

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: P961579

Luminaire Tested: **NAV-SB2A-835-U-RW**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P961579  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2A-835-U-RW  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND RECTANGULAR  
WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8782.2 lumens  
Efficiency: N/A  
Efficacy: 153.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 57.3  
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



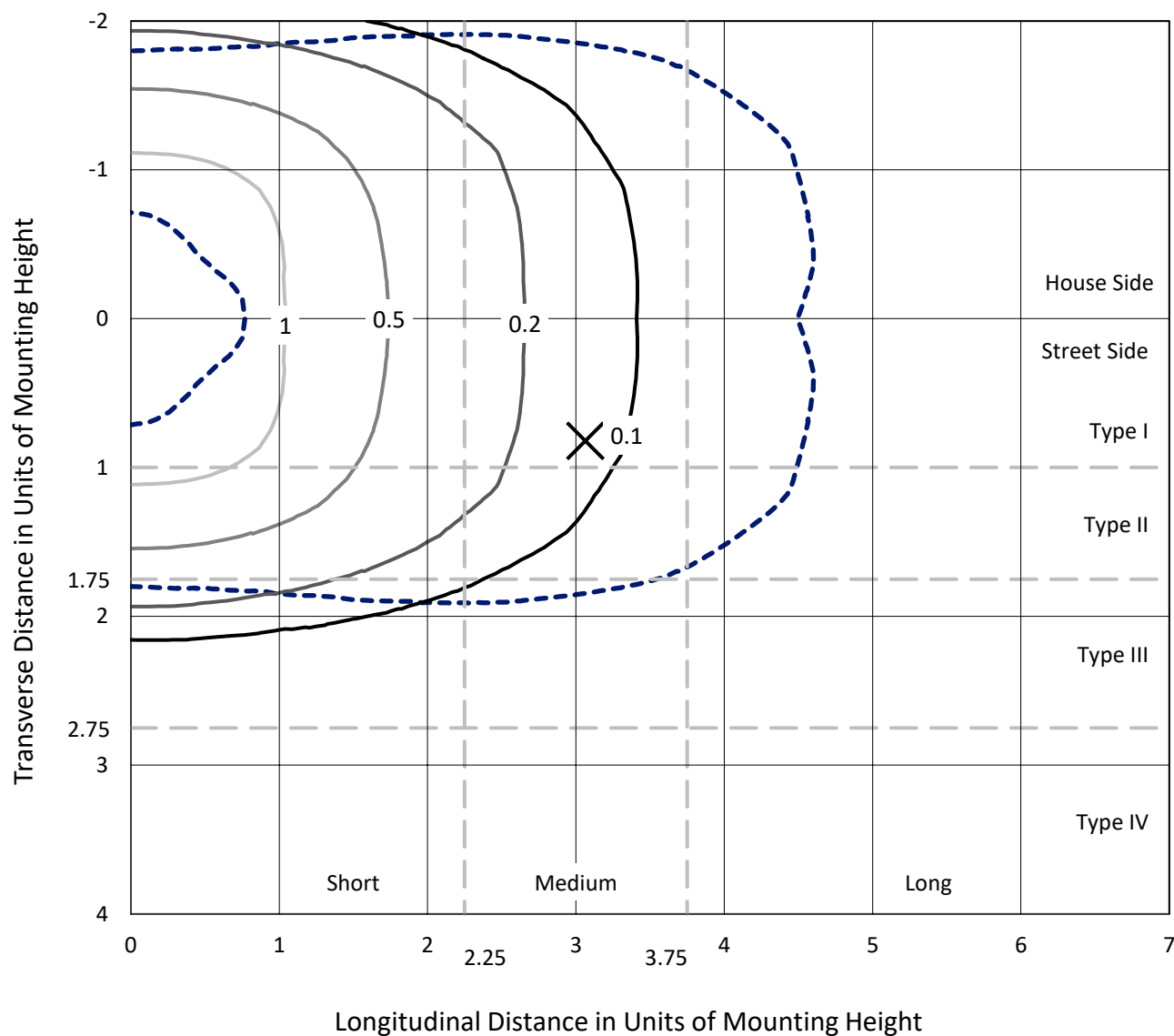
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



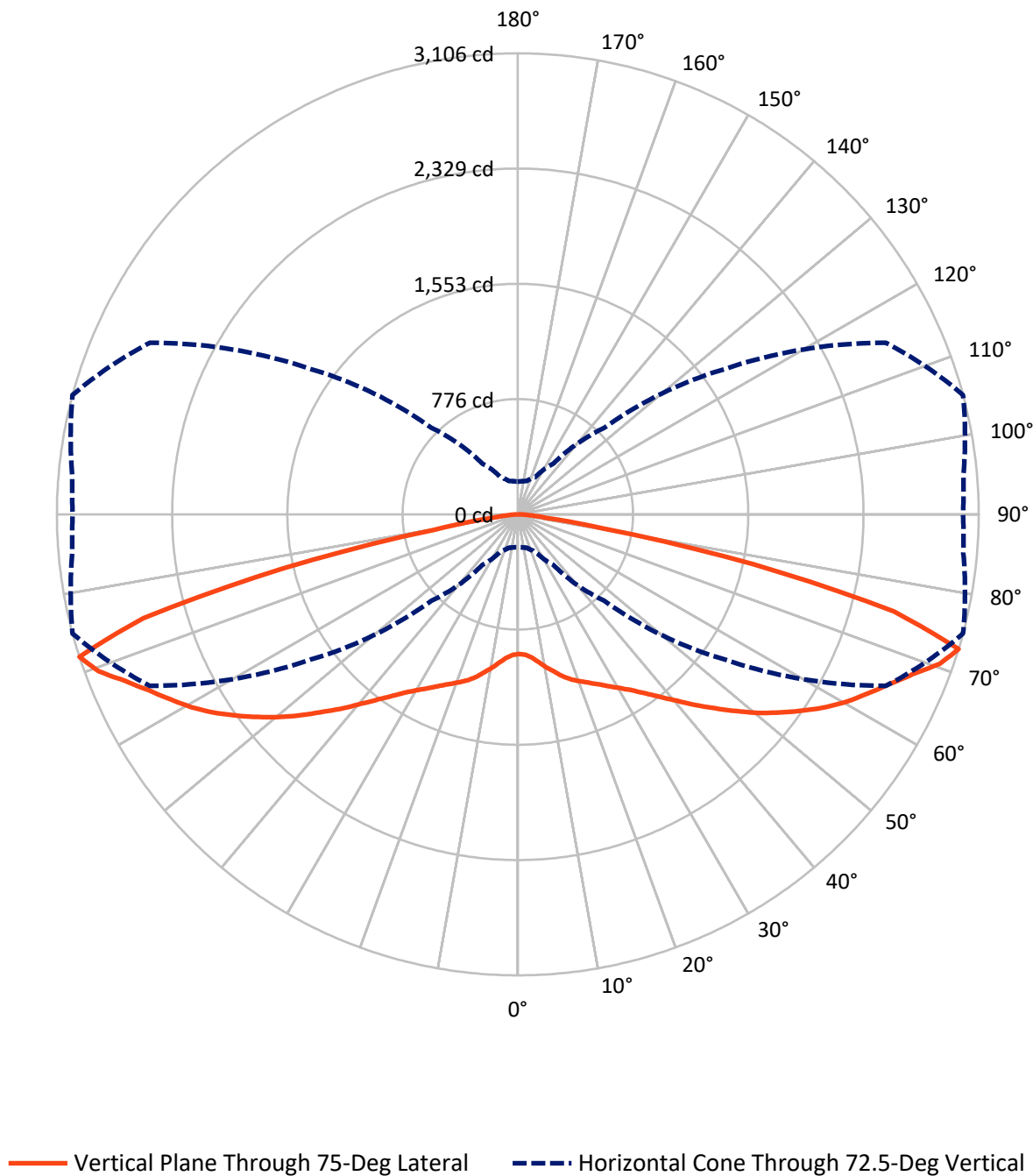
Based on 25 foot mounting height. Maximum calculated value = 1.6 fc

Type III - 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    | 4391.1   | 0.0    | 4391.1 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 4391.1   | 0.0    | 4391.1 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 8782.2   | 0.0    | 8782.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 92.2   | 1.0       |
| 10°-20°   | 303.9  | 3.5       |
| 20°-30°   | 587.3  | 6.7       |
| 30°-40°   | 991.7  | 11.3      |
| 40°-50°   | 1572.7 | 17.9      |
| 50°-60°   | 2105.7 | 24.0      |
| 60°-70°   | 2003.9 | 22.8      |
| 70°-80°   | 1045.7 | 11.9      |
| 80°-90°   | 79.1   | 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°    | 8782.2 | 100.0     |
| 0°-180°   | 8782.2 | 100.0     |

**Coefficient of Utilization**



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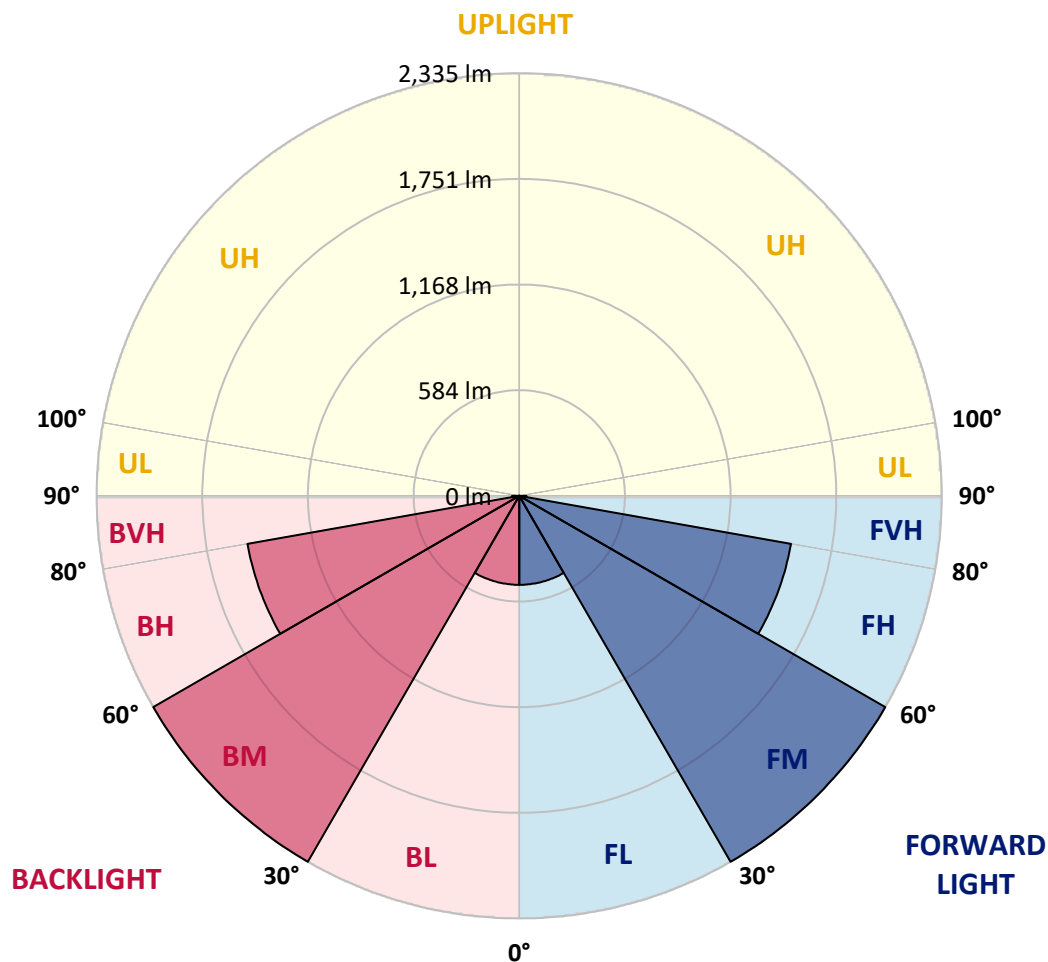
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 491.7  | 5.6       |                         |      |         |
| FM   | (30°-60°)   | 2335.0 | 26.6      |                         |      |         |
| FH   | (60°-80°)   | 1524.8 | 17.4      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 39.6   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 491.7  | 5.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 2335.0 | 26.6      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1524.8 | 17.4      | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 39.6   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 940.7  | 940.7  | 940.7  | 940.7  | 940.7  | 940.7  | 940.7  | 940.7  | 940.7  | 940.7  | 940.7  |
| 2.5°  | 940.7  | 939.8  | 940.7  | 941.7  | 941.2  | 941.2  | 943.4  | 944.7  | 947.4  | 947.0  | 946.6  |
| 5°    | 934.5  | 934.0  | 937.6  | 941.7  | 944.7  | 950.2  | 956.8  | 961.8  | 968.1  | 969.4  | 969.4  |
| 7.5°  | 931.3  | 930.0  | 936.2  | 943.4  | 953.2  | 966.8  | 979.7  | 993.2  | 1004.0 | 1007.6 | 1008.4 |
| 10°   | 933.6  | 934.0  | 942.5  | 956.0  | 971.7  | 990.5  | 1008.9 | 1031.8 | 1047.0 | 1050.6 | 1054.2 |
| 12.5° | 943.8  | 943.0  | 957.4  | 978.9  | 1000.4 | 1024.2 | 1045.7 | 1070.7 | 1087.3 | 1095.8 | 1099.4 |
| 15°   | 962.7  | 960.9  | 981.1  | 1012.9 | 1044.3 | 1072.1 | 1089.6 | 1113.4 | 1132.6 | 1143.4 | 1147.5 |
| 17.5° | 985.1  | 986.0  | 1012.5 | 1053.7 | 1095.0 | 1126.4 | 1143.0 | 1155.1 | 1169.8 | 1179.3 | 1183.8 |
| 20°   | 1024.6 | 1026.3 | 1056.0 | 1104.8 | 1151.9 | 1187.8 | 1201.2 | 1196.8 | 1200.8 | 1208.0 | 1213.4 |
| 22.5° | 1077.5 | 1078.4 | 1111.6 | 1164.5 | 1213.8 | 1253.3 | 1262.2 | 1243.8 | 1232.7 | 1237.6 | 1241.2 |
| 25°   | 1138.9 | 1144.7 | 1177.9 | 1232.2 | 1282.9 | 1320.5 | 1324.5 | 1296.7 | 1268.9 | 1270.3 | 1272.5 |
| 27.5° | 1213.8 | 1219.1 | 1252.9 | 1306.7 | 1358.2 | 1390.9 | 1390.5 | 1353.2 | 1312.4 | 1302.2 | 1305.2 |
| 30°   | 1295.0 | 1300.8 | 1335.3 | 1390.9 | 1438.9 | 1467.6 | 1461.3 | 1417.0 | 1358.6 | 1339.4 | 1341.6 |
| 32.5° | 1391.3 | 1394.9 | 1430.0 | 1485.5 | 1529.9 | 1552.8 | 1539.8 | 1485.1 | 1412.4 | 1390.5 | 1395.8 |
| 35°   | 1508.0 | 1513.3 | 1539.3 | 1591.8 | 1630.8 | 1649.6 | 1627.7 | 1563.1 | 1481.5 | 1456.8 | 1460.4 |
| 37.5° | 1641.1 | 1637.5 | 1667.2 | 1713.8 | 1746.1 | 1757.7 | 1727.6 | 1651.0 | 1560.5 | 1531.2 | 1536.7 |
| 40°   | 1780.1 | 1778.4 | 1810.7 | 1855.5 | 1873.0 | 1880.2 | 1835.8 | 1751.8 | 1651.5 | 1620.0 | 1630.4 |
| 42.5° | 1906.1 | 1904.8 | 1948.3 | 1998.0 | 2019.1 | 2011.0 | 1955.0 | 1859.0 | 1756.8 | 1721.0 | 1729.9 |
| 45°   | 2007.1 | 2005.2 | 2058.6 | 2128.5 | 2169.8 | 2156.3 | 2081.0 | 1977.4 | 1863.6 | 1826.3 | 1834.9 |
| 47.5° | 2084.5 | 2085.5 | 2142.9 | 2229.4 | 2301.6 | 2306.6 | 2209.7 | 2098.1 | 1981.0 | 1938.9 | 1951.4 |
| 50°   | 2140.6 | 2143.3 | 2204.8 | 2300.7 | 2399.3 | 2442.9 | 2341.1 | 2221.8 | 2102.5 | 2055.0 | 2069.4 |
| 52.5° | 2154.5 | 2159.5 | 2233.5 | 2346.0 | 2462.2 | 2545.1 | 2474.7 | 2340.6 | 2217.8 | 2172.5 | 2184.2 |
| 55°   | 2080.5 | 2090.4 | 2184.2 | 2342.4 | 2500.7 | 2612.3 | 2592.1 | 2461.2 | 2333.9 | 2287.3 | 2300.3 |
| 57.5° | 1910.6 | 1924.5 | 2033.9 | 2240.6 | 2492.2 | 2658.5 | 2683.1 | 2577.0 | 2450.1 | 2405.2 | 2415.5 |
| 60°   | 1672.5 | 1689.1 | 1794.1 | 2019.6 | 2372.1 | 2675.6 | 2747.3 | 2689.5 | 2556.8 | 2513.3 | 2522.6 |
| 62.5° | 1313.3 | 1334.9 | 1460.4 | 1725.0 | 2118.3 | 2596.2 | 2802.0 | 2791.3 | 2652.7 | 2598.5 | 2604.7 |
| 65°   | 842.6  | 865.4  | 997.6  | 1310.3 | 1779.7 | 2353.2 | 2819.1 | 2890.4 | 2754.1 | 2678.2 | 2687.7 |
| 67.5° | 508.0  | 518.3  | 583.8  | 794.1  | 1300.8 | 1986.9 | 2674.6 | 3000.2 | 2872.5 | 2778.3 | 2785.4 |
| 70°   | 325.1  | 330.9  | 369.9  | 466.4  | 735.3  | 1449.7 | 2316.8 | 3020.9 | 3015.9 | 2881.0 | 2880.0 |
| 72.5° | 220.6  | 222.4  | 232.7  | 276.2  | 416.2  | 823.7  | 1708.9 | 2734.8 | 3105.5 | 3013.2 | 2998.8 |
| 75°   | 161.4  | 171.3  | 187.9  | 195.5  | 236.3  | 411.6  | 979.3  | 1921.4 | 2617.2 | 2657.6 | 2559.8 |
| 77.5° | 120.1  | 120.6  | 143.5  | 152.4  | 168.6  | 219.2  | 414.3  | 1072.6 | 1624.9 | 1706.1 | 1521.8 |
| 80°   | 101.8  | 96.5   | 95.9   | 122.9  | 126.9  | 136.7  | 185.2  | 370.3  | 582.0  | 352.9  | 266.8  |
| 82.5° | 84.8   | 78.9   | 71.3   | 95.9   | 86.5   | 83.8   | 80.3   | 150.7  | 185.2  | 91.0   | 77.6   |
| 85°   | 59.1   | 56.5   | 53.8   | 62.7   | 49.3   | 42.1   | 38.5   | 70.4   | 78.0   | 38.5   | 34.0   |
| 87.5° | 25.5   | 26.4   | 26.9   | 27.8   | 20.6   | 14.8   | 14.8   | 19.7   | 19.7   | 15.3   | 11.2   |
| 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)