

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: P588680

Luminaire Tested: **22CGTS-NUV-LOW-5000K**

Issue Date: 12/3/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P588680
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (LCS210329025BSA)
Test Lab:
Issue Date: 12/3/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CGTS-NUV-LOW-5000K
Description: 2X2 CGT SELECT TROFFER AT LOW LUMEN OUTPUT AND 5000K COLOR SETTING

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

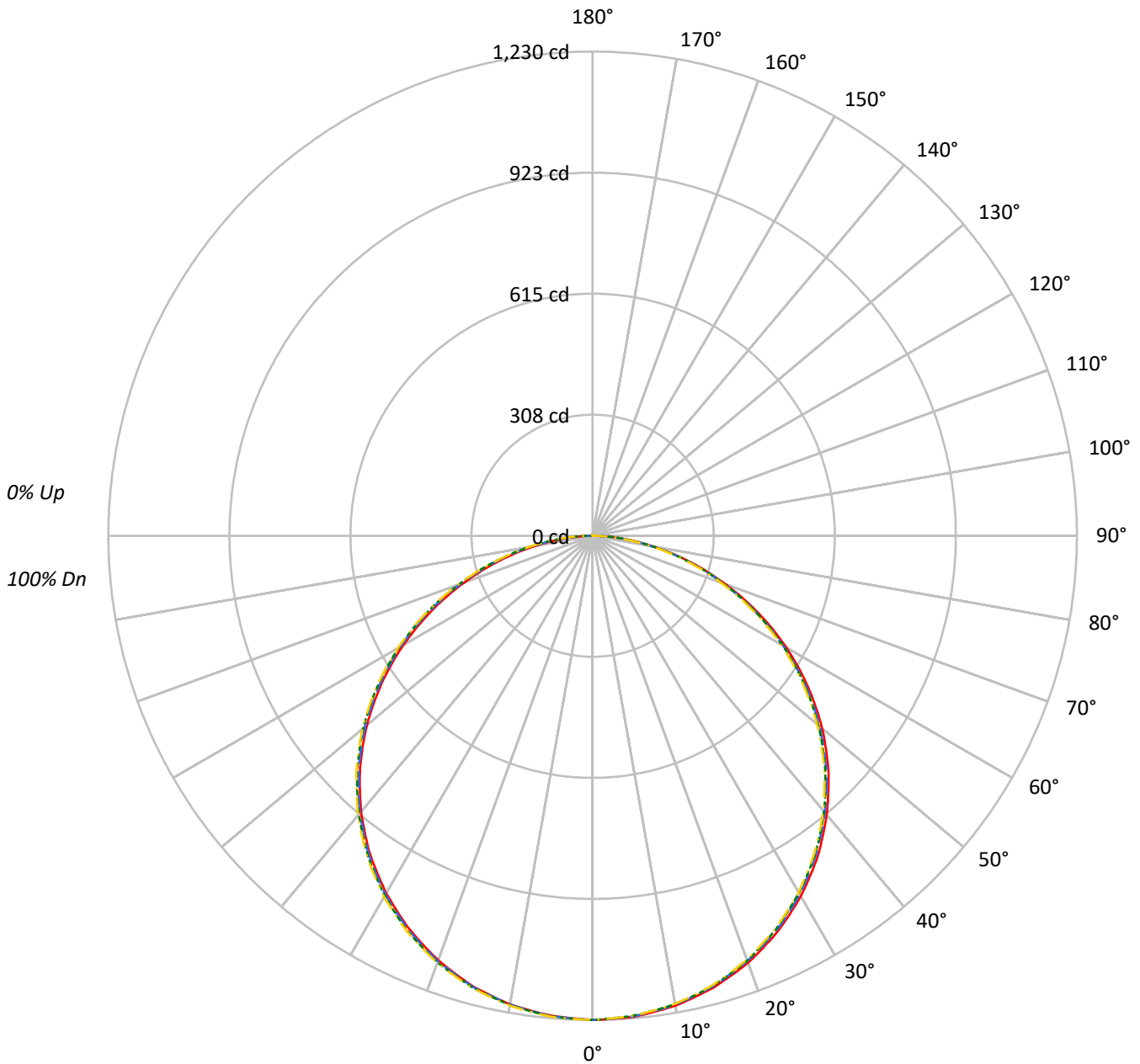
Summary

Lumens per Lamp: 3510.7 (1 lamp)
Luminaire Lumens: 3625.0 lumens
Efficiency: 103.3%
Efficacy: 118.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 30.5
Input Voltage (V): NR
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: P588680
CATALOG NUMBER: 22CGTS-NUV-LOW-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P588680

CATALOG NUMBER: 22CGTS-NUV-LOW-5000K

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 | 123 | 123 | 123 | 123 | 120 | 120 | 120 | 120 | 115 | 115 | 115 | 110 | 110 | 110 | 105 | 105 | 105 | 103 | | | | | | | | | | | | | | | | | | |
| | 1 | 112 | 107 | 102 | 98 | 109 | 105 | 100 | 97 | 100 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 88 | 86 | | | | | | | | | | | | | | | | | | |
| | 2 | 102 | 93 | 86 | 80 | 99 | 91 | 84 | 79 | 87 | 82 | 77 | 84 | 79 | 75 | 81 | 77 | 73 | 71 | | | | | | | | | | | | | | | | | | |
| | 3 | 92 | 81 | 73 | 66 | 90 | 80 | 72 | 65 | 77 | 70 | 64 | 74 | 68 | 63 | 71 | 66 | 62 | 60 | | | | | | | | | | | | | | | | | | |
| | 4 | 85 | 72 | 63 | 56 | 82 | 71 | 62 | 55 | 68 | 60 | 54 | 65 | 59 | 54 | 63 | 58 | 53 | 51 | | | | | | | | | | | | | | | | | | |
| | 5 | 78 | 64 | 55 | 48 | 75 | 63 | 54 | 48 | 61 | 53 | 47 | 59 | 52 | 46 | 57 | 51 | 46 | 44 | | | | | | | | | | | | | | | | | | |
| | 6 | 72 | 58 | 48 | 42 | 70 | 57 | 48 | 41 | 55 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 40 | 38 | | | | | | | | | | | | | | | | | | |
| | 7 | 66 | 52 | 43 | 37 | 65 | 51 | 43 | 37 | 50 | 42 | 36 | 48 | 41 | 36 | 47 | 41 | 36 | 34 | | | | | | | | | | | | | | | | | | |
| | 8 | 62 | 48 | 39 | 33 | 60 | 47 | 38 | 33 | 46 | 38 | 32 | 44 | 37 | 32 | 43 | 37 | 32 | 30 | | | | | | | | | | | | | | | | | | |
| | 9 | 58 | 44 | 35 | 29 | 56 | 43 | 35 | 29 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 33 | 29 | 27 | | | | | | | | | | | | | | | | | | |
| | 10 | 54 | 40 | 32 | 27 | 53 | 40 | 32 | 27 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 31 | 26 | 24 | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|------|------|------|------|
| 0° | 3310 | 3310 | 3310 | 3310 |
| 5° | 3312 | 3304 | 3305 | 3310 |
| 10° | 3313 | 3301 | 3303 | 3308 |
| 15° | 3310 | 3296 | 3297 | 3306 |
| 20° | 3306 | 3288 | 3285 | 3302 |
| 25° | 3297 | 3273 | 3273 | 3295 |
| 30° | 3285 | 3256 | 3258 | 3282 |
| 35° | 3272 | 3240 | 3240 | 3266 |
| 40° | 3250 | 3213 | 3214 | 3245 |
| 45° | 3224 | 3178 | 3178 | 3220 |
| 50° | 3186 | 3133 | 3132 | 3183 |
| 55° | 3131 | 3076 | 3070 | 3131 |
| 60° | 3059 | 3000 | 2987 | 3061 |
| 65° | 2958 | 2897 | 2873 | 2968 |
| 70° | 2823 | 2768 | 2725 | 2851 |
| 75° | 2650 | 2600 | 2534 | 2705 |
| 80° | 2408 | 2390 | 2263 | 2531 |
| 85° | 2075 | 2059 | 1856 | 2309 |



TEST NUMBER: P588680

CATALOG NUMBER: 22CGTS-NUV-LOW-5000K

ZONAL LUMENS:

CANDELA DISTRIBUTION:

| Zone | Lumens | % Fixture | % Lamp | | 0° | 90° | 180° | 270° | 360° | Flux |
|-----------------|---------------|-------------|--------------|------|------|------|------|------|------|------|
| 0°-10° | 116.4 | 3.2 | 3.3 | 0° | 1230 | 1230 | 1230 | 1230 | 1230 | |
| 10°-20° | 334.5 | 9.2 | 9.5 | 5° | 1226 | 1223 | 1224 | 1225 | 1226 | 117 |
| 20°-30° | 509.8 | 14.1 | 14.5 | 15° | 1188 | 1183 | 1183 | 1187 | 1188 | 335 |
| 30°-40° | 619.3 | 17.1 | 17.6 | 25° | 1110 | 1102 | 1102 | 1110 | 1110 | 512 |
| 40°-50° | 647.8 | 17.9 | 18.5 | 35° | 996 | 986 | 986 | 994 | 996 | 623 |
| 50°-60° | 590.0 | 16.3 | 16.8 | 45° | 847 | 835 | 835 | 846 | 847 | 653 |
| 60°-70° | 454.1 | 12.5 | 12.9 | 55° | 667 | 656 | 654 | 667 | 667 | 596 |
| 70°-80° | 267.6 | 7.4 | 7.6 | 65° | 464 | 455 | 451 | 466 | 464 | 460 |
| 80°-90° | 79.2 | 2.2 | 2.3 | 75° | 255 | 250 | 244 | 260 | 255 | 270 |
| 90°-100° | 0.9 | 0.0 | 0.0 | 85° | 67 | 67 | 60 | 75 | 67 | 74 |
| 100°-110° | 0.6 | 0.0 | 0.0 | 90° | 2 | 0 | 1 | 2 | 2 | 10 |
| 110°-120° | 0.7 | 0.0 | 0.0 | 95° | 1 | 0 | 0 | 1 | 1 | 1 |
| 120°-130° | 0.7 | 0.0 | 0.0 | 105° | 0 | 1 | 1 | 0 | 0 | 0 |
| 130°-140° | 0.8 | 0.0 | 0.0 | 115° | 0 | 1 | 1 | 0 | 0 | 0 |
| 140°-150° | 0.9 | 0.0 | 0.0 | 125° | 0 | 1 | 1 | 0 | 0 | 0 |
| 150°-160° | 0.8 | 0.0 | 0.0 | 135° | 1 | 1 | 2 | 0 | 1 | 0 |
| 160°-170° | 0.6 | 0.0 | 0.0 | 145° | 1 | 2 | 2 | 1 | 1 | 1 |
| 170°-180° | 0.2 | 0.0 | 0.0 | 155° | 1 | 2 | 2 | 1 | 1 | 1 |
| 0°-30° | 960.8 | 26.5 | 27.4 | 165° | 2 | 2 | 2 | 2 | 2 | 0 |
| 0°-40° | 1580.1 | 43.6 | 45.0 | 175° | 2 | 3 | 2 | 2 | 2 | 0 |
| 0°-60° | 2818.0 | 77.7 | 80.3 | 180° | 2 | 2 | 2 | 2 | 2 | |
| 0°-90° | 3618.9 | 99.8 | 103.1 | | | | | | | |
| 90°-120° | 2.1 | 0.1 | 0.1 | | | | | | | |
| 90°-150° | 4.6 | 0.1 | 0.1 | | | | | | | |
| 90°-180° | 6.0 | 0.2 | 0.2 | | | | | | | |
| 0°-180° | 3625.0 | 100.0 | 103.3 | | | | | | | |



TEST NUMBER: P588680

CATALOG NUMBER: 22CGTS-NUV-LOW-5000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1229.9 | 1229.9 | 1229.9 | 1229.9 | 1229.9 | 1229.9 | 1229.9 | 1229.9 | 1229.9 | 1229.9 | 1229.9 |
| 5° | 1226.2 | 1225.5 | 1224.8 | 1224.6 | 1223.1 | 1224.0 | 1223.6 | 1223.6 | 1223.6 | 1224.2 | 1224.5 |
| 10° | 1212.3 | 1210.7 | 1209.3 | 1208.7 | 1208.1 | 1208.1 | 1207.4 | 1207.8 | 1208.7 | 1208.8 | 1209.4 |
| 15° | 1188.1 | 1186.3 | 1184.5 | 1183.2 | 1183.2 | 1182.0 | 1181.4 | 1182.2 | 1183.4 | 1184.2 | 1185.0 |
| 20° | 1154.5 | 1152.1 | 1149.4 | 1147.7 | 1148.3 | 1146.2 | 1145.5 | 1146.5 | 1147.2 | 1148.8 | 1150.0 |
| 25° | 1110.4 | 1108.1 | 1105.6 | 1103.1 | 1102.4 | 1101.4 | 1100.4 | 1100.9 | 1102.3 | 1104.2 | 1105.8 |
| 30° | 1057.3 | 1054.5 | 1051.8 | 1049.2 | 1047.8 | 1046.5 | 1045.9 | 1046.3 | 1048.4 | 1050.1 | 1052.5 |
| 35° | 996.0 | 992.4 | 989.1 | 985.0 | 986.2 | 983.9 | 982.5 | 983.6 | 986.4 | 988.2 | 990.4 |
| 40° | 925.1 | 921.7 | 917.6 | 913.8 | 914.6 | 912.4 | 911.4 | 912.1 | 915.0 | 916.4 | 919.6 |
| 45° | 847.2 | 843.1 | 839.4 | 835.0 | 835.1 | 832.7 | 831.1 | 832.6 | 835.1 | 837.3 | 840.0 |
| 50° | 761.0 | 756.3 | 752.3 | 747.8 | 748.3 | 745.7 | 744.0 | 745.2 | 748.2 | 750.1 | 754.4 |
| 55° | 667.4 | 663.2 | 659.1 | 654.9 | 655.6 | 653.0 | 650.5 | 651.5 | 654.4 | 656.8 | 661.3 |
| 60° | 568.3 | 563.8 | 559.4 | 555.4 | 557.5 | 554.5 | 552.2 | 552.0 | 555.0 | 557.8 | 563.5 |
| 65° | 464.5 | 460.6 | 456.5 | 453.0 | 454.9 | 452.4 | 449.2 | 448.4 | 451.2 | 454.8 | 460.6 |
| 70° | 358.8 | 354.9 | 352.1 | 348.9 | 351.8 | 348.7 | 345.7 | 344.3 | 346.4 | 350.3 | 356.7 |
| 75° | 254.9 | 251.9 | 249.6 | 247.4 | 250.1 | 247.7 | 244.4 | 242.4 | 243.7 | 247.9 | 254.4 |
| 80° | 155.4 | 153.0 | 153.0 | 151.7 | 154.2 | 151.8 | 148.1 | 145.1 | 146.0 | 149.9 | 157.3 |
| 85° | 67.2 | 65.3 | 64.9 | 64.7 | 66.7 | 64.5 | 60.6 | 59.1 | 60.1 | 62.9 | 68.5 |
| 90° | 1.6 | 1.3 | 1.3 | 1.2 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 1.1 |
| 95° | 0.6 | 0.6 | 0.6 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 100° | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 |
| 105° | 0.4 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 |
| 110° | 0.4 | 0.4 | 0.5 | 0.4 | 0.8 | 0.9 | 0.9 | 0.8 | 0.7 | 0.8 | 0.9 |
| 115° | 0.4 | 0.4 | 0.5 | 0.4 | 0.9 | 1.0 | 1.0 | 0.9 | 0.9 | 1.1 | 1.0 |
| 120° | 0.4 | 0.4 | 0.5 | 0.4 | 1.0 | 1.2 | 1.2 | 0.9 | 1.0 | 1.0 | 1.3 |
| 125° | 0.4 | 0.4 | 0.5 | 0.4 | 1.1 | 1.3 | 1.2 | 0.9 | 1.0 | 1.0 | 1.3 |
| 130° | 0.4 | 0.4 | 0.5 | 0.4 | 1.2 | 1.5 | 1.4 | 1.1 | 1.2 | 1.4 | 1.4 |
| 135° | 0.6 | 0.4 | 0.5 | 0.4 | 1.4 | 1.5 | 1.4 | 1.4 | 1.5 | 1.7 | 1.6 |
| 140° | 1.0 | 0.8 | 0.5 | 0.6 | 1.5 | 1.7 | 1.6 | 1.6 | 1.6 | 1.8 | 1.7 |
| 145° | 1.4 | 1.4 | 0.7 | 1.1 | 1.7 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 150° | 1.4 | 1.4 | 1.4 | 1.4 | 1.9 | 2.0 | 2.1 | 2.1 | 1.8 | 2.1 | 2.1 |
| 155° | 1.4 | 1.4 | 1.3 | 1.4 | 2.1 | 2.2 | 2.3 | 2.2 | 2.1 | 2.4 | 2.3 |
| 160° | 1.4 | 1.4 | 1.3 | 1.4 | 2.5 | 2.5 | 2.5 | 2.2 | 2.4 | 2.4 | 2.6 |
| 165° | 1.7 | 1.7 | 1.5 | 1.4 | 2.5 | 2.5 | 2.6 | 2.2 | 2.4 | 2.4 | 2.5 |
| 170° | 1.9 | 2.0 | 1.7 | 1.9 | 2.6 | 2.5 | 2.8 | 2.2 | 2.4 | 2.4 | 2.6 |
| 175° | 2.3 | 2.5 | 2.1 | 2.5 | 2.9 | 2.5 | 2.8 | 2.2 | 2.4 | 2.4 | 2.6 |
| 180° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |



TEST NUMBER: P588680

CATALOG NUMBER: 22CGTS-NUV-LOW-5000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|------|--------|--------|--------|--------|--------|--------|
| 0° | 1229.9 | 1229.9 | 1229.9 | 1229.9 | 1229.9 | 1229.9 |
| 5° | 1225.0 | 1225.2 | 1226.5 | 1226.2 | 1226.4 | 1226.2 |
| 10° | 1210.4 | 1210.6 | 1212.2 | 1212.1 | 1212.3 | 1212.3 |
| 15° | 1186.3 | 1186.7 | 1188.4 | 1188.2 | 1188.5 | 1188.1 |
| 20° | 1152.8 | 1153.2 | 1154.8 | 1154.6 | 1154.9 | 1154.5 |
| 25° | 1108.5 | 1109.7 | 1111.7 | 1111.5 | 1111.7 | 1110.4 |
| 30° | 1055.2 | 1056.1 | 1058.4 | 1059.2 | 1059.0 | 1057.3 |
| 35° | 993.5 | 994.3 | 996.7 | 997.1 | 996.7 | 996.0 |
| 40° | 923.3 | 923.8 | 926.2 | 926.7 | 926.3 | 925.1 |
| 45° | 844.3 | 846.1 | 848.1 | 849.0 | 847.9 | 847.2 |
| 50° | 758.0 | 760.4 | 762.0 | 762.7 | 762.0 | 761.0 |
| 55° | 666.0 | 667.3 | 669.5 | 670.1 | 668.9 | 667.4 |
| 60° | 568.1 | 568.8 | 571.2 | 571.3 | 569.5 | 568.3 |
| 65° | 465.8 | 466.1 | 469.0 | 468.4 | 466.2 | 464.5 |
| 70° | 361.9 | 362.4 | 364.9 | 363.9 | 361.0 | 358.8 |
| 75° | 260.5 | 260.2 | 262.4 | 261.0 | 257.9 | 254.9 |
| 80° | 163.9 | 163.3 | 165.0 | 163.6 | 159.0 | 155.4 |
| 85° | 75.4 | 74.8 | 76.2 | 74.0 | 70.2 | 67.2 |
| 90° | 2.9 | 2.3 | 3.2 | 3.3 | 2.5 | 1.6 |
| 95° | 0.5 | 0.7 | 0.6 | 0.6 | 0.7 | 0.6 |
| 100° | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.4 |
| 105° | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 |
| 110° | 0.8 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 |
| 115° | 0.9 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 |
| 120° | 1.0 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 |
| 125° | 1.1 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 |
| 130° | 1.4 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 |
| 135° | 1.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 |
| 140° | 1.5 | 1.0 | 1.0 | 0.5 | 0.9 | 1.0 |
| 145° | 1.7 | 1.3 | 1.4 | 0.8 | 1.3 | 1.4 |
| 150° | 2.0 | 1.4 | 1.4 | 1.3 | 1.4 | 1.4 |
| 155° | 2.2 | 1.4 | 1.4 | 1.3 | 1.4 | 1.4 |
| 160° | 2.3 | 1.4 | 1.4 | 1.3 | 1.4 | 1.4 |
| 165° | 2.3 | 1.5 | 1.5 | 1.4 | 1.6 | 1.7 |
| 170° | 2.3 | 1.8 | 1.9 | 1.7 | 1.8 | 1.9 |
| 175° | 2.3 | 2.4 | 2.6 | 2.1 | 2.4 | 2.3 |
| 180° | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 |



Report Generated By 670246072 / DESKTOP-MV3F9LC





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









(END OF REPORT)