

**EPA 511 TEST PROGRAM
Test-to-Test Variability Worksheet**

**Customer: Microlon Corporation
Hazel Crest, IL**

**Auto/Year: 1985 Buick
Model: Skylark Marron
VIN: 1G4XB69R0FW418329
Driver: Rich
Operator: Marty
Comments: Microlon Before & After**

**Engine CID: 151/4 Cylinder
Transmission: Auto
A/C Equipped: Yes
Inertia WT: 2875
HP ACT/IND: 11.1/8.5
Fuel: Inddlene**

Baseline Test Date: 11/12/85

| <i>Test Run</i> | Hot Start LA-4 Urban Fuel Economy | | | | | | Highway Fuel Economy | | | | | |
|-----------------|--|-----------|-----------|------------|------------|-------------|-----------------------------|-----------|-----------|------------|------------|-------------|
| | <i>Odometer</i> | <i>HC</i> | <i>CO</i> | <i>CO2</i> | <i>NOX</i> | <i>F.E.</i> | <i>Odometer</i> | <i>HC</i> | <i>CO</i> | <i>CO2</i> | <i>NOX</i> | <i>F.E.</i> |
| 1 | 15466 | 0.071 | 2.871 | 381.700 | 0.179 | 22.950 | 15491 | 0.060 | 2.535 | 278.500 | 0.213 | 31.370 |
| 2 | 15484 | 0.075 | 3.044 | 378.700 | 0.148 | 23.110 | 15502 | 0.038 | 2.565 | 279.900 | 0.213 | 31.220 |
| MEAN | | 0.073 | 2.958 | 380.200 | 0.164 | 23.030 | | 0.049 | 2.550 | 279.200 | 0.213 | 31.290 |
| S.D. | | 0.003 | 0.122 | 2.144 | 0.022 | 0.116 | | 0.016 | 0.021 | 0.975 | 0.000 | 0.106 |
| C.V. | | 3.900 | 4.100 | 0.600 | 13.400 | 0.500 | | 31.700 | 0.800 | 0.300 | 0.000 | 0.300 |

Final Test Date: 11/15/85

| <i>Final Run</i> | Hot Start LA-4 Urban Fuel Economy | | | | | | Highway Fuel Economy | | | | | |
|-----------------------|--|---------------|---------------|--------------|---------------|---------------|-----------------------------|--------------|---------------|---------------|---------------|--------------|
| | <i>Odometer</i> | <i>HC</i> | <i>CO</i> | <i>CO2</i> | <i>NOX</i> | <i>F.E.</i> | <i>Odometer</i> | <i>HC</i> | <i>CO</i> | <i>CO2</i> | <i>NOX</i> | <i>F.E.</i> |
| 1 | 16592 | 0.062 | 1.603 | 389.700 | 0.158 | 22.601 | 16600 | 0.047 | 1.102 | 262.600 | 0.157 | 33.537 |
| 2 | 16610 | 0.080 | 2.581 | 376.600 | 0.140 | 23.284 | 16618 | 0.053 | 1.229 | 259.800 | 0.155 | 33.859 |
| MEAN | | 0.071 | 2.092 | 383.100 | 0.149 | 22.940 | | 0.050 | 1.166 | 261.200 | 0.156 | 33.700 |
| S.D. | | 0.013 | 0.692 | 9.267 | 0.013 | 0.483 | | 0.004 | 0.090 | 19.340 | 0.001 | 0.228 |
| C.V. | | 17.900 | 33.100 | 2.400 | 8.500 | 2.100 | | 8.500 | 7.700 | 0.700 | 0.900 | 0.700 |
| Percent Change | | -2.740 | 29.260 | 0.770 | -8.870 | -0.380 | | 2.040 | 54.290 | -6.470 | 26.760 | 7.690 |

Note 1: Exhaust emissions are in grams per mile. Fuel Economy is in miles per gallon

Note 2: C.V. if the Coefficient of Variation for tests.

Note 3: C.V. = Standard Deviation/Mean x 100%

