

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: P230974

Luminaire Tested: **ARCH-M-AF48-70-D-U-5WQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230974
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-M-AF48-70-D-U-5WQ-7050
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 470mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10206 lumens
Efficiency: N/A
Efficacy: 139.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 73
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

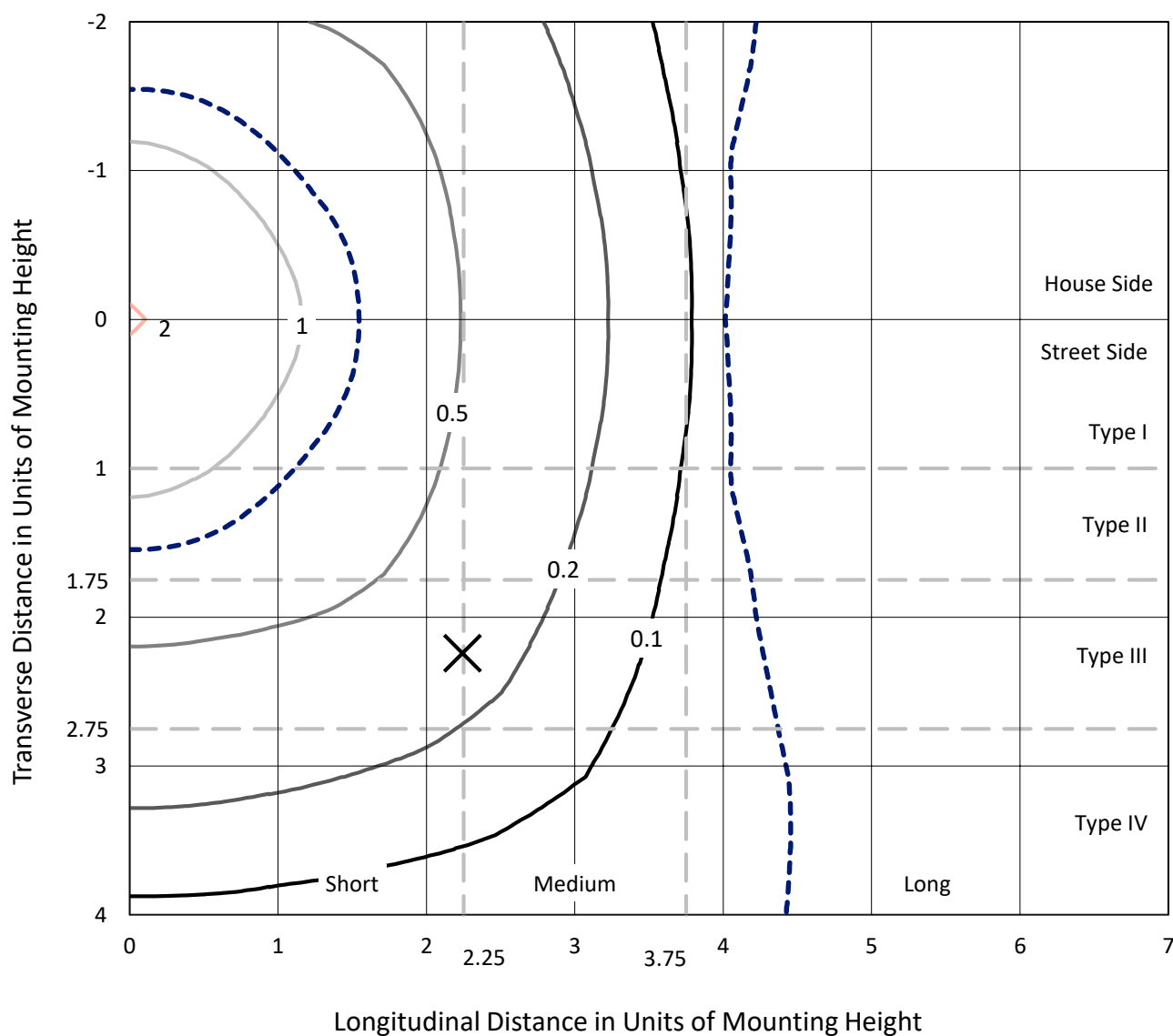


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

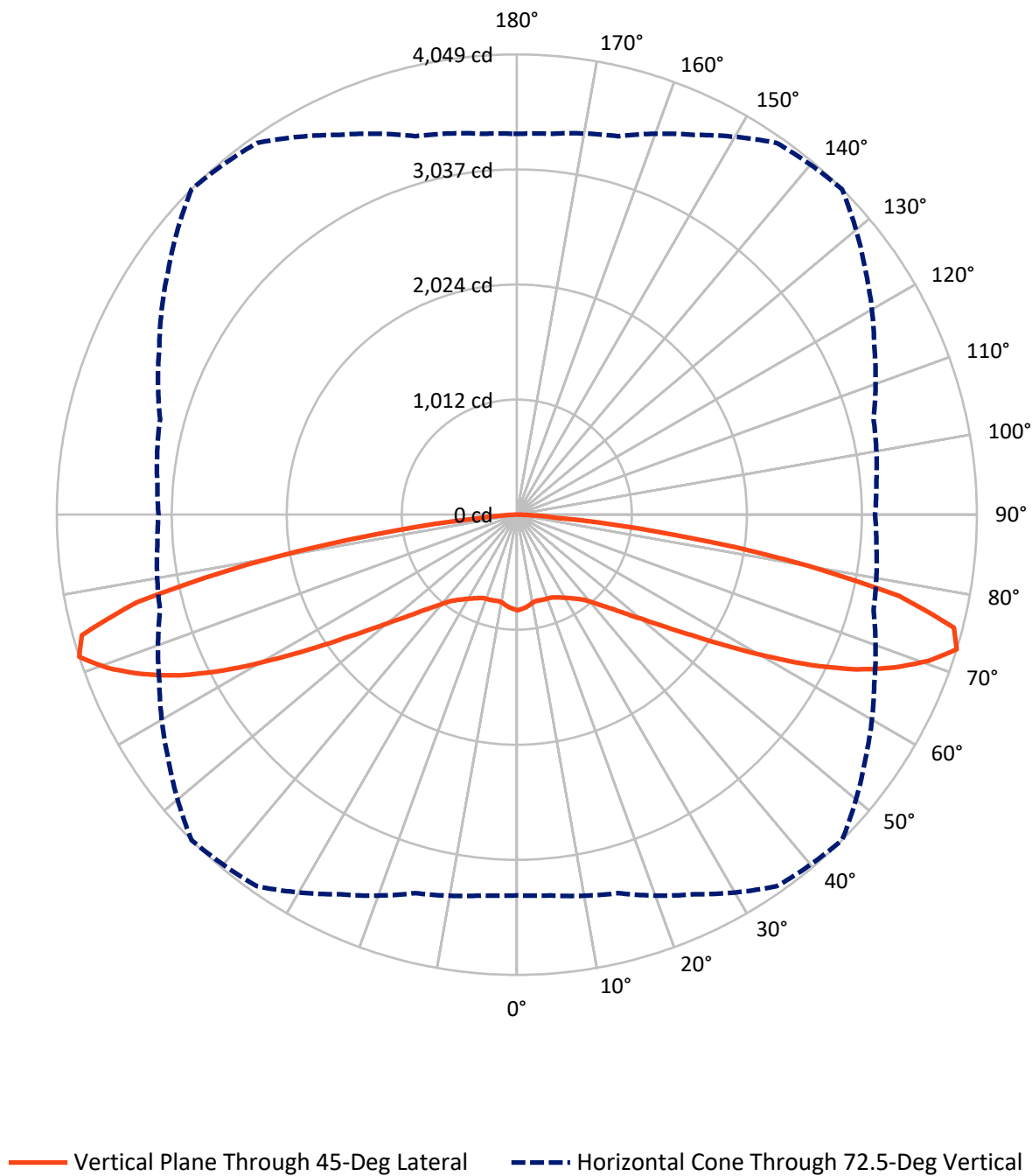


Based on 20 foot mounting height. Maximum calculated value = 2.1 fc
Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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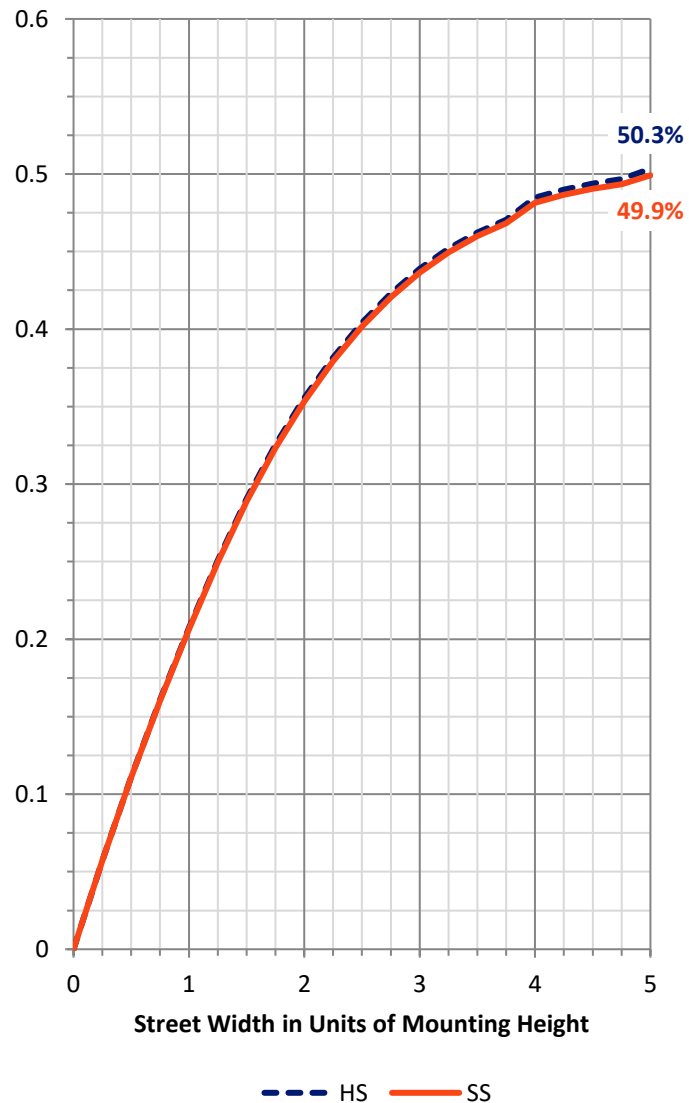
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5103.0	0.0	5103.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5103.0	0.0	5103.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	10206.0	0.0	10206.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.4	0.8
10°-20°	223.3	2.2
20°-30°	373.7	3.7
30°-40°	574.2	5.6
40°-50°	950.8	9.3
50°-60°	1690.3	16.6
60°-70°	2957.2	29.0
70°-80°	3008.7	29.5
80°-90°	350.3	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°	10206.0	100.0
0°-180°	10206.0	100.0

Coefficient of Utilization



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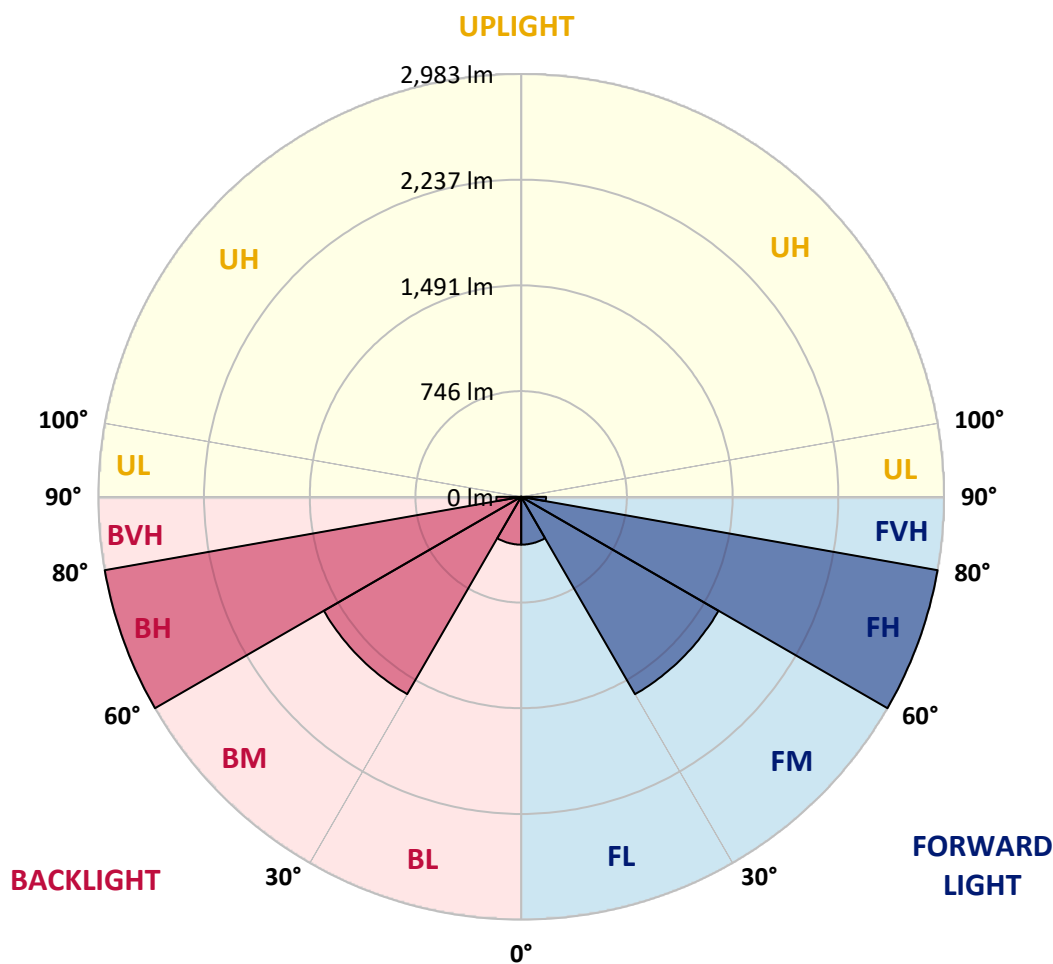
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	337.2	3.3			
FM	(30°-60°)	1607.7	15.8			
FH	(60°-80°)	2982.9	29.2			G2/5000
FVH	(80°-90°)	175.2	1.7			G2/225
BL	(0°-30°)	337.2	3.3	B1/500		
BM	(30°-60°)	1607.7	15.8	B2/2500		
BH	(60°-80°)	2982.9	29.2	B4/5000		G2/5000
BVH	(80°-90°)	175.2	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°	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2	841.2
2.5°	833.4	835.4	831.5	831.5	831.5	829.6	831.5	829.6	831.5	833.4	833.4
5°	825.7	825.7	821.8	821.8	821.8	819.8	821.8	821.8	823.7	825.7	825.7
7.5°	808.2	808.2	806.2	804.3	802.4	802.4	804.3	804.3	806.2	808.2	808.2
10°	798.5	796.5	792.6	786.8	784.9	782.9	786.8	790.7	796.5	802.4	800.4
12.5°	794.6	792.6	784.9	779.0	775.2	777.1	781.0	784.9	794.6	800.4	798.5
15°	798.5	794.6	784.9	775.2	777.1	781.0	784.9	784.9	796.5	802.4	802.4
17.5°	798.5	796.5	784.9	777.1	779.0	784.9	786.8	784.9	794.6	804.3	804.3
20°	800.4	800.4	784.9	779.0	781.0	786.8	788.8	786.8	794.6	806.2	806.2
22.5°	804.3	802.4	786.8	782.9	786.8	790.7	792.6	790.7	798.5	808.2	810.1
25°	812.1	808.2	794.6	792.6	800.4	806.2	806.2	802.4	806.2	816.0	816.0
27.5°	821.8	819.8	804.3	804.3	814.0	825.7	819.8	812.1	816.0	825.7	825.7
30°	839.3	837.3	821.8	821.8	835.4	849.0	835.4	825.7	831.5	841.2	843.2
32.5°	864.5	864.5	850.9	847.0	870.4	876.2	870.4	850.9	854.8	868.4	868.4
35°	907.3	903.4	889.8	887.8	911.2	909.2	907.3	889.8	893.7	909.2	909.2
37.5°	963.6	961.7	950.0	944.2	955.8	948.1	951.9	944.2	953.9	965.5	967.5
40°	1035.5	1033.5	1023.8	1016.1	1019.9	1008.3	1012.2	1016.1	1025.8	1033.5	1035.5
42.5°	1124.9	1124.9	1115.1	1101.5	1095.7	1089.9	1089.9	1097.7	1107.4	1117.1	1117.1
45°	1235.6	1235.6	1223.9	1210.3	1192.8	1183.1	1187.0	1194.8	1206.4	1218.1	1222.0
47.5°	1365.8	1365.8	1350.2	1336.6	1319.1	1307.5	1307.5	1311.4	1328.8	1338.6	1344.4
50°	1511.5	1505.6	1490.1	1476.5	1466.8	1451.2	1453.2	1451.2	1466.8	1480.4	1484.3
52.5°	1663.0	1661.1	1645.5	1641.6	1647.5	1639.7	1639.7	1620.3	1626.1	1633.9	1631.9
55°	1851.4	1845.6	1832.0	1839.8	1863.1	1874.8	1870.9	1839.8	1822.3	1826.2	1824.2
57.5°	2057.4	2051.5	2047.7	2071.0	2123.4	2172.0	2162.3	2090.4	2057.4	2059.3	2061.3
60°	2267.2	2267.2	2278.8	2337.1	2449.8	2529.5	2500.3	2379.9	2321.6	2309.9	2306.0
62.5°	2482.8	2488.7	2513.9	2611.1	2784.0	2916.1	2842.2	2671.3	2583.9	2560.5	2552.8
65°	2733.5	2739.3	2776.2	2896.6	3125.9	3283.3	3157.0	2995.7	2873.3	2824.8	2817.0
67.5°	3096.7	3100.6	3129.8	3246.3	3462.0	3588.3	3458.1	3314.3	3182.2	3125.9	3122.0
70°	3423.1	3427.0	3452.3	3605.7	3803.9	3848.6	3704.8	3522.2	3384.3	3339.6	3331.8
72.5°	3349.3	3362.9	3446.4	3685.4	3990.4	4048.7	3745.6	3471.7	3250.2	3176.4	3153.1
75°	2809.2	2830.6	2962.7	3322.1	3807.8	3972.9	3504.7	3001.6	2671.3	2529.5	2492.6
77.5°	1639.7	1719.3	1946.6	2407.1	3100.6	3436.7	2886.9	2197.3	1641.6	1408.5	1330.8
80°	448.8	491.5	656.7	1107.4	1944.7	2407.1	1841.7	1008.3	544.0	408.0	378.8
82.5°	141.8	188.4	239.0	318.6	763.5	1268.6	683.8	297.2	233.1	192.3	171.0
85°	75.8	81.6	134.0	155.4	229.2	355.5	211.8	155.4	139.9	103.0	97.1
87.5°	38.9	40.8	75.8	75.8	101.0	83.5	91.3	83.5	79.7	50.5	44.7
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)