

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: P855717

Luminaire Tested: **22SFS-L3C4-NUV-LOW-4000K**

Issue Date: 7/17/2024

Test Information

Test Method: LM-79-08
Report Number: P855717
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (BL231218006-9)
Test Lab: INNOVATION CENTER
Issue Date: 7/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22SFS-L3C4-NUV-LOW-4000K
Description: 2x2 Surround Frame Selectable - Architectural Slim LED Frame with,
LOW Lumen and 4000K CCT Settings
Light Source: -
Ballast/Driver: -

Summary

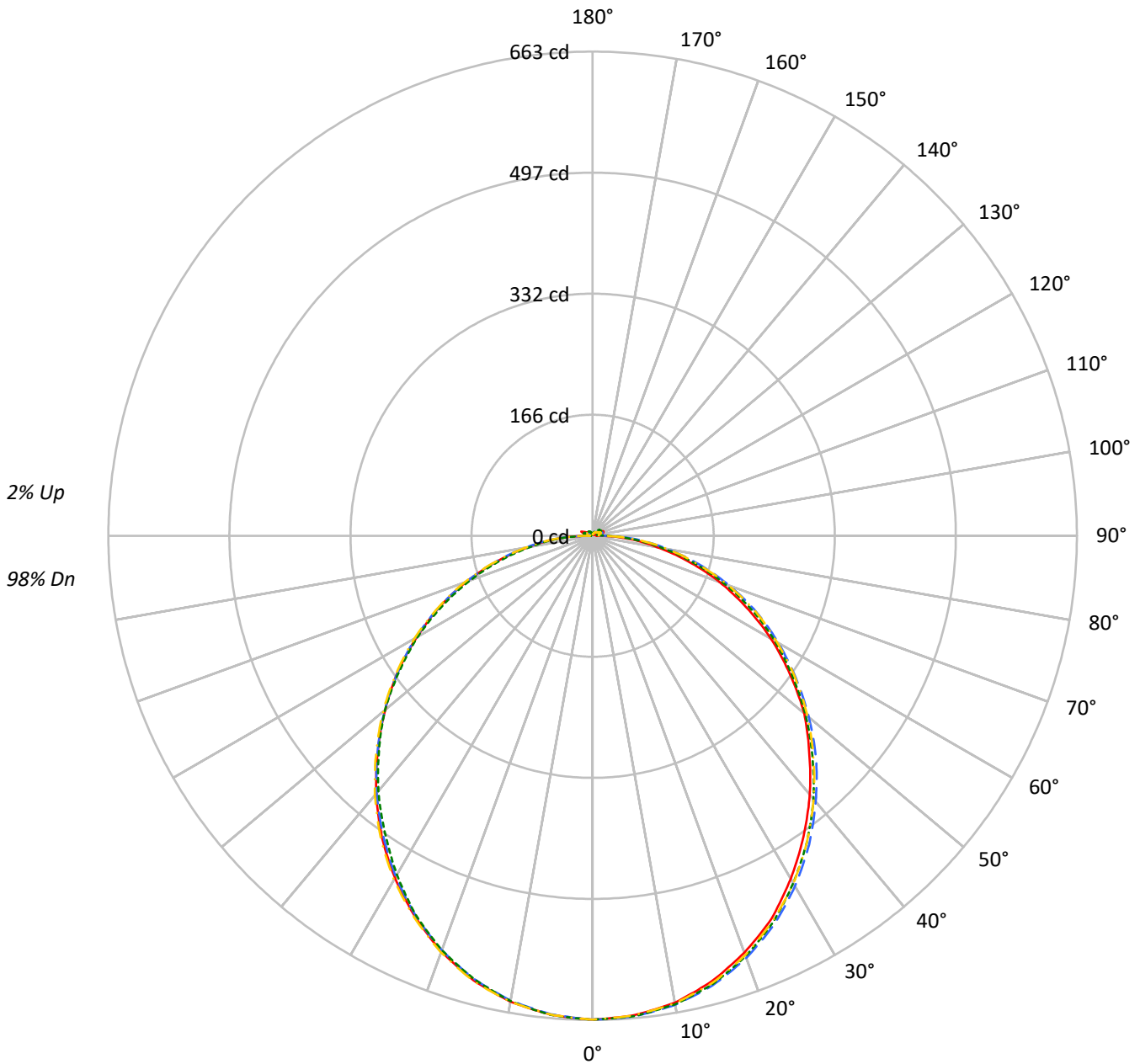
Lumens per Lamp: N/A
Luminaire Lumens: 1933.0 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.35
Luminous Opening: Rectangular (W 0.92' x L: 7.81' x H: 0')
CIE Type: Direct

Input Watts (W): 15
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: P855717

CATALOG NUMBER: 22SFS-L3C4-NUV-LOW-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P855717

CATALOG NUMBER: 22SFS-L3C4-NUV-LOW-4000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|
| RF | 20 | | | | 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 | 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° | 994 | 994 | 994 | 994 |
| 5° | 993 | 994 | 992 | 992 |
| 10° | 989 | 992 | 987 | 986 |
| 15° | 981 | 987 | 979 | 976 |
| 20° | 970 | 978 | 967 | 964 |
| 25° | 959 | 967 | 953 | 949 |
| 30° | 940 | 952 | 938 | 929 |
| 35° | 922 | 937 | 922 | 908 |
| 40° | 906 | 922 | 903 | 894 |
| 45° | 890 | 903 | 882 | 877 |
| 50° | 883 | 887 | 865 | 866 |
| 55° | 862 | 872 | 853 | 844 |
| 60° | 846 | 864 | 834 | 829 |
| 65° | 824 | 855 | 821 | 805 |
| 70° | 810 | 841 | 808 | 781 |
| 75° | 786 | 830 | 784 | 754 |
| 80° | 773 | 842 | 769 | 733 |
| 85° | 883 | 954 | 876 | 823 |



TEST NUMBER: P855717

CATALOG NUMBER: 22SFS-L3C4-NUV-LOW-4000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 62.6 | 3.2 |
| 10°-20° | 178.1 | 9.2 |
| 20°-30° | 266.8 | 13.8 |
| 30°-40° | 317.0 | 16.4 |
| 40°-50° | 325.5 | 16.8 |
| 50°-60° | 296.1 | 15.3 |
| 60°-70° | 234.2 | 12.1 |
| 70°-80° | 148.7 | 7.7 |
| 80°-90° | 58.3 | 3.0 |
| 90°-100° | 6.4 | 0.3 |
| 100°-110° | 11.7 | 0.6 |
| 110°-120° | 10.9 | 0.6 |
| 120°-130° | 6.6 | 0.3 |
| 130°-140° | 4.4 | 0.2 |
| 140°-150° | 3.0 | 0.2 |
| 150°-160° | 1.8 | 0.1 |
| 160°-170° | 0.7 | 0.0 |
| 170°-180° | 0.2 | 0.0 |
| 0°-30° | 507.5 | 26.3 |
| 0°-40° | 824.6 | 42.7 |
| 0°-60° | 1446.3 | 74.8 |
| 0°-90° | 1887.4 | 97.6 |
| 90°-120° | 29.0 | 1.5 |
| 90°-150° | 43.0 | 2.2 |
| 90°-180° | 46.0 | 2.4 |
| 0°-180° | 1933.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|------|-----|-----|------|------|------|------|
| 0° | 663 | 663 | 663 | 663 | 663 | |
| 5° | 659 | 660 | 658 | 659 | 659 | 63 |
| 15° | 632 | 636 | 630 | 628 | 632 | 178 |
| 25° | 579 | 584 | 576 | 573 | 579 | 266 |
| 35° | 503 | 512 | 503 | 496 | 503 | 315 |
| 45° | 419 | 425 | 416 | 413 | 419 | 324 |
| 55° | 329 | 333 | 326 | 323 | 329 | 295 |
| 65° | 232 | 241 | 231 | 227 | 232 | 231 |
| 75° | 136 | 143 | 135 | 130 | 136 | 144 |
| 85° | 51 | 55 | 51 | 48 | 51 | 49 |
| 90° | 6 | 17 | 5 | 4 | 6 | 9 |
| 95° | 5 | 6 | 2 | 2 | 5 | 4 |
| 105° | 14 | 14 | 13 | 13 | 14 | 13 |
| 115° | 15 | 14 | 12 | 11 | 15 | 14 |
| 125° | 4 | 13 | 4 | 10 | 4 | 5 |
| 135° | 2 | 11 | 2 | 8 | 2 | 1 |
| 145° | 2 | 8 | 2 | 7 | 2 | 1 |
| 155° | 2 | 6 | 2 | 6 | 2 | 1 |
| 165° | 2 | 3 | 2 | 3 | 2 | 1 |
| 175° | 2 | 2 | 2 | 2 | 2 | 0 |
| 180° | 2 | 2 | 2 | 2 | 2 | |



TEST NUMBER: P855717

CATALOG NUMBER: 22SFS-L3C4-NUV-LOW-4000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 0° | 662.6 | 662.6 | 662.6 | 662.6 | 662.6 | 662.6 | 662.6 | 662.6 | 662.6 | 662.6 | 662.6 |
| 5° | 659.0 | 656.9 | 660.6 | 662.1 | 660.2 | 657.6 | 658.9 | 660.1 | 658.3 | 655.4 | 657.6 |
| 10° | 649.2 | 647.8 | 652.1 | 653.5 | 651.3 | 648.6 | 650.1 | 650.4 | 647.8 | 645.0 | 646.3 |
| 15° | 631.5 | 631.7 | 637.1 | 638.5 | 635.5 | 632.7 | 633.8 | 633.5 | 630.3 | 627.5 | 628.1 |
| 20° | 607.5 | 609.6 | 615.2 | 616.7 | 612.5 | 611.0 | 611.0 | 610.1 | 605.8 | 603.4 | 604.0 |
| 25° | 579.0 | 581.3 | 587.7 | 588.8 | 584.3 | 582.8 | 582.5 | 581.7 | 575.7 | 573.7 | 573.7 |
| 30° | 542.4 | 548.1 | 554.1 | 556.4 | 549.3 | 549.1 | 549.7 | 547.1 | 541.1 | 539.9 | 539.1 |
| 35° | 503.2 | 510.5 | 516.6 | 518.6 | 511.5 | 512.3 | 511.7 | 508.5 | 503.4 | 501.3 | 500.1 |
| 40° | 462.5 | 470.2 | 475.2 | 475.8 | 470.6 | 471.2 | 470.7 | 467.5 | 461.1 | 460.8 | 460.0 |
| 45° | 419.4 | 426.2 | 432.8 | 432.8 | 425.3 | 427.3 | 427.3 | 423.8 | 415.7 | 415.2 | 416.2 |
| 50° | 378.1 | 380.5 | 386.4 | 387.1 | 380.1 | 382.3 | 384.2 | 379.3 | 370.7 | 371.5 | 371.4 |
| 55° | 329.4 | 336.0 | 339.7 | 343.1 | 333.3 | 337.1 | 338.3 | 333.5 | 326.0 | 324.5 | 325.3 |
| 60° | 282.0 | 288.4 | 293.4 | 296.1 | 287.9 | 290.1 | 291.2 | 287.9 | 277.9 | 278.0 | 279.8 |
| 65° | 232.1 | 239.1 | 247.4 | 247.5 | 240.8 | 243.4 | 246.5 | 239.9 | 231.3 | 232.5 | 232.2 |
| 70° | 184.7 | 191.3 | 198.8 | 199.3 | 191.7 | 196.0 | 196.8 | 191.3 | 184.1 | 183.8 | 183.8 |
| 75° | 135.6 | 144.8 | 150.3 | 150.6 | 143.2 | 147.6 | 148.1 | 145.3 | 135.2 | 136.2 | 137.2 |
| 80° | 89.5 | 97.2 | 103.2 | 103.1 | 97.4 | 101.4 | 103.1 | 97.4 | 89.0 | 92.4 | 91.8 |
| 85° | 51.3 | 58.3 | 63.2 | 62.5 | 55.4 | 59.8 | 61.7 | 56.8 | 50.9 | 53.0 | 52.8 |
| 90° | 6.4 | 9.7 | 17.2 | 23.8 | 17.2 | 19.6 | 14.9 | 7.9 | 4.9 | 3.9 | 4.0 |
| 95° | 4.9 | 4.7 | 4.2 | 5.5 | 6.0 | 4.8 | 3.0 | 2.6 | 2.3 | 2.6 | 2.6 |
| 100° | 4.3 | 4.3 | 7.0 | 5.6 | 4.1 | 7.6 | 4.1 | 2.2 | 1.9 | 2.4 | 10.6 |
| 105° | 14.3 | 13.5 | 14.1 | 11.6 | 13.6 | 11.7 | 12.0 | 12.0 | 12.8 | 13.2 | 13.0 |
| 110° | 16.0 | 14.8 | 14.1 | 12.7 | 14.5 | 11.3 | 12.1 | 13.6 | 16.5 | 13.0 | 10.2 |
| 115° | 15.2 | 13.9 | 10.7 | 12.5 | 14.0 | 11.9 | 11.1 | 11.8 | 12.1 | 10.1 | 6.3 |
| 120° | 9.8 | 9.7 | 8.1 | 11.5 | 13.2 | 11.3 | 8.2 | 9.5 | 8.9 | 7.8 | 4.6 |
| 125° | 4.2 | 5.1 | 7.8 | 11.1 | 12.7 | 10.5 | 8.2 | 4.7 | 3.8 | 4.6 | 4.5 |
| 130° | 1.8 | 4.7 | 7.7 | 10.8 | 12.4 | 10.1 | 7.8 | 4.1 | 1.5 | 4.3 | 4.7 |
| 135° | 1.8 | 4.3 | 6.8 | 10.0 | 11.0 | 8.8 | 6.6 | 3.9 | 1.5 | 4.1 | 4.3 |
| 140° | 1.8 | 4.1 | 5.5 | 7.4 | 8.9 | 7.3 | 5.7 | 3.5 | 1.6 | 3.8 | 5.5 |
| 145° | 1.7 | 3.9 | 5.1 | 6.4 | 7.7 | 6.5 | 5.9 | 3.4 | 1.7 | 3.4 | 6.0 |
| 150° | 1.7 | 3.6 | 4.6 | 6.1 | 6.7 | 5.7 | 5.2 | 3.1 | 1.6 | 3.1 | 5.2 |
| 155° | 1.8 | 3.1 | 4.2 | 5.2 | 6.3 | 5.1 | 4.2 | 2.9 | 1.7 | 2.8 | 4.2 |
| 160° | 1.8 | 2.7 | 3.3 | 4.1 | 3.2 | 4.0 | 3.1 | 2.3 | 1.6 | 2.3 | 3.3 |
| 165° | 1.8 | 2.2 | 2.5 | 2.6 | 2.8 | 2.3 | 2.3 | 2.0 | 1.6 | 2.0 | 2.6 |
| 170° | 1.8 | 2.0 | 2.2 | 2.3 | 3.0 | 2.1 | 2.0 | 1.8 | 1.5 | 1.8 | 2.1 |
| 175° | 2.0 | 2.1 | 2.2 | 2.2 | 2.4 | 2.2 | 1.9 | 1.7 | 1.7 | 1.6 | 1.9 |
| 180° | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |



TEST NUMBER: P855717

CATALOG NUMBER: 22SFS-L3C4-NUV-LOW-4000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|------|--------|-------|--------|-------|--------|-------|
| 0° | 662.6 | 662.6 | 662.6 | 662.6 | 662.6 | 662.6 |
| 5° | 658.8 | 658.6 | 655.7 | 658.2 | 660.0 | 659.0 |
| 10° | 647.1 | 647.1 | 644.9 | 647.9 | 649.4 | 649.2 |
| 15° | 628.7 | 628.2 | 627.0 | 631.2 | 632.5 | 631.5 |
| 20° | 603.6 | 603.7 | 601.9 | 607.1 | 609.5 | 607.5 |
| 25° | 573.1 | 572.9 | 573.9 | 577.3 | 580.4 | 579.0 |
| 30° | 538.7 | 535.9 | 539.6 | 543.9 | 545.8 | 542.4 |
| 35° | 500.3 | 495.8 | 501.0 | 505.5 | 506.6 | 503.2 |
| 40° | 455.9 | 456.3 | 459.1 | 463.7 | 465.4 | 462.5 |
| 45° | 412.1 | 413.4 | 416.1 | 419.1 | 420.4 | 419.4 |
| 50° | 369.1 | 371.1 | 370.9 | 374.2 | 374.9 | 378.1 |
| 55° | 323.1 | 322.7 | 325.2 | 328.1 | 330.6 | 329.4 |
| 60° | 275.9 | 276.2 | 277.3 | 281.6 | 282.8 | 282.0 |
| 65° | 228.0 | 226.6 | 229.7 | 233.7 | 234.3 | 232.1 |
| 70° | 180.4 | 178.0 | 181.5 | 186.5 | 184.6 | 184.7 |
| 75° | 132.1 | 130.0 | 134.0 | 138.0 | 136.3 | 135.6 |
| 80° | 87.7 | 84.8 | 88.6 | 92.0 | 90.4 | 89.5 |
| 85° | 50.0 | 47.8 | 51.4 | 53.0 | 54.2 | 51.3 |
| 90° | 3.5 | 3.6 | 4.3 | 5.4 | 6.0 | 6.4 |
| 95° | 5.2 | 1.9 | 4.0 | 3.5 | 4.7 | 4.9 |
| 100° | 10.7 | 8.5 | 10.0 | 9.6 | 4.6 | 4.3 |
| 105° | 10.4 | 12.9 | 11.1 | 13.5 | 14.0 | 14.3 |
| 110° | 8.9 | 11.6 | 9.5 | 11.7 | 13.4 | 16.0 |
| 115° | 8.0 | 10.8 | 9.0 | 8.2 | 12.3 | 15.2 |
| 120° | 8.0 | 10.5 | 8.1 | 5.5 | 8.4 | 9.8 |
| 125° | 7.6 | 9.7 | 7.6 | 5.1 | 4.2 | 4.2 |
| 130° | 6.8 | 9.2 | 6.8 | 4.7 | 3.5 | 1.8 |
| 135° | 5.8 | 7.9 | 5.3 | 4.2 | 3.4 | 1.8 |
| 140° | 4.9 | 7.8 | 4.7 | 4.7 | 3.2 | 1.8 |
| 145° | 5.8 | 6.6 | 5.8 | 4.9 | 3.0 | 1.7 |
| 150° | 5.7 | 6.5 | 5.7 | 4.6 | 2.8 | 1.7 |
| 155° | 4.5 | 5.6 | 3.9 | 3.5 | 2.6 | 1.8 |
| 160° | 3.4 | 3.4 | 3.2 | 3.2 | 2.3 | 1.8 |
| 165° | 2.8 | 2.7 | 2.8 | 2.7 | 2.0 | 1.8 |
| 170° | 2.5 | 2.9 | 2.6 | 2.1 | 2.0 | 1.8 |
| 175° | 1.8 | 2.4 | 2.1 | 2.1 | 2.0 | 2.0 |
| 180° | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |



Report Generated By 670246072 / DESKTOP-50001EG





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









(END OF REPORT)