

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: INVUE

Report Number: P140298

Luminaire Tested: **EMM-E01-LED-E1-5MQ-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140298
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33686)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: EMM-E01-LED-E1-5MQ-8030
Description: EPIC MODERN MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (21) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2577.3 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B2 - U0 - G1

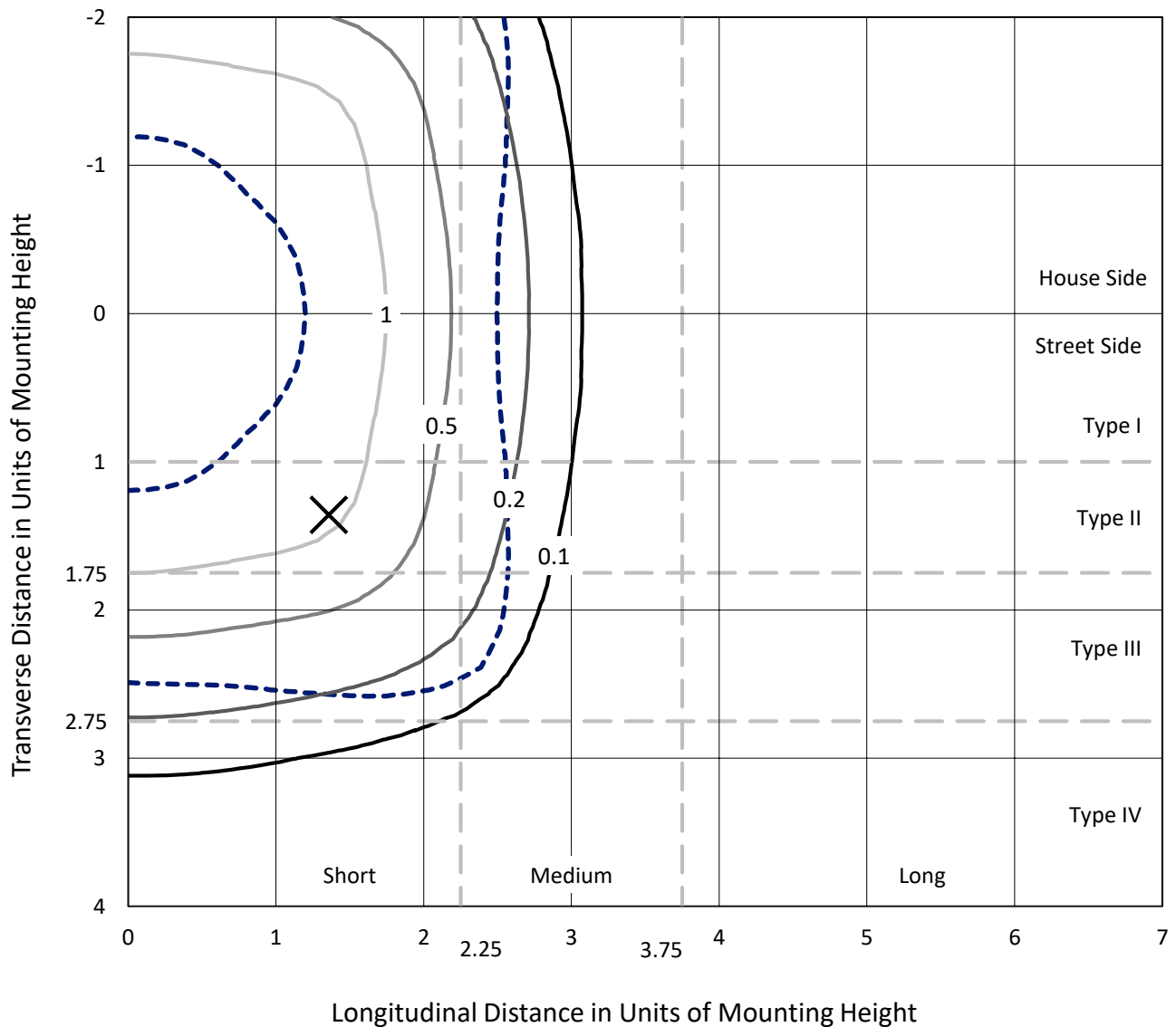
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

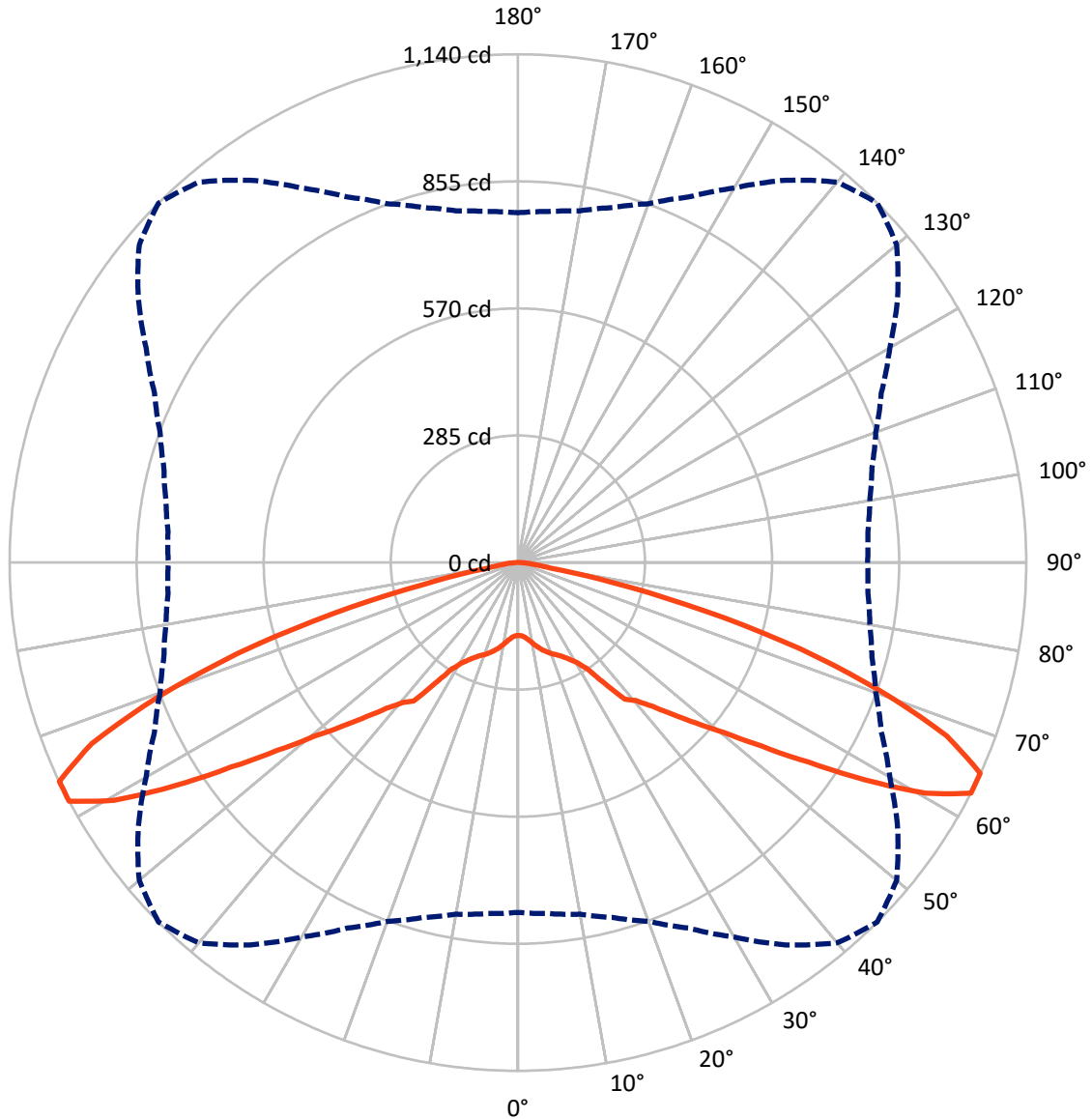
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.9 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1288.7 | 0.0 | 1288.7 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 1288.7 | 0.0 | 1288.7 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 2577.3 | 0.0 | 2577.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 16.6 | 0.6 |
| 10°-20° | 57.9 | 2.2 |
| 20°-30° | 111.2 | 4.3 |
| 30°-40° | 214.0 | 8.3 |
| 40°-50° | 372.5 | 14.5 |
| 50°-60° | 669.0 | 26.0 |
| 60°-70° | 820.1 | 31.8 |
| 70°-80° | 289.2 | 11.2 |
| 80°-90° | 26.7 | 1.0 |
| 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° | 2577.3 | 100.0 |
| 0°-180° | 2577.3 | 100.0 |



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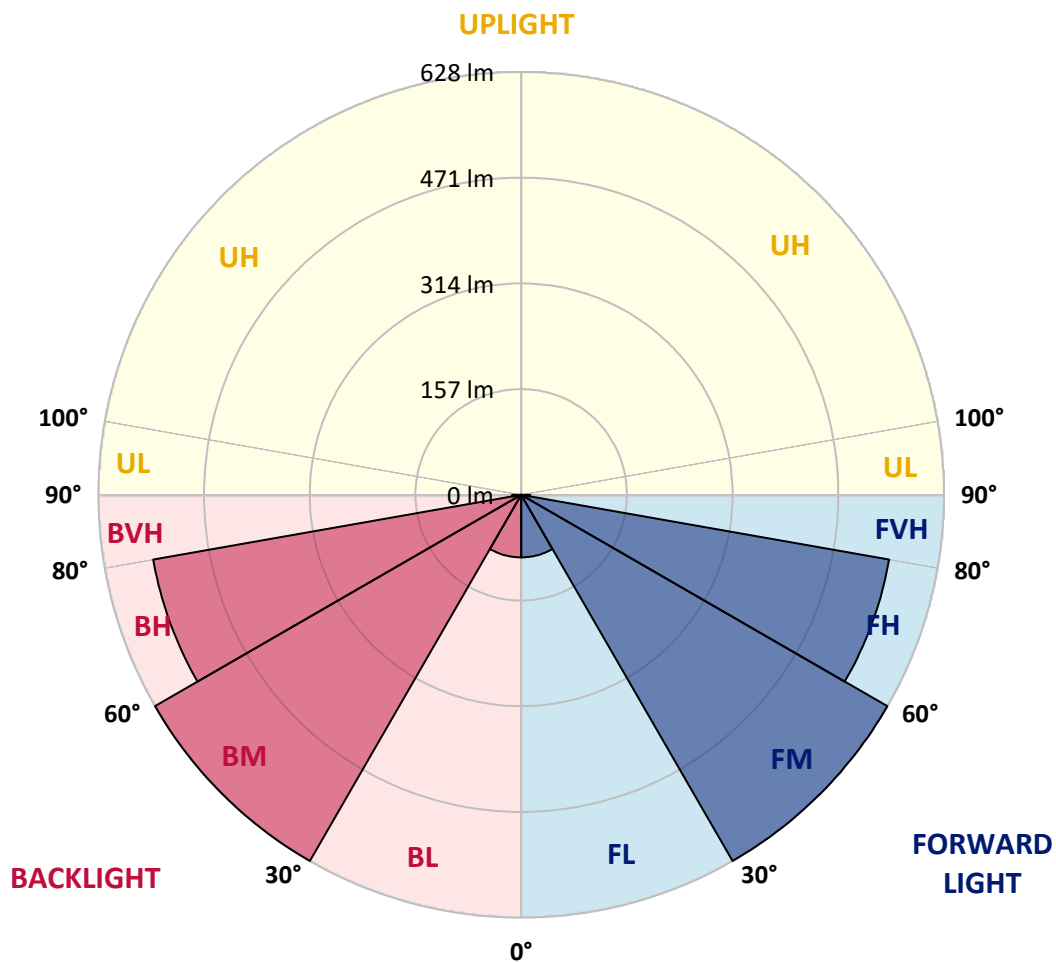
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|--------|
| | | | | B | U | G |
| FL | (0°-30°) | 92.9 | 3.6 | | | |
| FM | (30°-60°) | 627.7 | 24.4 | | | |
| FH | (60°-80°) | 554.7 | 21.5 | | | G0/660 |
| FVH | (80°-90°) | 13.4 | 0.5 | | | G1/100 |
| BL | (0°-30°) | 92.9 | 3.6 | B0/110 | | |
| BM | (30°-60°) | 627.7 | 24.4 | B1/1000 | | |
| BH | (60°-80°) | 554.7 | 21.5 | B2/1000 | | G0/660 |
| BVH | (80°-90°) | 13.4 | 0.5 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| 0° | 163.5 | 163.5 | 163.5 | 163.5 | 163.5 | 163.5 | 163.5 | 163.5 | 163.5 | 163.5 | 163.5 |
| 2.5° | 165.4 | 165.4 | 165.1 | 164.9 | 164.9 | 164.9 | 164.6 | 164.6 | 164.9 | 164.3 | 164.3 |
| 5° | 169.6 | 169.9 | 169.6 | 169.4 | 169.1 | 169.1 | 168.8 | 168.8 | 169.1 | 168.5 | 168.2 |
| 7.5° | 177.5 | 177.8 | 177.2 | 177.0 | 176.7 | 176.4 | 176.1 | 175.8 | 176.1 | 175.3 | 175.3 |
| 10° | 187.6 | 187.6 | 187.6 | 186.5 | 186.5 | 185.7 | 185.4 | 184.8 | 185.1 | 184.3 | 184.3 |
| 12.5° | 197.8 | 197.8 | 197.5 | 196.9 | 196.6 | 196.1 | 195.5 | 195.5 | 195.0 | 193.8 | 193.3 |
| 15° | 206.8 | 207.1 | 206.8 | 205.9 | 205.7 | 204.8 | 204.8 | 204.2 | 203.4 | 202.8 | 202.3 |
| 17.5° | 215.2 | 215.5 | 214.7 | 214.4 | 213.5 | 213.0 | 212.4 | 212.1 | 211.6 | 210.7 | 210.4 |
| 20° | 223.4 | 223.1 | 222.3 | 221.1 | 220.6 | 220.0 | 219.4 | 219.2 | 218.9 | 218.3 | 218.3 |
| 22.5° | 231.3 | 231.3 | 230.4 | 228.7 | 227.6 | 227.0 | 226.2 | 225.6 | 225.1 | 224.8 | 225.3 |
| 25° | 243.1 | 242.8 | 241.1 | 239.4 | 237.4 | 235.8 | 234.6 | 234.3 | 233.8 | 233.8 | 234.1 |
| 27.5° | 258.3 | 257.7 | 255.2 | 252.9 | 250.7 | 248.4 | 247.0 | 245.9 | 245.6 | 245.3 | 245.3 |
| 30° | 277.4 | 276.5 | 274.3 | 271.5 | 269.0 | 266.1 | 263.3 | 262.5 | 261.1 | 259.9 | 261.9 |
| 32.5° | 314.0 | 314.5 | 310.0 | 304.4 | 298.8 | 293.4 | 288.6 | 285.0 | 282.7 | 283.0 | 283.0 |
| 35° | 354.2 | 354.5 | 352.5 | 350.3 | 348.6 | 345.5 | 340.1 | 335.6 | 332.3 | 328.6 | 330.3 |
| 37.5° | 371.6 | 371.9 | 370.2 | 369.9 | 371.1 | 373.0 | 378.4 | 382.3 | 388.2 | 389.1 | 387.4 |
| 40° | 402.3 | 400.9 | 398.6 | 398.1 | 397.2 | 400.1 | 402.3 | 404.3 | 405.1 | 406.8 | 405.1 |
| 42.5° | 434.4 | 433.8 | 432.1 | 430.2 | 430.2 | 430.7 | 434.4 | 437.5 | 439.4 | 439.7 | 439.4 |
| 45° | 470.4 | 469.5 | 468.1 | 467.9 | 468.7 | 471.2 | 473.8 | 477.7 | 483.9 | 484.2 | 483.9 |
| 47.5° | 510.1 | 510.6 | 508.4 | 509.2 | 510.6 | 514.8 | 521.9 | 528.3 | 535.1 | 537.6 | 534.5 |
| 50° | 564.3 | 562.4 | 562.4 | 561.5 | 565.2 | 571.4 | 579.8 | 587.4 | 597.0 | 599.2 | 594.5 |
| 52.5° | 638.1 | 633.8 | 634.7 | 632.4 | 634.4 | 640.0 | 653.8 | 665.6 | 677.7 | 683.6 | 674.3 |
| 55° | 726.7 | 719.6 | 720.5 | 722.7 | 724.4 | 734.0 | 751.4 | 764.9 | 787.7 | 789.7 | 779.0 |
| 57.5° | 799.3 | 797.3 | 798.4 | 803.8 | 814.5 | 831.0 | 853.0 | 885.6 | 913.8 | 920.5 | 909.0 |
| 60° | 825.7 | 827.1 | 835.0 | 849.1 | 869.3 | 898.9 | 941.6 | 992.5 | 1037.3 | 1050.8 | 1033.3 |
| 62.5° | 784.6 | 790.3 | 800.9 | 824.3 | 856.4 | 904.5 | 970.0 | 1046.8 | 1113.8 | 1140.0 | 1108.7 |
| 65° | 704.5 | 708.1 | 725.6 | 745.5 | 786.9 | 842.0 | 922.5 | 1022.4 | 1104.8 | 1139.4 | 1104.5 |
| 67.5° | 599.2 | 606.3 | 621.5 | 646.2 | 681.9 | 737.9 | 822.3 | 924.5 | 1007.2 | 1037.5 | 1006.9 |
| 70° | 481.1 | 484.2 | 493.7 | 513.1 | 550.3 | 599.8 | 672.1 | 763.5 | 844.0 | 863.1 | 838.6 |
| 72.5° | 333.7 | 339.8 | 348.0 | 365.7 | 389.1 | 431.0 | 490.6 | 557.9 | 622.6 | 662.3 | 626.2 |
| 75° | 143.8 | 135.6 | 153.6 | 171.3 | 200.0 | 238.8 | 285.6 | 340.7 | 404.8 | 431.3 | 395.8 |
| 77.5° | 43.0 | 42.8 | 45.6 | 50.6 | 60.8 | 80.5 | 112.8 | 149.9 | 199.5 | 216.6 | 186.0 |
| 80° | 35.2 | 36.3 | 37.4 | 38.5 | 39.7 | 41.1 | 43.6 | 50.9 | 62.5 | 73.7 | 59.9 |
| 82.5° | 29.8 | 31.2 | 34.3 | 36.0 | 36.9 | 37.1 | 37.1 | 36.9 | 35.4 | 34.9 | 34.6 |
| 85° | 22.5 | 24.8 | 29.0 | 31.5 | 31.5 | 31.5 | 31.5 | 30.7 | 28.7 | 25.3 | 28.1 |
| 87.5° | 7.6 | 10.1 | 16.9 | 18.0 | 18.6 | 17.2 | 18.0 | 18.3 | 15.2 | 11.5 | 14.6 |
| 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° | 163.5 | 163.5 | 163.5 | 163.5 | 163.5 | 163.5 | 163.5 | 163.5 |
| 2.5° | 164.3 | 164.3 | 164.3 | 164.6 | 164.3 | 164.3 | 164.3 | 164.3 |
| 5° | 168.5 | 168.2 | 168.5 | 168.2 | 168.5 | 168.5 | 168.2 | 168.5 |
| 7.5° | 175.0 | 175.0 | 175.3 | 175.3 | 175.0 | 175.0 | 175.0 | 175.0 |
| 10° | 183.7 | 183.1 | 183.4 | 183.4 | 183.4 | 183.1 | 183.1 | 182.9 |
| 12.5° | 192.7 | 192.1 | 192.1 | 192.1 | 192.1 | 191.9 | 192.1 | 192.1 |
| 15° | 201.2 | 200.6 | 200.0 | 200.0 | 200.3 | 200.6 | 200.6 | 200.3 |
| 17.5° | 209.3 | 208.7 | 207.9 | 207.9 | 207.6 | 208.2 | 208.7 | 208.5 |
| 20° | 217.5 | 217.2 | 215.8 | 215.8 | 215.8 | 216.3 | 216.6 | 217.5 |
| 22.5° | 225.6 | 225.3 | 224.2 | 223.9 | 224.2 | 225.3 | 226.2 | 226.2 |
| 25° | 234.3 | 234.9 | 234.6 | 234.6 | 235.2 | 236.9 | 237.7 | 238.8 |
| 27.5° | 246.7 | 247.9 | 248.1 | 249.3 | 249.5 | 251.5 | 252.9 | 254.6 |
| 30° | 262.8 | 264.7 | 265.9 | 267.8 | 269.2 | 270.4 | 272.3 | 273.7 |
| 32.5° | 285.0 | 289.8 | 295.4 | 301.9 | 304.7 | 309.7 | 312.0 | 312.6 |
| 35° | 336.2 | 341.3 | 346.0 | 348.8 | 347.7 | 349.1 | 349.1 | 350.3 |
| 37.5° | 382.3 | 377.3 | 373.0 | 372.2 | 369.9 | 369.1 | 369.4 | 370.2 |
| 40° | 403.7 | 401.2 | 399.5 | 400.3 | 399.2 | 398.4 | 398.9 | 399.2 |
| 42.5° | 438.3 | 434.4 | 433.0 | 432.7 | 432.1 | 432.7 | 434.1 | 433.5 |
| 45° | 478.8 | 473.8 | 471.8 | 471.5 | 470.7 | 470.4 | 470.9 | 472.1 |
| 47.5° | 527.5 | 521.3 | 515.1 | 513.1 | 513.1 | 511.5 | 512.6 | 510.9 |
| 50° | 587.1 | 577.0 | 570.5 | 566.9 | 564.6 | 562.1 | 564.3 | 560.7 |
| 52.5° | 665.6 | 651.3 | 644.2 | 639.5 | 633.0 | 633.3 | 633.8 | 632.4 |
| 55° | 764.7 | 748.9 | 735.1 | 725.8 | 721.9 | 719.6 | 719.1 | 723.6 |
| 57.5° | 878.6 | 850.7 | 828.8 | 812.5 | 806.3 | 797.9 | 793.9 | 793.9 |
| 60° | 986.9 | 936.3 | 892.7 | 865.4 | 845.1 | 830.8 | 821.2 | 818.4 |
| 62.5° | 1039.8 | 963.0 | 899.1 | 854.1 | 822.0 | 801.5 | 787.7 | 784.1 |
| 65° | 1017.0 | 919.4 | 844.3 | 793.6 | 756.5 | 730.1 | 714.0 | 709.5 |
| 67.5° | 925.3 | 823.2 | 744.1 | 693.2 | 653.2 | 624.6 | 612.5 | 607.4 |
| 70° | 768.3 | 674.6 | 606.0 | 556.2 | 514.6 | 490.4 | 473.8 | 467.0 |
| 72.5° | 552.3 | 481.1 | 418.1 | 375.3 | 337.9 | 325.2 | 302.7 | 300.5 |
| 75° | 326.3 | 264.5 | 212.4 | 179.8 | 146.3 | 128.0 | 117.6 | 106.3 |
| 77.5° | 132.8 | 94.8 | 71.2 | 53.7 | 46.1 | 41.9 | 39.9 | 39.4 |
| 80° | 45.3 | 40.5 | 38.3 | 37.4 | 36.3 | 35.7 | 34.3 | 33.2 |
| 82.5° | 35.7 | 35.4 | 34.3 | 34.0 | 32.9 | 31.2 | 28.4 | 26.7 |
| 85° | 29.8 | 29.3 | 27.9 | 27.6 | 26.7 | 24.5 | 21.4 | 19.4 |
| 87.5° | 16.9 | 15.5 | 14.1 | 14.3 | 13.5 | 11.8 | 8.7 | 6.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)