

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: P884309

Luminaire Tested: **NAV-SB5A-760-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884309
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-760-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 5700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24557 lumens
Efficiency: N/A
Efficacy: 173.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

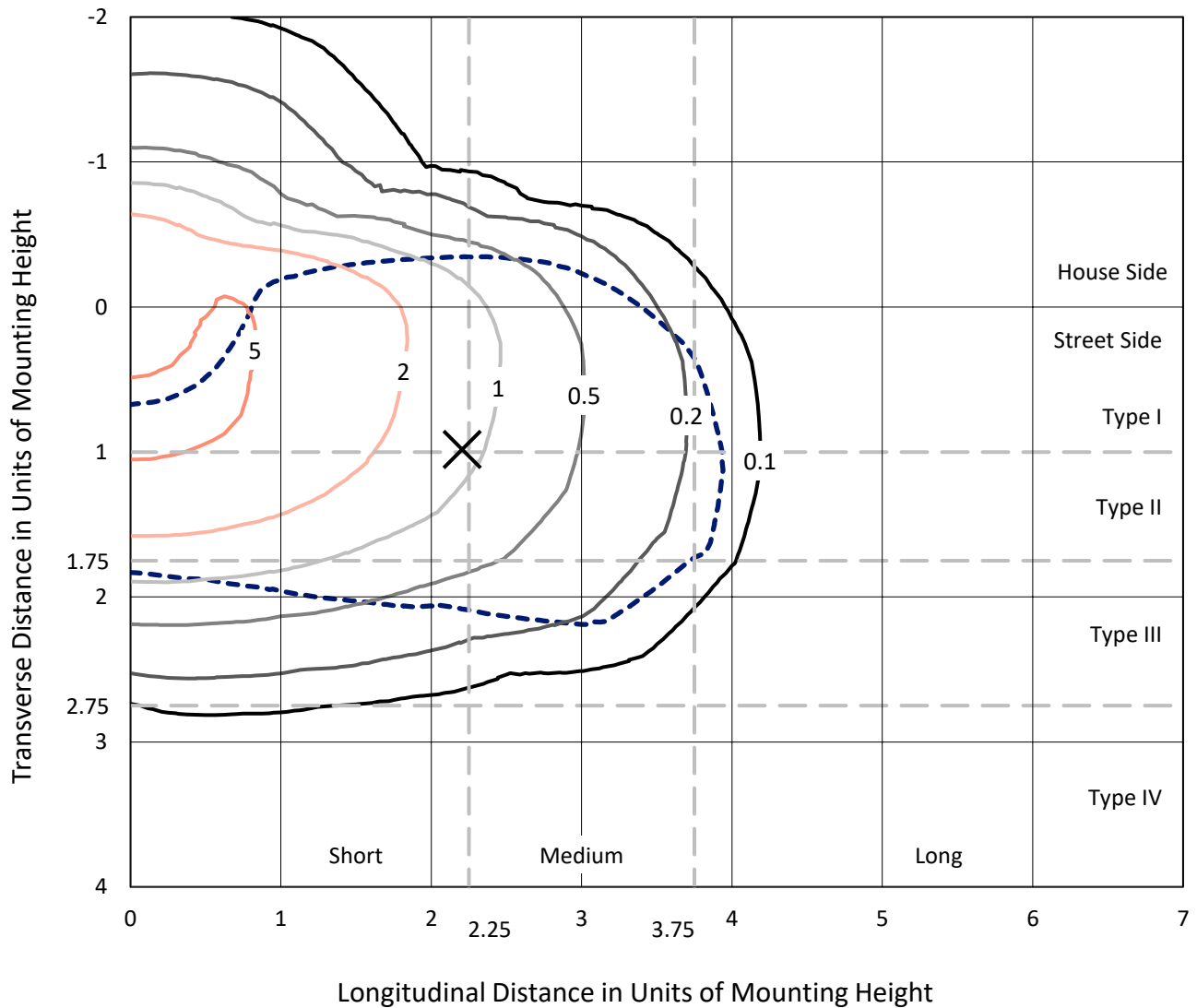
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884309
 CATALOG NUMBER: NAV-SB5A-760-U-T3

Iso-Footcandle Lines of Horizontal Illumination

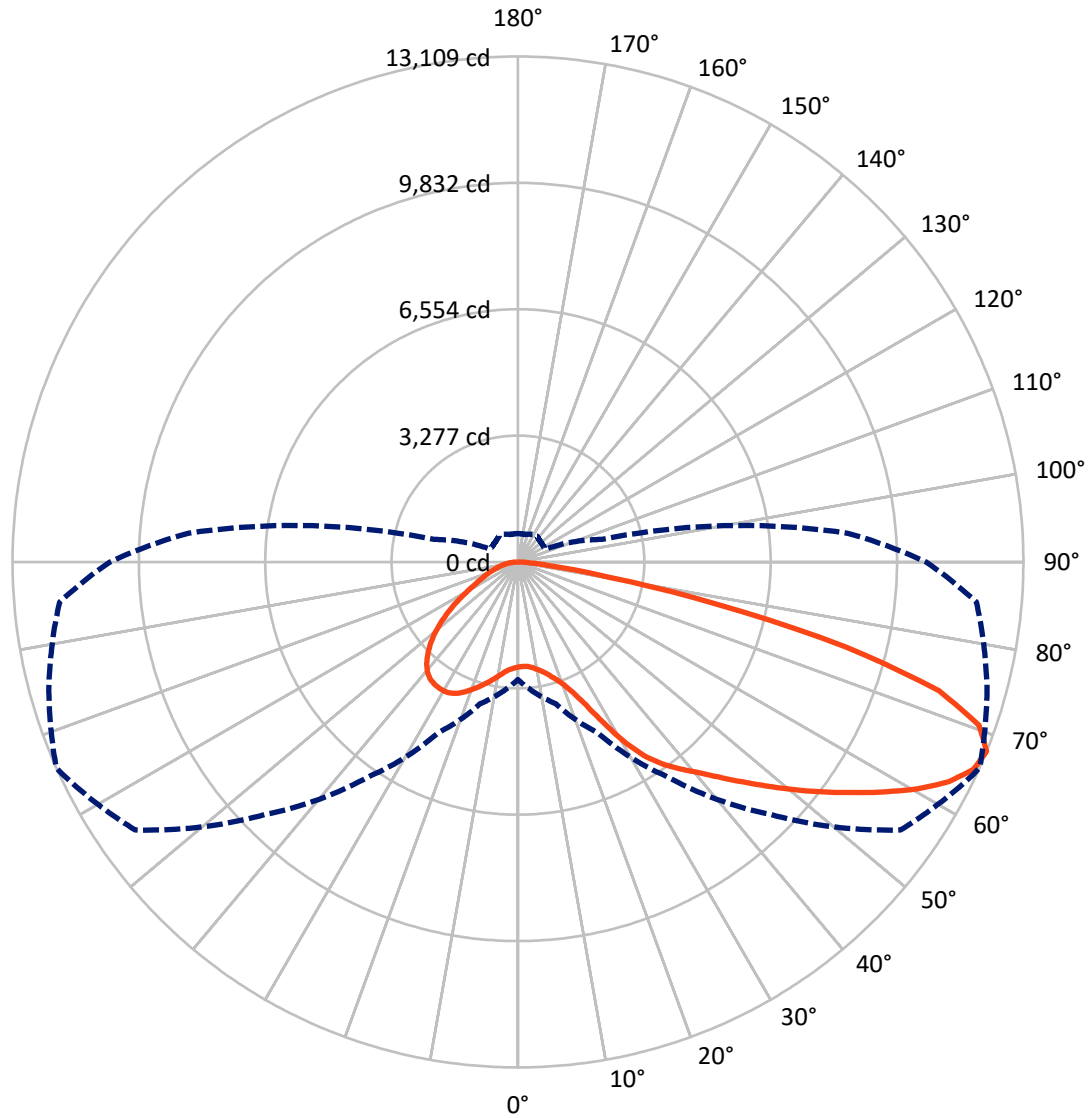
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type III - Short - N/A

REPORT NUMBER: P884309
CATALOG NUMBER: NAV-SB5A-760-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P884309
 CATALOG NUMBER: NAV-SB5A-760-U-T3

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 6106.0 | 0.0 | 6106.0 |
| | % Fixture | 24.9 | 0.0 | 24.9 |
| Street Side | Lumens | 18451.0 | 0.0 | 18451.0 |
| | % Fixture | 75.1 | 0.0 | 75.1 |
| Total | Lumens | 24557.0 | 0.0 | 24557.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 270.0 | 1.1 |
| 10°-20° | 892.2 | 3.6 |
| 20°-30° | 1719.6 | 7.0 |
| 30°-40° | 3015.2 | 12.3 |
| 40°-50° | 4482.6 | 18.3 |
| 50°-60° | 5682.1 | 23.1 |
| 60°-70° | 5559.8 | 22.6 |
| 70°-80° | 2652.1 | 10.8 |
| 80°-90° | 283.4 | 1.2 |
| 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° | 24557.0 | 100.0 |
| 0°-180° | 24557.0 | 100.0 |

Coefficient of Utilization



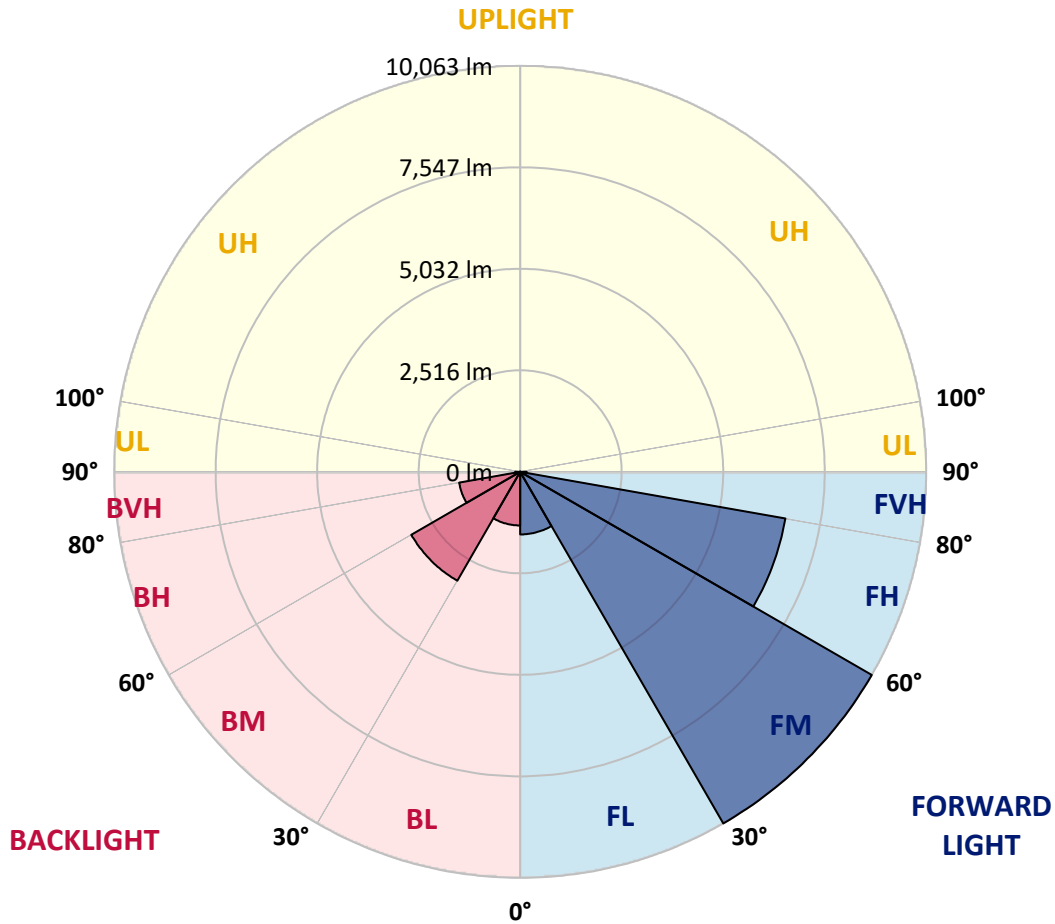
REPORT NUMBER: P884309
 CATALOG NUMBER: NAV-SB5A-760-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1551.8 | 6.3 | | | |
| FM (30°-60°) | 10063.3 | 41.0 | | | |
| FH (60°-80°) | 6675.3 | 27.2 | | | G3/7500 |
| FVH (80°-90°) | 160.7 | 0.7 | | | G2/225 |
| BL (0°-30°) | 1330.1 | 5.4 | B3/2500 | | |
| BM (30°-60°) | 3116.6 | 12.7 | B3/5000 | | |
| BH (60°-80°) | 1536.6 | 6.3 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 122.7 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type III Short



REPORT NUMBER: P884309
 CATALOG NUMBER: NAV-SB5A-760-U-T3

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° | 85° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 |
| 2.5° | 2695.3 | 2710.8 | 2706.9 | 2700.5 | 2699.2 | 2701.8 | 2705.6 | 2709.5 | 2708.2 | 2714.7 | 2725.0 |
| 5° | 2687.6 | 2703.1 | 2701.8 | 2701.8 | 2706.9 | 2717.2 | 2723.7 | 2730.1 | 2723.7 | 2731.4 | 2745.6 |
| 7.5° | 2692.7 | 2704.3 | 2709.5 | 2714.7 | 2727.6 | 2746.9 | 2762.4 | 2776.6 | 2768.9 | 2777.9 | 2795.9 |
| 10° | 2758.5 | 2767.6 | 2772.7 | 2772.7 | 2781.8 | 2803.7 | 2819.2 | 2845.0 | 2838.5 | 2852.7 | 2875.9 |
| 12.5° | 2878.5 | 2887.6 | 2887.6 | 2882.4 | 2888.8 | 2903.0 | 2908.2 | 2936.6 | 2925.0 | 2948.2 | 2971.4 |
| 15° | 3025.6 | 3043.7 | 3029.5 | 3020.5 | 3023.0 | 3037.2 | 3035.9 | 3057.9 | 3046.3 | 3065.6 | 3086.3 |
| 17.5° | 3188.2 | 3211.4 | 3188.2 | 3186.9 | 3181.7 | 3197.2 | 3198.5 | 3217.9 | 3197.2 | 3211.4 | 3225.6 |
| 20° | 3380.4 | 3412.7 | 3393.3 | 3399.8 | 3388.2 | 3394.6 | 3401.1 | 3429.5 | 3397.2 | 3407.5 | 3403.7 |
| 22.5° | 3651.4 | 3690.1 | 3669.4 | 3694.0 | 3686.2 | 3681.1 | 3679.8 | 3730.1 | 3679.8 | 3683.6 | 3646.2 |
| 25° | 4046.2 | 4092.6 | 4056.5 | 4090.1 | 4090.1 | 4106.8 | 4126.2 | 4190.7 | 4106.8 | 4082.3 | 3985.6 |
| 27.5° | 4629.4 | 4675.8 | 4604.9 | 4625.5 | 4619.1 | 4660.3 | 4639.7 | 4799.7 | 4709.4 | 4669.4 | 4474.6 |
| 30° | 5331.3 | 5413.8 | 5279.7 | 5274.5 | 5268.0 | 5333.9 | 5363.5 | 5469.3 | 5377.7 | 5337.7 | 5102.9 |
| 32.5° | 6089.9 | 6176.4 | 6016.4 | 5969.9 | 5945.4 | 5985.4 | 5960.9 | 6046.1 | 5982.8 | 5920.9 | 5630.6 |
| 35° | 6892.5 | 6977.6 | 6825.4 | 6735.1 | 6637.0 | 6553.1 | 6465.4 | 6487.3 | 6428.0 | 6333.8 | 6033.2 |
| 37.5° | 7651.1 | 7807.2 | 7646.0 | 7549.2 | 7368.6 | 7204.7 | 6959.6 | 6857.6 | 6802.1 | 6715.7 | 6412.5 |
| 40° | 8424.0 | 8513.0 | 8390.4 | 8307.9 | 8111.7 | 7855.0 | 7462.7 | 7247.3 | 7172.4 | 7088.6 | 6831.8 |
| 42.5° | 8993.0 | 9078.1 | 9012.3 | 8955.6 | 8802.0 | 8504.0 | 7996.9 | 7727.2 | 7618.9 | 7524.7 | 7306.6 |
| 45° | 9444.6 | 9507.8 | 9466.5 | 9487.1 | 9421.3 | 9132.3 | 8550.4 | 8242.1 | 8129.8 | 8015.0 | 7843.4 |
| 47.5° | 9626.5 | 9693.6 | 9759.4 | 9881.9 | 9994.2 | 9781.3 | 9145.2 | 8799.4 | 8680.7 | 8563.3 | 8394.3 |
| 50° | 9605.8 | 9674.2 | 9865.2 | 10125.8 | 10474.2 | 10403.2 | 9772.3 | 9392.9 | 9283.3 | 9149.1 | 8993.0 |
| 52.5° | 9440.7 | 9518.1 | 9763.2 | 10196.8 | 10751.6 | 10869.0 | 10410.9 | 10005.8 | 9902.6 | 9742.6 | 9586.5 |
| 55° | 9007.2 | 9053.6 | 9421.3 | 10035.5 | 10817.4 | 11194.1 | 11036.7 | 10658.7 | 10555.5 | 10332.2 | 10161.9 |
| 57.5° | 8203.3 | 8270.4 | 8805.9 | 9600.7 | 10652.2 | 11414.7 | 11586.4 | 11345.1 | 11245.7 | 10924.5 | 10746.4 |
| 60° | 7154.4 | 7261.5 | 7874.3 | 8870.4 | 10231.6 | 11413.5 | 12085.7 | 12019.9 | 11937.3 | 11507.6 | 11321.9 |
| 62.5° | 5967.4 | 6091.2 | 6680.9 | 7838.2 | 9496.2 | 11089.6 | 12397.9 | 12585.0 | 12542.4 | 12045.7 | 11808.3 |
| 65° | 4582.9 | 4668.1 | 5255.1 | 6502.8 | 8351.7 | 10394.2 | 12434.0 | 12970.8 | 12978.5 | 12454.7 | 12062.5 |
| 67.5° | 3051.4 | 3296.6 | 3806.2 | 4879.7 | 6818.9 | 9257.5 | 12116.6 | 13034.0 | 13108.8 | 12595.3 | 11934.7 |
| 70° | 1488.9 | 1811.5 | 2310.8 | 3171.4 | 4879.7 | 7514.4 | 11287.0 | 12515.3 | 12681.8 | 12185.0 | 11173.5 |
| 72.5° | 618.0 | 722.5 | 994.8 | 1565.1 | 2801.1 | 5070.6 | 9620.0 | 11109.0 | 11417.3 | 10796.7 | 9394.2 |
| 75° | 416.7 | 451.6 | 569.0 | 802.5 | 1276.0 | 2500.5 | 6937.6 | 8283.3 | 8780.1 | 8154.3 | 6665.4 |
| 77.5° | 321.3 | 343.2 | 414.2 | 561.3 | 758.7 | 945.7 | 3713.3 | 4991.9 | 5248.7 | 4859.0 | 3468.2 |
| 80° | 252.9 | 269.7 | 309.7 | 409.0 | 538.0 | 505.8 | 1265.7 | 2261.8 | 2410.2 | 2021.8 | 1114.8 |
| 82.5° | 219.3 | 225.8 | 221.9 | 277.4 | 357.4 | 295.5 | 415.5 | 834.8 | 921.2 | 668.3 | 363.8 |
| 85° | 158.7 | 176.8 | 184.5 | 171.6 | 189.7 | 149.7 | 170.3 | 295.5 | 325.1 | 290.3 | 205.1 |
| 87.5° | 64.5 | 95.5 | 117.4 | 111.0 | 69.7 | 42.6 | 52.9 | 86.4 | 99.3 | 108.4 | 67.1 |
| 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: P884309
 CATALOG NUMBER: NAV-SB5A-760-U-T3

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 | 2723.7 |
| 2.5° | 2726.3 | 2735.3 | 2741.8 | 2749.5 | 2754.7 | 2762.4 | 2777.9 | 2786.9 | 2788.2 | 2794.7 | 2793.4 |
| 5° | 2750.8 | 2763.7 | 2777.9 | 2798.5 | 2821.8 | 2841.1 | 2870.8 | 2891.4 | 2899.2 | 2905.6 | 2904.3 |
| 7.5° | 2803.7 | 2821.8 | 2847.6 | 2883.7 | 2917.2 | 2943.0 | 2979.2 | 3003.7 | 3028.2 | 3037.2 | 3038.5 |
| 10° | 2882.4 | 2908.2 | 2945.6 | 2994.6 | 3030.8 | 3064.3 | 3101.7 | 3122.4 | 3146.9 | 3157.2 | 3162.4 |
| 12.5° | 2980.5 | 3007.5 | 3056.6 | 3125.0 | 3158.5 | 3181.7 | 3194.6 | 3189.5 | 3194.6 | 3203.7 | 3206.2 |
| 15° | 3092.7 | 3122.4 | 3177.9 | 3251.4 | 3274.6 | 3254.0 | 3225.6 | 3199.8 | 3195.9 | 3198.5 | 3207.5 |
| 17.5° | 3225.6 | 3247.5 | 3312.0 | 3374.0 | 3357.2 | 3272.0 | 3210.1 | 3168.8 | 3148.2 | 3141.7 | 3150.8 |
| 20° | 3411.4 | 3411.4 | 3464.3 | 3503.0 | 3390.7 | 3246.2 | 3149.5 | 3082.4 | 3039.8 | 3021.7 | 3017.9 |
| 22.5° | 3637.2 | 3616.5 | 3650.1 | 3623.0 | 3384.3 | 3174.0 | 3039.8 | 2923.7 | 2859.2 | 2833.4 | 2829.5 |
| 25° | 3923.6 | 3899.1 | 3890.1 | 3722.3 | 3337.8 | 3059.2 | 2841.1 | 2700.5 | 2643.7 | 2629.5 | 2632.1 |
| 27.5° | 4355.8 | 4293.9 | 4176.5 | 3776.5 | 3252.7 | 2878.5 | 2608.9 | 2478.6 | 2446.3 | 2447.6 | 2451.5 |
| 30° | 4931.3 | 4807.4 | 4519.7 | 3785.6 | 3113.3 | 2623.1 | 2371.5 | 2278.6 | 2263.1 | 2269.5 | 2291.5 |
| 32.5° | 5464.2 | 5346.8 | 4870.7 | 3744.3 | 2899.2 | 2372.8 | 2158.6 | 2096.6 | 2073.4 | 2081.2 | 2091.5 |
| 35° | 5882.2 | 5849.9 | 5195.8 | 3686.2 | 2636.0 | 2137.9 | 1967.6 | 1914.7 | 1869.6 | 1859.2 | 1867.0 |
| 37.5° | 6277.0 | 6264.1 | 5439.7 | 3604.9 | 2375.3 | 1971.5 | 1814.1 | 1744.4 | 1678.6 | 1642.5 | 1643.8 |
| 40° | 6710.5 | 6697.6 | 5599.6 | 3479.8 | 2144.4 | 1827.0 | 1676.0 | 1584.4 | 1503.1 | 1437.3 | 1443.8 |
| 42.5° | 7198.2 | 7122.1 | 5675.8 | 3300.4 | 1948.3 | 1704.4 | 1563.8 | 1439.9 | 1332.8 | 1272.2 | 1276.0 |
| 45° | 7731.1 | 7559.5 | 5674.5 | 3072.1 | 1783.1 | 1592.2 | 1443.8 | 1268.3 | 1169.0 | 1112.2 | 1109.6 |
| 47.5° | 8296.2 | 7977.6 | 5604.8 | 2819.2 | 1623.1 | 1468.3 | 1258.0 | 1123.8 | 1058.0 | 1023.2 | 1015.4 |
| 50° | 8879.4 | 8368.5 | 5486.1 | 2528.9 | 1459.3 | 1327.7 | 1141.9 | 1050.3 | 999.9 | 967.7 | 956.1 |
| 52.5° | 9427.8 | 8723.3 | 5342.9 | 2199.9 | 1292.8 | 1190.9 | 1090.3 | 1019.3 | 966.4 | 930.3 | 914.8 |
| 55° | 9937.4 | 9029.1 | 5140.3 | 1863.1 | 1157.3 | 1099.3 | 1065.7 | 1006.4 | 945.7 | 903.2 | 886.4 |
| 57.5° | 10390.3 | 9227.8 | 4790.7 | 1547.0 | 1060.6 | 1036.1 | 1039.9 | 984.5 | 914.8 | 878.7 | 855.4 |
| 60° | 10767.0 | 9373.6 | 4273.3 | 1254.1 | 981.9 | 974.1 | 999.9 | 943.2 | 861.9 | 820.6 | 802.5 |
| 62.5° | 10992.8 | 9371.0 | 3638.5 | 1027.0 | 914.8 | 917.4 | 947.0 | 891.6 | 809.0 | 770.3 | 758.7 |
| 65° | 10973.5 | 9141.3 | 2941.7 | 878.7 | 850.3 | 852.8 | 891.6 | 834.8 | 765.1 | 741.9 | 740.6 |
| 67.5° | 10585.1 | 8581.4 | 2256.6 | 781.9 | 779.3 | 790.9 | 836.1 | 796.1 | 738.0 | 735.4 | 739.3 |
| 70° | 9533.6 | 7418.9 | 1625.7 | 704.5 | 705.8 | 722.5 | 781.9 | 771.6 | 723.8 | 729.0 | 727.7 |
| 72.5° | 7644.7 | 5656.4 | 1091.5 | 623.2 | 624.5 | 651.6 | 730.3 | 752.2 | 709.6 | 778.0 | 788.3 |
| 75° | 5091.3 | 3527.5 | 701.9 | 536.7 | 538.0 | 572.9 | 685.1 | 714.8 | 670.9 | 775.4 | 781.9 |
| 77.5° | 2446.3 | 1585.7 | 508.4 | 451.6 | 451.6 | 483.8 | 592.2 | 640.0 | 571.6 | 602.5 | 552.2 |
| 80° | 845.1 | 596.1 | 400.0 | 363.8 | 356.1 | 378.0 | 499.3 | 554.8 | 492.9 | 454.2 | 425.8 |
| 82.5° | 332.9 | 309.7 | 321.3 | 282.6 | 256.8 | 271.0 | 388.4 | 458.0 | 362.6 | 327.7 | 326.4 |
| 85° | 191.0 | 201.3 | 227.1 | 187.1 | 148.4 | 166.4 | 285.1 | 329.0 | 273.5 | 241.3 | 246.4 |
| 87.5° | 51.6 | 71.0 | 104.5 | 96.8 | 67.1 | 71.0 | 135.5 | 181.9 | 157.4 | 121.3 | 125.2 |
| 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)