

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: P333738-927

Luminaire Tested: **S125RDIW-S1270D1560U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333738-927  
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: S125RDIW-S1270D1560U927-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1560 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8806.7 lumens  
Efficiency: N/A  
Efficacy: 106.2 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: General Diffuse

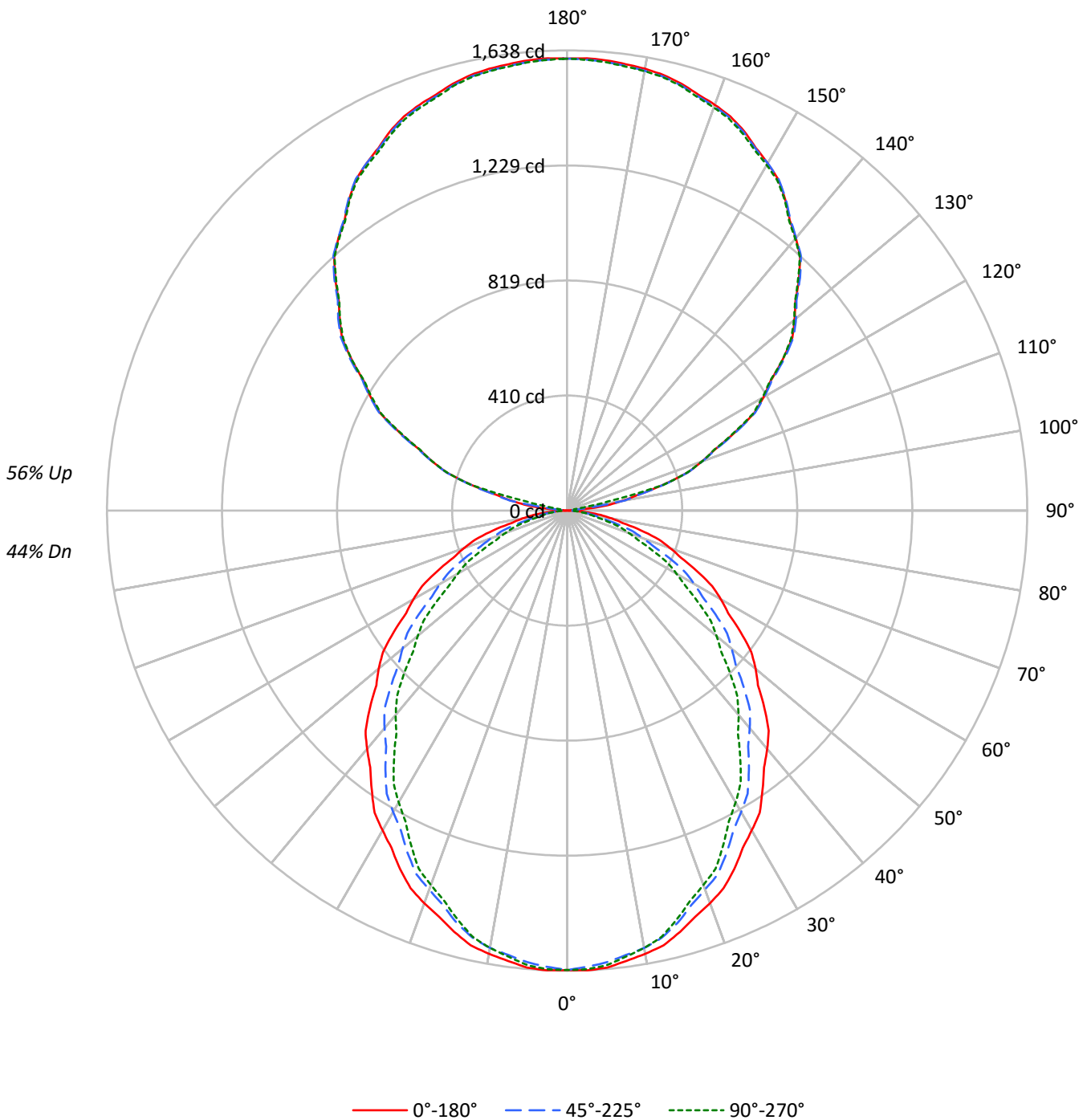
Input Watts (W): 82.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	37
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	40	38	37	32
3	80	71	64	58	73	65	59	54	55	50	46	45	41	39	35	33	31	27
4	74	63	55	49	67	58	51	46	49	44	40	40	36	33	32	29	27	23
5	68	56	48	42	62	52	45	40	44	38	34	36	32	29	29	26	24	20
6	62	50	43	37	57	47	40	34	39	34	30	32	28	25	26	23	21	18
7	58	46	38	32	53	42	35	30	36	30	26	30	25	22	24	21	19	16
8	53	41	34	29	49	38	32	27	32	27	23	27	23	20	22	19	17	14
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	20	17	15	13
10	46	35	28	23	43	32	26	21	27	22	19	23	19	16	19	16	14	12

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10561	10561	10561
5°	10585	10466	10529
10°	10506	10368	10368
15°	10380	10158	10075
20°	10221	9864	9745
25°	10033	9576	9365
30°	9801	9238	8944
35°	9563	8891	8472
40°	9340	8528	8008
45°	9070	8122	7501
50°	8799	7681	6974
55°	8483	7260	6411
60°	8169	6748	5807
65°	7795	6154	5115
70°	7370	5410	4409
75°	6780	4561	3666
80°	5973	3582	3080
85°	5039	2927	2749



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.8	1.7
10°-20°	429.7	4.9
20°-30°	623.1	7.1
30°-40°	710.2	8.1
40°-50°	692.3	7.9
50°-60°	582.7	6.6
60°-70°	408.5	4.6
70°-80°	210.0	2.4
80°-90°	56.4	0.6
90°-100°	58.5	0.7
100°-110°	360.3	4.1
110°-120°	653.4	7.4
120°-130°	838.6	9.5
130°-140°	902.0	10.2
140°-150°	846.7	9.6
150°-160°	684.9	7.8
160°-170°	442.9	5.0
170°-180°	152.8	1.7
0°-30°	1206.6	13.7
0°-40°	1916.8	21.8
0°-60°	3191.8	36.2
0°-90°	3866.6	43.9
90°-120°	1072.2	12.2
90°-150°	3659.5	41.6
90°-180°	4940.0	56.1
0°-180°	8806.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1635	1635	1635	1635	1635	
5°	1633	1627	1614	1626	1624	155
15°	1552	1544	1519	1517	1507	437
25°	1408	1388	1344	1328	1314	648
35°	1213	1182	1128	1093	1074	759
45°	993	955	889	842	821	766
55°	753	712	645	591	569	674
65°	510	467	403	355	335	505
75°	272	234	183	157	147	288
85°	68	47	40	38	37	76
90°	1	11	19	25	29	6
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: P333738-927

CATALOG NUMBER: S125RDIW-S1270D1560U927-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3
2.5°	1638.2	1637.6	1636.9	1636.3	1635.6	1634.2	1632.0	1629.8	1627.6	1625.4	1627.6
5°	1632.8	1631.7	1630.6	1629.5	1628.4	1626.4	1623.3	1620.3	1617.3	1614.3	1617.0
7.5°	1616.8	1615.7	1614.7	1613.6	1612.6	1610.3	1606.6	1603.0	1599.4	1595.8	1597.7
10°	1602.0	1601.1	1600.3	1599.5	1598.6	1596.3	1592.4	1588.6	1584.8	1581.0	1581.8
12.5°	1585.2	1584.1	1583.0	1582.0	1581.0	1577.9	1572.7	1567.6	1562.3	1557.2	1557.8
15°	1552.5	1550.9	1549.3	1547.6	1545.9	1542.2	1536.4	1530.7	1525.0	1519.2	1518.9
17.5°	1515.7	1513.2	1510.7	1508.2	1505.6	1500.7	1493.5	1486.2	1479.0	1471.7	1470.4
20°	1487.1	1484.3	1481.5	1478.8	1476.1	1470.3	1461.6	1452.8	1444.0	1435.2	1433.8
22.5°	1455.5	1452.7	1449.9	1447.2	1444.5	1438.5	1429.3	1420.1	1410.8	1401.6	1398.9
25°	1408.0	1403.9	1399.8	1395.7	1391.5	1384.4	1374.3	1364.1	1353.9	1343.8	1340.2
27.5°	1353.7	1348.7	1343.7	1338.7	1333.7	1325.8	1314.9	1304.0	1293.2	1282.3	1277.3
30°	1314.2	1308.9	1303.7	1298.5	1293.3	1284.9	1273.4	1261.9	1250.3	1238.8	1232.5
32.5°	1275.7	1269.6	1263.5	1257.4	1251.3	1242.3	1230.6	1218.9	1207.0	1195.3	1188.4
35°	1212.9	1206.3	1199.7	1193.1	1186.5	1177.0	1164.7	1152.4	1140.0	1127.7	1119.7
37.5°	1151.4	1143.4	1135.4	1127.4	1119.3	1108.9	1096.2	1083.5	1070.7	1058.0	1048.5
40°	1107.9	1099.6	1091.4	1083.2	1075.0	1064.2	1051.1	1037.9	1024.7	1011.5	1001.2
42.5°	1062.5	1054.0	1045.5	1037.0	1028.6	1017.6	1004.0	990.4	976.8	963.1	953.2
45°	993.0	985.1	977.1	969.2	961.2	949.7	934.5	919.5	904.4	889.3	878.3
47.5°	921.1	912.8	904.4	896.0	887.6	875.8	860.5	845.3	830.1	814.9	803.6
50°	875.7	866.6	857.5	848.5	839.5	827.1	811.4	795.8	780.1	764.5	753.0
52.5°	826.2	817.0	807.7	798.4	789.2	777.1	762.4	747.7	732.8	718.1	705.7
55°	753.4	744.7	735.9	727.1	718.3	706.2	690.9	675.5	660.1	644.8	632.4
57.5°	679.8	670.4	661.0	651.6	642.2	630.2	615.4	600.5	585.7	570.8	558.8
60°	632.4	622.7	613.1	603.6	594.0	581.7	566.9	552.1	537.3	522.4	510.4
62.5°	582.0	572.8	563.6	554.4	545.3	533.2	518.2	503.1	488.1	473.0	461.8
65°	510.1	500.7	491.5	482.1	472.8	460.8	446.3	431.7	417.2	402.7	391.7
67.5°	438.7	429.4	420.0	410.7	401.4	389.8	375.8	361.9	347.9	334.0	323.9
70°	390.3	381.0	371.6	362.3	353.0	341.4	327.7	314.0	300.2	286.5	278.1
72.5°	342.9	333.7	324.6	315.5	306.4	295.4	282.6	269.7	256.9	244.1	236.2
75°	271.7	263.5	255.2	247.0	238.8	228.9	217.4	205.9	194.3	182.8	176.7
77.5°	201.1	194.5	187.9	181.3	174.8	166.8	157.6	148.4	139.2	129.9	125.7
80°	160.6	154.0	147.4	140.8	134.2	127.1	119.4	111.7	104.0	96.3	93.9
82.5°	121.0	115.1	109.2	103.2	97.4	91.7	86.4	81.2	75.9	70.7	69.5
85°	68.0	63.0	58.1	53.1	48.2	45.0	43.6	42.3	40.9	39.5	39.2
87.5°	23.0	21.9	20.8	19.6	18.5	18.1	18.2	18.3	18.5	18.6	18.9
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: P333738-927

CATALOG NUMBER: S125RDIW-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: P333738-927

CATALOG NUMBER: S125RDIW-S1270D1560U927-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3
2.5°	1629.8	1632.0	1634.2	1635.1	1635.0	1634.7	1634.5	1634.3
5°	1619.8	1622.5	1625.2	1626.4	1625.8	1625.2	1624.7	1624.1
7.5°	1599.6	1601.6	1603.5	1604.1	1603.5	1602.9	1602.3	1601.7
10°	1582.5	1583.4	1584.2	1584.2	1583.4	1582.5	1581.8	1581.0
12.5°	1558.5	1559.0	1559.6	1559.3	1558.1	1556.8	1555.5	1554.3
15°	1518.6	1518.4	1518.1	1516.7	1514.3	1511.8	1509.3	1506.8
17.5°	1469.0	1467.6	1466.3	1464.6	1462.5	1460.5	1458.5	1456.4
20°	1432.4	1431.1	1429.7	1427.8	1425.3	1422.8	1420.4	1417.9
22.5°	1396.2	1393.5	1390.8	1388.5	1386.5	1384.4	1382.4	1380.4
25°	1336.6	1333.1	1329.5	1326.2	1323.2	1320.2	1317.2	1314.2
27.5°	1272.3	1267.3	1262.3	1258.4	1255.5	1252.5	1249.6	1246.7
30°	1226.2	1219.9	1213.5	1209.2	1206.7	1204.2	1201.7	1199.3
32.5°	1181.4	1174.4	1167.4	1162.4	1159.3	1156.1	1153.0	1149.9
35°	1111.7	1103.7	1095.8	1089.9	1086.1	1082.2	1078.4	1074.5
37.5°	1038.9	1029.4	1019.8	1013.1	1009.4	1005.7	1002.0	998.2
40°	990.7	980.2	969.9	963.0	959.6	956.4	953.1	949.8
42.5°	943.2	933.2	923.2	915.8	910.9	906.1	901.3	896.4
45°	867.3	856.3	845.3	837.8	833.7	829.6	825.5	821.3
47.5°	792.3	781.0	769.7	761.8	757.2	752.7	748.1	743.5
50°	741.5	729.9	718.4	710.6	706.5	702.3	698.2	694.1
52.5°	693.2	680.9	668.4	660.2	656.1	652.0	647.8	643.7
55°	620.0	607.7	595.3	586.9	582.6	578.1	573.8	569.4
57.5°	546.7	534.6	522.5	514.6	510.6	506.8	502.9	499.0
60°	498.3	486.2	474.1	466.0	461.9	457.8	453.7	449.6
62.5°	450.7	439.4	428.3	420.6	416.5	412.3	408.2	404.1
65°	380.7	369.7	358.7	351.2	347.1	342.9	338.8	334.7
67.5°	313.9	303.8	293.8	287.1	283.8	280.5	277.3	273.9
70°	269.5	261.0	252.5	246.6	243.3	240.0	236.7	233.5
72.5°	228.4	220.5	212.6	207.6	205.4	203.3	201.1	198.8
75°	170.7	164.7	158.7	154.6	152.7	150.8	148.9	146.9
77.5°	121.4	117.2	113.0	110.2	108.8	107.3	105.9	104.5
80°	91.4	89.0	86.4	84.9	84.4	83.8	83.3	82.8
82.5°	68.4	67.2	66.1	65.3	65.0	64.6	64.3	64.0
85°	39.0	38.7	38.4	38.2	37.9	37.6	37.3	37.1
87.5°	19.2	19.4	19.7	19.8	19.7	19.6	19.6	19.6
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: P333738-927

CATALOG NUMBER: S125RDIW-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)