

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: INVUE

Report Number: P472207

Luminaire Tested: **CCP-VA-1-860-U-T4W**

Issue Date: 01/27/2021



Test Information

Test Method: LM-79-08
Report Number: P472207
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCP-VA-1-860-U-T4W
Description: INVUE CLEARCURVE POLE MOUNT Wave Stream LUMINAIRE WITH T4W
DISTRIBUTION LENS
Light Source: 5700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

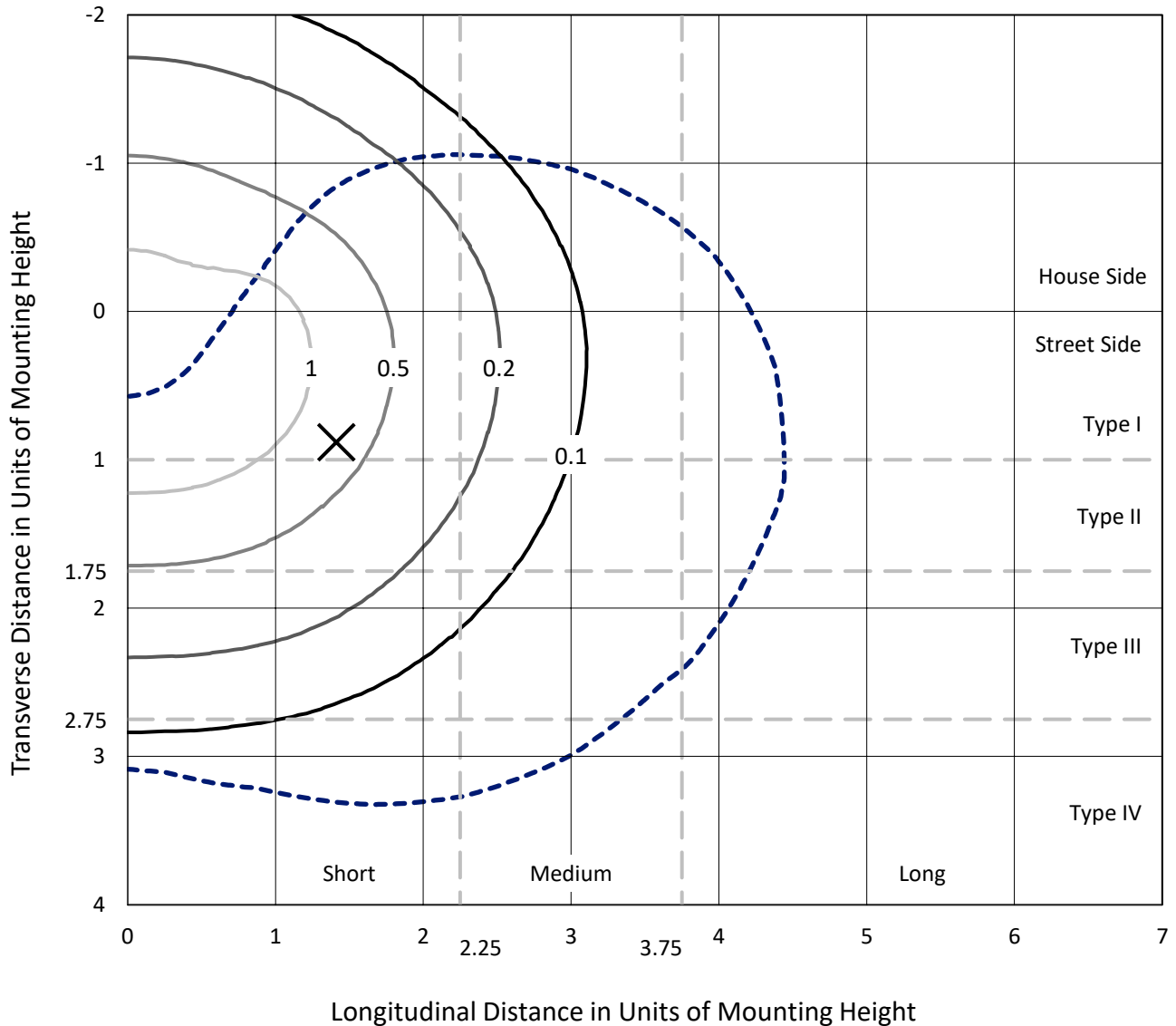
Lumens per Lamp: N/A
Luminaire Lumens: 3125.2 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 29
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

REPORT NUMBER: P472207
 CATALOG NUMBER: CCP-VA-1-860-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

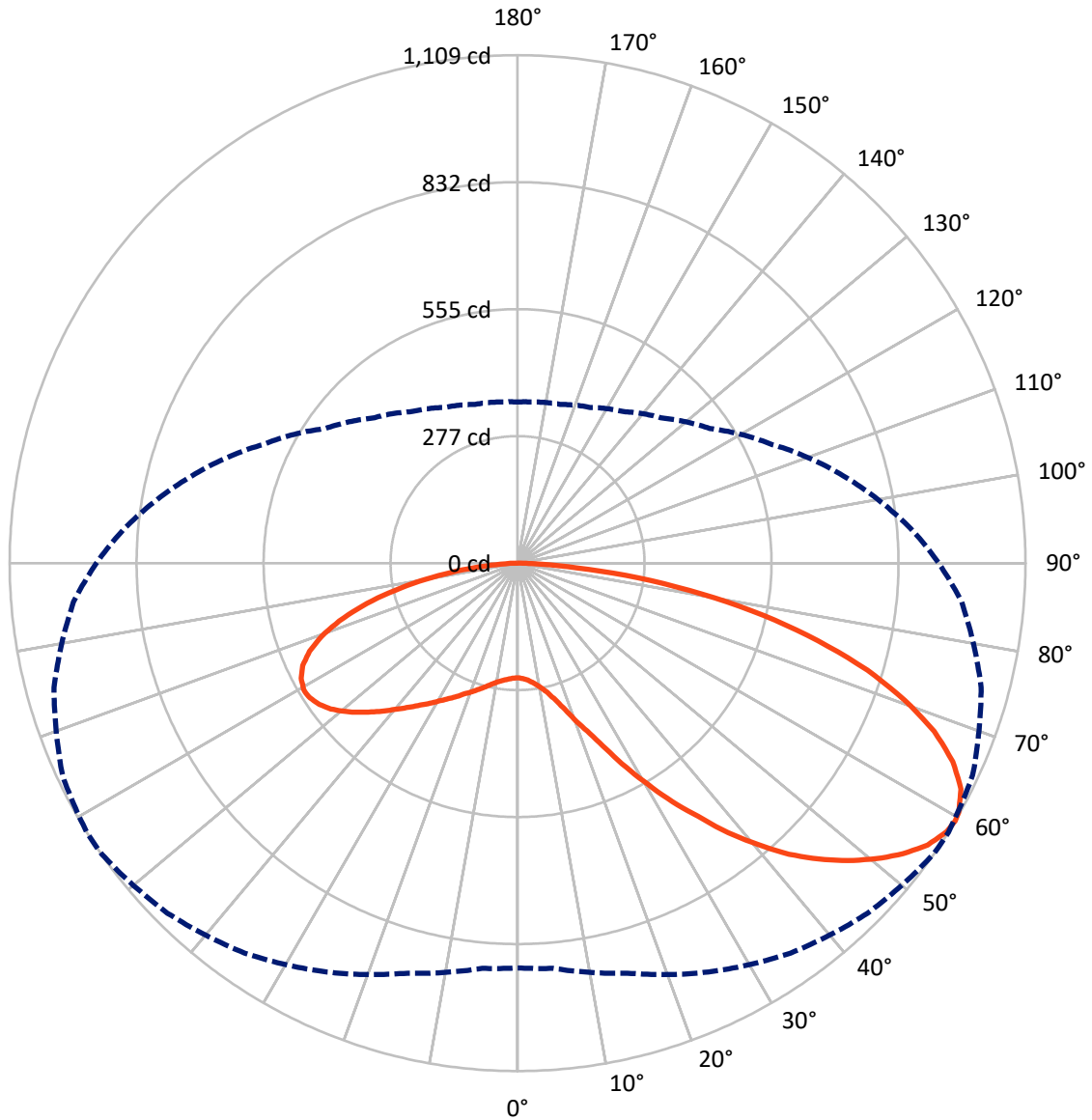
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 59-Deg Vertical

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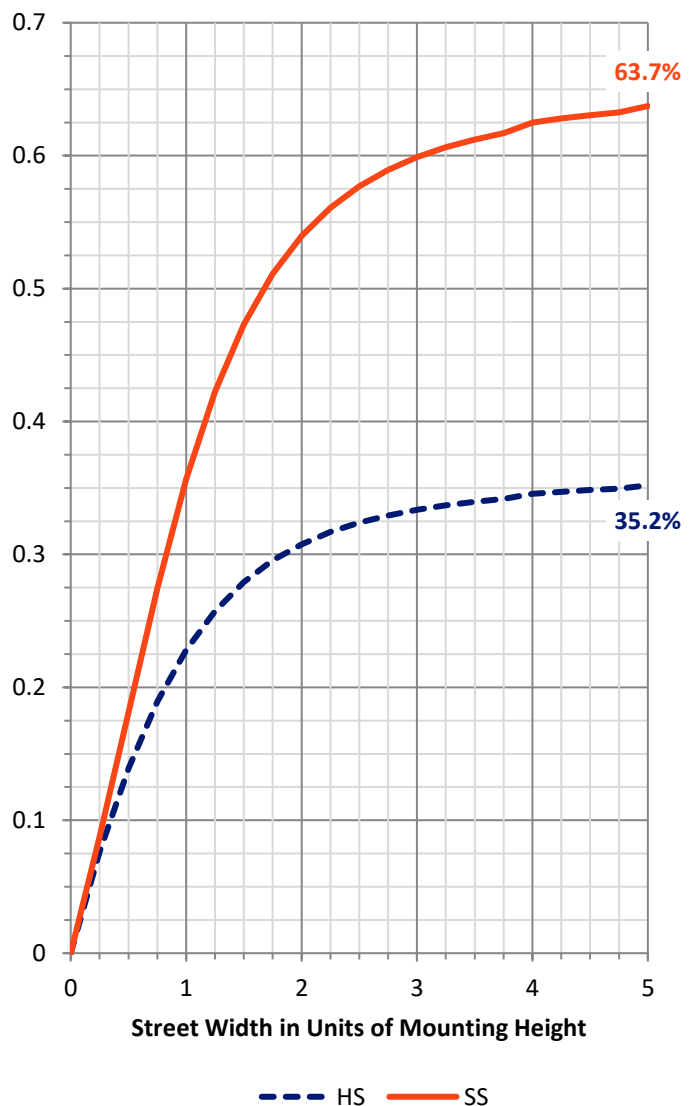
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1114.6 | 0.0 | 1114.6 |
| | % Fixture | 35.7 | 0.0 | 35.7 |
| Street Side | Lumens | 2010.6 | 0.0 | 2010.6 |
| | % Fixture | 64.3 | 0.0 | 64.3 |
| Total | Lumens | 3125.2 | 0.0 | 3125.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 24.9 | 0.8 |
| 10°-20° | 84.8 | 2.7 |
| 20°-30° | 178.9 | 5.7 |
| 30°-40° | 329.3 | 10.5 |
| 40°-50° | 513.3 | 16.4 |
| 50°-60° | 674.4 | 21.6 |
| 60°-70° | 706.7 | 22.6 |
| 70°-80° | 490.0 | 15.7 |
| 80°-90° | 123.0 | 3.9 |
| 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° | 3125.2 | 100.0 |
| 0°-180° | 3125.2 | 100.0 |



REPORT NUMBER: P472207

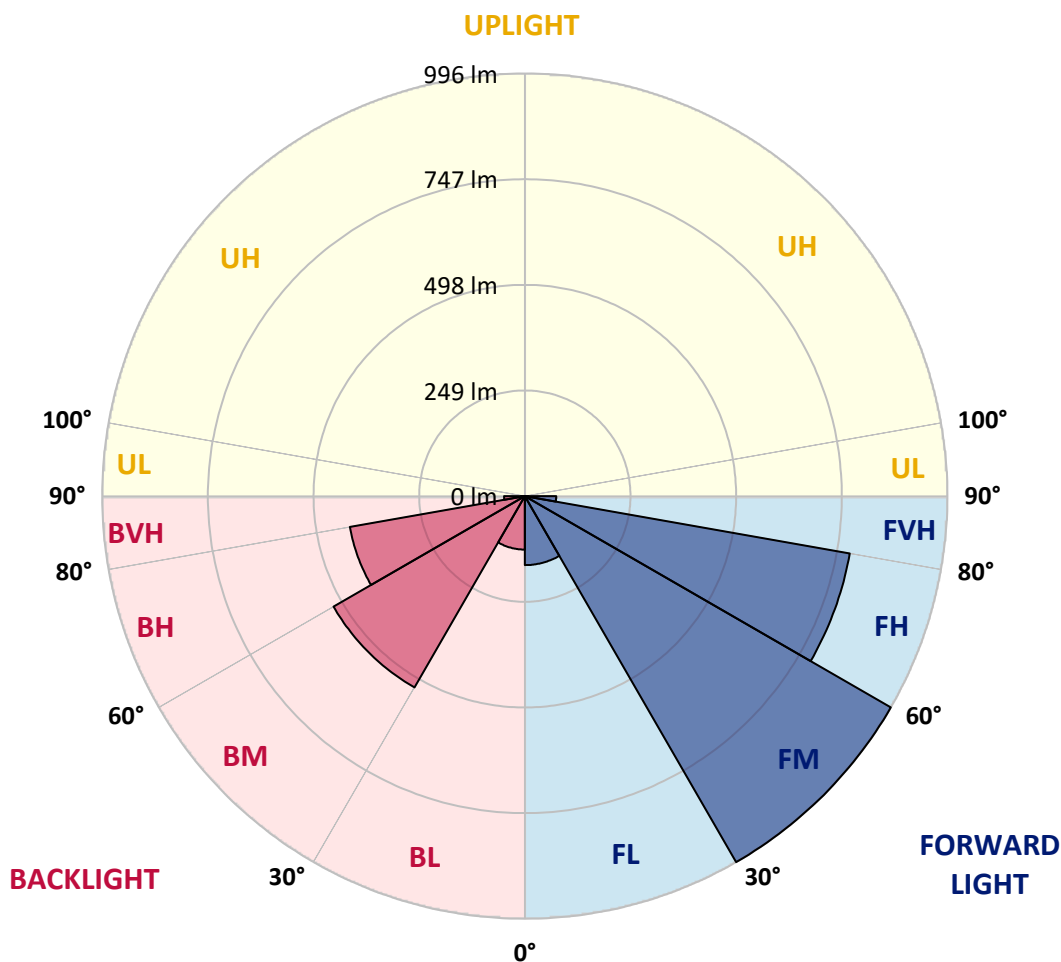
CATALOG NUMBER: CCP-VA-1-860-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 162.6 | 5.2 | | | |
| FM (30°-60°) | 996.3 | 31.9 | | | |
| FH (60°-80°) | 777.9 | 24.9 | | | G1/1800 |
| FVH (80°-90°) | 73.9 | 2.4 | | | G1/100 |
| BL (0°-30°) | 126.0 | 4.0 | B1/500 | | |
| BM (30°-60°) | 520.7 | 16.7 | B1/1000 | | |
| BH (60°-80°) | 418.8 | 13.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 49.1 | 1.6 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1

Type IV Short





REPORT NUMBER: P472207
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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|
| 0° | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 |
| 2.5° | 254.1 | 254.1 | 254.1 | 253.3 | 253.3 | 253.3 | 252.6 | 252.6 | 252.6 | 251.9 | 251.2 |
| 5° | 259.7 | 259.7 | 259.0 | 259.7 | 259.0 | 258.3 | 257.6 | 257.6 | 257.6 | 256.9 | 256.2 |
| 7.5° | 267.4 | 268.1 | 267.4 | 268.1 | 267.4 | 266.7 | 265.3 | 265.3 | 264.6 | 263.2 | 261.8 |
| 10° | 279.4 | 279.4 | 279.4 | 278.7 | 278.0 | 277.3 | 276.6 | 275.9 | 275.2 | 273.1 | 270.9 |
| 12.5° | 294.2 | 294.2 | 294.2 | 292.8 | 292.8 | 291.4 | 290.6 | 289.9 | 288.5 | 285.7 | 282.9 |
| 15° | 312.5 | 311.8 | 313.9 | 313.9 | 313.2 | 313.2 | 311.1 | 309.6 | 308.2 | 304.0 | 297.7 |
| 17.5° | 337.1 | 336.4 | 338.5 | 339.9 | 339.9 | 340.6 | 337.1 | 335.7 | 330.8 | 325.1 | 316.7 |
| 20° | 370.2 | 368.8 | 370.9 | 372.3 | 370.9 | 372.3 | 368.8 | 369.5 | 362.4 | 352.6 | 339.2 |
| 22.5° | 406.1 | 406.1 | 408.2 | 408.2 | 408.9 | 410.3 | 406.1 | 403.9 | 398.3 | 384.2 | 367.4 |
| 25° | 450.4 | 453.9 | 453.9 | 453.9 | 456.7 | 457.4 | 453.2 | 449.7 | 442.0 | 423.0 | 399.7 |
| 27.5° | 504.6 | 503.9 | 503.2 | 507.4 | 507.4 | 508.8 | 506.0 | 504.6 | 495.4 | 472.2 | 437.0 |
| 30° | 562.3 | 558.1 | 560.9 | 562.3 | 565.1 | 567.2 | 564.4 | 560.2 | 548.9 | 523.6 | 480.0 |
| 32.5° | 615.1 | 617.9 | 622.1 | 623.5 | 627.7 | 628.4 | 621.4 | 621.4 | 610.1 | 577.8 | 532.7 |
| 35° | 674.9 | 674.9 | 686.2 | 691.1 | 691.1 | 695.3 | 684.7 | 679.1 | 671.4 | 637.6 | 580.6 |
| 37.5° | 727.0 | 728.4 | 737.5 | 748.8 | 750.2 | 756.5 | 748.8 | 746.7 | 732.6 | 698.1 | 634.8 |
| 40° | 775.5 | 776.9 | 788.2 | 801.6 | 809.3 | 819.2 | 811.4 | 807.9 | 793.1 | 753.7 | 689.0 |
| 42.5° | 813.5 | 816.3 | 830.4 | 850.1 | 862.8 | 874.8 | 871.2 | 869.1 | 848.7 | 807.2 | 738.9 |
| 45° | 842.4 | 847.3 | 867.0 | 890.2 | 907.8 | 925.4 | 926.1 | 921.9 | 902.9 | 856.5 | 787.5 |
| 47.5° | 865.6 | 871.2 | 893.1 | 922.6 | 949.4 | 971.2 | 975.4 | 970.5 | 952.9 | 904.3 | 831.1 |
| 50° | 884.6 | 887.4 | 912.1 | 950.1 | 983.1 | 1010.6 | 1019.0 | 1014.8 | 999.3 | 944.4 | 869.1 |
| 52.5° | 894.5 | 898.7 | 926.8 | 970.5 | 1010.6 | 1043.7 | 1056.3 | 1054.2 | 1035.9 | 981.0 | 902.9 |
| 55° | 899.4 | 903.6 | 936.7 | 986.7 | 1031.7 | 1070.4 | 1085.9 | 1086.6 | 1069.0 | 1014.1 | 934.6 |
| 57.5° | 893.8 | 899.4 | 935.3 | 990.9 | 1040.8 | 1082.4 | 1106.3 | 1105.6 | 1091.5 | 1039.4 | 961.3 |
| 59° | 883.9 | 888.1 | 926.8 | 985.2 | 1039.4 | 1081.0 | 1108.4 | 1109.1 | 1096.4 | 1047.9 | 973.3 |
| 60° | 872.6 | 877.6 | 917.0 | 978.2 | 1033.8 | 1076.0 | 1104.9 | 1106.3 | 1095.7 | 1050.0 | 978.2 |
| 62.5° | 833.9 | 840.3 | 883.9 | 949.4 | 1009.9 | 1050.0 | 1084.5 | 1086.6 | 1081.0 | 1044.4 | 981.7 |
| 65° | 779.7 | 785.4 | 832.5 | 902.2 | 965.5 | 1007.1 | 1039.4 | 1044.4 | 1043.7 | 1019.0 | 967.6 |
| 67.5° | 713.6 | 714.3 | 758.6 | 834.6 | 900.8 | 941.6 | 972.6 | 981.0 | 987.4 | 971.2 | 926.1 |
| 70° | 634.1 | 633.4 | 676.3 | 751.6 | 817.8 | 860.7 | 891.6 | 897.3 | 913.5 | 900.8 | 864.2 |
| 72.5° | 535.6 | 544.0 | 584.1 | 647.4 | 712.9 | 760.7 | 788.2 | 798.8 | 807.9 | 810.7 | 780.5 |
| 75° | 442.7 | 451.8 | 483.5 | 542.6 | 598.9 | 643.2 | 672.8 | 677.7 | 694.6 | 698.8 | 670.7 |
| 77.5° | 354.0 | 354.7 | 377.9 | 425.1 | 476.4 | 513.0 | 537.0 | 549.6 | 558.8 | 567.2 | 537.7 |
| 80° | 248.4 | 251.9 | 268.1 | 301.9 | 342.0 | 380.7 | 400.4 | 408.9 | 415.2 | 420.8 | 411.0 |
| 82.5° | 155.5 | 156.9 | 167.5 | 187.9 | 215.3 | 237.2 | 257.6 | 264.6 | 266.0 | 278.7 | 277.3 |
| 85° | 73.9 | 74.6 | 81.6 | 91.5 | 103.5 | 121.0 | 128.8 | 128.8 | 138.6 | 147.8 | 147.8 |
| 87.5° | 9.9 | 9.9 | 12.0 | 13.4 | 16.9 | 21.8 | 30.3 | 31.0 | 36.6 | 40.8 | 44.3 |
| 90° | 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: CCP-VA-1-860-U-T4W

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 | 250.5 |
| 2.5° | 251.2 | 251.2 | 251.2 | 251.2 | 251.2 | 250.5 | 251.2 | 251.2 | 251.2 | 251.2 | 251.2 |
| 5° | 256.2 | 255.5 | 254.8 | 254.1 | 254.1 | 253.3 | 253.3 | 253.3 | 253.3 | 253.3 | 253.3 |
| 7.5° | 261.1 | 260.4 | 259.7 | 258.3 | 257.6 | 256.9 | 256.9 | 256.2 | 256.2 | 256.2 | 256.2 |
| 10° | 269.5 | 268.8 | 266.0 | 263.9 | 262.5 | 261.8 | 261.1 | 260.4 | 259.7 | 259.7 | 259.7 |
| 12.5° | 280.8 | 279.4 | 274.5 | 271.6 | 269.5 | 268.1 | 266.7 | 266.0 | 265.3 | 264.6 | 264.6 |
| 15° | 294.9 | 291.4 | 285.0 | 280.8 | 278.0 | 275.9 | 273.8 | 272.3 | 271.6 | 270.9 | 270.9 |
| 17.5° | 311.8 | 307.5 | 299.1 | 291.4 | 286.4 | 282.9 | 280.1 | 278.0 | 277.3 | 277.3 | 277.3 |
| 20° | 332.9 | 325.8 | 313.9 | 303.3 | 295.6 | 290.6 | 286.4 | 284.3 | 283.6 | 282.9 | 282.2 |
| 22.5° | 357.5 | 348.4 | 330.8 | 314.6 | 304.7 | 297.7 | 292.8 | 289.9 | 287.8 | 287.1 | 287.1 |
| 25° | 385.7 | 372.3 | 349.1 | 329.4 | 316.0 | 306.1 | 299.8 | 296.3 | 292.8 | 291.4 | 291.4 |
| 27.5° | 419.4 | 401.8 | 370.9 | 344.8 | 326.5 | 314.6 | 307.5 | 302.6 | 299.1 | 296.3 | 294.9 |
| 30° | 456.0 | 436.3 | 394.8 | 361.7 | 338.5 | 325.1 | 316.7 | 311.1 | 306.1 | 301.2 | 300.5 |
| 32.5° | 502.5 | 474.3 | 423.7 | 380.7 | 352.6 | 335.7 | 325.8 | 318.8 | 312.5 | 307.5 | 306.1 |
| 35° | 549.6 | 515.8 | 453.9 | 400.4 | 365.9 | 345.5 | 333.6 | 325.8 | 319.5 | 313.9 | 313.2 |
| 37.5° | 598.2 | 562.3 | 487.0 | 423.7 | 381.4 | 356.8 | 342.0 | 333.6 | 325.8 | 320.2 | 319.5 |
| 40° | 648.9 | 606.6 | 520.8 | 447.6 | 397.6 | 368.1 | 351.2 | 340.6 | 332.2 | 327.2 | 326.5 |
| 42.5° | 696.7 | 651.0 | 557.4 | 475.7 | 416.6 | 380.0 | 360.3 | 349.1 | 338.5 | 333.6 | 332.9 |
| 45° | 742.5 | 693.2 | 594.0 | 501.8 | 435.6 | 392.7 | 369.5 | 356.1 | 344.8 | 339.9 | 339.2 |
| 47.5° | 784.0 | 734.7 | 627.7 | 529.9 | 455.3 | 406.8 | 379.3 | 363.1 | 350.5 | 345.5 | 345.5 |
| 50° | 821.3 | 769.9 | 660.8 | 556.0 | 473.6 | 420.8 | 387.8 | 369.5 | 356.8 | 351.9 | 351.2 |
| 52.5° | 856.5 | 800.9 | 689.7 | 578.5 | 491.2 | 433.5 | 396.2 | 374.4 | 361.0 | 355.4 | 354.7 |
| 55° | 884.6 | 829.0 | 713.6 | 596.8 | 503.2 | 442.0 | 401.8 | 377.2 | 362.4 | 357.5 | 356.8 |
| 57.5° | 909.2 | 852.2 | 730.5 | 609.4 | 510.9 | 446.9 | 404.7 | 377.2 | 361.7 | 356.1 | 355.4 |
| 59° | 919.8 | 862.1 | 736.1 | 613.0 | 512.3 | 447.6 | 403.9 | 375.1 | 358.9 | 353.3 | 351.9 |
| 60° | 925.4 | 866.3 | 738.2 | 613.7 | 511.6 | 446.2 | 403.2 | 373.0 | 356.1 | 349.8 | 349.8 |
| 62.5° | 931.1 | 869.8 | 735.4 | 608.0 | 503.9 | 438.4 | 396.2 | 364.5 | 345.5 | 338.5 | 338.5 |
| 65° | 919.1 | 857.2 | 719.2 | 592.6 | 488.4 | 425.1 | 382.8 | 350.5 | 329.4 | 322.3 | 322.3 |
| 67.5° | 883.9 | 826.2 | 689.7 | 563.7 | 463.1 | 401.8 | 361.0 | 327.9 | 308.2 | 300.5 | 298.4 |
| 70° | 824.1 | 775.5 | 643.2 | 522.2 | 428.6 | 372.3 | 333.6 | 301.9 | 281.5 | 273.8 | 270.9 |
| 72.5° | 743.9 | 696.0 | 581.3 | 471.5 | 382.8 | 333.6 | 299.8 | 269.5 | 247.0 | 239.3 | 240.0 |
| 75° | 633.4 | 599.6 | 501.1 | 407.5 | 330.1 | 284.3 | 256.2 | 230.8 | 211.8 | 205.5 | 206.2 |
| 77.5° | 513.7 | 485.6 | 406.1 | 332.2 | 269.5 | 234.3 | 210.4 | 190.0 | 177.3 | 173.8 | 171.7 |
| 80° | 393.4 | 365.9 | 304.7 | 247.7 | 204.8 | 180.2 | 164.0 | 149.9 | 140.0 | 135.1 | 136.5 |
| 82.5° | 263.9 | 247.0 | 202.0 | 164.0 | 139.3 | 121.7 | 116.1 | 107.0 | 103.5 | 100.6 | 102.7 |
| 85° | 142.2 | 127.4 | 105.6 | 88.0 | 76.7 | 71.8 | 73.2 | 72.5 | 69.7 | 69.0 | 71.1 |
| 87.5° | 46.4 | 40.1 | 31.0 | 26.0 | 26.7 | 23.9 | 23.9 | 22.5 | 20.4 | 19.7 | 21.1 |
| 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)