

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PORTFOLIO

Report Number: P1312598

Luminaire Tested: LDSQA3D13R459050DE010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312598
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LDSQA3D13R459050DE010 3LSQCA45R 1MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 5000K CCT AND, 90CRI , 3LSQCA45R 1MMS TRII
Light Source: -
Ballast/Driver: -

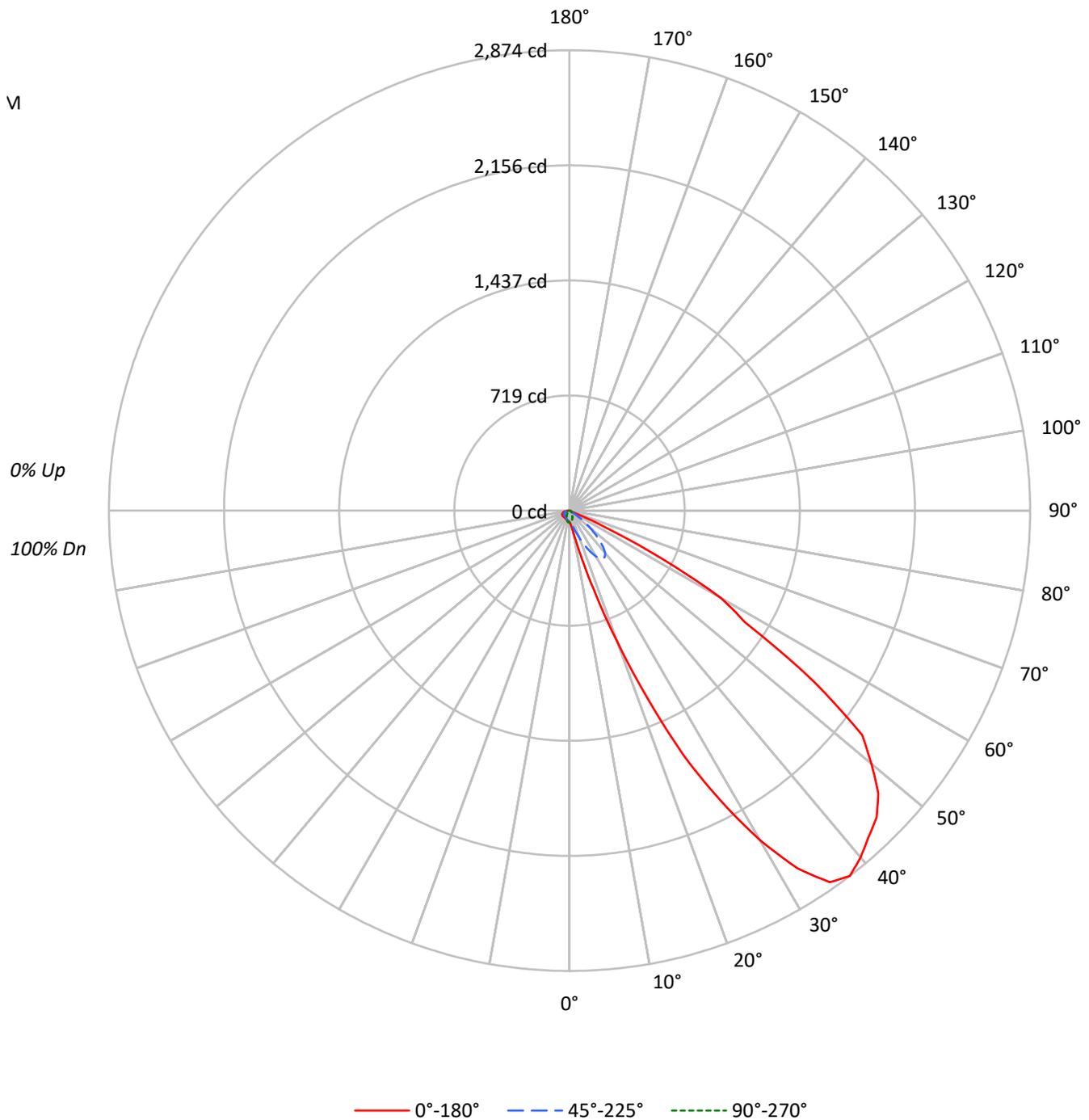
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1284.0 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | 20 | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | | 10 | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 | 100 | 100 | |
| 1 | 110 | 106 | 102 | 99 | 107 | 104 | 100 | 97 | 99 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 88 | 86 | 86 | 86 | 86 | |
| 2 | 100 | 93 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 83 | 78 | 84 | 80 | 77 | 81 | 78 | 75 | 73 | 73 | 73 | 73 | |
| 3 | 91 | 81 | 73 | 67 | 89 | 80 | 72 | 66 | 77 | 70 | 65 | 74 | 69 | 64 | 71 | 67 | 63 | 61 | 61 | 61 | 61 | |
| 4 | 83 | 71 | 62 | 56 | 81 | 70 | 62 | 55 | 67 | 60 | 55 | 65 | 59 | 54 | 63 | 58 | 53 | 51 | 51 | 51 | 51 | |
| 5 | 76 | 63 | 53 | 47 | 73 | 61 | 53 | 46 | 59 | 52 | 46 | 57 | 51 | 45 | 55 | 50 | 45 | 43 | 43 | 43 | 43 | |
| 6 | 69 | 55 | 46 | 39 | 67 | 54 | 46 | 39 | 52 | 45 | 39 | 51 | 44 | 39 | 49 | 43 | 38 | 36 | 36 | 36 | 36 | |
| 7 | 63 | 49 | 40 | 34 | 61 | 48 | 40 | 33 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 37 | 33 | 31 | 31 | 31 | 31 | |
| 8 | 58 | 44 | 35 | 29 | 56 | 43 | 35 | 29 | 42 | 34 | 29 | 40 | 33 | 28 | 39 | 33 | 28 | 26 | 26 | 26 | 26 | |
| 9 | 53 | 39 | 31 | 25 | 52 | 39 | 30 | 25 | 38 | 30 | 25 | 36 | 29 | 25 | 35 | 29 | 24 | 22 | 22 | 22 | 22 | |
| 10 | 49 | 36 | 27 | 22 | 48 | 35 | 27 | 22 | 34 | 27 | 21 | 33 | 26 | 21 | 32 | 26 | 21 | 19 | 19 | 19 | 19 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|--------|-------|-------|-------|-------|
| 0° | 12796 | 12796 | 12796 | 12796 | 12796 |
| 5° | 15231 | 14124 | 12655 | 11739 | 11739 |
| 10° | 24308 | 16509 | 11874 | 11140 | 11140 |
| 15° | 60532 | 22127 | 10787 | 10413 | 10787 |
| 20° | 159450 | 33063 | 9329 | 9915 | 10502 |
| 25° | 320157 | 48989 | 8057 | 9273 | 10280 |
| 30° | 471968 | 65626 | 6543 | 9068 | 10540 |
| 35° | 595330 | 76950 | 5571 | 8914 | 10933 |
| 40° | 635186 | 77765 | 5014 | 9308 | 11691 |
| 45° | 659949 | 64860 | 4652 | 10083 | 12665 |
| 50° | 658922 | 45200 | 4555 | 10798 | 14200 |
| 55° | 560017 | 20057 | 4774 | 12101 | 15614 |
| 60° | 376410 | 4030 | 4753 | 13537 | 17911 |
| 65° | 99882 | 1712 | 4768 | 14711 | 20335 |
| 70° | 2669 | 2115 | 4784 | 16013 | 22962 |
| 75° | 2129 | 2129 | 4924 | 16968 | 26151 |
| 80° | 2083 | 3174 | 5256 | 17852 | 29456 |
| 85° | 2174 | 4150 | 8299 | 18772 | 29443 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°
 Vertical Angle: 47.5°
 Luminance: 676945 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 7.4 | 0.6 |
| 10°-20° | 36.2 | 2.8 |
| 20°-30° | 149.4 | 11.6 |
| 30°-40° | 314.8 | 24.5 |
| 40°-50° | 388.4 | 30.2 |
| 50°-60° | 291.1 | 22.7 |
| 60°-70° | 74.9 | 5.8 |
| 70°-80° | 15.5 | 1.2 |
| 80°-90° | 6.3 | 0.5 |
| 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°-30° | 193.0 | 15.0 |
| 0°-40° | 507.8 | 39.5 |
| 0°-60° | 1187.3 | 92.5 |
| 0°-90° | 1284.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1284.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0° | 74 | 74 | 74 | 74 | 74 | |
| 5° | 88 | 82 | 73 | 68 | 68 | 10 |
| 15° | 340 | 124 | 60 | 58 | 60 | 124 |
| 25° | 1685 | 258 | 42 | 49 | 54 | 785 |
| 35° | 2832 | 366 | 26 | 42 | 52 | 1726 |
| 45° | 2710 | 266 | 19 | 41 | 52 | 2073 |
| 55° | 1865 | 67 | 16 | 40 | 52 | 1610 |
| 65° | 245 | 4 | 12 | 36 | 50 | 353 |
| 75° | 3 | 3 | 7 | 26 | 39 | 4 |
| 85° | 1 | 2 | 4 | 10 | 15 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1312598

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 45° | 67.5° | 90° | 112.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|
| 0° | 74.3 | 74.3 | 74.3 | 74.3 | 74.3 | 74.3 | 74.3 | 74.3 | 74.3 | 74.3 | 74.3 |
| 2.5° | 78.5 | 78.5 | 78.5 | 78.5 | 78.5 | 78.5 | 78.5 | 77.4 | 76.4 | 74.3 | 72.1 |
| 5° | 88.1 | 87.0 | 87.0 | 87.0 | 85.9 | 84.9 | 84.9 | 81.7 | 77.4 | 73.2 | 70.0 |
| 7.5° | 104.0 | 104.0 | 102.9 | 100.8 | 99.7 | 97.6 | 95.5 | 87.0 | 77.4 | 71.1 | 66.8 |
| 10° | 139.0 | 136.9 | 133.7 | 131.6 | 126.3 | 118.8 | 113.5 | 94.4 | 76.4 | 67.9 | 64.7 |
| 12.5° | 207.9 | 212.2 | 201.6 | 191.0 | 176.1 | 162.3 | 145.3 | 107.2 | 76.4 | 64.7 | 61.5 |
| 15° | 339.5 | 346.9 | 326.8 | 305.6 | 269.5 | 235.5 | 203.7 | 124.1 | 74.3 | 60.5 | 57.3 |
| 17.5° | 554.9 | 564.4 | 530.5 | 480.6 | 424.4 | 356.5 | 298.1 | 147.5 | 72.1 | 56.2 | 54.1 |
| 20° | 870.0 | 868.9 | 803.1 | 740.5 | 632.3 | 532.6 | 423.3 | 180.4 | 69.0 | 50.9 | 50.9 |
| 22.5° | 1257.2 | 1261.5 | 1180.8 | 1068.4 | 914.5 | 754.3 | 580.3 | 218.6 | 64.7 | 46.7 | 47.7 |
| 25° | 1684.8 | 1648.7 | 1553.2 | 1416.4 | 1220.1 | 998.3 | 769.2 | 257.8 | 60.5 | 42.4 | 44.6 |
| 27.5° | 2041.2 | 2006.2 | 1897.0 | 1734.6 | 1523.5 | 1260.4 | 961.2 | 297.1 | 55.2 | 38.2 | 41.4 |
| 30° | 2373.3 | 2328.8 | 2197.2 | 2013.7 | 1762.2 | 1477.9 | 1141.6 | 330.0 | 48.8 | 32.9 | 38.2 |
| 32.5° | 2647.0 | 2606.7 | 2457.1 | 2243.9 | 1970.2 | 1664.6 | 1294.3 | 355.4 | 42.4 | 29.7 | 36.1 |
| 35° | 2831.6 | 2790.3 | 2652.3 | 2417.9 | 2119.8 | 1800.4 | 1418.5 | 366.0 | 37.1 | 26.5 | 35.0 |
| 37.5° | 2874.1 | 2851.8 | 2753.1 | 2533.5 | 2222.7 | 1887.4 | 1498.0 | 362.8 | 30.8 | 24.4 | 32.9 |
| 40° | 2825.3 | 2830.6 | 2783.9 | 2601.4 | 2277.8 | 1924.5 | 1530.9 | 345.9 | 25.5 | 22.3 | 31.8 |
| 42.5° | 2762.7 | 2776.5 | 2773.3 | 2629.0 | 2301.2 | 1926.7 | 1517.1 | 311.9 | 20.2 | 20.2 | 30.8 |
| 45° | 2709.6 | 2723.4 | 2742.5 | 2617.3 | 2285.3 | 1899.1 | 1473.6 | 266.3 | 14.9 | 19.1 | 30.8 |
| 47.5° | 2613.1 | 2627.9 | 2655.5 | 2524.0 | 2204.6 | 1828.0 | 1395.1 | 216.4 | 10.6 | 18.0 | 29.7 |
| 50° | 2459.3 | 2466.7 | 2459.3 | 2311.8 | 2049.7 | 1713.4 | 1267.8 | 168.7 | 7.4 | 17.0 | 29.7 |
| 52.5° | 2301.2 | 2286.3 | 2224.8 | 2038.1 | 1803.6 | 1532.0 | 1107.6 | 119.9 | 5.3 | 15.9 | 28.6 |
| 55° | 1865.1 | 1841.8 | 1796.2 | 1681.6 | 1547.9 | 1309.2 | 895.4 | 66.8 | 5.3 | 15.9 | 27.6 |
| 57.5° | 1299.6 | 1312.4 | 1328.3 | 1305.0 | 1243.4 | 1031.2 | 680.1 | 29.7 | 5.3 | 14.9 | 27.6 |
| 60° | 1092.8 | 1082.2 | 1083.2 | 1068.4 | 966.5 | 752.2 | 467.9 | 11.7 | 5.3 | 13.8 | 26.5 |
| 62.5° | 652.5 | 659.9 | 673.7 | 676.9 | 576.1 | 420.1 | 245.1 | 5.3 | 5.3 | 12.7 | 25.5 |
| 65° | 245.1 | 256.7 | 224.9 | 195.2 | 154.9 | 113.5 | 57.3 | 4.2 | 6.4 | 11.7 | 23.3 |
| 67.5° | 7.4 | 8.5 | 10.6 | 9.5 | 9.5 | 8.5 | 6.4 | 4.2 | 6.4 | 10.6 | 22.3 |
| 70° | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 | 4.2 | 4.2 | 4.2 | 5.3 | 9.5 | 20.2 |
| 72.5° | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 5.3 | 8.5 | 18.0 |
| 75° | 3.2 | 4.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 5.3 | 7.4 | 14.9 |
| 77.5° | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 4.2 | 6.4 | 12.7 |
| 80° | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 3.2 | 4.2 | 5.3 | 10.6 |
| 82.5° | 2.1 | 2.1 | 2.1 | 1.1 | 2.1 | 2.1 | 2.1 | 2.1 | 4.2 | 4.2 | 8.5 |
| 85° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 2.1 | 3.2 | 4.2 | 5.3 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 1.1 | 2.1 | 3.2 | 3.2 | 3.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CANDELA DISTRIBUTION (continued):

| | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0° | 74.3 | 74.3 | 74.3 |
| 2.5° | 70.0 | 70.0 | 70.0 |
| 5° | 67.9 | 67.9 | 67.9 |
| 7.5° | 65.8 | 65.8 | 65.8 |
| 10° | 63.7 | 63.7 | 63.7 |
| 12.5° | 61.5 | 61.5 | 62.6 |
| 15° | 58.4 | 60.5 | 60.5 |
| 17.5° | 56.2 | 58.4 | 59.4 |
| 20° | 54.1 | 56.2 | 57.3 |
| 22.5° | 50.9 | 54.1 | 56.2 |
| 25° | 48.8 | 53.0 | 54.1 |
| 27.5° | 46.7 | 52.0 | 54.1 |
| 30° | 45.6 | 50.9 | 53.0 |
| 32.5° | 43.5 | 49.9 | 52.0 |
| 35° | 42.4 | 49.9 | 52.0 |
| 37.5° | 42.4 | 48.8 | 52.0 |
| 40° | 41.4 | 48.8 | 52.0 |
| 42.5° | 41.4 | 48.8 | 52.0 |
| 45° | 41.4 | 48.8 | 52.0 |
| 47.5° | 40.3 | 48.8 | 53.0 |
| 50° | 40.3 | 49.9 | 53.0 |
| 52.5° | 40.3 | 49.9 | 53.0 |
| 55° | 40.3 | 49.9 | 52.0 |
| 57.5° | 39.3 | 48.8 | 52.0 |
| 60° | 39.3 | 48.8 | 52.0 |
| 62.5° | 37.1 | 47.7 | 50.9 |
| 65° | 36.1 | 46.7 | 49.9 |
| 67.5° | 34.0 | 45.6 | 47.7 |
| 70° | 31.8 | 42.4 | 45.6 |
| 72.5° | 28.6 | 40.3 | 43.5 |
| 75° | 25.5 | 37.1 | 39.3 |
| 77.5° | 22.3 | 32.9 | 35.0 |
| 80° | 18.0 | 27.6 | 29.7 |
| 82.5° | 13.8 | 21.2 | 22.3 |
| 85° | 9.5 | 13.8 | 14.9 |
| 87.5° | 4.2 | 6.4 | 7.4 |
| 90° | 0.0 | 0.0 | 0.0 |

(END OF REPORT)