

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: P855641

Luminaire Tested: **12SFS-L3C4-NUV-HIGH-4000K**

Issue Date: 7/17/2024



Test Information

Test Method: LM-79-08
Report Number: P855641
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-4000K
Description: 1x2 Surround Frame Selectable - Architectural Slim LED Frame with,
HIGH Lumen and 4000K CCT Settings
Light Source: -
Ballast/Driver: -

Summary

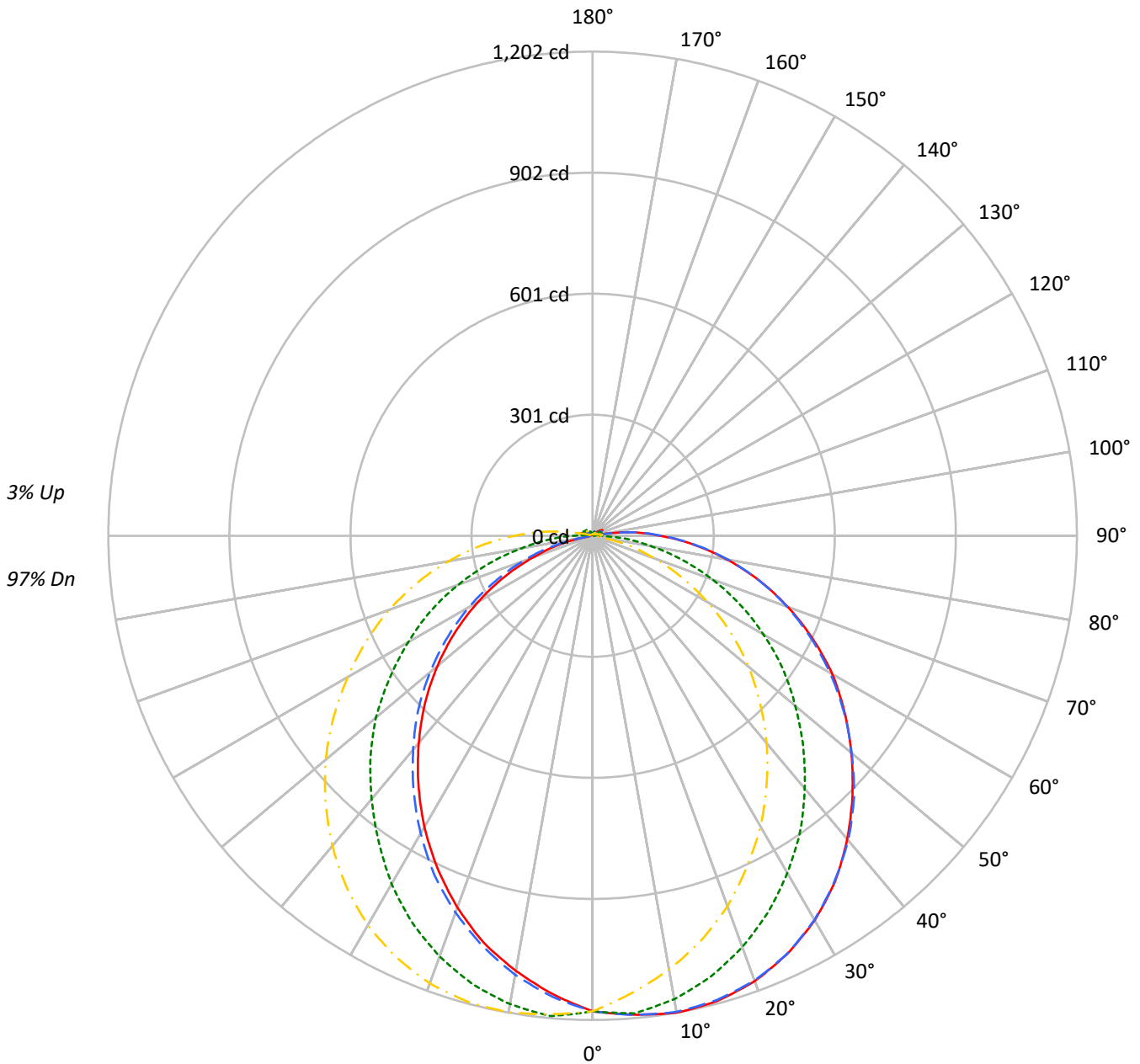
Lumens per Lamp: N/A
Luminaire Lumens: 3550.0 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.92' x L: 1.9' x H: 0')
CIE Type: Direct

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: P855641

CATALOG NUMBER: 12SFS-L3C4-NUV-HIGH-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P855641

CATALOG NUMBER: 12SFS-L3C4-NUV-HIGH-4000K

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 | 34 | 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° | 7269 | 7269 | 7269 | 7269 |
| 5° | 7377 | 7356 | 7061 | 7398 |
| 10° | 7518 | 7302 | 6857 | 7382 |
| 15° | 7623 | 7223 | 6667 | 7346 |
| 20° | 7711 | 7120 | 6432 | 7280 |
| 25° | 7777 | 7004 | 6190 | 7201 |
| 30° | 7839 | 6873 | 5935 | 7095 |
| 35° | 7884 | 6748 | 5666 | 6960 |
| 40° | 7903 | 6583 | 5395 | 6858 |
| 45° | 7942 | 6434 | 5125 | 6790 |
| 50° | 8029 | 6287 | 4816 | 6724 |
| 55° | 8194 | 6192 | 4463 | 6597 |
| 60° | 8463 | 6028 | 4036 | 6509 |
| 65° | 8764 | 5878 | 3511 | 6476 |
| 70° | 9276 | 5682 | 2830 | 6372 |
| 75° | 10168 | 5429 | 2098 | 6307 |
| 80° | 11993 | 5152 | 387 | 6347 |
| 85° | 17762 | 5694 | 586 | 7644 |



TEST NUMBER: P855641

CATALOG NUMBER: 12SFS-L3C4-NUV-HIGH-4000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 111.5 | 3.1 |
| 10°-20° | 317.8 | 9.0 |
| 20°-30° | 477.1 | 13.4 |
| 30°-40° | 569.0 | 16.0 |
| 40°-50° | 586.6 | 16.5 |
| 50°-60° | 534.2 | 15.0 |
| 60°-70° | 423.6 | 11.9 |
| 70°-80° | 275.1 | 7.8 |
| 80°-90° | 136.7 | 3.9 |
| 90°-100° | 53.4 | 1.5 |
| 100°-110° | 17.4 | 0.5 |
| 110°-120° | 16.2 | 0.5 |
| 120°-130° | 13.0 | 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° | 906.5 | 25.5 |
| 0°-40° | 1475.5 | 41.6 |
| 0°-60° | 2596.3 | 73.1 |
| 0°-90° | 3431.7 | 96.7 |
| 90°-120° | 87.0 | 2.5 |
| 90°-150° | 113.3 | 3.2 |
| 90°-180° | 118.0 | 3.3 |
| 0°-180° | 3550.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1180 | 1180 | 1180 | 1180 | 1180 | |
| 5° | 1194 | 1190 | 1142 | 1197 | 1194 | 114 |
| 15° | 1196 | 1133 | 1046 | 1152 | 1196 | 338 |
| 25° | 1145 | 1031 | 911 | 1060 | 1145 | 528 |
| 35° | 1049 | 898 | 754 | 926 | 1049 | 656 |
| 45° | 912 | 739 | 588 | 780 | 912 | 705 |
| 55° | 763 | 577 | 416 | 614 | 763 | 683 |
| 65° | 602 | 403 | 241 | 444 | 602 | 596 |
| 75° | 427 | 228 | 88 | 265 | 427 | 451 |
| 85° | 251 | 81 | 8 | 108 | 251 | 223 |
| 90° | 167 | 6 | 8 | 46 | 167 | 94 |
| 95° | 98 | 2 | 26 | 14 | 98 | 60 |
| 105° | 4 | 23 | 27 | 24 | 4 | 7 |
| 115° | 19 | 20 | 7 | 24 | 19 | 18 |
| 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: P855641

CATALOG NUMBER: 12SFS-L3C4-NUV-HIGH-4000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1180.5 | 1180.5 | 1180.5 | 1180.5 | 1180.5 | 1180.5 | 1180.5 | 1180.5 | 1180.5 | 1180.5 | 1180.5 |
| 5° | 1193.5 | 1190.5 | 1193.9 | 1196.3 | 1190.1 | 1186.7 | 1138.5 | 1140.8 | 1142.3 | 1142.1 | 1148.7 |
| 10° | 1202.4 | 1197.1 | 1200.3 | 1201.8 | 1167.9 | 1166.2 | 1093.5 | 1097.8 | 1096.7 | 1100.4 | 1106.8 |
| 15° | 1195.8 | 1190.1 | 1192.8 | 1193.3 | 1133.0 | 1132.8 | 1040.1 | 1044.3 | 1045.8 | 1049.6 | 1054.8 |
| 20° | 1176.7 | 1172.2 | 1174.9 | 1172.8 | 1086.5 | 1088.0 | 978.5 | 980.8 | 981.5 | 987.6 | 995.3 |
| 25° | 1144.7 | 1141.3 | 1144.1 | 1140.8 | 1030.9 | 1033.2 | 906.3 | 911.2 | 911.1 | 920.5 | 929.1 |
| 30° | 1102.5 | 1098.5 | 1101.0 | 1098.7 | 966.6 | 971.5 | 833.2 | 834.0 | 834.7 | 845.1 | 853.2 |
| 35° | 1048.8 | 1047.3 | 1047.1 | 1045.0 | 897.7 | 900.9 | 753.3 | 753.3 | 753.7 | 765.8 | 774.6 |
| 40° | 983.2 | 985.9 | 986.8 | 981.2 | 818.9 | 824.6 | 671.6 | 672.1 | 671.2 | 683.2 | 692.9 |
| 45° | 912.0 | 916.0 | 917.7 | 909.9 | 738.8 | 744.9 | 587.3 | 590.5 | 588.5 | 597.5 | 612.0 |
| 50° | 838.1 | 840.6 | 839.5 | 835.3 | 656.3 | 665.2 | 505.0 | 505.2 | 502.7 | 515.4 | 526.7 |
| 55° | 763.3 | 763.0 | 761.1 | 754.7 | 576.8 | 580.2 | 417.6 | 416.8 | 415.7 | 429.2 | 439.8 |
| 60° | 687.2 | 680.6 | 680.2 | 670.4 | 489.5 | 495.4 | 329.0 | 331.6 | 327.7 | 340.7 | 354.4 |
| 65° | 601.5 | 598.1 | 596.6 | 593.7 | 403.4 | 411.0 | 244.0 | 243.1 | 241.0 | 255.5 | 266.1 |
| 70° | 515.2 | 512.0 | 512.9 | 508.0 | 315.6 | 322.0 | 161.7 | 159.0 | 157.2 | 172.0 | 184.5 |
| 75° | 427.4 | 426.6 | 426.8 | 419.6 | 228.2 | 235.0 | 91.8 | 92.1 | 88.2 | 100.4 | 107.2 |
| 80° | 338.2 | 340.3 | 341.6 | 330.1 | 145.3 | 156.0 | 9.6 | 11.1 | 10.9 | 13.9 | 20.0 |
| 85° | 251.4 | 253.8 | 254.6 | 245.9 | 80.6 | 88.6 | 5.8 | 8.1 | 8.3 | 8.1 | 7.0 |
| 90° | 167.1 | 170.5 | 171.1 | 162.4 | 5.8 | 7.3 | 19.2 | 8.1 | 7.5 | 7.5 | 13.8 |
| 95° | 98.4 | 102.3 | 100.2 | 94.4 | 2.1 | 8.3 | 23.9 | 24.9 | 26.2 | 24.7 | 25.8 |
| 100° | 14.3 | 7.5 | 7.0 | 6.6 | 17.5 | 18.1 | 20.2 | 24.1 | 29.2 | 27.3 | 25.4 |
| 105° | 4.5 | 5.3 | 5.1 | 9.0 | 23.2 | 20.2 | 14.3 | 21.7 | 26.6 | 25.4 | 19.0 |
| 110° | 4.0 | 4.7 | 17.3 | 18.3 | 21.7 | 17.7 | 9.8 | 15.1 | 17.1 | 16.8 | 14.3 |
| 115° | 19.4 | 22.4 | 23.7 | 18.7 | 20.0 | 16.2 | 9.0 | 7.3 | 6.6 | 8.3 | 13.9 |
| 120° | 28.6 | 23.0 | 18.7 | 16.4 | 18.7 | 15.5 | 8.5 | 6.8 | 2.6 | 7.5 | 13.0 |
| 125° | 21.9 | 17.7 | 11.7 | 14.7 | 17.7 | 14.1 | 7.5 | 6.6 | 2.6 | 7.3 | 11.5 |
| 130° | 15.8 | 13.6 | 8.5 | 14.1 | 15.8 | 10.9 | 8.9 | 6.0 | 2.8 | 7.2 | 9.8 |
| 135° | 7.7 | 9.0 | 8.7 | 13.9 | 13.9 | 10.9 | 9.0 | 5.7 | 2.8 | 6.4 | 8.9 |
| 140° | 2.8 | 8.7 | 9.0 | 12.4 | 12.8 | 10.7 | 8.5 | 5.3 | 2.6 | 5.8 | 7.9 |
| 145° | 2.8 | 8.1 | 7.5 | 11.1 | 11.3 | 7.7 | 6.6 | 4.9 | 3.0 | 5.5 | 7.3 |
| 150° | 2.8 | 7.3 | 10.4 | 9.2 | 11.3 | 6.2 | 5.3 | 4.0 | 3.0 | 4.9 | 5.8 |
| 155° | 2.8 | 6.8 | 11.1 | 9.8 | 10.2 | 3.8 | 3.8 | 3.4 | 3.0 | 4.1 | 5.3 |
| 160° | 3.2 | 6.0 | 9.6 | 10.4 | 5.8 | 4.1 | 3.2 | 3.0 | 3.0 | 3.4 | 4.3 |
| 165° | 3.2 | 5.3 | 7.7 | 8.9 | 4.9 | 3.4 | 3.4 | 3.4 | 3.6 | 3.8 | 3.6 |
| 170° | 3.0 | 4.3 | 5.8 | 6.8 | 4.9 | 3.4 | 3.4 | 3.4 | 3.2 | 3.4 | 3.2 |
| 175° | 2.8 | 3.8 | 4.1 | 3.6 | 3.8 | 3.8 | 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: P855641

CATALOG NUMBER: 12SFS-L3C4-NUV-HIGH-4000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|------|--------|--------|--------|--------|--------|--------|
| 0° | 1180.5 | 1180.5 | 1180.5 | 1180.5 | 1180.5 | 1180.5 |
| 5° | 1150.6 | 1196.9 | 1192.8 | 1192.2 | 1193.3 | 1193.5 |
| 10° | 1109.7 | 1180.7 | 1178.3 | 1201.2 | 1202.4 | 1202.4 |
| 15° | 1060.1 | 1152.3 | 1150.4 | 1197.7 | 1196.5 | 1195.8 |
| 20° | 998.9 | 1111.0 | 1110.8 | 1182.6 | 1180.1 | 1176.7 |
| 25° | 929.1 | 1059.9 | 1060.5 | 1154.3 | 1150.0 | 1144.7 |
| 30° | 855.9 | 997.9 | 1003.4 | 1116.1 | 1110.2 | 1102.5 |
| 35° | 776.7 | 925.9 | 935.7 | 1065.0 | 1060.7 | 1048.8 |
| 40° | 695.7 | 853.2 | 861.3 | 1004.9 | 999.6 | 983.2 |
| 45° | 611.6 | 779.7 | 782.2 | 937.3 | 930.1 | 912.0 |
| 50° | 529.3 | 701.9 | 702.8 | 864.9 | 856.8 | 838.1 |
| 55° | 442.1 | 614.5 | 617.7 | 784.6 | 776.9 | 763.3 |
| 60° | 353.5 | 528.5 | 534.2 | 701.3 | 694.7 | 687.2 |
| 65° | 265.9 | 444.5 | 445.6 | 620.3 | 611.6 | 601.5 |
| 70° | 183.2 | 353.9 | 361.0 | 536.3 | 527.0 | 515.2 |
| 75° | 107.4 | 265.1 | 274.7 | 450.5 | 441.5 | 427.4 |
| 80° | 27.3 | 179.0 | 189.4 | 362.5 | 353.5 | 338.2 |
| 85° | 9.6 | 108.2 | 114.6 | 277.7 | 266.1 | 251.4 |
| 90° | 10.7 | 46.2 | 48.4 | 192.2 | 180.7 | 167.1 |
| 95° | 20.7 | 14.1 | 9.6 | 116.8 | 108.3 | 98.4 |
| 100° | 22.8 | 6.0 | 13.4 | 39.6 | 32.2 | 14.3 |
| 105° | 22.0 | 23.6 | 21.3 | 6.0 | 5.1 | 4.5 |
| 110° | 21.1 | 25.1 | 19.6 | 6.8 | 4.0 | 4.0 |
| 115° | 20.2 | 24.5 | 20.4 | 20.9 | 20.5 | 19.4 |
| 120° | 19.2 | 22.0 | 19.4 | 22.0 | 24.7 | 28.6 |
| 125° | 16.8 | 21.7 | 18.3 | 20.5 | 21.1 | 21.9 |
| 130° | 13.2 | 20.9 | 17.3 | 14.5 | 17.3 | 15.8 |
| 135° | 11.7 | 20.4 | 14.9 | 14.5 | 9.0 | 7.7 |
| 140° | 10.7 | 16.0 | 13.0 | 13.8 | 7.0 | 2.8 |
| 145° | 7.9 | 14.1 | 11.1 | 11.3 | 6.8 | 2.8 |
| 150° | 6.6 | 12.1 | 13.0 | 10.0 | 6.2 | 2.8 |
| 155° | 5.7 | 11.3 | 10.9 | 10.2 | 5.8 | 2.8 |
| 160° | 5.3 | 5.8 | 10.0 | 9.2 | 5.5 | 3.2 |
| 165° | 3.6 | 4.9 | 8.3 | 7.3 | 5.1 | 3.2 |
| 170° | 3.2 | 5.3 | 6.6 | 6.2 | 4.5 | 3.0 |
| 175° | 3.8 | 4.1 | 5.5 | 5.3 | 4.0 | 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)