

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: P333613-930

Luminaire Tested: **S125RDIP-S1270D365U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333613-930  
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-S1270D365U930-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5170.7 lumens  
Efficiency: N/A  
Efficacy: 103.8 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: Semi-Direct

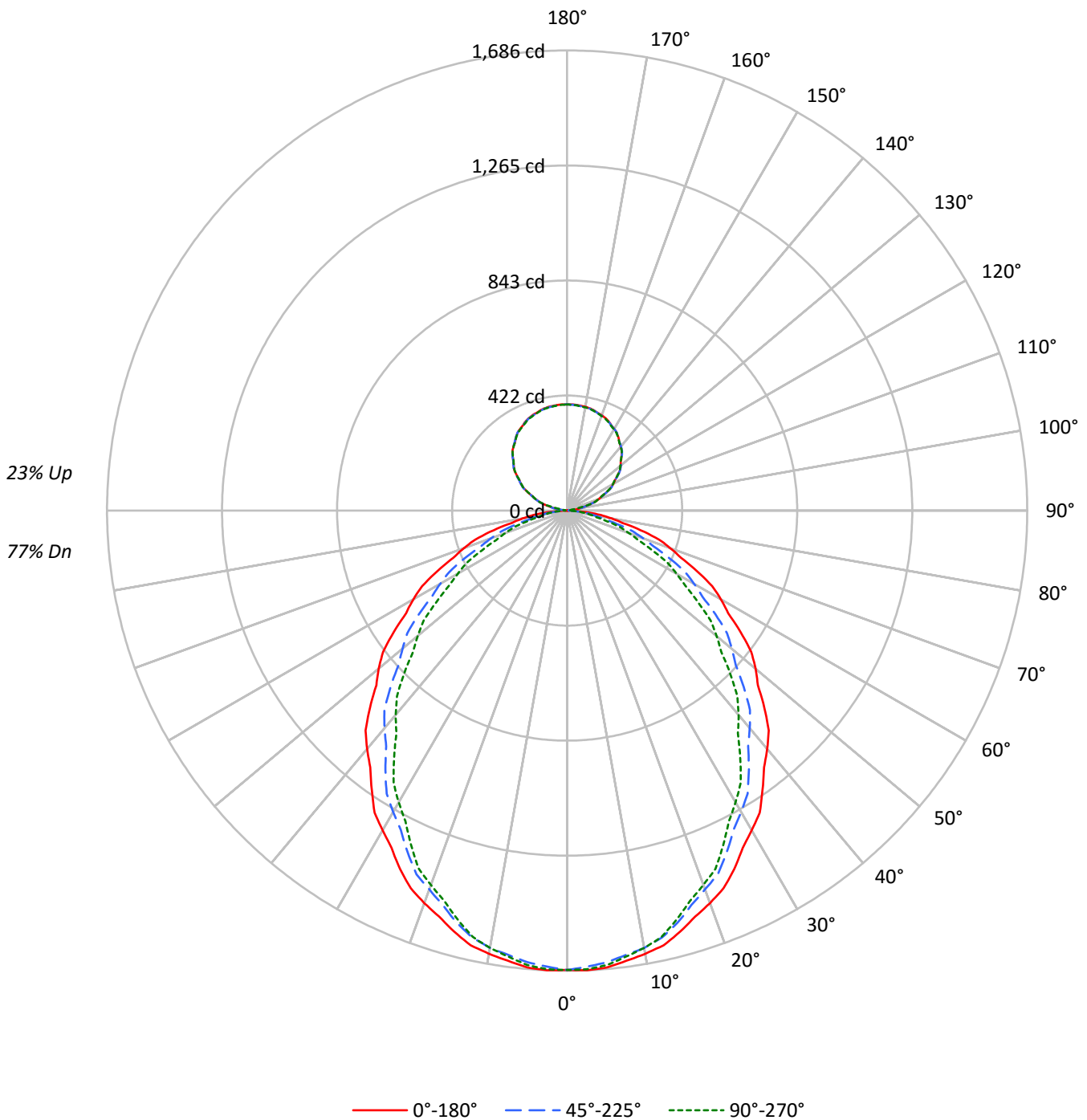
Input Watts (W): 49.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333613-930

CATALOG NUMBER: S125RDIP-S1270D365U930-4F0-1E-UDD-F

### Luminous Intensity Polar Plot





TEST NUMBER: P333613-930

CATALOG NUMBER: S125RDIP-S1270D365U930-4F0-1E-UDD-F

**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	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77
1	104	100	96	92	99	95	92	89	87	84	82	79	77	75	72	71	69	66
2	95	88	81	76	90	84	78	73	77	72	68	70	66	63	64	61	59	55
3	87	77	70	64	83	74	67	62	68	62	58	62	58	54	57	53	50	47
4	80	69	61	54	76	66	59	53	61	54	50	56	51	47	51	47	44	41
5	74	62	53	47	70	59	51	46	54	48	43	50	45	41	46	42	38	36
6	68	56	47	41	65	53	46	40	49	43	38	45	40	36	42	37	34	31
7	63	50	42	36	60	48	41	35	45	38	34	42	36	32	38	34	30	28
8	59	46	38	32	56	44	37	32	41	35	30	38	33	29	35	31	27	25
9	55	42	34	29	52	41	33	29	38	32	27	35	30	26	33	28	25	23
10	51	39	31	26	49	38	31	26	35	29	25	33	27	24	30	26	22	21

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

	0°	45°	90°
0°	10869	10869	10869
5°	10895	10771	10836
10°	10812	10670	10670
15°	10683	10454	10369
20°	10519	10152	10030
25°	10326	9855	9638
30°	10086	9508	9205
35°	9842	9150	8719
40°	9613	8777	8241
45°	9334	8360	7721
50°	9055	7905	7178
55°	8731	7472	6598
60°	8407	6945	5977
65°	8023	6333	5265
70°	7585	5569	4538
75°	6977	4694	3773
80°	6148	3686	3169
85°	5187	3016	2831



TEST NUMBER: P333613-930

CATALOG NUMBER: S125RDIP-S1270D365U930-4F0-1E-UDD-F

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.3	3.1
10°-20°	442.3	8.6
20°-30°	641.3	12.4
30°-40°	730.9	14.1
40°-50°	712.5	13.8
50°-60°	599.7	11.6
60°-70°	420.4	8.1
70°-80°	216.1	4.2
80°-90°	55.4	1.1
90°-100°	14.1	0.3
100°-110°	87.1	1.7
110°-120°	157.9	3.1
120°-130°	202.7	3.9
130°-140°	218.0	4.2
140°-150°	204.6	4.0
150°-160°	165.5	3.2
160°-170°	107.0	2.1
170°-180°	36.9	0.7
0°-30°	1241.9	24.0
0°-40°	1972.8	38.2
0°-60°	3284.9	63.5
0°-90°	3976.8	76.9
90°-120°	259.1	5.0
90°-150°	884.4	17.1
90°-180°	1194.0	23.1
0°-180°	5170.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1683	1683	1683	1683	1683	
5°	1680	1675	1661	1673	1672	159
15°	1598	1589	1564	1562	1551	450
25°	1449	1428	1383	1367	1352	666
35°	1248	1216	1161	1125	1106	781
45°	1022	983	915	866	845	788
55°	775	733	664	608	586	693
65°	525	480	414	365	344	520
75°	280	241	188	161	151	296
85°	70	48	41	39	38	79
90°	0	3	5	6	7	4
95°	16	15	5	6	6	21
105°	85	86	86	86	86	90
115°	159	160	161	160	158	158
125°	226	228	228	227	226	202
135°	282	284	283	283	281	217
145°	327	328	328	328	326	204
155°	360	359	359	360	358	166
165°	380	379	379	380	378	107
175°	389	387	387	389	387	37
180°	389	389	389	389	389	



TEST NUMBER: P333613-930

CATALOG NUMBER: S125RDIP-S1270D365U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0
2.5°	1686.0	1685.4	1684.7	1684.0	1683.3	1681.9	1679.6	1677.3	1675.1	1672.8	1675.1
5°	1680.5	1679.4	1678.2	1677.1	1675.9	1673.8	1670.7	1667.6	1664.5	1661.4	1664.2
7.5°	1663.9	1662.9	1661.8	1660.7	1659.6	1657.3	1653.5	1649.8	1646.1	1642.3	1644.3
10°	1648.7	1647.8	1647.0	1646.2	1645.3	1642.9	1638.9	1635.0	1631.0	1627.1	1627.9
12.5°	1631.4	1630.4	1629.2	1628.2	1627.1	1623.9	1618.6	1613.3	1607.9	1602.6	1603.3
15°	1597.8	1596.1	1594.5	1592.8	1591.1	1587.2	1581.3	1575.4	1569.5	1563.5	1563.3
17.5°	1559.9	1557.4	1554.8	1552.2	1549.6	1544.5	1537.1	1529.6	1522.2	1514.7	1513.3
20°	1530.5	1527.6	1524.8	1522.0	1519.1	1513.2	1504.2	1495.2	1486.1	1477.1	1475.7
22.5°	1497.9	1495.1	1492.2	1489.5	1486.6	1480.5	1471.0	1461.5	1452.0	1442.5	1439.7
25°	1449.1	1444.9	1440.6	1436.4	1432.2	1424.8	1414.4	1403.9	1393.4	1383.0	1379.3
27.5°	1393.2	1388.0	1382.9	1377.8	1372.6	1364.5	1353.2	1342.1	1330.9	1319.7	1314.6
30°	1352.5	1347.1	1341.7	1336.4	1331.1	1322.4	1310.5	1298.7	1286.8	1275.0	1268.4
32.5°	1312.9	1306.6	1300.3	1294.0	1287.8	1278.6	1266.5	1254.4	1242.3	1230.2	1223.0
35°	1248.3	1241.5	1234.7	1227.9	1221.2	1211.4	1198.7	1186.0	1173.3	1160.6	1152.3
37.5°	1185.0	1176.7	1168.5	1160.3	1151.9	1141.3	1128.2	1115.1	1102.0	1088.8	1079.0
40°	1140.2	1131.7	1123.2	1114.8	1106.4	1095.3	1081.7	1068.2	1054.6	1041.1	1030.4
42.5°	1093.5	1084.8	1076.0	1067.3	1058.7	1047.3	1033.3	1019.3	1005.3	991.2	981.0
45°	1022.0	1013.8	1005.6	997.4	989.2	977.4	961.8	946.3	930.7	915.3	903.9
47.5°	948.0	939.4	930.7	922.1	913.5	901.3	885.7	870.0	854.4	838.7	827.0
50°	901.2	891.9	882.6	873.3	864.0	851.3	835.1	819.0	802.9	786.8	774.9
52.5°	850.4	840.8	831.3	821.7	812.2	799.8	784.6	769.5	754.2	739.1	726.3
55°	775.4	766.4	757.3	748.3	739.2	726.8	711.0	695.2	679.4	663.6	650.9
57.5°	699.6	690.0	680.3	670.7	661.0	648.6	633.3	618.0	602.8	587.5	575.1
60°	650.9	640.9	631.0	621.2	611.3	598.7	583.4	568.2	552.9	537.7	525.3
62.5°	599.0	589.5	580.1	570.6	561.3	548.8	533.3	517.8	502.3	486.8	475.3
65°	525.0	515.4	505.8	496.2	486.6	474.3	459.3	444.3	429.3	414.4	403.1
67.5°	451.5	441.9	432.3	422.7	413.1	401.1	386.8	372.4	358.1	343.7	333.4
70°	401.7	392.1	382.5	372.8	363.3	351.4	337.3	323.2	309.0	294.9	286.2
72.5°	352.9	343.5	334.1	324.7	315.4	304.0	290.8	277.6	264.4	251.2	243.1
75°	279.6	271.2	262.7	254.2	245.7	235.6	223.7	211.9	200.0	188.1	181.9
77.5°	206.9	200.2	193.4	186.6	179.9	171.7	162.2	152.7	143.2	133.7	129.4
80°	165.3	158.5	151.7	144.9	138.1	130.8	122.9	115.0	107.0	99.1	96.6
82.5°	124.6	118.5	112.3	106.2	100.2	94.4	88.9	83.6	78.1	72.7	71.5
85°	70.0	64.8	59.8	54.6	49.6	46.3	44.9	43.5	42.1	40.7	40.4
87.5°	23.5	21.9	20.5	19.0	17.5	16.7	16.6	16.5	16.3	16.1	16.2
90°	0.3	0.8	1.3	1.8	2.4	2.9	3.3	3.8	4.2	4.6	4.9
92.5°	4.4	4.1	3.8	3.3	3.0	3.0	3.4	3.8	4.2	4.6	4.9
95°	16.4	16.2	16.1	15.8	15.7	14.3	11.9	9.5	7.0	4.6	4.9
97.5°	34.3	34.7	35.0	35.3	35.7	33.4	28.6	23.8	19.0	14.2	12.4
100°	48.1	48.3	48.5	48.7	48.9	49.1	49.4	49.7	49.9	50.1	40.6
102.5°	62.2	62.5	62.7	62.9	63.2	63.3	63.5	63.7	63.8	64.0	62.2
105°	84.7	85.0	85.3	85.5	85.8	85.9	85.9	85.9	85.9	85.9	85.9
107.5°	108.1	108.1	108.1	108.1	108.1	108.2	108.4	108.4	108.6	108.7	108.7
110°	123.4	123.4	123.4	123.4	123.4	123.4	123.5	123.7	123.8	123.9	123.8



TEST NUMBER: P333613-930

CATALOG NUMBER: S125RDIP-S1270D365U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	137.6	137.8	137.9	138.1	138.3	138.4	138.4	138.5	138.6	138.7	138.4
115°	159.1	159.4	159.7	160.0	160.4	160.5	160.6	160.7	160.8	160.8	160.5
117.5°	181.2	181.2	181.2	181.2	181.2	181.3	181.6	181.8	182.1	182.3	182.0
120°	195.1	195.0	195.0	194.9	194.9	194.9	195.1	195.3	195.5	195.7	195.6
122.5°	207.3	207.6	207.8	208.1	208.3	208.5	208.6	208.6	208.7	208.8	208.7
125°	226.2	226.7	227.1	227.6	228.0	228.3	228.3	228.3	228.3	228.3	228.0
127.5°	244.3	244.6	244.9	245.2	245.6	245.7	245.6	245.6	245.6	245.6	245.4
130°	255.4	255.7	256.0	256.3	256.7	256.8	256.9	256.9	257.0	257.1	256.9
132.5°	266.4	266.8	267.2	267.5	267.9	268.0	267.9	267.7	267.6	267.4	267.4
135°	282.2	282.5	282.9	283.3	283.6	283.8	283.6	283.6	283.4	283.3	283.2
137.5°	296.6	296.9	297.3	297.6	297.9	298.1	297.9	297.8	297.7	297.6	297.6
140°	306.1	306.2	306.3	306.5	306.6	306.6	306.6	306.5	306.4	306.4	306.5
142.5°	314.6	314.7	314.8	314.8	314.9	315.0	315.1	315.2	315.3	315.4	315.4
145°	327.1	327.3	327.3	327.5	327.6	327.7	327.7	327.7	327.7	327.7	327.8
147.5°	338.0	338.0	338.0	337.9	337.9	337.9	338.0	338.1	338.2	338.3	338.3
150°	345.0	344.9	344.7	344.5	344.5	344.5	344.5	344.7	344.9	345.0	345.1
152.5°	351.6	351.4	351.1	350.8	350.5	350.4	350.6	350.7	350.8	351.0	351.1
155°	360.3	359.9	359.5	359.1	358.7	358.6	358.7	358.8	359.0	359.1	359.3
157.5°	366.9	366.6	366.4	366.2	366.0	365.8	365.8	365.9	365.9	365.9	366.1
160°	371.5	371.1	370.7	370.3	370.0	369.8	369.8	369.9	370.0	370.1	370.3
162.5°	375.2	374.8	374.4	374.0	373.7	373.5	373.6	373.6	373.7	373.7	374.1
165°	380.1	379.8	379.4	379.0	378.6	378.5	378.5	378.5	378.6	378.7	379.0
167.5°	383.8	383.4	383.0	382.6	382.2	382.0	382.1	382.2	382.3	382.3	382.8
170°	385.9	385.5	385.0	384.6	384.1	383.9	384.0	384.0	384.1	384.2	384.7
172.5°	387.3	386.9	386.4	386.0	385.5	385.3	385.4	385.6	385.6	385.8	386.2
175°	388.7	388.4	388.0	387.6	387.3	387.1	387.1	387.2	387.3	387.3	387.8
177.5°	389.5	389.1	388.8	388.6	388.2	388.1	388.2	388.2	388.2	388.3	388.7
180°	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7



TEST NUMBER: P333613-930

CATALOG NUMBER: S125RDIP-S1270D365U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0
2.5°	1677.3	1679.6	1681.9	1682.9	1682.7	1682.5	1682.2	1682.0
5°	1667.0	1669.9	1672.7	1673.8	1673.2	1672.7	1672.1	1671.5
7.5°	1646.3	1648.3	1650.2	1650.9	1650.2	1649.7	1649.0	1648.5
10°	1628.7	1629.6	1630.4	1630.4	1629.6	1628.7	1627.9	1627.1
12.5°	1603.9	1604.5	1605.2	1604.8	1603.5	1602.2	1600.9	1599.6
15°	1562.9	1562.7	1562.4	1561.0	1558.4	1555.9	1553.3	1550.8
17.5°	1511.9	1510.4	1509.0	1507.3	1505.2	1503.1	1501.0	1498.9
20°	1474.2	1472.8	1471.5	1469.4	1466.9	1464.4	1461.8	1459.3
22.5°	1437.0	1434.2	1431.4	1429.0	1426.9	1424.8	1422.7	1420.7
25°	1375.7	1372.0	1368.3	1364.9	1361.8	1358.7	1355.6	1352.5
27.5°	1309.5	1304.3	1299.2	1295.1	1292.1	1289.1	1286.1	1283.1
30°	1262.0	1255.5	1249.0	1244.5	1241.9	1239.3	1236.8	1234.3
32.5°	1215.9	1208.7	1201.5	1196.3	1193.1	1189.8	1186.7	1183.4
35°	1144.2	1136.0	1127.8	1121.7	1117.8	1113.8	1109.9	1105.9
37.5°	1069.2	1059.4	1049.5	1042.7	1038.9	1035.0	1031.2	1027.4
40°	1019.6	1008.9	998.2	991.1	987.7	984.3	980.9	977.5
42.5°	970.7	960.4	950.1	942.5	937.5	932.5	927.6	922.6
45°	892.6	881.3	870.0	862.3	858.0	853.8	849.5	845.3
47.5°	815.5	803.8	792.1	784.0	779.3	774.6	769.9	765.2
50°	763.1	751.2	739.4	731.3	727.1	722.8	718.6	714.4
52.5°	713.5	700.7	687.9	679.5	675.2	671.0	666.8	662.5
55°	638.1	625.4	612.7	604.1	599.6	595.0	590.5	586.0
57.5°	562.6	550.2	537.8	529.6	525.5	521.5	517.6	513.6
60°	512.8	500.4	488.0	479.6	475.4	471.2	466.9	462.7
62.5°	463.8	452.2	440.8	432.8	428.6	424.4	420.1	415.9
65°	391.8	380.5	369.2	361.4	357.2	352.9	348.7	344.5
67.5°	323.0	312.7	302.4	295.5	292.1	288.7	285.4	281.9
70°	277.4	268.6	259.9	253.8	250.4	247.0	243.6	240.3
72.5°	235.1	227.0	218.8	213.7	211.4	209.2	206.9	204.6
75°	175.7	169.5	163.3	159.1	157.2	155.2	153.3	151.2
77.5°	125.0	120.7	116.3	113.4	111.9	110.5	109.0	107.5
80°	94.1	91.6	88.9	87.4	86.8	86.3	85.8	85.2
82.5°	70.4	69.1	68.0	67.2	66.9	66.5	66.2	65.9
85°	40.1	39.9	39.5	39.3	39.0	38.7	38.4	38.2
87.5°	16.3	16.4	16.5	16.4	16.1	16.0	15.8	15.7
90°	5.2	5.5	5.9	6.1	6.4	6.5	6.7	6.9
92.5°	5.2	5.5	5.9	6.1	6.2	6.3	6.4	6.4
95°	5.2	5.5	5.9	6.0	6.0	6.0	6.0	6.0
97.5°	10.6	8.7	6.9	6.0	6.0	6.0	6.0	6.0
100°	31.1	21.5	12.0	7.1	6.8	6.6	6.3	6.0
102.5°	60.3	58.5	56.7	53.6	49.3	45.0	40.6	36.3
105°	85.9	85.9	85.9	85.9	85.8	85.7	85.7	85.6
107.5°	108.8	108.8	108.8	108.7	108.5	108.3	108.1	107.9
110°	123.5	123.4	123.2	123.1	123.2	123.2	123.3	123.4





TEST NUMBER: P333613-930

CATALOG NUMBER: S125RDIP-S1270D365U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	138.2	137.9	137.7	137.5	137.5	137.4	137.3	137.2
115°	160.3	160.0	159.8	159.5	159.1	158.7	158.3	157.9
117.5°	181.6	181.3	181.0	180.8	180.6	180.4	180.3	180.1
120°	195.4	195.3	195.2	194.9	194.6	194.3	194.0	193.6
122.5°	208.6	208.5	208.3	208.1	207.7	207.3	206.9	206.6
125°	227.7	227.5	227.2	227.0	226.8	226.7	226.4	226.2
127.5°	245.2	245.1	245.0	244.7	244.2	243.7	243.3	242.8
130°	256.7	256.5	256.3	256.0	255.8	255.4	255.1	254.8
132.5°	267.3	267.3	267.3	267.1	266.8	266.4	266.1	265.9
135°	283.1	282.9	282.7	282.5	282.2	281.8	281.4	281.0
137.5°	297.7	297.7	297.7	297.5	297.2	296.9	296.5	296.2
140°	306.6	306.7	306.9	306.7	306.4	306.0	305.6	305.2
142.5°	315.4	315.4	315.4	315.3	314.9	314.5	314.1	313.7
145°	327.8	327.8	327.9	327.8	327.4	327.0	326.6	326.2
147.5°	338.4	338.5	338.6	338.4	337.9	337.5	337.0	336.6
150°	345.2	345.4	345.4	345.3	344.8	344.3	343.7	343.2
152.5°	351.2	351.3	351.5	351.3	350.8	350.4	349.9	349.4
155°	359.5	359.6	359.9	359.7	359.2	358.7	358.2	357.7
157.5°	366.3	366.5	366.7	366.6	366.1	365.5	365.0	364.5
160°	370.6	370.8	371.0	371.0	370.4	369.9	369.4	368.9
162.5°	374.5	374.8	375.2	375.0	374.5	373.9	373.4	372.8
165°	379.4	379.8	380.3	380.2	379.7	379.1	378.6	378.1
167.5°	383.3	383.7	384.2	384.1	383.5	382.9	382.4	381.8
170°	385.1	385.7	386.2	386.2	385.6	385.1	384.4	383.8
172.5°	386.7	387.2	387.6	387.6	387.0	386.4	385.8	385.2
175°	388.3	388.9	389.4	389.4	388.7	388.2	387.6	387.0
177.5°	389.1	389.4	389.7	389.7	389.3	388.9	388.5	388.1
180°	388.7	388.7	388.7	388.7	388.7	388.7	388.7	388.7

(END OF REPORT)