

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: P239999

Luminaire Tested: **UTLD-AF24-90-D-U-T2U-A**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P239999  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-18)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: UTLD-AF24-90-D-U-T2U-A  
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE  
(1) 70 CRI, 4000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
AND REFRACTOR PANELS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 7434 lumens  
Efficiency: N/A  
Efficacy: 79.1 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B2 - U4 - G2

Input Watts (W): 94  
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



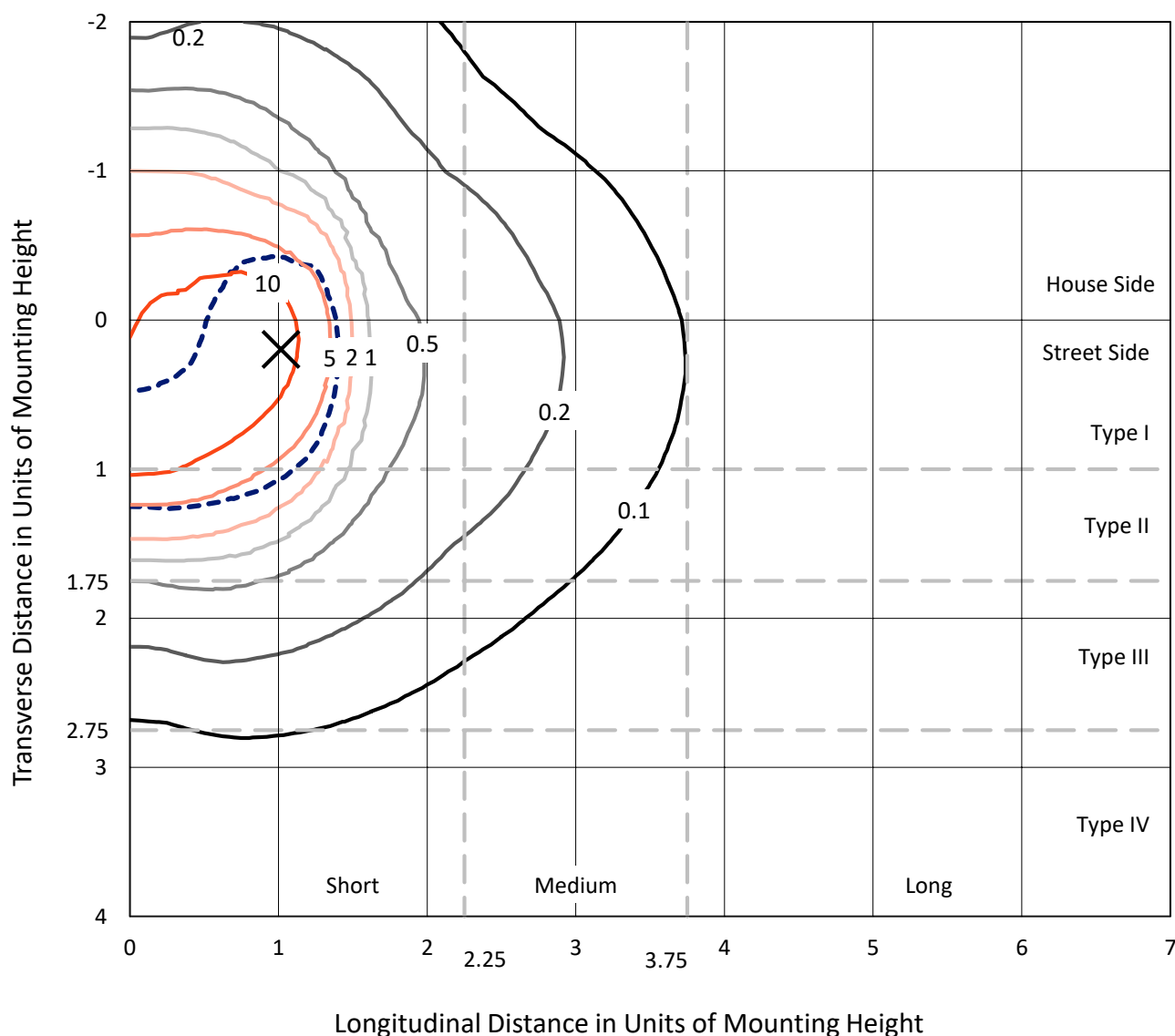
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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

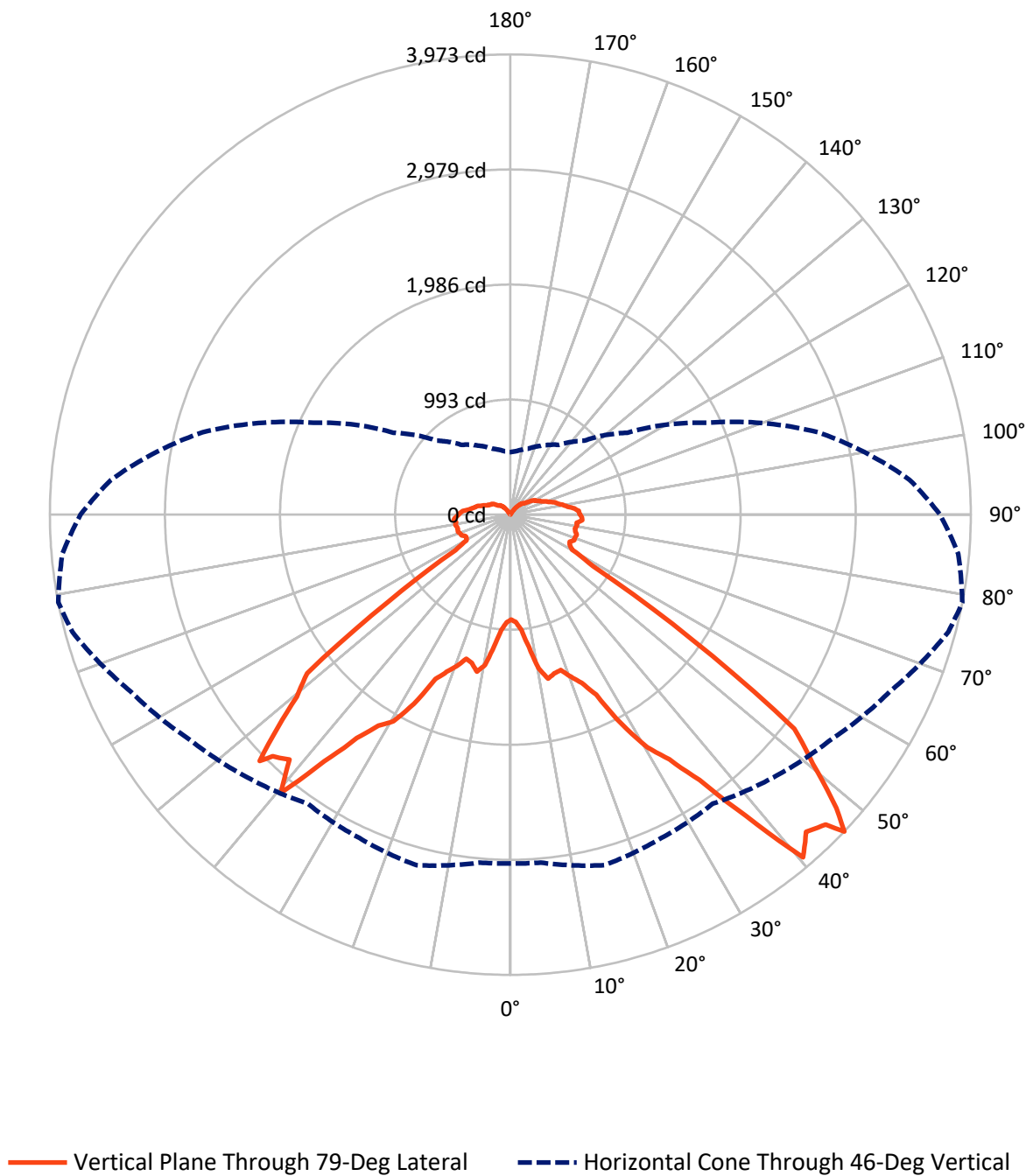


Based on 10 foot mounting height. Maximum calculated value = 16.3 fc  
 Type II - Short - Non-Cutoff

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## Luminous Intensity Polar Plot



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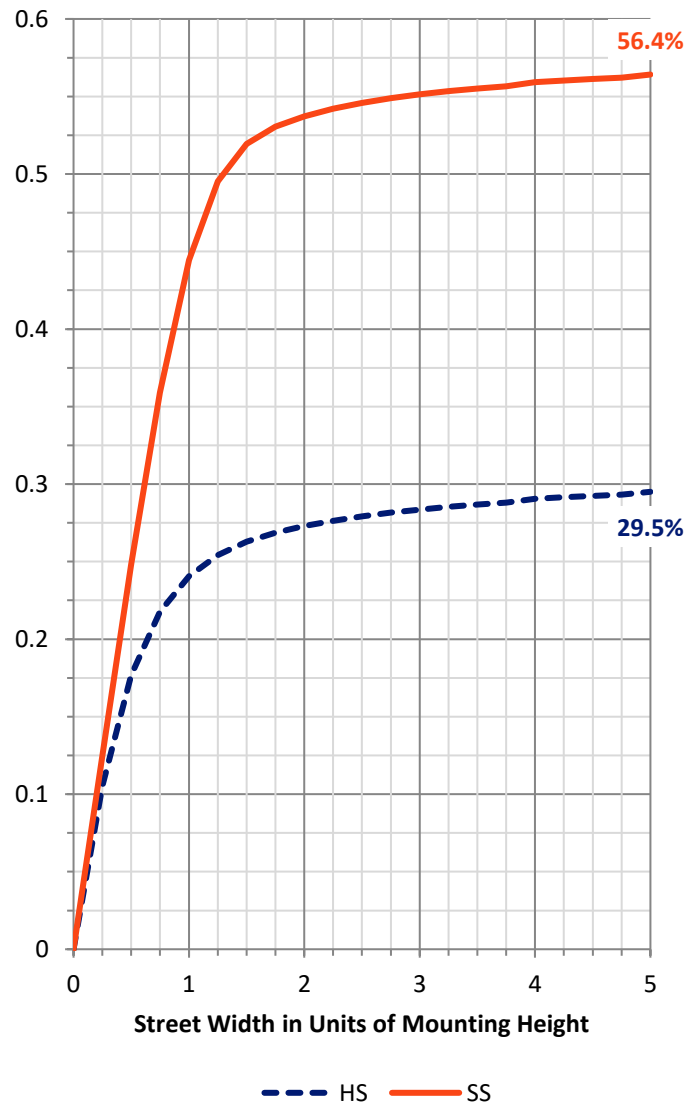
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2266.1   | 281.8  | 2547.9 |
|                    | % Fixture | 30.5     | 3.8    | 34.3   |
| <b>Street Side</b> | Lumens    | 4274.7   | 611.4  | 4886.1 |
|                    | % Fixture | 57.5     | 8.2    | 65.7   |
| <b>Total</b>       | Lumens    | 6540.7   | 893.3  | 7434.0 |
|                    | % Fixture | 88.0     | 12.0   | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 97.7   | 1.3       |
| 10°-20°   | 353.2  | 4.8       |
| 20°-30°   | 713.5  | 9.6       |
| 30°-40°   | 1306.2 | 17.6      |
| 40°-50°   | 1805.1 | 24.3      |
| 50°-60°   | 1152.2 | 15.5      |
| 60°-70°   | 412.7  | 5.6       |
| 70°-80°   | 370.6  | 5.0       |
| 80°-90°   | 329.5  | 4.4       |
| 90°-100°  | 302.3  | 4.1       |
| 100°-110° | 235.0  | 3.2       |
| 110°-120° | 163.1  | 2.2       |
| 120°-130° | 109.2  | 1.5       |
| 130°-140° | 65.5   | 0.9       |
| 140°-150° | 17.4   | 0.2       |
| 150°-160° | 0.8    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-90°    | 6540.7 | 88.0      |
| 0°-180°   | 7434.0 | 100.0     |

**Coefficient of Utilization**



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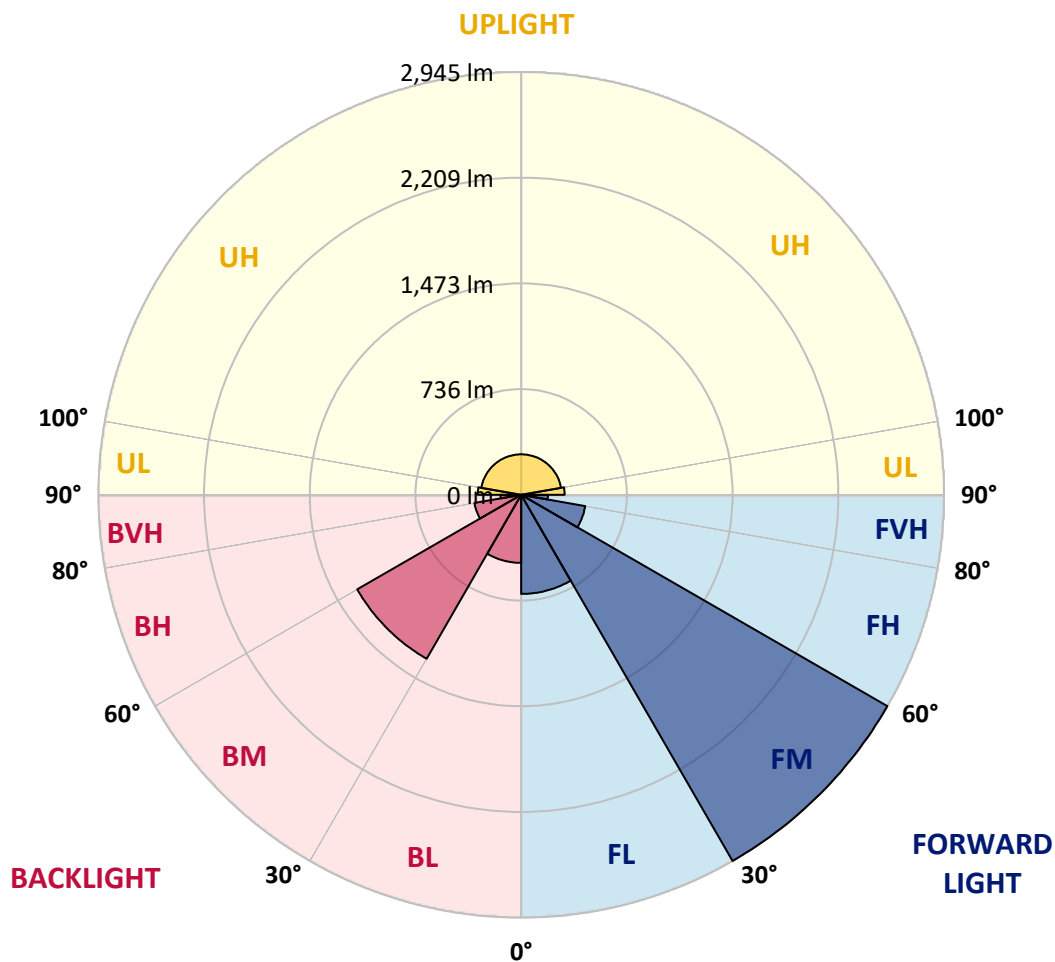
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |        |        |
|------|-------------|--------|-----------|-------------------------|--------|--------|
|      |             |        |           | B                       | U      | G      |
| FL   | (0°-30°)    | 690.5  | 9.3       |                         |        |        |
| FM   | (30°-60°)   | 2945.1 | 39.6      |                         |        |        |
| FH   | (60°-80°)   | 453.0  | 6.1       |                         |        | G0/660 |
| FVH  | (80°-90°)   | 186.1  | 2.5       |                         |        | G2/225 |
| BL   | (0°-30°)    | 473.9  | 6.4       | B1/500                  |        |        |
| BM   | (30°-60°)   | 1318.4 | 17.7      | B2/2500                 |        |        |
| BH   | (60°-80°)   | 330.4  | 4.4       | B1/500                  |        | G1/500 |
| BVH  | (80°-90°)   | 143.4  | 1.9       |                         |        | G2/225 |
| UL   | (90°-100°)  | 302.3  | 4.1       |                         | U3/500 |        |
| UH   | (100°-180°) | 281.8  | 3.8       |                         | U3/500 |        |

**BUG Rating: B2-U4-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 79°    | 85°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 906.1  | 906.1  | 906.1  | 906.1  | 906.1  | 906.1  | 906.1  | 906.1  | 906.1  | 906.1  | 906.1  |
| 2.5°   | 921.0  | 924.0  | 923.0  | 921.0  | 925.0  | 927.0  | 927.0  | 926.0  | 927.0  | 929.0  | 933.0  |
| 5°     | 964.9  | 963.9  | 966.9  | 974.9  | 985.9  | 988.9  | 997.9  | 995.9  | 1000.8 | 1000.8 | 1006.8 |
| 7.5°   | 1041.8 | 1042.8 | 1052.7 | 1060.7 | 1072.7 | 1098.6 | 1123.6 | 1156.5 | 1155.5 | 1153.5 | 1161.5 |
| 10°    | 1121.6 | 1121.6 | 1141.5 | 1170.5 | 1219.4 | 1274.3 | 1298.2 | 1327.1 | 1357.1 | 1352.1 | 1344.1 |
| 12.5°  | 1146.5 | 1150.5 | 1185.5 | 1257.3 | 1363.1 | 1456.9 | 1504.8 | 1498.8 | 1468.8 | 1451.9 | 1424.9 |
| 15°    | 1192.4 | 1197.4 | 1235.3 | 1345.1 | 1470.8 | 1554.7 | 1572.6 | 1498.8 | 1433.9 | 1421.9 | 1399.0 |
| 17.5°  | 1365.1 | 1365.1 | 1404.0 | 1504.8 | 1599.6 | 1580.6 | 1509.8 | 1474.8 | 1432.9 | 1410.0 | 1377.0 |
| 20°    | 1484.8 | 1491.8 | 1553.7 | 1624.5 | 1676.4 | 1614.5 | 1615.5 | 1550.7 | 1507.8 | 1493.8 | 1462.9 |
| 22.5°  | 1600.6 | 1610.5 | 1628.5 | 1739.3 | 1754.2 | 1766.2 | 1730.3 | 1671.4 | 1599.6 | 1576.6 | 1544.7 |
| 25°    | 1846.0 | 1849.0 | 1868.0 | 1920.9 | 1881.0 | 1861.0 | 1809.1 | 1761.2 | 1733.3 | 1721.3 | 1687.4 |
| 27.5°  | 2137.4 | 2128.4 | 2136.4 | 2140.4 | 2079.5 | 2024.6 | 1948.8 | 1999.7 | 2039.6 | 2050.6 | 2020.7 |
| 30°    | 2197.3 | 2182.3 | 2243.2 | 2308.0 | 2278.1 | 2212.2 | 2207.3 | 2268.1 | 2343.0 | 2329.0 | 2287.1 |
| 32.5°  | 2438.8 | 2415.8 | 2443.7 | 2450.7 | 2445.7 | 2426.8 | 2418.8 | 2495.6 | 2549.5 | 2518.6 | 2457.7 |
| 35°    | 2633.3 | 2632.3 | 2533.6 | 2556.5 | 2570.5 | 2614.4 | 2658.3 | 2763.1 | 2811.0 | 2813.0 | 2762.1 |
| 37.5°  | 3049.4 | 3019.5 | 2982.6 | 2836.9 | 2760.1 | 2780.0 | 2931.7 | 3117.3 | 3225.1 | 3295.9 | 3215.1 |
| 40°    | 3192.1 | 3205.1 | 3174.2 | 3158.2 | 3046.5 | 2999.6 | 3174.2 | 3493.5 | 3785.9 | 3889.6 | 3879.7 |
| 42.5°  | 2957.6 | 2987.6 | 2969.6 | 3080.4 | 3169.2 | 3229.1 | 3439.6 | 3713.0 | 3768.9 | 3742.0 | 3599.3 |
| 45°    | 3153.2 | 3153.2 | 3105.3 | 3036.5 | 3067.4 | 3262.0 | 3428.6 | 3613.2 | 3787.9 | 3815.8 | 3737.0 |
| 46°    | 3011.5 | 3014.5 | 3132.3 | 3080.4 | 3045.5 | 3207.1 | 3380.7 | 3613.2 | 3911.6 | 3972.5 | 3879.7 |
| 47.5°  | 2750.1 | 2745.1 | 2961.6 | 2978.6 | 3002.5 | 3135.3 | 3325.9 | 3612.2 | 3780.9 | 3784.9 | 3669.1 |
| 50°    | 2179.3 | 2188.3 | 2485.7 | 2643.3 | 2801.0 | 2931.7 | 3189.1 | 3350.8 | 3388.7 | 3381.7 | 3256.0 |
| 52.5°  | 1769.2 | 1793.1 | 1950.8 | 2149.4 | 2340.0 | 2591.4 | 2890.8 | 3041.5 | 3124.3 | 3069.4 | 2953.7 |
| 55°    | 1226.4 | 1278.3 | 1476.8 | 1655.4 | 1934.8 | 2176.3 | 2434.8 | 2448.7 | 2070.5 | 1897.9 | 1683.4 |
| 57.5°  | 758.4  | 768.3  | 944.0  | 1196.4 | 1406.0 | 1595.6 | 1598.6 | 1242.3 | 966.9  | 840.2  | 698.5  |
| 60°    | 421.1  | 430.1  | 585.7  | 772.3  | 976.9  | 999.9  | 893.1  | 718.5  | 644.6  | 611.7  | 561.8  |
| 62.5°  | 313.3  | 320.3  | 422.1  | 536.8  | 618.7  | 651.6  | 599.7  | 587.7  | 588.7  | 573.8  | 540.8  |
| 65°    | 282.4  | 286.4  | 370.2  | 428.1  | 476.0  | 483.0  | 501.9  | 543.8  | 566.8  | 563.8  | 549.8  |
| 67.5°  | 256.4  | 261.4  | 337.3  | 379.2  | 408.1  | 442.0  | 458.0  | 522.9  | 584.7  | 594.7  | 581.7  |
| 70°    | 228.5  | 236.5  | 304.3  | 348.3  | 381.2  | 414.1  | 446.0  | 526.9  | 576.8  | 590.7  | 584.7  |
| 72.5°  | 197.6  | 207.6  | 264.4  | 310.3  | 347.3  | 383.2  | 438.1  | 506.9  | 574.8  | 599.7  | 603.7  |
| 75°    | 173.6  | 186.6  | 233.5  | 274.4  | 313.3  | 356.2  | 414.1  | 499.9  | 563.8  | 579.8  | 587.7  |
| 77.5°  | 156.7  | 170.6  | 206.6  | 244.5  | 281.4  | 328.3  | 395.2  | 497.9  | 552.8  | 570.8  | 584.7  |
| 80°    | 143.7  | 157.7  | 187.6  | 217.5  | 248.5  | 301.4  | 375.2  | 494.9  | 563.8  | 582.7  | 590.7  |
| 82.5°  | 133.7  | 146.7  | 172.6  | 199.6  | 224.5  | 272.4  | 361.2  | 489.9  | 560.8  | 576.8  | 580.8  |
| 85°    | 134.7  | 144.7  | 168.6  | 193.6  | 216.5  | 257.4  | 354.2  | 491.9  | 597.7  | 622.7  | 626.7  |
| 87.5°  | 141.7  | 148.7  | 173.6  | 202.6  | 228.5  | 270.4  | 367.2  | 488.0  | 593.7  | 616.7  | 626.7  |
| 90°    | 153.7  | 159.7  | 189.6  | 223.5  | 254.5  | 293.4  | 364.2  | 477.0  | 576.8  | 597.7  | 603.7  |
| 92.5°  | 190.6  | 195.6  | 228.5  | 265.4  | 292.4  | 305.3  | 352.2  | 493.9  | 579.8  | 591.7  | 591.7  |
| 95°    | 246.5  | 252.5  | 284.4  | 312.3  | 317.3  | 310.3  | 346.3  | 439.1  | 528.9  | 554.8  | 569.8  |
| 97.5°  | 308.3  | 310.3  | 328.3  | 333.3  | 318.3  | 302.4  | 338.3  | 410.1  | 480.0  | 497.9  | 501.9  |
| 100°   | 328.3  | 328.3  | 340.3  | 336.3  | 307.3  | 285.4  | 306.3  | 373.2  | 441.1  | 461.0  | 467.0  |
| 102.5° | 332.3  | 334.3  | 346.3  | 333.3  | 294.4  | 258.4  | 272.4  | 336.3  | 399.1  | 421.1  | 433.1  |
| 105°   | 352.2  | 353.2  | 346.3  | 314.3  | 266.4  | 234.5  | 246.5  | 310.3  | 377.2  | 398.1  | 411.1  |
| 107.5° | 329.3  | 326.3  | 307.3  | 277.4  | 245.5  | 222.5  | 236.5  | 283.4  | 334.3  | 351.2  | 360.2  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 65°   | 75°   | 79°   | 85°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110°   | 272.4 | 270.4 | 263.4 | 252.5 | 232.5 | 215.5 | 224.5 | 267.4 | 316.3 | 329.3 | 337.3 |
| 112.5° | 262.4 | 260.4 | 253.5 | 240.5 | 217.5 | 204.6 | 219.5 | 256.4 | 286.4 | 292.4 | 293.4 |
| 115°   | 252.5 | 250.5 | 234.5 | 219.5 | 201.6 | 195.6 | 205.6 | 239.5 | 267.4 | 274.4 | 280.4 |
| 117.5° | 217.5 | 215.5 | 203.6 | 194.6 | 187.6 | 190.6 | 207.6 | 226.5 | 246.5 | 252.5 | 256.4 |
| 120°   | 193.6 | 192.6 | 186.6 | 180.6 | 176.6 | 178.6 | 196.6 | 217.5 | 237.5 | 243.5 | 246.5 |
| 122.5° | 182.6 | 181.6 | 174.6 | 165.6 | 165.6 | 165.6 | 179.6 | 195.6 | 217.5 | 222.5 | 229.5 |
| 125°   | 160.7 | 160.7 | 153.7 | 146.7 | 156.7 | 160.7 | 163.6 | 164.6 | 181.6 | 189.6 | 192.6 |
| 127.5° | 142.7 | 143.7 | 137.7 | 132.7 | 150.7 | 159.7 | 157.7 | 144.7 | 154.7 | 160.7 | 164.6 |
| 130°   | 140.7 | 140.7 | 133.7 | 127.7 | 136.7 | 154.7 | 148.7 | 135.7 | 147.7 | 151.7 | 153.7 |
| 132.5° | 136.7 | 136.7 | 129.7 | 120.7 | 122.7 | 142.7 | 129.7 | 126.7 | 137.7 | 141.7 | 142.7 |
| 135°   | 125.7 | 125.7 | 120.7 | 108.8 | 100.8 | 120.7 | 104.8 | 110.8 | 121.7 | 124.7 | 125.7 |
| 137.5° | 111.8 | 111.8 | 106.8 | 96.8  | 79.8  | 90.8  | 80.8  | 93.8  | 104.8 | 107.8 | 108.8 |
| 140°   | 91.8  | 90.8  | 87.8  | 75.8  | 57.9  | 50.9  | 54.9  | 74.8  | 85.8  | 87.8  | 90.8  |
| 142.5° | 67.9  | 68.9  | 63.9  | 53.9  | 34.9  | 19.0  | 31.9  | 47.9  | 59.9  | 62.9  | 64.9  |
| 145°   | 49.9  | 48.9  | 43.9  | 34.9  | 19.0  | 3.0   | 15.0  | 29.9  | 37.9  | 40.9  | 42.9  |
| 147.5° | 32.9  | 32.9  | 28.9  | 21.0  | 6.0   | 1.0   | 4.0   | 15.0  | 23.9  | 25.9  | 26.9  |
| 150°   | 22.0  | 22.0  | 16.0  | 6.0   | 1.0   | 1.0   | 1.0   | 3.0   | 10.0  | 12.0  | 14.0  |
| 152.5° | 7.0   | 7.0   | 3.0   | 2.0   | 1.0   | 0.0   | 0.0   | 1.0   | 2.0   | 2.0   | 3.0   |
| 155°   | 2.0   | 2.0   | 2.0   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 1.0   | 1.0   | 1.0   |
| 157.5° | 1.0   | 1.0   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 160°   | 1.0   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 162.5° | 1.0   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 165°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 167.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 170°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 172.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 175°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 177.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 180°   | 0.0   | 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°  | 180°  |
|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 0°     | 906.1  | 906.1  | 906.1  | 906.1  | 906.1  | 906.1  | 906.1  | 906.1 | 906.1 | 906.1 | 906.1 |
| 2.5°   | 934.0  | 933.0  | 930.0  | 927.0  | 919.0  | 909.0  | 899.1  | 892.1 | 888.1 | 885.1 | 884.1 |
| 5°     | 1004.8 | 1006.8 | 992.9  | 969.9  | 948.0  | 928.0  | 909.0  | 891.1 | 881.1 | 873.1 | 870.1 |
| 7.5°   | 1155.5 | 1158.5 | 1130.6 | 1094.6 | 1038.8 | 970.9  | 913.0  | 874.1 | 846.2 | 829.2 | 826.2 |
| 10°    | 1342.1 | 1334.1 | 1301.2 | 1224.4 | 1122.6 | 1017.8 | 909.0  | 825.2 | 780.3 | 759.4 | 758.4 |
| 12.5°  | 1418.0 | 1407.0 | 1370.1 | 1306.2 | 1199.4 | 1062.7 | 928.0  | 817.2 | 750.4 | 723.4 | 722.4 |
| 15°    | 1383.0 | 1364.1 | 1296.2 | 1237.3 | 1195.4 | 1119.6 | 998.9  | 872.1 | 780.3 | 746.4 | 737.4 |
| 17.5°  | 1353.1 | 1334.1 | 1277.3 | 1192.4 | 1113.6 | 1080.7 | 1021.8 | 917.0 | 821.2 | 773.3 | 763.4 |
| 20°    | 1440.9 | 1428.9 | 1358.1 | 1245.3 | 1158.5 | 1026.8 | 978.9  | 907.1 | 835.2 | 805.3 | 797.3 |
| 22.5°  | 1521.7 | 1515.7 | 1426.9 | 1309.2 | 1192.4 | 1100.6 | 1004.8 | 952.0 | 882.1 | 861.1 | 852.2 |
| 25°    | 1672.4 | 1644.5 | 1498.8 | 1340.1 | 1239.3 | 1149.5 | 1026.8 | 944.0 | 859.2 | 832.2 | 827.2 |
| 27.5°  | 2026.6 | 1961.8 | 1749.2 | 1510.8 | 1308.2 | 1165.5 | 1024.8 | 903.1 | 810.3 | 776.3 | 774.3 |
| 30°    | 2252.2 | 2193.3 | 1953.8 | 1691.4 | 1416.0 | 1203.4 | 1011.8 | 865.1 | 795.3 | 762.4 | 763.4 |
| 32.5°  | 2388.9 | 2310.0 | 2040.6 | 1708.3 | 1440.9 | 1222.4 | 1019.8 | 852.2 | 758.4 | 716.5 | 715.5 |
| 35°    | 2685.2 | 2575.5 | 2184.3 | 1845.0 | 1489.8 | 1194.4 | 985.9  | 825.2 | 738.4 | 707.5 | 703.5 |
| 37.5°  | 3107.3 | 2983.6 | 2453.7 | 1955.8 | 1509.8 | 1157.5 | 942.0  | 794.3 | 690.5 | 647.6 | 644.6 |
| 40°    | 3717.0 | 3535.4 | 2826.9 | 2089.5 | 1493.8 | 1129.6 | 894.1  | 747.4 | 661.6 | 633.6 | 624.7 |
| 42.5°  | 3414.7 | 3209.1 | 2604.4 | 2063.6 | 1453.9 | 1052.7 | 848.2  | 724.4 | 644.6 | 622.7 | 610.7 |
| 45°    | 3603.3 | 3363.8 | 2631.3 | 1918.9 | 1301.2 | 939.0  | 770.3  | 678.5 | 598.7 | 567.8 | 564.8 |
| 46°    | 3708.0 | 3457.6 | 2748.1 | 1875.0 | 1231.4 | 903.1  | 735.4  | 657.6 | 588.7 | 548.8 | 539.8 |
| 47.5°  | 3480.5 | 3202.1 | 2526.6 | 1789.2 | 1175.5 | 822.2  | 689.5  | 624.7 | 577.8 | 540.8 | 534.9 |
| 50°    | 3052.4 | 2780.0 | 2185.3 | 1525.7 | 1011.8 | 725.4  | 614.7  | 575.8 | 528.9 | 488.9 | 482.0 |
| 52.5°  | 2786.0 | 2557.5 | 2000.7 | 1384.0 | 859.2  | 611.7  | 548.8  | 514.9 | 467.0 | 420.1 | 414.1 |
| 55°    | 1531.7 | 1374.0 | 1236.3 | 1039.8 | 712.5  | 516.9  | 478.0  | 458.0 | 409.1 | 363.2 | 360.2 |
| 57.5°  | 630.6  | 566.8  | 561.8  | 529.9  | 489.9  | 435.1  | 413.1  | 401.1 | 352.2 | 296.4 | 294.4 |
| 60°    | 530.9  | 473.0  | 417.1  | 367.2  | 364.2  | 363.2  | 356.2  | 335.3 | 281.4 | 223.5 | 221.5 |
| 62.5°  | 516.9  | 460.0  | 405.1  | 344.3  | 318.3  | 326.3  | 313.3  | 287.4 | 246.5 | 190.6 | 188.6 |
| 65°    | 526.9  | 468.0  | 403.1  | 334.3  | 306.3  | 309.3  | 295.4  | 275.4 | 247.5 | 207.6 | 205.6 |
| 67.5°  | 560.8  | 499.9  | 427.1  | 330.3  | 296.4  | 302.4  | 292.4  | 277.4 | 261.4 | 236.5 | 231.5 |
| 70°    | 565.8  | 511.9  | 428.1  | 332.3  | 285.4  | 292.4  | 289.4  | 276.4 | 265.4 | 243.5 | 240.5 |
| 72.5°  | 580.8  | 531.9  | 437.1  | 325.3  | 273.4  | 276.4  | 280.4  | 276.4 | 269.4 | 256.4 | 251.5 |
| 75°    | 566.8  | 523.9  | 433.1  | 319.3  | 261.4  | 259.4  | 269.4  | 274.4 | 276.4 | 271.4 | 265.4 |
| 77.5°  | 563.8  | 527.9  | 434.1  | 315.3  | 250.5  | 242.5  | 250.5  | 258.4 | 262.4 | 257.4 | 252.5 |
| 80°    | 567.8  | 536.8  | 447.0  | 316.3  | 238.5  | 218.5  | 222.5  | 231.5 | 232.5 | 223.5 | 216.5 |
| 82.5°  | 558.8  | 528.9  | 433.1  | 305.3  | 219.5  | 194.6  | 195.6  | 204.6 | 205.6 | 194.6 | 186.6 |
| 85°    | 598.7  | 562.8  | 443.0  | 291.4  | 199.6  | 177.6  | 178.6  | 182.6 | 176.6 | 164.6 | 156.7 |
| 87.5°  | 597.7  | 554.8  | 423.1  | 269.4  | 186.6  | 167.6  | 166.6  | 165.6 | 155.7 | 141.7 | 134.7 |
| 90°    | 576.8  | 531.9  | 396.1  | 237.5  | 164.6  | 153.7  | 150.7  | 144.7 | 130.7 | 114.8 | 109.8 |
| 92.5°  | 562.8  | 514.9  | 378.2  | 224.5  | 144.7  | 134.7  | 132.7  | 126.7 | 112.8 | 95.8  | 92.8  |
| 95°    | 547.8  | 500.9  | 348.3  | 196.6  | 127.7  | 117.7  | 114.8  | 108.8 | 97.8  | 83.8  | 81.8  |
| 97.5°  | 483.0  | 437.1  | 307.3  | 178.6  | 113.8  | 102.8  | 100.8  | 95.8  | 86.8  | 76.8  | 75.8  |
| 100°   | 446.0  | 405.1  | 285.4  | 163.6  | 101.8  | 89.8   | 88.8   | 85.8  | 79.8  | 72.8  | 71.8  |
| 102.5° | 417.1  | 377.2  | 264.4  | 151.7  | 90.8   | 79.8   | 78.8   | 77.8  | 74.8  | 69.8  | 69.8  |
| 105°   | 395.2  | 357.2  | 253.5  | 141.7  | 81.8   | 72.8   | 71.8   | 71.8  | 68.9  | 65.9  | 65.9  |
| 107.5° | 344.3  | 312.3  | 220.5  | 125.7  | 74.8   | 66.9   | 66.9   | 66.9  | 64.9  | 62.9  | 63.9  |



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**CANDELA DISTRIBUTION (continued):**

|        | 90°   | 95°   | 105°  | 115°  | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 110°   | 324.3 | 294.4 | 209.5 | 117.7 | 71.8 | 61.9 | 60.9 | 60.9 | 59.9 | 60.9 | 60.9 |
| 112.5° | 279.4 | 253.5 | 184.6 | 112.8 | 69.8 | 58.9 | 55.9 | 53.9 | 51.9 | 53.9 | 54.9 |
| 115°   | 268.4 | 244.5 | 178.6 | 108.8 | 67.9 | 56.9 | 52.9 | 49.9 | 45.9 | 48.9 | 48.9 |
| 117.5° | 246.5 | 224.5 | 165.6 | 105.8 | 67.9 | 53.9 | 49.9 | 46.9 | 42.9 | 44.9 | 44.9 |
| 120°   | 236.5 | 217.5 | 166.6 | 108.8 | 68.9 | 50.9 | 46.9 | 41.9 | 38.9 | 41.9 | 41.9 |
| 122.5° | 222.5 | 205.6 | 156.7 | 102.8 | 65.9 | 49.9 | 45.9 | 35.9 | 33.9 | 36.9 | 36.9 |
| 125°   | 186.6 | 172.6 | 134.7 | 90.8  | 62.9 | 49.9 | 44.9 | 31.9 | 31.9 | 33.9 | 34.9 |
| 127.5° | 158.7 | 147.7 | 116.7 | 84.8  | 63.9 | 52.9 | 42.9 | 27.9 | 29.9 | 32.9 | 32.9 |
| 130°   | 149.7 | 140.7 | 115.8 | 86.8  | 66.9 | 55.9 | 34.9 | 25.9 | 27.9 | 30.9 | 30.9 |
| 132.5° | 139.7 | 131.7 | 111.8 | 88.8  | 67.9 | 52.9 | 28.9 | 23.9 | 25.9 | 27.9 | 27.9 |
| 135°   | 122.7 | 116.7 | 100.8 | 80.8  | 60.9 | 41.9 | 23.0 | 21.0 | 23.9 | 25.9 | 26.9 |
| 137.5° | 107.8 | 102.8 | 88.8  | 72.8  | 54.9 | 35.9 | 16.0 | 19.0 | 21.0 | 22.0 | 23.0 |
| 140°   | 88.8  | 85.8  | 74.8  | 59.9  | 40.9 | 20.0 | 12.0 | 15.0 | 17.0 | 19.0 | 19.0 |
| 142.5° | 64.9  | 62.9  | 52.9  | 38.9  | 24.9 | 8.0  | 8.0  | 11.0 | 13.0 | 15.0 | 15.0 |
| 145°   | 42.9  | 40.9  | 33.9  | 24.9  | 11.0 | 2.0  | 5.0  | 8.0  | 11.0 | 12.0 | 12.0 |
| 147.5° | 26.9  | 25.9  | 21.0  | 13.0  | 4.0  | 2.0  | 2.0  | 6.0  | 8.0  | 9.0  | 9.0  |
| 150°   | 14.0  | 13.0  | 9.0   | 4.0   | 2.0  | 1.0  | 1.0  | 2.0  | 5.0  | 6.0  | 6.0  |
| 152.5° | 3.0   | 3.0   | 2.0   | 1.0   | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 2.0  | 2.0  |
| 155°   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  |
| 157.5° | 1.0   | 1.0   | 1.0   | 1.0   | 1.0  | 1.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 160°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 162.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 165°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 167.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 170°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 172.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 175°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 177.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 180°   | 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)