

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: P140587

Luminaire Tested: **ECM-F01-LED-E1-5XQ-7060**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140587
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33688)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-F01-LED-E1-5XQ-7060
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (7) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2525.6 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U0 - G1

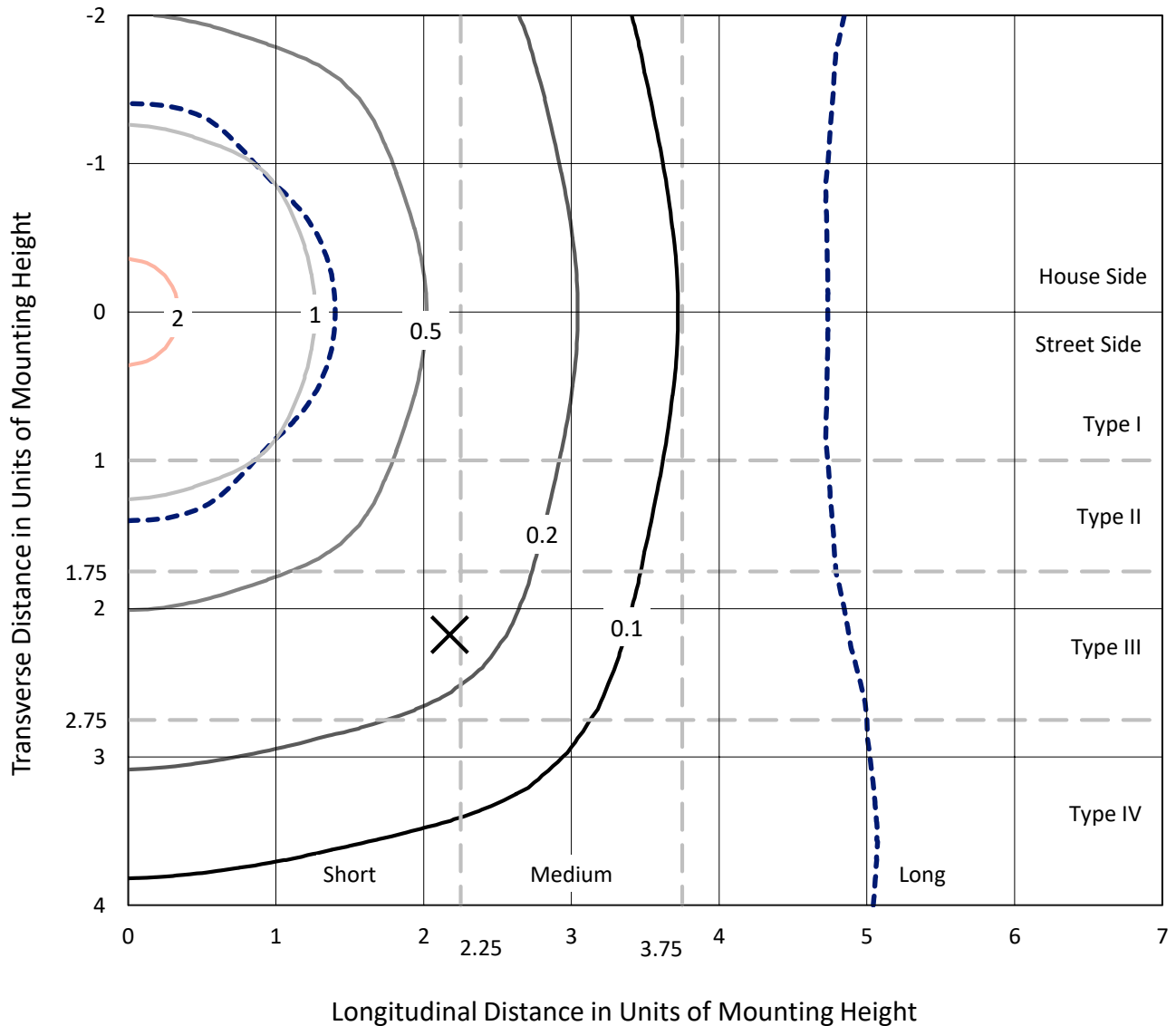
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

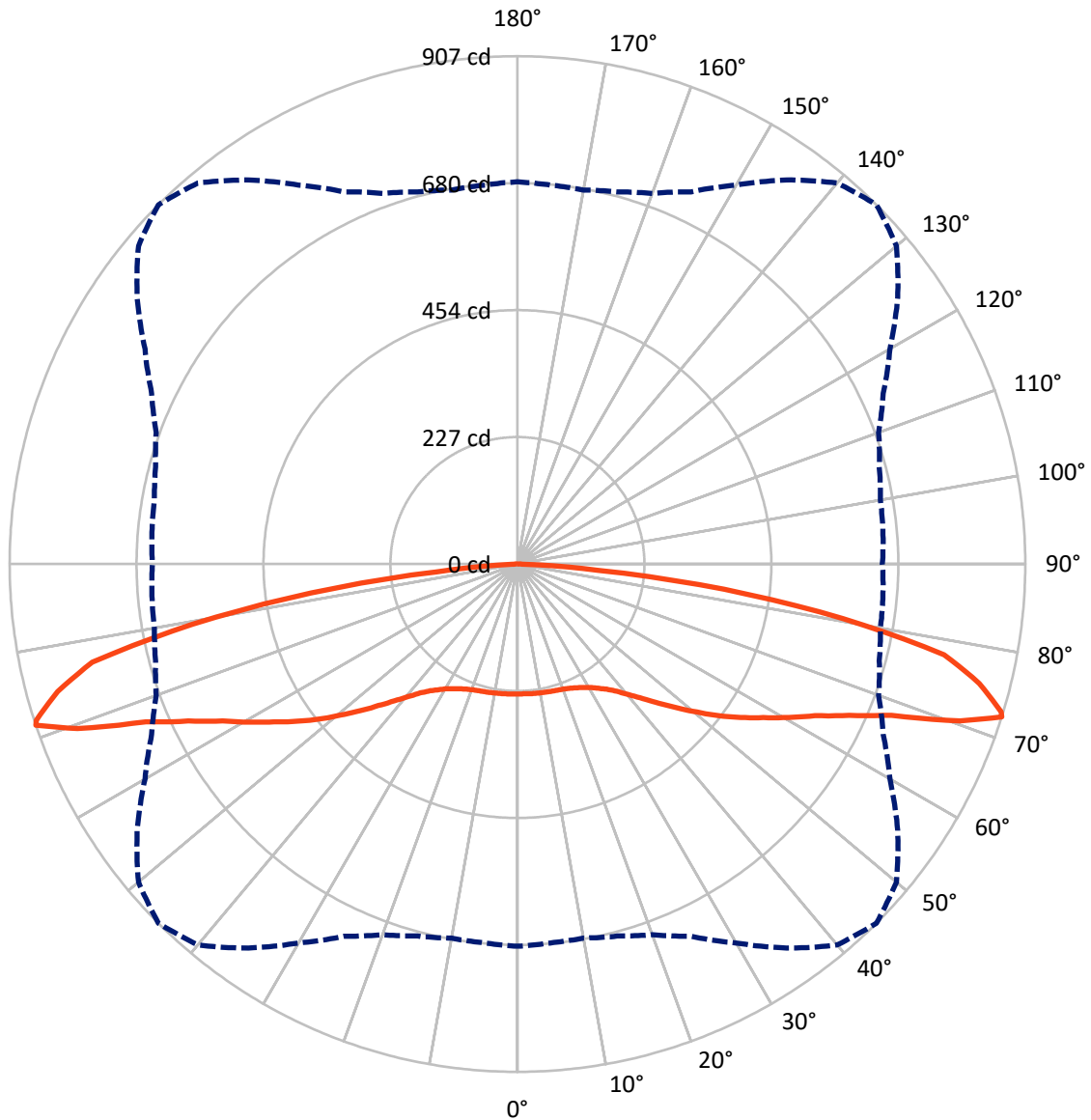
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.3 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1262.8 | 0.0 | 1262.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 1262.8 | 0.0 | 1262.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 2525.6 | 0.0 | 2525.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 22.3 | 0.9 |
| 10°-20° | 67.0 | 2.7 |
| 20°-30° | 113.4 | 4.5 |
| 30°-40° | 172.5 | 6.8 |
| 40°-50° | 273.1 | 10.8 |
| 50°-60° | 418.5 | 16.6 |
| 60°-70° | 614.4 | 24.3 |
| 70°-80° | 696.9 | 27.6 |
| 80°-90° | 147.6 | 5.8 |
| 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° | 2525.6 | 100.0 |
| 0°-180° | 2525.6 | 100.0 |



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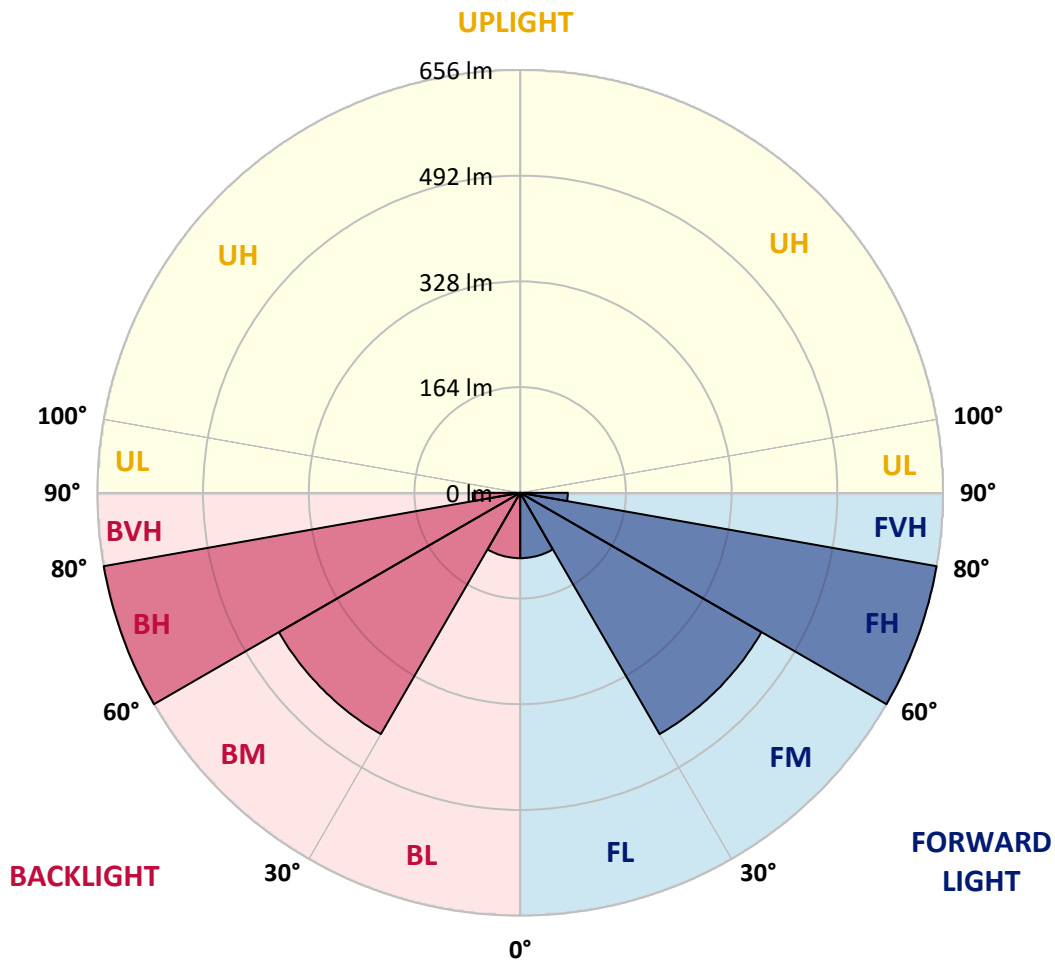
CATALOG NUMBER: ECM-F01-LED-E1-5XQ-7060

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|--------|
| | | | | B | U | G |
| FL | (0°-30°) | 101.3 | 4.0 | | | |
| FM | (30°-60°) | 432.0 | 17.1 | | | |
| FH | (60°-80°) | 655.6 | 26.0 | | | G0/660 |
| FVH | (80°-90°) | 73.8 | 2.9 | | | G1/100 |
| BL | (0°-30°) | 101.3 | 4.0 | B0/110 | | |
| BM | (30°-60°) | 432.0 | 17.1 | B1/1000 | | |
| BH | (60°-80°) | 655.6 | 26.0 | B2/1000 | | G0/660 |
| BVH | (80°-90°) | 73.8 | 2.9 | | | 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° | 232.1 | 232.1 | 232.1 | 232.1 | 232.1 | 232.1 | 232.1 | 232.1 | 232.1 | 232.1 | 232.1 |
| 2.5° | 232.9 | 233.2 | 232.9 | 232.7 | 232.7 | 232.4 | 232.4 | 232.4 | 232.7 | 232.1 | 232.1 |
| 5° | 233.5 | 233.8 | 233.5 | 232.9 | 232.9 | 232.9 | 232.7 | 232.7 | 232.9 | 232.7 | 232.7 |
| 7.5° | 234.4 | 234.6 | 234.4 | 233.8 | 233.8 | 233.5 | 233.2 | 233.2 | 233.8 | 233.2 | 233.2 |
| 10° | 235.2 | 235.8 | 235.2 | 234.6 | 234.6 | 234.4 | 234.1 | 234.1 | 234.4 | 233.8 | 233.8 |
| 12.5° | 236.6 | 236.6 | 236.3 | 236.1 | 236.1 | 235.8 | 235.5 | 235.2 | 234.9 | 234.6 | 234.4 |
| 15° | 237.7 | 238.0 | 237.5 | 237.2 | 236.9 | 236.6 | 236.3 | 236.3 | 235.8 | 235.5 | 235.5 |
| 17.5° | 239.2 | 239.4 | 238.9 | 238.3 | 238.3 | 237.7 | 237.5 | 237.5 | 236.9 | 236.6 | 236.3 |
| 20° | 240.6 | 240.9 | 240.3 | 240.0 | 239.7 | 239.4 | 238.9 | 239.2 | 238.9 | 238.3 | 238.3 |
| 22.5° | 242.3 | 242.3 | 242.0 | 241.7 | 241.7 | 241.4 | 241.1 | 241.7 | 241.1 | 241.1 | 240.9 |
| 25° | 244.0 | 244.2 | 244.0 | 244.0 | 244.2 | 244.2 | 244.5 | 245.1 | 245.1 | 244.8 | 244.5 |
| 27.5° | 247.6 | 247.6 | 247.6 | 247.6 | 248.5 | 248.5 | 248.8 | 249.6 | 249.9 | 249.9 | 249.9 |
| 30° | 252.4 | 252.7 | 252.4 | 252.4 | 253.3 | 253.6 | 254.4 | 255.3 | 255.8 | 255.8 | 256.1 |
| 32.5° | 259.5 | 259.2 | 259.5 | 260.1 | 260.6 | 261.2 | 262.0 | 263.4 | 264.3 | 264.6 | 264.6 |
| 35° | 268.5 | 268.8 | 268.5 | 268.8 | 269.9 | 270.8 | 271.6 | 273.3 | 273.9 | 274.5 | 274.7 |
| 37.5° | 281.8 | 282.6 | 282.1 | 282.1 | 283.5 | 284.1 | 285.2 | 286.6 | 287.7 | 288.3 | 288.0 |
| 40° | 301.0 | 300.7 | 300.1 | 300.4 | 300.7 | 301.3 | 302.4 | 305.2 | 306.6 | 306.6 | 306.6 |
| 42.5° | 323.0 | 323.3 | 322.5 | 322.2 | 322.5 | 323.0 | 324.7 | 327.0 | 329.2 | 328.7 | 328.9 |
| 45° | 348.1 | 346.2 | 346.7 | 346.2 | 346.5 | 348.4 | 351.3 | 352.4 | 354.6 | 354.6 | 355.2 |
| 47.5° | 372.7 | 371.9 | 371.6 | 371.3 | 372.1 | 374.1 | 377.5 | 381.2 | 383.2 | 384.3 | 385.1 |
| 50° | 400.4 | 399.0 | 398.7 | 399.0 | 399.3 | 399.8 | 406.3 | 410.0 | 414.8 | 415.6 | 415.3 |
| 52.5° | 427.2 | 426.1 | 425.5 | 425.5 | 426.6 | 428.6 | 435.4 | 441.3 | 446.7 | 450.1 | 448.7 |
| 55° | 456.3 | 456.3 | 454.6 | 454.0 | 455.7 | 457.7 | 467.0 | 473.8 | 481.4 | 484.0 | 480.0 |
| 57.5° | 486.2 | 485.9 | 483.4 | 482.6 | 484.0 | 489.0 | 497.0 | 507.4 | 515.6 | 517.8 | 515.6 |
| 60° | 515.6 | 515.6 | 514.2 | 513.6 | 515.0 | 521.2 | 530.8 | 542.4 | 552.3 | 556.5 | 552.9 |
| 62.5° | 549.2 | 549.2 | 545.5 | 547.2 | 549.2 | 554.0 | 566.1 | 581.1 | 594.4 | 596.6 | 593.2 |
| 65° | 587.3 | 589.0 | 586.2 | 585.6 | 588.2 | 597.2 | 611.0 | 629.9 | 645.5 | 651.4 | 646.3 |
| 67.5° | 645.5 | 642.9 | 639.5 | 638.1 | 642.1 | 650.6 | 667.5 | 692.3 | 715.2 | 720.9 | 714.9 |
| 70° | 705.9 | 703.4 | 702.2 | 706.7 | 715.2 | 733.0 | 759.0 | 793.7 | 825.6 | 839.2 | 826.7 |
| 72° | 682.7 | 679.4 | 678.5 | 688.1 | 704.5 | 733.6 | 781.6 | 837.5 | 888.3 | 907.2 | 883.8 |
| 72.5° | 670.9 | 668.1 | 667.8 | 676.8 | 694.6 | 724.0 | 771.1 | 828.7 | 883.2 | 903.8 | 878.7 |
| 75° | 622.9 | 620.1 | 622.9 | 633.0 | 650.8 | 682.5 | 730.5 | 784.4 | 833.5 | 852.4 | 827.9 |
| 77.5° | 556.5 | 551.4 | 554.0 | 568.1 | 587.9 | 622.3 | 673.1 | 737.0 | 784.4 | 779.3 | 742.9 |
| 80° | 444.1 | 432.9 | 445.0 | 449.2 | 471.8 | 495.0 | 544.1 | 572.6 | 589.0 | 589.8 | 563.9 |
| 82.5° | 194.0 | 198.5 | 213.7 | 226.5 | 242.5 | 269.4 | 289.1 | 319.9 | 355.8 | 372.4 | 352.4 |
| 85° | 12.7 | 15.8 | 25.1 | 29.9 | 41.5 | 50.5 | 72.6 | 105.6 | 127.3 | 145.7 | 122.8 |
| 87.5° | 2.3 | 3.1 | 5.6 | 6.8 | 7.3 | 8.2 | 8.2 | 11.3 | 11.9 | 9.6 | 10.7 |
| 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° | 232.1 | 232.1 | 232.1 | 232.1 | 232.1 | 232.1 | 232.1 | 232.1 |
| 2.5° | 232.1 | 232.1 | 232.4 | 232.1 | 232.1 | 232.1 | 231.8 | 231.8 |
| 5° | 232.4 | 232.4 | 232.7 | 232.7 | 232.4 | 232.4 | 232.4 | 232.4 |
| 7.5° | 233.2 | 232.9 | 233.2 | 233.2 | 232.9 | 232.9 | 232.7 | 232.9 |
| 10° | 233.5 | 233.5 | 233.8 | 233.8 | 233.5 | 233.5 | 233.5 | 233.5 |
| 12.5° | 234.4 | 234.4 | 234.4 | 234.6 | 234.4 | 234.4 | 234.6 | 234.4 |
| 15° | 235.2 | 234.9 | 234.9 | 234.9 | 234.9 | 235.2 | 235.2 | 235.5 |
| 17.5° | 236.1 | 236.1 | 235.8 | 236.1 | 236.1 | 236.3 | 236.3 | 236.3 |
| 20° | 237.7 | 237.5 | 236.9 | 237.5 | 237.5 | 237.5 | 237.5 | 237.7 |
| 22.5° | 240.3 | 239.7 | 239.2 | 239.2 | 238.9 | 239.2 | 238.9 | 238.9 |
| 25° | 244.0 | 243.1 | 242.3 | 242.0 | 241.7 | 241.4 | 241.1 | 241.4 |
| 27.5° | 249.3 | 248.2 | 247.1 | 246.5 | 246.2 | 245.7 | 245.4 | 245.4 |
| 30° | 255.3 | 254.4 | 252.7 | 252.1 | 251.3 | 250.5 | 250.5 | 250.2 |
| 32.5° | 264.3 | 263.2 | 261.2 | 260.3 | 258.9 | 258.1 | 257.8 | 257.8 |
| 35° | 273.6 | 272.2 | 271.3 | 270.2 | 268.5 | 267.7 | 267.4 | 267.4 |
| 37.5° | 287.7 | 286.0 | 284.9 | 283.5 | 283.2 | 282.1 | 282.1 | 282.1 |
| 40° | 306.1 | 304.7 | 303.3 | 302.1 | 301.3 | 300.4 | 299.3 | 299.3 |
| 42.5° | 328.7 | 326.4 | 325.6 | 324.1 | 323.0 | 322.2 | 321.6 | 321.6 |
| 45° | 353.5 | 351.5 | 350.4 | 348.4 | 348.1 | 347.6 | 346.5 | 346.5 |
| 47.5° | 381.5 | 378.6 | 376.4 | 375.8 | 374.4 | 373.0 | 372.4 | 372.7 |
| 50° | 412.0 | 407.2 | 404.1 | 404.1 | 402.4 | 400.4 | 400.7 | 400.4 |
| 52.5° | 443.3 | 437.9 | 434.0 | 431.2 | 429.2 | 428.9 | 429.2 | 428.9 |
| 55° | 474.9 | 469.3 | 464.5 | 461.4 | 459.4 | 457.4 | 457.1 | 457.1 |
| 57.5° | 507.7 | 500.6 | 493.0 | 490.2 | 488.2 | 487.1 | 487.1 | 487.4 |
| 60° | 544.7 | 533.1 | 523.5 | 519.8 | 518.4 | 519.0 | 518.7 | 519.0 |
| 62.5° | 582.2 | 569.0 | 557.7 | 553.4 | 551.4 | 551.2 | 553.4 | 554.3 |
| 65° | 629.7 | 613.3 | 600.6 | 592.7 | 592.7 | 591.8 | 594.4 | 593.2 |
| 67.5° | 691.5 | 668.3 | 652.8 | 640.1 | 640.4 | 641.2 | 644.9 | 644.6 |
| 70° | 796.8 | 755.9 | 727.1 | 705.3 | 696.9 | 691.2 | 690.1 | 690.1 |
| 72° | 829.3 | 768.3 | 720.9 | 686.7 | 669.2 | 658.5 | 655.4 | 652.0 |
| 72.5° | 820.8 | 758.1 | 710.1 | 674.6 | 656.5 | 645.8 | 641.0 | 636.7 |
| 75° | 767.5 | 697.4 | 645.2 | 607.9 | 587.9 | 574.9 | 572.3 | 570.4 |
| 77.5° | 677.1 | 615.0 | 561.0 | 522.4 | 502.3 | 485.7 | 478.9 | 478.3 |
| 80° | 522.1 | 466.2 | 424.7 | 394.5 | 376.4 | 364.0 | 364.5 | 360.6 |
| 82.5° | 308.1 | 260.9 | 225.3 | 184.9 | 158.4 | 143.2 | 133.6 | 132.4 |
| 85° | 90.6 | 61.6 | 39.2 | 28.2 | 20.3 | 15.2 | 11.3 | 10.2 |
| 87.5° | 8.2 | 6.5 | 5.4 | 4.5 | 4.2 | 3.7 | 2.3 | 1.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)