

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: P588669

Luminaire Tested: **14CGTS-NUV-LOW-3500K**

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: P588669
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (LCS210329017BSA)
Test Lab:
Issue Date: 12/3/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CGTS-NUV-LOW-3500K
Description: 1X4 CGT SELECT TROFFER AT LOW LUMEN OUTPUT AND 3500K COLOR SETTING

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

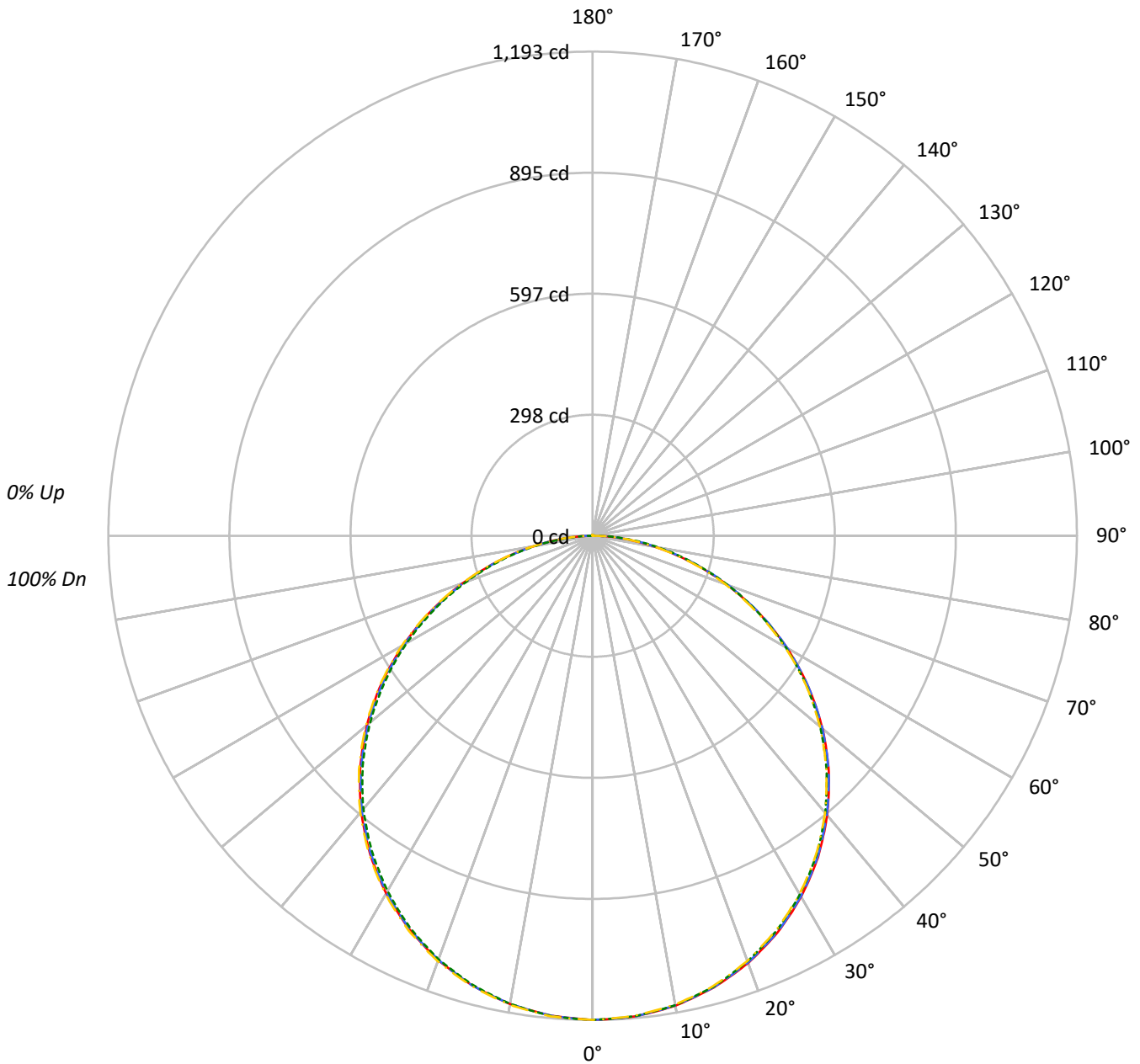
Lumens per Lamp: 3522.2 (1 lamp)
Luminaire Lumens: 3513.0 lumens
Efficiency: 99.7%
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P588669

CATALOG NUMBER: 14CGTS-NUV-LOW-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P588669

CATALOG NUMBER: 14CGTS-NUV-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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | | | | | | | | | | | | | | | |
| 1 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 88 | 89 | 87 | 85 | 83 | | | | | | | | | | | | | | | | | | | |
| 2 | 98 | 90 | 83 | 77 | 95 | 88 | 81 | 76 | 84 | 79 | 74 | 81 | 76 | 72 | 78 | 74 | 71 | 69 | | | | | | | | | | | | | | | | | | | |
| 3 | 89 | 79 | 70 | 64 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 | | | | | | | | | | | | | | | | | | | |
| 4 | 82 | 70 | 61 | 54 | 79 | 68 | 60 | 53 | 66 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 | | | | | | | | | | | | | | | | | | | |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 44 | 42 | | | | | | | | | | | | | | | | | | | |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 44 | 39 | 50 | 44 | 39 | 37 | | | | | | | | | | | | | | | | | | | |
| 7 | 64 | 51 | 42 | 35 | 62 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 34 | 32 | | | | | | | | | | | | | | | | | | | |
| 8 | 60 | 46 | 37 | 32 | 58 | 45 | 37 | 31 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 29 | | | | | | | | | | | | | | | | | | | |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 | | | | | | | | | | | | | | | | | | | |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 36 | 30 | 25 | 23 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|------|------|------|------|
| 0° | 3210 | 3210 | 3210 | 3210 |
| 5° | 3212 | 3210 | 3205 | 3207 |
| 10° | 3213 | 3209 | 3202 | 3200 |
| 15° | 3211 | 3205 | 3195 | 3190 |
| 20° | 3208 | 3196 | 3186 | 3179 |
| 25° | 3202 | 3186 | 3175 | 3162 |
| 30° | 3193 | 3172 | 3162 | 3140 |
| 35° | 3179 | 3157 | 3142 | 3116 |
| 40° | 3157 | 3132 | 3116 | 3086 |
| 45° | 3132 | 3101 | 3082 | 3048 |
| 50° | 3095 | 3063 | 3037 | 2994 |
| 55° | 3045 | 3015 | 2979 | 2927 |
| 60° | 2977 | 2954 | 2899 | 2846 |
| 65° | 2884 | 2876 | 2798 | 2739 |
| 70° | 2766 | 2781 | 2663 | 2600 |
| 75° | 2610 | 2660 | 2487 | 2426 |
| 80° | 2399 | 2521 | 2252 | 2197 |
| 85° | 2133 | 2414 | 1936 | 1825 |



TEST NUMBER: P588669

CATALOG NUMBER: 14CGTS-NUV-LOW-3500K

ZONAL LUMENS:

CANDELA DISTRIBUTION:

| Zone | Lumens | % Fixture | % Lamp | | 0° | 90° | 180° | 270° | 360° | Flux |
|-----------------|---------------|-------------|-------------|------|------|------|------|------|------|------|
| 0°-10° | 112.9 | 3.2 | 3.2 | 0° | 1193 | 1193 | 1193 | 1193 | 1193 | |
| 10°-20° | 324.3 | 9.2 | 9.2 | 5° | 1189 | 1188 | 1186 | 1187 | 1189 | 113 |
| 20°-30° | 494.1 | 14.1 | 14.0 | 15° | 1152 | 1150 | 1147 | 1145 | 1152 | 325 |
| 30°-40° | 600.0 | 17.1 | 17.0 | 25° | 1078 | 1073 | 1069 | 1065 | 1078 | 497 |
| 40°-50° | 627.1 | 17.9 | 17.8 | 35° | 968 | 961 | 956 | 948 | 968 | 605 |
| 50°-60° | 570.8 | 16.2 | 16.2 | 45° | 823 | 815 | 810 | 801 | 823 | 634 |
| 60°-70° | 439.8 | 12.5 | 12.5 | 55° | 649 | 643 | 635 | 624 | 649 | 580 |
| 70°-80° | 260.1 | 7.4 | 7.4 | 65° | 453 | 452 | 440 | 430 | 453 | 448 |
| 80°-90° | 78.2 | 2.2 | 2.2 | 75° | 251 | 256 | 239 | 233 | 251 | 266 |
| 90°-100° | 0.8 | 0.0 | 0.0 | 85° | 69 | 78 | 63 | 59 | 69 | 75 |
| 100°-110° | 0.7 | 0.0 | 0.0 | 90° | 2 | 1 | 1 | 1 | 2 | 10 |
| 110°-120° | 0.7 | 0.0 | 0.0 | 95° | 1 | 0 | 1 | 0 | 1 | 1 |
| 120°-130° | 0.6 | 0.0 | 0.0 | 105° | 1 | 0 | 2 | 0 | 1 | 1 |
| 130°-140° | 0.6 | 0.0 | 0.0 | 115° | 1 | 1 | 2 | 0 | 1 | 1 |
| 140°-150° | 0.8 | 0.0 | 0.0 | 125° | 0 | 1 | 1 | 0 | 0 | 0 |
| 150°-160° | 0.8 | 0.0 | 0.0 | 135° | 0 | 1 | 1 | 0 | 0 | 0 |
| 160°-170° | 0.6 | 0.0 | 0.0 | 145° | 1 | 1 | 1 | 1 | 1 | 1 |
| 170°-180° | 0.2 | 0.0 | 0.0 | 155° | 1 | 2 | 2 | 1 | 1 | 1 |
| 0°-30° | 931.4 | 26.5 | 26.4 | 165° | 2 | 2 | 2 | 2 | 2 | 0 |
| 0°-40° | 1531.4 | 43.6 | 43.5 | 175° | 2 | 3 | 2 | 2 | 2 | 0 |
| 0°-60° | 2729.3 | 77.7 | 77.5 | 180° | 2 | 2 | 2 | 2 | 2 | |
| 0°-90° | 3507.3 | 99.8 | 99.6 | | | | | | | |
| 90°-120° | 2.1 | 0.1 | 0.1 | | | | | | | |
| 90°-150° | 4.2 | 0.1 | 0.1 | | | | | | | |
| 90°-180° | 6.0 | 0.2 | 0.2 | | | | | | | |
| 0°-180° | 3513.0 | 100.0 | 99.7 | | | | | | | |



TEST NUMBER: P588669

CATALOG NUMBER: 14CGTS-NUV-LOW-3500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1192.9 | 1192.9 | 1192.9 | 1192.9 | 1192.9 | 1192.9 | 1192.9 | 1192.9 | 1192.9 | 1192.9 | 1192.9 |
| 5° | 1189.1 | 1189.5 | 1189.3 | 1189.0 | 1188.3 | 1188.1 | 1187.1 | 1187.0 | 1186.5 | 1186.9 | 1186.8 |
| 10° | 1175.7 | 1176.0 | 1174.7 | 1174.6 | 1174.3 | 1173.6 | 1172.7 | 1172.4 | 1171.7 | 1171.0 | 1171.4 |
| 15° | 1152.5 | 1153.7 | 1151.6 | 1150.4 | 1150.3 | 1149.1 | 1148.5 | 1148.2 | 1146.9 | 1146.7 | 1146.9 |
| 20° | 1120.4 | 1120.4 | 1118.9 | 1117.7 | 1115.9 | 1115.5 | 1114.5 | 1113.5 | 1112.5 | 1112.2 | 1111.7 |
| 25° | 1078.5 | 1079.1 | 1077.3 | 1075.2 | 1072.9 | 1072.6 | 1071.3 | 1070.2 | 1069.2 | 1068.6 | 1067.8 |
| 30° | 1027.5 | 1028.2 | 1026.2 | 1023.1 | 1020.9 | 1020.4 | 1019.4 | 1018.1 | 1017.5 | 1016.1 | 1015.4 |
| 35° | 967.6 | 968.4 | 966.0 | 962.6 | 961.0 | 960.2 | 959.2 | 957.3 | 956.4 | 955.4 | 953.5 |
| 40° | 898.8 | 899.7 | 897.6 | 894.2 | 891.5 | 891.5 | 890.8 | 888.6 | 887.1 | 885.9 | 884.2 |
| 45° | 823.0 | 824.6 | 822.3 | 818.5 | 814.9 | 814.0 | 814.0 | 811.6 | 809.8 | 808.2 | 806.2 |
| 50° | 739.3 | 741.0 | 738.7 | 735.4 | 731.7 | 731.0 | 730.6 | 728.3 | 725.5 | 723.8 | 721.4 |
| 55° | 649.0 | 650.4 | 648.8 | 645.6 | 642.7 | 641.1 | 641.1 | 637.7 | 635.0 | 632.7 | 630.7 |
| 60° | 553.1 | 554.2 | 553.7 | 550.7 | 548.9 | 546.6 | 546.1 | 542.2 | 538.7 | 536.2 | 535.2 |
| 65° | 453.0 | 454.4 | 454.8 | 452.3 | 451.7 | 449.0 | 447.0 | 443.4 | 439.5 | 436.4 | 435.9 |
| 70° | 351.5 | 353.0 | 354.5 | 352.2 | 353.5 | 349.6 | 346.4 | 342.6 | 338.5 | 335.7 | 335.8 |
| 75° | 251.0 | 253.0 | 255.1 | 253.6 | 255.8 | 251.8 | 247.7 | 243.4 | 239.2 | 236.6 | 237.2 |
| 80° | 154.8 | 157.5 | 160.4 | 160.3 | 162.7 | 159.1 | 154.3 | 148.8 | 145.3 | 143.2 | 144.0 |
| 85° | 69.1 | 72.0 | 74.2 | 74.8 | 78.2 | 75.0 | 70.1 | 65.7 | 62.7 | 60.8 | 60.6 |
| 90° | 2.4 | 2.3 | 1.5 | 1.5 | 1.0 | 0.8 | 0.8 | 0.8 | 1.0 | 0.5 | 0.3 |
| 95° | 1.0 | 0.8 | 0.6 | 0.5 | 0.3 | 0.4 | 0.4 | 0.8 | 0.9 | 0.5 | 0.3 |
| 100° | 1.0 | 0.7 | 0.4 | 0.5 | 0.3 | 0.4 | 0.5 | 0.9 | 1.2 | 0.5 | 0.4 |
| 105° | 1.0 | 0.7 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 1.2 | 2.0 | 0.8 | 0.5 |
| 110° | 0.9 | 0.7 | 0.3 | 0.3 | 0.5 | 0.5 | 0.7 | 1.3 | 2.4 | 0.8 | 0.6 |
| 115° | 0.7 | 0.6 | 0.3 | 0.3 | 0.8 | 0.7 | 0.9 | 1.3 | 1.9 | 0.9 | 0.7 |
| 120° | 0.5 | 0.5 | 0.3 | 0.3 | 0.7 | 0.7 | 0.9 | 1.2 | 1.5 | 0.9 | 0.8 |
| 125° | 0.5 | 0.5 | 0.3 | 0.3 | 0.7 | 0.7 | 0.9 | 1.2 | 0.8 | 0.9 | 0.8 |
| 130° | 0.5 | 0.5 | 0.3 | 0.3 | 0.8 | 0.7 | 1.0 | 1.5 | 0.8 | 1.0 | 0.9 |
| 135° | 0.5 | 0.9 | 0.5 | 0.4 | 0.8 | 0.9 | 1.1 | 2.1 | 0.8 | 1.5 | 0.9 |
| 140° | 0.6 | 1.2 | 0.9 | 0.8 | 0.9 | 1.0 | 1.4 | 2.3 | 0.8 | 2.0 | 1.1 |
| 145° | 1.2 | 1.3 | 1.2 | 1.2 | 1.2 | 1.3 | 1.5 | 2.5 | 1.0 | 2.3 | 1.2 |
| 150° | 1.2 | 1.5 | 1.5 | 1.2 | 1.5 | 1.5 | 1.7 | 2.5 | 1.3 | 2.4 | 1.5 |
| 155° | 1.3 | 1.6 | 1.6 | 1.3 | 1.7 | 1.7 | 2.1 | 2.5 | 1.7 | 1.8 | 1.8 |
| 160° | 1.5 | 1.8 | 1.6 | 1.4 | 2.0 | 2.0 | 2.2 | 2.5 | 2.4 | 1.7 | 2.3 |
| 165° | 1.6 | 1.8 | 1.8 | 1.5 | 2.1 | 2.2 | 2.4 | 2.5 | 2.5 | 1.7 | 2.5 |
| 170° | 1.6 | 2.1 | 2.2 | 1.8 | 2.3 | 2.3 | 2.4 | 2.5 | 2.5 | 1.7 | 2.5 |
| 175° | 1.7 | 2.4 | 2.4 | 2.1 | 2.6 | 2.5 | 2.6 | 2.5 | 2.5 | 1.7 | 2.5 |
| 180° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |



TEST NUMBER: P588669

CATALOG NUMBER: 14CGTS-NUV-LOW-3500K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|------|--------|--------|--------|--------|--------|--------|
| 0° | 1192.9 | 1192.9 | 1192.9 | 1192.9 | 1192.9 | 1192.9 |
| 5° | 1187.3 | 1187.4 | 1187.1 | 1188.5 | 1188.7 | 1189.1 |
| 10° | 1171.4 | 1171.1 | 1172.7 | 1173.4 | 1175.0 | 1175.7 |
| 15° | 1146.9 | 1144.9 | 1146.9 | 1149.0 | 1151.3 | 1152.5 |
| 20° | 1111.4 | 1110.2 | 1113.1 | 1115.7 | 1118.5 | 1120.4 |
| 25° | 1067.2 | 1064.9 | 1068.7 | 1073.1 | 1076.3 | 1078.5 |
| 30° | 1015.1 | 1010.5 | 1015.9 | 1020.2 | 1024.8 | 1027.5 |
| 35° | 952.7 | 948.4 | 953.8 | 959.2 | 964.7 | 967.6 |
| 40° | 883.2 | 878.5 | 883.3 | 890.4 | 895.9 | 898.8 |
| 45° | 805.4 | 800.8 | 806.5 | 813.8 | 819.7 | 823.0 |
| 50° | 720.4 | 715.2 | 721.3 | 729.4 | 734.9 | 739.3 |
| 55° | 630.0 | 623.8 | 630.3 | 638.7 | 644.7 | 649.0 |
| 60° | 534.5 | 528.8 | 534.1 | 543.0 | 548.8 | 553.1 |
| 65° | 435.8 | 430.1 | 434.6 | 443.2 | 449.0 | 453.0 |
| 70° | 335.7 | 330.4 | 334.9 | 341.8 | 347.4 | 351.5 |
| 75° | 237.9 | 233.3 | 237.1 | 242.2 | 247.2 | 251.0 |
| 80° | 145.2 | 141.8 | 144.8 | 148.5 | 151.8 | 154.8 |
| 85° | 62.3 | 59.1 | 61.8 | 64.2 | 66.5 | 69.1 |
| 90° | 0.5 | 1.1 | 1.3 | 1.6 | 1.8 | 2.4 |
| 95° | 0.3 | 0.5 | 0.5 | 0.6 | 0.7 | 1.0 |
| 100° | 0.3 | 0.5 | 0.5 | 0.4 | 0.6 | 1.0 |
| 105° | 0.4 | 0.4 | 0.3 | 0.3 | 0.6 | 1.0 |
| 110° | 0.5 | 0.4 | 0.3 | 0.3 | 0.6 | 0.9 |
| 115° | 0.6 | 0.4 | 0.3 | 0.3 | 0.6 | 0.7 |
| 120° | 0.6 | 0.4 | 0.3 | 0.3 | 0.5 | 0.5 |
| 125° | 0.6 | 0.4 | 0.3 | 0.3 | 0.5 | 0.5 |
| 130° | 0.7 | 0.4 | 0.3 | 0.3 | 0.5 | 0.5 |
| 135° | 0.8 | 0.4 | 0.3 | 0.4 | 0.6 | 0.5 |
| 140° | 0.9 | 0.7 | 0.6 | 0.8 | 1.2 | 0.6 |
| 145° | 1.2 | 1.2 | 1.3 | 1.2 | 1.3 | 1.2 |
| 150° | 1.4 | 1.2 | 1.3 | 1.4 | 1.5 | 1.2 |
| 155° | 1.6 | 1.2 | 1.3 | 1.5 | 1.5 | 1.3 |
| 160° | 2.0 | 1.3 | 1.3 | 1.5 | 1.6 | 1.5 |
| 165° | 2.1 | 1.6 | 1.6 | 1.7 | 2.2 | 1.6 |
| 170° | 2.3 | 1.7 | 2.1 | 2.4 | 2.4 | 1.6 |
| 175° | 2.4 | 2.5 | 2.5 | 2.5 | 2.4 | 1.7 |
| 180° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |



Report Generated By 670246072 / DESKTOP-MV3F9LC





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









(END OF REPORT)