

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: P672758

Luminaire Tested: **CCP-SA-2A-840-U-5NQ**

Issue Date: 04/16/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P672758  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA-2A-840-U-5NQ  
Description: INVUE CLEAR CURVE POLE MOUNT LIGHT SQUARE LUMINAIRE @350mA w/ 5NQ  
distribution lens  
Light Source: (32) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4854.6 lumens  
Efficiency: N/A  
Efficacy: 134.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B2 - U0 - G1

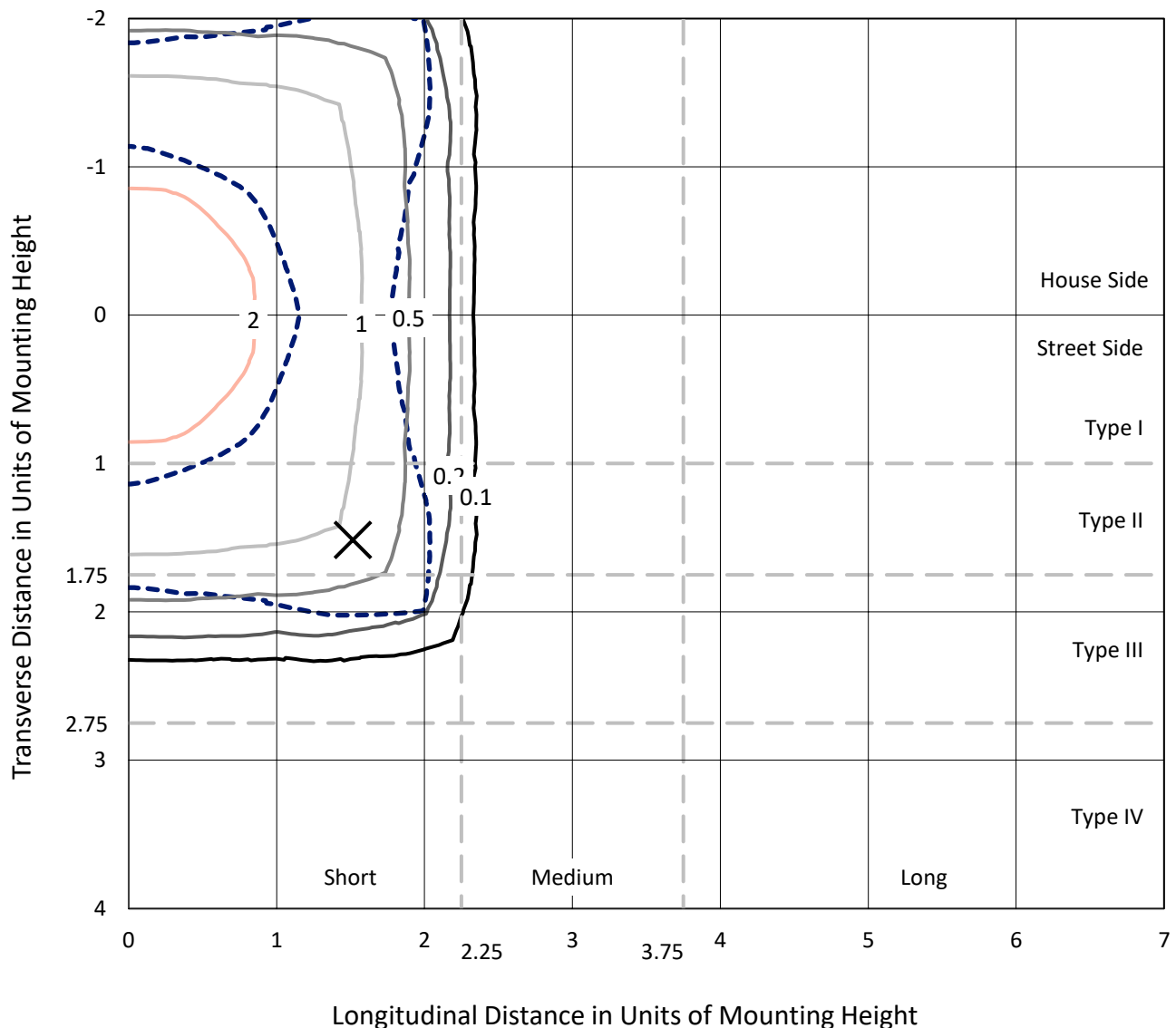
Input Watts (W): 36.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

REPORT NUMBER: P672758

CATALOG NUMBER: CCP-SA-2A-840-U-5NQ

## Iso-Footcandle Lines of Horizontal Illumination

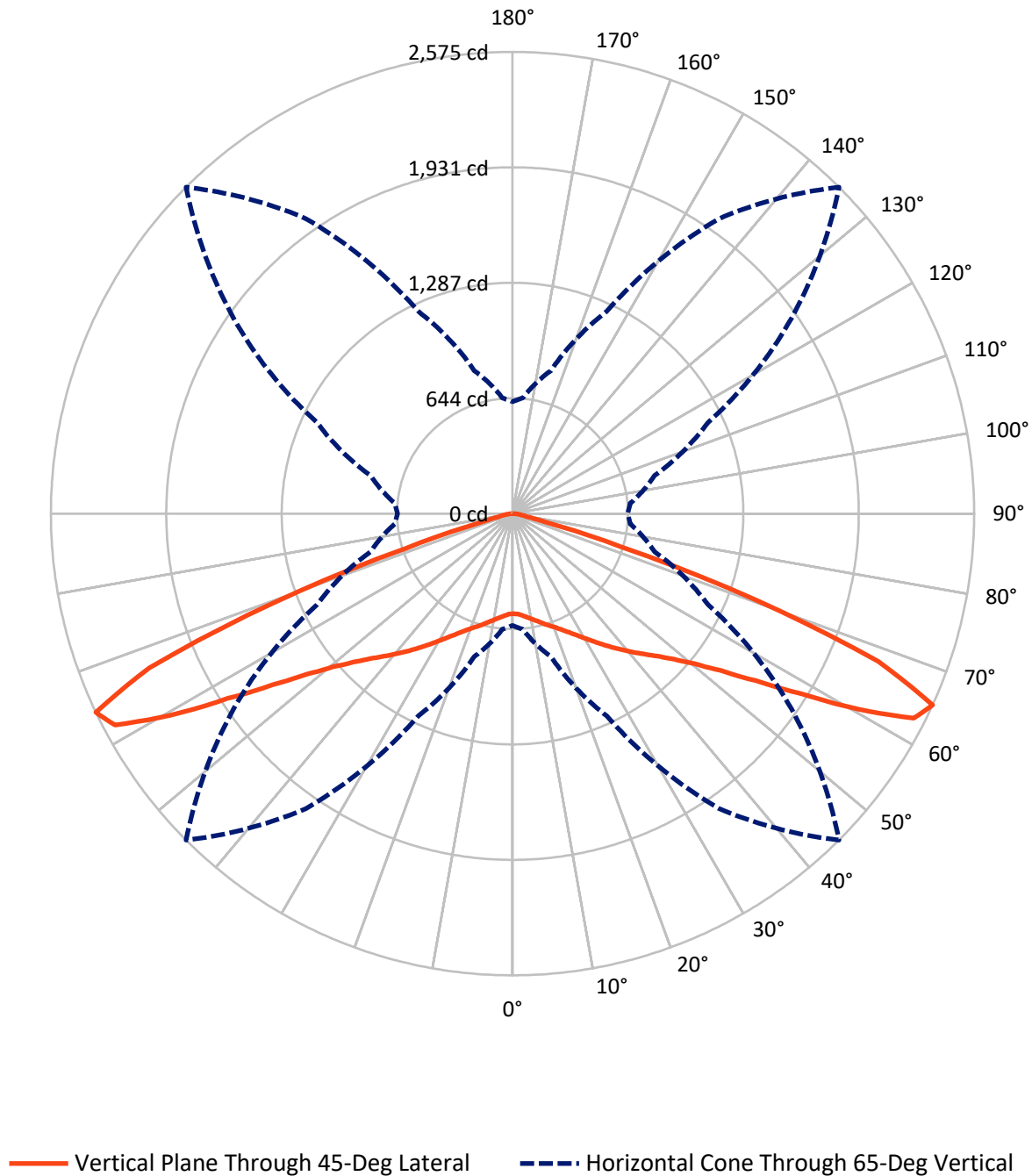
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.5 fc  
 Type V - Short - N/A

REPORT NUMBER: P672758  
CATALOG NUMBER: CCP-SA-2A-840-U-5NQ

## Luminous Intensity Polar Plot



REPORT NUMBER: P672758

CATALOG NUMBER: CCP-SA-2A-840-U-5NQ

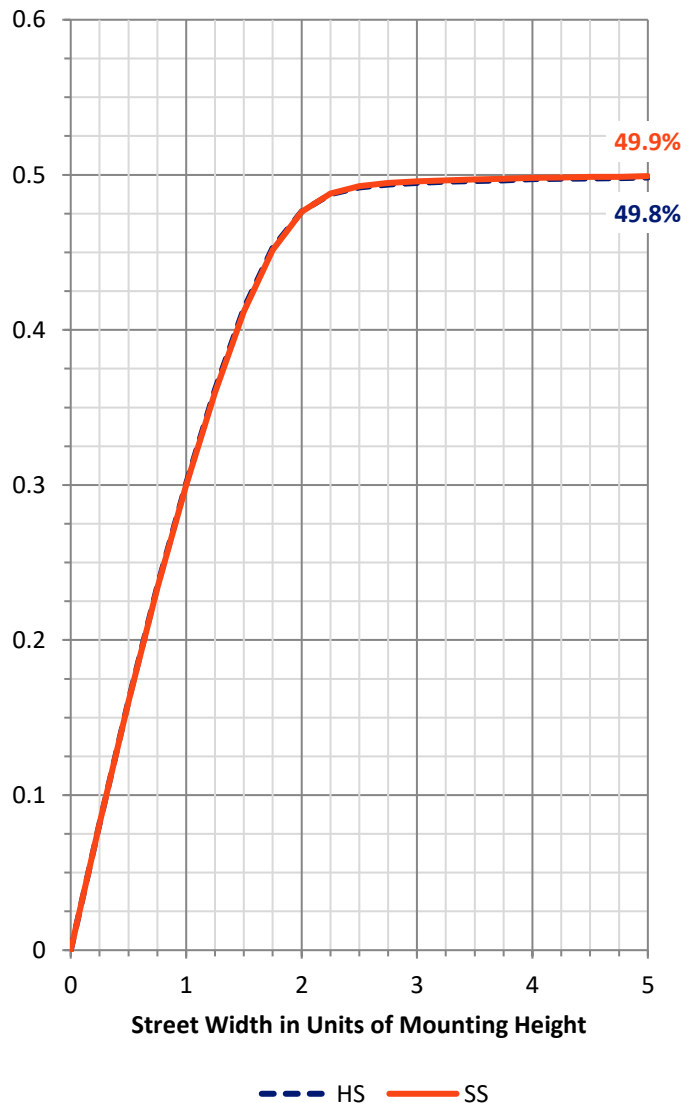
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2427.3   | 0.0    | 2427.3 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2427.3   | 0.0    | 2427.3 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 4854.6   | 0.0    | 4854.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 55.3   | 1.1       |
| 10°-20°   | 180.5  | 3.7       |
| 20°-30°   | 342.3  | 7.1       |
| 30°-40°   | 574.1  | 11.8      |
| 40°-50°   | 908.4  | 18.7      |
| 50°-60°   | 1427.1 | 29.4      |
| 60°-70°   | 1205.8 | 24.8      |
| 70°-80°   | 140.4  | 2.9       |
| 80°-90°   | 20.9   | 0.4       |
| 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°    | 4854.6 | 100.0     |
| 0°-180°   | 4854.6 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P672758

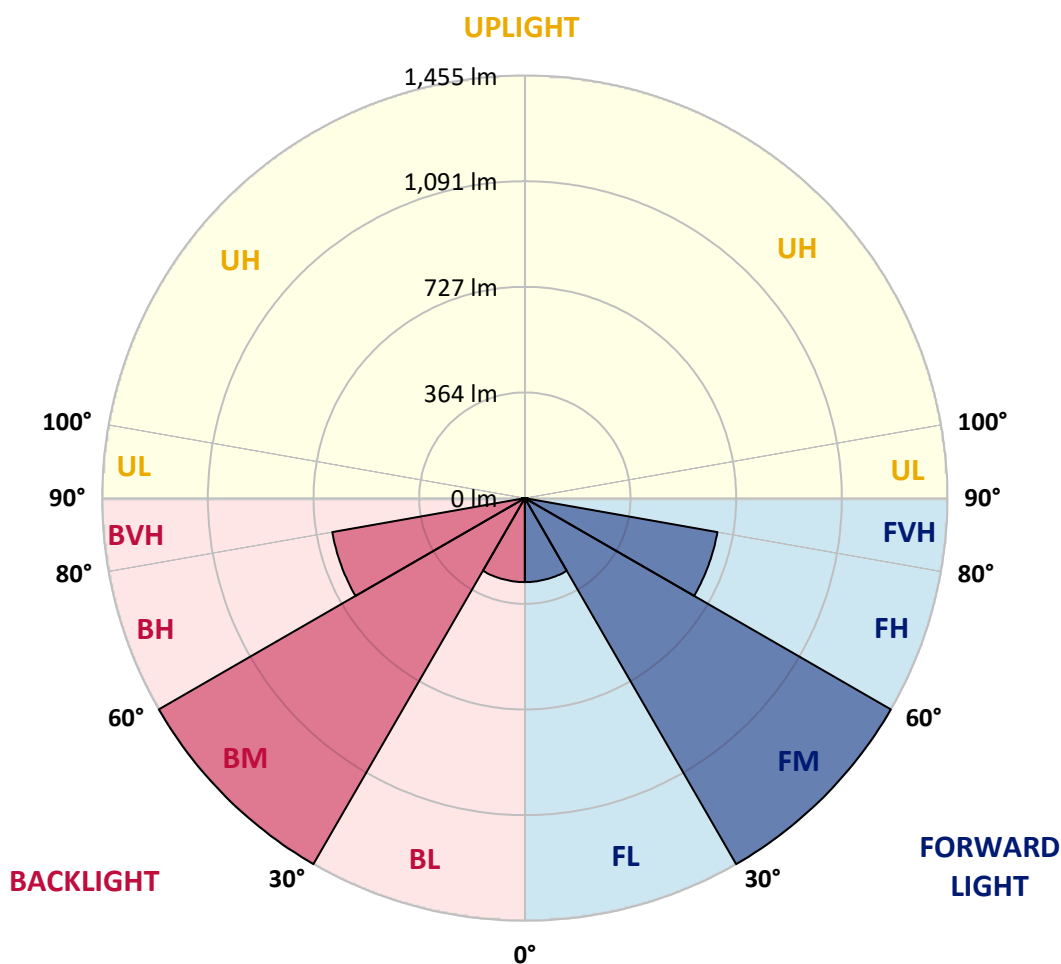
CATALOG NUMBER: CCP-SA-2A-840-U-5NQ

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 289.0  | 6.0       |                         |      |         |
| FM   | (30°-60°)   | 1454.7 | 30.0      |                         |      |         |
| FH   | (60°-80°)   | 673.1  | 13.9      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 10.5   | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 289.0  | 6.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1454.7 | 30.0      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 673.1  | 13.9      | B2/1000                 |      | G1/1800 |
| BVH  | (80°-90°)   | 10.5   | 0.2       |                         |      | 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





REPORT NUMBER: P672758

CATALOG NUMBER: CCP-SA-2A-840-U-5NQ

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 558.2  | 558.2  | 558.2  | 558.2  | 558.2  | 558.2  | 558.2  | 558.2  | 558.2  | 558.2  | 558.2  |
| 2.5°  | 561.3  | 559.6  | 561.3  | 561.3  | 560.2  | 560.6  | 559.2  | 558.9  | 560.6  | 559.2  | 558.9  |
| 5°    | 572.9  | 571.5  | 572.9  | 571.8  | 570.1  | 570.5  | 568.4  | 567.7  | 569.8  | 567.7  | 568.1  |
| 7.5°  | 586.2  | 583.8  | 584.5  | 585.5  | 583.8  | 583.8  | 582.1  | 581.1  | 582.1  | 580.0  | 581.4  |
| 10°   | 597.4  | 595.4  | 596.4  | 597.8  | 597.4  | 598.5  | 596.7  | 596.1  | 595.0  | 592.7  | 594.7  |
| 12.5° | 612.1  | 611.4  | 612.8  | 614.5  | 613.8  | 615.2  | 611.4  | 610.4  | 610.1  | 607.3  | 609.7  |
| 15°   | 631.2  | 629.5  | 631.9  | 633.9  | 632.9  | 635.3  | 632.2  | 630.9  | 629.2  | 625.8  | 627.8  |
| 17.5° | 650.3  | 649.0  | 652.4  | 653.4  | 653.7  | 655.8  | 653.4  | 651.3  | 650.7  | 648.3  | 646.9  |
| 20°   | 673.2  | 671.5  | 674.2  | 676.2  | 674.5  | 676.9  | 675.9  | 674.5  | 673.9  | 670.1  | 669.8  |
| 22.5° | 698.8  | 696.4  | 700.5  | 702.9  | 700.5  | 702.9  | 700.8  | 700.5  | 700.8  | 695.4  | 696.0  |
| 25°   | 727.4  | 727.8  | 731.9  | 733.6  | 732.2  | 733.6  | 730.5  | 732.5  | 731.5  | 725.7  | 723.7  |
| 27.5° | 764.3  | 762.9  | 767.3  | 772.5  | 769.1  | 769.1  | 767.7  | 769.7  | 769.4  | 763.9  | 762.6  |
| 30°   | 807.3  | 806.9  | 813.4  | 816.5  | 811.7  | 809.7  | 809.3  | 814.4  | 814.8  | 809.0  | 806.6  |
| 32.5° | 852.3  | 852.3  | 860.2  | 863.9  | 857.1  | 855.7  | 854.4  | 861.2  | 860.2  | 852.3  | 847.2  |
| 35°   | 901.8  | 899.7  | 910.3  | 915.8  | 908.9  | 904.8  | 904.2  | 910.3  | 908.9  | 898.0  | 891.9  |
| 37.5° | 950.6  | 951.9  | 964.2  | 970.4  | 962.2  | 957.1  | 958.8  | 962.9  | 963.2  | 951.3  | 944.8  |
| 40°   | 1010.3 | 1010.6 | 1026.0 | 1030.7 | 1020.2 | 1012.3 | 1014.7 | 1023.9 | 1023.2 | 1008.6 | 1000.4 |
| 42.5° | 1077.2 | 1075.8 | 1094.9 | 1099.0 | 1084.7 | 1069.6 | 1076.8 | 1091.1 | 1094.6 | 1078.2 | 1069.6 |
| 45°   | 1148.8 | 1150.9 | 1170.6 | 1175.1 | 1152.6 | 1133.4 | 1148.8 | 1170.3 | 1174.7 | 1157.0 | 1146.4 |
| 47.5° | 1235.8 | 1238.2 | 1262.1 | 1263.8 | 1238.2 | 1213.3 | 1233.8 | 1261.7 | 1263.4 | 1238.9 | 1226.6 |
| 50°   | 1335.1 | 1343.3 | 1369.9 | 1373.3 | 1348.1 | 1316.0 | 1345.3 | 1370.2 | 1363.8 | 1331.0 | 1319.7 |
| 52.5° | 1447.7 | 1454.2 | 1495.8 | 1510.1 | 1488.0 | 1453.5 | 1477.0 | 1492.4 | 1471.6 | 1428.6 | 1411.2 |
| 55°   | 1543.6 | 1554.5 | 1609.8 | 1653.4 | 1670.1 | 1644.2 | 1641.5 | 1619.0 | 1561.0 | 1495.5 | 1477.4 |
| 57.5° | 1570.5 | 1581.1 | 1666.7 | 1779.3 | 1878.6 | 1891.6 | 1831.5 | 1718.6 | 1593.7 | 1492.7 | 1474.3 |
| 60°   | 1461.0 | 1475.3 | 1600.5 | 1813.8 | 2098.7 | 2216.1 | 1999.1 | 1727.1 | 1508.8 | 1373.3 | 1350.1 |
| 62.5° | 1147.4 | 1174.1 | 1335.8 | 1670.1 | 2187.4 | 2511.5 | 2068.0 | 1580.1 | 1252.5 | 1092.5 | 1061.8 |
| 65°   | 624.0  | 646.9  | 825.4  | 1244.7 | 2007.6 | 2574.7 | 1899.1 | 1203.1 | 819.2  | 658.5  | 641.8  |
| 67.5° | 234.1  | 250.8  | 332.7  | 615.2  | 1419.4 | 2201.0 | 1441.5 | 688.9  | 371.9  | 266.8  | 243.3  |
| 70°   | 99.6   | 101.7  | 120.4  | 214.3  | 645.2  | 1432.0 | 738.0  | 234.1  | 124.2  | 100.3  | 97.6   |
| 72.5° | 71.7   | 72.0   | 77.1   | 94.9   | 196.5  | 628.1  | 223.1  | 98.3   | 75.7   | 68.2   | 68.2   |
| 75°   | 57.3   | 57.7   | 60.7   | 68.6   | 92.8   | 184.9  | 96.2   | 68.9   | 58.7   | 53.6   | 52.9   |
| 77.5° | 45.0   | 45.7   | 48.8   | 53.6   | 62.1   | 84.6   | 65.2   | 54.2   | 47.1   | 42.3   | 41.6   |
| 80°   | 33.4   | 34.5   | 38.6   | 40.9   | 43.7   | 56.3   | 47.4   | 42.3   | 37.5   | 32.4   | 31.4   |
| 82.5° | 22.2   | 23.2   | 28.7   | 30.4   | 30.0   | 35.5   | 32.8   | 32.4   | 28.7   | 21.5   | 20.5   |
| 85°   | 13.3   | 14.0   | 18.4   | 19.8   | 18.4   | 17.4   | 20.8   | 22.5   | 20.1   | 14.0   | 13.0   |
| 87.5° | 5.8    | 5.8    | 8.2    | 8.5    | 8.2    | 6.5    | 9.9    | 11.6   | 11.9   | 7.2    | 6.5    |
| 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)