

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: P333615-935

Luminaire Tested: **S125RDIP-S1270D365U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333615-935
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-S1270D365U935-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5331.5 lumens
Efficiency: N/A
Efficacy: 107.1 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

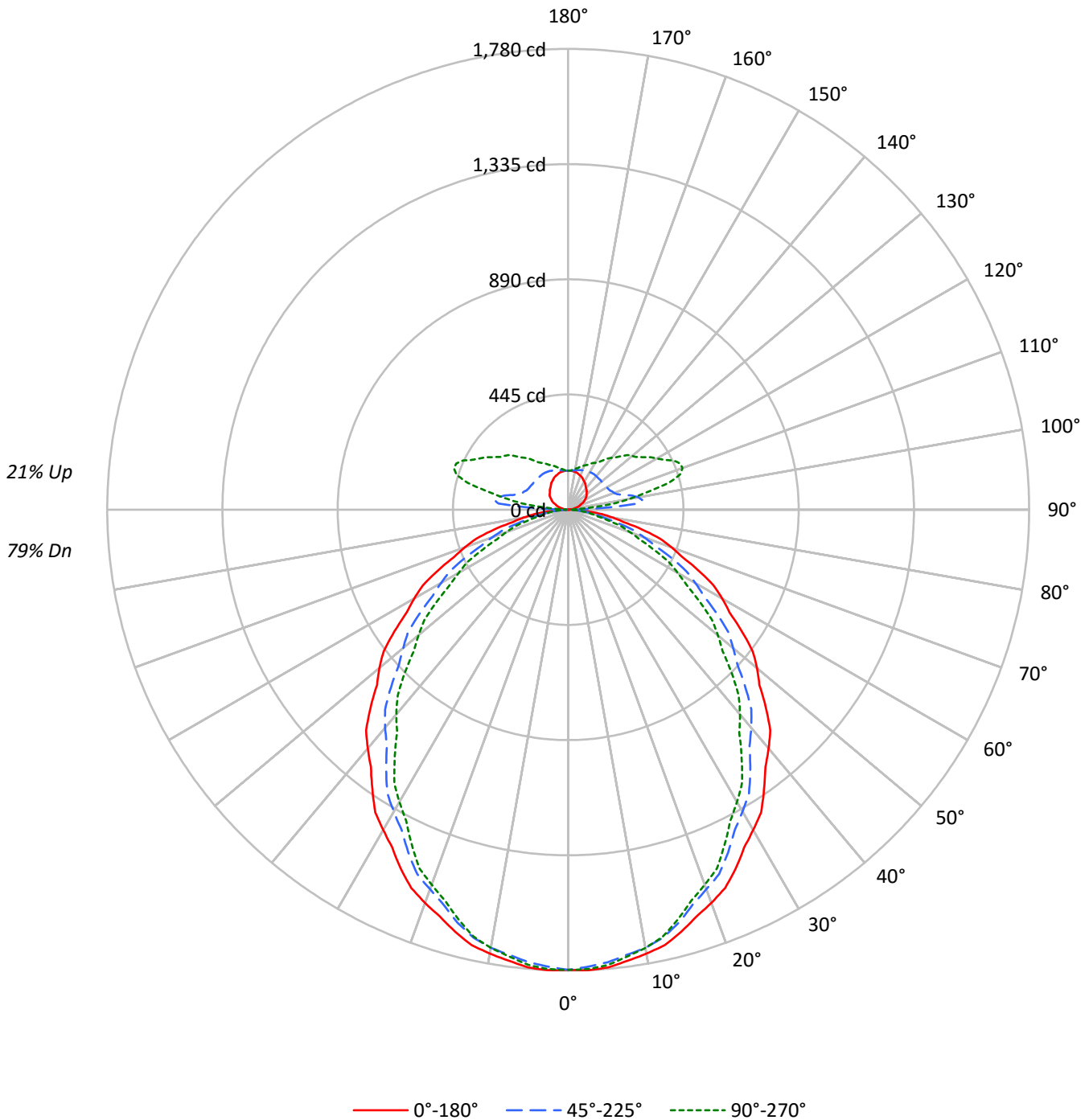
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	114	114	114	114	109	109	109	109	99	99	99	91	91	91	83	83	83	79
1	105	100	96	93	100	96	92	89	88	85	83	80	78	76	74	72	71	67
2	96	88	82	76	91	84	79	74	77	73	69	71	67	64	65	62	60	57
3	87	78	70	64	83	75	68	62	69	63	58	63	59	55	58	54	51	48
4	80	69	61	55	76	66	59	53	61	55	50	56	51	47	52	48	45	42
5	74	62	53	47	70	60	52	46	55	49	44	51	46	41	47	43	39	36
6	68	56	47	41	65	54	46	40	50	43	38	46	41	36	43	38	35	32
7	63	51	42	37	60	49	41	36	45	39	34	42	37	32	39	34	31	29
8	59	46	38	33	56	45	37	32	42	35	31	39	33	29	36	31	28	26
9	55	42	35	29	53	41	34	29	38	32	28	36	30	26	33	29	25	23
10	52	39	32	27	49	38	31	26	35	29	25	33	28	24	31	26	23	21

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	3.1
10°-20°	467.1	8.8
20°-30°	677.3	12.7
30°-40°	771.9	14.5
40°-50°	752.4	14.1
50°-60°	633.3	11.9
60°-70°	444.0	8.3
70°-80°	228.2	4.3
80°-90°	58.5	1.1
90°-100°	109.4	2.1
100°-110°	235.2	4.4
110°-120°	220.7	4.1
120°-130°	178.9	3.4
130°-140°	143.5	2.7
140°-150°	108.3	2.0
150°-160°	76.2	1.4
160°-170°	44.9	0.8
170°-180°	14.6	0.3
0°-30°	1311.5	24.6
0°-40°	2083.3	39.1
0°-60°	3469.1	65.1
0°-90°	4199.7	78.8
90°-120°	565.3	10.6
90°-150°	996.0	18.7
90°-180°	1132.0	21.2
0°-180°	5331.5	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	3	5	6	7	4
95°	10	30	270	122	72	11
105°	34	48	221	434	403	36
115°	62	74	177	382	449	60
125°	85	100	170	304	354	76
135°	100	120	169	255	294	77
145°	116	133	169	211	232	73
155°	133	143	165	186	194	61
165°	145	149	158	168	170	41
175°	151	151	152	154	153	14
180°	151	151	151	151	151	



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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	23.2	21.6	20.1	18.5	17.7	17.5	17.4	17.2	17.0	17.1
90°	0.3	0.6	1.2	1.8	2.4	3.0	3.4	4.0	4.2	4.9	5.2
92.5°	3.7	4.5	7.1	10.8	16.1	25.0	41.6	69.4	99.7	98.1	79.4
95°	10.1	10.3	12.7	16.1	22.8	36.5	69.1	136.0	220.0	269.6	263.8
97.5°	16.7	17.0	18.8	22.1	28.2	38.0	59.5	108.6	196.5	287.9	333.8
100°	21.3	21.9	23.2	26.4	32.3	41.4	59.1	98.6	175.3	274.7	350.9
102.5°	26.4	26.8	27.7	31.3	36.7	45.5	61.2	94.5	159.2	251.7	340.6
105°	34.4	34.4	35.9	38.9	43.8	52.3	65.7	92.8	143.6	220.6	308.0
107.5°	42.2	42.8	44.3	46.8	51.8	59.5	72.4	95.6	137.1	199.2	274.6
110°	47.8	48.4	49.6	52.3	56.9	64.8	77.3	98.3	135.1	189.2	255.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	53.4	54.0	54.9	57.7	62.3	69.9	81.9	101.7	135.1	183.4	241.5
115°	61.5	62.1	63.0	65.7	70.3	77.9	89.2	106.8	136.0	177.1	226.1
117.5°	68.8	69.7	70.7	73.4	78.6	85.9	96.6	112.6	138.0	174.0	216.9
120°	73.6	74.6	75.8	78.5	83.7	91.3	101.9	116.6	140.0	172.5	211.8
122.5°	78.8	79.4	80.4	83.2	88.8	96.4	107.0	120.9	141.6	171.3	207.4
125°	85.2	85.8	87.3	90.1	95.8	103.8	113.8	126.9	144.6	169.8	201.5
127.5°	90.2	91.2	93.1	96.6	102.7	110.6	120.3	132.3	147.7	169.1	196.0
130°	93.4	94.4	96.8	100.7	107.1	115.0	124.4	136.0	149.7	168.6	192.3
132.5°	95.8	97.0	100.0	104.4	111.0	118.9	128.4	139.2	151.9	168.6	189.4
135°	99.8	101.0	104.7	109.5	116.0	124.2	133.5	143.6	154.9	168.6	185.9
137.5°	104.8	105.7	109.1	114.0	120.3	128.7	137.3	146.9	157.6	168.9	182.8
140°	107.7	108.7	112.3	117.2	123.0	131.1	140.0	149.1	158.9	169.2	181.3
142.5°	111.2	111.8	115.2	120.1	125.6	133.4	141.6	150.3	159.5	169.4	180.1
145°	116.2	116.8	119.9	124.2	129.7	136.6	144.6	152.1	160.3	169.2	178.3
147.5°	121.6	121.9	124.6	128.5	133.3	139.4	146.4	153.3	160.7	168.4	176.4
150°	124.8	125.4	127.5	131.5	135.7	140.9	147.6	153.9	160.7	167.6	175.0
152.5°	128.2	128.5	130.4	133.9	137.9	142.6	148.8	154.5	160.4	166.7	173.2
155°	132.7	132.7	134.5	137.5	140.6	144.8	150.0	154.9	159.7	165.0	170.4
157.5°	136.7	136.6	138.1	140.7	143.4	146.6	151.0	155.2	158.9	163.1	167.7
160°	139.4	139.1	140.3	142.4	144.8	147.6	151.5	155.2	158.3	161.9	165.6
162.5°	141.5	141.3	142.5	144.4	146.3	148.5	152.1	155.0	157.5	160.4	163.6
165°	144.8	144.2	145.2	146.6	147.9	149.7	152.1	154.5	156.4	158.3	160.7
167.5°	147.1	146.7	147.3	148.1	149.0	150.2	152.1	153.9	154.7	156.1	157.8
170°	148.5	148.2	148.5	149.1	149.7	150.6	152.1	153.3	153.9	154.9	156.1
172.5°	149.5	149.0	149.2	149.8	150.2	150.6	151.9	152.9	153.0	153.4	154.4
175°	150.6	150.0	150.3	150.6	150.6	150.6	151.5	152.1	151.9	151.9	152.1
177.5°	151.2	150.7	150.7	150.9	150.7	150.7	151.2	151.4	150.9	150.9	151.2
180°	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9



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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°	17.2	17.3	17.3	17.3	17.0	16.9	16.7	16.4
90°	5.5	5.8	6.1	6.7	6.7	6.7	7.0	7.0
92.5°	53.9	39.1	29.4	25.0	21.1	20.3	19.9	19.4
95°	218.8	172.5	135.1	109.5	87.9	78.8	76.4	71.5
97.5°	325.8	293.4	256.9	221.4	202.6	185.5	176.8	172.8
100°	374.3	359.4	328.0	296.4	275.3	253.5	242.2	237.4
102.5°	390.5	399.8	384.8	363.3	340.9	325.3	313.1	309.4
105°	381.0	422.7	436.0	432.7	422.9	412.9	406.8	403.2
107.5°	346.6	402.3	436.6	452.5	457.4	457.4	455.4	453.0
110°	321.3	379.2	422.1	447.9	461.6	467.4	469.5	469.5



TEST NUMBER: P333615-935

CATALOG NUMBER: S125RDIP-S1270D365U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	301.4	356.3	399.7	430.2	450.1	460.1	465.4	467.6
115°	276.3	323.5	365.2	398.3	422.1	436.6	445.1	449.1
117.5°	260.1	300.7	336.7	367.1	390.8	406.0	414.4	416.8
120°	251.3	287.8	321.3	348.1	370.7	385.2	393.5	395.9
122.5°	244.8	278.6	308.4	333.5	353.6	367.0	375.2	377.4
125°	235.2	266.2	292.7	314.6	331.7	344.1	350.9	353.9
127.5°	225.5	254.4	279.1	299.6	315.1	326.1	332.4	333.8
130°	219.4	246.2	269.9	289.7	304.9	315.0	321.1	322.9
132.5°	213.3	238.4	259.9	279.0	294.2	304.2	309.8	311.9
135°	205.4	226.4	245.9	263.2	276.6	286.6	292.1	293.9
137.5°	198.7	215.7	231.9	246.6	258.6	267.7	272.8	274.7
140°	195.0	209.3	223.3	236.1	247.4	255.3	259.8	261.4
142.5°	191.9	204.0	216.0	227.1	236.7	243.4	247.7	249.0
145°	187.8	197.2	206.6	214.8	222.1	227.3	230.7	231.9
147.5°	183.8	191.5	198.8	205.0	210.8	214.9	216.8	217.4
150°	181.7	188.4	194.2	199.6	204.1	207.8	209.1	209.3
152.5°	179.3	185.2	190.5	194.8	198.5	201.5	202.7	203.0
155°	175.6	180.5	184.7	188.0	191.1	193.2	194.2	194.4
157.5°	171.9	175.9	179.3	181.8	184.3	186.0	186.8	186.8
160°	169.5	172.5	175.6	177.7	179.9	181.3	181.9	181.7
162.5°	166.8	169.6	172.2	174.1	175.7	176.9	177.1	177.0
165°	163.1	165.2	167.0	168.6	169.8	170.4	170.4	170.4
167.5°	159.5	161.0	162.4	163.5	164.1	164.6	164.4	164.3
170°	157.6	158.5	159.5	160.1	160.7	161.0	161.0	160.7
172.5°	155.4	156.4	157.0	157.4	157.5	158.1	157.6	157.2
175°	153.1	153.1	153.7	153.7	153.7	153.9	153.3	153.1
177.5°	151.4	151.6	151.6	151.6	151.4	151.6	150.9	150.9
180°	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9

(END OF REPORT)