

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: P331491-930

Luminaire Tested: **S122DIW-S290D1440U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331491-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIW-S290D1440U930-4F0-1E-UDD-D
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1440 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5675.1 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

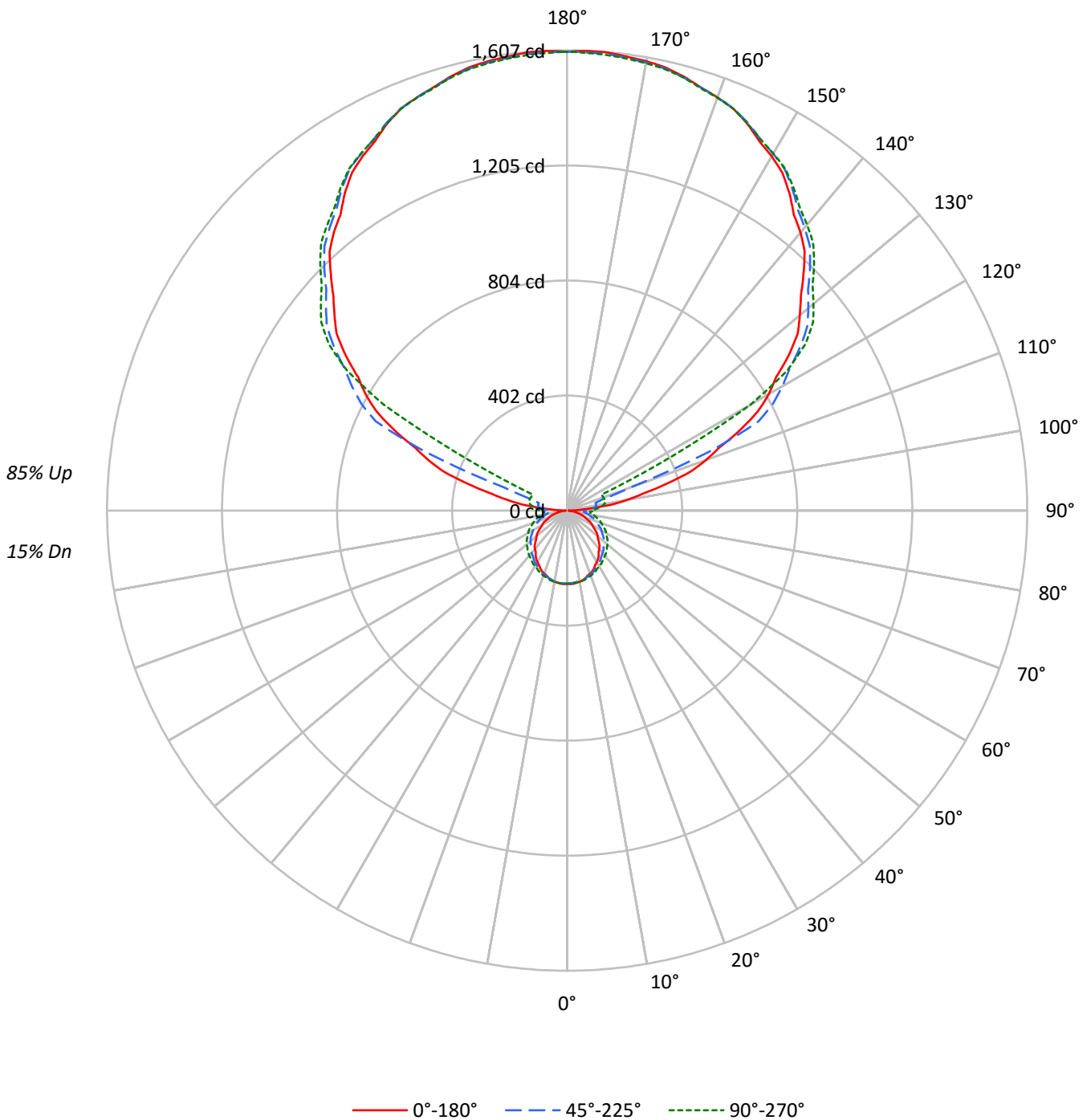
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331491-930

CATALOG NUMBER: S122DIW-S290D1440U930-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P331491-930

CATALOG NUMBER: S122DIW-S290D1440U930-4F0-1E-UDD-D

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 | 99 | 99 | 99 | 99 | 87 | 87 | 87 | 87 | 64 | 64 | 64 | 43 | 43 | 43 | 24 | 24 | 24 | 15 |
| 1 | 90 | 85 | 81 | 78 | 78 | 75 | 72 | 69 | 55 | 53 | 51 | 37 | 36 | 35 | 21 | 20 | 19 | 12 |
| 2 | 81 | 74 | 68 | 63 | 71 | 65 | 60 | 56 | 48 | 45 | 42 | 32 | 30 | 29 | 18 | 17 | 16 | 10 |
| 3 | 74 | 65 | 58 | 52 | 64 | 57 | 51 | 46 | 42 | 38 | 35 | 28 | 26 | 24 | 16 | 14 | 13 | 8 |
| 4 | 67 | 57 | 50 | 44 | 59 | 50 | 44 | 39 | 37 | 33 | 30 | 25 | 22 | 20 | 14 | 13 | 11 | 7 |
| 5 | 62 | 51 | 43 | 37 | 54 | 45 | 38 | 33 | 33 | 29 | 25 | 22 | 20 | 17 | 12 | 11 | 10 | 6 |
| 6 | 57 | 45 | 37 | 32 | 49 | 40 | 33 | 28 | 30 | 25 | 22 | 20 | 17 | 15 | 11 | 10 | 8 | 5 |
| 7 | 52 | 40 | 33 | 28 | 45 | 36 | 29 | 25 | 27 | 22 | 19 | 18 | 15 | 13 | 10 | 9 | 7 | 4 |
| 8 | 48 | 36 | 29 | 24 | 42 | 32 | 26 | 22 | 24 | 20 | 16 | 16 | 14 | 11 | 9 | 8 | 7 | 4 |
| 9 | 45 | 33 | 26 | 21 | 39 | 29 | 23 | 19 | 22 | 18 | 15 | 15 | 12 | 10 | 8 | 7 | 6 | 3 |
| 10 | 42 | 30 | 23 | 19 | 36 | 27 | 21 | 17 | 20 | 16 | 13 | 14 | 11 | 9 | 8 | 6 | 5 | 3 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4127 | 4127 | 4127 |
| 5° | 4146 | 3973 | 3957 |
| 10° | 4121 | 3855 | 3812 |
| 15° | 4063 | 3730 | 3659 |
| 20° | 3992 | 3597 | 3511 |
| 25° | 3922 | 3468 | 3376 |
| 30° | 3821 | 3336 | 3241 |
| 35° | 3720 | 3209 | 3148 |
| 40° | 3615 | 3101 | 3051 |
| 45° | 3512 | 3004 | 2971 |
| 50° | 3404 | 2917 | 2891 |
| 55° | 3289 | 2822 | 2810 |
| 60° | 3151 | 2723 | 2724 |
| 65° | 3006 | 2608 | 2622 |
| 70° | 2844 | 2485 | 2512 |
| 75° | 2639 | 2365 | 2410 |
| 80° | 2312 | 2240 | 2305 |
| 85° | 2005 | 2134 | 2226 |



TEST NUMBER: P331491-930

CATALOG NUMBER: S122DIW-S290D1440U930-4F0-1E-UDD-D

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 24.2 | 0.4 |
| 10°-20° | 69.4 | 1.2 |
| 20°-30° | 105.2 | 1.9 |
| 30°-40° | 128.2 | 2.3 |
| 40°-50° | 137.9 | 2.4 |
| 50°-60° | 133.9 | 2.4 |
| 60°-70° | 116.9 | 2.1 |
| 70°-80° | 90.0 | 1.6 |
| 80°-90° | 64.4 | 1.1 |
| 90°-100° | 95.1 | 1.7 |
| 100°-110° | 226.4 | 4.0 |
| 110°-120° | 544.1 | 9.6 |
| 120°-130° | 876.2 | 15.4 |
| 130°-140° | 924.6 | 16.3 |
| 140°-150° | 855.8 | 15.1 |
| 150°-160° | 687.4 | 12.1 |
| 160°-170° | 443.0 | 7.8 |
| 170°-180° | 152.5 | 2.7 |
| 0°-30° | 198.9 | 3.5 |
| 0°-40° | 327.1 | 5.8 |
| 0°-60° | 598.8 | 10.6 |
| 0°-90° | 870.1 | 15.3 |
| 90°-120° | 865.6 | 15.3 |
| 90°-150° | 3522.1 | 62.1 |
| 90°-180° | 4805.0 | 84.7 |
| 0°-180° | 5675.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 256 | 256 | 256 | 256 | 256 | |
| 5° | 256 | 255 | 253 | 255 | 255 | 24 |
| 15° | 244 | 245 | 245 | 248 | 248 | 69 |
| 25° | 222 | 225 | 228 | 232 | 234 | 102 |
| 35° | 192 | 198 | 205 | 213 | 216 | 120 |
| 45° | 157 | 167 | 180 | 191 | 195 | 121 |
| 55° | 120 | 134 | 153 | 166 | 171 | 108 |
| 65° | 82 | 101 | 122 | 137 | 142 | 82 |
| 75° | 46 | 66 | 90 | 105 | 111 | 48 |
| 85° | 13 | 36 | 60 | 75 | 81 | 14 |
| 90° | 5 | 39 | 72 | 92 | 100 | 6 |
| 95° | 78 | 60 | 88 | 107 | 111 | 95 |
| 105° | 354 | 381 | 103 | 127 | 137 | 379 |
| 115° | 668 | 693 | 738 | 237 | 132 | 658 |
| 125° | 944 | 960 | 992 | 1010 | 1017 | 841 |
| 135° | 1167 | 1185 | 1200 | 1218 | 1220 | 901 |
| 145° | 1353 | 1353 | 1372 | 1381 | 1378 | 846 |
| 155° | 1490 | 1481 | 1494 | 1500 | 1491 | 686 |
| 165° | 1570 | 1564 | 1566 | 1574 | 1566 | 443 |
| 175° | 1606 | 1598 | 1600 | 1607 | 1597 | 153 |
| 180° | 1602 | 1602 | 1602 | 1602 | 1602 | |



TEST NUMBER: P331491-930

CATALOG NUMBER: S122DIW-S290D1440U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 255.6 | 255.6 | 255.6 | 255.6 | 255.6 | 255.6 | 255.6 | 255.6 | 255.6 | 255.6 | 255.6 |
| 2.5° | 257.1 | 256.8 | 256.7 | 256.4 | 256.2 | 255.9 | 255.4 | 255.0 | 254.5 | 254.0 | 254.4 |
| 5° | 256.3 | 256.1 | 255.8 | 255.6 | 255.3 | 254.9 | 254.5 | 254.0 | 253.5 | 253.0 | 253.5 |
| 7.5° | 254.0 | 253.8 | 253.6 | 253.5 | 253.3 | 253.1 | 252.7 | 252.3 | 251.9 | 251.5 | 252.2 |
| 10° | 252.3 | 252.1 | 251.9 | 251.8 | 251.6 | 251.4 | 251.1 | 250.9 | 250.6 | 250.4 | 251.0 |
| 12.5° | 249.2 | 249.3 | 249.3 | 249.4 | 249.4 | 249.3 | 249.2 | 249.0 | 248.7 | 248.6 | 249.2 |
| 15° | 244.4 | 244.6 | 244.8 | 244.9 | 245.1 | 245.2 | 245.2 | 245.2 | 245.2 | 245.2 | 245.9 |
| 17.5° | 238.2 | 238.6 | 238.9 | 239.3 | 239.6 | 239.9 | 240.2 | 240.4 | 240.7 | 241.0 | 241.7 |
| 20° | 234.1 | 234.5 | 234.9 | 235.3 | 235.7 | 236.1 | 236.4 | 236.8 | 237.1 | 237.4 | 238.3 |
| 22.5° | 229.7 | 230.1 | 230.6 | 231.1 | 231.5 | 232.0 | 232.4 | 232.9 | 233.4 | 233.8 | 234.7 |
| 25° | 222.3 | 222.8 | 223.4 | 224.0 | 224.5 | 225.2 | 225.9 | 226.7 | 227.4 | 228.1 | 229.1 |
| 27.5° | 213.4 | 214.3 | 215.2 | 216.1 | 217.1 | 218.0 | 218.8 | 219.7 | 220.6 | 221.5 | 222.7 |
| 30° | 207.4 | 208.5 | 209.5 | 210.6 | 211.7 | 212.8 | 213.9 | 214.9 | 216.0 | 217.0 | 218.3 |
| 32.5° | 200.9 | 202.1 | 203.3 | 204.5 | 205.7 | 206.9 | 208.2 | 209.5 | 210.8 | 212.0 | 213.5 |
| 35° | 191.5 | 192.9 | 194.3 | 195.7 | 197.1 | 198.5 | 200.2 | 201.7 | 203.3 | 204.8 | 206.6 |
| 37.5° | 181.2 | 182.9 | 184.5 | 186.1 | 187.7 | 189.6 | 191.6 | 193.6 | 195.6 | 197.6 | 199.7 |
| 40° | 174.5 | 176.3 | 178.1 | 179.9 | 181.6 | 183.7 | 185.9 | 188.2 | 190.4 | 192.6 | 194.7 |
| 42.5° | 168.0 | 169.7 | 171.5 | 173.3 | 175.2 | 177.3 | 179.9 | 182.5 | 185.0 | 187.5 | 189.9 |
| 45° | 157.0 | 159.2 | 161.5 | 163.7 | 165.9 | 168.4 | 171.4 | 174.2 | 177.1 | 180.0 | 182.5 |
| 47.5° | 146.3 | 148.7 | 151.2 | 153.5 | 156.0 | 158.9 | 162.2 | 165.6 | 169.0 | 172.4 | 175.0 |
| 50° | 138.9 | 141.5 | 144.0 | 146.5 | 149.1 | 152.2 | 156.0 | 159.6 | 163.3 | 167.1 | 169.8 |
| 52.5° | 131.8 | 134.4 | 137.1 | 139.8 | 142.5 | 145.8 | 149.7 | 153.6 | 157.5 | 161.4 | 164.3 |
| 55° | 120.3 | 123.4 | 126.3 | 129.2 | 132.2 | 135.8 | 140.1 | 144.4 | 148.7 | 153.0 | 156.0 |
| 57.5° | 109.1 | 112.4 | 115.8 | 119.1 | 122.5 | 126.3 | 130.7 | 135.0 | 139.4 | 143.8 | 147.0 |
| 60° | 101.1 | 104.7 | 108.2 | 111.7 | 115.3 | 119.4 | 124.1 | 128.7 | 133.5 | 138.1 | 141.3 |
| 62.5° | 94.0 | 97.7 | 101.3 | 105.0 | 108.7 | 112.8 | 117.6 | 122.2 | 126.9 | 131.7 | 134.9 |
| 65° | 82.2 | 86.3 | 90.3 | 94.3 | 98.3 | 102.8 | 107.6 | 112.5 | 117.4 | 122.2 | 125.6 |
| 67.5° | 71.4 | 75.7 | 79.8 | 84.1 | 88.3 | 92.9 | 97.8 | 102.8 | 107.8 | 112.8 | 116.2 |
| 70° | 63.7 | 68.0 | 72.2 | 76.6 | 80.8 | 85.5 | 90.6 | 95.7 | 100.9 | 105.9 | 109.5 |
| 72.5° | 56.6 | 61.0 | 65.4 | 69.8 | 74.3 | 79.0 | 84.2 | 89.4 | 94.6 | 99.7 | 103.2 |
| 75° | 45.6 | 50.1 | 54.8 | 59.4 | 64.0 | 68.9 | 74.2 | 79.5 | 84.7 | 90.0 | 93.5 |
| 77.5° | 34.9 | 39.7 | 44.5 | 49.3 | 54.2 | 59.3 | 64.7 | 70.0 | 75.3 | 80.6 | 84.2 |
| 80° | 27.8 | 32.8 | 37.8 | 42.8 | 47.9 | 53.1 | 58.4 | 63.8 | 69.1 | 74.4 | 77.9 |
| 82.5° | 21.9 | 26.8 | 31.8 | 36.7 | 41.7 | 46.9 | 52.3 | 57.7 | 63.1 | 68.5 | 72.0 |
| 85° | 13.4 | 18.4 | 23.6 | 28.6 | 33.8 | 38.9 | 44.2 | 49.5 | 54.7 | 60.0 | 63.4 |
| 87.5° | 7.5 | 13.0 | 18.4 | 23.9 | 29.4 | 35.0 | 40.6 | 46.3 | 52.0 | 57.6 | 61.3 |
| 90° | 4.9 | 12.5 | 20.1 | 27.7 | 35.3 | 42.8 | 50.1 | 57.4 | 64.7 | 72.1 | 76.6 |
| 92.5° | 26.8 | 31.0 | 35.2 | 39.4 | 43.5 | 48.8 | 54.8 | 60.9 | 67.0 | 73.1 | 77.0 |
| 95° | 78.4 | 73.7 | 69.1 | 64.4 | 59.8 | 60.8 | 67.6 | 74.4 | 81.0 | 87.8 | 92.2 |
| 97.5° | 152.1 | 131.7 | 111.1 | 90.6 | 70.1 | 64.2 | 73.2 | 82.1 | 91.0 | 100.0 | 104.0 |
| 100° | 207.8 | 175.6 | 143.3 | 111.0 | 78.8 | 67.2 | 76.1 | 85.1 | 94.2 | 103.1 | 108.3 |
| 102.5° | 268.7 | 264.1 | 259.3 | 254.7 | 250.0 | 231.5 | 199.4 | 167.2 | 135.1 | 102.9 | 108.6 |
| 105° | 354.3 | 364.4 | 374.6 | 384.7 | 394.8 | 366.9 | 300.8 | 234.7 | 168.7 | 102.6 | 108.3 |
| 107.5° | 452.4 | 460.6 | 468.6 | 476.8 | 484.9 | 448.9 | 368.6 | 288.4 | 208.1 | 127.8 | 127.8 |
| 110° | 515.2 | 522.2 | 529.3 | 536.3 | 543.4 | 511.7 | 441.2 | 370.8 | 300.4 | 230.0 | 206.8 |



TEST NUMBER: P331491-930

CATALOG NUMBER: S122DIW-S290D1440U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 574.5 | 580.7 | 586.9 | 593.0 | 599.2 | 595.0 | 580.5 | 565.9 | 551.4 | 536.8 | 445.4 |
| 115° | 668.2 | 673.5 | 678.8 | 684.1 | 689.3 | 697.1 | 707.2 | 717.4 | 727.5 | 737.7 | 620.9 |
| 117.5° | 751.5 | 757.1 | 762.5 | 768.0 | 773.6 | 780.2 | 788.1 | 795.9 | 803.8 | 811.6 | 785.2 |
| 120° | 812.8 | 817.0 | 821.2 | 825.4 | 829.6 | 835.6 | 843.6 | 851.5 | 859.4 | 867.4 | 872.8 |
| 122.5° | 864.7 | 868.9 | 873.2 | 877.3 | 881.6 | 887.7 | 895.9 | 904.0 | 912.2 | 920.3 | 924.4 |
| 125° | 943.5 | 946.8 | 950.1 | 953.5 | 956.8 | 962.3 | 969.8 | 977.4 | 984.9 | 992.4 | 996.5 |
| 127.5° | 1015.1 | 1018.7 | 1022.4 | 1026.0 | 1029.6 | 1034.4 | 1040.1 | 1045.9 | 1051.7 | 1057.4 | 1062.2 |
| 130° | 1060.5 | 1064.6 | 1068.6 | 1072.7 | 1076.8 | 1081.0 | 1085.6 | 1090.1 | 1094.7 | 1099.3 | 1104.1 |
| 132.5° | 1106.9 | 1110.4 | 1113.8 | 1117.2 | 1120.6 | 1124.5 | 1128.6 | 1132.8 | 1136.9 | 1141.1 | 1145.4 |
| 135° | 1166.9 | 1171.0 | 1175.1 | 1179.2 | 1183.4 | 1187.0 | 1190.2 | 1193.3 | 1196.5 | 1199.5 | 1203.9 |
| 137.5° | 1227.8 | 1230.8 | 1233.6 | 1236.5 | 1239.3 | 1242.3 | 1245.3 | 1248.2 | 1251.2 | 1254.3 | 1258.3 |
| 140° | 1267.8 | 1269.7 | 1271.7 | 1273.7 | 1275.7 | 1278.1 | 1281.2 | 1284.2 | 1287.2 | 1290.1 | 1293.8 |
| 142.5° | 1301.1 | 1302.9 | 1304.7 | 1306.4 | 1308.2 | 1310.8 | 1314.0 | 1317.4 | 1320.6 | 1323.9 | 1327.1 |
| 145° | 1353.2 | 1352.9 | 1352.7 | 1352.4 | 1352.2 | 1354.2 | 1358.6 | 1363.0 | 1367.3 | 1371.7 | 1374.0 |
| 147.5° | 1398.9 | 1397.9 | 1396.9 | 1396.0 | 1395.0 | 1396.6 | 1400.9 | 1405.3 | 1409.7 | 1414.0 | 1415.4 |
| 150° | 1428.6 | 1426.8 | 1425.0 | 1423.2 | 1421.3 | 1422.5 | 1426.6 | 1430.8 | 1434.8 | 1439.0 | 1440.6 |
| 152.5° | 1453.6 | 1451.6 | 1449.6 | 1447.6 | 1445.6 | 1446.5 | 1450.4 | 1454.3 | 1458.2 | 1462.2 | 1463.7 |
| 155° | 1490.0 | 1487.7 | 1485.4 | 1483.0 | 1480.7 | 1481.2 | 1484.3 | 1487.4 | 1490.4 | 1493.5 | 1495.0 |
| 157.5° | 1518.6 | 1516.6 | 1514.7 | 1512.7 | 1510.7 | 1510.8 | 1513.0 | 1515.2 | 1517.3 | 1519.5 | 1521.3 |
| 160° | 1535.2 | 1533.7 | 1532.2 | 1530.6 | 1529.1 | 1529.1 | 1530.6 | 1532.2 | 1533.7 | 1535.2 | 1536.8 |
| 162.5° | 1550.0 | 1548.6 | 1547.0 | 1545.5 | 1543.9 | 1543.8 | 1545.2 | 1546.5 | 1547.8 | 1549.2 | 1550.9 |
| 165° | 1570.0 | 1568.5 | 1566.9 | 1565.4 | 1563.8 | 1563.5 | 1564.2 | 1565.0 | 1565.8 | 1566.5 | 1568.4 |
| 167.5° | 1584.9 | 1583.3 | 1581.8 | 1580.2 | 1578.7 | 1578.3 | 1579.0 | 1579.7 | 1580.5 | 1581.2 | 1583.0 |
| 170° | 1593.3 | 1591.7 | 1590.2 | 1588.6 | 1587.1 | 1586.5 | 1587.1 | 1587.6 | 1588.0 | 1588.6 | 1590.4 |
| 172.5° | 1598.8 | 1597.3 | 1595.7 | 1594.2 | 1592.6 | 1592.1 | 1592.6 | 1593.1 | 1593.7 | 1594.2 | 1595.9 |
| 175° | 1606.0 | 1604.2 | 1602.4 | 1600.6 | 1598.8 | 1598.1 | 1598.6 | 1599.1 | 1599.7 | 1600.2 | 1602.0 |
| 177.5° | 1607.1 | 1605.7 | 1604.3 | 1602.8 | 1601.3 | 1600.8 | 1600.9 | 1601.2 | 1601.3 | 1601.6 | 1603.0 |
| 180° | 1602.5 | 1602.5 | 1602.5 | 1602.5 | 1602.5 | 1602.5 | 1602.5 | 1602.5 | 1602.5 | 1602.5 | 1602.5 |



TEST NUMBER: P331491-930

CATALOG NUMBER: S122DIW-S290D1440U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 255.6 | 255.6 | 255.6 | 255.6 | 255.6 | 255.6 | 255.6 | 255.6 |
| 2.5° | 254.7 | 255.0 | 255.4 | 255.5 | 255.4 | 255.2 | 255.1 | 254.9 |
| 5° | 254.0 | 254.5 | 254.9 | 255.1 | 255.0 | 254.9 | 254.9 | 254.8 |
| 7.5° | 252.7 | 253.3 | 254.0 | 254.2 | 254.1 | 254.0 | 254.0 | 253.9 |
| 10° | 251.7 | 252.3 | 253.0 | 253.3 | 253.2 | 253.2 | 253.1 | 253.0 |
| 12.5° | 249.9 | 250.5 | 251.2 | 251.5 | 251.4 | 251.4 | 251.3 | 251.2 |
| 15° | 246.6 | 247.4 | 248.2 | 248.5 | 248.4 | 248.3 | 248.3 | 248.2 |
| 17.5° | 242.6 | 243.3 | 244.0 | 244.4 | 244.4 | 244.4 | 244.4 | 244.4 |
| 20° | 239.2 | 240.1 | 241.0 | 241.5 | 241.5 | 241.5 | 241.5 | 241.5 |
| 22.5° | 235.7 | 236.6 | 237.5 | 238.0 | 238.1 | 238.2 | 238.4 | 238.6 |
| 25° | 230.2 | 231.1 | 232.1 | 232.7 | 232.9 | 233.2 | 233.4 | 233.7 |
| 27.5° | 224.0 | 225.3 | 226.5 | 227.2 | 227.4 | 227.6 | 227.7 | 228.0 |
| 30° | 219.6 | 221.0 | 222.3 | 223.1 | 223.3 | 223.6 | 223.8 | 224.0 |
| 32.5° | 215.0 | 216.5 | 218.1 | 219.1 | 219.5 | 220.0 | 220.4 | 220.8 |
| 35° | 208.5 | 210.3 | 212.1 | 213.3 | 213.9 | 214.4 | 215.0 | 215.6 |
| 37.5° | 201.6 | 203.7 | 205.7 | 207.0 | 207.6 | 208.2 | 208.8 | 209.4 |
| 40° | 196.9 | 199.0 | 201.1 | 202.6 | 203.3 | 204.1 | 204.8 | 205.5 |
| 42.5° | 192.2 | 194.5 | 196.9 | 198.4 | 199.2 | 199.9 | 200.6 | 201.4 |
| 45° | 185.1 | 187.7 | 190.2 | 191.9 | 192.7 | 193.6 | 194.4 | 195.2 |
| 47.5° | 177.7 | 180.3 | 183.0 | 184.8 | 185.7 | 186.6 | 187.5 | 188.4 |
| 50° | 172.6 | 175.5 | 178.2 | 180.1 | 181.0 | 181.9 | 182.8 | 183.7 |
| 52.5° | 167.1 | 170.0 | 172.8 | 174.8 | 175.8 | 176.8 | 177.7 | 178.6 |
| 55° | 158.9 | 161.8 | 164.9 | 166.8 | 167.9 | 169.0 | 170.1 | 171.1 |
| 57.5° | 150.2 | 153.4 | 156.5 | 158.7 | 159.8 | 160.9 | 161.9 | 163.1 |
| 60° | 144.4 | 147.6 | 150.7 | 152.8 | 153.9 | 155.1 | 156.3 | 157.4 |
| 62.5° | 138.3 | 141.6 | 145.0 | 147.2 | 148.2 | 149.3 | 150.4 | 151.5 |
| 65° | 129.0 | 132.3 | 135.7 | 137.9 | 139.0 | 140.1 | 141.1 | 142.2 |
| 67.5° | 119.5 | 122.9 | 126.4 | 128.7 | 129.7 | 130.9 | 132.0 | 133.1 |
| 70° | 113.0 | 116.5 | 120.1 | 122.4 | 123.4 | 124.3 | 125.3 | 126.3 |
| 72.5° | 106.6 | 110.1 | 113.6 | 115.9 | 117.1 | 118.3 | 119.5 | 120.7 |
| 75° | 97.1 | 100.6 | 104.2 | 106.5 | 107.5 | 108.6 | 109.7 | 110.7 |
| 77.5° | 87.7 | 91.2 | 94.7 | 97.1 | 98.2 | 99.4 | 100.5 | 101.7 |
| 80° | 81.4 | 84.8 | 88.3 | 90.6 | 91.7 | 92.9 | 94.0 | 95.1 |
| 82.5° | 75.4 | 78.9 | 82.3 | 84.6 | 85.7 | 86.8 | 87.9 | 88.9 |
| 85° | 66.9 | 70.4 | 73.9 | 76.1 | 77.3 | 78.4 | 79.6 | 80.7 |
| 87.5° | 64.9 | 68.5 | 72.2 | 74.5 | 75.7 | 76.8 | 78.0 | 79.2 |
| 90° | 81.2 | 85.9 | 90.4 | 93.4 | 95.0 | 96.4 | 97.9 | 99.5 |
| 92.5° | 80.9 | 84.8 | 88.7 | 91.3 | 92.6 | 93.9 | 95.2 | 96.5 |
| 95° | 96.6 | 101.1 | 105.5 | 108.0 | 108.8 | 109.5 | 110.2 | 111.0 |
| 97.5° | 108.1 | 112.2 | 116.3 | 119.0 | 120.2 | 121.5 | 122.8 | 124.0 |
| 100° | 113.3 | 118.5 | 123.5 | 126.9 | 128.2 | 129.6 | 131.1 | 132.5 |
| 102.5° | 114.2 | 119.9 | 125.6 | 129.2 | 130.9 | 132.5 | 134.0 | 135.7 |
| 105° | 114.0 | 119.8 | 125.5 | 129.3 | 131.2 | 133.1 | 135.1 | 137.1 |
| 107.5° | 127.6 | 127.5 | 127.3 | 128.2 | 130.2 | 132.2 | 134.0 | 136.0 |
| 110° | 183.7 | 160.5 | 137.5 | 126.9 | 128.7 | 130.7 | 132.6 | 134.6 |



TEST NUMBER: P331491-930

CATALOG NUMBER: S122DIW-S290D1440U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 354.1 | 262.7 | 171.3 | 126.5 | 128.2 | 130.0 | 131.7 | 133.4 |
| 115° | 504.0 | 387.2 | 270.4 | 203.1 | 185.4 | 167.8 | 150.2 | 132.5 |
| 117.5° | 758.8 | 732.4 | 706.0 | 662.7 | 602.5 | 542.4 | 482.2 | 422.2 |
| 120° | 878.2 | 883.5 | 888.9 | 874.7 | 840.8 | 806.9 | 773.1 | 739.2 |
| 122.5° | 928.5 | 932.6 | 936.7 | 935.7 | 929.8 | 923.8 | 917.8 | 911.8 |
| 125° | 1000.5 | 1004.5 | 1008.5 | 1011.3 | 1012.8 | 1014.3 | 1015.9 | 1017.3 |
| 127.5° | 1066.8 | 1071.5 | 1076.1 | 1078.9 | 1079.8 | 1080.7 | 1081.6 | 1082.4 |
| 130° | 1108.9 | 1113.7 | 1118.5 | 1121.1 | 1121.5 | 1121.9 | 1122.3 | 1122.7 |
| 132.5° | 1149.7 | 1154.1 | 1158.5 | 1160.8 | 1161.2 | 1161.6 | 1162.0 | 1162.4 |
| 135° | 1208.2 | 1212.5 | 1216.8 | 1219.0 | 1219.2 | 1219.3 | 1219.4 | 1219.6 |
| 137.5° | 1262.3 | 1266.3 | 1270.4 | 1272.3 | 1271.9 | 1271.6 | 1271.3 | 1271.0 |
| 140° | 1297.5 | 1301.1 | 1304.7 | 1306.1 | 1305.3 | 1304.6 | 1303.7 | 1302.9 |
| 142.5° | 1330.2 | 1333.4 | 1336.5 | 1337.7 | 1336.8 | 1335.9 | 1335.1 | 1334.2 |
| 145° | 1376.3 | 1378.7 | 1381.0 | 1381.7 | 1380.8 | 1379.9 | 1379.0 | 1378.1 |
| 147.5° | 1416.7 | 1418.2 | 1419.6 | 1419.8 | 1418.9 | 1418.1 | 1417.2 | 1416.3 |
| 150° | 1442.1 | 1443.7 | 1445.2 | 1445.3 | 1444.1 | 1442.8 | 1441.4 | 1440.1 |
| 152.5° | 1465.3 | 1466.8 | 1468.4 | 1468.3 | 1466.6 | 1464.9 | 1463.2 | 1461.5 |
| 155° | 1496.6 | 1498.1 | 1499.7 | 1499.4 | 1497.4 | 1495.3 | 1493.2 | 1491.2 |
| 157.5° | 1523.0 | 1524.7 | 1526.5 | 1526.3 | 1524.4 | 1522.3 | 1520.3 | 1518.3 |
| 160° | 1538.3 | 1539.9 | 1541.4 | 1541.3 | 1539.5 | 1537.7 | 1535.9 | 1534.1 |
| 162.5° | 1552.7 | 1554.4 | 1556.2 | 1555.9 | 1553.7 | 1551.5 | 1549.3 | 1547.1 |
| 165° | 1570.2 | 1572.0 | 1573.8 | 1573.8 | 1572.0 | 1570.2 | 1568.4 | 1566.5 |
| 167.5° | 1584.8 | 1586.6 | 1588.4 | 1588.1 | 1585.8 | 1583.5 | 1581.2 | 1578.8 |
| 170° | 1592.2 | 1594.0 | 1595.8 | 1595.5 | 1593.3 | 1590.9 | 1588.6 | 1586.2 |
| 172.5° | 1597.7 | 1599.5 | 1601.3 | 1601.1 | 1598.8 | 1596.4 | 1594.2 | 1591.8 |
| 175° | 1603.8 | 1605.6 | 1607.4 | 1607.0 | 1604.4 | 1601.8 | 1599.3 | 1596.7 |
| 177.5° | 1604.4 | 1605.9 | 1607.4 | 1607.1 | 1605.2 | 1603.4 | 1601.6 | 1599.7 |
| 180° | 1602.5 | 1602.5 | 1602.5 | 1602.5 | 1602.5 | 1602.5 | 1602.5 | 1602.5 |

(END OF REPORT)