

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: LUMARK

Report Number: P961513

Luminaire Tested: **NAV-SB2A-827-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961513
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-827-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8378.3 lumens
Efficiency: N/A
Efficacy: 146.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

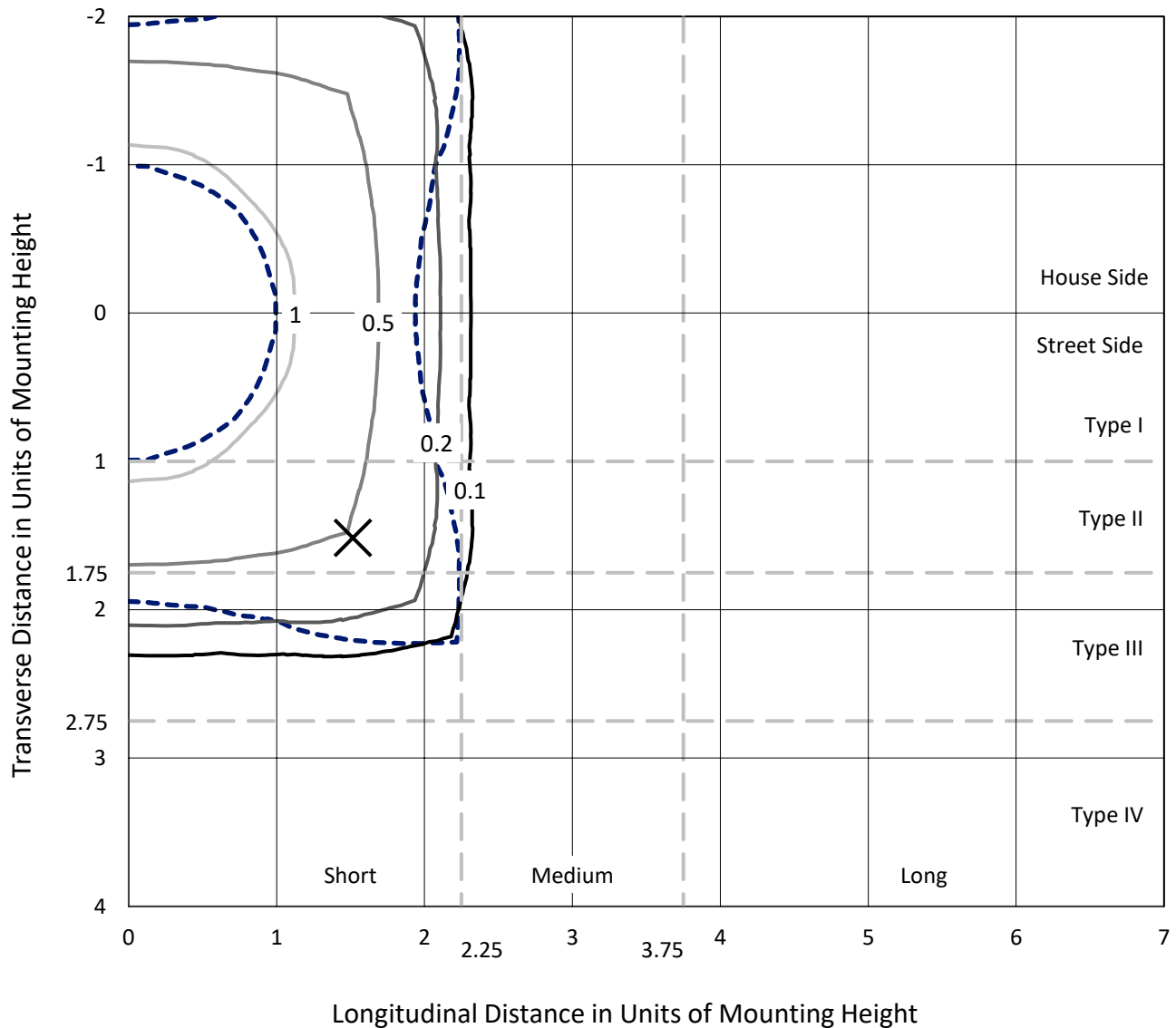
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

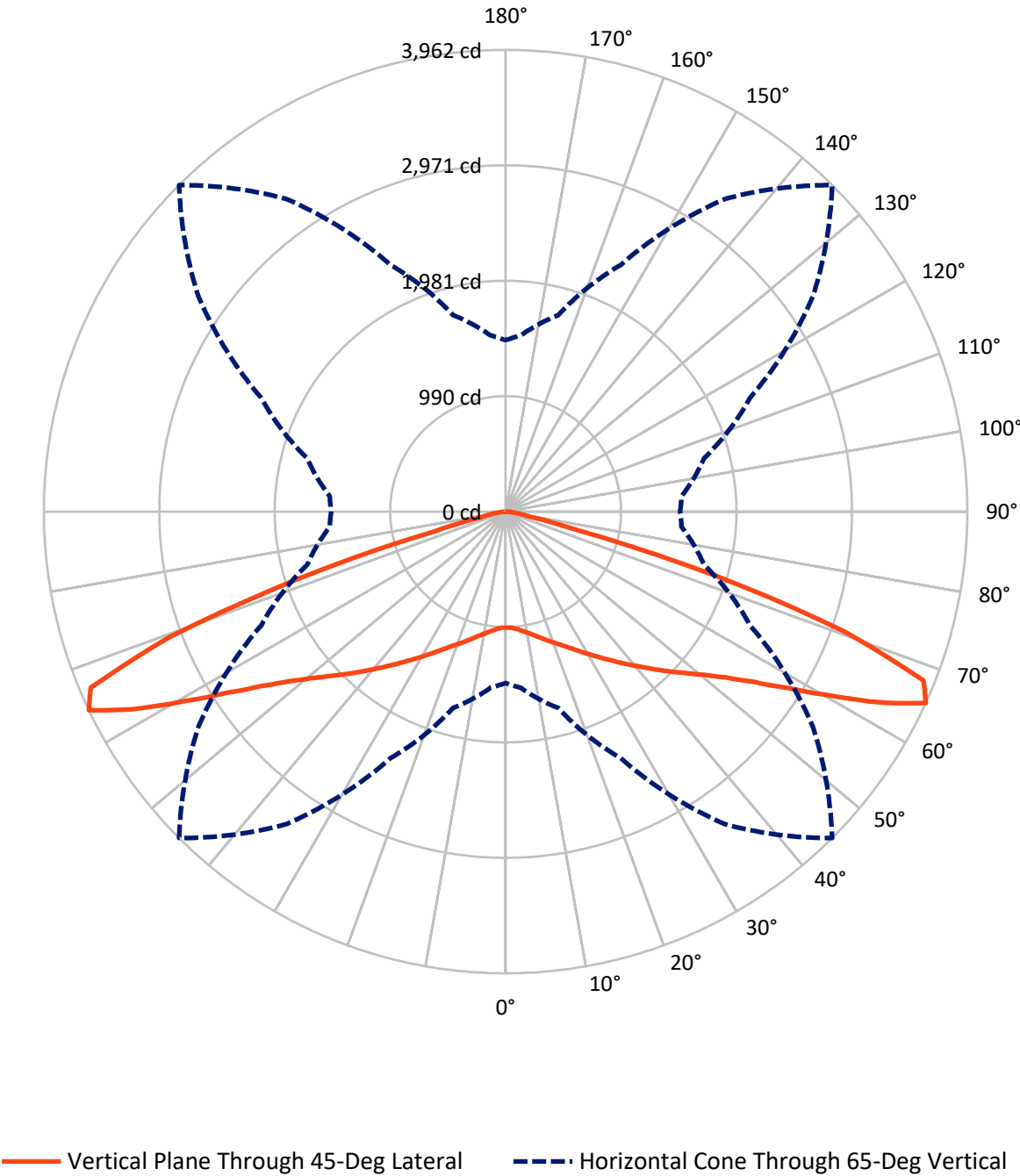
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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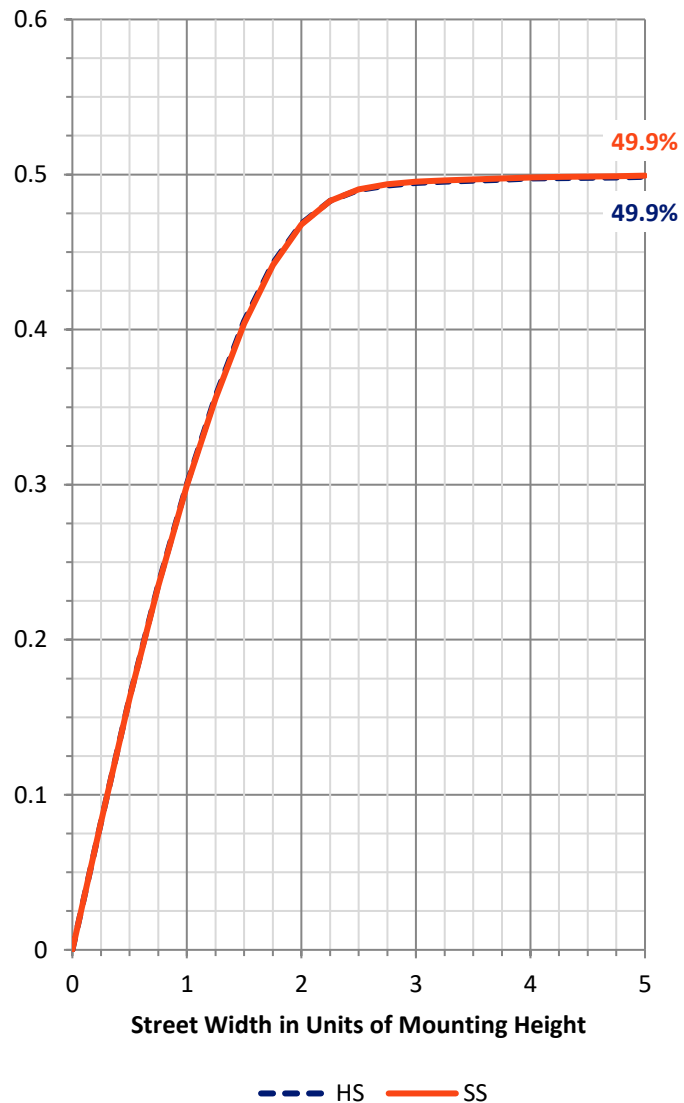
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4189.2	0.0	4189.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4189.2	0.0	4189.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	8378.3	0.0	8378.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.4	1.2
10°-20°	321.1	3.8
20°-30°	606.3	7.2
30°-40°	992.8	11.8
40°-50°	1539.3	18.4
50°-60°	2273.8	27.1
60°-70°	2164.5	25.8
70°-80°	349.3	4.2
80°-90°	32.9	0.4
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°	8378.3	100.0
0°-180°	8378.3	100.0

Coefficient of Utilization



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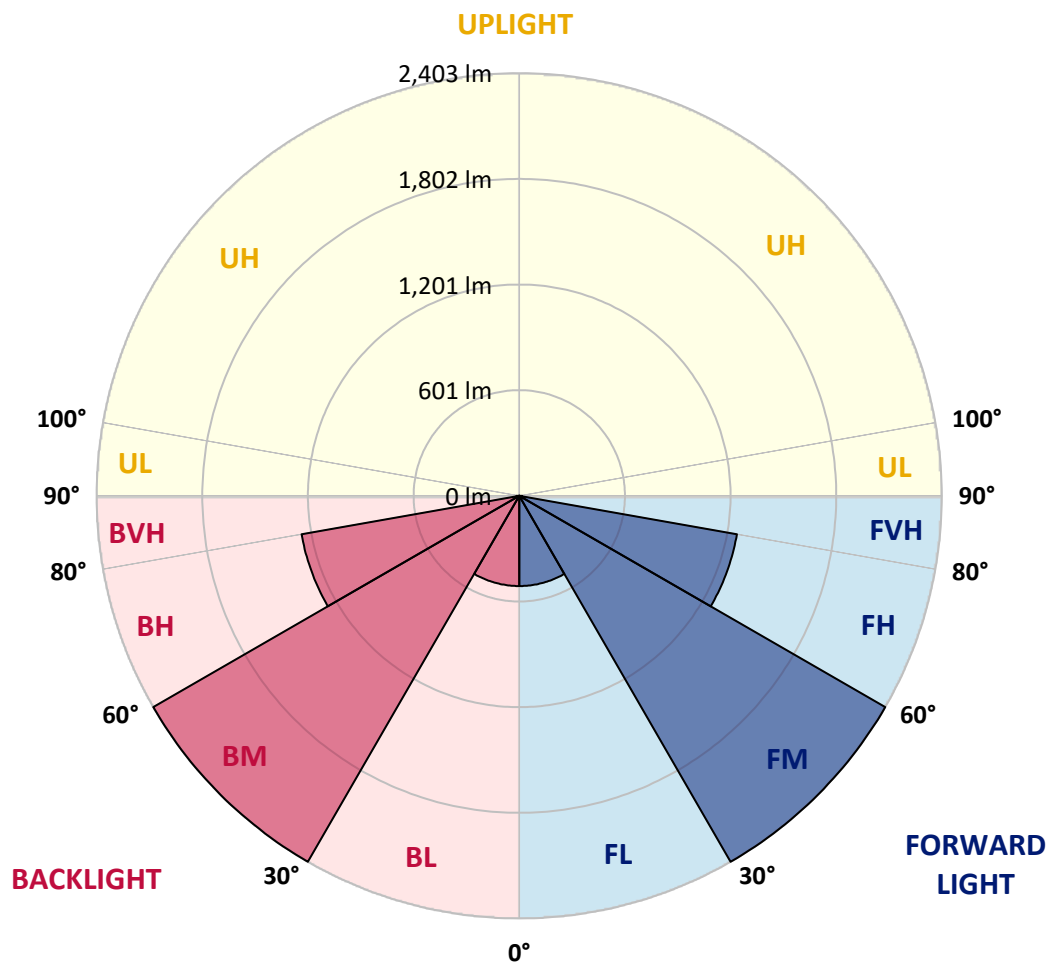
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	512.9	6.1			
FM	(30°-60°)	2402.9	28.7			
FH	(60°-80°)	1256.9	15.0			G1/1800
FVH	(80°-90°)	16.5	0.2			G1/100
BL	(0°-30°)	512.9	6.1	B2/1000		
BM	(30°-60°)	2402.9	28.7	B2/2500		
BH	(60°-80°)	1256.9	15.0	B3/2500		G1/1800
BVH	(80°-90°)	16.5	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	997.1	997.1	997.1	997.1	997.1	997.1	997.1	997.1	997.1	997.1	997.1
2.5°	1003.8	1000.5	1003.0	1000.9	999.2	997.5	998.4	1001.3	1002.6	1003.0	1003.0
5°	1017.3	1014.3	1015.6	1015.6	1012.7	1011.8	1012.3	1014.3	1016.9	1016.9	1016.9
7.5°	1039.1	1036.2	1039.1	1037.5	1034.9	1034.1	1033.7	1035.4	1039.1	1039.1	1037.9
10°	1065.6	1062.3	1063.9	1063.1	1060.2	1058.9	1058.5	1061.0	1064.4	1063.9	1063.1
12.5°	1094.6	1090.8	1093.0	1090.4	1089.6	1088.3	1088.3	1087.9	1090.0	1088.3	1089.2
15°	1127.0	1124.5	1125.3	1123.6	1124.9	1124.0	1120.7	1119.0	1119.8	1117.4	1117.8
17.5°	1165.2	1159.4	1162.4	1161.4	1161.4	1163.2	1157.7	1155.6	1157.2	1154.8	1156.8
20°	1209.4	1203.6	1204.8	1203.0	1201.0	1202.6	1196.0	1197.6	1198.8	1197.2	1201.0
22.5°	1257.8	1250.2	1249.8	1250.6	1246.0	1246.4	1241.8	1246.0	1248.4	1243.8	1248.4
25°	1307.4	1299.4	1304.8	1302.7	1296.8	1298.1	1294.7	1298.9	1301.0	1295.2	1301.9
27.5°	1359.9	1354.4	1359.5	1360.7	1353.6	1358.6	1353.6	1357.4	1359.5	1350.6	1357.4
30°	1421.3	1415.8	1420.4	1423.8	1415.4	1423.3	1419.1	1421.7	1422.1	1411.6	1417.9
32.5°	1488.1	1479.7	1491.5	1493.1	1483.9	1493.5	1488.1	1491.5	1493.5	1479.3	1488.9
35°	1569.7	1559.1	1572.6	1570.5	1562.5	1570.5	1565.5	1570.5	1575.5	1558.3	1568.8
37.5°	1657.5	1646.6	1660.9	1657.1	1649.5	1655.0	1652.0	1655.4	1663.4	1644.9	1656.2
40°	1754.2	1740.8	1760.0	1753.4	1746.2	1745.4	1747.0	1749.2	1759.6	1739.0	1745.8
42.5°	1857.6	1843.3	1872.3	1861.8	1851.7	1845.0	1850.4	1854.6	1864.8	1841.6	1853.8
45°	1975.7	1959.3	1997.1	1984.5	1968.6	1954.7	1963.5	1969.8	1984.5	1956.8	1971.1
47.5°	2106.1	2087.5	2127.9	2124.1	2098.1	2067.7	2087.9	2106.1	2116.9	2083.3	2094.7
50°	2233.4	2219.1	2272.1	2276.7	2244.8	2202.3	2230.5	2257.8	2260.7	2216.6	2222.1
52.5°	2352.8	2338.5	2415.4	2444.4	2415.8	2365.4	2395.2	2423.0	2400.8	2343.6	2345.2
55°	2448.2	2436.4	2534.4	2609.2	2618.9	2577.3	2594.9	2594.1	2520.9	2433.0	2436.0
57.5°	2471.4	2469.6	2593.2	2751.7	2852.6	2857.6	2822.7	2733.7	2576.0	2457.8	2450.3
60°	2366.2	2376.8	2546.6	2826.1	3095.2	3207.0	3056.0	2801.7	2513.4	2349.4	2330.1
62.5°	2051.8	2079.5	2284.3	2735.3	3291.1	3608.8	3243.1	2698.3	2256.1	2042.1	2029.5
65°	1470.5	1518.7	1745.0	2334.3	3273.3	3961.9	3216.2	2315.4	1761.8	1514.9	1496.9
67.5°	667.1	716.3	908.5	1598.2	2845.5	3866.1	2838.7	1615.1	953.8	718.8	708.3
70°	241.7	250.1	311.9	639.8	1818.5	3080.4	1896.2	644.4	331.7	266.5	263.1
72.5°	146.3	147.5	160.6	229.1	631.8	1870.2	658.7	236.7	163.9	145.4	148.0
75°	92.9	92.0	114.4	140.0	224.1	631.0	235.0	140.0	113.9	103.8	104.7
77.5°	66.8	69.0	82.0	104.7	141.2	213.9	138.7	100.0	82.0	67.2	68.5
80°	50.0	51.2	59.7	81.6	99.2	133.2	88.3	74.0	61.8	42.0	43.3
82.5°	36.2	36.2	39.1	59.2	60.6	71.9	48.0	52.2	40.8	29.8	29.8
85°	21.4	21.0	24.4	35.3	31.6	26.4	21.8	32.0	25.6	18.4	18.0
87.5°	7.6	8.0	7.6	10.0	8.4	7.2	6.8	8.8	7.2	6.4	5.8
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)