

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: P173747

Luminaire Tested: **ENV-EXX-LED-E1-BL4-8030-CWB**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P173747  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33646)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-EXX-LED-E1-BL4-8030-CWB  
Description: ENTRI LED LUMINAIRE, EMERGENCY MODE  
LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL  
Light Source: (42) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1427.8 lumens  
Efficiency: N/A  
Efficacy: 259.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B0 - U0 - G0

Input Watts (W): 5.5  
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



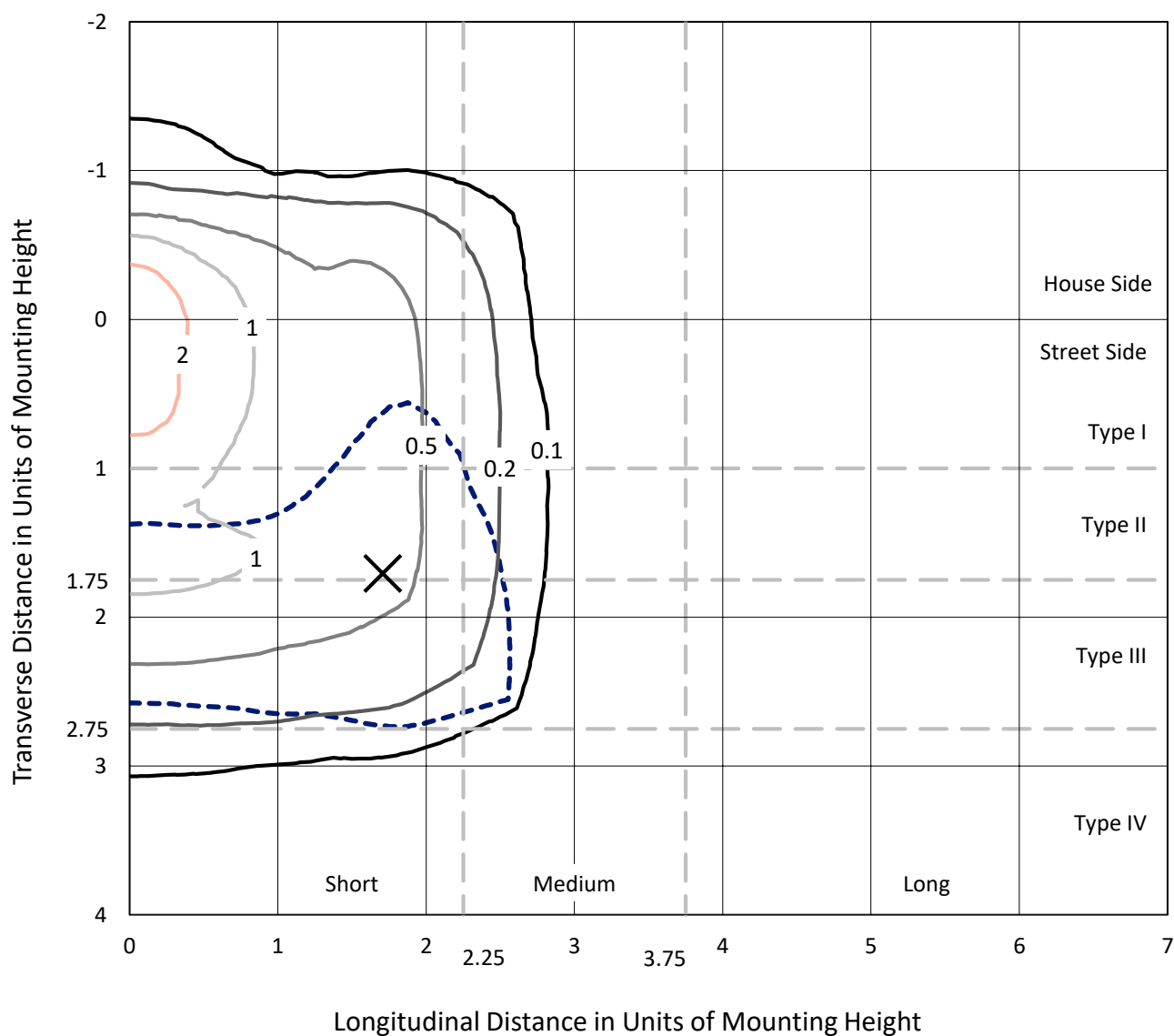
REPORT NUMBER: P173747

CATALOG NUMBER: ENV-EXX-LED-E1-BL4-8030-CWB

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

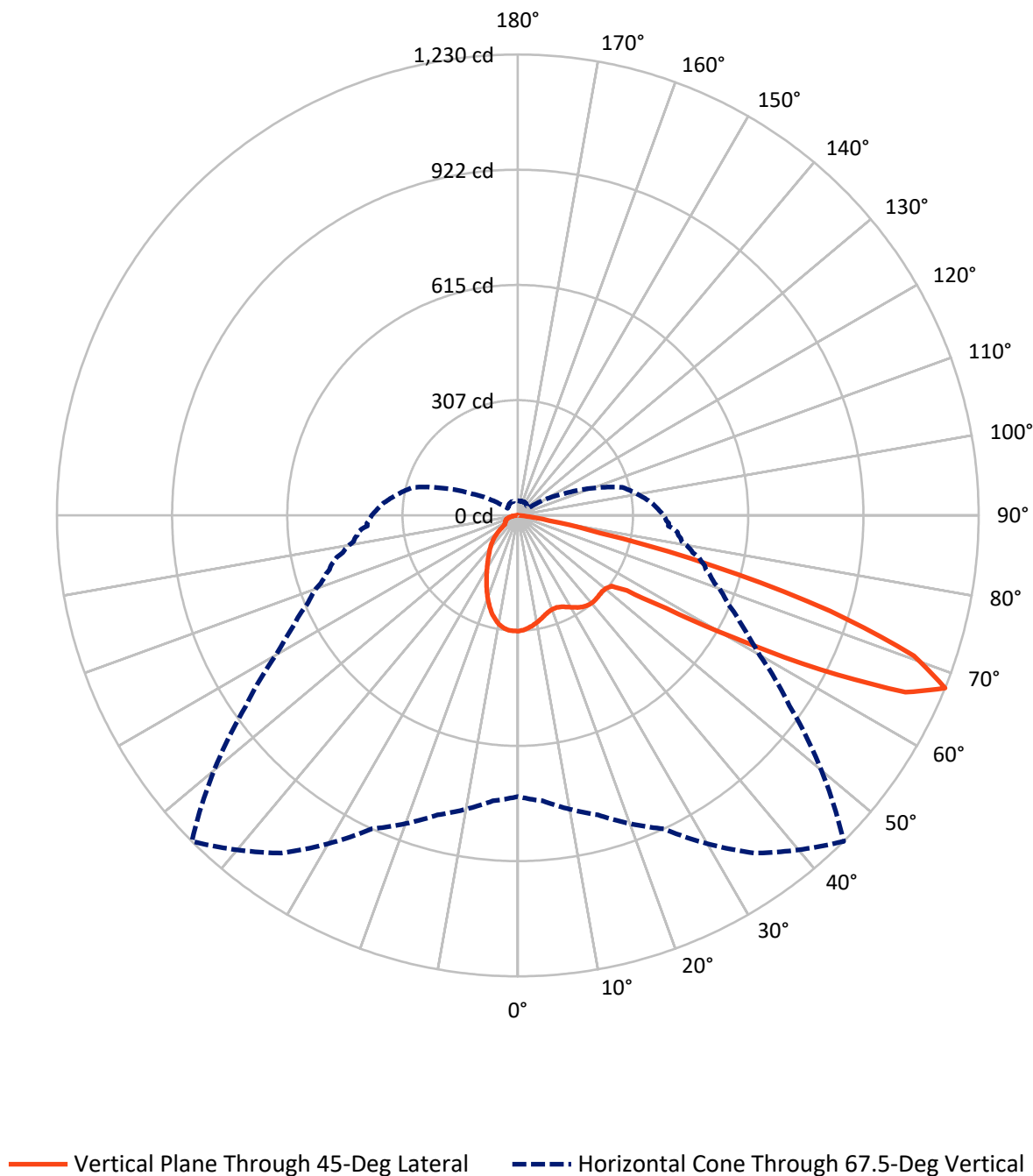


Based on 10 foot mounting height. Maximum calculated value = 3.1 fc  
 Type III - Short - Full Cutoff

REPORT NUMBER: P173747

CATALOG NUMBER: ENV-EXX-LED-E1-BL4-8030-CWB

## Luminous Intensity Polar Plot



REPORT NUMBER: P173747

CATALOG NUMBER: ENV-EXX-LED-E1-BL4-8030-CWB

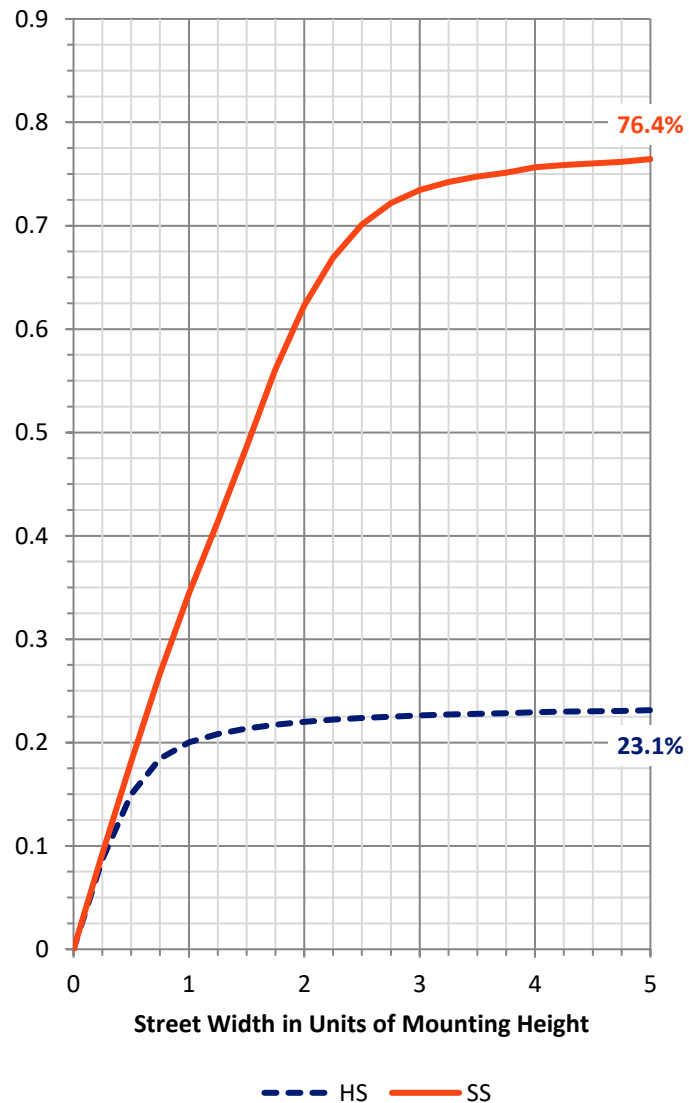
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 334.6    | 0.0    | 334.6  |
|                    | % Fixture | 23.4     | 0.0    | 23.4   |
| <b>Street Side</b> | Lumens    | 1093.2   | 0.0    | 1093.2 |
|                    | % Fixture | 76.6     | 0.0    | 76.6   |
| <b>Total</b>       | Lumens    | 1427.8   | 0.0    | 1427.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 28.7   | 2.0       |
| 10°-20°   | 77.1   | 5.4       |
| 20°-30°   | 111.2  | 7.8       |
| 30°-40°   | 141.9  | 9.9       |
| 40°-50°   | 167.5  | 11.7      |
| 50°-60°   | 268.6  | 18.8      |
| 60°-70°   | 452.0  | 31.7      |
| 70°-80°   | 168.1  | 11.8      |
| 80°-90°   | 12.8   | 0.9       |
| 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°    | 1427.8 | 100.0     |
| 0°-180°   | 1427.8 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P173747

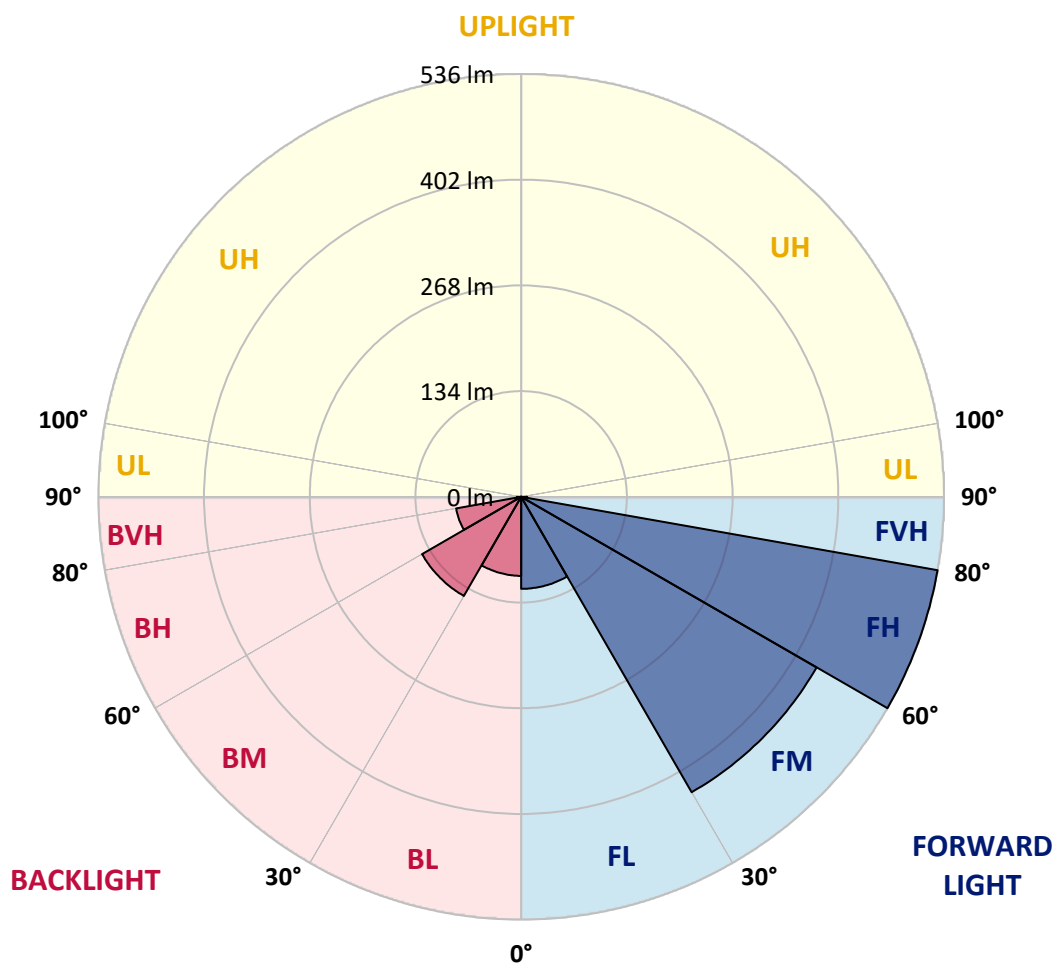
CATALOG NUMBER: ENV-EXX-LED-E1-BL4-8030-CWB

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|--------|-----------|-------------------------|------|--------|
|      |             |        |           | B                       | U    | G      |
| FL   | (0°-30°)    | 116.7  | 8.2       |                         |      |        |
| FM   | (30°-60°)   | 432.7  | 30.3      |                         |      |        |
| FH   | (60°-80°)   | 536.2  | 37.6      |                         |      | G0/660 |
| FVH  | (80°-90°)   | 7.6    | 0.5       |                         |      | G0/10  |
| BL   | (0°-30°)    | 100.3  | 7.0       | B0/110                  |      |        |
| BM   | (30°-60°)   | 145.2  | 10.2      | B0/220                  |      |        |
| BH   | (60°-80°)   | 83.8   | 5.9       | B0/110                  |      | G0/110 |
| BVH  | (80°-90°)   | 5.2    | 0.4       |                         |      | G0/10  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B0-U0-G0**

Type III Short



REPORT NUMBER: P173747

CATALOG NUMBER: ENV-EXX-LED-E1-BL4-8030-CWB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°   | 35°    | 45°    | 55°   | 60°   | 61°   | 62°   | 64°   |
|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|-------|
| 0°    | 308.5 | 308.5 | 308.5 | 308.5 | 308.5  | 308.5  | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 |
| 2.5°  | 304.1 | 304.1 | 304.7 | 304.7 | 305.5  | 306.1  | 305.5 | 306.6 | 306.6 | 306.3 | 306.9 |
| 5°    | 299.8 | 299.8 | 300.0 | 300.0 | 300.6  | 301.4  | 300.8 | 301.9 | 301.7 | 301.9 | 301.9 |
| 7.5°  | 294.6 | 294.6 | 295.1 | 294.9 | 295.1  | 295.7  | 294.3 | 295.1 | 295.1 | 295.4 | 295.1 |
| 10°   | 288.0 | 288.6 | 289.1 | 288.8 | 288.8  | 289.1  | 286.9 | 287.7 | 287.5 | 287.5 | 287.2 |
| 12.5° | 282.0 | 281.4 | 282.0 | 282.5 | 282.3  | 282.3  | 280.1 | 279.5 | 279.5 | 279.5 | 279.8 |
| 15°   | 275.7 | 276.3 | 277.1 | 276.3 | 275.7  | 274.6  | 272.4 | 271.9 | 271.9 | 271.9 | 272.2 |
| 17.5° | 274.4 | 274.4 | 274.9 | 274.1 | 271.9  | 269.7  | 265.3 | 264.5 | 264.5 | 264.2 | 264.2 |
| 20°   | 278.2 | 277.9 | 278.7 | 277.1 | 272.2  | 266.4  | 259.6 | 258.2 | 258.2 | 258.2 | 257.9 |
| 22.5° | 286.1 | 286.1 | 287.5 | 285.6 | 277.6  | 266.7  | 256.6 | 254.4 | 254.1 | 253.9 | 253.3 |
| 25°   | 301.4 | 301.1 | 301.9 | 297.0 | 285.6  | 270.2  | 255.8 | 252.5 | 252.2 | 251.7 | 251.1 |
| 27.5° | 319.2 | 319.7 | 321.3 | 314.0 | 297.0  | 276.5  | 259.3 | 253.9 | 253.3 | 252.5 | 251.4 |
| 30°   | 336.6 | 338.3 | 341.3 | 333.4 | 310.1  | 284.5  | 264.8 | 258.5 | 257.4 | 256.3 | 254.4 |
| 32.5° | 358.8 | 358.2 | 363.2 | 351.1 | 321.6  | 292.9  | 270.5 | 262.9 | 261.5 | 259.9 | 257.4 |
| 35°   | 382.3 | 383.4 | 384.5 | 365.1 | 331.2  | 299.8  | 274.1 | 265.3 | 263.7 | 262.1 | 258.5 |
| 37.5° | 405.8 | 406.1 | 403.6 | 376.3 | 336.9  | 303.9  | 276.0 | 265.9 | 263.7 | 261.2 | 257.1 |
| 40°   | 427.4 | 426.6 | 419.2 | 384.7 | 340.2  | 306.1  | 276.8 | 264.8 | 262.1 | 259.6 | 254.9 |
| 42.5° | 439.7 | 438.8 | 429.6 | 388.6 | 340.5  | 305.8  | 276.8 | 263.7 | 260.7 | 257.7 | 252.5 |
| 45°   | 444.8 | 444.3 | 433.6 | 389.1 | 338.6  | 304.1  | 275.2 | 262.6 | 259.6 | 256.9 | 251.4 |
| 47.5° | 445.4 | 445.4 | 434.5 | 388.3 | 336.9  | 303.0  | 275.2 | 264.0 | 261.5 | 259.3 | 255.2 |
| 50°   | 442.9 | 443.2 | 434.7 | 390.5 | 338.3  | 305.5  | 277.9 | 267.2 | 264.8 | 262.6 | 257.9 |
| 52.5° | 471.9 | 469.2 | 450.3 | 400.3 | 347.3  | 313.4  | 287.2 | 277.6 | 276.8 | 275.4 | 271.9 |
| 55°   | 693.2 | 695.4 | 592.4 | 461.8 | 385.3  | 354.1  | 343.2 | 341.3 | 347.3 | 349.5 | 349.5 |
| 57.5° | 880.1 | 873.1 | 834.2 | 673.8 | 503.9  | 466.4  | 470.8 | 475.4 | 484.2 | 488.0 | 490.8 |
| 60°   | 925.8 | 926.3 | 925.2 | 879.6 | 743.8  | 658.5  | 637.2 | 617.0 | 616.2 | 609.1 | 603.6 |
| 62.5° | 920.3 | 924.7 | 945.2 | 955.6 | 969.0  | 906.4  | 776.3 | 720.3 | 709.4 | 696.0 | 676.9 |
| 65°   | 880.7 | 887.2 | 920.0 | 970.6 | 1085.9 | 1137.3 | 870.0 | 769.7 | 752.8 | 736.7 | 704.4 |
| 67.5° | 750.4 | 764.6 | 827.4 | 922.8 | 1099.9 | 1229.9 | 885.3 | 745.7 | 723.3 | 702.3 | 664.0 |
| 70°   | 463.2 | 470.6 | 567.6 | 744.6 | 996.5  | 1121.4 | 803.9 | 632.9 | 604.4 | 577.7 | 525.5 |
| 72.5° | 298.9 | 296.5 | 312.9 | 419.4 | 732.3  | 871.4  | 552.8 | 420.8 | 397.6 | 376.3 | 342.7 |
| 75°   | 209.3 | 209.6 | 202.2 | 200.0 | 339.7  | 539.7  | 250.3 | 179.8 | 169.4 | 165.1 | 157.9 |
| 77.5° | 136.4 | 138.0 | 136.1 | 141.3 | 136.1  | 224.3  | 115.0 | 84.4  | 80.3  | 77.6  | 73.2  |
| 80°   | 82.2  | 87.7  | 89.4  | 90.5  | 91.8   | 84.7   | 68.3  | 49.7  | 44.8  | 40.2  | 33.1  |
| 82.5° | 14.5  | 14.2  | 19.7  | 26.5  | 34.7   | 39.6   | 28.7  | 18.0  | 16.9  | 16.4  | 15.0  |
| 85°   | 0.0   | 0.0   | 0.3   | 0.3   | 0.6    | 1.9    | 3.0   | 3.6   | 3.3   | 3.6   | 3.8   |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.3   | 0.3    | 0.6    | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   |
| 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: P173747

CATALOG NUMBER: ENV-EXX-LED-E1-BL4-8030-CWB

**CANDELA DISTRIBUTION (continued):**

|       | 65°   | 66°   | 67°   | 68°   | 69°   | 70°   | 71°   | 72°   | 73°   | 74°   | 75°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 |
| 2.5°  | 306.9 | 306.6 | 306.3 | 306.3 | 306.9 | 306.9 | 306.6 | 306.6 | 306.9 | 306.6 | 307.1 |
| 5°    | 302.2 | 301.9 | 301.9 | 301.7 | 301.9 | 302.2 | 301.9 | 301.9 | 302.2 | 301.9 | 302.5 |
| 7.5°  | 294.9 | 295.1 | 294.9 | 294.9 | 295.1 | 295.4 | 295.1 | 295.1 | 295.1 | 295.1 | 294.9 |
| 10°   | 287.2 | 287.2 | 286.9 | 286.9 | 287.5 | 287.2 | 286.9 | 286.9 | 287.2 | 287.5 | 286.9 |
| 12.5° | 279.5 | 280.1 | 280.1 | 279.0 | 279.3 | 279.5 | 279.5 | 279.3 | 279.3 | 280.1 | 279.3 |
| 15°   | 271.9 | 272.2 | 271.9 | 272.2 | 271.6 | 271.3 | 271.6 | 271.6 | 271.1 | 270.8 | 270.8 |
| 17.5° | 264.2 | 264.0 | 264.0 | 263.4 | 263.2 | 263.2 | 262.9 | 263.2 | 262.6 | 262.9 | 262.1 |
| 20°   | 257.4 | 257.1 | 256.9 | 256.9 | 256.0 | 256.0 | 256.0 | 255.8 | 255.2 | 255.2 | 254.9 |
| 22.5° | 253.3 | 253.0 | 252.8 | 252.2 | 252.0 | 251.7 | 251.7 | 251.4 | 250.9 | 250.6 | 250.3 |
| 25°   | 251.1 | 250.9 | 250.3 | 249.8 | 249.5 | 249.2 | 249.2 | 248.9 | 248.4 | 247.8 | 247.6 |
| 27.5° | 251.4 | 250.9 | 250.3 | 249.8 | 249.5 | 248.9 | 248.6 | 248.4 | 247.8 | 247.3 | 246.7 |
| 30°   | 253.9 | 252.8 | 251.7 | 250.9 | 250.0 | 249.2 | 248.6 | 248.4 | 247.6 | 246.7 | 245.9 |
| 32.5° | 256.3 | 254.9 | 253.3 | 251.7 | 250.3 | 248.9 | 248.1 | 247.3 | 246.2 | 244.8 | 244.0 |
| 35°   | 257.1 | 255.5 | 253.0 | 251.7 | 249.8 | 248.1 | 246.7 | 245.6 | 243.7 | 242.1 | 240.7 |
| 37.5° | 255.2 | 253.3 | 250.9 | 248.9 | 247.0 | 244.8 | 243.2 | 241.6 | 240.2 | 238.3 | 236.9 |
| 40°   | 252.2 | 250.0 | 247.6 | 244.8 | 242.9 | 240.7 | 239.1 | 237.7 | 235.8 | 234.2 | 233.1 |
| 42.5° | 249.8 | 247.3 | 244.6 | 242.4 | 240.2 | 238.0 | 236.1 | 234.7 | 232.8 | 230.9 | 229.5 |
| 45°   | 248.9 | 246.5 | 244.3 | 241.6 | 239.4 | 237.7 | 236.1 | 234.2 | 232.5 | 230.9 | 229.3 |
| 47.5° | 253.3 | 251.1 | 248.9 | 246.7 | 244.8 | 242.9 | 241.3 | 239.4 | 237.4 | 235.3 | 233.6 |
| 50°   | 255.8 | 253.3 | 251.4 | 248.9 | 246.7 | 244.8 | 243.2 | 241.3 | 239.9 | 237.7 | 236.1 |
| 52.5° | 273.5 | 270.2 | 270.8 | 268.6 | 268.6 | 266.4 | 268.1 | 265.6 | 267.0 | 265.3 | 267.8 |
| 55°   | 348.7 | 349.8 | 356.6 | 357.7 | 360.4 | 360.2 | 361.8 | 368.9 | 366.1 | 362.6 | 363.7 |
| 57.5° | 483.4 | 485.8 | 489.4 | 486.1 | 488.6 | 489.1 | 493.8 | 491.9 | 490.2 | 489.1 | 485.6 |
| 60°   | 600.3 | 597.0 | 591.9 | 585.6 | 583.1 | 580.4 | 575.7 | 575.7 | 569.7 | 567.8 | 563.2 |
| 62.5° | 668.9 | 659.4 | 652.8 | 642.7 | 635.6 | 630.7 | 622.5 | 616.2 | 608.0 | 601.7 | 594.3 |
| 65°   | 691.3 | 675.2 | 663.7 | 651.2 | 639.9 | 629.3 | 617.5 | 608.5 | 598.4 | 591.6 | 579.8 |
| 67.5° | 647.9 | 631.5 | 612.1 | 598.7 | 586.9 | 573.5 | 555.3 | 544.1 | 535.3 | 522.2 | 516.4 |
| 70°   | 504.4 | 487.2 | 462.9 | 456.3 | 438.3 | 417.5 | 398.9 | 387.7 | 374.9 | 365.9 | 356.3 |
| 72.5° | 320.0 | 300.6 | 289.9 | 282.0 | 270.2 | 253.0 | 236.9 | 230.4 | 219.2 | 216.7 | 210.4 |
| 75°   | 150.3 | 137.2 | 134.4 | 132.5 | 119.7 | 117.2 | 112.3 | 110.1 | 104.9 | 102.2 | 101.1 |
| 77.5° | 67.2  | 64.2  | 59.3  | 57.9  | 53.8  | 49.7  | 44.8  | 42.6  | 39.9  | 38.3  | 36.1  |
| 80°   | 30.6  | 27.6  | 25.7  | 24.3  | 23.8  | 22.4  | 21.3  | 20.5  | 19.7  | 19.7  | 18.3  |
| 82.5° | 14.8  | 14.2  | 13.7  | 13.7  | 12.9  | 12.9  | 12.0  | 11.8  | 11.5  | 11.2  | 11.2  |
| 85°   | 4.1   | 4.1   | 4.1   | 4.4   | 4.4   | 4.4   | 4.4   | 4.4   | 4.4   | 4.6   | 4.6   |
| 87.5° | 0.6   | 0.6   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   |
| 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: P173747

CATALOG NUMBER: ENV-EXX-LED-E1-BL4-8030-CWB

**CANDELA DISTRIBUTION (continued):**

|       | 76°   | 77°   | 78°   | 79°   | 80°   | 81°   | 82°   | 83°   | 84°   | 85°   | 86°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 |
| 2.5°  | 306.9 | 306.9 | 306.9 | 307.4 | 307.1 | 308.0 | 308.0 | 308.0 | 308.5 | 308.8 | 308.5 |
| 5°    | 302.5 | 302.5 | 302.5 | 302.8 | 302.8 | 303.3 | 303.3 | 303.9 | 303.9 | 304.1 | 304.1 |
| 7.5°  | 295.4 | 295.7 | 295.7 | 296.2 | 295.9 | 296.2 | 296.2 | 297.0 | 297.0 | 297.3 | 297.3 |
| 10°   | 287.2 | 287.5 | 287.5 | 287.5 | 287.7 | 288.0 | 288.0 | 288.6 | 288.8 | 288.8 | 289.4 |
| 12.5° | 279.5 | 279.3 | 279.5 | 279.3 | 280.1 | 280.1 | 280.3 | 280.1 | 280.3 | 280.6 | 280.9 |
| 15°   | 271.1 | 271.1 | 270.8 | 271.1 | 271.1 | 270.8 | 270.5 | 270.8 | 271.3 | 271.3 | 271.3 |
| 17.5° | 262.6 | 261.8 | 261.8 | 261.8 | 261.5 | 261.0 | 261.5 | 261.2 | 261.2 | 261.5 | 261.2 |
| 20°   | 254.7 | 254.4 | 254.1 | 253.9 | 253.6 | 252.8 | 252.8 | 252.8 | 252.5 | 252.5 | 252.5 |
| 22.5° | 249.8 | 249.5 | 249.2 | 248.9 | 247.8 | 247.3 | 247.0 | 246.7 | 246.2 | 245.9 | 245.6 |
| 25°   | 247.0 | 246.5 | 245.9 | 245.4 | 244.6 | 243.7 | 242.9 | 242.7 | 242.1 | 241.6 | 240.7 |
| 27.5° | 246.2 | 245.6 | 244.6 | 244.0 | 242.9 | 242.1 | 241.3 | 240.5 | 239.6 | 238.8 | 238.0 |
| 30°   | 244.8 | 244.0 | 242.9 | 242.1 | 241.3 | 239.9 | 238.8 | 238.0 | 236.6 | 235.8 | 234.7 |
| 32.5° | 242.9 | 241.8 | 240.7 | 239.6 | 238.5 | 237.2 | 235.8 | 234.7 | 233.6 | 232.5 | 231.2 |
| 35°   | 239.6 | 238.3 | 236.6 | 235.5 | 234.2 | 232.8 | 231.7 | 229.8 | 229.0 | 227.6 | 226.2 |
| 37.5° | 235.3 | 233.9 | 232.5 | 231.2 | 229.5 | 228.4 | 226.8 | 225.1 | 224.3 | 223.5 | 221.6 |
| 40°   | 231.5 | 229.8 | 228.4 | 227.3 | 225.4 | 224.6 | 223.0 | 221.3 | 220.3 | 219.4 | 217.8 |
| 42.5° | 227.9 | 226.2 | 224.9 | 223.2 | 221.9 | 220.8 | 219.4 | 217.8 | 216.7 | 216.1 | 214.8 |
| 45°   | 227.9 | 226.0 | 224.3 | 223.0 | 221.6 | 220.3 | 219.2 | 217.5 | 216.7 | 215.6 | 214.8 |
| 47.5° | 231.7 | 229.5 | 227.6 | 225.7 | 223.8 | 222.4 | 220.8 | 219.2 | 217.8 | 217.0 | 215.9 |
| 50°   | 234.4 | 232.3 | 231.2 | 229.0 | 227.9 | 226.0 | 224.1 | 223.2 | 221.9 | 221.1 | 220.8 |
| 52.5° | 267.8 | 266.4 | 266.7 | 261.2 | 260.1 | 262.9 | 258.5 | 262.3 | 261.2 | 257.9 | 257.9 |
| 55°   | 370.0 | 369.4 | 371.9 | 365.1 | 362.1 | 367.5 | 369.7 | 361.8 | 363.7 | 363.7 | 363.2 |
| 57.5° | 489.1 | 485.6 | 482.0 | 482.8 | 478.5 | 481.8 | 477.6 | 472.7 | 474.6 | 473.0 | 467.3 |
| 60°   | 560.2 | 558.0 | 552.8 | 547.9 | 543.2 | 538.9 | 535.0 | 530.6 | 528.5 | 524.7 | 520.5 |
| 62.5° | 588.9 | 583.1 | 576.8 | 570.3 | 562.9 | 555.8 | 551.4 | 545.7 | 539.7 | 535.9 | 531.5 |
| 65°   | 573.5 | 565.1 | 558.3 | 548.7 | 540.8 | 532.0 | 526.3 | 519.7 | 514.3 | 507.7 | 502.3 |
| 67.5° | 505.2 | 495.4 | 477.4 | 468.6 | 456.9 | 443.2 | 439.4 | 431.5 | 428.5 | 418.6 | 402.5 |
| 70°   | 344.0 | 334.2 | 323.2 | 305.5 | 294.0 | 282.3 | 269.4 | 260.1 | 258.8 | 250.9 | 239.1 |
| 72.5° | 202.2 | 195.4 | 188.3 | 178.2 | 169.7 | 165.1 | 156.0 | 146.7 | 146.5 | 137.4 | 132.8 |
| 75°   | 95.6  | 92.1  | 85.0  | 82.5  | 74.9  | 74.3  | 68.6  | 67.5  | 68.6  | 65.9  | 65.3  |
| 77.5° | 32.5  | 31.7  | 30.0  | 27.9  | 26.2  | 25.7  | 24.3  | 23.5  | 23.0  | 22.4  | 21.9  |
| 80°   | 17.8  | 17.2  | 16.9  | 16.1  | 15.6  | 15.3  | 14.5  | 14.2  | 13.9  | 13.7  | 13.4  |
| 82.5° | 10.7  | 10.9  | 10.4  | 9.8   | 9.8   | 9.3   | 9.0   | 8.7   | 8.5   | 8.5   | 8.5   |
| 85°   | 4.4   | 4.6   | 4.4   | 4.1   | 3.8   | 4.1   | 4.1   | 3.8   | 3.6   | 3.8   | 3.8   |
| 87.5° | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   |
| 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: P173747

CATALOG NUMBER: ENV-EXX-LED-E1-BL4-8030-CWB

**CANDELA DISTRIBUTION (continued):**

|       | 87°   | 88°   | 89°   | 90°   | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 | 308.5 |
| 2.5°  | 308.0 | 307.7 | 307.7 | 307.4 | 307.1 | 307.7 | 308.2 | 309.1 | 308.5 | 309.1 | 309.3 |
| 5°    | 303.6 | 303.6 | 303.6 | 303.9 | 303.6 | 304.4 | 305.5 | 307.1 | 307.4 | 308.5 | 309.3 |
| 7.5°  | 296.5 | 296.5 | 296.8 | 297.0 | 296.8 | 297.9 | 299.8 | 301.7 | 303.0 | 305.0 | 306.6 |
| 10°   | 288.3 | 288.3 | 288.3 | 288.3 | 288.6 | 289.9 | 291.3 | 293.5 | 295.7 | 298.7 | 301.1 |
| 12.5° | 280.9 | 280.1 | 280.3 | 280.9 | 280.3 | 280.3 | 281.7 | 283.4 | 284.7 | 288.6 | 292.9 |
| 15°   | 271.1 | 271.1 | 270.5 | 270.8 | 269.4 | 269.1 | 269.7 | 270.8 | 271.9 | 275.2 | 279.8 |
| 17.5° | 260.7 | 260.7 | 260.7 | 259.9 | 258.8 | 256.0 | 255.8 | 255.8 | 255.8 | 258.2 | 263.7 |
| 20°   | 251.4 | 251.4 | 250.9 | 250.3 | 247.8 | 243.2 | 239.4 | 237.7 | 237.2 | 241.3 | 243.7 |
| 22.5° | 244.8 | 244.6 | 243.5 | 242.9 | 239.1 | 231.7 | 225.7 | 221.1 | 219.7 | 221.1 | 221.9 |
| 25°   | 239.6 | 239.1 | 238.0 | 236.9 | 231.7 | 221.6 | 212.0 | 204.1 | 200.3 | 199.2 | 196.5 |
| 27.5° | 236.6 | 235.8 | 234.2 | 233.1 | 226.2 | 213.4 | 200.8 | 190.5 | 183.3 | 178.2 | 173.2 |
| 30°   | 233.4 | 232.0 | 230.4 | 228.7 | 221.1 | 206.9 | 192.4 | 179.5 | 167.0 | 157.9 | 150.8 |
| 32.5° | 229.5 | 228.2 | 226.5 | 224.9 | 216.4 | 200.8 | 185.5 | 169.7 | 152.2 | 139.9 | 129.2 |
| 35°   | 224.9 | 223.5 | 221.9 | 220.0 | 211.5 | 195.9 | 180.9 | 160.1 | 139.1 | 123.2 | 109.3 |
| 37.5° | 220.3 | 218.9 | 217.2 | 215.3 | 206.9 | 193.4 | 178.2 | 151.1 | 127.1 | 107.7 | 89.4  |
| 40°   | 216.7 | 215.3 | 213.7 | 212.0 | 204.4 | 192.4 | 176.8 | 143.5 | 116.4 | 92.4  | 71.3  |
| 42.5° | 213.7 | 212.3 | 211.0 | 209.3 | 202.7 | 192.9 | 173.8 | 136.9 | 106.0 | 77.1  | 56.0  |
| 45°   | 213.4 | 212.6 | 211.0 | 209.6 | 203.3 | 195.4 | 171.3 | 131.2 | 95.4  | 62.3  | 47.3  |
| 47.5° | 215.3 | 214.2 | 213.1 | 212.0 | 207.1 | 201.7 | 169.7 | 125.1 | 83.3  | 50.3  | 45.1  |
| 50°   | 220.0 | 218.9 | 218.3 | 217.8 | 214.8 | 210.1 | 169.7 | 118.9 | 69.4  | 44.3  | 44.8  |
| 52.5° | 257.4 | 254.4 | 253.6 | 255.8 | 247.6 | 224.3 | 170.8 | 111.2 | 54.4  | 42.3  | 45.1  |
| 55°   | 362.1 | 365.1 | 357.4 | 353.6 | 339.4 | 259.6 | 171.6 | 99.8  | 44.3  | 42.1  | 44.5  |
| 57.5° | 467.8 | 467.8 | 465.1 | 459.1 | 441.6 | 319.7 | 175.4 | 81.4  | 40.4  | 41.5  | 44.0  |
| 60°   | 519.4 | 516.2 | 513.5 | 509.9 | 483.4 | 361.5 | 181.2 | 60.1  | 38.8  | 41.2  | 43.4  |
| 62.5° | 528.7 | 523.6 | 520.0 | 515.4 | 480.1 | 363.7 | 183.6 | 45.1  | 37.2  | 41.2  | 42.1  |
| 65°   | 498.1 | 492.7 | 488.0 | 480.4 | 437.5 | 329.3 | 171.3 | 36.9  | 36.1  | 40.2  | 40.7  |
| 67.5° | 403.6 | 397.0 | 393.5 | 389.6 | 361.3 | 289.1 | 138.5 | 33.1  | 34.7  | 38.3  | 39.3  |
| 70°   | 230.9 | 223.8 | 219.7 | 220.5 | 203.3 | 228.7 | 110.7 | 30.3  | 32.8  | 36.1  | 37.7  |
| 72.5° | 124.3 | 116.7 | 114.2 | 106.3 | 90.7  | 115.3 | 85.2  | 27.9  | 30.3  | 32.8  | 34.4  |
| 75°   | 61.5  | 58.8  | 59.6  | 55.8  | 47.3  | 35.5  | 54.9  | 24.9  | 27.1  | 29.5  | 30.6  |
| 77.5° | 21.3  | 20.8  | 20.5  | 20.2  | 19.7  | 18.8  | 25.1  | 21.3  | 23.2  | 25.1  | 26.2  |
| 80°   | 13.1  | 12.9  | 13.1  | 12.9  | 12.6  | 14.5  | 16.1  | 16.9  | 18.6  | 21.0  | 21.3  |
| 82.5° | 7.9   | 7.9   | 7.9   | 7.9   | 7.9   | 10.1  | 11.5  | 13.1  | 14.5  | 16.1  | 17.5  |
| 85°   | 3.8   | 3.8   | 3.8   | 3.8   | 4.1   | 6.8   | 7.6   | 9.6   | 10.1  | 11.5  | 12.6  |
| 87.5° | 0.8   | 0.8   | 0.8   | 0.8   | 1.1   | 3.6   | 4.6   | 5.7   | 6.0   | 6.0   | 6.8   |
| 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: P173747

CATALOG NUMBER: ENV-EXX-LED-E1-BL4-8030-CWB

**CANDELA DISTRIBUTION (continued):**

|       | 165°  | 175°  | 180°  |
|-------|-------|-------|-------|
| 0°    | 308.5 | 308.5 | 308.5 |
| 2.5°  | 309.1 | 308.5 | 308.2 |
| 5°    | 309.9 | 309.3 | 309.1 |
| 7.5°  | 307.7 | 308.0 | 307.7 |
| 10°   | 303.0 | 303.9 | 304.1 |
| 12.5° | 295.7 | 297.3 | 298.4 |
| 15°   | 283.4 | 285.8 | 285.3 |
| 17.5° | 267.0 | 270.0 | 270.0 |
| 20°   | 246.5 | 247.8 | 247.0 |
| 22.5° | 221.3 | 221.9 | 221.1 |
| 25°   | 194.8 | 194.8 | 193.7 |
| 27.5° | 170.2 | 168.9 | 168.1 |
| 30°   | 146.7 | 143.2 | 142.1 |
| 32.5° | 121.9 | 115.9 | 115.9 |
| 35°   | 96.7  | 91.8  | 90.5  |
| 37.5° | 75.1  | 69.7  | 68.1  |
| 40°   | 57.7  | 53.6  | 53.3  |
| 42.5° | 48.6  | 47.8  | 48.1  |
| 45°   | 46.5  | 47.6  | 47.6  |
| 47.5° | 46.7  | 48.1  | 48.4  |
| 50°   | 47.0  | 48.4  | 48.6  |
| 52.5° | 47.0  | 47.8  | 47.8  |
| 55°   | 46.5  | 46.5  | 46.5  |
| 57.5° | 45.4  | 45.1  | 45.6  |
| 60°   | 44.5  | 44.5  | 44.5  |
| 62.5° | 43.2  | 43.2  | 43.2  |
| 65°   | 41.0  | 41.2  | 41.2  |
| 67.5° | 38.8  | 38.8  | 38.8  |
| 70°   | 36.1  | 36.1  | 36.6  |
| 72.5° | 33.3  | 34.4  | 35.0  |
| 75°   | 31.4  | 33.3  | 34.2  |
| 77.5° | 27.6  | 29.5  | 30.6  |
| 80°   | 22.7  | 23.0  | 23.0  |
| 82.5° | 18.0  | 17.5  | 16.7  |
| 85°   | 12.9  | 12.0  | 12.0  |
| 87.5° | 6.8   | 6.6   | 6.8   |
| 90°   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)