

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: P961916

Luminaire Tested: **NAV-SB2B-735-U-5NQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P961916  
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-SB2B-735-U-5NQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12095 lumens  
Efficiency: N/A  
Efficacy: 163.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B3 - U0 - G2

Input Watts (W): 73.9  
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

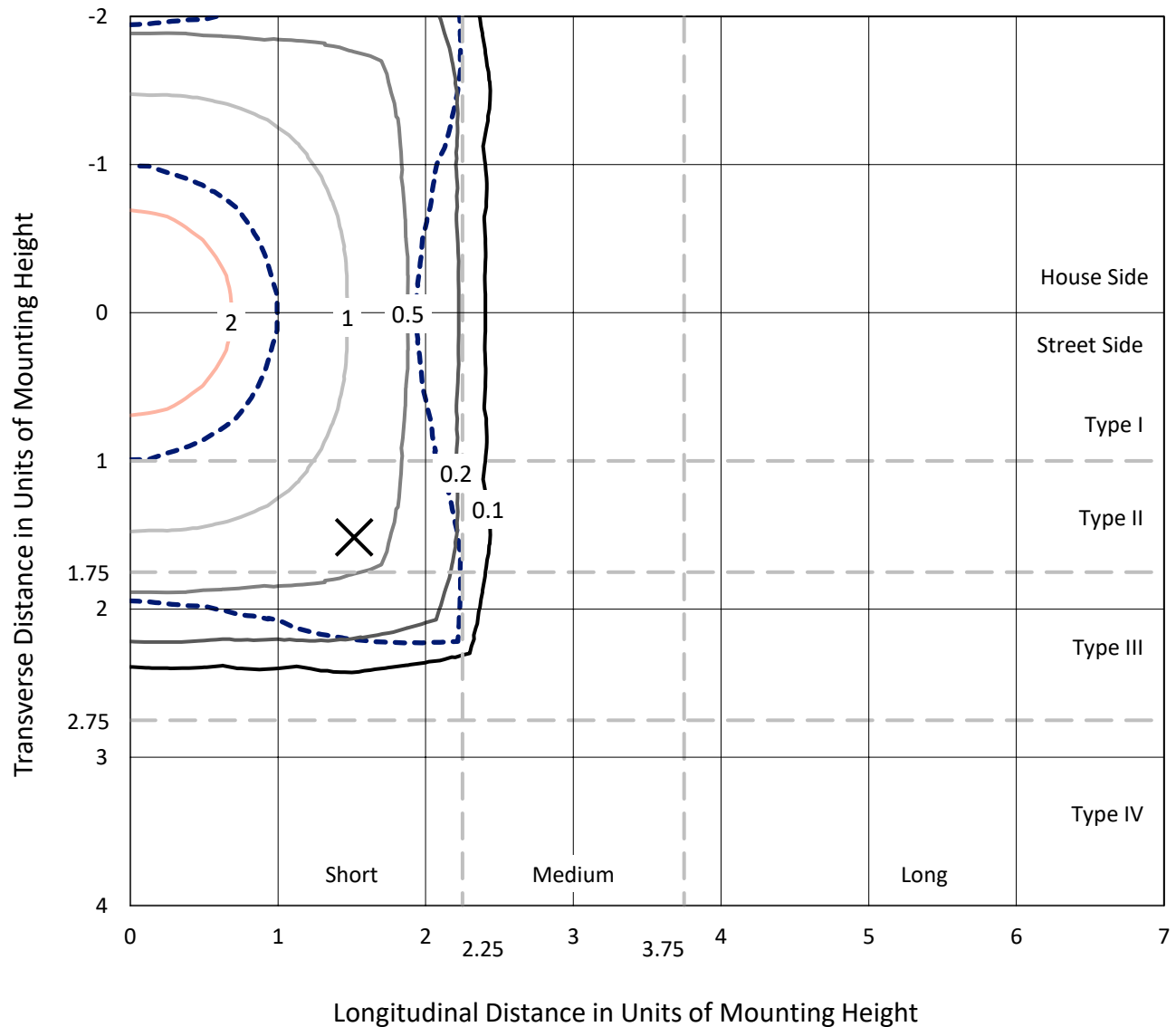


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## Iso-Footcandle Lines of Horizontal Illumination

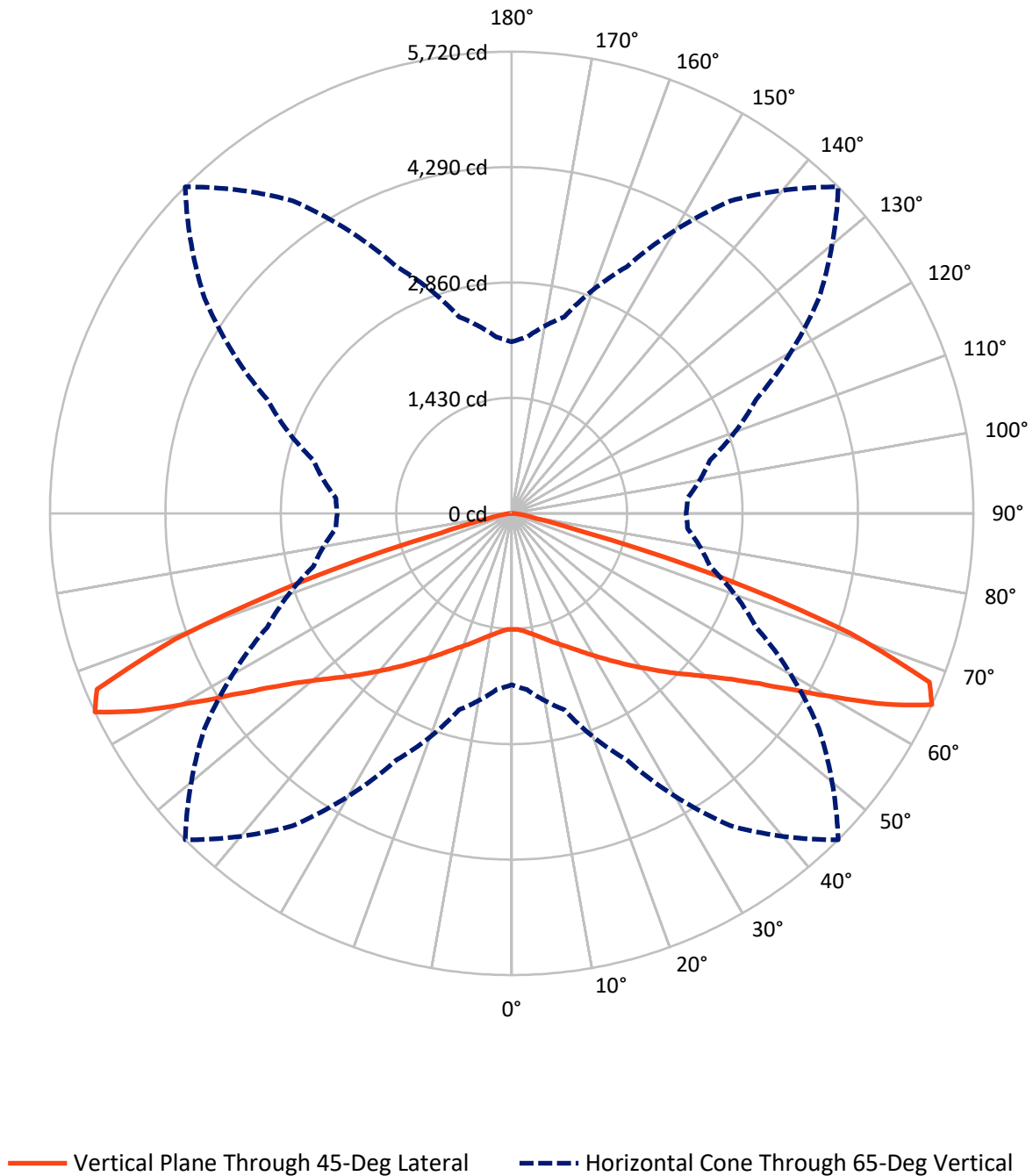
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
Type V - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6047.5   | 0.0    | 6047.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 6047.5   | 0.0    | 6047.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 12095.0  | 0.0    | 12095.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 142.1   | 1.2       |
| 10°-20°   | 463.5   | 3.8       |
| 20°-30°   | 875.2   | 7.2       |
| 30°-40°   | 1433.2  | 11.8      |
| 40°-50°   | 2222.1  | 18.4      |
| 50°-60°   | 3282.5  | 27.1      |
| 60°-70°   | 3124.7  | 25.8      |
| 70°-80°   | 504.2   | 4.2       |
| 80°-90°   | 47.5    | 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°    | 12095.0 | 100.0     |
| 0°-180°   | 12095.0 | 100.0     |

**Coefficient of Utilization**



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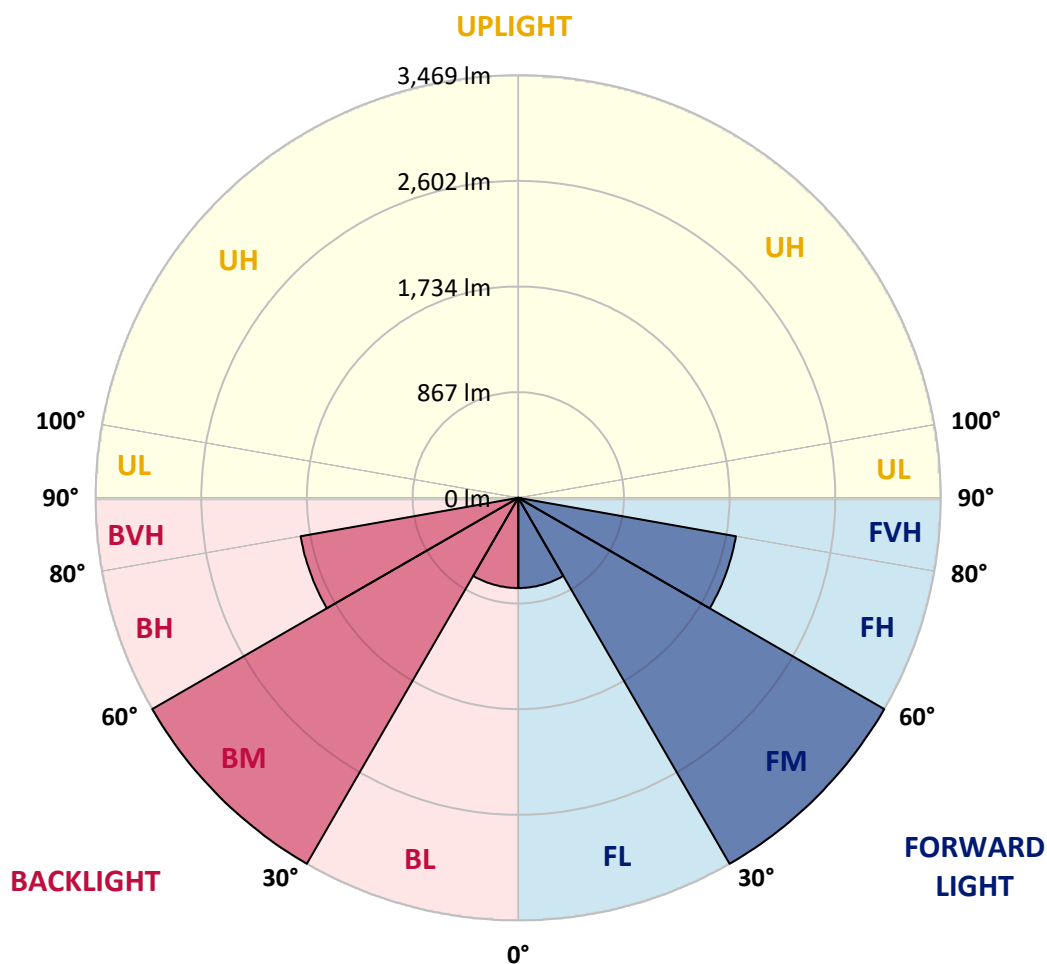
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 740.4  | 6.1       |                         |      |         |
| FM   | (30°-60°)   | 3468.9 | 28.7      |                         |      |         |
| FH   | (60°-80°)   | 1814.4 | 15.0      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 23.8   | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 740.4  | 6.1       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 3468.9 | 28.7      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1814.4 | 15.0      | B3/2500                 |      | G2/5000 |
| BVH  | (80°-90°)   | 23.8   | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1439.4 | 1439.4 | 1439.4 | 1439.4 | 1439.4 | 1439.4 | 1439.4 | 1439.4 | 1439.4 | 1439.4 | 1439.4 |
| 2.5°  | 1449.1 | 1444.3 | 1447.9 | 1444.8 | 1442.5 | 1440.0 | 1441.3 | 1445.5 | 1447.3 | 1447.9 | 1447.9 |
| 5°    | 1468.5 | 1464.3 | 1466.2 | 1466.2 | 1461.9 | 1460.6 | 1461.2 | 1464.3 | 1467.9 | 1467.9 | 1467.9 |
| 7.5°  | 1500.1 | 1495.9 | 1500.1 | 1497.7 | 1494.0 | 1492.8 | 1492.2 | 1494.7 | 1500.1 | 1500.1 | 1498.2 |
| 10°   | 1538.3 | 1533.5 | 1536.0 | 1534.7 | 1530.4 | 1528.6 | 1528.1 | 1531.7 | 1536.5 | 1536.0 | 1534.7 |
| 12.5° | 1580.2 | 1574.7 | 1577.8 | 1574.2 | 1573.0 | 1571.1 | 1571.1 | 1570.5 | 1573.6 | 1571.1 | 1572.4 |
| 15°   | 1627.0 | 1623.3 | 1624.5 | 1622.1 | 1623.9 | 1622.7 | 1617.9 | 1615.4 | 1616.6 | 1612.9 | 1613.6 |
| 17.5° | 1682.1 | 1673.6 | 1677.9 | 1676.7 | 1676.7 | 1679.2 | 1671.3 | 1668.2 | 1670.6 | 1667.0 | 1670.0 |
| 20°   | 1745.9 | 1737.4 | 1739.2 | 1736.8 | 1733.8 | 1736.1 | 1726.5 | 1728.9 | 1730.7 | 1728.3 | 1733.8 |
| 22.5° | 1815.7 | 1804.7 | 1804.1 | 1805.3 | 1798.7 | 1799.3 | 1792.6 | 1798.7 | 1802.4 | 1795.6 | 1802.4 |
| 25°   | 1887.2 | 1875.7 | 1883.6 | 1880.6 | 1872.1 | 1873.9 | 1869.1 | 1875.1 | 1878.2 | 1869.7 | 1879.3 |
| 27.5° | 1963.1 | 1955.3 | 1962.6 | 1964.3 | 1954.1 | 1961.3 | 1954.1 | 1959.5 | 1962.6 | 1949.8 | 1959.5 |
| 30°   | 2051.7 | 2043.8 | 2050.5 | 2055.3 | 2043.2 | 2054.7 | 2048.7 | 2052.4 | 2053.0 | 2037.8 | 2046.8 |
| 32.5° | 2148.2 | 2136.1 | 2153.1 | 2155.5 | 2142.1 | 2156.1 | 2148.2 | 2153.1 | 2156.1 | 2135.5 | 2149.4 |
| 35°   | 2266.0 | 2250.8 | 2270.2 | 2267.2 | 2255.6 | 2267.2 | 2259.9 | 2267.2 | 2274.5 | 2249.6 | 2264.7 |
| 37.5° | 2392.8 | 2377.0 | 2397.6 | 2392.1 | 2381.3 | 2389.2 | 2384.9 | 2389.8 | 2401.3 | 2374.6 | 2390.9 |
| 40°   | 2532.4 | 2512.9 | 2540.9 | 2531.1 | 2520.8 | 2519.6 | 2522.0 | 2525.1 | 2540.3 | 2510.5 | 2520.2 |
| 42.5° | 2681.6 | 2661.0 | 2702.8 | 2687.7 | 2673.1 | 2663.5 | 2671.4 | 2677.4 | 2692.0 | 2658.5 | 2676.2 |
| 45°   | 2852.2 | 2828.5 | 2883.1 | 2864.9 | 2841.8 | 2821.8 | 2834.5 | 2843.7 | 2864.9 | 2824.8 | 2845.5 |
| 47.5° | 3040.3 | 3013.6 | 3071.8 | 3066.4 | 3028.8 | 2985.0 | 3014.2 | 3040.3 | 3056.0 | 3007.5 | 3023.9 |
| 50°   | 3224.1 | 3203.5 | 3280.0 | 3286.7 | 3240.5 | 3179.2 | 3219.9 | 3259.3 | 3263.6 | 3199.8 | 3207.7 |
| 52.5° | 3396.4 | 3375.8 | 3486.9 | 3528.8 | 3487.6 | 3414.7 | 3457.7 | 3497.8 | 3465.6 | 3383.1 | 3385.6 |
| 55°   | 3534.2 | 3517.3 | 3658.6 | 3766.7 | 3780.6 | 3720.5 | 3746.1 | 3744.8 | 3639.3 | 3512.4 | 3516.7 |
| 57.5° | 3567.6 | 3565.2 | 3743.6 | 3972.4 | 4118.0 | 4125.3 | 4074.9 | 3946.2 | 3718.7 | 3548.2 | 3537.3 |
| 60°   | 3415.9 | 3431.1 | 3676.3 | 4079.8 | 4468.2 | 4629.6 | 4411.7 | 4044.5 | 3628.3 | 3391.6 | 3363.7 |
| 62.5° | 2961.9 | 3002.0 | 3297.5 | 3948.7 | 4751.0 | 5209.8 | 4681.8 | 3895.3 | 3256.9 | 2948.0 | 2929.9 |
| 65°   | 2122.8 | 2192.5 | 2519.0 | 3369.8 | 4725.5 | 5719.5 | 4642.9 | 3342.5 | 2543.2 | 2187.0 | 2161.0 |
| 67.5° | 963.1  | 1034.0 | 1311.4 | 2307.2 | 4107.7 | 5581.1 | 4098.0 | 2331.5 | 1376.9 | 1037.7 | 1022.5 |
| 70°   | 348.9  | 361.1  | 450.3  | 923.6  | 2625.2 | 4447.0 | 2737.5 | 930.3  | 478.8  | 384.8  | 379.9  |
| 72.5° | 211.2  | 213.0  | 231.9  | 330.8  | 912.0  | 2699.8 | 950.9  | 341.6  | 236.7  | 209.9  | 213.6  |
| 75°   | 134.1  | 132.9  | 165.0  | 202.0  | 323.5  | 910.9  | 339.3  | 202.0  | 164.4  | 149.9  | 151.1  |
| 77.5° | 96.5   | 99.5   | 118.3  | 151.1  | 203.9  | 308.8  | 200.3  | 144.4  | 118.3  | 97.1   | 98.9   |
| 80°   | 72.3   | 74.0   | 86.2   | 117.8  | 143.2  | 192.4  | 127.4  | 106.8  | 89.2   | 60.7   | 62.5   |
| 82.5° | 52.2   | 52.2   | 56.5   | 85.6   | 87.4   | 103.7  | 69.2   | 75.2   | 58.8   | 43.0   | 43.0   |
| 85°   | 31.0   | 30.3   | 35.2   | 50.9   | 45.5   | 38.2   | 31.6   | 46.1   | 37.0   | 26.6   | 26.1   |
| 87.5° | 11.0   | 11.5   | 11.0   | 14.6   | 12.1   | 10.4   | 9.7    | 12.7   | 10.4   | 9.1    | 8.5    |
| 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)