

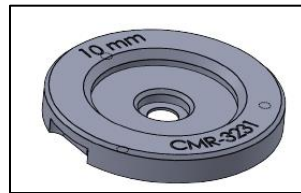
## **Addendum for CMR-3231**

### **For the Measurement of 10mm Round Caplets**

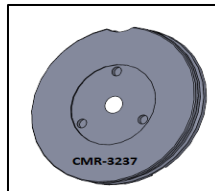
**Instruments:** UltraScan Pro; UltraScan VIS, Agera.

**Requires:** Small Area of View (SAV) port plate known as CMR-3237 for USPRO and USVIS and CMR-3238 for Agera.

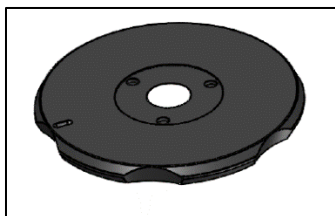
**Description:** CMR-3231 provides a reflectance insert with an aperture of 10mm for the UltraScan Pro , UltraScan VIS and Agera. It requires the Small Area of View (SAV) port plate known as CMR-3237/3238 that holds the 10mm aperture magnetically.



*10mm Aperture*



*CMR-3237 SAV Port Plate for USPRO/USVIS*



*CMR-3238 SAV Port Plate for Agera*

*Installation:*

- 1- Place the CMR SAV port plate (CMR-3237 or CMR-3238) at the reflectance port after standardization of the instrument.



*CMR-3237 SAV Port Plate*

***Note: This aperture has an opening that is smaller than the usual reflectance port opening. Performance specifications (i.e. Factory-supplied color values, stability, accuracy, etc.) are based on the standard 1-inch round transmission port opening. These specifications will not be met with the aperture in place.***

*Reading Samples with EasyMatch QC:*

1. In EasyMatch QC, go to **SENSOR > ADD SENSOR** to select your sensor. Then set up the **COLOR DATA VIEW** screen to read the desired color scale, illuminant, and observer.
2. Go to **SENSOR > STANDARDIZE** and select the Reflectance-Specular-Included Mode for USVIS and USPRO with SAV. Standardize using the light trap and then the white tile with standard SAV port plate. For Agera, standardize using the black glass and white tile with standard SAV port plate.
3. Place the CMR SAV port plate and place the 10mm caplet insert (CMR 3231) into the CMR SAV port plate and then insert the sample to be measured. Make sure that the area of the sample to be measured faces the port.



*SAV Port Plate with CMR-3231*

4. Then take a reading using the sample button or **MEASUREMENTS > SAMPLE**.



*Holding Sample in Place*

5. Rotate the sample and read it at least one more time. Average the multiple color readings for a single measurement representing its color (**MEASUREMENTS > AVERAGE**). Averaging multiple readings with rotation between readings minimizes measurement variation associated with non-uniformity or texture.
6. Record the average color values.
7. With small samples, it is recommended to look at color difference using a Sample vs. a Standard instead of absolute readings. Difference measurements show excellent repeatability.

**Note:** *if this is the first time using EZMQC software, please refer to EasyMatch QC user Manual.*

### *Reading Samples with Agera Essentials*

1. From the **WORKSPACE** menu, select **STANDARDIZATION**. You can also press the Standardization button in the Status bar as a shortcut. Select the standard SAV port plate (16.9mm; 0.625 in) and place it in view.
2. **READ BLACK GLASS:** Place the Agera black glass at the sensor port and press **READ**. Make sure that the line on the tile matches the port plate white line.
3. **READ WHITE TILE:** Remove the black glass and place the Agera white tile at the port. Press **READ** to continue.
4. Remove the calibrated white tile when standardization is completed. Click **OK**.
5. Standardization status is updated and reported as **STANDARDIZED** in the bottom status bar along with UV Mode and Port Plate Size.
6. Remove the standard SAV port plate and place the SAV port plate (CMR 3238) with the 10mm caplet holder at the port.
7. Go to **WORKSPACE > VIEWS** to select the screen views to be used. Simply check on the box of the screen needed. Press **APPLY** to save one or all of the screens.

8. Go to **WORKSPACE > COLOR SCALES** provide four tabs in which the **SCALES, INDICES, DIFFERENCES AND ILLUMINANT/OBSERVER (ILL/OBS)** can be configured.
9. It is recommended that measurements be averaged. Go to **READ OPTIONS > AVERAGING** and insert the number of sample readings to average. Press **APPLY** to close the screen.
10. Press **READ** to initiate readings, rotating the sample in between.