

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: P855640

Luminaire Tested: **12SFS-L3C4-NUV-HIGH-3500K**

Issue Date: 7/17/2024

Test Information

Test Method: LM-79-08
Report Number: P855640
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (BL231218002-9)
Test Lab: INNOVATION CENTER
Issue Date: 7/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12SFS-L3C4-NUV-HIGH-3500K
Description: 1x2 Surround Frame Selectable - Architectural Slim LED Frame with,
HIGH Lumen and 3500K CCT Settings
Light Source: -
Ballast/Driver: -

Summary

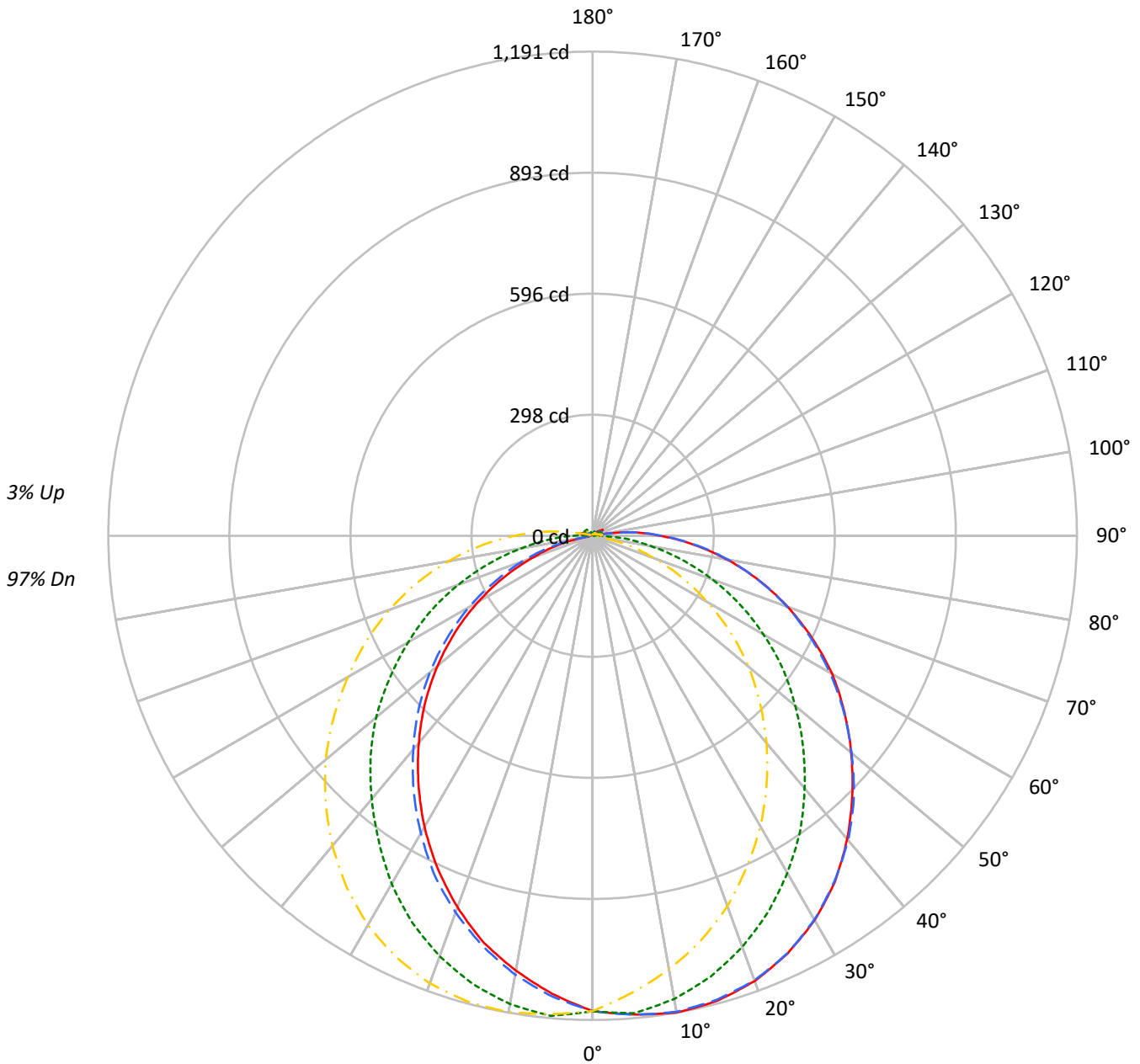
Lumens per Lamp: N/A
Luminaire Lumens: 3516.0 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.92' x L: 1.9' x H: 0')
CIE Type: Direct

Input Watts (W): 28
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: P855640

CATALOG NUMBER: 12SFS-L3C4-NUV-HIGH-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P855640

CATALOG NUMBER: 12SFS-L3C4-NUV-HIGH-3500K

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 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 104 | 104 | 104 | 99 | 99 | 99 | 99 | 99 | 99 | 97 |
| 1 | 107 | 102 | 97 | 93 | 104 | 99 | 95 | 91 | 94 | 91 | 88 | 90 | 87 | 84 | 86 | 83 | 81 | 81 | 81 | 81 | 79 |
| 2 | 97 | 88 | 81 | 75 | 94 | 86 | 80 | 74 | 82 | 76 | 72 | 78 | 74 | 70 | 75 | 71 | 68 | 68 | 68 | 68 | 65 |
| 3 | 88 | 77 | 69 | 62 | 85 | 76 | 68 | 61 | 72 | 65 | 60 | 69 | 63 | 58 | 66 | 61 | 57 | 57 | 57 | 57 | 55 |
| 4 | 81 | 68 | 59 | 53 | 78 | 67 | 58 | 52 | 64 | 57 | 51 | 61 | 55 | 50 | 59 | 53 | 49 | 49 | 49 | 49 | 46 |
| 5 | 74 | 61 | 52 | 45 | 72 | 60 | 51 | 45 | 57 | 50 | 44 | 55 | 48 | 43 | 53 | 47 | 42 | 42 | 42 | 42 | 40 |
| 6 | 69 | 55 | 46 | 39 | 66 | 54 | 45 | 39 | 52 | 44 | 38 | 50 | 43 | 38 | 48 | 42 | 37 | 37 | 37 | 37 | 35 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 40 | 34 | 47 | 39 | 34 | 45 | 39 | 33 | 44 | 38 | 33 | 33 | 33 | 33 | 31 |
| 8 | 59 | 45 | 37 | 31 | 57 | 45 | 36 | 31 | 43 | 36 | 30 | 41 | 35 | 30 | 40 | 34 | 30 | 30 | 30 | 30 | 28 |
| 9 | 55 | 42 | 33 | 28 | 54 | 41 | 33 | 28 | 40 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 27 | 27 | 27 | 25 |
| 10 | 52 | 38 | 31 | 25 | 50 | 38 | 30 | 25 | 37 | 30 | 25 | 35 | 29 | 25 | 34 | 28 | 24 | 24 | 24 | 24 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|-------|------|------|------|
| 0° | 7200 | 7200 | 7200 | 7200 |
| 5° | 7307 | 7286 | 6993 | 7327 |
| 10° | 7446 | 7232 | 6792 | 7312 |
| 15° | 7550 | 7154 | 6603 | 7275 |
| 20° | 7637 | 7051 | 6370 | 7210 |
| 25° | 7703 | 6937 | 6130 | 7133 |
| 30° | 7764 | 6807 | 5879 | 7028 |
| 35° | 7809 | 6683 | 5612 | 6894 |
| 40° | 7828 | 6520 | 5344 | 6792 |
| 45° | 7866 | 6373 | 5075 | 6725 |
| 50° | 7952 | 6227 | 4770 | 6660 |
| 55° | 8116 | 6133 | 4420 | 6534 |
| 60° | 8382 | 5972 | 3996 | 6447 |
| 65° | 8679 | 5822 | 3478 | 6414 |
| 70° | 9186 | 5628 | 2801 | 6310 |
| 75° | 10071 | 5377 | 2077 | 6248 |
| 80° | 11879 | 5103 | 383 | 6287 |
| 85° | 17592 | 5645 | 579 | 7567 |



TEST NUMBER: P855640

CATALOG NUMBER: 12SFS-L3C4-NUV-HIGH-3500K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 110.5 | 3.1 |
| 10°-20° | 314.8 | 9.0 |
| 20°-30° | 472.6 | 13.4 |
| 30°-40° | 563.6 | 16.0 |
| 40°-50° | 581.0 | 16.5 |
| 50°-60° | 529.1 | 15.0 |
| 60°-70° | 419.5 | 11.9 |
| 70°-80° | 272.5 | 7.8 |
| 80°-90° | 135.4 | 3.9 |
| 90°-100° | 52.9 | 1.5 |
| 100°-110° | 17.2 | 0.5 |
| 110°-120° | 16.0 | 0.5 |
| 120°-130° | 12.9 | 0.4 |
| 130°-140° | 8.2 | 0.2 |
| 140°-150° | 5.1 | 0.1 |
| 150°-160° | 3.1 | 0.1 |
| 160°-170° | 1.4 | 0.0 |
| 170°-180° | 0.4 | 0.0 |
| <hr/> | | |
| 0°-30° | 897.8 | 25.5 |
| 0°-40° | 1461.4 | 41.6 |
| 0°-60° | 2571.5 | 73.1 |
| 0°-90° | 3398.8 | 96.7 |
| 90°-120° | 86.2 | 2.5 |
| 90°-150° | 112.3 | 3.2 |
| 90°-180° | 117.0 | 3.3 |
| 0°-180° | 3516.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1169 | 1169 | 1169 | 1169 | 1169 | |
| 5° | 1182 | 1179 | 1131 | 1185 | 1182 | 113 |
| 15° | 1184 | 1122 | 1036 | 1141 | 1184 | 335 |
| 25° | 1134 | 1021 | 902 | 1050 | 1134 | 523 |
| 35° | 1039 | 889 | 746 | 917 | 1039 | 650 |
| 45° | 903 | 732 | 583 | 772 | 903 | 698 |
| 55° | 756 | 571 | 412 | 609 | 756 | 677 |
| 65° | 596 | 400 | 239 | 440 | 596 | 590 |
| 75° | 423 | 226 | 87 | 263 | 423 | 447 |
| 85° | 249 | 80 | 8 | 107 | 249 | 221 |
| 90° | 166 | 6 | 8 | 46 | 166 | 93 |
| 95° | 97 | 2 | 26 | 14 | 97 | 59 |
| 105° | 4 | 23 | 26 | 23 | 4 | 7 |
| 115° | 19 | 20 | 6 | 24 | 19 | 17 |
| 125° | 22 | 18 | 3 | 22 | 22 | 20 |
| 135° | 8 | 14 | 3 | 20 | 8 | 7 |
| 145° | 3 | 11 | 3 | 14 | 3 | 2 |
| 155° | 3 | 10 | 3 | 11 | 3 | 1 |
| 165° | 3 | 5 | 4 | 5 | 3 | 1 |
| 175° | 3 | 4 | 3 | 4 | 3 | 0 |
| 180° | 4 | 4 | 4 | 4 | 4 | |



TEST NUMBER: P855640

CATALOG NUMBER: 12SFS-L3C4-NUV-HIGH-3500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1169.2 | 1169.2 | 1169.2 | 1169.2 | 1169.2 | 1169.2 | 1169.2 | 1169.2 | 1169.2 | 1169.2 | 1169.2 |
| 5° | 1182.1 | 1179.1 | 1182.5 | 1184.9 | 1178.7 | 1175.4 | 1127.6 | 1129.8 | 1131.3 | 1131.1 | 1137.7 |
| 10° | 1190.9 | 1185.6 | 1188.8 | 1190.3 | 1156.7 | 1155.0 | 1083.0 | 1087.3 | 1086.2 | 1089.9 | 1096.2 |
| 15° | 1184.3 | 1178.7 | 1181.3 | 1181.9 | 1122.2 | 1122.0 | 1030.2 | 1034.3 | 1035.8 | 1039.5 | 1044.7 |
| 20° | 1165.5 | 1161.0 | 1163.6 | 1161.6 | 1076.1 | 1077.6 | 969.1 | 971.4 | 972.1 | 978.1 | 985.8 |
| 25° | 1133.8 | 1130.4 | 1133.2 | 1129.8 | 1021.0 | 1023.3 | 897.7 | 902.5 | 902.3 | 911.7 | 920.3 |
| 30° | 1091.9 | 1088.0 | 1090.5 | 1088.2 | 957.4 | 962.2 | 825.3 | 826.0 | 826.8 | 837.0 | 845.0 |
| 35° | 1038.8 | 1037.3 | 1037.1 | 1035.0 | 889.1 | 892.3 | 746.1 | 746.1 | 746.5 | 758.4 | 767.2 |
| 40° | 973.8 | 976.4 | 977.4 | 971.8 | 811.1 | 816.7 | 665.1 | 665.7 | 664.8 | 676.7 | 686.2 |
| 45° | 903.3 | 907.2 | 908.9 | 901.2 | 731.8 | 737.7 | 581.7 | 584.9 | 582.8 | 591.8 | 606.2 |
| 50° | 830.1 | 832.5 | 831.4 | 827.3 | 650.0 | 658.8 | 500.2 | 500.3 | 497.9 | 510.4 | 521.6 |
| 55° | 756.0 | 755.6 | 753.8 | 747.4 | 571.3 | 574.6 | 413.6 | 412.8 | 411.7 | 425.1 | 435.6 |
| 60° | 680.6 | 674.1 | 673.7 | 664.0 | 484.9 | 490.6 | 325.8 | 328.5 | 324.5 | 337.4 | 351.0 |
| 65° | 595.7 | 592.3 | 590.9 | 588.1 | 399.6 | 407.0 | 241.7 | 240.7 | 238.7 | 253.1 | 263.5 |
| 70° | 510.2 | 507.1 | 508.0 | 503.1 | 312.6 | 318.9 | 160.1 | 157.5 | 155.6 | 170.4 | 182.7 |
| 75° | 423.3 | 422.5 | 422.7 | 415.6 | 226.0 | 232.7 | 90.9 | 91.3 | 87.3 | 99.5 | 106.2 |
| 80° | 335.0 | 337.0 | 338.4 | 327.0 | 143.9 | 154.5 | 9.5 | 11.0 | 10.8 | 13.8 | 19.8 |
| 85° | 249.0 | 251.4 | 252.1 | 243.5 | 79.9 | 87.7 | 5.8 | 8.0 | 8.2 | 8.0 | 6.9 |
| 90° | 165.5 | 168.9 | 169.5 | 160.9 | 5.8 | 7.3 | 19.0 | 8.0 | 7.5 | 7.5 | 13.6 |
| 95° | 97.4 | 101.3 | 99.3 | 93.5 | 2.1 | 8.2 | 23.7 | 24.6 | 25.9 | 24.4 | 25.6 |
| 100° | 14.2 | 7.5 | 6.9 | 6.5 | 17.4 | 17.9 | 20.0 | 23.9 | 28.9 | 27.1 | 25.2 |
| 105° | 4.5 | 5.2 | 5.0 | 9.0 | 23.0 | 20.0 | 14.2 | 21.5 | 26.3 | 25.2 | 18.8 |
| 110° | 3.9 | 4.7 | 17.2 | 18.1 | 21.5 | 17.5 | 9.7 | 14.9 | 17.0 | 16.6 | 14.2 |
| 115° | 19.2 | 22.2 | 23.5 | 18.5 | 19.8 | 16.1 | 9.0 | 7.3 | 6.5 | 8.2 | 13.8 |
| 120° | 28.4 | 22.8 | 18.5 | 16.2 | 18.5 | 15.3 | 8.4 | 6.7 | 2.6 | 7.5 | 12.9 |
| 125° | 21.6 | 17.5 | 11.6 | 14.6 | 17.5 | 14.0 | 7.5 | 6.5 | 2.6 | 7.3 | 11.4 |
| 130° | 15.7 | 13.4 | 8.4 | 14.0 | 15.7 | 10.8 | 8.8 | 6.0 | 2.8 | 7.1 | 9.7 |
| 135° | 7.7 | 9.0 | 8.6 | 13.8 | 13.8 | 10.8 | 9.0 | 5.6 | 2.8 | 6.3 | 8.8 |
| 140° | 2.8 | 8.6 | 9.0 | 12.3 | 12.7 | 10.6 | 8.4 | 5.2 | 2.6 | 5.8 | 7.8 |
| 145° | 2.8 | 8.0 | 7.5 | 11.0 | 11.2 | 7.7 | 6.5 | 4.9 | 3.0 | 5.4 | 7.3 |
| 150° | 2.8 | 7.3 | 10.3 | 9.1 | 11.2 | 6.2 | 5.2 | 3.9 | 3.0 | 4.9 | 5.8 |
| 155° | 2.8 | 6.7 | 11.0 | 9.7 | 10.1 | 3.7 | 3.7 | 3.4 | 3.0 | 4.1 | 5.2 |
| 160° | 3.2 | 6.0 | 9.5 | 10.3 | 5.8 | 4.1 | 3.2 | 3.0 | 3.0 | 3.4 | 4.3 |
| 165° | 3.2 | 5.2 | 7.7 | 8.8 | 4.9 | 3.4 | 3.4 | 3.4 | 3.5 | 3.7 | 3.5 |
| 170° | 3.0 | 4.3 | 5.8 | 6.7 | 4.9 | 3.4 | 3.4 | 3.4 | 3.2 | 3.4 | 3.2 |
| 175° | 2.8 | 3.7 | 4.1 | 3.5 | 3.7 | 3.7 | 3.4 | 3.0 | 3.0 | 3.0 | 3.2 |
| 180° | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |



TEST NUMBER: P855640

CATALOG NUMBER: 12SFS-L3C4-NUV-HIGH-3500K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|------|--------|--------|--------|--------|--------|--------|
| 0° | 1169.2 | 1169.2 | 1169.2 | 1169.2 | 1169.2 | 1169.2 |
| 5° | 1139.5 | 1185.4 | 1181.3 | 1180.8 | 1181.9 | 1182.1 |
| 10° | 1099.0 | 1169.4 | 1167.0 | 1189.7 | 1190.9 | 1190.9 |
| 15° | 1050.0 | 1141.2 | 1139.3 | 1186.2 | 1185.1 | 1184.3 |
| 20° | 989.3 | 1100.3 | 1100.2 | 1171.3 | 1168.8 | 1165.5 |
| 25° | 920.3 | 1049.8 | 1050.3 | 1143.3 | 1139.0 | 1133.8 |
| 30° | 847.7 | 988.4 | 993.8 | 1105.4 | 1099.6 | 1091.9 |
| 35° | 769.3 | 917.1 | 926.8 | 1054.8 | 1050.5 | 1038.8 |
| 40° | 689.0 | 845.0 | 853.1 | 995.3 | 990.0 | 973.8 |
| 45° | 605.8 | 772.3 | 774.7 | 928.3 | 921.2 | 903.3 |
| 50° | 524.2 | 695.2 | 696.1 | 856.6 | 848.6 | 830.1 |
| 55° | 437.8 | 608.6 | 611.8 | 777.1 | 769.5 | 756.0 |
| 60° | 350.1 | 523.5 | 529.1 | 694.6 | 688.1 | 680.6 |
| 65° | 263.3 | 440.2 | 441.4 | 614.4 | 605.8 | 595.7 |
| 70° | 181.4 | 350.5 | 357.6 | 531.1 | 522.0 | 510.2 |
| 75° | 106.4 | 262.6 | 272.1 | 446.2 | 437.3 | 423.3 |
| 80° | 27.1 | 177.3 | 187.6 | 359.1 | 350.1 | 335.0 |
| 85° | 9.5 | 107.1 | 113.5 | 275.1 | 263.5 | 249.0 |
| 90° | 10.6 | 45.7 | 48.0 | 190.4 | 179.0 | 165.5 |
| 95° | 20.5 | 14.0 | 9.5 | 115.7 | 107.3 | 97.4 |
| 100° | 22.6 | 6.0 | 13.3 | 39.2 | 31.9 | 14.2 |
| 105° | 21.8 | 23.3 | 21.1 | 6.0 | 5.0 | 4.5 |
| 110° | 20.9 | 24.8 | 19.4 | 6.7 | 3.9 | 3.9 |
| 115° | 20.0 | 24.3 | 20.2 | 20.7 | 20.3 | 19.2 |
| 120° | 19.0 | 21.8 | 19.2 | 21.8 | 24.4 | 28.4 |
| 125° | 16.6 | 21.5 | 18.1 | 20.3 | 20.9 | 21.6 |
| 130° | 13.1 | 20.7 | 17.2 | 14.4 | 17.2 | 15.7 |
| 135° | 11.6 | 20.2 | 14.7 | 14.4 | 9.0 | 7.7 |
| 140° | 10.6 | 15.9 | 12.9 | 13.6 | 6.9 | 2.8 |
| 145° | 7.8 | 14.0 | 11.0 | 11.2 | 6.7 | 2.8 |
| 150° | 6.5 | 11.9 | 12.9 | 9.9 | 6.2 | 2.8 |
| 155° | 5.6 | 11.2 | 10.8 | 10.1 | 5.8 | 2.8 |
| 160° | 5.2 | 5.8 | 9.9 | 9.1 | 5.4 | 3.2 |
| 165° | 3.5 | 4.9 | 8.2 | 7.3 | 5.0 | 3.2 |
| 170° | 3.2 | 5.2 | 6.5 | 6.2 | 4.5 | 3.0 |
| 175° | 3.7 | 4.1 | 5.4 | 5.2 | 3.9 | 2.8 |
| 180° | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |



Report Generated By 670246072 / DESKTOP-50001EG





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









(END OF REPORT)