

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: METALUX

Report Number: P855752

Luminaire Tested: **24SFS-L3C4-UNV-LOW-3500K**

Issue Date: 7/17/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P855752  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( BL231218008-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24SFS-L3C4-UNV-LOW-3500K  
Description: 2x4 Surround Frame Selectable - Architectural Slim LED Frame with,  
LOW Lumen and 3500K CCT Settings  
Light Source: -  
Ballast/Driver: -

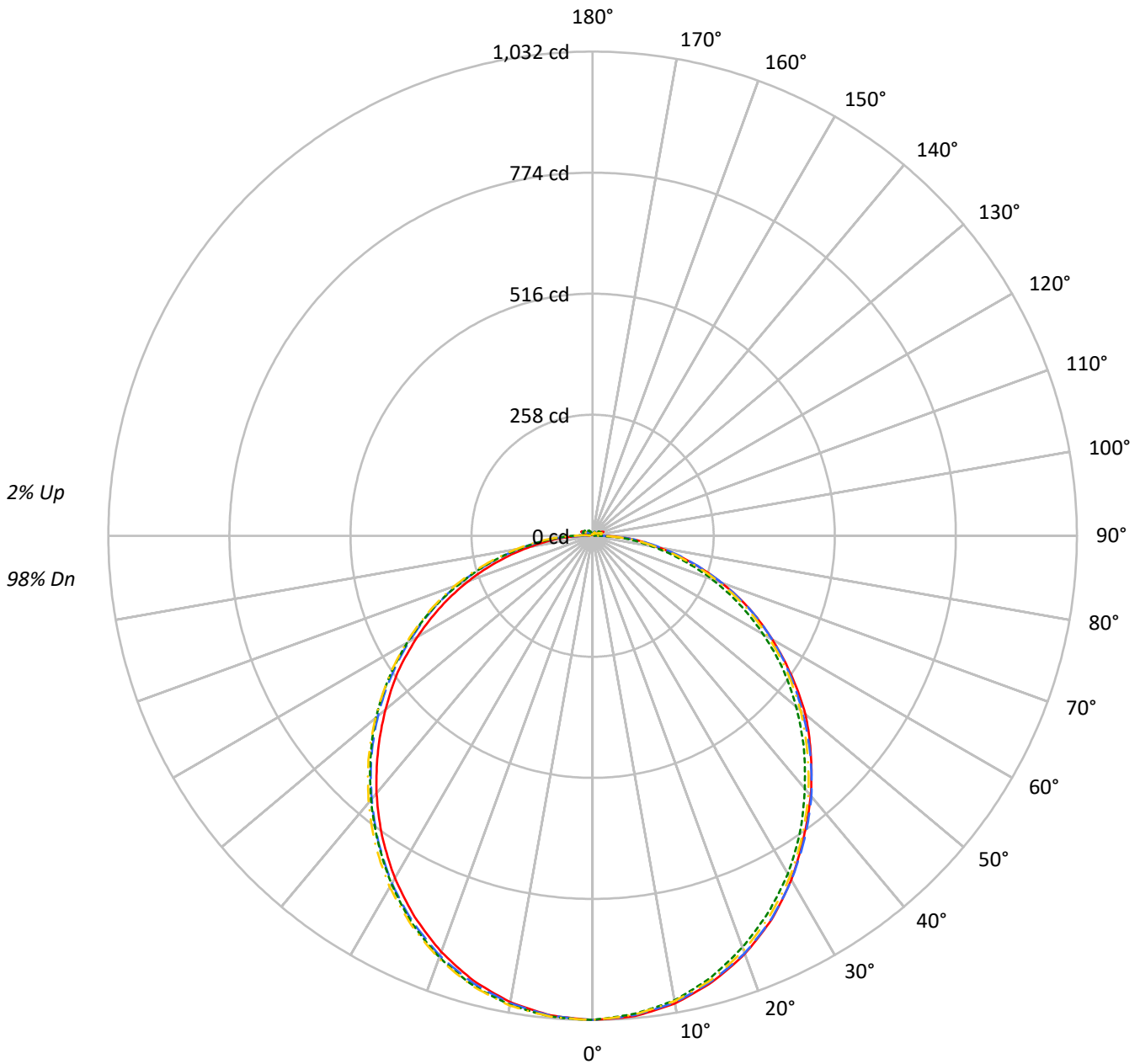
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3011.0 lumens  
Efficiency: N/A  
Efficacy: 130.9 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.35  
Luminous Opening: Rectangular (W 1.9' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23  
Input Voltage (V): NR  
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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CATALOG NUMBER: 24SFS-L3C4-UNV-LOW-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P855752

CATALOG NUMBER: 24SFS-L3C4-UNV-LOW-3500K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF  | 20  |     |     |     |     |     |     |     |     | 20  |     |     |     |     |     |     |     |    | 20 |    |   |  |  |  |  |  |  | 20 |  |  |  |  |  |  |  |  |   |
| RC  | 80  |     |     |     |     |     |     |     |     | 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 | 0 |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 0   | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 108 | 103 | 98  | 94  | 105 | 100 | 96  | 92  | 95  | 92  | 89  | 91  | 88  | 86  | 87  | 85  | 83  | 80 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 98  | 89  | 82  | 76  | 95  | 87  | 80  | 75  | 83  | 78  | 73  | 79  | 75  | 71  | 76  | 72  | 69  | 67 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 89  | 78  | 70  | 63  | 86  | 76  | 69  | 62  | 73  | 66  | 61  | 70  | 64  | 59  | 67  | 62  | 58  | 56 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 81  | 69  | 60  | 53  | 79  | 68  | 59  | 53  | 65  | 57  | 52  | 62  | 56  | 51  | 60  | 54  | 50  | 48 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 75  | 62  | 53  | 46  | 72  | 60  | 52  | 45  | 58  | 50  | 45  | 56  | 49  | 44  | 54  | 48  | 43  | 41 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 69  | 56  | 46  | 40  | 67  | 54  | 46  | 40  | 52  | 45  | 39  | 50  | 44  | 39  | 49  | 43  | 38  | 36 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 48  | 40  | 35  | 46  | 39  | 34  | 44  | 38  | 34  | 32 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 60  | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 44  | 36  | 31  | 42  | 35  | 31  | 41  | 35  | 30  | 28 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 56  | 42  | 34  | 28  | 54  | 41  | 34  | 28  | 40  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 27  | 25 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 52  | 39  | 31  | 26  | 51  | 38  | 31  | 26  | 37  | 30  | 25  | 36  | 30  | 25  | 35  | 29  | 25  | 23 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 1495 | 1495 | 1495 | 1495 |
| 5°  | 1495 | 1487 | 1492 | 1496 |
| 10° | 1489 | 1479 | 1485 | 1493 |
| 15° | 1477 | 1462 | 1472 | 1487 |
| 20° | 1462 | 1439 | 1455 | 1474 |
| 25° | 1443 | 1416 | 1433 | 1456 |
| 30° | 1416 | 1392 | 1410 | 1434 |
| 35° | 1387 | 1363 | 1383 | 1410 |
| 40° | 1368 | 1330 | 1355 | 1390 |
| 45° | 1347 | 1303 | 1325 | 1372 |
| 50° | 1335 | 1275 | 1298 | 1359 |
| 55° | 1304 | 1249 | 1280 | 1339 |
| 60° | 1280 | 1216 | 1249 | 1322 |
| 65° | 1265 | 1184 | 1220 | 1307 |
| 70° | 1237 | 1144 | 1187 | 1286 |
| 75° | 1202 | 1094 | 1154 | 1285 |
| 80° | 1191 | 1054 | 1120 | 1294 |
| 85° | 1421 | 1169 | 1247 | 1536 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 97.4   | 3.2       |
| 10°-20°   | 277.4  | 9.2       |
| 20°-30°   | 415.6  | 13.8      |
| 30°-40°   | 493.7  | 16.4      |
| 40°-50°   | 507.2  | 16.8      |
| 50°-60°   | 461.4  | 15.3      |
| 60°-70°   | 364.6  | 12.1      |
| 70°-80°   | 231.2  | 7.7       |
| 80°-90°   | 91.4   | 3.0       |
| 90°-100°  | 10.5   | 0.3       |
| 100°-110° | 18.0   | 0.6       |
| 110°-120° | 16.8   | 0.6       |
| 120°-130° | 10.1   | 0.3       |
| 130°-140° | 6.7    | 0.2       |
| 140°-150° | 4.7    | 0.2       |
| 150°-160° | 2.7    | 0.1       |
| 160°-170° | 1.1    | 0.0       |
| 170°-180° | 0.3    | 0.0       |
| 0°-30°    | 790.4  | 26.3      |
| 0°-40°    | 1284.1 | 42.6      |
| 0°-60°    | 2252.8 | 74.8      |
| 0°-90°    | 2940.0 | 97.6      |
| 90°-120°  | 45.4   | 1.5       |
| 90°-150°  | 66.9   | 2.2       |
| 90°-180°  | 71.0   | 2.4       |
| 0°-180°   | 3011.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 90°  | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0°   | 1032 | 1032 | 1032 | 1032 | 1032 |      |
| 5°   | 1028 | 1023 | 1026 | 1029 | 1028 | 98   |
| 15°  | 985  | 974  | 982  | 991  | 985  | 278  |
| 25°  | 903  | 886  | 897  | 911  | 903  | 415  |
| 35°  | 784  | 771  | 782  | 797  | 784  | 492  |
| 45°  | 658  | 636  | 647  | 670  | 658  | 508  |
| 55°  | 516  | 495  | 507  | 530  | 516  | 462  |
| 65°  | 369  | 345  | 356  | 381  | 369  | 364  |
| 75°  | 215  | 195  | 206  | 230  | 215  | 228  |
| 85°  | 86   | 70   | 75   | 92   | 86   | 81   |
| 90°  | 15   | 5    | 10   | 38   | 15   | 16   |
| 95°  | 4    | 2    | 7    | 13   | 4    | 5    |
| 105° | 17   | 20   | 22   | 21   | 17   | 16   |
| 115° | 19   | 17   | 23   | 22   | 19   | 19   |
| 125° | 6    | 16   | 6    | 19   | 6    | 7    |
| 135° | 3    | 12   | 2    | 18   | 3    | 2    |
| 145° | 3    | 10   | 2    | 13   | 3    | 2    |
| 155° | 3    | 9    | 3    | 10   | 3    | 1    |
| 165° | 3    | 4    | 3    | 5    | 3    | 1    |
| 175° | 2    | 3    | 3    | 4    | 2    | 0    |
| 180° | 3    | 3    | 3    | 3    | 3    |      |



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**CANDELA DISTRIBUTION (FULL):**

|      | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   | 202.5° | 225°   |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°   | 1031.9 | 1031.9 | 1031.9 | 1031.9 | 1031.9 | 1031.9 | 1031.9 | 1031.9 | 1031.9 | 1031.9 | 1031.9 |
| 5°   | 1027.8 | 1022.7 | 1025.3 | 1025.3 | 1022.7 | 1020.1 | 1024.4 | 1025.2 | 1026.1 | 1023.4 | 1026.6 |
| 10°  | 1012.0 | 1007.4 | 1009.8 | 1008.5 | 1005.4 | 1002.0 | 1006.9 | 1008.8 | 1009.5 | 1007.7 | 1011.9 |
| 15°  | 984.8  | 981.4  | 981.9  | 981.0  | 974.5  | 972.9  | 979.2  | 981.9  | 981.6  | 982.3  | 986.6  |
| 20°  | 948.4  | 945.0  | 947.0  | 943.2  | 933.4  | 936.1  | 940.5  | 943.1  | 943.6  | 946.5  | 952.3  |
| 25°  | 902.6  | 899.7  | 901.0  | 897.3  | 885.8  | 888.8  | 893.4  | 897.9  | 896.6  | 901.6  | 907.6  |
| 30°  | 846.6  | 846.4  | 847.2  | 844.6  | 831.9  | 833.8  | 840.1  | 843.7  | 842.7  | 849.7  | 855.2  |
| 35°  | 784.3  | 788.3  | 787.7  | 783.1  | 770.8  | 773.1  | 779.7  | 782.3  | 781.8  | 790.2  | 796.1  |
| 40°  | 723.1  | 723.4  | 725.0  | 717.1  | 703.1  | 709.5  | 715.0  | 715.8  | 716.3  | 725.3  | 732.3  |
| 45°  | 657.5  | 654.6  | 655.7  | 649.9  | 635.9  | 641.0  | 646.1  | 648.7  | 646.6  | 657.0  | 667.0  |
| 50°  | 592.2  | 584.1  | 583.3  | 579.4  | 565.5  | 570.4  | 578.0  | 578.6  | 575.9  | 588.4  | 596.8  |
| 55°  | 516.1  | 515.5  | 512.1  | 509.3  | 494.6  | 500.0  | 505.9  | 506.6  | 506.9  | 514.8  | 524.9  |
| 60°  | 441.7  | 441.3  | 442.2  | 435.4  | 419.5  | 426.8  | 432.6  | 432.9  | 431.0  | 444.1  | 451.5  |
| 65°  | 369.0  | 365.4  | 368.2  | 362.2  | 345.3  | 352.0  | 360.2  | 359.4  | 355.9  | 367.7  | 379.2  |
| 70°  | 291.9  | 291.4  | 292.2  | 284.9  | 270.1  | 276.0  | 284.0  | 283.7  | 280.3  | 294.2  | 305.8  |
| 75°  | 214.8  | 219.4  | 217.8  | 210.5  | 195.4  | 203.3  | 208.7  | 207.7  | 206.1  | 218.2  | 227.6  |
| 80°  | 142.8  | 147.7  | 148.3  | 138.9  | 126.3  | 132.9  | 137.8  | 137.6  | 134.2  | 146.7  | 157.2  |
| 85°  | 85.5   | 87.4   | 87.4   | 80.3   | 70.3   | 75.6   | 81.1   | 78.5   | 75.0   | 86.9   | 92.9   |
| 90°  | 14.7   | 6.2    | 6.0    | 5.7    | 5.2    | 6.6    | 8.4    | 9.2    | 9.6    | 12.3   | 15.9   |
| 95°  | 3.7    | 4.4    | 4.4    | 7.4    | 1.9    | 6.3    | 5.0    | 6.8    | 7.3    | 7.0    | 5.8    |
| 100° | 3.4    | 3.9    | 14.7   | 15.9   | 14.9   | 15.9   | 17.2   | 7.0    | 6.8    | 6.6    | 11.8   |
| 105° | 17.2   | 19.4   | 20.2   | 16.2   | 20.2   | 17.3   | 20.7   | 21.5   | 22.5   | 21.2   | 22.2   |
| 110° | 24.6   | 19.8   | 15.9   | 14.2   | 18.8   | 15.1   | 17.3   | 20.7   | 25.1   | 23.3   | 21.7   |
| 115° | 18.9   | 15.5   | 10.0   | 12.6   | 17.3   | 14.2   | 12.3   | 18.6   | 23.0   | 21.9   | 16.2   |
| 120° | 13.6   | 12.0   | 7.1    | 12.3   | 16.4   | 13.4   | 8.4    | 13.1   | 14.4   | 14.4   | 12.3   |
| 125° | 6.5    | 7.8    | 7.3    | 12.0   | 15.5   | 12.1   | 7.9    | 6.5    | 5.7    | 7.1    | 12.1   |
| 130° | 2.4    | 7.3    | 7.6    | 10.5   | 13.6   | 10.7   | 7.3    | 6.0    | 2.4    | 6.8    | 11.2   |
| 135° | 2.8    | 7.0    | 6.6    | 9.6    | 12.3   | 8.3    | 6.6    | 5.5    | 2.4    | 6.3    | 9.9    |
| 140° | 2.4    | 6.5    | 9.1    | 7.9    | 11.3   | 7.6    | 7.8    | 5.2    | 2.4    | 6.0    | 8.4    |
| 145° | 2.6    | 5.8    | 9.6    | 8.6    | 9.7    | 9.4    | 7.9    | 4.9    | 2.4    | 5.5    | 7.6    |
| 150° | 2.4    | 5.0    | 8.3    | 8.7    | 10.0   | 9.4    | 7.3    | 4.7    | 2.6    | 5.2    | 6.8    |
| 155° | 2.6    | 4.7    | 6.8    | 7.8    | 8.7    | 7.0    | 5.5    | 4.0    | 2.6    | 4.7    | 6.2    |
| 160° | 2.8    | 3.9    | 4.9    | 5.7    | 5.2    | 5.3    | 4.5    | 3.4    | 2.4    | 4.0    | 5.3    |
| 165° | 2.6    | 3.1    | 3.6    | 3.1    | 4.2    | 3.2    | 3.2    | 2.8    | 2.6    | 3.4    | 4.5    |
| 170° | 2.6    | 2.8    | 2.9    | 3.1    | 4.2    | 3.7    | 2.9    | 2.6    | 2.6    | 3.1    | 3.7    |
| 175° | 2.4    | 2.6    | 2.9    | 3.2    | 3.2    | 3.1    | 2.9    | 3.1    | 3.1    | 3.1    | 3.2    |
| 180° | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    |



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**CANDELA DISTRIBUTION (continued):**

|      | 247.5° | 270°   | 292.5° | 315°   | 337.5° | 360°   |
|------|--------|--------|--------|--------|--------|--------|
| 0°   | 1031.9 | 1031.9 | 1031.9 | 1031.9 | 1031.9 | 1031.9 |
| 5°   | 1028.1 | 1028.6 | 1025.0 | 1028.7 | 1028.1 | 1027.8 |
| 10°  | 1014.2 | 1015.1 | 1012.5 | 1016.7 | 1014.2 | 1012.0 |
| 15°  | 989.5  | 991.3  | 988.2  | 992.9  | 989.9  | 984.8  |
| 20°  | 954.6  | 955.9  | 955.5  | 958.6  | 954.9  | 948.4  |
| 25°  | 910.5  | 911.0  | 912.6  | 914.9  | 911.0  | 902.6  |
| 30°  | 859.1  | 857.3  | 861.5  | 864.6  | 857.9  | 846.6  |
| 35°  | 799.8  | 797.4  | 801.4  | 806.3  | 800.1  | 784.3  |
| 40°  | 734.9  | 734.7  | 741.5  | 742.2  | 735.7  | 723.1  |
| 45°  | 666.5  | 669.6  | 673.3  | 675.5  | 666.5  | 657.5  |
| 50°  | 596.8  | 602.9  | 602.8  | 603.9  | 595.8  | 592.2  |
| 55°  | 527.0  | 530.1  | 532.0  | 531.8  | 527.0  | 516.1  |
| 60°  | 453.8  | 456.1  | 460.8  | 459.8  | 454.3  | 441.7  |
| 65°  | 379.7  | 381.3  | 384.2  | 386.0  | 378.2  | 369.0  |
| 70°  | 303.4  | 303.6  | 309.6  | 313.0  | 301.9  | 291.9  |
| 75°  | 229.7  | 229.6  | 235.2  | 237.7  | 229.3  | 214.8  |
| 80°  | 156.2  | 155.1  | 164.3  | 164.3  | 154.5  | 142.8  |
| 85°  | 91.3   | 92.4   | 99.6   | 101.5  | 94.2   | 85.5   |
| 90°  | 26.1   | 37.6   | 39.5   | 36.4   | 25.3   | 14.7   |
| 95°  | 8.3    | 13.1   | 8.4    | 5.2    | 4.5    | 3.7    |
| 100° | 9.2    | 5.2    | 11.5   | 5.7    | 3.6    | 3.4    |
| 105° | 18.0   | 20.6   | 18.6   | 18.1   | 18.0   | 17.2   |
| 110° | 19.6   | 21.7   | 17.0   | 19.3   | 21.0   | 24.6   |
| 115° | 18.9   | 21.5   | 17.5   | 17.5   | 18.0   | 18.9   |
| 120° | 18.1   | 19.6   | 16.7   | 12.6   | 15.1   | 13.6   |
| 125° | 17.5   | 19.1   | 15.9   | 12.5   | 7.8    | 6.5    |
| 130° | 16.7   | 18.5   | 15.1   | 11.7   | 6.0    | 2.4    |
| 135° | 14.2   | 17.8   | 12.6   | 9.7    | 6.0    | 2.8    |
| 140° | 11.3   | 14.1   | 11.5   | 8.6    | 5.5    | 2.4    |
| 145° | 10.2   | 12.6   | 9.7    | 8.7    | 5.2    | 2.6    |
| 150° | 9.2    | 10.8   | 8.6    | 7.8    | 4.7    | 2.4    |
| 155° | 7.1    | 9.9    | 7.3    | 6.3    | 4.4    | 2.6    |
| 160° | 5.5    | 5.5    | 5.7    | 5.3    | 3.9    | 2.8    |
| 165° | 4.7    | 4.9    | 4.7    | 4.4    | 3.4    | 2.6    |
| 170° | 4.4    | 4.9    | 4.2    | 3.6    | 2.9    | 2.6    |
| 175° | 3.2    | 4.2    | 3.2    | 2.8    | 2.8    | 2.4    |
| 180° | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    |



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°









(END OF REPORT)