Test Procedure for the CCRGEVB 2.0 Evaluation Board

Setup:

1. Connect a DC power source across PWR1 and PWR2. Polarity does not matter because of the bridge rectifier on the board.
2. Connect a voltmeter across TP4 and TP7 to measure voltage across R3 (1 mV = 1 mA). This will effectively provide a measurement of the current through R3, because R3 is a 1 Ω resistor.
3. Remove any jumpers that may be on the board.

Circuit 1: Do NOT exceed 70 mA:

2. Apply an input voltage of 15 Vdc across PWR1 and PWR2 and flip the switch to the “On” position.
3. Verify that LED D5 is on. Measure voltage across R3 to get current. Current should be 17 to 25 mA.
4. Flip the switch to the “Off” position whenever jumpers are being changed. Remove the jumper on JP4 to light LEDs D5, D6, and D7.
5. Verify that LEDs D5, D6, and D7 are on. Current should be 16 to 24 mA.
6. Remove the jumper on JP1 and place a jumper on JP2. Current should be 24 to 36 mA.
7. Remove the jumper on JP2 and place a jumper on JP3. Current should be 22 to 34 mA.
8. Add a jumper to JP2. Current should be 46 to 68 mA.
9. Remove all jumpers.

Circuit 2: Do NOT exceed 120 mA:

2. Verify LED D8 is on. Current should be 26 to 40 mA.
3. Remove jumper JP11 to light D8, D9, and D10.
4. Verify LEDs D8, D9, and D10 are on. Current should be 24 to 36 mA.
5. Put a jumper on JP8. Current should be 43 to 65 mA.
6. Remove all jumpers.

Circuit 3: Do NOT exceed 1.2 A:

2. Verify D11 is on. Current should be 82 to 122 mA.
3. Remove the jumper from JP17. Verify D11, D12, and D13 are on.
4. Measured current is 75 to 113 mA.
5. Place a jumper on JP15. Current is 112 to 168 mA.
7. Current should be 258 to 386 mA.
8. Remove the jumper from JP18. Place a jumper on JP19. Current should 113 to 169 mA.
9. Place a jumper on JP21. Current should be 281 to 421 mA.
10. Place a jumper on JP18. Current should be 502 to 752 mA.
11. Remove jumpers.