

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: P333639-940

Luminaire Tested: **S125RDIP-S1270D1205U940-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333639-940  
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-S1270D1205U940-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8205.5 lumens  
Efficiency: N/A  
Efficacy: 114.4 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

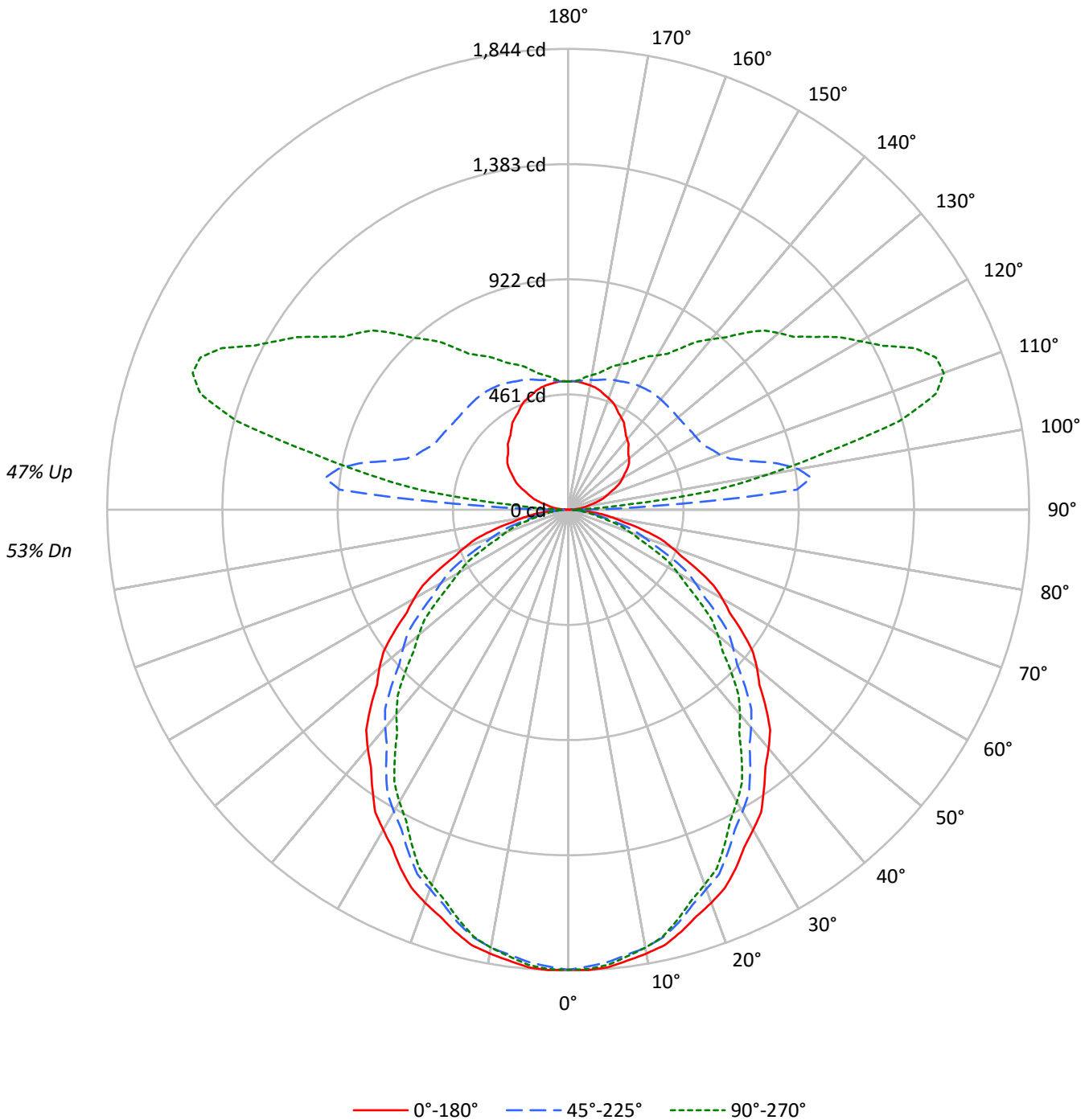
Input Watts (W): 71.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59
1	99	94	91	87	91	88	84	81	75	73	70	63	62	60	52	51	50
2	90	83	77	72	83	77	72	67	66	62	59	56	53	50	46	44	43
3	82	73	66	60	76	68	61	56	58	53	50	49	46	43	41	39	37
4	75	65	57	51	70	60	53	48	52	47	42	44	40	37	37	34	32
5	69	58	50	44	64	54	47	41	47	41	37	40	35	32	33	30	28
6	64	52	44	38	59	48	41	36	42	36	32	36	32	28	30	27	24
7	59	47	39	33	55	44	37	32	38	33	28	33	28	25	28	24	22
8	55	43	35	30	51	40	33	28	35	29	25	30	26	22	26	22	20
9	51	39	32	26	47	37	30	25	32	27	23	28	23	20	24	20	18
10	48	36	29	24	44	34	27	23	30	24	20	26	21	18	22	19	16

**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	2.1
10°-20°	483.7	5.9
20°-30°	701.4	8.5
30°-40°	799.4	9.7
40°-50°	779.2	9.5
50°-60°	655.9	8.0
60°-70°	459.8	5.6
70°-80°	236.3	2.9
80°-90°	62.6	0.8
90°-100°	372.5	4.5
100°-110°	800.8	9.8
110°-120°	751.5	9.2
120°-130°	609.1	7.4
130°-140°	488.8	6.0
140°-150°	368.8	4.5
150°-160°	259.6	3.2
160°-170°	153.0	1.9
170°-180°	49.8	0.6
0°-30°	1358.2	16.6
0°-40°	2157.6	26.3
0°-60°	3592.8	43.8
0°-90°	4351.5	53.0
90°-120°	1924.8	23.5
90°-150°	3391.5	41.3
90°-180°	3854.0	47.0
0°-180°	8205.5	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	24	6
95°	34	101	918	416	244	36
105°	117	164	751	1479	1373	123
115°	209	252	603	1300	1529	206
125°	290	340	578	1034	1205	257
135°	340	409	574	867	1001	264
145°	396	453	576	718	790	248
155°	452	486	562	635	662	208
165°	493	507	539	571	580	139
175°	513	513	517	523	521	49
180°	514	514	514	514	514	



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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	21.7	20.3	19.7	19.7	19.9	19.8	20.0	20.2
90°	1.1	2.1	4.1	6.2	8.3	10.3	11.4	13.5	14.5	16.6	17.7
92.5°	12.7	15.3	24.1	36.9	54.8	85.0	141.5	236.5	339.5	334.0	270.5
95°	34.2	35.2	43.5	54.9	77.7	124.3	235.2	463.2	749.1	918.0	898.3
97.5°	56.8	58.1	63.8	75.3	95.8	129.3	202.7	369.7	669.0	980.3	1136.7
100°	72.5	74.6	78.7	90.2	109.9	140.9	201.0	335.7	596.8	935.6	1194.6
102.5°	90.0	91.2	94.5	106.7	124.8	155.0	208.5	321.6	542.1	856.8	1159.8
105°	117.1	117.1	122.3	132.6	149.2	178.3	223.8	316.0	489.0	751.2	1048.6
107.5°	143.6	145.7	150.6	159.2	176.4	202.4	246.6	325.6	466.6	678.4	935.0
110°	162.6	164.8	168.9	178.3	193.8	220.7	263.1	334.7	460.0	644.4	870.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	181.7	183.8	187.1	196.4	212.0	238.1	278.9	346.3	460.0	624.6	822.2
115°	209.3	211.3	214.5	223.8	239.3	265.3	303.6	363.6	463.2	603.1	769.8
117.5°	234.2	237.3	240.6	249.9	267.5	292.6	328.9	383.6	470.0	592.5	738.5
120°	250.7	253.9	258.0	267.3	284.9	310.9	347.1	396.8	476.6	587.5	721.1
122.5°	268.1	270.5	273.8	283.0	302.4	328.2	364.5	411.8	482.4	583.4	706.2
125°	290.1	292.2	297.4	306.7	326.4	353.3	387.5	432.0	492.1	578.2	685.9
127.5°	307.3	310.4	317.1	328.9	349.8	376.7	409.7	450.8	503.1	575.7	667.3
130°	318.1	321.2	329.5	343.0	364.7	391.6	423.7	463.2	509.8	574.0	654.9
132.5°	326.4	330.3	340.3	355.4	378.0	404.9	437.0	473.9	517.2	574.0	644.9
135°	339.8	344.0	356.4	373.0	394.8	422.8	454.9	489.0	527.4	574.0	633.1
137.5°	356.9	360.0	371.6	388.2	409.5	438.3	467.5	500.2	536.7	575.2	622.5
140°	366.8	369.9	382.4	399.0	418.6	446.6	476.6	507.7	540.8	576.0	617.5
142.5°	378.4	380.7	392.3	408.8	427.8	454.1	482.4	511.8	543.3	576.9	613.4
145°	395.8	397.9	408.2	422.8	441.4	465.2	492.1	518.1	546.1	576.0	607.2
147.5°	414.0	415.3	424.2	437.7	453.8	474.7	498.4	521.8	547.1	573.4	600.7
150°	424.8	426.9	434.2	447.6	462.1	479.7	502.5	524.3	547.1	570.9	595.8
152.5°	436.4	437.7	444.1	455.9	469.6	485.5	506.7	525.9	546.3	567.6	590.0
155°	451.7	451.7	458.0	468.3	478.7	493.2	510.8	527.4	543.9	561.6	580.2
157.5°	465.5	465.2	470.2	479.1	488.2	499.2	514.3	528.4	541.3	555.4	571.1
160°	474.6	473.5	477.7	484.9	493.2	502.5	516.0	528.4	538.8	551.3	563.7
162.5°	482.0	481.0	485.1	491.5	498.2	505.9	517.6	527.6	536.3	546.3	557.1
165°	493.2	491.2	494.3	499.4	503.5	509.8	518.1	526.4	532.5	538.8	547.1
167.5°	500.7	499.6	501.5	504.4	507.3	511.2	518.1	523.9	526.7	531.5	537.3
170°	505.6	504.6	505.6	507.7	509.8	512.9	518.1	522.2	524.3	527.4	531.5
172.5°	509.0	507.1	508.1	510.1	511.4	512.9	517.2	520.6	520.9	522.5	525.8
175°	512.9	510.8	511.8	512.9	512.9	512.9	516.0	518.1	517.0	517.0	518.1
177.5°	514.8	513.1	513.1	513.9	513.1	513.1	514.8	515.6	513.9	513.9	514.8
180°	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9



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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°	20.4	20.6	20.9	21.1	20.9	20.6	20.6	20.3
90°	18.6	19.7	20.7	22.8	22.8	22.8	23.8	23.8
92.5°	183.6	133.2	100.3	85.0	71.7	69.2	67.8	66.1
95°	744.9	587.5	460.0	373.0	299.4	268.3	260.1	243.5
97.5°	1109.5	999.1	874.9	753.9	689.8	631.9	601.8	588.5
100°	1274.4	1223.7	1117.0	1009.1	937.7	863.1	824.7	808.2
102.5°	1330.0	1361.3	1310.1	1237.2	1160.7	1107.6	1066.0	1053.6
105°	1297.3	1439.2	1484.8	1473.4	1440.2	1406.0	1385.3	1372.9
107.5°	1180.4	1369.8	1486.8	1541.0	1557.7	1557.6	1550.7	1542.4
110°	1094.1	1291.0	1437.1	1525.2	1571.8	1591.5	1598.7	1598.7





TEST NUMBER: P333639-940

CATALOG NUMBER: S125RDIP-S1270D1205U940-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1026.2	1213.1	1360.8	1464.6	1532.9	1566.6	1584.7	1592.1
115°	940.8	1101.4	1243.3	1356.3	1437.1	1486.8	1515.8	1529.3
117.5°	885.6	1024.1	1146.4	1250.0	1330.8	1382.2	1411.0	1419.2
120°	855.9	980.2	1094.1	1185.4	1262.0	1311.7	1339.7	1348.0
122.5°	833.5	948.7	1050.3	1135.6	1204.0	1249.6	1277.6	1285.0
125°	800.9	906.6	996.8	1071.4	1129.4	1171.9	1194.6	1205.1
127.5°	767.8	866.4	950.6	1020.4	1073.0	1110.5	1132.1	1136.7
130°	747.1	838.2	919.1	986.4	1038.2	1072.4	1093.1	1099.3
132.5°	726.3	811.7	885.0	949.9	1001.7	1035.9	1055.0	1062.0
135°	699.4	770.9	837.2	896.3	941.8	976.1	994.7	1000.9
137.5°	676.6	734.4	789.5	839.7	880.5	911.6	928.8	935.6
140°	664.1	712.8	760.5	804.1	842.4	869.3	884.8	890.0
142.5°	653.4	694.6	735.7	773.4	805.9	828.7	843.4	847.7
145°	639.3	671.4	703.6	731.5	756.3	774.0	785.4	789.5
147.5°	626.1	652.1	676.8	697.9	717.6	731.7	738.3	740.2
150°	618.6	641.4	661.0	679.7	695.3	707.7	711.9	712.8
152.5°	610.3	630.6	648.6	663.2	676.2	686.1	690.3	691.3
155°	597.8	614.4	628.9	640.3	650.7	657.9	661.0	662.1
157.5°	585.4	599.1	610.3	619.2	627.2	633.3	636.1	636.0
160°	577.1	587.5	597.8	605.1	612.3	617.5	619.6	618.6
162.5°	568.0	577.6	586.2	592.6	598.2	602.6	603.1	602.8
165°	555.4	562.6	568.8	574.0	578.2	580.2	580.2	580.2
167.5°	543.3	548.1	552.9	556.6	558.7	560.5	559.7	559.5
170°	536.7	539.8	543.0	545.0	547.1	548.1	548.1	547.1
172.5°	529.2	532.4	534.7	535.9	536.3	538.1	536.5	535.5
175°	521.2	521.2	523.3	523.3	523.3	524.3	522.2	521.2
177.5°	515.6	516.4	516.4	516.4	515.6	516.4	513.9	513.9
180°	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9

(END OF REPORT)