Minnesota Department of Health Radiation Control, X-ray Unit

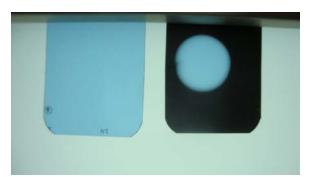
Dental Darkroom Fog Test - Intraoral

Equipment needed

- Timer
- Coin
- Unexposed Intraoral Film Packet (Fastest film in use)

Procedure

- Turn off Safelights
- In the totally darkened darkroom or inside the glove box of the processor, remove the film from the film holder and place it on the counter. Place the coin on the film.
- Turn on safelights.
- Let film sit for 2 minutes, which is the nationally recognized standard. Change your position in the darkroom so as not to block any light from the film.
- Process the film. Because your eyes have now partially adapted to the dark (about 5 minutes) look for light leaks around the door, and around ceiling fixtures and vents.
- Evaluate the film. If the outline of the coin is visible, a fog problem exists that needs to be corrected.
- Date film(s) and record results.





Determining where fog is from

• Run another fog test, this time leaving the safelights off. If the fog is reduced, you have a safelight problem. If the fog is not reduced, there is probably a white light problem.

Some possible sources of safelight fog

- The bulb or filter may give off the correct color spectrum for the film being used.
- The bulb may not be the correct wattage for the distance to the work surface. A 15-watt bulb should be four feet or more from the surface. If the distance is less, switch to a 7 1/2 watt bulb. Use 25 watt or less for ceiling lights.
- There may be a crack in the safelight filter. If so, replace filter.
- The filter may be in the receptacle incorrectly. Follow manufacturer's instructions for installation of the filter. There may be a specific orientation for the filter. The lettering should be readable from the outside.
- Are there other indicator lights that may not be "safe" for your film? If so, run a test with all indicators light covered.

Sources of white light fog

• Stay in closed darkroom (no lights on and indicator lights covered) for approximately 10-15 minutes, and then look for white light leaks that were not seen while waiting for the 2 minute fog test. Seal off any sources of white light.



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