

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: LUMARK

Report Number: P885347

Luminaire Tested: **NAV-SB6C-830-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885347
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6C-830-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39410 lumens
Efficiency: N/A
Efficacy: 131.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

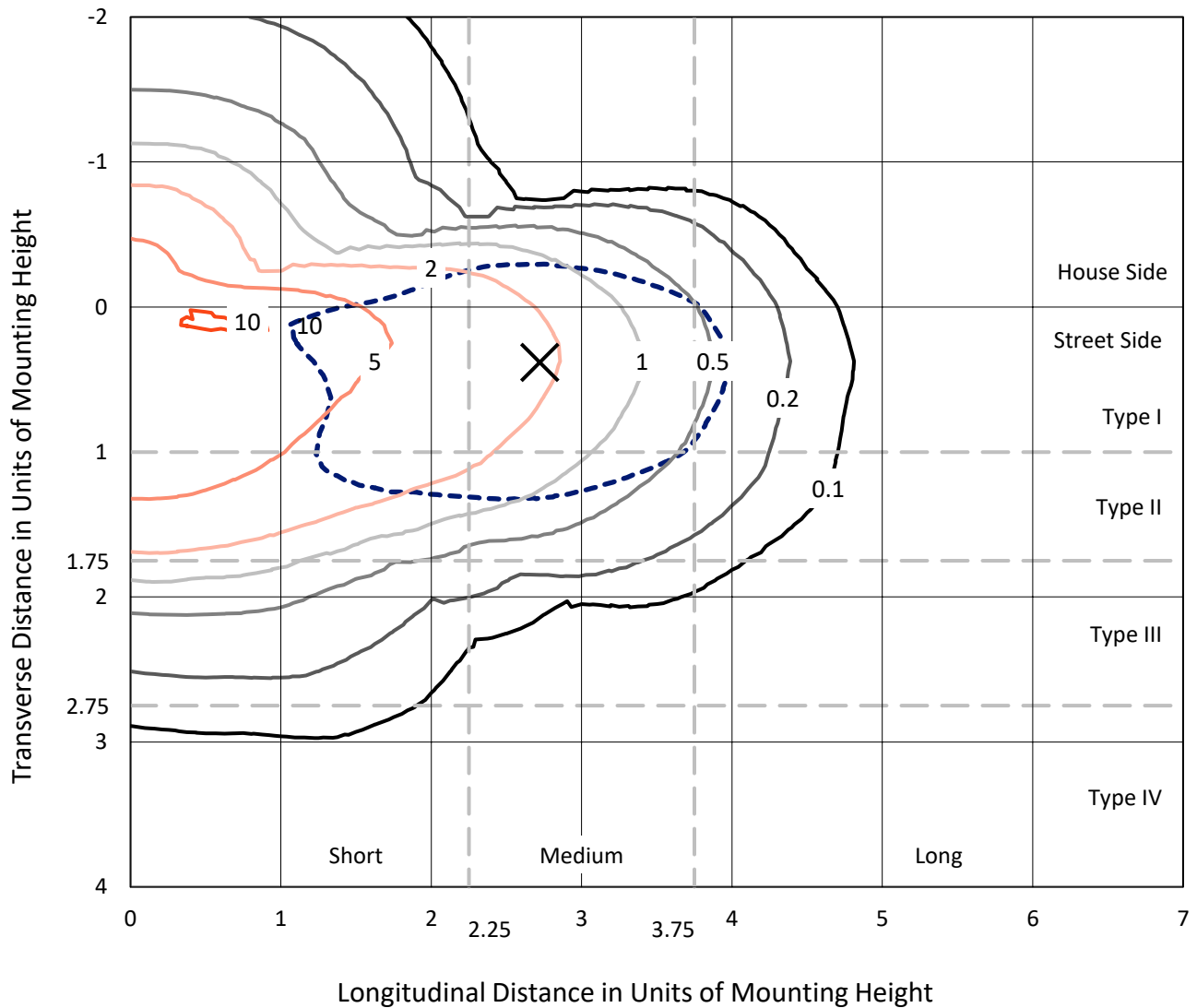
Input Watts (W): 300.9
Input Voltage (V): 120.0
Input Current (Ain): 2.518
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.297
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

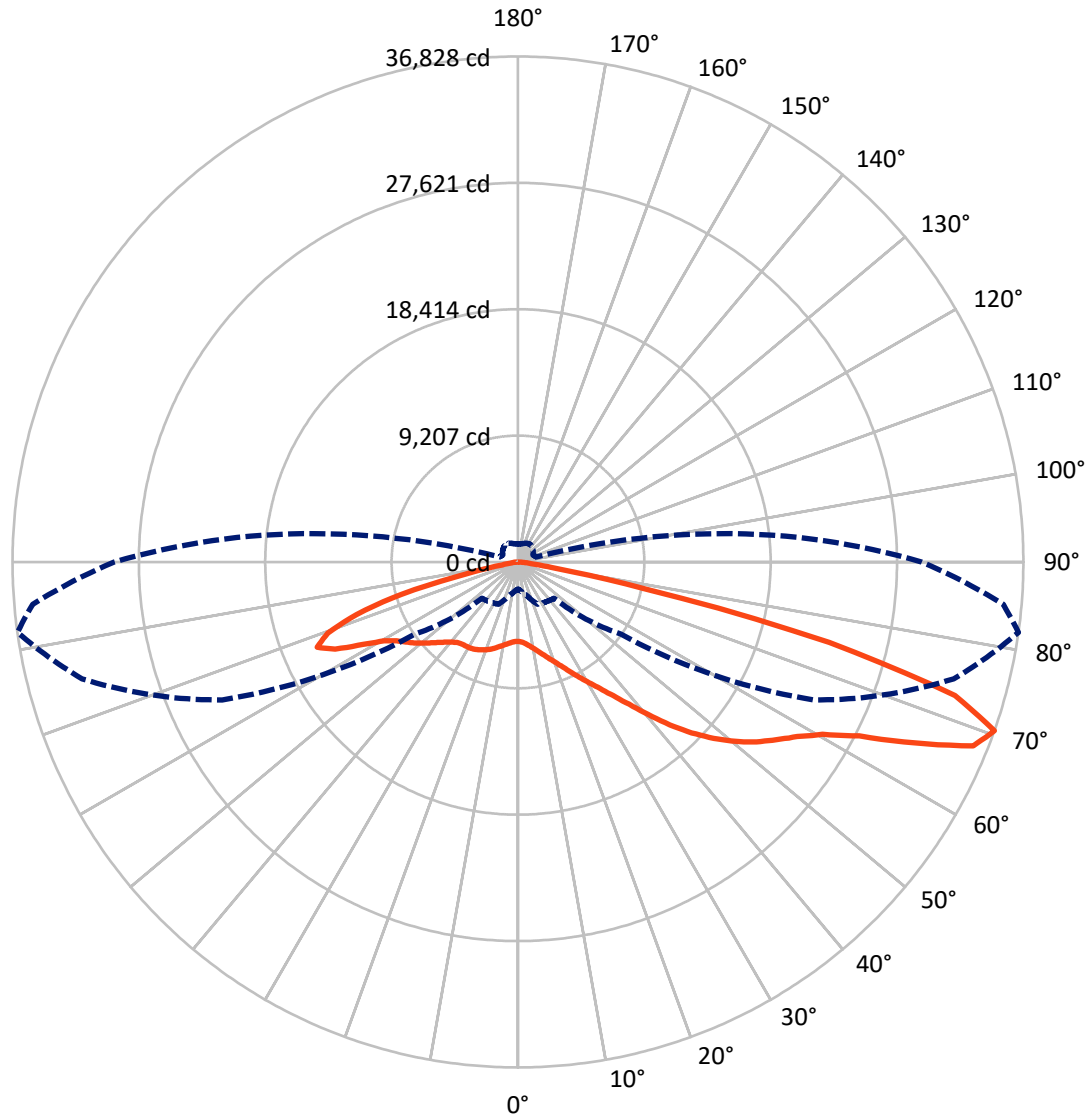
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9715.5 | 0.0 | 9715.5 |
| | % Fixture | 24.7 | 0.0 | 24.7 |
| Street Side | Lumens | 29694.5 | 0.0 | 29694.5 |
| | % Fixture | 75.3 | 0.0 | 75.3 |
| Total | Lumens | 39410.0 | 0.0 | 39410.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 545.5 | 1.4 |
| 10°-20° | 1567.4 | 4.0 |
| 20°-30° | 2622.1 | 6.7 |
| 30°-40° | 4096.4 | 10.4 |
| 40°-50° | 6523.9 | 16.6 |
| 50°-60° | 9078.8 | 23.0 |
| 60°-70° | 9496.9 | 24.1 |
| 70°-80° | 4963.6 | 12.6 |
| 80°-90° | 515.4 | 1.3 |
| 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° | 39410.0 | 100.0 |
| 0°-180° | 39410.0 | 100.0 |

Coefficient of Utilization

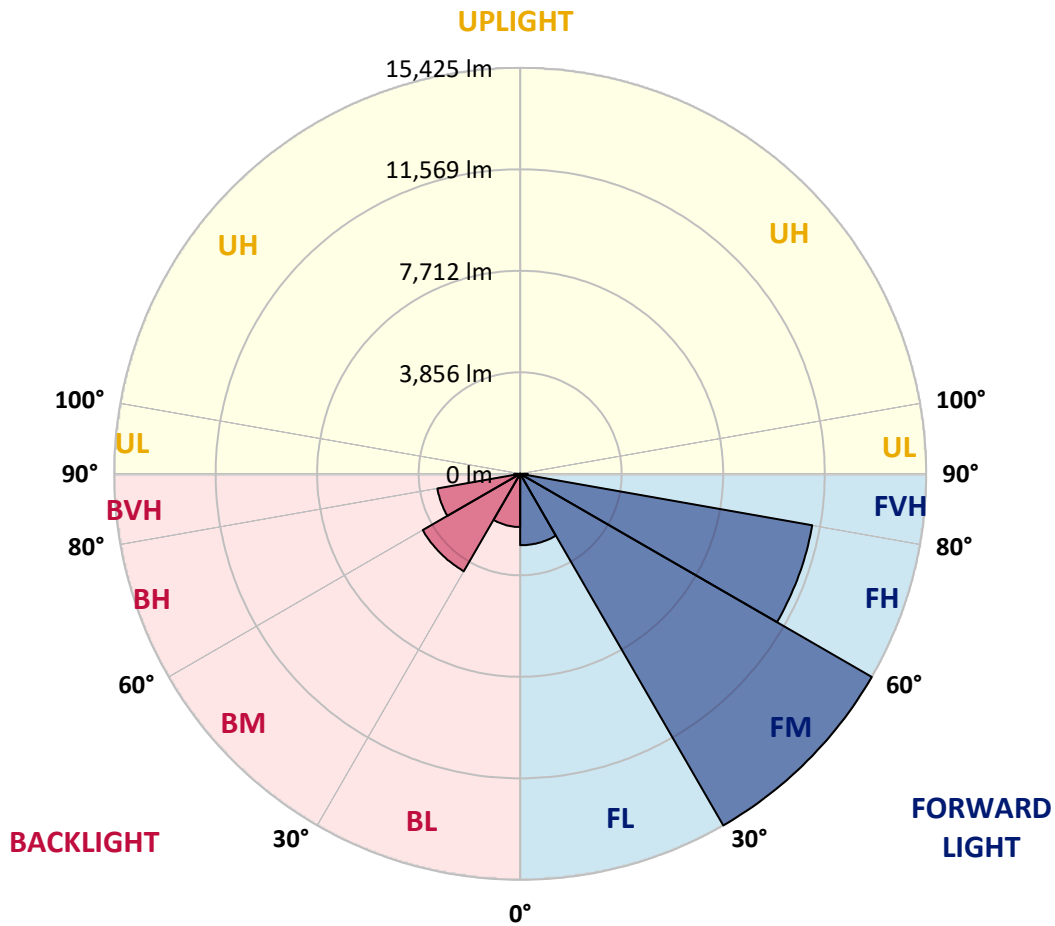


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 2713.8 | 6.9 | | | |
| FM (30°-60°) | 15424.7 | 39.1 | | | |
| FH (60°-80°) | 11267.4 | 28.6 | | | G4/12000 |
| FVH (80°-90°) | 288.5 | 0.7 | | | G3/500 |
| BL (0°-30°) | 2021.2 | 5.1 | B3/2500 | | |
| BM (30°-60°) | 4274.4 | 10.8 | B3/5000 | | |
| BH (60°-80°) | 3193.0 | 8.1 | B4/5000 | | G4/5000 |
| BVH (80°-90°) | 226.9 | 0.6 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G4
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 82° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 |
| 2.5° | 5916.0 | 5949.5 | 5939.0 | 5928.6 | 5928.6 | 5913.9 | 5911.8 | 5890.9 | 5874.2 | 5847.0 | 5840.7 |
| 5° | 5991.3 | 6026.9 | 6022.7 | 6031.0 | 6058.2 | 6064.5 | 6070.8 | 6058.2 | 6024.8 | 5991.3 | 5976.7 |
| 7.5° | 5924.4 | 5964.1 | 5976.7 | 6026.9 | 6110.5 | 6185.8 | 6242.2 | 6265.2 | 6233.9 | 6185.8 | 6162.8 |
| 10° | 5698.5 | 5742.4 | 5786.4 | 5905.6 | 6054.0 | 6231.8 | 6382.4 | 6472.3 | 6466.0 | 6420.0 | 6380.3 |
| 12.5° | 5240.6 | 5286.6 | 5380.7 | 5612.8 | 5884.7 | 6198.3 | 6478.6 | 6666.8 | 6731.6 | 6698.1 | 6629.1 |
| 15° | 4874.6 | 4914.3 | 4985.4 | 5223.8 | 5577.2 | 6054.0 | 6514.1 | 6880.1 | 7045.3 | 7026.4 | 6942.8 |
| 17.5° | 4864.1 | 4880.9 | 4924.8 | 5037.7 | 5309.6 | 5828.2 | 6476.5 | 7089.2 | 7405.0 | 7402.9 | 7298.3 |
| 20° | 5048.2 | 5054.4 | 5079.5 | 5102.5 | 5257.3 | 5656.7 | 6380.3 | 7262.8 | 7808.6 | 7808.6 | 7695.6 |
| 22.5° | 5303.3 | 5299.1 | 5324.2 | 5303.3 | 5378.6 | 5642.1 | 6319.6 | 7415.4 | 8258.2 | 8291.6 | 8149.4 |
| 25° | 5686.0 | 5665.1 | 5658.8 | 5610.7 | 5625.3 | 5778.0 | 6386.5 | 7589.0 | 8791.4 | 8860.4 | 8682.7 |
| 27.5° | 6196.2 | 6162.8 | 6139.8 | 6028.9 | 5991.3 | 6058.2 | 6591.5 | 7798.1 | 9385.3 | 9504.5 | 9278.7 |
| 30° | 6861.2 | 6800.6 | 6767.1 | 6574.7 | 6438.8 | 6449.3 | 6901.0 | 8076.2 | 10006.4 | 10198.8 | 9912.3 |
| 32.5° | 7768.8 | 7674.7 | 7584.8 | 7269.0 | 7020.2 | 6938.6 | 7300.4 | 8461.0 | 10679.8 | 10987.2 | 10619.1 |
| 35° | 8785.2 | 8709.9 | 8613.7 | 8126.4 | 7743.7 | 7555.5 | 7839.9 | 8998.5 | 11468.2 | 11955.4 | 11476.5 |
| 37.5° | 9763.8 | 9699.0 | 9745.0 | 9088.4 | 8594.9 | 8320.9 | 8546.8 | 9719.9 | 12440.6 | 13160.0 | 12551.4 |
| 40° | 10776.0 | 10725.8 | 10732.1 | 10104.7 | 9529.6 | 9222.2 | 9404.1 | 10625.4 | 13555.2 | 14592.4 | 13843.8 |
| 42.5° | 11876.0 | 11838.3 | 11712.8 | 11156.6 | 10510.4 | 10223.9 | 10391.2 | 11671.0 | 14751.4 | 16223.6 | 15261.6 |
| 45° | 13107.7 | 13084.7 | 12967.6 | 12329.7 | 11589.5 | 11267.4 | 11493.3 | 12825.4 | 15953.8 | 17758.5 | 16685.7 |
| 47.5° | 14172.1 | 14190.9 | 14176.3 | 13638.8 | 12871.4 | 12398.8 | 12668.5 | 14029.9 | 17072.6 | 19201.4 | 18051.3 |
| 50° | 14684.4 | 14782.7 | 14927.0 | 14759.7 | 14282.9 | 13802.0 | 13854.2 | 15192.6 | 18139.1 | 20554.5 | 19360.4 |
| 52.5° | 14416.8 | 14602.9 | 14996.0 | 15263.7 | 15447.7 | 15347.4 | 15207.2 | 16346.9 | 19142.9 | 21775.7 | 20598.4 |
| 55° | 13419.3 | 13680.7 | 14333.1 | 14979.3 | 15918.3 | 16648.1 | 16832.1 | 17626.8 | 20121.6 | 22850.6 | 21769.4 |
| 57.5° | 11602.0 | 12026.5 | 12612.1 | 13919.1 | 15500.0 | 17277.5 | 18726.7 | 19402.2 | 21158.8 | 23998.7 | 22994.9 |
| 60° | 8486.1 | 9054.9 | 9782.7 | 11727.5 | 14036.2 | 16940.8 | 20339.1 | 22129.1 | 22633.1 | 25485.5 | 24590.5 |
| 62.5° | 5430.9 | 5782.2 | 6451.4 | 8283.3 | 10937.0 | 15215.6 | 20832.6 | 25537.8 | 25132.1 | 27923.9 | 26982.8 |
| 65° | 3718.2 | 3944.0 | 4556.7 | 5585.6 | 7070.4 | 11326.0 | 19510.9 | 28093.2 | 29101.2 | 31788.4 | 31073.2 |
| 67.5° | 2701.8 | 2873.3 | 3396.1 | 4297.4 | 4606.9 | 6702.3 | 15140.3 | 27976.1 | 32959.5 | 35770.1 | 34657.5 |
| 70° | 1969.9 | 2091.2 | 2530.4 | 3396.1 | 3544.6 | 3728.6 | 9172.0 | 23781.2 | 32875.8 | 36828.2 | 35496.1 |
| 72.5° | 1459.7 | 1543.3 | 1838.2 | 2634.9 | 2869.1 | 2517.8 | 4540.0 | 17283.8 | 28250.1 | 33310.8 | 32242.2 |
| 75° | 1056.1 | 1118.8 | 1336.3 | 2015.9 | 2296.1 | 1917.6 | 2264.8 | 10100.5 | 19705.4 | 23431.9 | 23620.2 |
| 77.5° | 807.2 | 855.3 | 997.5 | 1476.4 | 1838.2 | 1438.7 | 1405.3 | 4646.7 | 9343.5 | 9389.5 | 9916.5 |
| 80° | 648.3 | 679.6 | 757.0 | 1039.3 | 1409.5 | 1077.0 | 915.9 | 1875.8 | 2952.8 | 2499.0 | 2622.4 |
| 82.5° | 476.8 | 529.1 | 639.9 | 729.8 | 1008.0 | 742.4 | 558.4 | 947.3 | 1123.0 | 966.1 | 974.5 |
| 85° | 271.9 | 307.4 | 386.9 | 522.8 | 644.1 | 453.8 | 320.0 | 420.3 | 522.8 | 428.7 | 382.7 |
| 87.5° | 96.2 | 125.5 | 135.9 | 204.9 | 280.2 | 188.2 | 123.4 | 121.3 | 171.5 | 127.6 | 106.7 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 | 5778.0 |
| 2.5° | 5819.8 | 5809.4 | 5767.5 | 5711.1 | 5652.5 | 5596.1 | 5577.2 | 5537.5 | 5510.3 | 5495.7 | 5512.4 |
| 5° | 5936.9 | 5903.5 | 5805.2 | 5679.7 | 5548.0 | 5405.8 | 5305.4 | 5213.4 | 5146.5 | 5083.7 | 5108.8 |
| 7.5° | 6104.2 | 6045.7 | 5876.3 | 5656.7 | 5422.5 | 5186.2 | 5010.5 | 4876.7 | 4786.8 | 4728.2 | 4740.8 |
| 10° | 6298.7 | 6208.8 | 5949.5 | 5621.2 | 5259.4 | 4920.6 | 4713.6 | 4598.6 | 4542.1 | 4510.7 | 4519.1 |
| 12.5° | 6522.5 | 6394.9 | 6024.8 | 5539.6 | 5010.5 | 4623.7 | 4481.5 | 4448.0 | 4450.1 | 4452.2 | 4456.4 |
| 15° | 6798.5 | 6620.8 | 6085.4 | 5361.8 | 4686.4 | 4395.7 | 4370.6 | 4425.0 | 4481.5 | 4508.6 | 4506.5 |
| 17.5° | 7110.1 | 6859.2 | 6095.9 | 5069.1 | 4368.5 | 4249.3 | 4328.8 | 4445.9 | 4531.6 | 4569.3 | 4577.6 |
| 20° | 7444.7 | 7101.7 | 6020.6 | 4655.0 | 4107.1 | 4130.1 | 4272.3 | 4422.9 | 4517.0 | 4565.1 | 4577.6 |
| 22.5° | 7827.4 | 7361.0 | 5840.7 | 4220.1 | 3893.8 | 4000.5 | 4167.8 | 4314.2 | 4412.4 | 4460.5 | 4473.1 |
| 25° | 8264.4 | 7651.7 | 5558.4 | 3854.1 | 3709.8 | 3854.1 | 4021.4 | 4142.7 | 4222.1 | 4266.1 | 4278.6 |
| 27.5° | 8749.6 | 7954.9 | 5182.0 | 3563.4 | 3548.8 | 3703.5 | 3841.5 | 3935.6 | 3977.5 | 4010.9 | 4023.5 |
| 30° | 9236.9 | 8231.0 | 4726.1 | 3343.8 | 3408.7 | 3555.0 | 3653.3 | 3695.2 | 3707.7 | 3714.0 | 3728.6 |
| 32.5° | 9763.8 | 8469.4 | 4247.2 | 3161.9 | 3274.8 | 3410.8 | 3469.3 | 3488.1 | 3429.6 | 3389.8 | 3402.4 |
| 35° | 10401.7 | 8724.5 | 3778.8 | 3017.6 | 3143.1 | 3260.2 | 3279.0 | 3262.3 | 3193.3 | 3111.7 | 3115.9 |
| 37.5° | 11190.0 | 9042.4 | 3404.5 | 2915.1 | 3019.7 | 3097.1 | 3074.1 | 3069.9 | 3076.2 | 2980.0 | 2986.2 |
| 40° | 12156.2 | 9456.4 | 3130.5 | 2835.7 | 2919.3 | 2936.1 | 2871.2 | 2906.8 | 2938.1 | 2791.8 | 2795.9 |
| 42.5° | 13229.0 | 9956.2 | 2957.0 | 2781.3 | 2835.7 | 2795.9 | 2695.6 | 2735.3 | 2731.1 | 2538.7 | 2536.6 |
| 45° | 14322.7 | 10499.9 | 2896.3 | 2741.6 | 2758.3 | 2678.8 | 2568.0 | 2578.5 | 2490.6 | 2317.1 | 2323.3 |
| 47.5° | 15410.1 | 11083.4 | 2934.0 | 2708.1 | 2662.1 | 2572.2 | 2486.4 | 2440.4 | 2310.8 | 2181.1 | 2181.1 |
| 50° | 16476.6 | 11696.1 | 3072.0 | 2641.2 | 2530.4 | 2478.1 | 2415.3 | 2333.8 | 2195.8 | 2084.9 | 2076.6 |
| 52.5° | 17465.7 | 12313.0 | 3226.7 | 2530.4 | 2365.2 | 2396.5 | 2356.8 | 2262.7 | 2126.8 | 2013.8 | 2015.9 |
| 55° | 18402.6 | 12929.9 | 3287.4 | 2377.7 | 2210.4 | 2325.4 | 2302.4 | 2128.8 | 1965.7 | 1873.7 | 1865.4 |
| 57.5° | 19423.1 | 13672.3 | 3220.5 | 2183.2 | 2084.9 | 2243.9 | 2156.0 | 1963.6 | 1869.5 | 1800.5 | 1794.3 |
| 60° | 20836.8 | 14837.1 | 3076.2 | 1942.7 | 1965.7 | 2122.6 | 1972.0 | 1892.5 | 1790.1 | 1712.7 | 1708.5 |
| 62.5° | 23185.2 | 17009.9 | 2844.0 | 1704.3 | 1825.6 | 1942.7 | 1884.2 | 1804.7 | 1700.1 | 1624.9 | 1624.9 |
| 65° | 26656.6 | 20029.6 | 2407.0 | 1518.2 | 1668.8 | 1767.1 | 1790.1 | 1710.6 | 1601.9 | 1522.4 | 1526.6 |
| 67.5° | 29584.3 | 21924.2 | 1821.4 | 1363.5 | 1507.8 | 1624.9 | 1689.7 | 1612.3 | 1497.3 | 1419.9 | 1422.0 |
| 70° | 29423.3 | 20548.2 | 1390.7 | 1210.8 | 1365.6 | 1484.8 | 1568.4 | 1507.8 | 1384.4 | 1311.2 | 1317.5 |
| 72.5° | 26133.8 | 17189.7 | 1125.1 | 1056.1 | 1221.3 | 1338.4 | 1438.7 | 1392.7 | 1267.3 | 1196.2 | 1196.2 |
| 75° | 19199.4 | 12202.2 | 899.2 | 899.2 | 1041.4 | 1185.7 | 1296.5 | 1267.3 | 1152.3 | 1102.1 | 1087.4 |
| 77.5° | 8093.0 | 5119.3 | 704.7 | 746.6 | 865.8 | 1018.4 | 1156.4 | 1166.9 | 1066.5 | 1129.3 | 1024.7 |
| 80° | 2151.8 | 1411.6 | 537.4 | 587.6 | 679.6 | 840.7 | 1005.9 | 1001.7 | 892.9 | 834.4 | 775.8 |
| 82.5° | 819.8 | 556.3 | 382.7 | 414.1 | 491.4 | 644.1 | 796.7 | 821.8 | 713.1 | 616.9 | 616.9 |
| 85° | 315.8 | 238.4 | 236.3 | 248.9 | 286.5 | 426.6 | 602.3 | 623.2 | 537.4 | 455.9 | 470.5 |
| 87.5° | 81.6 | 71.1 | 87.8 | 83.6 | 131.7 | 227.9 | 345.0 | 357.6 | 328.3 | 190.3 | 271.9 |
| 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)