

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: P472185

Luminaire Tested: **CCP-VA-3-830-U-T4W**

Issue Date: 01/27/2021



Test Information

Test Method: LM-79-08
Report Number: P472185
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCP-VA-3-830-U-T4W
Description: INVUE CLEARCURVE POLE MOUNT Wave Stream LUMINAIRE WITH T4W
DISTRIBUTION LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

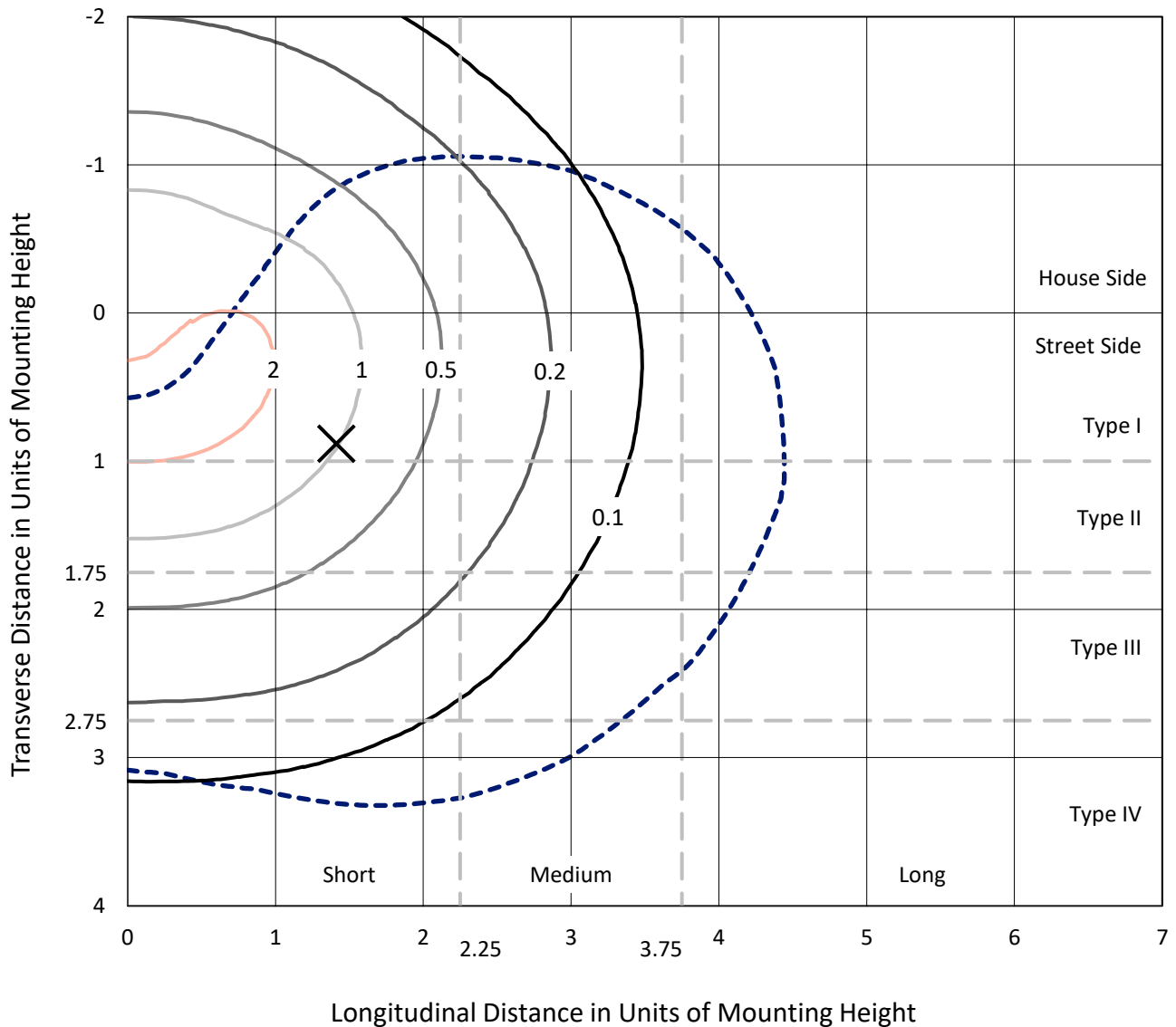
Lumens per Lamp: N/A
Luminaire Lumens: 4737.7 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 46.8
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: P472185
 CATALOG NUMBER: CCP-VA-3-830-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

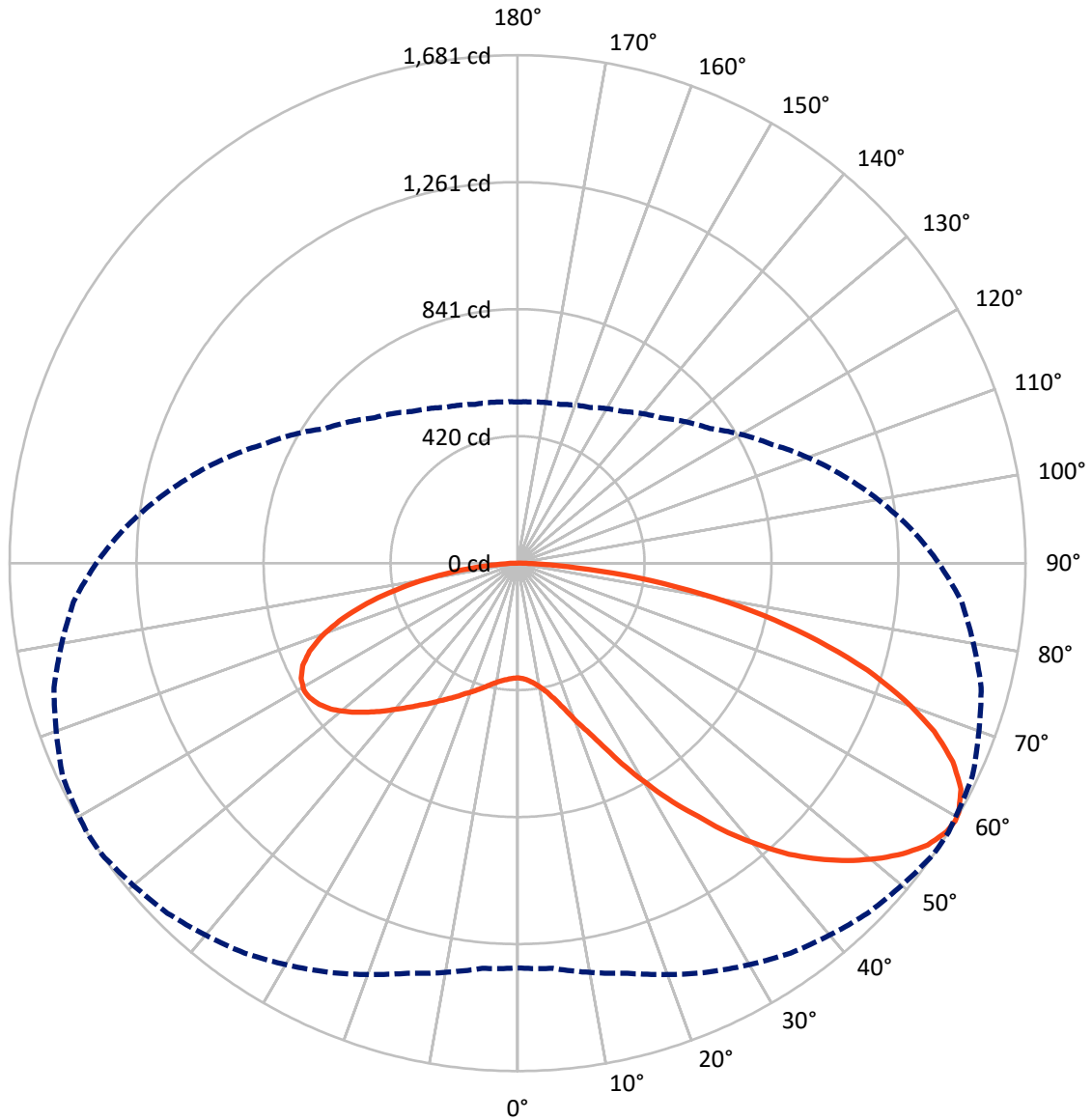
✕ Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P472185
CATALOG NUMBER: CCP-VA-3-830-U-T4W

Luminous Intensity Polar Plot



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

REPORT NUMBER: P472185
 CATALOG NUMBER: CCP-VA-3-830-U-T4W

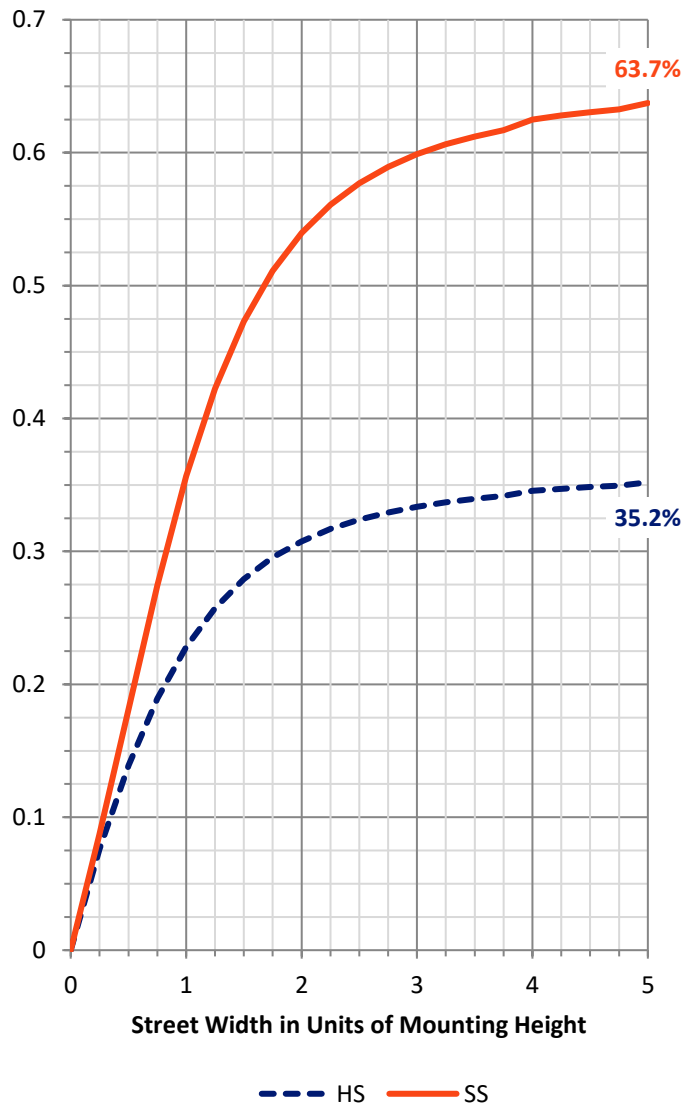
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1689.6 | 0.0 | 1689.6 |
| | % Fixture | 35.7 | 0.0 | 35.7 |
| Street Side | Lumens | 3048.0 | 0.0 | 3048.0 |
| | % Fixture | 64.3 | 0.0 | 64.3 |
| Total | Lumens | 4737.7 | 0.0 | 4737.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 37.7 | 0.8 |
| 10°-20° | 128.5 | 2.7 |
| 20°-30° | 271.2 | 5.7 |
| 30°-40° | 499.2 | 10.5 |
| 40°-50° | 778.1 | 16.4 |
| 50°-60° | 1022.4 | 21.6 |
| 60°-70° | 1071.3 | 22.6 |
| 70°-80° | 742.8 | 15.7 |
| 80°-90° | 186.5 | 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° | 4737.7 | 100.0 |
| 0°-180° | 4737.7 | 100.0 |



REPORT NUMBER: P472185

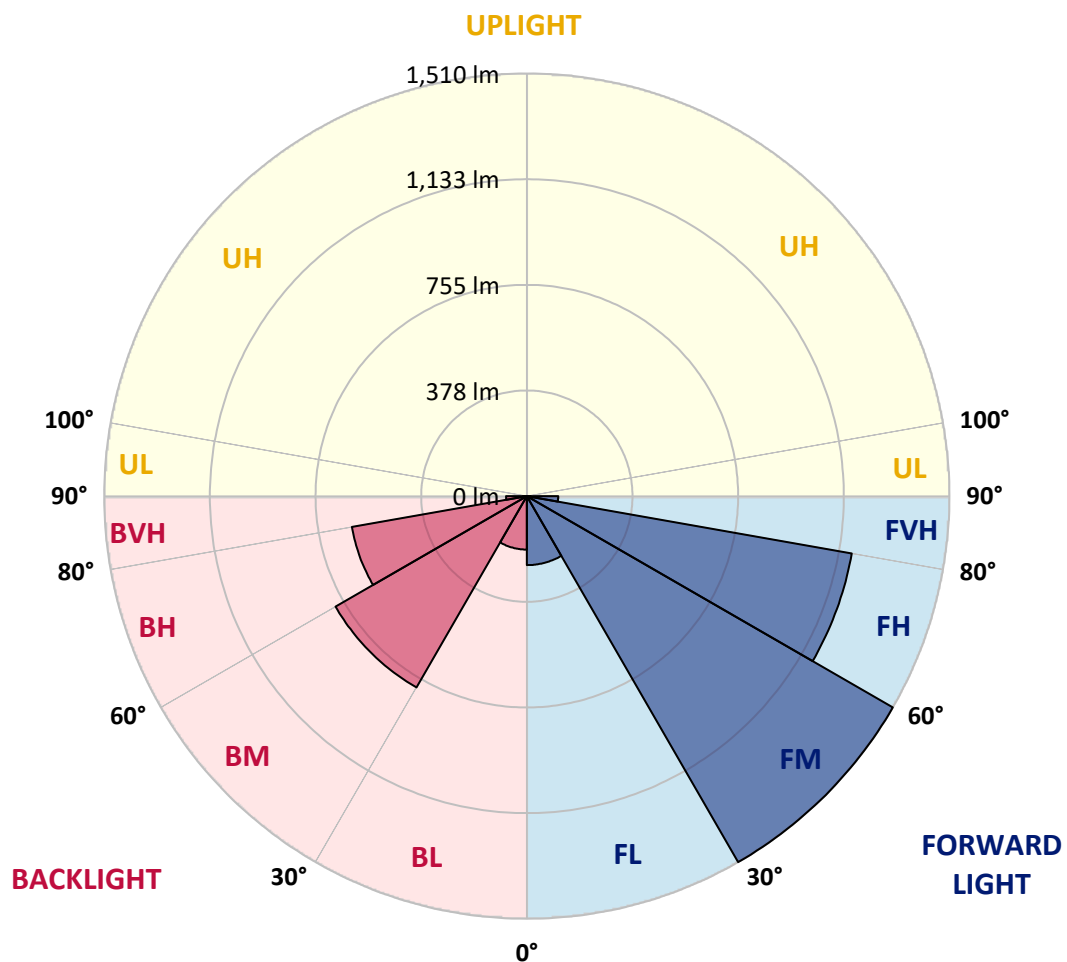
CATALOG NUMBER: CCP-VA-3-830-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 246.5 | 5.2 | | | |
| FM (30°-60°) | 1510.3 | 31.9 | | | |
| FH (60°-80°) | 1179.2 | 24.9 | | | G1/1800 |
| FVH (80°-90°) | 112.1 | 2.4 | | | G2/225 |
| BL (0°-30°) | 191.0 | 4.0 | B1/500 | | |
| BM (30°-60°) | 789.4 | 16.7 | B1/1000 | | |
| BH (60°-80°) | 634.9 | 13.4 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 74.4 | 1.6 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type IV Short





REPORT NUMBER: P472185

CATALOG NUMBER: CCP-VA-3-830-U-T4W

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 |
| 2.5° | 385.1 | 385.1 | 385.1 | 384.1 | 384.1 | 384.1 | 383.0 | 383.0 | 383.0 | 381.9 | 380.9 |
| 5° | 393.7 | 393.7 | 392.6 | 393.7 | 392.6 | 391.5 | 390.5 | 390.5 | 390.5 | 389.4 | 388.3 |
| 7.5° | 405.4 | 406.5 | 405.4 | 406.5 | 405.4 | 404.3 | 402.2 | 402.2 | 401.1 | 399.0 | 396.9 |
| 10° | 423.5 | 423.5 | 423.5 | 422.5 | 421.4 | 420.3 | 419.3 | 418.2 | 417.1 | 413.9 | 410.7 |
| 12.5° | 445.9 | 445.9 | 445.9 | 443.8 | 443.8 | 441.7 | 440.6 | 439.5 | 437.4 | 433.1 | 428.9 |
| 15° | 473.7 | 472.6 | 475.8 | 475.8 | 474.7 | 474.7 | 471.5 | 469.4 | 467.3 | 460.9 | 451.3 |
| 17.5° | 511.0 | 510.0 | 513.2 | 515.3 | 515.3 | 516.4 | 511.0 | 508.9 | 501.4 | 492.9 | 480.1 |
| 20° | 561.2 | 559.0 | 562.2 | 564.4 | 562.2 | 564.4 | 559.0 | 560.1 | 549.4 | 534.5 | 514.2 |
| 22.5° | 615.6 | 615.6 | 618.8 | 618.8 | 619.8 | 622.0 | 615.6 | 612.4 | 603.8 | 582.5 | 556.9 |
| 25° | 682.8 | 688.1 | 688.1 | 688.1 | 692.4 | 693.4 | 687.0 | 681.7 | 670.0 | 641.2 | 606.0 |
| 27.5° | 764.9 | 763.9 | 762.8 | 769.2 | 769.2 | 771.3 | 767.1 | 764.9 | 751.1 | 715.9 | 662.5 |
| 30° | 852.4 | 846.0 | 850.3 | 852.4 | 856.7 | 859.9 | 855.6 | 849.2 | 832.1 | 793.7 | 727.6 |
| 32.5° | 932.4 | 936.7 | 943.1 | 945.2 | 951.6 | 952.7 | 942.0 | 942.0 | 925.0 | 875.9 | 807.6 |
| 35° | 1023.1 | 1023.1 | 1040.2 | 1047.6 | 1047.6 | 1054.0 | 1038.0 | 1029.5 | 1017.8 | 966.6 | 880.1 |
| 37.5° | 1102.0 | 1104.2 | 1118.1 | 1135.1 | 1137.3 | 1146.9 | 1135.1 | 1131.9 | 1110.6 | 1058.3 | 962.3 |
| 40° | 1175.7 | 1177.8 | 1194.9 | 1215.1 | 1226.9 | 1241.8 | 1230.1 | 1224.7 | 1202.3 | 1142.6 | 1044.4 |
| 42.5° | 1233.3 | 1237.5 | 1258.9 | 1288.7 | 1307.9 | 1326.1 | 1320.8 | 1317.6 | 1286.6 | 1223.7 | 1120.2 |
| 45° | 1277.0 | 1284.5 | 1314.4 | 1349.6 | 1376.2 | 1402.9 | 1404.0 | 1397.6 | 1368.8 | 1298.3 | 1193.8 |
| 47.5° | 1312.2 | 1320.8 | 1353.8 | 1398.6 | 1439.2 | 1472.2 | 1478.6 | 1471.2 | 1444.5 | 1370.9 | 1259.9 |
| 50° | 1341.0 | 1345.3 | 1382.6 | 1440.2 | 1490.4 | 1532.0 | 1544.8 | 1538.4 | 1514.9 | 1431.7 | 1317.6 |
| 52.5° | 1356.0 | 1362.4 | 1405.0 | 1471.2 | 1532.0 | 1582.1 | 1601.3 | 1598.1 | 1570.4 | 1487.2 | 1368.8 |
| 55° | 1363.4 | 1369.8 | 1420.0 | 1495.7 | 1564.0 | 1622.7 | 1646.1 | 1647.2 | 1620.5 | 1537.3 | 1416.8 |
| 57.5° | 1354.9 | 1363.4 | 1417.8 | 1502.1 | 1577.9 | 1640.8 | 1677.1 | 1676.0 | 1654.7 | 1575.7 | 1457.3 |
| 59° | 1340.0 | 1346.4 | 1405.0 | 1493.6 | 1575.7 | 1638.7 | 1680.3 | 1681.3 | 1662.1 | 1588.5 | 1475.4 |
| 60° | 1322.9 | 1330.4 | 1390.1 | 1482.9 | 1567.2 | 1631.2 | 1674.9 | 1677.1 | 1661.1 | 1591.7 | 1482.9 |
| 62.5° | 1264.2 | 1273.8 | 1340.0 | 1439.2 | 1530.9 | 1591.7 | 1644.0 | 1647.2 | 1638.7 | 1583.2 | 1488.2 |
| 65° | 1182.1 | 1190.6 | 1262.1 | 1367.7 | 1463.7 | 1526.7 | 1575.7 | 1583.2 | 1582.1 | 1544.8 | 1466.9 |
| 67.5° | 1081.8 | 1082.8 | 1150.1 | 1265.3 | 1365.6 | 1427.4 | 1474.4 | 1487.2 | 1496.8 | 1472.2 | 1404.0 |
| 70° | 961.2 | 960.2 | 1025.2 | 1139.4 | 1239.7 | 1304.7 | 1351.7 | 1360.2 | 1384.8 | 1365.6 | 1310.1 |
| 72.5° | 811.9 | 824.7 | 885.5 | 981.5 | 1080.7 | 1153.3 | 1194.9 | 1210.9 | 1224.7 | 1229.0 | 1183.1 |
| 75° | 671.0 | 684.9 | 732.9 | 822.5 | 907.9 | 975.1 | 1019.9 | 1027.4 | 1053.0 | 1059.4 | 1016.7 |
| 77.5° | 536.6 | 537.7 | 572.9 | 644.4 | 722.3 | 777.7 | 814.0 | 833.2 | 847.1 | 859.9 | 815.1 |
| 80° | 376.6 | 381.9 | 406.5 | 457.7 | 518.5 | 577.2 | 607.0 | 619.8 | 629.4 | 638.0 | 623.0 |
| 82.5° | 235.8 | 237.9 | 253.9 | 284.8 | 326.5 | 359.5 | 390.5 | 401.1 | 403.3 | 422.5 | 420.3 |
| 85° | 112.0 | 113.1 | 123.8 | 138.7 | 156.8 | 183.5 | 195.2 | 195.2 | 210.2 | 224.0 | 224.0 |
| 87.5° | 14.9 | 14.9 | 18.1 | 20.3 | 25.6 | 33.1 | 45.9 | 46.9 | 55.5 | 61.9 | 67.2 |
| 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: P472185
 CATALOG NUMBER: CCP-VA-3-830-U-T4W

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 | 379.8 |
| 2.5° | 380.9 | 380.9 | 380.9 | 380.9 | 380.9 | 379.8 | 380.9 | 380.9 | 380.9 | 380.9 | 380.9 |
| 5° | 388.3 | 387.3 | 386.2 | 385.1 | 385.1 | 384.1 | 384.1 | 384.1 | 384.1 | 384.1 | 384.1 |
| 7.5° | 395.8 | 394.7 | 393.7 | 391.5 | 390.5 | 389.4 | 389.4 | 388.3 | 388.3 | 388.3 | 388.3 |
| 10° | 408.6 | 407.5 | 403.3 | 400.1 | 397.9 | 396.9 | 395.8 | 394.7 | 393.7 | 393.7 | 393.7 |
| 12.5° | 425.7 | 423.5 | 416.1 | 411.8 | 408.6 | 406.5 | 404.3 | 403.3 | 402.2 | 401.1 | 401.1 |
| 15° | 447.0 | 441.7 | 432.1 | 425.7 | 421.4 | 418.2 | 415.0 | 412.9 | 411.8 | 410.7 | 410.7 |
| 17.5° | 472.6 | 466.2 | 453.4 | 441.7 | 434.2 | 428.9 | 424.6 | 421.4 | 420.3 | 420.3 | 420.3 |
| 20° | 504.6 | 493.9 | 475.8 | 459.8 | 448.1 | 440.6 | 434.2 | 431.0 | 429.9 | 428.9 | 427.8 |
| 22.5° | 542.0 | 528.1 | 501.4 | 476.9 | 461.9 | 451.3 | 443.8 | 439.5 | 436.3 | 435.3 | 435.3 |
| 25° | 584.6 | 564.4 | 529.2 | 499.3 | 479.0 | 464.1 | 454.5 | 449.1 | 443.8 | 441.7 | 441.7 |
| 27.5° | 635.8 | 609.2 | 562.2 | 522.8 | 495.0 | 476.9 | 466.2 | 458.7 | 453.4 | 449.1 | 447.0 |
| 30° | 691.3 | 661.4 | 598.5 | 548.4 | 513.2 | 492.9 | 480.1 | 471.5 | 464.1 | 456.6 | 455.5 |
| 32.5° | 761.7 | 719.1 | 642.2 | 577.2 | 534.5 | 508.9 | 493.9 | 483.3 | 473.7 | 466.2 | 464.1 |
| 35° | 833.2 | 782.0 | 688.1 | 607.0 | 554.8 | 523.8 | 505.7 | 493.9 | 484.3 | 475.8 | 474.7 |
| 37.5° | 906.8 | 852.4 | 738.3 | 642.2 | 578.2 | 540.9 | 518.5 | 505.7 | 493.9 | 485.4 | 484.3 |
| 40° | 983.6 | 919.6 | 789.5 | 678.5 | 602.8 | 558.0 | 532.4 | 516.4 | 503.5 | 496.1 | 495.0 |
| 42.5° | 1056.2 | 986.8 | 844.9 | 721.2 | 631.6 | 576.1 | 546.2 | 529.2 | 513.2 | 505.7 | 504.6 |
| 45° | 1125.5 | 1050.8 | 900.4 | 760.7 | 660.4 | 595.3 | 560.1 | 539.8 | 522.8 | 515.3 | 514.2 |
| 47.5° | 1188.5 | 1113.8 | 951.6 | 803.3 | 690.2 | 616.6 | 575.0 | 550.5 | 531.3 | 523.8 | 523.8 |
| 50° | 1245.0 | 1167.1 | 1001.8 | 842.8 | 718.0 | 638.0 | 587.8 | 560.1 | 540.9 | 533.4 | 532.4 |
| 52.5° | 1298.3 | 1214.1 | 1045.5 | 876.9 | 744.7 | 657.2 | 600.6 | 567.6 | 547.3 | 538.8 | 537.7 |
| 55° | 1341.0 | 1256.7 | 1081.8 | 904.7 | 762.8 | 670.0 | 609.2 | 571.8 | 549.4 | 542.0 | 540.9 |
| 57.5° | 1378.4 | 1291.9 | 1107.4 | 923.9 | 774.5 | 677.4 | 613.4 | 571.8 | 548.4 | 539.8 | 538.8 |
| 59° | 1394.4 | 1306.9 | 1115.9 | 929.2 | 776.7 | 678.5 | 612.4 | 568.6 | 544.1 | 535.6 | 533.4 |
| 60° | 1402.9 | 1313.3 | 1119.1 | 930.3 | 775.6 | 676.4 | 611.3 | 565.4 | 539.8 | 530.2 | 530.2 |
| 62.5° | 1411.4 | 1318.6 | 1114.9 | 921.8 | 763.9 | 664.6 | 600.6 | 552.6 | 523.8 | 513.2 | 513.2 |
| 65° | 1393.3 | 1299.4 | 1090.3 | 898.3 | 740.4 | 644.4 | 580.4 | 531.3 | 499.3 | 488.6 | 488.6 |
| 67.5° | 1340.0 | 1252.5 | 1045.5 | 854.5 | 702.0 | 609.2 | 547.3 | 497.1 | 467.3 | 455.5 | 452.3 |
| 70° | 1249.3 | 1175.7 | 975.1 | 791.6 | 649.7 | 564.4 | 505.7 | 457.7 | 426.7 | 415.0 | 410.7 |
| 72.5° | 1127.7 | 1055.1 | 881.2 | 714.8 | 580.4 | 505.7 | 454.5 | 408.6 | 374.5 | 362.7 | 363.8 |
| 75° | 960.2 | 909.0 | 759.6 | 617.7 | 500.3 | 431.0 | 388.3 | 349.9 | 321.1 | 311.5 | 312.6 |
| 77.5° | 778.8 | 736.1 | 615.6 | 503.5 | 408.6 | 355.3 | 319.0 | 288.0 | 268.8 | 263.5 | 260.3 |
| 80° | 596.4 | 554.8 | 461.9 | 375.5 | 310.5 | 273.1 | 248.6 | 227.2 | 212.3 | 204.8 | 207.0 |
| 82.5° | 400.1 | 374.5 | 306.2 | 248.6 | 211.2 | 184.6 | 176.0 | 162.2 | 156.8 | 152.6 | 155.8 |
| 85° | 215.5 | 193.1 | 160.0 | 133.4 | 116.3 | 108.8 | 111.0 | 109.9 | 105.6 | 104.6 | 107.8 |
| 87.5° | 70.4 | 60.8 | 46.9 | 39.5 | 40.5 | 36.3 | 36.3 | 34.1 | 30.9 | 29.9 | 32.0 |
| 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)