

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: P333730

Luminaire Tested: **S125RDIW-S1270D1050U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333730
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIW-S1270D1050U835-4F0-1E-UDD-F
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, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9069.2 lumens
Efficiency: N/A
Efficacy: 134.6 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

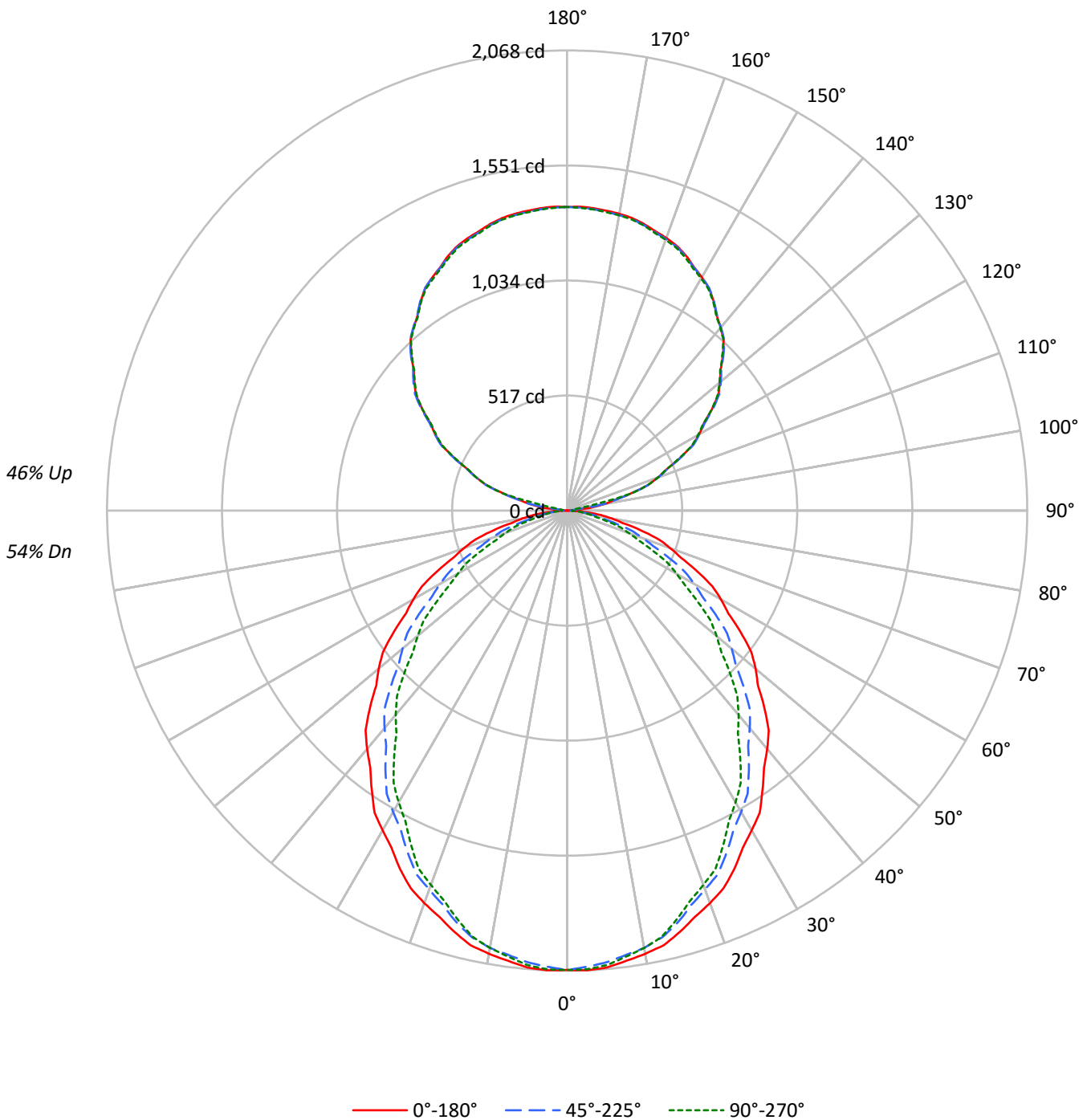
Input Watts (W): 67.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	85	85	85	72	72	72	60	60	60	54
1	99	95	91	87	92	88	85	82	75	73	71	64	62	60	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	53	48	52	47	43	45	41	37	37	34	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	28	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	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13332	13332	13332
5°	13363	13211	13291
10°	13262	13088	13088
15°	13104	12822	12718
20°	12902	12451	12302
25°	12666	12088	11821
30°	12371	11662	11290
35°	12071	11223	10694
40°	11790	10765	10108
45°	11449	10253	9470
50°	11106	9697	8804
55°	10709	9164	8094
60°	10311	8519	7330
65°	9840	7768	6457
70°	9304	6830	5565
75°	8559	5757	4629
80°	7539	4523	3887
85°	6358	3698	3468



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.1	2.1
10°-20°	542.5	6.0
20°-30°	786.6	8.7
30°-40°	896.5	9.9
40°-50°	873.9	9.6
50°-60°	735.6	8.1
60°-70°	515.6	5.7
70°-80°	265.0	2.9
80°-90°	69.8	0.8
90°-100°	49.6	0.5
100°-110°	305.6	3.4
110°-120°	554.2	6.1
120°-130°	711.2	7.8
130°-140°	765.0	8.4
140°-150°	718.0	7.9
150°-160°	580.8	6.4
160°-170°	375.7	4.1
170°-180°	129.6	1.4
0°-30°	1523.2	16.8
0°-40°	2419.7	26.7
0°-60°	4029.1	44.4
0°-90°	4879.6	53.8
90°-120°	909.3	10.0
90°-150°	3103.6	34.2
90°-180°	4190.0	46.2
0°-180°	9069.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2064	2064	2064	2064	2064	
5°	2061	2054	2038	2052	2050	195
15°	1960	1949	1918	1915	1902	552
25°	1777	1752	1696	1676	1659	817
35°	1531	1492	1424	1380	1356	958
45°	1254	1206	1123	1062	1037	967
55°	951	899	814	746	719	850
65°	644	589	508	448	422	638
75°	343	295	231	198	186	363
85°	86	59	50	48	47	96
90°	1	9	16	21	24	6
95°	58	53	16	21	21	73
105°	297	301	301	301	300	315
115°	558	563	564	560	554	553
125°	794	801	801	797	794	709
135°	990	996	994	992	986	763
145°	1148	1150	1150	1151	1145	718
155°	1264	1259	1260	1263	1255	582
165°	1334	1328	1329	1334	1327	377
175°	1364	1359	1359	1366	1358	130
180°	1364	1364	1364	1364	1364	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3
2.5°	2068.0	2067.2	2066.3	2065.5	2064.7	2062.9	2060.1	2057.3	2054.6	2051.8	2054.6
5°	2061.2	2059.8	2058.4	2057.0	2055.6	2053.0	2049.2	2045.4	2041.6	2037.8	2041.2
7.5°	2040.9	2039.6	2038.3	2036.9	2035.6	2032.7	2028.1	2023.5	2019.0	2014.4	2016.8
10°	2022.2	2021.1	2020.1	2019.1	2018.0	2015.1	2010.2	2005.4	2000.5	1995.7	1996.7
12.5°	2001.0	1999.7	1998.3	1997.0	1995.7	1991.8	1985.3	1978.8	1972.2	1965.7	1966.5
15°	1959.8	1957.7	1955.7	1953.6	1951.5	1946.8	1939.5	1932.3	1925.0	1917.7	1917.4
17.5°	1913.3	1910.2	1907.0	1903.8	1900.6	1894.4	1885.3	1876.1	1867.0	1857.8	1856.1
20°	1877.2	1873.7	1870.2	1866.8	1863.3	1856.0	1845.0	1833.9	1822.8	1811.7	1810.0
22.5°	1837.3	1833.8	1830.3	1826.9	1823.4	1815.9	1804.2	1792.6	1780.9	1769.3	1765.9
25°	1777.4	1772.2	1767.0	1761.8	1756.6	1747.6	1734.8	1722.0	1709.1	1696.3	1691.8
27.5°	1708.8	1702.5	1696.2	1689.9	1683.6	1673.6	1659.8	1646.1	1632.4	1618.7	1612.4
30°	1658.9	1652.3	1645.7	1639.2	1632.6	1622.0	1607.4	1592.9	1578.3	1563.8	1555.8
32.5°	1610.3	1602.6	1594.9	1587.2	1579.5	1568.2	1553.4	1538.6	1523.7	1508.9	1500.1
35°	1531.1	1522.7	1514.4	1506.1	1497.8	1485.8	1470.2	1454.7	1439.1	1423.5	1413.4
37.5°	1453.4	1443.3	1433.2	1423.1	1412.9	1399.8	1383.8	1367.7	1351.6	1335.5	1323.5
40°	1398.5	1388.1	1377.7	1367.3	1357.0	1343.4	1326.8	1310.2	1293.5	1276.9	1263.8
42.5°	1341.2	1330.5	1319.8	1309.1	1298.5	1284.5	1267.4	1250.2	1233.0	1215.8	1203.2
45°	1253.5	1243.5	1233.4	1223.4	1213.3	1198.8	1179.7	1160.7	1141.6	1122.6	1108.7
47.5°	1162.8	1152.2	1141.6	1131.0	1120.4	1105.5	1086.3	1067.1	1047.9	1028.7	1014.4
50°	1105.4	1094.0	1082.5	1071.1	1059.7	1044.1	1024.3	1004.6	984.8	965.1	950.5
52.5°	1043.0	1031.3	1019.6	1007.9	996.2	981.0	962.4	943.8	925.1	906.5	890.8
55°	951.1	940.0	928.9	917.8	906.7	891.5	872.1	852.7	833.3	813.9	798.3
57.5°	858.1	846.3	834.4	822.6	810.7	795.5	776.8	758.0	739.3	720.6	705.4
60°	798.3	786.1	774.0	761.9	749.8	734.3	715.6	696.9	678.2	659.5	644.3
62.5°	734.7	723.1	711.5	699.9	688.4	673.1	654.1	635.1	616.1	597.1	583.0
65°	643.9	632.1	620.4	608.6	596.8	581.7	563.4	545.0	526.6	508.3	494.4
67.5°	553.8	542.0	530.2	518.5	506.7	492.0	474.4	456.8	439.2	421.6	408.9
70°	492.7	480.9	469.1	457.3	445.6	431.0	413.7	396.4	379.0	361.7	351.0
72.5°	432.8	421.3	409.8	398.3	386.8	372.9	356.7	340.5	324.3	308.1	298.2
75°	343.0	332.6	322.2	311.8	301.4	289.0	274.4	259.9	245.3	230.7	223.1
77.5°	253.8	245.5	237.2	228.9	220.6	210.6	198.9	187.3	175.7	164.0	158.7
80°	202.7	194.4	186.1	177.7	169.4	160.4	150.7	141.0	131.3	121.6	118.5
82.5°	152.8	145.3	137.8	130.3	122.9	115.8	109.1	102.5	95.8	89.2	87.7
85°	85.8	79.5	73.3	67.0	60.8	56.8	55.1	53.4	51.6	49.9	49.5
87.5°	28.9	27.3	25.7	24.1	22.6	21.8	21.8	21.9	21.9	21.9	22.2
90°	1.0	2.8	4.6	6.4	8.2	9.9	11.5	13.0	14.6	16.2	17.3
92.5°	15.6	14.3	13.1	11.8	10.5	10.6	12.0	13.4	14.8	16.2	17.3
95°	57.6	57.0	56.3	55.6	55.0	50.3	41.8	33.3	24.7	16.2	17.3
97.5°	120.4	121.6	122.8	124.0	125.2	117.4	100.5	83.6	66.7	49.8	43.4
100°	168.9	169.6	170.2	170.9	171.6	172.4	173.3	174.2	175.1	176.0	142.5
102.5°	218.3	219.1	220.0	220.8	221.7	222.4	222.9	223.4	224.0	224.5	218.2
105°	297.3	298.2	299.1	300.0	300.9	301.4	301.4	301.4	301.4	301.4	301.4
107.5°	379.5	379.5	379.5	379.5	379.5	379.7	380.1	380.6	381.0	381.5	381.5
110°	432.9	432.9	432.9	432.9	432.9	433.1	433.5	434.0	434.4	434.9	434.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	483.0	483.6	484.1	484.6	485.2	485.6	485.9	486.1	486.4	486.7	485.8
115°	558.3	559.4	560.5	561.6	562.8	563.4	563.7	563.9	564.1	564.3	563.4
117.5°	636.2	636.1	636.1	636.0	636.0	636.4	637.2	638.1	638.9	639.8	638.6
120°	684.7	684.5	684.2	684.0	683.8	684.0	684.7	685.4	686.0	686.7	686.3
122.5°	727.6	728.4	729.3	730.1	731.0	731.6	731.9	732.2	732.5	732.8	732.4
125°	793.9	795.5	797.1	798.6	800.2	801.0	801.0	801.0	801.0	801.0	800.1
127.5°	857.2	858.4	859.5	860.6	861.7	862.2	862.1	862.0	861.8	861.7	861.2
130°	896.1	897.2	898.3	899.4	900.6	901.2	901.5	901.7	901.9	902.1	901.5
132.5°	934.9	936.2	937.5	938.8	940.1	940.5	940.0	939.5	939.0	938.6	938.4
135°	990.1	991.5	992.8	994.2	995.5	996.0	995.5	995.1	994.6	994.2	993.7
137.5°	1040.9	1042.1	1043.2	1044.4	1045.6	1046.0	1045.6	1045.2	1044.7	1044.3	1044.4
140°	1074.1	1074.5	1075.0	1075.4	1075.9	1076.0	1075.8	1075.5	1075.3	1075.1	1075.5
142.5°	1104.0	1104.3	1104.6	1104.8	1105.1	1105.4	1105.7	1106.0	1106.3	1106.6	1106.7
145°	1147.9	1148.4	1148.8	1149.3	1149.7	1149.9	1149.9	1149.9	1149.9	1149.9	1150.2
147.5°	1186.3	1186.3	1186.2	1186.1	1186.0	1186.1	1186.3	1186.6	1186.9	1187.1	1187.4
150°	1210.6	1210.2	1209.7	1209.3	1208.8	1208.8	1209.3	1209.7	1210.2	1210.6	1211.1
152.5°	1234.1	1233.1	1232.1	1231.1	1230.1	1229.9	1230.3	1230.8	1231.2	1231.6	1232.1
155°	1264.2	1262.9	1261.5	1260.2	1258.8	1258.4	1258.8	1259.3	1259.7	1260.2	1260.8
157.5°	1287.5	1286.7	1285.9	1285.1	1284.2	1283.9	1283.9	1283.9	1284.0	1284.0	1284.8
160°	1303.7	1302.3	1301.0	1299.6	1298.3	1297.7	1297.9	1298.2	1298.4	1298.6	1299.5
162.5°	1316.6	1315.3	1313.9	1312.6	1311.2	1310.6	1310.9	1311.1	1311.3	1311.5	1312.8
165°	1334.0	1332.7	1331.3	1330.0	1328.6	1328.0	1328.3	1328.5	1328.7	1328.9	1330.3
167.5°	1346.9	1345.6	1344.2	1342.8	1341.4	1340.8	1341.0	1341.2	1341.5	1341.7	1343.3
170°	1354.2	1352.7	1351.1	1349.5	1347.9	1347.3	1347.5	1347.7	1347.9	1348.2	1350.0
172.5°	1359.1	1357.5	1355.9	1354.4	1352.8	1352.2	1352.6	1353.0	1353.4	1353.8	1355.4
175°	1364.3	1363.0	1361.6	1360.3	1358.9	1358.4	1358.6	1358.8	1359.1	1359.3	1361.1
177.5°	1366.8	1365.7	1364.6	1363.5	1362.5	1362.0	1362.2	1362.4	1362.5	1362.7	1364.0
180°	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3	2064.3
2.5°	2057.3	2060.1	2062.9	2064.1	2063.9	2063.6	2063.3	2063.0
5°	2044.7	2048.2	2051.6	2053.0	2052.3	2051.6	2050.9	2050.2
7.5°	2019.2	2021.7	2024.1	2024.9	2024.1	2023.4	2022.6	2021.9
10°	1997.7	1998.8	1999.8	1999.8	1998.8	1997.7	1996.7	1995.7
12.5°	1967.3	1968.0	1968.8	1968.4	1966.8	1965.2	1963.6	1962.0
15°	1917.0	1916.7	1916.3	1914.6	1911.5	1908.4	1905.2	1902.1
17.5°	1854.4	1852.6	1850.9	1848.8	1846.2	1843.6	1841.1	1838.5
20°	1808.2	1806.5	1804.8	1802.3	1799.2	1796.1	1793.0	1789.9
22.5°	1762.5	1759.1	1755.7	1752.7	1750.2	1747.6	1745.0	1742.5
25°	1687.3	1682.8	1678.3	1674.1	1670.3	1666.5	1662.7	1658.9
27.5°	1606.1	1599.8	1593.5	1588.5	1584.8	1581.1	1577.4	1573.8
30°	1547.9	1539.9	1531.9	1526.4	1523.3	1520.1	1517.0	1513.9
32.5°	1491.3	1482.5	1473.7	1467.3	1463.4	1459.4	1455.5	1451.5
35°	1403.4	1393.3	1383.3	1375.8	1371.0	1366.1	1361.3	1356.4
37.5°	1311.4	1299.4	1287.3	1278.9	1274.2	1269.5	1264.8	1260.1
40°	1250.6	1237.4	1224.3	1215.6	1211.4	1207.3	1203.1	1199.0
42.5°	1190.6	1178.0	1165.4	1156.0	1149.9	1143.8	1137.7	1131.6
45°	1094.8	1081.0	1067.1	1057.6	1052.4	1047.2	1042.0	1036.8
47.5°	1000.2	985.9	971.6	961.6	955.8	950.1	944.3	938.6
50°	936.0	921.4	906.9	897.0	891.8	886.6	881.4	876.2
52.5°	875.1	859.5	843.8	833.4	828.2	823.0	817.8	812.6
55°	782.7	767.1	751.5	740.9	735.4	729.8	724.3	718.8
57.5°	690.1	674.9	659.6	649.6	644.6	639.7	634.8	629.9
60°	629.0	613.8	598.5	588.3	583.1	577.9	572.7	567.5
62.5°	568.9	554.7	540.6	530.9	525.7	520.5	515.3	510.1
65°	480.6	466.7	452.8	443.3	438.1	432.9	427.7	422.5
67.5°	396.2	383.5	370.9	362.4	358.3	354.1	350.0	345.8
70°	340.2	329.5	318.8	311.3	307.1	303.0	298.8	294.7
72.5°	288.3	278.4	268.4	262.1	259.3	256.6	253.8	251.0
75°	215.5	207.9	200.3	195.2	192.8	190.4	188.0	185.5
77.5°	153.3	148.0	142.7	139.1	137.3	135.5	133.7	131.9
80°	115.4	112.3	109.1	107.2	106.5	105.8	105.2	104.5
82.5°	86.3	84.8	83.4	82.4	82.0	81.6	81.2	80.8
85°	49.2	48.9	48.5	48.2	47.8	47.5	47.1	46.8
87.5°	22.4	22.6	22.8	22.9	22.7	22.6	22.5	22.3
90°	18.4	19.6	20.7	21.6	22.3	22.9	23.6	24.3
92.5°	18.4	19.6	20.7	21.4	21.7	22.0	22.3	22.7
95°	18.4	19.6	20.7	21.2	21.2	21.2	21.2	21.2
97.5°	37.1	30.7	24.4	21.2	21.2	21.2	21.2	21.2
100°	109.0	75.5	42.0	24.8	23.9	23.0	22.1	21.2
102.5°	211.8	205.5	199.2	188.4	173.1	157.8	142.5	127.2
105°	301.4	301.4	301.4	301.3	301.1	300.8	300.6	300.4
107.5°	381.6	381.6	381.7	381.4	380.7	380.0	379.3	378.7
110°	433.5	432.9	432.2	432.0	432.2	432.4	432.6	432.9



TEST NUMBER: P333730

CATALOG NUMBER: S125RDIW-S1270D1050U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	485.0	484.1	483.3	482.7	482.4	482.0	481.7	481.4
115°	562.5	561.6	560.7	559.6	558.3	556.9	555.6	554.2
117.5°	637.5	636.3	635.1	634.2	633.7	633.1	632.5	631.9
120°	685.8	685.4	684.9	684.1	683.0	681.9	680.8	679.6
122.5°	731.9	731.5	731.0	730.2	728.9	727.6	726.3	725.0
125°	799.2	798.3	797.4	796.6	796.0	795.3	794.6	793.9
127.5°	860.7	860.2	859.7	858.6	857.0	855.3	853.6	852.0
130°	900.8	900.1	899.4	898.5	897.4	896.3	895.2	894.1
132.5°	938.3	938.1	938.0	937.4	936.3	935.1	934.0	932.9
135°	993.3	992.8	992.4	991.5	990.1	988.8	987.4	986.1
137.5°	1044.5	1044.6	1044.7	1044.2	1043.0	1041.8	1040.7	1039.5
140°	1076.0	1076.4	1076.9	1076.4	1075.1	1073.7	1072.4	1071.0
142.5°	1106.8	1106.9	1107.0	1106.4	1105.0	1103.7	1102.3	1101.0
145°	1150.4	1150.6	1150.8	1150.3	1148.9	1147.6	1146.2	1144.9
147.5°	1187.7	1188.0	1188.2	1187.6	1185.9	1184.3	1182.7	1181.1
150°	1211.5	1212.0	1212.4	1211.7	1209.9	1208.1	1206.3	1204.5
152.5°	1232.5	1233.0	1233.4	1232.9	1231.2	1229.6	1228.0	1226.4
155°	1261.5	1262.2	1262.9	1262.3	1260.5	1258.7	1256.9	1255.1
157.5°	1285.5	1286.2	1286.9	1286.4	1284.6	1282.8	1281.0	1279.2
160°	1300.4	1301.3	1302.2	1301.7	1300.0	1298.2	1296.4	1294.6
162.5°	1314.1	1315.3	1316.6	1316.2	1314.2	1312.3	1310.3	1308.3
165°	1331.6	1333.0	1334.3	1334.1	1332.3	1330.5	1328.7	1326.9
167.5°	1344.9	1346.5	1348.2	1348.0	1345.9	1343.9	1341.9	1339.9
170°	1351.8	1353.6	1355.4	1355.2	1353.2	1351.2	1349.2	1347.1
172.5°	1357.1	1358.7	1360.3	1360.1	1358.1	1356.0	1354.0	1352.0
175°	1362.9	1364.7	1366.5	1366.4	1364.3	1362.3	1360.3	1358.3
177.5°	1365.2	1366.5	1367.8	1367.7	1366.2	1364.8	1363.4	1361.9
180°	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3

(END OF REPORT)