

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: P333627-935

Luminaire Tested: **S125RDIP-S1270D810U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333627-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S1270D810U935-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6704.8 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

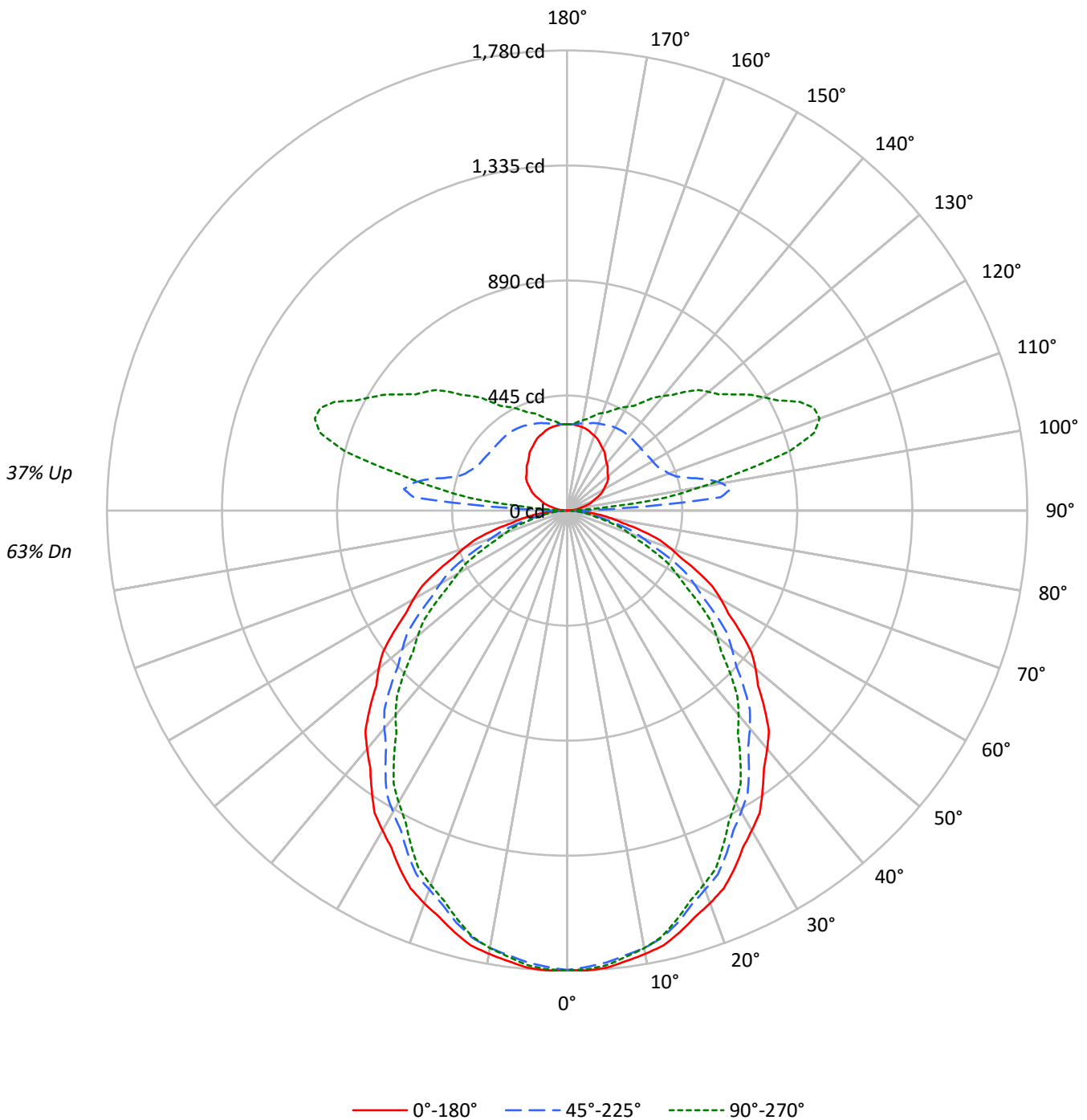
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68	63
1	101	97	93	89	94	91	87	84	80	77	75	70	68	66	60	59	58	53
2	92	85	79	73	86	80	74	70	70	66	62	61	58	56	53	51	49	45
3	84	75	67	61	79	70	64	59	62	57	53	55	51	47	48	45	42	38
4	77	66	58	52	72	63	55	50	55	50	45	49	44	41	43	39	36	33
5	71	59	51	45	66	56	49	43	50	44	39	44	39	36	39	35	32	29
6	66	53	45	39	61	50	43	38	45	39	34	40	35	31	35	31	28	26
7	61	48	40	35	57	46	38	33	41	35	31	36	31	28	32	28	25	23
8	56	44	36	31	53	42	35	30	37	31	27	33	28	25	30	26	23	20
9	53	40	33	28	49	38	31	27	34	29	25	31	26	22	27	23	21	18
10	49	37	30	25	46	35	28	24	32	26	22	28	24	20	25	21	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11479	11479	11479
5°	11505	11374	11444
10°	11418	11269	11269
15°	11282	11040	10950
20°	11109	10721	10592
25°	10905	10408	10178
30°	10651	10041	9721
35°	10394	9663	9208
40°	10151	9269	8703
45°	9858	8828	8153
50°	9562	8349	7580
55°	9221	7891	6969
60°	8878	7334	6311
65°	8472	6687	5559
70°	8010	5880	4791
75°	7369	4956	3985
80°	6490	3894	3347
85°	5476	3186	2986



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.1	2.5
10°-20°	467.1	7.0
20°-30°	677.3	10.1
30°-40°	771.9	11.5
40°-50°	752.4	11.2
50°-60°	633.3	9.4
60°-70°	444.0	6.6
70°-80°	228.2	3.4
80°-90°	59.5	0.9
90°-100°	242.0	3.6
100°-110°	520.3	7.8
110°-120°	488.3	7.3
120°-130°	395.7	5.9
130°-140°	317.6	4.7
140°-150°	239.7	3.6
150°-160°	168.7	2.5
160°-170°	99.4	1.5
170°-180°	32.3	0.5
0°-30°	1311.5	19.6
0°-40°	2083.3	31.1
0°-60°	3469.1	51.7
0°-90°	4200.7	62.7
90°-120°	1250.6	18.7
90°-150°	2203.6	32.9
90°-180°	2504.0	37.3
0°-180°	6704.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1777	1777	1777	1777	1777	
5°	1775	1769	1754	1767	1765	168
15°	1687	1678	1651	1649	1638	475
25°	1530	1509	1460	1443	1428	704
35°	1318	1284	1226	1188	1168	825
45°	1079	1038	967	915	893	832
55°	819	774	701	642	619	732
65°	554	507	438	386	364	549
75°	295	254	199	170	160	313
85°	74	51	43	42	40	83
90°	1	6	11	14	16	5
95°	22	66	596	271	158	24
105°	76	106	488	961	892	80
115°	136	164	392	845	994	134
125°	188	221	376	672	783	167
135°	221	266	373	563	650	171
145°	257	295	374	466	513	161
155°	294	316	365	412	430	135
165°	320	329	350	371	377	90
175°	333	333	336	340	339	32
180°	334	334	334	334	334	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4
2.5°	1780.5	1779.9	1779.1	1778.4	1777.7	1776.2	1773.7	1771.3	1769.0	1766.6	1769.0
5°	1774.7	1773.5	1772.3	1771.1	1769.9	1767.6	1764.4	1761.1	1757.8	1754.5	1757.5
7.5°	1757.2	1756.1	1755.0	1753.8	1752.7	1750.2	1746.2	1742.2	1738.4	1734.4	1736.5
10°	1741.1	1740.2	1739.3	1738.4	1737.5	1735.0	1730.8	1726.6	1722.4	1718.3	1719.2
12.5°	1722.9	1721.7	1720.5	1719.4	1718.3	1714.9	1709.3	1703.7	1698.1	1692.5	1693.2
15°	1687.4	1685.6	1683.9	1682.0	1680.2	1676.2	1669.9	1663.7	1657.4	1651.1	1650.9
17.5°	1647.4	1644.7	1641.9	1639.2	1636.4	1631.1	1623.2	1615.3	1607.5	1599.6	1598.1
20°	1616.3	1613.3	1610.2	1607.3	1604.3	1598.0	1588.5	1579.0	1569.4	1559.9	1558.4
22.5°	1581.9	1578.9	1575.9	1573.0	1569.9	1563.5	1553.4	1543.4	1533.4	1523.4	1520.4
25°	1530.3	1525.9	1521.4	1516.9	1512.4	1504.7	1493.7	1482.6	1471.5	1460.5	1456.6
27.5°	1471.3	1465.9	1460.4	1455.0	1449.6	1441.0	1429.1	1417.3	1405.5	1393.7	1388.3
30°	1428.3	1422.6	1416.9	1411.4	1405.7	1396.5	1384.0	1371.5	1358.9	1346.4	1339.5
32.5°	1386.5	1379.8	1373.2	1366.6	1359.9	1350.2	1337.5	1324.7	1311.9	1299.2	1291.6
35°	1318.3	1311.0	1303.9	1296.8	1289.6	1279.3	1265.8	1252.5	1239.1	1225.6	1216.9
37.5°	1251.4	1242.7	1234.0	1225.3	1216.5	1205.2	1191.5	1177.6	1163.7	1149.9	1139.5
40°	1204.1	1195.2	1186.2	1177.2	1168.4	1156.7	1142.4	1128.1	1113.7	1099.4	1088.1
42.5°	1154.8	1145.6	1136.3	1127.1	1118.0	1106.0	1091.2	1076.4	1061.6	1046.8	1036.0
45°	1079.3	1070.7	1062.0	1053.3	1044.7	1032.2	1015.7	999.4	982.9	966.6	954.6
47.5°	1001.2	992.0	982.9	973.8	964.7	951.8	935.3	918.8	902.2	885.7	873.4
50°	951.7	941.9	932.0	922.2	912.4	899.0	881.9	865.0	847.9	831.0	818.4
52.5°	898.0	887.9	877.9	867.8	857.7	844.6	828.6	812.6	796.5	780.5	767.0
55°	818.9	809.3	799.8	790.2	780.7	767.6	750.9	734.2	717.5	700.8	687.3
57.5°	738.8	728.7	718.4	708.3	698.0	684.9	668.8	652.6	636.5	620.4	607.3
60°	687.3	676.8	666.4	656.0	645.6	632.2	616.1	600.0	583.9	567.8	554.7
62.5°	632.6	622.6	612.6	602.6	592.7	579.5	563.2	546.8	530.5	514.1	502.0
65°	554.4	544.2	534.2	524.0	513.8	500.8	485.1	469.2	453.4	437.6	425.7
67.5°	476.8	466.7	456.5	446.4	436.3	423.6	408.5	393.3	378.2	363.0	352.1
70°	424.2	414.1	403.9	393.7	383.7	371.1	356.2	341.3	326.3	311.4	302.2
72.5°	372.6	362.7	352.8	342.9	333.0	321.1	307.1	293.2	279.2	265.3	256.8
75°	295.3	286.4	277.4	268.5	259.5	248.8	236.3	223.8	211.2	198.6	192.1
77.5°	218.5	211.4	204.2	197.1	189.9	181.3	171.3	161.3	151.3	141.2	136.6
80°	174.5	167.4	160.2	153.0	145.9	138.1	129.8	121.4	113.0	104.7	102.0
82.5°	131.6	125.1	118.6	112.2	105.8	99.7	93.9	88.3	82.5	76.8	75.5
85°	73.9	68.4	63.1	57.7	52.3	48.9	47.4	46.0	44.4	43.0	42.6
87.5°	24.8	23.3	21.9	20.5	19.1	18.4	18.3	18.3	18.3	18.3	18.4
90°	0.7	1.4	2.7	4.0	5.4	6.7	7.4	8.8	9.4	10.8	11.5
92.5°	8.2	10.0	15.6	23.9	35.6	55.2	92.0	153.6	220.5	217.1	175.7
95°	22.2	22.9	28.2	35.6	50.5	80.8	152.8	300.9	486.7	596.5	583.7
97.5°	36.9	37.7	41.5	48.9	62.2	84.0	131.6	240.2	434.6	637.0	738.5
100°	47.1	48.5	51.1	58.5	71.4	91.5	130.6	218.1	387.8	608.0	776.2
102.5°	58.5	59.2	61.4	69.3	81.0	100.7	135.4	209.0	352.2	556.7	753.6
105°	76.1	76.1	79.5	86.2	96.9	115.8	145.4	205.3	317.8	488.1	681.3
107.5°	93.3	94.6	97.9	103.4	114.6	131.6	160.2	211.5	303.2	440.8	607.5
110°	105.7	107.0	109.7	115.8	125.9	143.4	171.0	217.5	298.9	418.7	565.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	118.0	119.4	121.6	127.6	137.8	154.7	181.2	225.0	298.9	405.8	534.3
115°	136.0	137.3	139.4	145.4	155.5	172.4	197.3	236.3	300.9	391.8	500.2
117.5°	152.1	154.2	156.4	162.4	173.8	190.1	213.7	249.3	305.4	385.0	479.8
120°	162.9	165.0	167.6	173.7	185.1	202.0	225.5	257.9	309.7	381.7	468.6
122.5°	174.3	175.7	177.9	183.9	196.5	213.3	236.9	267.5	313.4	379.0	458.8
125°	188.5	189.9	193.2	199.2	212.1	229.5	251.8	280.7	319.8	375.7	445.7
127.5°	199.7	201.7	206.0	213.7	227.3	244.8	266.2	292.8	326.9	374.0	433.5
130°	206.6	208.7	214.0	222.8	236.9	254.5	275.3	300.9	331.2	373.0	425.5
132.5°	212.1	214.6	221.1	230.9	245.6	263.1	284.0	307.9	336.0	373.0	419.0
135°	220.8	223.5	231.6	242.4	256.5	274.7	295.6	317.8	342.7	373.0	411.3
137.5°	231.9	233.8	241.4	252.2	266.0	284.7	303.8	325.0	348.7	373.8	404.5
140°	238.3	240.3	248.4	259.2	272.0	290.2	309.7	329.8	351.4	374.3	401.2
142.5°	245.8	247.4	254.9	265.6	277.9	295.0	313.4	332.6	353.0	374.9	398.6
145°	257.2	258.5	265.3	274.7	286.8	302.3	319.8	336.6	354.8	374.3	394.5
147.5°	269.0	269.8	275.6	284.4	294.9	308.5	323.8	339.1	355.4	372.6	390.3
150°	276.0	277.3	282.1	290.8	300.2	311.7	326.5	340.6	355.4	370.9	387.1
152.5°	283.5	284.4	288.5	296.2	305.1	315.5	329.2	341.7	354.9	368.8	383.3
155°	293.5	293.5	297.6	304.3	311.0	320.5	331.9	342.7	353.4	364.9	377.0
157.5°	302.4	302.3	305.5	311.3	317.2	324.3	334.2	343.4	351.7	360.8	371.1
160°	308.3	307.6	310.4	315.0	320.5	326.5	335.3	343.4	350.1	358.2	366.3
162.5°	313.1	312.5	315.2	319.3	323.6	328.6	336.3	342.8	348.4	354.9	361.9
165°	320.5	319.1	321.2	324.5	327.2	331.2	336.6	342.0	346.0	350.1	355.4
167.5°	325.3	324.6	325.8	327.7	329.6	332.2	336.6	340.4	342.2	345.3	349.1
170°	328.6	327.9	328.6	329.8	331.2	333.2	336.6	339.3	340.6	342.7	345.3
172.5°	330.7	329.5	330.1	331.5	332.3	333.2	336.0	338.2	338.5	339.4	341.6
175°	333.2	331.9	332.6	333.2	333.2	333.2	335.3	336.6	336.0	336.0	336.6
177.5°	334.4	333.4	333.4	333.9	333.4	333.4	334.4	335.0	333.9	333.9	334.4
180°	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4
2.5°	1771.3	1773.7	1776.2	1777.2	1777.0	1776.8	1776.5	1776.2
5°	1760.5	1763.5	1766.4	1767.6	1767.0	1766.4	1765.8	1765.2
7.5°	1738.5	1740.7	1742.8	1743.4	1742.8	1742.1	1741.5	1740.9
10°	1720.0	1721.0	1721.8	1721.8	1721.0	1720.0	1719.2	1718.3
12.5°	1693.8	1694.4	1695.1	1694.8	1693.4	1692.0	1690.7	1689.3
15°	1650.5	1650.3	1649.9	1648.5	1645.8	1643.1	1640.4	1637.7
17.5°	1596.6	1595.1	1593.6	1591.8	1589.6	1587.3	1585.2	1582.9
20°	1556.9	1555.4	1553.9	1551.8	1549.1	1546.4	1543.8	1541.1
22.5°	1517.5	1514.6	1511.7	1509.1	1506.9	1504.7	1502.4	1500.3
25°	1452.8	1448.9	1445.0	1441.4	1438.1	1434.9	1431.6	1428.3
27.5°	1382.9	1377.4	1372.0	1367.7	1364.5	1361.3	1358.1	1355.0
30°	1332.7	1325.9	1319.0	1314.2	1311.6	1308.8	1306.1	1303.5
32.5°	1284.0	1276.4	1268.9	1263.3	1260.0	1256.5	1253.2	1249.7
35°	1208.3	1199.6	1191.0	1184.6	1180.4	1176.2	1172.1	1167.9
37.5°	1129.1	1118.8	1108.4	1101.1	1097.1	1093.0	1089.0	1084.9
40°	1076.8	1065.4	1054.1	1046.6	1043.0	1039.5	1035.9	1032.3
42.5°	1025.1	1014.3	1003.4	995.3	990.1	984.8	979.6	974.3
45°	942.6	930.7	918.8	910.6	906.1	901.6	897.2	892.7
47.5°	861.2	848.9	836.5	827.9	822.9	818.0	813.0	808.1
50°	805.9	793.3	780.8	772.3	767.8	763.4	758.9	754.4
52.5°	753.5	740.0	726.5	717.6	713.1	708.6	704.1	699.6
55°	673.9	660.5	647.0	637.9	633.2	628.4	623.6	618.9
57.5°	594.2	581.1	567.9	559.3	555.0	550.8	546.6	542.3
60°	541.6	528.5	515.3	506.5	502.0	497.6	493.1	488.6
62.5°	489.8	477.6	465.5	457.1	452.6	448.2	443.7	439.2
65°	413.8	401.8	389.9	381.7	377.2	372.7	368.2	363.8
67.5°	341.1	330.2	319.3	312.0	308.5	304.9	301.4	297.7
70°	292.9	283.7	274.5	268.0	264.4	260.9	257.3	253.7
72.5°	248.2	239.7	231.1	225.7	223.3	220.9	218.5	216.1
75°	185.5	179.0	172.5	168.1	166.0	163.9	161.9	159.7
77.5°	132.0	127.4	122.9	119.8	118.2	116.7	115.1	113.6
80°	99.4	96.7	93.9	92.3	91.7	91.1	90.6	90.0
82.5°	74.3	73.0	71.8	70.9	70.6	70.3	69.9	69.6
85°	42.4	42.1	41.8	41.5	41.2	40.9	40.6	40.3
87.5°	18.5	18.7	18.8	18.9	18.7	18.5	18.3	18.2
90°	12.1	12.8	13.4	14.8	14.8	14.8	15.5	15.5
92.5°	119.3	86.6	65.2	55.2	46.6	44.9	44.0	43.0
95°	484.1	381.7	298.9	242.4	194.6	174.4	169.0	158.2
97.5°	720.9	649.1	568.4	489.8	448.2	410.5	391.0	382.4
100°	828.0	795.0	725.7	655.7	609.2	560.8	535.9	525.1
102.5°	864.1	884.5	851.2	803.8	754.1	719.6	692.6	684.5
105°	842.8	935.1	964.8	957.3	935.7	913.5	900.1	892.0
107.5°	766.9	890.0	966.0	1001.2	1012.1	1011.9	1007.5	1002.1
110°	710.9	838.8	933.8	990.9	1021.2	1034.1	1038.8	1038.8



TEST NUMBER: P333627-935

CATALOG NUMBER: S125RDIP-S1270D810U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	666.8	788.2	884.2	951.7	995.9	1017.9	1029.6	1034.5
115°	611.3	715.7	807.9	881.2	933.8	966.0	984.9	993.7
117.5°	575.5	665.4	744.9	812.2	864.7	898.0	916.8	922.1
120°	556.0	636.9	710.9	770.2	819.9	852.3	870.5	875.8
122.5°	541.6	616.4	682.3	737.9	782.3	811.9	830.1	834.9
125°	520.4	589.1	647.6	696.1	733.8	761.4	776.2	782.9
127.5°	498.9	562.9	617.6	663.0	697.2	721.5	735.6	738.5
130°	485.3	544.7	597.1	640.9	674.6	696.8	710.2	714.3
132.5°	471.9	527.4	575.1	617.2	650.8	673.0	685.4	690.0
135°	454.4	500.8	544.0	582.3	611.9	634.1	646.3	650.3
137.5°	439.6	477.2	513.0	545.5	572.1	592.3	603.5	608.0
140°	431.5	463.1	494.1	522.4	547.3	564.8	574.9	578.2
142.5°	424.6	451.3	477.9	502.5	523.7	538.5	548.0	550.8
145°	415.3	436.3	457.1	475.3	491.5	502.9	510.3	513.0
147.5°	406.7	423.7	439.7	453.5	466.2	475.4	479.7	481.0
150°	401.9	416.7	429.5	441.6	451.8	459.8	462.5	463.1
152.5°	396.5	409.7	421.5	430.8	439.4	445.8	448.5	449.2
155°	388.5	399.2	408.6	416.0	422.8	427.5	429.5	430.2
157.5°	380.4	389.3	396.5	402.3	407.6	411.5	413.4	413.2
160°	375.0	381.7	388.5	393.1	397.9	401.2	402.6	401.9
162.5°	369.0	375.2	380.9	385.0	388.7	391.5	391.8	391.7
165°	360.8	365.6	369.6	373.0	375.7	377.0	377.0	377.0
167.5°	353.0	356.1	359.2	361.6	363.0	364.2	363.7	363.5
170°	348.7	350.8	352.8	354.1	355.4	356.1	356.1	355.4
172.5°	343.9	345.9	347.4	348.2	348.4	349.7	348.6	347.9
175°	338.6	338.6	340.0	340.0	340.0	340.6	339.3	338.6
177.5°	335.0	335.5	335.5	335.5	335.0	335.5	333.9	333.9
180°	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9

(END OF REPORT)