

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: STREETWORKS

Report Number: P399817

Luminaire Tested: **ARCH-L-PA3-190-827-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399817
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-190-827-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14857 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G3

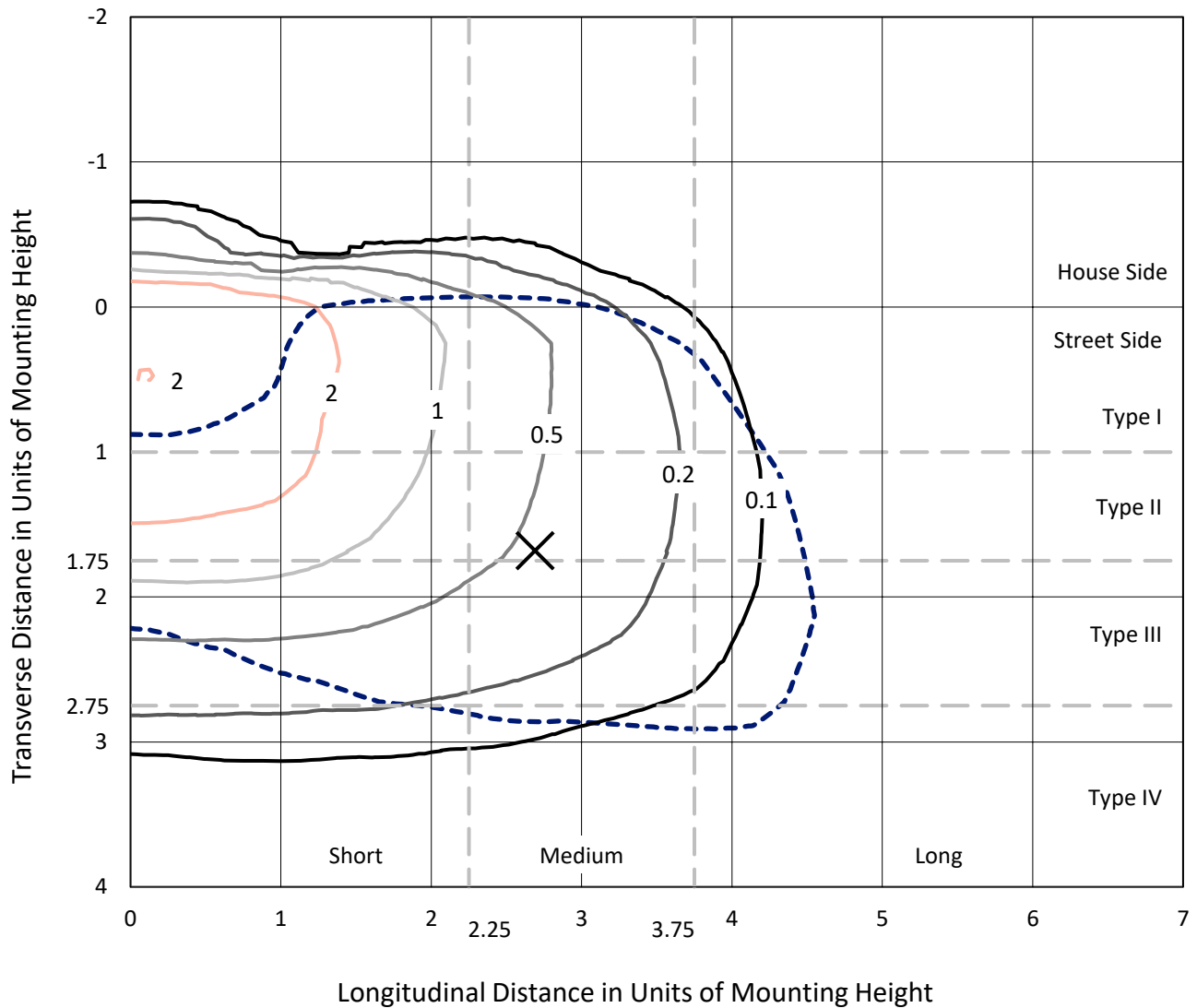
Input Watts (W): 189
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399817
 CATALOG NUMBER: ARCH-L-PA3-190-827-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

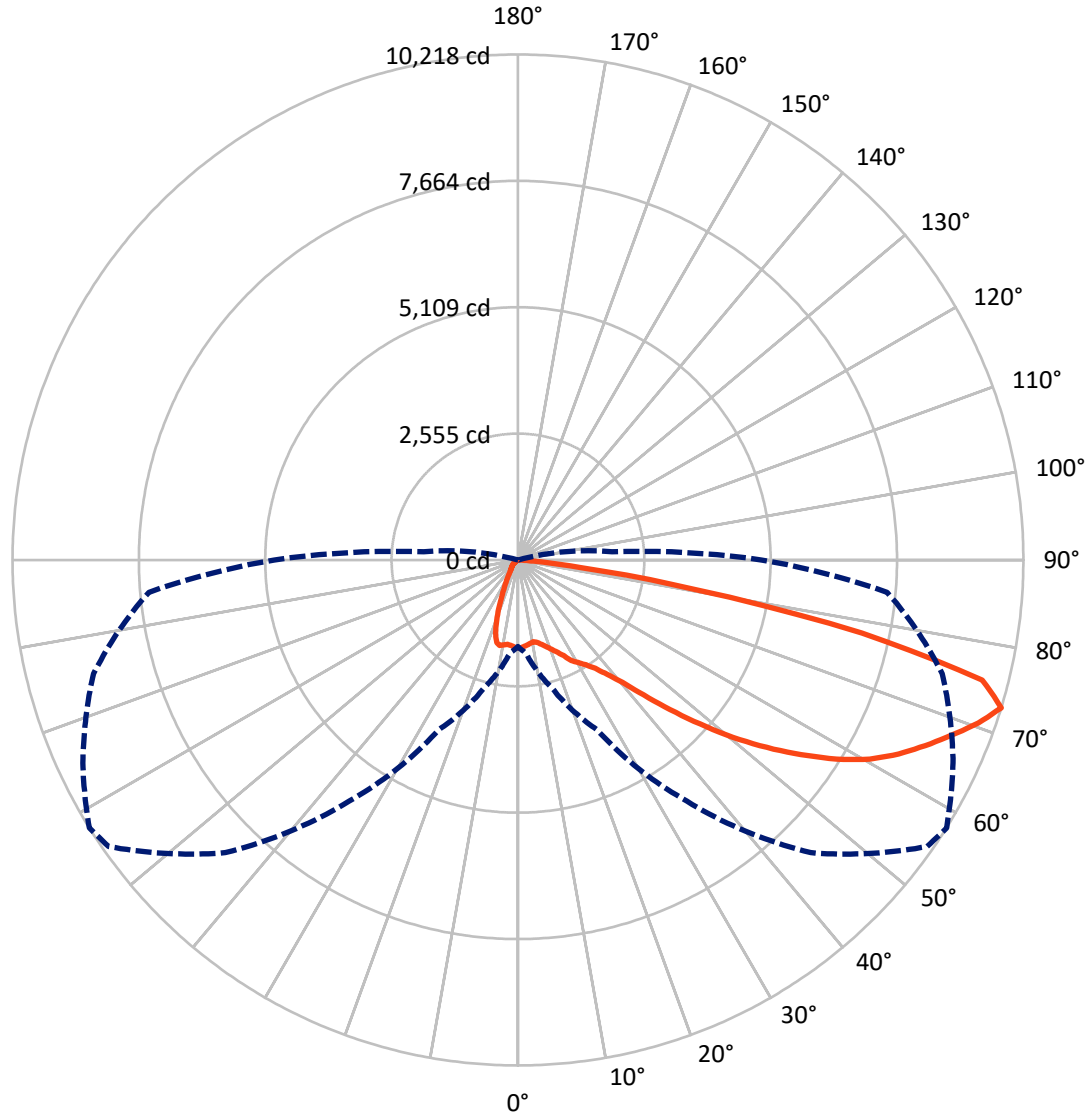
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Medium - N/A

REPORT NUMBER: P399817
CATALOG NUMBER: ARCH-L-PA3-190-827-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P399817
 CATALOG NUMBER: ARCH-L-PA3-190-827-U-T3-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1444.7 | 0.0 | 1444.7 |
| | % Fixture | 9.7 | 0.0 | 9.7 |
| Street Side | Lumens | 13412.3 | 0.0 | 13412.3 |
| | % Fixture | 90.3 | 0.0 | 90.3 |
| Total | Lumens | 14857.0 | 0.0 | 14857.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 163.6 | 1.1 |
| 10°-20° | 426.1 | 2.9 |
| 20°-30° | 669.4 | 4.5 |
| 30°-40° | 1154.5 | 7.8 |
| 40°-50° | 2196.5 | 14.8 |
| 50°-60° | 3478.6 | 23.4 |
| 60°-70° | 4059.1 | 27.3 |
| 70°-80° | 2542.2 | 17.1 |
| 80°-90° | 166.9 | 1.1 |
| 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° | 14857.0 | 100.0 |
| 0°-180° | 14857.0 | 100.0 |

Coefficient of Utilization



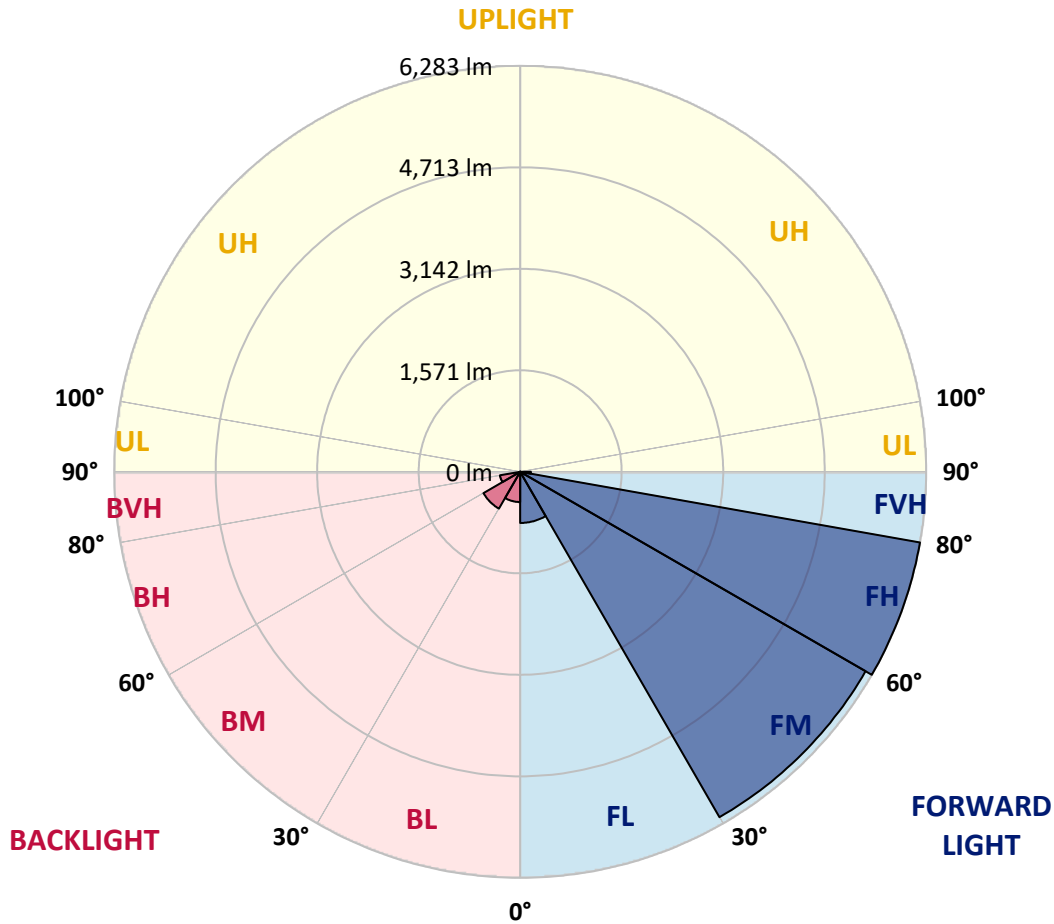
REPORT NUMBER: P399817
 CATALOG NUMBER: ARCH-L-PA3-190-827-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 791.3 | 5.3 | | | |
| FM (30°-60°) | 6172.2 | 41.5 | | | |
| FH (60°-80°) | 6283.4 | 42.3 | | | G3/7500 |
| FVH (80°-90°) | 165.3 | 1.1 | | | G2/225 |
| BL (0°-30°) | 467.9 | 3.1 | B1/500 | | |
| BM (30°-60°) | 657.4 | 4.4 | B1/1000 | | |
| BH (60°-80°) | 317.9 | 2.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.6 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G3

Type IV Medium





REPORT NUMBER: P399817

CATALOG NUMBER: ARCH-L-PA3-190-827-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|
| 0° | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 |
| 2.5° | 1774.8 | 1766.8 | 1764.2 | 1761.5 | 1764.2 | 1766.8 | 1758.8 | 1766.8 | 1761.5 | 1764.2 | 1769.5 |
| 5° | 1711.0 | 1703.0 | 1700.4 | 1703.0 | 1711.0 | 1724.3 | 1729.6 | 1737.6 | 1737.6 | 1745.6 | 1748.2 |
| 7.5° | 1639.3 | 1634.0 | 1631.3 | 1636.6 | 1652.6 | 1681.8 | 1697.7 | 1708.4 | 1719.0 | 1734.9 | 1750.9 |
| 10° | 1599.4 | 1596.8 | 1594.1 | 1602.1 | 1618.0 | 1644.6 | 1665.8 | 1681.8 | 1721.6 | 1766.8 | 1796.0 |
| 12.5° | 1572.9 | 1572.9 | 1578.2 | 1594.1 | 1615.4 | 1636.6 | 1687.1 | 1708.4 | 1769.5 | 1838.5 | 1878.4 |
| 15° | 1551.6 | 1551.6 | 1559.6 | 1588.8 | 1618.0 | 1668.5 | 1742.9 | 1766.8 | 1838.5 | 1923.6 | 1976.7 |
| 17.5° | 1535.7 | 1541.0 | 1546.3 | 1575.5 | 1631.3 | 1716.3 | 1804.0 | 1838.5 | 1926.2 | 2019.2 | 2077.7 |
| 20° | 1538.3 | 1543.6 | 1546.3 | 1575.5 | 1655.2 | 1772.1 | 1883.7 | 1923.6 | 2024.5 | 2122.8 | 2181.3 |
| 22.5° | 1554.3 | 1562.2 | 1564.9 | 1604.7 | 1697.7 | 1830.6 | 1974.0 | 2019.2 | 2128.1 | 2231.8 | 2276.9 |
| 25° | 1620.7 | 1626.0 | 1610.1 | 1644.6 | 1758.8 | 1920.9 | 2090.9 | 2138.8 | 2247.7 | 2343.3 | 2380.5 |
| 27.5° | 1846.5 | 1851.8 | 1764.2 | 1724.3 | 1806.7 | 1995.3 | 2234.4 | 2300.8 | 2436.3 | 2500.1 | 2505.4 |
| 30° | 2335.4 | 2340.7 | 2168.0 | 1979.4 | 1920.9 | 2059.1 | 2314.1 | 2407.1 | 2582.5 | 2654.2 | 2622.3 |
| 32.5° | 2965.0 | 2959.7 | 2723.3 | 2444.3 | 2191.9 | 2170.7 | 2428.4 | 2526.7 | 2718.0 | 2787.0 | 2763.1 |
| 35° | 3597.4 | 3605.4 | 3403.4 | 2983.6 | 2622.3 | 2380.5 | 2574.5 | 2688.7 | 2919.9 | 3018.2 | 2975.7 |
| 37.5° | 4030.4 | 4083.6 | 3995.9 | 3541.6 | 3151.0 | 2768.4 | 2811.0 | 2933.2 | 3222.8 | 3355.6 | 3265.3 |
| 40° | 4641.5 | 4628.2 | 4415.7 | 4080.9 | 3735.5 | 3342.3 | 3193.5 | 3252.0 | 3584.1 | 3762.1 | 3621.3 |
| 42.5° | 5462.5 | 5435.9 | 5074.6 | 4747.8 | 4362.6 | 4041.1 | 3738.2 | 3727.6 | 3998.6 | 4205.8 | 4001.2 |
| 45° | 6206.4 | 6166.6 | 5919.5 | 5603.3 | 5180.9 | 4811.6 | 4402.4 | 4309.4 | 4498.1 | 4673.4 | 4434.3 |
| 47.5° | 6798.9 | 6732.5 | 6557.1 | 6389.7 | 6286.1 | 5712.2 | 5098.5 | 4957.7 | 5053.3 | 5183.5 | 4846.1 |
| 50° | 7500.3 | 7317.0 | 7061.9 | 6961.0 | 7176.2 | 6732.5 | 5768.0 | 5632.5 | 5627.2 | 5701.6 | 5271.2 |
| 52.5° | 7819.1 | 7487.0 | 7343.5 | 7428.6 | 7808.5 | 7681.0 | 6490.7 | 6296.7 | 6219.7 | 6227.7 | 5667.1 |
| 55° | 7433.9 | 7396.7 | 7473.7 | 7739.4 | 8236.2 | 8161.9 | 7184.1 | 6945.0 | 6830.8 | 6687.3 | 6047.0 |
| 57.5° | 6995.5 | 7109.7 | 7415.3 | 7922.7 | 8778.2 | 8664.0 | 7866.9 | 7595.9 | 7386.1 | 7056.6 | 6469.4 |
| 60° | 6591.7 | 6708.6 | 7213.4 | 7965.3 | 9075.8 | 9147.6 | 8435.5 | 8177.8 | 7866.9 | 7433.9 | 6934.4 |
| 62.5° | 5977.9 | 6068.3 | 6777.6 | 7904.1 | 8945.6 | 9429.2 | 8831.4 | 8637.4 | 8347.8 | 7792.6 | 7468.4 |
| 65° | 5287.1 | 5345.6 | 6047.0 | 7415.3 | 8690.6 | 9397.3 | 9158.2 | 9049.2 | 8767.6 | 8167.2 | 7997.1 |
| 67.5° | 4529.9 | 4599.0 | 5183.5 | 6535.9 | 8191.1 | 9248.5 | 9466.4 | 9455.7 | 9134.3 | 8581.6 | 8379.7 |
| 70° | 3658.5 | 3663.8 | 4147.4 | 5420.0 | 7319.6 | 8950.9 | 9849.0 | 9872.9 | 9485.0 | 8892.5 | 8395.7 |
| 72.5° | 1750.9 | 1894.3 | 2688.7 | 3783.4 | 5948.7 | 8366.4 | 10098.7 | 10218.3 | 9705.5 | 8881.9 | 7489.7 |
| 75° | 401.2 | 414.5 | 783.8 | 1798.7 | 3488.5 | 6421.6 | 9474.3 | 9697.5 | 9168.8 | 7681.0 | 5276.5 |
| 77.5° | 146.1 | 154.1 | 220.5 | 526.1 | 1341.7 | 3318.4 | 6780.3 | 7107.1 | 6777.6 | 4965.7 | 2494.8 |
| 80° | 98.3 | 95.6 | 114.2 | 233.8 | 616.4 | 940.5 | 3467.2 | 3661.1 | 3342.3 | 1695.1 | 597.8 |
| 82.5° | 50.5 | 53.1 | 79.7 | 130.2 | 414.5 | 326.8 | 1158.4 | 1259.3 | 1036.2 | 340.1 | 111.6 |
| 85° | 23.9 | 23.9 | 45.2 | 82.4 | 175.4 | 114.2 | 257.7 | 310.9 | 279.0 | 148.8 | 37.2 |
| 87.5° | 23.9 | 23.9 | 42.5 | 53.1 | 90.3 | 47.8 | 63.8 | 79.7 | 74.4 | 79.7 | 13.3 |
| 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: P399817

CATALOG NUMBER: ARCH-L-PA3-190-827-U-T3-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 | 1782.7 |
| 2.5° | 1769.5 | 1766.8 | 1764.2 | 1769.5 | 1766.8 | 1772.1 | 1772.1 | 1777.4 | 1777.4 | 1772.1 | 1769.5 |
| 5° | 1745.6 | 1740.2 | 1734.9 | 1734.9 | 1732.3 | 1737.6 | 1753.5 | 1766.8 | 1769.5 | 1761.5 | 1758.8 |
| 7.5° | 1748.2 | 1748.2 | 1742.9 | 1732.3 | 1713.7 | 1713.7 | 1713.7 | 1729.6 | 1737.6 | 1732.3 | 1729.6 |
| 10° | 1796.0 | 1798.7 | 1785.4 | 1761.5 | 1729.6 | 1700.4 | 1644.6 | 1562.2 | 1485.2 | 1463.9 | 1456.0 |
| 12.5° | 1878.4 | 1881.1 | 1854.5 | 1812.0 | 1745.6 | 1572.9 | 1360.3 | 1163.7 | 1012.3 | 969.8 | 961.8 |
| 15° | 1976.7 | 1979.4 | 1931.5 | 1862.5 | 1660.5 | 1259.3 | 943.2 | 720.0 | 587.2 | 555.3 | 552.6 |
| 17.5° | 2077.7 | 2072.3 | 2000.6 | 1867.8 | 1408.1 | 892.7 | 573.9 | 459.6 | 425.1 | 417.1 | 419.8 |
| 20° | 2176.0 | 2160.0 | 2061.7 | 1769.5 | 1084.0 | 584.5 | 419.8 | 393.2 | 385.2 | 379.9 | 379.9 |
| 22.5° | 2266.3 | 2234.4 | 2112.2 | 1575.5 | 759.9 | 419.8 | 374.6 | 369.3 | 358.7 | 350.7 | 348.0 |
| 25° | 2356.6 | 2311.5 | 2144.1 | 1323.1 | 510.1 | 366.6 | 353.4 | 342.7 | 329.4 | 318.8 | 316.2 |
| 27.5° | 2465.6 | 2401.8 | 2128.1 | 1004.3 | 382.6 | 340.1 | 329.4 | 313.5 | 294.9 | 279.0 | 273.7 |
| 30° | 2569.2 | 2497.4 | 2037.8 | 693.4 | 326.8 | 313.5 | 297.6 | 273.7 | 249.7 | 231.1 | 225.8 |
| 32.5° | 2699.4 | 2617.0 | 1875.7 | 454.3 | 284.3 | 273.7 | 257.7 | 228.5 | 196.6 | 175.4 | 170.0 |
| 35° | 2885.3 | 2792.4 | 1668.5 | 318.8 | 249.7 | 231.1 | 209.9 | 178.0 | 143.5 | 127.5 | 124.9 |
| 37.5° | 3145.7 | 3020.8 | 1408.1 | 257.7 | 220.5 | 194.0 | 162.1 | 130.2 | 106.3 | 93.0 | 90.3 |
| 40° | 3464.5 | 3273.2 | 1118.5 | 228.5 | 196.6 | 162.1 | 122.2 | 93.0 | 77.0 | 66.4 | 66.4 |
| 42.5° | 3809.9 | 3509.7 | 823.6 | 209.9 | 172.7 | 132.8 | 90.3 | 66.4 | 55.8 | 50.5 | 47.8 |
| 45° | 4165.9 | 3719.6 | 555.3 | 194.0 | 151.4 | 101.0 | 63.8 | 45.2 | 37.2 | 37.2 | 34.5 |
| 47.5° | 4535.3 | 3860.4 | 358.7 | 175.4 | 127.5 | 74.4 | 42.5 | 31.9 | 26.6 | 26.6 | 26.6 |
| 50° | 4901.9 | 3934.8 | 255.1 | 159.4 | 103.6 | 50.5 | 31.9 | 23.9 | 21.3 | 21.3 | 21.3 |
| 52.5° | 5167.6 | 3887.0 | 204.6 | 138.2 | 79.7 | 37.2 | 23.9 | 18.6 | 15.9 | 15.9 | 15.9 |
| 55° | 5398.7 | 3804.6 | 178.0 | 119.6 | 58.5 | 26.6 | 18.6 | 15.9 | 13.3 | 13.3 | 13.3 |
| 57.5° | 5635.2 | 3698.3 | 159.4 | 101.0 | 42.5 | 18.6 | 13.3 | 10.6 | 10.6 | 10.6 | 10.6 |
| 60° | 5850.4 | 3517.7 | 138.2 | 79.7 | 29.2 | 13.3 | 10.6 | 8.0 | 8.0 | 8.0 | 8.0 |
| 62.5° | 6060.3 | 3363.6 | 119.6 | 61.1 | 21.3 | 10.6 | 5.3 | 5.3 | 2.7 | 2.7 | 2.7 |
| 65° | 6179.8 | 3156.3 | 95.6 | 39.9 | 13.3 | 8.0 | 2.7 | 2.7 | 0.0 | 0.0 | 0.0 |
| 67.5° | 6142.6 | 2909.3 | 66.4 | 23.9 | 8.0 | 5.3 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 5884.9 | 2577.1 | 39.9 | 13.3 | 8.0 | 5.3 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 4928.5 | 1907.6 | 23.9 | 10.6 | 5.3 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 3291.8 | 876.8 | 13.3 | 8.0 | 2.7 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 1506.4 | 263.0 | 8.0 | 5.3 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 302.9 | 69.1 | 5.3 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 63.8 | 13.3 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 13.3 | 5.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 5.3 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)