

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: P883482

Luminaire Tested: **NAV-SB3D-835-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883482  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3D-835-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

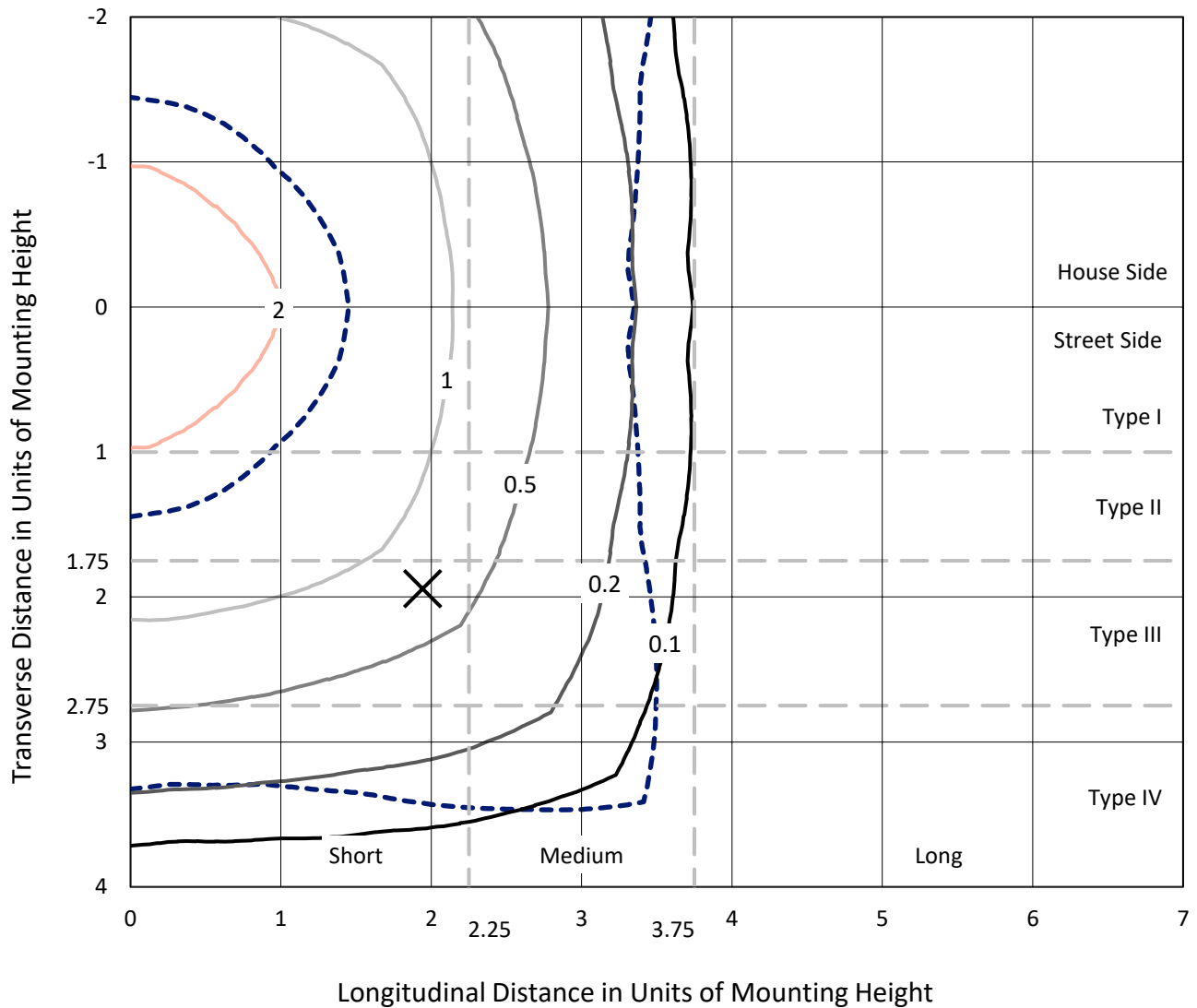
Lumens per Lamp: N/A  
Luminaire Lumens: 26050 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G3  
  
Input Watts (W): 218.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.84  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 2.542  
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

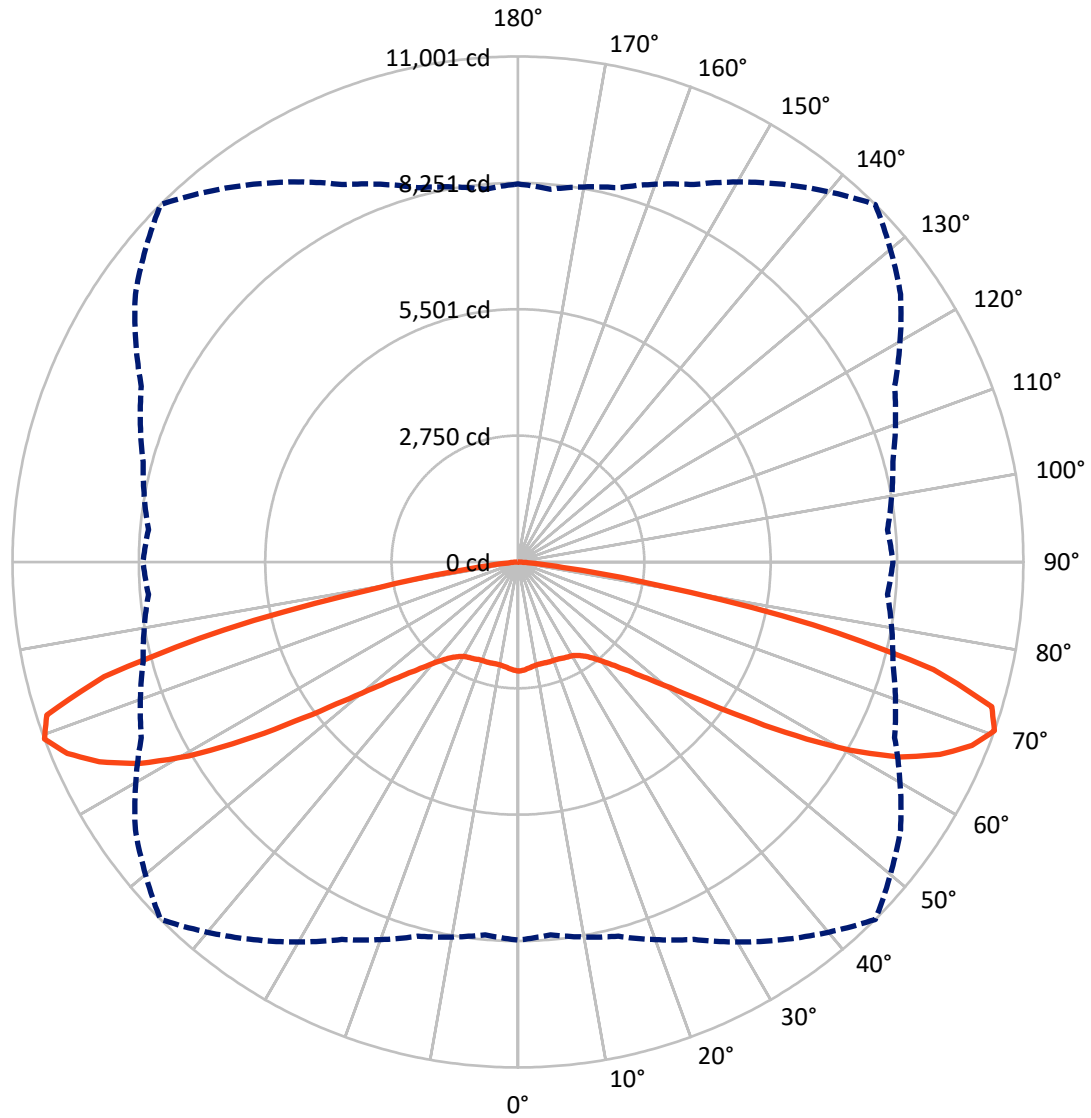
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 13025.0  | 0.0    | 13025.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 13025.0  | 0.0    | 13025.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 26050.0  | 0.0    | 26050.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 221.1   | 0.8       |
| 10°-20°   | 649.1   | 2.5       |
| 20°-30°   | 1080.1  | 4.1       |
| 30°-40°   | 1633.5  | 6.3       |
| 40°-50°   | 2714.5  | 10.4      |
| 50°-60°   | 5122.1  | 19.7      |
| 60°-70°   | 8648.8  | 33.2      |
| 70°-80°   | 5683.2  | 21.8      |
| 80°-90°   | 297.7   | 1.1       |
| 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°    | 26050.0 | 100.0     |
| 0°-180°   | 26050.0 | 100.0     |



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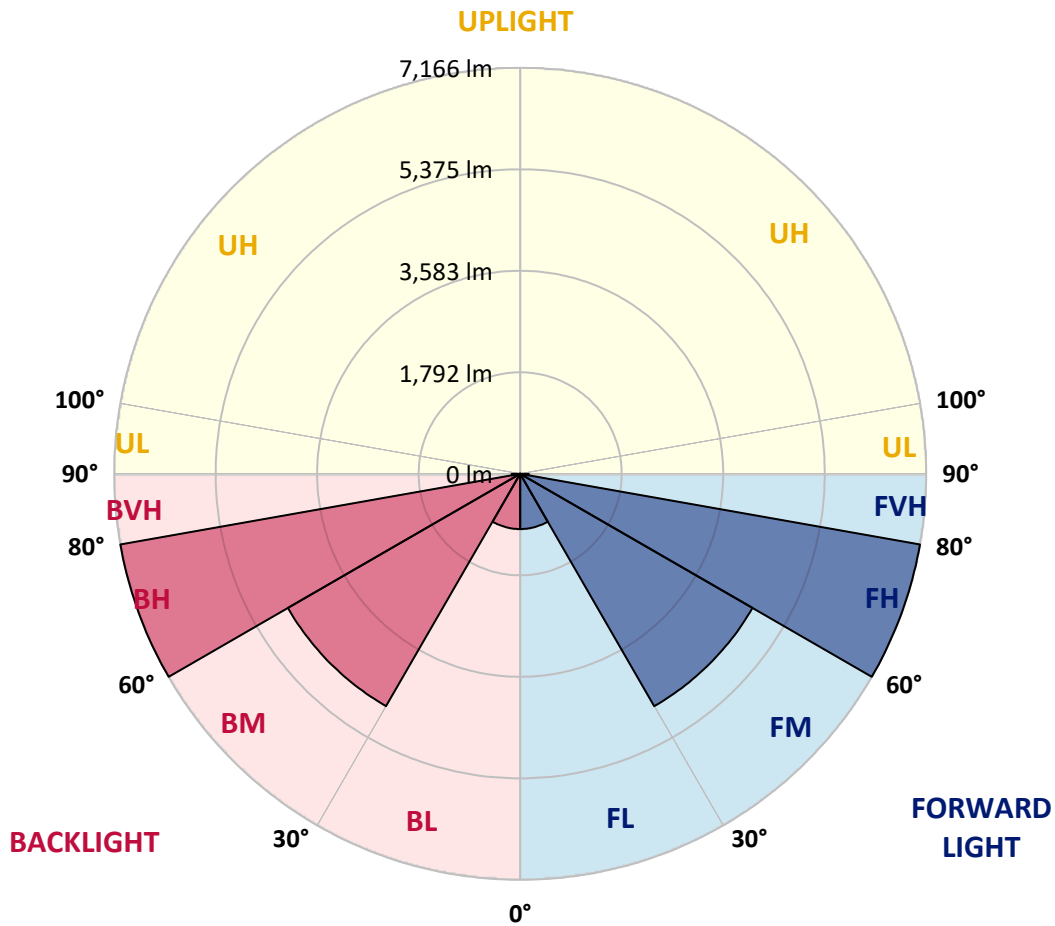
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 975.1  | 3.7       |                         |      |         |
| FM (30°-60°)   | 4735.0 | 18.2      |                         |      |         |
| FH (60°-80°)   | 7166.0 | 27.5      |                         |      | G3/7500 |
| FVH (80°-90°)  | 148.9  | 0.6       |                         |      | G2/225  |
| BL (0°-30°)    | 975.1  | 3.7       | B2/1000                 |      |         |
| BM (30°-60°)   | 4735.0 | 18.2      | B3/5000                 |      |         |
| BH (60°-80°)   | 7166.0 | 27.5      | B5                      |      | G3/7500 |
| BVH (80°-90°)  | 148.9  | 0.6       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B5-U0-G3**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 45°     | 55°     | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|
| 0°    | 2376.3 | 2376.3 | 2376.3 | 2376.3 | 2376.3  | 2376.3  | 2376.3  | 2376.3 | 2376.3 | 2376.3 | 2376.3 |
| 2.5°  | 2361.4 | 2368.2 | 2365.5 | 2360.0 | 2360.0  | 2356.0  | 2360.0  | 2362.7 | 2366.8 | 2369.5 | 2368.2 |
| 5°    | 2330.2 | 2335.7 | 2334.3 | 2330.2 | 2331.6  | 2327.5  | 2330.2  | 2334.3 | 2337.0 | 2338.4 | 2338.4 |
| 7.5°  | 2303.2 | 2308.6 | 2305.9 | 2299.1 | 2299.1  | 2295.0  | 2296.4  | 2300.5 | 2304.5 | 2305.9 | 2305.9 |
| 10°   | 2296.4 | 2301.8 | 2293.7 | 2282.9 | 2278.8  | 2273.4  | 2274.7  | 2278.8 | 2286.9 | 2291.0 | 2291.0 |
| 12.5° | 2299.1 | 2303.2 | 2295.0 | 2278.8 | 2274.7  | 2269.3  | 2269.3  | 2273.4 | 2284.2 | 2289.6 | 2291.0 |
| 15°   | 2307.2 | 2311.3 | 2299.1 | 2281.5 | 2277.4  | 2273.4  | 2272.0  | 2277.4 | 2289.6 | 2299.1 | 2300.5 |
| 17.5° | 2322.1 | 2326.2 | 2307.2 | 2282.9 | 2277.4  | 2278.8  | 2277.4  | 2281.5 | 2300.5 | 2318.1 | 2318.1 |
| 20°   | 2335.7 | 2338.4 | 2312.6 | 2282.9 | 2277.4  | 2278.8  | 2277.4  | 2285.6 | 2309.9 | 2334.3 | 2335.7 |
| 22.5° | 2339.7 | 2342.4 | 2318.1 | 2292.3 | 2288.3  | 2289.6  | 2288.3  | 2296.4 | 2319.4 | 2343.8 | 2343.8 |
| 25°   | 2341.1 | 2345.1 | 2326.2 | 2305.9 | 2312.6  | 2315.4  | 2312.6  | 2314.0 | 2331.6 | 2353.3 | 2351.9 |
| 27.5° | 2361.4 | 2366.8 | 2349.2 | 2331.6 | 2335.7  | 2334.3  | 2338.4  | 2342.4 | 2356.0 | 2377.6 | 2372.2 |
| 30°   | 2403.4 | 2407.4 | 2392.5 | 2374.9 | 2372.2  | 2362.7  | 2374.9  | 2388.5 | 2403.4 | 2422.3 | 2418.3 |
| 32.5° | 2472.4 | 2480.5 | 2461.6 | 2442.6 | 2430.4  | 2425.0  | 2434.5  | 2457.5 | 2477.8 | 2498.1 | 2490.0 |
| 35°   | 2587.5 | 2592.9 | 2575.3 | 2540.1 | 2518.5  | 2518.5  | 2526.6  | 2556.4 | 2588.9 | 2614.6 | 2605.1 |
| 37.5° | 2750.0 | 2756.8 | 2725.6 | 2683.6 | 2651.1  | 2651.1  | 2662.0  | 2693.1 | 2741.9 | 2778.4 | 2764.9 |
| 40°   | 2947.7 | 2957.2 | 2917.9 | 2874.6 | 2843.4  | 2838.0  | 2851.5  | 2886.7 | 2932.8 | 2978.8 | 2963.9 |
| 42.5° | 3186.0 | 3196.8 | 3145.4 | 3107.4 | 3083.1  | 3083.1  | 3089.8  | 3122.3 | 3164.3 | 3221.2 | 3217.1 |
| 45°   | 3490.6 | 3509.6 | 3439.2 | 3401.3 | 3378.3  | 3383.7  | 3387.7  | 3416.2 | 3454.1 | 3519.1 | 3516.4 |
| 47.5° | 3853.5 | 3872.5 | 3798.0 | 3758.7 | 3754.7  | 3780.4  | 3764.1  | 3784.5 | 3804.8 | 3879.2 | 3857.6 |
| 50°   | 4265.1 | 4297.6 | 4246.2 | 4243.5 | 4251.6  | 4299.0  | 4261.1  | 4271.9 | 4248.9 | 4296.3 | 4267.8 |
| 52.5° | 4768.8 | 4816.2 | 4806.7 | 4823.0 | 4913.7  | 5011.2  | 4924.5  | 4886.6 | 4800.0 | 4814.9 | 4764.8 |
| 55°   | 5379.5 | 5451.2 | 5464.8 | 5562.3 | 5768.1  | 5967.1  | 5783.0  | 5630.0 | 5445.8 | 5412.0 | 5359.2 |
| 57.5° | 6074.1 | 6130.9 | 6195.9 | 6395.0 | 6779.5  | 7132.9  | 6779.5  | 6441.0 | 6151.3 | 6082.2 | 6033.5 |
| 60°   | 6821.5 | 6891.9 | 6954.2 | 7248.0 | 7819.4  | 8316.3  | 7808.6  | 7271.0 | 6887.8 | 6794.4 | 6713.2 |
| 62.5° | 7624.4 | 7715.1 | 7758.5 | 8084.8 | 8751.0  | 9344.0  | 8760.4  | 8109.2 | 7684.0 | 7583.8 | 7502.6 |
| 65°   | 8394.9 | 8469.3 | 8518.1 | 8866.0 | 9502.4  | 10096.8 | 9545.8  | 8904.0 | 8466.6 | 8335.3 | 8270.3 |
| 67.5° | 8753.7 | 8794.3 | 8913.4 | 9307.5 | 9979.0  | 10657.4 | 10092.8 | 9349.4 | 8860.6 | 8630.4 | 8633.2 |
| 70°   | 8228.3 | 8145.7 | 8432.8 | 9063.7 | 10035.9 | 11001.3 | 10165.9 | 9044.8 | 8446.3 | 8072.6 | 8162.0 |
| 72.5° | 6358.4 | 6216.3 | 6714.5 | 7793.7 | 9386.0  | 10782.0 | 9451.0  | 7854.6 | 7024.6 | 6266.4 | 6454.6 |
| 75°   | 3459.5 | 3298.4 | 3986.2 | 5351.0 | 7485.0  | 9345.4  | 7656.9  | 5504.0 | 4438.4 | 3433.8 | 3657.2 |
| 77.5° | 976.2  | 915.3  | 1470.5 | 2588.9 | 4502.1  | 6561.5  | 4675.4  | 2645.7 | 1744.0 | 1034.5 | 1149.6 |
| 80°   | 299.2  | 289.8  | 392.7  | 779.9  | 1911.9  | 3142.7  | 1837.4  | 789.4  | 499.6  | 315.5  | 333.1  |
| 82.5° | 177.4  | 162.5  | 195.0  | 284.3  | 487.4   | 987.1   | 473.9   | 296.5  | 238.3  | 159.8  | 173.3  |
| 85°   | 101.6  | 94.8   | 115.1  | 138.1  | 163.8   | 209.9   | 136.8   | 140.8  | 127.3  | 85.3   | 89.4   |
| 87.5° | 42.0   | 37.9   | 44.7   | 43.3   | 37.9    | 48.7    | 36.6    | 43.3   | 51.5   | 33.9   | 31.1   |
| 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)