

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: P333488-927

Luminaire Tested: **S125DIW-S1270D1560U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333488-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S1270D1560U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9005.9 lumens
Efficiency: N/A
Efficacy: 108.6 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: General Diffuse

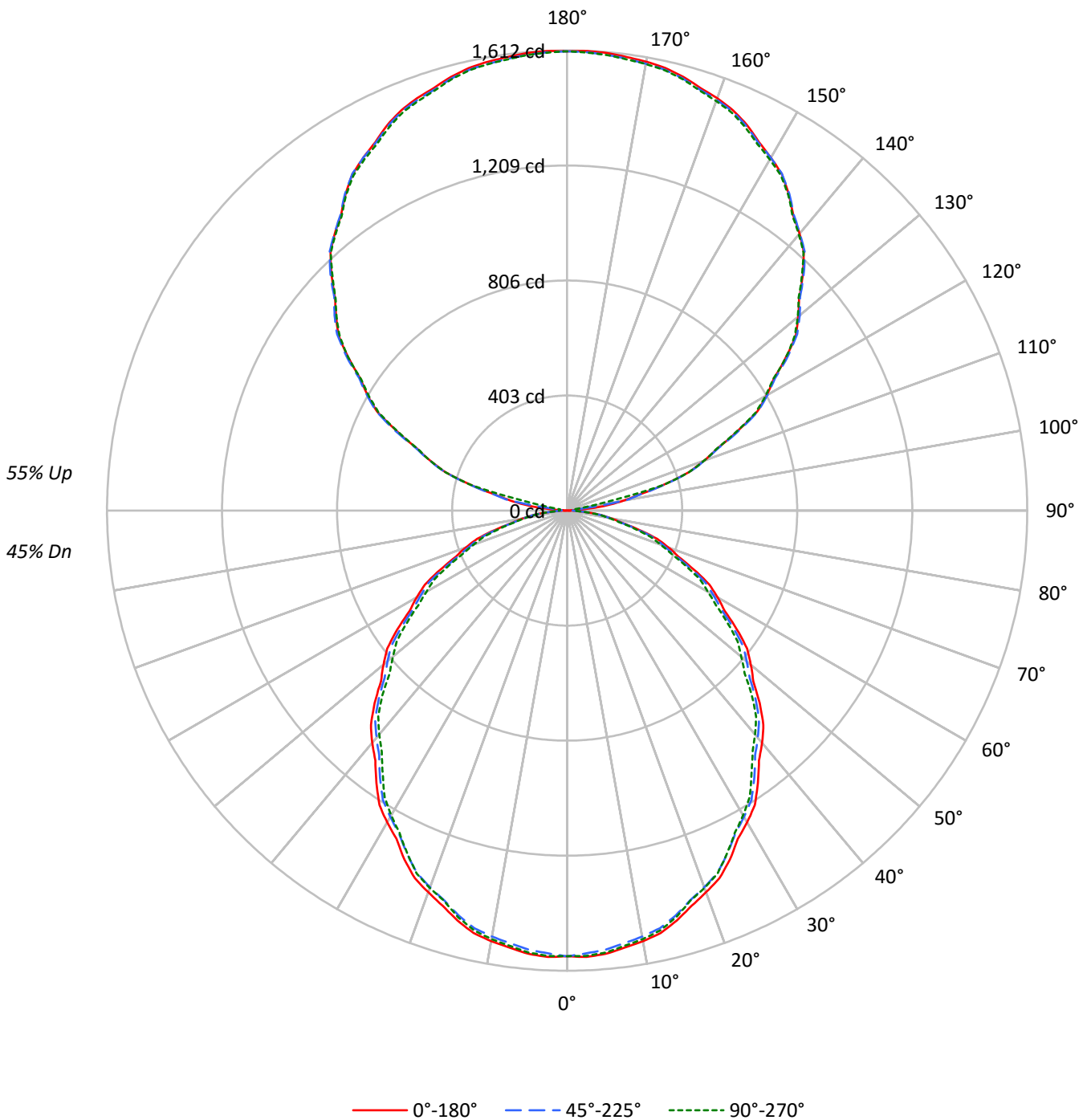
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45				
1	97	92	88	85	88	85	81	78	71	68	66	58	56	54	46	44	43	38				
2	88	81	74	69	80	74	69	64	62	58	55	50	48	45	40	38	37	32				
3	80	71	63	58	73	65	59	54	54	50	46	45	41	38	35	33	31	27				
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23				
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20				
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	21	18				
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16				
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14				
9	49	37	30	25	45	35	28	23	29	24	20	25	20	18	20	17	15	13				
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	11				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10083	10083	10083
5°	10105	10009	10073
10°	10044	9938	9996
15°	9934	9819	9860
20°	9779	9652	9669
25°	9612	9453	9443
30°	9405	9238	9192
35°	9183	9008	8881
40°	8955	8757	8632
45°	8709	8528	8359
50°	8439	8252	8004
55°	8178	7942	7719
60°	7865	7626	7355
65°	7494	7248	7002
70°	7138	6811	6577
75°	6503	6288	6071
80°	5787	5694	5560
85°	5039	5128	4846



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.2	1.6
10°-20°	415.8	4.6
20°-30°	613.9	6.8
30°-40°	716.4	8.0
40°-50°	719.5	8.0
50°-60°	631.6	7.0
60°-70°	470.6	5.2
70°-80°	269.1	3.0
80°-90°	81.6	0.9
90°-100°	58.5	0.6
100°-110°	360.3	4.0
110°-120°	653.4	7.3
120°-130°	838.6	9.3
130°-140°	902.0	10.0
140°-150°	846.7	9.4
150°-160°	684.9	7.6
160°-170°	442.9	4.9
170°-180°	152.8	1.7
0°-30°	1177.0	13.1
0°-40°	1893.4	21.0
0°-60°	3244.5	36.0
0°-90°	4065.8	45.1
90°-120°	1072.2	11.9
90°-150°	3659.5	40.6
90°-180°	4940.0	54.9
0°-180°	9005.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1561	1561	1561	1561	1561	
5°	1559	1556	1544	1554	1554	148
15°	1486	1482	1468	1474	1475	419
25°	1349	1342	1326	1329	1325	620
35°	1165	1159	1142	1136	1126	728
45°	954	948	934	920	915	734
55°	726	722	705	694	686	648
65°	490	487	474	464	458	486
75°	261	258	252	248	243	278
85°	68	69	69	68	65	76
90°	1	11	19	25	29	7
95°	68	62	19	25	25	87
105°	351	355	355	355	354	372
115°	658	664	665	661	654	652
125°	936	944	944	940	936	836
135°	1167	1174	1172	1170	1163	900
145°	1354	1356	1356	1357	1350	846
155°	1491	1484	1486	1489	1480	686
165°	1573	1566	1567	1573	1565	444
175°	1609	1602	1603	1611	1602	153
180°	1609	1609	1609	1609	1609	



TEST NUMBER: P333488-927

CATALOG NUMBER: S125DIW-S1270D1560U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2
2.5°	1565.1	1564.5	1563.8	1563.1	1562.5	1561.1	1558.9	1556.6	1554.5	1552.3	1554.5
5°	1558.7	1558.1	1557.6	1557.0	1556.5	1554.9	1552.1	1549.4	1546.7	1543.9	1546.3
7.5°	1544.4	1543.8	1543.3	1542.7	1542.1	1540.4	1537.4	1534.4	1531.4	1528.4	1530.7
10°	1531.5	1531.0	1530.4	1529.9	1529.3	1527.6	1524.6	1521.5	1518.5	1515.4	1517.7
12.5°	1515.7	1514.7	1513.8	1512.8	1511.8	1509.9	1507.0	1504.3	1501.5	1498.7	1500.5
15°	1485.8	1485.0	1484.2	1483.4	1482.6	1480.6	1477.6	1474.6	1471.6	1468.5	1469.9
17.5°	1451.5	1450.3	1449.1	1447.9	1446.7	1444.5	1441.4	1438.2	1435.1	1431.9	1433.7
20°	1422.8	1422.3	1421.7	1421.2	1420.6	1418.6	1415.0	1411.4	1407.9	1404.3	1406.2
22.5°	1394.2	1393.2	1392.2	1391.2	1390.2	1388.1	1384.7	1381.4	1378.0	1374.7	1375.9
25°	1348.8	1347.3	1346.0	1344.7	1343.2	1340.8	1337.2	1333.6	1330.1	1326.5	1327.1
27.5°	1295.6	1294.8	1294.0	1293.2	1292.4	1290.1	1286.4	1282.7	1279.1	1275.3	1275.5
30°	1261.1	1260.2	1259.4	1258.5	1257.7	1255.3	1251.2	1247.1	1242.9	1238.8	1238.3
32.5°	1223.5	1222.3	1221.0	1219.7	1218.5	1216.0	1212.3	1208.6	1204.9	1201.3	1200.3
35°	1164.7	1163.6	1162.5	1161.4	1160.3	1157.9	1154.0	1150.2	1146.3	1142.5	1141.1
37.5°	1103.7	1102.3	1101.0	1099.5	1098.2	1095.7	1092.1	1088.5	1084.8	1081.2	1079.2
40°	1062.2	1060.8	1059.5	1058.0	1056.7	1054.1	1050.3	1046.4	1042.6	1038.7	1036.3
42.5°	1017.7	1016.6	1015.4	1014.2	1013.1	1010.6	1006.8	1002.9	999.1	995.2	993.0
45°	953.5	952.4	951.3	950.2	949.1	946.9	943.6	940.3	937.1	933.7	930.4
47.5°	884.3	884.4	884.5	884.5	884.6	882.6	878.7	874.7	870.8	866.8	863.5
50°	839.9	839.1	838.2	837.4	836.5	834.5	831.2	827.9	824.7	821.3	817.8
52.5°	794.4	793.8	793.2	792.6	792.0	790.0	786.4	782.9	779.4	775.9	772.8
55°	726.3	725.4	724.6	723.7	722.9	720.6	716.8	713.0	709.1	705.3	702.7
57.5°	654.3	653.9	653.5	653.1	652.6	650.8	647.5	644.3	641.0	637.8	634.6
60°	608.9	607.8	606.7	605.6	604.5	602.5	599.4	596.4	593.4	590.4	587.6
62.5°	561.5	560.6	559.8	558.8	557.9	556.3	553.7	551.0	548.5	545.9	543.0
65°	490.4	489.8	489.3	488.7	488.1	486.3	483.3	480.3	477.3	474.3	471.8
67.5°	421.4	420.3	419.1	418.0	416.8	415.1	412.9	410.6	408.4	406.1	404.0
70°	378.0	376.6	375.2	373.8	372.5	370.5	368.0	365.6	363.1	360.7	359.0
72.5°	330.5	329.5	328.7	327.7	326.8	325.5	323.9	322.3	320.8	319.2	317.3
75°	260.6	260.1	259.5	259.0	258.4	257.5	256.1	254.7	253.3	252.0	251.1
77.5°	196.1	195.9	195.7	195.5	195.3	194.8	194.0	193.2	192.4	191.7	191.2
80°	155.6	155.6	155.6	155.6	155.6	155.3	154.8	154.2	153.7	153.1	152.9
82.5°	120.0	119.6	119.1	118.7	118.3	118.0	117.9	117.8	117.7	117.6	117.1
85°	68.0	68.2	68.4	68.8	69.0	69.2	69.2	69.2	69.2	69.2	68.9
87.5°	26.9	27.3	27.7	28.2	28.6	28.9	29.1	29.2	29.4	29.5	29.8
90°	1.2	3.3	5.5	7.5	9.7	11.6	13.5	15.4	17.2	19.1	20.4
92.5°	18.4	16.9	15.4	13.9	12.4	12.5	14.2	15.8	17.4	19.1	20.4
95°	68.0	67.2	66.4	65.6	64.8	59.3	49.3	39.2	29.2	19.1	20.4
97.5°	141.9	143.3	144.7	146.2	147.7	138.4	118.4	98.5	78.6	58.7	51.2
100°	199.2	199.9	200.7	201.5	202.3	203.3	204.3	205.4	206.4	207.5	168.0
102.5°	257.4	258.3	259.4	260.4	261.3	262.2	262.8	263.5	264.1	264.7	257.3
105°	350.6	351.6	352.8	353.8	354.8	355.4	355.4	355.4	355.4	355.4	355.4
107.5°	447.4	447.4	447.4	447.4	447.4	447.7	448.2	448.8	449.3	449.8	449.9
110°	510.4	510.4	510.4	510.4	510.4	510.6	511.2	511.7	512.2	512.8	512.0



TEST NUMBER: P333488-927

CATALOG NUMBER: S125DIW-S1270D1560U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	569.6	570.2	570.8	571.5	572.1	572.6	572.9	573.2	573.5	573.9	572.8
115°	658.3	659.6	660.9	662.3	663.5	664.3	664.6	664.9	665.2	665.4	664.3
117.5°	750.1	750.0	750.0	750.0	749.9	750.4	751.4	752.3	753.4	754.4	753.0
120°	807.3	807.1	806.8	806.5	806.3	806.5	807.3	808.1	808.9	809.7	809.2
122.5°	857.9	858.9	859.9	860.9	861.9	862.6	863.0	863.3	863.7	864.1	863.6
125°	936.1	937.9	939.8	941.7	943.6	944.4	944.4	944.4	944.4	944.4	943.4
127.5°	1010.7	1012.1	1013.4	1014.8	1016.1	1016.7	1016.5	1016.4	1016.2	1016.1	1015.4
130°	1056.5	1057.9	1059.2	1060.6	1061.8	1062.6	1063.0	1063.2	1063.4	1063.7	1063.0
132.5°	1102.3	1103.9	1105.4	1107.0	1108.5	1109.0	1108.4	1107.8	1107.2	1106.7	1106.5
135°	1167.4	1169.0	1170.7	1172.3	1173.9	1174.3	1173.9	1173.3	1172.7	1172.3	1171.7
137.5°	1227.3	1228.7	1230.1	1231.4	1232.9	1233.3	1232.8	1232.3	1231.8	1231.4	1231.5
140°	1266.5	1267.0	1267.5	1268.0	1268.6	1268.7	1268.4	1268.2	1267.9	1267.7	1268.2
142.5°	1301.7	1302.0	1302.3	1302.7	1303.0	1303.4	1303.8	1304.1	1304.5	1304.9	1305.0
145°	1353.5	1354.0	1354.6	1355.1	1355.7	1355.9	1355.9	1355.9	1355.9	1355.9	1356.1
147.5°	1398.8	1398.7	1398.6	1398.5	1398.4	1398.5	1398.8	1399.2	1399.5	1399.8	1400.1
150°	1427.4	1426.9	1426.4	1425.8	1425.3	1425.3	1425.8	1426.4	1426.9	1427.4	1428.0
152.5°	1455.1	1454.0	1452.8	1451.6	1450.4	1450.1	1450.6	1451.2	1451.8	1452.2	1452.8
155°	1490.6	1489.1	1487.5	1485.9	1484.3	1483.8	1484.3	1484.8	1485.3	1485.9	1486.7
157.5°	1518.1	1517.1	1516.2	1515.2	1514.3	1513.8	1513.9	1513.9	1513.9	1514.0	1514.9
160°	1537.2	1535.6	1534.0	1532.4	1530.8	1530.1	1530.4	1530.7	1530.9	1531.2	1532.2
162.5°	1552.4	1550.9	1549.3	1547.6	1546.0	1545.4	1545.6	1545.9	1546.2	1546.4	1547.9
165°	1573.0	1571.4	1569.7	1568.1	1566.5	1565.9	1566.1	1566.5	1566.7	1566.9	1568.5
167.5°	1588.2	1586.6	1584.9	1583.3	1581.6	1581.0	1581.2	1581.4	1581.8	1582.0	1583.9
170°	1596.8	1594.9	1593.1	1591.2	1589.4	1588.6	1588.8	1589.1	1589.4	1589.6	1591.7
172.5°	1602.5	1600.7	1598.8	1597.0	1595.1	1594.4	1594.9	1595.4	1595.9	1596.3	1598.2
175°	1608.7	1607.1	1605.5	1603.9	1602.3	1601.7	1602.0	1602.2	1602.5	1602.7	1604.9
177.5°	1611.5	1610.3	1609.0	1607.7	1606.5	1605.9	1606.1	1606.4	1606.5	1606.8	1608.3
180°	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7



TEST NUMBER: P333488-927

CATALOG NUMBER: S125DIW-S1270D1560U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2	1561.2
2.5°	1556.6	1558.9	1561.1	1562.0	1561.9	1561.6	1561.4	1561.2
5°	1548.8	1551.3	1553.8	1554.9	1554.6	1554.3	1554.0	1553.8
7.5°	1533.1	1535.6	1537.9	1539.1	1538.8	1538.5	1538.3	1537.9
10°	1519.9	1522.1	1524.2	1525.2	1525.0	1524.6	1524.4	1524.2
12.5°	1502.2	1504.0	1505.7	1506.6	1506.5	1506.4	1506.4	1506.3
15°	1471.3	1472.7	1474.0	1474.7	1474.7	1474.7	1474.7	1474.7
17.5°	1435.4	1437.1	1438.8	1438.9	1437.6	1436.2	1434.8	1433.5
20°	1408.2	1410.1	1412.0	1412.3	1410.9	1409.5	1408.2	1406.8
22.5°	1377.2	1378.5	1379.7	1379.9	1379.0	1378.0	1377.1	1376.2
25°	1327.6	1328.2	1328.7	1328.6	1327.8	1326.9	1326.1	1325.2
27.5°	1275.6	1275.7	1275.8	1275.4	1274.6	1273.8	1273.0	1272.2
30°	1237.7	1237.2	1236.6	1236.0	1235.1	1234.3	1233.4	1232.6
32.5°	1199.3	1198.3	1197.3	1196.0	1194.6	1193.1	1191.6	1190.2
35°	1139.7	1138.4	1137.0	1135.2	1133.0	1130.8	1128.6	1126.4
37.5°	1077.1	1075.1	1073.1	1071.4	1070.2	1068.9	1067.6	1066.4
40°	1033.8	1031.3	1028.8	1027.2	1026.4	1025.6	1024.7	1023.9
42.5°	990.8	988.5	986.3	984.5	983.3	982.0	980.7	979.5
45°	927.2	923.8	920.6	918.5	917.7	916.9	916.0	915.2
47.5°	860.1	856.7	853.4	850.8	848.8	846.9	845.0	843.1
50°	814.2	810.6	807.1	804.3	802.4	800.5	798.6	796.6
52.5°	769.6	766.5	763.3	760.7	758.6	756.5	754.3	752.2
55°	700.3	697.8	695.4	693.2	691.3	689.4	687.4	685.5
57.5°	631.4	628.3	625.1	623.0	621.9	620.9	619.8	618.8
60°	584.9	582.2	579.4	577.1	575.1	573.2	571.3	569.4
62.5°	540.0	537.0	534.1	531.9	530.4	528.9	527.4	525.9
65°	469.4	466.8	464.4	462.6	461.5	460.4	459.3	458.2
67.5°	402.0	399.8	397.8	396.4	395.7	395.1	394.4	393.7
70°	357.4	355.7	354.0	352.7	351.6	350.5	349.4	348.3
72.5°	315.4	313.5	311.7	310.2	309.1	308.0	306.9	305.8
75°	250.3	249.5	248.7	247.7	246.6	245.5	244.4	243.3
77.5°	190.7	190.2	189.7	189.1	188.3	187.5	186.8	186.0
80°	152.6	152.3	152.0	151.6	151.1	150.5	150.0	149.5
82.5°	116.6	116.1	115.6	115.3	115.2	115.1	114.9	114.9
85°	68.6	68.4	68.0	67.7	67.1	66.5	66.0	65.4
87.5°	30.0	30.3	30.6	30.6	30.3	30.0	29.7	29.5
90°	21.7	23.1	24.4	25.4	26.2	27.0	27.8	28.6
92.5°	21.7	23.1	24.4	25.2	25.6	26.0	26.4	26.7
95°	21.7	23.1	24.4	25.0	25.0	25.0	25.0	25.0
97.5°	43.7	36.3	28.8	25.0	25.0	25.0	25.0	25.0
100°	128.5	89.0	49.6	29.3	28.2	27.2	26.1	25.0
102.5°	249.8	242.3	234.9	222.1	204.1	186.1	168.0	150.0
105°	355.4	355.4	355.4	355.2	355.0	354.7	354.4	354.2
107.5°	450.0	450.0	450.0	449.6	448.9	448.1	447.3	446.5
110°	511.2	510.4	509.6	509.4	509.6	509.8	510.2	510.4



TEST NUMBER: P333488-927

CATALOG NUMBER: S125DIW-S1270D1560U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	571.8	570.8	569.8	569.1	568.8	568.4	568.0	567.6
115°	663.3	662.3	661.2	659.9	658.3	656.6	655.1	653.5
117.5°	751.6	750.3	748.8	747.8	747.2	746.5	745.8	745.0
120°	808.7	808.1	807.6	806.7	805.3	804.0	802.7	801.4
122.5°	863.0	862.5	862.0	860.9	859.4	857.9	856.3	854.8
125°	942.4	941.3	940.2	939.3	938.5	937.7	936.9	936.1
127.5°	1014.9	1014.3	1013.7	1012.4	1010.4	1008.5	1006.5	1004.6
130°	1062.2	1061.4	1060.6	1059.5	1058.2	1056.9	1055.5	1054.2
132.5°	1106.4	1106.2	1106.0	1105.3	1104.0	1102.6	1101.3	1099.9
135°	1171.2	1170.7	1170.1	1169.0	1167.4	1165.9	1164.3	1162.7
137.5°	1231.6	1231.7	1231.8	1231.2	1229.8	1228.4	1227.0	1225.7
140°	1268.7	1269.2	1269.8	1269.2	1267.7	1266.1	1264.5	1262.9
142.5°	1305.0	1305.2	1305.3	1304.6	1302.9	1301.3	1299.7	1298.1
145°	1356.5	1356.7	1356.9	1356.3	1354.7	1353.1	1351.5	1350.0
147.5°	1400.4	1400.7	1401.1	1400.3	1398.4	1396.5	1394.6	1392.7
150°	1428.5	1429.0	1429.6	1428.8	1426.6	1424.5	1422.4	1420.3
152.5°	1453.3	1453.8	1454.4	1453.7	1451.8	1449.9	1448.0	1446.0
155°	1487.5	1488.3	1489.1	1488.4	1486.3	1484.2	1482.0	1479.9
157.5°	1515.7	1516.6	1517.4	1516.8	1514.7	1512.5	1510.4	1508.3
160°	1533.3	1534.4	1535.4	1534.9	1532.8	1530.7	1528.5	1526.5
162.5°	1549.4	1550.9	1552.4	1552.0	1549.7	1547.3	1545.0	1542.6
165°	1570.1	1571.8	1573.4	1573.0	1571.0	1568.8	1566.7	1564.6
167.5°	1585.8	1587.7	1589.6	1589.4	1587.0	1584.6	1582.2	1579.8
170°	1593.9	1596.0	1598.1	1598.0	1595.6	1593.2	1590.8	1588.4
172.5°	1600.1	1602.0	1603.9	1603.7	1601.3	1598.9	1596.6	1594.2
175°	1606.9	1609.1	1611.2	1611.1	1608.7	1606.3	1603.9	1601.6
177.5°	1609.8	1611.2	1612.7	1612.6	1610.9	1609.2	1607.5	1605.8
180°	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7

(END OF REPORT)