

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: P968182

Luminaire Tested: **NAV-SB5B-727-U-RW**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968182
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-19)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-727-U-RW
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND RECTANGULAR
WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27848.2 lumens
Efficiency: N/A
Efficacy: 152.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G4

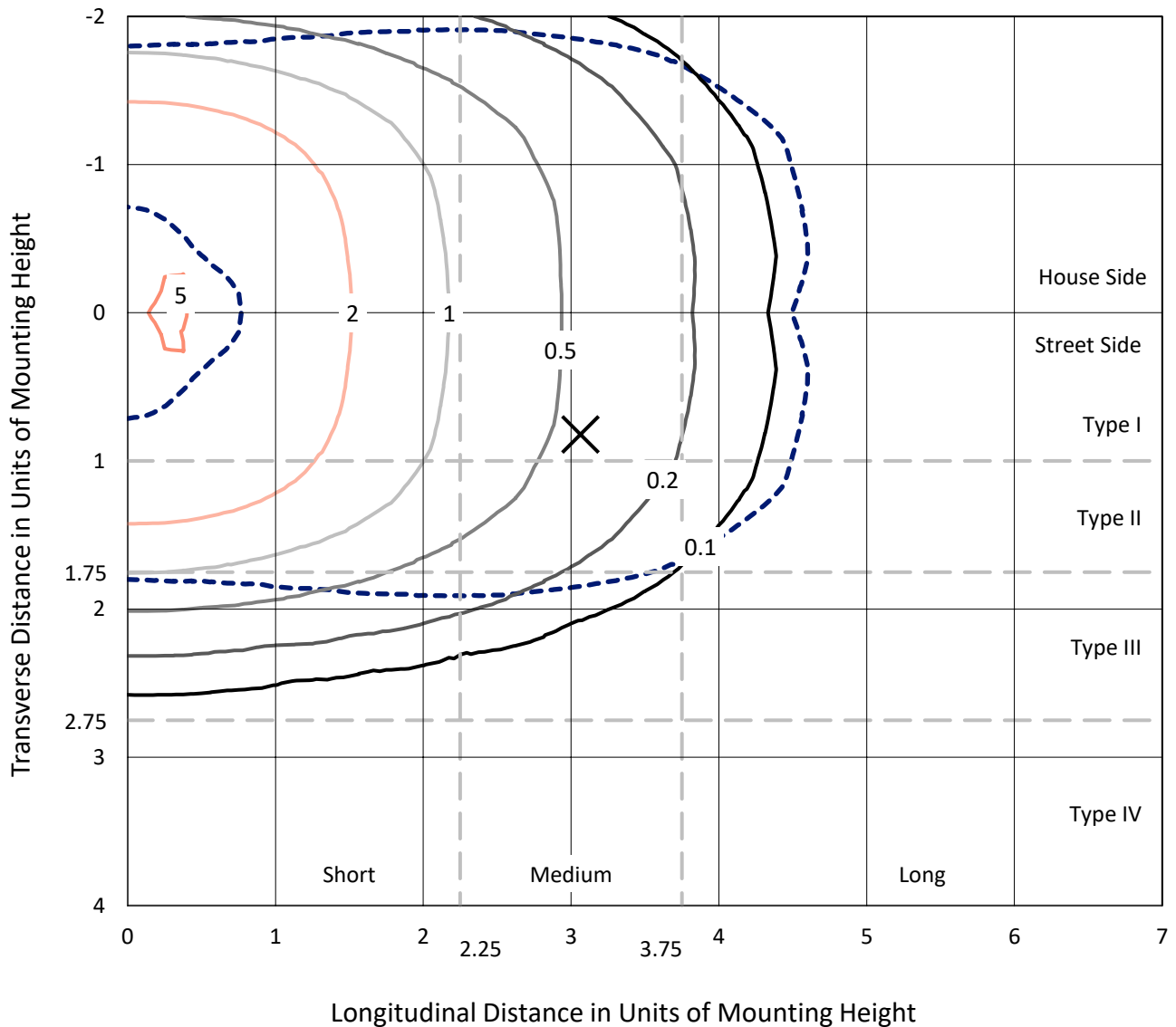
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

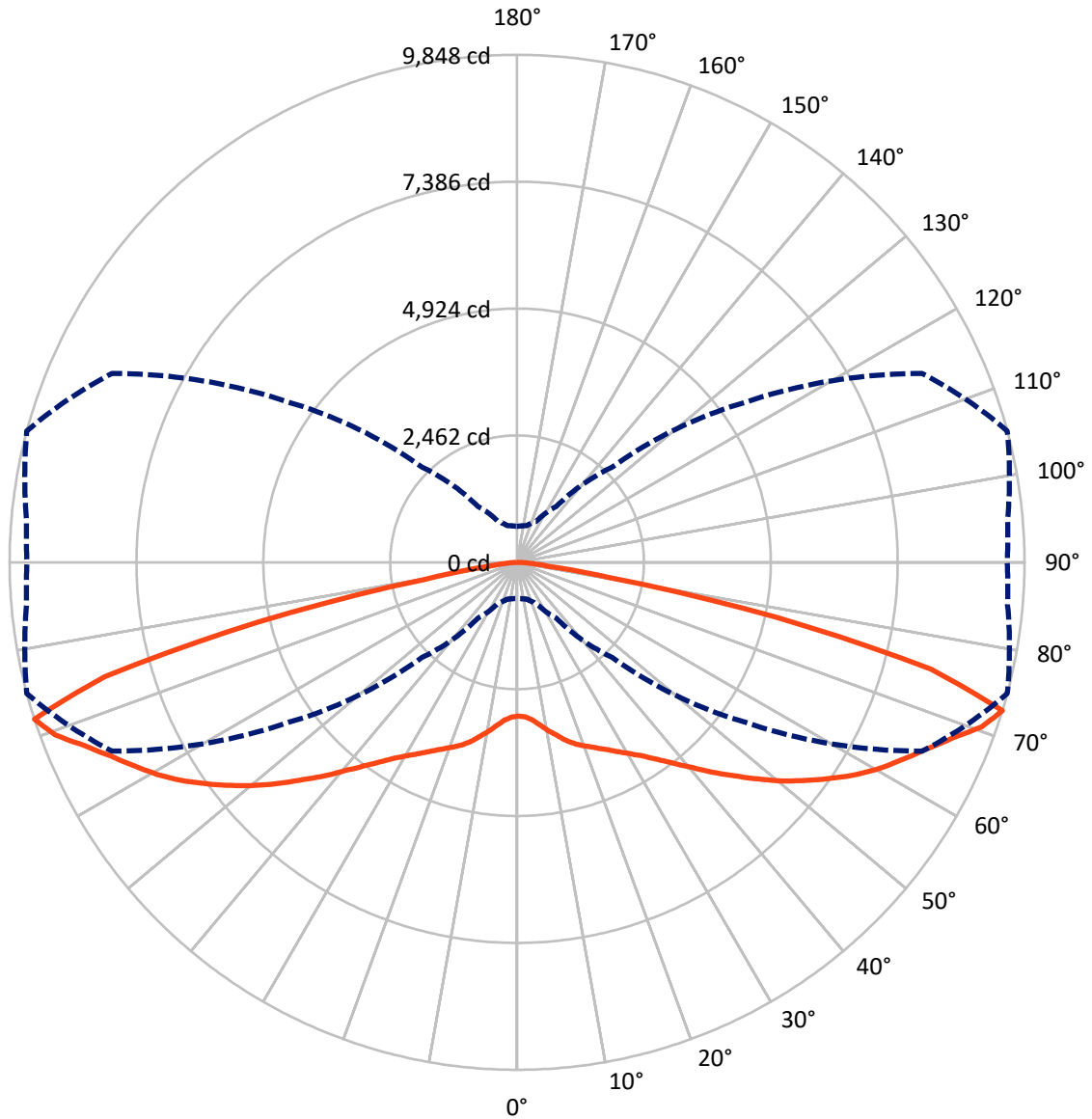
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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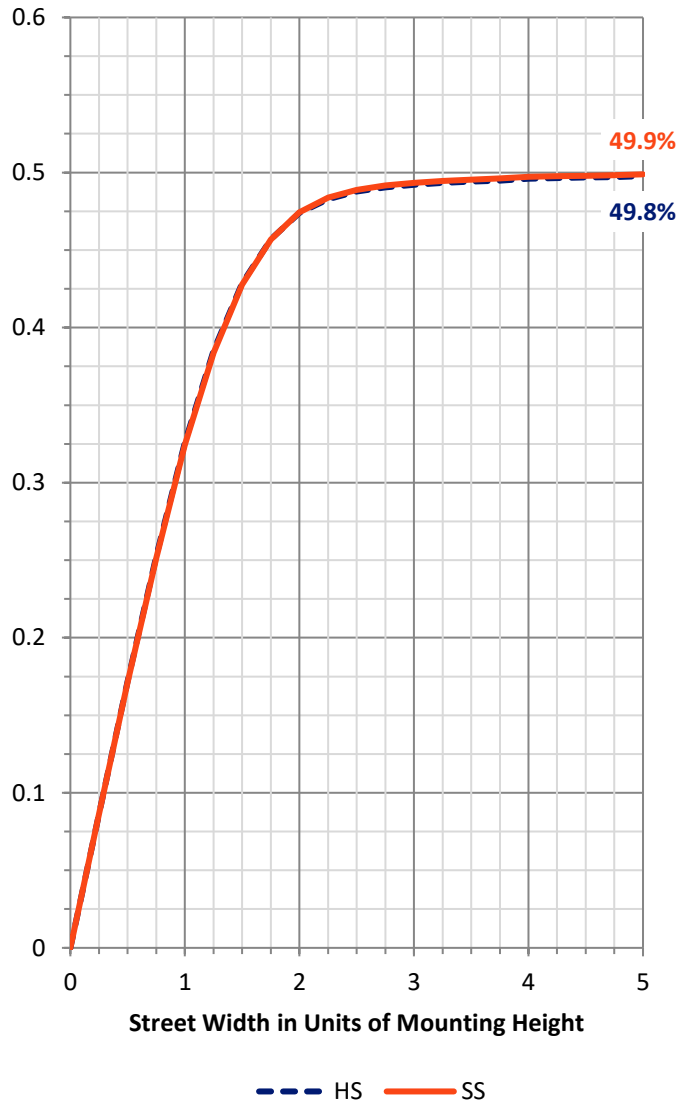
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 13924.1 | 0.0 | 13924.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 13924.1 | 0.0 | 13924.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 27848.2 | 0.0 | 27848.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 292.2 | 1.0 |
| 10°-20° | 963.8 | 3.5 |
| 20°-30° | 1862.3 | 6.7 |
| 30°-40° | 3144.6 | 11.3 |
| 40°-50° | 4987.0 | 17.9 |
| 50°-60° | 6677.0 | 24.0 |
| 60°-70° | 6354.4 | 22.8 |
| 70°-80° | 3315.8 | 11.9 |
| 80°-90° | 251.0 | 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° | 27848.2 | 100.0 |
| 0°-180° | 27848.2 | 100.0 |

Coefficient of Utilization

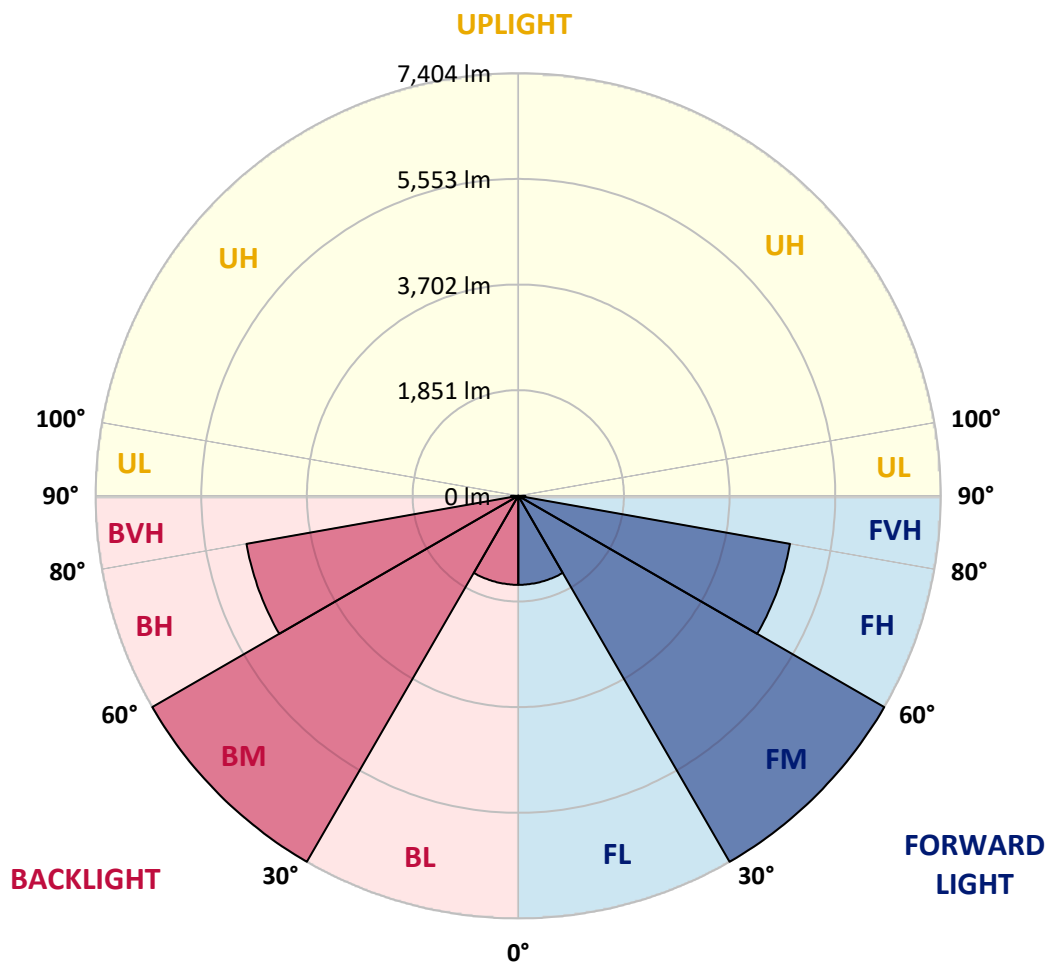


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1559.2 | 5.6 | | | |
| FM (30°-60°) | 7404.3 | 26.6 | | | |
| FH (60°-80°) | 4835.1 | 17.4 | | | G2/5000 |
| FVH (80°-90°) | 125.5 | 0.5 | | | G2/225 |
| BL (0°-30°) | 1559.2 | 5.6 | B3/2500 | | |
| BM (30°-60°) | 7404.3 | 26.6 | B4/8500 | | |
| BH (60°-80°) | 4835.1 | 17.4 | B4/5000 | | G4/5000 |
| BVH (80°-90°) | 125.5 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G4
 Type III Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2983.1 | 2983.1 | 2983.1 | 2983.1 | 2983.1 | 2983.1 | 2983.1 | 2983.1 | 2983.1 | 2983.1 | 2983.1 |
| 2.5° | 2983.1 | 2980.2 | 2983.1 | 2985.9 | 2984.5 | 2984.5 | 2991.6 | 2995.9 | 3004.4 | 3002.9 | 3001.5 |
| 5° | 2963.2 | 2961.7 | 2973.1 | 2985.9 | 2995.9 | 3012.9 | 3034.2 | 3049.9 | 3069.8 | 3074.1 | 3074.1 |
| 7.5° | 2953.2 | 2948.9 | 2968.8 | 2991.6 | 3022.8 | 3065.5 | 3106.8 | 3149.4 | 3183.5 | 3194.9 | 3197.7 |
| 10° | 2960.3 | 2961.7 | 2988.7 | 3031.4 | 3081.1 | 3140.9 | 3199.1 | 3271.7 | 3320.0 | 3331.4 | 3342.7 |
| 12.5° | 2993.0 | 2990.1 | 3035.6 | 3103.9 | 3172.2 | 3247.5 | 3315.8 | 3395.4 | 3448.0 | 3475.0 | 3486.3 |
| 15° | 3052.8 | 3047.0 | 3111.0 | 3211.9 | 3311.5 | 3399.6 | 3455.1 | 3530.4 | 3591.6 | 3625.7 | 3638.5 |
| 17.5° | 3123.8 | 3126.7 | 3210.5 | 3341.4 | 3472.2 | 3571.7 | 3624.3 | 3662.7 | 3709.6 | 3739.5 | 3753.7 |
| 20° | 3248.9 | 3254.6 | 3348.5 | 3503.4 | 3652.7 | 3766.5 | 3809.1 | 3795.0 | 3807.7 | 3830.4 | 3847.5 |
| 22.5° | 3416.7 | 3419.5 | 3524.8 | 3692.6 | 3849.0 | 3974.0 | 4002.5 | 3944.2 | 3908.6 | 3924.3 | 3935.7 |
| 25° | 3611.5 | 3629.9 | 3735.2 | 3907.2 | 4067.9 | 4187.3 | 4200.1 | 4112.0 | 4023.8 | 4028.1 | 4035.2 |
| 27.5° | 3849.0 | 3866.0 | 3972.7 | 4143.3 | 4306.7 | 4410.6 | 4409.1 | 4291.2 | 4161.8 | 4129.0 | 4139.1 |
| 30° | 4106.4 | 4124.8 | 4234.3 | 4410.6 | 4562.7 | 4653.7 | 4633.8 | 4493.1 | 4308.2 | 4247.1 | 4254.2 |
| 32.5° | 4412.0 | 4423.4 | 4534.3 | 4710.6 | 4851.3 | 4923.9 | 4882.6 | 4709.2 | 4478.8 | 4409.1 | 4426.3 |
| 35° | 4781.7 | 4798.7 | 4881.3 | 5047.6 | 5171.2 | 5231.0 | 5161.3 | 4956.6 | 4697.8 | 4619.6 | 4631.0 |
| 37.5° | 5203.9 | 5192.6 | 5286.4 | 5434.3 | 5536.6 | 5573.6 | 5478.4 | 5235.3 | 4948.1 | 4855.6 | 4872.6 |
| 40° | 5644.8 | 5639.0 | 5741.4 | 5883.6 | 5939.1 | 5961.8 | 5821.1 | 5555.2 | 5236.7 | 5137.2 | 5169.9 |
| 42.5° | 6044.3 | 6040.0 | 6178.0 | 6335.7 | 6402.6 | 6377.0 | 6199.3 | 5895.0 | 5570.8 | 5457.1 | 5485.5 |
| 45° | 6364.2 | 6358.5 | 6527.7 | 6749.5 | 6880.3 | 6837.7 | 6598.8 | 6270.3 | 5909.2 | 5791.2 | 5818.2 |
| 47.5° | 6610.2 | 6613.0 | 6795.0 | 7069.4 | 7298.4 | 7314.0 | 7006.9 | 6652.9 | 6281.7 | 6148.1 | 6187.9 |
| 50° | 6788.0 | 6796.5 | 6991.2 | 7295.5 | 7608.4 | 7746.2 | 7423.5 | 7045.2 | 6667.0 | 6516.3 | 6561.8 |
| 52.5° | 6832.0 | 6847.6 | 7082.2 | 7439.1 | 7807.4 | 8070.4 | 7847.2 | 7422.0 | 7032.5 | 6888.8 | 6925.8 |
| 55° | 6597.4 | 6628.7 | 6925.8 | 7427.8 | 7929.7 | 8283.7 | 8219.7 | 7804.6 | 7400.7 | 7252.9 | 7294.1 |
| 57.5° | 6058.5 | 6102.5 | 6449.5 | 7105.0 | 7902.6 | 8430.1 | 8508.3 | 8171.4 | 7769.0 | 7626.8 | 7659.5 |
| 60° | 5303.6 | 5356.1 | 5688.9 | 6404.0 | 7521.6 | 8484.2 | 8711.7 | 8528.3 | 8107.4 | 7969.5 | 7999.3 |
| 62.5° | 4164.6 | 4232.8 | 4631.0 | 5469.8 | 6716.8 | 8232.5 | 8885.1 | 8851.0 | 8411.7 | 8239.7 | 8259.6 |
| 65° | 2671.7 | 2744.1 | 3163.7 | 4154.6 | 5643.3 | 7461.9 | 8939.1 | 9165.2 | 8733.0 | 8492.7 | 8522.6 |
| 67.5° | 1611.0 | 1643.7 | 1851.3 | 2518.1 | 4124.8 | 6300.3 | 8481.4 | 9513.6 | 9108.4 | 8809.8 | 8832.5 |
| 70° | 1030.8 | 1049.3 | 1173.0 | 1478.8 | 2331.9 | 4596.8 | 7346.7 | 9579.0 | 9563.4 | 9135.4 | 9132.5 |
| 72.5° | 699.6 | 705.2 | 737.9 | 875.9 | 1319.5 | 2611.9 | 5418.7 | 8671.9 | 9847.8 | 9554.8 | 9509.3 |
| 75° | 511.9 | 543.1 | 595.7 | 619.9 | 749.3 | 1305.2 | 3105.3 | 6092.6 | 8299.3 | 8427.3 | 8117.4 |
| 77.5° | 381.1 | 382.4 | 455.0 | 483.4 | 534.6 | 695.3 | 1313.7 | 3401.1 | 5152.8 | 5410.2 | 4825.8 |
| 80° | 322.8 | 305.7 | 304.3 | 389.6 | 402.4 | 433.7 | 587.2 | 1174.4 | 1845.5 | 1119.0 | 846.0 |
| 82.5° | 268.8 | 250.2 | 226.1 | 304.3 | 274.4 | 265.9 | 254.5 | 477.8 | 587.2 | 288.6 | 246.0 |
| 85° | 187.7 | 179.2 | 170.7 | 199.1 | 156.4 | 133.7 | 122.3 | 223.2 | 247.4 | 122.3 | 108.0 |
| 87.5° | 81.1 | 83.8 | 85.3 | 88.1 | 65.4 | 46.9 | 46.9 | 62.5 | 62.5 | 48.4 | 35.6 |
| 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)