

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: P333471-935

Luminaire Tested: **S125DIW-S1270D770U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333471-935
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: S125DIW-S1270D770U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6709.0 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

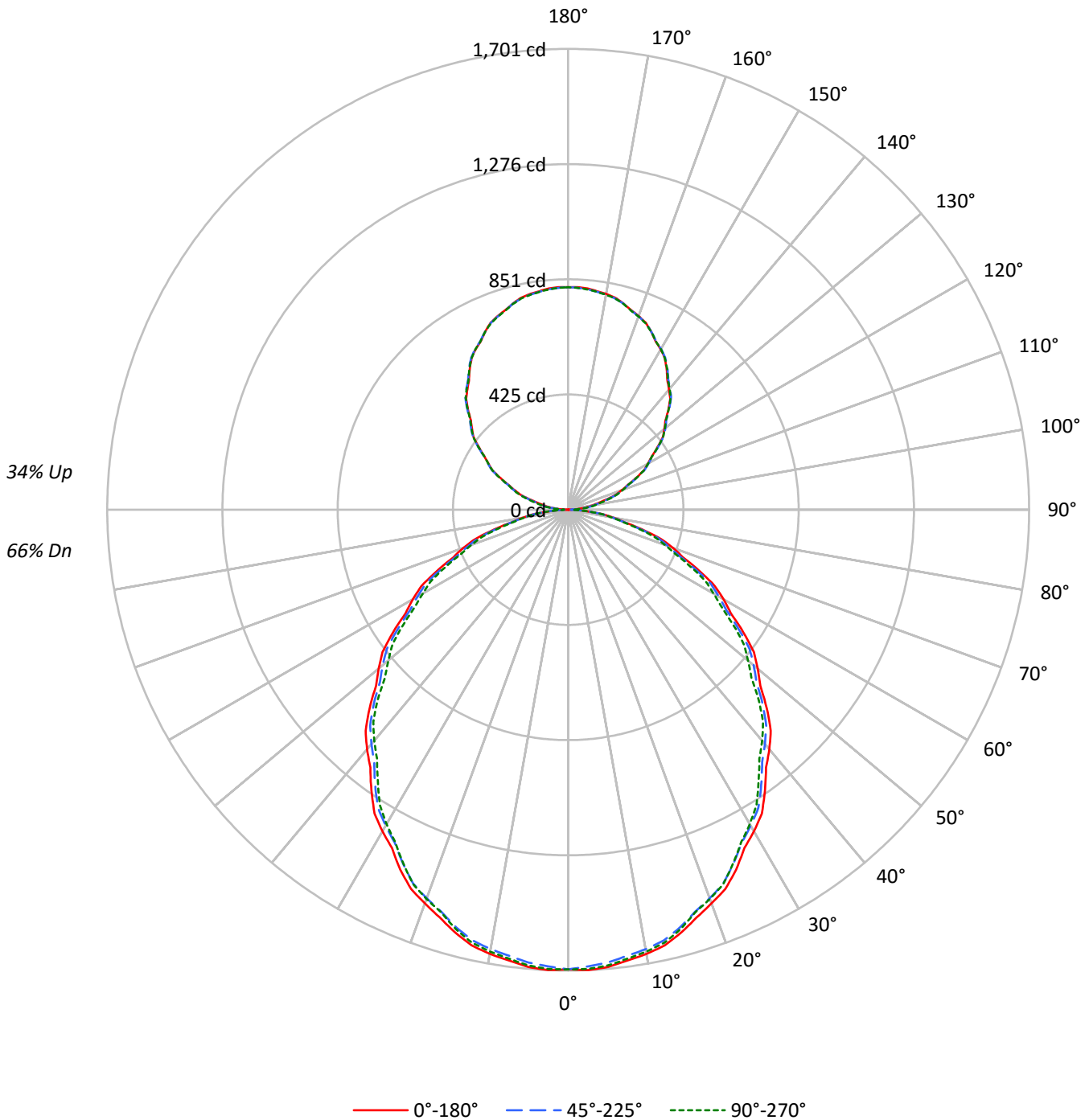
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333471-935

CATALOG NUMBER: S125DIW-S1270D770U935-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333471-935

CATALOG NUMBER: S125DIW-S1270D770U935-4F0-1E-UDD-F1

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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	84	81	78	76	71	69	67	62	61	60	55
2	92	84	78	73	86	80	74	69	71	66	63	62	59	56	55	52	50	46
3	84	74	67	61	79	70	63	58	62	57	53	55	51	48	49	45	43	39
4	77	66	58	51	72	62	55	49	55	50	45	49	45	41	43	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	40	34	57	45	38	32	41	35	30	36	31	28	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	25	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	23	20	18
10	49	37	29	24	46	35	28	23	32	26	22	28	24	20	26	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10959	10959	10959
5°	10983	10878	10949
10°	10916	10802	10864
15°	10797	10672	10717
20°	10628	10490	10509
25°	10446	10274	10264
30°	10221	10041	9991
35°	9980	9790	9653
40°	9732	9517	9382
45°	9465	9270	9085
50°	9171	8969	8699
55°	8888	8631	8389
60°	8548	8289	7994
65°	8145	7878	7610
70°	7757	7402	7149
75°	7069	6835	6598
80°	6289	6189	6044
85°	5476	5572	5269



TEST NUMBER: P333471-935

CATALOG NUMBER: S125DIW-S1270D770U935-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.0	2.4
10°-20°	451.9	6.7
20°-30°	667.3	9.9
30°-40°	778.6	11.6
40°-50°	782.0	11.7
50°-60°	686.5	10.2
60°-70°	511.5	7.6
70°-80°	292.5	4.4
80°-90°	86.9	1.3
90°-100°	55.0	0.8
100°-110°	162.4	2.4
110°-120°	275.1	4.1
120°-130°	362.1	5.4
130°-140°	405.7	6.0
140°-150°	397.7	5.9
150°-160°	334.0	5.0
160°-170°	222.0	3.3
170°-180°	77.7	1.2
0°-30°	1279.2	19.1
0°-40°	2057.8	30.7
0°-60°	3526.3	52.6
0°-90°	4417.1	65.8
90°-120°	492.6	7.3
90°-150°	1658.1	24.7
90°-180°	2292.0	34.2
0°-180°	6709.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1697	1697	1697	1697	1697	
5°	1694	1691	1678	1689	1689	161
15°	1615	1610	1596	1602	1603	455
25°	1466	1459	1442	1444	1440	674
35°	1266	1260	1242	1235	1224	791
45°	1036	1030	1015	999	995	798
55°	789	784	766	755	745	704
65°	533	530	516	504	498	529
75°	283	280	274	270	264	302
85°	74	75	75	74	71	82
90°	1	6	10	13	15	6
95°	42	43	49	54	55	44
105°	146	149	153	156	158	156
115°	276	278	279	279	278	272
125°	402	406	406	405	405	360
135°	523	526	527	527	525	403
145°	633	636	638	638	636	396
155°	725	725	726	728	725	334
165°	788	787	788	790	786	222
175°	819	817	817	820	816	78
180°	821	821	821	821	821	



TEST NUMBER: P333471-935

CATALOG NUMBER: S125DIW-S1270D770U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8
2.5°	1701.1	1700.4	1699.7	1698.9	1698.2	1696.7	1694.3	1691.9	1689.5	1687.1	1689.5
5°	1694.1	1693.5	1692.9	1692.3	1691.7	1690.0	1687.0	1683.9	1681.0	1678.0	1680.7
7.5°	1678.5	1677.9	1677.3	1676.7	1676.1	1674.2	1670.9	1667.7	1664.4	1661.1	1663.7
10°	1664.6	1664.0	1663.4	1662.8	1662.2	1660.3	1657.0	1653.7	1650.4	1647.1	1649.5
12.5°	1647.4	1646.3	1645.3	1644.2	1643.1	1641.1	1638.0	1635.0	1631.9	1628.8	1630.8
15°	1614.9	1614.0	1613.1	1612.2	1611.4	1609.2	1605.9	1602.7	1599.4	1596.1	1597.6
17.5°	1577.6	1576.3	1574.9	1573.6	1572.4	1569.9	1566.6	1563.1	1559.8	1556.3	1558.2
20°	1546.4	1545.8	1545.2	1544.6	1544.0	1541.8	1537.9	1534.0	1530.2	1526.3	1528.4
22.5°	1515.3	1514.2	1513.1	1512.1	1511.0	1508.6	1505.0	1501.4	1497.7	1494.1	1495.5
25°	1465.9	1464.4	1462.9	1461.5	1459.9	1457.2	1453.4	1449.5	1445.6	1441.7	1442.3
27.5°	1408.2	1407.3	1406.4	1405.5	1404.6	1402.1	1398.2	1394.1	1390.2	1386.1	1386.3
30°	1370.6	1369.7	1368.8	1367.9	1367.0	1364.3	1359.9	1355.4	1350.9	1346.4	1345.8
32.5°	1329.8	1328.4	1327.1	1325.7	1324.3	1321.6	1317.6	1313.6	1309.6	1305.6	1304.6
35°	1265.8	1264.7	1263.5	1262.3	1261.1	1258.4	1254.2	1250.1	1245.9	1241.7	1240.3
37.5°	1199.5	1198.1	1196.6	1195.1	1193.6	1190.8	1187.0	1183.0	1179.1	1175.2	1172.9
40°	1154.4	1153.0	1151.5	1150.0	1148.5	1145.6	1141.5	1137.3	1133.2	1128.9	1126.3
42.5°	1106.1	1104.9	1103.6	1102.3	1101.1	1098.4	1094.2	1090.0	1085.9	1081.7	1079.3
45°	1036.3	1035.2	1034.0	1032.8	1031.6	1029.2	1025.6	1022.0	1018.5	1014.9	1011.2
47.5°	961.1	961.2	961.3	961.3	961.4	959.2	955.0	950.7	946.4	942.1	938.5
50°	912.8	912.0	911.0	910.2	909.2	907.0	903.4	899.8	896.3	892.7	888.8
52.5°	863.4	862.8	862.1	861.4	860.8	858.6	854.7	850.9	847.1	843.3	839.9
55°	789.4	788.4	787.6	786.6	785.7	783.3	779.0	774.9	770.7	766.5	763.8
57.5°	711.2	710.8	710.2	709.8	709.3	707.3	703.8	700.3	696.7	693.2	689.7
60°	661.8	660.6	659.4	658.2	657.0	654.8	651.5	648.2	645.0	641.7	638.7
62.5°	610.3	609.3	608.4	607.3	606.4	604.6	601.8	598.9	596.2	593.3	590.1
65°	533.0	532.4	531.8	531.2	530.5	528.6	525.3	522.0	518.8	515.5	512.8
67.5°	458.1	456.8	455.6	454.3	453.1	451.2	448.8	446.3	443.8	441.3	439.1
70°	410.8	409.3	407.8	406.3	404.8	402.7	400.0	397.4	394.7	392.0	390.2
72.5°	359.2	358.2	357.2	356.2	355.2	353.8	352.1	350.3	348.6	346.9	344.8
75°	283.3	282.7	282.1	281.5	280.9	279.8	278.4	276.8	275.3	273.9	272.9
77.5°	213.2	212.9	212.7	212.5	212.2	211.7	210.9	210.0	209.1	208.4	207.8
80°	169.1	169.1	169.1	169.1	169.1	168.8	168.2	167.6	167.0	166.4	166.2
82.5°	130.4	130.0	129.5	129.1	128.5	128.3	128.1	128.0	127.9	127.8	127.3
85°	73.9	74.1	74.4	74.7	75.0	75.2	75.2	75.2	75.2	75.2	74.9
87.5°	29.1	29.4	29.6	29.8	30.0	30.1	30.0	30.0	30.0	30.0	30.1
90°	0.6	1.8	2.9	4.0	5.2	6.3	7.2	8.3	9.2	10.2	10.9
92.5°	15.5	16.3	17.0	17.8	18.7	19.6	20.9	22.1	23.3	24.5	25.5
95°	41.6	41.8	42.1	42.4	42.7	43.6	44.9	46.4	47.8	49.2	50.2
97.5°	69.1	69.1	69.2	69.4	69.5	70.5	72.5	74.5	76.4	78.4	79.3
100°	89.5	89.5	89.5	89.5	89.5	90.4	92.2	94.1	95.9	97.8	99.1
102.5°	111.5	112.0	112.6	113.1	113.7	114.5	115.5	116.4	117.3	118.2	119.7
105°	145.8	146.5	147.1	147.8	148.6	149.4	150.2	151.0	151.9	152.7	153.6
107.5°	183.6	184.3	185.0	185.7	186.4	187.1	187.8	188.4	189.1	189.7	190.1
110°	209.7	210.3	211.0	211.8	212.5	213.0	213.4	213.9	214.3	214.7	215.2



TEST NUMBER: P333471-935

CATALOG NUMBER: S125DIW-S1270D770U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	236.3	236.6	236.9	237.4	237.7	238.2	238.7	239.3	239.8	240.3	240.6
115°	275.5	276.0	276.6	277.2	277.8	278.2	278.4	278.7	279.1	279.3	279.1
117.5°	314.9	315.1	315.4	315.6	315.9	316.2	316.4	316.7	316.9	317.2	317.3
120°	339.4	340.1	340.8	341.6	342.2	342.7	342.8	342.9	343.1	343.2	343.2
122.5°	366.0	366.3	366.5	366.8	367.0	367.3	367.6	368.1	368.4	368.8	368.7
125°	402.0	402.9	403.7	404.6	405.4	406.0	406.0	406.2	406.4	406.5	406.2
127.5°	440.4	440.8	441.3	441.9	442.3	442.6	442.8	443.0	443.2	443.3	443.2
130°	463.4	464.1	464.9	465.5	466.2	466.7	467.0	467.3	467.6	467.9	467.7
132.5°	486.4	487.6	488.7	489.9	491.0	491.6	491.5	491.5	491.5	491.4	491.3
135°	522.8	523.7	524.5	525.4	526.2	526.8	526.8	527.0	527.2	527.3	527.3
137.5°	557.1	557.9	558.7	559.6	560.4	560.9	561.3	561.5	561.9	562.2	562.4
140°	579.1	579.8	580.5	581.2	581.9	582.5	582.9	583.3	583.8	584.2	584.4
142.5°	601.1	601.7	602.3	602.9	603.5	604.0	604.6	605.1	605.6	606.1	606.3
145°	633.4	634.0	634.6	635.1	635.7	636.2	636.6	637.1	637.5	637.9	637.9
147.5°	663.3	663.7	663.9	664.3	664.6	664.9	665.2	665.6	665.9	666.2	666.6
150°	683.3	683.1	682.9	682.9	682.7	682.9	683.5	684.1	684.6	685.2	685.2
152.5°	699.6	699.8	700.0	700.3	700.4	700.6	700.9	701.1	701.3	701.5	701.9
155°	724.8	724.8	724.8	724.8	724.8	724.9	725.0	725.1	725.3	725.5	726.0
157.5°	747.3	747.0	746.7	746.4	746.1	746.0	746.1	746.2	746.4	746.6	747.1
160°	760.6	760.2	759.7	759.3	758.9	758.7	758.9	759.1	759.1	759.3	759.9
162.5°	772.4	772.1	771.7	771.5	771.1	770.9	771.0	771.0	771.0	771.1	771.8
165°	788.1	787.8	787.6	787.2	787.0	786.9	787.0	787.1	787.3	787.5	788.0
167.5°	801.4	800.8	800.2	799.7	799.1	798.8	798.8	798.8	798.8	798.8	799.7
170°	808.6	808.0	807.4	806.8	806.2	806.0	806.0	806.0	806.0	806.0	806.8
172.5°	813.6	813.0	812.5	811.9	811.4	811.1	811.1	811.1	811.1	811.1	811.9
175°	819.4	818.8	818.3	817.7	817.1	816.8	816.8	816.8	816.8	816.8	817.7
177.5°	822.3	821.9	821.4	821.0	820.5	820.3	820.1	820.0	819.9	819.8	820.4
180°	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3



TEST NUMBER: P333471-935

CATALOG NUMBER: S125DIW-S1270D770U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8	1696.8
2.5°	1691.9	1694.3	1696.7	1697.7	1697.5	1697.3	1697.0	1696.8
5°	1683.3	1686.1	1688.8	1690.0	1689.6	1689.4	1689.0	1688.8
7.5°	1666.3	1669.0	1671.5	1672.8	1672.5	1672.1	1671.9	1671.5
10°	1651.9	1654.3	1656.7	1657.7	1657.4	1657.1	1656.8	1656.6
12.5°	1632.7	1634.6	1636.5	1637.4	1637.4	1637.3	1637.3	1637.2
15°	1599.1	1600.6	1602.1	1602.8	1602.8	1602.8	1602.8	1602.8
17.5°	1560.0	1561.9	1563.7	1563.9	1562.5	1561.0	1559.4	1558.0
20°	1530.5	1532.6	1534.6	1535.0	1533.4	1532.0	1530.5	1529.0
22.5°	1496.8	1498.2	1499.6	1499.8	1498.7	1497.7	1496.7	1495.7
25°	1442.9	1443.6	1444.2	1444.0	1443.1	1442.2	1441.3	1440.4
27.5°	1386.4	1386.6	1386.6	1386.2	1385.3	1384.5	1383.5	1382.7
30°	1345.2	1344.6	1344.0	1343.3	1342.4	1341.5	1340.6	1339.7
32.5°	1303.5	1302.4	1301.3	1299.9	1298.4	1296.8	1295.1	1293.6
35°	1238.7	1237.3	1235.8	1233.8	1231.4	1229.1	1226.7	1224.3
37.5°	1170.7	1168.5	1166.3	1164.5	1163.1	1161.7	1160.4	1159.0
40°	1123.6	1120.9	1118.2	1116.5	1115.5	1114.7	1113.7	1112.8
42.5°	1076.9	1074.4	1071.9	1070.1	1068.7	1067.3	1065.9	1064.5
45°	1007.7	1004.1	1000.6	998.3	997.4	996.5	995.6	994.7
47.5°	934.8	931.2	927.6	924.7	922.6	920.5	918.4	916.4
50°	884.9	881.1	877.2	874.2	872.1	870.0	868.0	865.8
52.5°	836.5	833.1	829.7	826.8	824.5	822.2	819.8	817.5
55°	761.1	758.5	755.8	753.4	751.3	749.2	747.1	745.0
57.5°	686.3	682.9	679.4	677.1	676.0	674.9	673.6	672.5
60°	635.7	632.7	629.7	627.2	625.1	623.0	621.0	618.9
62.5°	586.9	583.7	580.5	578.1	576.4	574.8	573.2	571.6
65°	510.1	507.4	504.7	502.8	501.6	500.4	499.2	498.0
67.5°	436.9	434.5	432.3	430.8	430.1	429.4	428.7	427.9
70°	388.4	386.6	384.8	383.3	382.1	380.9	379.8	378.6
72.5°	342.9	340.8	338.8	337.2	336.0	334.8	333.6	332.3
75°	272.1	271.1	270.3	269.2	268.0	266.8	265.6	264.4
77.5°	207.2	206.7	206.2	205.5	204.7	203.8	203.0	202.2
80°	165.8	165.6	165.2	164.8	164.2	163.6	163.0	162.5
82.5°	126.7	126.2	125.6	125.4	125.2	125.1	124.9	124.8
85°	74.6	74.3	74.0	73.5	72.9	72.3	71.7	71.1
87.5°	30.2	30.4	30.6	30.4	30.0	29.6	29.3	28.8
90°	11.6	12.4	13.1	13.6	14.0	14.5	14.9	15.3
92.5°	26.4	27.4	28.3	28.9	29.3	29.5	29.9	30.1
95°	51.2	52.2	53.2	53.8	54.2	54.4	54.7	54.9
97.5°	80.2	81.2	82.1	82.7	82.8	83.0	83.2	83.3
100°	100.3	101.6	102.9	103.7	104.0	104.3	104.5	104.8
102.5°	121.1	122.4	123.8	124.7	125.1	125.5	125.9	126.3
105°	154.5	155.3	156.2	156.8	157.2	157.6	158.1	158.5
107.5°	190.5	191.0	191.4	191.6	191.6	191.6	191.5	191.5
110°	215.6	216.0	216.5	216.6	216.5	216.3	216.2	216.0



TEST NUMBER: P333471-935

CATALOG NUMBER: S125DIW-S1270D770U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	240.7	240.9	241.1	241.1	240.8	240.6	240.3	240.0
115°	279.1	278.9	278.7	278.6	278.4	278.4	278.2	278.0
117.5°	317.4	317.5	317.6	317.4	316.8	316.2	315.6	315.1
120°	343.2	343.2	343.2	342.9	342.4	341.8	341.2	340.7
122.5°	368.6	368.4	368.3	368.1	367.6	367.1	366.7	366.3
125°	406.0	405.6	405.4	405.2	405.0	404.8	404.8	404.6
127.5°	443.1	442.9	442.7	442.6	442.3	442.0	441.7	441.4
130°	467.6	467.4	467.3	467.1	466.8	466.5	466.2	466.0
132.5°	491.1	490.9	490.9	490.5	490.2	489.7	489.4	489.0
135°	527.3	527.3	527.3	527.0	526.4	525.9	525.3	524.8
137.5°	562.6	562.7	562.9	562.6	561.9	561.2	560.5	559.7
140°	584.8	585.0	585.3	585.1	584.4	583.7	583.0	582.3
142.5°	606.5	606.7	606.8	606.6	605.9	605.2	604.4	603.7
145°	637.9	637.9	637.9	637.7	637.2	636.8	636.4	635.9
147.5°	666.9	667.3	667.6	667.3	666.3	665.4	664.4	663.5
150°	685.2	685.2	685.2	685.0	684.8	684.5	684.2	683.9
152.5°	702.2	702.6	702.9	702.8	702.3	701.8	701.3	700.8
155°	726.6	727.1	727.7	727.6	726.9	726.3	725.5	724.8
157.5°	747.7	748.2	748.8	748.6	747.7	746.7	745.8	744.9
160°	760.4	761.0	761.6	761.6	760.8	760.1	759.4	758.7
162.5°	772.5	773.1	773.8	773.8	772.9	772.1	771.3	770.4
165°	788.6	789.2	789.7	789.5	788.8	787.9	787.0	786.2
167.5°	800.6	801.4	802.2	802.2	801.3	800.5	799.6	798.7
170°	807.7	808.6	809.4	809.3	808.3	807.4	806.3	805.4
172.5°	812.8	813.6	814.5	814.5	813.6	812.7	811.8	811.0
175°	818.6	819.4	820.3	820.2	819.2	818.2	817.2	816.2
177.5°	821.1	821.8	822.5	822.4	821.7	820.9	820.1	819.2
180°	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3

(END OF REPORT)