

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P640952

Luminaire Tested: GWS-SA5E-830-U-SL4-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640952
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-36)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5E-830-U-SL4-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23497 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

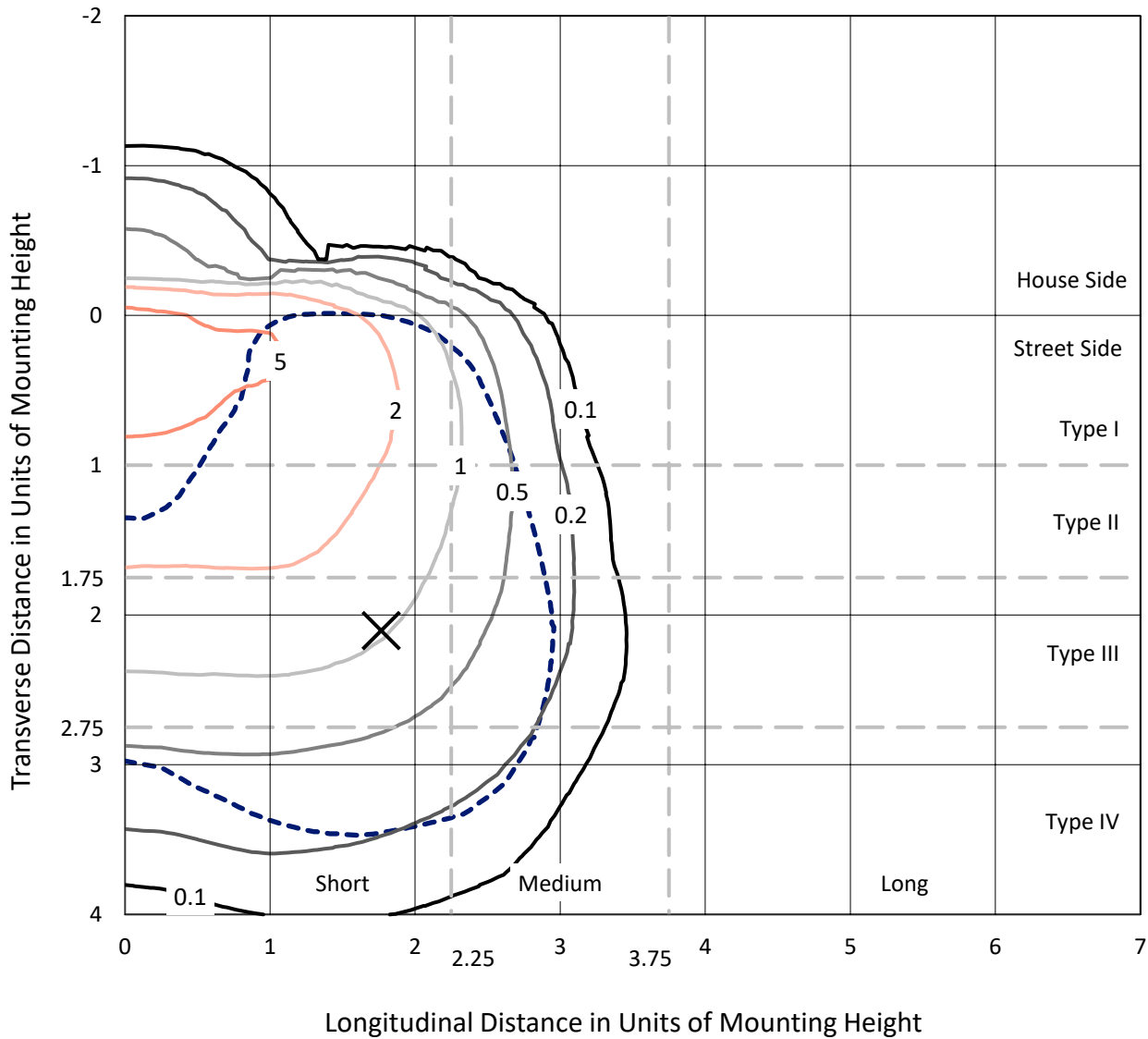
Input Watts (W): 269.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P640952
 CATALOG NUMBER: GWS-SA5E-830-U-SL4-W-HSS

Iso-Footcandle Lines of Horizontal Illumination

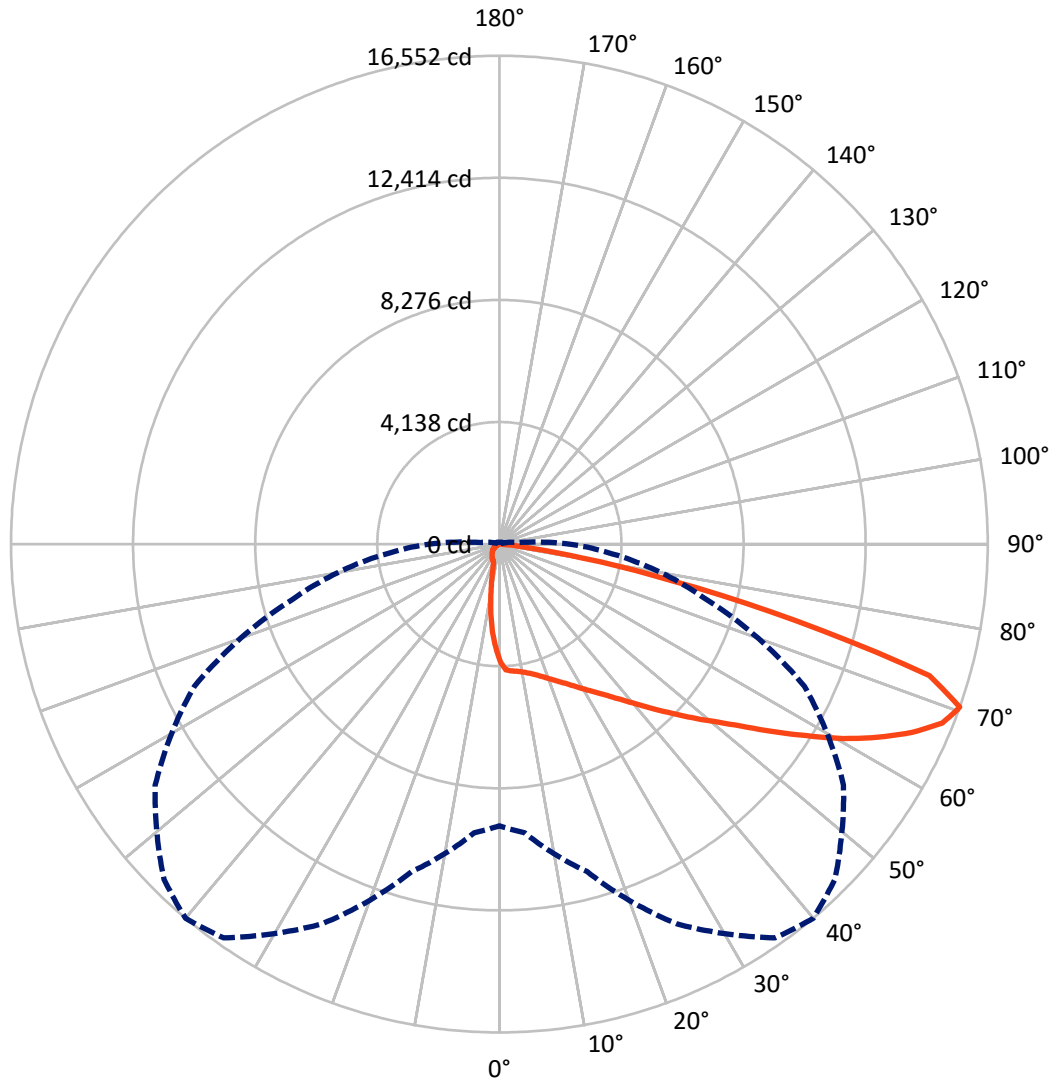
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type IV - Short - N/A

REPORT NUMBER: P640952
CATALOG NUMBER: GWS-SA5E-830-U-SL4-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



REPORT NUMBER: P640952
 CATALOG NUMBER: GWS-SA5E-830-U-SL4-W-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1921.5 | 0.0 | 1921.5 |
| | % Fixture | 8.2 | 0.0 | 8.2 |
| Street Side | Lumens | 21575.5 | 0.0 | 21575.5 |
| | % Fixture | 91.8 | 0.0 | 91.8 |
| Total | Lumens | 23497.0 | 0.0 | 23497.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 337.0 | 1.4 |
| 10°-20° | 854.7 | 3.6 |
| 20°-30° | 1430.5 | 6.1 |
| 30°-40° | 2246.8 | 9.6 |
| 40°-50° | 3553.8 | 15.1 |
| 50°-60° | 5184.1 | 22.1 |
| 60°-70° | 6426.5 | 27.4 |
| 70°-80° | 3251.4 | 13.8 |
| 80°-90° | 212.3 | 0.9 |
| 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° | 23497.0 | 100.0 |
| 0°-180° | 23497.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P640952

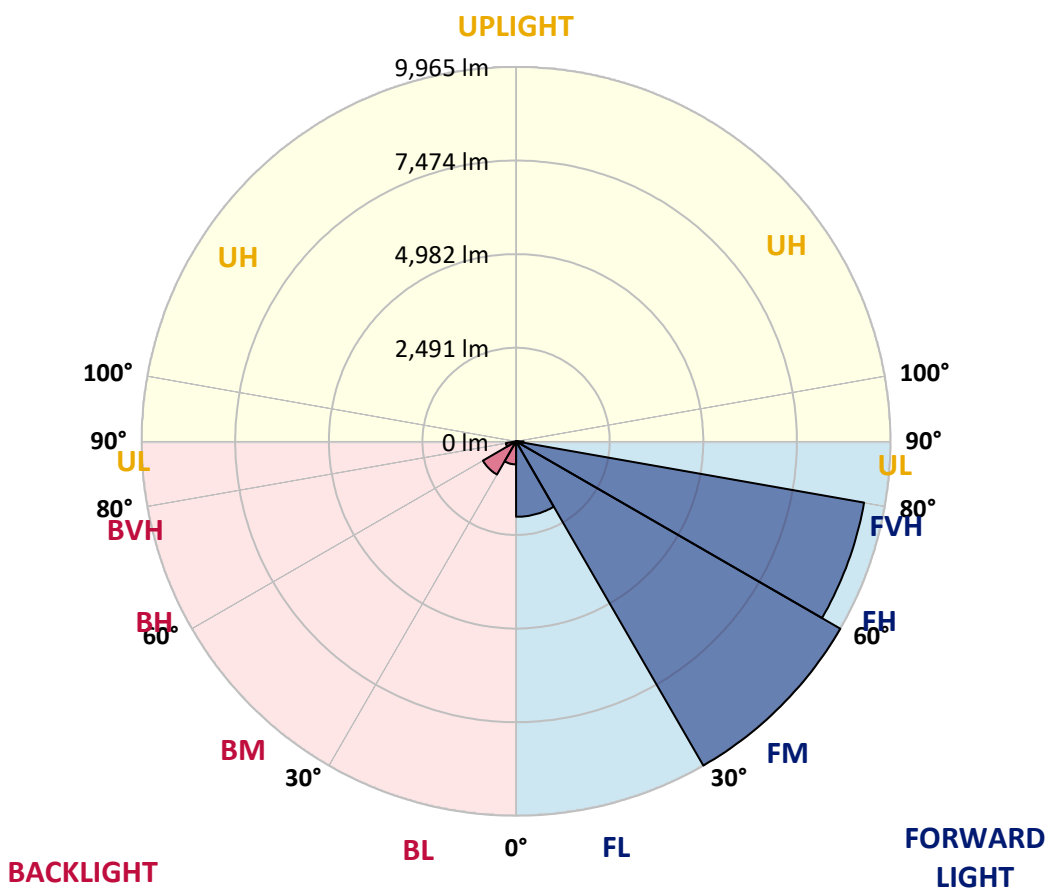
CATALOG NUMBER: GWS-SA5E-830-U-SL4-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 2008.6 | 8.5 | | | |
| FM (30°-60°) | 9964.8 | 42.4 | | | |
| FH (60°-80°) | 9403.9 | 40.0 | | | G4/12000 |
| FVH (80°-90°) | 198.3 | 0.8 | | | G2/225 |
| BL (0°-30°) | 613.6 | 2.6 | B2/1000 | | |
| BM (30°-60°) | 1019.9 | 4.3 | B2/2500 | | |
| BH (60°-80°) | 274.0 | 1.2 | B1/500 | | G1/500 |
| BVH (80°-90°) | 14.0 | 0.1 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G4

Type IV Short





REPORT NUMBER: P640952

CATALOG NUMBER: GWS-SA5E-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 |
| 2.5° | 4286.5 | 4301.4 | 4299.3 | 4305.7 | 4290.7 | 4267.2 | 4262.9 | 4230.9 | 4173.2 | 4100.5 | 4019.2 |
| 5° | 4374.1 | 4391.2 | 4378.4 | 4372.0 | 4344.2 | 4318.5 | 4312.1 | 4277.9 | 4211.6 | 4113.3 | 3972.2 |
| 7.5° | 4448.9 | 4453.2 | 4444.7 | 4429.7 | 4389.1 | 4354.9 | 4331.4 | 4284.3 | 4205.2 | 4106.9 | 3944.4 |
| 10° | 4461.8 | 4459.6 | 4463.9 | 4466.0 | 4440.4 | 4410.5 | 4391.2 | 4327.1 | 4226.6 | 4121.8 | 3946.5 |
| 12.5° | 4446.8 | 4446.8 | 4474.6 | 4506.7 | 4506.7 | 4491.7 | 4472.5 | 4414.7 | 4297.2 | 4173.2 | 3989.3 |
| 15° | 4466.0 | 4472.5 | 4525.9 | 4585.8 | 4605.0 | 4590.0 | 4581.5 | 4521.6 | 4399.8 | 4262.9 | 4066.3 |
| 17.5° | 4534.5 | 4540.9 | 4626.4 | 4716.2 | 4739.7 | 4722.6 | 4705.5 | 4645.6 | 4515.2 | 4365.6 | 4153.9 |
| 20° | 4634.9 | 4652.0 | 4761.1 | 4876.5 | 4897.9 | 4876.5 | 4842.3 | 4758.9 | 4628.5 | 4476.7 | 4237.3 |
| 22.5° | 4818.8 | 4829.5 | 4947.1 | 5068.9 | 5079.6 | 5045.4 | 4994.1 | 4878.7 | 4741.8 | 4594.3 | 4331.4 |
| 25° | 5062.5 | 5077.5 | 5195.1 | 5312.6 | 5284.9 | 5233.5 | 5163.0 | 5032.6 | 4876.5 | 4733.3 | 4451.1 |
| 27.5° | 5353.3 | 5370.4 | 5485.8 | 5588.4 | 5515.7 | 5455.9 | 5376.8 | 5214.3 | 5056.1 | 4925.7 | 4605.0 |
| 30° | 5667.5 | 5682.5 | 5785.1 | 5877.1 | 5780.8 | 5710.3 | 5616.2 | 5449.5 | 5289.1 | 5190.8 | 4823.1 |
| 32.5° | 5971.1 | 5969.0 | 6067.3 | 6142.1 | 6043.8 | 5988.2 | 5902.7 | 5733.8 | 5605.5 | 5562.8 | 5148.0 |
| 35° | 6253.3 | 6253.3 | 6334.6 | 6409.4 | 6338.8 | 6308.9 | 6229.8 | 6095.1 | 6022.4 | 6073.7 | 5582.0 |
| 37.5° | 6537.7 | 6522.7 | 6599.7 | 6683.0 | 6676.6 | 6678.8 | 6633.9 | 6569.7 | 6574.0 | 6755.7 | 6178.5 |
| 40° | 6772.8 | 6766.4 | 6856.2 | 6965.2 | 7050.8 | 7119.2 | 7091.4 | 7114.9 | 7249.6 | 7589.5 | 6941.7 |
| 42.5° | 6961.0 | 6975.9 | 7091.4 | 7264.5 | 7480.5 | 7619.4 | 7638.7 | 7734.9 | 8081.2 | 8607.1 | 7803.3 |
| 45° | 7176.9 | 7179.0 | 7339.4 | 7604.5 | 7948.7 | 8168.9 | 8245.8 | 8493.8 | 8985.5 | 9663.2 | 8748.2 |
| 47.5° | 7442.0 | 7416.3 | 7595.9 | 7967.9 | 8466.0 | 8791.0 | 8927.8 | 9237.8 | 9998.9 | 10693.7 | 9517.9 |
| 50° | 7734.9 | 7687.8 | 7890.9 | 8397.6 | 9045.4 | 9451.6 | 9729.5 | 10182.8 | 11003.7 | 11540.3 | 10090.8 |
| 52.5° | 8074.8 | 8029.9 | 8260.8 | 8891.5 | 9740.2 | 10234.1 | 10591.1 | 11048.6 | 11865.3 | 12186.0 | 10432.9 |
| 55° | 8506.7 | 8461.8 | 8705.5 | 9483.7 | 10561.2 | 11202.5 | 11576.7 | 11961.5 | 12667.0 | 12662.7 | 10680.9 |
| 57.5° | 8985.5 | 8923.5 | 9261.3 | 10231.9 | 11585.2 | 12252.2 | 12632.8 | 12820.9 | 13276.3 | 13032.6 | 10847.6 |
| 60° | 9535.0 | 9479.4 | 9947.6 | 11123.4 | 12767.5 | 13385.3 | 13624.8 | 13547.8 | 13776.5 | 13250.6 | 10789.9 |
| 62.5° | 10031.0 | 10005.3 | 10586.8 | 12068.4 | 13894.1 | 14415.8 | 14482.0 | 14146.4 | 14144.3 | 13254.9 | 10400.8 |
| 65° | 10546.2 | 10595.4 | 11459.1 | 13156.6 | 15027.2 | 15377.8 | 15264.5 | 14740.7 | 14291.8 | 12731.1 | 9250.6 |
| 67.5° | 10738.6 | 10881.8 | 12034.2 | 14140.0 | 15920.8 | 16194.5 | 15995.7 | 15037.9 | 13678.2 | 10969.5 | 7044.3 |
| 70° | 9549.9 | 9819.3 | 11491.1 | 14195.6 | 16290.7 | 16551.5 | 16074.8 | 14238.3 | 11403.5 | 7266.7 | 3858.9 |
| 72.5° | 7262.4 | 7576.7 | 9575.6 | 11623.7 | 14650.9 | 15245.3 | 14430.7 | 11600.2 | 7350.1 | 3183.3 | 1295.6 |
| 75° | 4064.1 | 4404.0 | 7132.0 | 8752.5 | 9836.4 | 10379.4 | 10080.1 | 7442.0 | 3256.0 | 831.6 | 387.0 |
| 77.5° | 1374.7 | 1488.0 | 3318.0 | 5415.3 | 6492.8 | 6005.3 | 5083.9 | 3696.4 | 1197.2 | 316.4 | 205.2 |
| 80° | 814.5 | 857.3 | 1235.7 | 2695.9 | 3416.3 | 2832.7 | 2236.2 | 1366.1 | 609.3 | 168.9 | 143.2 |
| 82.5° | 243.7 | 288.6 | 682.0 | 1000.5 | 1338.3 | 833.8 | 705.5 | 780.3 | 316.4 | 91.9 | 119.7 |
| 85° | 0.0 | 0.0 | 145.4 | 310.0 | 350.6 | 136.8 | 136.8 | 442.5 | 57.7 | 38.5 | 87.7 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 10.7 | 6.4 | 8.6 | 19.2 |
| 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: P640952
 CATALOG NUMBER: GWS-SA5E-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 | 3987.2 |
| 2.5° | 3961.5 | 3886.7 | 3799.0 | 3715.6 | 3636.5 | 3533.9 | 3484.8 | 3424.9 | 3373.6 | 3345.8 | 3360.8 |
| 5° | 3882.4 | 3764.8 | 3585.2 | 3403.5 | 3219.7 | 3046.5 | 2890.4 | 2785.7 | 2691.6 | 2642.4 | 2653.1 |
| 7.5° | 3814.0 | 3655.8 | 3375.7 | 3078.6 | 2783.5 | 2486.4 | 2244.8 | 2056.6 | 1911.3 | 1851.4 | 1840.7 |
| 10° | 3784.1 | 3585.2 | 3189.7 | 2762.1 | 2308.9 | 1909.1 | 1567.1 | 1359.7 | 1212.2 | 1139.5 | 1152.3 |
| 12.5° | 3799.0 | 3548.9 | 3031.5 | 2452.2 | 1864.2 | 1398.2 | 1071.1 | 876.5 | 771.8 | 729.0 | 718.3 |
| 15° | 3841.8 | 3540.3 | 2890.4 | 2135.7 | 1438.8 | 977.0 | 739.7 | 660.6 | 639.2 | 635.0 | 635.0 |
| 17.5° | 3891.0 | 3542.5 | 2745.0 | 1815.1 | 1092.5 | 724.7 | 632.8 | 617.8 | 611.4 | 607.2 | 609.3 |
| 20° | 3940.1 | 3542.5 | 2578.3 | 1490.1 | 820.9 | 626.4 | 602.9 | 592.2 | 585.8 | 583.6 | 583.6 |
| 22.5° | 4000.0 | 3542.5 | 2392.3 | 1188.7 | 658.5 | 594.3 | 575.1 | 568.7 | 562.3 | 560.1 | 558.0 |
| 25° | 4072.7 | 3544.6 | 2187.1 | 930.0 | 598.6 | 566.5 | 551.6 | 545.2 | 538.7 | 534.5 | 534.5 |
| 27.5° | 4177.4 | 3561.7 | 1960.4 | 724.7 | 564.4 | 540.9 | 528.1 | 521.6 | 515.2 | 508.8 | 508.8 |
| 30° | 4329.2 | 3604.5 | 1706.0 | 598.6 | 532.3 | 513.1 | 500.3 | 496.0 | 489.6 | 483.2 | 481.0 |
| 32.5° | 4555.8 | 3679.3 | 1443.1 | 536.6 | 502.4 | 483.2 | 468.2 | 463.9 | 457.5 | 451.1 | 449.0 |
| 35° | 4872.2 | 3816.1 | 1186.5 | 498.1 | 463.9 | 444.7 | 436.1 | 434.0 | 425.4 | 419.0 | 419.0 |
| 37.5° | 5336.2 | 4038.5 | 940.7 | 459.6 | 431.9 | 416.9 | 406.2 | 401.9 | 393.4 | 387.0 | 384.8 |
| 40° | 5902.7 | 4327.1 | 731.2 | 429.7 | 401.9 | 387.0 | 376.3 | 369.9 | 359.2 | 350.6 | 346.3 |
| 42.5° | 6625.3 | 4679.8 | 577.2 | 397.6 | 374.1 | 359.2 | 350.6 | 337.8 | 322.8 | 310.0 | 307.9 |
| 45° | 7377.8 | 5043.3 | 476.7 | 367.7 | 348.5 | 335.6 | 325.0 | 307.9 | 286.5 | 271.5 | 267.2 |
| 47.5° | 7955.1 | 5269.9 | 416.9 | 335.6 | 320.7 | 310.0 | 297.2 | 275.8 | 250.1 | 233.0 | 228.8 |
| 50° | 8367.7 | 5304.1 | 372.0 | 305.7 | 297.2 | 286.5 | 267.2 | 241.6 | 213.8 | 196.7 | 192.4 |
| 52.5° | 8570.8 | 5150.2 | 335.6 | 277.9 | 271.5 | 260.8 | 237.3 | 209.5 | 179.6 | 162.5 | 158.2 |
| 55° | 8662.7 | 4859.4 | 301.4 | 254.4 | 245.9 | 233.0 | 207.4 | 177.4 | 147.5 | 132.5 | 128.3 |
| 57.5° | 8626.4 | 4429.7 | 271.5 | 230.9 | 220.2 | 205.2 | 177.4 | 145.4 | 121.9 | 106.9 | 104.8 |
| 60° | 8357.0 | 3826.8 | 241.6 | 207.4 | 194.5 | 177.4 | 149.7 | 119.7 | 98.3 | 87.7 | 85.5 |
| 62.5° | 7775.5 | 3078.6 | 211.7 | 179.6 | 171.0 | 153.9 | 128.3 | 98.3 | 81.2 | 74.8 | 72.7 |
| 65° | 6584.7 | 2176.4 | 181.7 | 151.8 | 147.5 | 130.4 | 106.9 | 81.2 | 70.6 | 66.3 | 64.1 |
| 67.5° | 4733.3 | 1323.4 | 153.9 | 130.4 | 126.1 | 111.2 | 89.8 | 70.6 | 64.1 | 62.0 | 62.0 |
| 70° | 2379.5 | 626.4 | 121.9 | 106.9 | 106.9 | 91.9 | 77.0 | 64.1 | 62.0 | 59.9 | 59.9 |
| 72.5° | 808.1 | 267.2 | 91.9 | 83.4 | 87.7 | 79.1 | 66.3 | 59.9 | 59.9 | 59.9 | 59.9 |
| 75° | 275.8 | 141.1 | 64.1 | 59.9 | 64.1 | 64.1 | 57.7 | 57.7 | 59.9 | 59.9 | 59.9 |
| 77.5° | 179.6 | 94.1 | 44.9 | 40.6 | 49.2 | 49.2 | 49.2 | 53.4 | 57.7 | 57.7 | 57.7 |
| 80° | 147.5 | 51.3 | 29.9 | 27.8 | 36.3 | 36.3 | 40.6 | 49.2 | 53.4 | 53.4 | 53.4 |
| 82.5° | 126.1 | 32.1 | 17.1 | 19.2 | 25.7 | 27.8 | 34.2 | 40.6 | 47.0 | 49.2 | 49.2 |
| 85° | 85.5 | 17.1 | 12.8 | 15.0 | 17.1 | 21.4 | 27.8 | 34.2 | 38.5 | 42.8 | 42.8 |
| 87.5° | 23.5 | 6.4 | 8.6 | 10.7 | 10.7 | 15.0 | 21.4 | 25.7 | 29.9 | 32.1 | 32.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)