

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: P962923

Luminaire Tested: **NAV-SB2D-727-U-T1**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962923
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-727-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19139.8 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

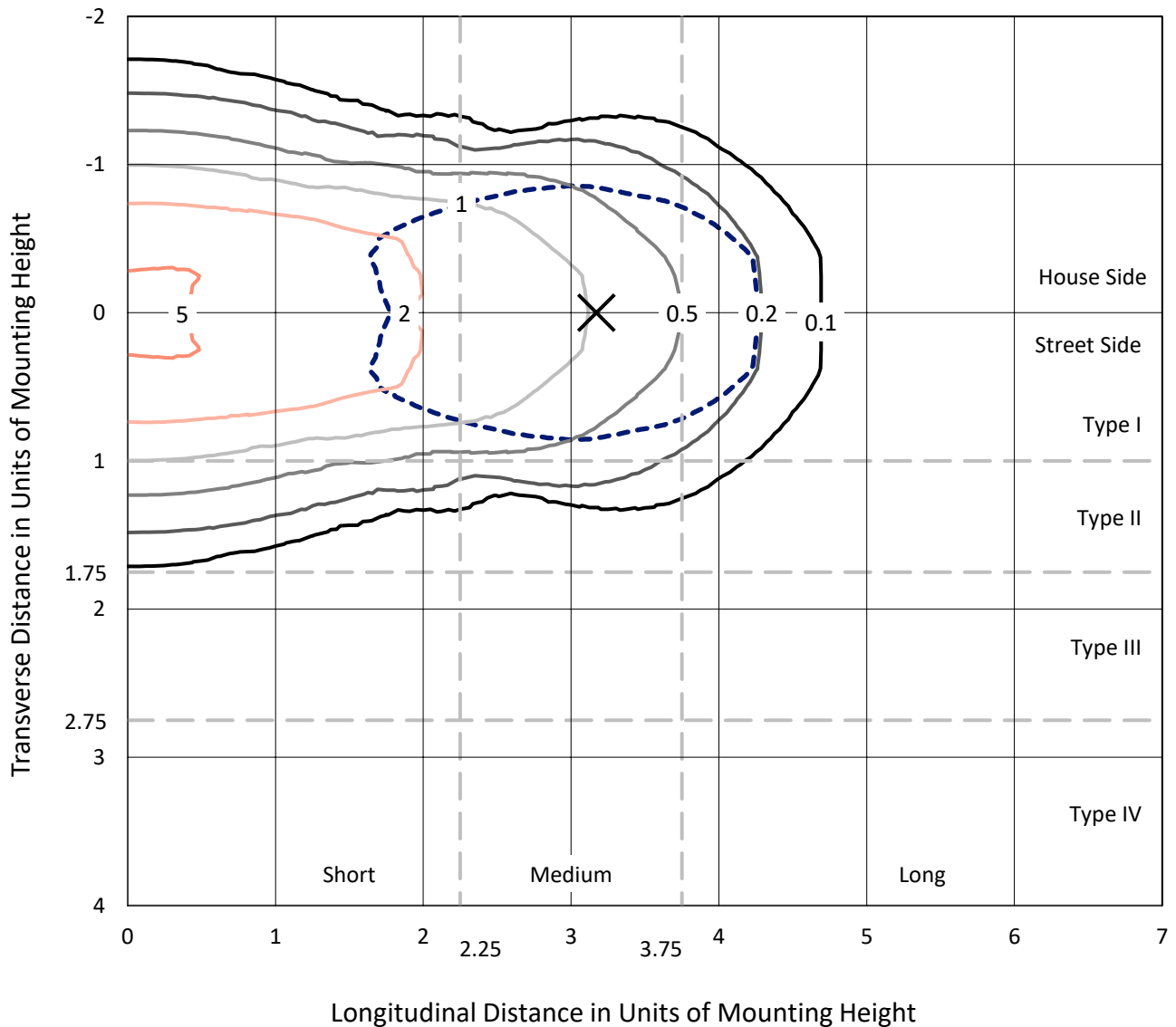
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

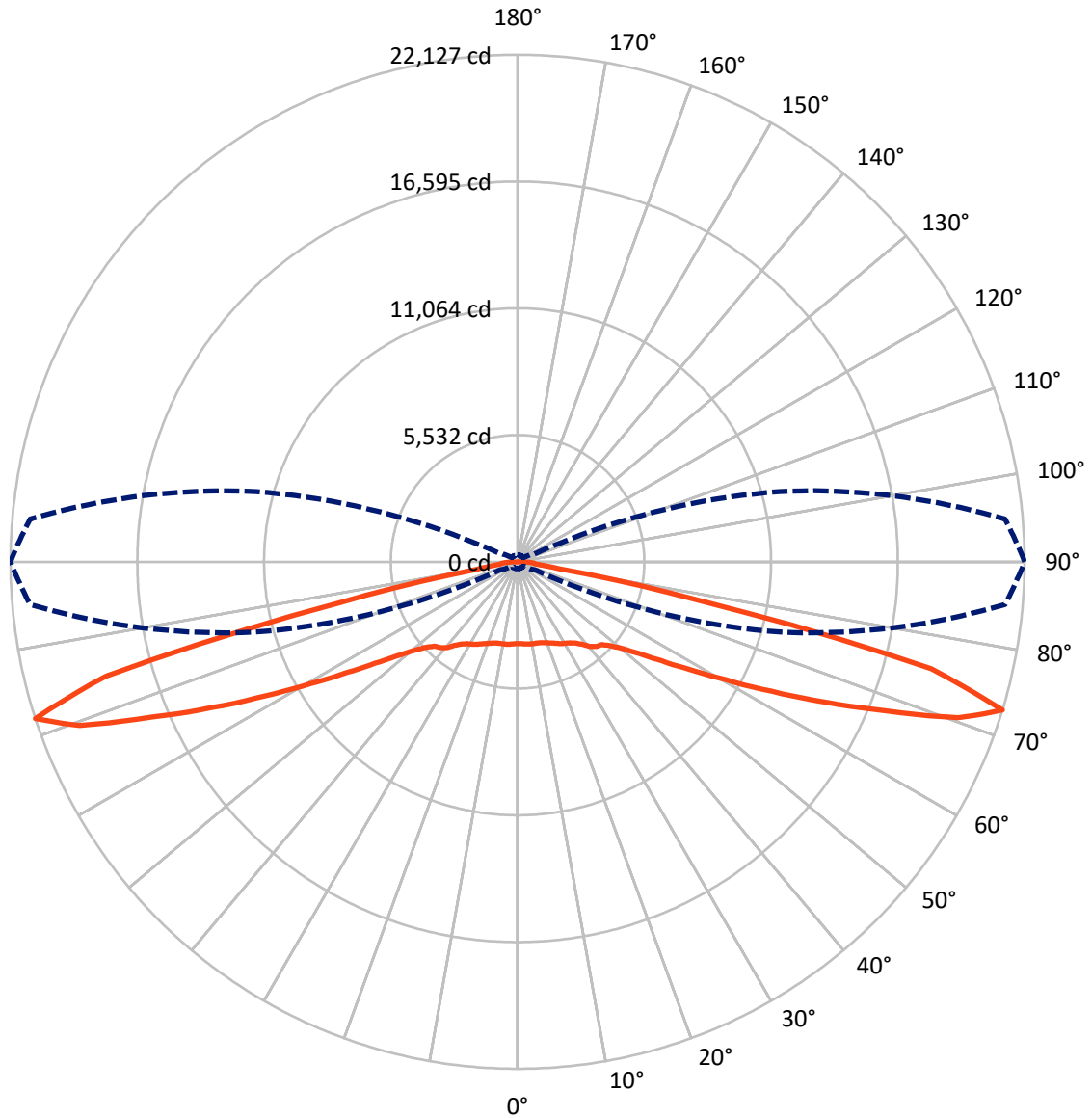
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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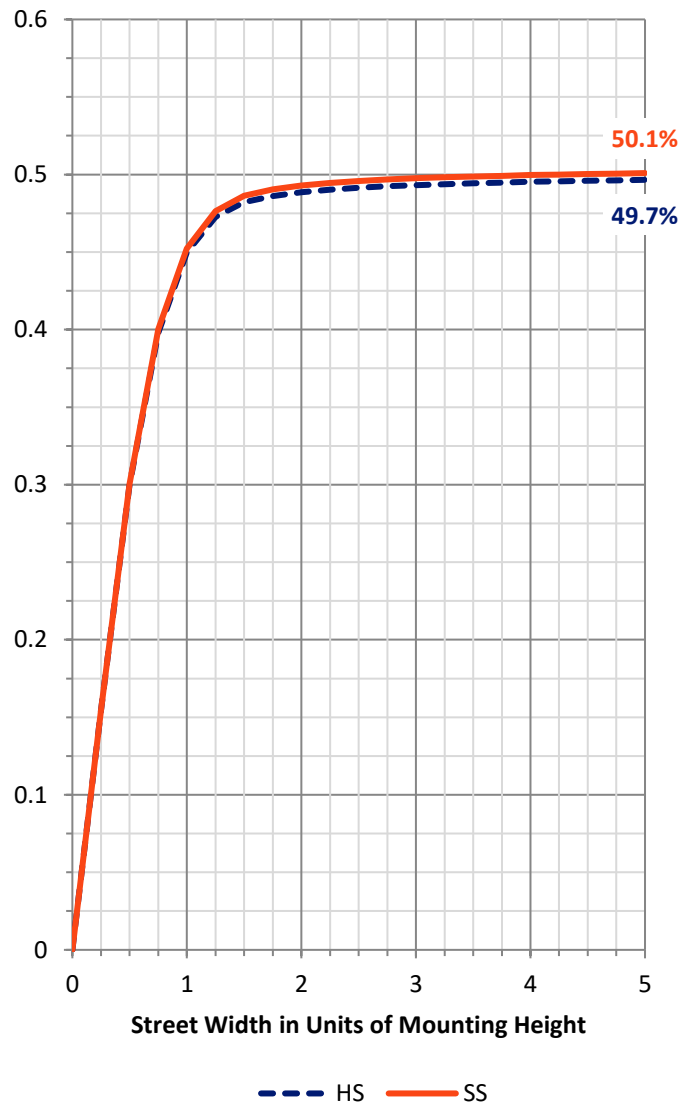
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9569.9 | 0.0 | 9569.9 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 9569.9 | 0.0 | 9569.9 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 19139.8 | 0.0 | 19139.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 346.8 | 1.8 |
| 10°-20° | 1060.3 | 5.5 |
| 20°-30° | 1768.0 | 9.2 |
| 30°-40° | 2431.5 | 12.7 |
| 40°-50° | 2969.6 | 15.5 |
| 50°-60° | 3434.6 | 17.9 |
| 60°-70° | 4095.2 | 21.4 |
| 70°-80° | 2858.2 | 14.9 |
| 80°-90° | 175.5 | 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° | 19139.8 | 100.0 |
| 0°-180° | 19139.8 | 100.0 |

Coefficient of Utilization

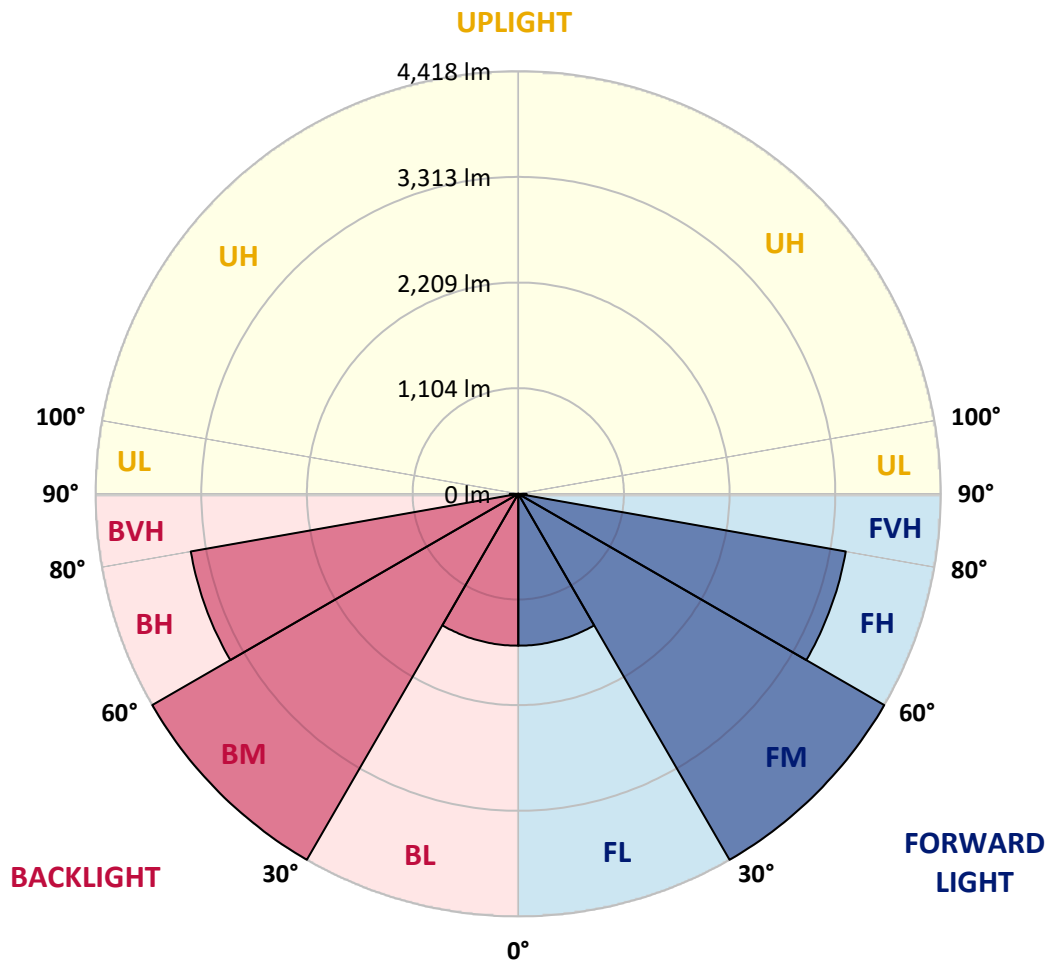


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1587.6 | 8.3 | | | |
| FM (30°-60°) | 4417.9 | 23.1 | | | |
| FH (60°-80°) | 3476.7 | 18.2 | | | G2/5000 |
| FVH (80°-90°) | 87.8 | 0.5 | | | G1/100 |
| BL (0°-30°) | 1587.6 | 8.3 | B3/2500 | | |
| BM (30°-60°) | 4417.9 | 23.1 | B3/5000 | | |
| BH (60°-80°) | 3476.7 | 18.2 | B4/5000 | | G4/5000 |
| BVH (80°-90°) | 87.8 | 0.5 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G4
 Type I Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0° | 3576.4 | 3576.4 | 3576.4 | 3576.4 | 3576.4 | 3576.4 | 3576.4 | 3576.4 | 3576.4 | 3576.4 | 3576.4 |
| 2.5° | 3579.5 | 3583.6 | 3583.6 | 3580.5 | 3587.7 | 3581.6 | 3581.6 | 3578.5 | 3581.6 | 3578.5 | 3578.5 |
| 5° | 3597.9 | 3602.9 | 3604.9 | 3603.9 | 3613.1 | 3608.0 | 3608.0 | 3603.9 | 3604.9 | 3602.0 | 3602.0 |
| 7.5° | 3632.4 | 3639.6 | 3643.6 | 3648.7 | 3661.9 | 3655.9 | 3651.8 | 3639.6 | 3634.4 | 3626.3 | 3626.3 |
| 10° | 3643.6 | 3651.8 | 3665.0 | 3691.4 | 3722.0 | 3723.0 | 3710.7 | 3680.3 | 3656.8 | 3638.5 | 3635.5 |
| 12.5° | 3609.0 | 3620.2 | 3647.7 | 3701.6 | 3769.7 | 3797.2 | 3777.8 | 3727.0 | 3681.3 | 3648.7 | 3643.6 |
| 15° | 3565.3 | 3577.5 | 3619.2 | 3700.6 | 3801.3 | 3865.4 | 3863.3 | 3796.2 | 3723.0 | 3672.1 | 3664.0 |
| 17.5° | 3497.1 | 3509.3 | 3569.4 | 3683.2 | 3825.7 | 3931.5 | 3960.0 | 3890.8 | 3788.1 | 3719.9 | 3708.8 |
| 20° | 3374.1 | 3385.3 | 3468.7 | 3628.4 | 3833.8 | 4001.7 | 4075.9 | 4014.9 | 3886.7 | 3794.1 | 3776.8 |
| 22.5° | 3214.4 | 3231.6 | 3329.3 | 3533.8 | 3814.5 | 4074.9 | 4208.1 | 4166.4 | 4001.7 | 3873.5 | 3850.1 |
| 25° | 3043.4 | 3061.8 | 3175.7 | 3417.8 | 3764.6 | 4127.8 | 4364.9 | 4338.3 | 4131.9 | 3972.2 | 3939.6 |
| 27.5° | 2895.9 | 2915.3 | 3039.4 | 3302.9 | 3687.3 | 4148.2 | 4519.4 | 4532.7 | 4289.5 | 4081.0 | 4046.4 |
| 30° | 2780.0 | 2798.4 | 2930.6 | 3210.3 | 3587.7 | 4127.8 | 4654.7 | 4746.3 | 4450.2 | 4175.6 | 4125.7 |
| 32.5° | 2652.9 | 2676.3 | 2815.6 | 3097.3 | 3469.6 | 4079.0 | 4772.7 | 4977.2 | 4636.4 | 4277.3 | 4214.3 |
| 35° | 2492.2 | 2513.5 | 2660.0 | 2942.8 | 3315.1 | 4000.7 | 4871.4 | 5233.5 | 4902.9 | 4431.9 | 4361.8 |
| 37.5° | 2296.8 | 2317.2 | 2462.7 | 2749.5 | 3161.5 | 3890.8 | 4946.6 | 5522.4 | 5220.3 | 4654.7 | 4561.1 |
| 40° | 2100.5 | 2119.8 | 2256.1 | 2533.8 | 2977.3 | 3750.4 | 4973.1 | 5805.2 | 5584.4 | 4960.9 | 4861.2 |
| 42.5° | 1920.4 | 1937.8 | 2062.9 | 2321.2 | 2770.9 | 3571.4 | 4938.6 | 6051.3 | 5911.0 | 5174.5 | 5046.4 |
| 45° | 1754.7 | 1770.0 | 1880.8 | 2121.9 | 2556.2 | 3353.7 | 4834.7 | 6315.8 | 6299.5 | 5327.1 | 5154.1 |
| 47.5° | 1565.5 | 1580.8 | 1695.7 | 1928.6 | 2341.6 | 3098.4 | 4658.8 | 6576.2 | 6839.6 | 5673.0 | 5473.6 |
| 50° | 1334.6 | 1347.8 | 1465.7 | 1705.8 | 2118.9 | 2826.8 | 4414.7 | 6780.7 | 7521.1 | 6196.7 | 5946.5 |
| 52.5° | 1061.0 | 1075.2 | 1190.1 | 1430.2 | 1854.3 | 2534.8 | 4093.2 | 6913.9 | 8308.5 | 6961.7 | 6653.5 |
| 55° | 789.4 | 799.5 | 899.2 | 1114.9 | 1526.8 | 2202.2 | 3690.4 | 6951.6 | 9201.6 | 8007.4 | 7621.9 |
| 57.5° | 572.7 | 578.8 | 642.9 | 803.6 | 1157.5 | 1786.2 | 3201.2 | 6853.9 | 10264.6 | 9348.1 | 8862.9 |
| 60° | 463.8 | 465.9 | 485.2 | 556.4 | 804.6 | 1316.3 | 2610.2 | 6518.2 | 11418.1 | 11076.3 | 10464.9 |
| 62.5° | 421.1 | 421.1 | 426.2 | 445.6 | 544.2 | 868.7 | 1895.0 | 5822.4 | 12655.0 | 13260.2 | 12441.3 |
| 65° | 391.7 | 391.7 | 393.7 | 402.8 | 429.3 | 553.4 | 1196.3 | 4689.3 | 13697.6 | 15818.5 | 14783.0 |
| 67.5° | 365.2 | 366.2 | 365.2 | 368.2 | 383.5 | 408.9 | 693.7 | 3238.8 | 14259.1 | 18469.3 | 17351.4 |
| 70° | 337.7 | 339.8 | 334.7 | 334.7 | 346.9 | 347.9 | 434.4 | 1776.0 | 13793.2 | 20690.9 | 20396.9 |
| 72.5° | 305.1 | 308.2 | 300.1 | 298.1 | 307.2 | 303.1 | 326.6 | 852.4 | 11842.2 | 21354.1 | 22127.2 |
| 75° | 276.6 | 280.7 | 262.4 | 257.4 | 257.4 | 254.3 | 265.5 | 437.4 | 7686.0 | 17419.6 | 18632.0 |
| 77.5° | 251.2 | 259.4 | 229.9 | 213.6 | 209.5 | 200.4 | 216.7 | 267.5 | 3361.9 | 8178.3 | 8008.4 |
| 80° | 207.5 | 218.7 | 189.2 | 169.8 | 162.8 | 152.6 | 170.9 | 187.2 | 999.9 | 1899.1 | 1818.8 |
| 82.5° | 154.6 | 159.7 | 134.3 | 121.1 | 114.9 | 107.8 | 128.1 | 130.2 | 325.5 | 672.4 | 759.8 |
| 85° | 98.7 | 100.7 | 82.4 | 71.2 | 68.2 | 65.1 | 81.4 | 71.2 | 124.1 | 494.4 | 718.1 |
| 87.5° | 34.5 | 39.7 | 31.6 | 28.5 | 30.5 | 25.4 | 37.6 | 21.3 | 34.5 | 348.9 | 432.3 |
| 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)