

Scaled data based on original data using  
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge  
or Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: 769096

Luminaire Tested: **ACN85QXX5C1XX**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: 769096  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ACN85QXX5C1XX  
Description: Architectural Post Top Luminaire - TYPE V CUTOFF WITH CAGE  
Light Source: 85 WATT PHILIPS QL INDUCTION LAMP  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 6000 (1 lamp)  
Luminaire Lumens: 2214.5 lumens  
Efficiency: 36.9%  
Efficacy: 26.1 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type V - Short - Cutoff  
BUG Rating: B1 - U1 - G1

Input Watts (W): 85  
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

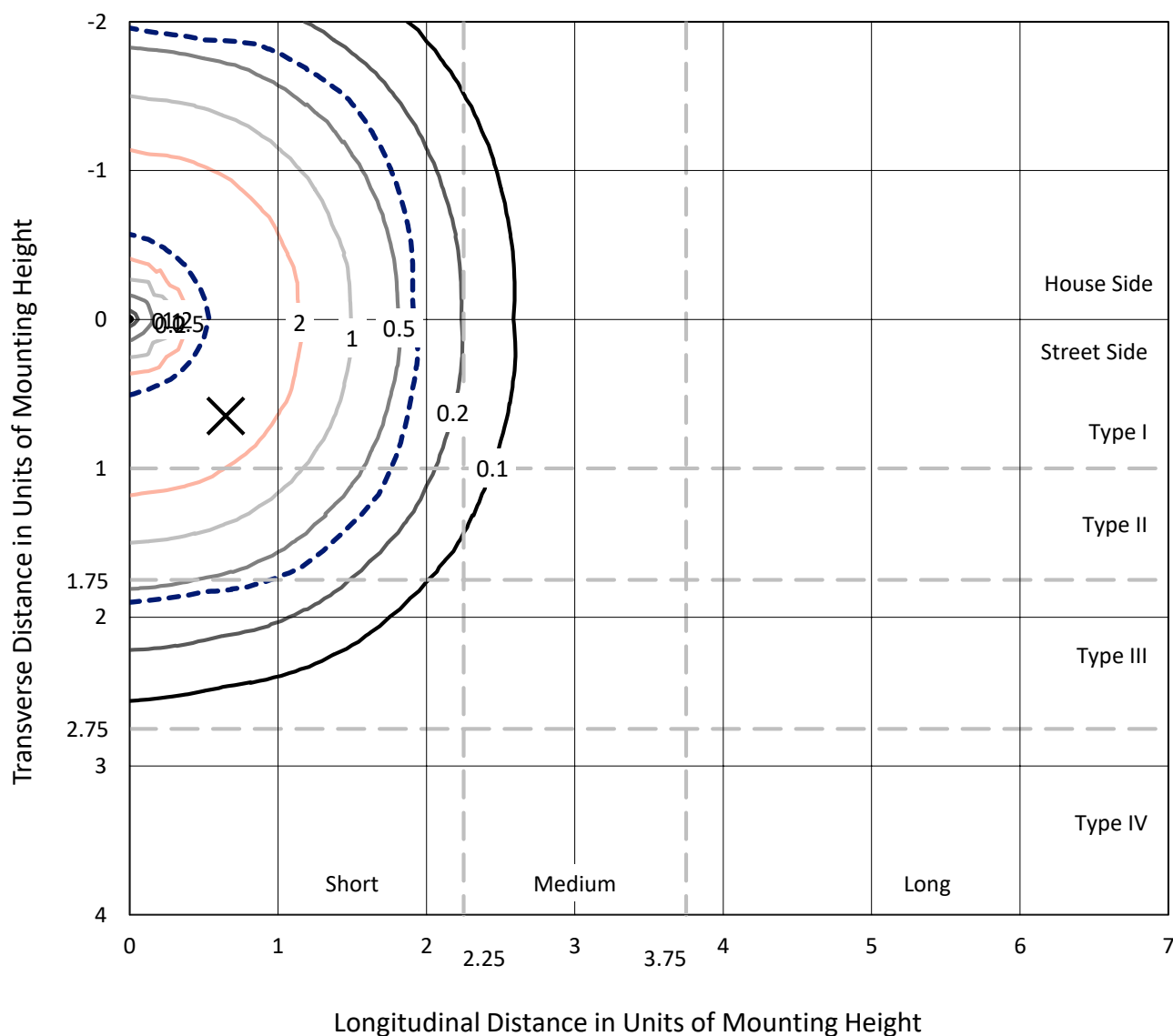


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 --- 1/2 Max cd

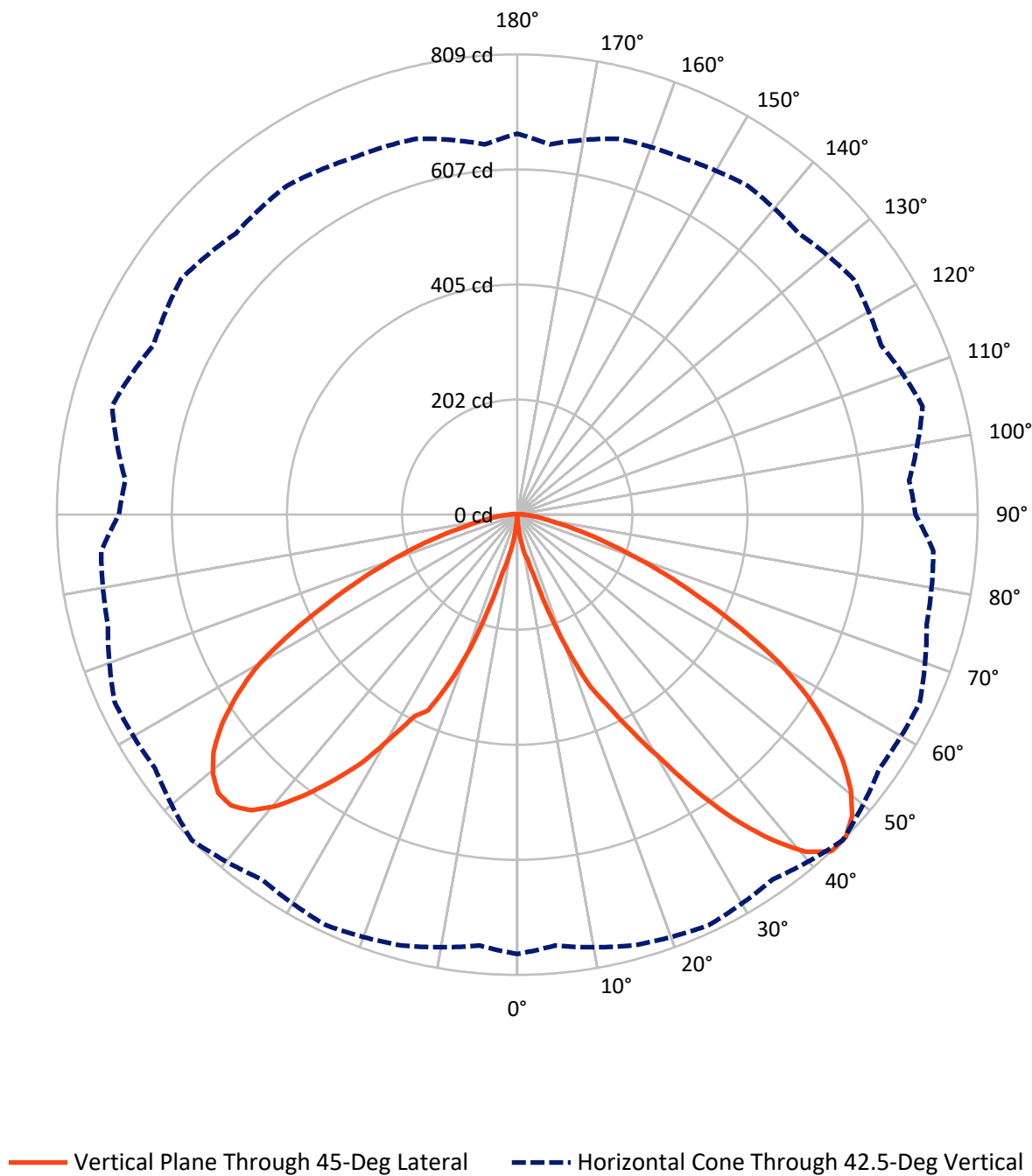


Based on 10 foot mounting height. Maximum calculated value = 3.7 fc  
 Type V - Short - Cutoff

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## Luminous Intensity Polar Plot



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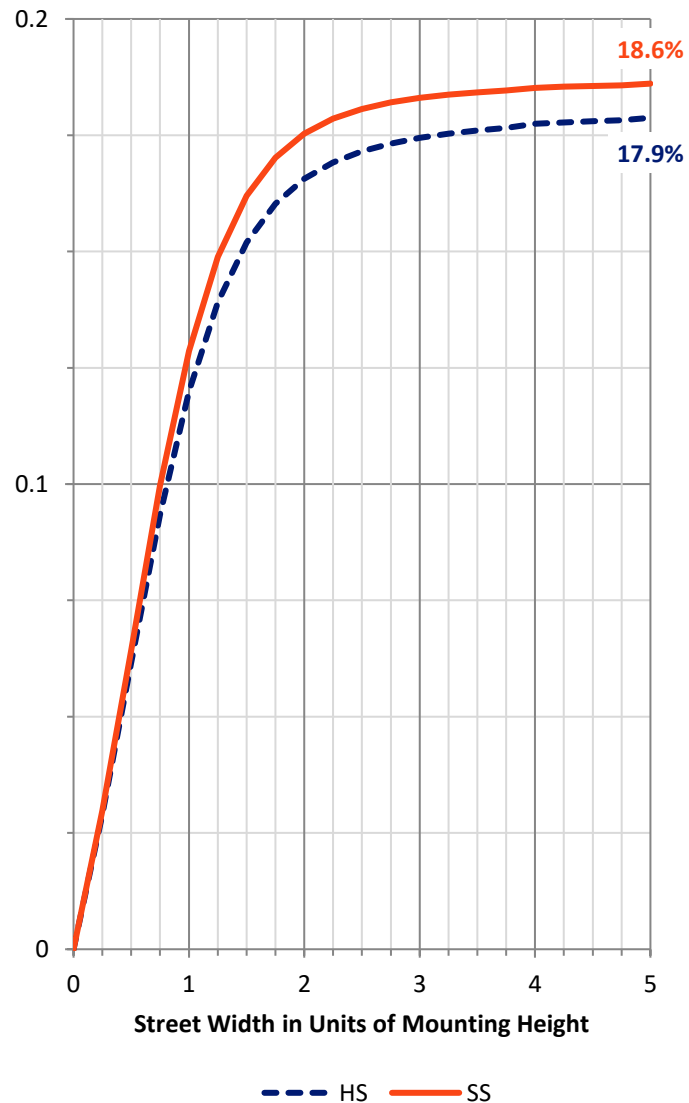
**FLUX DISTRIBUTION:**

|                    |        | Downward | Upward | Total  |
|--------------------|--------|----------|--------|--------|
| <b>House Side</b>  | Lumens | 1080.8   | 6.4    | 1087.3 |
|                    | % Lamp | 18.0     | 0.1    | 18.1   |
| <b>Street Side</b> | Lumens | 1122.2   | 5.1    | 1127.2 |
|                    | % Lamp | 18.7     | 0.1    | 18.8   |
| <b>Total</b>       | Lumens | 2203.0   | 11.5   | 2214.5 |
|                    | % Lamp | 36.7     | 0.2    | 36.9   |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10°    | 3.3    | 0.1       | 0.1    |
| 10°-20°   | 37.3   | 1.7       | 0.6    |
| 20°-30°   | 165.3  | 7.5       | 2.8    |
| 30°-40°   | 378.0  | 17.1      | 6.3    |
| 40°-50°   | 568.1  | 25.7      | 9.5    |
| 50°-60°   | 557.1  | 25.2      | 9.3    |
| 60°-70°   | 344.8  | 15.6      | 5.7    |
| 70°-80°   | 120.2  | 5.4       | 2.0    |
| 80°-90°   | 28.7   | 1.3       | 0.5    |
| 90°-100°  | 7.8    | 0.4       | 0.1    |
| 100°-110° | 3.2    | 0.1       | 0.1    |
| 110°-120° | 0.8    | 0.0       | 0.0    |
| 120°-130° | 0.1    | 0.0       | 0.0    |
| 130°-140° | 0.0    | 0.0       | 0.0    |
| 140°-150° | 0.0    | 0.0       | 0.0    |
| 150°-160° | 0.0    | 0.0       | 0.0    |
| 160°-170° | 0.0    | 0.0       | 0.0    |
| 170°-180° | 0.0    | 0.0       | 0.0    |
| 0°-90°    | 2203.0 | 99.5      | 36.7   |
| 0°-180°   | 2214.5 | 100.0     | 36.9   |

**Coefficient of Utilization**



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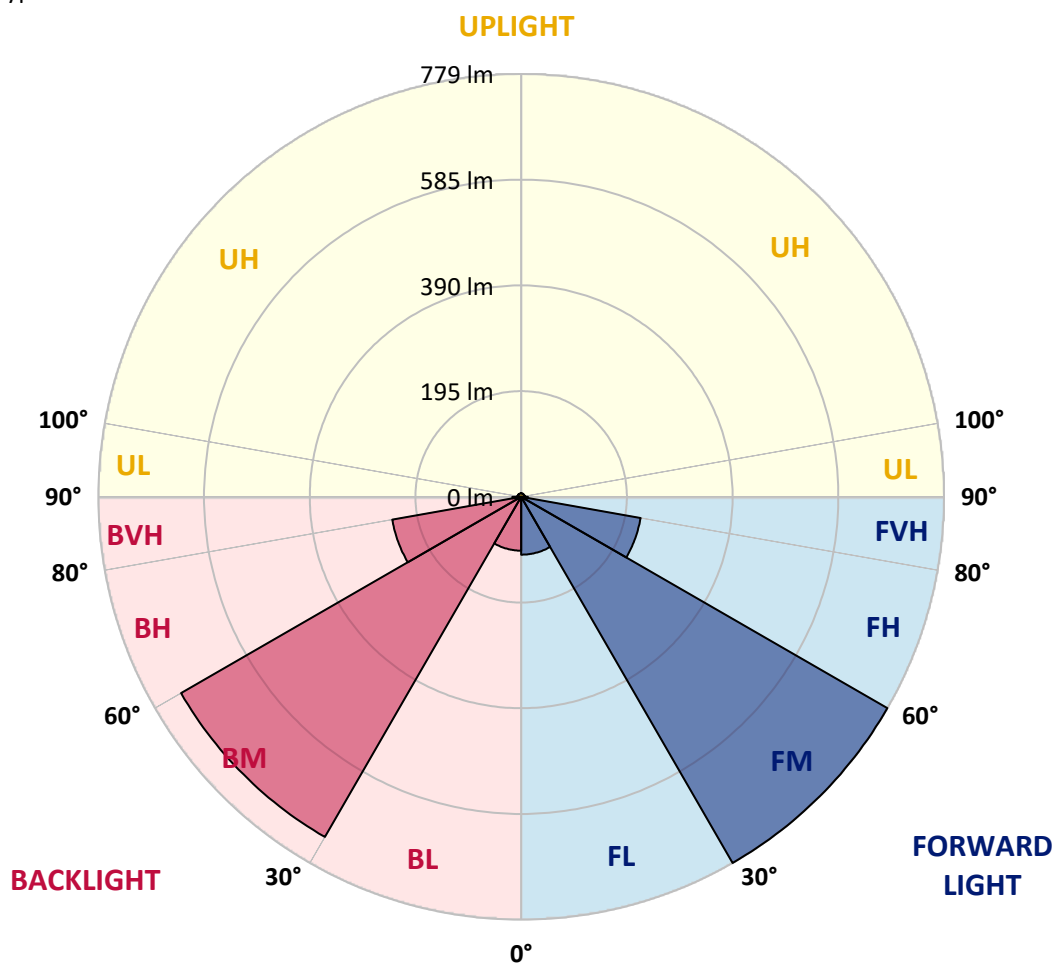
CATALOG NUMBER: ACN85QXX5C1XX

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

| Zone          |             | Lumens | % Lamp | Zone Rating/Lumen Limit |       |        |
|---------------|-------------|--------|--------|-------------------------|-------|--------|
|               |             |        |        | B                       | U     | G      |
| FL            | (0°-30°)    | 106.7  | 1.8    |                         |       |        |
| FM            | (30°-60°)   | 779.4  | 13.0   |                         |       |        |
| FH            | (60°-80°)   | 223.6  | 3.7    |                         |       | G0/660 |
| FVH           | (80°-90°)   | 12.4   | 0.2    |                         |       | G1/100 |
| BL            | (0°-30°)    | 99.2   | 1.7    | B0/110                  |       |        |
| BM            | (30°-60°)   | 723.9  | 12.1   | B1/1000                 |       |        |
| BH            | (60°-80°)   | 241.4  | 4.0    | B1/500                  |       | G0/660 |
| BVH           | (80°-90°)   | 16.3   | 0.3    |                         |       | G1/100 |
| UL            | (90°-100°)  | 7.8    | 0.1    |                         | U1/10 |        |
| UH            | (100°-180°) | 6.4    | 0.1    |                         | U1/10 |        |
| Trapped Light |             | 3785.5 | 63.1   |                         |       |        |

**BUG Rating: B1-U1-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 65°   | 75°   | 85°   | 90°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   |
| 2.5°  | 7.6   | 8.1   | 8.1   | 8.1   | 7.6   | 7.0   | 7.0   | 6.5   | 7.0   | 7.0   | 7.0   |
| 5°    | 31.4  | 30.8  | 31.4  | 30.3  | 27.6  | 26.0  | 22.7  | 21.1  | 22.2  | 21.1  | 21.6  |
| 7.5°  | 46.5  | 46.5  | 46.0  | 46.5  | 45.4  | 44.9  | 44.4  | 43.3  | 43.3  | 41.7  | 41.1  |
| 10°   | 73.6  | 72.5  | 69.2  | 66.5  | 67.6  | 69.2  | 68.2  | 61.7  | 59.0  | 61.1  | 62.8  |
| 12.5° | 84.4  | 84.9  | 86.0  | 82.8  | 82.8  | 80.6  | 81.7  | 79.0  | 76.8  | 80.6  | 82.8  |
| 15°   | 120.1 | 118.5 | 109.8 | 103.9 | 112.0 | 114.2 | 107.7 | 99.0  | 100.1 | 108.7 | 110.4 |
| 17.5° | 177.4 | 174.7 | 160.1 | 156.9 | 168.3 | 181.8 | 167.2 | 153.6 | 148.8 | 163.9 | 167.2 |
| 20°   | 243.4 | 242.4 | 231.0 | 234.3 | 245.1 | 254.3 | 239.1 | 221.3 | 219.1 | 222.4 | 225.1 |
| 22.5° | 300.8 | 304.6 | 311.1 | 312.7 | 316.5 | 328.4 | 308.4 | 301.9 | 290.0 | 286.7 | 278.6 |
| 25°   | 349.5 | 352.7 | 372.2 | 372.2 | 371.1 | 374.4 | 358.1 | 358.1 | 348.9 | 330.6 | 332.2 |
| 27.5° | 411.2 | 419.8 | 443.6 | 443.1 | 434.4 | 433.9 | 417.7 | 420.9 | 406.8 | 385.2 | 379.8 |
| 30°   | 485.8 | 500.4 | 524.2 | 526.9 | 502.6 | 499.3 | 487.4 | 492.3 | 475.0 | 451.2 | 439.3 |
| 32.5° | 572.4 | 584.8 | 605.9 | 615.1 | 580.0 | 581.6 | 564.3 | 572.4 | 546.4 | 522.6 | 509.6 |
| 35°   | 641.6 | 649.7 | 671.4 | 683.3 | 653.5 | 658.4 | 639.5 | 646.5 | 610.8 | 587.5 | 577.8 |
| 37.5° | 701.1 | 701.1 | 720.1 | 737.9 | 708.2 | 724.9 | 699.5 | 704.9 | 671.4 | 645.4 | 635.1 |
| 40°   | 745.5 | 734.1 | 760.1 | 773.6 | 750.9 | 779.6 | 744.4 | 748.7 | 714.1 | 698.4 | 671.4 |
| 42.5° | 772.5 | 760.6 | 784.4 | 796.4 | 782.8 | 809.3 | 777.4 | 780.7 | 745.0 | 734.1 | 700.1 |
| 45°   | 779.0 | 765.5 | 784.4 | 799.6 | 789.9 | 809.3 | 785.5 | 787.7 | 754.2 | 743.3 | 716.3 |
| 47.5° | 766.1 | 749.8 | 764.4 | 785.5 | 775.3 | 792.0 | 771.5 | 778.0 | 740.6 | 737.9 | 711.4 |
| 50°   | 736.8 | 718.4 | 729.8 | 749.8 | 746.0 | 759.6 | 743.3 | 751.4 | 712.5 | 717.9 | 689.8 |
| 52.5° | 692.5 | 675.7 | 680.6 | 702.2 | 706.5 | 715.7 | 705.5 | 708.7 | 675.2 | 681.7 | 657.3 |
| 55°   | 626.5 | 616.2 | 619.4 | 643.8 | 653.0 | 662.7 | 654.1 | 652.4 | 622.1 | 628.1 | 607.0 |
| 57.5° | 552.9 | 546.4 | 548.0 | 577.8 | 591.9 | 601.0 | 596.7 | 586.4 | 559.4 | 562.6 | 543.2 |
| 60°   | 475.0 | 468.0 | 471.8 | 505.8 | 525.3 | 529.1 | 530.7 | 511.8 | 493.9 | 492.8 | 473.9 |
| 62.5° | 389.5 | 386.3 | 387.4 | 419.3 | 442.0 | 441.5 | 449.6 | 431.7 | 416.0 | 411.2 | 396.6 |
| 65°   | 308.4 | 306.2 | 304.6 | 335.4 | 355.4 | 355.4 | 363.0 | 350.0 | 335.4 | 330.0 | 317.6 |
| 67.5° | 238.0 | 233.2 | 231.0 | 261.3 | 278.1 | 281.3 | 287.8 | 274.8 | 264.0 | 258.1 | 247.2 |
| 70°   | 172.0 | 167.2 | 167.2 | 193.1 | 209.9 | 213.2 | 219.1 | 206.7 | 199.1 | 192.6 | 182.3 |
| 72.5° | 116.9 | 114.2 | 116.3 | 135.8 | 151.5 | 156.3 | 161.2 | 150.9 | 143.9 | 138.5 | 129.3 |
| 75°   | 73.6  | 72.5  | 75.7  | 90.9  | 102.8 | 110.4 | 109.8 | 103.3 | 96.8  | 93.1  | 86.6  |
| 77.5° | 46.5  | 46.0  | 48.1  | 57.9  | 66.0  | 72.5  | 70.9  | 65.5  | 61.7  | 57.3  | 52.5  |
| 80°   | 33.5  | 34.6  | 34.6  | 41.1  | 46.5  | 49.8  | 50.3  | 43.8  | 41.1  | 39.0  | 36.8  |
| 82.5° | 27.0  | 24.9  | 25.4  | 30.3  | 35.7  | 37.3  | 38.4  | 31.9  | 30.8  | 27.6  | 27.0  |
| 85°   | 16.2  | 15.7  | 16.8  | 19.5  | 22.7  | 23.8  | 25.4  | 20.6  | 20.6  | 17.9  | 18.4  |
| 87.5° | 10.8  | 11.9  | 11.4  | 13.5  | 14.1  | 15.1  | 15.1  | 14.1  | 13.0  | 12.4  | 13.5  |
| 90°   | 8.7   | 9.2   | 9.2   | 9.7   | 10.8  | 10.8  | 10.8  | 9.7   | 9.7   | 8.7   | 9.7   |
| 95°   | 5.4   | 6.0   | 5.4   | 6.0   | 6.0   | 7.0   | 6.5   | 6.0   | 4.9   | 4.3   | 6.5   |
| 105°  | 2.2   | 2.7   | 2.2   | 2.2   | 2.7   | 2.2   | 2.7   | 2.7   | 2.2   | 2.2   | 3.2   |
| 115°  | 0.0   | 0.0   | 0.5   | 0.0   | 0.0   | 0.0   | 0.5   | 0.0   | 0.0   | 0.0   | 0.0   |
| 125°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 135°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 145°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 155°  | 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   |



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**CANDELA DISTRIBUTION (continued):**

|      | 0°  | 5°  | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 175° | 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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CATALOG NUMBER: ACN85QXX5C1XX

**CANDELA DISTRIBUTION (continued):**

|       | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   |
| 2.5°  | 6.5   | 6.0   | 5.4   | 6.0   | 5.4   | 6.0   | 5.4   | 5.4   | 5.4   | 5.4   |
| 5°    | 19.5  | 16.8  | 13.5  | 11.9  | 9.7   | 9.7   | 9.2   | 10.8  | 10.8  | 10.8  |
| 7.5°  | 40.0  | 40.0  | 39.0  | 37.9  | 35.7  | 35.2  | 35.7  | 38.4  | 39.0  | 40.0  |
| 10°   | 64.4  | 60.6  | 56.3  | 55.7  | 55.7  | 55.2  | 54.6  | 53.0  | 53.0  | 53.0  |
| 12.5° | 82.2  | 81.1  | 76.8  | 77.4  | 82.2  | 79.5  | 74.1  | 73.0  | 76.8  | 76.8  |
| 15°   | 107.7 | 106.6 | 97.9  | 105.0 | 108.7 | 106.6 | 95.2  | 95.8  | 100.6 | 102.8 |
| 17.5° | 163.4 | 154.7 | 150.9 | 167.2 | 178.0 | 165.5 | 148.8 | 147.2 | 156.9 | 159.1 |
| 20°   | 225.1 | 215.3 | 221.8 | 237.0 | 251.6 | 234.3 | 215.9 | 208.8 | 211.5 | 216.4 |
| 22.5° | 280.8 | 290.5 | 289.4 | 305.7 | 319.2 | 299.2 | 278.6 | 272.1 | 264.5 | 258.6 |
| 25°   | 332.7 | 350.6 | 356.0 | 361.4 | 378.2 | 354.9 | 346.2 | 336.0 | 314.3 | 318.1 |
| 27.5° | 379.2 | 394.4 | 400.3 | 389.0 | 397.6 | 379.8 | 387.9 | 371.7 | 353.8 | 345.2 |
| 30°   | 437.7 | 453.4 | 463.6 | 439.3 | 450.1 | 424.7 | 445.2 | 419.8 | 399.8 | 393.8 |
| 32.5° | 507.5 | 524.2 | 531.8 | 509.1 | 513.9 | 491.8 | 506.4 | 481.5 | 460.4 | 459.8 |
| 35°   | 570.2 | 595.6 | 589.1 | 573.5 | 564.8 | 552.9 | 561.6 | 543.7 | 523.1 | 517.2 |
| 37.5° | 623.8 | 651.4 | 642.2 | 633.0 | 615.7 | 614.0 | 616.2 | 602.1 | 577.2 | 574.5 |
| 40°   | 659.5 | 703.3 | 677.3 | 683.8 | 663.3 | 666.5 | 659.5 | 649.7 | 622.1 | 626.5 |
| 42.5° | 691.4 | 737.4 | 705.5 | 721.7 | 699.5 | 706.0 | 690.9 | 684.4 | 653.5 | 669.8 |
| 45°   | 708.7 | 743.3 | 716.8 | 739.5 | 717.4 | 726.6 | 704.4 | 699.5 | 672.5 | 695.7 |
| 47.5° | 703.3 | 735.8 | 713.6 | 735.8 | 718.4 | 723.3 | 704.9 | 697.3 | 675.2 | 701.1 |
| 50°   | 680.6 | 716.8 | 690.3 | 717.4 | 703.3 | 707.6 | 689.2 | 682.2 | 662.7 | 689.2 |
| 52.5° | 653.0 | 681.1 | 661.1 | 684.9 | 677.3 | 680.0 | 663.8 | 654.1 | 638.9 | 664.3 |
| 55°   | 605.9 | 629.2 | 619.4 | 641.6 | 638.9 | 638.9 | 623.2 | 608.1 | 596.7 | 620.0 |
| 57.5° | 542.6 | 567.0 | 565.3 | 589.7 | 590.2 | 589.1 | 570.8 | 550.7 | 540.5 | 557.2 |
| 60°   | 470.7 | 493.9 | 504.8 | 526.4 | 535.0 | 527.5 | 512.3 | 486.4 | 476.1 | 486.9 |
| 62.5° | 394.4 | 414.9 | 430.6 | 447.4 | 460.4 | 449.6 | 441.5 | 407.9 | 402.0 | 411.2 |
| 65°   | 320.8 | 336.5 | 351.1 | 368.4 | 380.3 | 371.7 | 364.6 | 330.6 | 328.9 | 339.7 |
| 67.5° | 253.7 | 268.3 | 283.5 | 301.3 | 310.5 | 304.0 | 297.5 | 265.6 | 262.4 | 274.8 |
| 70°   | 191.0 | 202.3 | 221.8 | 237.0 | 247.8 | 240.2 | 235.3 | 205.0 | 201.8 | 212.1 |
| 72.5° | 135.8 | 146.6 | 166.1 | 181.2 | 191.0 | 184.5 | 179.1 | 153.1 | 149.9 | 155.8 |
| 75°   | 89.8  | 102.8 | 117.4 | 130.9 | 139.6 | 136.3 | 129.3 | 110.9 | 106.6 | 109.3 |
| 77.5° | 55.2  | 67.1  | 76.8  | 88.2  | 95.8  | 92.5  | 84.9  | 73.0  | 68.7  | 68.2  |
| 80°   | 39.0  | 44.4  | 54.6  | 62.2  | 68.2  | 65.5  | 59.5  | 50.3  | 46.5  | 46.5  |
| 82.5° | 29.8  | 31.4  | 40.6  | 44.4  | 49.2  | 46.5  | 43.3  | 35.7  | 32.5  | 33.5  |
| 85°   | 20.6  | 21.6  | 29.8  | 32.5  | 36.2  | 33.5  | 31.9  | 26.5  | 23.3  | 26.0  |
| 87.5° | 13.5  | 15.1  | 18.4  | 21.1  | 23.3  | 21.6  | 21.1  | 17.9  | 16.2  | 17.3  |
| 90°   | 9.7   | 10.3  | 12.4  | 13.5  | 14.6  | 14.6  | 13.5  | 11.9  | 10.8  | 10.8  |
| 95°   | 6.0   | 6.0   | 7.6   | 7.6   | 8.1   | 8.1   | 7.6   | 6.5   | 6.0   | 5.4   |
| 105°  | 2.7   | 2.7   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 2.2   |
| 115°  | 1.1   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.0   | 0.5   | 0.5   | 0.0   |
| 125°  | 0.0   | 0.0   | 0.0   | 0.5   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 135°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 145°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 155°  | 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   |



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**CANDELA DISTRIBUTION (continued):**

|      | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|------|-----|------|------|------|------|------|------|------|------|------|
| 175° | 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  |

(END OF REPORT)