

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: P1318076

Luminaire Tested: P3SQAS13R709835DE010 E3SQCA451MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1318076  
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: P3SQAS13R709835DE010 E3SQCA451MW  
Description: 3in Adjustable LED luminaire with, R70 optic, 3500K CCT AND, 98CRI , E3SQCA451MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

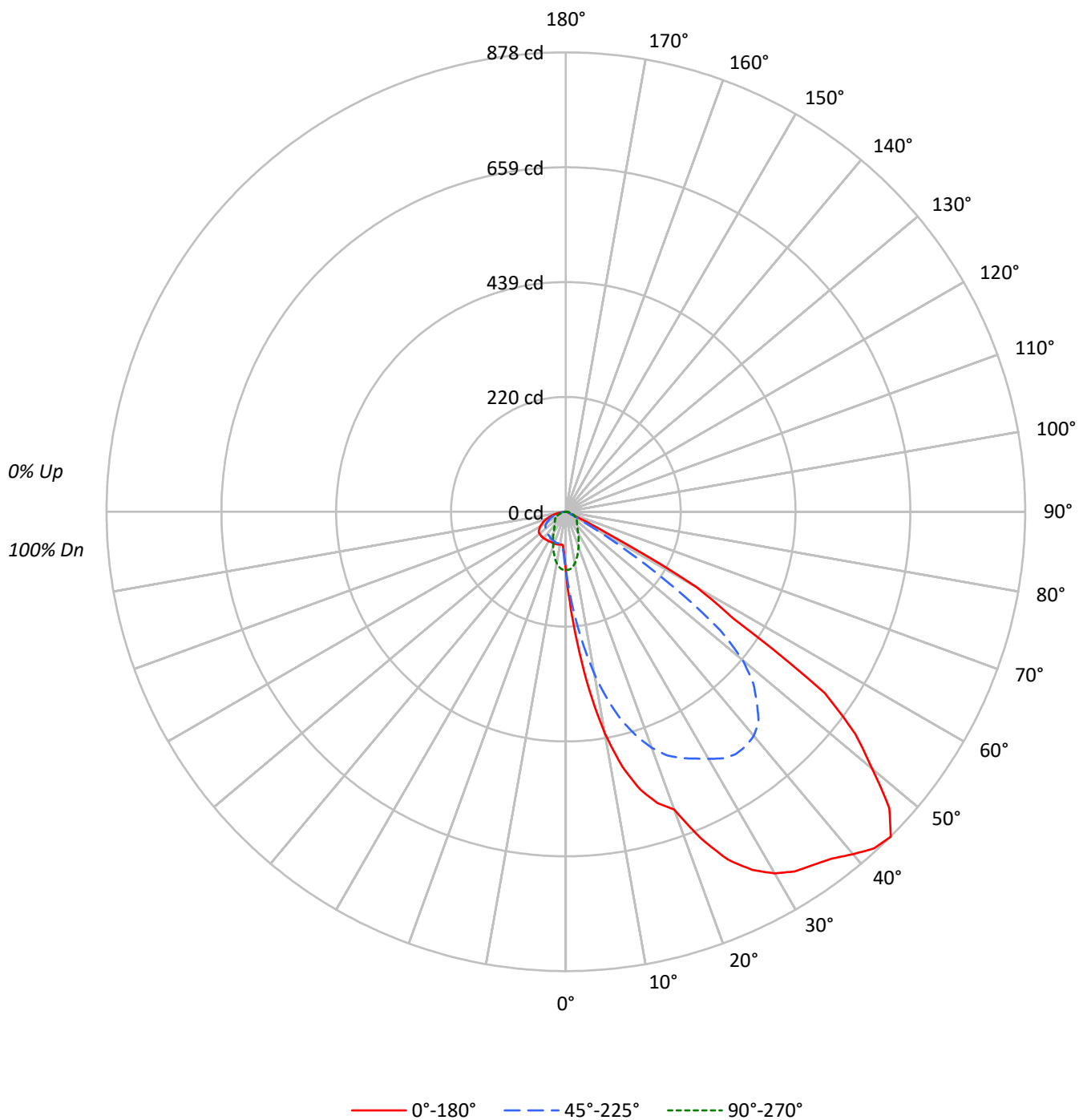
Lumens per Lamp: N/A  
Luminaire Lumens: 759.0 lumens  
Efficiency: N/A  
Efficacy: 52.3 lumens/watt  
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.5  
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  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 102 | 100 |
| 1   | 110 | 106 | 103 | 99  | 108 | 104 | 101 | 98  | 100 | 97  | 95  | 96  | 94  | 92  | 93  | 91  | 89  | 87  | 87  | 87  |
| 2   | 101 | 94  | 88  | 83  | 99  | 92  | 87  | 82  | 89  | 84  | 80  | 86  | 82  | 78  | 83  | 79  | 77  | 75  | 75  | 75  |
| 3   | 93  | 83  | 76  | 70  | 90  | 82  | 75  | 69  | 79  | 73  | 68  | 76  | 71  | 67  | 74  | 69  | 66  | 64  | 64  | 64  |
| 4   | 85  | 74  | 66  | 59  | 83  | 72  | 65  | 59  | 70  | 63  | 58  | 68  | 62  | 57  | 66  | 61  | 57  | 54  | 54  | 54  |
| 5   | 78  | 66  | 57  | 51  | 76  | 65  | 57  | 51  | 63  | 55  | 50  | 61  | 54  | 49  | 59  | 53  | 49  | 47  | 47  | 47  |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 43  | 54  | 48  | 43  | 53  | 47  | 43  | 41  | 41  | 41  |
| 7   | 66  | 53  | 44  | 38  | 65  | 52  | 44  | 38  | 51  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 37  | 35  | 35  | 35  |
| 8   | 61  | 48  | 40  | 34  | 60  | 47  | 39  | 34  | 46  | 39  | 33  | 45  | 38  | 33  | 44  | 38  | 33  | 31  | 31  | 31  |
| 9   | 57  | 44  | 35  | 30  | 56  | 43  | 35  | 30  | 42  | 35  | 30  | 41  | 34  | 30  | 40  | 34  | 29  | 28  | 28  | 28  |
| 10  | 53  | 40  | 32  | 27  | 52  | 39  | 32  | 27  | 38  | 31  | 27  | 37  | 31  | 26  | 37  | 31  | 26  | 25  | 25  | 25  |

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

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 19048  | 19048  | 19048 | 19048 | 19048 |
| 5°  | 43341  | 34697  | 18844 | 11911 | 11134 |
| 10° | 75093  | 55087  | 17488 | 10860 | 11122 |
| 15° | 98028  | 73584  | 15262 | 11072 | 11482 |
| 20° | 111028 | 87991  | 13049 | 11235 | 11931 |
| 25° | 139442 | 98719  | 10946 | 11364 | 12238 |
| 30° | 158715 | 108422 | 9327  | 11594 | 12946 |
| 35° | 173221 | 118936 | 8115  | 11774 | 13687 |
| 40° | 192042 | 125652 | 7487  | 12253 | 14816 |
| 45° | 213943 | 125774 | 7380  | 12909 | 16051 |
| 50° | 204914 | 118291 | 7315  | 13584 | 17442 |
| 55° | 181448 | 76627  | 7507  | 14322 | 18886 |
| 60° | 99372  | 16430  | 7578  | 14604 | 19564 |
| 65° | 7091   | 3994   | 7417  | 14507 | 19764 |
| 70° | 3424   | 3827   | 6848  | 13747 | 19084 |
| 75° | 2994   | 4059   | 6521  | 13109 | 17634 |
| 80° | 2975   | 3769   | 6050  | 12001 | 16563 |
| 85° | 2964   | 4545   | 5928  | 10473 | 15018 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 213943 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 14.4   | 1.9       |
| 10°-20°   | 61.7   | 8.1       |
| 20°-30°   | 118.3  | 15.6      |
| 30°-40°   | 167.4  | 22.0      |
| 40°-50°   | 189.3  | 24.9      |
| 50°-60°   | 149.9  | 19.8      |
| 60°-70°   | 40.4   | 5.3       |
| 70°-80°   | 13.4   | 1.8       |
| 80°-90°   | 4.1    | 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°    | 194.5  | 25.6      |
| 0°-40°    | 361.8  | 47.7      |
| 0°-60°    | 701.1  | 92.4      |
| 0°-90°    | 759.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 759.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 111 | 111 | 111 | 111  | 111  |      |
| 5°  | 251 | 201 | 109 | 69   | 64   | 30   |
| 15° | 550 | 413 | 86  | 62   | 64   | 155  |
| 25° | 734 | 520 | 58  | 60   | 64   | 336  |
| 35° | 824 | 566 | 39  | 56   | 65   | 519  |
| 45° | 878 | 516 | 30  | 53   | 66   | 657  |
| 55° | 604 | 255 | 25  | 48   | 63   | 490  |
| 65° | 17  | 10  | 18  | 36   | 48   | 63   |
| 75° | 4   | 6   | 10  | 20   | 26   | 5    |
| 85° | 2   | 2   | 3   | 5    | 8    | 2    |
| 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°    | 110.6 | 110.6 | 110.6 | 110.6 | 110.6 | 110.6 | 110.6 | 110.6 | 110.6 | 110.6 | 110.6  |
| 2.5°  | 171.9 | 171.9 | 171.1 | 168.1 | 166.6 | 162.8 | 159.8 | 151.5 | 131.0 | 111.3 | 95.4   |
| 5°    | 250.7 | 254.4 | 249.1 | 248.4 | 243.8 | 237.0 | 232.5 | 200.7 | 151.5 | 109.0 | 81.8   |
| 7.5°  | 343.8 | 345.3 | 343.8 | 336.2 | 329.4 | 318.0 | 307.4 | 257.5 | 171.9 | 105.3 | 71.9   |
| 10°   | 429.4 | 427.1 | 422.5 | 417.2 | 407.4 | 395.3 | 377.1 | 315.0 | 191.6 | 100.0 | 65.9   |
| 12.5° | 499.0 | 498.3 | 493.0 | 487.7 | 475.6 | 459.7 | 441.5 | 367.3 | 208.2 | 93.1  | 62.9   |
| 15°   | 549.8 | 549.8 | 544.5 | 538.4 | 527.0 | 514.2 | 493.7 | 412.7 | 221.9 | 85.6  | 59.8   |
| 17.5° | 583.8 | 582.3 | 578.5 | 574.0 | 564.9 | 552.0 | 536.1 | 449.1 | 231.0 | 78.0  | 59.1   |
| 20°   | 605.8 | 605.0 | 602.0 | 595.2 | 587.6 | 577.8 | 563.4 | 480.1 | 234.7 | 71.2  | 58.3   |
| 22.5° | 676.2 | 670.2 | 658.8 | 644.4 | 626.3 | 602.8 | 583.1 | 503.6 | 233.2 | 63.6  | 56.8   |
| 25°   | 733.8 | 731.5 | 719.4 | 702.0 | 677.7 | 647.5 | 614.9 | 519.5 | 225.7 | 57.6  | 55.3   |
| 27.5° | 771.6 | 767.9 | 756.5 | 737.6 | 711.8 | 682.3 | 652.0 | 531.6 | 215.1 | 52.3  | 53.0   |
| 30°   | 798.1 | 795.9 | 784.5 | 763.3 | 736.8 | 704.2 | 673.2 | 545.2 | 200.7 | 46.9  | 50.7   |
| 32.5° | 814.8 | 812.5 | 801.2 | 782.2 | 756.5 | 722.4 | 686.8 | 558.9 | 183.3 | 42.4  | 48.5   |
| 35°   | 823.9 | 821.6 | 808.7 | 792.1 | 767.9 | 734.5 | 696.7 | 565.7 | 162.1 | 38.6  | 46.2   |
| 37.5° | 835.3 | 830.7 | 813.3 | 792.8 | 768.6 | 737.6 | 699.7 | 564.9 | 140.8 | 35.6  | 44.7   |
| 40°   | 854.2 | 842.1 | 817.1 | 789.8 | 764.8 | 733.8 | 697.4 | 558.9 | 117.4 | 33.3  | 43.2   |
| 42.5° | 872.4 | 854.9 | 817.8 | 785.3 | 757.3 | 727.0 | 689.1 | 545.2 | 91.6  | 31.8  | 42.4   |
| 45°   | 878.4 | 852.7 | 807.2 | 774.7 | 748.2 | 717.1 | 677.7 | 516.4 | 62.1  | 30.3  | 40.9   |
| 47.5° | 838.3 | 819.4 | 781.5 | 757.3 | 732.3 | 702.0 | 661.1 | 486.2 | 35.6  | 28.8  | 39.4   |
| 50°   | 764.8 | 752.7 | 731.5 | 716.4 | 702.7 | 681.5 | 641.4 | 441.5 | 21.2  | 27.3  | 37.9   |
| 52.5° | 696.7 | 692.9 | 677.7 | 665.6 | 658.1 | 648.2 | 611.9 | 372.6 | 17.4  | 26.5  | 36.3   |
| 55°   | 604.3 | 592.2 | 588.4 | 583.8 | 599.7 | 599.0 | 549.8 | 255.2 | 16.7  | 25.0  | 34.8   |
| 57.5° | 379.4 | 384.7 | 404.4 | 440.7 | 483.9 | 508.9 | 507.4 | 136.3 | 15.9  | 23.5  | 32.6   |
| 60°   | 288.5 | 287.8 | 293.8 | 309.0 | 340.8 | 376.4 | 409.7 | 47.7  | 15.1  | 22.0  | 31.0   |
| 62.5° | 86.3  | 88.6  | 106.8 | 156.8 | 187.8 | 231.7 | 211.3 | 11.4  | 14.4  | 19.7  | 28.0   |
| 65°   | 17.4  | 18.2  | 18.2  | 20.4  | 25.0  | 37.9  | 46.2  | 9.8   | 13.6  | 18.2  | 25.7   |
| 67.5° | 7.6   | 7.6   | 7.6   | 8.3   | 8.3   | 9.8   | 8.3   | 9.1   | 12.1  | 15.9  | 22.7   |
| 70°   | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   | 6.8   | 7.6   | 7.6   | 10.6  | 13.6  | 19.7   |
| 72.5° | 5.3   | 5.3   | 5.3   | 6.1   | 6.1   | 6.1   | 6.1   | 6.8   | 9.1   | 11.4  | 16.7   |
| 75°   | 4.5   | 4.5   | 4.5   | 4.5   | 5.3   | 5.3   | 5.3   | 6.1   | 7.6   | 9.8   | 13.6   |
| 77.5° | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 4.5   | 4.5   | 4.5   | 6.1   | 7.6   | 11.4   |
| 80°   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.8   | 4.5   | 6.1   | 8.3    |
| 82.5° | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 3.0   | 3.8   | 4.5   | 6.1    |
| 85°   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 2.3   | 2.3   | 3.0   | 3.8    |
| 87.5° | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 1.5   | 1.5   | 1.5   | 2.3    |
| 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°    | 110.6 | 110.6  | 110.6 |
| 2.5°  | 84.1  | 79.5   | 77.2  |
| 5°    | 68.9  | 65.1   | 64.4  |
| 7.5°  | 63.6  | 62.9   | 62.9  |
| 10°   | 62.1  | 62.9   | 63.6  |
| 12.5° | 62.1  | 63.6   | 64.4  |
| 15°   | 62.1  | 63.6   | 64.4  |
| 17.5° | 62.1  | 63.6   | 64.4  |
| 20°   | 61.3  | 63.6   | 65.1  |
| 22.5° | 60.6  | 63.6   | 64.4  |
| 25°   | 59.8  | 63.6   | 64.4  |
| 27.5° | 59.1  | 62.9   | 64.4  |
| 30°   | 58.3  | 62.9   | 65.1  |
| 32.5° | 56.8  | 62.9   | 65.1  |
| 35°   | 56.0  | 62.9   | 65.1  |
| 37.5° | 55.3  | 62.9   | 65.9  |
| 40°   | 54.5  | 62.9   | 65.9  |
| 42.5° | 53.8  | 62.9   | 65.9  |
| 45°   | 53.0  | 62.1   | 65.9  |
| 47.5° | 51.5  | 62.1   | 65.9  |
| 50°   | 50.7  | 61.3   | 65.1  |
| 52.5° | 49.2  | 60.6   | 65.1  |
| 55°   | 47.7  | 59.1   | 62.9  |
| 57.5° | 45.4  | 56.8   | 59.8  |
| 60°   | 42.4  | 53.8   | 56.8  |
| 62.5° | 38.6  | 50.0   | 52.3  |
| 65°   | 35.6  | 45.4   | 48.5  |
| 67.5° | 31.0  | 40.1   | 43.2  |
| 70°   | 27.3  | 34.8   | 37.9  |
| 72.5° | 23.5  | 29.5   | 32.6  |
| 75°   | 19.7  | 24.2   | 26.5  |
| 77.5° | 15.1  | 19.7   | 21.2  |
| 80°   | 12.1  | 15.1   | 16.7  |
| 82.5° | 8.3   | 10.6   | 11.4  |
| 85°   | 5.3   | 6.8    | 7.6   |
| 87.5° | 2.3   | 3.0    | 3.0   |
| 90°   | 0.0   | 0.0    | 0.0   |

(END OF REPORT)