

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: P333627-930

Luminaire Tested: **S125RDIP-S1270D810U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333627-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S1270D810U930-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 810 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6348.9 lumens
Efficiency: N/A
Efficacy: 104.6 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

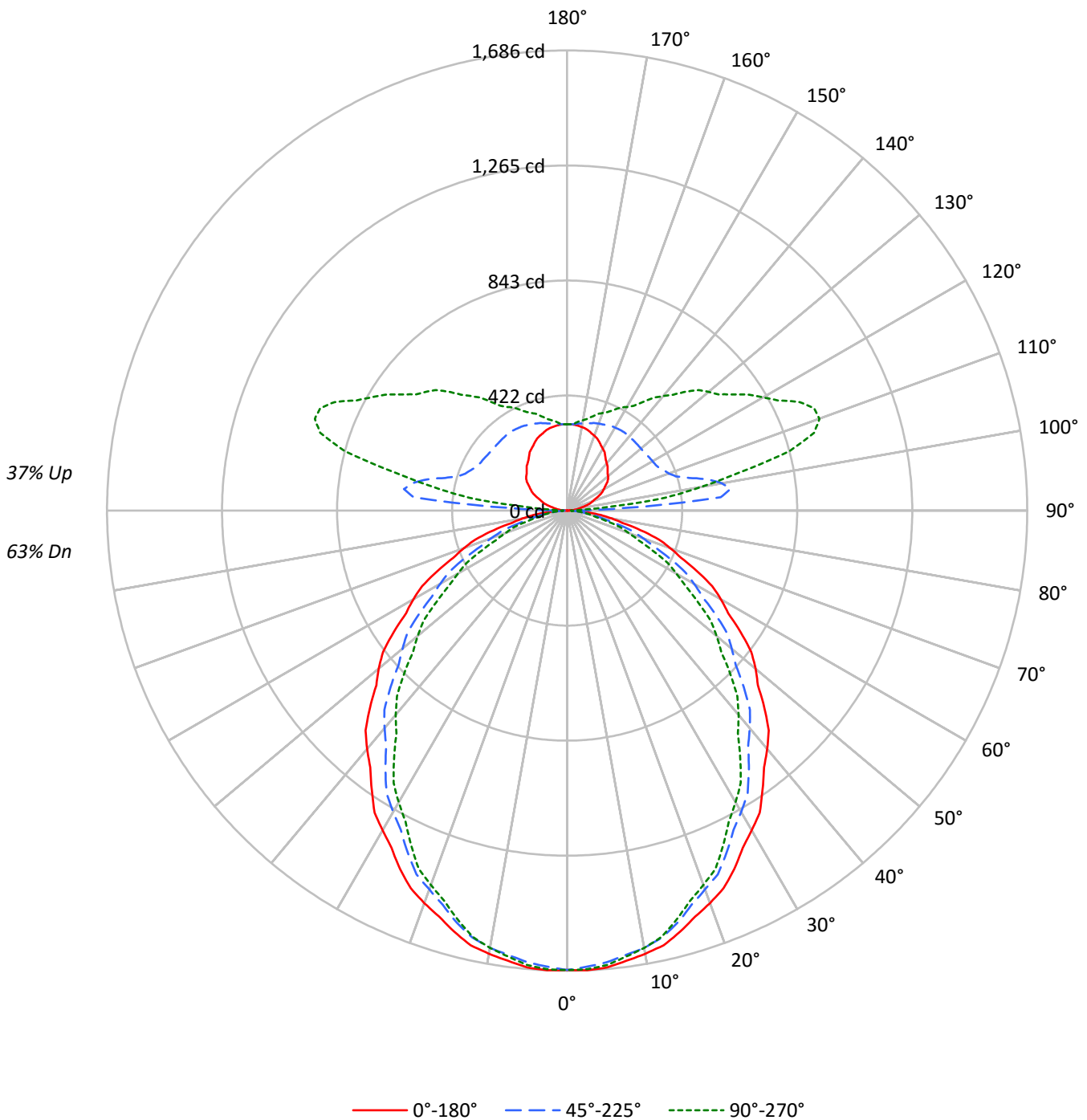
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68	63
1	101	97	93	89	94	91	87	84	80	77	75	70	68	66	60	59	58	53
2	92	85	79	73	86	80	74	70	70	66	62	61	58	56	53	51	49	45
3	84	75	67	61	79	70	64	59	62	57	53	55	51	47	48	45	42	38
4	77	66	58	52	72	63	55	50	55	50	45	49	44	41	43	39	36	33
5	71	59	51	45	66	56	49	43	50	44	39	44	39	36	39	35	32	29
6	66	53	45	39	61	50	43	38	45	39	34	40	35	31	35	31	28	26
7	61	48	40	35	57	46	38	33	41	35	31	36	31	28	32	28	25	23
8	56	44	36	31	53	42	35	30	37	31	27	33	28	25	30	26	23	20
9	53	40	33	28	49	38	31	27	34	29	25	31	26	22	27	23	21	18
10	49	37	30	25	46	35	28	24	32	26	22	28	24	20	25	21	19	17

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.3	2.5
10°-20°	442.3	7.0
20°-30°	641.3	10.1
30°-40°	730.9	11.5
40°-50°	712.5	11.2
50°-60°	599.7	9.4
60°-70°	420.4	6.6
70°-80°	216.1	3.4
80°-90°	56.3	0.9
90°-100°	229.2	3.6
100°-110°	492.7	7.8
110°-120°	462.4	7.3
120°-130°	374.7	5.9
130°-140°	300.7	4.7
140°-150°	226.9	3.6
150°-160°	159.7	2.5
160°-170°	94.2	1.5
170°-180°	30.6	0.5
0°-30°	1241.9	19.6
0°-40°	1972.8	31.1
0°-60°	3284.9	51.7
0°-90°	3977.8	62.7
90°-120°	1184.3	18.7
90°-150°	2086.6	32.9
90°-180°	2371.0	37.3
0°-180°	6348.9	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°	1	6	10	13	15	4
95°	21	62	565	256	150	22
105°	72	101	462	910	845	76
115°	129	155	371	800	941	127
125°	178	209	356	636	741	158
135°	209	252	353	533	616	162
145°	244	279	354	441	486	153
155°	278	299	346	390	407	128
165°	304	312	332	352	357	85
175°	316	316	318	322	321	30
180°	316	316	316	316	316	



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CATALOG NUMBER: S125RDIP-S1270D810U930-4F0-1E-UDD-F4

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	22.1	20.7	19.4	18.1	17.4	17.4	17.4	17.3	17.3	17.4
90°	0.7	1.3	2.5	3.8	5.1	6.4	7.0	8.3	8.9	10.2	10.8
92.5°	7.7	9.5	14.8	22.7	33.7	52.3	87.1	145.4	208.8	205.5	166.4
95°	21.0	21.7	26.7	33.8	47.8	76.5	144.7	284.9	460.9	564.8	552.7
97.5°	34.9	35.7	39.3	46.3	58.9	79.6	124.7	227.5	411.6	603.2	699.3
100°	44.6	45.9	48.4	55.4	67.6	86.7	123.7	206.5	367.2	575.7	735.0
102.5°	55.4	56.1	58.1	65.6	76.7	95.4	128.2	197.9	333.5	527.2	713.6
105°	72.1	72.1	75.3	81.6	91.8	109.7	137.7	194.4	300.9	462.2	645.1
107.5°	88.4	89.6	92.7	97.9	108.5	124.6	151.7	200.3	287.1	417.4	575.3
110°	100.1	101.3	103.9	109.7	119.2	135.7	161.9	205.9	283.1	396.5	535.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	111.8	113.1	115.1	120.8	130.4	146.5	171.6	213.0	283.1	384.3	505.9
115°	128.7	130.0	132.0	137.7	147.2	163.2	186.8	223.7	284.9	371.0	473.6
117.5°	144.1	146.0	148.1	153.8	164.6	180.0	202.4	236.0	289.2	364.5	454.4
120°	154.3	156.2	158.7	164.4	175.3	191.3	213.5	244.2	293.3	361.4	443.7
122.5°	165.0	166.4	168.4	174.1	186.1	201.9	224.3	253.3	296.8	358.9	434.5
125°	178.5	179.8	183.0	188.7	200.8	217.4	238.4	265.8	302.8	355.7	422.0
127.5°	189.1	191.0	195.1	202.4	215.2	231.8	252.1	277.3	309.6	354.2	410.5
130°	195.7	197.6	202.7	211.0	224.4	241.0	260.7	284.9	313.6	353.2	402.9
132.5°	200.8	203.3	209.4	218.7	232.5	249.2	268.9	291.6	318.2	353.2	396.8
135°	209.1	211.7	219.3	229.5	242.9	260.1	279.9	300.9	324.5	353.2	389.5
137.5°	219.6	221.4	228.6	238.8	251.9	269.6	287.6	307.8	330.2	353.9	383.0
140°	225.7	227.6	235.2	245.4	257.6	274.8	293.3	312.3	332.7	354.4	379.9
142.5°	232.8	234.2	241.3	251.5	263.2	279.3	296.8	315.0	334.3	355.0	377.4
145°	243.5	244.8	251.2	260.1	271.6	286.3	302.8	318.7	336.0	354.4	373.6
147.5°	254.7	255.5	261.0	269.3	279.2	292.1	306.6	321.1	336.6	352.8	369.6
150°	261.4	262.6	267.1	275.4	284.3	295.1	309.2	322.5	336.6	351.2	366.6
152.5°	268.5	269.3	273.2	280.5	288.9	298.7	311.7	323.6	336.1	349.2	363.0
155°	277.9	277.9	281.8	288.1	294.5	303.5	314.3	324.5	334.7	345.5	357.0
157.5°	286.3	286.3	289.3	294.7	300.4	307.1	316.4	325.1	333.0	341.7	351.4
160°	292.0	291.3	293.9	298.3	303.5	309.2	317.5	325.1	331.5	339.2	346.8
162.5°	296.5	296.0	298.5	302.4	306.5	311.2	318.5	324.6	330.0	336.1	342.7
165°	303.5	302.1	304.1	307.3	309.8	313.6	318.7	323.8	327.7	331.5	336.6
167.5°	308.0	307.4	308.5	310.3	312.1	314.5	318.7	322.3	324.1	327.0	330.6
170°	311.1	310.5	311.1	312.3	313.6	315.5	318.7	321.3	322.5	324.5	327.0
172.5°	313.2	312.0	312.6	313.9	314.6	315.5	318.2	320.2	320.5	321.4	323.4
175°	315.5	314.3	315.0	315.5	315.5	315.5	317.5	318.7	318.1	318.1	318.7
177.5°	316.7	315.7	315.7	316.2	315.7	315.7	316.7	317.2	316.2	316.2	316.7
180°	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2



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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°	17.5	17.7	17.8	17.9	17.7	17.5	17.4	17.2
90°	11.5	12.1	12.7	14.0	14.0	14.0	14.7	14.7
92.5°	113.0	82.0	61.7	52.3	44.1	42.6	41.7	40.7
95°	458.4	361.4	283.1	229.5	184.3	165.1	160.0	149.8
97.5°	682.7	614.7	538.3	463.8	424.4	388.7	370.2	362.1
100°	784.1	752.8	687.2	620.9	576.9	531.0	507.4	497.3
102.5°	818.2	837.6	806.0	761.2	714.1	681.4	655.8	648.2
105°	798.1	885.5	913.5	906.5	886.1	865.0	852.3	844.7
107.5°	726.2	842.8	914.8	948.0	958.4	958.2	954.1	948.9
110°	673.2	794.3	884.2	938.3	967.0	979.2	983.7	983.7



TEST NUMBER: P333627-930

CATALOG NUMBER: S125RDIP-S1270D810U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	631.4	746.3	837.2	901.2	943.1	963.8	974.9	979.6
115°	578.9	677.7	765.0	834.5	884.2	914.8	932.6	940.9
117.5°	544.9	630.1	705.3	769.1	818.8	850.4	868.1	873.2
120°	526.5	603.1	673.2	729.3	776.4	807.1	824.3	829.3
122.5°	512.8	583.7	646.1	698.7	740.8	768.8	786.0	790.6
125°	492.8	557.8	613.3	659.2	694.9	721.0	735.0	741.4
127.5°	472.4	533.0	584.8	627.8	660.1	683.2	696.5	699.3
130°	459.6	515.8	565.4	606.9	638.8	659.8	672.5	676.4
132.5°	446.9	499.4	544.5	584.4	616.3	637.3	649.1	653.4
135°	430.3	474.3	515.1	551.4	579.4	600.5	612.0	615.8
137.5°	416.3	451.8	485.8	516.6	541.8	560.8	571.4	575.7
140°	408.6	438.5	467.9	494.6	518.3	534.8	544.4	547.6
142.5°	402.0	427.4	452.6	475.8	495.9	509.9	518.9	521.5
145°	393.3	413.1	432.8	450.0	465.4	476.2	483.2	485.8
147.5°	385.1	401.2	416.4	429.4	441.5	450.2	454.3	455.4
150°	380.6	394.6	406.7	418.2	427.8	435.4	438.0	438.5
152.5°	375.4	388.0	399.1	408.0	416.0	422.2	424.7	425.3
155°	367.9	378.1	386.9	394.0	400.3	404.8	406.7	407.3
157.5°	360.2	368.6	375.4	381.0	386.0	389.6	391.4	391.3
160°	355.1	361.4	367.9	372.3	376.7	379.9	381.2	380.6
162.5°	349.4	355.3	360.7	364.6	368.1	370.7	371.0	370.9
165°	341.7	346.2	350.0	353.2	355.7	357.0	357.0	357.0
167.5°	334.3	337.2	340.1	342.4	343.7	344.9	344.4	344.2
170°	330.2	332.2	334.0	335.3	336.6	337.2	337.2	336.6
172.5°	325.6	327.5	329.0	329.7	330.0	331.1	330.1	329.5
175°	320.7	320.7	322.0	322.0	322.0	322.5	321.3	320.7
177.5°	317.2	317.7	317.7	317.7	317.2	317.7	316.2	316.2
180°	316.2	316.2	316.2	316.2	316.2	316.2	316.2	316.2

(END OF REPORT)