

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: McGRAW-EDISON

Report Number: P454570

Luminaire Tested: **GALN-SA5D-722-U-5NQ**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454570
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA5D-722-U-5NQ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2200K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29721 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G2

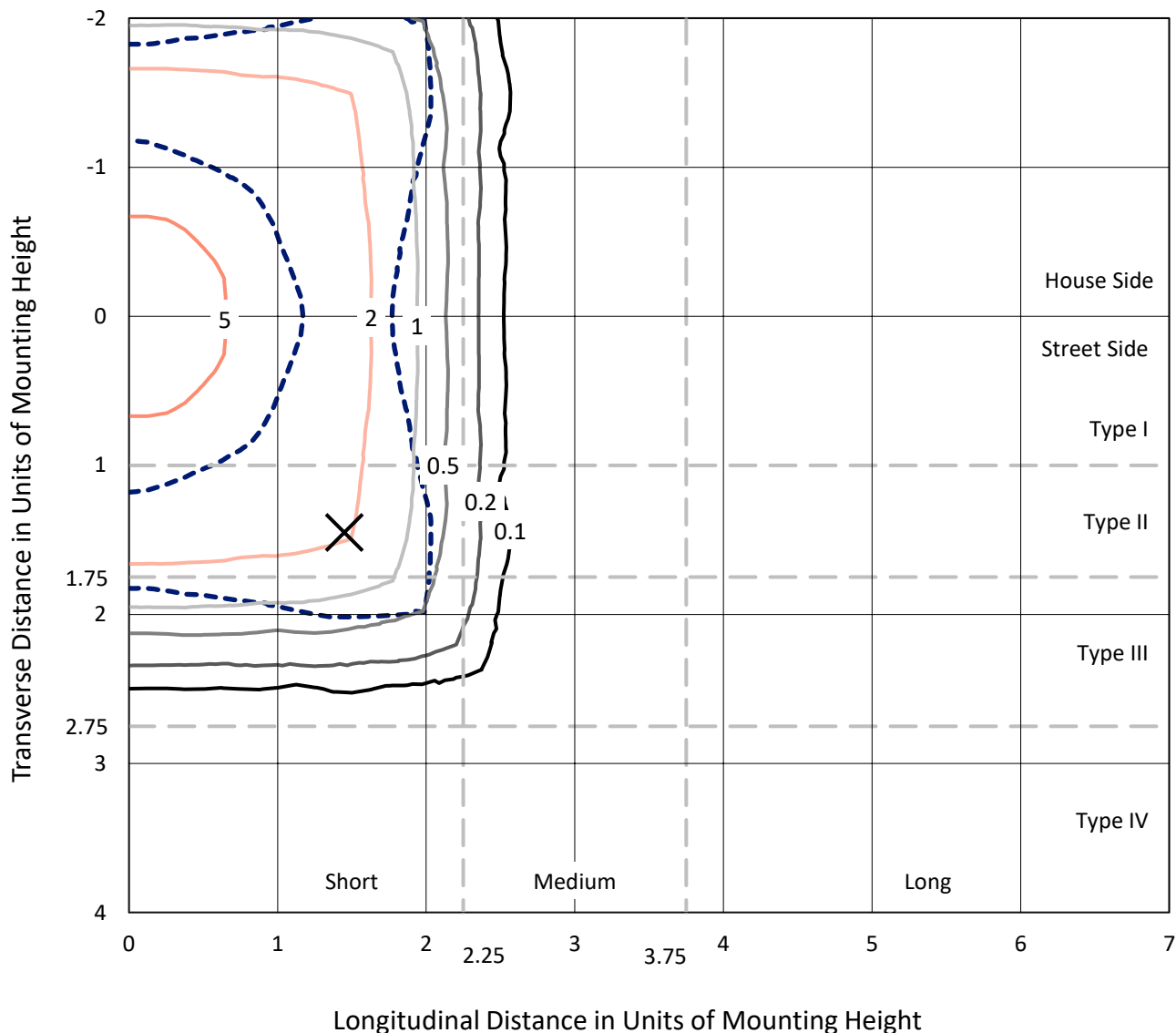
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

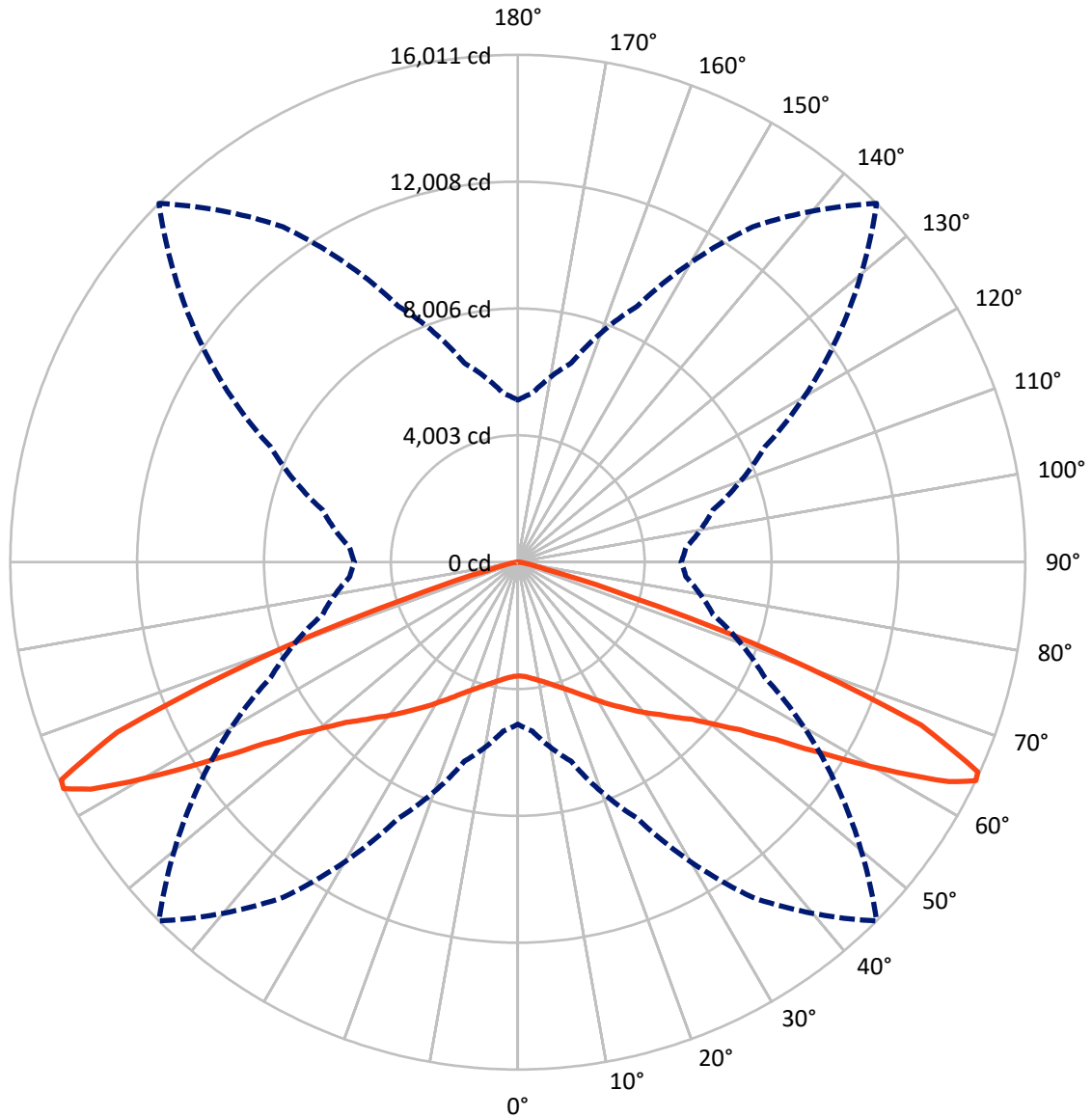
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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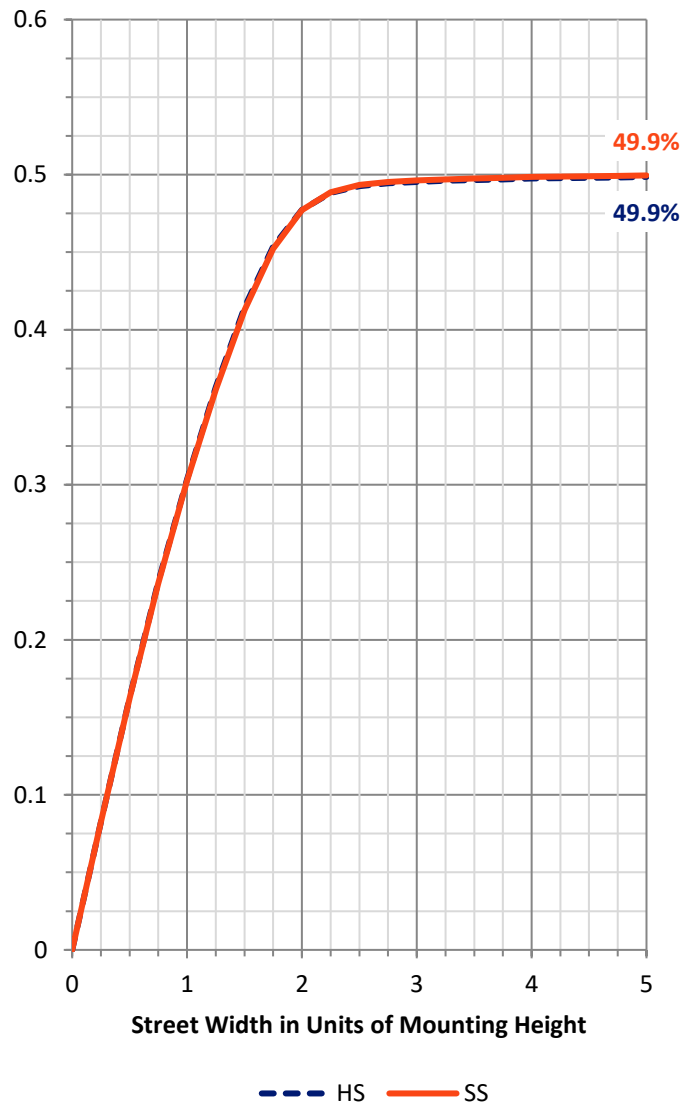
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 14860.5 | 0.0 | 14860.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 14860.5 | 0.0 | 14860.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 29721.0 | 0.0 | 29721.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 352.9 | 1.2 |
| 10°-20° | 1138.4 | 3.8 |
| 20°-30° | 2151.2 | 7.2 |
| 30°-40° | 3562.7 | 12.0 |
| 40°-50° | 5561.9 | 18.7 |
| 50°-60° | 8598.6 | 28.9 |
| 60°-70° | 7414.4 | 24.9 |
| 70°-80° | 840.2 | 2.8 |
| 80°-90° | 100.7 | 0.3 |
| 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° | 29721.0 | 100.0 |
| 0°-180° | 29721.0 | 100.0 |



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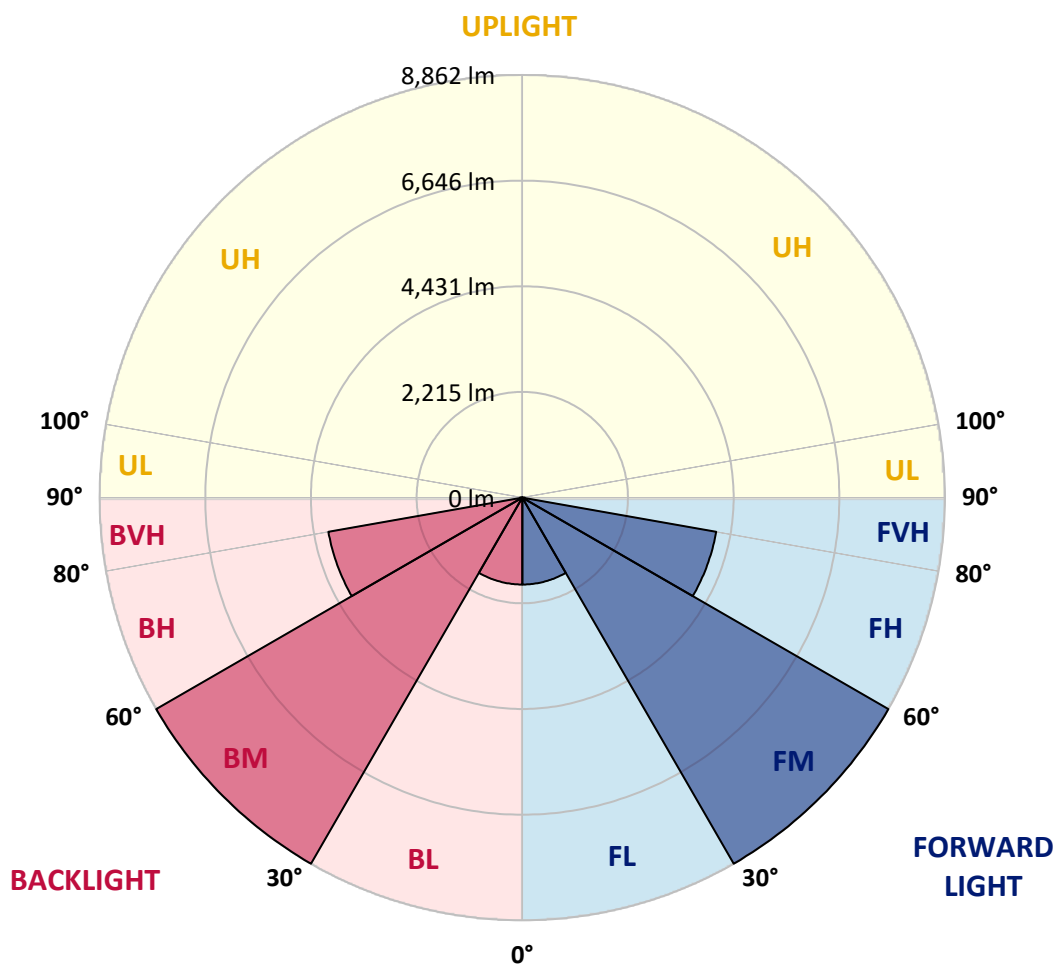
CATALOG NUMBER: GALN-SA5D-722-U-5NQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1821.3 | 6.1 | | | |
| FM | (30°-60°) | 8861.6 | 29.8 | | | |
| FH | (60°-80°) | 4127.3 | 13.9 | | | G2/5000 |
| FVH | (80°-90°) | 50.3 | 0.2 | | | G1/100 |
| BL | (0°-30°) | 1821.3 | 6.1 | B3/2500 | | |
| BM | (30°-60°) | 8861.6 | 29.8 | B5 | | |
| BH | (60°-80°) | 4127.3 | 13.9 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 50.3 | 0.2 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|--------|--------|--------|
| 0° | 3592.3 | 3592.3 | 3592.3 | 3592.3 | 3592.3 | 3592.3 | 3592.3 | 3592.3 | 3592.3 | 3592.3 | 3592.3 |
| 2.5° | 3606.5 | 3614.3 | 3608.0 | 3606.5 | 3604.9 | 3604.9 | 3604.9 | 3606.5 | 3612.7 | 3617.5 | 3614.3 |
| 5° | 3652.1 | 3658.4 | 3655.2 | 3653.7 | 3652.1 | 3653.7 | 3650.5 | 3649.0 | 3653.7 | 3653.7 | 3652.1 |
| 7.5° | 3708.8 | 3716.6 | 3713.5 | 3716.6 | 3718.2 | 3719.8 | 3711.9 | 3705.6 | 3704.0 | 3708.8 | 3705.6 |
| 10° | 3785.9 | 3792.2 | 3793.8 | 3795.4 | 3798.5 | 3796.9 | 3787.5 | 3776.5 | 3774.9 | 3773.3 | 3771.7 |
| 12.5° | 3872.5 | 3877.2 | 3878.8 | 3885.1 | 3889.8 | 3891.4 | 3880.4 | 3870.9 | 3855.2 | 3858.3 | 3852.0 |
| 15° | 3970.1 | 3979.5 | 3978.0 | 3987.4 | 4000.0 | 4003.1 | 3992.1 | 3976.4 | 3962.2 | 3954.3 | 3949.6 |
| 17.5° | 4089.7 | 4096.0 | 4092.9 | 4102.3 | 4118.1 | 4125.9 | 4116.5 | 4096.0 | 4081.9 | 4064.5 | 4055.1 |
| 20° | 4231.4 | 4242.4 | 4245.6 | 4245.6 | 4259.7 | 4267.6 | 4253.4 | 4247.1 | 4225.1 | 4212.5 | 4204.6 |
| 22.5° | 4392.0 | 4396.7 | 4406.1 | 4415.6 | 4429.7 | 4426.6 | 4421.9 | 4412.4 | 4392.0 | 4380.9 | 4368.4 |
| 25° | 4573.0 | 4577.7 | 4601.3 | 4621.8 | 4626.5 | 4623.4 | 4617.1 | 4612.4 | 4593.5 | 4568.3 | 4558.8 |
| 27.5° | 4783.9 | 4793.4 | 4824.9 | 4843.8 | 4843.8 | 4845.3 | 4832.7 | 4848.5 | 4807.6 | 4777.6 | 4774.5 |
| 30° | 5048.4 | 5054.7 | 5081.5 | 5100.3 | 5090.9 | 5083.0 | 5079.9 | 5095.6 | 5051.5 | 4998.0 | 4985.4 |
| 32.5° | 5309.7 | 5331.8 | 5355.4 | 5396.3 | 5363.2 | 5349.1 | 5345.9 | 5356.9 | 5306.6 | 5246.7 | 5229.4 |
| 35° | 5589.9 | 5605.7 | 5649.7 | 5684.4 | 5654.5 | 5621.4 | 5635.6 | 5670.2 | 5610.4 | 5530.1 | 5527.0 |
| 37.5° | 5900.0 | 5914.2 | 5970.9 | 6007.1 | 5985.0 | 5928.4 | 5952.0 | 5992.9 | 5933.1 | 5833.9 | 5813.5 |
| 40° | 6222.7 | 6252.6 | 6323.5 | 6361.3 | 6325.1 | 6249.5 | 6293.6 | 6337.7 | 6284.1 | 6169.2 | 6123.6 |
| 42.5° | 6584.8 | 6632.0 | 6734.3 | 6753.2 | 6684.0 | 6581.7 | 6658.8 | 6729.6 | 6691.8 | 6559.6 | 6542.3 |
| 45° | 7008.3 | 7036.6 | 7162.5 | 7203.5 | 7107.4 | 6979.9 | 7075.9 | 7205.0 | 7176.7 | 7024.0 | 6990.9 |
| 47.5° | 7482.1 | 7508.8 | 7639.5 | 7700.9 | 7579.7 | 7408.1 | 7581.3 | 7749.7 | 7732.4 | 7568.7 | 7552.9 |
| 50° | 8042.5 | 8048.8 | 8229.8 | 8299.1 | 8177.9 | 8029.9 | 8184.2 | 8393.5 | 8324.3 | 8114.9 | 8111.8 |
| 52.5° | 8656.4 | 8664.3 | 8892.6 | 9026.4 | 8958.7 | 8791.8 | 8974.4 | 9101.9 | 8925.6 | 8651.7 | 8631.2 |
| 55° | 9188.5 | 9227.9 | 9539.5 | 9895.3 | 9988.2 | 9867.0 | 9922.1 | 9862.2 | 9427.8 | 9043.7 | 8983.9 |
| 57.5° | 9405.7 | 9482.9 | 9956.7 | 10621.0 | 11225.5 | 11404.9 | 10979.9 | 10410.1 | 9627.7 | 9084.6 | 9026.4 |
| 60° | 8875.2 | 8958.7 | 9693.8 | 10954.7 | 12497.4 | 13276.6 | 12081.8 | 10502.9 | 9172.8 | 8409.3 | 8318.0 |
| 62.5° | 7107.4 | 7131.0 | 8212.5 | 10169.2 | 13238.9 | 15257.0 | 12546.2 | 9711.1 | 7848.9 | 6811.5 | 6775.3 |
| 64° | 5114.5 | 5356.9 | 6502.9 | 8916.2 | 12914.6 | 16011.0 | 12278.6 | 8601.3 | 6375.4 | 5325.5 | 5155.4 |
| 65° | 3825.3 | 3891.4 | 5242.0 | 7614.3 | 12343.2 | 15954.3 | 11759.1 | 7540.3 | 5279.8 | 4075.6 | 3886.7 |
| 67.5° | 1445.1 | 1453.0 | 1934.7 | 3795.4 | 8787.1 | 13726.9 | 8974.4 | 4102.3 | 2224.3 | 1608.8 | 1550.6 |
| 70° | 599.8 | 610.8 | 710.0 | 1276.7 | 3776.5 | 8813.8 | 4327.4 | 1479.7 | 813.9 | 659.6 | 650.1 |
| 72.5° | 439.2 | 445.5 | 475.4 | 566.7 | 1161.7 | 3619.0 | 1423.1 | 628.1 | 477.0 | 426.6 | 421.9 |
| 75° | 344.7 | 347.9 | 369.9 | 417.2 | 541.5 | 1002.8 | 591.9 | 431.3 | 363.6 | 327.4 | 324.3 |
| 77.5° | 262.9 | 270.8 | 286.5 | 318.0 | 363.6 | 475.4 | 392.0 | 322.7 | 280.2 | 250.3 | 245.6 |
| 80° | 181.0 | 190.5 | 220.4 | 233.0 | 244.0 | 308.5 | 267.6 | 244.0 | 218.8 | 182.6 | 171.6 |
| 82.5° | 111.8 | 118.1 | 148.0 | 159.0 | 154.3 | 173.2 | 171.6 | 174.7 | 155.8 | 113.3 | 105.5 |
| 85° | 58.2 | 61.4 | 80.3 | 83.4 | 77.1 | 70.8 | 88.2 | 102.3 | 96.0 | 64.5 | 63.0 |
| 87.5° | 12.6 | 14.2 | 17.3 | 15.7 | 17.3 | 17.3 | 22.0 | 33.1 | 34.6 | 22.0 | 20.5 |
| 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)