

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: STREETWORKS

Report Number: P214525

Luminaire Tested: **ARCH-AF24-100-D-U-5WQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214525
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29597)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-100-D-U-5WQ
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10366.6 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - U0 - G2

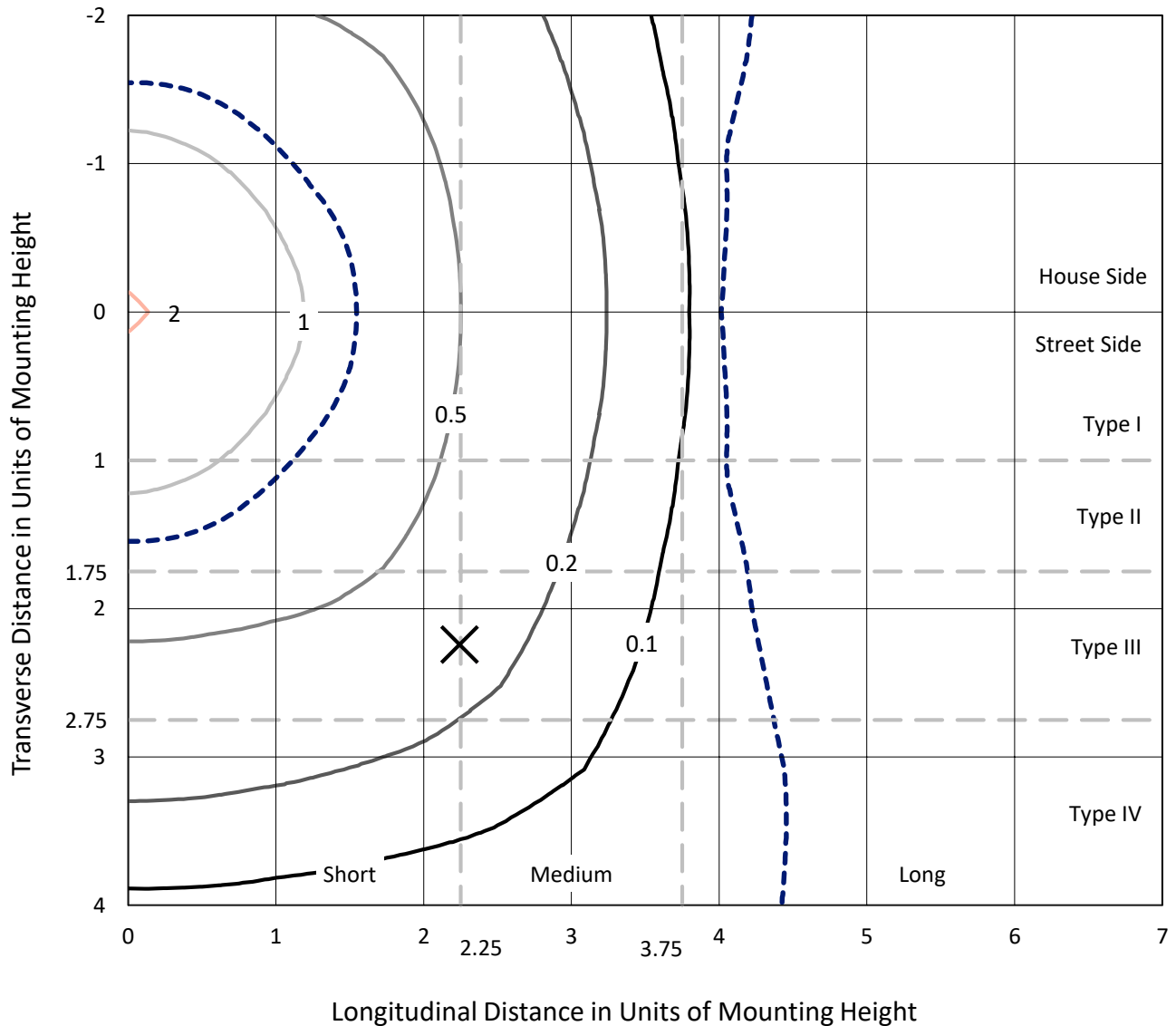
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

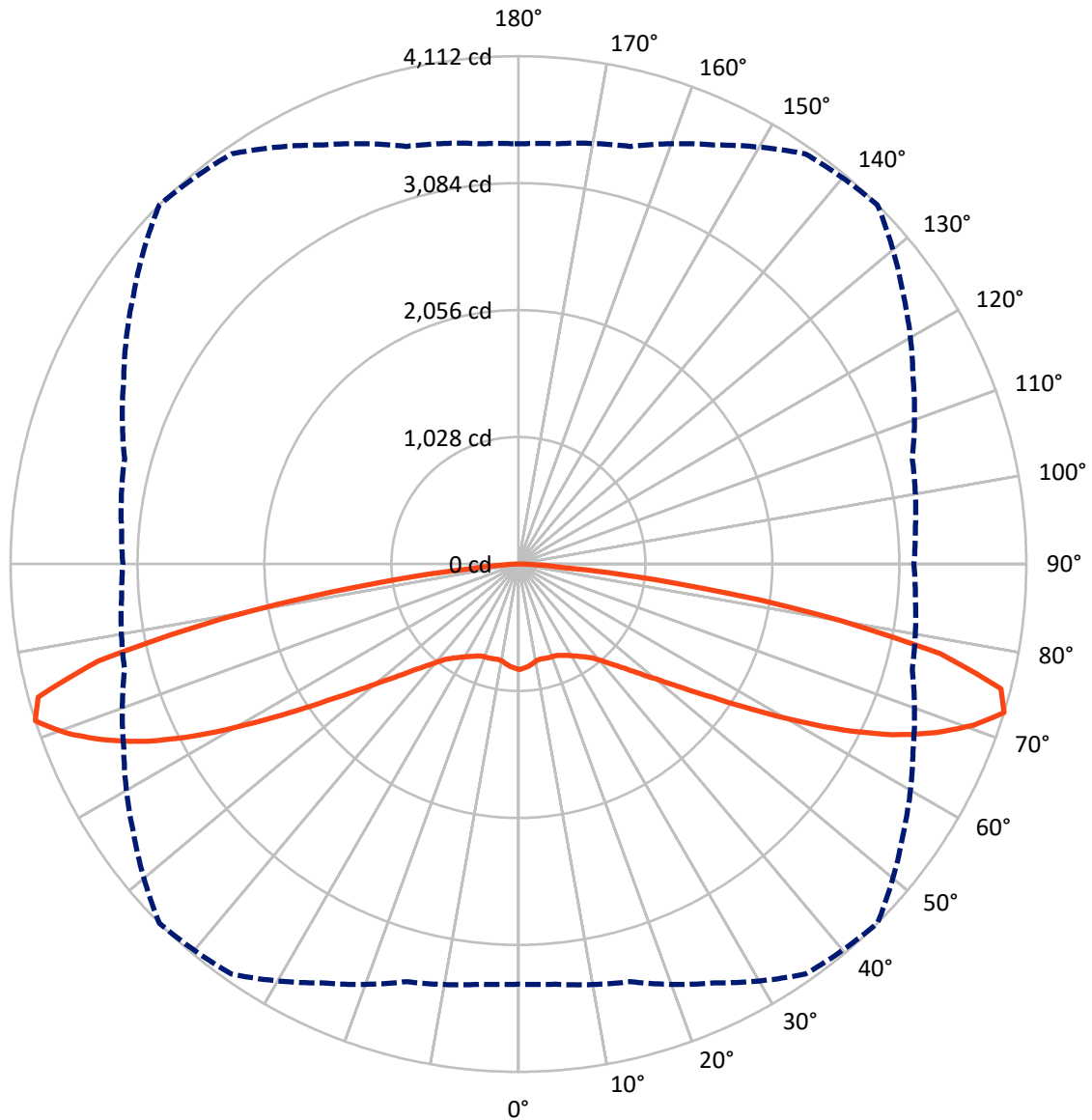


Based on 20 foot mounting height. Maximum calculated value = 2.1 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5183.3 | 0.0 | 5183.3 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 5183.3 | 0.0 | 5183.3 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 10366.6 | 0.0 | 10366.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 78.6 | 0.8 |
| 10°-20° | 226.8 | 2.2 |
| 20°-30° | 379.6 | 3.7 |
| 30°-40° | 583.3 | 5.6 |
| 40°-50° | 965.7 | 9.3 |
| 50°-60° | 1716.9 | 16.6 |
| 60°-70° | 3003.7 | 29.0 |
| 70°-80° | 3056.0 | 29.5 |
| 80°-90° | 355.8 | 3.4 |
| 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° | 10366.6 | 100.0 |
| 0°-180° | 10366.6 | 100.0 |



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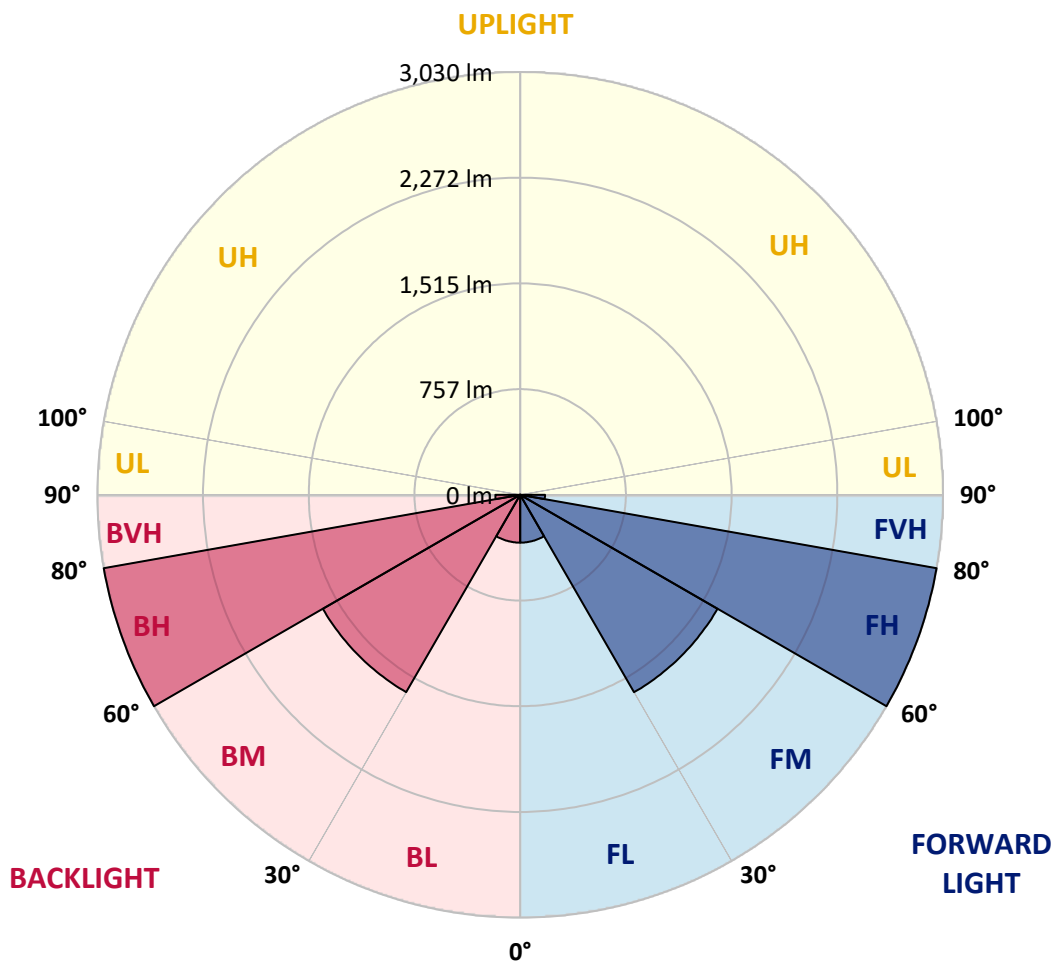
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 342.5 | 3.3 | | | |
| FM | (30°-60°) | 1633.0 | 15.8 | | | |
| FH | (60°-80°) | 3029.9 | 29.2 | | | G2/5000 |
| FVH | (80°-90°) | 177.9 | 1.7 | | | G2/225 |
| BL | (0°-30°) | 342.5 | 3.3 | B1/500 | | |
| BM | (30°-60°) | 1633.0 | 15.8 | B2/2500 | | |
| BH | (60°-80°) | 3029.9 | 29.2 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 177.9 | 1.7 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 854.5 | 854.5 | 854.5 | 854.5 | 854.5 | 854.5 | 854.5 | 854.5 | 854.5 | 854.5 | 854.5 |
| 2.5° | 846.6 | 848.5 | 844.5 | 844.5 | 844.5 | 842.6 | 844.5 | 842.6 | 844.5 | 846.6 | 846.6 |
| 5° | 838.6 | 838.6 | 834.7 | 834.7 | 834.7 | 832.8 | 834.7 | 834.7 | 836.7 | 838.6 | 838.6 |
| 7.5° | 820.9 | 820.9 | 819.0 | 816.9 | 815.0 | 815.0 | 816.9 | 816.9 | 819.0 | 820.9 | 820.9 |
| 10° | 811.0 | 809.1 | 805.2 | 799.2 | 797.2 | 795.2 | 799.2 | 803.1 | 809.1 | 815.0 | 813.0 |
| 12.5° | 807.1 | 805.2 | 797.2 | 791.3 | 787.4 | 789.3 | 793.3 | 797.2 | 807.1 | 813.0 | 811.0 |
| 15° | 811.0 | 807.1 | 797.2 | 787.4 | 789.3 | 793.3 | 797.2 | 797.2 | 809.1 | 815.0 | 815.0 |
| 17.5° | 811.0 | 809.1 | 797.2 | 789.3 | 791.3 | 797.2 | 799.2 | 797.2 | 807.1 | 816.9 | 816.9 |
| 20° | 813.0 | 813.0 | 797.2 | 791.3 | 793.3 | 799.2 | 801.2 | 799.2 | 807.1 | 819.0 | 819.0 |
| 22.5° | 816.9 | 815.0 | 799.2 | 795.2 | 799.2 | 803.1 | 805.2 | 803.1 | 811.0 | 820.9 | 822.9 |
| 25° | 824.8 | 820.9 | 807.1 | 805.2 | 813.0 | 819.0 | 819.0 | 815.0 | 819.0 | 828.8 | 828.8 |
| 27.5° | 834.7 | 832.8 | 816.9 | 816.9 | 826.9 | 838.6 | 832.8 | 824.8 | 828.8 | 838.6 | 838.6 |
| 30° | 852.4 | 850.5 | 834.7 | 834.7 | 848.5 | 862.3 | 848.5 | 838.6 | 844.5 | 854.5 | 856.4 |
| 32.5° | 878.1 | 878.1 | 864.3 | 860.4 | 884.0 | 890.0 | 884.0 | 864.3 | 868.3 | 882.1 | 882.1 |
| 35° | 921.6 | 917.6 | 903.8 | 901.8 | 925.5 | 923.5 | 921.6 | 903.8 | 907.8 | 923.5 | 923.5 |
| 37.5° | 978.8 | 976.8 | 964.9 | 959.0 | 970.9 | 963.0 | 966.9 | 959.0 | 968.9 | 980.7 | 982.7 |
| 40° | 1051.8 | 1049.9 | 1039.9 | 1032.1 | 1035.9 | 1024.2 | 1028.1 | 1032.1 | 1041.9 | 1049.9 | 1051.8 |
| 42.5° | 1142.5 | 1142.5 | 1132.7 | 1118.9 | 1113.0 | 1107.0 | 1107.0 | 1114.9 | 1124.8 | 1134.7 | 1134.7 |
| 45° | 1255.1 | 1255.1 | 1243.2 | 1229.4 | 1211.6 | 1201.8 | 1205.6 | 1213.6 | 1225.4 | 1237.3 | 1241.2 |
| 47.5° | 1387.2 | 1387.2 | 1371.5 | 1357.7 | 1339.9 | 1328.0 | 1328.0 | 1332.0 | 1349.8 | 1359.6 | 1365.5 |
| 50° | 1535.2 | 1529.3 | 1513.6 | 1499.7 | 1489.8 | 1474.1 | 1476.0 | 1474.1 | 1489.8 | 1503.6 | 1507.6 |
| 52.5° | 1689.2 | 1687.2 | 1671.4 | 1667.4 | 1673.3 | 1665.5 | 1665.5 | 1645.7 | 1651.7 | 1659.5 | 1657.6 |
| 55° | 1880.6 | 1874.7 | 1860.8 | 1868.7 | 1892.5 | 1904.2 | 1900.3 | 1868.7 | 1850.9 | 1854.9 | 1853.0 |
| 57.5° | 2089.8 | 2083.9 | 2079.9 | 2103.6 | 2156.8 | 2206.2 | 2196.3 | 2123.3 | 2089.8 | 2091.7 | 2093.7 |
| 60° | 2302.9 | 2302.9 | 2314.7 | 2373.9 | 2488.3 | 2569.2 | 2539.7 | 2417.3 | 2358.1 | 2346.2 | 2342.4 |
| 62.5° | 2521.9 | 2527.8 | 2553.5 | 2652.1 | 2827.7 | 2962.0 | 2887.0 | 2713.3 | 2624.5 | 2600.9 | 2593.0 |
| 65° | 2776.5 | 2782.4 | 2819.9 | 2942.2 | 3175.0 | 3334.9 | 3206.6 | 3042.9 | 2918.6 | 2869.2 | 2861.3 |
| 67.5° | 3145.5 | 3149.5 | 3179.0 | 3297.4 | 3516.5 | 3644.7 | 3512.5 | 3366.5 | 3232.3 | 3175.0 | 3171.1 |
| 70° | 3477.0 | 3480.9 | 3506.6 | 3662.5 | 3863.8 | 3909.1 | 3763.1 | 3577.7 | 3437.5 | 3392.1 | 3384.2 |
| 72.5° | 3402.0 | 3415.8 | 3500.6 | 3743.4 | 4053.2 | 4112.4 | 3804.6 | 3526.3 | 3301.4 | 3226.4 | 3202.7 |
| 75° | 2853.4 | 2875.1 | 3009.3 | 3374.4 | 3867.7 | 4035.4 | 3559.9 | 3048.8 | 2713.3 | 2569.2 | 2531.8 |
| 77.5° | 1665.5 | 1746.4 | 1977.3 | 2445.0 | 3149.5 | 3490.8 | 2932.4 | 2231.9 | 1667.4 | 1430.7 | 1351.7 |
| 80° | 455.8 | 499.2 | 667.0 | 1124.8 | 1975.3 | 2445.0 | 1870.7 | 1024.2 | 552.5 | 414.4 | 384.8 |
| 82.5° | 144.0 | 191.4 | 242.7 | 323.7 | 775.5 | 1288.6 | 694.6 | 301.9 | 236.8 | 195.4 | 173.7 |
| 85° | 76.9 | 82.9 | 136.2 | 157.8 | 232.8 | 361.1 | 215.1 | 157.8 | 142.1 | 104.5 | 98.7 |
| 87.5° | 39.5 | 41.4 | 76.9 | 76.9 | 102.6 | 84.8 | 92.8 | 84.8 | 80.9 | 51.4 | 45.4 |
| 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)