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4. Title and Subtitle DESIGN AND DEVELOPMENT OF AN AUTOMATED NEMA TRAFFIC SIGNAL CONTROLLER TESTER		5. Report Date August, 2000	
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7. Author(s) James C. Gilfert, Ted A. Gilfert		8. Performing Organization Report No.	
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16. Abstract Traffic signal system controllers designed to meet the NEMA TS1 Standards are one of the most prevalent types in use in the US and Canada as of this writing. A PC-based tester for testing NEMA TS1 traffic signal controllers has been developed as a part of this program. This tester may be used to verify compliance of controllers to the NEMA TS1 Standards. Test selection, data management, and data processing are controlled via familiar point-and-click menus and buttons on the display of the PC. Precise timing of the test conditions and test result reporting are handled by a separate microprocessor, located in the hardware interface. The user interface offers multiple levels of test result processing, including comparison of the results to user-specified tolerance limits for acceptable performance.			
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