

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: P140624

Luminaire Tested: **EMM-F01-LED-E1-5XQ-7030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140624
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33688)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: EMM-F01-LED-E1-5XQ-7030
Description: EPIC MODERN MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (7) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2248.1 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U0 - G1

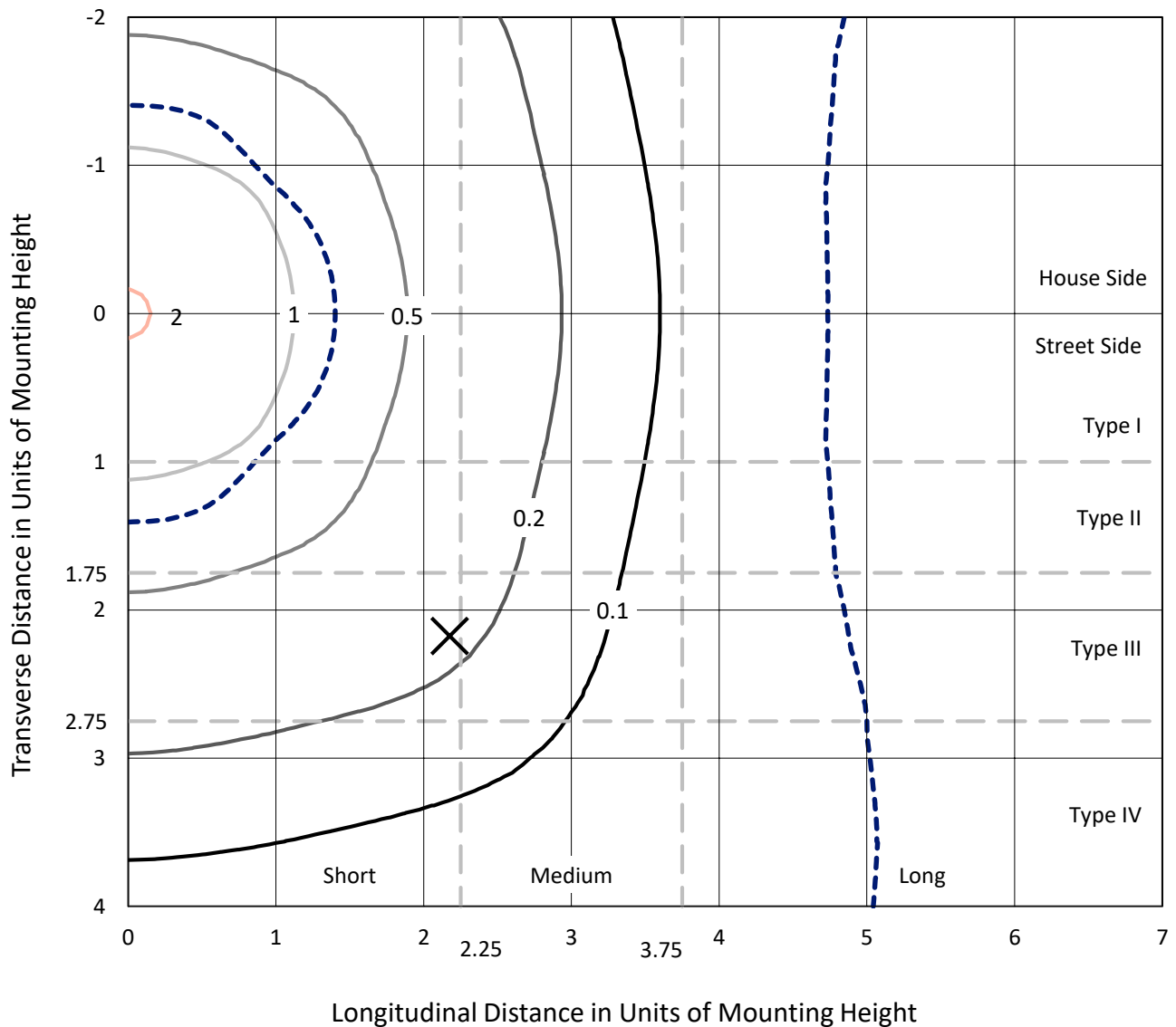
Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

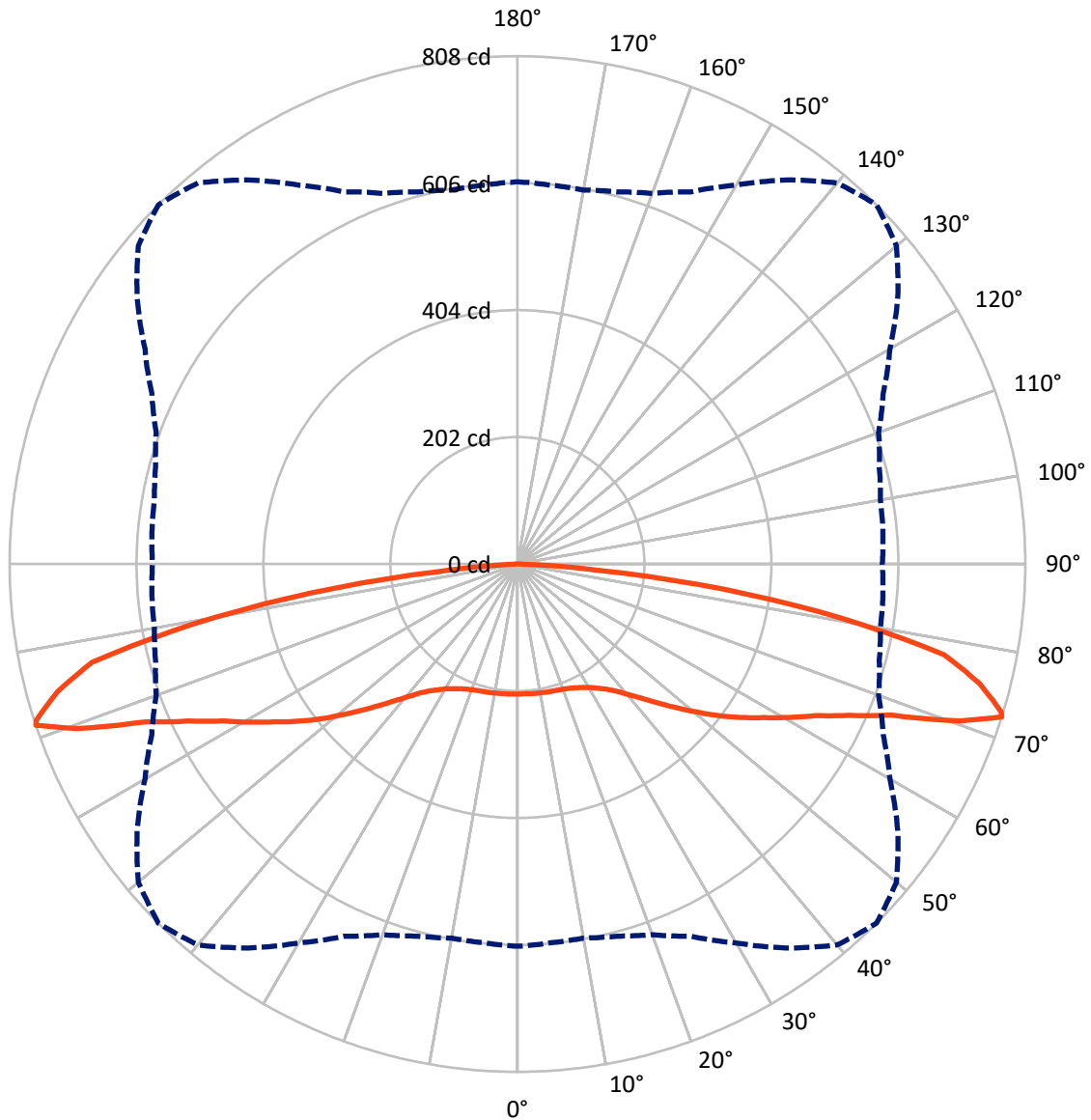
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.1 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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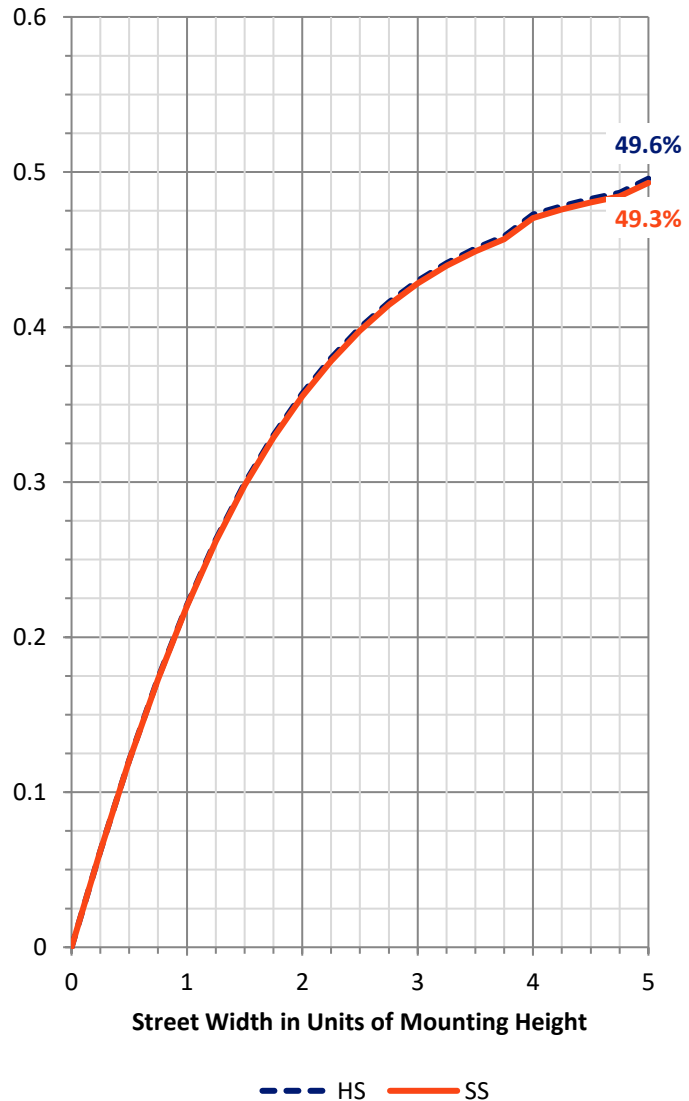
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1124.0 | 0.0 | 1124.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 1124.0 | 0.0 | 1124.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 2248.1 | 0.0 | 2248.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 19.8 | 0.9 |
| 10°-20° | 59.6 | 2.7 |
| 20°-30° | 100.9 | 4.5 |
| 30°-40° | 153.5 | 6.8 |
| 40°-50° | 243.1 | 10.8 |
| 50°-60° | 372.5 | 16.6 |
| 60°-70° | 546.9 | 24.3 |
| 70°-80° | 620.3 | 27.6 |
| 80°-90° | 131.4 | 5.8 |
| 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° | 2248.1 | 100.0 |
| 0°-180° | 2248.1 | 100.0 |



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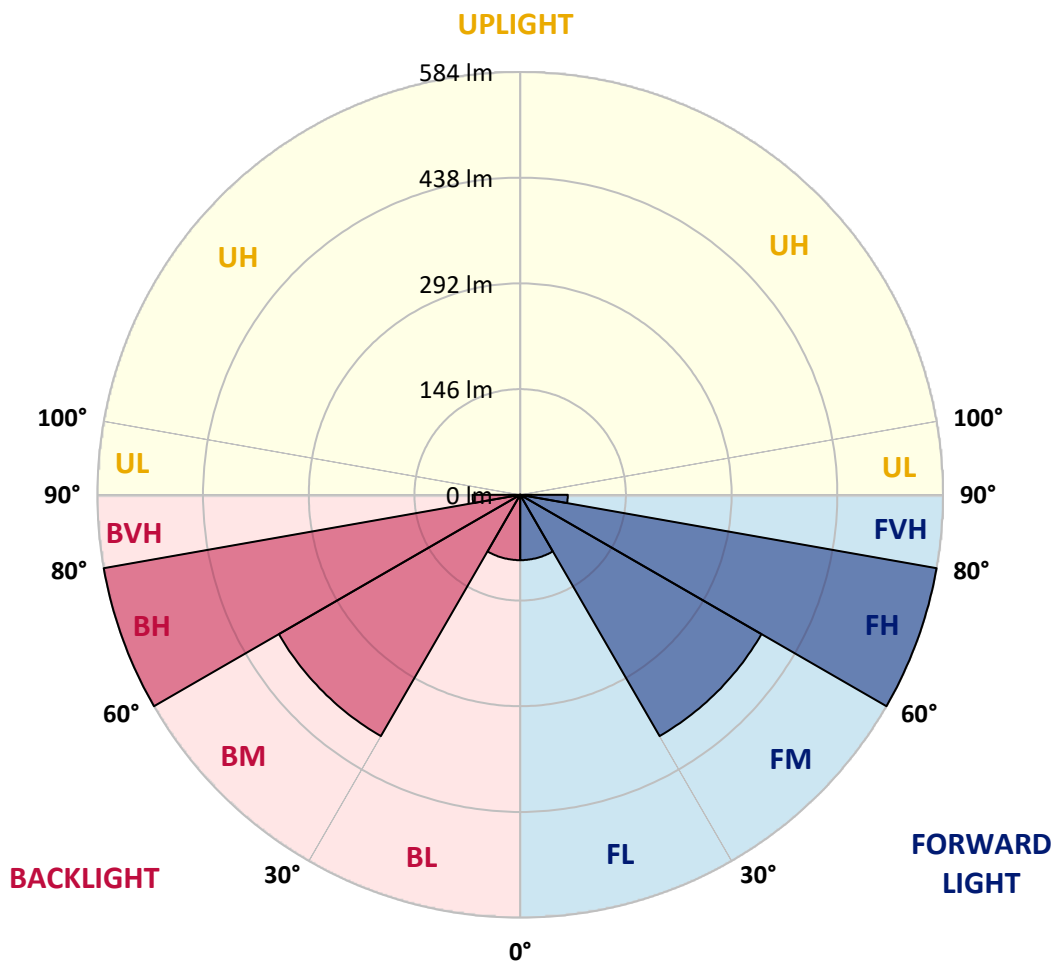
CATALOG NUMBER: EMM-F01-LED-E1-5XQ-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|--------|
| | | | | B | U | G |
| FL | (0°-30°) | 90.2 | 4.0 | | | |
| FM | (30°-60°) | 384.5 | 17.1 | | | |
| FH | (60°-80°) | 583.6 | 26.0 | | | G0/660 |
| FVH | (80°-90°) | 65.7 | 2.9 | | | G1/100 |
| BL | (0°-30°) | 90.2 | 4.0 | B0/110 | | |
| BM | (30°-60°) | 384.5 | 17.1 | B1/1000 | | |
| BH | (60°-80°) | 583.6 | 26.0 | B2/1000 | | G0/660 |
| BVH | (80°-90°) | 65.7 | 2.9 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 206.6 | 206.6 | 206.6 | 206.6 | 206.6 | 206.6 | 206.6 | 206.6 | 206.6 | 206.6 | 206.6 |
| 2.5° | 207.3 | 207.6 | 207.3 | 207.1 | 207.1 | 206.8 | 206.8 | 206.8 | 207.1 | 206.6 | 206.6 |
| 5° | 207.9 | 208.1 | 207.9 | 207.3 | 207.3 | 207.3 | 207.1 | 207.1 | 207.3 | 207.1 | 207.1 |
| 7.5° | 208.6 | 208.9 | 208.6 | 208.1 | 208.1 | 207.9 | 207.6 | 207.6 | 208.1 | 207.6 | 207.6 |
| 10° | 209.4 | 209.9 | 209.4 | 208.9 | 208.9 | 208.6 | 208.4 | 208.4 | 208.6 | 208.1 | 208.1 |
| 12.5° | 210.6 | 210.6 | 210.4 | 210.1 | 210.1 | 209.9 | 209.6 | 209.4 | 209.1 | 208.9 | 208.6 |
| 15° | 211.6 | 211.9 | 211.4 | 211.1 | 210.9 | 210.6 | 210.4 | 210.4 | 209.9 | 209.6 | 209.6 |
| 17.5° | 212.9 | 213.1 | 212.6 | 212.1 | 212.1 | 211.6 | 211.4 | 211.4 | 210.9 | 210.6 | 210.4 |
| 20° | 214.1 | 214.4 | 213.9 | 213.6 | 213.4 | 213.1 | 212.6 | 212.9 | 212.6 | 212.1 | 212.1 |
| 22.5° | 215.6 | 215.6 | 215.4 | 215.1 | 215.1 | 214.9 | 214.6 | 215.1 | 214.6 | 214.6 | 214.4 |
| 25° | 217.2 | 217.4 | 217.2 | 217.2 | 217.4 | 217.4 | 217.7 | 218.2 | 218.2 | 217.9 | 217.7 |
| 27.5° | 220.4 | 220.4 | 220.4 | 220.4 | 221.2 | 221.2 | 221.4 | 222.2 | 222.4 | 222.4 | 222.4 |
| 30° | 224.7 | 224.9 | 224.7 | 224.7 | 225.4 | 225.7 | 226.4 | 227.2 | 227.7 | 227.7 | 228.0 |
| 32.5° | 231.0 | 230.7 | 231.0 | 231.5 | 232.0 | 232.5 | 233.2 | 234.5 | 235.2 | 235.5 | 235.5 |
| 35° | 239.0 | 239.3 | 239.0 | 239.3 | 240.3 | 241.0 | 241.8 | 243.3 | 243.8 | 244.3 | 244.5 |
| 37.5° | 250.8 | 251.6 | 251.1 | 251.1 | 252.3 | 252.8 | 253.8 | 255.1 | 256.1 | 256.6 | 256.4 |
| 40° | 267.9 | 267.7 | 267.2 | 267.4 | 267.7 | 268.2 | 269.2 | 271.7 | 272.9 | 272.9 | 272.9 |
| 42.5° | 287.5 | 287.8 | 287.0 | 286.8 | 287.0 | 287.5 | 289.0 | 291.0 | 293.1 | 292.5 | 292.8 |
| 45° | 309.9 | 308.1 | 308.6 | 308.1 | 308.4 | 310.1 | 312.7 | 313.7 | 315.7 | 315.7 | 316.2 |
| 47.5° | 331.8 | 331.0 | 330.8 | 330.5 | 331.3 | 333.0 | 336.0 | 339.3 | 341.1 | 342.1 | 342.8 |
| 50° | 356.4 | 355.1 | 354.9 | 355.1 | 355.4 | 355.9 | 361.7 | 364.9 | 369.2 | 370.0 | 369.7 |
| 52.5° | 380.3 | 379.3 | 378.8 | 378.8 | 379.8 | 381.5 | 387.6 | 392.8 | 397.6 | 400.6 | 399.4 |
| 55° | 406.2 | 406.2 | 404.6 | 404.1 | 405.6 | 407.4 | 415.7 | 421.7 | 428.5 | 430.8 | 427.3 |
| 57.5° | 432.8 | 432.5 | 430.3 | 429.5 | 430.8 | 435.3 | 442.3 | 451.6 | 458.9 | 460.9 | 458.9 |
| 60° | 458.9 | 458.9 | 457.7 | 457.2 | 458.4 | 464.0 | 472.5 | 482.8 | 491.6 | 495.4 | 492.1 |
| 62.5° | 488.8 | 488.8 | 485.6 | 487.1 | 488.8 | 493.1 | 503.9 | 517.2 | 529.1 | 531.1 | 528.0 |
| 65° | 522.8 | 524.3 | 521.8 | 521.3 | 523.5 | 531.6 | 543.9 | 560.7 | 574.5 | 579.8 | 575.3 |
| 67.5° | 574.5 | 572.3 | 569.3 | 568.0 | 571.5 | 579.1 | 594.1 | 616.3 | 636.6 | 641.6 | 636.4 |
| 70° | 628.3 | 626.1 | 625.1 | 629.1 | 636.6 | 652.5 | 675.6 | 706.5 | 734.9 | 747.0 | 735.9 |
| 72° | 607.7 | 604.7 | 603.9 | 612.5 | 627.1 | 653.0 | 695.7 | 745.4 | 790.7 | 807.5 | 786.7 |
| 72.5° | 597.2 | 594.6 | 594.4 | 602.4 | 618.3 | 644.4 | 686.4 | 737.7 | 786.2 | 804.5 | 782.1 |
| 75° | 554.4 | 551.9 | 554.4 | 563.5 | 579.3 | 607.5 | 650.2 | 698.2 | 741.9 | 758.8 | 736.9 |
| 77.5° | 495.4 | 490.8 | 493.1 | 505.7 | 523.3 | 553.9 | 599.2 | 656.0 | 698.2 | 693.7 | 661.3 |
| 80° | 395.3 | 385.3 | 396.1 | 399.9 | 420.0 | 440.6 | 484.3 | 509.7 | 524.3 | 525.0 | 501.9 |
| 82.5° | 172.7 | 176.7 | 190.3 | 201.6 | 215.9 | 239.8 | 257.4 | 284.8 | 316.7 | 331.5 | 313.7 |
| 85° | 11.3 | 14.1 | 22.4 | 26.6 | 36.9 | 45.0 | 64.6 | 94.0 | 113.4 | 129.7 | 109.3 |
| 87.5° | 2.0 | 2.8 | 5.0 | 6.0 | 6.5 | 7.3 | 7.3 | 10.1 | 10.6 | 8.5 | 9.6 |
| 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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CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 206.6 | 206.6 | 206.6 | 206.6 | 206.6 | 206.6 | 206.6 | 206.6 |
| 2.5° | 206.6 | 206.6 | 206.8 | 206.6 | 206.6 | 206.6 | 206.3 | 206.3 |
| 5° | 206.8 | 206.8 | 207.1 | 207.1 | 206.8 | 206.8 | 206.8 | 206.8 |
| 7.5° | 207.6 | 207.3 | 207.6 | 207.6 | 207.3 | 207.3 | 207.1 | 207.3 |
| 10° | 207.9 | 207.9 | 208.1 | 208.1 | 207.9 | 207.9 | 207.9 | 207.9 |
| 12.5° | 208.6 | 208.6 | 208.6 | 208.9 | 208.6 | 208.6 | 208.9 | 208.6 |
| 15° | 209.4 | 209.1 | 209.1 | 209.1 | 209.1 | 209.4 | 209.4 | 209.6 |
| 17.5° | 210.1 | 210.1 | 209.9 | 210.1 | 210.1 | 210.4 | 210.4 | 210.4 |
| 20° | 211.6 | 211.4 | 210.9 | 211.4 | 211.4 | 211.4 | 211.4 | 211.6 |
| 22.5° | 213.9 | 213.4 | 212.9 | 212.9 | 212.6 | 212.9 | 212.6 | 212.6 |
| 25° | 217.2 | 216.4 | 215.6 | 215.4 | 215.1 | 214.9 | 214.6 | 214.9 |
| 27.5° | 221.9 | 220.9 | 219.9 | 219.4 | 219.2 | 218.7 | 218.4 | 218.4 |
| 30° | 227.2 | 226.4 | 224.9 | 224.4 | 223.7 | 222.9 | 222.9 | 222.7 |
| 32.5° | 235.2 | 234.2 | 232.5 | 231.7 | 230.5 | 229.7 | 229.5 | 229.5 |
| 35° | 243.5 | 242.3 | 241.5 | 240.5 | 239.0 | 238.3 | 238.0 | 238.0 |
| 37.5° | 256.1 | 254.6 | 253.6 | 252.3 | 252.1 | 251.1 | 251.1 | 251.1 |
| 40° | 272.4 | 271.2 | 269.9 | 268.9 | 268.2 | 267.4 | 266.4 | 266.4 |
| 42.5° | 292.5 | 290.5 | 289.8 | 288.5 | 287.5 | 286.8 | 286.3 | 286.3 |
| 45° | 314.7 | 312.9 | 311.9 | 310.1 | 309.9 | 309.4 | 308.4 | 308.4 |
| 47.5° | 339.5 | 337.0 | 335.0 | 334.5 | 333.3 | 332.0 | 331.5 | 331.8 |
| 50° | 366.7 | 362.4 | 359.7 | 359.7 | 358.1 | 356.4 | 356.6 | 356.4 |
| 52.5° | 394.6 | 389.8 | 386.3 | 383.8 | 382.0 | 381.8 | 382.0 | 381.8 |
| 55° | 422.7 | 417.7 | 413.4 | 410.7 | 408.9 | 407.2 | 406.9 | 406.9 |
| 57.5° | 451.9 | 445.6 | 438.8 | 436.3 | 434.6 | 433.5 | 433.5 | 433.8 |
| 60° | 484.8 | 474.5 | 466.0 | 462.7 | 461.4 | 461.9 | 461.7 | 461.9 |
| 62.5° | 518.2 | 506.4 | 496.4 | 492.6 | 490.8 | 490.6 | 492.6 | 493.4 |
| 65° | 560.5 | 545.9 | 534.6 | 527.5 | 527.5 | 526.8 | 529.1 | 528.0 |
| 67.5° | 615.5 | 594.9 | 581.1 | 569.8 | 570.0 | 570.8 | 574.0 | 573.8 |
| 70° | 709.3 | 672.8 | 647.2 | 627.8 | 620.3 | 615.3 | 614.3 | 614.3 |
| 72° | 738.2 | 683.9 | 641.6 | 611.2 | 595.7 | 586.1 | 583.3 | 580.3 |
| 72.5° | 730.6 | 674.8 | 632.1 | 600.4 | 584.3 | 574.8 | 570.5 | 566.8 |
| 75° | 683.1 | 620.8 | 574.3 | 541.1 | 523.3 | 511.7 | 509.4 | 507.7 |
| 77.5° | 602.7 | 547.4 | 499.4 | 465.0 | 447.1 | 432.3 | 426.3 | 425.8 |
| 80° | 464.7 | 414.9 | 378.0 | 351.1 | 335.0 | 324.0 | 324.5 | 320.9 |
| 82.5° | 274.2 | 232.2 | 200.6 | 164.6 | 141.0 | 127.4 | 118.9 | 117.9 |
| 85° | 80.7 | 54.8 | 34.9 | 25.1 | 18.1 | 13.6 | 10.1 | 9.0 |
| 87.5° | 7.3 | 5.8 | 4.8 | 4.0 | 3.8 | 3.3 | 2.0 | 1.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)