

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: P333465-935

Luminaire Tested: **S125DIW-S1270D470U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333465-935
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-S1270D470U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5815.8 lumens
Efficiency: N/A
Efficacy: 111.0 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

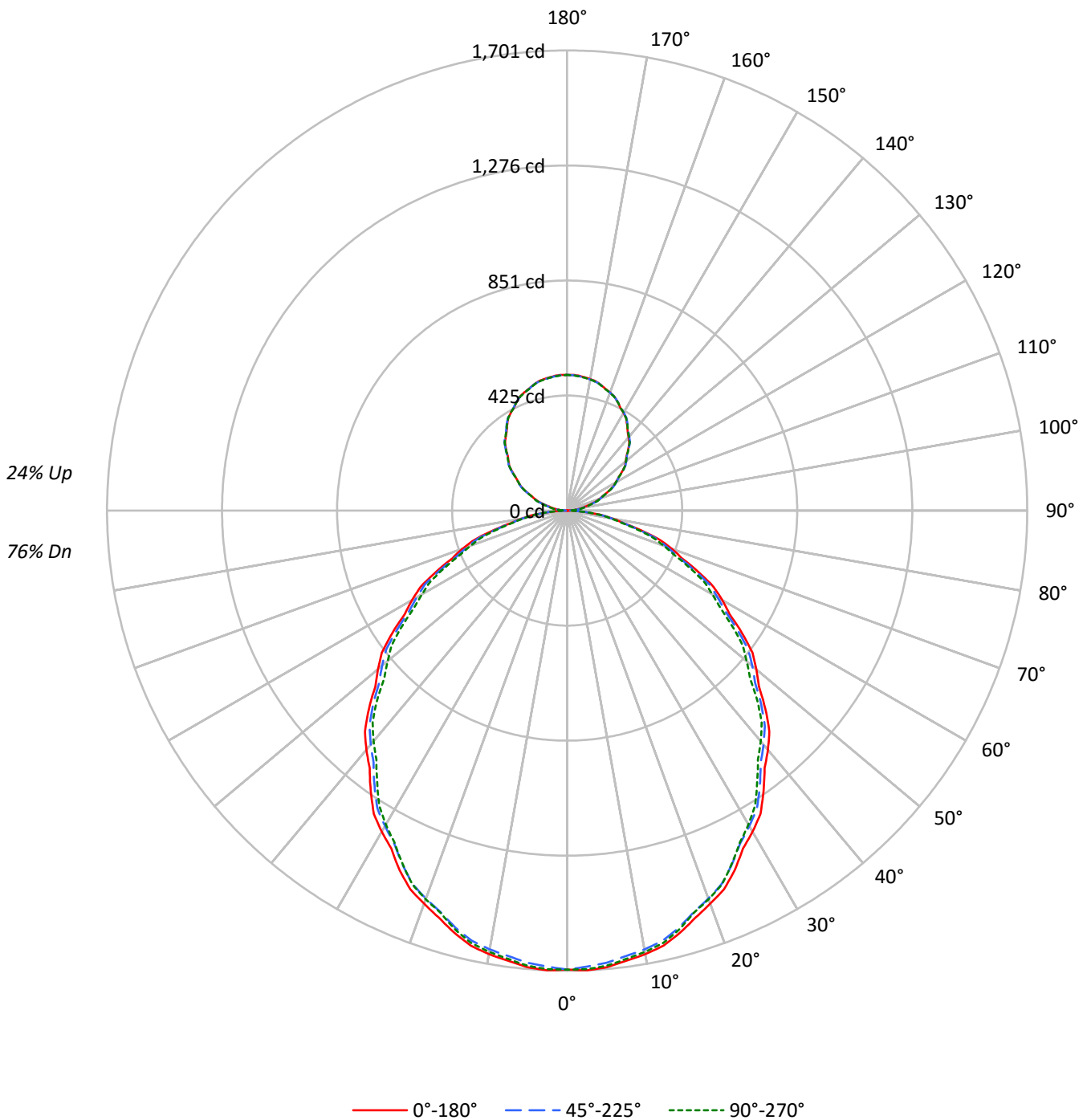
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	98	98	88	88	88	80	80	80	76
1	104	99	95	91	98	94	91	87	86	83	80	78	76	74	71	69	67	64
2	94	86	80	74	89	82	77	72	75	71	67	68	65	61	62	59	57	53
3	86	76	68	62	82	73	66	60	66	61	56	60	56	52	55	51	48	45
4	79	67	59	53	75	64	57	51	59	53	48	54	49	45	49	45	42	39
5	72	60	52	45	69	58	50	44	53	46	41	48	43	39	44	40	36	34
6	67	54	46	40	63	52	44	38	48	41	36	44	38	34	40	36	32	29
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	37	32	28	26
8	58	45	37	31	55	43	35	30	40	33	29	37	31	27	34	29	26	23
9	54	41	33	28	51	39	32	27	37	30	26	34	28	24	31	27	23	21
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	24	21	19

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.0	2.8
10°-20°	451.9	7.8
20°-30°	667.3	11.5
30°-40°	778.6	13.4
40°-50°	782.0	13.4
50°-60°	686.5	11.8
60°-70°	511.5	8.8
70°-80°	292.5	5.0
80°-90°	86.2	1.5
90°-100°	33.6	0.6
100°-110°	99.2	1.7
110°-120°	168.0	2.9
120°-130°	221.1	3.8
130°-140°	247.7	4.3
140°-150°	242.8	4.2
150°-160°	203.9	3.5
160°-170°	135.6	2.3
170°-180°	47.4	0.8
0°-30°	1279.2	22.0
0°-40°	2057.8	35.4
0°-60°	3526.3	60.6
0°-90°	4416.5	75.9
90°-120°	300.8	5.2
90°-150°	1012.4	17.4
90°-180°	1399.0	24.1
0°-180°	5815.8	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°	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°	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	29.2	29.4	29.5	29.6	29.6	29.5	29.4	29.3	29.2	29.3
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°	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°	29.4	29.4	29.5	29.4	28.9	28.5	28.1	27.6
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: P333465-935

CATALOG NUMBER: S125DIW-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)