

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: P962385

Luminaire Tested: **NAV-SB2C-727-U-RW**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P962385  
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-SB2C-727-U-RW  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND RECTANGULAR  
WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14662.6 lumens  
Efficiency: N/A  
Efficacy: 145.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B4 - U0 - G4

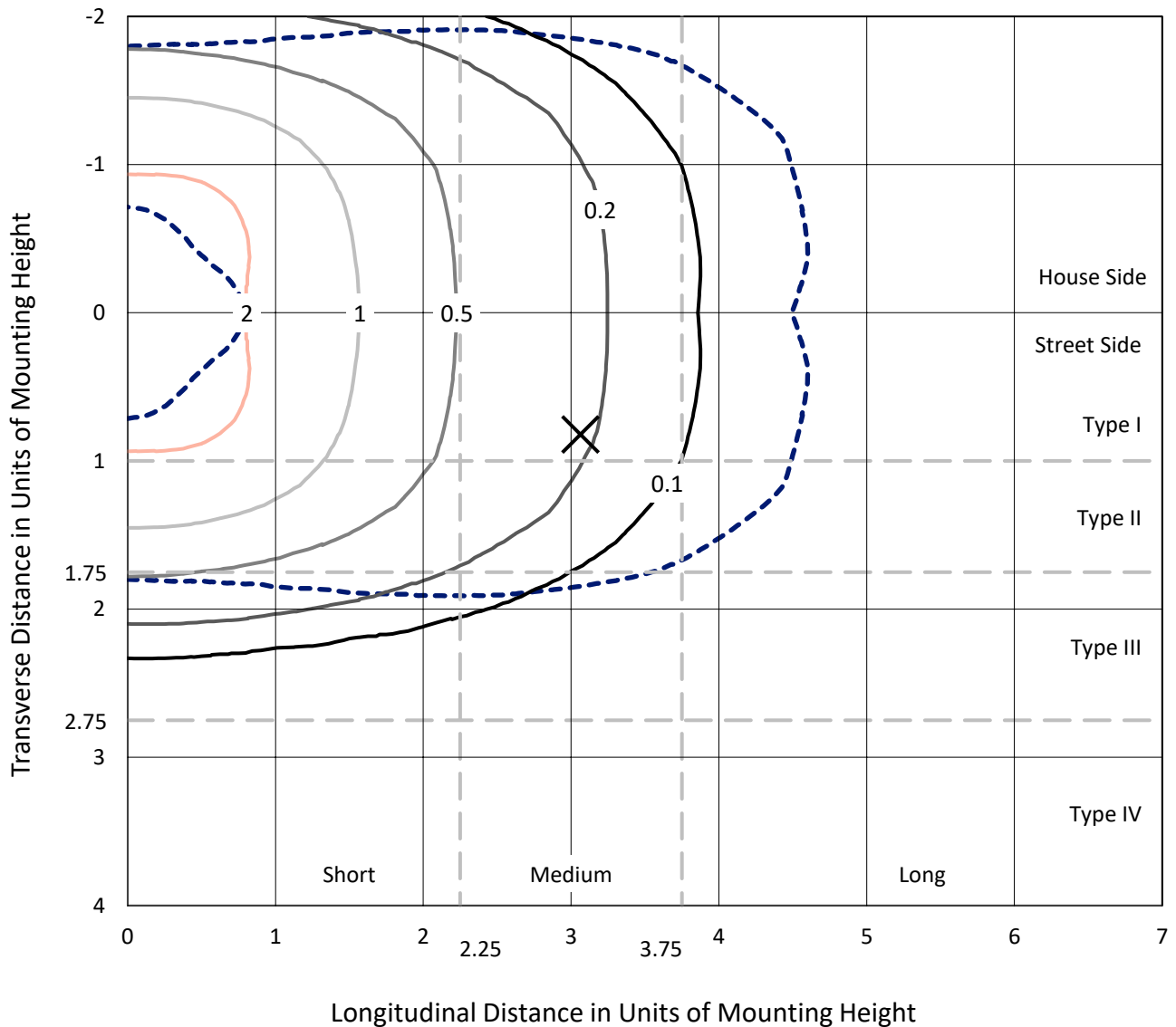
Input Watts (W): 100.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

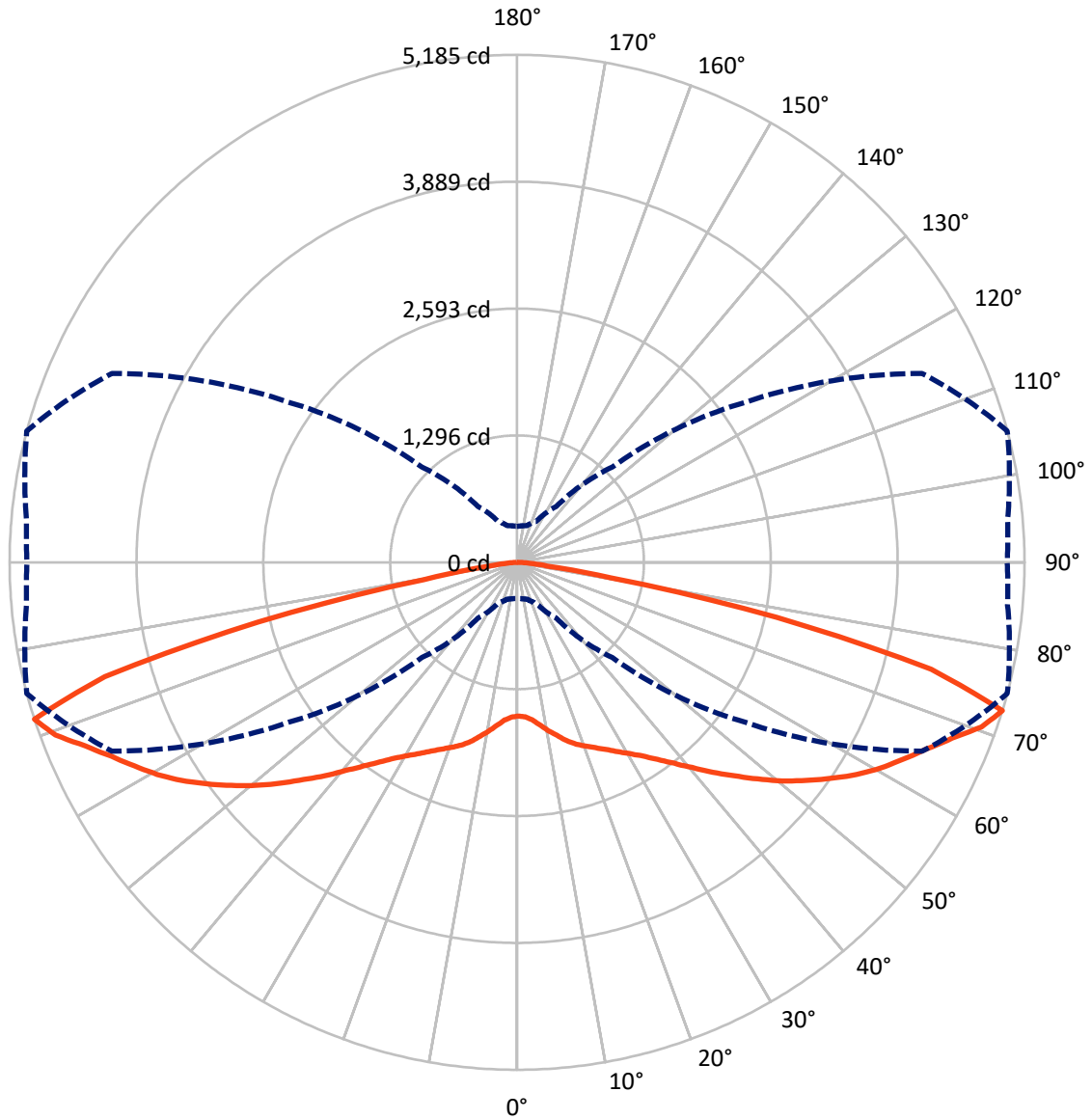
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7331.3   | 0.0    | 7331.3  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 7331.3   | 0.0    | 7331.3  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 14662.6  | 0.0    | 14662.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 153.9   | 1.0       |
| 10°-20°   | 507.4   | 3.5       |
| 20°-30°   | 980.5   | 6.7       |
| 30°-40°   | 1655.7  | 11.3      |
| 40°-50°   | 2625.8  | 17.9      |
| 50°-60°   | 3515.6  | 24.0      |
| 60°-70°   | 3345.7  | 22.8      |
| 70°-80°   | 1745.8  | 11.9      |
| 80°-90°   | 132.1   | 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°    | 14662.6 | 100.0     |
| 0°-180°   | 14662.6 | 100.0     |

**Coefficient of Utilization**

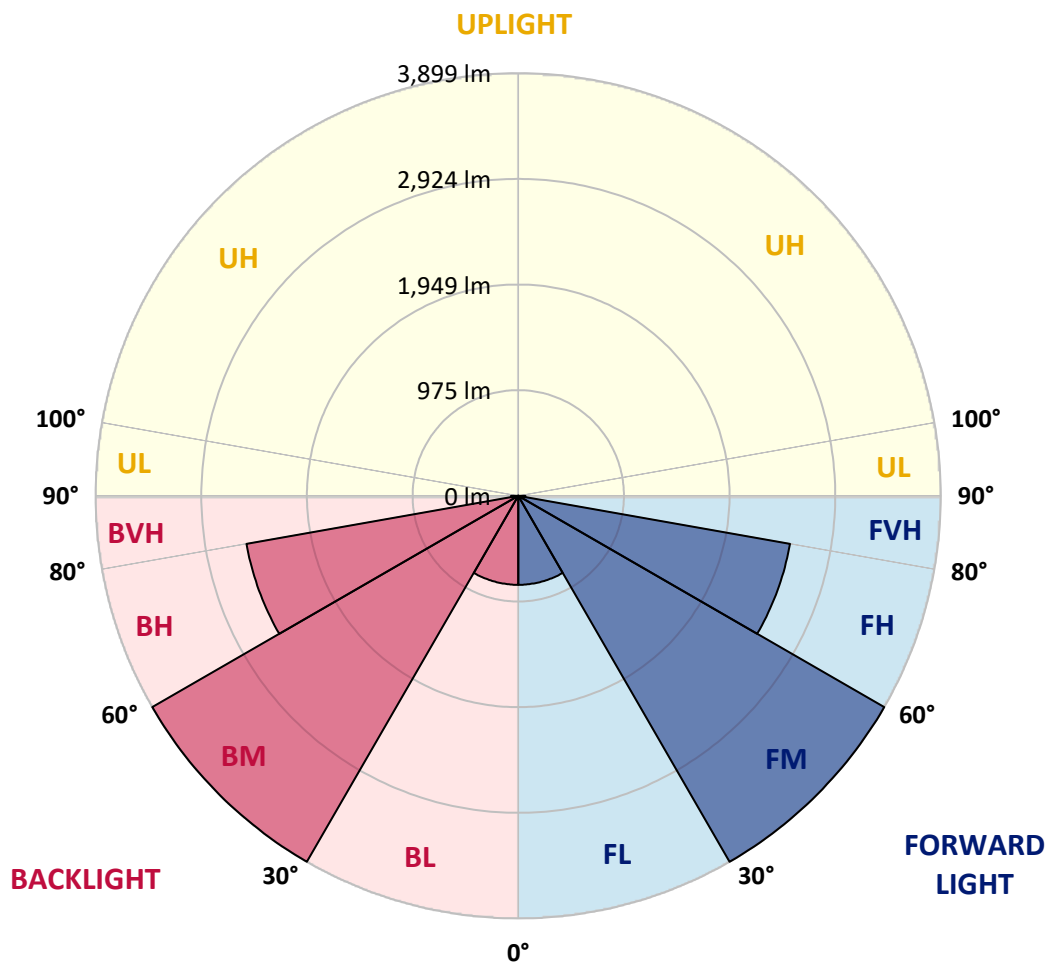


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 820.9  | 5.6       |                         |      |         |
| FM (30°-60°)   | 3898.5 | 26.6      |                         |      |         |
| FH (60°-80°)   | 2545.8 | 17.4      |                         |      | G2/5000 |
| FVH (80°-90°)  | 66.1   | 0.5       |                         |      | G1/100  |
| BL (0°-30°)    | 820.9  | 5.6       | B2/1000                 |      |         |
| BM (30°-60°)   | 3898.5 | 26.6      | B3/5000                 |      |         |
| BH (60°-80°)   | 2545.8 | 17.4      | B4/5000                 |      | G4/5000 |
| BVH (80°-90°)  | 66.1   | 0.5       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G4**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1570.6 | 1570.6 | 1570.6 | 1570.6 | 1570.6 | 1570.6 | 1570.6 | 1570.6 | 1570.6 | 1570.6 | 1570.6 |
| 2.5°  | 1570.6 | 1569.2 | 1570.6 | 1572.1 | 1571.4 | 1571.4 | 1575.1 | 1577.4 | 1581.9 | 1581.1 | 1580.3 |
| 5°    | 1560.2 | 1559.4 | 1565.4 | 1572.1 | 1577.4 | 1586.4 | 1597.6 | 1605.8 | 1616.3 | 1618.6 | 1618.6 |
| 7.5°  | 1554.9 | 1552.7 | 1563.1 | 1575.1 | 1591.6 | 1614.1 | 1635.8 | 1658.2 | 1676.2 | 1682.1 | 1683.7 |
| 10°   | 1558.6 | 1559.4 | 1573.6 | 1596.1 | 1622.3 | 1653.7 | 1684.4 | 1722.6 | 1748.0 | 1754.1 | 1760.0 |
| 12.5° | 1575.8 | 1574.4 | 1598.3 | 1634.3 | 1670.2 | 1709.9 | 1745.8 | 1787.7 | 1815.5 | 1829.6 | 1835.7 |
| 15°   | 1607.3 | 1604.3 | 1638.1 | 1691.1 | 1743.5 | 1790.0 | 1819.2 | 1858.8 | 1891.0 | 1909.0 | 1915.7 |
| 17.5° | 1644.7 | 1646.3 | 1690.4 | 1759.3 | 1828.2 | 1880.6 | 1908.2 | 1928.4 | 1953.1 | 1968.9 | 1976.4 |
| 20°   | 1710.6 | 1713.6 | 1763.0 | 1844.6 | 1923.2 | 1983.2 | 2005.6 | 1998.1 | 2004.8 | 2016.8 | 2025.8 |
| 22.5° | 1799.0 | 1800.4 | 1855.9 | 1944.2 | 2026.5 | 2092.4 | 2107.4 | 2076.8 | 2058.0 | 2066.2 | 2072.2 |
| 25°   | 1901.5 | 1911.2 | 1966.7 | 2057.3 | 2141.8 | 2204.7 | 2211.4 | 2165.0 | 2118.7 | 2120.8 | 2124.6 |
| 27.5° | 2026.5 | 2035.5 | 2091.7 | 2181.5 | 2267.6 | 2322.2 | 2321.5 | 2259.4 | 2191.2 | 2174.0 | 2179.3 |
| 30°   | 2162.0 | 2171.8 | 2229.4 | 2322.2 | 2402.4 | 2450.3 | 2439.8 | 2365.7 | 2268.3 | 2236.1 | 2239.9 |
| 32.5° | 2323.0 | 2329.0 | 2387.4 | 2480.2 | 2554.3 | 2592.5 | 2570.8 | 2479.5 | 2358.2 | 2321.5 | 2330.4 |
| 35°   | 2517.6 | 2526.6 | 2570.1 | 2657.6 | 2722.8 | 2754.2 | 2717.6 | 2609.8 | 2473.5 | 2432.3 | 2438.3 |
| 37.5° | 2740.0 | 2734.0 | 2783.4 | 2861.3 | 2915.2 | 2934.7 | 2884.5 | 2756.4 | 2605.2 | 2556.6 | 2565.6 |
| 40°   | 2972.1 | 2969.1 | 3022.9 | 3097.9 | 3127.1 | 3139.1 | 3064.9 | 2924.9 | 2757.2 | 2704.8 | 2722.0 |
| 42.5° | 3182.4 | 3180.2 | 3252.8 | 3335.9 | 3371.1 | 3357.6 | 3264.0 | 3103.8 | 2933.1 | 2873.3 | 2888.2 |
| 45°   | 3350.8 | 3347.9 | 3436.9 | 3553.8 | 3622.7 | 3600.2 | 3474.4 | 3301.4 | 3111.3 | 3049.2 | 3063.4 |
| 47.5° | 3480.4 | 3481.9 | 3577.8 | 3722.2 | 3842.7 | 3850.9 | 3689.3 | 3502.8 | 3307.5 | 3237.1 | 3258.1 |
| 50°   | 3574.0 | 3578.5 | 3681.0 | 3841.2 | 4005.9 | 4078.6 | 3908.6 | 3709.5 | 3510.3 | 3431.0 | 3455.0 |
| 52.5° | 3597.1 | 3605.4 | 3729.0 | 3916.8 | 4110.8 | 4249.2 | 4131.7 | 3907.8 | 3702.7 | 3627.2 | 3646.5 |
| 55°   | 3473.6 | 3490.1 | 3646.5 | 3910.9 | 4175.1 | 4361.6 | 4327.9 | 4109.2 | 3896.6 | 3818.7 | 3840.5 |
| 57.5° | 3189.9 | 3213.2 | 3395.8 | 3740.9 | 4160.9 | 4438.7 | 4479.8 | 4302.4 | 4090.6 | 4015.6 | 4032.9 |
| 60°   | 2792.4 | 2820.1 | 2995.3 | 3371.8 | 3960.3 | 4467.1 | 4586.9 | 4490.3 | 4268.7 | 4196.0 | 4211.8 |
| 62.5° | 2192.8 | 2228.7 | 2438.3 | 2879.9 | 3536.6 | 4334.6 | 4678.2 | 4660.3 | 4428.9 | 4338.3 | 4348.8 |
| 65°   | 1406.7 | 1444.8 | 1665.7 | 2187.5 | 2971.3 | 3928.8 | 4706.7 | 4825.7 | 4598.0 | 4471.6 | 4487.3 |
| 67.5° | 848.2  | 865.4  | 974.7  | 1325.8 | 2171.8 | 3317.2 | 4465.6 | 5009.1 | 4795.8 | 4638.5 | 4650.5 |
| 70°   | 542.7  | 552.5  | 617.7  | 778.6  | 1227.7 | 2420.3 | 3868.1 | 5043.5 | 5035.3 | 4809.9 | 4808.5 |
| 72.5° | 368.3  | 371.4  | 388.6  | 461.1  | 694.7  | 1375.2 | 2853.0 | 4565.9 | 5185.1 | 5030.8 | 5006.8 |
| 75°   | 269.5  | 286.0  | 313.6  | 326.4  | 394.5  | 687.3  | 1635.0 | 3207.8 | 4369.8 | 4437.1 | 4273.9 |
| 77.5° | 200.6  | 201.4  | 239.5  | 254.5  | 281.5  | 366.1  | 691.8  | 1790.8 | 2713.1 | 2848.6 | 2540.9 |
| 80°   | 169.9  | 160.9  | 160.2  | 205.1  | 211.9  | 228.4  | 309.1  | 618.4  | 971.7  | 589.2  | 445.5  |
| 82.5° | 141.4  | 131.7  | 119.0  | 160.2  | 144.5  | 140.0  | 134.0  | 251.5  | 309.1  | 152.0  | 129.6  |
| 85°   | 98.8   | 94.3   | 89.8   | 104.9  | 82.3   | 70.4   | 64.4   | 117.6  | 130.3  | 64.4   | 56.9   |
| 87.5° | 42.6   | 44.2   | 44.9   | 46.4   | 34.4   | 24.7   | 24.7   | 32.9   | 32.9   | 25.4   | 18.8   |
| 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)