

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: P333638-940

Luminaire Tested: **S125RDIP-S1270D1205U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333638-940
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-S1270D1205U940-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8067.1 lumens
Efficiency: N/A
Efficacy: 112.5 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

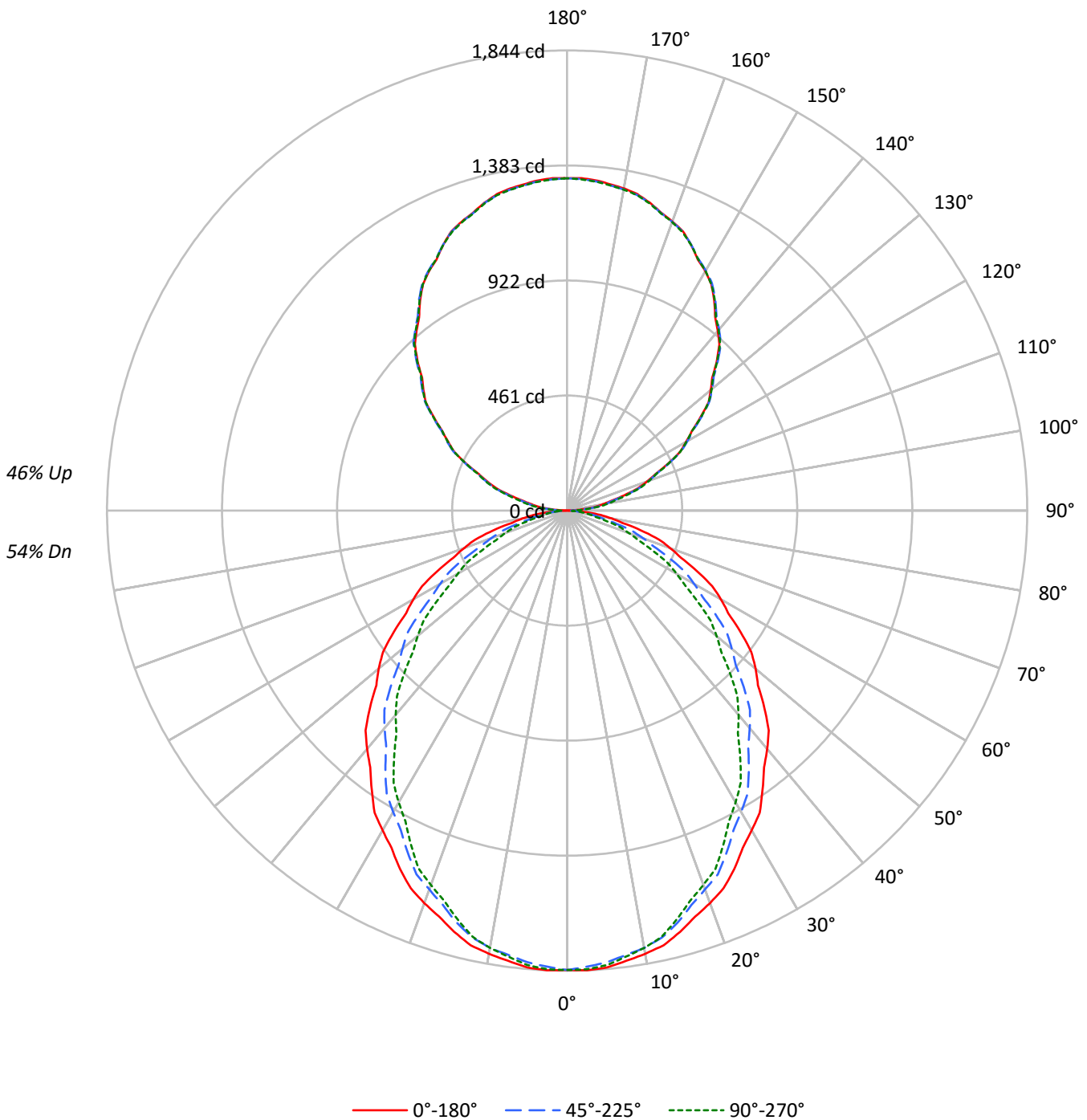
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333638-940

CATALOG NUMBER: S125RDIP-S1270D1205U940-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333638-940

CATALOG NUMBER: S125RDIP-S1270D1205U940-4F0-1E-UDD-F1

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		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	54	48		52	47	43		45	41	37		38	35	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	29		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	19		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: P333638-940

CATALOG NUMBER: S125RDIP-S1270D1205U940-4F0-1E-UDD-F1

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	9.7
50°-60°	655.9	8.1
60°-70°	459.8	5.7
70°-80°	236.3	2.9
80°-90°	62.6	0.8
90°-100°	89.2	1.1
100°-110°	263.4	3.3
110°-120°	446.1	5.5
120°-130°	587.0	7.3
130°-140°	657.8	8.2
140°-150°	644.7	8.0
150°-160°	541.5	6.7
160°-170°	359.9	4.5
170°-180°	126.0	1.6
0°-30°	1358.2	16.8
0°-40°	2157.6	26.7
0°-60°	3592.8	44.5
0°-90°	4351.6	53.9
90°-120°	798.6	9.9
90°-150°	2688.1	33.3
90°-180°	3716.0	46.1
0°-180°	8067.1	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	9	17	22	25	7
95°	67	70	80	87	89	72
105°	236	242	248	254	257	252
115°	447	451	453	452	451	442
125°	652	658	659	657	656	584
135°	848	854	855	855	851	653
145°	1027	1031	1034	1034	1031	642
155°	1175	1175	1176	1180	1175	541
165°	1278	1276	1277	1280	1274	360
175°	1328	1324	1324	1330	1323	126
180°	1332	1332	1332	1332	1332	



TEST NUMBER: P333638-940

CATALOG NUMBER: S125RDIP-S1270D1205U940-4F0-1E-UDD-F1

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	24.4	23.1	21.7	20.3	19.7	19.8	19.9	19.9	20.0	20.2
90°	1.1	2.9	4.7	6.6	8.4	10.2	11.8	13.4	15.0	16.6	17.7
92.5°	25.1	26.4	27.6	29.0	30.2	31.8	33.9	35.8	37.8	39.8	41.3
95°	67.3	67.8	68.3	68.8	69.2	70.5	72.9	75.2	77.5	79.8	81.4
97.5°	111.9	112.1	112.3	112.4	112.6	114.3	117.5	120.6	123.9	127.1	128.6
100°	145.1	145.1	145.1	145.1	145.1	146.6	149.5	152.6	155.5	158.5	160.6
102.5°	180.7	181.6	182.5	183.5	184.4	185.7	187.2	188.7	190.2	191.7	193.9
105°	236.2	237.4	238.5	239.7	240.9	242.1	243.5	244.9	246.3	247.6	249.1
107.5°	297.6	298.7	299.9	301.0	302.2	303.3	304.3	305.4	306.5	307.6	308.3
110°	339.9	341.0	342.1	343.3	344.5	345.4	346.1	346.8	347.5	348.1	348.8



TEST NUMBER: P333638-940

CATALOG NUMBER: S125RDIP-S1270D1205U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	383.0	383.6	384.1	384.8	385.4	386.1	387.0	387.9	388.7	389.6	389.9
115°	446.6	447.5	448.4	449.3	450.3	450.9	451.5	451.9	452.4	452.8	452.6
117.5°	510.4	510.9	511.3	511.7	512.1	512.5	512.9	513.4	513.7	514.2	514.3
120°	550.2	551.3	552.5	553.7	554.8	555.5	555.7	556.0	556.2	556.4	556.4
122.5°	593.3	593.8	594.1	594.6	594.9	595.5	596.1	596.7	597.3	597.9	597.7
125°	651.8	653.2	654.5	655.9	657.3	658.1	658.4	658.5	658.8	659.1	658.5
127.5°	714.0	714.7	715.5	716.3	717.1	717.6	717.9	718.2	718.5	718.7	718.5
130°	751.3	752.4	753.6	754.7	755.8	756.7	757.2	757.6	758.0	758.5	758.3
132.5°	788.5	790.4	792.4	794.2	796.1	797.0	796.9	796.8	796.7	796.7	796.4
135°	847.7	849.0	850.4	851.8	853.2	854.0	854.2	854.4	854.6	854.9	854.9
137.5°	903.1	904.5	905.8	907.1	908.5	909.5	909.9	910.4	911.0	911.4	911.7
140°	938.8	940.0	941.1	942.3	943.4	944.3	945.0	945.7	946.4	947.1	947.5
142.5°	974.5	975.4	976.4	977.3	978.3	979.3	980.1	981.0	981.9	982.8	983.0
145°	1026.9	1027.8	1028.8	1029.7	1030.6	1031.4	1032.1	1032.8	1033.4	1034.1	1034.1
147.5°	1075.4	1075.8	1076.4	1076.9	1077.4	1077.9	1078.5	1079.1	1079.6	1080.1	1080.7
150°	1107.7	1107.5	1107.2	1107.1	1106.8	1107.1	1108.0	1108.9	1109.9	1110.8	1110.8
152.5°	1134.3	1134.5	1134.9	1135.2	1135.5	1135.9	1136.2	1136.6	1137.0	1137.4	1137.9
155°	1175.1	1175.1	1175.1	1175.1	1175.1	1175.2	1175.5	1175.6	1175.9	1176.1	1177.1
157.5°	1211.6	1211.0	1210.5	1210.1	1209.5	1209.3	1209.6	1209.9	1210.1	1210.3	1211.2
160°	1233.1	1232.4	1231.7	1231.0	1230.3	1230.1	1230.3	1230.6	1230.8	1231.0	1231.9
162.5°	1252.1	1251.7	1251.2	1250.6	1250.1	1249.9	1249.9	1250.0	1250.0	1250.1	1251.2
165°	1277.6	1277.2	1276.8	1276.3	1275.8	1275.7	1275.9	1276.1	1276.4	1276.6	1277.6
167.5°	1299.2	1298.2	1297.4	1296.5	1295.5	1295.0	1295.0	1295.0	1295.0	1295.0	1296.5
170°	1310.8	1309.9	1308.9	1308.1	1307.2	1306.6	1306.6	1306.6	1306.6	1306.6	1308.1
172.5°	1319.1	1318.2	1317.2	1316.3	1315.5	1314.9	1314.9	1314.9	1314.9	1314.9	1316.3
175°	1328.4	1327.5	1326.6	1325.6	1324.7	1324.3	1324.3	1324.3	1324.3	1324.3	1325.6
177.5°	1333.2	1332.5	1331.7	1331.0	1330.3	1329.8	1329.6	1329.5	1329.2	1329.0	1330.2
180°	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5



TEST NUMBER: P333638-940

CATALOG NUMBER: S125RDIP-S1270D1205U940-4F0-1E-UDD-F1

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°	20.4	20.7	21.0	21.0	20.9	20.8	20.7	20.5
90°	18.9	20.1	21.2	22.1	22.8	23.5	24.2	24.9
92.5°	42.8	44.3	45.8	46.9	47.3	47.9	48.4	48.9
95°	83.0	84.6	86.2	87.3	87.7	88.2	88.6	89.1
97.5°	130.1	131.6	133.1	134.0	134.3	134.6	134.8	135.1
100°	162.6	164.8	166.8	168.1	168.5	169.0	169.5	170.0
102.5°	196.2	198.5	200.7	202.2	202.9	203.5	204.1	204.7
105°	250.4	251.8	253.2	254.2	254.9	255.6	256.3	257.0
107.5°	308.9	309.6	310.3	310.7	310.6	310.6	310.5	310.4
110°	349.6	350.3	350.9	351.2	350.9	350.7	350.4	350.3



TEST NUMBER: P333638-940

CATALOG NUMBER: S125RDIP-S1270D1205U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	390.3	390.6	390.9	390.8	390.5	390.0	389.6	389.2
115°	452.4	452.1	451.9	451.7	451.5	451.2	450.9	450.8
117.5°	514.5	514.7	514.9	514.5	513.6	512.7	511.8	510.9
120°	556.4	556.4	556.4	556.0	555.1	554.1	553.2	552.3
122.5°	597.5	597.4	597.2	596.7	595.9	595.2	594.5	593.8
125°	658.1	657.6	657.2	656.8	656.7	656.4	656.1	655.9
127.5°	718.3	718.0	717.8	717.5	717.0	716.5	716.0	715.6
130°	758.0	757.8	757.6	757.2	756.8	756.3	755.8	755.4
132.5°	796.2	795.9	795.7	795.3	794.6	794.0	793.4	792.7
135°	854.9	854.9	854.9	854.4	853.5	852.6	851.7	850.7
137.5°	912.0	912.3	912.6	912.1	911.0	909.8	908.7	907.5
140°	948.0	948.5	949.0	948.6	947.4	946.3	945.1	944.0
142.5°	983.3	983.6	983.8	983.4	982.2	981.1	980.0	978.8
145°	1034.1	1034.1	1034.1	1033.8	1033.1	1032.4	1031.7	1031.0
147.5°	1081.3	1081.8	1082.4	1081.8	1080.3	1078.7	1077.2	1075.6
150°	1110.8	1110.8	1110.8	1110.6	1110.1	1109.6	1109.2	1108.8
152.5°	1138.4	1139.0	1139.5	1139.4	1138.6	1137.7	1136.9	1136.1
155°	1177.9	1178.8	1179.8	1179.6	1178.5	1177.3	1176.3	1175.1
157.5°	1212.1	1213.1	1214.0	1213.7	1212.2	1210.7	1209.2	1207.6
160°	1232.9	1233.8	1234.7	1234.6	1233.4	1232.3	1231.1	1230.0
162.5°	1252.3	1253.4	1254.5	1254.4	1253.0	1251.7	1250.4	1249.0
165°	1278.4	1279.3	1280.3	1280.1	1278.7	1277.3	1275.9	1274.5
167.5°	1297.8	1299.2	1300.6	1300.6	1299.1	1297.7	1296.3	1294.9
170°	1309.4	1310.8	1312.2	1312.1	1310.5	1308.9	1307.2	1305.6
172.5°	1317.7	1319.1	1320.4	1320.4	1319.0	1317.6	1316.2	1314.7
175°	1327.0	1328.4	1329.8	1329.7	1328.1	1326.5	1324.8	1323.2
177.5°	1331.2	1332.4	1333.5	1333.4	1332.1	1330.8	1329.5	1328.2
180°	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5

(END OF REPORT)