

Handling and storage

Media storage and platemaking environments

- Relative Humidity: 40%-60%

Platemaking environment

- Temperature: 17°-30°C (63°-86°F)

Media storage before platemaking

- Temperature: 0°-40°C (32°-104°F)
- Orientation: Flat
- Plates are sensitive to light, heat, and ozone. Store in a controlled environment.
- Store Thermal Imaging Layer media in the original packaging in a cool, dry place. Avoid scratching or kinking.



More guidelines: Answer 66888

Thermal Imaging Layer/Layer-R

X-Rite 361T densitometer

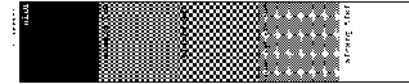
- Calibrate before use, and zero on air before reading the media densities.
- Allow the densitometer's UV lamp to warm up for at least five minutes.

Media optimization

- Use the densitometer to verify densities weekly.



- TIFF test file: NX_series_target.tiff.



Target densities

Test patch	Thermal Imaging Layer		Thermal Imaging Layer-R	
	non DigiCap NX Patterning	DigiCap NX Patterning	non DigiCap NX Patterning	DigiCap NX Patterning
Dmin	0.10 max	0.63 max	0.19 ±0.03	0.81 max
1 x 15	2.60 ±0.03	2.60 ±0.03	2.73 ±0.03	2.73 ±0.03
1 x 15 wide	2.62 ±0.03	2.60 ±0.03	2.73 ±0.03	2.73 ±0.03

Densitometer guidelines: Answer 11485
TIFF test file: Answer 7676

Exposure lamps

- LED lamps will provide consistent results.
- Observe lamps once per week for proper function. Only observe lamps while wearing UV protecting eyewear such as sunglasses or safety glasses.
- Ensure cooling is working on the system at all times while lamps are operating.

Optimization

- Verify exposure times weekly and when...
 - Starting a new plate lot
 - Installing new lamps
- To verify, use applicable optimization test procedures.

Processor

Maintain processor cleanliness.

- Clean the processor screens and trays biweekly.
- Check and clean or replace brushes as needed.

Washout temperature

- Refer to the washout solution manufacturer's recommendations.

Optimization

- Testing with an automatic viscometer: Set percent solids to 4.5 ±0.5%. Do not exceed 5% solids.
- Testing without a viscometer: Use an EZ Series viscosity cup #1 for seconds (unless the manufacturer recommends otherwise).

Note: When processing thicker plates or larger plates with DigiCap NX, it may be necessary to reduce solids.

Equipment maintenance: Answer 70749
% Solids test procedure: Answer 73346

Processing speed and back exposure

Optimization

Verify the washout and back exposure units when...

- Changing to a new plate type
- Changing to a different washout solution
- Verifying overall plate floor appearance and uniformity

Target specification

Plate thickness	Floor (finished plate)	Relief (finished plate)
1.14 mm (0.045 in.)	0.56 ±0.025 mm (0.022 ±0.001 in.)	0.58 ±0.025 mm (0.023 ±0.001 in.)
1.70 mm (0.067 in.)	1.12 ±0.025 mm (0.044 ±0.001 in.)	0.58 ±0.025 mm (0.023 ±0.001 in.)
2.54 mm (0.10 in.)	1.85 ±0.025 mm (0.073 ±0.001 in.)	0.69 ±0.025 mm (0.027 ±0.001 in.)
2.72 mm (0.107 in.)	2.03 ±0.025 mm (0.080 ±0.001 in.)	0.69 ±0.025 mm (0.027 ±0.001 in.)
2.84 mm (0.112 in.)	2.15 ±0.025 mm (0.085 ±0.001 in.)	0.69 ±0.025 mm (0.027 ±0.001 in.)

For consistent results, measure each finished plate, and keep a record of the results.

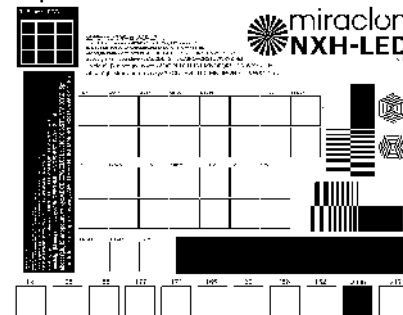
Test procedure: Answer 62382

Main exposure

(Recommended) Enable the light integrator.

Optimization

- Perform a main exposure test series using the latest target file: Flexcel_NXH_LED_Plate_Setup_<version>.tif.
- Test targets must be at least 50.8 mm (2 in.) from each side of the plate.



Main calibration pass/fail targets

All plate calipers	LED
PASS	Test Target T71 should hold all dots in alignment.
FAIL	Test Target T71 does not hold all dots and is not in alignment.

Drying

Guidelines

- Temperature (setpoint): 51°-55°C (123.8°-131°F)
- Check progress periodically, until the plate measures 0.012-0.025 mm (0.0005-0.0010 in.) above the plate caliper.
- Allow the plate to cool to room temperature (10-20 minutes) before measuring the caliper.

Optimization

- Check the drying time when changing...
- The washout solution
- The washout speeds
- Dryer airflow

Plate thickness	With DigiCap NX	Standard non DCNX
1.14 mm (0.045 in.)	71-74 Shore A	75-77 Shore A
1.70 mm (0.067 in.)	63-66 Shore A	67-69 Shore A
2.54 mm (0.1 in.)	58-61 Shore A	62-64 Shore A
2.72 mm (0.107 in.)	57-60 Shore A	61-63 Shore A
2.84 mm (0.112 in.)	57-60 Shore A	61-63 Shore A

More guidelines: Answer 64886

Post exposure and light finishing

Some units combine these functions:

- UVA post exposure completes the polymerization to produce a resilient plate.
- UVC light finishing (de-tack) removes tackiness from the plate surface.

Suggested starting points

- Note: Times vary, depending on variables such as plate type.
- UVA time: 2 minutes
- UVC time: 15 minutes
- If tackiness starts to increase, add one UVC minute for every 200 hours of lamp time, to a maximum of 20 minutes.

Optimization

- Establish or re-establish the light finishing times when...
- Introducing a different plate caliper or type
- Repairing or modifying the light finishing unit
- Ink transfer on press is poor

More guidelines: Answer 66700

Finding Answers

1. Log on to Partner Place <https://partnerplace.kodak.com>.
If you do not have an account, click **Request an account** and follow the instructions provided.
2. On the Partner Place home page, click **Service & Support** and select **Search Knowledgebase Answers**.
Your Kodak service and support portal then opens at the default **Search** page.
3. Search for answers.
 - a. To limit the search results, use the Filter by Product list—for example, **Plates & Consumables > Flexographic**.
 - b. In the Search box, type a question or keywords, and click **Search**.
 - c. Each portal answer has a unique, searchable ID. An answer may provide specific content or a collection of related links.
4. For the Miraclon Shine LED for FLEXCEL NXH links, see the [Miraclon Shine LED Exposures for FLEXCEL NXH Plates links page](#).

Tips

- At the bottom of answers of interest (such as links pages), click **Notify Me** to receive email notifications of content updates.
- To subscribe at a product or category level, configure your preferences—click **Service & Support** and select **Notifications & Search Settings**.

More user tips: Answer 66890

Document Number: EN_0010QR_MiraclonShineFLEXCELNXHQuickReferenceGuide_EN_0010

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