

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: P800175

Luminaire Tested: **ARCH2-80-740-U-5WQ**

Issue Date: 4/4/2024

### Test Information

Test Method: LM-79-08  
Report Number: P800175  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH2-80-740-U-5WQ  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 630mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 11588 lumens  
Efficiency: N/A  
Efficacy: 137.5 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type V - Medium  
BUG Rating: B4 - U0 - G2  
  
Input Watts (W): 84.3  
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

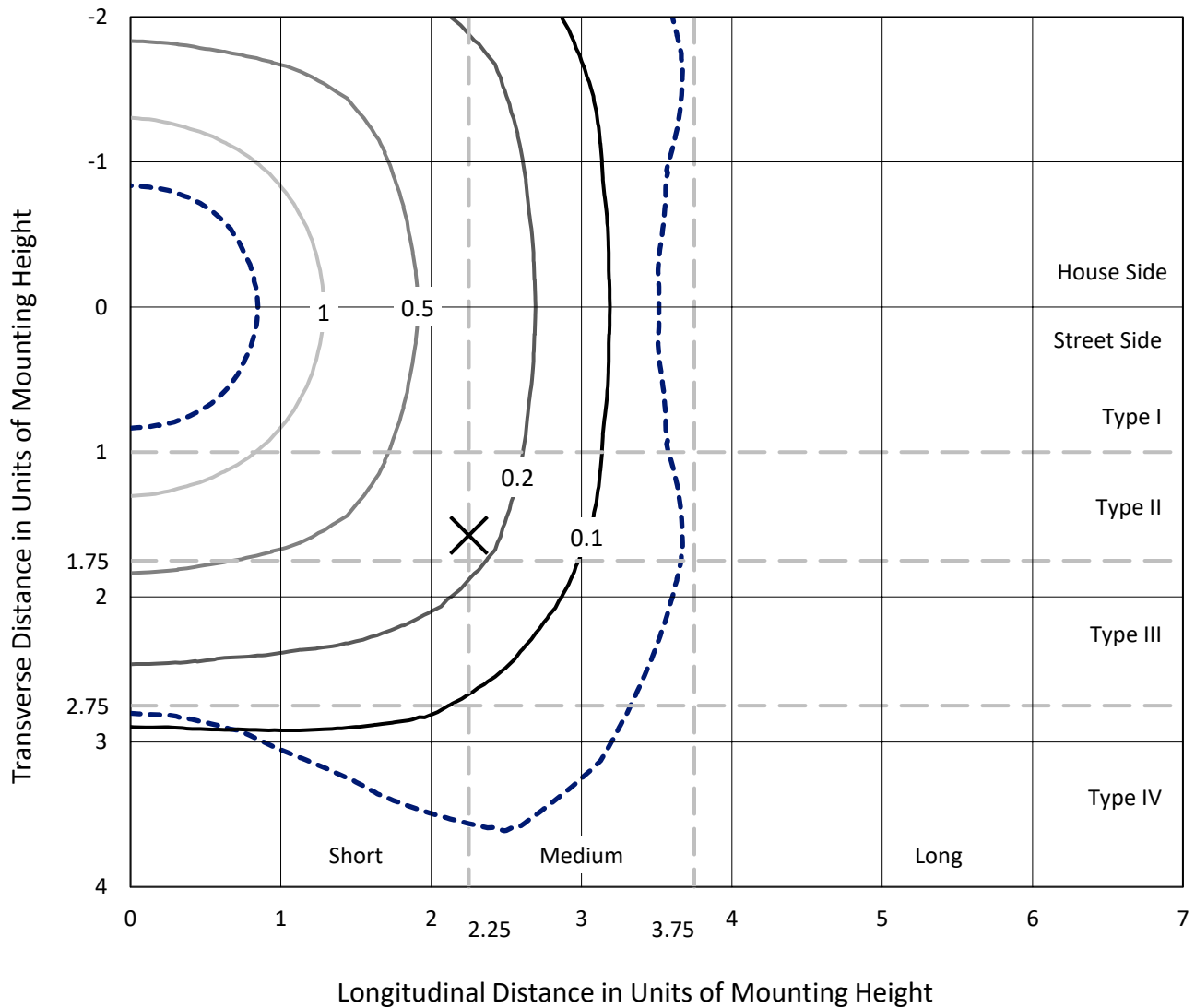


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## Iso-Footcandle Lines of Horizontal Illumination

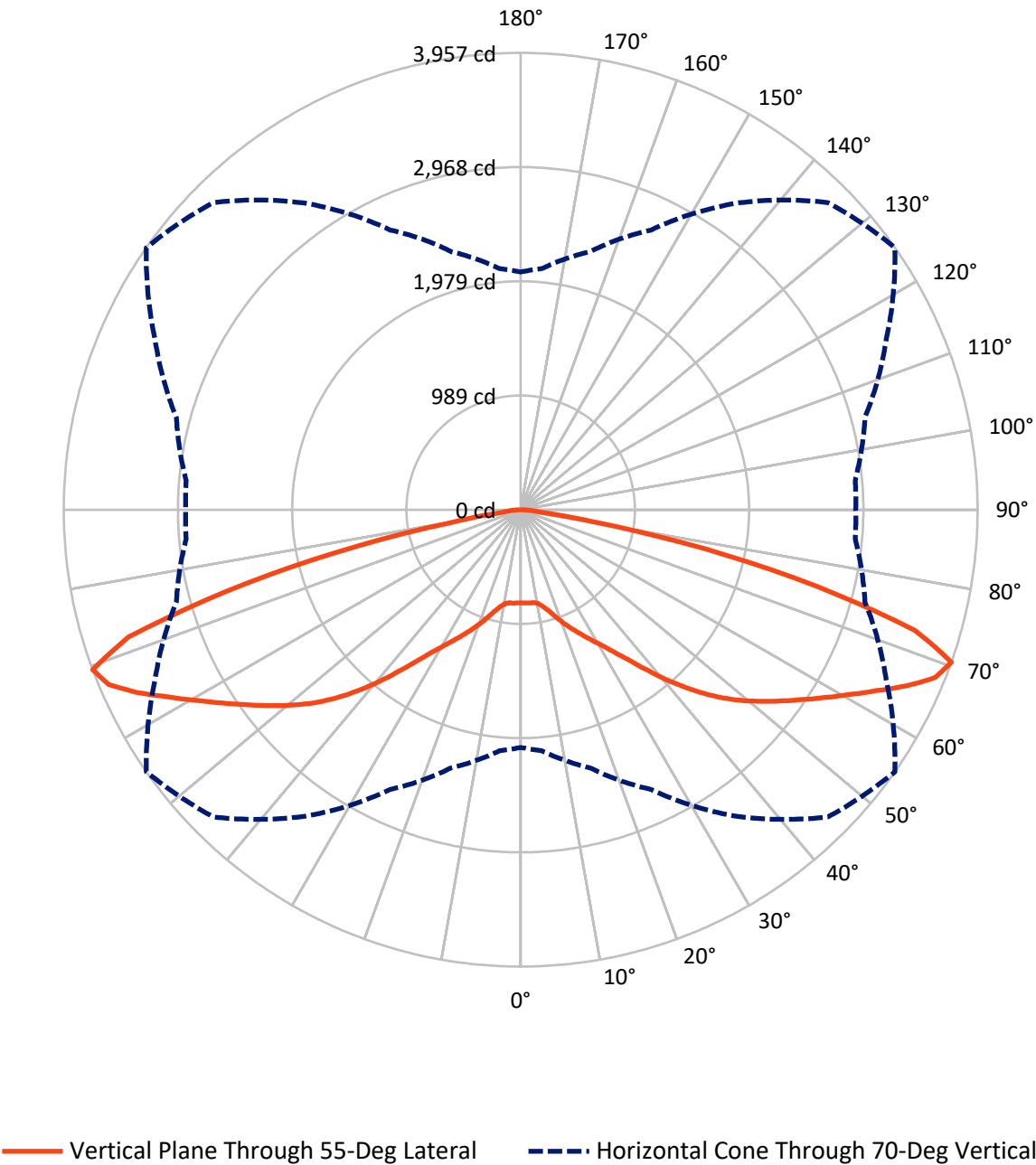
✕ Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc  
Type V - Medium - N/A

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Luminous Intensity Polar Plot



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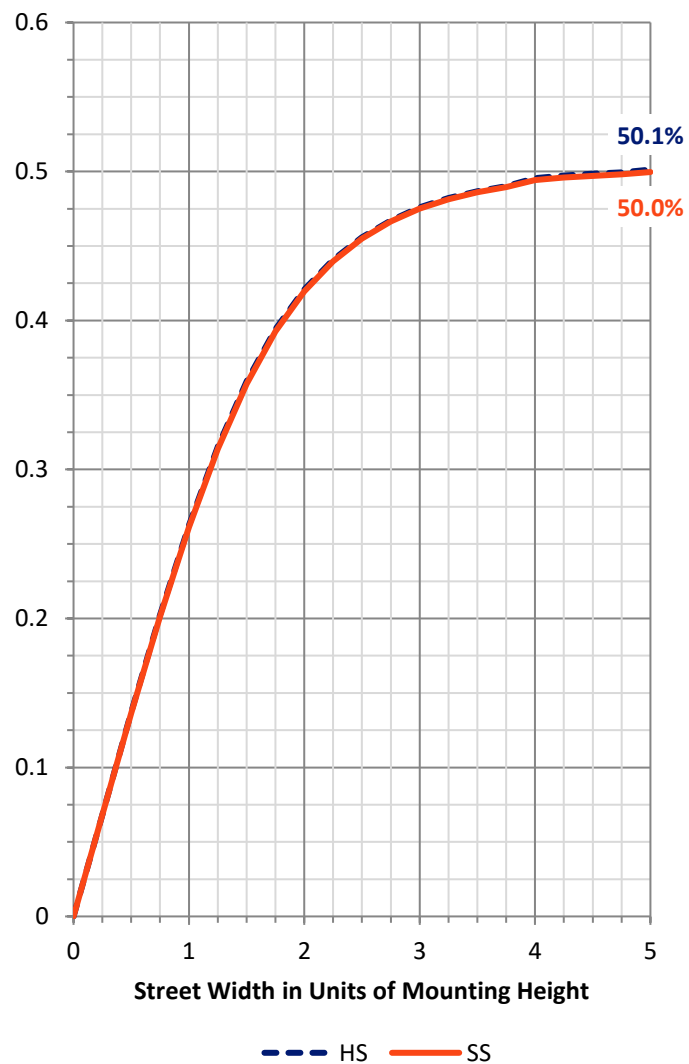
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5794.0   | 0.0    | 5794.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 5794.0   | 0.0    | 5794.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 11588.0  | 0.0    | 11588.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 78.0    | 0.7       |
| 10°-20°   | 265.4   | 2.3       |
| 20°-30°   | 551.5   | 4.8       |
| 30°-40°   | 1018.6  | 8.8       |
| 40°-50°   | 1789.4  | 15.4      |
| 50°-60°   | 2580.7  | 22.3      |
| 60°-70°   | 3158.5  | 27.3      |
| 70°-80°   | 2009.9  | 17.3      |
| 80°-90°   | 136.0   | 1.2       |
| 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°    | 11588.0 | 100.0     |
| 0°-180°   | 11588.0 | 100.0     |

**Coefficient of Utilization**



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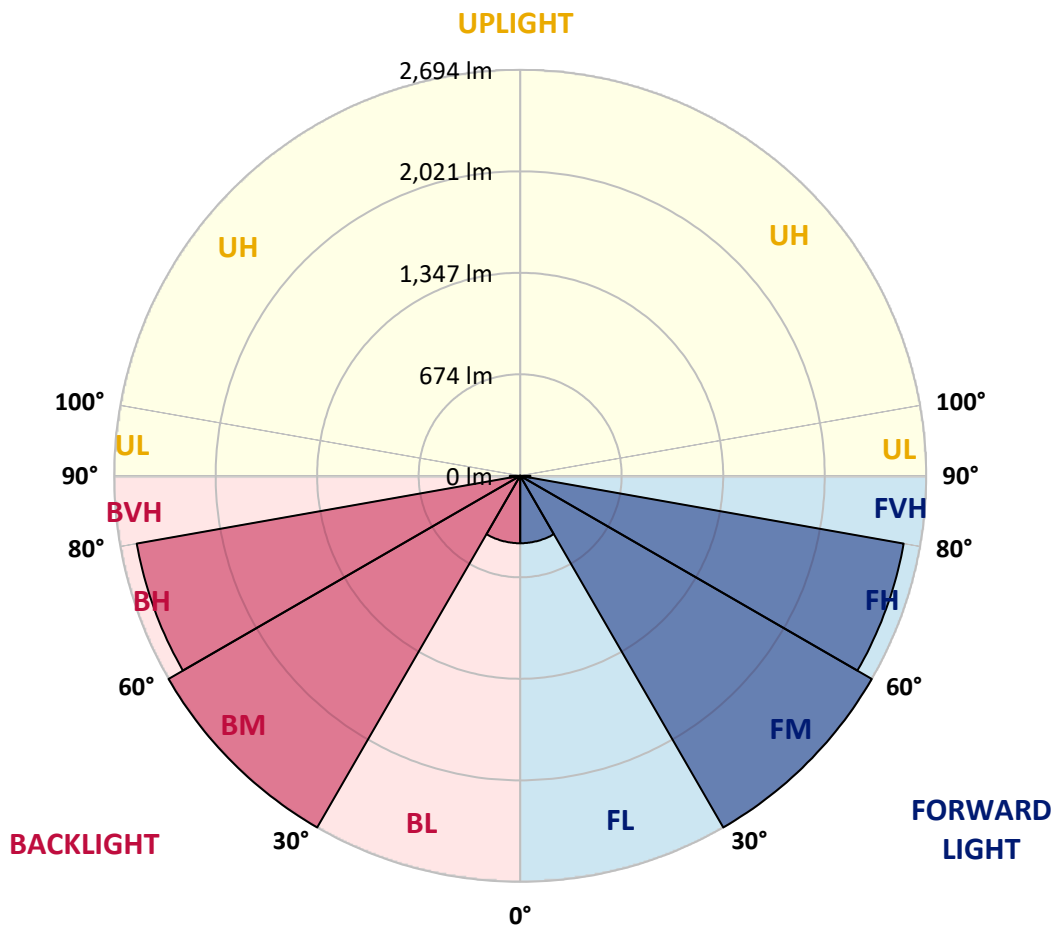
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 447.4  | 3.9       |                         |      |         |
| FM   | (30°-60°)   | 2694.4 | 23.3      |                         |      |         |
| FH   | (60°-80°)   | 2584.2 | 22.3      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 68.0   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 447.4  | 3.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 2694.4 | 23.3      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2584.2 | 22.3      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 68.0   | 0.6       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G2**

Type V Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 807.8  | 807.8  | 807.8  | 807.8  | 807.8  | 807.8  | 807.8  | 807.8  | 807.8  | 807.8  | 807.8  |
| 2.5°  | 818.6  | 818.6  | 816.4  | 816.4  | 812.1  | 809.9  | 807.8  | 807.8  | 805.6  | 805.6  | 803.5  |
| 5°    | 822.9  | 822.9  | 822.9  | 820.7  | 818.6  | 816.4  | 812.1  | 807.8  | 805.6  | 803.5  | 801.3  |
| 7.5°  | 825.0  | 825.0  | 822.9  | 822.9  | 820.7  | 818.6  | 812.1  | 805.6  | 803.5  | 801.3  | 801.3  |
| 10°   | 842.3  | 840.1  | 838.0  | 833.6  | 833.6  | 833.6  | 825.0  | 818.6  | 816.4  | 816.4  | 816.4  |
| 12.5° | 883.2  | 881.0  | 876.7  | 870.3  | 870.3  | 872.4  | 859.5  | 850.9  | 850.9  | 848.7  | 848.7  |
| 15°   | 943.5  | 941.3  | 937.0  | 926.3  | 924.1  | 928.4  | 909.0  | 900.4  | 900.4  | 900.4  | 898.3  |
| 17.5° | 1010.3 | 1006.0 | 999.5  | 990.9  | 990.9  | 990.9  | 971.5  | 960.7  | 954.3  | 954.3  | 952.1  |
| 20°   | 1066.3 | 1064.1 | 1064.1 | 1062.0 | 1068.4 | 1068.4 | 1042.6 | 1025.4 | 1010.3 | 1001.7 | 999.5  |
| 22.5° | 1115.8 | 1113.7 | 1118.0 | 1126.6 | 1139.5 | 1143.8 | 1113.7 | 1087.8 | 1064.1 | 1046.9 | 1042.6 |
| 25°   | 1182.6 | 1180.5 | 1178.3 | 1191.2 | 1212.8 | 1219.2 | 1186.9 | 1154.6 | 1130.9 | 1122.3 | 1118.0 |
| 27.5° | 1253.7 | 1255.8 | 1258.0 | 1270.9 | 1288.2 | 1298.9 | 1266.6 | 1236.5 | 1217.1 | 1204.1 | 1199.8 |
| 30°   | 1333.4 | 1337.7 | 1344.2 | 1363.6 | 1376.5 | 1380.8 | 1352.8 | 1331.2 | 1314.0 | 1303.2 | 1296.8 |
| 32.5° | 1434.6 | 1443.3 | 1451.9 | 1469.1 | 1475.6 | 1471.3 | 1458.3 | 1443.3 | 1430.3 | 1415.3 | 1413.1 |
| 35°   | 1585.4 | 1594.0 | 1591.9 | 1598.4 | 1600.5 | 1596.2 | 1589.7 | 1581.1 | 1574.7 | 1555.3 | 1553.1 |
| 37.5° | 1775.0 | 1783.6 | 1770.7 | 1764.2 | 1749.1 | 1751.3 | 1749.1 | 1755.6 | 1757.8 | 1738.4 | 1736.2 |
| 40°   | 1966.7 | 1975.3 | 1958.1 | 1940.9 | 1925.8 | 1919.3 | 1930.1 | 1951.6 | 1951.6 | 1938.7 | 1938.7 |
| 42.5° | 2171.3 | 2177.8 | 2149.8 | 2128.3 | 2108.9 | 2104.6 | 2111.0 | 2136.9 | 2143.3 | 2141.2 | 2141.2 |
| 45°   | 2376.0 | 2371.7 | 2335.1 | 2313.5 | 2296.3 | 2285.5 | 2287.7 | 2307.1 | 2320.0 | 2326.4 | 2326.4 |
| 47.5° | 2533.2 | 2526.8 | 2496.6 | 2479.4 | 2468.6 | 2453.5 | 2453.5 | 2464.3 | 2470.8 | 2472.9 | 2472.9 |
| 50°   | 2658.2 | 2651.7 | 2621.6 | 2619.4 | 2619.4 | 2612.9 | 2606.5 | 2604.3 | 2600.0 | 2602.2 | 2602.2 |
| 52.5° | 2765.9 | 2757.3 | 2735.7 | 2740.0 | 2759.4 | 2763.7 | 2755.1 | 2737.9 | 2720.6 | 2714.2 | 2716.3 |
| 55°   | 2882.2 | 2869.3 | 2852.0 | 2865.0 | 2903.7 | 2921.0 | 2908.1 | 2873.6 | 2843.4 | 2824.0 | 2824.0 |
| 57.5° | 2974.8 | 2959.8 | 2959.8 | 2996.4 | 3067.5 | 3101.9 | 3073.9 | 3009.3 | 2957.6 | 2936.1 | 2938.2 |
| 60°   | 2910.2 | 2897.3 | 2949.0 | 3110.5 | 3244.1 | 3302.3 | 3254.9 | 3140.7 | 3056.7 | 3030.8 | 3035.1 |
| 62.5° | 2783.1 | 2774.5 | 2839.1 | 3089.0 | 3403.5 | 3524.1 | 3453.0 | 3289.3 | 3164.4 | 3134.2 | 3134.2 |
| 65°   | 2595.7 | 2593.6 | 2684.0 | 2992.1 | 3440.1 | 3737.4 | 3677.1 | 3450.9 | 3289.3 | 3248.4 | 3257.0 |
| 67.5° | 2401.8 | 2401.8 | 2483.7 | 2826.2 | 3397.0 | 3827.9 | 3875.3 | 3597.4 | 3349.6 | 3248.4 | 3250.6 |
| 70°   | 2059.3 | 2096.0 | 2313.5 | 2673.3 | 3239.8 | 3763.2 | 3957.1 | 3494.0 | 3086.8 | 2908.1 | 2901.6 |
| 72.5° | 1357.1 | 1404.5 | 1837.5 | 2406.1 | 3084.7 | 3528.4 | 3571.5 | 3069.6 | 2563.4 | 2354.4 | 2343.7 |
| 75°   | 818.6  | 859.5  | 1191.2 | 1878.4 | 2712.0 | 2841.3 | 2651.7 | 2406.1 | 1915.0 | 1751.3 | 1751.3 |
| 77.5° | 241.3  | 269.3  | 549.3  | 1191.2 | 1876.2 | 1867.6 | 1635.0 | 1417.4 | 1133.1 | 962.9  | 975.8  |
| 80°   | 142.2  | 146.5  | 178.8  | 542.8  | 777.6  | 818.6  | 631.2  | 394.2  | 394.2  | 293.0  | 284.3  |
| 82.5° | 109.9  | 109.9  | 114.2  | 135.7  | 187.4  | 208.9  | 159.4  | 135.7  | 155.1  | 131.4  | 124.9  |
| 85°   | 77.5   | 77.5   | 77.5   | 79.7   | 81.9   | 84.0   | 88.3   | 90.5   | 99.1   | 81.9   | 77.5   |
| 87.5° | 23.7   | 25.8   | 28.0   | 32.3   | 38.8   | 40.9   | 43.1   | 38.8   | 38.8   | 36.6   | 34.5   |
| 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)