

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: P333723-935

Luminaire Tested: **S125RDIW-S1270D470U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333723-935
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: S125RDIW-S1270D470U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5599.3 lumens
Efficiency: N/A
Efficacy: 106.9 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

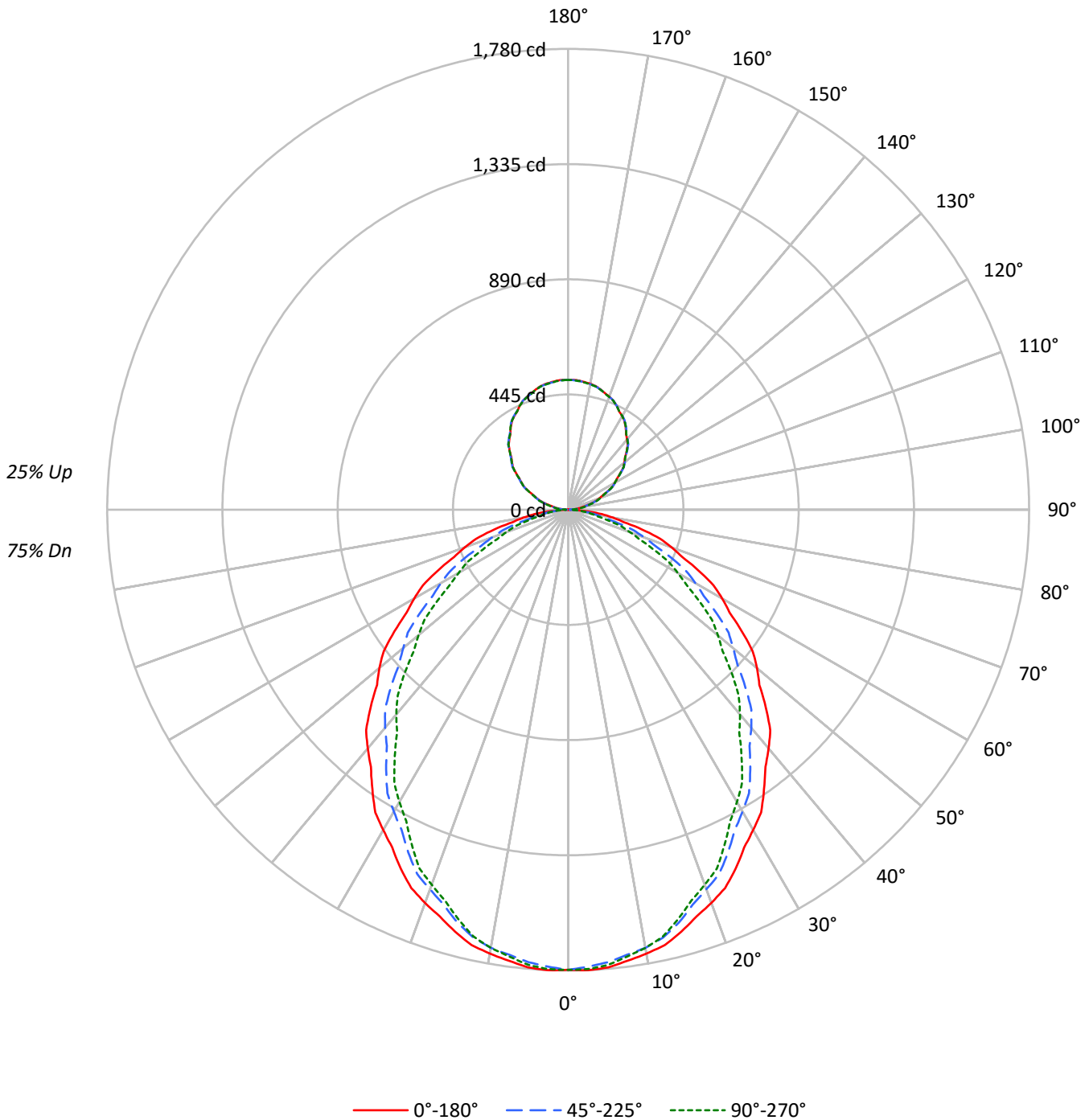
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	75
1	104	99	95	92	99	95	91	88	86	83	81	78	76	74	70	69	68	64
2	95	87	81	76	90	83	78	73	76	71	67	69	65	62	62	60	57	54
3	87	77	69	63	82	74	67	61	67	62	57	61	57	53	56	52	49	46
4	80	68	60	54	75	65	58	52	60	54	49	55	50	46	50	46	43	40
5	73	61	53	47	69	59	51	45	54	47	43	49	44	40	45	41	37	35
6	68	55	47	41	64	53	45	40	49	42	37	45	39	35	41	37	33	31
7	63	50	42	36	60	48	41	35	44	38	33	41	35	31	38	33	30	27
8	58	46	38	32	55	44	37	31	41	34	30	38	32	28	35	30	27	24
9	55	42	34	29	52	40	33	28	37	31	27	35	29	25	32	27	24	22
10	51	39	31	26	49	37	30	26	35	29	24	32	27	23	30	25	22	20

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	3.0
10°-20°	467.1	8.3
20°-30°	677.3	12.1
30°-40°	771.9	13.8
40°-50°	752.4	13.4
50°-60°	633.3	11.3
60°-70°	444.0	7.9
70°-80°	228.2	4.1
80°-90°	58.7	1.0
90°-100°	33.6	0.6
100°-110°	99.2	1.8
110°-120°	168.0	3.0
120°-130°	221.1	3.9
130°-140°	247.7	4.4
140°-150°	242.8	4.3
150°-160°	203.9	3.6
160°-170°	135.6	2.4
170°-180°	47.4	0.8
0°-30°	1311.5	23.4
0°-40°	2083.3	37.2
0°-60°	3469.1	62.0
0°-90°	4200.0	75.0
90°-120°	300.8	5.4
90°-150°	1012.4	18.1
90°-180°	1399.0	25.0
0°-180°	5599.3	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	6	8	9	5
95°	25	26	30	33	34	27
105°	89	91	93	96	97	95
115°	168	170	171	170	170	166
125°	246	248	248	247	247	220
135°	319	321	322	322	320	246
145°	387	388	389	389	388	242
155°	443	443	443	444	443	204
165°	481	480	481	482	480	136
175°	500	499	499	501	498	48
180°	501	501	501	501	501	



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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	21.7	20.1	18.7	17.8	17.7	17.6	17.5	17.4	17.5
90°	0.4	1.1	1.8	2.5	3.2	3.8	4.4	5.0	5.6	6.3	6.7
92.5°	9.5	9.9	10.4	10.9	11.4	12.0	12.7	13.5	14.2	15.0	15.6
95°	25.4	25.6	25.7	25.9	26.1	26.6	27.5	28.3	29.2	30.0	30.7
97.5°	42.1	42.2	42.3	42.4	42.4	43.0	44.3	45.5	46.7	47.9	48.4
100°	54.7	54.7	54.7	54.7	54.7	55.2	56.3	57.4	58.5	59.7	60.5
102.5°	68.0	68.4	68.8	69.1	69.5	69.9	70.5	71.0	71.6	72.2	73.0
105°	88.9	89.4	89.8	90.2	90.7	91.2	91.7	92.2	92.7	93.2	93.8
107.5°	112.1	112.5	113.0	113.4	113.8	114.3	114.6	115.0	115.5	115.8	116.1
110°	128.0	128.5	128.9	129.3	129.8	130.1	130.4	130.6	130.9	131.1	131.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	144.2	144.5	144.6	144.9	145.2	145.4	145.8	146.1	146.4	146.7	146.9
115°	168.2	168.5	168.9	169.3	169.6	169.9	170.0	170.2	170.4	170.6	170.5
117.5°	192.3	192.3	192.5	192.7	192.9	193.0	193.2	193.3	193.5	193.6	193.7
120°	207.2	207.7	208.1	208.5	209.0	209.2	209.3	209.4	209.5	209.6	209.6
122.5°	223.4	223.6	223.8	223.9	224.0	224.3	224.5	224.7	225.0	225.2	225.1
125°	245.5	246.0	246.5	247.0	247.5	247.9	248.0	248.1	248.1	248.2	248.1
127.5°	268.9	269.1	269.5	269.8	270.1	270.3	270.4	270.4	270.5	270.7	270.6
130°	282.9	283.4	283.8	284.2	284.6	285.0	285.2	285.3	285.5	285.7	285.6
132.5°	297.0	297.6	298.4	299.1	299.8	300.1	300.1	300.1	300.1	300.0	299.9
135°	319.2	319.8	320.3	320.8	321.3	321.6	321.7	321.8	321.8	321.9	321.9
137.5°	340.1	340.6	341.1	341.6	342.2	342.5	342.7	342.9	343.0	343.3	343.4
140°	353.5	354.0	354.4	354.8	355.2	355.7	355.9	356.2	356.5	356.7	356.9
142.5°	367.0	367.3	367.7	368.1	368.4	368.8	369.1	369.5	369.8	370.1	370.2
145°	386.8	387.1	387.4	387.8	388.1	388.4	388.7	388.9	389.2	389.4	389.4
147.5°	405.0	405.2	405.4	405.5	405.8	406.0	406.1	406.4	406.6	406.8	407.0
150°	417.2	417.1	417.0	416.9	416.8	417.0	417.3	417.7	418.0	418.4	418.4
152.5°	427.1	427.3	427.4	427.5	427.7	427.7	427.9	428.1	428.2	428.3	428.5
155°	442.6	442.6	442.6	442.6	442.6	442.6	442.6	442.7	442.8	442.9	443.2
157.5°	456.2	456.1	455.9	455.7	455.5	455.5	455.6	455.6	455.7	455.8	456.2
160°	464.4	464.2	463.8	463.6	463.3	463.2	463.3	463.4	463.5	463.6	464.0
162.5°	471.6	471.4	471.2	471.0	470.8	470.7	470.7	470.7	470.8	470.8	471.2
165°	481.1	481.0	480.8	480.6	480.4	480.4	480.5	480.6	480.7	480.8	481.1
167.5°	489.3	489.0	488.6	488.3	487.9	487.8	487.8	487.8	487.8	487.8	488.3
170°	493.6	493.3	492.9	492.6	492.2	492.1	492.1	492.1	492.1	492.1	492.6
172.5°	496.8	496.5	496.1	495.8	495.4	495.2	495.2	495.2	495.2	495.2	495.8
175°	500.3	499.9	499.6	499.2	498.9	498.7	498.7	498.7	498.7	498.7	499.2
177.5°	502.0	501.8	501.5	501.3	500.9	500.8	500.8	500.7	500.6	500.5	500.9
180°	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4



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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°	17.6	17.7	17.7	17.7	17.5	17.3	17.1	16.9
90°	7.1	7.6	8.0	8.4	8.6	8.9	9.1	9.4
92.5°	16.1	16.7	17.3	17.7	17.8	18.0	18.3	18.4
95°	31.3	31.9	32.5	32.9	33.1	33.2	33.4	33.6
97.5°	49.0	49.6	50.1	50.5	50.5	50.7	50.8	50.9
100°	61.3	62.1	62.9	63.3	63.5	63.6	63.8	64.0
102.5°	73.9	74.7	75.6	76.1	76.4	76.6	76.9	77.1
105°	94.3	94.8	95.3	95.7	96.0	96.3	96.5	96.8
107.5°	116.3	116.6	116.8	117.0	117.0	116.9	116.9	116.9
110°	131.6	131.9	132.2	132.2	132.2	132.1	132.0	131.9



TEST NUMBER: P333723-935

CATALOG NUMBER: S125RDIW-S1270D470U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	147.0	147.1	147.2	147.2	147.1	146.9	146.7	146.5
115°	170.4	170.3	170.2	170.1	170.0	170.0	169.9	169.8
117.5°	193.8	193.8	193.9	193.8	193.5	193.1	192.7	192.3
120°	209.6	209.6	209.6	209.4	209.1	208.7	208.4	208.0
122.5°	225.1	225.0	224.9	224.7	224.5	224.2	223.9	223.6
125°	247.9	247.7	247.5	247.4	247.3	247.2	247.1	247.0
127.5°	270.5	270.4	270.4	270.2	270.0	269.8	269.7	269.5
130°	285.5	285.4	285.3	285.2	285.0	284.8	284.6	284.5
132.5°	299.8	299.7	299.6	299.5	299.3	299.0	298.8	298.5
135°	321.9	321.9	321.9	321.8	321.4	321.1	320.7	320.4
137.5°	343.5	343.5	343.7	343.5	343.1	342.7	342.2	341.7
140°	357.1	357.2	357.4	357.2	356.8	356.4	355.9	355.5
142.5°	370.3	370.4	370.5	370.3	369.9	369.5	369.0	368.6
145°	389.4	389.4	389.4	389.3	389.1	388.8	388.6	388.3
147.5°	407.2	407.4	407.6	407.4	406.8	406.2	405.6	405.1
150°	418.4	418.4	418.4	418.3	418.1	417.9	417.8	417.6
152.5°	428.8	429.0	429.1	429.1	428.8	428.5	428.2	427.8
155°	443.6	443.9	444.3	444.3	443.8	443.4	443.0	442.6
157.5°	456.5	456.8	457.2	457.1	456.5	455.9	455.4	454.8
160°	464.3	464.7	465.0	464.9	464.5	464.1	463.6	463.2
162.5°	471.7	472.0	472.4	472.4	471.9	471.4	470.9	470.4
165°	481.5	481.8	482.2	482.1	481.6	481.0	480.5	480.0
167.5°	488.8	489.3	489.8	489.8	489.2	488.7	488.2	487.7
170°	493.1	493.6	494.2	494.1	493.5	492.9	492.3	491.7
172.5°	496.3	496.8	497.3	497.3	496.7	496.2	495.7	495.2
175°	499.7	500.3	500.8	500.8	500.2	499.6	498.9	498.3
177.5°	501.4	501.8	502.2	502.1	501.7	501.2	500.7	500.2
180°	501.4	501.4	501.4	501.4	501.4	501.4	501.4	501.4

(END OF REPORT)