

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: P885172

Luminaire Tested: **NAV-SB6B-830-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P885172  
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-SB6B-830-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

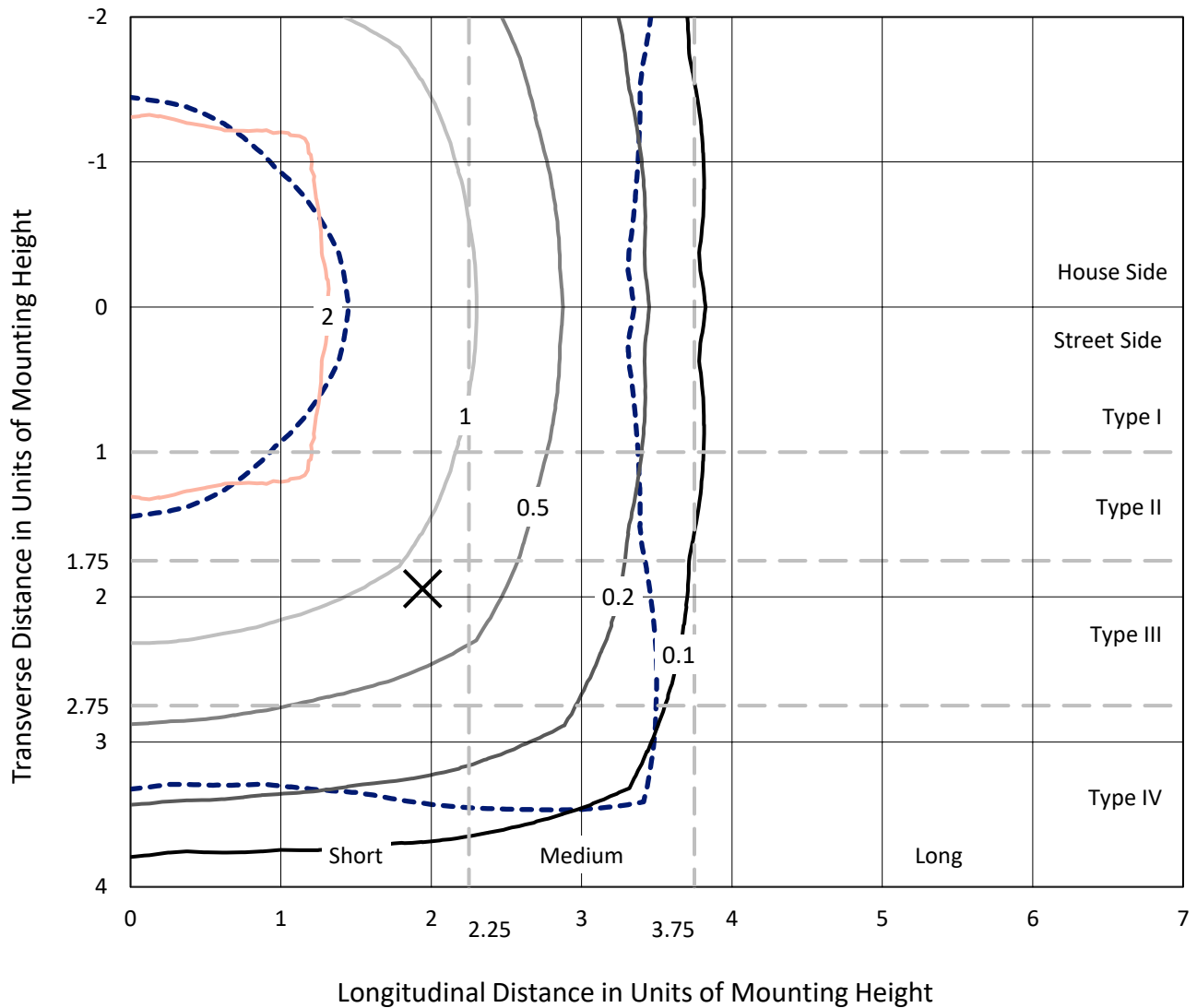
Lumens per Lamp: N/A  
Luminaire Lumens: 30250 lumens  
Efficiency: N/A  
Efficacy: 137.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G4  
  
Input Watts (W): 220.4  
Input Voltage (V): 120.0  
Input Current (Ain): 1.838  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.657  
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

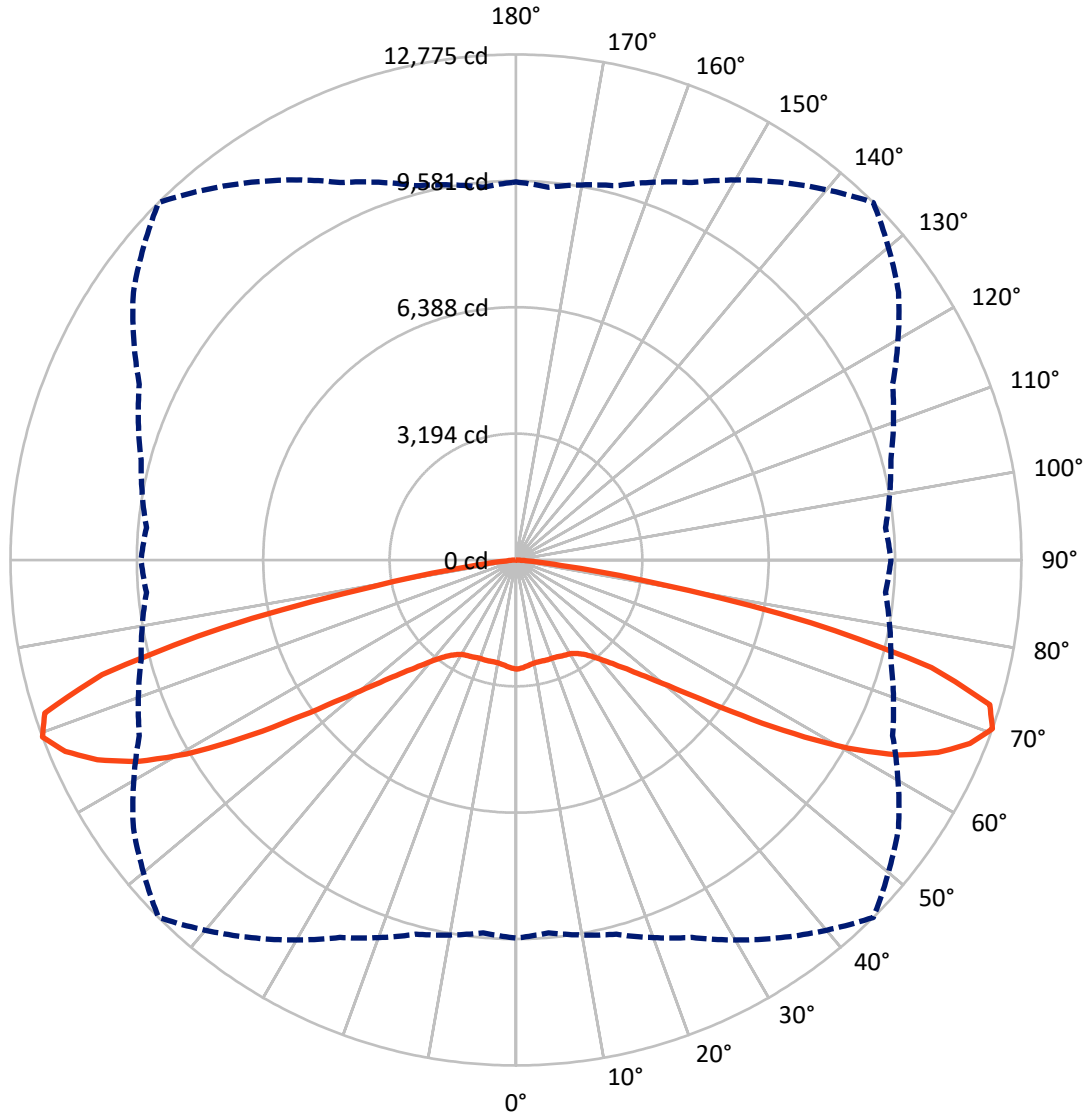
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 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    | 15125.0  | 0.0    | 15125.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 15125.0  | 0.0    | 15125.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 30250.0  | 0.0    | 30250.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 256.7   | 0.8       |
| 10°-20°   | 753.7   | 2.5       |
| 20°-30°   | 1254.3  | 4.1       |
| 30°-40°   | 1896.8  | 6.3       |
| 40°-50°   | 3152.1  | 10.4      |
| 50°-60°   | 5947.9  | 19.7      |
| 60°-70°   | 10043.3 | 33.2      |
| 70°-80°   | 6599.5  | 21.8      |
| 80°-90°   | 345.7   | 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°    | 30250.0 | 100.0     |
| 0°-180°   | 30250.0 | 100.0     |

**Coefficient of Utilization**

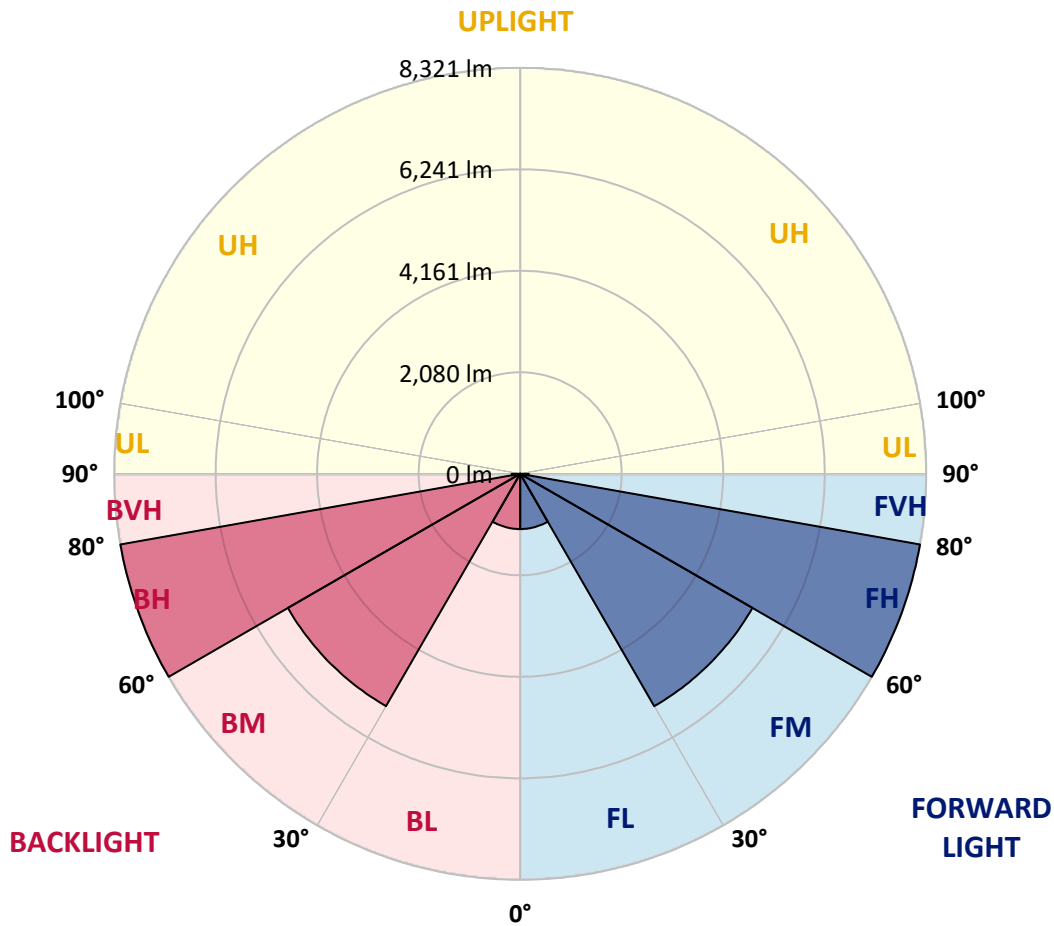


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|--------|-----------|-------------------------|------|----------|
|                |        |           | B                       | U    | G        |
| FL (0°-30°)    | 1132.3 | 3.7       |                         |      |          |
| FM (30°-60°)   | 5498.4 | 18.2      |                         |      |          |
| FH (60°-80°)   | 8321.4 | 27.5      |                         |      | G4/12000 |
| FVH (80°-90°)  | 172.9  | 0.6       |                         |      | G2/225   |
| BL (0°-30°)    | 1132.3 | 3.7       | B3/2500                 |      |          |
| BM (30°-60°)   | 5498.4 | 18.2      | B4/8500                 |      |          |
| BH (60°-80°)   | 8321.4 | 27.5      | B5                      |      | G4/12000 |
| BVH (80°-90°)  | 172.9  | 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-G4**  
 Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2759.4  | 2759.4  | 2759.4  | 2759.4  | 2759.4  | 2759.4  | 2759.4  | 2759.4  | 2759.4  | 2759.4  | 2759.4  |
| 2.5°  | 2742.1  | 2750.0  | 2746.8  | 2740.5  | 2740.5  | 2735.8  | 2740.5  | 2743.7  | 2748.4  | 2751.5  | 2750.0  |
| 5°    | 2706.0  | 2712.2  | 2710.7  | 2706.0  | 2707.5  | 2702.8  | 2706.0  | 2710.7  | 2713.8  | 2715.4  | 2715.4  |
| 7.5°  | 2674.5  | 2680.8  | 2677.6  | 2669.8  | 2669.8  | 2665.1  | 2666.6  | 2671.4  | 2676.1  | 2677.6  | 2677.6  |
| 10°   | 2666.6  | 2672.9  | 2663.5  | 2650.9  | 2646.2  | 2639.9  | 2641.5  | 2646.2  | 2655.6  | 2660.4  | 2660.4  |
| 12.5° | 2669.8  | 2674.5  | 2665.1  | 2646.2  | 2641.5  | 2635.2  | 2635.2  | 2639.9  | 2652.5  | 2658.8  | 2660.4  |
| 15°   | 2679.2  | 2683.9  | 2669.8  | 2649.3  | 2644.6  | 2639.9  | 2638.3  | 2644.6  | 2658.8  | 2669.8  | 2671.4  |
| 17.5° | 2696.5  | 2701.2  | 2679.2  | 2650.9  | 2644.6  | 2646.2  | 2644.6  | 2649.3  | 2671.4  | 2691.8  | 2691.8  |
| 20°   | 2712.2  | 2715.4  | 2685.5  | 2650.9  | 2644.6  | 2646.2  | 2644.6  | 2654.1  | 2682.4  | 2710.7  | 2712.2  |
| 22.5° | 2717.0  | 2720.1  | 2691.8  | 2661.9  | 2657.2  | 2658.8  | 2657.2  | 2666.6  | 2693.4  | 2721.7  | 2721.7  |
| 25°   | 2718.5  | 2723.2  | 2701.2  | 2677.6  | 2685.5  | 2688.7  | 2685.5  | 2687.1  | 2707.5  | 2732.7  | 2731.1  |
| 27.5° | 2742.1  | 2748.4  | 2728.0  | 2707.5  | 2712.2  | 2710.7  | 2715.4  | 2720.1  | 2735.8  | 2761.0  | 2754.7  |
| 30°   | 2790.9  | 2795.6  | 2778.3  | 2757.8  | 2754.7  | 2743.7  | 2757.8  | 2773.6  | 2790.9  | 2812.9  | 2808.2  |
| 32.5° | 2871.0  | 2880.5  | 2858.5  | 2836.5  | 2822.3  | 2816.0  | 2827.0  | 2853.7  | 2877.3  | 2900.9  | 2891.5  |
| 35°   | 3004.7  | 3011.0  | 2990.5  | 2949.7  | 2924.5  | 2924.5  | 2933.9  | 2968.5  | 3006.3  | 3036.1  | 3025.1  |
| 37.5° | 3193.4  | 3201.2  | 3165.1  | 3116.3  | 3078.6  | 3078.6  | 3091.2  | 3127.3  | 3183.9  | 3226.4  | 3210.7  |
| 40°   | 3422.9  | 3433.9  | 3388.3  | 3338.0  | 3301.9  | 3295.6  | 3311.3  | 3352.2  | 3405.6  | 3459.1  | 3441.8  |
| 42.5° | 3699.7  | 3712.2  | 3652.5  | 3608.5  | 3580.2  | 3580.2  | 3588.0  | 3625.8  | 3674.5  | 3740.5  | 3735.8  |
| 45°   | 4053.4  | 4075.4  | 3993.7  | 3949.6  | 3922.9  | 3929.2  | 3933.9  | 3966.9  | 4011.0  | 4086.4  | 4083.3  |
| 47.5° | 4474.8  | 4496.8  | 4410.3  | 4364.7  | 4360.0  | 4389.9  | 4371.0  | 4394.6  | 4418.2  | 4504.7  | 4479.5  |
| 50°   | 4952.8  | 4990.5  | 4930.8  | 4927.6  | 4937.1  | 4992.1  | 4948.1  | 4960.6  | 4933.9  | 4988.9  | 4955.9  |
| 52.5° | 5537.7  | 5592.7  | 5581.7  | 5600.6  | 5705.9  | 5819.1  | 5718.5  | 5674.5  | 5573.8  | 5591.1  | 5533.0  |
| 55°   | 6246.8  | 6330.1  | 6345.9  | 6459.1  | 6698.1  | 6929.2  | 6715.3  | 6537.7  | 6323.8  | 6284.5  | 6223.2  |
| 57.5° | 7053.4  | 7119.4  | 7194.9  | 7426.0  | 7872.6  | 8282.9  | 7872.6  | 7479.5  | 7143.0  | 7062.8  | 7006.2  |
| 60°   | 7921.3  | 8003.1  | 8075.4  | 8416.6  | 9080.1  | 9657.1  | 9067.5  | 8443.3  | 7998.4  | 7889.9  | 7795.5  |
| 62.5° | 8853.7  | 8959.0  | 9009.4  | 9388.3  | 10161.9 | 10850.5 | 10172.9 | 9416.6  | 8922.9  | 8806.5  | 8712.2  |
| 65°   | 9748.3  | 9834.8  | 9891.4  | 10295.5 | 11034.5 | 11724.7 | 11084.8 | 10339.5 | 9831.7  | 9679.2  | 9603.7  |
| 67.5° | 10165.0 | 10212.2 | 10350.5 | 10808.1 | 11587.9 | 12375.7 | 11720.0 | 10856.8 | 10289.2 | 10021.9 | 10025.1 |
| 70°   | 9554.9  | 9459.0  | 9792.4  | 10525.1 | 11654.0 | 12775.0 | 11804.9 | 10503.0 | 9808.1  | 9374.1  | 9477.9  |
| 72.5° | 7383.6  | 7218.5  | 7797.1  | 9050.2  | 10899.3 | 12520.3 | 10974.7 | 9121.0  | 8157.2  | 7276.7  | 7495.2  |
| 75°   | 4017.3  | 3830.2  | 4628.9  | 6213.8  | 8691.7  | 10852.1 | 8891.4  | 6391.5  | 5154.0  | 3987.4  | 4246.8  |
| 77.5° | 1133.6  | 1062.9  | 1707.5  | 3006.3  | 5227.9  | 7619.4  | 5429.2  | 3072.3  | 2025.1  | 1201.2  | 1334.9  |
| 80°   | 347.5   | 336.5   | 456.0   | 905.7   | 2220.1  | 3649.3  | 2133.6  | 916.7   | 580.2   | 366.3   | 386.8   |
| 82.5° | 206.0   | 188.7   | 226.4   | 330.2   | 566.0   | 1146.2  | 550.3   | 344.3   | 276.7   | 185.5   | 201.3   |
| 85°   | 117.9   | 110.1   | 133.6   | 160.4   | 190.2   | 243.7   | 158.8   | 163.5   | 147.8   | 99.1    | 103.8   |
| 87.5° | 48.7    | 44.0    | 51.9    | 50.3    | 44.0    | 56.6    | 42.5    | 50.3    | 59.7    | 39.3    | 36.2    |
| 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)