

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: P333602-840

Luminaire Tested: **S125RDIP-S1090D1035U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333602-840
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-S1090D1035U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 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: 7882.1 lumens
Efficiency: N/A
Efficacy: 130.3 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

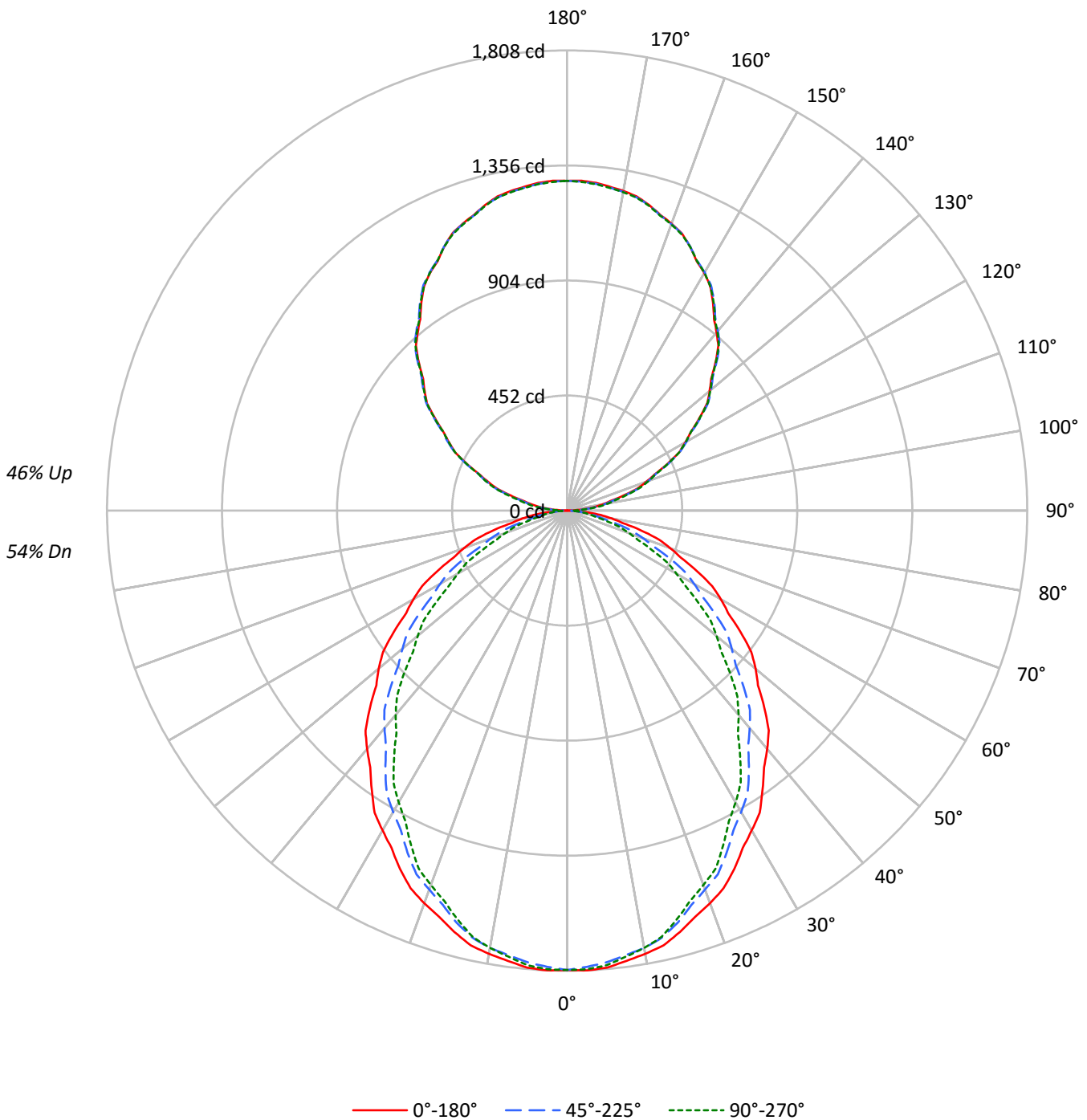
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	84	77	72	67	66	62	59	56	54	51	47	45	43	39
3	83	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37	33
4	76	65	57	51	70	61	54	48	52	47	43	45	41	37	38	35	32	29
5	69	58	50	44	64	54	47	42	47	41	37	40	36	33	34	31	28	25
6	64	52	44	38	59	49	41	36	42	37	32	36	32	29	31	28	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	30	25	30	26	23	26	23	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	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11657	11657	11657
5°	11684	11551	11622
10°	11596	11444	11444
15°	11457	11212	11120
20°	11281	10888	10757
25°	11075	10570	10337
30°	10818	10197	9871
35°	10555	9813	9351
40°	10309	9413	8838
45°	10011	8965	8280
50°	9711	8478	7698
55°	9364	8014	7076
60°	9016	7448	6409
65°	8604	6791	5645
70°	8135	5973	4864
75°	7483	5036	4047
80°	6590	3954	3396
85°	5550	3231	3031



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.7	2.2
10°-20°	474.3	6.0
20°-30°	687.8	8.7
30°-40°	783.9	9.9
40°-50°	764.1	9.7
50°-60°	643.2	8.2
60°-70°	450.9	5.7
70°-80°	231.8	2.9
80°-90°	61.4	0.8
90°-100°	86.8	1.1
100°-110°	256.2	3.3
110°-120°	434.0	5.5
120°-130°	571.2	7.2
130°-140°	640.0	8.1
140°-150°	627.3	8.0
150°-160°	526.9	6.7
160°-170°	350.2	4.4
170°-180°	122.6	1.6
0°-30°	1331.9	16.9
0°-40°	2115.8	26.8
0°-60°	3523.1	44.7
0°-90°	4267.0	54.1
90°-120°	777.0	9.9
90°-150°	2615.5	33.2
90°-180°	3615.0	45.9
0°-180°	7882.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1805	1805	1805	1805	1805	
5°	1802	1796	1782	1794	1793	171
15°	1714	1704	1677	1675	1663	483
25°	1554	1532	1483	1466	1451	715
35°	1339	1304	1245	1206	1186	838
45°	1096	1055	982	929	907	845
55°	832	786	712	652	628	744
65°	563	515	444	392	369	558
75°	300	258	202	173	162	317
85°	75	51	44	42	41	84
90°	1	9	16	21	24	7
95°	66	68	78	84	87	70
105°	230	235	241	247	250	245
115°	434	438	441	440	439	430
125°	634	640	641	639	638	568
135°	825	830	832	832	828	635
145°	999	1003	1006	1006	1003	624
155°	1143	1143	1144	1148	1143	526
165°	1243	1241	1242	1246	1240	351
175°	1292	1289	1288	1294	1288	123
180°	1296	1296	1296	1296	1296	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0
2.5°	1808.3	1807.6	1806.9	1806.0	1805.3	1803.8	1801.4	1799.0	1796.5	1794.1	1796.5
5°	1802.3	1801.1	1799.9	1798.7	1797.5	1795.1	1791.8	1788.5	1785.1	1781.8	1784.8
7.5°	1784.5	1783.4	1782.2	1781.1	1779.9	1777.4	1773.3	1769.4	1765.3	1761.4	1763.5
10°	1768.2	1767.3	1766.4	1765.4	1764.5	1762.0	1757.8	1753.5	1749.3	1745.0	1746.0
12.5°	1749.6	1748.5	1747.4	1746.2	1745.0	1741.6	1736.0	1730.2	1724.5	1718.8	1719.5
15°	1713.6	1711.8	1710.0	1708.2	1706.4	1702.3	1696.0	1689.6	1683.2	1676.9	1676.6
17.5°	1673.0	1670.2	1667.5	1664.7	1661.8	1656.5	1648.5	1640.5	1632.4	1624.5	1623.0
20°	1641.4	1638.4	1635.4	1632.3	1629.3	1623.0	1613.3	1603.6	1593.9	1584.2	1582.7
22.5°	1606.5	1603.5	1600.4	1597.4	1594.4	1587.8	1577.6	1567.4	1557.2	1547.0	1544.1
25°	1554.2	1549.6	1545.1	1540.5	1536.0	1528.1	1516.9	1505.7	1494.5	1483.3	1479.4
27.5°	1494.2	1488.6	1483.1	1477.6	1472.1	1463.4	1451.4	1439.4	1427.3	1415.3	1409.9
30°	1450.6	1444.8	1439.1	1433.3	1427.5	1418.3	1405.5	1392.8	1380.1	1367.4	1360.4
32.5°	1408.0	1401.3	1394.5	1387.9	1381.1	1371.3	1358.3	1345.3	1332.3	1319.4	1311.7
35°	1338.8	1331.5	1324.2	1317.0	1309.7	1299.2	1285.6	1271.9	1258.3	1244.7	1235.9
37.5°	1270.8	1262.0	1253.1	1244.4	1235.5	1224.1	1209.9	1195.9	1181.8	1167.8	1157.2
40°	1222.8	1213.8	1204.7	1195.6	1186.5	1174.7	1160.1	1145.6	1131.0	1116.5	1105.0
42.5°	1172.7	1163.4	1154.1	1144.7	1135.4	1123.2	1108.1	1093.2	1078.1	1063.1	1052.1
45°	1096.1	1087.3	1078.5	1069.8	1061.0	1048.2	1031.6	1014.9	998.3	981.6	969.5
47.5°	1016.7	1007.4	998.2	989.0	979.7	966.6	949.9	933.0	916.3	899.5	887.0
50°	966.5	956.5	946.5	936.5	926.6	912.9	895.6	878.4	861.1	843.8	831.1
52.5°	912.0	901.8	891.5	881.3	871.1	857.8	841.5	825.2	808.9	792.6	778.9
55°	831.6	821.9	812.2	802.5	792.8	779.5	762.5	745.6	728.6	711.7	698.0
57.5°	750.3	740.0	729.6	719.2	708.9	695.6	679.2	662.9	646.5	630.2	616.8
60°	698.0	687.4	676.8	666.2	655.6	642.1	625.7	609.4	593.0	576.6	563.3
62.5°	642.4	632.3	622.2	612.0	601.9	588.5	572.0	555.3	538.8	522.1	509.8
65°	563.0	552.7	542.4	532.1	521.8	508.7	492.6	476.6	460.5	444.4	432.3
67.5°	484.2	473.9	463.6	453.3	443.0	430.2	414.8	399.4	384.1	368.6	357.6
70°	430.8	420.5	410.2	399.9	389.6	376.9	361.7	346.6	331.4	316.3	306.9
72.5°	378.5	368.4	358.3	348.3	338.2	326.1	311.9	297.7	283.6	269.4	260.7
75°	299.9	290.8	281.8	272.7	263.6	252.7	239.9	227.2	214.5	201.8	195.1
77.5°	222.0	214.7	207.4	200.2	192.9	184.1	174.0	163.8	153.6	143.4	138.8
80°	177.2	170.0	162.7	155.4	148.1	140.3	131.8	123.3	114.8	106.3	103.6
82.5°	133.6	127.0	120.5	114.0	107.4	101.3	95.4	89.6	83.8	78.0	76.7
85°	74.9	69.5	64.0	58.6	53.1	49.7	48.2	46.7	45.1	43.6	43.3
87.5°	25.2	23.9	22.6	21.3	19.9	19.3	19.4	19.5	19.5	19.6	19.8
90°	1.0	2.8	4.5	6.4	8.2	9.9	11.4	13.0	14.5	16.2	17.3
92.5°	24.4	25.7	26.9	28.2	29.4	31.0	32.9	34.8	36.8	38.7	40.2
95°	65.5	65.9	66.4	66.9	67.4	68.7	70.9	73.1	75.4	77.7	79.2
97.5°	108.9	109.1	109.3	109.5	109.6	111.3	114.3	117.4	120.5	123.6	125.1
100°	141.2	141.2	141.2	141.2	141.2	142.6	145.5	148.5	151.4	154.2	156.2
102.5°	175.8	176.7	177.6	178.5	179.5	180.6	182.1	183.6	185.0	186.5	188.7
105°	229.8	231.0	232.1	233.3	234.4	235.6	236.9	238.2	239.6	241.0	242.3
107.5°	289.5	290.6	291.8	293.0	294.1	295.1	296.1	297.2	298.2	299.2	299.9
110°	330.7	331.8	333.0	334.1	335.2	336.1	336.7	337.4	338.1	338.7	339.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	372.6	373.2	373.8	374.4	375.0	375.7	376.6	377.4	378.2	379.1	379.4
115°	434.5	435.5	436.4	437.3	438.1	438.8	439.2	439.7	440.1	440.6	440.4
117.5°	496.7	497.1	497.5	497.9	498.3	498.7	499.1	499.5	499.9	500.3	500.5
120°	535.3	536.4	537.6	538.8	539.9	540.5	540.7	541.0	541.2	541.4	541.4
122.5°	577.3	577.7	578.1	578.6	579.0	579.4	580.0	580.6	581.2	581.7	581.6
125°	634.2	635.5	636.8	638.2	639.5	640.4	640.6	640.8	641.0	641.3	640.8
127.5°	694.7	695.4	696.2	696.9	697.7	698.2	698.5	698.7	699.0	699.3	699.0
130°	730.9	732.1	733.2	734.3	735.4	736.2	736.7	737.1	737.5	738.0	737.8
132.5°	767.2	769.1	770.9	772.7	774.6	775.5	775.4	775.3	775.2	775.1	774.9
135°	824.8	826.1	827.4	828.7	830.1	830.9	831.1	831.3	831.5	831.7	831.7
137.5°	878.8	880.0	881.3	882.6	883.9	884.8	885.3	885.9	886.4	886.8	887.1
140°	913.4	914.5	915.6	916.8	917.9	918.8	919.5	920.2	920.8	921.5	921.9
142.5°	948.1	949.1	950.0	950.9	951.9	952.8	953.6	954.5	955.3	956.1	956.4
145°	999.2	1000.1	1000.9	1001.8	1002.7	1003.5	1004.2	1004.8	1005.5	1006.2	1006.2
147.5°	1046.3	1046.8	1047.3	1047.8	1048.2	1048.8	1049.4	1049.9	1050.4	1051.0	1051.5
150°	1077.7	1077.5	1077.3	1077.1	1076.9	1077.2	1078.1	1079.0	1079.8	1080.8	1080.8
152.5°	1103.6	1103.9	1104.2	1104.5	1104.8	1105.2	1105.5	1105.9	1106.2	1106.6	1107.1
155°	1143.3	1143.3	1143.3	1143.3	1143.3	1143.4	1143.7	1143.9	1144.1	1144.3	1145.2
157.5°	1178.8	1178.3	1177.8	1177.3	1176.8	1176.7	1176.9	1177.1	1177.4	1177.6	1178.5
160°	1199.7	1199.1	1198.4	1197.7	1197.1	1196.9	1197.1	1197.3	1197.5	1197.7	1198.6
162.5°	1218.3	1217.8	1217.3	1216.8	1216.4	1216.1	1216.2	1216.2	1216.3	1216.3	1217.4
165°	1243.1	1242.6	1242.2	1241.7	1241.3	1241.2	1241.4	1241.6	1241.8	1242.1	1243.0
167.5°	1264.0	1263.1	1262.3	1261.4	1260.5	1260.0	1260.0	1260.0	1260.0	1260.0	1261.4
170°	1275.4	1274.4	1273.5	1272.7	1271.8	1271.3	1271.3	1271.3	1271.3	1271.3	1272.7
172.5°	1283.4	1282.5	1281.6	1280.7	1279.9	1279.4	1279.4	1279.4	1279.4	1279.4	1280.7
175°	1292.5	1291.6	1290.7	1289.8	1288.9	1288.5	1288.5	1288.5	1288.5	1288.5	1289.8
177.5°	1297.2	1296.5	1295.8	1294.9	1294.2	1293.8	1293.6	1293.4	1293.3	1293.1	1294.2
180°	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0
2.5°	1799.0	1801.4	1803.8	1804.8	1804.6	1804.4	1804.1	1803.9
5°	1787.9	1790.9	1793.9	1795.1	1794.5	1793.9	1793.3	1792.7
7.5°	1765.6	1767.8	1769.9	1770.6	1769.9	1769.3	1768.6	1767.9
10°	1746.9	1747.8	1748.7	1748.7	1747.8	1746.9	1746.0	1745.0
12.5°	1720.2	1720.8	1721.5	1721.1	1719.7	1718.4	1717.0	1715.6
15°	1676.3	1676.0	1675.7	1674.2	1671.4	1668.7	1666.0	1663.2
17.5°	1621.4	1619.9	1618.4	1616.6	1614.3	1612.0	1609.8	1607.6
20°	1581.1	1579.6	1578.1	1576.0	1573.3	1570.5	1567.8	1565.1
22.5°	1541.2	1538.1	1535.2	1532.6	1530.3	1528.1	1525.8	1523.6
25°	1475.4	1471.5	1467.5	1463.9	1460.6	1457.2	1453.9	1450.6
27.5°	1404.3	1398.9	1393.3	1389.0	1385.7	1382.5	1379.3	1376.1
30°	1353.4	1346.5	1339.5	1334.6	1331.9	1329.2	1326.5	1323.7
32.5°	1304.0	1296.3	1288.6	1283.0	1279.6	1276.2	1272.6	1269.2
35°	1227.1	1218.3	1209.5	1203.1	1198.8	1194.6	1190.3	1186.1
37.5°	1146.7	1136.2	1125.6	1118.3	1114.2	1110.0	1105.9	1101.8
40°	1093.5	1082.0	1070.5	1062.9	1059.2	1055.6	1052.0	1048.3
42.5°	1041.1	1030.0	1019.0	1010.8	1005.4	1000.2	994.8	989.5
45°	957.4	945.2	933.1	924.7	920.2	915.6	911.1	906.6
47.5°	874.5	862.0	849.6	840.8	835.8	830.7	825.8	820.7
50°	818.4	805.7	792.9	784.4	779.8	775.3	770.7	766.2
52.5°	765.3	751.5	737.8	728.7	724.2	719.6	715.1	710.5
55°	684.4	670.8	657.1	647.8	643.0	638.1	633.3	628.4
57.5°	603.5	590.2	576.8	567.9	563.7	559.4	555.0	550.8
60°	550.0	536.6	523.3	514.4	509.9	505.3	500.8	496.2
62.5°	497.5	485.0	472.7	464.2	459.7	455.1	450.6	446.1
65°	420.2	408.1	396.0	387.6	383.0	378.5	374.0	369.4
67.5°	346.5	335.4	324.3	316.9	313.3	309.6	306.0	302.4
70°	297.5	288.1	278.7	272.2	268.5	264.9	261.3	257.6
72.5°	252.1	243.4	234.7	229.1	226.7	224.3	221.9	219.4
75°	188.4	181.8	175.1	170.7	168.5	166.4	164.3	162.2
77.5°	134.1	129.5	124.7	121.6	120.1	118.5	116.9	115.3
80°	100.9	98.2	95.4	93.7	93.1	92.5	91.9	91.3
82.5°	75.4	74.1	72.9	72.1	71.7	71.3	71.0	70.6
85°	43.0	42.7	42.4	42.1	41.8	41.5	41.2	40.9
87.5°	20.0	20.3	20.5	20.5	20.4	20.3	20.2	20.1
90°	18.4	19.5	20.6	21.5	22.2	22.8	23.5	24.2
92.5°	41.7	43.1	44.6	45.6	46.2	46.6	47.1	47.6
95°	80.8	82.3	83.9	84.9	85.3	85.8	86.2	86.7
97.5°	126.5	128.1	129.6	130.4	130.7	131.0	131.2	131.5
100°	158.2	160.3	162.3	163.6	164.0	164.4	164.9	165.3
102.5°	190.9	193.1	195.3	196.7	197.3	197.9	198.6	199.2
105°	243.7	245.0	246.3	247.3	248.0	248.7	249.3	250.0
107.5°	300.5	301.2	301.9	302.3	302.2	302.2	302.2	302.1
110°	340.1	340.7	341.4	341.6	341.4	341.2	341.0	340.7



TEST NUMBER: P333602-840

CATALOG NUMBER: S125RDIP-S1090D1035U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	379.7	380.0	380.3	380.3	379.9	379.5	379.1	378.7
115°	440.1	439.9	439.7	439.5	439.2	439.0	438.8	438.6
117.5°	500.6	500.8	501.0	500.6	499.7	498.9	498.0	497.1
120°	541.4	541.4	541.4	541.0	540.1	539.2	538.3	537.3
122.5°	581.4	581.2	581.0	580.6	579.9	579.2	578.5	577.7
125°	640.4	639.9	639.4	639.0	638.8	638.6	638.4	638.2
127.5°	698.8	698.6	698.4	698.0	697.6	697.1	696.7	696.3
130°	737.5	737.3	737.1	736.8	736.3	735.9	735.4	735.0
132.5°	774.7	774.5	774.2	773.8	773.2	772.5	771.9	771.2
135°	831.7	831.7	831.7	831.3	830.4	829.5	828.6	827.7
137.5°	887.4	887.6	887.9	887.5	886.4	885.2	884.1	883.0
140°	922.4	922.8	923.3	922.9	921.8	920.7	919.6	918.5
142.5°	956.7	956.9	957.3	956.8	955.7	954.6	953.5	952.3
145°	1006.2	1006.2	1006.2	1005.8	1005.2	1004.5	1003.8	1003.2
147.5°	1052.0	1052.6	1053.1	1052.6	1051.1	1049.6	1048.0	1046.5
150°	1080.8	1080.8	1080.8	1080.6	1080.2	1079.6	1079.2	1078.7
152.5°	1107.7	1108.2	1108.7	1108.6	1107.8	1107.0	1106.2	1105.4
155°	1146.1	1147.0	1147.9	1147.8	1146.7	1145.5	1144.4	1143.3
157.5°	1179.3	1180.2	1181.1	1180.8	1179.4	1177.9	1176.4	1175.0
160°	1199.5	1200.4	1201.3	1201.2	1200.1	1199.0	1197.9	1196.7
162.5°	1218.4	1219.5	1220.6	1220.5	1219.2	1217.9	1216.6	1215.3
165°	1243.9	1244.8	1245.7	1245.5	1244.2	1242.7	1241.4	1240.1
167.5°	1262.7	1264.0	1265.5	1265.4	1264.0	1262.6	1261.2	1259.8
170°	1274.0	1275.4	1276.7	1276.6	1275.1	1273.4	1271.9	1270.3
172.5°	1282.1	1283.4	1284.8	1284.8	1283.3	1282.0	1280.6	1279.2
175°	1291.2	1292.5	1293.8	1293.7	1292.2	1290.6	1289.0	1287.5
177.5°	1295.3	1296.4	1297.4	1297.4	1296.1	1294.8	1293.5	1292.3
180°	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6

(END OF REPORT)