



## WSDOT SOP 429

### *Methods for Determining the Acceptance of Traffic Signal Controller Assembly*

#### 1. Scope

The purpose of this procedure is to provide a description of the steps involved with traffic signal controller assembly testing.

#### 2. Reference Documents

- T 421 Receiving Inspection and Test Procedure
- T 422 Transient Voltage (Spike Test) Procedure
- T 423 Conflict Monitor Testing
- T 424 Power interruption Test
- T 425 Environmental Chamber Test
- T 427 Loop Amplifier Test
- T 428 Compliance Inspection and Test Procedure

#### 3. Process

WSDOT Test Method    T 421 Receiving Inspection and Test Procedure

When the traffic controller assembly arrives for testing, the supplier should have arranged an appointment. Within 5 days of arrival the supplier shall assemble and demonstrate the controller assembly, Test Method T421 is to be completed in the presence of the supplier. After acceptance for testing a letter or e-mail is to be sent to the Project Engineer and/or the local agency identifying the assembly as ready of testing.

WSDOT Test Method    T 425 Environmental Chamber Test

After completion of the environmental chamber test the controller assembly is to be sent to the Region Signal Shop to complete the test regimen. The Region Signal Shop will be informed when a traffic signal controller assembly has passed T425. The Region can choose to have the assembly picked up or it can be shipped commercially. If the controller assembly is not to be sent to the Region Signal Shop the Materials Lab will complete the test regimen beginning with Method T 428.

WSDOT Test Method    T 428 Compliance Inspection and Test Procedure

After receiving the controller assembly for testing a letter or e-mail is to be sent to the Project Engineer and/or the local agency identifying the assembly as ready for testing. At this point order is no longer important.

WSDOT Test Method    T 422 Transient Voltage (Spike Test) Procedure

Test Method T422 is to be done only randomly and is not to be done on every assembly.

WSDOT Test Method    T 423 Conflict Monitor Testing

WSDOT Test Method T 424 Power interruption Test

Test Method T424 is not to be performed on type 2070 controllers

WSDOT Test Method T 427 Loop Amplifier Test

Upon completion of all testing send the satisfactory test report to the Project Engineer with a copy to the Region Administrator, the State Signal Operation Engineer and the State Material Laboratory Electrical Engineer.

**Note:** All of the testing may not be performed at the same facility; there may be more than one satisfactory test report to document all of the required tests.

