**Section 276.507 On-Road Remote Sensing Test Systems Functional Requirements and Performance Criteria**

a) The on-road remote sensing test equipment shall consist of the following:

1) An infrared SDM capable of measuring the concentration of HC, CO, and CO2 present in an in-use vehicle;

2) A camera system that automatically photographs vehicle license plates;

3) A system that links each emission record to the correct vehicle license plate photograph; and

4) A laser based speed and acceleration measurement system.

b) The Infrared SDM shall be of a design certified to meet the following accuracy requirements:

|  |  |  |
| --- | --- | --- |
| Pollutant | Range | Accuracy |
|   |  |  |
| HC | ALL | ±150 ppm or ±15 percent of expected HC Concentration |
|   |  |  |
| CO | ≤ 3.0 percent | ±10 percent or 0.25 percent (Whichever is greater) |
|   |  |  |
|   | > 3.0 percent | ±15 percent |

c) The speed and acceleration measurement system shall be of a design certified to measure vehicle speed to within ±0.5 miles per hour and vehicle acceleration to within ±0.3 miles per hour per second at the moment exhaust is measured.

(Source: Amended at 35 Ill. Reg. 11268, effective June 28, 2011)