

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: P885114

Luminaire Tested: **NAV-SB6B-730-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885114
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6B-730-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 70 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33351 lumens
Efficiency: N/A
Efficacy: 151.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

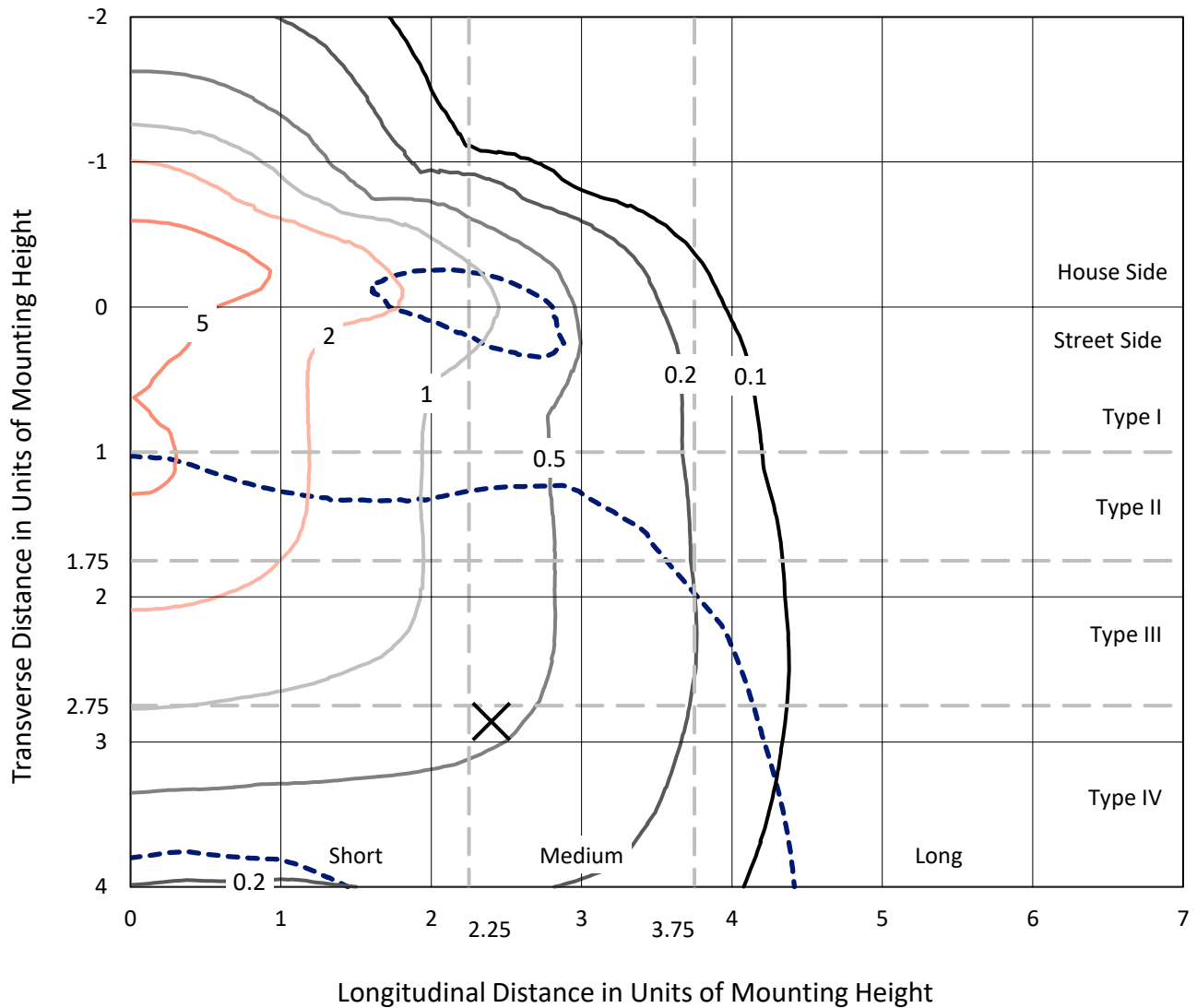
Input Watts (W): 220.4
Input Voltage (V): 120.0
Input Current (Ain): 1.838
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P885114
 CATALOG NUMBER: NAV-SB6B-730-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

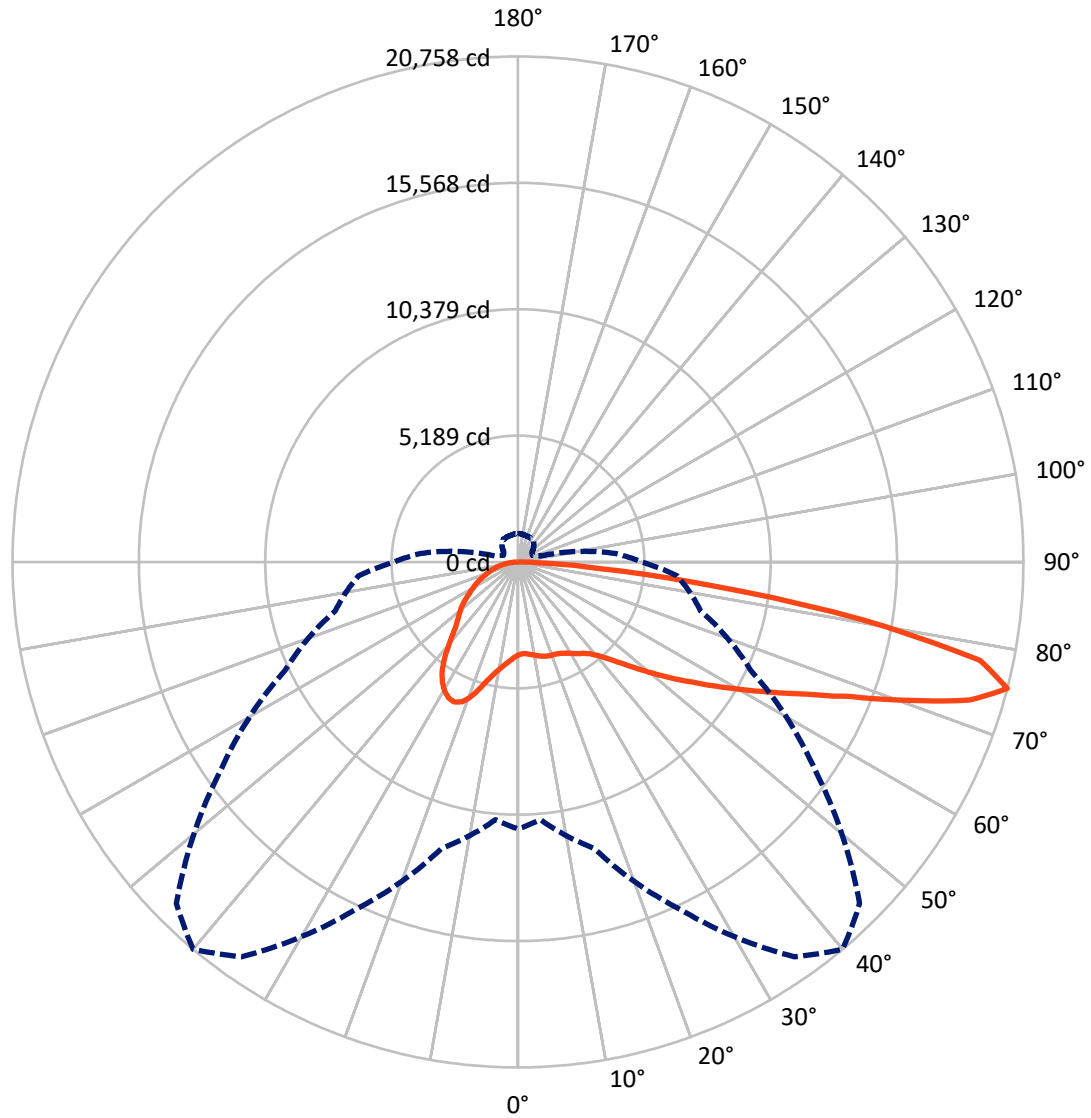
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
 Type IV - Medium - N/A

REPORT NUMBER: P885114
CATALOG NUMBER: NAV-SB6B-730-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P885114
 CATALOG NUMBER: NAV-SB6B-730-U-SL4

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 10333.3 | 0.0 | 10333.3 |
| | % Fixture | 31.0 | 0.0 | 31.0 |
| Street Side | Lumens | 23017.7 | 0.0 | 23017.7 |
| | % Fixture | 69.0 | 0.0 | 69.0 |
| Total | Lumens | 33351.0 | 0.0 | 33351.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 380.7 | 1.1 |
| 10°-20° | 1278.1 | 3.8 |
| 20°-30° | 2333.8 | 7.0 |
| 30°-40° | 3309.9 | 9.9 |
| 40°-50° | 4469.4 | 13.4 |
| 50°-60° | 6012.5 | 18.0 |
| 60°-70° | 7631.2 | 22.9 |
| 70°-80° | 6925.8 | 20.8 |
| 80°-90° | 1009.6 | 3.0 |
| 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° | 33351.0 | 100.0 |
| 0°-180° | 33351.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P885114

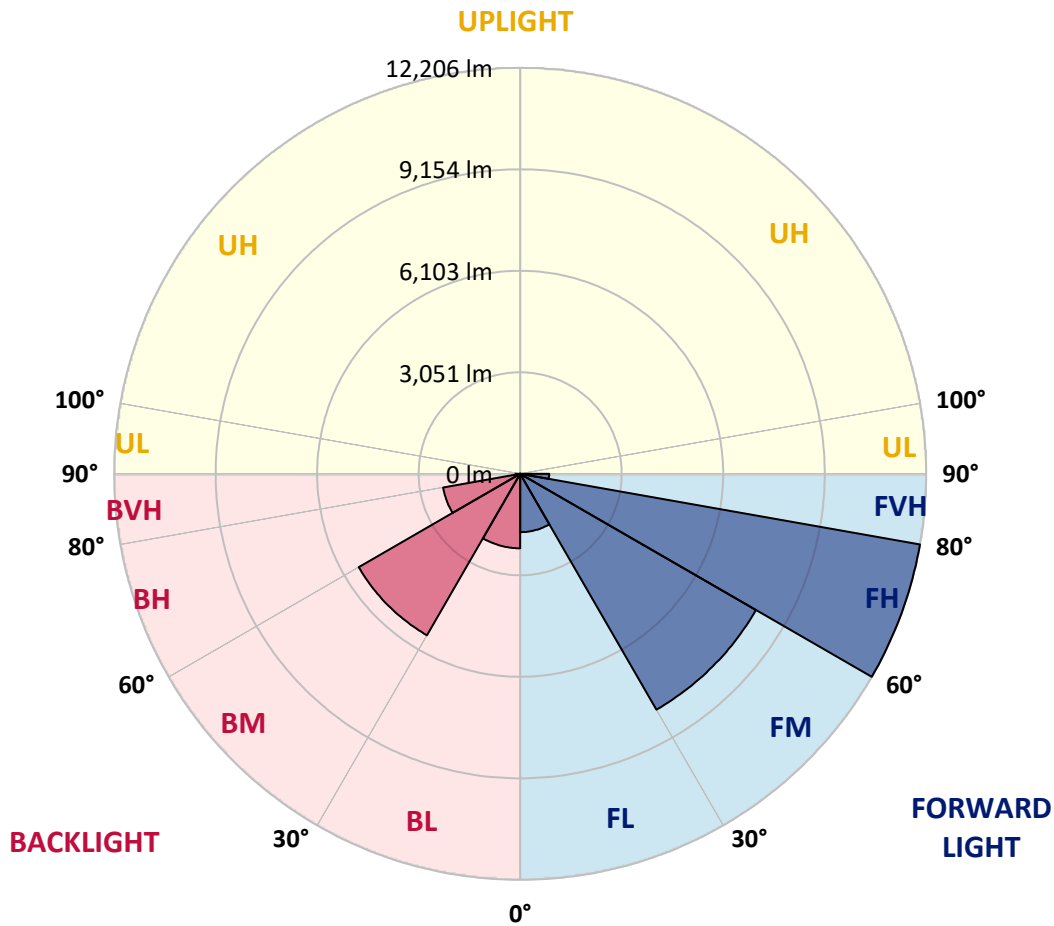
CATALOG NUMBER: NAV-SB6B-730-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1754.3 | 5.3 | | | |
| FM (30°-60°) | 8186.9 | 24.5 | | | |
| FH (60°-80°) | 12206.0 | 36.6 | | | G5 |
| FVH (80°-90°) | 870.6 | 2.6 | | | G5 |
| BL (0°-30°) | 2238.3 | 6.7 | B3/2500 | | |
| BM (30°-60°) | 5604.9 | 16.8 | B4/8500 | | |
| BH (60°-80°) | 2351.1 | 7.0 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 139.0 | 0.4 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G5

Type IV Medium



REPORT NUMBER: P885114

CATALOG NUMBER: NAV-SB6B-730-U-SL4

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|
| 0° | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 |
| 2.5° | 3755.4 | 3776.6 | 3771.3 | 3764.2 | 3764.2 | 3766.0 | 3764.2 | 3776.6 | 3789.0 | 3801.3 | 3820.8 |
| 5° | 3794.3 | 3815.5 | 3804.9 | 3796.0 | 3789.0 | 3787.2 | 3781.9 | 3780.1 | 3787.2 | 3803.1 | 3829.7 |
| 7.5° | 3870.3 | 3891.6 | 3875.6 | 3859.7 | 3845.6 | 3838.5 | 3831.4 | 3820.8 | 3815.5 | 3824.3 | 3861.5 |
| 10° | 3955.2 | 3976.5 | 3957.0 | 3928.7 | 3905.7 | 3896.9 | 3889.8 | 3879.2 | 3872.1 | 3877.4 | 3918.1 |
| 12.5° | 4040.1 | 4061.4 | 4034.8 | 3995.9 | 3965.9 | 3960.5 | 3951.7 | 3948.2 | 3946.4 | 3944.6 | 3985.3 |
| 15° | 4119.7 | 4137.4 | 4103.8 | 4057.8 | 4026.0 | 4017.2 | 4008.3 | 4013.6 | 4022.5 | 4033.1 | 4079.1 |
| 17.5° | 4181.7 | 4199.3 | 4149.8 | 4089.7 | 4059.6 | 4056.1 | 4050.8 | 4068.5 | 4093.2 | 4119.7 | 4176.4 |
| 20° | 4238.3 | 4256.0 | 4192.3 | 4110.9 | 4075.5 | 4075.5 | 4077.3 | 4114.4 | 4149.8 | 4188.7 | 4266.6 |
| 22.5° | 4317.9 | 4332.0 | 4254.2 | 4142.7 | 4091.4 | 4095.0 | 4109.1 | 4146.3 | 4190.5 | 4243.6 | 4351.5 |
| 25° | 4436.4 | 4447.0 | 4351.5 | 4202.9 | 4144.5 | 4155.1 | 4167.5 | 4185.2 | 4227.7 | 4289.6 | 4434.6 |
| 27.5° | 4627.4 | 4636.3 | 4510.7 | 4309.0 | 4220.6 | 4238.3 | 4256.0 | 4243.6 | 4263.0 | 4316.1 | 4501.8 |
| 30° | 4896.3 | 4901.6 | 4742.4 | 4475.3 | 4349.7 | 4358.6 | 4362.1 | 4310.8 | 4273.6 | 4316.1 | 4549.6 |
| 32.5° | 5214.7 | 5212.9 | 5023.7 | 4677.0 | 4496.5 | 4487.7 | 4457.6 | 4356.8 | 4270.1 | 4307.3 | 4592.0 |
| 35° | 5708.2 | 5688.8 | 5444.6 | 4960.0 | 4662.8 | 4608.0 | 4537.2 | 4408.1 | 4287.8 | 4298.4 | 4629.2 |
| 37.5° | 6525.4 | 6465.3 | 6127.4 | 5423.4 | 4910.4 | 4770.7 | 4666.3 | 4491.2 | 4326.7 | 4294.9 | 4673.4 |
| 40° | 7447.0 | 7371.0 | 6999.5 | 6058.5 | 5281.9 | 5057.3 | 4889.2 | 4609.7 | 4390.4 | 4310.8 | 4738.9 |
| 42.5° | 8540.2 | 8432.3 | 8032.5 | 6806.7 | 5752.4 | 5427.0 | 5174.0 | 4760.1 | 4484.1 | 4362.1 | 4827.3 |
| 45° | 9882.8 | 9739.5 | 9173.5 | 7650.5 | 6345.0 | 5911.6 | 5573.8 | 4988.3 | 4627.4 | 4461.1 | 4960.0 |
| 47.5° | 11239.5 | 11274.9 | 10470.1 | 8616.3 | 7056.1 | 6509.5 | 6074.4 | 5331.4 | 4836.2 | 4620.3 | 5174.0 |
| 50° | 12681.2 | 12706.0 | 11759.6 | 9686.5 | 7862.7 | 7185.2 | 6636.9 | 5715.3 | 5126.2 | 4846.8 | 5494.2 |
| 52.5° | 13806.2 | 13809.7 | 12930.6 | 10806.2 | 8702.9 | 7928.2 | 7243.6 | 6154.0 | 5462.3 | 5147.5 | 5920.5 |
| 55° | 14510.2 | 14501.4 | 13751.4 | 11865.7 | 9668.8 | 8708.3 | 7915.8 | 6652.8 | 5872.7 | 5501.3 | 6456.5 |
| 57.5° | 15021.4 | 14994.9 | 14317.4 | 12776.7 | 10698.3 | 9629.8 | 8676.4 | 7218.8 | 6357.4 | 5922.3 | 7162.2 |
| 60° | 15216.0 | 15200.1 | 14701.3 | 13563.9 | 11780.8 | 10648.7 | 9553.8 | 7852.1 | 6907.5 | 6419.3 | 8069.7 |
| 62.5° | 15290.3 | 15320.4 | 15078.0 | 14326.3 | 12939.4 | 11777.3 | 10517.8 | 8609.2 | 7526.6 | 6981.8 | 9026.7 |
| 65° | 15552.1 | 15606.9 | 15557.4 | 15323.9 | 14248.4 | 13098.6 | 11796.7 | 9509.6 | 8202.4 | 7585.0 | 10026.1 |
| 67.5° | 16070.4 | 16125.2 | 16146.4 | 16517.9 | 15847.5 | 14745.5 | 13392.3 | 10631.0 | 8993.0 | 8211.2 | 10777.9 |
| 70° | 16058.0 | 16042.1 | 16417.1 | 17467.8 | 17849.9 | 17025.6 | 15543.3 | 12010.8 | 9935.9 | 8731.3 | 10873.4 |
| 72.5° | 14616.4 | 14489.0 | 15375.2 | 17457.2 | 19516.2 | 19406.5 | 18170.1 | 13790.3 | 10749.6 | 8794.9 | 9435.3 |
| 75° | 10965.4 | 10625.7 | 12191.2 | 15732.5 | 19793.9 | 20757.9 | 19839.9 | 14894.1 | 10556.7 | 7770.7 | 6566.1 |
| 77.5° | 4689.3 | 4347.9 | 6192.9 | 11646.4 | 17715.5 | 19404.7 | 18308.0 | 12994.3 | 8427.0 | 5138.6 | 3224.7 |
| 80° | 1227.6 | 1225.8 | 1871.5 | 5280.1 | 12047.9 | 14329.8 | 12571.5 | 8391.6 | 4814.9 | 1836.1 | 889.8 |
| 82.5° | 507.7 | 495.3 | 688.1 | 2053.7 | 5886.9 | 8041.4 | 6562.6 | 3743.0 | 1738.8 | 497.1 | 295.4 |
| 85° | 189.3 | 187.5 | 334.3 | 709.3 | 2076.7 | 3316.7 | 2400.4 | 957.0 | 433.4 | 242.3 | 132.7 |
| 87.5° | 53.1 | 51.3 | 72.5 | 245.9 | 505.9 | 767.7 | 410.4 | 157.4 | 122.1 | 95.5 | 38.9 |
| 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: P885114
 CATALOG NUMBER: NAV-SB6B-730-U-SL4

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 | 3813.7 |
| 2.5° | 3826.1 | 3835.0 | 3850.9 | 3863.3 | 3879.2 | 3896.9 | 3921.6 | 3937.6 | 3953.5 | 3964.1 | 3957.0 |
| 5° | 3842.0 | 3861.5 | 3902.2 | 3942.9 | 3990.6 | 4034.8 | 4086.1 | 4123.3 | 4153.4 | 4162.2 | 4165.7 |
| 7.5° | 3877.4 | 3909.3 | 3978.2 | 4047.2 | 4123.3 | 4195.8 | 4270.1 | 4333.8 | 4385.1 | 4404.5 | 4406.3 |
| 10° | 3939.3 | 3981.8 | 4079.1 | 4176.4 | 4277.2 | 4388.6 | 4484.1 | 4576.1 | 4648.6 | 4678.7 | 4680.5 |
| 12.5° | 4017.2 | 4070.2 | 4197.6 | 4332.0 | 4471.8 | 4625.7 | 4749.5 | 4862.7 | 4952.9 | 4993.6 | 4993.6 |
| 15° | 4118.0 | 4187.0 | 4349.7 | 4530.1 | 4735.3 | 4949.4 | 5106.8 | 5232.4 | 5333.2 | 5382.7 | 5379.2 |
| 17.5° | 4227.7 | 4319.6 | 4524.8 | 4797.2 | 5090.9 | 5372.1 | 5556.1 | 5648.1 | 5752.4 | 5800.2 | 5798.4 |
| 20° | 4333.8 | 4447.0 | 4740.6 | 5136.9 | 5527.8 | 5826.7 | 5975.3 | 6000.1 | 6007.2 | 6012.5 | 6026.6 |
| 22.5° | 4443.5 | 4595.6 | 5011.3 | 5564.9 | 5984.2 | 6191.1 | 6212.3 | 6106.2 | 5957.6 | 5888.6 | 5908.1 |
| 25° | 4563.7 | 4765.4 | 5365.0 | 6037.2 | 6376.9 | 6401.6 | 6238.9 | 5980.6 | 5699.4 | 5570.2 | 5589.7 |
| 27.5° | 4680.5 | 4961.7 | 5789.6 | 6488.3 | 6659.9 | 6442.3 | 6092.1 | 5725.9 | 5386.3 | 5250.1 | 5266.0 |
| 30° | 4797.2 | 5186.4 | 6258.3 | 6882.8 | 6789.0 | 6341.5 | 5860.3 | 5451.7 | 5110.3 | 4967.0 | 4983.0 |
| 32.5° | 4915.8 | 5448.2 | 6797.9 | 7167.6 | 6766.0 | 6127.4 | 5572.0 | 5143.9 | 4843.2 | 4692.9 | 4712.3 |
| 35° | 5050.2 | 5770.1 | 7309.1 | 7323.2 | 6612.1 | 5812.6 | 5191.7 | 4776.0 | 4514.2 | 4393.9 | 4420.5 |
| 37.5° | 5225.3 | 6178.7 | 7760.1 | 7362.1 | 6343.2 | 5350.9 | 4719.4 | 4340.9 | 4125.1 | 4070.2 | 4109.1 |
| 40° | 5442.9 | 6670.5 | 8105.1 | 7300.2 | 5945.2 | 4790.2 | 4202.9 | 3900.4 | 3778.4 | 3790.7 | 3833.2 |
| 42.5° | 5725.9 | 7220.6 | 8347.4 | 7141.0 | 5391.6 | 4211.7 | 3750.1 | 3615.6 | 3674.0 | 3723.5 | 3769.5 |
| 45° | 6093.8 | 7792.0 | 8497.8 | 6870.4 | 4765.4 | 3721.7 | 3482.9 | 3514.8 | 3559.0 | 3564.3 | 3599.7 |
| 47.5° | 6564.4 | 8370.4 | 8596.8 | 6461.8 | 4126.8 | 3376.8 | 3313.1 | 3320.2 | 3311.4 | 3274.2 | 3302.5 |
| 50° | 7151.6 | 8932.9 | 8685.3 | 5920.5 | 3583.8 | 3161.0 | 3076.1 | 3051.3 | 2929.3 | 2809.0 | 2824.9 |
| 52.5° | 7820.3 | 9449.4 | 8722.4 | 5248.3 | 3161.0 | 2980.6 | 2842.6 | 2686.9 | 2458.8 | 2421.6 | 2434.0 |
| 55° | 8563.2 | 9927.0 | 8626.9 | 4422.2 | 2805.5 | 2748.9 | 2540.1 | 2352.6 | 2327.9 | 2296.0 | 2301.3 |
| 57.5° | 9451.2 | 10441.8 | 8432.3 | 3500.6 | 2441.1 | 2478.2 | 2274.8 | 2296.0 | 2251.8 | 2202.3 | 2193.4 |
| 60° | 10422.3 | 10974.2 | 8090.9 | 2660.4 | 2064.3 | 2140.4 | 2205.8 | 2204.0 | 2191.7 | 2151.0 | 2136.8 |
| 62.5° | 11296.1 | 11324.4 | 7418.7 | 2037.8 | 1733.5 | 1878.6 | 2057.2 | 2055.5 | 2044.8 | 2021.8 | 2013.0 |
| 65° | 11816.2 | 11271.4 | 6297.3 | 1604.4 | 1461.1 | 1662.8 | 1855.6 | 1869.7 | 1871.5 | 1869.7 | 1869.7 |
| 67.5° | 11724.2 | 10650.5 | 4758.3 | 1277.1 | 1236.5 | 1443.4 | 1655.7 | 1675.1 | 1689.3 | 1692.8 | 1696.4 |
| 70° | 10684.1 | 9286.7 | 3102.6 | 1018.9 | 1036.6 | 1250.6 | 1466.4 | 1485.9 | 1498.3 | 1512.4 | 1519.5 |
| 72.5° | 8327.9 | 6827.9 | 1776.0 | 824.3 | 861.5 | 1084.3 | 1278.9 | 1301.9 | 1309.0 | 1335.5 | 1346.1 |
| 75° | 5075.0 | 4015.4 | 958.7 | 649.2 | 707.6 | 926.9 | 1093.2 | 1119.7 | 1132.1 | 1163.9 | 1167.5 |
| 77.5° | 2412.8 | 1738.8 | 546.6 | 505.9 | 569.6 | 757.1 | 923.4 | 953.4 | 919.8 | 937.5 | 923.4 |
| 80° | 815.5 | 645.6 | 344.9 | 385.6 | 435.1 | 590.8 | 739.4 | 769.5 | 698.7 | 695.2 | 688.1 |
| 82.5° | 284.8 | 261.8 | 219.3 | 256.5 | 281.3 | 422.8 | 559.0 | 597.9 | 520.1 | 518.3 | 493.5 |
| 85° | 111.4 | 106.1 | 122.1 | 139.7 | 168.0 | 260.0 | 367.9 | 387.4 | 320.2 | 258.3 | 254.7 |
| 87.5° | 23.0 | 24.8 | 30.1 | 31.8 | 51.3 | 90.2 | 132.7 | 162.7 | 129.1 | 109.7 | 100.8 |
| 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)