

Proposed CIE output linearization for display and data projector devices

Display or data projector company:

realized output options:

One Company preference (Y/N)?

One ISO 9241–306 linearized (Y/N)?

Eighth ISO 9241–306 linearized (Y/N)?

Only one option not specified (Y/N)?

User display or data projector
without or with device specific
up to 8 PS linearization codes
in display output software.

For test charts of ISO 9241–306 see (1,7 and 20MB)

<http://standards.iso.org/iso/9241/306/ed-2/AE09/AE09F0PX.PDF>

<http://standards.iso.org/iso/9241/306/ed-2/AE27/AE27F0PX.PDF>

Linearization company: < _____

Measure 1080 colours of display output
with no room light reflection and produces

8 PS linearization codes
for eight room light reflections.

User visual test for up to 8 room light reflections

with output of ISO 9241–306 test charts.

Agrees the output with the user wishes (Y/N)?

If No (N) agreement to the user wishes then:

Output of reference test chart with 1080 colours.

Continues colour change in output (Y/N)?

If Yes, then linearization possible and decision:

Ask display or linearization company for help. →

Advantages of Output Linearization:

- Linear relation between rgb and CIELAB data.
- No loss of visual information for 16 step colour series on different devices.
- Linearized output of whole display for ergonomic work depending on room light reflections, for solutions see ISO 9241–306.