

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: P641437

Luminaire Tested: GWS-SA5F-830-U-RW-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P641437
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-51)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5F-830-U-RW-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29228.7 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G1

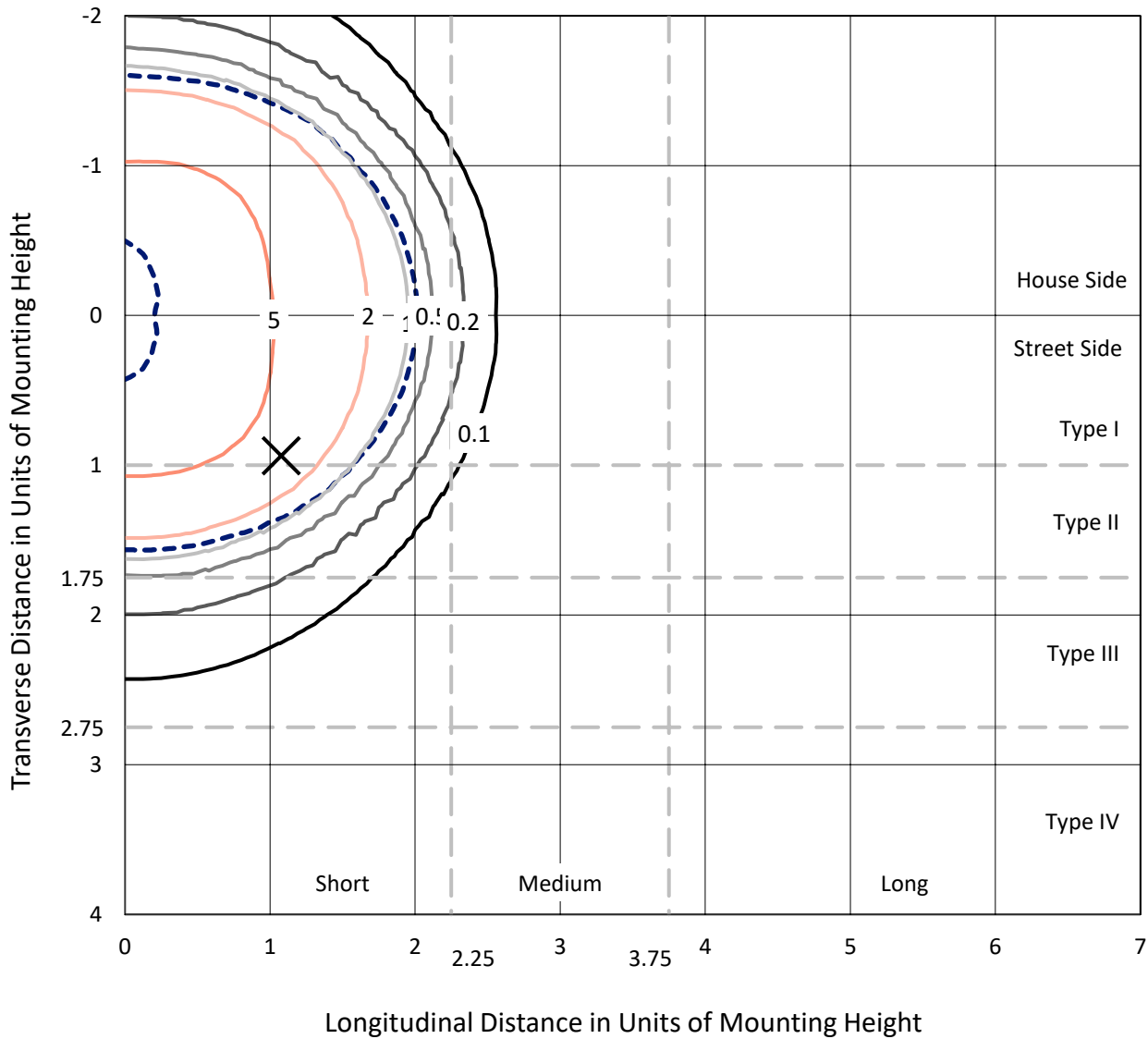
Input Watts (W): 310.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P641437
 CATALOG NUMBER: GWS-SA5F-830-U-RW-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination

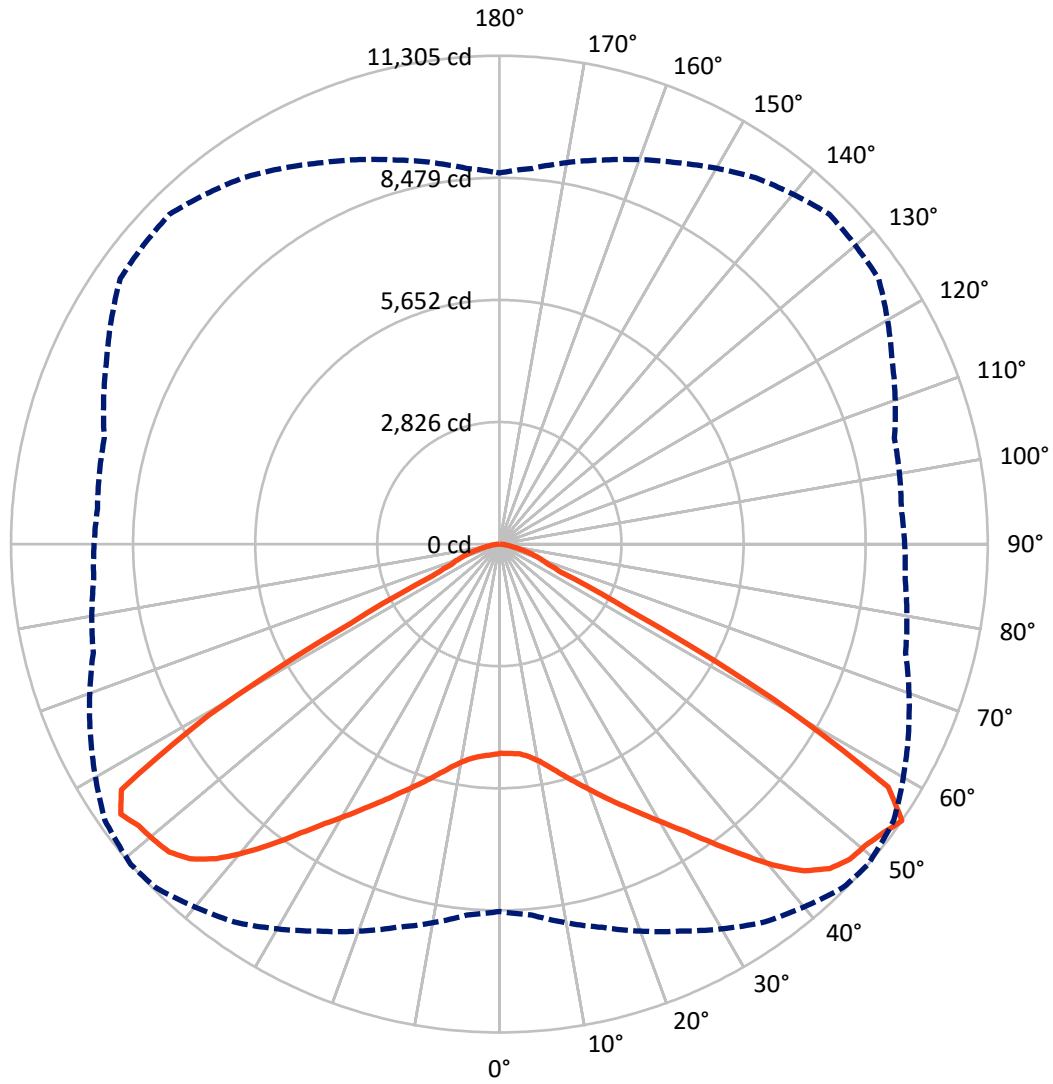
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
 Type V - Short - N/A

REPORT NUMBER: P641437
CATALOG NUMBER: GWS-SA5F-830-U-RW-W-GRSWH

Luminous Intensity Polar Plot



— Vertical Plane Through 49-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

REPORT NUMBER: P641437

CATALOG NUMBER: GWS-SA5F-830-U-RW-W-GRSWH

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 14471.0 | 0.0 | 14471.0 |
| | % Fixture | 49.5 | 0.0 | 49.5 |
| Street Side | Lumens | 14757.7 | 0.0 | 14757.7 |
| | % Fixture | 50.5 | 0.0 | 50.5 |
| Total | Lumens | 29228.7 | 0.0 | 29228.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 472.3 | 1.6 |
| 10°-20° | 1558.0 | 5.3 |
| 20°-30° | 2967.4 | 10.2 |
| 30°-40° | 5030.4 | 17.2 |
| 40°-50° | 7570.4 | 25.9 |
| 50°-60° | 8286.6 | 28.4 |
| 60°-70° | 2620.3 | 9.0 |
| 70°-80° | 628.9 | 2.2 |
| 80°-90° | 94.4 | 0.3 |
| 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° | 29228.7 | 100.0 |
| 0°-180° | 29228.7 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P641437

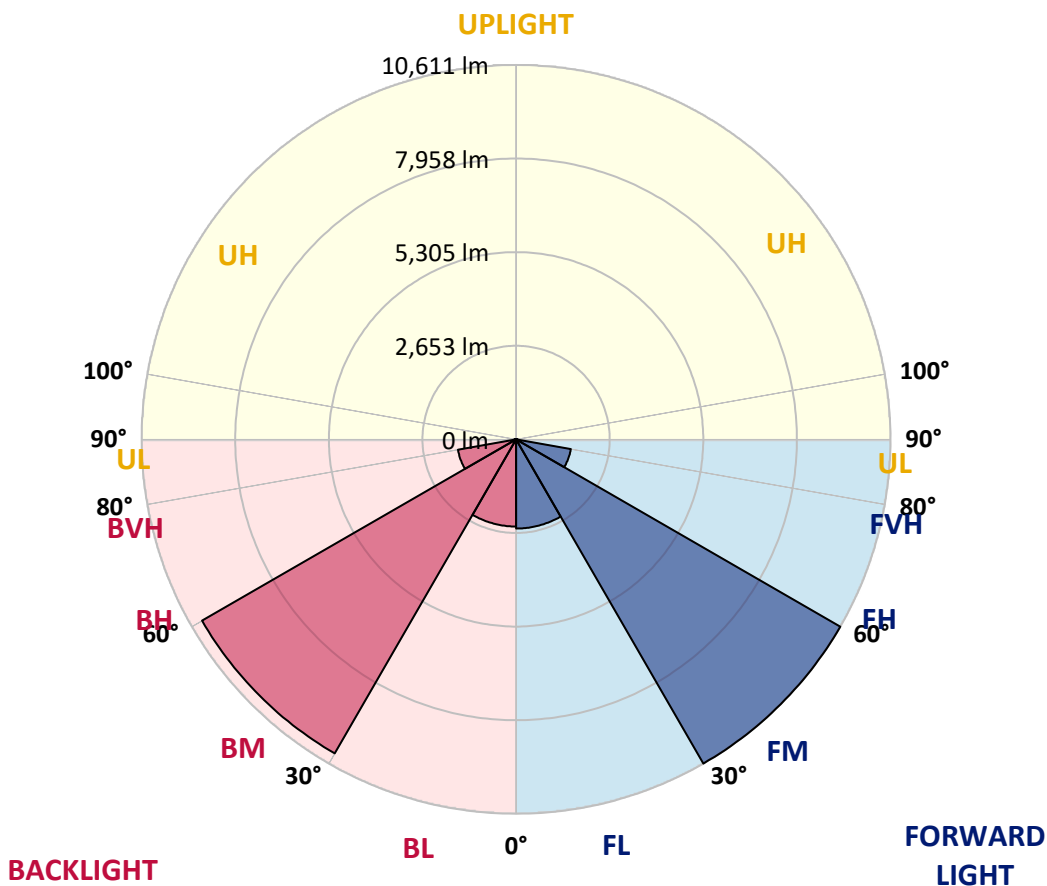
CATALOG NUMBER: GWS-SA5F-830-U-RW-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2527.1 | 8.6 | | | |
| FM (30°-60°) | 10610.8 | 36.3 | | | |
| FH (60°-80°) | 1576.1 | 5.4 | | | G1/1800 |
| FVH (80°-90°) | 43.7 | 0.1 | | | G1/100 |
| BL (0°-30°) | 2470.6 | 8.5 | B3/2500 | | |
| BM (30°-60°) | 10276.7 | 35.2 | B5 | | |
| BH (60°-80°) | 1673.0 | 5.7 | B3/2500 | | G1/1800 |
| BVH (80°-90°) | 50.7 | 0.2 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G1

Type V Short





REPORT NUMBER: P641437

CATALOG NUMBER: GWS-SA5F-830-U-RW-W-GRSWH

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 49° | 55° | 65° | 75° | 85° |
|-------|--------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| 0° | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 |
| 2.5° | 4770.6 | 4775.4 | 4784.9 | 4801.5 | 4818.1 | 4841.9 | 4851.4 | 4863.3 | 4860.9 | 4875.2 | 4875.2 |
| 5° | 4746.8 | 4754.0 | 4768.2 | 4792.0 | 4820.5 | 4865.7 | 4877.6 | 4906.1 | 4934.6 | 4970.3 | 4982.2 |
| 7.5° | 4775.4 | 4784.9 | 4801.5 | 4839.5 | 4882.3 | 4941.7 | 4965.5 | 5013.1 | 5067.7 | 5131.9 | 5158.0 |
| 10° | 4830.0 | 4841.9 | 4870.4 | 4932.2 | 5001.2 | 5091.5 | 5112.9 | 5172.3 | 5260.3 | 5348.2 | 5400.5 |
| 12.5° | 4891.8 | 4910.8 | 4963.1 | 5060.6 | 5162.8 | 5281.7 | 5314.9 | 5388.6 | 5483.7 | 5597.8 | 5669.1 |
| 15° | 4963.1 | 4979.8 | 5060.6 | 5198.5 | 5357.7 | 5514.6 | 5552.6 | 5623.9 | 5730.9 | 5842.6 | 5942.5 |
| 17.5° | 5112.9 | 5141.4 | 5236.5 | 5395.7 | 5581.2 | 5766.6 | 5809.3 | 5890.2 | 5975.7 | 6063.7 | 6158.8 |
| 20° | 5317.3 | 5341.1 | 5462.3 | 5659.6 | 5878.3 | 6047.0 | 6089.8 | 6161.1 | 6201.5 | 6246.7 | 6327.5 |
| 22.5° | 5521.7 | 5555.0 | 5692.9 | 5925.8 | 6182.5 | 6365.6 | 6398.8 | 6465.4 | 6436.9 | 6422.6 | 6474.9 |
| 25° | 5776.1 | 5821.2 | 5956.7 | 6211.1 | 6472.5 | 6698.3 | 6724.5 | 6781.5 | 6734.0 | 6660.3 | 6657.9 |
| 27.5° | 6092.2 | 6132.6 | 6272.9 | 6534.3 | 6793.4 | 7028.7 | 7078.7 | 7154.7 | 7050.1 | 6959.8 | 6895.6 |
| 30° | 6467.8 | 6493.9 | 6648.4 | 6926.5 | 7192.7 | 7416.2 | 7480.4 | 7556.4 | 7478.0 | 7328.2 | 7264.1 |
| 32.5° | 6905.1 | 6940.8 | 7119.1 | 7411.4 | 7649.1 | 7872.6 | 7936.7 | 8031.8 | 7946.2 | 7777.5 | 7696.7 |
| 35° | 7430.4 | 7466.1 | 7653.9 | 7972.4 | 8214.8 | 8445.4 | 8490.6 | 8569.0 | 8462.1 | 8267.1 | 8203.0 |
| 37.5° | 8000.9 | 8046.1 | 8283.8 | 8585.7 | 8840.0 | 9108.6 | 9111.0 | 9134.7 | 8982.6 | 8740.2 | 8668.9 |
| 40° | 8642.7 | 8702.1 | 8939.8 | 9253.6 | 9560.2 | 9778.9 | 9776.5 | 9710.0 | 9453.3 | 9077.7 | 8968.4 |
| 42.5° | 9277.4 | 9324.9 | 9565.0 | 9888.2 | 10194.9 | 10401.7 | 10339.9 | 10178.2 | 9807.4 | 9296.4 | 9151.4 |
| 45° | 9736.1 | 9771.8 | 10023.7 | 10387.4 | 10698.8 | 10827.2 | 10715.4 | 10520.5 | 10019.0 | 9434.2 | 9220.3 |
| 47.5° | 9952.4 | 10000.0 | 10254.3 | 10615.6 | 10967.4 | 11041.1 | 10908.0 | 10724.9 | 10142.6 | 9562.6 | 9275.0 |
| 50° | 9835.9 | 9897.8 | 10185.4 | 10520.5 | 10917.5 | 11069.6 | 10974.5 | 10791.5 | 10273.3 | 9688.6 | 9372.4 |
| 52.5° | 9534.1 | 9593.5 | 9957.2 | 10363.6 | 10812.9 | 11114.8 | 11112.4 | 10962.6 | 10423.1 | 9724.2 | 9377.2 |
| 55° | 8502.5 | 8618.9 | 9184.7 | 9885.9 | 10684.5 | 11247.9 | 11304.9 | 11145.7 | 10446.8 | 9733.7 | 9427.1 |
| 57.5° | 5533.6 | 5738.0 | 6275.2 | 7188.0 | 8790.1 | 10230.5 | 10615.6 | 10653.6 | 10275.7 | 9693.3 | 9436.6 |
| 60° | 2310.4 | 2474.4 | 2899.9 | 3506.0 | 4830.0 | 6543.8 | 7290.2 | 8039.0 | 8942.2 | 9270.2 | 9348.7 |
| 62.5° | 1435.7 | 1450.0 | 1492.7 | 1630.6 | 2072.7 | 2909.4 | 3389.6 | 4090.8 | 5433.8 | 6577.1 | 7104.8 |
| 65° | 1295.5 | 1302.6 | 1312.1 | 1302.6 | 1324.0 | 1426.2 | 1554.5 | 1799.4 | 2346.1 | 2914.2 | 3589.2 |
| 67.5° | 1141.0 | 1150.5 | 1157.6 | 1150.5 | 1157.6 | 1162.3 | 1176.6 | 1198.0 | 1297.8 | 1378.6 | 1440.5 |
| 70° | 922.3 | 936.5 | 948.4 | 943.7 | 972.2 | 972.2 | 986.4 | 1003.1 | 1053.0 | 1112.4 | 1155.2 |
| 72.5° | 703.6 | 691.7 | 706.0 | 710.7 | 736.9 | 751.1 | 772.5 | 791.5 | 848.6 | 884.2 | 938.9 |
| 75° | 456.4 | 444.5 | 465.9 | 477.8 | 513.4 | 532.4 | 551.5 | 570.5 | 610.9 | 634.7 | 686.9 |
| 77.5° | 247.2 | 244.8 | 266.2 | 282.9 | 320.9 | 344.7 | 358.9 | 373.2 | 406.5 | 413.6 | 446.9 |
| 80° | 142.6 | 142.6 | 156.9 | 168.8 | 192.5 | 218.7 | 232.9 | 244.8 | 268.6 | 275.7 | 290.0 |
| 82.5° | 78.4 | 78.4 | 85.6 | 92.7 | 111.7 | 126.0 | 137.9 | 147.4 | 168.8 | 175.9 | 183.0 |
| 85° | 38.0 | 35.7 | 40.4 | 45.2 | 52.3 | 59.4 | 66.6 | 71.3 | 87.9 | 92.7 | 102.2 |
| 87.5° | 4.8 | 4.8 | 4.8 | 7.1 | 9.5 | 14.3 | 16.6 | 16.6 | 26.1 | 30.9 | 35.7 |
| 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: P641437

CATALOG NUMBER: GWS-SA5F-830-U-RW-W-GRSWH

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|--------|--------|--------|
| 0° | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 | 4841.9 |
| 2.5° | 4889.5 | 4858.6 | 4877.6 | 4884.7 | 4884.7 | 4877.6 | 4846.7 | 4837.2 | 4822.9 | 4801.5 | 4801.5 |
| 5° | 4998.8 | 4975.0 | 4979.8 | 4967.9 | 4939.4 | 4903.7 | 4846.7 | 4818.1 | 4794.4 | 4768.2 | 4765.8 |
| 7.5° | 5186.6 | 5155.7 | 5150.9 | 5105.8 | 5029.7 | 4953.6 | 4868.1 | 4815.8 | 4780.1 | 4746.8 | 4744.5 |
| 10° | 5431.4 | 5402.9 | 5367.2 | 5276.9 | 5165.2 | 5053.5 | 4937.0 | 4865.7 | 4813.4 | 4765.8 | 4763.5 |
| 12.5° | 5704.8 | 5671.5 | 5604.9 | 5471.8 | 5331.6 | 5222.2 | 5089.1 | 4979.8 | 4901.3 | 4837.2 | 4825.3 |
| 15° | 6001.9 | 5954.3 | 5840.2 | 5683.4 | 5545.5 | 5429.0 | 5286.4 | 5129.5 | 5010.7 | 4908.5 | 4896.6 |
| 17.5° | 6230.1 | 6168.3 | 6044.7 | 5897.3 | 5783.2 | 5666.7 | 5481.3 | 5284.0 | 5112.9 | 4984.5 | 4965.5 |
| 20° | 6386.9 | 6337.0 | 6196.8 | 6087.4 | 6020.9 | 5918.7 | 5702.4 | 5478.9 | 5286.4 | 5124.8 | 5115.3 |
| 22.5° | 6531.9 | 6472.5 | 6334.7 | 6270.5 | 6270.5 | 6201.5 | 5994.7 | 5730.9 | 5505.1 | 5317.3 | 5293.5 |
| 25° | 6696.0 | 6631.8 | 6527.2 | 6520.1 | 6553.3 | 6522.4 | 6272.9 | 5990.0 | 5726.1 | 5514.6 | 5476.6 |
| 27.5° | 6924.1 | 6852.8 | 6791.0 | 6833.8 | 6881.4 | 6848.1 | 6570.0 | 6242.0 | 5963.8 | 5749.9 | 5716.6 |
| 30° | 7287.8 | 7199.9 | 7142.8 | 7195.1 | 7287.8 | 7190.4 | 6888.5 | 6541.5 | 6261.0 | 6025.6 | 6009.0 |
| 32.5° | 7710.9 | 7611.1 | 7551.7 | 7634.9 | 7718.1 | 7565.9 | 7266.4 | 6933.7 | 6638.9 | 6391.7 | 6363.2 |
| 35° | 8219.6 | 8093.6 | 8005.7 | 8117.4 | 8203.0 | 8053.2 | 7756.1 | 7440.0 | 7111.9 | 6855.2 | 6817.2 |
| 37.5° | 8671.2 | 8519.1 | 8459.7 | 8616.6 | 8730.7 | 8633.2 | 8309.9 | 8012.8 | 7653.9 | 7373.4 | 7356.8 |
| 40° | 8999.3 | 8849.5 | 8806.7 | 9065.8 | 9265.5 | 9241.7 | 8951.7 | 8611.8 | 8274.3 | 7951.0 | 7920.1 |
| 42.5° | 9141.9 | 9037.3 | 9046.8 | 9396.2 | 9705.2 | 9857.3 | 9598.3 | 9234.6 | 8908.9 | 8573.8 | 8552.4 |
| 45° | 9172.8 | 9108.6 | 9184.7 | 9622.0 | 10028.5 | 10339.9 | 10118.8 | 9814.6 | 9446.1 | 9122.9 | 9113.3 |
| 47.5° | 9206.0 | 9170.4 | 9286.9 | 9750.4 | 10232.9 | 10594.2 | 10470.6 | 10156.8 | 9783.7 | 9467.5 | 9443.7 |
| 50° | 9284.5 | 9270.2 | 9401.0 | 9840.7 | 10330.4 | 10663.1 | 10522.9 | 10211.5 | 9828.8 | 9517.4 | 9460.4 |
| 52.5° | 9308.3 | 9284.5 | 9472.3 | 9980.9 | 10492.0 | 10660.8 | 10358.9 | 9952.4 | 9567.4 | 9220.3 | 9160.9 |
| 55° | 9381.9 | 9339.2 | 9467.5 | 10033.2 | 10715.4 | 10798.6 | 10349.4 | 9740.9 | 9203.7 | 8730.7 | 8590.4 |
| 57.5° | 9401.0 | 9353.4 | 9436.6 | 9947.7 | 10473.0 | 10399.3 | 9096.7 | 7860.7 | 6848.1 | 6322.8 | 6382.2 |
| 60° | 9298.8 | 9313.0 | 9170.4 | 9113.3 | 8400.3 | 7416.2 | 5569.3 | 4452.1 | 3496.5 | 3092.5 | 3180.4 |
| 62.5° | 7078.7 | 7138.1 | 6650.8 | 5783.2 | 4447.3 | 3525.1 | 2331.8 | 1811.3 | 1533.2 | 1461.8 | 1473.7 |
| 65° | 3572.6 | 3653.4 | 3147.1 | 2602.8 | 1934.9 | 1564.1 | 1352.5 | 1309.7 | 1295.5 | 1278.8 | 1278.8 |
| 67.5° | 1414.3 | 1438.1 | 1419.1 | 1328.7 | 1236.0 | 1202.8 | 1193.2 | 1188.5 | 1171.9 | 1162.3 | 1164.7 |
| 70° | 1136.2 | 1155.2 | 1126.7 | 1069.6 | 1031.6 | 1029.2 | 1024.5 | 1015.0 | 1003.1 | 1003.1 | 1010.2 |
| 72.5° | 927.0 | 946.0 | 905.6 | 870.0 | 841.5 | 820.1 | 808.2 | 801.0 | 784.4 | 784.4 | 791.5 |
| 75° | 682.2 | 694.1 | 660.8 | 656.0 | 625.1 | 603.8 | 584.7 | 575.2 | 553.8 | 544.3 | 551.5 |
| 77.5° | 454.0 | 451.6 | 435.0 | 435.0 | 423.1 | 397.0 | 375.6 | 354.2 | 325.6 | 306.6 | 311.4 |
| 80° | 294.7 | 294.7 | 287.6 | 287.6 | 275.7 | 254.3 | 228.2 | 206.8 | 190.2 | 175.9 | 175.9 |
| 82.5° | 187.8 | 185.4 | 183.0 | 180.7 | 175.9 | 154.5 | 135.5 | 121.2 | 109.3 | 99.8 | 102.2 |
| 85° | 104.6 | 104.6 | 99.8 | 99.8 | 90.3 | 78.4 | 68.9 | 59.4 | 52.3 | 49.9 | 49.9 |
| 87.5° | 35.7 | 35.7 | 33.3 | 33.3 | 28.5 | 21.4 | 16.6 | 14.3 | 11.9 | 9.5 | 11.9 |
| 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)