

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: SHAPER

Report Number: P316058

Luminaire Tested: **ShSe-SQR-2-L40-80-UNV-STD**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P316058
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1811-037-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: ShSe-SQR-2-L40-80-UNV-STD
Description: SHAPER SENSE SQUARE
LIGHT LEVEL 2
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

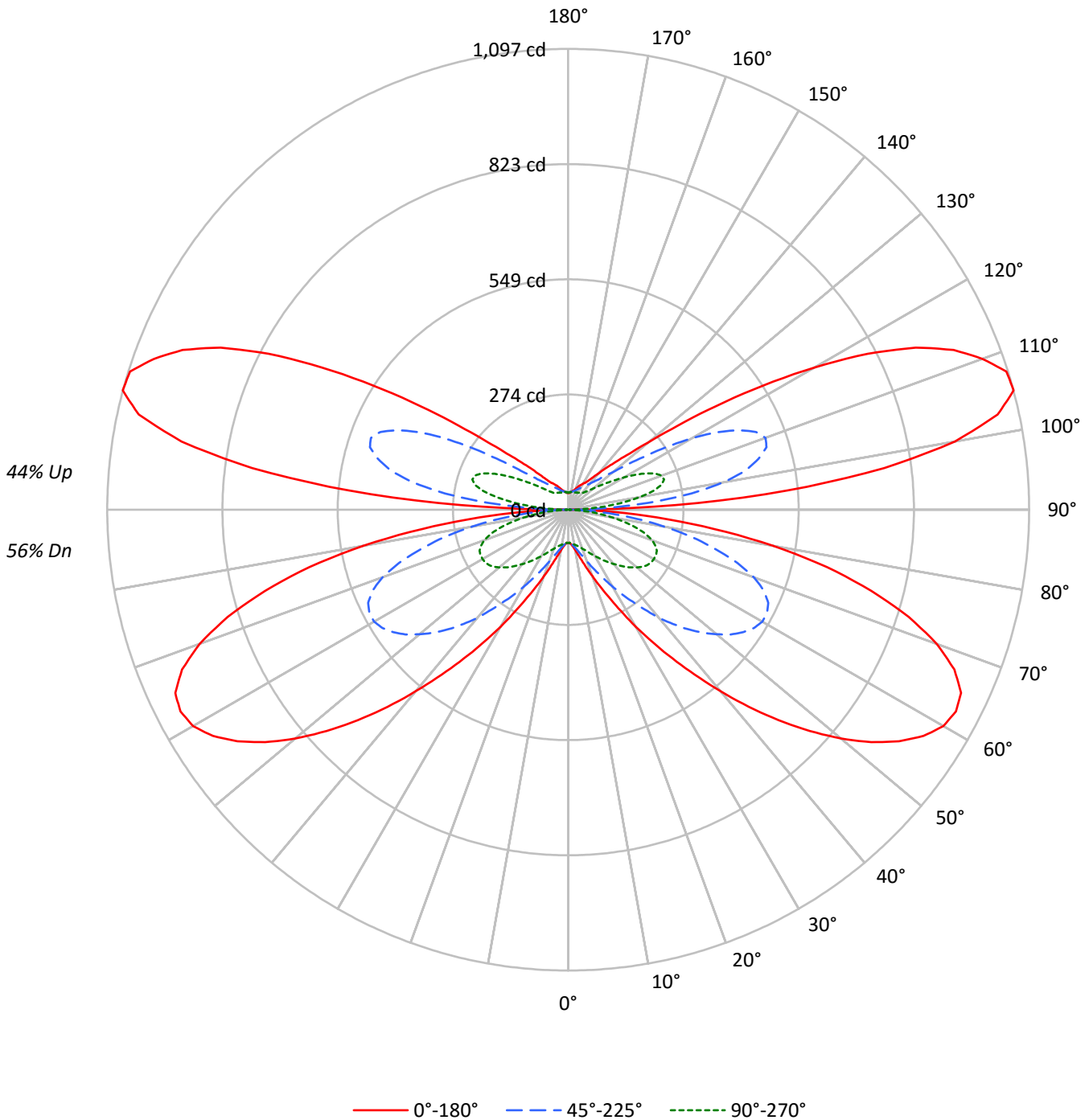
Lumens per Lamp: N/A
Luminaire Lumens: 4027.4 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 5.4 / 3.01 / 3.76
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 38.8
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



TEST NUMBER: P316058
CATALOG NUMBER: ShSe-SQR-2-L40-80-UNV-STD

Luminous Intensity Polar Plot





TEST NUMBER: P316058

CATALOG NUMBER: ShSe-SQR-2-L40-80-UNV-STD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|----|--|--|--|--|--|--|--|--|----|---|
| RF | 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 | 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 | 56 | | | | | | | | | | | | | | | | | | | | |
| 1 | 96 | 90 | 85 | 80 | 89 | 84 | 79 | 75 | 71 | 68 | 65 | 60 | 57 | 55 | 49 | 48 | 46 | 41 | | | | | | | | | | | | | | | | | | | | |
| 2 | 85 | 75 | 67 | 61 | 78 | 70 | 63 | 57 | 59 | 53 | 49 | 49 | 45 | 41 | 40 | 37 | 34 | 29 | | | | | | | | | | | | | | | | | | | | |
| 3 | 76 | 64 | 55 | 47 | 69 | 59 | 51 | 44 | 49 | 43 | 38 | 41 | 36 | 32 | 33 | 29 | 26 | 21 | | | | | | | | | | | | | | | | | | | | |
| 4 | 68 | 55 | 45 | 38 | 62 | 50 | 42 | 35 | 42 | 35 | 30 | 35 | 29 | 25 | 28 | 23 | 20 | 16 | | | | | | | | | | | | | | | | | | | | |
| 5 | 61 | 48 | 38 | 31 | 56 | 44 | 35 | 28 | 37 | 30 | 24 | 30 | 24 | 20 | 24 | 19 | 16 | 12 | | | | | | | | | | | | | | | | | | | | |
| 6 | 56 | 42 | 32 | 25 | 51 | 38 | 30 | 24 | 32 | 25 | 20 | 26 | 21 | 16 | 21 | 16 | 13 | 10 | | | | | | | | | | | | | | | | | | | | |
| 7 | 51 | 37 | 28 | 21 | 47 | 34 | 26 | 20 | 29 | 22 | 17 | 23 | 18 | 14 | 19 | 14 | 11 | 8 | | | | | | | | | | | | | | | | | | | | |
| 8 | 47 | 33 | 24 | 18 | 43 | 31 | 23 | 17 | 26 | 19 | 14 | 21 | 16 | 12 | 17 | 12 | 9 | 6 | | | | | | | | | | | | | | | | | | | | |
| 9 | 44 | 30 | 21 | 16 | 40 | 28 | 20 | 15 | 23 | 17 | 12 | 19 | 14 | 10 | 15 | 11 | 8 | 5 | | | | | | | | | | | | | | | | | | | | |
| 10 | 41 | 27 | 19 | 14 | 37 | 25 | 18 | 13 | 21 | 15 | 11 | 17 | 12 | 9 | 14 | 10 | 7 | 4 | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 212 | 212 | 212 |
| 5° | 224 | 220 | 217 |
| 10° | 267 | 248 | 230 |
| 15° | 346 | 298 | 249 |
| 20° | 483 | 375 | 284 |
| 25° | 683 | 492 | 329 |
| 30° | 997 | 656 | 394 |
| 35° | 1418 | 878 | 483 |
| 40° | 1982 | 1179 | 592 |
| 45° | 2696 | 1531 | 733 |
| 50° | 3548 | 1930 | 895 |
| 55° | 4509 | 2383 | 1079 |
| 60° | 5546 | 2870 | 1266 |
| 65° | 6571 | 3345 | 1481 |
| 70° | 7341 | 3702 | 1672 |
| 75° | 7769 | 3779 | 1764 |
| 80° | 7665 | 3605 | 1657 |
| 85° | 6561 | 2930 | 1278 |



TEST NUMBER: P316058

CATALOG NUMBER: ShSe-SQR-2-L40-80-UNV-STD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 8.1 | 0.2 |
| 10°-20° | 31.4 | 0.8 |
| 20°-30° | 80.3 | 2.0 |
| 30°-40° | 178.1 | 4.4 |
| 40°-50° | 331.4 | 8.2 |
| 50°-60° | 493.5 | 12.3 |
| 60°-70° | 569.4 | 14.1 |
| 70°-80° | 437.7 | 10.9 |
| 80°-90° | 131.6 | 3.3 |
| 90°-100° | 270.2 | 6.7 |
| 100°-110° | 603.6 | 15.0 |
| 110°-120° | 495.4 | 12.3 |
| 120°-130° | 225.5 | 5.6 |
| 130°-140° | 85.7 | 2.1 |
| 140°-150° | 43.7 | 1.1 |
| 150°-160° | 25.0 | 0.6 |
| 160°-170° | 12.9 | 0.3 |
| 170°-180° | 4.0 | 0.1 |
| 0°-30° | 119.7 | 3.0 |
| 0°-40° | 297.8 | 7.4 |
| 0°-60° | 1122.7 | 27.9 |
| 0°-90° | 2261.4 | 56.1 |
| 90°-120° | 1369.2 | 34.0 |
| 90°-150° | 1724.1 | 42.8 |
| 90°-180° | 1766.0 | 43.8 |
| 0°-180° | 4027.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|-----|-------|-----|------|
| 0° | 79 | 79 | 79 | 79 | 79 | |
| 5° | 83 | 83 | 82 | 80 | 80 | 8 |
| 15° | 124 | 120 | 107 | 95 | 90 | 37 |
| 25° | 230 | 211 | 166 | 126 | 111 | 111 |
| 35° | 432 | 382 | 267 | 179 | 147 | 277 |
| 45° | 708 | 612 | 402 | 243 | 192 | 551 |
| 55° | 961 | 818 | 508 | 294 | 230 | 856 |
| 65° | 1032 | 874 | 525 | 299 | 233 | 1004 |
| 75° | 747 | 639 | 364 | 217 | 170 | 776 |
| 85° | 212 | 168 | 95 | 60 | 41 | 232 |
| 90° | 3 | 4 | 3 | 1 | 1 | 47 |
| 95° | 524 | 405 | 192 | 116 | 86 | 511 |
| 105° | 1097 | 922 | 469 | 290 | 230 | 1118 |
| 115° | 913 | 758 | 448 | 259 | 204 | 889 |
| 125° | 429 | 352 | 219 | 135 | 110 | 401 |
| 135° | 162 | 140 | 102 | 72 | 62 | 132 |
| 145° | 84 | 83 | 68 | 54 | 50 | 56 |
| 155° | 63 | 59 | 54 | 48 | 46 | 29 |
| 165° | 47 | 47 | 46 | 44 | 43 | 14 |
| 175° | 40 | 41 | 41 | 41 | 41 | 4 |
| 180° | 40 | 40 | 40 | 40 | 40 | |



TEST NUMBER: P316058

CATALOG NUMBER: ShSe-SQR-2-L40-80-UNV-STD

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 |
| 2.5° | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 | 80.2 | 78.8 | 78.8 | 78.8 | 78.8 | 80.2 |
| 5° | 82.9 | 82.9 | 82.9 | 82.9 | 81.6 | 82.9 | 81.6 | 81.6 | 81.6 | 81.6 | 81.6 |
| 7.5° | 88.3 | 88.3 | 88.3 | 88.3 | 88.3 | 88.3 | 86.9 | 86.9 | 86.9 | 85.5 | 85.5 |
| 10° | 97.6 | 97.6 | 97.6 | 97.6 | 96.2 | 96.2 | 94.9 | 93.6 | 92.2 | 92.2 | 90.9 |
| 12.5° | 109.6 | 109.6 | 108.3 | 108.3 | 106.9 | 106.9 | 104.3 | 102.9 | 101.6 | 100.2 | 97.6 |
| 15° | 124.3 | 124.3 | 124.3 | 123.0 | 120.3 | 120.3 | 117.6 | 115.0 | 112.3 | 109.6 | 106.9 |
| 17.5° | 144.3 | 144.3 | 143.0 | 141.7 | 137.6 | 136.4 | 133.7 | 129.7 | 126.9 | 121.6 | 117.6 |
| 20° | 168.5 | 168.5 | 165.7 | 164.4 | 159.0 | 157.8 | 153.7 | 148.3 | 143.0 | 137.6 | 131.0 |
| 22.5° | 196.5 | 197.8 | 193.8 | 189.8 | 184.5 | 181.8 | 177.8 | 171.1 | 163.1 | 155.0 | 147.1 |
| 25° | 229.9 | 231.2 | 227.3 | 221.9 | 213.8 | 211.2 | 205.9 | 196.5 | 185.8 | 176.4 | 165.7 |
| 27.5° | 271.4 | 271.4 | 266.0 | 259.3 | 248.6 | 245.9 | 238.0 | 227.3 | 213.8 | 200.5 | 187.1 |
| 30° | 320.8 | 320.8 | 314.2 | 304.7 | 288.7 | 286.1 | 275.4 | 260.7 | 244.6 | 228.6 | 211.2 |
| 32.5° | 373.0 | 370.2 | 363.5 | 354.2 | 336.8 | 331.5 | 320.8 | 300.7 | 279.4 | 258.0 | 239.3 |
| 35° | 431.8 | 431.8 | 422.4 | 410.4 | 389.0 | 382.3 | 367.6 | 346.2 | 322.1 | 291.4 | 267.3 |
| 37.5° | 494.6 | 493.2 | 485.2 | 469.2 | 443.8 | 435.8 | 418.4 | 391.6 | 362.3 | 331.5 | 299.4 |
| 40° | 564.1 | 562.7 | 552.0 | 533.3 | 503.9 | 491.9 | 473.2 | 439.7 | 406.3 | 368.9 | 335.5 |
| 42.5° | 636.3 | 634.9 | 621.5 | 598.9 | 565.4 | 550.7 | 529.4 | 491.9 | 451.8 | 409.0 | 368.9 |
| 45° | 708.4 | 708.4 | 692.4 | 665.6 | 630.9 | 612.2 | 586.8 | 544.0 | 497.3 | 449.1 | 402.3 |
| 47.5° | 779.3 | 777.9 | 759.2 | 729.8 | 691.0 | 669.6 | 640.3 | 593.5 | 541.3 | 485.2 | 433.1 |
| 50° | 847.4 | 844.8 | 823.4 | 791.3 | 747.2 | 725.8 | 695.1 | 640.3 | 581.5 | 519.9 | 461.1 |
| 52.5° | 908.9 | 906.2 | 882.2 | 847.4 | 798.0 | 775.3 | 741.8 | 681.7 | 618.9 | 550.7 | 487.9 |
| 55° | 961.0 | 958.4 | 933.0 | 895.5 | 843.4 | 818.0 | 780.6 | 715.1 | 648.2 | 576.1 | 508.0 |
| 57.5° | 1002.5 | 999.8 | 974.4 | 933.0 | 878.2 | 850.1 | 810.0 | 739.2 | 669.6 | 594.8 | 524.0 |
| 60° | 1030.5 | 1029.3 | 1003.8 | 958.4 | 902.2 | 871.5 | 830.1 | 753.9 | 681.7 | 606.8 | 533.3 |
| 62.5° | 1040.0 | 1041.2 | 1017.2 | 970.4 | 911.6 | 880.8 | 838.1 | 760.6 | 687.0 | 608.2 | 533.3 |
| 65° | 1031.9 | 1035.9 | 1013.2 | 962.4 | 904.9 | 874.1 | 832.7 | 755.2 | 680.3 | 600.1 | 525.3 |
| 67.5° | 994.5 | 1005.2 | 983.8 | 931.7 | 875.5 | 847.4 | 810.0 | 733.8 | 660.3 | 580.1 | 503.9 |
| 70° | 933.0 | 947.7 | 927.6 | 871.5 | 823.4 | 800.6 | 765.9 | 693.7 | 624.2 | 544.0 | 470.5 |
| 72.5° | 850.1 | 868.8 | 848.8 | 787.3 | 748.5 | 731.2 | 700.4 | 632.2 | 568.0 | 493.2 | 422.4 |
| 75° | 747.2 | 764.6 | 744.5 | 684.4 | 653.6 | 638.9 | 613.5 | 553.4 | 498.5 | 430.4 | 363.5 |
| 77.5° | 630.9 | 642.9 | 629.6 | 572.1 | 545.4 | 533.3 | 512.0 | 455.8 | 413.0 | 356.9 | 302.1 |
| 80° | 494.6 | 502.6 | 493.2 | 442.5 | 423.7 | 414.4 | 395.6 | 347.5 | 318.1 | 274.0 | 232.6 |
| 82.5° | 350.2 | 356.9 | 350.2 | 310.1 | 296.8 | 287.4 | 275.4 | 235.2 | 216.6 | 191.1 | 163.1 |
| 85° | 212.5 | 207.2 | 201.8 | 177.8 | 177.8 | 168.5 | 157.8 | 132.3 | 125.7 | 112.3 | 94.9 |
| 87.5° | 84.2 | 78.8 | 76.2 | 68.1 | 69.5 | 64.2 | 60.2 | 46.8 | 46.8 | 44.1 | 37.4 |
| 90° | 2.7 | 2.7 | 4.0 | 2.7 | 4.0 | 4.0 | 4.0 | 2.7 | 2.7 | 2.7 | 2.7 |
| 92.5° | 255.3 | 247.3 | 232.6 | 224.5 | 197.8 | 184.5 | 169.7 | 140.4 | 124.3 | 104.3 | 86.9 |
| 95° | 524.0 | 517.3 | 499.9 | 455.8 | 425.1 | 405.0 | 373.0 | 312.8 | 278.0 | 238.0 | 192.5 |
| 97.5° | 759.2 | 767.2 | 739.2 | 663.0 | 629.6 | 601.5 | 568.0 | 477.2 | 429.0 | 364.9 | 295.4 |
| 100° | 934.3 | 951.7 | 922.3 | 819.4 | 780.6 | 756.5 | 723.1 | 613.5 | 550.7 | 463.8 | 375.6 |
| 102.5° | 1046.6 | 1072.0 | 1040.0 | 916.9 | 879.5 | 863.4 | 828.7 | 715.1 | 640.3 | 534.7 | 433.1 |
| 105° | 1097.4 | 1132.1 | 1098.8 | 970.4 | 937.0 | 922.3 | 890.2 | 775.3 | 693.7 | 580.1 | 469.2 |
| 107.5° | 1093.4 | 1134.8 | 1106.7 | 997.2 | 957.0 | 937.0 | 906.2 | 793.9 | 709.8 | 598.9 | 494.6 |
| 110° | 1049.3 | 1090.7 | 1068.0 | 986.5 | 937.0 | 906.2 | 872.9 | 768.6 | 688.4 | 589.4 | 499.9 |



TEST NUMBER: P316058

CATALOG NUMBER: ShSe-SQR-2-L40-80-UNV-STD

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 993.1 | 1015.9 | 994.5 | 937.0 | 880.8 | 843.4 | 804.6 | 712.4 | 637.5 | 558.7 | 483.9 |
| 115° | 912.9 | 918.3 | 898.2 | 851.5 | 800.6 | 757.9 | 719.1 | 633.6 | 570.8 | 512.0 | 447.8 |
| 117.5° | 803.4 | 798.0 | 777.9 | 744.5 | 701.7 | 663.0 | 624.2 | 544.0 | 497.3 | 454.5 | 399.7 |
| 120° | 677.7 | 668.4 | 641.6 | 624.2 | 590.8 | 554.7 | 518.7 | 447.8 | 418.4 | 386.3 | 339.5 |
| 122.5° | 549.4 | 534.7 | 508.0 | 494.6 | 475.9 | 449.1 | 421.1 | 364.9 | 340.9 | 314.2 | 276.7 |
| 125° | 429.0 | 415.7 | 389.0 | 379.6 | 371.6 | 351.6 | 335.5 | 296.8 | 271.4 | 250.0 | 219.2 |
| 127.5° | 327.5 | 316.8 | 288.7 | 284.7 | 283.3 | 274.0 | 263.3 | 236.6 | 217.9 | 197.8 | 172.4 |
| 130° | 248.6 | 240.6 | 223.2 | 221.9 | 220.6 | 215.2 | 208.5 | 189.8 | 176.4 | 159.0 | 139.0 |
| 132.5° | 197.8 | 192.5 | 183.1 | 179.1 | 176.4 | 172.4 | 167.1 | 153.7 | 143.0 | 131.0 | 117.6 |
| 135° | 161.7 | 159.0 | 153.7 | 149.7 | 144.3 | 140.4 | 135.0 | 125.7 | 117.6 | 109.6 | 101.6 |
| 137.5° | 135.0 | 135.0 | 132.3 | 128.3 | 123.0 | 117.6 | 113.6 | 105.6 | 100.2 | 94.9 | 90.9 |
| 140° | 113.6 | 115.0 | 113.6 | 112.3 | 106.9 | 101.6 | 97.6 | 89.5 | 86.9 | 85.5 | 81.6 |
| 142.5° | 97.6 | 99.0 | 99.0 | 97.6 | 93.6 | 90.9 | 88.3 | 81.6 | 80.2 | 77.6 | 74.8 |
| 145° | 84.2 | 86.9 | 86.9 | 86.9 | 85.5 | 82.9 | 80.2 | 77.6 | 74.8 | 72.2 | 68.1 |
| 147.5° | 76.2 | 77.6 | 78.8 | 78.8 | 77.6 | 76.2 | 74.8 | 72.2 | 69.5 | 66.9 | 64.2 |
| 150° | 72.2 | 72.2 | 72.2 | 72.2 | 70.9 | 70.9 | 69.5 | 66.9 | 65.5 | 62.8 | 60.2 |
| 152.5° | 66.9 | 66.9 | 66.9 | 65.5 | 65.5 | 64.2 | 62.8 | 61.5 | 60.2 | 58.8 | 57.4 |
| 155° | 62.8 | 62.8 | 61.5 | 60.2 | 60.2 | 58.8 | 57.4 | 56.2 | 56.2 | 54.8 | 53.5 |
| 157.5° | 57.4 | 57.4 | 56.2 | 56.2 | 54.8 | 54.8 | 53.5 | 52.1 | 52.1 | 50.8 | 50.8 |
| 160° | 53.5 | 53.5 | 52.1 | 52.1 | 50.8 | 50.8 | 50.8 | 49.5 | 49.5 | 48.1 | 48.1 |
| 162.5° | 49.5 | 49.5 | 49.5 | 49.5 | 48.1 | 48.1 | 48.1 | 46.8 | 48.1 | 46.8 | 46.8 |
| 165° | 46.8 | 46.8 | 46.8 | 46.8 | 46.8 | 46.8 | 46.8 | 45.5 | 45.5 | 45.5 | 45.5 |
| 167.5° | 45.5 | 45.5 | 44.1 | 45.5 | 45.5 | 44.1 | 44.1 | 44.1 | 44.1 | 44.1 | 44.1 |
| 170° | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 44.1 | 42.8 | 42.8 |
| 172.5° | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 42.8 | 42.8 | 42.8 |
| 175° | 40.1 | 40.1 | 40.1 | 40.1 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 |
| 177.5° | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 41.4 | 41.4 | 41.4 |
| 180° | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 |



TEST NUMBER: P316058

CATALOG NUMBER: ShSe-SQR-2-L40-80-UNV-STD

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 | 78.8 |
| 2.5° | 80.2 | 78.8 | 78.8 | 78.8 | 78.8 | 80.2 | 78.8 | 78.8 | 78.8 | 78.8 |
| 5° | 81.6 | 80.2 | 80.2 | 80.2 | 80.2 | 80.2 | 80.2 | 80.2 | 80.2 | 80.2 |
| 7.5° | 84.2 | 84.2 | 82.9 | 82.9 | 82.9 | 82.9 | 81.6 | 81.6 | 81.6 | 81.6 |
| 10° | 89.5 | 88.3 | 86.9 | 86.9 | 85.5 | 85.5 | 84.2 | 84.2 | 84.2 | 84.2 |
| 12.5° | 96.2 | 93.6 | 92.2 | 90.9 | 89.5 | 89.5 | 88.3 | 86.9 | 86.9 | 86.9 |
| 15° | 104.3 | 100.2 | 99.0 | 96.2 | 94.9 | 93.6 | 92.2 | 90.9 | 89.5 | 89.5 |
| 17.5° | 113.6 | 109.6 | 105.6 | 102.9 | 100.2 | 100.2 | 96.2 | 94.9 | 93.6 | 93.6 |
| 20° | 125.7 | 120.3 | 115.0 | 109.6 | 108.3 | 106.9 | 102.9 | 100.2 | 99.0 | 99.0 |
| 22.5° | 139.0 | 132.3 | 125.7 | 119.0 | 116.3 | 115.0 | 109.6 | 106.9 | 105.6 | 104.3 |
| 25° | 155.0 | 145.7 | 137.6 | 129.7 | 125.7 | 124.3 | 117.6 | 115.0 | 112.3 | 110.9 |
| 27.5° | 173.8 | 161.7 | 151.1 | 141.7 | 137.6 | 133.7 | 126.9 | 123.0 | 120.3 | 119.0 |
| 30° | 195.2 | 179.1 | 165.7 | 155.0 | 149.7 | 145.7 | 137.6 | 132.3 | 128.3 | 126.9 |
| 32.5° | 217.9 | 199.2 | 183.1 | 169.7 | 163.1 | 157.8 | 148.3 | 141.7 | 137.6 | 136.4 |
| 35° | 243.3 | 220.6 | 201.8 | 185.8 | 179.1 | 172.4 | 161.7 | 152.4 | 149.7 | 147.1 |
| 37.5° | 270.0 | 243.3 | 221.9 | 203.2 | 193.8 | 187.1 | 173.8 | 164.4 | 160.4 | 157.8 |
| 40° | 299.4 | 267.3 | 241.9 | 220.6 | 211.2 | 201.8 | 188.5 | 176.4 | 172.4 | 168.5 |
| 42.5° | 330.2 | 292.8 | 263.3 | 238.0 | 227.3 | 217.9 | 201.8 | 189.8 | 183.1 | 180.4 |
| 45° | 359.5 | 319.5 | 283.3 | 255.3 | 243.3 | 232.6 | 215.2 | 201.8 | 195.2 | 192.5 |
| 47.5° | 384.9 | 340.9 | 303.5 | 271.4 | 258.0 | 247.3 | 227.3 | 213.8 | 207.2 | 203.2 |
| 50° | 409.0 | 360.9 | 322.1 | 286.1 | 271.4 | 259.3 | 239.3 | 224.5 | 217.9 | 213.8 |
| 52.5° | 430.4 | 378.3 | 338.2 | 300.7 | 283.3 | 270.0 | 250.0 | 233.9 | 227.3 | 223.2 |
| 55° | 446.4 | 393.0 | 350.2 | 311.4 | 294.0 | 279.4 | 258.0 | 240.6 | 233.9 | 229.9 |
| 57.5° | 459.8 | 402.3 | 358.2 | 319.5 | 300.7 | 286.1 | 263.3 | 245.9 | 238.0 | 233.9 |
| 60° | 466.5 | 409.0 | 360.9 | 323.5 | 304.7 | 290.0 | 266.0 | 248.6 | 240.6 | 235.2 |
| 62.5° | 467.8 | 409.0 | 360.9 | 322.1 | 304.7 | 290.0 | 266.0 | 248.6 | 240.6 | 235.2 |
| 65° | 461.1 | 402.3 | 352.8 | 315.4 | 299.4 | 286.1 | 262.0 | 244.6 | 238.0 | 232.6 |
| 67.5° | 443.8 | 386.3 | 338.2 | 303.5 | 287.4 | 275.4 | 251.3 | 235.2 | 229.9 | 224.5 |
| 70° | 417.0 | 362.3 | 314.2 | 282.1 | 270.0 | 258.0 | 235.2 | 220.6 | 216.6 | 212.5 |
| 72.5° | 376.9 | 328.8 | 283.3 | 256.6 | 245.9 | 233.9 | 212.5 | 199.2 | 197.8 | 193.8 |
| 75° | 330.2 | 287.4 | 247.3 | 225.9 | 216.6 | 205.9 | 184.5 | 175.1 | 173.8 | 169.7 |
| 77.5° | 274.0 | 240.6 | 205.9 | 189.8 | 181.8 | 172.4 | 152.4 | 145.7 | 143.0 | 139.0 |
| 80° | 213.8 | 188.5 | 161.7 | 147.1 | 143.0 | 133.7 | 117.6 | 113.6 | 110.9 | 106.9 |
| 82.5° | 151.1 | 132.3 | 113.6 | 104.3 | 101.6 | 94.9 | 82.9 | 80.2 | 76.2 | 73.5 |
| 85° | 89.5 | 78.8 | 68.1 | 61.5 | 60.2 | 56.2 | 48.1 | 48.1 | 44.1 | 41.4 |
| 87.5° | 33.4 | 30.7 | 25.4 | 24.1 | 22.7 | 21.4 | 20.0 | 20.0 | 17.4 | 16.0 |
| 90° | 2.7 | 2.7 | 2.7 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| 92.5° | 74.8 | 60.2 | 56.2 | 49.5 | 48.1 | 46.8 | 42.8 | 41.4 | 40.1 | 37.4 |
| 95° | 175.1 | 149.7 | 131.0 | 117.6 | 116.3 | 110.9 | 96.2 | 93.6 | 86.9 | 85.5 |
| 97.5° | 268.7 | 233.9 | 201.8 | 184.5 | 179.1 | 169.7 | 144.3 | 141.7 | 137.6 | 131.0 |
| 100° | 350.2 | 304.7 | 258.0 | 238.0 | 231.2 | 217.9 | 185.8 | 181.8 | 180.4 | 173.8 |
| 102.5° | 407.7 | 354.2 | 299.4 | 275.4 | 268.7 | 252.6 | 216.6 | 212.5 | 212.5 | 207.2 |
| 105° | 441.1 | 383.7 | 323.5 | 300.7 | 290.0 | 274.0 | 236.6 | 233.9 | 235.2 | 229.9 |
| 107.5° | 455.8 | 394.3 | 332.8 | 308.8 | 299.4 | 283.3 | 250.0 | 244.6 | 244.6 | 239.3 |
| 110° | 449.1 | 387.6 | 326.1 | 304.7 | 294.0 | 280.7 | 254.0 | 244.6 | 241.9 | 236.6 |



TEST NUMBER: P316058

CATALOG NUMBER: ShSe-SQR-2-L40-80-UNV-STD

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 427.7 | 368.9 | 316.8 | 290.0 | 280.7 | 268.7 | 247.3 | 235.2 | 227.3 | 224.5 |
| 115° | 395.6 | 340.9 | 296.8 | 268.7 | 259.3 | 248.6 | 229.9 | 217.9 | 208.5 | 204.5 |
| 117.5° | 350.2 | 303.5 | 267.3 | 241.9 | 232.6 | 221.9 | 207.2 | 196.5 | 185.8 | 180.4 |
| 120° | 295.4 | 258.0 | 232.6 | 208.5 | 199.2 | 189.8 | 179.1 | 169.7 | 159.0 | 153.7 |
| 122.5° | 239.3 | 213.8 | 195.2 | 175.1 | 165.7 | 156.4 | 148.3 | 141.7 | 135.0 | 129.7 |
| 125° | 189.8 | 172.4 | 159.0 | 143.0 | 135.0 | 126.9 | 121.6 | 117.6 | 113.6 | 109.6 |
| 127.5° | 148.3 | 139.0 | 128.3 | 116.3 | 109.6 | 102.9 | 99.0 | 97.6 | 94.9 | 93.6 |
| 130° | 123.0 | 113.6 | 105.6 | 96.2 | 90.9 | 86.9 | 82.9 | 81.6 | 80.2 | 78.8 |
| 132.5° | 105.6 | 97.6 | 90.9 | 84.2 | 80.2 | 76.2 | 73.5 | 70.9 | 69.5 | 69.5 |
| 135° | 93.6 | 85.5 | 80.2 | 74.8 | 72.2 | 69.5 | 66.9 | 64.2 | 61.5 | 61.5 |
| 137.5° | 84.2 | 77.6 | 72.2 | 68.1 | 65.5 | 64.2 | 61.5 | 58.8 | 56.2 | 56.2 |
| 140° | 76.2 | 70.9 | 65.5 | 62.8 | 61.5 | 58.8 | 57.4 | 54.8 | 52.1 | 50.8 |
| 142.5° | 69.5 | 64.2 | 60.2 | 57.4 | 56.2 | 56.2 | 54.8 | 52.1 | 50.8 | 49.5 |
| 145° | 64.2 | 60.2 | 56.2 | 54.8 | 53.5 | 53.5 | 52.1 | 50.8 | 49.5 | 49.5 |
| 147.5° | 60.2 | 56.2 | 53.5 | 52.1 | 52.1 | 50.8 | 50.8 | 49.5 | 48.1 | 48.1 |
| 150° | 57.4 | 54.8 | 52.1 | 50.8 | 50.8 | 49.5 | 49.5 | 48.1 | 48.1 | 46.8 |
| 152.5° | 54.8 | 53.5 | 50.8 | 49.5 | 49.5 | 48.1 | 48.1 | 46.8 | 46.8 | 45.5 |
| 155° | 52.1 | 50.8 | 49.5 | 48.1 | 48.1 | 46.8 | 46.8 | 45.5 | 45.5 | 45.5 |
| 157.5° | 49.5 | 49.5 | 48.1 | 46.8 | 46.8 | 45.5 | 45.5 | 44.1 | 44.1 | 44.1 |
| 160° | 48.1 | 46.8 | 46.8 | 45.5 | 45.5 | 44.1 | 44.1 | 44.1 | 42.8 | 42.8 |
| 162.5° | 46.8 | 45.5 | 45.5 | 45.5 | 44.1 | 44.1 | 44.1 | 42.8 | 42.8 | 42.8 |
| 165° | 45.5 | 45.5 | 44.1 | 44.1 | 44.1 | 44.1 | 44.1 | 42.8 | 42.8 | 42.8 |
| 167.5° | 44.1 | 44.1 | 44.1 | 44.1 | 44.1 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 |
| 170° | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 |
| 172.5° | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 41.4 | 42.8 | 42.8 | 42.8 | 42.8 |
| 175° | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 |
| 177.5° | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 | 41.4 |
| 180° | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 |

(END OF REPORT)