

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: EPHESUS

Report Number: P638844

Luminaire Tested: **EPH-VN-08-D-735-U-LAM-VI**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-08
Report Number: P638844
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-08-D-735-U-LAM-VI
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Lambertian distribution lens and Visor
Light Source: (128) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40525.2 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G3

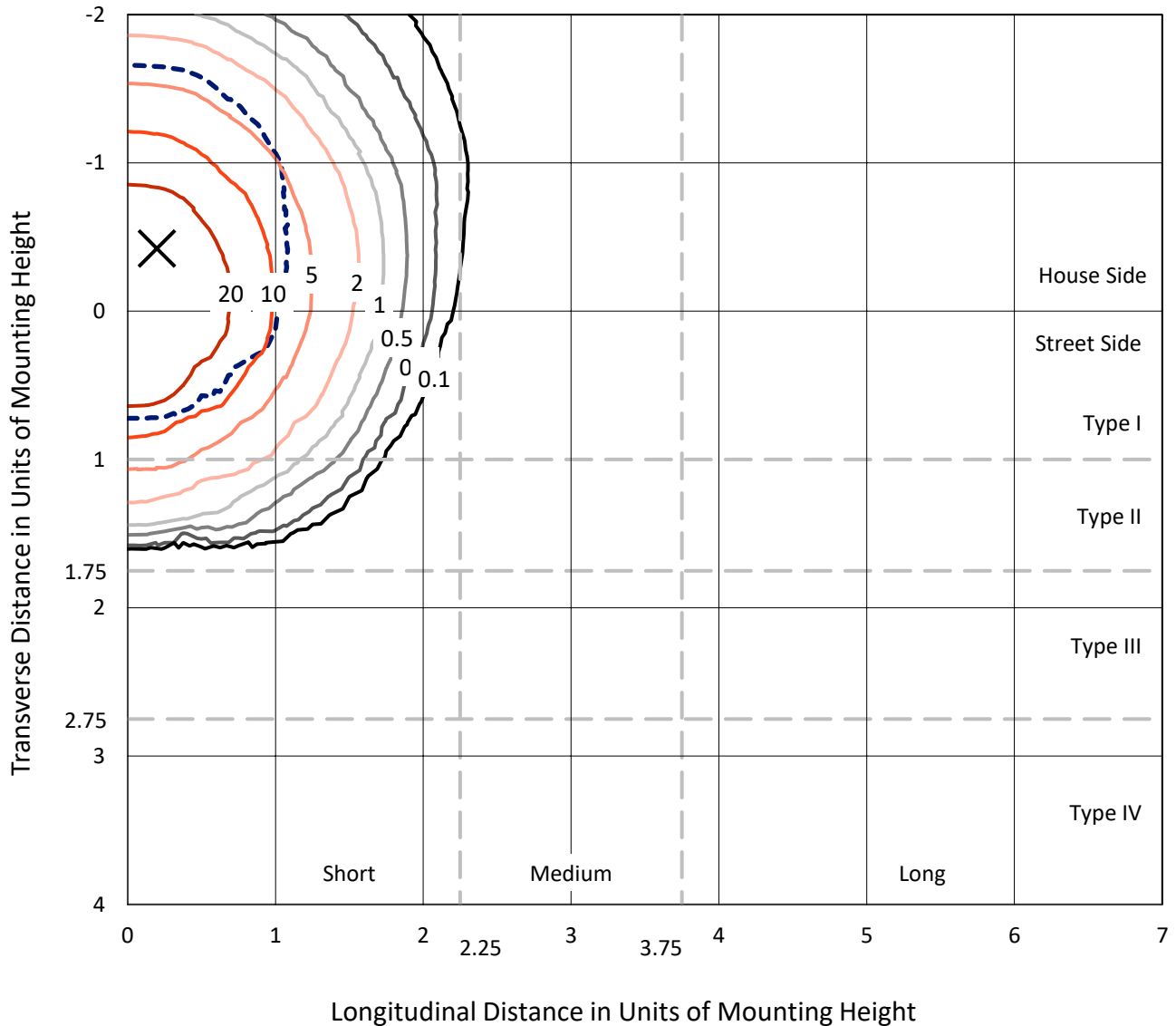
Input Watts (W): 488.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

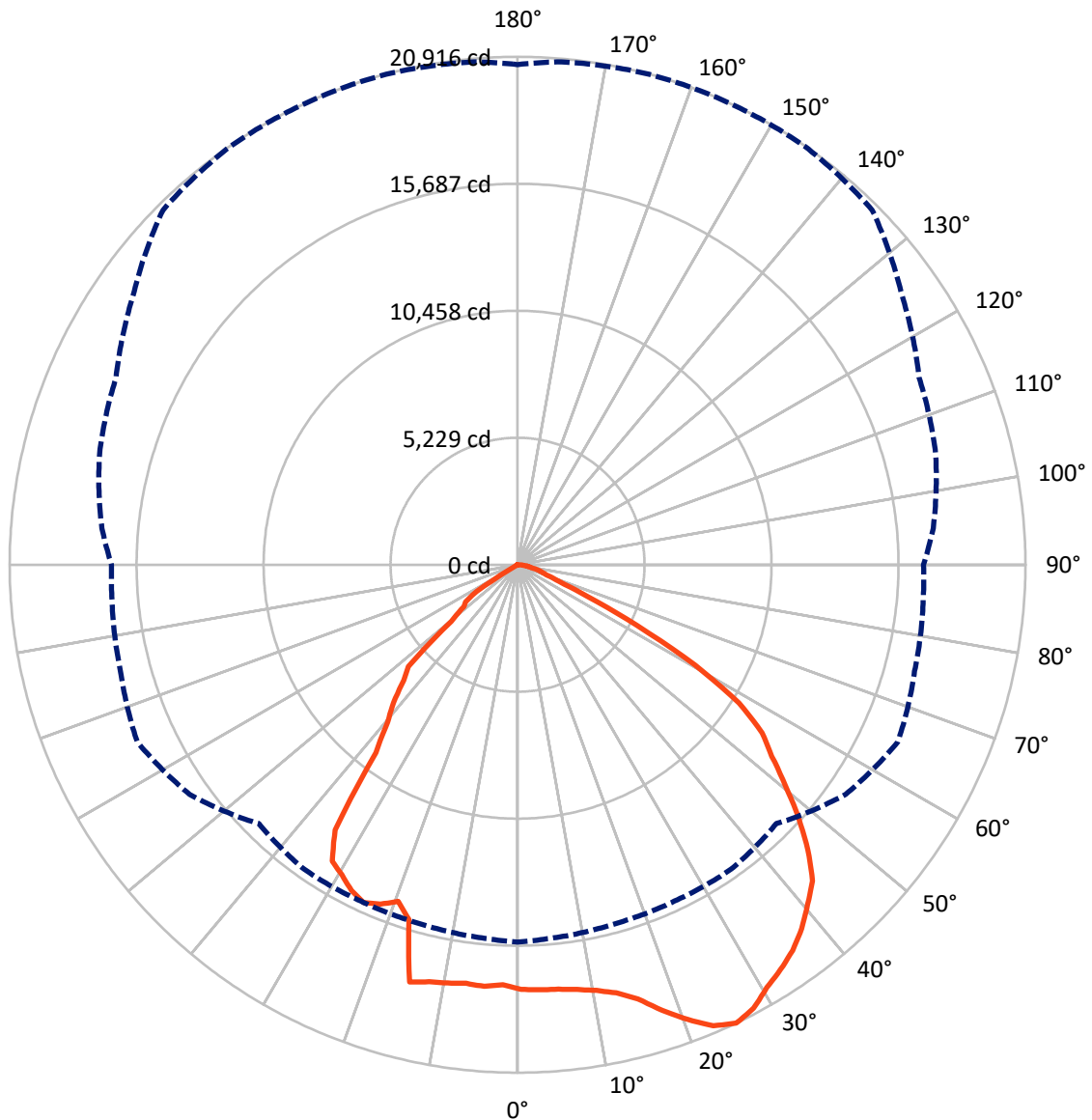
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 43.7 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 155-Deg Lateral - - - Horizontal Cone Through 25-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 25089.2 | 0.0 | 25089.2 |
| | % Fixture | 61.9 | 0.0 | 61.9 |
| Street Side | Lumens | 15435.9 | 0.0 | 15435.9 |
| | % Fixture | 38.1 | 0.0 | 38.1 |
| Total | Lumens | 40525.2 | 0.0 | 40525.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1677.5 | 4.1 |
| 10°-20° | 5122.3 | 12.6 |
| 20°-30° | 8098.0 | 20.0 |
| 30°-40° | 9147.4 | 22.6 |
| 40°-50° | 8566.8 | 21.1 |
| 50°-60° | 5906.2 | 14.6 |
| 60°-70° | 1586.8 | 3.9 |
| 70°-80° | 330.7 | 0.8 |
| 80°-90° | 89.5 | 0.2 |
| 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° | 40525.2 | 100.0 |
| 0°-180° | 40525.2 | 100.0 |

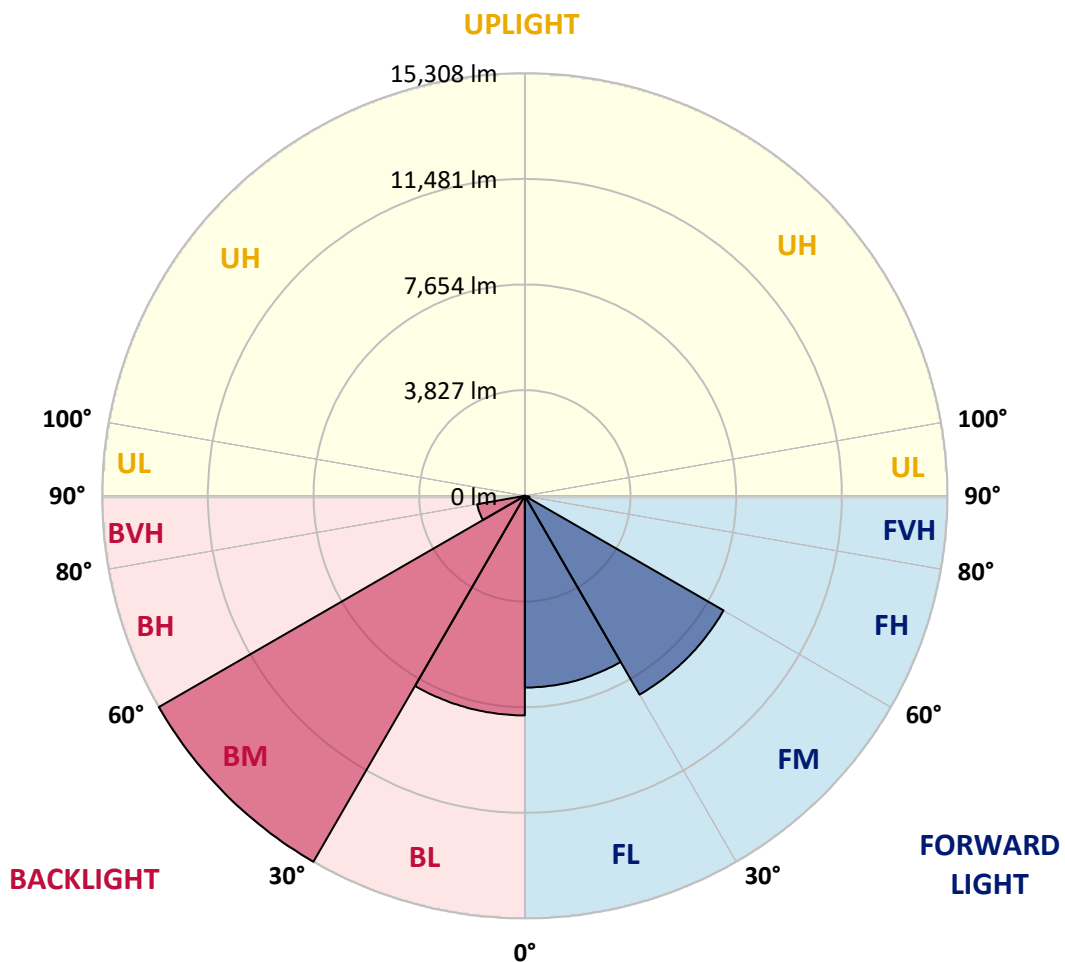


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 6944.7 | 17.1 | | | |
| FM (30°-60°) | 8312.6 | 20.5 | | | |
| FH (60°-80°) | 166.6 | 0.4 | | | G0/660 |
| FVH (80°-90°) | 12.0 | 0.0 | | | G1/100 |
| BL (0°-30°) | 7953.1 | 19.6 | B5 | | |
| BM (30°-60°) | 15307.7 | 37.8 | B5 | | |
| BH (60°-80°) | 1750.9 | 4.3 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 77.5 | 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-G3
 Type I Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 17485.9 | 17485.9 | 17485.9 | 17485.9 | 17485.9 | 17485.9 | 17485.9 | 17485.9 | 17485.9 | 17485.9 |
| 2.5° | 17563.3 | 17450.1 | 17342.9 | 17307.2 | 17456.1 | 17616.9 | 17515.7 | 17521.6 | 17485.9 | 17551.4 |
| 5° | 17694.3 | 17539.5 | 17468.0 | 17414.4 | 17438.2 | 17605.0 | 17462.1 | 17515.7 | 17456.1 | 17533.5 |
| 7.5° | 17646.7 | 17539.5 | 17468.0 | 17366.8 | 17444.2 | 17640.7 | 17503.7 | 17509.7 | 17479.9 | 17551.4 |
| 10° | 17616.9 | 17539.5 | 17450.1 | 17462.1 | 17551.4 | 17718.2 | 17611.0 | 17670.5 | 17628.8 | 17670.5 |
| 12.5° | 17688.4 | 17605.0 | 17557.3 | 17557.3 | 17634.8 | 17825.4 | 17771.8 | 17825.4 | 17807.5 | 17843.2 |
| 15° | 17015.4 | 17092.8 | 17545.4 | 17747.9 | 17902.8 | 18093.4 | 18069.5 | 18123.1 | 18135.1 | 18188.7 |
| 17.5° | 14353.2 | 14275.8 | 14240.0 | 15282.3 | 18051.7 | 18641.3 | 18623.4 | 18617.5 | 18557.9 | 18516.2 |
| 20° | 14704.6 | 14674.8 | 14633.1 | 14710.5 | 15020.2 | 18927.2 | 19046.3 | 18313.7 | 18099.3 | 18081.4 |
| 22.5° | 15264.4 | 15216.8 | 15061.9 | 15067.9 | 15163.2 | 16455.5 | 18456.7 | 17789.6 | 17718.2 | 17676.5 |
| 25° | 15538.4 | 15443.1 | 15318.0 | 15282.3 | 15312.1 | 15073.8 | 16485.3 | 17277.4 | 16926.0 | 16765.2 |
| 27.5° | 15056.0 | 15061.9 | 14960.7 | 15056.0 | 14942.8 | 13870.8 | 13269.3 | 16276.9 | 16265.0 | 16193.5 |
| 30° | 14692.7 | 14674.8 | 14555.7 | 14674.8 | 13894.6 | 12697.5 | 12441.4 | 15181.0 | 15056.0 | 14960.7 |
| 32.5° | 13579.0 | 13590.9 | 13936.3 | 14400.8 | 13120.4 | 12173.4 | 11399.2 | 13561.1 | 14746.3 | 14692.7 |
| 35° | 9713.7 | 9737.5 | 10964.4 | 13257.3 | 11947.1 | 11131.2 | 11071.6 | 11720.8 | 14257.9 | 14281.7 |
| 37.5° | 9350.4 | 9350.4 | 9320.6 | 9695.8 | 11024.0 | 10708.3 | 10827.4 | 10761.9 | 13060.8 | 13120.4 |
| 40° | 9088.4 | 9034.8 | 8993.1 | 8403.5 | 7665.0 | 10410.5 | 10493.9 | 10196.1 | 12346.1 | 12358.0 |
| 42.5° | 8772.7 | 8713.2 | 8725.1 | 7635.2 | 6860.9 | 9672.0 | 9439.8 | 9040.7 | 11155.0 | 11166.9 |
| 45° | 8195.0 | 8296.3 | 8367.7 | 6682.3 | 6622.7 | 6908.6 | 8707.2 | 8457.1 | 10351.0 | 10571.3 |
| 47.5° | 4169.0 | 4258.3 | 6533.4 | 6146.3 | 6283.2 | 6140.3 | 7355.3 | 7361.2 | 8611.9 | 9344.5 |
| 50° | 3781.9 | 3758.0 | 3764.0 | 3585.3 | 5800.8 | 4967.0 | 5318.4 | 6747.8 | 6896.7 | 7944.9 |
| 52.5° | 3525.8 | 3519.8 | 3156.5 | 2805.1 | 3644.9 | 4371.5 | 3859.3 | 4883.7 | 5127.8 | 6729.9 |
| 55° | 2608.6 | 2799.2 | 2489.5 | 2638.4 | 2281.0 | 3501.9 | 3484.1 | 4407.2 | 4490.6 | 5395.8 |
| 57.5° | 23.8 | 29.8 | 71.5 | 2007.1 | 1578.3 | 1751.0 | 2406.1 | 3007.6 | 3156.5 | 4204.7 |
| 60° | 6.0 | 11.9 | 29.8 | 59.6 | 1024.4 | 1078.0 | 1608.0 | 1739.1 | 1959.4 | 2507.3 |
| 62.5° | 0.0 | 0.0 | 11.9 | 29.8 | 53.6 | 440.7 | 512.2 | 559.8 | 863.6 | 1280.5 |
| 65° | 0.0 | 0.0 | 6.0 | 17.9 | 29.8 | 71.5 | 125.1 | 262.0 | 375.2 | 464.5 |
| 67.5° | 0.0 | 0.0 | 6.0 | 11.9 | 23.8 | 35.7 | 71.5 | 101.2 | 160.8 | 274.0 |
| 70° | 0.0 | 0.0 | 6.0 | 11.9 | 17.9 | 29.8 | 47.6 | 71.5 | 95.3 | 137.0 |
| 72.5° | 0.0 | 0.0 | 6.0 | 11.9 | 11.9 | 35.7 | 35.7 | 53.6 | 71.5 | 89.3 |
| 75° | 0.0 | 0.0 | 6.0 | 6.0 | 11.9 | 23.8 | 35.7 | 41.7 | 47.6 | 71.5 |
| 77.5° | 0.0 | 0.0 | 6.0 | 11.9 | 17.9 | 23.8 | 29.8 | 47.6 | 41.7 | 41.7 |
| 80° | 0.0 | 0.0 | 6.0 | 17.9 | 17.9 | 29.8 | 35.7 | 47.6 | 29.8 | 29.8 |
| 82.5° | 0.0 | 0.0 | 6.0 | 23.8 | 17.9 | 59.6 | 59.6 | 65.5 | 23.8 | 23.8 |
| 85° | 0.0 | 0.0 | 17.9 | 11.9 | 35.7 | 59.6 | 53.6 | 35.7 | 29.8 | 17.9 |
| 87.5° | 0.0 | 0.0 | 6.0 | 6.0 | 11.9 | 17.9 | 41.7 | 35.7 | 11.9 | 11.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CANDELA DISTRIBUTION (continued):

| 90° | | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|---------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 17485.9 | 0° | 17485.9 | 17485.9 | 17485.9 | 17485.9 | 17485.9 | 17485.9 | 17485.9 | 17485.9 | 17485.9 |
| 17378.7 | 2.5° | 17616.9 | 17539.5 | 17700.3 | 17682.4 | 17605.0 | 17569.3 | 17527.6 | 17491.8 | 17229.8 |
| 17390.6 | 5° | 17622.9 | 17503.7 | 17700.3 | 17664.6 | 17652.6 | 17593.1 | 17557.3 | 17611.0 | 17372.7 |
| 17438.2 | 7.5° | 17622.9 | 17503.7 | 17718.2 | 17730.1 | 17712.2 | 17664.6 | 17658.6 | 17694.3 | 17497.8 |
| 17521.6 | 10° | 17742.0 | 17694.3 | 17873.0 | 17890.9 | 17867.0 | 17855.1 | 17825.4 | 17801.5 | 17593.1 |
| 17807.5 | 12.5° | 17992.1 | 17896.8 | 18099.3 | 18152.9 | 18135.1 | 18164.8 | 18093.4 | 18129.1 | 17914.7 |
| 18099.3 | 15° | 18295.9 | 18301.8 | 18456.7 | 18575.8 | 18563.9 | 18659.2 | 18551.9 | 18647.2 | 18492.4 |
| 18432.8 | 17.5° | 18760.4 | 18825.9 | 19046.3 | 19224.9 | 19290.5 | 19361.9 | 19290.5 | 19320.2 | 19099.9 |
| 18063.6 | 20° | 18272.0 | 18516.2 | 19576.3 | 19903.9 | 20040.9 | 20106.4 | 19987.3 | 20023.0 | 19802.6 |
| 17611.0 | 22.5° | 17831.3 | 18147.0 | 19088.0 | 20112.3 | 20535.2 | 20666.2 | 20624.5 | 20618.6 | 20535.2 |
| 16717.6 | 25° | 17182.1 | 17819.4 | 18242.3 | 19326.2 | 20654.3 | 20892.5 | 20916.4 | 20910.4 | 20785.3 |
| 16169.7 | 27.5° | 16384.1 | 16527.0 | 17622.9 | 18283.9 | 19820.5 | 20725.8 | 20690.0 | 20517.3 | 20350.6 |
| 15032.1 | 30° | 15365.7 | 16014.8 | 16509.1 | 17563.3 | 18742.5 | 20213.6 | 20213.6 | 20082.6 | 19909.8 |
| 14627.2 | 32.5° | 14847.5 | 15687.3 | 16145.9 | 16527.0 | 17533.5 | 19641.8 | 19880.1 | 19743.1 | 19606.1 |
| 14311.5 | 35° | 14573.6 | 14698.6 | 15770.6 | 16116.1 | 16967.7 | 18540.0 | 19504.9 | 19367.9 | 19266.6 |
| 13471.8 | 37.5° | 13972.0 | 14263.9 | 14764.1 | 15687.3 | 15949.3 | 17640.7 | 19004.6 | 18933.1 | 18814.0 |
| 12381.9 | 40° | 12632.0 | 13412.2 | 14180.5 | 15056.0 | 15329.9 | 16485.3 | 18397.1 | 18426.9 | 18266.1 |
| 11220.5 | 42.5° | 11839.9 | 12370.0 | 13573.0 | 14162.6 | 14901.1 | 15740.9 | 17807.5 | 17855.1 | 17742.0 |
| 10630.9 | 45° | 10910.8 | 11500.4 | 12346.1 | 13418.2 | 14424.7 | 14716.5 | 16765.2 | 17265.5 | 17170.2 |
| 9457.6 | 47.5° | 10059.1 | 10535.6 | 11571.9 | 12655.8 | 13769.5 | 13727.8 | 15568.2 | 16509.1 | 16378.1 |
| 8558.3 | 50° | 8850.1 | 9683.9 | 10172.3 | 11166.9 | 12828.5 | 12941.7 | 14293.6 | 15621.8 | 15514.6 |
| 7271.9 | 52.5° | 7462.5 | 8510.7 | 9445.7 | 10356.9 | 11875.6 | 12143.6 | 13108.5 | 14716.5 | 14645.0 |
| 5556.7 | 55° | 6521.5 | 7283.8 | 8338.0 | 9070.5 | 10720.2 | 11434.9 | 12221.1 | 13852.9 | 13817.2 |
| 4568.0 | 57.5° | 4639.5 | 6110.5 | 6980.1 | 8004.4 | 8874.0 | 10166.3 | 10750.0 | 12096.0 | 11762.5 |
| 2531.2 | 60° | 3144.6 | 3835.5 | 4895.6 | 5997.4 | 6581.0 | 7873.4 | 8415.4 | 9493.4 | 9404.0 |
| 1512.7 | 62.5° | 1661.6 | 2298.9 | 3055.3 | 3609.1 | 4032.0 | 5288.6 | 5515.0 | 6676.3 | 6646.5 |
| 607.5 | 65° | 732.5 | 970.8 | 1655.7 | 1941.6 | 2376.3 | 2960.0 | 3156.5 | 3573.4 | 3472.2 |
| 297.8 | 67.5° | 381.2 | 577.7 | 935.0 | 1149.4 | 1447.2 | 1667.6 | 1828.4 | 1959.4 | 2042.8 |
| 196.5 | 70° | 232.3 | 422.9 | 577.7 | 798.1 | 994.6 | 1173.3 | 1298.3 | 1477.0 | 1584.2 |
| 101.2 | 72.5° | 172.7 | 268.0 | 399.0 | 613.4 | 720.6 | 929.1 | 1054.2 | 1185.2 | 1280.5 |
| 83.4 | 75° | 95.3 | 178.7 | 321.6 | 482.4 | 577.7 | 756.4 | 869.5 | 958.9 | 988.6 |
| 47.6 | 77.5° | 59.6 | 137.0 | 268.0 | 375.2 | 452.6 | 613.4 | 583.7 | 667.0 | 738.5 |
| 35.7 | 80° | 41.7 | 101.2 | 208.4 | 309.7 | 315.7 | 393.1 | 464.5 | 536.0 | 583.7 |
| 23.8 | 82.5° | 29.8 | 83.4 | 154.8 | 238.2 | 208.4 | 303.7 | 363.3 | 416.9 | 303.7 |
| 17.9 | 85° | 23.8 | 59.6 | 77.4 | 142.9 | 119.1 | 214.4 | 184.6 | 178.7 | 119.1 |
| 11.9 | 87.5° | 17.9 | 29.8 | 53.6 | 65.5 | 47.6 | 47.6 | 59.6 | 71.5 | 59.6 |
| 0.0 | 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



180°
17485.9
17051.1
17170.2
17271.5
17420.4
17724.1
18236.3
18909.3
19647.8
20267.2
20594.7
20219.5
19844.3
19492.9
19123.7
18694.9
18230.3
17730.1
17182.1
16473.4
15532.4
14692.7
13858.9
11726.7
9410.0
6652.5
3430.5
2042.8
1590.2
1298.3
970.8
750.4
589.6
220.4
119.1
59.6
0.0

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