

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: P140467

Luminaire Tested: **EMM-F01-LED-E1-5WQ-7060**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140467
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33687)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: EMM-F01-LED-E1-5WQ-7060
Description: EPIC MODERN MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (7) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2530.5 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G1

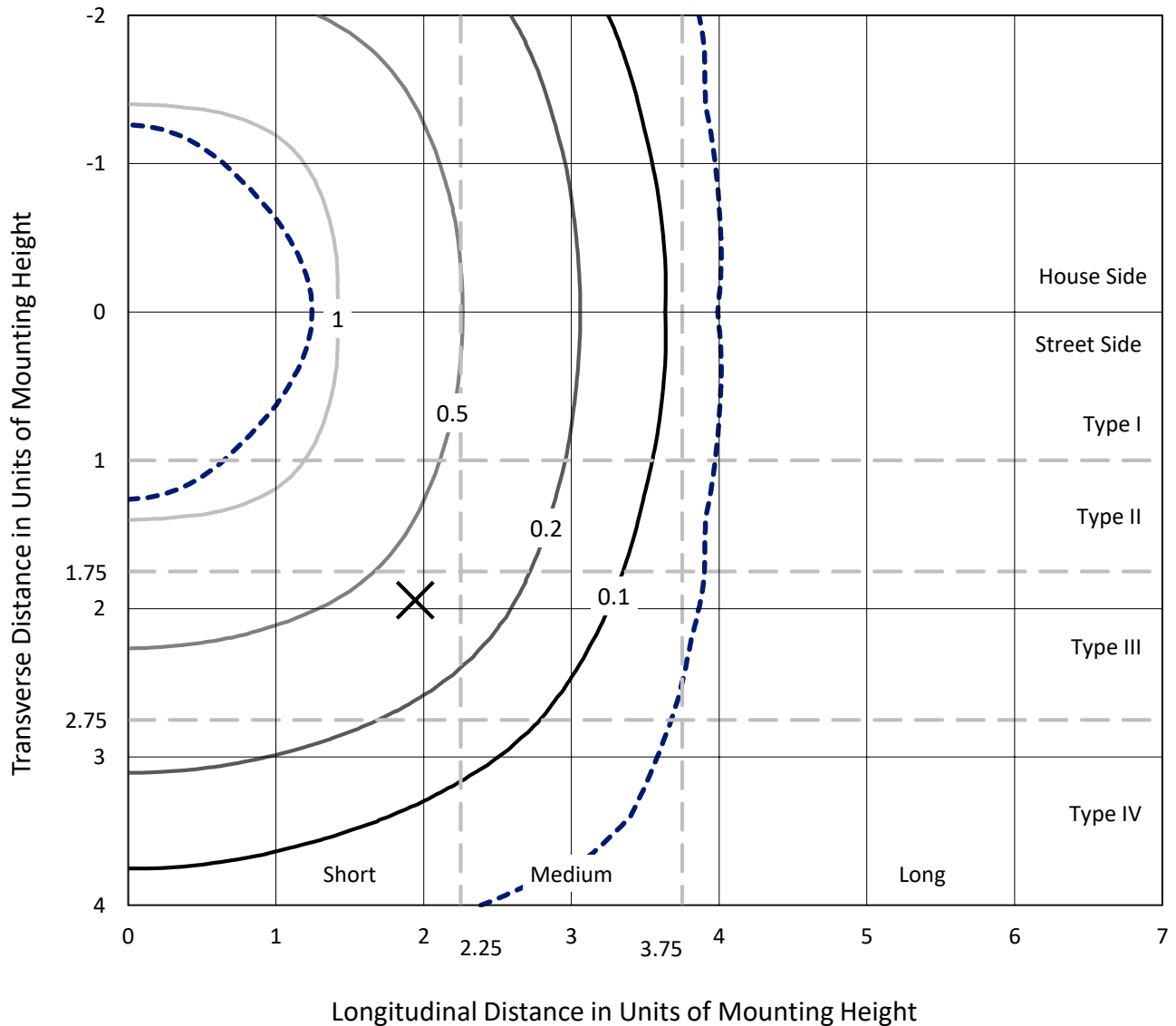
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P140467
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Iso-Footcandle Lines of Horizontal Illumination

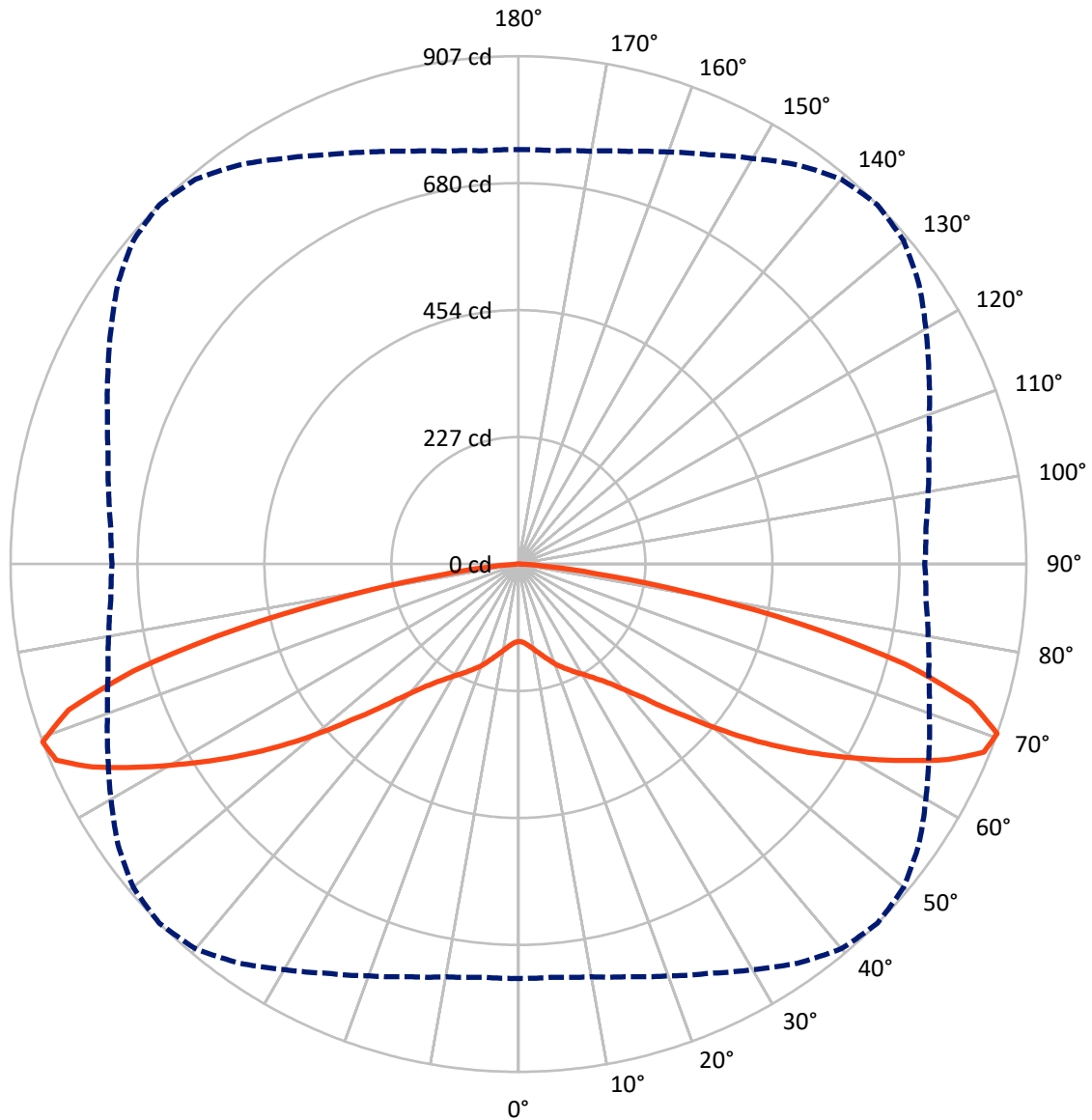
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.6 fc
 Type V - Short - Semi-Cutoff

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CATALOG NUMBER: EMM-F01-LED-E1-5WQ-7060

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1265.3 | 0.0 | 1265.3 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 1265.3 | 0.0 | 1265.3 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 2530.5 | 0.0 | 2530.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 14.0 | 0.6 |
| 10°-20° | 49.0 | 1.9 |
| 20°-30° | 96.3 | 3.8 |
| 30°-40° | 159.3 | 6.3 |
| 40°-50° | 278.9 | 11.0 |
| 50°-60° | 497.4 | 19.7 |
| 60°-70° | 767.9 | 30.3 |
| 70°-80° | 607.9 | 24.0 |
| 80°-90° | 59.8 | 2.4 |
| 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° | 2530.5 | 100.0 |
| 0°-180° | 2530.5 | 100.0 |



REPORT NUMBER: P140467

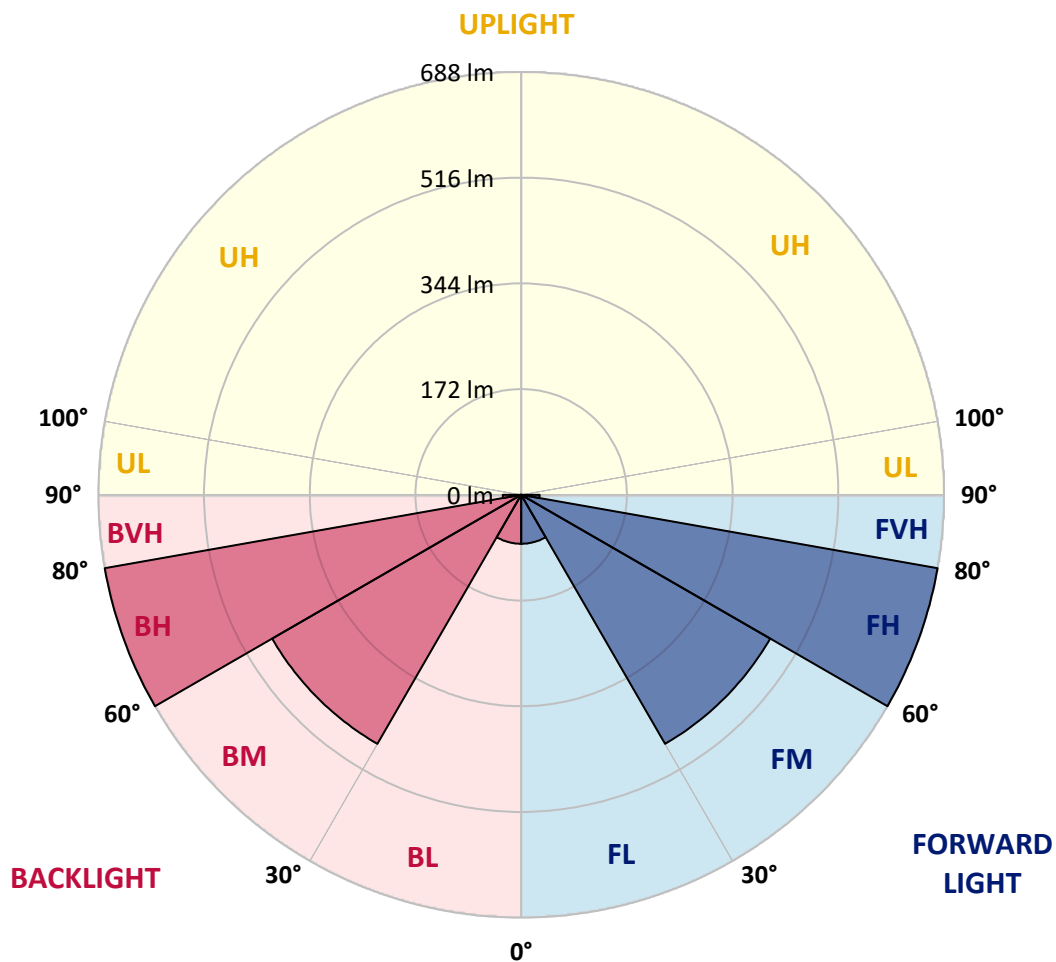
CATALOG NUMBER: EMM-F01-LED-E1-5WQ-7060

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 79.7 | 3.1 | | | |
| FM | (30°-60°) | 467.8 | 18.5 | | | |
| FH | (60°-80°) | 687.9 | 27.2 | | | G1/1800 |
| FVH | (80°-90°) | 29.9 | 1.2 | | | G1/100 |
| BL | (0°-30°) | 79.7 | 3.1 | B0/110 | | |
| BM | (30°-60°) | 467.8 | 18.5 | B1/1000 | | |
| BH | (60°-80°) | 687.9 | 27.2 | B2/1000 | | G1/1800 |
| BVH | (80°-90°) | 29.9 | 1.2 | | | 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





REPORT NUMBER: P140467

CATALOG NUMBER: EMM-F01-LED-E1-5WQ-7060

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 |
| 2.5° | 140.0 | 140.0 | 139.8 | 139.8 | 139.8 | 139.8 | 139.5 | 139.5 | 139.8 | 139.5 | 139.5 |
| 5° | 143.4 | 143.7 | 143.7 | 143.4 | 143.4 | 143.4 | 143.4 | 143.4 | 143.7 | 143.4 | 143.4 |
| 7.5° | 148.5 | 148.8 | 148.8 | 148.5 | 148.5 | 148.5 | 148.5 | 148.5 | 148.8 | 148.8 | 148.2 |
| 10° | 154.7 | 155.0 | 155.0 | 154.7 | 154.7 | 155.0 | 155.0 | 155.0 | 155.3 | 155.3 | 155.0 |
| 12.5° | 162.1 | 162.4 | 162.6 | 162.4 | 162.6 | 162.6 | 162.9 | 163.2 | 163.2 | 163.2 | 162.6 |
| 15° | 170.5 | 171.4 | 170.8 | 170.8 | 171.1 | 171.4 | 171.4 | 172.2 | 172.0 | 171.7 | 171.4 |
| 17.5° | 180.4 | 180.1 | 180.1 | 180.4 | 180.7 | 180.4 | 180.7 | 181.6 | 181.3 | 181.0 | 180.7 |
| 20° | 189.7 | 189.7 | 189.7 | 189.5 | 190.0 | 190.0 | 190.3 | 190.6 | 190.6 | 191.2 | 190.3 |
| 22.5° | 198.8 | 198.8 | 198.5 | 198.5 | 199.1 | 199.1 | 199.6 | 200.2 | 200.2 | 200.2 | 199.6 |
| 25° | 207.3 | 207.3 | 207.5 | 207.3 | 207.5 | 207.8 | 208.4 | 208.9 | 209.2 | 209.2 | 209.2 |
| 27.5° | 214.9 | 215.7 | 215.4 | 215.7 | 216.3 | 216.9 | 217.4 | 218.3 | 218.8 | 219.1 | 218.3 |
| 30° | 224.5 | 224.5 | 224.2 | 224.5 | 225.0 | 225.9 | 227.0 | 228.4 | 228.4 | 228.7 | 228.7 |
| 32.5° | 234.6 | 234.9 | 234.4 | 234.9 | 235.8 | 236.9 | 238.0 | 239.2 | 239.7 | 240.9 | 240.6 |
| 35° | 247.9 | 247.1 | 247.3 | 248.2 | 248.8 | 249.9 | 251.3 | 253.3 | 254.4 | 255.0 | 254.4 |
| 37.5° | 263.2 | 262.9 | 263.4 | 263.4 | 265.4 | 266.5 | 269.1 | 270.8 | 271.6 | 273.0 | 272.5 |
| 40° | 282.4 | 283.5 | 283.8 | 284.6 | 285.7 | 288.0 | 290.8 | 293.7 | 295.3 | 296.5 | 296.8 |
| 42.5° | 308.3 | 308.9 | 307.8 | 310.9 | 314.0 | 315.4 | 318.8 | 322.7 | 325.3 | 326.1 | 326.4 |
| 45° | 340.2 | 340.2 | 341.9 | 343.9 | 347.9 | 350.7 | 354.4 | 360.9 | 363.1 | 366.2 | 366.2 |
| 47.5° | 378.4 | 379.5 | 379.5 | 384.0 | 387.1 | 392.8 | 399.8 | 405.2 | 410.0 | 408.6 | 413.4 |
| 50° | 422.4 | 423.3 | 426.4 | 428.9 | 434.3 | 440.8 | 447.3 | 455.2 | 462.2 | 463.1 | 463.9 |
| 52.5° | 468.4 | 469.6 | 472.1 | 478.0 | 484.5 | 491.9 | 503.7 | 510.5 | 517.3 | 521.0 | 520.4 |
| 55° | 521.2 | 520.7 | 524.9 | 529.4 | 539.0 | 548.9 | 558.8 | 568.4 | 575.4 | 580.5 | 580.2 |
| 57.5° | 576.6 | 578.6 | 583.4 | 589.0 | 597.2 | 605.9 | 617.8 | 627.4 | 639.0 | 642.1 | 637.6 |
| 60° | 641.0 | 639.0 | 643.8 | 652.5 | 659.9 | 671.2 | 681.6 | 694.0 | 702.2 | 705.9 | 704.5 |
| 62.5° | 706.7 | 705.0 | 708.7 | 720.0 | 728.8 | 737.0 | 751.4 | 764.9 | 771.7 | 773.1 | 770.6 |
| 65° | 755.0 | 755.6 | 761.5 | 771.4 | 785.2 | 797.7 | 813.8 | 830.1 | 840.9 | 842.6 | 836.9 |
| 67.5° | 766.3 | 767.5 | 775.6 | 788.3 | 805.6 | 826.2 | 850.2 | 874.5 | 892.8 | 896.8 | 888.6 |
| 70° | 740.3 | 740.9 | 748.8 | 763.2 | 783.0 | 806.7 | 836.6 | 870.2 | 897.1 | 907.2 | 898.2 |
| 72.5° | 687.0 | 689.2 | 695.7 | 707.9 | 723.4 | 746.8 | 775.6 | 805.6 | 832.1 | 845.1 | 845.1 |
| 75° | 590.7 | 595.8 | 598.9 | 602.8 | 616.4 | 635.3 | 658.7 | 682.5 | 705.9 | 713.2 | 692.6 |
| 77.5° | 421.6 | 413.1 | 415.1 | 437.1 | 434.0 | 455.4 | 481.4 | 498.4 | 519.3 | 516.2 | 486.5 |
| 80° | 193.4 | 188.6 | 199.6 | 214.3 | 232.9 | 247.3 | 275.3 | 278.1 | 302.1 | 303.5 | 282.1 |
| 82.5° | 38.7 | 40.7 | 48.6 | 59.9 | 74.5 | 90.6 | 105.3 | 117.7 | 134.1 | 137.2 | 127.3 |
| 85° | 12.1 | 13.3 | 16.7 | 18.4 | 19.2 | 22.0 | 25.1 | 33.9 | 39.0 | 40.4 | 37.8 |
| 87.5° | 2.5 | 4.0 | 6.5 | 7.3 | 7.6 | 7.3 | 7.3 | 7.1 | 5.6 | 4.5 | 5.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P140467

CATALOG NUMBER: EMM-F01-LED-E1-5WQ-7060

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 | 138.4 |
| 2.5° | 139.2 | 139.2 | 139.5 | 139.5 | 139.5 | 139.2 | 138.9 | 139.2 |
| 5° | 143.2 | 143.2 | 143.2 | 143.2 | 142.6 | 142.6 | 142.3 | 142.3 |
| 7.5° | 148.2 | 148.0 | 148.0 | 147.7 | 147.4 | 147.4 | 147.1 | 147.4 |
| 10° | 155.0 | 154.5 | 154.2 | 153.9 | 153.6 | 153.6 | 153.3 | 153.0 |
| 12.5° | 162.4 | 162.1 | 161.8 | 161.2 | 160.9 | 160.4 | 160.4 | 160.4 |
| 15° | 170.8 | 170.5 | 170.3 | 169.4 | 169.4 | 168.6 | 168.9 | 168.9 |
| 17.5° | 180.1 | 179.6 | 178.7 | 178.5 | 178.2 | 177.3 | 177.3 | 177.3 |
| 20° | 189.7 | 188.6 | 188.1 | 187.5 | 187.5 | 186.6 | 186.4 | 186.4 |
| 22.5° | 199.1 | 197.9 | 196.8 | 196.2 | 195.7 | 195.4 | 194.8 | 194.5 |
| 25° | 208.4 | 207.3 | 206.1 | 205.3 | 204.1 | 203.6 | 203.0 | 203.0 |
| 27.5° | 217.7 | 216.6 | 214.9 | 213.7 | 212.6 | 211.5 | 210.9 | 211.2 |
| 30° | 227.3 | 226.2 | 224.5 | 223.1 | 221.7 | 220.5 | 220.0 | 219.7 |
| 32.5° | 239.4 | 238.0 | 236.1 | 234.6 | 232.1 | 231.0 | 230.4 | 230.7 |
| 35° | 253.6 | 251.6 | 250.2 | 247.9 | 245.9 | 244.5 | 243.7 | 243.7 |
| 37.5° | 271.6 | 269.9 | 268.5 | 266.3 | 263.4 | 261.7 | 260.6 | 261.5 |
| 40° | 295.1 | 293.7 | 290.8 | 287.4 | 285.2 | 283.8 | 282.6 | 282.9 |
| 42.5° | 325.0 | 322.2 | 319.6 | 317.7 | 314.3 | 312.3 | 309.2 | 310.3 |
| 45° | 362.8 | 359.7 | 357.2 | 354.1 | 351.0 | 347.0 | 345.9 | 343.6 |
| 47.5° | 408.6 | 406.3 | 400.7 | 397.8 | 393.9 | 388.2 | 385.4 | 383.2 |
| 50° | 459.1 | 454.9 | 450.9 | 443.9 | 439.3 | 432.9 | 430.3 | 429.5 |
| 52.5° | 516.2 | 509.1 | 502.6 | 496.1 | 487.1 | 480.9 | 475.8 | 476.9 |
| 55° | 572.6 | 564.4 | 555.1 | 548.1 | 541.0 | 533.4 | 528.0 | 524.9 |
| 57.5° | 632.2 | 623.2 | 613.3 | 603.1 | 597.2 | 588.2 | 584.8 | 583.1 |
| 60° | 693.5 | 685.3 | 675.4 | 666.1 | 657.9 | 647.4 | 641.8 | 639.5 |
| 62.5° | 761.2 | 749.9 | 738.1 | 726.5 | 717.5 | 709.8 | 703.9 | 700.0 |
| 65° | 823.6 | 808.1 | 796.0 | 781.3 | 771.4 | 760.4 | 753.1 | 751.6 |
| 67.5° | 870.2 | 846.2 | 825.1 | 806.1 | 790.9 | 777.3 | 768.0 | 764.3 |
| 70° | 873.3 | 840.3 | 809.0 | 781.0 | 758.7 | 743.2 | 730.7 | 725.9 |
| 72.5° | 812.9 | 772.0 | 729.6 | 702.2 | 678.5 | 657.0 | 648.3 | 646.3 |
| 75° | 661.3 | 627.1 | 591.8 | 560.8 | 544.4 | 533.7 | 526.3 | 515.6 |
| 77.5° | 459.4 | 428.1 | 409.1 | 374.4 | 368.2 | 359.4 | 352.1 | 345.0 |
| 80° | 257.2 | 229.8 | 208.7 | 186.9 | 173.7 | 166.3 | 158.7 | 154.5 |
| 82.5° | 115.5 | 94.9 | 75.4 | 58.4 | 48.3 | 38.1 | 28.5 | 30.2 |
| 85° | 28.8 | 24.3 | 18.6 | 15.5 | 14.1 | 13.0 | 10.4 | 9.3 |
| 87.5° | 5.4 | 5.1 | 4.5 | 4.5 | 4.8 | 4.0 | 2.3 | 2.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)