GLV V6 QA Testing				
Test	Description	Test Method	Expected Results	Pass/Fail
1.0	**Power**	**Pass tests 1.1 - 1.3**		
1.1	Energize Subsystem Connections-24V	Connect all 3 5A breakers to J6. Supply external 24V to J1. Measure 24V pins on J2.2, J3.2, J4.4, and J5.1	Measure 24V on J2.2, J3.2, J4.4, and J5.1. The D3 LED will turn on.	
1.2	Energize Subsystem Connections-5V	Connect all 3 5A breakers to J6. Supply external 24V to J1. Measure 5V Pin 1 of CR1.	Measure 5V on Pin 1 of CR1. The D2 LED will turn on.	
1.3	Energize Subsystem Connections-3.3V	Connect all 3 5A breakers to J6. Supply external 24V to J1. Measure 3.3V Pin 6 of U1.	Measure 3.3V on Pin 6 of U1. The D1 LED will turn on.	
2.0	**Grounding**	**Pass tests 2.1 - 2.2**		
2.1	Ground Connector Continuity	Perform a continuity check between J1.1, J2.1, J3.1, J4.3, and J5.2	All 5 pins will be electrically connected.	
2.2	Ground IC Pins Continuity	Perform a continuity check between pin 6 of CR1, pin 7 of U1, and J1.1	All 3 pins will be electrically connected.	
3.0	**I2C Communication**	**Pass Tests 3.1 - 3.3**		
3.1	SDA Continuity	Perform a continuity check between pin 4 of U1 and J4.2	The 2 pins will be electrically connected.	
3.2	SCL Continuity	Perform a continuity check between pin 5 of U1 and J4.1	The 2 pins will be electrically connected.	
3.3	I2C Data and Display	Connect 5A breaker to J6.4 and J6.1. Connect external 24V to J1. Connect GLV J4 to Logic J7. Monitor the SCADA display.	The display will show GLV current and voltage. The voltage will be within 1-2V of 24V and the current will be within 95% of the sum of the Raspberry Pi 3B and its display's current draw.	