

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: IRiS

Report Number: P1307128

Luminaire Tested: P3SQAS17R709027DE010 E3SQCA451MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1307128  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS17R709027DE010 E3SQCA451MMS  
Description: 3in Adjustable LED luminaire with, R70 optic, 2700K CCT AND, 90CRI , E3SQCA451MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

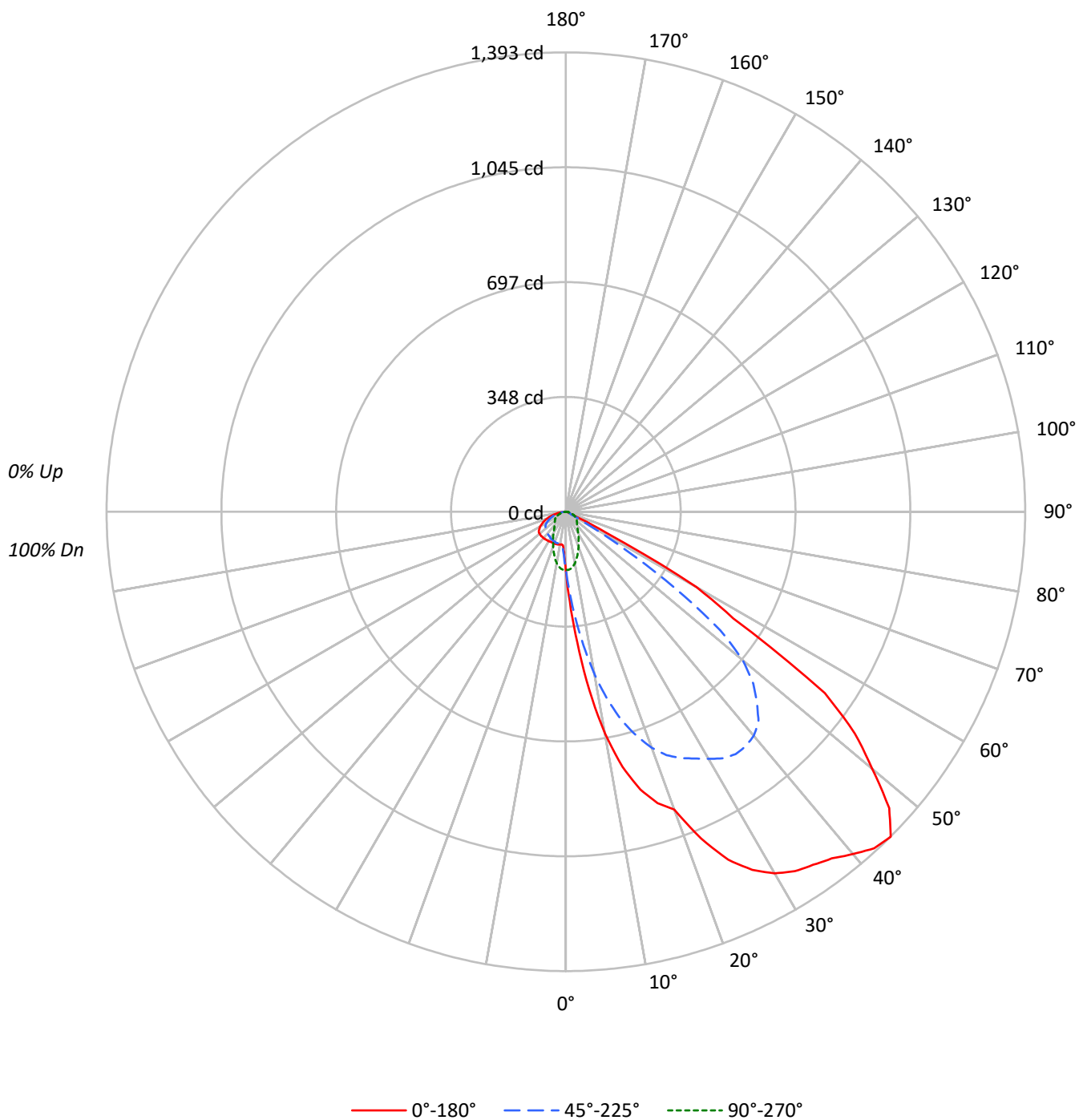
Lumens per Lamp: N/A  
Luminaire Lumens: 1204.0 lumens  
Efficiency: N/A  
Efficacy: 56.8 lumens/watt  
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.2  
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 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |
| 1   | 110 | 106 | 103 | 99  | 108 | 104 | 101 | 98  | 100 | 97  | 95  | 96  | 94  | 92  | 93  | 91  | 89  | 87  |    |
| 2   | 101 | 94  | 88  | 83  | 99  | 92  | 87  | 82  | 89  | 84  | 80  | 86  | 82  | 78  | 83  | 79  | 77  | 75  |    |
| 3   | 93  | 83  | 76  | 70  | 90  | 82  | 75  | 69  | 79  | 73  | 68  | 76  | 71  | 67  | 74  | 69  | 66  | 64  |    |
| 4   | 85  | 74  | 66  | 59  | 83  | 72  | 65  | 59  | 70  | 63  | 58  | 68  | 62  | 57  | 66  | 61  | 57  | 54  |    |
| 5   | 78  | 66  | 57  | 51  | 76  | 65  | 57  | 51  | 63  | 55  | 50  | 61  | 54  | 49  | 59  | 53  | 49  | 47  |    |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 43  | 54  | 48  | 43  | 53  | 47  | 43  | 41  |    |
| 7   | 66  | 53  | 44  | 38  | 65  | 52  | 44  | 38  | 51  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 37  | 35  |    |
| 8   | 61  | 48  | 40  | 34  | 60  | 47  | 39  | 34  | 46  | 39  | 33  | 45  | 38  | 33  | 44  | 38  | 33  | 31  |    |
| 9   | 57  | 44  | 35  | 30  | 56  | 43  | 35  | 30  | 42  | 35  | 30  | 41  | 34  | 30  | 40  | 34  | 29  | 28  |    |
| 10  | 53  | 40  | 32  | 27  | 52  | 39  | 32  | 27  | 38  | 31  | 27  | 37  | 31  | 26  | 37  | 31  | 26  | 25  |    |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 30208  | 30208  | 30208 | 30208 | 30208 |
| 5°  | 68737  | 55028  | 29908 | 18896 | 17651 |
| 10° | 119110 | 87387  | 27736 | 17226 | 17645 |
| 15° | 155494 | 116732 | 24195 | 17562 | 18204 |
| 20° | 176128 | 139583 | 20692 | 17833 | 18932 |
| 25° | 221191 | 156582 | 17349 | 18034 | 19402 |
| 30° | 251784 | 171999 | 14815 | 18395 | 20543 |
| 35° | 274769 | 188653 | 12888 | 18691 | 21718 |
| 40° | 304632 | 199304 | 11893 | 19447 | 23494 |
| 45° | 339376 | 199524 | 11691 | 20483 | 25452 |
| 50° | 325054 | 187632 | 11575 | 21568 | 27677 |
| 55° | 287830 | 121546 | 11890 | 22730 | 29936 |
| 60° | 157653 | 26075  | 11987 | 23181 | 31035 |
| 65° | 11247  | 6357   | 11736 | 23025 | 31338 |
| 70° | 5438   | 6043   | 10877 | 21753 | 30263 |
| 75° | 4791   | 6388   | 10381 | 20761 | 27948 |
| 80° | 4761   | 5951   | 9521  | 19042 | 26183 |
| 85° | 4742   | 7114   | 9485  | 16599 | 23712 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 339376 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 22.9   | 1.9       |
| 10°-20°   | 97.8   | 8.1       |
| 20°-30°   | 187.7  | 15.6      |
| 30°-40°   | 265.5  | 22.1      |
| 40°-50°   | 300.3  | 24.9      |
| 50°-60°   | 237.8  | 19.8      |
| 60°-70°   | 64.1   | 5.3       |
| 70°-80°   | 21.3   | 1.8       |
| 80°-90°   | 6.5    | 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°    | 308.5  | 25.6      |
| 0°-40°    | 573.9  | 47.7      |
| 0°-60°    | 1112.1 | 92.4      |
| 0°-90°    | 1204.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1204.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 175  | 175 | 175 | 175  | 175  |      |
| 5°  | 398  | 318 | 173 | 109  | 102  | 47   |
| 15° | 872  | 655 | 136 | 98   | 102  | 246  |
| 25° | 1164 | 824 | 91  | 95   | 102  | 533  |
| 35° | 1307 | 897 | 61  | 89   | 103  | 823  |
| 45° | 1393 | 819 | 48  | 84   | 104  | 1042 |
| 55° | 959  | 405 | 40  | 76   | 100  | 778  |
| 65° | 28   | 16  | 29  | 56   | 77   | 100  |
| 75° | 7    | 10  | 16  | 31   | 42   | 8    |
| 85° | 2    | 4   | 5   | 8    | 12   | 3    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 45°   | 67.5° | 90°   | 112.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|--------|
| 0°    | 175.4  | 175.4  | 175.4  | 175.4  | 175.4  | 175.4  | 175.4  | 175.4 | 175.4 | 175.4 | 175.4  |
| 2.5°  | 272.7  | 272.7  | 271.5  | 266.7  | 264.3  | 258.3  | 253.5  | 240.2 | 207.8 | 176.6 | 151.4  |
| 5°    | 397.6  | 403.6  | 395.2  | 394.0  | 386.8  | 376.0  | 368.8  | 318.3 | 240.2 | 173.0 | 129.7  |
| 7.5°  | 545.4  | 547.8  | 545.4  | 533.3  | 522.5  | 504.5  | 487.7  | 408.4 | 272.7 | 167.0 | 114.1  |
| 10°   | 681.1  | 677.5  | 670.3  | 661.9  | 646.3  | 627.0  | 598.2  | 499.7 | 303.9 | 158.6 | 104.5  |
| 12.5° | 791.6  | 790.4  | 782.0  | 773.6  | 754.4  | 729.1  | 700.3  | 582.6 | 330.3 | 147.8 | 99.7   |
| 15°   | 872.1  | 872.1  | 863.7  | 854.1  | 836.1  | 815.6  | 783.2  | 654.7 | 352.0 | 135.7 | 94.9   |
| 17.5° | 926.2  | 923.7  | 917.7  | 910.5  | 896.1  | 875.7  | 850.5  | 712.3 | 366.4 | 123.7 | 93.7   |
| 20°   | 961.0  | 959.8  | 955.0  | 944.2  | 932.2  | 916.5  | 893.7  | 761.6 | 372.4 | 112.9 | 92.5   |
| 22.5° | 1072.7 | 1063.1 | 1045.1 | 1022.2 | 993.4  | 956.2  | 924.9  | 798.8 | 370.0 | 100.9 | 90.1   |
| 25°   | 1164.0 | 1160.4 | 1141.2 | 1113.5 | 1075.1 | 1027.1 | 975.4  | 824.0 | 358.0 | 91.3  | 87.7   |
| 27.5° | 1224.1 | 1218.0 | 1200.0 | 1170.0 | 1129.2 | 1082.3 | 1034.3 | 843.3 | 341.2 | 82.9  | 84.1   |
| 30°   | 1266.1 | 1262.5 | 1244.5 | 1210.8 | 1168.8 | 1117.1 | 1067.9 | 864.9 | 318.3 | 74.5  | 80.5   |
| 32.5° | 1292.5 | 1288.9 | 1270.9 | 1240.9 | 1200.0 | 1146.0 | 1089.5 | 886.5 | 290.7 | 67.3  | 76.9   |
| 35°   | 1306.9 | 1303.3 | 1282.9 | 1256.5 | 1218.0 | 1165.2 | 1105.1 | 897.3 | 257.1 | 61.3  | 73.3   |
| 37.5° | 1325.0 | 1317.8 | 1290.1 | 1257.7 | 1219.3 | 1170.0 | 1109.9 | 896.1 | 223.4 | 56.5  | 70.9   |
| 40°   | 1355.0 | 1335.8 | 1296.1 | 1252.9 | 1213.2 | 1164.0 | 1106.3 | 886.5 | 186.2 | 52.9  | 68.5   |
| 42.5° | 1383.8 | 1356.2 | 1297.3 | 1245.7 | 1201.2 | 1153.2 | 1093.1 | 864.9 | 145.3 | 50.5  | 67.3   |
| 45°   | 1393.4 | 1352.6 | 1280.5 | 1228.9 | 1186.8 | 1137.6 | 1075.1 | 819.2 | 98.5  | 48.0  | 64.9   |
| 47.5° | 1329.8 | 1299.7 | 1239.7 | 1201.2 | 1161.6 | 1113.5 | 1048.7 | 771.2 | 56.5  | 45.6  | 62.5   |
| 50°   | 1213.2 | 1194.0 | 1160.4 | 1136.4 | 1114.7 | 1081.1 | 1017.4 | 700.3 | 33.6  | 43.2  | 60.1   |
| 52.5° | 1105.1 | 1099.1 | 1075.1 | 1055.9 | 1043.9 | 1028.3 | 970.6  | 591.0 | 27.6  | 42.0  | 57.7   |
| 55°   | 958.6  | 939.4  | 933.4  | 926.2  | 951.4  | 950.2  | 872.1  | 404.8 | 26.4  | 39.6  | 55.3   |
| 57.5° | 601.8  | 610.2  | 641.5  | 699.1  | 767.6  | 807.2  | 804.8  | 216.2 | 25.2  | 37.2  | 51.7   |
| 60°   | 457.7  | 456.5  | 466.1  | 490.1  | 540.6  | 597.0  | 649.9  | 75.7  | 24.0  | 34.8  | 49.3   |
| 62.5° | 136.9  | 140.5  | 169.4  | 248.7  | 297.9  | 367.6  | 335.1  | 18.0  | 22.8  | 31.2  | 44.4   |
| 65°   | 27.6   | 28.8   | 28.8   | 32.4   | 39.6   | 60.1   | 73.3   | 15.6  | 21.6  | 28.8  | 40.8   |
| 67.5° | 12.0   | 12.0   | 12.0   | 13.2   | 13.2   | 15.6   | 13.2   | 14.4  | 19.2  | 25.2  | 36.0   |
| 70°   | 10.8   | 10.8   | 10.8   | 10.8   | 10.8   | 10.8   | 12.0   | 12.0  | 16.8  | 21.6  | 31.2   |
| 72.5° | 8.4    | 8.4    | 8.4    | 9.6    | 9.6    | 9.6    | 9.6    | 10.8  | 14.4  | 18.0  | 26.4   |
| 75°   | 7.2    | 7.2    | 7.2    | 7.2    | 8.4    | 8.4    | 8.4    | 9.6   | 12.0  | 15.6  | 21.6   |
| 77.5° | 6.0    | 6.0    | 6.0    | 6.0    | 6.0    | 7.2    | 7.2    | 7.2   | 9.6   | 12.0  | 18.0   |
| 80°   | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 6.0   | 7.2   | 9.6   | 13.2   |
| 82.5° | 3.6    | 3.6    | 3.6    | 3.6    | 3.6    | 3.6    | 3.6    | 4.8   | 6.0   | 7.2   | 9.6    |
| 85°   | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 3.6   | 3.6   | 4.8   | 6.0    |
| 87.5° | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 2.4   | 2.4   | 2.4   | 3.6    |
| 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°    | 175.4 | 175.4  | 175.4 |
| 2.5°  | 133.3 | 126.1  | 122.5 |
| 5°    | 109.3 | 103.3  | 102.1 |
| 7.5°  | 100.9 | 99.7   | 99.7  |
| 10°   | 98.5  | 99.7   | 100.9 |
| 12.5° | 98.5  | 100.9  | 102.1 |
| 15°   | 98.5  | 100.9  | 102.1 |
| 17.5° | 98.5  | 100.9  | 102.1 |
| 20°   | 97.3  | 100.9  | 103.3 |
| 22.5° | 96.1  | 100.9  | 102.1 |
| 25°   | 94.9  | 100.9  | 102.1 |
| 27.5° | 93.7  | 99.7   | 102.1 |
| 30°   | 92.5  | 99.7   | 103.3 |
| 32.5° | 90.1  | 99.7   | 103.3 |
| 35°   | 88.9  | 99.7   | 103.3 |
| 37.5° | 87.7  | 99.7   | 104.5 |
| 40°   | 86.5  | 99.7   | 104.5 |
| 42.5° | 85.3  | 99.7   | 104.5 |
| 45°   | 84.1  | 98.5   | 104.5 |
| 47.5° | 81.7  | 98.5   | 104.5 |
| 50°   | 80.5  | 97.3   | 103.3 |
| 52.5° | 78.1  | 96.1   | 103.3 |
| 55°   | 75.7  | 93.7   | 99.7  |
| 57.5° | 72.1  | 90.1   | 94.9  |
| 60°   | 67.3  | 85.3   | 90.1  |
| 62.5° | 61.3  | 79.3   | 82.9  |
| 65°   | 56.5  | 72.1   | 76.9  |
| 67.5° | 49.3  | 63.7   | 68.5  |
| 70°   | 43.2  | 55.3   | 60.1  |
| 72.5° | 37.2  | 46.8   | 51.7  |
| 75°   | 31.2  | 38.4   | 42.0  |
| 77.5° | 24.0  | 31.2   | 33.6  |
| 80°   | 19.2  | 24.0   | 26.4  |
| 82.5° | 13.2  | 16.8   | 18.0  |
| 85°   | 8.4   | 10.8   | 12.0  |
| 87.5° | 3.6   | 4.8    | 4.8   |
| 90°   | 0.0   | 0.0    | 0.0   |

(END OF REPORT)