

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: P333621-935

Luminaire Tested: **S125RDIP-S1270D590U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333621-935
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-S1270D590U935-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6027.1 lumens
Efficiency: N/A
Efficacy: 109.4 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

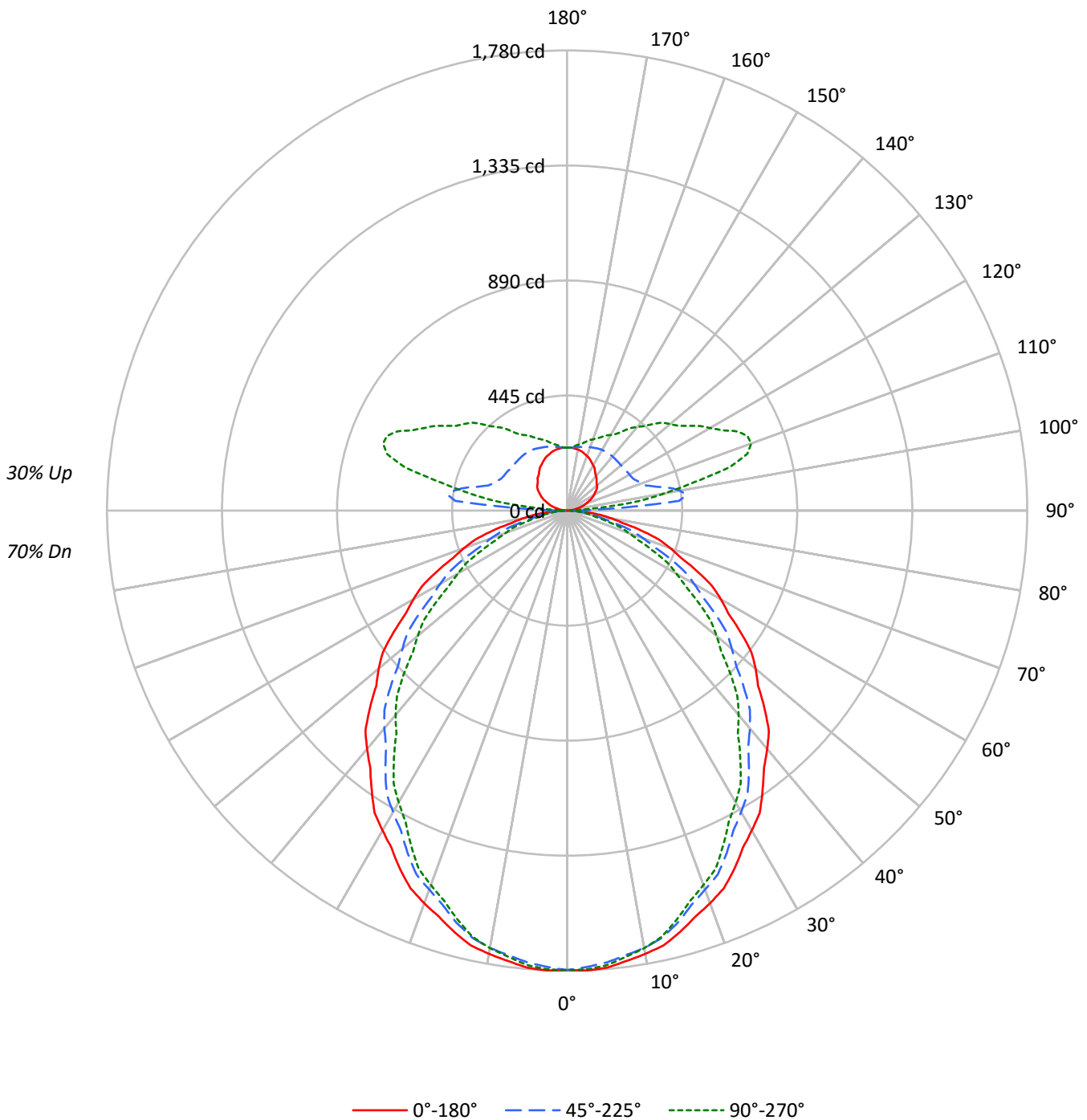
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	70
1	103	98	94	91	97	93	90	86	83	81	78	74	72	71	66	65	63	59
2	94	86	80	75	88	82	76	71	73	69	65	66	62	59	59	56	54	50
3	86	76	69	63	81	72	65	60	65	60	55	58	54	51	52	49	46	43
4	79	68	59	53	74	64	57	51	58	52	47	52	47	44	47	43	40	37
5	72	60	52	46	68	58	50	44	52	46	41	47	42	38	42	38	35	32
6	67	54	46	40	63	52	44	39	47	41	36	43	37	34	38	34	31	28
7	62	49	41	35	58	47	40	34	43	37	32	39	34	30	35	31	28	25
8	58	45	37	32	54	43	36	31	39	33	29	36	31	27	32	28	25	23
9	54	41	34	28	51	39	32	28	36	30	26	33	28	24	30	26	23	21
10	50	38	31	26	48	36	30	25	33	27	23	31	26	22	28	24	21	19

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	2.8
10°-20°	467.1	7.7
20°-30°	677.3	11.2
30°-40°	771.9	12.8
40°-50°	752.4	12.5
50°-60°	633.3	10.5
60°-70°	444.0	7.4
70°-80°	228.2	3.8
80°-90°	59.0	1.0
90°-100°	176.6	2.9
100°-110°	379.6	6.3
110°-120°	356.2	5.9
120°-130°	288.7	4.8
130°-140°	231.7	3.8
140°-150°	174.8	2.9
150°-160°	123.1	2.0
160°-170°	72.5	1.2
170°-180°	23.6	0.4
0°-30°	1311.5	21.8
0°-40°	2083.3	34.6
0°-60°	3469.1	57.6
0°-90°	4200.2	69.7
90°-120°	912.4	15.1
90°-150°	1607.6	26.7
90°-180°	1827.0	30.3
0°-180°	6027.1	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°	0	4	8	10	11	4
95°	16	48	435	197	116	17
105°	56	78	356	701	651	59
115°	99	120	286	616	725	98
125°	138	161	274	490	571	122
135°	161	194	272	411	474	125
145°	188	215	273	340	374	118
155°	214	230	266	301	314	99
165°	234	240	255	271	275	66
175°	243	243	245	248	247	23
180°	244	244	244	244	244	



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CATALOG NUMBER: S125RDIP-S1270D590U935-4F0-1E-UDD-F4

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	23.2	21.8	20.3	18.8	18.1	17.9	17.8	17.7	17.7	17.7
90°	0.5	0.9	2.0	2.9	4.0	4.9	5.4	6.4	6.9	7.8	8.4
92.5°	6.0	7.2	11.4	17.5	25.9	40.3	67.1	112.1	160.9	158.3	128.2
95°	16.2	16.7	20.7	26.0	36.9	59.0	111.5	219.6	355.1	435.1	425.9
97.5°	26.9	27.5	30.2	35.6	45.4	61.3	96.1	175.2	317.1	464.7	538.8
100°	34.4	35.4	37.4	42.7	52.1	66.8	95.3	159.1	282.9	443.5	566.3
102.5°	42.6	43.2	44.8	50.6	59.2	73.4	98.8	152.5	256.9	406.1	549.7
105°	55.5	55.5	57.9	62.9	70.7	84.5	106.1	149.8	231.8	356.1	497.1
107.5°	68.1	69.1	71.4	75.4	83.6	96.0	116.9	154.3	221.2	321.6	443.2
110°	77.1	78.1	80.1	84.5	91.9	104.6	124.8	158.6	218.1	305.5	412.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	86.2	87.1	88.7	93.2	100.5	112.9	132.2	164.1	218.1	296.1	389.8
115°	99.2	100.2	101.7	106.1	113.5	125.7	143.9	172.4	219.6	285.9	364.9
117.5°	111.0	112.4	114.1	118.5	126.8	138.7	155.9	181.8	222.7	280.9	350.1
120°	118.8	120.4	122.3	126.7	135.1	147.3	164.5	188.1	225.9	278.4	341.8
122.5°	127.1	128.2	129.8	134.1	143.4	155.6	172.8	195.2	228.7	276.6	334.8
125°	137.5	138.5	140.9	145.3	154.7	167.5	183.7	204.8	233.3	274.1	325.1
127.5°	145.7	147.1	150.3	155.9	165.8	178.6	194.2	213.6	238.5	272.9	316.3
130°	150.8	152.2	156.2	162.6	172.9	185.6	200.9	219.6	241.7	272.1	310.4
132.5°	154.7	156.6	161.3	168.5	179.2	191.9	207.2	224.6	245.2	272.1	305.7
135°	161.1	163.1	168.9	176.8	187.1	200.4	215.6	231.8	249.9	272.1	300.1
137.5°	169.2	170.7	176.2	184.0	194.1	207.8	221.6	237.1	254.4	272.7	295.1
140°	173.8	175.3	181.2	189.1	198.5	211.7	225.9	240.6	256.4	273.1	292.7
142.5°	179.3	180.5	186.0	193.8	202.8	215.2	228.7	242.6	257.5	273.5	290.8
145°	187.6	188.6	193.5	200.4	209.2	220.5	233.3	245.6	258.8	273.1	287.8
147.5°	196.2	196.8	201.0	207.4	215.1	225.1	236.3	247.4	259.3	271.8	284.7
150°	201.4	202.3	205.8	212.2	219.0	227.4	238.2	248.5	259.3	270.6	282.4
152.5°	206.9	207.4	210.5	216.1	222.6	230.1	240.1	249.3	258.9	269.1	279.7
155°	214.1	214.1	217.1	222.0	226.9	233.8	242.1	249.9	257.9	266.2	275.0
157.5°	220.6	220.5	222.9	227.1	231.4	236.6	243.8	250.5	256.6	263.2	270.7
160°	225.0	224.5	226.4	229.9	233.8	238.2	244.6	250.5	255.4	261.3	267.2
162.5°	228.5	228.0	230.0	233.0	236.2	239.8	245.4	250.1	254.3	258.9	264.1
165°	233.8	232.8	234.3	236.7	238.7	241.7	245.6	249.5	252.4	255.4	259.3
167.5°	237.3	236.9	237.7	239.1	240.5	242.3	245.6	248.3	249.7	251.9	254.7
170°	239.7	239.2	239.7	240.6	241.7	243.1	245.6	247.5	248.5	249.9	251.9
172.5°	241.3	240.4	240.8	241.9	242.5	243.1	245.2	246.8	246.9	247.6	249.2
175°	243.1	242.1	242.6	243.1	243.1	243.1	244.6	245.6	245.0	245.0	245.6
177.5°	244.0	243.2	243.2	243.6	243.2	243.2	244.0	244.4	243.6	243.6	244.0
180°	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6



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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°	17.9	18.0	18.1	18.2	17.9	17.7	17.6	17.3
90°	8.9	9.3	9.8	10.8	10.8	10.8	11.3	11.3
92.5°	87.0	63.2	47.5	40.3	34.0	32.8	32.1	31.3
95°	353.1	278.4	218.1	176.8	142.0	127.2	123.3	115.5
97.5°	525.9	473.6	414.7	357.3	327.0	299.5	285.2	279.0
100°	604.1	580.1	529.4	478.4	444.4	409.1	391.0	383.1
102.5°	630.4	645.2	621.0	586.4	550.2	525.0	505.3	499.4
105°	614.9	682.2	703.8	698.4	682.7	666.5	656.7	650.7
107.5°	559.5	649.3	704.8	730.4	738.4	738.3	735.0	731.1
110°	518.7	612.0	681.2	723.0	745.0	754.4	757.9	757.9



TEST NUMBER: P333621-935

CATALOG NUMBER: S125RDIP-S1270D590U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	486.5	575.1	645.1	694.3	726.6	742.6	751.1	754.7
115°	445.9	522.1	589.4	642.9	681.2	704.8	718.5	725.0
117.5°	419.8	485.4	543.4	592.5	630.9	655.2	668.8	672.8
120°	405.7	464.6	518.7	561.9	598.2	621.8	635.1	638.9
122.5°	395.1	449.7	497.8	538.3	570.7	592.3	605.5	609.1
125°	379.6	429.7	472.5	507.8	535.4	555.5	566.3	571.2
127.5°	363.9	410.7	450.6	483.7	508.6	526.4	536.6	538.8
130°	354.1	397.4	435.7	467.5	492.1	508.3	518.1	521.1
132.5°	344.3	384.8	419.6	450.3	474.8	491.0	500.1	503.4
135°	331.5	365.4	396.8	424.8	446.4	462.6	471.5	474.4
137.5°	320.7	348.1	374.3	398.0	417.3	432.1	440.2	443.5
140°	314.8	337.9	360.5	381.2	399.3	412.1	419.4	421.9
142.5°	309.7	329.2	348.7	366.6	382.0	392.8	399.8	401.8
145°	303.1	318.2	333.5	346.7	358.5	366.9	372.3	374.3
147.5°	296.8	309.1	320.8	330.8	340.2	346.8	350.0	350.9
150°	293.2	304.0	313.3	322.2	329.6	335.4	337.4	337.9
152.5°	289.3	298.9	307.5	314.4	320.6	325.2	327.2	327.7
155°	283.4	291.3	298.1	303.5	308.4	311.9	313.3	313.8
157.5°	277.5	284.0	289.3	293.5	297.3	300.1	301.5	301.4
160°	273.5	278.4	283.4	286.8	290.2	292.7	293.7	293.2
162.5°	269.2	273.8	277.8	280.9	283.6	285.7	285.9	285.8
165°	263.2	266.7	269.7	272.1	274.1	275.0	275.0	275.0
167.5°	257.5	259.8	262.1	263.8	264.8	265.7	265.3	265.2
170°	254.4	255.9	257.4	258.3	259.3	259.8	259.8	259.3
172.5°	250.9	252.4	253.4	254.0	254.3	255.1	254.3	253.8
175°	247.0	247.0	248.1	248.1	248.1	248.5	247.5	247.0
177.5°	244.4	244.8	244.8	244.8	244.4	244.8	243.6	243.6
180°	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6

(END OF REPORT)