

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: P333632-940

Luminaire Tested: **S125RDIP-S1270D1035U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333632-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S1270D1035U940-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7543.3 lumens
Efficiency: N/A
Efficacy: 112.9 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

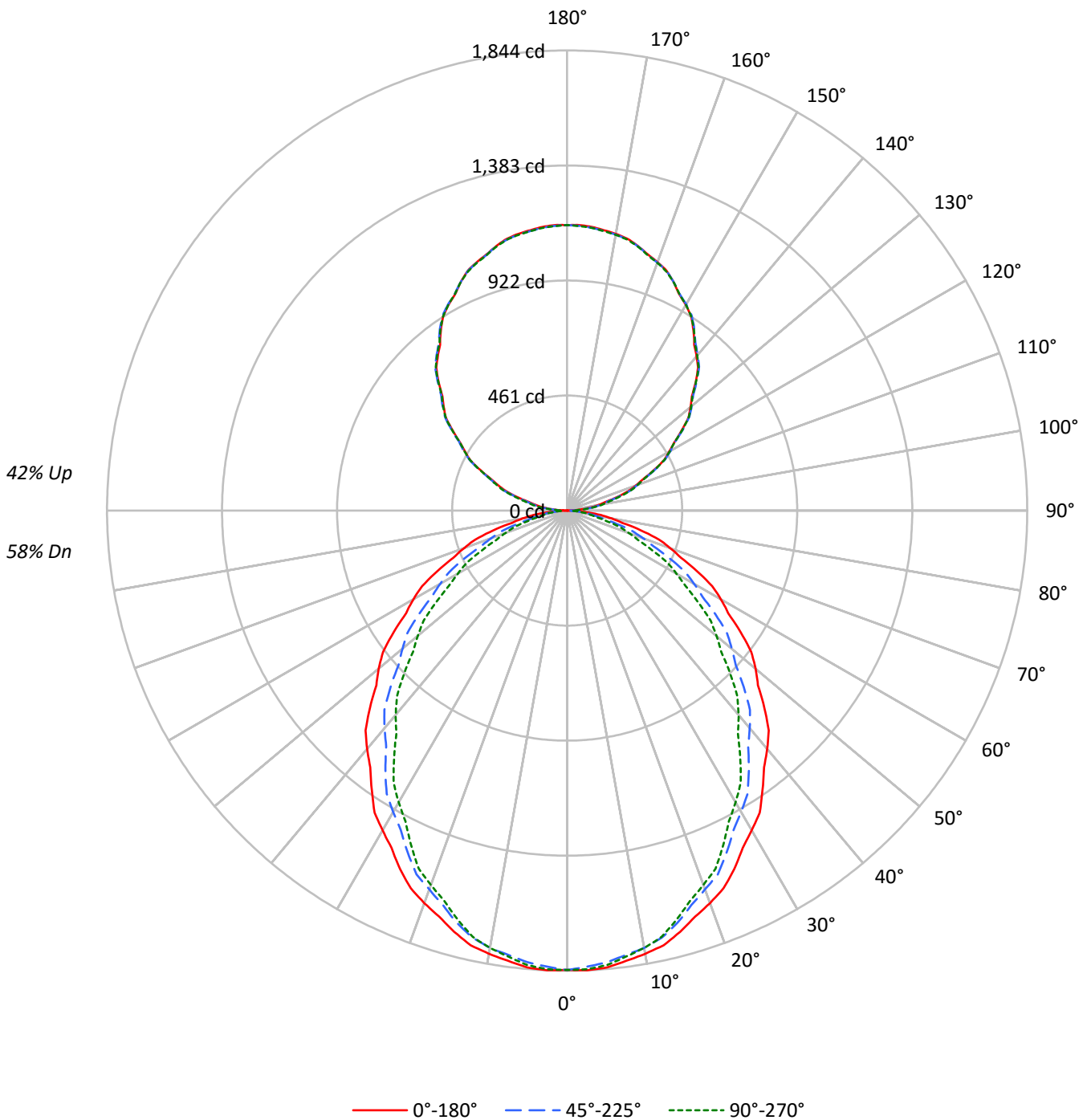
Input Watts (W): 66.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	100	95	92	88	93	89	86	83	77	75	73	66	65	63	56	55	54	49
2	91	84	78	72	85	78	73	68	68	64	60	59	56	53	50	48	46	42
3	83	74	66	61	77	69	63	57	60	55	51	52	48	45	44	42	39	35
4	76	65	58	52	71	61	54	49	54	48	44	46	42	39	40	37	34	31
5	70	58	50	44	65	55	48	42	48	42	38	42	37	34	36	32	30	27
6	65	53	44	39	60	49	42	37	43	38	33	38	33	30	33	29	26	24
7	60	48	40	34	56	45	38	32	39	34	29	35	30	26	30	26	23	21
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	27	24	21	19
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	25	22	19	17
10	49	36	29	24	45	34	28	23	31	25	21	27	23	19	24	20	17	15

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.1	2.3
10°-20°	483.7	6.4
20°-30°	701.4	9.3
30°-40°	799.4	10.6
40°-50°	779.2	10.3
50°-60°	655.9	8.7
60°-70°	459.8	6.1
70°-80°	236.3	3.1
80°-90°	62.2	0.8
90°-100°	76.6	1.0
100°-110°	226.3	3.0
110°-120°	383.2	5.1
120°-130°	504.3	6.7
130°-140°	565.1	7.5
140°-150°	553.9	7.3
150°-160°	465.2	6.2
160°-170°	309.2	4.1
170°-180°	108.2	1.4
0°-30°	1358.2	18.0
0°-40°	2157.6	28.6
0°-60°	3592.8	47.6
0°-90°	4351.1	57.7
90°-120°	686.1	9.1
90°-150°	2309.5	30.6
90°-180°	3192.0	42.3
0°-180°	7543.3	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	21	7
95°	58	60	69	75	77	62
105°	203	208	213	218	221	217
115°	384	387	389	388	387	379
125°	560	565	566	564	564	501
135°	728	733	734	734	731	561
145°	882	886	888	888	886	551
155°	1010	1010	1010	1014	1010	465
165°	1098	1096	1097	1100	1095	310
175°	1141	1138	1138	1142	1137	108
180°	1144	1144	1144	1144	1144	



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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	20.1	19.4	19.4	19.4	19.5	19.5	19.7
90°	0.9	2.5	4.0	5.6	7.2	8.7	10.1	11.5	12.8	14.3	15.2
92.5°	21.6	22.6	23.7	24.9	25.9	27.4	29.1	30.8	32.5	34.2	35.5
95°	57.9	58.2	58.7	59.0	59.5	60.6	62.6	64.6	66.6	68.6	69.9
97.5°	96.1	96.3	96.5	96.7	96.8	98.3	100.9	103.7	106.4	109.1	110.5
100°	124.7	124.7	124.7	124.7	124.7	125.9	128.5	131.1	133.7	136.2	137.9
102.5°	155.2	156.0	156.9	157.7	158.5	159.4	160.8	162.1	163.4	164.7	166.7
105°	203.0	203.9	204.9	206.0	207.0	208.0	209.2	210.4	211.6	212.8	213.9
107.5°	255.7	256.6	257.6	258.7	259.7	260.6	261.4	262.4	263.3	264.2	264.8
110°	292.0	293.0	294.0	295.0	296.0	296.8	297.3	297.9	298.5	299.1	299.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	329.0	329.6	330.0	330.6	331.1	331.7	332.5	333.2	333.9	334.7	335.0
115°	383.7	384.5	385.3	386.1	386.8	387.4	387.8	388.3	388.6	389.1	388.9
117.5°	438.5	438.9	439.3	439.6	440.0	440.3	440.7	441.0	441.4	441.8	441.9
120°	472.7	473.7	474.7	475.7	476.7	477.2	477.4	477.7	477.9	478.0	478.0
122.5°	509.8	510.1	510.5	510.9	511.2	511.6	512.1	512.6	513.2	513.6	513.5
125°	560.0	561.2	562.3	563.6	564.7	565.4	565.6	565.8	566.0	566.2	565.8
127.5°	613.4	614.0	614.7	615.4	616.1	616.5	616.8	617.0	617.2	617.5	617.2
130°	645.4	646.4	647.4	648.4	649.3	650.1	650.5	650.9	651.2	651.7	651.5
132.5°	677.4	679.1	680.7	682.3	683.9	684.7	684.7	684.6	684.5	684.4	684.2
135°	728.3	729.4	730.6	731.7	733.0	733.7	733.9	734.1	734.2	734.4	734.4
137.5°	776.0	777.0	778.2	779.4	780.5	781.3	781.8	782.2	782.7	783.0	783.3
140°	806.6	807.5	808.5	809.5	810.5	811.3	811.9	812.5	813.1	813.7	814.0
142.5°	837.1	838.0	838.8	839.6	840.5	841.3	842.0	842.8	843.6	844.3	844.5
145°	882.3	883.1	883.8	884.6	885.4	886.1	886.7	887.3	887.9	888.5	888.5
147.5°	923.9	924.3	924.8	925.2	925.6	926.1	926.6	927.0	927.5	928.0	928.4
150°	951.6	951.5	951.3	951.1	950.9	951.2	952.0	952.8	953.5	954.3	954.3
152.5°	974.5	974.7	975.0	975.3	975.5	975.9	976.2	976.5	976.8	977.1	977.6
155°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.6	1009.9	1010.0	1010.2	1010.4	1011.2
157.5°	1040.9	1040.4	1040.0	1039.6	1039.1	1039.0	1039.2	1039.4	1039.6	1039.8	1040.6
160°	1059.4	1058.8	1058.2	1057.6	1057.0	1056.9	1057.0	1057.2	1057.4	1057.6	1058.4
162.5°	1075.8	1075.3	1074.9	1074.4	1074.1	1073.8	1073.9	1073.9	1074.0	1074.0	1075.0
165°	1097.7	1097.3	1096.9	1096.4	1096.1	1096.0	1096.2	1096.4	1096.5	1096.8	1097.6
167.5°	1116.2	1115.4	1114.6	1113.8	1113.0	1112.6	1112.6	1112.6	1112.6	1112.6	1113.8
170°	1126.1	1125.3	1124.5	1123.8	1123.0	1122.6	1122.6	1122.6	1122.6	1122.6	1123.8
172.5°	1133.3	1132.5	1131.7	1130.9	1130.2	1129.7	1129.7	1129.7	1129.7	1129.7	1130.9
175°	1141.3	1140.5	1139.7	1138.9	1138.1	1137.7	1137.7	1137.7	1137.7	1137.7	1138.9
177.5°	1145.4	1144.8	1144.2	1143.4	1142.8	1142.5	1142.3	1142.1	1142.0	1141.8	1142.8
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0



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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°	19.9	20.2	20.3	20.3	20.2	20.1	20.0	19.9
90°	16.2	17.2	18.2	19.0	19.6	20.2	20.8	21.4
92.5°	36.8	38.1	39.4	40.3	40.8	41.1	41.6	42.0
95°	71.3	72.7	74.1	75.0	75.3	75.8	76.2	76.6
97.5°	111.7	113.1	114.4	115.1	115.4	115.7	115.8	116.1
100°	139.7	141.5	143.3	144.5	144.8	145.2	145.6	146.0
102.5°	168.5	170.5	172.5	173.7	174.2	174.8	175.4	175.9
105°	215.2	216.3	217.5	218.4	219.0	219.6	220.2	220.8
107.5°	265.4	266.0	266.6	266.9	266.8	266.8	266.8	266.7
110°	300.3	300.9	301.5	301.7	301.5	301.3	301.1	300.9



TEST NUMBER: P333632-940

CATALOG NUMBER: S125RDIP-S1270D1035U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	335.3	335.6	335.8	335.8	335.5	335.1	334.7	334.4
115°	388.6	388.4	388.3	388.1	387.8	387.6	387.4	387.3
117.5°	442.0	442.2	442.4	442.0	441.2	440.5	439.7	438.9
120°	478.0	478.0	478.0	477.7	476.9	476.1	475.3	474.5
122.5°	513.4	513.2	513.0	512.6	512.0	511.4	510.8	510.1
125°	565.4	565.0	564.6	564.3	564.1	563.9	563.7	563.6
127.5°	617.1	616.9	616.7	616.4	616.0	615.5	615.2	614.8
130°	651.2	651.0	650.9	650.6	650.1	649.8	649.3	649.0
132.5°	684.0	683.9	683.6	683.2	682.7	682.2	681.6	681.0
135°	734.4	734.4	734.4	734.1	733.3	732.5	731.6	730.8
137.5°	783.5	783.7	784.0	783.6	782.7	781.7	780.7	779.7
140°	814.5	814.8	815.3	814.9	814.0	813.0	812.0	811.0
142.5°	844.8	845.0	845.3	844.9	843.9	842.9	842.0	840.9
145°	888.5	888.5	888.5	888.1	887.6	887.0	886.4	885.8
147.5°	928.9	929.4	929.9	929.4	928.1	926.8	925.4	924.1
150°	954.3	954.3	954.3	954.1	953.8	953.3	953.0	952.5
152.5°	978.1	978.6	979.0	978.9	978.2	977.5	976.8	976.1
155°	1012.0	1012.8	1013.6	1013.5	1012.5	1011.5	1010.5	1009.5
157.5°	1041.3	1042.1	1042.9	1042.7	1041.4	1040.1	1038.8	1037.5
160°	1059.2	1060.0	1060.8	1060.7	1059.7	1058.7	1057.7	1056.7
162.5°	1075.8	1076.8	1077.8	1077.7	1076.6	1075.4	1074.2	1073.1
165°	1098.3	1099.1	1099.9	1099.7	1098.6	1097.3	1096.2	1095.0
167.5°	1115.0	1116.2	1117.4	1117.3	1116.2	1114.9	1113.7	1112.4
170°	1125.0	1126.1	1127.3	1127.2	1125.9	1124.4	1123.1	1121.7
172.5°	1132.1	1133.3	1134.4	1134.4	1133.2	1132.0	1130.8	1129.5
175°	1140.1	1141.3	1142.5	1142.4	1141.0	1139.6	1138.2	1136.8
177.5°	1143.7	1144.7	1145.6	1145.6	1144.4	1143.4	1142.2	1141.1
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0

(END OF REPORT)