

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: P333626-935

Luminaire Tested: **S125RDIP-S1270D810U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333626-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
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-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6614.9 lumens
Efficiency: N/A
Efficacy: 109.0 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

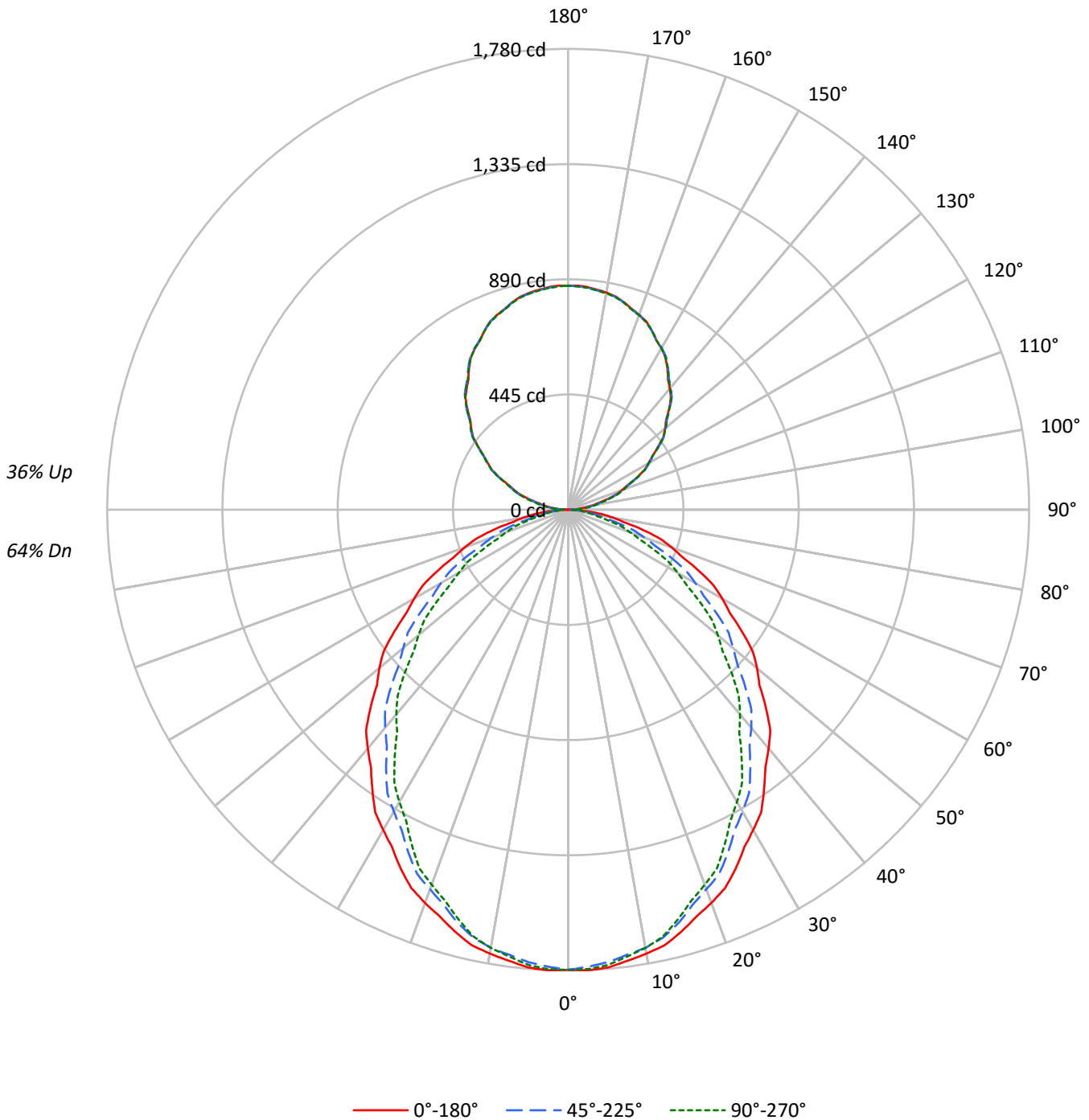
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69
1	101	97	93	89	95	91	88	85	80	78	75	70	68	67	61	60	58
2	92	85	79	74	86	80	74	70	71	66	63	62	59	56	54	52	50
3	84	75	67	62	79	71	64	59	62	57	53	55	51	48	48	45	43
4	77	66	58	52	72	63	56	50	56	50	46	49	45	41	43	40	37
5	71	59	51	45	67	56	49	43	50	44	40	44	40	36	39	35	32
6	66	53	45	39	61	51	43	38	45	39	35	40	35	32	35	32	29
7	61	48	40	35	57	46	39	33	41	35	31	37	32	28	32	29	25
8	57	44	36	31	53	42	35	30	38	32	27	34	29	25	30	26	23
9	53	40	33	28	50	38	31	27	35	29	25	31	26	23	28	24	21
10	49	37	30	25	46	35	29	24	32	26	22	29	24	21	26	22	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	2.5
10°-20°	467.1	7.1
20°-30°	677.3	10.2
30°-40°	771.9	11.7
40°-50°	752.4	11.4
50°-60°	633.3	9.6
60°-70°	444.0	6.7
70°-80°	228.2	3.4
80°-90°	59.5	0.9
90°-100°	57.9	0.9
100°-110°	171.1	2.6
110°-120°	289.8	4.4
120°-130°	381.4	5.8
130°-140°	427.4	6.5
140°-150°	418.9	6.3
150°-160°	351.8	5.3
160°-170°	233.9	3.5
170°-180°	81.8	1.2
0°-30°	1311.5	19.8
0°-40°	2083.3	31.5
0°-60°	3469.1	52.4
0°-90°	4200.8	63.5
90°-120°	518.9	7.8
90°-150°	1746.6	26.4
90°-180°	2414.0	36.5
0°-180°	6614.9	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	6
95°	44	45	52	56	58	47
105°	154	157	161	165	167	164
115°	290	293	294	294	293	287
125°	423	427	428	427	426	379
135°	551	555	555	555	553	424
145°	667	670	672	672	670	417
155°	763	763	764	766	763	351
165°	830	829	830	832	828	234
175°	863	861	860	864	860	82
180°	865	865	865	865	865	



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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	23.4	22.0	20.6	19.1	18.3	18.3	18.3	18.3	18.3	18.4
90°	0.7	1.9	3.1	4.3	5.4	6.5	7.7	8.7	9.7	10.8	11.5
92.5°	16.3	17.1	18.0	18.8	19.6	20.7	22.0	23.2	24.5	25.8	26.9
95°	43.7	44.1	44.3	44.7	44.9	45.9	47.4	48.8	50.4	51.8	52.9
97.5°	72.8	72.8	72.9	73.1	73.2	74.3	76.4	78.4	80.5	82.6	83.5
100°	94.3	94.3	94.3	94.3	94.3	95.2	97.2	99.1	101.1	103.0	104.4
102.5°	117.4	118.0	118.6	119.2	119.9	120.6	121.6	122.6	123.6	124.6	126.1
105°	153.5	154.3	155.0	155.8	156.5	157.3	158.3	159.1	160.0	160.9	161.8
107.5°	193.4	194.1	194.8	195.6	196.4	197.1	197.8	198.5	199.1	199.8	200.3
110°	220.8	221.6	222.3	223.1	223.9	224.5	224.9	225.3	225.8	226.2	226.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	248.8	249.3	249.6	250.0	250.4	250.9	251.4	252.0	252.6	253.1	253.4
115°	290.2	290.8	291.4	292.0	292.6	293.0	293.3	293.6	293.9	294.2	294.0
117.5°	331.7	331.9	332.2	332.4	332.7	333.0	333.3	333.6	333.8	334.1	334.2
120°	357.5	358.3	359.0	359.7	360.5	360.9	361.1	361.3	361.4	361.5	361.5
122.5°	385.5	385.8	386.1	386.3	386.6	386.9	387.3	387.7	388.1	388.5	388.3
125°	423.4	424.4	425.2	426.2	427.1	427.6	427.7	427.9	428.0	428.2	427.9
127.5°	463.9	464.4	464.9	465.4	465.9	466.2	466.4	466.6	466.8	467.0	466.8
130°	488.1	488.9	489.7	490.3	491.1	491.6	491.9	492.2	492.5	492.8	492.7
132.5°	512.4	513.6	514.8	516.0	517.3	517.8	517.8	517.7	517.6	517.6	517.5
135°	550.7	551.6	552.5	553.5	554.3	554.8	555.0	555.2	555.3	555.4	555.4
137.5°	586.9	587.7	588.6	589.4	590.3	590.9	591.2	591.5	591.9	592.2	592.4
140°	610.0	610.7	611.5	612.3	612.9	613.5	614.0	614.5	614.9	615.4	615.7
142.5°	633.2	633.8	634.4	635.0	635.7	636.3	636.8	637.4	637.9	638.5	638.7
145°	667.2	667.8	668.4	669.0	669.6	670.1	670.5	671.0	671.5	671.9	671.9
147.5°	698.7	699.0	699.4	699.7	700.0	700.3	700.8	701.1	701.5	701.8	702.1
150°	719.7	719.5	719.5	719.3	719.1	719.4	720.0	720.6	721.2	721.8	721.8
152.5°	736.9	737.2	737.4	737.6	737.8	738.0	738.2	738.5	738.7	739.0	739.3
155°	763.4	763.4	763.4	763.4	763.4	763.5	763.7	763.9	764.0	764.1	764.7
157.5°	787.2	786.9	786.5	786.2	785.8	785.7	785.9	786.1	786.2	786.4	787.0
160°	801.2	800.7	800.3	799.9	799.4	799.3	799.4	799.5	799.7	799.9	800.5
162.5°	813.6	813.2	812.9	812.6	812.3	812.1	812.1	812.2	812.2	812.3	813.0
165°	830.2	829.8	829.6	829.2	829.0	828.9	829.0	829.1	829.3	829.5	830.1
167.5°	844.1	843.5	842.9	842.3	841.7	841.5	841.5	841.5	841.5	841.5	842.3
170°	851.7	851.1	850.5	849.9	849.3	848.9	848.9	848.9	848.9	848.9	849.9
172.5°	857.0	856.4	855.8	855.2	854.6	854.4	854.4	854.4	854.4	854.4	855.2
175°	863.2	862.5	861.9	861.3	860.7	860.4	860.4	860.4	860.4	860.4	861.3
177.5°	866.3	865.7	865.3	864.8	864.3	864.0	863.9	863.8	863.7	863.5	864.3
180°	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1



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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°	18.6	18.7	18.9	18.9	18.7	18.6	18.4	18.3
90°	12.2	13.0	13.8	14.4	14.8	15.2	15.7	16.2
92.5°	27.8	28.8	29.8	30.5	30.8	31.1	31.4	31.8
95°	53.9	55.0	56.1	56.7	57.0	57.3	57.6	57.9
97.5°	84.6	85.5	86.5	87.0	87.2	87.4	87.6	87.8
100°	105.7	107.0	108.4	109.3	109.5	109.8	110.1	110.4
102.5°	127.5	129.0	130.4	131.4	131.8	132.2	132.6	133.0
105°	162.7	163.6	164.5	165.1	165.7	166.1	166.5	166.9
107.5°	200.7	201.1	201.6	201.8	201.8	201.7	201.7	201.7
110°	227.1	227.6	228.0	228.2	228.0	227.8	227.7	227.6



TEST NUMBER: P333626-935

CATALOG NUMBER: S125RDIP-S1270D810U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	253.6	253.7	254.0	254.0	253.7	253.4	253.1	252.9
115°	293.9	293.8	293.6	293.4	293.3	293.2	293.0	292.9
117.5°	334.3	334.4	334.6	334.3	333.7	333.1	332.5	331.9
120°	361.5	361.5	361.5	361.3	360.7	360.1	359.5	358.9
122.5°	388.2	388.1	388.0	387.7	387.2	386.8	386.2	385.8
125°	427.6	427.3	427.0	426.8	426.6	426.5	426.4	426.2
127.5°	466.7	466.5	466.4	466.1	465.9	465.5	465.3	464.9
130°	492.5	492.4	492.2	492.0	491.7	491.4	491.1	490.8
132.5°	517.3	517.1	517.0	516.7	516.3	515.9	515.5	515.1
135°	555.4	555.4	555.4	555.2	554.6	554.0	553.4	552.8
137.5°	592.5	592.7	592.9	592.6	591.9	591.2	590.4	589.6
140°	616.0	616.2	616.6	616.3	615.6	614.8	614.1	613.4
142.5°	638.9	639.0	639.2	638.9	638.2	637.5	636.7	635.9
145°	671.9	671.9	671.9	671.7	671.2	670.8	670.4	669.9
147.5°	702.5	702.9	703.3	702.9	701.9	700.9	699.9	698.9
150°	721.8	721.8	721.8	721.6	721.3	721.0	720.7	720.4
152.5°	739.7	740.0	740.4	740.3	739.8	739.3	738.7	738.1
155°	765.3	765.9	766.5	766.5	765.7	765.0	764.2	763.4
157.5°	787.6	788.2	788.8	788.6	787.6	786.6	785.6	784.6
160°	801.1	801.6	802.2	802.2	801.4	800.6	799.9	799.2
162.5°	813.6	814.4	815.1	815.0	814.2	813.3	812.4	811.6
165°	830.7	831.3	831.8	831.7	830.8	829.9	829.0	828.1
167.5°	843.3	844.1	845.1	845.0	844.1	843.2	842.2	841.3
170°	850.8	851.7	852.6	852.5	851.4	850.4	849.4	848.3
172.5°	856.2	857.0	858.0	858.0	857.0	856.1	855.1	854.2
175°	862.2	863.2	864.0	863.9	862.9	861.9	860.8	859.8
177.5°	865.0	865.6	866.4	866.3	865.5	864.7	863.8	863.0
180°	865.1	865.1	865.1	865.1	865.1	865.1	865.1	865.1

(END OF REPORT)