

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: P333730-940

Luminaire Tested: **S125RDIW-S1270D1050U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333730-940
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-S1270D1050U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8087.1 lumens
Efficiency: N/A
Efficacy: 120.0 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

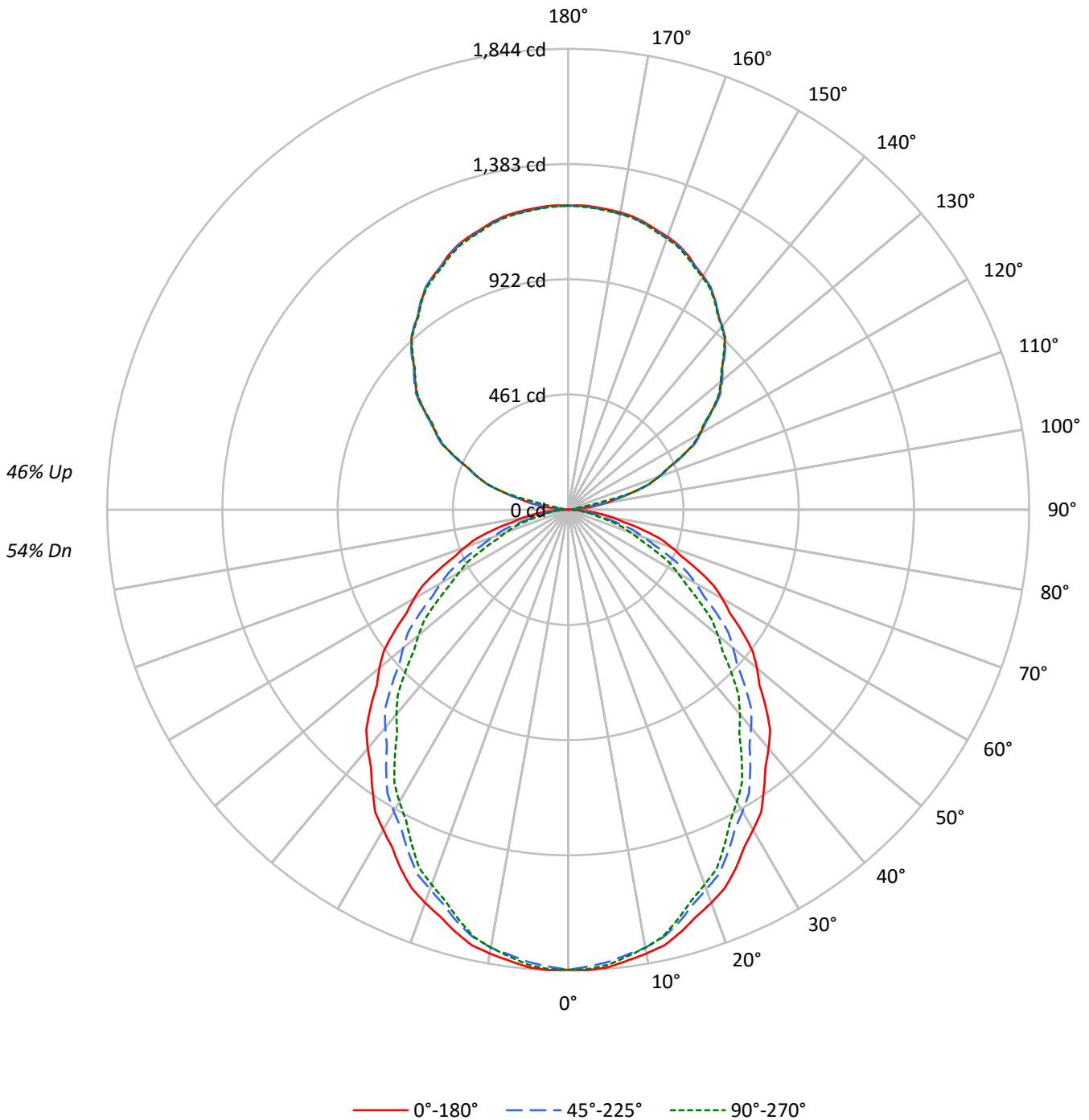
Input Watts (W): 67.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333730-940

CATALOG NUMBER: S125RDIW-S1270D1050U940-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P333730-940

CATALOG NUMBER: S125RDIW-S1270D1050U940-4F0-1E-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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	60	60	60	54
1	99	95	91	87	92	88	85	82	75	73	71	64	62	60	53	52	51	46
2	90	83	77	72	83	77	72	67	66	62	59	56	53	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	60	53	48	52	47	43	45	41	37	37	34	32	29
5	69	58	50	44	64	54	47	41	47	41	37	40	36	32	34	31	28	25
6	64	52	44	38	59	49	41	36	42	37	32	36	32	28	31	27	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	29	25	30	26	23	26	22	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	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11889	11889	11889
5°	11916	11780	11852
10°	11825	11671	11671
15°	11685	11433	11340
20°	11504	11103	10970
25°	11294	10779	10541
30°	11032	10399	10068
35°	10764	10008	9536
40°	10514	9599	9014
45°	10209	9143	8444
50°	9904	8647	7850
55°	9549	8172	7218
60°	9195	7596	6536
65°	8775	6927	5757
70°	8295	6090	4962
75°	7633	5133	4127
80°	6721	4032	3466
85°	5669	3298	3090



TEST NUMBER: P333730-940

CATALOG NUMBER: S125RDIW-S1270D1050U940-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.1	2.1
10°-20°	483.7	6.0
20°-30°	701.4	8.7
30°-40°	799.4	9.9
40°-50°	779.2	9.6
50°-60°	655.9	8.1
60°-70°	459.8	5.7
70°-80°	236.3	2.9
80°-90°	62.2	0.8
90°-100°	44.2	0.5
100°-110°	272.5	3.4
110°-120°	494.2	6.1
120°-130°	634.2	7.8
130°-140°	682.1	8.4
140°-150°	640.3	7.9
150°-160°	517.9	6.4
160°-170°	335.0	4.1
170°-180°	115.5	1.4
0°-30°	1358.2	16.8
0°-40°	2157.6	26.7
0°-60°	3592.8	44.4
0°-90°	4351.2	53.8
90°-120°	810.9	10.0
90°-150°	2767.5	34.2
90°-180°	3736.0	46.2
0°-180°	8087.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1841	1841	1841	1841	1841	
5°	1838	1832	1817	1830	1828	174
15°	1748	1738	1710	1708	1696	492
25°	1585	1562	1513	1495	1479	729
35°	1365	1330	1269	1230	1210	854
45°	1118	1075	1001	947	924	862
55°	848	802	726	665	641	758
65°	574	525	453	400	377	569
75°	306	263	206	176	165	324
85°	76	52	44	43	42	86
90°	1	8	14	19	22	6
95°	51	47	14	19	19	66
105°	265	269	269	269	268	281
115°	498	502	503	500	494	493
125°	708	714	714	711	708	632
135°	883	888	886	884	879	680
145°	1024	1025	1025	1026	1021	640
155°	1127	1122	1124	1126	1119	519
165°	1190	1184	1185	1190	1183	336
175°	1217	1212	1212	1218	1211	116
180°	1217	1217	1217	1217	1217	



TEST NUMBER: P333730-940

CATALOG NUMBER: S125RDIW-S1270D1050U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8
2.5°	1844.1	1843.3	1842.5	1841.8	1841.1	1839.5	1837.0	1834.5	1832.1	1829.6	1832.1
5°	1838.0	1836.7	1835.5	1834.2	1833.0	1830.7	1827.3	1823.9	1820.5	1817.1	1820.2
7.5°	1819.9	1818.7	1817.6	1816.3	1815.2	1812.6	1808.5	1804.4	1800.4	1796.3	1798.4
10°	1803.2	1802.2	1801.3	1800.5	1799.5	1796.9	1792.5	1788.2	1783.9	1779.6	1780.5
12.5°	1784.3	1783.2	1781.9	1780.7	1779.6	1776.1	1770.3	1764.5	1758.6	1752.8	1753.5
15°	1747.6	1745.7	1743.9	1742.0	1740.2	1736.0	1729.5	1723.1	1716.5	1710.0	1709.8
17.5°	1706.1	1703.3	1700.5	1697.6	1694.8	1689.3	1681.1	1672.9	1664.8	1656.6	1655.1
20°	1673.9	1670.8	1667.7	1664.6	1661.5	1655.0	1645.2	1635.3	1625.4	1615.5	1614.0
22.5°	1638.3	1635.2	1632.1	1629.1	1625.9	1619.3	1608.8	1598.5	1588.0	1577.7	1574.7
25°	1584.9	1580.3	1575.7	1571.0	1566.4	1558.4	1546.9	1535.5	1524.0	1512.6	1508.6
27.5°	1523.8	1518.1	1512.5	1506.9	1501.3	1492.4	1480.1	1467.8	1455.6	1443.4	1437.8
30°	1479.3	1473.4	1467.5	1461.7	1455.8	1446.4	1433.3	1420.4	1407.4	1394.5	1387.3
32.5°	1435.9	1429.1	1422.2	1415.3	1408.5	1398.4	1385.2	1372.0	1358.7	1345.5	1337.7
35°	1365.3	1357.8	1350.4	1343.0	1335.6	1324.9	1311.0	1297.2	1283.3	1269.4	1260.3
37.5°	1296.0	1287.0	1278.0	1269.0	1259.9	1248.2	1233.9	1219.6	1205.2	1190.9	1180.2
40°	1247.1	1237.8	1228.5	1219.2	1210.1	1197.9	1183.1	1168.3	1153.4	1138.6	1126.9
42.5°	1196.0	1186.4	1176.9	1167.3	1157.9	1145.4	1130.2	1114.8	1099.5	1084.1	1072.9
45°	1117.8	1108.8	1099.8	1090.9	1081.9	1069.0	1052.0	1035.0	1018.0	1001.0	988.6
47.5°	1036.9	1027.4	1018.0	1008.5	999.1	985.8	968.7	951.5	934.4	917.3	904.6
50°	985.7	975.5	965.3	955.1	944.9	931.0	913.4	895.8	878.2	860.6	847.6
52.5°	930.1	919.6	909.2	898.8	888.3	874.8	858.2	841.6	824.9	808.3	794.3
55°	848.1	838.2	828.3	818.4	808.5	795.0	777.7	760.4	743.1	725.8	711.9
57.5°	765.2	754.7	744.0	733.5	722.9	709.4	692.7	675.9	659.2	642.6	629.0
60°	711.9	701.0	690.2	679.4	668.6	654.8	638.1	621.4	604.8	588.1	574.5
62.5°	655.1	644.8	634.5	624.1	613.9	600.2	583.3	566.3	549.4	532.4	519.9
65°	574.2	563.7	553.2	542.7	532.2	518.7	502.4	486.0	469.6	453.3	440.9
67.5°	493.8	483.3	472.8	462.4	451.8	438.7	423.0	407.3	391.6	375.9	364.6
70°	439.3	428.8	418.3	407.8	397.3	384.3	368.9	353.5	338.0	322.5	313.0
72.5°	385.9	375.7	365.4	355.2	344.9	332.5	318.1	303.6	289.2	274.7	265.9
75°	305.9	296.6	287.3	278.0	268.8	257.7	244.7	231.8	218.7	205.7	198.9
77.5°	226.3	218.9	211.5	204.1	196.7	187.8	177.4	167.0	156.7	146.2	141.5
80°	180.7	173.3	165.9	158.5	151.1	143.0	134.4	125.7	117.1	108.4	105.7
82.5°	136.3	129.6	122.9	116.2	109.6	103.3	97.3	91.4	85.4	79.5	78.2
85°	76.5	70.9	65.4	59.7	54.2	50.6	49.1	47.6	46.0	44.5	44.1
87.5°	25.8	24.3	22.9	21.5	20.2	19.4	19.4	19.5	19.5	19.5	19.8
90°	0.9	2.5	4.1	5.7	7.3	8.8	10.3	11.6	13.0	14.4	15.4
92.5°	13.9	12.8	11.7	10.5	9.4	9.5	10.7	11.9	13.2	14.4	15.4
95°	51.4	50.8	50.2	49.6	49.0	44.9	37.3	29.7	22.0	14.4	15.4
97.5°	107.4	108.4	109.5	110.6	111.6	104.7	89.6	74.5	59.5	44.4	38.7
100°	150.6	151.2	151.8	152.4	153.0	153.7	154.5	155.3	156.1	156.9	127.1
102.5°	194.7	195.4	196.2	196.9	197.7	198.3	198.8	199.2	199.7	200.2	194.6
105°	265.1	265.9	266.7	267.5	268.3	268.8	268.8	268.8	268.8	268.8	268.8
107.5°	338.4	338.4	338.4	338.4	338.4	338.6	338.9	339.4	339.7	340.2	340.2
110°	386.0	386.0	386.0	386.0	386.0	386.2	386.6	387.0	387.4	387.8	387.2



TEST NUMBER: P333730-940

CATALOG NUMBER: S125RDIW-S1270D1050U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	430.7	431.2	431.7	432.1	432.7	433.0	433.3	433.5	433.7	434.0	433.2
115°	497.8	498.8	499.8	500.8	501.9	502.4	502.7	502.8	503.0	503.2	502.4
117.5°	567.3	567.2	567.2	567.1	567.1	567.5	568.2	569.0	569.7	570.5	569.4
120°	610.6	610.4	610.1	609.9	609.8	609.9	610.6	611.2	611.7	612.3	612.0
122.5°	648.8	649.5	650.3	651.0	651.8	652.4	652.6	652.9	653.2	653.4	653.1
125°	707.9	709.4	710.8	712.1	713.5	714.3	714.3	714.3	714.3	714.3	713.5
127.5°	764.4	765.4	766.4	767.4	768.4	768.8	768.7	768.7	768.5	768.4	767.9
130°	799.1	800.0	801.0	802.0	803.1	803.6	803.9	804.1	804.2	804.4	803.9
132.5°	833.7	834.8	836.0	837.1	838.3	838.7	838.2	837.8	837.3	837.0	836.8
135°	882.9	884.1	885.3	886.5	887.7	888.1	887.7	887.3	886.9	886.5	886.1
137.5°	928.2	929.3	930.2	931.3	932.4	932.7	932.4	932.0	931.6	931.2	931.3
140°	957.8	958.1	958.6	958.9	959.4	959.5	959.3	959.0	958.9	958.7	959.0
142.5°	984.4	984.7	985.0	985.2	985.4	985.7	986.0	986.2	986.5	986.8	986.9
145°	1023.6	1024.0	1024.4	1024.8	1025.2	1025.4	1025.4	1025.4	1025.4	1025.4	1025.6
147.5°	1057.8	1057.8	1057.7	1057.7	1057.6	1057.7	1057.8	1058.1	1058.4	1058.5	1058.8
150°	1079.5	1079.1	1078.7	1078.3	1077.9	1077.9	1078.3	1078.7	1079.1	1079.5	1080.0
152.5°	1100.5	1099.6	1098.7	1097.8	1096.9	1096.7	1097.1	1097.5	1097.9	1098.2	1098.7
155°	1127.3	1126.1	1124.9	1123.7	1122.5	1122.1	1122.5	1122.9	1123.3	1123.7	1124.3
157.5°	1148.1	1147.4	1146.7	1145.9	1145.1	1144.9	1144.9	1144.9	1145.0	1145.0	1145.7
160°	1162.5	1161.3	1160.1	1158.9	1157.7	1157.2	1157.4	1157.6	1157.8	1158.0	1158.8
162.5°	1174.0	1172.9	1171.6	1170.5	1169.2	1168.7	1168.9	1169.1	1169.3	1169.5	1170.6
165°	1189.5	1188.4	1187.1	1186.0	1184.7	1184.2	1184.5	1184.6	1184.8	1185.0	1186.2
167.5°	1201.0	1199.9	1198.6	1197.4	1196.1	1195.6	1195.8	1196.0	1196.2	1196.4	1197.8
170°	1207.6	1206.2	1204.8	1203.4	1201.9	1201.4	1201.6	1201.8	1201.9	1202.2	1203.8
172.5°	1211.9	1210.5	1209.1	1207.7	1206.3	1205.8	1206.1	1206.5	1206.8	1207.2	1208.6
175°	1216.6	1215.4	1214.2	1213.0	1211.7	1211.3	1211.5	1211.7	1211.9	1212.1	1213.7
177.5°	1218.8	1217.8	1216.8	1215.8	1215.0	1214.5	1214.7	1214.9	1215.0	1215.1	1216.3
180°	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6



TEST NUMBER: P333730-940

CATALOG NUMBER: S125RDIW-S1270D1050U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8
2.5°	1834.5	1837.0	1839.5	1840.6	1840.4	1840.1	1839.9	1839.6
5°	1823.3	1826.4	1829.4	1830.7	1830.1	1829.4	1828.8	1828.2
7.5°	1800.5	1802.8	1804.9	1805.6	1804.9	1804.3	1803.6	1803.0
10°	1781.4	1782.4	1783.2	1783.2	1782.4	1781.4	1780.5	1779.6
12.5°	1754.3	1754.9	1755.6	1755.2	1753.8	1752.4	1751.0	1749.5
15°	1709.4	1709.1	1708.8	1707.3	1704.5	1701.7	1698.9	1696.1
17.5°	1653.6	1652.0	1650.5	1648.6	1646.3	1644.0	1641.7	1639.4
20°	1612.4	1610.9	1609.4	1607.1	1604.4	1601.6	1598.8	1596.1
22.5°	1571.6	1568.6	1565.6	1562.9	1560.7	1558.4	1556.0	1553.8
25°	1504.6	1500.6	1496.6	1492.8	1489.4	1486.0	1482.6	1479.3
27.5°	1432.2	1426.6	1420.9	1416.5	1413.2	1409.9	1406.6	1403.4
30°	1380.3	1373.1	1366.0	1361.1	1358.3	1355.5	1352.7	1350.0
32.5°	1329.8	1322.0	1314.1	1308.4	1304.9	1301.4	1297.9	1294.3
35°	1251.4	1242.4	1233.5	1226.8	1222.5	1218.2	1213.9	1209.5
37.5°	1169.4	1158.7	1147.9	1140.4	1136.2	1132.0	1127.8	1123.6
40°	1115.2	1103.4	1091.7	1084.0	1080.2	1076.6	1072.8	1069.2
42.5°	1061.7	1050.4	1039.2	1030.8	1025.4	1019.9	1014.5	1009.1
45°	976.2	963.9	951.5	943.1	938.4	933.8	929.2	924.5
47.5°	891.9	879.1	866.4	857.5	852.3	847.2	842.0	837.0
50°	834.6	821.6	808.7	799.9	795.2	790.6	786.0	781.3
52.5°	780.3	766.4	752.4	743.2	738.5	733.9	729.2	724.6
55°	697.9	684.0	670.1	660.7	655.8	650.8	645.9	641.0
57.5°	615.4	601.8	588.2	579.3	574.8	570.4	566.1	561.7
60°	560.9	547.3	533.7	524.6	520.0	515.3	510.7	506.0
62.5°	507.3	494.6	482.1	473.4	468.8	464.1	459.5	454.9
65°	428.6	416.2	403.8	395.3	390.7	386.0	381.4	376.7
67.5°	353.3	342.0	330.7	323.2	319.5	315.8	312.1	308.4
70°	303.4	293.8	284.3	277.6	273.8	270.2	266.4	262.8
72.5°	257.1	248.3	239.3	233.7	231.2	228.8	226.3	223.8
75°	192.2	185.4	178.6	174.1	171.9	169.8	167.6	165.4
77.5°	136.7	132.0	127.2	124.0	122.4	120.8	119.2	117.6
80°	102.9	100.1	97.3	95.6	95.0	94.3	93.8	93.2
82.5°	77.0	75.6	74.4	73.5	73.1	72.8	72.4	72.1
85°	43.9	43.6	43.2	43.0	42.6	42.4	42.0	41.7
87.5°	20.0	20.2	20.3	20.4	20.2	20.2	20.1	19.9
90°	16.4	17.5	18.5	19.3	19.9	20.4	21.0	21.7
92.5°	16.4	17.5	18.5	19.1	19.4	19.6	19.9	20.2
95°	16.4	17.5	18.5	18.9	18.9	18.9	18.9	18.9
97.5°	33.1	27.4	21.8	18.9	18.9	18.9	18.9	18.9
100°	97.2	67.3	37.5	22.1	21.3	20.5	19.7	18.9
102.5°	188.9	183.2	177.6	168.0	154.4	140.7	127.1	113.4
105°	268.8	268.8	268.8	268.7	268.5	268.2	268.0	267.9
107.5°	340.3	340.3	340.4	340.1	339.5	338.9	338.2	337.7
110°	386.6	386.0	385.4	385.2	385.4	385.6	385.8	386.0



TEST NUMBER: P333730-940

CATALOG NUMBER: S125RDIW-S1270D1050U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	432.5	431.7	431.0	430.4	430.2	429.8	429.5	429.3
115°	501.6	500.8	500.0	499.0	497.8	496.6	495.4	494.2
117.5°	568.5	567.4	566.3	565.5	565.1	564.5	564.0	563.5
120°	611.5	611.2	610.7	610.0	609.0	608.1	607.1	606.0
122.5°	652.6	652.3	651.8	651.1	650.0	648.8	647.6	646.5
125°	712.7	711.9	711.1	710.3	709.8	709.2	708.6	707.9
127.5°	767.5	767.0	766.6	765.6	764.2	762.7	761.2	759.7
130°	803.3	802.6	802.0	801.2	800.2	799.2	798.3	797.3
132.5°	836.7	836.5	836.4	835.9	834.9	833.8	832.9	831.9
135°	885.7	885.3	884.9	884.1	882.9	881.7	880.5	879.3
137.5°	931.4	931.5	931.6	931.1	930.1	929.0	928.0	926.9
140°	959.5	959.8	960.3	959.8	958.7	957.4	956.3	955.0
142.5°	986.9	987.0	987.1	986.6	985.3	984.2	982.9	981.8
145°	1025.8	1026.0	1026.2	1025.7	1024.5	1023.3	1022.1	1020.9
147.5°	1059.1	1059.4	1059.5	1059.0	1057.5	1056.1	1054.6	1053.2
150°	1080.3	1080.8	1081.1	1080.5	1078.9	1077.3	1075.7	1074.1
152.5°	1099.0	1099.5	1099.8	1099.4	1097.9	1096.4	1095.0	1093.6
155°	1124.9	1125.5	1126.1	1125.6	1124.0	1122.4	1120.8	1119.2
157.5°	1146.3	1146.9	1147.5	1147.1	1145.5	1143.9	1142.3	1140.7
160°	1159.6	1160.4	1161.2	1160.7	1159.2	1157.6	1156.0	1154.4
162.5°	1171.8	1172.9	1174.0	1173.7	1171.9	1170.2	1168.4	1166.6
165°	1187.4	1188.7	1189.8	1189.6	1188.0	1186.4	1184.8	1183.2
167.5°	1199.3	1200.7	1202.2	1202.0	1200.2	1198.4	1196.6	1194.8
170°	1205.4	1207.0	1208.6	1208.4	1206.7	1204.9	1203.1	1201.2
172.5°	1210.1	1211.6	1213.0	1212.8	1211.0	1209.2	1207.4	1205.6
175°	1215.3	1216.9	1218.5	1218.4	1216.6	1214.8	1213.0	1211.2
177.5°	1217.4	1218.5	1219.7	1219.6	1218.3	1217.0	1215.8	1214.4
180°	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6

(END OF REPORT)