

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: P333633-940

Luminaire Tested: **S125RDIP-S1270D1035U940-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333633-940  
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-S1270D1035U940-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7662.1 lumens  
Efficiency: N/A  
Efficacy: 114.7 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

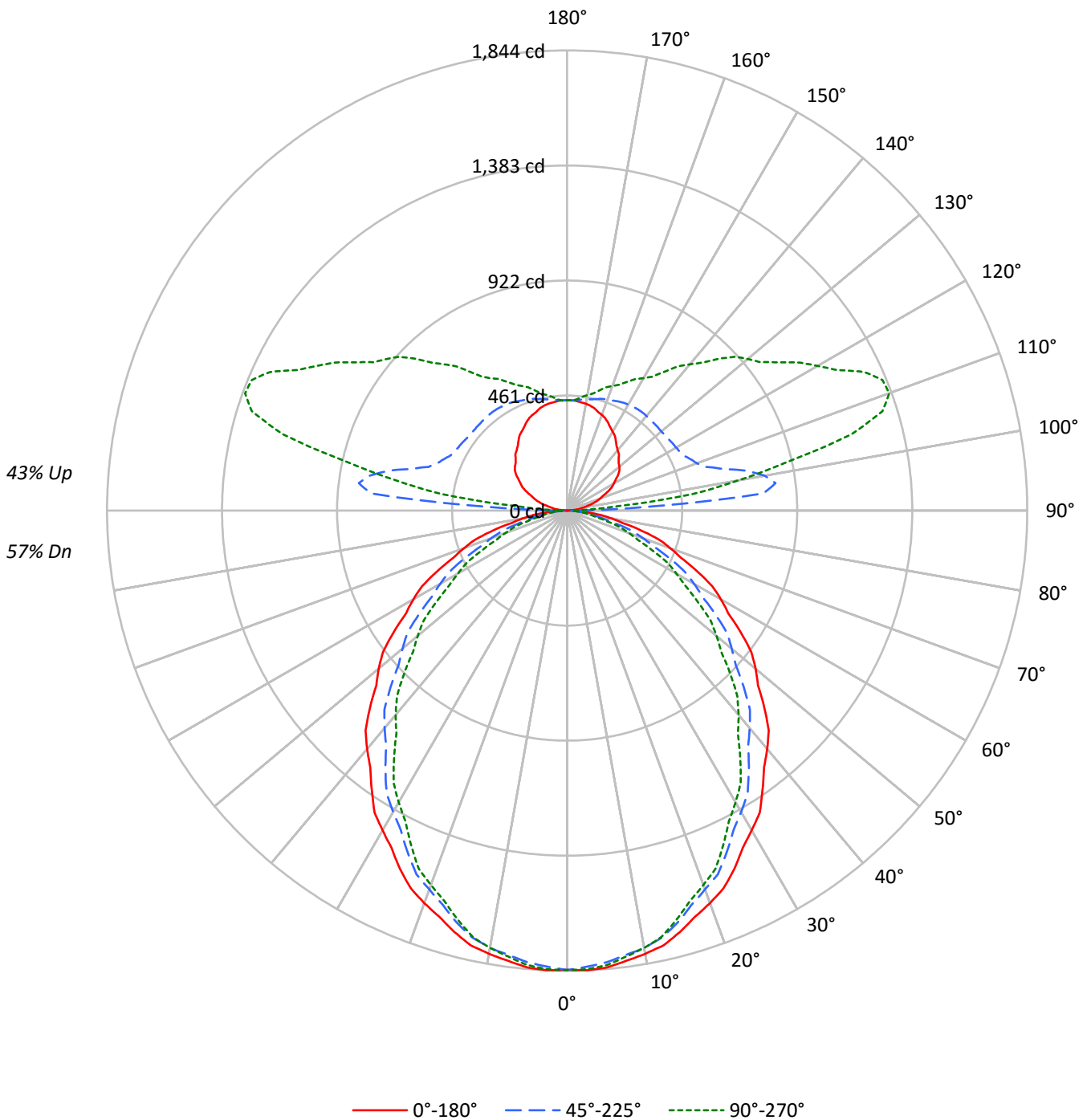
Input Watts (W): 66.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	100	95	91	88	93	89	86	83	77	74	72	66	64	62	56	54	53	48
2	91	83	77	72	84	78	73	68	68	64	60	58	55	52	49	47	45	41
3	83	74	66	60	77	69	62	57	60	55	51	51	48	45	44	41	39	35
4	76	65	57	51	71	61	54	49	53	48	44	46	42	38	39	36	34	30
5	70	58	50	44	65	55	47	42	48	42	38	41	37	33	35	32	29	26
6	65	52	44	39	60	49	42	37	43	37	33	38	33	29	32	29	26	23
7	60	47	39	34	56	45	37	32	39	33	29	34	30	26	29	26	23	21
8	55	43	35	30	52	41	34	29	36	30	26	31	27	23	27	24	21	19
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	17
10	48	36	29	24	45	34	28	23	30	25	21	27	22	19	23	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	6.3
20°-30°	701.4	9.2
30°-40°	799.4	10.4
40°-50°	779.2	10.2
50°-60°	655.9	8.6
60°-70°	459.8	6.0
70°-80°	236.3	3.1
80°-90°	62.2	0.8
90°-100°	320.0	4.2
100°-110°	688.0	9.0
110°-120°	645.7	8.4
120°-130°	523.3	6.8
130°-140°	419.9	5.5
140°-150°	316.9	4.1
150°-160°	223.1	2.9
160°-170°	131.5	1.7
170°-180°	42.8	0.6
0°-30°	1358.2	17.7
0°-40°	2157.6	28.2
0°-60°	3592.8	46.9
0°-90°	4351.1	56.8
90°-120°	1653.7	21.6
90°-150°	2913.7	38.0
90°-180°	3311.0	43.2
0°-180°	7662.1	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	20	5
95°	29	87	789	358	209	31
105°	101	141	645	1271	1180	106
115°	180	217	518	1117	1314	177
125°	249	292	497	888	1035	221
135°	292	351	493	745	860	227
145°	340	389	495	616	678	213
155°	388	418	482	545	569	179
165°	424	435	463	491	498	119
175°	441	441	444	450	448	42
180°	442	442	442	442	442	

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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	24.2	22.8	21.5	20.1	19.4	19.4	19.5	19.4	19.5	19.7
90°	0.9	1.8	3.6	5.4	7.1	8.9	9.8	11.6	12.5	14.3	15.2
92.5°	10.9	13.2	20.7	31.7	47.0	73.0	121.6	203.1	291.6	287.0	232.3
95°	29.3	30.2	37.4	47.2	66.8	106.8	202.1	397.9	643.6	788.7	771.8
97.5°	48.8	49.8	54.8	64.6	82.2	111.1	174.2	317.6	574.7	842.3	976.5
100°	62.3	64.1	67.7	77.4	94.3	121.1	172.7	288.4	512.7	803.8	1026.4
102.5°	77.3	78.3	81.1	91.7	107.2	133.1	179.1	276.3	465.7	736.2	996.5
105°	100.6	100.6	105.0	114.0	128.2	153.1	192.3	271.5	420.2	645.3	900.9
107.5°	123.4	125.2	129.4	136.7	151.5	174.0	211.9	279.7	400.9	582.9	803.3
110°	139.7	141.5	145.1	153.1	166.5	189.6	226.1	287.5	395.2	553.7	747.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	156.1	157.9	160.8	168.8	182.1	204.6	239.6	297.5	395.2	536.6	706.4
115°	179.9	181.6	184.2	192.3	205.6	227.9	260.8	312.5	397.9	518.1	661.4
117.5°	201.2	203.8	206.7	214.7	229.9	251.4	282.6	329.6	403.8	509.0	634.5
120°	215.4	218.1	221.7	229.7	244.8	267.1	298.2	340.9	409.5	504.7	619.6
122.5°	230.4	232.3	235.1	243.2	259.8	282.0	313.2	353.7	414.5	501.1	606.7
125°	249.2	251.0	255.5	263.5	280.4	303.5	333.0	371.2	422.8	496.7	589.3
127.5°	264.0	266.7	272.4	282.6	300.5	323.7	352.0	387.2	432.3	494.5	573.3
130°	273.3	276.0	283.1	294.6	313.3	336.4	364.1	397.9	438.0	493.1	562.6
132.5°	280.4	283.7	292.3	305.3	324.8	347.9	375.5	407.2	444.3	493.1	554.0
135°	291.9	295.5	306.2	320.5	339.1	363.2	390.7	420.2	453.1	493.1	543.9
137.5°	306.6	309.2	319.2	333.5	351.8	376.6	401.6	429.8	461.1	494.2	534.8
140°	315.1	317.8	328.5	342.7	359.6	383.7	409.5	436.2	464.7	494.9	530.6
142.5°	325.1	327.1	337.0	351.2	367.5	390.0	414.5	439.7	466.8	495.6	527.0
145°	340.0	341.8	350.7	363.2	379.2	399.7	422.8	445.1	469.1	494.9	521.7
147.5°	355.7	356.8	364.4	376.0	389.9	407.9	428.2	448.3	470.0	492.6	516.1
150°	365.0	366.8	373.0	384.6	397.0	412.1	431.8	450.4	470.0	490.4	511.8
152.5°	375.0	376.0	381.6	391.6	403.4	417.1	435.3	451.8	469.3	487.7	506.8
155°	388.1	388.1	393.4	402.3	411.3	423.7	438.8	453.1	467.3	482.5	498.5
157.5°	399.8	399.7	403.9	411.6	419.5	428.9	441.8	454.0	465.0	477.2	490.6
160°	407.7	406.8	410.4	416.6	423.7	431.8	443.3	454.0	462.9	473.6	484.3
162.5°	414.1	413.2	416.8	422.3	428.0	434.6	444.7	453.3	460.7	469.3	478.6
165°	423.7	422.0	424.6	429.1	432.7	438.0	445.1	452.2	457.5	462.9	470.0
167.5°	430.2	429.3	430.9	433.4	435.9	439.2	445.1	450.0	452.5	456.6	461.6
170°	434.4	433.5	434.4	436.2	438.0	440.6	445.1	448.6	450.4	453.1	456.6
172.5°	437.3	435.7	436.6	438.3	439.3	440.6	444.3	447.2	447.5	448.8	451.7
175°	440.6	438.8	439.7	440.6	440.6	440.6	443.3	445.1	444.2	444.2	445.1
177.5°	442.2	440.8	440.8	441.5	440.8	440.8	442.2	442.9	441.5	441.5	442.2
180°	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5



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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	20.1	20.2	20.5	20.2	20.0	19.9	19.7
90°	16.1	16.9	17.8	19.6	19.6	19.6	20.5	20.5
92.5°	157.7	114.5	86.1	73.0	61.6	59.5	58.2	56.8
95°	640.1	504.7	395.2	320.5	257.3	230.6	223.5	209.2
97.5°	953.2	858.3	751.6	647.6	592.7	542.8	517.0	505.6
100°	1094.9	1051.3	959.6	867.0	805.6	741.5	708.6	694.4
102.5°	1142.6	1169.5	1125.5	1062.8	997.2	951.6	915.8	905.1
105°	1114.5	1236.4	1275.6	1265.8	1237.3	1208.0	1190.2	1179.5
107.5°	1014.1	1176.8	1277.4	1323.8	1338.3	1338.1	1332.2	1325.1
110°	940.0	1109.1	1234.7	1310.4	1350.4	1367.3	1373.5	1373.5





TEST NUMBER: P333633-940

CATALOG NUMBER: S125RDIP-S1270D1035U940-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	881.6	1042.2	1169.1	1258.4	1316.9	1345.9	1361.5	1367.8
115°	808.2	946.3	1068.2	1165.2	1234.7	1277.4	1302.3	1313.9
117.5°	760.9	879.9	984.9	1073.9	1143.4	1187.5	1212.2	1219.3
120°	735.3	842.1	940.0	1018.3	1084.2	1126.9	1151.0	1158.2
122.5°	716.0	815.0	902.2	975.6	1034.4	1073.5	1097.6	1104.0
125°	688.1	778.9	856.3	920.4	970.3	1006.7	1026.4	1035.3
127.5°	659.6	744.4	816.6	876.6	921.9	954.0	972.6	976.5
130°	641.9	720.1	789.6	847.5	892.0	921.3	939.1	944.5
132.5°	624.0	697.3	760.4	816.1	860.6	890.0	906.3	912.4
135°	600.8	662.3	719.3	770.0	809.1	838.6	854.5	859.9
137.5°	581.3	631.0	678.3	721.4	756.4	783.2	798.0	803.8
140°	570.6	612.4	653.4	690.8	723.7	746.9	760.2	764.6
142.5°	561.3	596.7	632.0	664.4	692.4	711.9	724.6	728.3
145°	549.2	576.8	604.4	628.5	649.8	664.9	674.8	678.3
147.5°	537.9	560.3	581.5	599.6	616.5	628.7	634.4	636.0
150°	531.5	551.0	567.9	584.0	597.3	608.0	611.5	612.4
152.5°	524.3	541.7	557.2	569.7	580.9	589.5	593.0	593.9
155°	513.6	527.9	540.4	550.1	559.0	565.3	567.9	568.8
157.5°	502.9	514.7	524.3	532.0	539.0	544.0	546.5	546.4
160°	495.8	504.7	513.6	519.9	526.1	530.6	532.4	531.5
162.5°	488.0	496.1	503.6	509.2	514.0	517.7	518.1	517.9
165°	477.2	483.4	488.7	493.1	496.7	498.5	498.5	498.5
167.5°	466.8	470.9	475.0	478.2	480.0	481.6	480.9	480.7
170°	461.1	463.8	466.5	468.2	470.0	470.9	470.9	470.0
172.5°	454.7	457.4	459.3	460.4	460.7	462.4	460.9	460.0
175°	447.7	447.7	449.5	449.5	449.5	450.4	448.6	447.7
177.5°	442.9	443.6	443.6	443.6	442.9	443.6	441.5	441.5
180°	441.5	441.5	441.5	441.5	441.5	441.5	441.5	441.5

(END OF REPORT)