

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: P398093

Luminaire Tested: **ARCH-S-PA1-80-830-U-5WQ**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398093
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-80-830-U-5WQ
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8836 lumens
Efficiency: N/A
Efficacy: 106.5 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

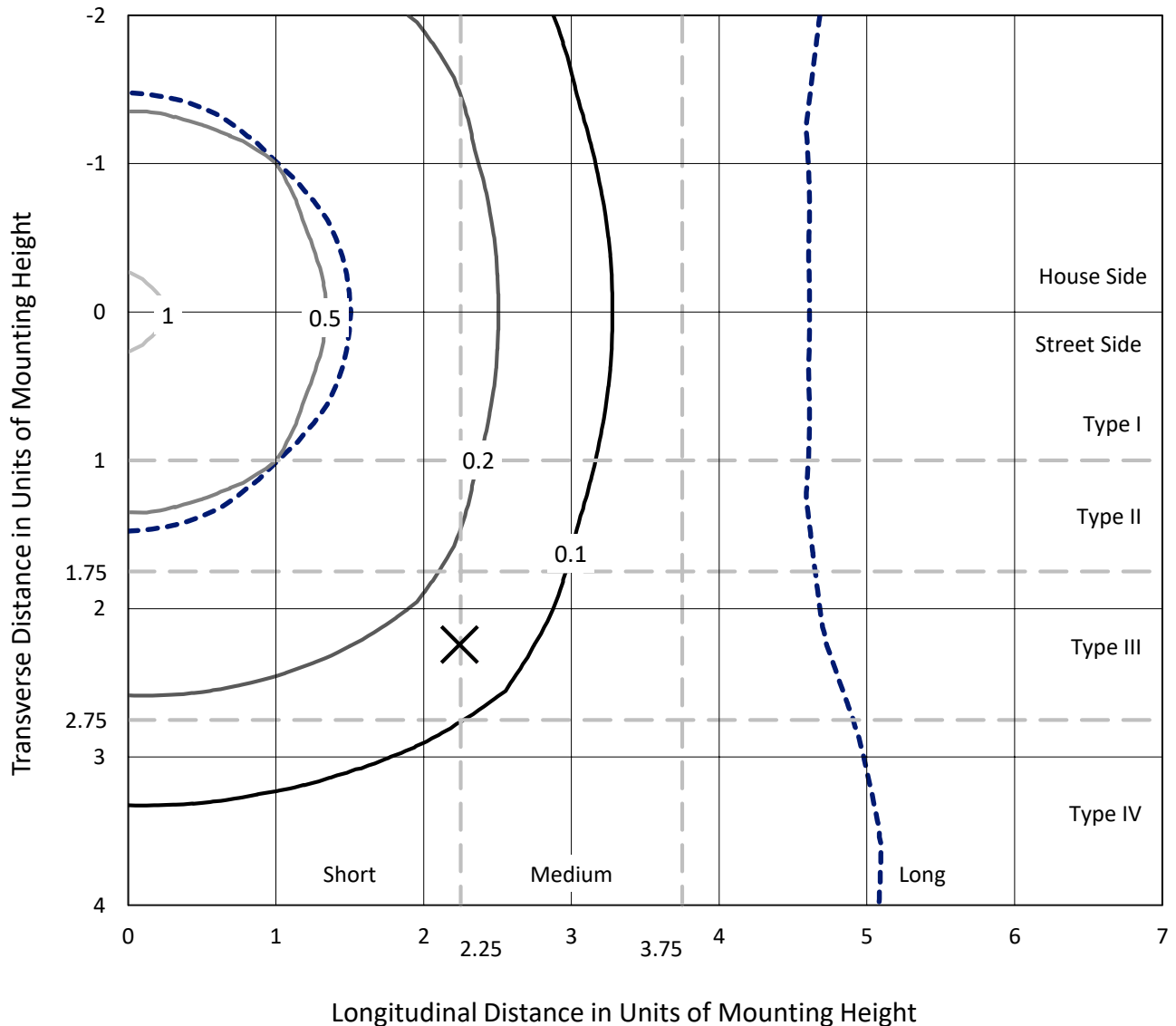
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

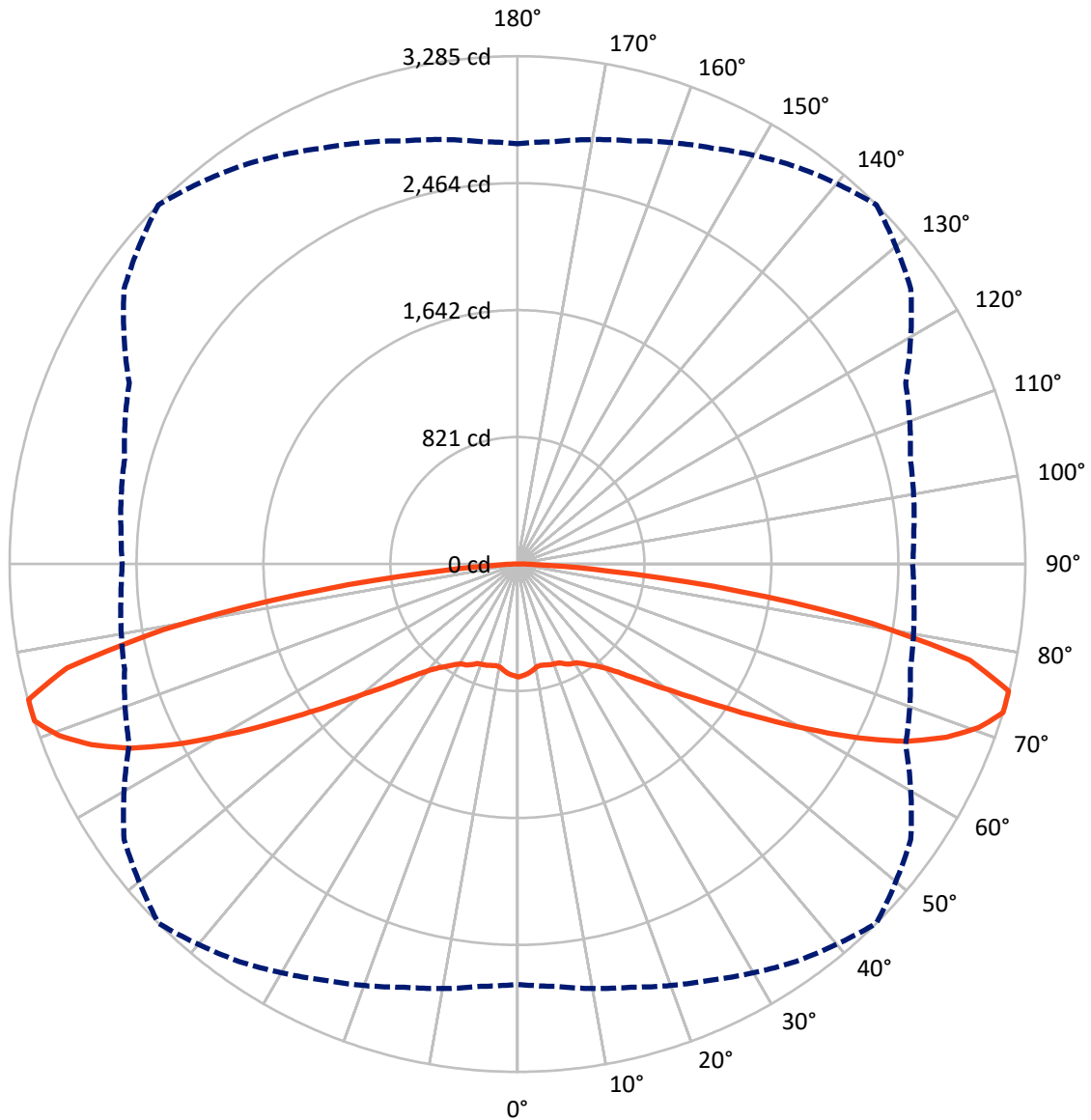
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 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 | 4418.0 | 0.0 | 4418.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 4418.0 | 0.0 | 4418.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 8836.0 | 0.0 | 8836.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 67.0 | 0.8 |
| 10°-20° | 194.6 | 2.2 |
| 20°-30° | 330.7 | 3.7 |
| 30°-40° | 504.4 | 5.7 |
| 40°-50° | 830.5 | 9.4 |
| 50°-60° | 1450.4 | 16.4 |
| 60°-70° | 2431.6 | 27.5 |
| 70°-80° | 2602.3 | 29.5 |
| 80°-90° | 424.4 | 4.8 |
| 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° | 8836.0 | 100.0 |
| 0°-180° | 8836.0 | 100.0 |



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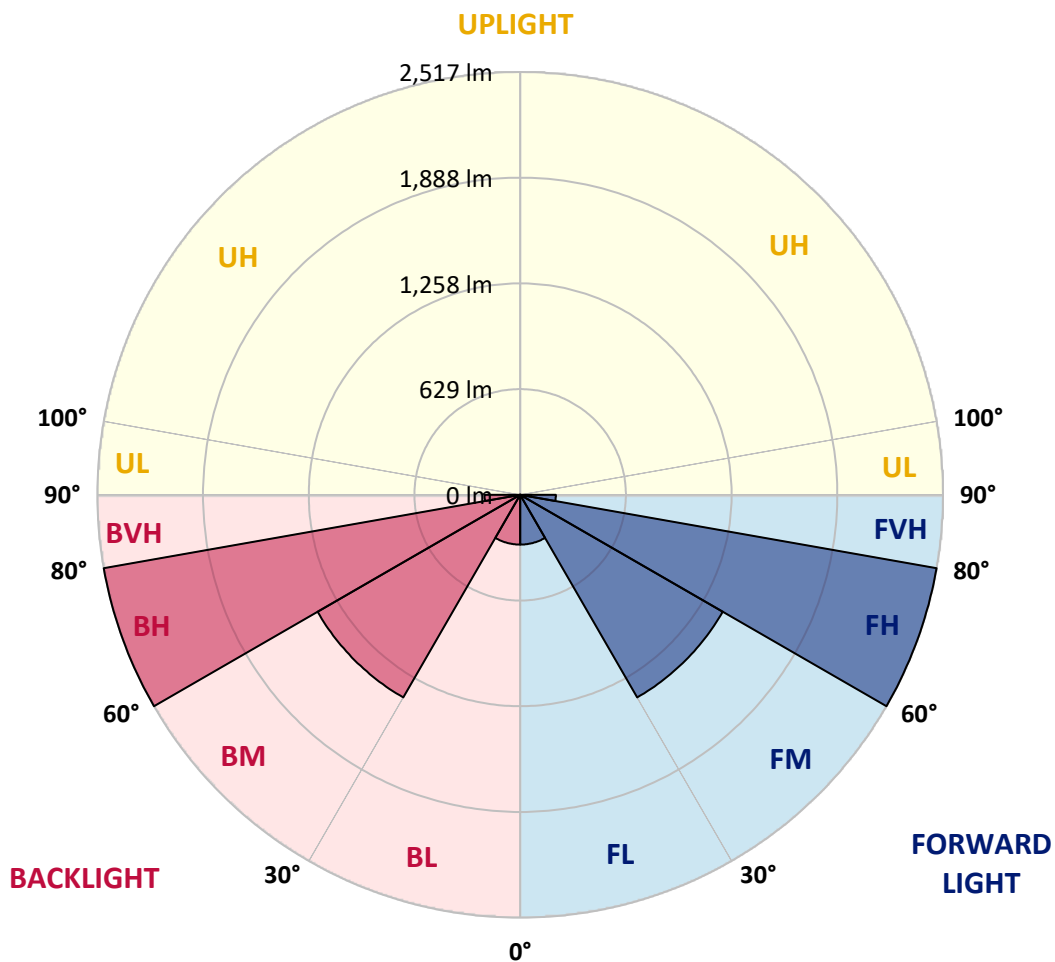
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 296.2 | 3.4 | | | |
| FM | (30°-60°) | 1392.7 | 15.8 | | | |
| FH | (60°-80°) | 2516.9 | 28.5 | | | G2/5000 |
| FVH | (80°-90°) | 212.2 | 2.4 | | | G2/225 |
| BL | (0°-30°) | 296.2 | 3.4 | B1/500 | | |
| BM | (30°-60°) | 1392.7 | 15.8 | B2/2500 | | |
| BH | (60°-80°) | 2516.9 | 28.5 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 212.2 | 2.4 | | | 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° | 731.2 | 731.2 | 731.2 | 731.2 | 731.2 | 731.2 | 731.2 | 731.2 | 731.2 | 731.2 | 731.2 |
| 2.5° | 726.7 | 726.7 | 726.7 | 725.5 | 723.3 | 722.2 | 719.9 | 721.0 | 721.0 | 721.0 | 721.0 |
| 5° | 717.6 | 717.6 | 716.5 | 715.4 | 713.1 | 712.0 | 709.7 | 712.0 | 712.0 | 712.0 | 712.0 |
| 7.5° | 700.7 | 701.9 | 701.9 | 700.7 | 697.3 | 696.2 | 692.8 | 694.0 | 694.0 | 695.1 | 694.0 |
| 10° | 691.7 | 691.7 | 690.6 | 684.9 | 679.3 | 677.0 | 675.9 | 679.3 | 682.7 | 686.1 | 686.1 |
| 12.5° | 691.7 | 691.7 | 689.4 | 680.4 | 672.5 | 672.5 | 672.5 | 677.0 | 683.8 | 690.6 | 691.7 |
| 15° | 695.1 | 695.1 | 690.6 | 680.4 | 675.9 | 677.0 | 677.0 | 681.5 | 689.4 | 698.5 | 699.6 |
| 17.5° | 697.3 | 697.3 | 691.7 | 681.5 | 681.5 | 684.9 | 682.7 | 686.1 | 694.0 | 704.1 | 705.2 |
| 20° | 700.7 | 700.7 | 692.8 | 684.9 | 684.9 | 688.3 | 688.3 | 691.7 | 698.5 | 708.6 | 709.7 |
| 22.5° | 707.5 | 706.4 | 698.5 | 691.7 | 691.7 | 694.0 | 696.2 | 700.7 | 706.4 | 715.4 | 717.6 |
| 25° | 715.4 | 715.4 | 708.6 | 707.5 | 709.7 | 715.4 | 714.3 | 713.1 | 715.4 | 723.3 | 726.7 |
| 27.5° | 719.9 | 719.9 | 715.4 | 718.8 | 727.8 | 732.3 | 726.7 | 722.2 | 722.2 | 730.1 | 731.2 |
| 30° | 734.6 | 733.4 | 728.9 | 731.2 | 739.1 | 741.3 | 738.0 | 732.3 | 735.7 | 744.7 | 745.9 |
| 32.5° | 759.4 | 759.4 | 752.6 | 752.6 | 758.3 | 767.3 | 756.0 | 752.6 | 757.1 | 767.3 | 768.4 |
| 35° | 797.8 | 797.8 | 788.7 | 784.2 | 788.7 | 801.1 | 784.2 | 783.1 | 791.0 | 802.3 | 803.4 |
| 37.5° | 846.3 | 846.3 | 840.6 | 829.4 | 830.5 | 838.4 | 823.7 | 822.6 | 837.3 | 849.7 | 849.7 |
| 40° | 907.2 | 910.6 | 905.0 | 891.4 | 886.9 | 888.0 | 876.7 | 877.9 | 894.8 | 909.5 | 909.5 |
| 42.5° | 982.8 | 985.1 | 976.0 | 965.9 | 960.2 | 956.9 | 945.6 | 947.8 | 968.1 | 987.3 | 987.3 |
| 45° | 1074.2 | 1075.3 | 1066.3 | 1053.9 | 1047.1 | 1044.9 | 1033.6 | 1039.2 | 1061.8 | 1082.1 | 1081.0 |
| 47.5° | 1176.9 | 1178.0 | 1169.0 | 1156.6 | 1152.1 | 1155.5 | 1144.2 | 1144.2 | 1164.5 | 1181.4 | 1179.2 |
| 50° | 1293.1 | 1295.4 | 1285.2 | 1279.6 | 1276.2 | 1285.2 | 1271.7 | 1259.3 | 1272.8 | 1289.7 | 1287.5 |
| 52.5° | 1421.8 | 1427.4 | 1420.6 | 1422.9 | 1435.3 | 1446.6 | 1424.0 | 1396.9 | 1403.7 | 1415.0 | 1411.6 |
| 55° | 1577.5 | 1584.2 | 1586.5 | 1594.4 | 1627.1 | 1646.3 | 1609.1 | 1563.9 | 1560.5 | 1561.7 | 1556.0 |
| 57.5° | 1752.4 | 1756.9 | 1771.6 | 1789.6 | 1857.3 | 1887.8 | 1829.1 | 1751.2 | 1726.4 | 1711.7 | 1708.4 |
| 60° | 1928.4 | 1936.3 | 1972.4 | 2009.6 | 2113.5 | 2168.7 | 2078.5 | 1947.6 | 1894.5 | 1867.5 | 1861.8 |
| 62.5° | 2105.6 | 2121.4 | 2180.0 | 2243.2 | 2394.4 | 2476.8 | 2338.0 | 2148.4 | 2071.7 | 2037.9 | 2028.8 |
| 65° | 2310.9 | 2330.1 | 2401.2 | 2481.3 | 2649.4 | 2765.7 | 2597.5 | 2356.1 | 2273.7 | 2228.5 | 2217.3 |
| 67.5° | 2551.3 | 2571.6 | 2629.1 | 2718.3 | 2877.4 | 2991.3 | 2842.4 | 2568.2 | 2461.0 | 2403.4 | 2394.4 |
| 70° | 2748.7 | 2766.8 | 2828.8 | 2919.1 | 3037.6 | 3167.4 | 3025.2 | 2737.4 | 2640.4 | 2599.8 | 2594.1 |
| 72.5° | 2718.3 | 2742.0 | 2833.4 | 2968.8 | 3138.0 | 3284.7 | 3105.3 | 2770.2 | 2630.2 | 2573.8 | 2555.8 |
| 75° | 2374.1 | 2400.1 | 2508.4 | 2753.2 | 3062.4 | 3281.3 | 2989.1 | 2552.4 | 2387.6 | 2340.3 | 2331.2 |
| 77.5° | 1571.8 | 1596.7 | 1779.5 | 2165.4 | 2674.3 | 2990.2 | 2638.1 | 2138.3 | 1873.1 | 1759.1 | 1752.4 |
| 80° | 635.3 | 666.9 | 841.8 | 1251.4 | 1895.7 | 2324.5 | 1956.6 | 1368.7 | 923.0 | 744.7 | 708.6 |
| 82.5° | 147.8 | 176.0 | 256.1 | 461.5 | 970.4 | 1447.7 | 1055.0 | 511.2 | 296.8 | 211.0 | 189.6 |
| 85° | 62.1 | 63.2 | 109.5 | 150.1 | 303.5 | 584.5 | 345.3 | 186.2 | 151.2 | 110.6 | 108.3 |
| 87.5° | 23.7 | 24.8 | 53.0 | 63.2 | 97.0 | 110.6 | 117.4 | 95.9 | 89.1 | 55.3 | 53.0 |
| 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)