

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: McGRAW-EDISON

Report Number: P197706

Luminaire Tested: **TT-C2-LED-E1-5MQ-PM-CG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197706
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115348)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-C2-LED-E1-5MQ-PM-CG
Description: TOPTIER LED AREA/SITE LUMINAIRE
MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4225 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

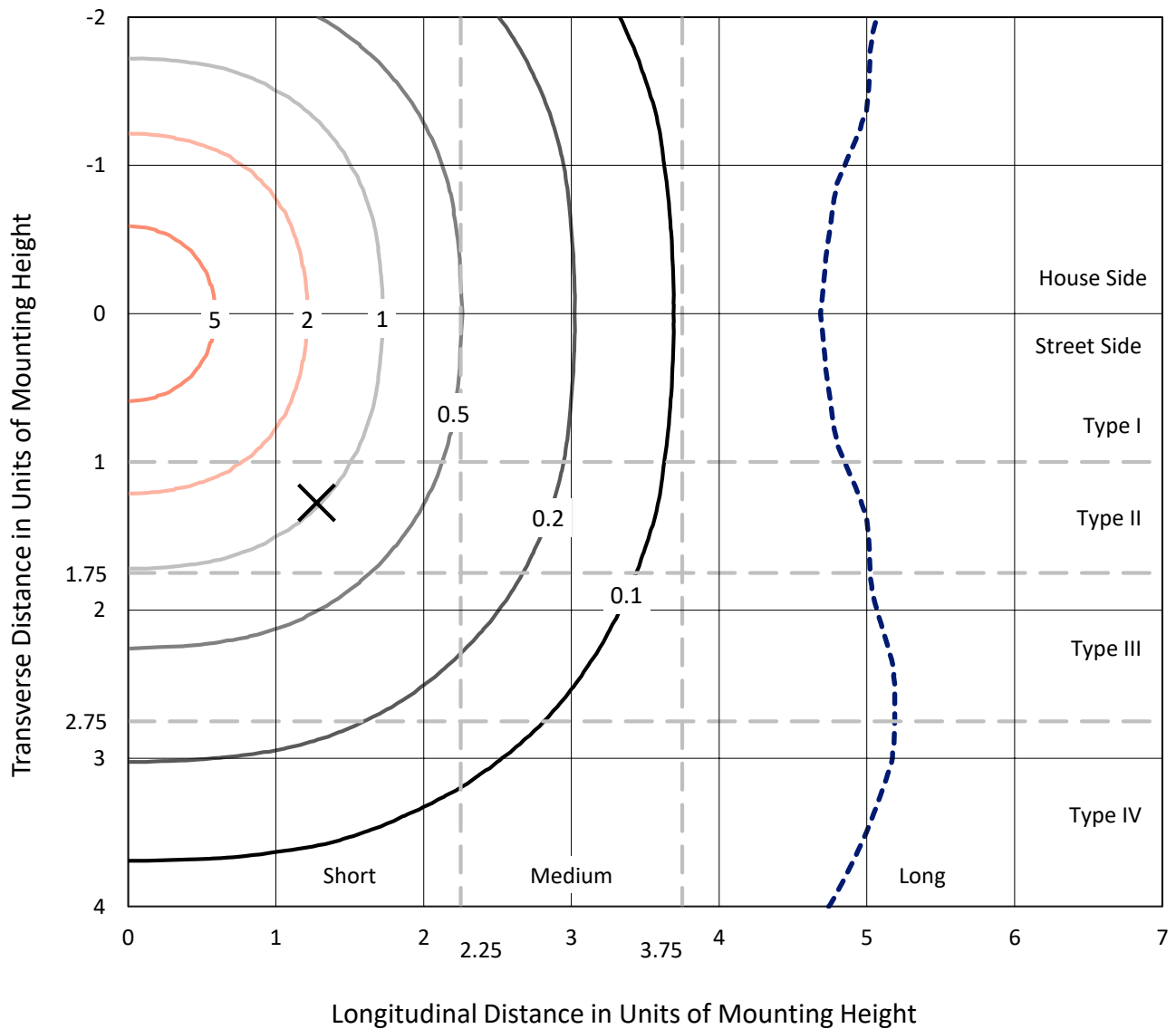
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

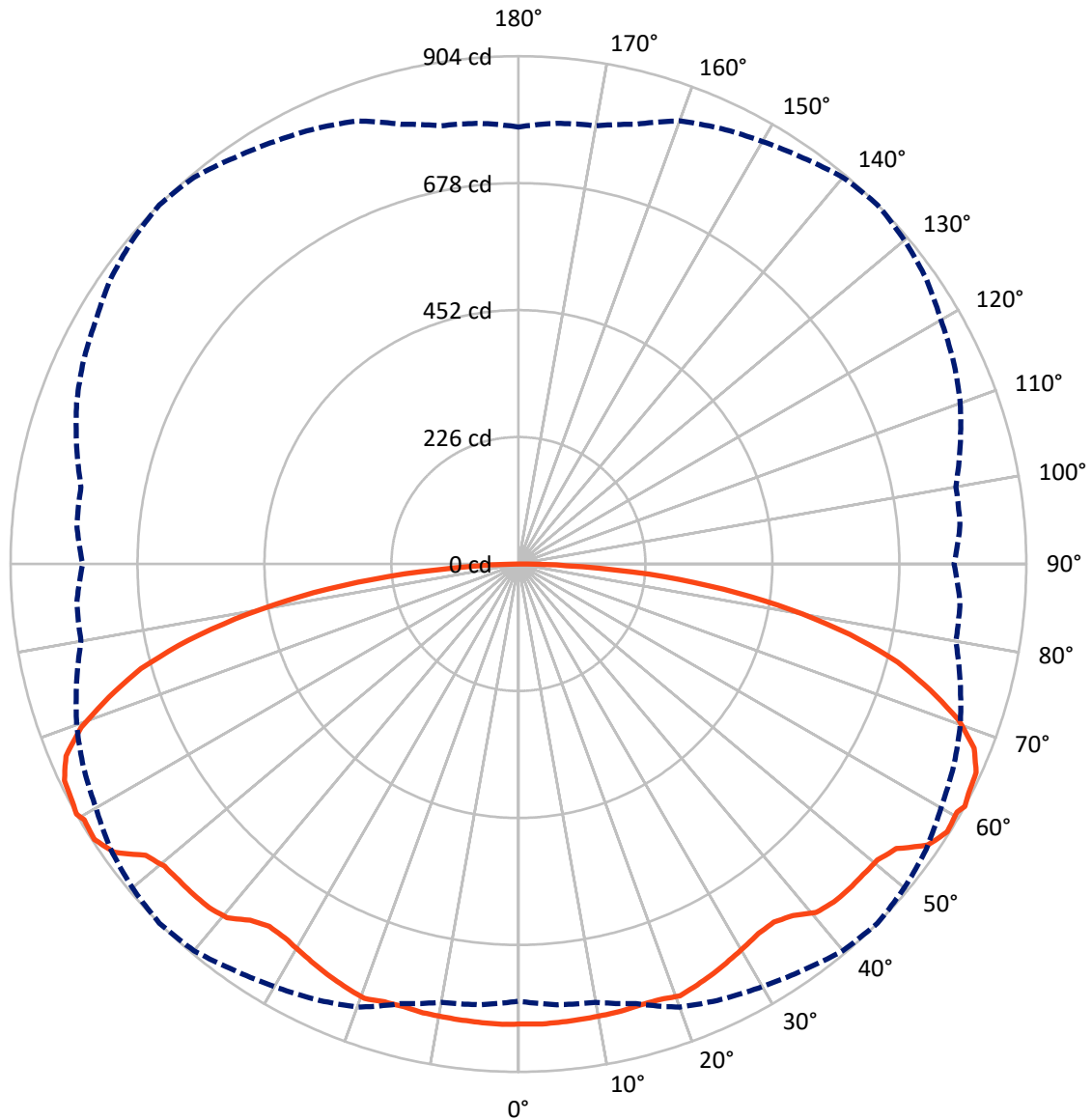
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.2 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 61-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2112.5 | 0.0 | 2112.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 2112.5 | 0.0 | 2112.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 4225.0 | 0.0 | 4225.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 78.1 | 1.8 |
| 10°-20° | 230.9 | 5.5 |
| 20°-30° | 371.5 | 8.8 |
| 30°-40° | 492.1 | 11.6 |
| 40°-50° | 621.4 | 14.7 |
| 50°-60° | 744.6 | 17.6 |
| 60°-70° | 814.2 | 19.3 |
| 70°-80° | 651.8 | 15.4 |
| 80°-90° | 220.5 | 5.2 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 4225.0 | 100.0 |
| 0°-180° | 4225.0 | 100.0 |



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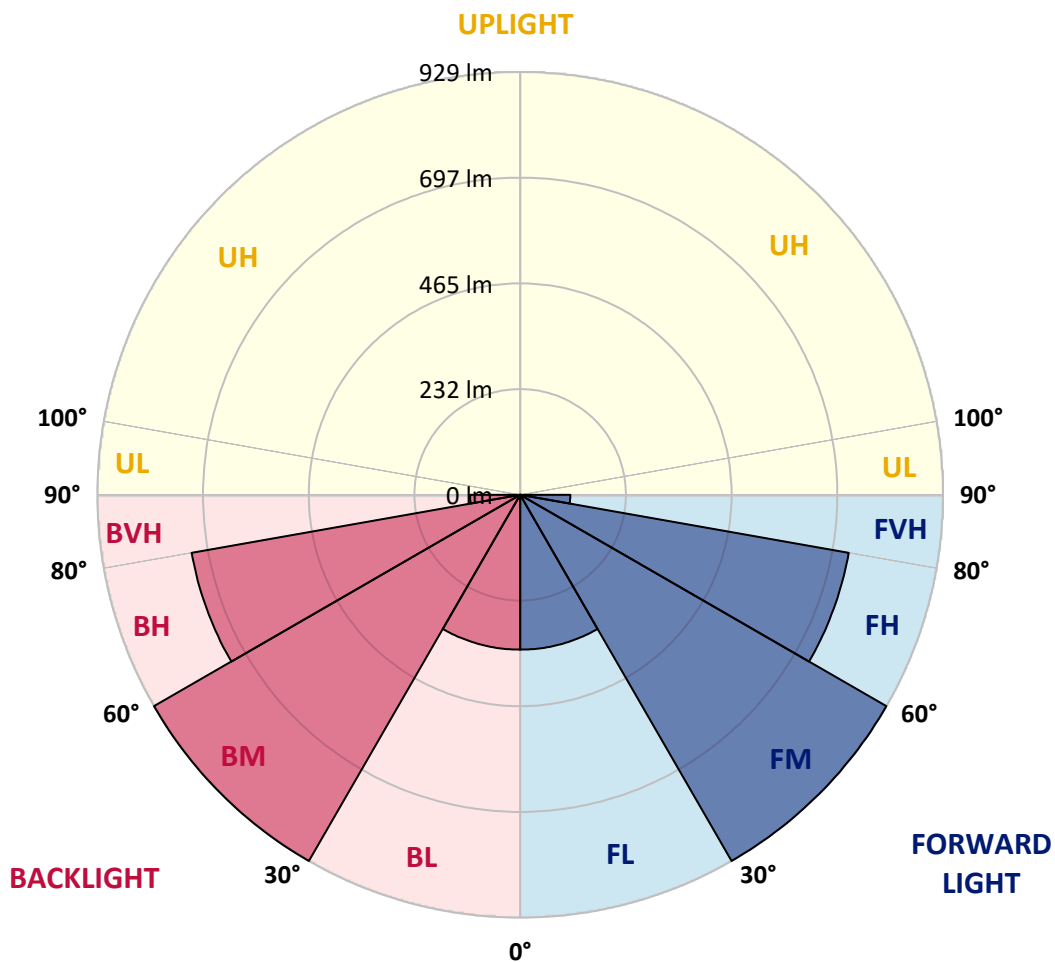
CATALOG NUMBER: TT-C2-LED-E1-5MQ-PM-CG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 340.2 | 8.1 | | | |
| FM (30°-60°) | 929.1 | 22.0 | | | |
| FH (60°-80°) | 733.0 | 17.3 | | | G1/1800 |
| FVH (80°-90°) | 110.3 | 2.6 | | | G2/225 |
| BL (0°-30°) | 340.2 | 8.1 | B1/500 | | |
| BM (30°-60°) | 929.1 | 22.0 | B1/1000 | | |
| BH (60°-80°) | 733.0 | 17.3 | B2/1000 | | G1/1800 |
| BVH (80°-90°) | 110.3 | 2.6 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 |
| 2.5° | 819.3 | 818.5 | 819.3 | 819.3 | 819.3 | 819.3 | 819.3 | 819.3 | 819.3 | 819.3 | 819.3 |
| 5° | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 |
| 7.5° | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 818.5 | 817.7 | 818.5 |
| 10° | 816.2 | 816.2 | 816.2 | 816.2 | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 | 816.9 |
| 12.5° | 814.6 | 814.6 | 814.6 | 814.6 | 815.4 | 815.4 | 815.4 | 815.4 | 816.2 | 816.2 | 815.4 |
| 15° | 813.0 | 812.2 | 812.2 | 813.0 | 813.0 | 813.8 | 813.8 | 813.8 | 814.6 | 813.8 | 813.8 |
| 17.5° | 811.5 | 810.7 | 811.5 | 812.2 | 812.2 | 813.0 | 813.8 | 813.8 | 814.6 | 814.6 | 814.6 |
| 20° | 813.8 | 813.0 | 813.8 | 814.6 | 815.4 | 816.9 | 817.7 | 818.5 | 819.3 | 820.1 | 820.1 |
| 22.5° | 809.1 | 808.3 | 809.1 | 809.1 | 809.9 | 810.7 | 812.2 | 813.0 | 813.8 | 813.8 | 813.8 |
| 25° | 802.1 | 802.1 | 802.8 | 802.8 | 803.6 | 804.4 | 805.2 | 806.0 | 806.0 | 806.8 | 806.0 |
| 27.5° | 794.2 | 794.2 | 795.0 | 795.0 | 796.6 | 796.6 | 797.4 | 798.1 | 798.9 | 798.9 | 798.9 |
| 30° | 784.8 | 784.8 | 785.5 | 786.3 | 787.9 | 788.7 | 789.5 | 790.3 | 791.1 | 791.1 | 791.1 |
| 32.5° | 776.1 | 775.3 | 776.1 | 777.7 | 780.0 | 781.6 | 783.2 | 784.0 | 784.0 | 784.0 | 784.8 |
| 35° | 769.0 | 769.8 | 771.4 | 772.9 | 776.1 | 777.7 | 779.2 | 781.6 | 782.4 | 782.4 | 782.4 |
| 37.5° | 770.6 | 771.4 | 773.7 | 776.9 | 780.8 | 785.5 | 788.7 | 791.8 | 794.2 | 793.4 | 792.6 |
| 40° | 780.8 | 782.4 | 786.3 | 791.1 | 797.4 | 803.6 | 808.3 | 812.2 | 814.6 | 815.4 | 814.6 |
| 42.5° | 782.4 | 784.0 | 787.1 | 794.2 | 801.3 | 808.3 | 814.6 | 818.5 | 821.7 | 822.5 | 821.7 |
| 45° | 781.6 | 781.6 | 786.3 | 794.2 | 801.3 | 808.3 | 816.2 | 821.7 | 824.8 | 824.8 | 824.8 |
| 47.5° | 776.1 | 778.5 | 781.6 | 789.5 | 798.9 | 806.0 | 813.8 | 819.3 | 823.2 | 825.6 | 823.2 |
| 50° | 776.1 | 776.1 | 781.6 | 787.1 | 795.8 | 808.3 | 819.3 | 824.8 | 828.8 | 828.0 | 828.8 |
| 52.5° | 774.5 | 779.2 | 782.4 | 790.3 | 806.0 | 818.5 | 827.2 | 835.1 | 840.6 | 841.4 | 839.8 |
| 55° | 788.7 | 789.5 | 796.6 | 811.5 | 826.4 | 840.6 | 856.3 | 868.1 | 877.6 | 883.1 | 875.2 |
| 57.5° | 799.7 | 795.8 | 809.9 | 822.5 | 839.8 | 861.1 | 884.7 | 894.1 | 901.2 | 899.6 | 902.0 |
| 60° | 784.8 | 790.3 | 800.5 | 813.8 | 841.4 | 862.6 | 875.2 | 885.5 | 894.1 | 896.5 | 893.3 |
| 61° | 777.7 | 787.1 | 791.8 | 809.9 | 839.0 | 854.8 | 868.1 | 882.3 | 898.1 | 903.6 | 896.5 |
| 62.5° | 765.9 | 780.8 | 779.2 | 808.3 | 826.4 | 844.5 | 869.7 | 886.3 | 897.3 | 898.9 | 897.3 |
| 65° | 766.6 | 764.3 | 782.4 | 803.6 | 821.7 | 854.0 | 875.2 | 885.5 | 891.8 | 894.9 | 893.3 |
| 67.5° | 741.4 | 733.6 | 755.6 | 770.6 | 801.3 | 826.4 | 846.9 | 861.8 | 871.3 | 874.4 | 870.5 |
| 70° | 683.2 | 688.7 | 704.4 | 727.3 | 752.5 | 783.2 | 802.1 | 821.7 | 829.5 | 830.3 | 830.3 |
| 72.5° | 627.3 | 630.5 | 646.2 | 667.4 | 696.5 | 723.3 | 742.2 | 758.0 | 765.1 | 765.9 | 767.4 |
| 75° | 553.3 | 556.4 | 574.6 | 594.3 | 623.4 | 646.2 | 659.6 | 678.4 | 688.7 | 697.3 | 690.2 |
| 77.5° | 467.5 | 473.1 | 487.2 | 508.5 | 535.2 | 547.8 | 571.4 | 593.5 | 600.6 | 602.9 | 600.6 |
| 80° | 370.7 | 377.8 | 390.4 | 418.7 | 430.5 | 451.0 | 473.8 | 483.3 | 489.6 | 491.2 | 492.0 |
| 82.5° | 266.8 | 272.3 | 285.7 | 305.4 | 318.8 | 335.3 | 351.1 | 362.9 | 369.9 | 368.3 | 367.6 |
| 85° | 157.4 | 159.0 | 173.2 | 186.6 | 196.8 | 207.0 | 219.6 | 228.2 | 229.8 | 232.9 | 232.1 |
| 87.5° | 47.3 | 48.0 | 54.3 | 61.4 | 66.2 | 70.9 | 78.7 | 88.9 | 91.3 | 85.0 | 85.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 |
| 2.5° | 819.3 | 819.3 | 819.3 | 819.3 | 819.3 | 819.3 | 818.5 | 819.3 |
| 5° | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 | 818.5 |
| 7.5° | 818.5 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 | 817.7 |
| 10° | 816.9 | 816.9 | 816.9 | 816.9 | 816.2 | 816.2 | 816.2 | 816.2 |
| 12.5° | 815.4 | 815.4 | 815.4 | 815.4 | 814.6 | 814.6 | 814.6 | 814.6 |
| 15° | 813.8 | 813.8 | 813.8 | 813.8 | 813.0 | 813.0 | 813.0 | 813.0 |
| 17.5° | 814.6 | 813.8 | 813.0 | 813.0 | 812.2 | 811.5 | 811.5 | 811.5 |
| 20° | 819.3 | 818.5 | 816.9 | 815.4 | 814.6 | 813.8 | 813.8 | 813.8 |
| 22.5° | 813.0 | 812.2 | 810.7 | 809.9 | 809.9 | 809.1 | 808.3 | 808.3 |
| 25° | 806.0 | 804.4 | 804.4 | 803.6 | 803.6 | 802.1 | 802.1 | 801.3 |
| 27.5° | 798.1 | 797.4 | 796.6 | 795.8 | 795.8 | 795.0 | 794.2 | 793.4 |
| 30° | 791.1 | 789.5 | 787.9 | 787.1 | 786.3 | 785.5 | 785.5 | 785.5 |
| 32.5° | 784.0 | 782.4 | 781.6 | 779.2 | 777.7 | 776.9 | 776.1 | 776.1 |
| 35° | 781.6 | 779.2 | 777.7 | 775.3 | 772.9 | 771.4 | 770.6 | 769.0 |
| 37.5° | 791.1 | 787.9 | 785.5 | 781.6 | 776.1 | 773.7 | 771.4 | 770.6 |
| 40° | 811.5 | 808.3 | 803.6 | 797.4 | 791.1 | 786.3 | 782.4 | 780.8 |
| 42.5° | 818.5 | 814.6 | 808.3 | 802.1 | 794.2 | 787.1 | 784.0 | 782.4 |
| 45° | 820.9 | 816.9 | 808.3 | 800.5 | 793.4 | 787.1 | 782.4 | 780.8 |
| 47.5° | 818.5 | 813.0 | 805.2 | 798.9 | 788.7 | 780.8 | 777.7 | 775.3 |
| 50° | 824.0 | 819.3 | 809.1 | 795.0 | 786.3 | 781.6 | 776.1 | 775.3 |
| 52.5° | 835.1 | 826.4 | 816.9 | 806.8 | 790.3 | 780.8 | 777.7 | 773.7 |
| 55° | 868.1 | 856.3 | 839.8 | 823.2 | 813.0 | 798.1 | 788.7 | 788.7 |
| 57.5° | 893.3 | 883.9 | 862.6 | 840.6 | 821.7 | 810.7 | 796.6 | 797.4 |
| 60° | 886.3 | 873.7 | 863.4 | 841.4 | 814.6 | 799.7 | 794.2 | 784.0 |
| 61° | 885.5 | 868.1 | 854.0 | 836.6 | 813.8 | 790.3 | 788.7 | 775.3 |
| 62.5° | 887.0 | 871.3 | 844.5 | 826.4 | 809.1 | 778.5 | 777.7 | 765.1 |
| 65° | 885.5 | 870.5 | 857.1 | 823.2 | 799.7 | 787.1 | 760.3 | 770.6 |
| 67.5° | 861.1 | 847.7 | 823.2 | 804.4 | 768.2 | 752.5 | 737.5 | 737.5 |
| 70° | 822.5 | 802.8 | 779.2 | 755.6 | 731.2 | 704.4 | 691.0 | 683.2 |
| 72.5° | 758.0 | 741.4 | 722.5 | 697.3 | 667.4 | 643.1 | 630.5 | 625.0 |
| 75° | 676.9 | 658.8 | 642.3 | 623.4 | 591.9 | 571.4 | 558.0 | 554.1 |
| 77.5° | 591.9 | 576.1 | 547.0 | 528.9 | 507.7 | 484.1 | 472.3 | 467.5 |
| 80° | 483.3 | 474.6 | 454.2 | 425.0 | 414.8 | 385.6 | 377.8 | 370.7 |
| 82.5° | 362.9 | 353.4 | 334.5 | 314.1 | 301.5 | 284.9 | 270.7 | 269.2 |
| 85° | 228.2 | 221.9 | 210.2 | 195.2 | 179.5 | 170.0 | 157.4 | 160.6 |
| 87.5° | 85.0 | 81.0 | 74.0 | 64.6 | 57.5 | 51.2 | 44.9 | 47.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)