

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: P881555

Luminaire Tested: **NAV-SB1A-735-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881555
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-2)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4441 lumens
Efficiency: N/A
Efficacy: 143.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type I - Short
BUG Rating: B2 - U0 - G2

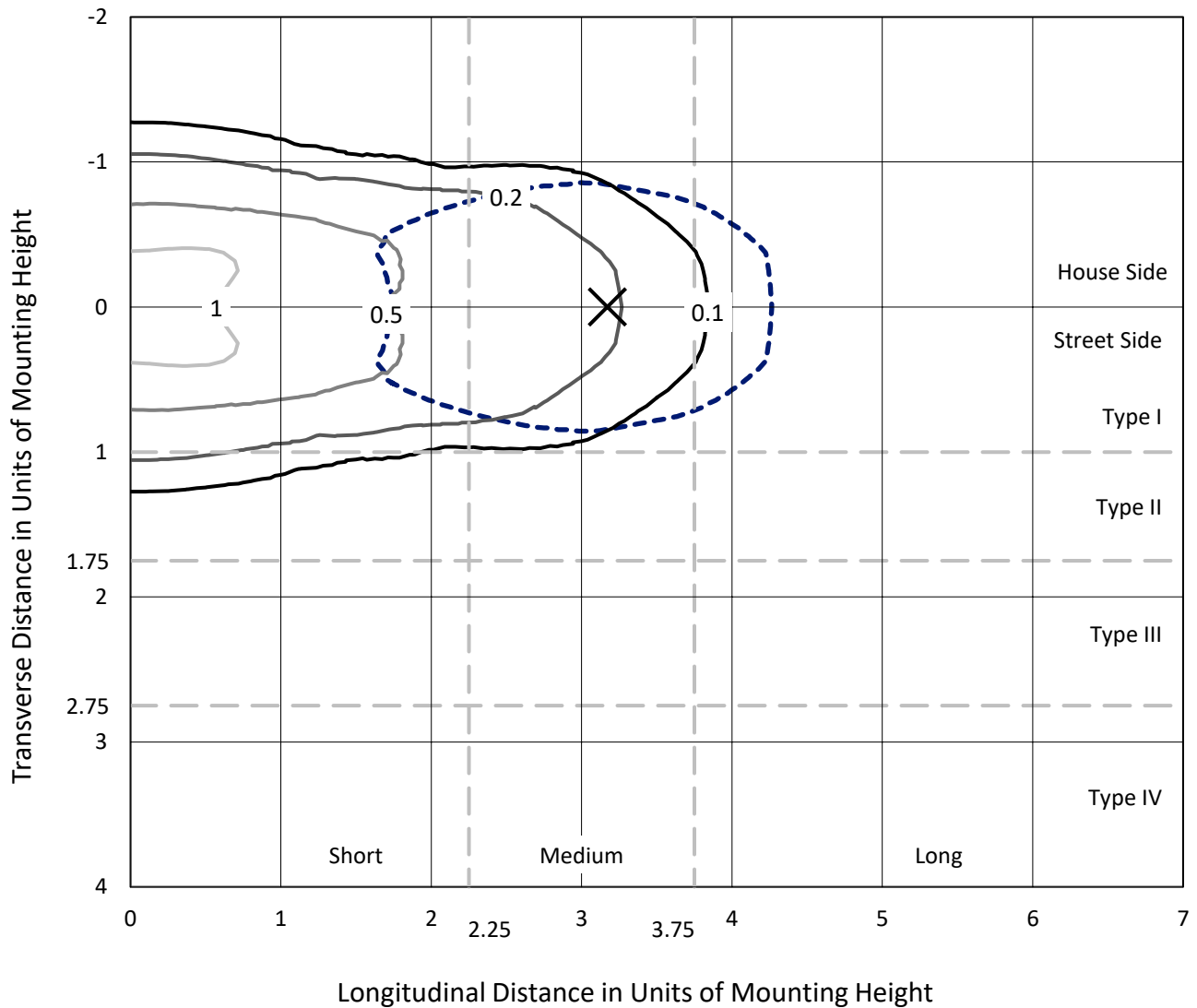
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

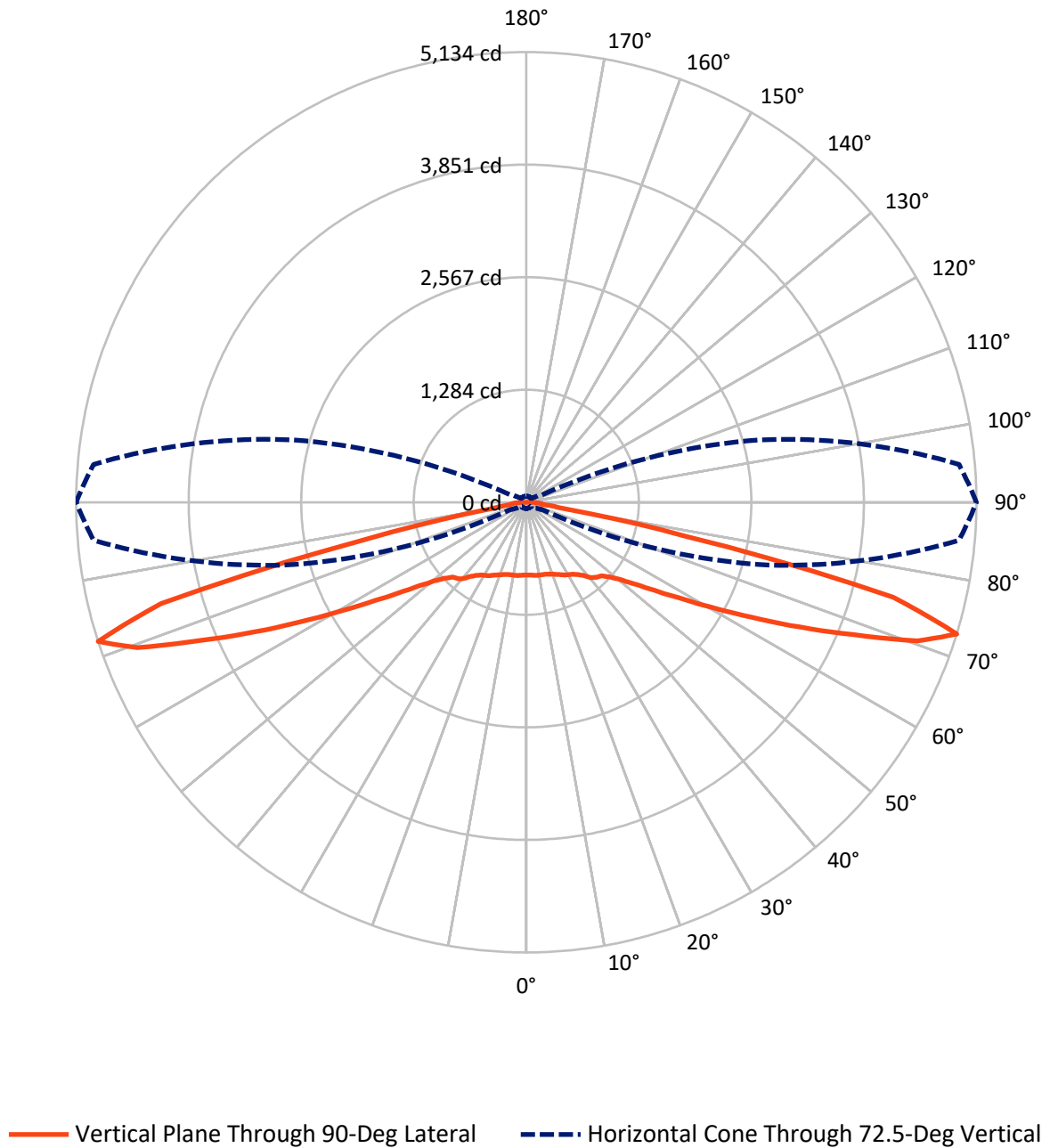
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2220.5 | 0.0 | 2220.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 2220.5 | 0.0 | 2220.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 4441.0 | 0.0 | 4441.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 80.5 | 1.8 |
| 10°-20° | 246.0 | 5.5 |
| 20°-30° | 410.2 | 9.2 |
| 30°-40° | 564.2 | 12.7 |
| 40°-50° | 689.0 | 15.5 |
| 50°-60° | 796.9 | 17.9 |
| 60°-70° | 950.2 | 21.4 |
| 70°-80° | 663.2 | 14.9 |
| 80°-90° | 40.7 | 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° | 4441.0 | 100.0 |
| 0°-180° | 4441.0 | 100.0 |



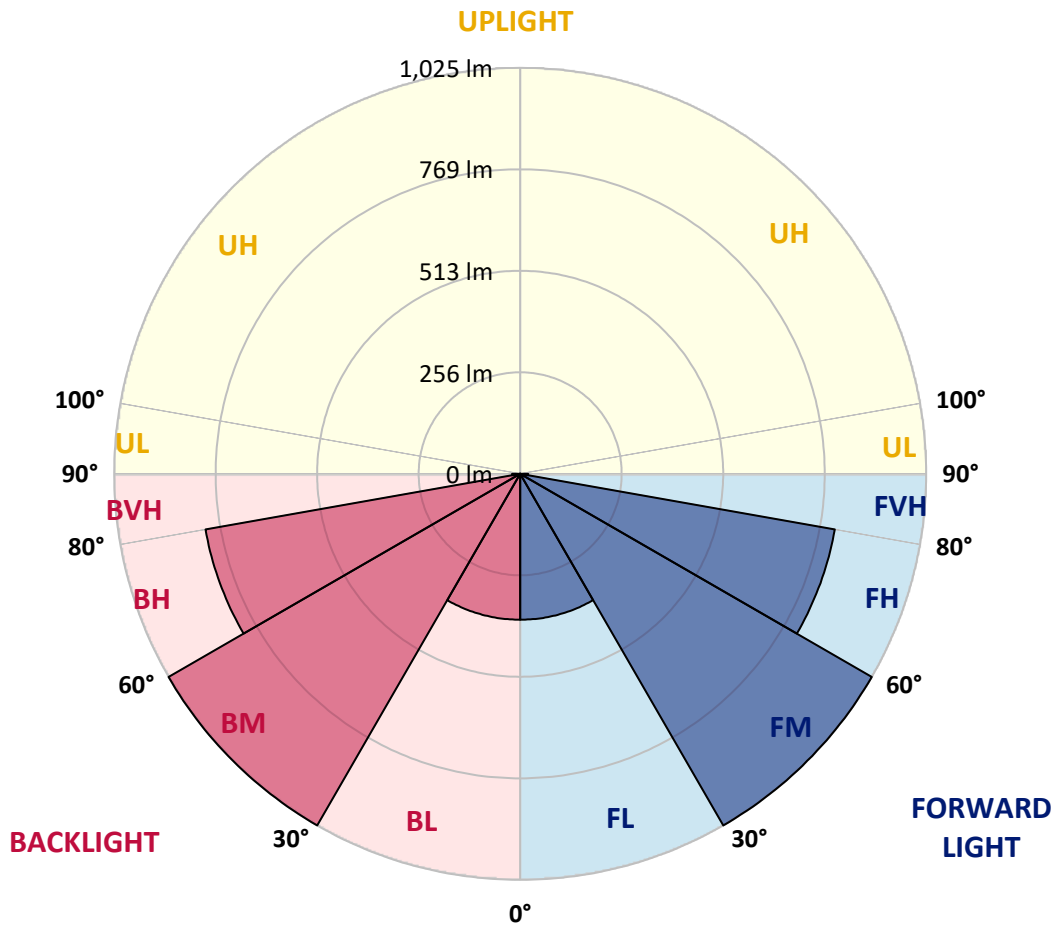
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 368.4 | 8.3 | | | |
| FM (30°-60°) | 1025.1 | 23.1 | | | |
| FH (60°-80°) | 806.7 | 18.2 | | | G1/1800 |
| FVH (80°-90°) | 20.4 | 0.5 | | | G1/100 |
| BL (0°-30°) | 368.4 | 8.3 | B1/500 | | |
| BM (30°-60°) | 1025.1 | 23.1 | B2/2500 | | |
| BH (60°-80°) | 806.7 | 18.2 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 20.4 | 0.5 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type I Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| 0° | 829.8 | 829.8 | 829.8 | 829.8 | 829.8 | 829.8 | 829.8 | 829.8 | 829.8 | 829.8 | 829.8 |
| 2.5° | 830.6 | 831.5 | 831.5 | 830.8 | 832.4 | 831.0 | 831.0 | 830.3 | 831.0 | 830.3 | 830.3 |
| 5° | 834.8 | 836.0 | 836.5 | 836.2 | 838.3 | 837.2 | 837.2 | 836.2 | 836.5 | 835.7 | 835.7 |
| 7.5° | 842.8 | 844.5 | 845.4 | 846.6 | 849.7 | 848.3 | 847.3 | 844.5 | 843.3 | 841.4 | 841.4 |
| 10° | 845.4 | 847.3 | 850.4 | 856.5 | 863.6 | 863.8 | 861.0 | 853.9 | 848.5 | 844.2 | 843.5 |
| 12.5° | 837.4 | 840.0 | 846.4 | 858.9 | 874.7 | 881.1 | 876.6 | 864.8 | 854.2 | 846.6 | 845.4 |
| 15° | 827.3 | 830.1 | 839.8 | 858.6 | 882.0 | 896.9 | 896.4 | 880.8 | 863.8 | 852.0 | 850.1 |
| 17.5° | 811.4 | 814.3 | 828.2 | 854.6 | 887.7 | 912.2 | 918.8 | 902.8 | 878.9 | 863.1 | 860.5 |
| 20° | 782.9 | 785.5 | 804.8 | 841.9 | 889.6 | 928.5 | 945.7 | 931.6 | 901.8 | 880.4 | 876.3 |
| 22.5° | 745.8 | 749.8 | 772.5 | 819.9 | 885.1 | 945.5 | 976.4 | 966.7 | 928.5 | 898.8 | 893.3 |
| 25° | 706.2 | 710.4 | 736.9 | 793.0 | 873.5 | 957.8 | 1012.8 | 1006.6 | 958.7 | 921.7 | 914.1 |
| 27.5° | 672.0 | 676.4 | 705.2 | 766.4 | 855.6 | 962.5 | 1048.6 | 1051.7 | 995.3 | 946.9 | 938.9 |
| 30° | 645.0 | 649.3 | 680.0 | 744.9 | 832.4 | 957.8 | 1080.0 | 1101.3 | 1032.6 | 968.9 | 957.3 |
| 32.5° | 615.5 | 621.0 | 653.3 | 718.7 | 805.1 | 946.4 | 1107.4 | 1154.8 | 1075.8 | 992.5 | 977.8 |
| 35° | 578.2 | 583.2 | 617.2 | 682.8 | 769.2 | 928.3 | 1130.3 | 1214.3 | 1137.6 | 1028.3 | 1012.1 |
| 37.5° | 532.9 | 537.7 | 571.4 | 638.0 | 733.6 | 902.8 | 1147.8 | 1281.4 | 1211.3 | 1080.0 | 1058.3 |
| 40° | 487.4 | 491.9 | 523.5 | 587.9 | 690.8 | 870.2 | 1153.9 | 1347.0 | 1295.8 | 1151.1 | 1127.9 |
| 42.5° | 445.6 | 449.6 | 478.6 | 538.6 | 642.9 | 828.7 | 1145.9 | 1404.1 | 1371.5 | 1200.6 | 1170.9 |
| 45° | 407.1 | 410.7 | 436.4 | 492.3 | 593.1 | 778.2 | 1121.8 | 1465.5 | 1461.7 | 1236.0 | 1195.9 |
| 47.5° | 363.2 | 366.8 | 393.4 | 447.5 | 543.3 | 718.9 | 1081.0 | 1525.9 | 1587.0 | 1316.3 | 1270.0 |
| 50° | 309.7 | 312.7 | 340.1 | 395.8 | 491.6 | 655.9 | 1024.3 | 1573.3 | 1745.1 | 1437.8 | 1379.8 |
| 52.5° | 246.2 | 249.5 | 276.1 | 331.8 | 430.3 | 588.2 | 949.7 | 1604.2 | 1927.8 | 1615.3 | 1543.8 |
| 55° | 183.2 | 185.5 | 208.6 | 258.7 | 354.3 | 511.0 | 856.3 | 1613.0 | 2135.0 | 1858.0 | 1768.5 |
| 57.5° | 132.9 | 134.3 | 149.2 | 186.5 | 268.6 | 414.5 | 742.8 | 1590.3 | 2381.7 | 2169.0 | 2056.4 |
| 60° | 107.6 | 108.1 | 112.6 | 129.1 | 186.7 | 305.4 | 605.6 | 1512.4 | 2649.3 | 2570.0 | 2428.2 |
| 62.5° | 97.7 | 97.7 | 98.9 | 103.4 | 126.3 | 201.6 | 439.7 | 1351.0 | 2936.3 | 3076.8 | 2886.8 |
| 65° | 90.9 | 90.9 | 91.3 | 93.5 | 99.6 | 128.4 | 277.6 | 1088.1 | 3178.3 | 3670.4 | 3430.1 |
| 67.5° | 84.7 | 85.0 | 84.7 | 85.4 | 89.0 | 94.9 | 161.0 | 751.5 | 3308.5 | 4285.4 | 4026.0 |
| 70° | 78.4 | 78.8 | 77.7 | 77.7 | 80.5 | 80.7 | 100.8 | 412.1 | 3200.4 | 4800.9 | 4732.7 |
| 72.5° | 70.8 | 71.5 | 69.6 | 69.2 | 71.3 | 70.3 | 75.8 | 197.8 | 2747.7 | 4954.8 | 5134.2 |
| 75° | 64.2 | 65.1 | 60.9 | 59.7 | 59.7 | 59.0 | 61.6 | 101.5 | 1783.4 | 4041.8 | 4323.2 |
| 77.5° | 58.3 | 60.2 | 53.3 | 49.6 | 48.6 | 46.5 | 50.3 | 62.1 | 780.0 | 1897.6 | 1858.2 |
| 80° | 48.1 | 50.7 | 43.9 | 39.4 | 37.8 | 35.4 | 39.7 | 43.4 | 232.0 | 440.7 | 422.0 |
| 82.5° | 35.9 | 37.1 | 31.2 | 28.1 | 26.7 | 25.0 | 29.7 | 30.2 | 75.5 | 156.0 | 176.3 |
| 85° | 22.9 | 23.4 | 19.1 | 16.5 | 15.8 | 15.1 | 18.9 | 16.5 | 28.8 | 114.7 | 166.6 |
| 87.5° | 8.0 | 9.2 | 7.3 | 6.6 | 7.1 | 5.9 | 8.7 | 5.0 | 8.0 | 81.0 | 100.3 |
| 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)