

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: P256795

Luminaire Tested: **ULA-A4-D-U-ASYM-VMx-7030-HSS-BK**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P256795  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1804-729-18)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ULA-A4-D-U-ASYM-VMx-7030-HSS-BK  
Description: UTILITY LIGHT ACORN ASYMMETRIC W/ HSS  
Light Source: (60) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3493.5 lumens  
Efficiency: N/A  
Efficacy: 117.6 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 2.17')  
IES Classification: Type - Short - Non-Cutoff  
BUG Rating: B1 - U5 - G3

Input Watts (W): 29.7  
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



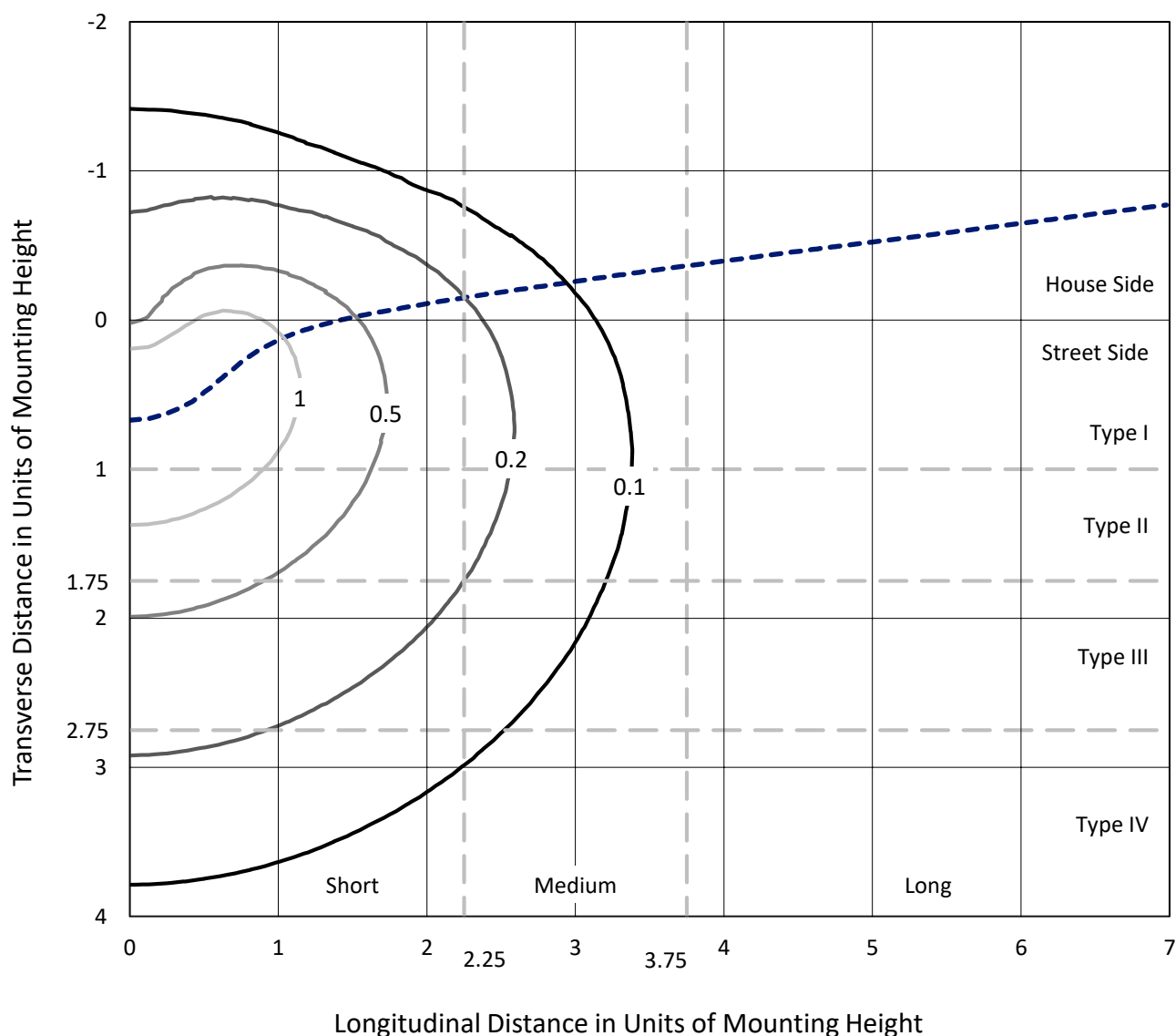
REPORT NUMBER: P256795

CATALOG NUMBER: ULA-A4-D-U-ASYM-VMx-7030-HSS-BK

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

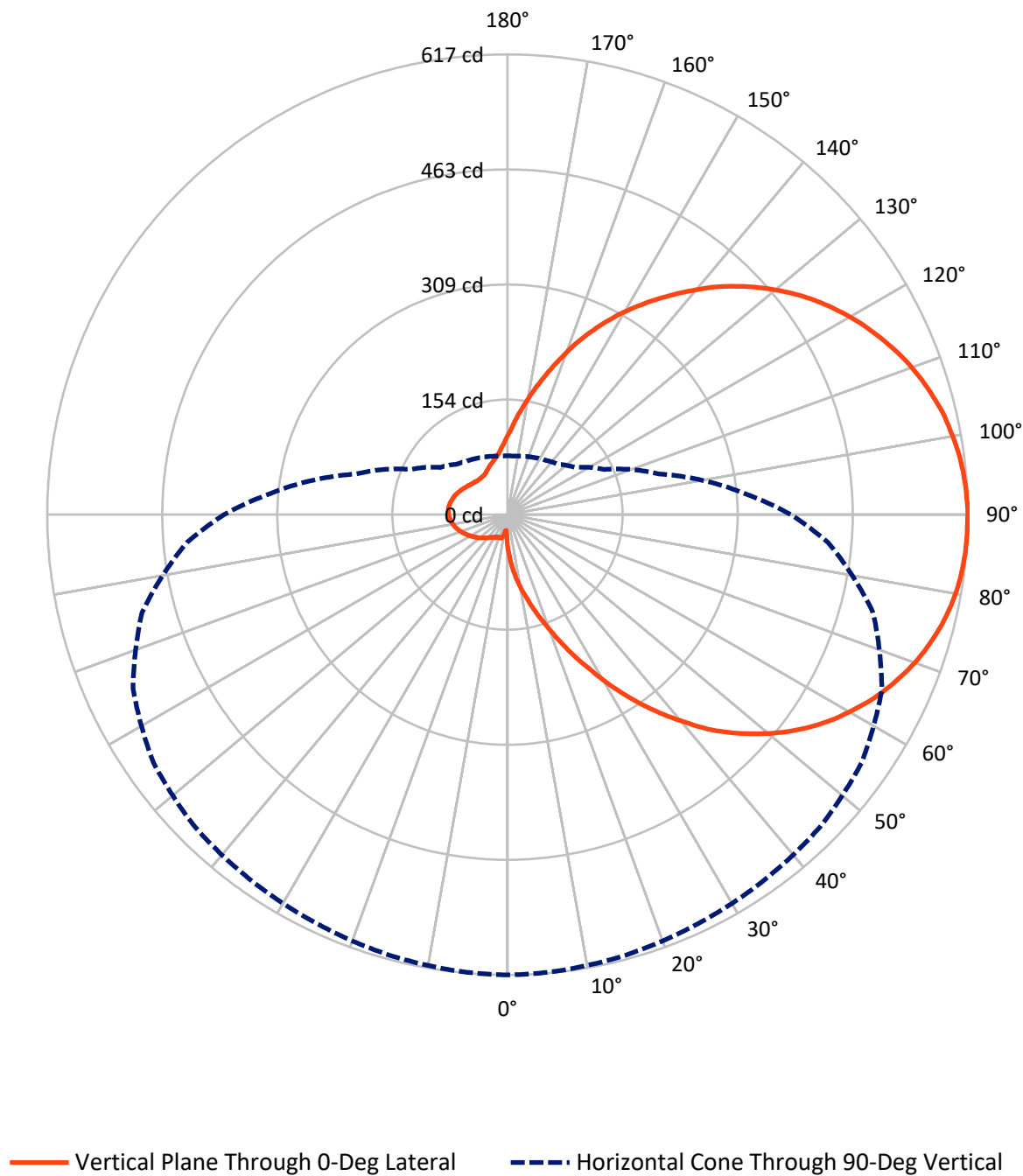


Based on 10 foot mounting height. Maximum calculated value = 1.7 fc  
 Type - Short - Non-Cutoff

REPORT NUMBER: P256795

CATALOG NUMBER: ULA-A4-D-U-ASYM-VMx-7030-HSS-BK

## Luminous Intensity Polar Plot



REPORT NUMBER: P256795

CATALOG NUMBER: ULA-A4-D-U-ASYM-VMx-7030-HSS-BK

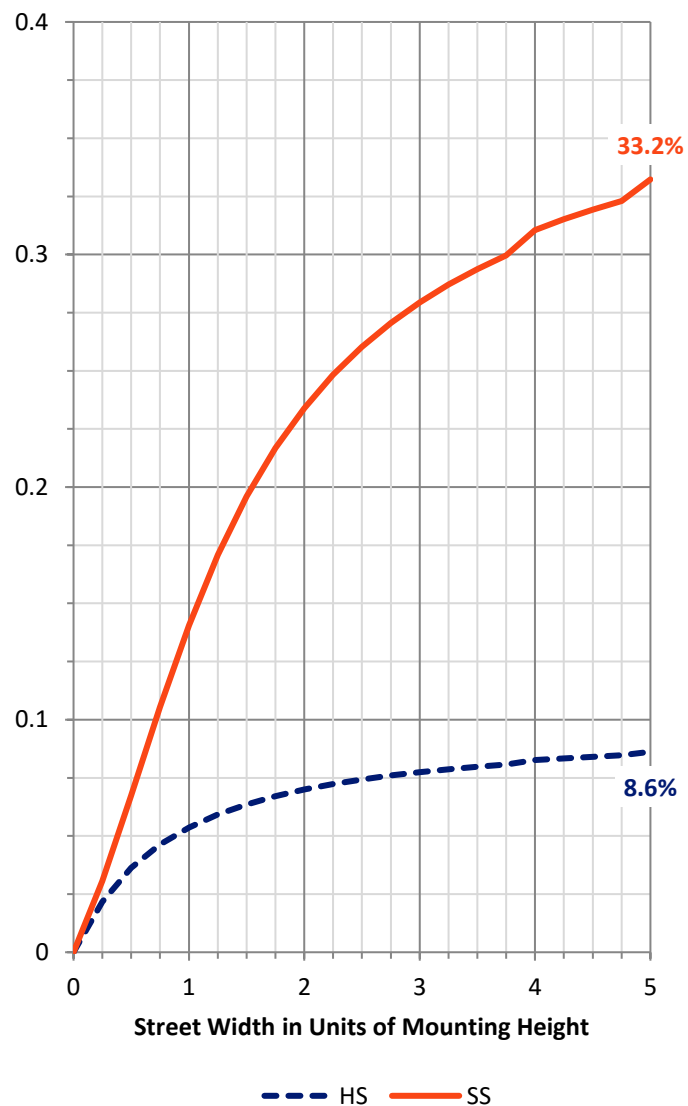
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 334.0    | 405.8  | 739.8  |
|                    | % Fixture | 9.6      | 11.6   | 21.2   |
| <b>Street Side</b> | Lumens    | 1354.9   | 1398.8 | 2753.7 |
|                    | % Fixture | 38.8     | 40.0   | 78.8   |
| <b>Total</b>       | Lumens    | 1688.9   | 1804.5 | 3493.5 |
|                    | % Fixture | 48.3     | 51.7   | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 5.1    | 0.1       |
| 10°-20°   | 24.3   | 0.7       |
| 20°-30°   | 60.8   | 1.7       |
| 30°-40°   | 117.1  | 3.4       |
| 40°-50°   | 184.6  | 5.3       |
| 50°-60°   | 251.5  | 7.2       |
| 60°-70°   | 310.4  | 8.9       |
| 70°-80°   | 355.3  | 10.2      |
| 80°-90°   | 379.8  | 10.9      |
| 90°-100°  | 381.5  | 10.9      |
| 100°-110° | 360.0  | 10.3      |
| 110°-120° | 319.6  | 9.1       |
| 120°-130° | 266.6  | 7.6       |
| 130°-140° | 204.2  | 5.8       |
| 140°-150° | 139.7  | 4.0       |
| 150°-160° | 83.0   | 2.4       |
| 160°-170° | 39.3   | 1.1       |
| 170°-180° | 10.6   | 0.3       |
| 0°-90°    | 1688.9 | 48.3      |
| 0°-180°   | 3493.5 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P256795

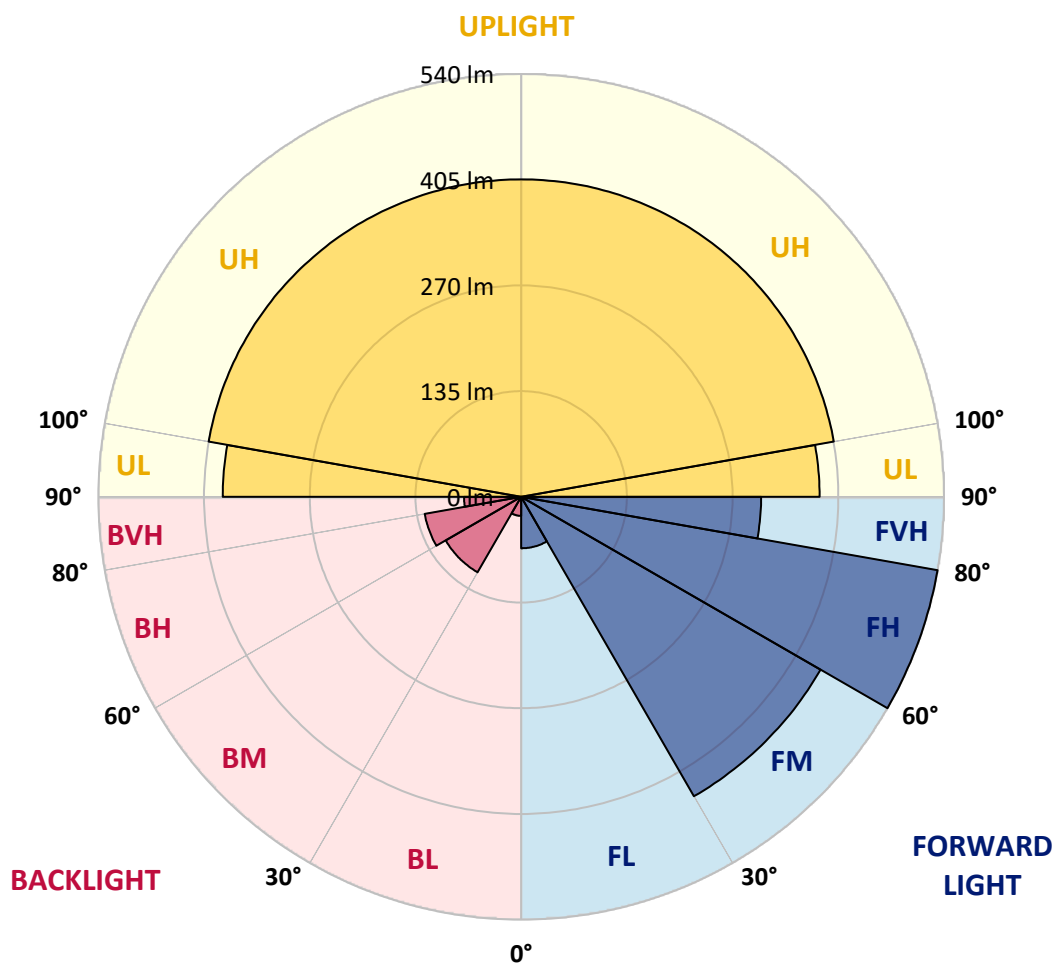
CATALOG NUMBER: ULA-A4-D-U-ASYM-VMx-7030-HSS-BK

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |        |        |
|------|-------------|--------|-----------|-------------------------|--------|--------|
|      |             |        |           | B                       | U      | G      |
| FL   | (0°-30°)    | 65.8   | 1.9       |                         |        |        |
| FM   | (30°-60°)   | 441.9  | 12.6      |                         |        |        |
| FH   | (60°-80°)   | 540.5  | 15.5      |                         |        | G0/660 |
| FVH  | (80°-90°)   | 306.7  | 8.8       |                         |        | G3/500 |
| BL   | (0°-30°)    | 24.4   | 0.7       | B0/110                  |        |        |
| BM   | (30°-60°)   | 111.4  | 3.2       | B0/220                  |        |        |
| BH   | (60°-80°)   | 125.2  | 3.6       | B1/500                  |        | G1/500 |
| BVH  | (80°-90°)   | 73.1   | 2.1       |                         |        | G1/100 |
| UL   | (90°-100°)  | 381.5  | 10.9      |                         | U3/500 |        |
| UH   | (100°-180°) | 405.8  | 11.6      |                         | U3/500 |        |

**BUG Rating: B1-U5-G3**

Type Short





REPORT NUMBER: P256795

CATALOG NUMBER: ULA-A4-D-U-ASYM-VMx-7030-HSS-BK

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 65°   | 75°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 44.0  | 44.0  | 44.0  | 44.0  | 44.0  | 44.0  | 44.0  | 44.0  | 44.0  | 44.0  | 44.0  |
| 2.5°   | 57.7  | 56.7  | 56.7  | 56.2  | 56.2  | 54.1  | 52.1  | 50.1  | 47.6  | 46.0  | 45.0  |
| 5°     | 72.8  | 71.3  | 70.8  | 69.3  | 67.8  | 64.2  | 61.7  | 57.7  | 54.1  | 49.6  | 47.6  |
| 7.5°   | 87.0  | 86.0  | 84.5  | 82.5  | 80.9  | 76.4  | 72.8  | 67.8  | 63.2  | 58.2  | 56.2  |
| 10°    | 101.2 | 100.2 | 98.6  | 96.6  | 93.6  | 90.0  | 86.0  | 79.9  | 74.4  | 68.3  | 65.3  |
| 12.5°  | 114.8 | 114.3 | 113.3 | 111.3 | 108.8 | 104.7 | 100.2 | 93.6  | 87.0  | 78.9  | 74.9  |
| 15°    | 131.5 | 130.5 | 129.5 | 127.5 | 125.0 | 120.4 | 115.3 | 108.8 | 100.2 | 91.1  | 86.5  |
| 17.5°  | 148.2 | 147.2 | 147.2 | 145.7 | 142.7 | 138.6 | 133.0 | 125.0 | 114.3 | 103.2 | 97.1  |
| 20°    | 166.9 | 165.9 | 165.9 | 164.4 | 161.4 | 157.3 | 151.3 | 142.7 | 131.0 | 116.4 | 109.3 |
| 22.5°  | 188.2 | 187.2 | 187.2 | 185.7 | 182.6 | 178.6 | 172.0 | 162.4 | 148.7 | 133.0 | 123.4 |
| 25°    | 211.5 | 209.9 | 209.9 | 208.4 | 205.4 | 201.3 | 194.8 | 183.6 | 168.0 | 150.2 | 139.1 |
| 27.5°  | 234.2 | 234.2 | 233.2 | 233.2 | 230.2 | 226.1 | 219.1 | 206.9 | 189.2 | 168.0 | 154.8 |
| 30°    | 261.0 | 261.0 | 259.5 | 259.0 | 255.5 | 251.9 | 243.8 | 230.7 | 211.5 | 186.2 | 170.5 |
| 32.5°  | 287.3 | 287.3 | 285.8 | 285.3 | 281.3 | 277.7 | 269.1 | 255.0 | 233.2 | 203.9 | 186.7 |
| 35°    | 314.2 | 313.1 | 312.1 | 311.6 | 308.1 | 303.5 | 294.9 | 278.7 | 254.5 | 221.6 | 202.4 |
| 37.5°  | 340.0 | 340.0 | 338.9 | 337.4 | 334.4 | 328.8 | 318.7 | 301.5 | 275.7 | 239.3 | 217.0 |
| 40°    | 365.8 | 366.3 | 365.3 | 363.7 | 358.7 | 354.1 | 343.5 | 324.8 | 296.5 | 256.0 | 231.7 |
| 42.5°  | 393.1 | 391.6 | 390.0 | 388.5 | 383.5 | 377.9 | 366.8 | 347.0 | 316.2 | 272.2 | 245.4 |
| 45°    | 416.9 | 415.8 | 414.3 | 412.3 | 407.7 | 400.7 | 389.5 | 367.8 | 334.9 | 286.8 | 258.5 |
| 47.5°  | 439.1 | 438.6 | 436.1 | 433.5 | 429.5 | 421.9 | 409.8 | 387.5 | 352.6 | 301.5 | 270.1 |
| 50°    | 460.9 | 460.9 | 458.3 | 454.3 | 449.7 | 443.7 | 429.5 | 406.2 | 369.3 | 315.2 | 281.8 |
| 52.5°  | 481.1 | 480.6 | 477.1 | 472.5 | 468.5 | 461.9 | 448.2 | 423.9 | 385.0 | 327.8 | 291.9 |
| 55°    | 499.8 | 499.3 | 495.3 | 490.7 | 486.2 | 479.6 | 465.4 | 440.1 | 400.2 | 340.0 | 302.0 |
| 57.5°  | 517.0 | 516.5 | 512.5 | 506.9 | 502.3 | 495.8 | 481.1 | 454.8 | 413.8 | 351.1 | 311.6 |
| 60°    | 532.2 | 531.7 | 527.6 | 521.6 | 517.0 | 510.4 | 496.3 | 469.0 | 427.0 | 361.7 | 320.2 |
| 62.5°  | 547.4 | 546.4 | 541.8 | 535.7 | 530.2 | 524.1 | 509.9 | 482.6 | 439.6 | 371.8 | 328.3 |
| 65°    | 560.5 | 559.5 | 554.5 | 547.9 | 542.8 | 536.2 | 522.1 | 494.8 | 450.7 | 381.4 | 336.4 |
| 67.5°  | 572.2 | 571.1 | 566.1 | 559.0 | 553.9 | 547.4 | 533.7 | 505.9 | 460.9 | 390.0 | 343.5 |
| 70°    | 583.3 | 581.8 | 576.7 | 569.1 | 564.1 | 557.5 | 543.8 | 516.0 | 471.0 | 398.1 | 350.6 |
| 72.5°  | 591.9 | 590.9 | 585.3 | 577.7 | 572.2 | 566.6 | 552.9 | 525.1 | 479.6 | 405.7 | 357.2 |
| 75°    | 600.0 | 599.0 | 593.4 | 585.3 | 580.3 | 574.2 | 561.0 | 533.2 | 486.7 | 412.3 | 362.7 |
| 77.5°  | 606.1 | 605.0 | 599.5 | 591.4 | 586.3 | 580.3 | 567.1 | 539.8 | 492.7 | 417.9 | 367.3 |
| 80°    | 611.1 | 609.6 | 604.0 | 596.4 | 590.9 | 584.8 | 572.2 | 544.8 | 498.3 | 422.4 | 371.8 |
| 82.5°  | 614.1 | 613.1 | 608.1 | 600.5 | 594.9 | 588.3 | 575.7 | 548.9 | 501.8 | 426.5 | 374.9 |
| 85°    | 616.2 | 615.2 | 610.1 | 603.0 | 596.9 | 590.9 | 578.2 | 551.4 | 504.9 | 429.0 | 377.4 |
| 87.5°  | 616.7 | 616.2 | 611.6 | 604.5 | 598.5 | 591.9 | 579.2 | 552.9 | 506.9 | 431.0 | 378.9 |
| 90°    | 617.2 | 616.2 | 611.6 | 605.0 | 599.0 | 592.4 | 579.7 | 553.9 | 507.4 | 431.5 | 379.9 |
| 92.5°  | 615.7 | 615.2 | 611.1 | 604.5 | 599.0 | 591.4 | 578.7 | 553.4 | 507.4 | 432.0 | 380.4 |
| 95°    | 613.6 | 612.6 | 609.6 | 603.0 | 596.9 | 589.9 | 576.7 | 551.9 | 506.4 | 431.5 | 379.9 |
| 97.5°  | 610.1 | 609.6 | 606.6 | 600.0 | 594.4 | 586.8 | 573.7 | 548.9 | 503.9 | 429.5 | 378.9 |
| 100°   | 605.0 | 604.5 | 601.5 | 595.4 | 589.4 | 582.3 | 569.1 | 544.3 | 499.8 | 426.5 | 376.4 |
| 102.5° | 600.0 | 599.0 | 595.9 | 589.9 | 584.3 | 577.2 | 564.1 | 539.8 | 495.3 | 422.9 | 373.9 |
| 105°   | 592.4 | 591.4 | 588.9 | 583.3 | 577.2 | 570.1 | 557.0 | 533.2 | 488.7 | 418.4 | 369.8 |
| 107.5° | 584.3 | 583.3 | 580.8 | 575.2 | 569.1 | 562.5 | 549.9 | 526.1 | 482.1 | 413.3 | 365.8 |
| 110°   | 575.2 | 573.2 | 571.1 | 565.6 | 560.0 | 553.9 | 541.3 | 518.0 | 475.5 | 407.2 | 361.2 |



REPORT NUMBER: P256795

CATALOG NUMBER: ULA-A4-D-U-ASYM-VMx-7030-HSS-BK

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 65°   | 75°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 564.6 | 563.6 | 561.0 | 556.0 | 549.9 | 544.3 | 531.7 | 508.9 | 466.4 | 400.7 | 356.7 |
| 115°   | 552.9 | 551.9 | 549.4 | 544.3 | 539.3 | 533.7 | 522.1 | 498.3 | 457.8 | 394.1 | 351.6 |
| 117.5° | 540.8 | 539.8 | 536.7 | 532.2 | 527.6 | 522.6 | 510.4 | 488.2 | 448.2 | 386.5 | 346.0 |
| 120°   | 527.6 | 526.6 | 524.1 | 520.1 | 515.5 | 510.4 | 498.8 | 476.5 | 438.1 | 378.9 | 340.0 |
| 122.5° | 513.5 | 513.0 | 510.4 | 505.9 | 501.8 | 497.8 | 486.7 | 464.9 | 427.5 | 370.3 | 333.9 |
| 125°   | 498.8 | 497.8 | 495.3 | 491.2 | 488.2 | 483.6 | 472.5 | 451.3 | 415.8 | 361.2 | 326.8 |
| 127.5° | 482.6 | 482.1 | 479.6 | 476.0 | 473.0 | 469.0 | 457.8 | 437.6 | 403.2 | 351.6 | 319.2 |
| 130°   | 465.4 | 465.4 | 461.9 | 459.9 | 457.3 | 452.8 | 442.1 | 422.4 | 389.5 | 340.5 | 310.6 |
| 132.5° | 447.7 | 447.2 | 445.2 | 442.1 | 440.1 | 435.6 | 425.5 | 406.2 | 374.9 | 329.3 | 301.5 |
| 135°   | 429.5 | 429.0 | 426.0 | 423.9 | 422.4 | 417.9 | 407.2 | 389.0 | 359.7 | 317.2 | 291.4 |
| 137.5° | 410.3 | 410.3 | 407.2 | 405.7 | 403.7 | 398.6 | 388.5 | 370.8 | 343.5 | 304.0 | 280.3 |
| 140°   | 389.5 | 389.5 | 387.5 | 385.0 | 383.5 | 377.9 | 368.3 | 351.1 | 325.8 | 289.4 | 268.1 |
| 142.5° | 369.3 | 369.3 | 367.3 | 364.7 | 362.7 | 357.2 | 347.5 | 331.4 | 308.1 | 275.2 | 256.0 |
| 145°   | 349.6 | 349.6 | 348.1 | 345.5 | 343.0 | 337.4 | 327.8 | 312.1 | 290.9 | 260.5 | 243.8 |
| 147.5° | 329.8 | 329.8 | 328.3 | 325.8 | 323.3 | 317.7 | 308.1 | 293.4 | 273.7 | 246.9 | 231.2 |
| 150°   | 310.1 | 310.1 | 308.1 | 305.6 | 303.5 | 297.5 | 288.4 | 274.2 | 256.5 | 231.7 | 218.0 |
| 152.5° | 289.9 | 289.9 | 287.9 | 285.8 | 282.8 | 277.2 | 268.1 | 256.0 | 238.8 | 217.0 | 204.9 |
| 155°   | 269.1 | 268.1 | 267.1 | 265.1 | 262.1 | 256.5 | 247.9 | 236.8 | 221.1 | 202.4 | 191.7 |
| 157.5° | 248.9 | 247.9 | 246.4 | 244.9 | 241.8 | 236.8 | 228.7 | 218.0 | 204.4 | 188.2 | 179.1 |
| 160°   | 227.1 | 228.2 | 226.6 | 225.1 | 222.1 | 216.5 | 209.4 | 200.3 | 188.2 | 174.0 | 166.4 |
| 162.5° | 206.9 | 207.4 | 206.4 | 204.9 | 202.4 | 196.8 | 190.7 | 182.6 | 172.0 | 159.9 | 153.3 |
| 165°   | 187.7 | 188.2 | 187.2 | 185.7 | 183.1 | 178.1 | 173.0 | 165.4 | 156.3 | 146.7 | 141.1 |
| 167.5° | 170.5 | 171.5 | 169.5 | 168.0 | 165.9 | 161.4 | 156.8 | 150.8 | 142.7 | 135.1 | 130.5 |
| 170°   | 153.8 | 155.3 | 153.3 | 152.3 | 150.2 | 146.7 | 142.2 | 137.6 | 131.0 | 124.4 | 120.4 |
| 172.5° | 139.1 | 140.1 | 138.6 | 137.6 | 135.6 | 132.5 | 129.5 | 125.5 | 120.4 | 115.3 | 112.8 |
| 175°   | 125.5 | 125.5 | 125.0 | 122.9 | 122.4 | 120.4 | 117.9 | 115.3 | 112.8 | 109.3 | 107.2 |
| 177.5° | 112.8 | 112.8 | 112.8 | 112.3 | 111.8 | 110.8 | 109.8 | 108.3 | 106.7 | 105.2 | 104.2 |
| 180°   | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 |





REPORT NUMBER: P256795

CATALOG NUMBER: ULA-A4-D-U-ASYM-VMx-7030-HSS-BK

**CANDELA DISTRIBUTION (continued):**

|        | 95°   | 105°  | 115°  | 125°  | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|-------|-------|-------|-------|------|------|------|------|------|------|
| 0°     | 44.0  | 44.0  | 44.0  | 44.0  | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 |
| 2.5°   | 44.0  | 41.0  | 38.4  | 35.9  | 33.4 | 31.9 | 29.3 | 28.8 | 28.3 | 27.8 |
| 5°     | 45.5  | 41.5  | 36.9  | 33.4  | 29.8 | 26.3 | 23.8 | 22.3 | 21.2 | 21.2 |
| 7.5°   | 53.1  | 48.6  | 43.0  | 37.9  | 33.9 | 29.8 | 26.8 | 24.3 | 22.8 | 22.3 |
| 10°    | 61.7  | 55.6  | 49.1  | 43.0  | 38.4 | 33.9 | 29.8 | 27.3 | 26.3 | 26.3 |
| 12.5°  | 71.3  | 63.7  | 55.6  | 48.1  | 42.5 | 36.9 | 32.9 | 30.9 | 29.8 | 29.8 |
| 15°    | 80.9  | 71.3  | 61.7  | 52.6  | 45.5 | 40.0 | 35.9 | 33.4 | 32.4 | 32.4 |
| 17.5°  | 91.1  | 79.4  | 67.3  | 56.7  | 48.6 | 42.0 | 37.4 | 34.4 | 32.9 | 32.9 |
| 20°    | 101.7 | 87.0  | 72.8  | 60.2  | 50.6 | 43.0 | 37.9 | 34.4 | 32.9 | 32.4 |
| 22.5°  | 113.8 | 95.6  | 78.9  | 64.2  | 53.1 | 44.5 | 38.4 | 34.9 | 32.9 | 32.9 |
| 25°    | 127.5 | 104.7 | 85.0  | 67.8  | 55.1 | 45.5 | 39.0 | 34.9 | 33.4 | 32.9 |
| 27.5°  | 141.6 | 114.3 | 91.1  | 71.8  | 57.2 | 47.0 | 40.0 | 35.9 | 33.9 | 33.9 |
| 30°    | 155.8 | 123.9 | 96.6  | 74.9  | 59.2 | 48.1 | 41.0 | 36.9 | 34.9 | 34.4 |
| 32.5°  | 169.5 | 133.6 | 101.7 | 77.9  | 61.2 | 49.6 | 42.0 | 37.9 | 35.9 | 35.9 |
| 35°    | 181.6 | 141.1 | 106.2 | 79.9  | 62.7 | 51.1 | 43.5 | 39.0 | 36.9 | 36.9 |
| 37.5°  | 194.3 | 148.7 | 109.8 | 82.0  | 63.7 | 52.1 | 44.5 | 40.5 | 38.4 | 38.4 |
| 40°    | 205.9 | 155.3 | 112.8 | 83.5  | 64.8 | 53.1 | 46.0 | 42.0 | 40.0 | 40.0 |
| 42.5°  | 217.0 | 161.4 | 115.3 | 85.0  | 66.3 | 54.6 | 47.6 | 43.5 | 42.0 | 42.0 |
| 45°    | 227.1 | 165.9 | 117.4 | 86.0  | 67.3 | 56.2 | 49.6 | 45.5 | 44.0 | 43.5 |
| 47.5°  | 236.3 | 170.5 | 118.9 | 87.0  | 68.3 | 57.2 | 51.1 | 47.6 | 45.5 | 45.5 |
| 50°    | 244.9 | 174.5 | 120.4 | 87.5  | 69.3 | 58.7 | 53.1 | 49.6 | 48.1 | 48.1 |
| 52.5°  | 252.9 | 178.1 | 121.4 | 88.5  | 70.3 | 60.2 | 54.6 | 51.6 | 50.1 | 50.1 |
| 55°    | 260.5 | 181.6 | 123.4 | 89.5  | 71.8 | 62.2 | 56.7 | 53.6 | 52.1 | 52.1 |
| 57.5°  | 267.6 | 184.6 | 125.0 | 90.6  | 72.8 | 64.2 | 59.2 | 56.2 | 54.6 | 54.6 |
| 60°    | 274.2 | 187.2 | 126.0 | 91.6  | 74.4 | 66.3 | 61.2 | 58.2 | 56.7 | 56.7 |
| 62.5°  | 280.8 | 190.2 | 127.0 | 93.1  | 76.4 | 68.3 | 63.7 | 60.7 | 59.2 | 59.2 |
| 65°    | 286.8 | 192.7 | 128.5 | 94.6  | 77.9 | 70.3 | 65.8 | 63.2 | 61.7 | 61.2 |
| 67.5°  | 291.9 | 194.8 | 130.0 | 96.1  | 79.9 | 72.3 | 68.3 | 65.8 | 63.7 | 63.7 |
| 70°    | 297.0 | 197.3 | 132.0 | 97.6  | 82.0 | 74.9 | 70.3 | 67.8 | 66.3 | 65.8 |
| 72.5°  | 302.0 | 199.8 | 133.6 | 99.2  | 84.0 | 76.9 | 72.8 | 69.8 | 68.3 | 68.3 |
| 75°    | 306.6 | 201.8 | 135.6 | 101.2 | 86.0 | 79.4 | 74.9 | 72.3 | 70.3 | 70.3 |
| 77.5°  | 310.1 | 203.9 | 137.1 | 102.7 | 88.0 | 80.9 | 76.9 | 74.4 | 72.3 | 72.3 |
| 80°    | 313.1 | 205.4 | 138.6 | 104.7 | 90.0 | 83.0 | 78.9 | 75.9 | 74.4 | 73.9 |
| 82.5°  | 316.2 | 206.9 | 139.6 | 106.2 | 91.6 | 85.0 | 80.4 | 77.9 | 75.9 | 75.4 |
| 85°    | 317.7 | 208.4 | 141.1 | 107.8 | 93.1 | 86.5 | 82.0 | 78.9 | 77.4 | 76.9 |
| 87.5°  | 319.2 | 209.4 | 142.2 | 108.8 | 94.6 | 87.5 | 83.5 | 80.4 | 78.4 | 77.9 |
| 90°    | 320.2 | 210.4 | 143.2 | 110.3 | 95.6 | 89.0 | 84.5 | 80.9 | 78.9 | 78.9 |
| 92.5°  | 320.7 | 211.0 | 144.2 | 110.8 | 96.6 | 89.5 | 85.0 | 81.4 | 79.4 | 79.4 |
| 95°    | 320.7 | 211.5 | 145.2 | 111.8 | 97.6 | 90.0 | 85.5 | 82.0 | 79.9 | 79.4 |
| 97.5°  | 320.2 | 212.0 | 145.7 | 112.8 | 98.1 | 90.0 | 85.5 | 82.0 | 79.9 | 79.4 |
| 100°   | 318.7 | 211.5 | 146.7 | 113.3 | 98.1 | 90.0 | 85.0 | 81.4 | 79.4 | 78.9 |
| 102.5° | 317.2 | 212.0 | 147.7 | 114.3 | 98.6 | 90.0 | 84.5 | 80.9 | 78.9 | 78.4 |
| 105°   | 314.7 | 212.5 | 148.7 | 114.8 | 98.6 | 89.5 | 84.0 | 79.9 | 77.9 | 77.4 |
| 107.5° | 312.1 | 212.5 | 149.7 | 115.3 | 98.6 | 89.0 | 83.0 | 78.9 | 76.9 | 76.4 |
| 110°   | 309.6 | 213.5 | 151.3 | 116.9 | 98.6 | 88.5 | 82.0 | 77.9 | 75.4 | 75.4 |



REPORT NUMBER: P256795

CATALOG NUMBER: ULA-A4-D-U-ASYM-VMx-7030-HSS-BK

**CANDELA DISTRIBUTION (continued):**

|        | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 307.1 | 214.0 | 153.3 | 117.9 | 99.2  | 87.5  | 80.4  | 76.4  | 73.9  | 73.9  |
| 115°   | 304.0 | 215.0 | 155.3 | 118.9 | 99.2  | 87.0  | 79.4  | 74.9  | 72.3  | 72.3  |
| 117.5° | 301.0 | 216.0 | 156.8 | 120.4 | 99.7  | 86.5  | 78.4  | 73.4  | 70.8  | 70.8  |
| 120°   | 297.5 | 217.0 | 158.8 | 121.9 | 100.2 | 86.0  | 77.4  | 71.8  | 69.8  | 69.3  |
| 122.5° | 293.9 | 217.0 | 160.9 | 124.4 | 100.7 | 85.5  | 76.4  | 70.8  | 68.3  | 67.8  |
| 125°   | 289.4 | 217.0 | 162.4 | 125.5 | 101.2 | 85.5  | 75.4  | 69.3  | 66.8  | 66.3  |
| 127.5° | 284.3 | 216.5 | 163.9 | 126.5 | 101.2 | 85.0  | 74.4  | 68.3  | 65.3  | 65.3  |
| 130°   | 278.2 | 215.0 | 164.4 | 127.5 | 101.7 | 84.5  | 73.9  | 67.3  | 64.2  | 63.7  |
| 132.5° | 272.2 | 213.0 | 164.4 | 128.5 | 102.2 | 84.5  | 72.8  | 66.3  | 63.2  | 62.7  |
| 135°   | 263.6 | 209.4 | 163.4 | 128.5 | 102.2 | 84.5  | 72.3  | 65.8  | 62.2  | 62.2  |
| 137.5° | 255.0 | 205.4 | 161.9 | 127.5 | 102.2 | 84.0  | 72.3  | 65.3  | 61.7  | 61.2  |
| 140°   | 245.4 | 199.8 | 159.4 | 127.0 | 101.7 | 84.0  | 71.8  | 64.8  | 61.2  | 60.7  |
| 142.5° | 235.2 | 194.3 | 156.8 | 126.0 | 101.7 | 84.0  | 71.8  | 64.8  | 61.2  | 60.7  |
| 145°   | 225.1 | 188.2 | 153.8 | 124.4 | 100.7 | 84.0  | 71.8  | 64.8  | 61.2  | 60.7  |
| 147.5° | 214.5 | 181.6 | 150.2 | 121.9 | 100.2 | 84.0  | 72.3  | 64.8  | 61.7  | 61.2  |
| 150°   | 203.4 | 173.5 | 145.7 | 119.4 | 99.2  | 83.5  | 72.3  | 65.3  | 62.2  | 61.7  |
| 152.5° | 192.2 | 165.4 | 140.1 | 116.4 | 98.1  | 83.5  | 72.8  | 66.3  | 63.2  | 62.7  |
| 155°   | 180.1 | 157.3 | 135.1 | 113.8 | 97.1  | 84.0  | 74.4  | 67.8  | 65.3  | 64.8  |
| 157.5° | 169.0 | 149.2 | 130.0 | 111.3 | 96.6  | 84.5  | 75.9  | 69.8  | 67.3  | 66.8  |
| 160°   | 157.8 | 141.1 | 124.4 | 108.8 | 95.6  | 85.0  | 76.9  | 71.8  | 69.3  | 69.3  |
| 162.5° | 146.7 | 132.5 | 117.9 | 105.2 | 94.1  | 85.0  | 78.4  | 73.9  | 71.3  | 71.3  |
| 165°   | 135.6 | 123.4 | 112.3 | 101.7 | 92.6  | 85.5  | 79.4  | 75.9  | 73.9  | 73.4  |
| 167.5° | 126.0 | 116.4 | 107.2 | 99.2  | 91.6  | 86.0  | 80.9  | 77.9  | 76.4  | 76.4  |
| 170°   | 116.9 | 110.3 | 103.2 | 97.1  | 91.6  | 87.0  | 83.0  | 80.9  | 79.4  | 79.4  |
| 172.5° | 110.3 | 105.7 | 100.7 | 96.1  | 92.1  | 88.5  | 86.0  | 84.5  | 83.5  | 83.0  |
| 175°   | 105.7 | 102.7 | 99.2  | 96.6  | 94.1  | 91.6  | 90.0  | 89.5  | 89.0  | 89.0  |
| 177.5° | 103.7 | 101.7 | 100.2 | 98.6  | 97.6  | 96.6  | 96.1  | 95.6  | 95.6  | 95.1  |
| 180°   | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 | 103.7 |

(END OF REPORT)