	686.5	686.7	687.0
47.5°	642.0	644.4	646.7	648.2	648.7	649.2	649.7	650.3
50°	615.5	618.1	620.7	622.3	623.0	623.7	624.4	625.1
52.5°	589.1	591.8	594.5	596.2	596.7	597.2	597.7	598.2
55°	547.3	550.0	552.5	554.2	555.1	556.1	557.0	558.0
57.5°	506.1	509.1	512.0	513.8	514.5	515.2	515.9	516.6
60°	477.9	481.4	484.9	487.0	487.7	488.4	489.1	489.8
62.5°	449.3	453.1	457.1	459.4	460.3	461.2	462.0	462.9
65°	406.6	410.1	413.5	415.8	416.8	417.7	418.6	419.5
67.5°	362.7	367.0	371.2	374.0	375.2	376.4	377.6	378.8
70°	333.0	337.4	341.8	344.7	346.1	347.5	348.9	350.3
72.5°	305.2	309.9	314.8	317.7	318.7	319.7	320.7	321.7
75°	263.2	267.8	272.5	275.4	276.5	277.7	278.8	280.0
77.5°	221.1	226.2	231.4	234.4	235.3	236.2	237.1	238.1
80°	195.9	201.1	206.1	209.1	210.2	211.1	212.0	212.9
82.5°	172.0	176.9	181.9	185.2	186.9	188.5	190.3	192.0
85°	139.3	144.4	149.6	153.0	154.9	156.7	158.6	160.5
87.5°	116.9	122.6	128.2	131.9	133.7	135.4	137.2	139.1
90°	118.2	124.8	131.5	135.9	138.4	140.8	143.2	145.6
92.5°	114.4	120.9	127.3	131.6	133.6	135.5	137.5	139.6
95°	108.2	114.6	121.1	125.1	126.7	128.4	130.0	131.6
97.5°	124.1	121.7	119.3	118.8	120.4	122.0	123.5	125.1
100°	203.4	169.5	135.4	118.7	119.1	119.4	119.8	120.1
102.5°	319.0	316.4	313.8	304.3	287.9	271.6	255.2	238.9
105°	416.8	421.4	426.1	429.1	430.5	431.8	433.2	434.5
107.5°	504.7	509.4	514.0	516.6	517.4	518.0	518.7	519.4
110°	561.3	564.9	568.6	571.3	573.2	575.1	577.0	578.9



TEST NUMBER: P333244-840

CATALOG NUMBER: S125DIP-S850D1205U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	617.2	620.5	623.7	625.9	627.2	628.5	629.8	631.1
115°	702.1	705.3	708.4	709.9	709.7	709.5	709.4	709.2
117.5°	783.6	786.2	788.7	790.5	791.4	792.3	793.2	794.2
120°	836.3	839.7	843.1	845.0	845.1	845.2	845.3	845.4
122.5°	886.1	889.4	892.6	894.1	894.0	893.9	893.8	893.7
125°	959.1	961.7	964.4	965.9	966.3	966.7	967.0	967.5
127.5°	1025.0	1027.8	1030.8	1031.9	1031.3	1030.8	1030.2	1029.6
130°	1068.6	1071.2	1073.6	1074.8	1074.6	1074.5	1074.4	1074.2
132.5°	1108.8	1111.9	1115.0	1116.4	1116.1	1115.7	1115.4	1115.1
135°	1167.1	1169.6	1172.2	1173.2	1172.8	1172.4	1171.9	1171.5
137.5°	1222.2	1225.1	1227.9	1229.1	1228.7	1228.3	1227.9	1227.5
140°	1255.9	1258.9	1262.0	1263.2	1262.6	1262.0	1261.3	1260.7
142.5°	1289.2	1291.5	1293.8	1294.6	1294.0	1293.3	1292.7	1292.1
145°	1337.3	1338.7	1340.2	1340.5	1339.9	1339.3	1338.7	1338.0
147.5°	1379.0	1379.7	1380.4	1380.0	1378.6	1377.1	1375.6	1374.1
150°	1405.9	1406.4	1406.9	1406.2	1404.4	1402.6	1400.7	1398.9
152.5°	1430.3	1430.9	1431.4	1430.7	1428.9	1427.0	1425.2	1423.4
155°	1463.9	1464.7	1465.5	1464.8	1462.8	1460.7	1458.5	1456.5
157.5°	1491.8	1492.6	1493.4	1492.8	1490.7	1488.6	1486.5	1484.4
160°	1509.0	1510.1	1511.2	1510.7	1508.5	1506.4	1504.4	1502.3
162.5°	1524.9	1526.4	1527.8	1527.4	1525.1	1522.8	1520.6	1518.2
165°	1545.3	1546.9	1548.4	1548.1	1546.1	1544.0	1541.9	1539.8
167.5°	1560.7	1562.6	1564.5	1564.3	1561.9	1559.5	1557.2	1554.9
170°	1568.6	1570.7	1572.9	1572.7	1570.3	1568.0	1565.7	1563.3
172.5°	1574.8	1576.7	1578.5	1578.3	1576.0	1573.7	1571.2	1568.9
175°	1581.5	1583.7	1585.7	1585.6	1583.3	1580.9	1578.5	1576.2
177.5°	1584.3	1585.8	1587.2	1587.1	1585.5	1583.8	1582.1	1580.4
180°	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3

(END OF REPORT)