

20. The Y values measured for the yellow and blue tiles are compared the values read at factory (“Assigned”) and the shift for each and total shift displayed.

The screenshot shows a 'Lamp Check' interface with the following data:

C/2	Y	Measured	Assigned	Shift
Yellow		61.17	60.72	0.45
Blue		41.71	41.34	0.37
Total shift				0.82

Additional values shown: Lamp DAC: 0, Lamp Voltage (V): 2.8, Lamp Life (hours): 0.

Buttons: Retest, OK, Cancel.

Message: The lamp may need to be replaced.

21. A statement at the bottom of the screen will indicate what, if any, action should be taken concerning the lamp. Lamp **adjustment** is needed when the Y values read for the yellow and blue tiles are both out of the ± 0.3 unit tolerance and they have shifted in opposite directions (i.e., the yellow tile value is too high and the blue tile value is too low or vice versa). Lamp adjustment must also be done when the lamp in the instrument is changed or when you begin to use an alternate white standard. Adjust the lamp DAC as outlined in the following steps.

22. The lamp DAC should generally be between 6,000 and 9,000. If the Y value of the yellow tile as read during the lamp check has increased versus the Y value read at factory AND the Y value of the blue tile has decreased, then you will want to decrease the lamp DAC from its current value. Conversely, if the Y value of the yellow tile has decreased AND the Y value of the blue tile has increased, then increase the lamp DAC.

Note: If the color shift is greater than 0.3 units for both tiles and the shift is in the SAME direction for both, a lamp change is warranted.

Note: “DAC” is an acronym for digital-to-analog converter, and this value is a representation of the amount of current that will flow through the lamp. A lower DAC means higher current and higher DAC means lower current. A starting value is provided with each replacement lamp purchased from HunterLab.

23. After each lamp adjustment, allow the lamp to stabilize for several minutes. Then touch **Retest** to perform the lamp check again and evaluate the adjustment. Continue to adjust the lamp DAC until the sum of the shift in Y values for the yellow and blue tiles is less than 0.3 units. If this cannot be achieved, contact HunterLab Technical Support regarding instrument service. Please read “When You Need Assistance,” page 8-5, prior to telephoning HunterLab.

24. Touch **OK** to return to the Diagnostics menu.

25. Touch **Go Back** to return to the main menu.