

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: P638476

Luminaire Tested: GWS-SA4E-830-U-SL3-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638476
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-31)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4E-830-U-SL3-W
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23819.8 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

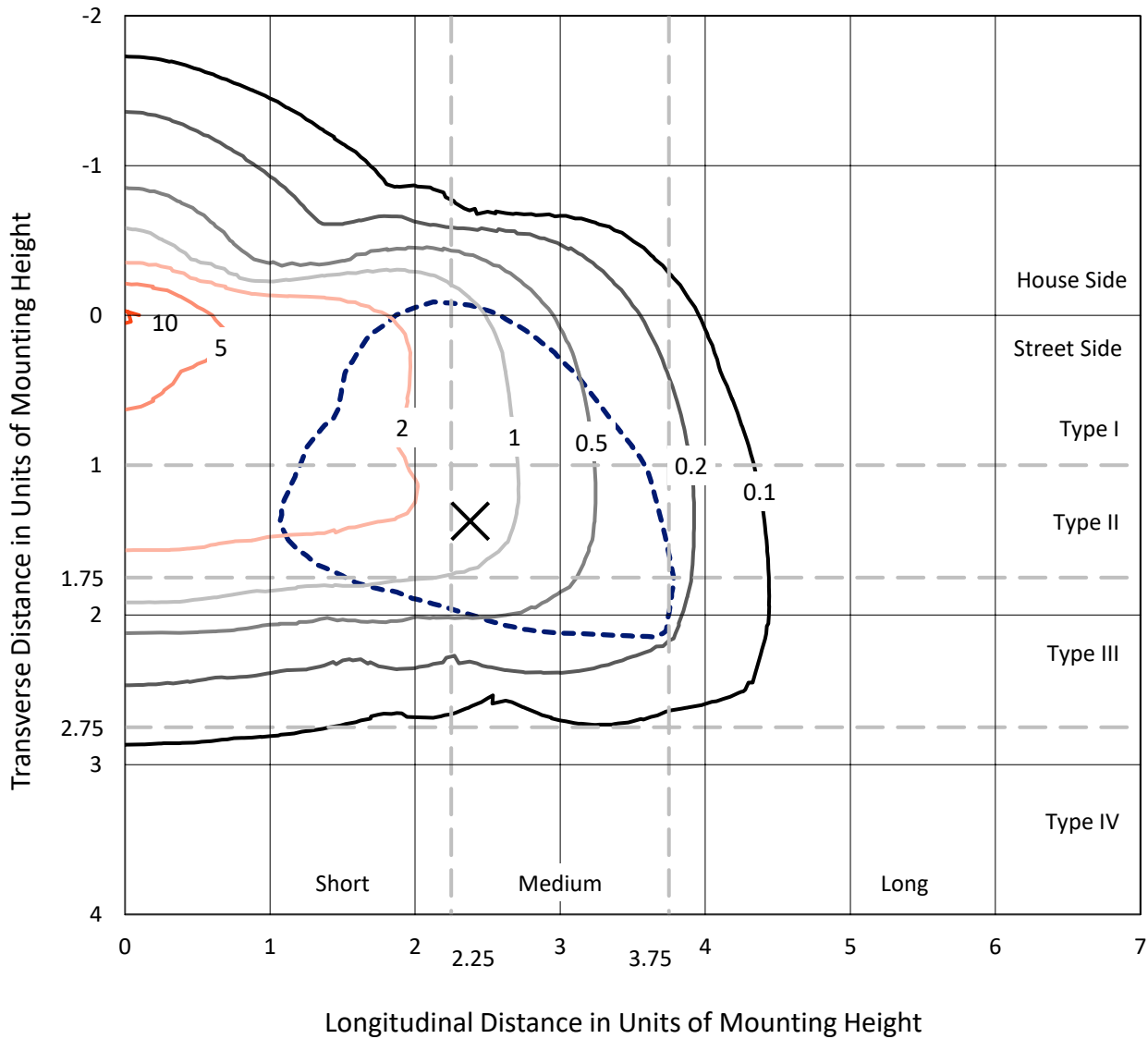
Input Watts (W): 202.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

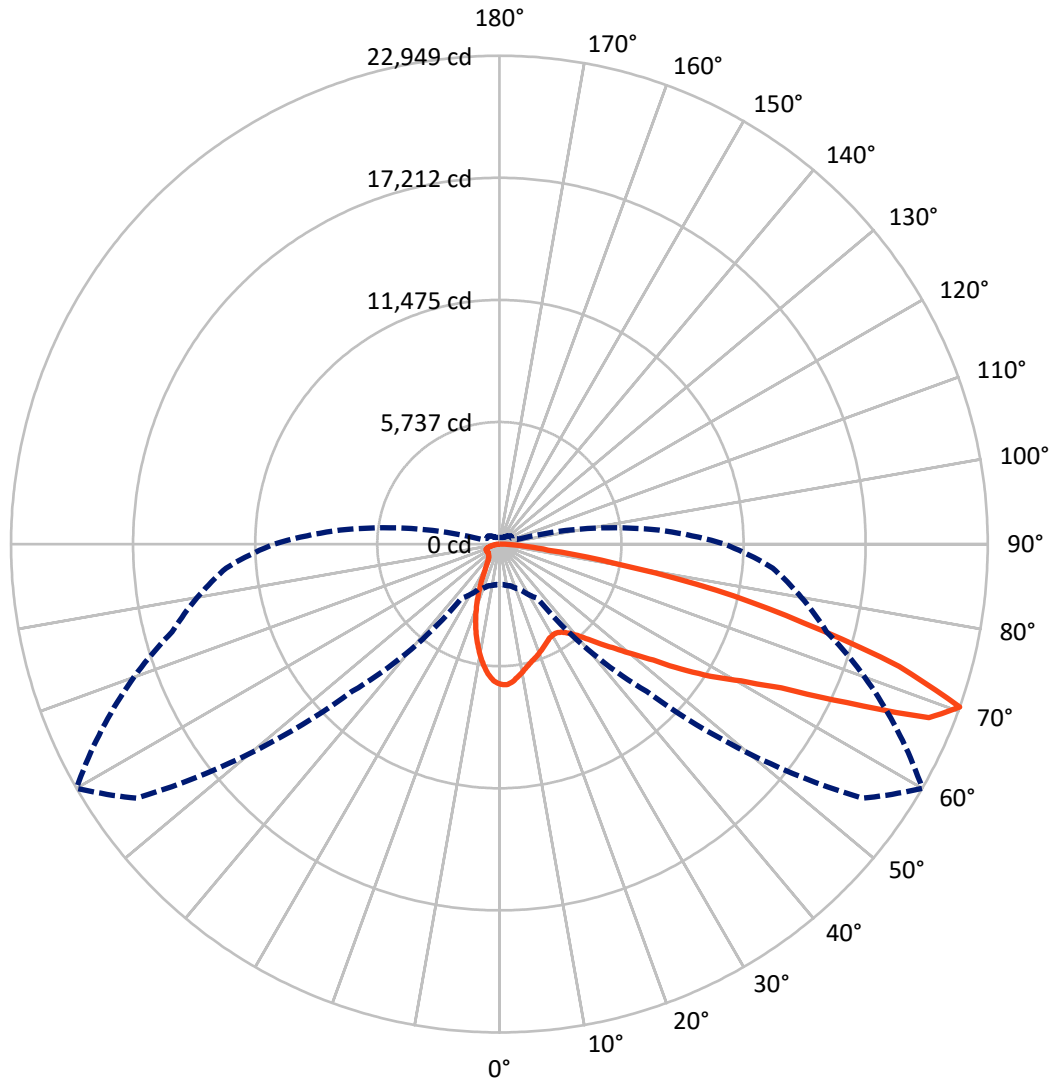
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4073.7 | 0.0 | 4073.7 |
| | % Fixture | 17.1 | 0.0 | 17.1 |
| Street Side | Lumens | 19746.1 | 0.0 | 19746.1 |
| | % Fixture | 82.9 | 0.0 | 82.9 |
| Total | Lumens | 23819.8 | 0.0 | 23819.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 568.1 | 2.4 |
| 10°-20° | 1272.8 | 5.3 |
| 20°-30° | 1630.1 | 6.8 |
| 30°-40° | 2142.3 | 9.0 |
| 40°-50° | 3108.1 | 13.0 |
| 50°-60° | 4849.4 | 20.4 |
| 60°-70° | 6348.8 | 26.7 |
| 70°-80° | 3510.7 | 14.7 |
| 80°-90° | 389.6 | 1.6 |
| 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° | 23819.8 | 100.0 |
| 0°-180° | 23819.8 | 100.0 |

Coefficient of Utilization



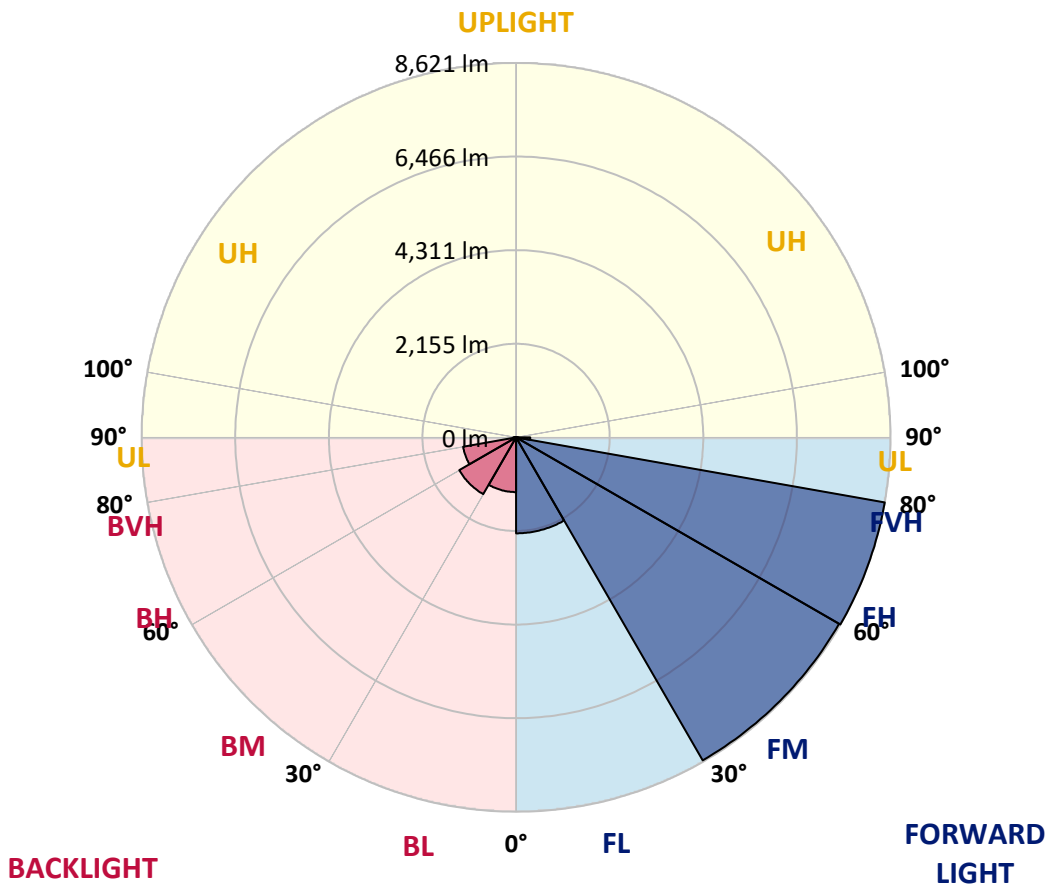
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 2210.6 | 9.3 | | | |
| FM (30°-60°) | 8589.3 | 36.1 | | | |
| FH (60°-80°) | 8621.5 | 36.2 | | | G4/12000 |
| FVH (80°-90°) | 324.6 | 1.4 | | | G3/500 |
| BL (0°-30°) | 1260.4 | 5.3 | B3/2500 | | |
| BM (30°-60°) | 1510.4 | 6.3 | B2/2500 | | |
| BH (60°-80°) | 1238.0 | 5.2 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 65.0 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 60° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 |
| 2.5° | 6498.9 | 6505.9 | 6525.0 | 6552.9 | 6580.8 | 6594.7 | 6629.6 | 6619.1 | 6612.2 | 6598.2 | 6580.8 |
| 5° | 6211.3 | 6225.3 | 6242.7 | 6296.7 | 6357.7 | 6406.5 | 6484.9 | 6493.7 | 6497.1 | 6504.1 | 6476.2 |
| 7.5° | 5845.3 | 5848.8 | 5890.6 | 5962.1 | 6042.3 | 6125.9 | 6256.6 | 6293.2 | 6324.6 | 6359.5 | 6336.8 |
| 10° | 5441.0 | 5449.7 | 5481.1 | 5583.9 | 5721.6 | 5845.3 | 6021.4 | 6082.4 | 6148.6 | 6225.3 | 6193.9 |
| 12.5° | 5109.9 | 5111.6 | 5162.2 | 5272.0 | 5421.8 | 5589.1 | 5808.7 | 5881.9 | 5969.1 | 6089.3 | 6061.4 |
| 15° | 4846.7 | 4846.7 | 4893.8 | 4987.9 | 5160.4 | 5357.3 | 5618.8 | 5712.9 | 5831.4 | 5993.5 | 5944.7 |
| 17.5° | 4637.6 | 4639.3 | 4668.9 | 4768.3 | 4921.7 | 5139.5 | 5449.7 | 5576.9 | 5707.7 | 5922.0 | 5848.8 |
| 20° | 4527.8 | 4519.1 | 4524.3 | 4585.3 | 4716.0 | 4926.9 | 5280.7 | 5428.8 | 5604.8 | 5873.2 | 5761.7 |
| 22.5° | 4522.6 | 4506.9 | 4484.2 | 4489.4 | 4566.1 | 4740.4 | 5099.4 | 5278.9 | 5500.3 | 5833.1 | 5672.8 |
| 25° | 4611.4 | 4594.0 | 4553.9 | 4508.6 | 4501.6 | 4606.2 | 4928.6 | 5132.5 | 5392.2 | 5815.7 | 5587.4 |
| 27.5° | 4761.3 | 4749.1 | 4696.8 | 4628.9 | 4557.4 | 4553.9 | 4799.7 | 5012.3 | 5313.8 | 5833.1 | 5526.4 |
| 30° | 4960.0 | 4939.1 | 4906.0 | 4818.8 | 4710.8 | 4599.2 | 4749.1 | 4947.8 | 5261.5 | 5888.9 | 5500.3 |
| 32.5° | 5184.8 | 5172.6 | 5141.2 | 5054.1 | 4939.1 | 4761.3 | 4789.2 | 4961.7 | 5261.5 | 5986.5 | 5505.5 |
| 35° | 5423.6 | 5421.8 | 5421.8 | 5364.3 | 5237.1 | 5015.8 | 4947.8 | 5080.2 | 5341.7 | 6143.3 | 5561.3 |
| 37.5° | 5655.4 | 5653.6 | 5709.4 | 5730.3 | 5585.7 | 5346.9 | 5217.9 | 5317.3 | 5517.7 | 6375.1 | 5698.9 |
| 40° | 5843.6 | 5850.6 | 5972.6 | 6077.1 | 5997.0 | 5775.6 | 5594.4 | 5644.9 | 5803.5 | 6704.5 | 5939.4 |
| 42.5° | 6033.6 | 6052.7 | 6235.7 | 6420.5 | 6451.8 | 6260.1 | 6077.1 | 6106.8 | 6213.1 | 7140.2 | 6298.5 |
| 45° | 6240.9 | 6249.7 | 6505.9 | 6763.8 | 6915.4 | 6802.1 | 6652.2 | 6692.3 | 6716.7 | 7678.8 | 6833.5 |
| 47.5° | 6441.4 | 6464.0 | 6795.2 | 7148.9 | 7436.5 | 7426.0 | 7342.4 | 7330.2 | 7335.4 | 8334.0 | 7466.1 |
| 50° | 6715.0 | 6748.1 | 7136.7 | 7563.7 | 7985.5 | 8178.9 | 8203.3 | 8111.0 | 8072.6 | 9062.5 | 8253.9 |
| 52.5° | 7234.3 | 7234.3 | 7582.9 | 8002.9 | 8569.3 | 9048.6 | 9212.4 | 9060.8 | 8938.8 | 9832.8 | 9090.4 |
| 55° | 7884.4 | 7912.3 | 8189.4 | 8529.2 | 9247.3 | 9963.6 | 10517.8 | 10350.5 | 10005.4 | 10671.1 | 9967.0 |
| 57.5° | 8173.7 | 8208.6 | 8647.7 | 9175.8 | 10134.3 | 11004.0 | 11772.6 | 11713.3 | 11209.7 | 11542.5 | 10876.8 |
| 60° | 7650.9 | 7724.1 | 8328.8 | 9214.2 | 10937.8 | 12682.3 | 13224.3 | 13051.8 | 12332.0 | 12457.5 | 11863.2 |
| 62.5° | 6382.1 | 6462.3 | 7133.3 | 8368.9 | 10826.2 | 14496.6 | 15512.6 | 14876.5 | 13733.2 | 13613.0 | 13177.3 |
| 65° | 3808.0 | 3804.5 | 4611.4 | 6249.7 | 9451.2 | 15000.2 | 19134.1 | 17947.3 | 15897.8 | 15198.9 | 14529.7 |
| 67.5° | 2420.7 | 2415.5 | 2584.6 | 3311.3 | 6289.7 | 13766.3 | 21462.5 | 21771.0 | 18837.9 | 16364.8 | 14641.2 |
| 70° | 1910.1 | 1908.4 | 2030.4 | 2361.5 | 3110.9 | 9796.2 | 20814.2 | 22949.1 | 20613.8 | 15920.4 | 12891.4 |
| 72.5° | 1392.5 | 1396.0 | 1584.2 | 1978.1 | 2399.8 | 4918.2 | 16854.6 | 19636.1 | 18959.9 | 14053.9 | 10465.5 |
| 75° | 1000.4 | 1005.6 | 1118.9 | 1514.5 | 2213.3 | 2689.1 | 11207.9 | 14765.0 | 14425.1 | 11265.4 | 7199.5 |
| 77.5° | 636.1 | 643.1 | 742.4 | 1061.4 | 1788.1 | 2171.5 | 6795.2 | 10423.7 | 9597.6 | 6347.3 | 2560.2 |
| 80° | 388.6 | 411.3 | 495.0 | 791.2 | 1429.1 | 1629.5 | 3396.7 | 5491.5 | 4806.6 | 1741.1 | 860.9 |
| 82.5° | 200.4 | 217.8 | 298.0 | 489.7 | 984.7 | 1430.8 | 1922.3 | 2307.5 | 1488.3 | 728.5 | 458.4 |
| 85° | 62.7 | 73.2 | 104.6 | 198.7 | 468.8 | 887.1 | 1272.2 | 1146.8 | 683.2 | 343.3 | 212.6 |
| 87.5° | 15.7 | 15.7 | 17.4 | 17.4 | 19.2 | 40.1 | 245.7 | 259.7 | 181.3 | 108.1 | 87.1 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 | 6591.2 |
| 2.5° | 6545.9 | 6504.1 | 6486.7 | 6484.9 | 6441.4 | 6378.6 | 6336.8 | 6307.2 | 6289.7 | 6286.3 | 6286.3 |
| 5° | 6429.2 | 6375.1 | 6303.7 | 6249.7 | 6132.9 | 6014.4 | 5915.0 | 5859.3 | 5794.8 | 5786.1 | 5784.3 |
| 7.5° | 6274.1 | 6195.6 | 6059.7 | 5908.1 | 5704.2 | 5507.2 | 5339.9 | 5226.6 | 5113.4 | 5092.4 | 5085.5 |
| 10° | 6106.8 | 6000.4 | 5768.6 | 5502.0 | 5197.0 | 4902.5 | 4646.3 | 4445.9 | 4313.4 | 4219.3 | 4201.9 |
| 12.5° | 5941.2 | 5800.0 | 5460.2 | 5062.8 | 4644.5 | 4242.0 | 3856.8 | 3529.2 | 3292.1 | 3154.5 | 3130.1 |
| 15° | 5786.1 | 5589.1 | 5123.8 | 4616.7 | 4072.9 | 3522.2 | 2976.7 | 2551.5 | 2218.6 | 2100.1 | 2072.2 |
| 17.5° | 5644.9 | 5399.2 | 4797.9 | 4154.8 | 3476.9 | 2757.1 | 2136.7 | 1758.5 | 1563.3 | 1504.0 | 1490.1 |
| 20° | 5503.7 | 5204.0 | 4466.8 | 3668.6 | 2844.2 | 2037.3 | 1561.5 | 1383.8 | 1310.6 | 1287.9 | 1281.0 |
| 22.5° | 5352.1 | 4989.6 | 4106.0 | 3189.3 | 2204.6 | 1524.9 | 1277.5 | 1199.0 | 1176.4 | 1178.1 | 1176.4 |
| 25° | 5200.5 | 4771.8 | 3727.8 | 2668.2 | 1641.7 | 1237.4 | 1115.4 | 1085.8 | 1091.0 | 1106.7 | 1110.2 |
| 27.5° | 5075.0 | 4578.3 | 3356.6 | 2096.6 | 1282.7 | 1064.8 | 1007.3 | 1005.6 | 1024.8 | 1045.7 | 1049.2 |
| 30° | 4984.4 | 4405.8 | 2990.6 | 1612.1 | 1056.1 | 946.3 | 923.7 | 934.1 | 956.8 | 972.5 | 977.7 |
| 32.5° | 4919.9 | 4257.6 | 2600.2 | 1267.0 | 925.4 | 862.7 | 852.2 | 862.7 | 876.6 | 892.3 | 895.8 |
| 35° | 4897.3 | 4149.6 | 2216.8 | 1033.5 | 836.5 | 801.7 | 794.7 | 799.9 | 806.9 | 815.6 | 819.1 |
| 37.5° | 4947.8 | 4095.6 | 1816.0 | 899.3 | 782.5 | 761.6 | 751.1 | 747.7 | 749.4 | 752.9 | 754.6 |
| 40° | 5097.7 | 4120.0 | 1488.3 | 820.9 | 747.7 | 728.5 | 711.1 | 704.1 | 702.3 | 705.8 | 704.1 |
| 42.5° | 5355.6 | 4222.8 | 1251.3 | 775.5 | 719.8 | 691.9 | 672.7 | 665.7 | 665.7 | 674.5 | 674.5 |
| 45° | 5733.8 | 4425.0 | 1080.5 | 742.4 | 695.4 | 660.5 | 639.6 | 636.1 | 643.1 | 657.0 | 658.8 |
| 47.5° | 6288.0 | 4721.2 | 977.7 | 718.0 | 672.7 | 632.6 | 611.7 | 610.0 | 623.9 | 646.6 | 648.3 |
| 50° | 6945.0 | 5148.2 | 921.9 | 700.6 | 657.0 | 610.0 | 589.1 | 590.8 | 606.5 | 630.9 | 636.1 |
| 52.5° | 7736.3 | 5730.3 | 925.4 | 693.6 | 648.3 | 596.0 | 575.1 | 571.6 | 587.3 | 611.7 | 616.9 |
| 55° | 8553.6 | 6437.9 | 993.4 | 695.4 | 636.1 | 589.1 | 561.2 | 549.0 | 562.9 | 580.4 | 582.1 |
| 57.5° | 9452.9 | 7236.1 | 1162.4 | 691.9 | 620.4 | 582.1 | 549.0 | 521.1 | 529.8 | 540.3 | 545.5 |
| 60° | 10467.2 | 8175.4 | 1526.7 | 698.9 | 613.5 | 566.4 | 524.6 | 488.0 | 486.2 | 493.2 | 495.0 |
| 62.5° | 11823.1 | 9452.9 | 1936.2 | 711.1 | 629.1 | 547.2 | 488.0 | 449.6 | 442.7 | 446.2 | 447.9 |
| 65° | 12860.1 | 10062.9 | 1807.3 | 700.6 | 662.3 | 533.3 | 453.1 | 413.0 | 399.1 | 395.6 | 395.6 |
| 67.5° | 12438.3 | 9256.0 | 1258.3 | 672.7 | 677.9 | 535.0 | 425.2 | 374.7 | 357.3 | 348.6 | 346.8 |
| 70° | 10584.0 | 7518.4 | 874.9 | 644.8 | 660.5 | 531.6 | 395.6 | 343.3 | 320.7 | 308.5 | 306.7 |
| 72.5° | 8361.9 | 5740.8 | 707.6 | 589.1 | 599.5 | 479.3 | 352.0 | 308.5 | 289.3 | 273.6 | 273.6 |
| 75° | 5381.7 | 3503.0 | 590.8 | 524.6 | 489.7 | 373.0 | 305.0 | 275.4 | 256.2 | 240.5 | 240.5 |
| 77.5° | 1810.8 | 1300.1 | 458.4 | 444.4 | 366.0 | 280.6 | 256.2 | 237.0 | 221.3 | 207.4 | 205.6 |
| 80° | 735.5 | 616.9 | 336.4 | 336.4 | 256.2 | 214.4 | 200.4 | 191.7 | 181.3 | 163.8 | 163.8 |
| 82.5° | 427.0 | 374.7 | 235.3 | 203.9 | 170.8 | 148.1 | 139.4 | 130.7 | 130.7 | 118.5 | 118.5 |
| 85° | 205.6 | 207.4 | 141.2 | 125.5 | 97.6 | 85.4 | 81.9 | 76.7 | 74.9 | 68.0 | 66.2 |
| 87.5° | 111.5 | 113.3 | 71.5 | 55.8 | 38.3 | 33.1 | 27.9 | 26.1 | 24.4 | 22.7 | 22.7 |
| 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)