

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: P333631-927

Luminaire Tested: **S125RDIP-S1270D1035U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333631-927  
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: S125RDIP-S1270D1035U927-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7142.1 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: General Diffuse

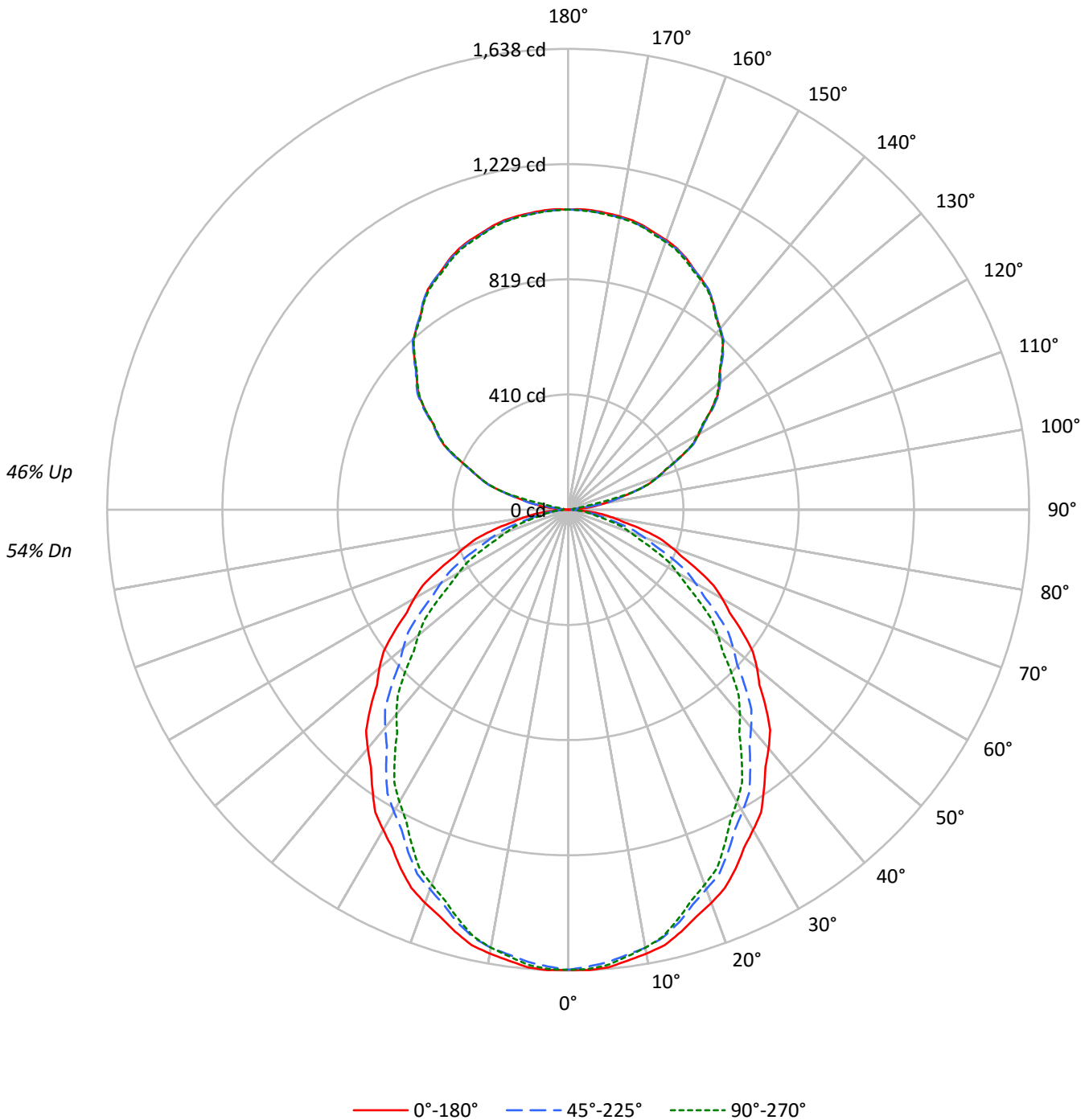
Input Watts (W): 66.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54
1	99	95	91	87	92	88	85	82	75	73	71	64	62	61	53	52	51	46
2	90	83	77	72	84	77	72	67	66	62	59	56	54	51	47	45	43	39
3	82	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37	33
4	76	65	57	51	70	61	54	48	52	47	43	45	41	37	38	35	32	29
5	69	58	50	44	64	54	47	42	47	41	37	40	36	33	34	31	28	25
6	64	52	44	38	59	49	41	36	42	37	32	36	32	29	31	28	25	22
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22	20
8	55	43	35	30	51	40	33	28	35	30	25	30	26	23	26	23	20	18
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16	15

**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	2.2
10°-20°	429.7	6.0
20°-30°	623.1	8.7
30°-40°	710.2	9.9
40°-50°	692.3	9.7
50°-60°	582.7	8.2
60°-70°	408.5	5.7
70°-80°	210.0	2.9
80°-90°	55.3	0.8
90°-100°	38.8	0.5
100°-110°	239.0	3.3
110°-120°	433.4	6.1
120°-130°	556.2	7.8
130°-140°	598.3	8.4
140°-150°	561.6	7.9
150°-160°	454.3	6.4
160°-170°	293.8	4.1
170°-180°	101.3	1.4
0°-30°	1206.6	16.9
0°-40°	1916.8	26.8
0°-60°	3191.8	44.7
0°-90°	3865.5	54.1
90°-120°	711.2	10.0
90°-150°	2427.2	34.0
90°-180°	3277.0	45.9
0°-180°	7142.1	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	7	13	17	19	5
95°	45	41	13	16	17	57
105°	232	236	236	236	235	246
115°	437	440	441	438	434	433
125°	621	626	626	623	621	554
135°	774	779	778	776	771	597
145°	898	899	899	900	895	561
155°	989	984	986	987	982	455
165°	1043	1039	1039	1043	1038	295
175°	1067	1063	1063	1069	1062	102
180°	1067	1067	1067	1067	1067	



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**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°	22.9	21.6	20.4	19.1	17.8	17.3	17.3	17.3	17.3	17.3	17.5
90°	0.8	2.2	3.6	5.0	6.4	7.8	9.0	10.2	11.4	12.7	13.5
92.5°	12.2	11.2	10.2	9.2	8.2	8.3	9.3	10.5	11.6	12.7	13.5
95°	45.1	44.5	44.0	43.5	43.0	39.4	32.7	26.0	19.3	12.7	13.5
97.5°	94.1	95.1	96.0	97.0	97.9	91.8	78.6	65.4	52.1	38.9	34.0
100°	132.1	132.6	133.2	133.6	134.2	134.8	135.5	136.3	136.9	137.6	111.5
102.5°	170.7	171.3	172.1	172.7	173.3	173.9	174.4	174.8	175.2	175.6	170.6
105°	232.5	233.2	233.9	234.6	235.4	235.7	235.7	235.7	235.7	235.7	235.7
107.5°	296.8	296.8	296.8	296.8	296.8	296.9	297.3	297.6	298.0	298.3	298.4
110°	338.5	338.5	338.5	338.5	338.5	338.7	339.1	339.5	339.8	340.1	339.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	377.8	378.2	378.6	379.1	379.5	379.8	380.0	380.2	380.4	380.6	379.9
115°	436.7	437.5	438.4	439.3	440.1	440.7	440.8	441.0	441.2	441.3	440.7
117.5°	497.5	497.5	497.4	497.4	497.4	497.7	498.4	499.0	499.7	500.3	499.5
120°	535.5	535.3	535.1	535.0	534.8	535.0	535.5	536.0	536.5	537.1	536.7
122.5°	569.0	569.7	570.4	571.0	571.7	572.1	572.4	572.7	572.9	573.1	572.7
125°	620.9	622.1	623.4	624.6	625.8	626.5	626.5	626.5	626.5	626.5	625.7
127.5°	670.4	671.3	672.2	673.0	673.9	674.3	674.2	674.1	674.0	673.9	673.5
130°	700.8	701.7	702.6	703.5	704.3	704.8	705.0	705.2	705.4	705.5	705.0
132.5°	731.2	732.2	733.2	734.2	735.2	735.5	735.1	734.8	734.4	734.0	733.9
135°	774.4	775.4	776.5	777.5	778.6	779.0	778.6	778.2	777.8	777.5	777.1
137.5°	814.0	815.0	815.9	816.8	817.7	818.0	817.7	817.4	817.1	816.7	816.8
140°	840.0	840.3	840.7	841.1	841.4	841.5	841.3	841.1	841.0	840.8	841.1
142.5°	863.4	863.6	863.9	864.0	864.3	864.5	864.7	865.0	865.2	865.5	865.5
145°	897.8	898.1	898.4	898.8	899.1	899.4	899.4	899.4	899.4	899.4	899.5
147.5°	927.8	927.7	927.6	927.6	927.5	927.6	927.8	928.0	928.2	928.4	928.7
150°	946.8	946.4	946.1	945.7	945.4	945.4	945.7	946.1	946.4	946.8	947.1
152.5°	965.1	964.4	963.6	962.8	962.0	961.9	962.2	962.5	962.9	963.2	963.6
155°	988.7	987.7	986.6	985.6	984.5	984.1	984.5	984.8	985.2	985.6	986.1
157.5°	1006.9	1006.2	1005.7	1005.0	1004.4	1004.1	1004.1	1004.2	1004.2	1004.2	1004.8
160°	1019.5	1018.5	1017.5	1016.4	1015.3	1014.9	1015.1	1015.3	1015.4	1015.6	1016.3
162.5°	1029.7	1028.6	1027.5	1026.5	1025.5	1025.0	1025.2	1025.4	1025.6	1025.7	1026.7
165°	1043.3	1042.2	1041.2	1040.1	1039.1	1038.6	1038.8	1038.9	1039.2	1039.3	1040.4
167.5°	1053.4	1052.3	1051.2	1050.1	1049.1	1048.6	1048.8	1048.9	1049.1	1049.3	1050.6
170°	1059.1	1057.9	1056.6	1055.4	1054.2	1053.7	1053.8	1054.0	1054.2	1054.4	1055.7
172.5°	1062.9	1061.7	1060.4	1059.2	1058.0	1057.6	1057.8	1058.1	1058.4	1058.8	1060.0
175°	1067.0	1066.0	1064.9	1063.8	1062.8	1062.4	1062.6	1062.7	1062.9	1063.0	1064.5
177.5°	1068.9	1068.1	1067.2	1066.4	1065.6	1065.2	1065.3	1065.5	1065.6	1065.7	1066.8
180°	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0



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**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°	17.7	17.9	18.1	18.1	18.0	17.8	17.7	17.7
90°	14.4	15.3	16.2	16.9	17.4	17.9	18.5	19.0
92.5°	14.4	15.3	16.2	16.7	17.0	17.2	17.5	17.7
95°	14.4	15.3	16.2	16.6	16.6	16.6	16.6	16.6
97.5°	29.0	24.1	19.1	16.6	16.6	16.6	16.6	16.6
100°	85.2	59.1	32.9	19.4	18.7	18.0	17.3	16.6
102.5°	165.6	160.7	155.7	147.3	135.4	123.4	111.5	99.5
105°	235.7	235.7	235.7	235.6	235.4	235.3	235.1	234.9
107.5°	298.4	298.5	298.5	298.3	297.7	297.2	296.7	296.1
110°	339.1	338.5	338.0	337.9	338.0	338.2	338.3	338.5





TEST NUMBER: P333631-927

CATALOG NUMBER: S125RDIP-S1270D1035U927-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	379.3	378.6	378.0	377.5	377.2	377.0	376.8	376.5
115°	440.0	439.3	438.6	437.7	436.7	435.5	434.5	433.5
117.5°	498.5	497.6	496.7	496.0	495.6	495.1	494.6	494.2
120°	536.4	536.0	535.7	535.0	534.2	533.3	532.4	531.6
122.5°	572.4	572.1	571.7	571.0	570.1	569.0	568.0	567.0
125°	625.0	624.3	623.6	623.1	622.5	621.9	621.5	620.9
127.5°	673.1	672.7	672.3	671.5	670.2	668.9	667.7	666.3
130°	704.5	703.9	703.5	702.7	701.9	701.0	700.1	699.2
132.5°	733.8	733.7	733.6	733.1	732.2	731.3	730.5	729.6
135°	776.8	776.5	776.1	775.4	774.4	773.3	772.2	771.2
137.5°	816.9	817.0	817.1	816.6	815.7	814.8	813.9	812.9
140°	841.5	841.9	842.2	841.9	840.8	839.7	838.7	837.7
142.5°	865.6	865.7	865.8	865.3	864.2	863.2	862.1	861.0
145°	899.7	899.8	900.0	899.6	898.6	897.5	896.4	895.4
147.5°	928.8	929.1	929.3	928.8	927.5	926.2	925.0	923.7
150°	947.5	947.8	948.2	947.7	946.3	944.8	943.4	942.1
152.5°	963.9	964.3	964.6	964.2	962.9	961.6	960.4	959.1
155°	986.6	987.1	987.7	987.2	985.8	984.4	983.0	981.6
157.5°	1005.4	1005.9	1006.5	1006.1	1004.6	1003.2	1001.8	1000.4
160°	1017.0	1017.7	1018.4	1018.0	1016.7	1015.3	1013.8	1012.4
162.5°	1027.7	1028.6	1029.7	1029.4	1027.9	1026.3	1024.8	1023.2
165°	1041.4	1042.5	1043.5	1043.4	1042.0	1040.5	1039.2	1037.8
167.5°	1051.9	1053.1	1054.4	1054.2	1052.7	1051.1	1049.5	1047.9
170°	1057.2	1058.6	1060.0	1059.9	1058.3	1056.8	1055.2	1053.6
172.5°	1061.3	1062.6	1063.8	1063.7	1062.1	1060.5	1058.9	1057.4
175°	1065.9	1067.3	1068.7	1068.6	1067.0	1065.4	1063.8	1062.2
177.5°	1067.7	1068.7	1069.7	1069.6	1068.5	1067.4	1066.3	1065.1
180°	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0

(END OF REPORT)