

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: LUMARK

Report Number: P959405

Luminaire Tested: **NAV-SB1A-827-U-5NQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P959405  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-827-U-5NQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: -

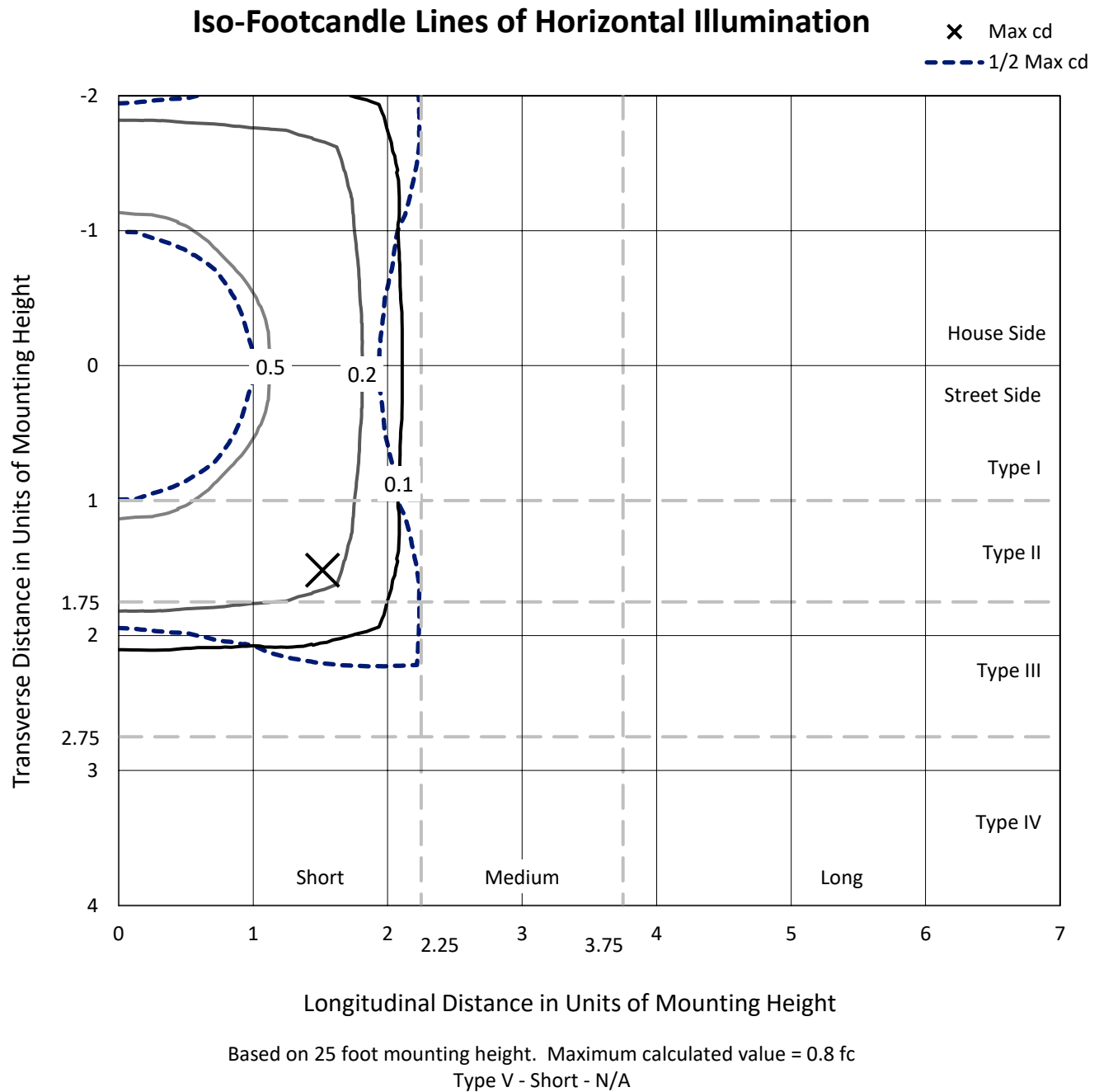
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4191.2 lumens  
Efficiency: N/A  
Efficacy: 135.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B2 - U0 - G0

Input Watts (W): 30.9  
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: 24 FT

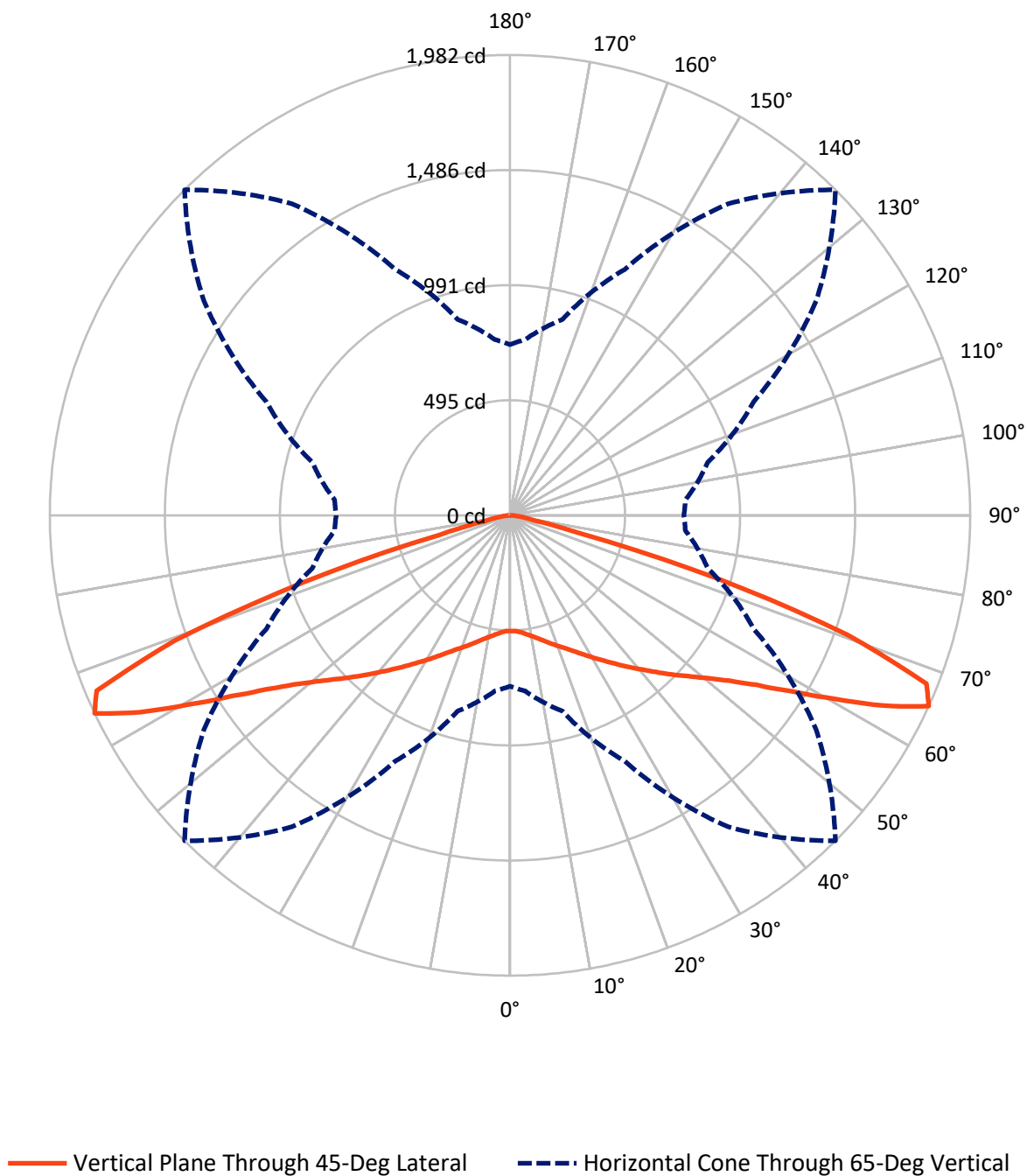


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## Luminous Intensity Polar Plot



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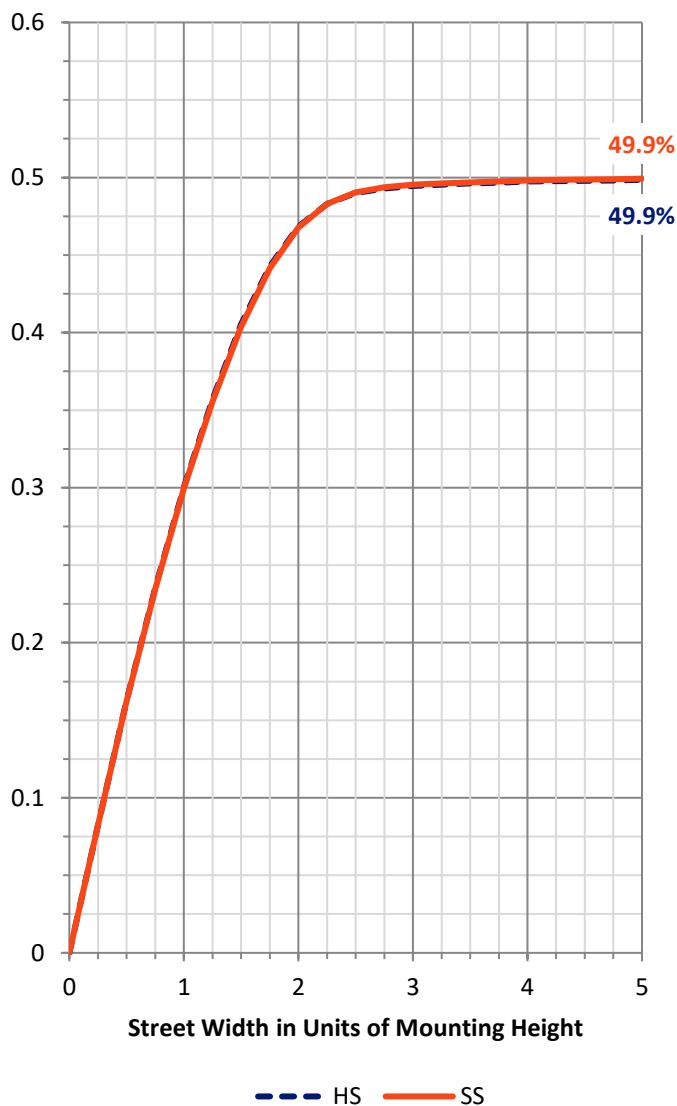
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2095.6   | 0.0    | 2095.6 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2095.6   | 0.0    | 2095.6 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 4191.2   | 0.0    | 4191.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 49.2   | 1.2       |
| 10°-20°   | 160.6  | 3.8       |
| 20°-30°   | 303.3  | 7.2       |
| 30°-40°   | 496.6  | 11.8      |
| 40°-50°   | 770.0  | 18.4      |
| 50°-60°   | 1137.5 | 27.1      |
| 60°-70°   | 1082.8 | 25.8      |
| 70°-80°   | 174.7  | 4.2       |
| 80°-90°   | 16.5   | 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°    | 4191.2 | 100.0     |
| 0°-180°   | 4191.2 | 100.0     |

**Coefficient of Utilization**



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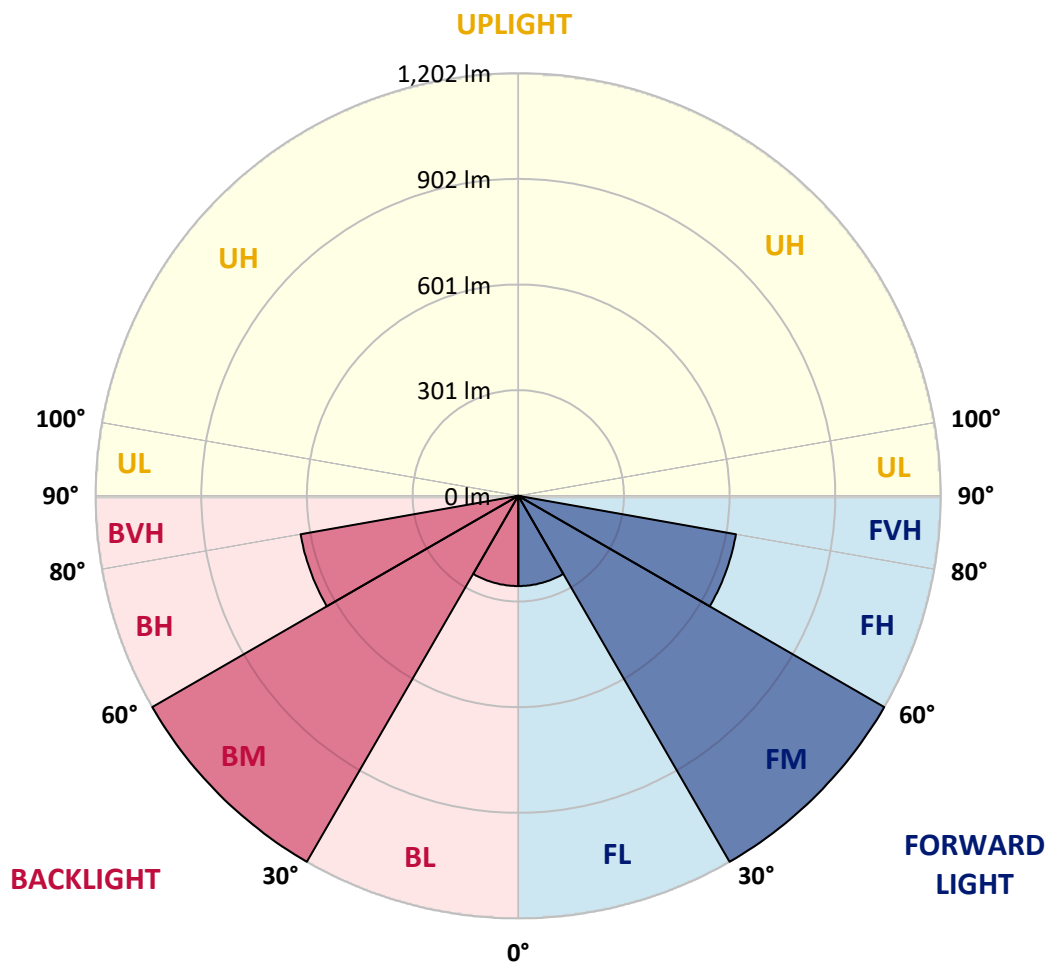
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|--------|-----------|-------------------------|------|--------|
|      |             |        |           | B                       | U    | G      |
| FL   | (0°-30°)    | 256.6  | 6.1       |                         |      |        |
| FM   | (30°-60°)   | 1202.1 | 28.7      |                         |      |        |
| FH   | (60°-80°)   | 628.7  | 15.0      |                         |      | G0/660 |
| FVH  | (80°-90°)   | 8.2    | 0.2       |                         |      | G0/10  |
| BL   | (0°-30°)    | 256.6  | 6.1       | B1/500                  |      |        |
| BM   | (30°-60°)   | 1202.1 | 28.7      | B2/2500                 |      |        |
| BH   | (60°-80°)   | 628.7  | 15.0      | B2/1000                 |      | G0/660 |
| BVH  | (80°-90°)   | 8.2    | 0.2       |                         |      | G0/10  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B2-U0-G0**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 498.8  | 498.8  | 498.8  | 498.8  | 498.8  | 498.8  | 498.8  | 498.8  | 498.8  | 498.8  | 498.8  |
| 2.5°  | 502.1  | 500.5  | 501.7  | 500.7  | 499.9  | 499.0  | 499.4  | 500.9  | 501.5  | 501.7  | 501.7  |
| 5°    | 508.9  | 507.4  | 508.1  | 508.1  | 506.6  | 506.1  | 506.4  | 507.4  | 508.7  | 508.7  | 508.7  |
| 7.5°  | 519.8  | 518.3  | 519.8  | 519.0  | 517.7  | 517.3  | 517.1  | 517.9  | 519.8  | 519.8  | 519.2  |
| 10°   | 533.1  | 531.4  | 532.3  | 531.8  | 530.3  | 529.7  | 529.5  | 530.7  | 532.5  | 532.3  | 531.8  |
| 12.5° | 547.6  | 545.7  | 546.7  | 545.5  | 545.1  | 544.5  | 544.5  | 544.2  | 545.3  | 544.5  | 544.9  |
| 15°   | 563.8  | 562.5  | 562.9  | 562.1  | 562.7  | 562.3  | 560.6  | 559.8  | 560.2  | 558.9  | 559.1  |
| 17.5° | 582.9  | 579.9  | 581.5  | 581.0  | 581.0  | 581.9  | 579.1  | 578.1  | 578.9  | 577.7  | 578.7  |
| 20°   | 605.0  | 602.1  | 602.7  | 601.9  | 600.8  | 601.7  | 598.3  | 599.1  | 599.7  | 598.9  | 600.8  |
| 22.5° | 629.1  | 625.4  | 625.1  | 625.6  | 623.3  | 623.5  | 621.2  | 623.3  | 624.5  | 622.3  | 624.5  |
| 25°   | 653.9  | 650.0  | 652.7  | 651.7  | 648.7  | 649.3  | 647.7  | 649.7  | 650.9  | 647.9  | 651.3  |
| 27.5° | 680.3  | 677.5  | 680.1  | 680.7  | 677.1  | 679.7  | 677.1  | 679.1  | 680.1  | 675.7  | 679.1  |
| 30°   | 710.9  | 708.3  | 710.5  | 712.3  | 708.1  | 712.1  | 709.9  | 711.1  | 711.3  | 706.1  | 709.3  |
| 32.5° | 744.5  | 740.3  | 746.1  | 746.9  | 742.3  | 747.1  | 744.5  | 746.1  | 747.1  | 739.9  | 744.9  |
| 35°   | 785.3  | 779.9  | 786.7  | 785.7  | 781.7  | 785.7  | 783.1  | 785.7  | 788.1  | 779.5  | 784.7  |
| 37.5° | 829.1  | 823.7  | 830.9  | 828.9  | 825.1  | 827.9  | 826.5  | 828.1  | 832.1  | 822.9  | 828.5  |
| 40°   | 877.5  | 870.8  | 880.5  | 877.1  | 873.5  | 873.1  | 873.9  | 875.0  | 880.3  | 869.9  | 873.3  |
| 42.5° | 929.3  | 922.1  | 936.6  | 931.3  | 926.3  | 922.9  | 925.7  | 927.8  | 932.9  | 921.3  | 927.3  |
| 45°   | 988.3  | 980.1  | 999.1  | 992.7  | 984.7  | 977.8  | 982.3  | 985.4  | 992.7  | 978.9  | 986.0  |
| 47.5° | 1053.5 | 1044.3 | 1064.5 | 1062.6 | 1049.5 | 1034.4 | 1044.5 | 1053.5 | 1059.0 | 1042.2 | 1047.9 |
| 50°   | 1117.2 | 1110.1 | 1136.6 | 1138.9 | 1122.9 | 1101.7 | 1115.8 | 1129.4 | 1130.9 | 1108.8 | 1111.6 |
| 52.5° | 1177.0 | 1169.8 | 1208.3 | 1222.8 | 1208.5 | 1183.3 | 1198.2 | 1212.1 | 1201.0 | 1172.3 | 1173.2 |
| 55°   | 1224.7 | 1218.8 | 1267.8 | 1305.2 | 1310.1 | 1289.2 | 1298.1 | 1297.6 | 1261.1 | 1217.1 | 1218.6 |
| 57.5° | 1236.3 | 1235.4 | 1297.2 | 1376.6 | 1427.0 | 1429.6 | 1412.0 | 1367.5 | 1288.6 | 1229.6 | 1225.8 |
| 60°   | 1183.7 | 1189.0 | 1273.9 | 1413.8 | 1548.4 | 1604.2 | 1528.8 | 1401.6 | 1257.3 | 1175.3 | 1165.6 |
| 62.5° | 1026.4 | 1040.3 | 1142.7 | 1368.4 | 1646.4 | 1805.3 | 1622.4 | 1349.8 | 1128.6 | 1021.6 | 1015.3 |
| 65°   | 735.5  | 759.7  | 872.9  | 1167.7 | 1637.5 | 1981.9 | 1608.9 | 1158.2 | 881.3  | 757.9  | 748.9  |
| 67.5° | 333.7  | 358.3  | 454.4  | 799.5  | 1423.4 | 1934.0 | 1420.0 | 807.9  | 477.1  | 359.6  | 354.3  |
| 70°   | 121.0  | 125.2  | 156.0  | 320.0  | 909.7  | 1541.0 | 948.6  | 322.4  | 165.9  | 133.4  | 131.6  |
| 72.5° | 73.2   | 73.8   | 80.4   | 114.6  | 316.1  | 935.5  | 329.5  | 118.4  | 82.0   | 72.8   | 74.0   |
| 75°   | 46.4   | 46.0   | 57.2   | 70.0   | 112.0  | 315.6  | 117.6  | 70.0   | 57.0   | 52.0   | 52.4   |
| 77.5° | 33.4   | 34.4   | 41.0   | 52.4   | 70.6   | 107.0  | 69.4   | 50.0   | 41.0   | 33.6   | 34.2   |
| 80°   | 25.0   | 25.6   | 29.8   | 40.8   | 49.6   | 66.6   | 44.2   | 37.0   | 31.0   | 21.0   | 21.6   |
| 82.5° | 18.0   | 18.0   | 19.6   | 29.6   | 30.2   | 36.0   | 24.0   | 26.0   | 20.4   | 15.0   | 15.0   |
| 85°   | 10.8   | 10.6   | 12.2   | 17.6   | 15.8   | 13.2   | 11.0   | 16.0   | 12.8   | 9.2    | 9.0    |
| 87.5° | 3.8    | 4.0    | 3.8    | 5.0    | 4.2    | 3.6    | 3.4    | 4.4    | 3.6    | 3.2    | 3.0    |
| 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)