

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: P333731-940

Luminaire Tested: **S125RDIW-S1270D1050U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333731-940  
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: S125RDIW-S1270D1050U940-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7591.0 lumens  
Efficiency: N/A  
Efficacy: 112.6 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

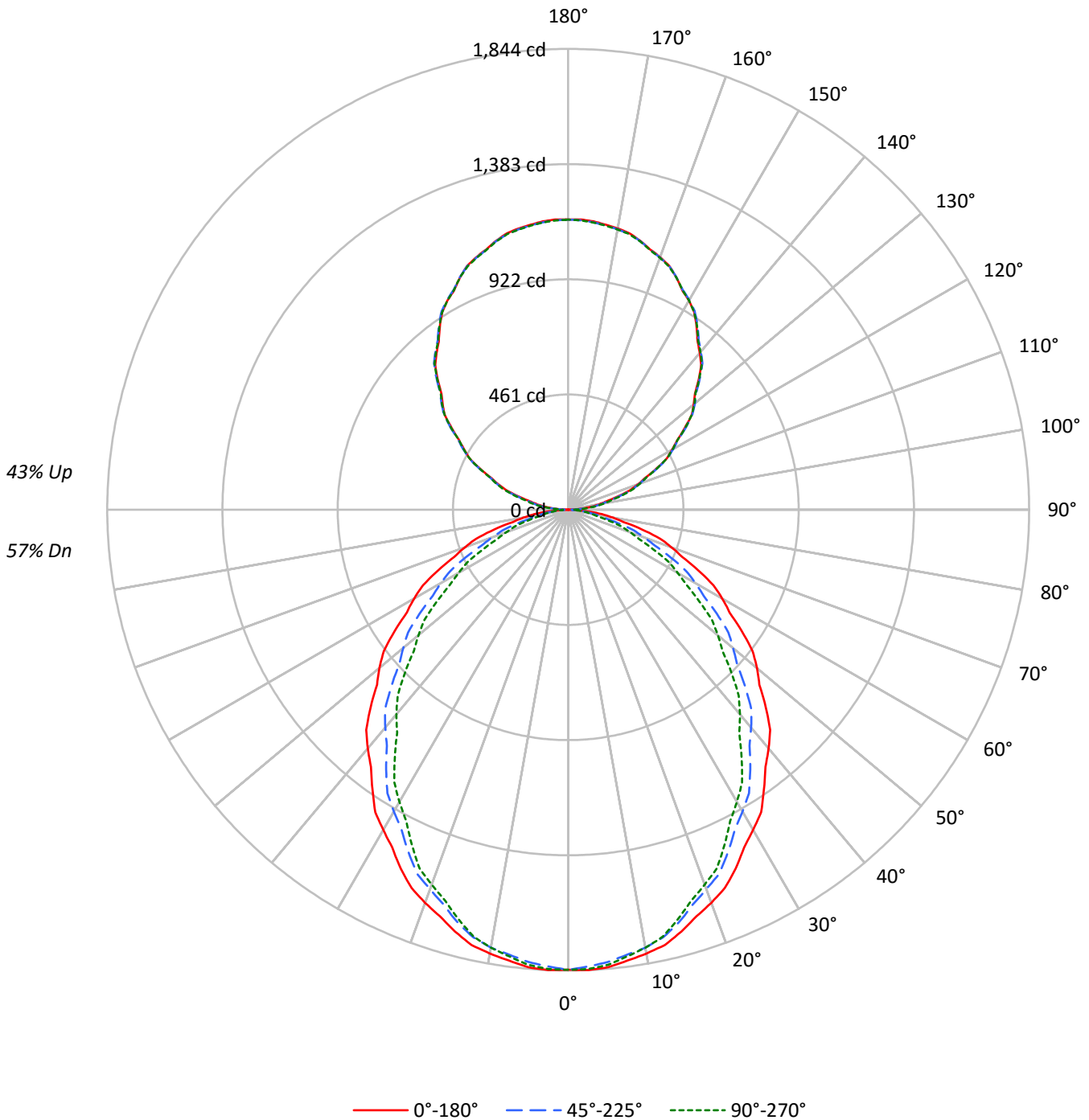
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	75	75	75	63	63	63	57
1	100	95	92	88	93	89	86	83	77	75	72	66	64	63	56	55	54	49
2	91	84	78	72	84	78	73	68	68	64	60	58	55	53	50	47	46	41
3	83	74	66	61	77	69	63	57	60	55	51	52	48	45	44	41	39	35
4	76	65	57	51	71	61	54	49	53	48	44	46	42	39	40	36	34	30
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	32	29	26	23
7	60	48	40	34	56	45	38	32	39	34	29	34	30	26	30	26	23	21
8	56	43	35	30	52	41	34	29	36	30	26	32	27	24	27	24	21	19
9	52	40	32	27	48	37	30	26	33	27	23	29	24	21	25	22	19	17
10	48	36	29	24	45	34	28	23	31	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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CATALOG NUMBER: S125RDIW-S1270D1050U940-4F0-1E-UDD-F1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.1	2.3
10°-20°	483.7	6.4
20°-30°	701.4	9.2
30°-40°	799.4	10.5
40°-50°	779.2	10.3
50°-60°	655.9	8.6
60°-70°	459.8	6.1
70°-80°	236.3	3.1
80°-90°	62.2	0.8
90°-100°	77.8	1.0
100°-110°	229.6	3.0
110°-120°	388.9	5.1
120°-130°	511.9	6.7
130°-140°	573.6	7.6
140°-150°	562.1	7.4
150°-160°	472.2	6.2
160°-170°	313.9	4.1
170°-180°	109.8	1.4
0°-30°	1358.2	17.9
0°-40°	2157.6	28.4
0°-60°	3592.8	47.3
0°-90°	4351.2	57.3
90°-120°	696.4	9.2
90°-150°	2344.0	30.9
90°-180°	3240.0	42.7
0°-180°	7591.0	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	22	7
95°	59	61	70	76	78	63
105°	206	211	216	221	224	220
115°	389	393	395	394	393	385
125°	568	573	575	573	572	509
135°	739	744	745	745	742	569
145°	895	899	902	902	899	560
155°	1025	1025	1026	1029	1025	472
165°	1114	1112	1113	1116	1111	314
175°	1158	1155	1155	1160	1154	110
180°	1161	1161	1161	1161	1161	



TEST NUMBER: P333731-940

CATALOG NUMBER: S125RDIW-S1270D1050U940-4F0-1E-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	24.3	22.9	21.6	20.2	19.4	19.4	19.5	19.5	19.6	19.8
90°	0.9	2.5	4.1	5.7	7.3	8.8	10.3	11.7	13.0	14.4	15.4
92.5°	21.8	23.0	24.1	25.2	26.4	27.8	29.5	31.2	33.0	34.7	36.0
95°	58.8	59.1	59.6	59.9	60.4	61.5	63.6	65.5	67.6	69.6	71.0
97.5°	97.6	97.7	97.9	98.1	98.3	99.7	102.5	105.2	108.0	110.8	112.1
100°	126.5	126.5	126.5	126.5	126.5	127.8	130.4	133.0	135.6	138.2	140.1
102.5°	157.6	158.4	159.2	160.0	160.8	161.8	163.2	164.5	165.9	167.2	169.2
105°	206.0	207.0	208.0	209.0	210.0	211.2	212.3	213.6	214.7	216.0	217.1
107.5°	259.5	260.5	261.5	262.5	263.5	264.5	265.4	266.4	267.2	268.1	268.8
110°	296.3	297.4	298.4	299.3	300.4	301.2	301.8	302.4	303.0	303.6	304.2



TEST NUMBER: P333731-940

CATALOG NUMBER: S125RDIW-S1270D1050U940-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	333.9	334.5	335.0	335.6	336.0	336.7	337.4	338.2	338.9	339.7	340.0
115°	389.4	390.2	391.0	391.8	392.6	393.2	393.6	394.0	394.4	394.8	394.7
117.5°	445.1	445.4	445.8	446.1	446.6	446.9	447.3	447.6	448.0	448.4	448.5
120°	479.7	480.8	481.8	482.8	483.8	484.4	484.6	484.8	485.0	485.2	485.2
122.5°	517.4	517.7	518.1	518.4	518.8	519.2	519.8	520.3	520.8	521.4	521.2
125°	568.3	569.5	570.7	571.9	573.1	573.8	574.1	574.3	574.4	574.6	574.3
127.5°	622.5	623.2	623.9	624.6	625.3	625.7	626.0	626.2	626.4	626.7	626.5
130°	655.1	656.0	657.1	658.1	659.1	659.8	660.2	660.6	661.0	661.4	661.2
132.5°	687.6	689.2	690.9	692.5	694.2	695.0	694.9	694.8	694.7	694.6	694.5
135°	739.0	740.3	741.5	742.7	744.0	744.6	744.8	745.0	745.2	745.4	745.4
137.5°	787.6	788.7	789.9	791.0	792.2	793.0	793.4	793.9	794.3	794.8	795.0
140°	818.6	819.6	820.6	821.6	822.6	823.4	824.0	824.7	825.2	825.8	826.3
142.5°	849.7	850.5	851.4	852.2	853.1	853.9	854.6	855.4	856.1	856.9	857.1
145°	895.4	896.2	897.0	897.8	898.6	899.3	899.9	900.5	901.2	901.7	901.7
147.5°	937.7	938.2	938.6	939.0	939.4	940.0	940.4	940.8	941.4	941.8	942.4
150°	965.9	965.7	965.5	965.3	965.1	965.4	966.2	967.0	967.8	968.6	968.6
152.5°	989.0	989.3	989.5	989.9	990.2	990.4	990.8	991.0	991.4	991.8	992.2
155°	1024.6	1024.6	1024.6	1024.6	1024.6	1024.7	1024.9	1025.1	1025.3	1025.6	1026.4
157.5°	1056.4	1056.0	1055.5	1055.1	1054.6	1054.5	1054.7	1054.9	1055.2	1055.3	1056.1
160°	1075.2	1074.6	1074.0	1073.4	1072.8	1072.6	1072.8	1073.0	1073.2	1073.4	1074.2
162.5°	1091.8	1091.4	1090.9	1090.5	1090.0	1089.8	1089.9	1089.9	1090.0	1090.0	1091.0
165°	1114.1	1113.7	1113.2	1112.9	1112.4	1112.3	1112.6	1112.8	1112.9	1113.1	1113.9
167.5°	1132.8	1132.0	1131.2	1130.4	1129.6	1129.3	1129.3	1129.3	1129.3	1129.3	1130.4
170°	1143.0	1142.2	1141.4	1140.6	1139.8	1139.3	1139.3	1139.3	1139.3	1139.3	1140.6
172.5°	1150.2	1149.4	1148.6	1147.8	1147.0	1146.6	1146.6	1146.6	1146.6	1146.6	1147.8
175°	1158.3	1157.5	1156.7	1155.9	1155.1	1154.7	1154.7	1154.7	1154.7	1154.7	1155.9
177.5°	1162.5	1161.8	1161.2	1160.6	1159.9	1159.5	1159.3	1159.2	1159.0	1158.9	1159.8
180°	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0



TEST NUMBER: P333731-940

CATALOG NUMBER: S125RDIW-S1270D1050U940-4F0-1E-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°	20.0	20.2	20.4	20.4	20.3	20.2	20.1	19.9
90°	16.5	17.5	18.5	19.3	19.9	20.5	21.0	21.7
92.5°	37.4	38.7	40.0	40.8	41.3	41.7	42.2	42.6
95°	72.4	73.7	75.2	76.1	76.5	76.9	77.3	77.7
97.5°	113.4	114.8	116.1	116.8	117.1	117.3	117.6	117.8
100°	141.9	143.7	145.4	146.6	147.0	147.4	147.8	148.2
102.5°	171.1	173.1	175.0	176.3	176.8	177.5	178.0	178.5
105°	218.4	219.5	220.8	221.7	222.3	222.8	223.5	224.1
107.5°	269.4	270.0	270.5	270.9	270.8	270.8	270.7	270.7
110°	304.8	305.4	306.0	306.2	306.0	305.8	305.6	305.4





TEST NUMBER: P333731-940

CATALOG NUMBER: S125RDIW-S1270D1050U940-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	340.3	340.5	340.8	340.8	340.5	340.1	339.7	339.4
115°	394.4	394.2	394.0	393.9	393.6	393.4	393.2	393.1
117.5°	448.6	448.8	449.0	448.6	447.8	447.0	446.2	445.4
120°	485.2	485.2	485.2	484.8	484.0	483.2	482.4	481.6
122.5°	521.0	520.8	520.7	520.3	519.7	519.0	518.4	517.7
125°	573.8	573.5	573.0	572.7	572.6	572.3	572.1	571.9
127.5°	626.2	626.1	625.9	625.6	625.2	624.8	624.4	624.0
130°	661.0	660.8	660.6	660.3	659.9	659.5	659.1	658.7
132.5°	694.2	694.0	693.8	693.5	692.9	692.3	691.8	691.2
135°	745.4	745.4	745.4	745.0	744.2	743.4	742.6	741.8
137.5°	795.2	795.5	795.7	795.3	794.3	793.4	792.3	791.3
140°	826.6	827.1	827.4	827.2	826.2	825.1	824.1	823.1
142.5°	857.4	857.6	857.9	857.5	856.5	855.5	854.5	853.5
145°	901.7	901.7	901.7	901.4	900.8	900.2	899.6	899.0
147.5°	942.8	943.3	943.8	943.3	942.0	940.6	939.2	937.9
150°	968.6	968.6	968.6	968.4	968.0	967.6	967.1	966.8
152.5°	992.7	993.2	993.6	993.5	992.8	992.1	991.3	990.6
155°	1027.2	1028.0	1028.8	1028.6	1027.6	1026.6	1025.6	1024.6
157.5°	1056.9	1057.7	1058.5	1058.3	1056.9	1055.6	1054.3	1053.0
160°	1075.0	1075.8	1076.7	1076.5	1075.5	1074.5	1073.5	1072.5
162.5°	1092.0	1092.9	1093.9	1093.8	1092.6	1091.5	1090.3	1089.1
165°	1114.7	1115.5	1116.3	1116.2	1115.0	1113.7	1112.6	1111.3
167.5°	1131.7	1132.8	1134.1	1134.1	1132.8	1131.6	1130.3	1129.1
170°	1141.7	1143.0	1144.2	1144.1	1142.6	1141.3	1139.9	1138.4
172.5°	1149.0	1150.2	1151.4	1151.4	1150.1	1148.9	1147.6	1146.4
175°	1157.1	1158.3	1159.6	1159.4	1158.1	1156.6	1155.2	1153.8
177.5°	1160.8	1161.8	1162.7	1162.6	1161.5	1160.4	1159.3	1158.2
180°	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0	1161.0

(END OF REPORT)