

NRK's journey towards HDR

How we got there and what we learnt

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NRK TV

NRK TV
Kategorier
Søk
Direkte
TV-guide
Odd Erling



Oppsynsmannen

Hvordan endte Norges morsomste mann opp som aktivist? Bli med Bård Tufte Johansen på en dystopisk reise i verdens vakreste land.




Oppsynsmannen



Makta



Dagsrevyen




Mesternes Mester

Mitt innhold



Dagsnytt 18



THE SEED




Makta



NRK Nyheter

Dagsrevyen



EI ISKALD VERD

Snøfall 2: 1080p25 HDR HLG

Snøfall

Noah er 10 år og har et veldig viktig juleønske, men tenk om brevet til julenissen ikke kommer fram? Bli med tilbake til magiske og mystiske Snøfall.



Episodevisning ☰



The beginning..

Two misunderstandings among industry

SONY

- **HDR is just brightness.**
 - NO, HDR is number of colors and information!
- **HDR requires quite complicated system.**
 - NO, HDR is simple and matches for current system, but requires new perspective to production/TV people!
- **Brightness is the matter of HDR-TV.**
 - NO, priority of HDR-TV is
 - ① connectivity ② accuracy ③ performance

Sony Visual Products

TVPF Div.

Investigation & learning



Snowhow - co-production with SVT & YLE



The Strategy

- HD or UHD?
- PQ or HLG?
- Linear distribution and/or OTT?



We need to wait for a strategy



Nils Mathisen (1929-2018)

We **don't** need to wait for a strategy



Nils Mathisen (1929-2018)

We **don't** need to wait for a strategy

Learning point #1:

Don't wait for marching orders, they will most likely never come.
Find the enthusiasts within your organization and create a task force

Nils Mathisen (1929-2018)

Learning with



EBU

OPERATING EUROVISION AND EURORADIO

TECHNOLOGY & INNOVATION

EBU HDR WORKSHOP

16 - 20 May 2022



NRK

HDR LIVE PRODUCTION WORKSHOP



EBU



EBU
OPERATING EUROVISION AND EURORADIO

Osk, 18-20 November 2019
Hosted by NRK

HDR LIVE PRODUCTION WORKSHOP



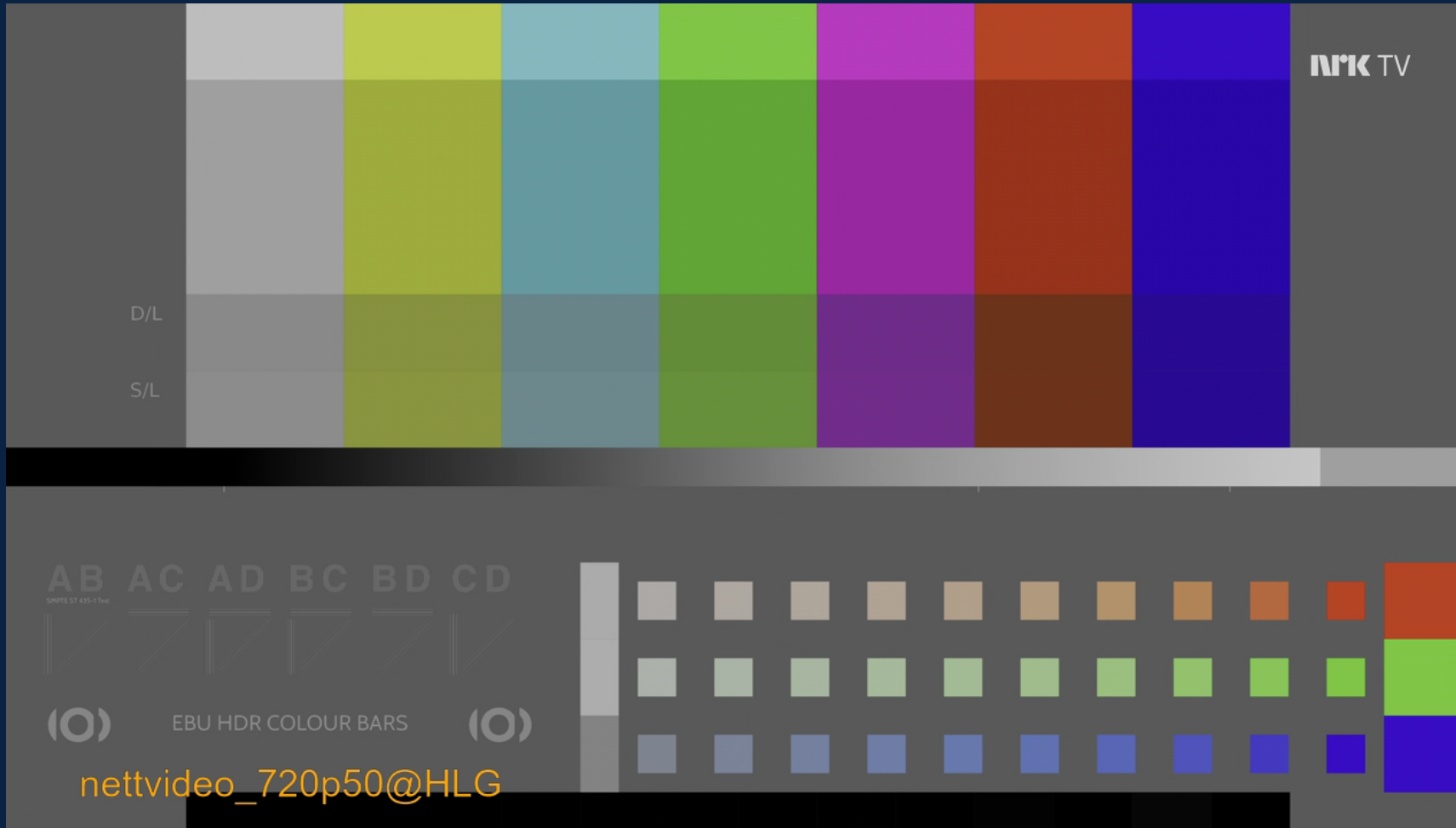
Investments



HDR Testlab



Distribution tests



Learning point #2:

We recommend a dedicated Lab, with conversion capabilities and both professional and consumers screens

Blindtest rig



4K HDR™
IMMERSIVE

UHDTV demo

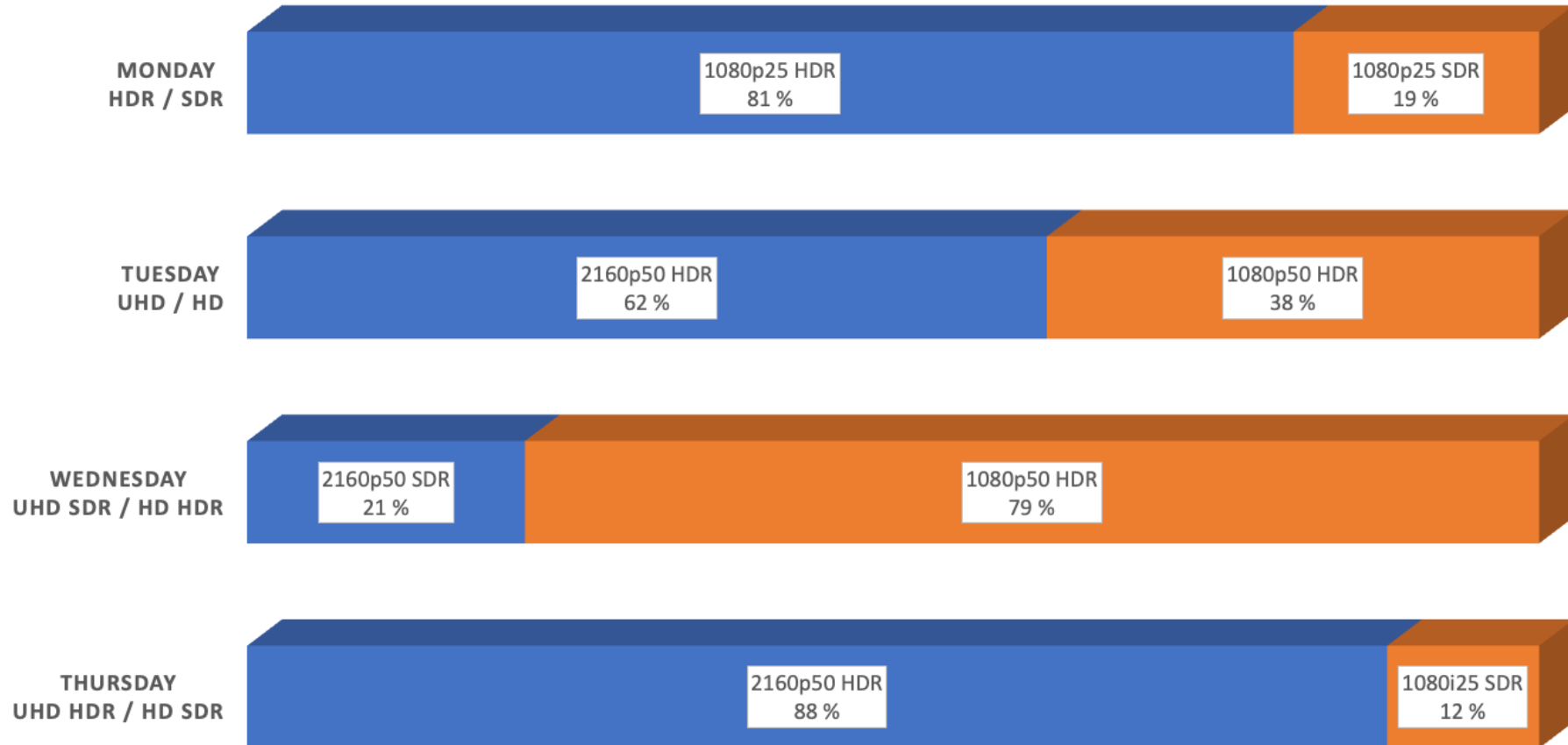
Ser du forskjell
på de to bildene?

Trykk på knappen til
bildet du liker best

For mer info om UHDTV:
portalen.nrk.no/uhdtv



UHDTV-DEMO RESULTS - 514 REGISTERED RESPONSES



UHDTV-DEMO RESULTS - 514 REGISTERED RESPONSES

MONDAY

1080p25 HDR

1080p25 SDR

Learning point #3:

Easy-to-use workflows
 Encourage exploration of p50
 Contrast > Resolution

THURSDAY
 UHD HDR / HD SDR

2160p50 HDR
 88 %

1080i25 SDR
 12 %

HDR (pre-)production

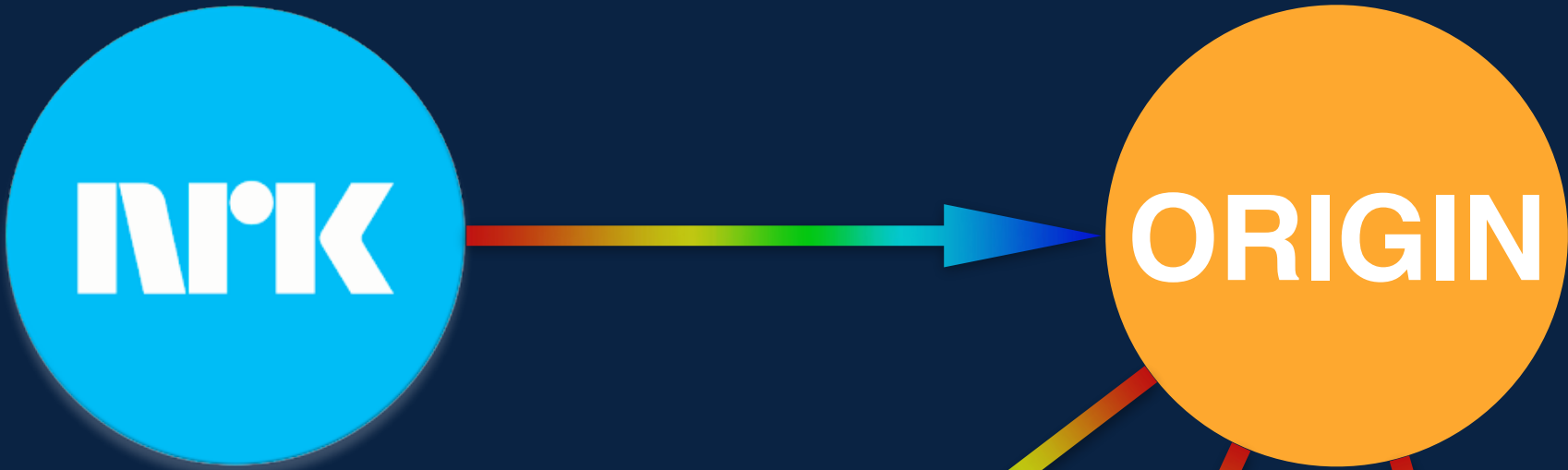


HDR (pre-)production



Learning point #4:

Promote UHDTV in your organization
Pre-produce HDR content



HDR distribution trials

androidtv



android iOS

TIZEN™

webOS

nrk.no/hdr




HDR ↗

NRK offers content in [HDR ↗](#) (High Dynamic Range). These programs have sharper images, better contrast and more colors.

HDR is available in **the NRK TV** app on some platforms, and currently only for selected programmes.

Live broadcasts in HDR will be available on **NRK TV** at a later date.

Basic picture settings we recommend

- ▶  TV settings
- ▶  Apple TV
- ▶  Android TV (Smart TVs and streaming boxes based on Android TV)

HDR information

- ▶ What are HDR, UHD and 4K
- ▶ What content is available in HDR?
- ▶ How can you watch HDR from NRK
- ▶ How to check if you can receive HDR from NRK
- ▶ Which HDR format does NRK offer?
- ▶ What if I can't get HDR?

Ja, dette er HDR!

Du ser nå en HDR-strøm fra NRK



Skann QR-koden med mobilkameraet for å lese mer om HDR



Yes, this is HDR!

*You are now watching an HDR stream from NRK
Scan the QR code to learn more about HDR*

Dette er ikke HDR

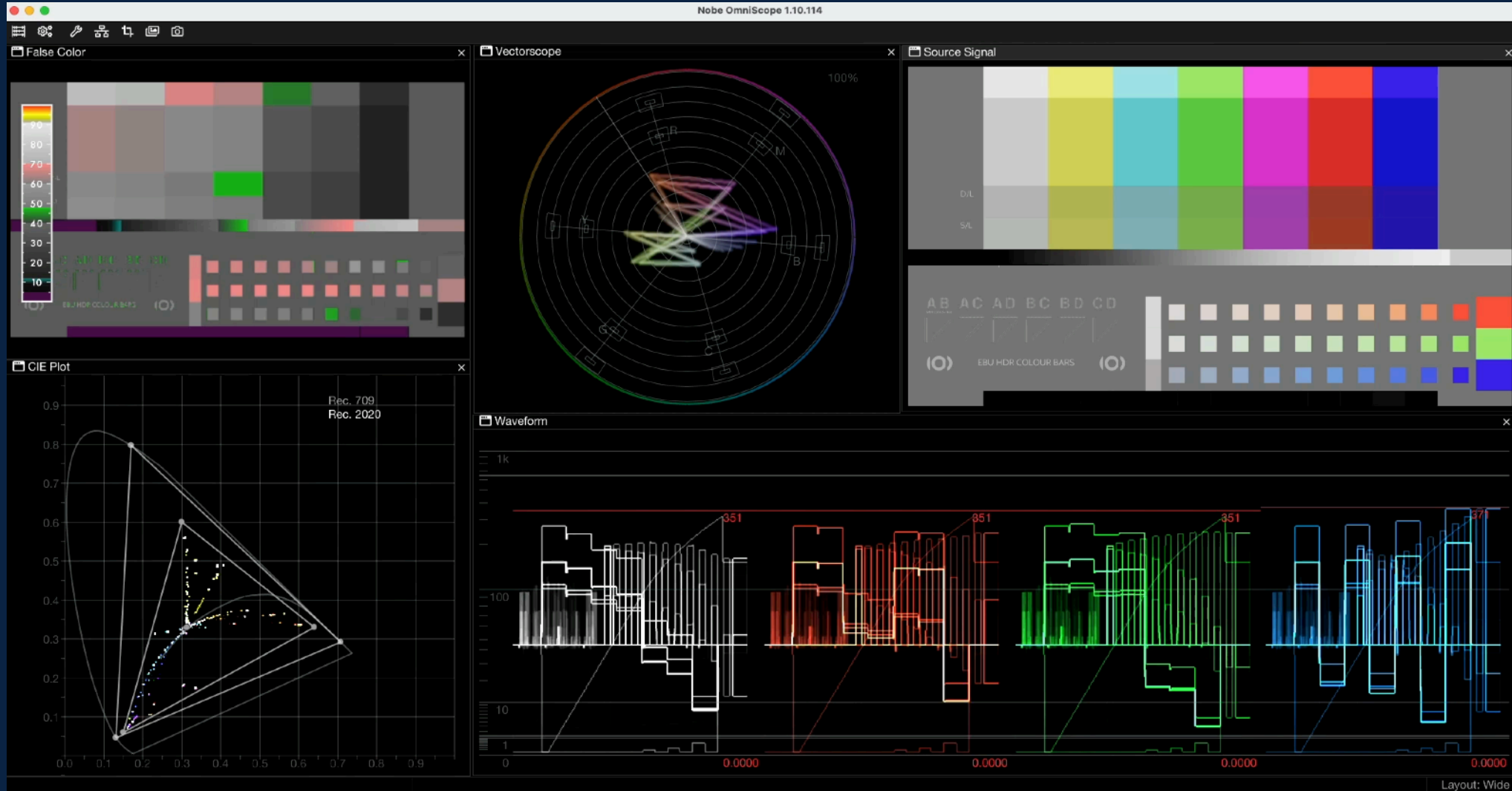
Vil du vite hva som må til for å spille av i HDR? Skann QR-koden eller gå til nrk.no/HDR

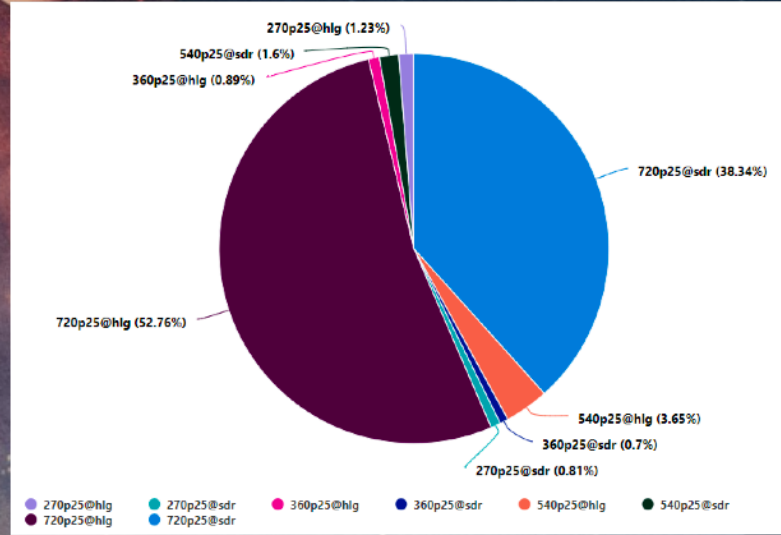
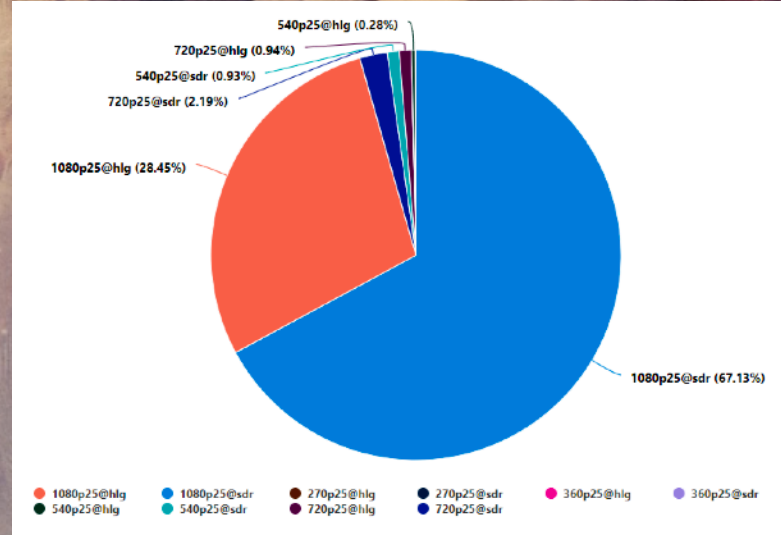
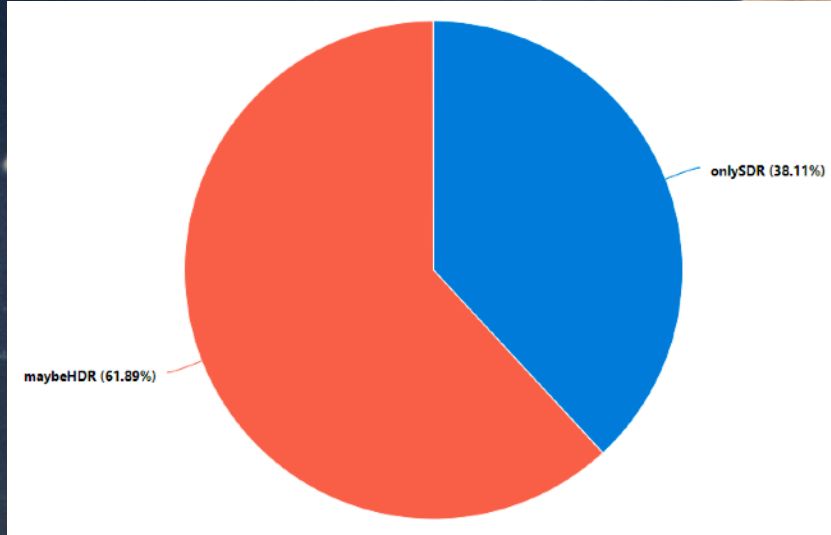


This is not HDR

Scan the QR code to learn what you can do to receive HDR from NRK

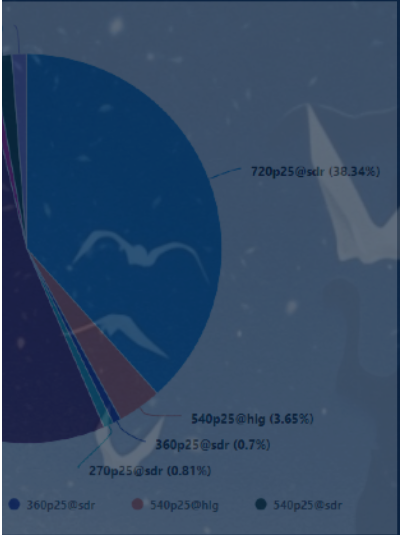
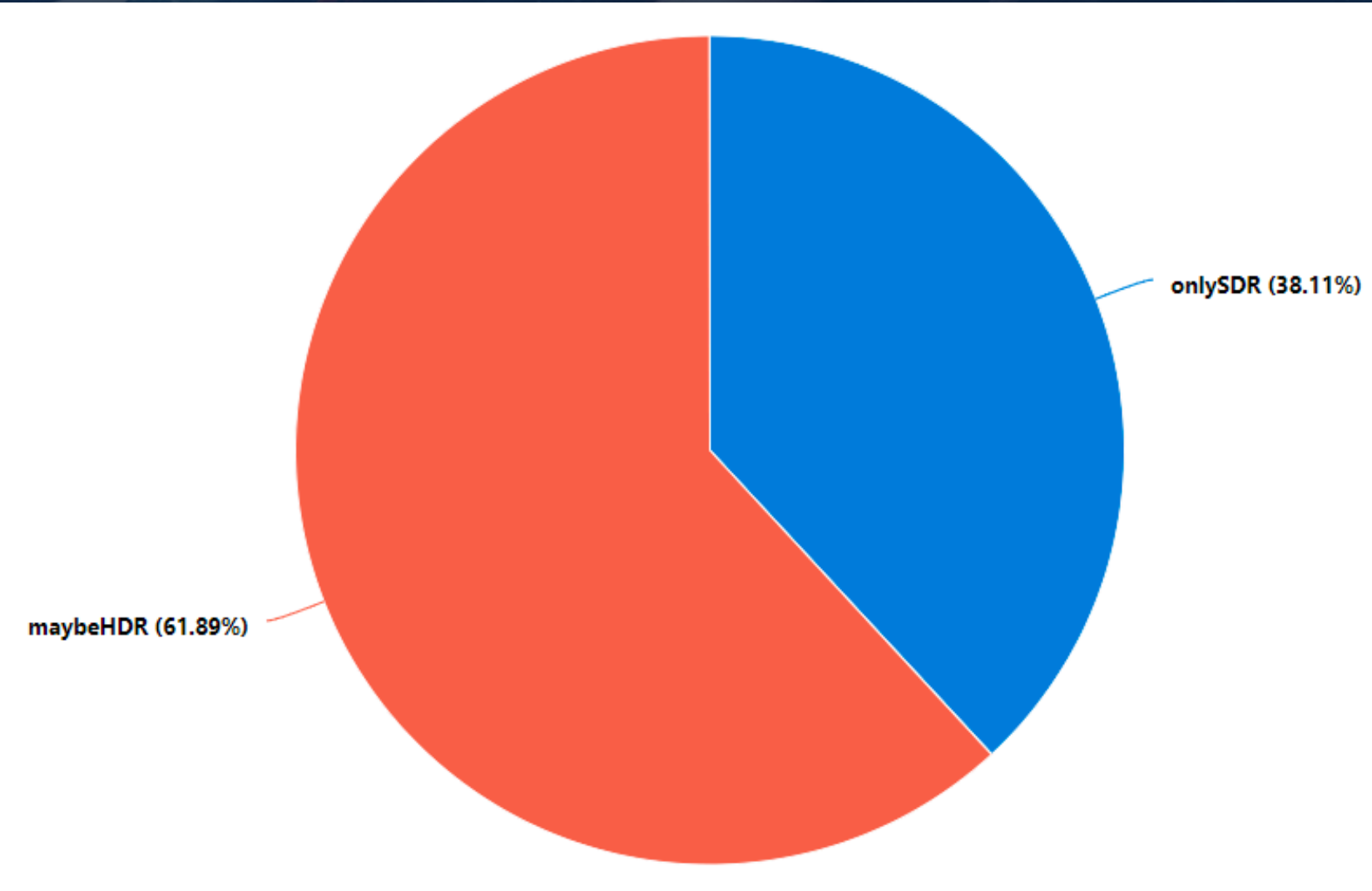
Current scope



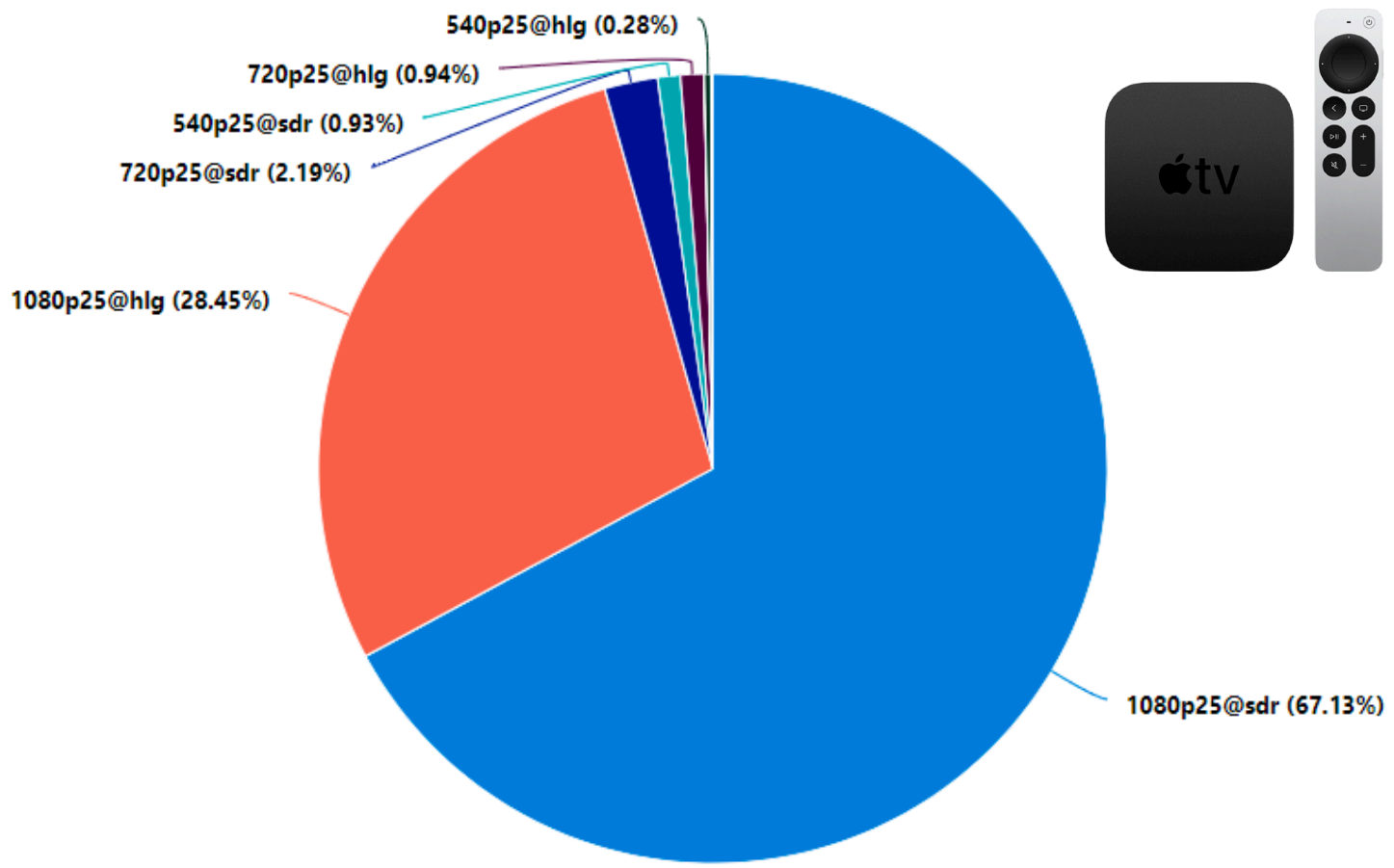


Snowfall



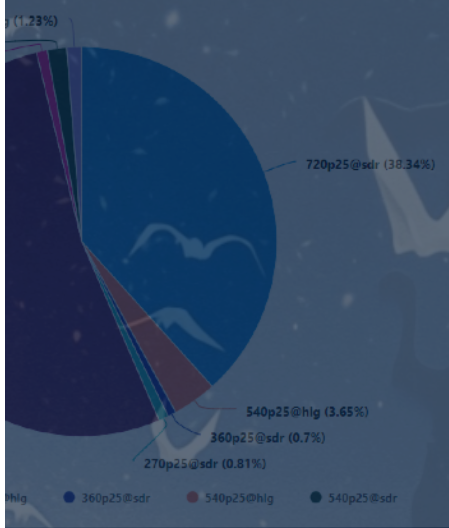


Snoofall

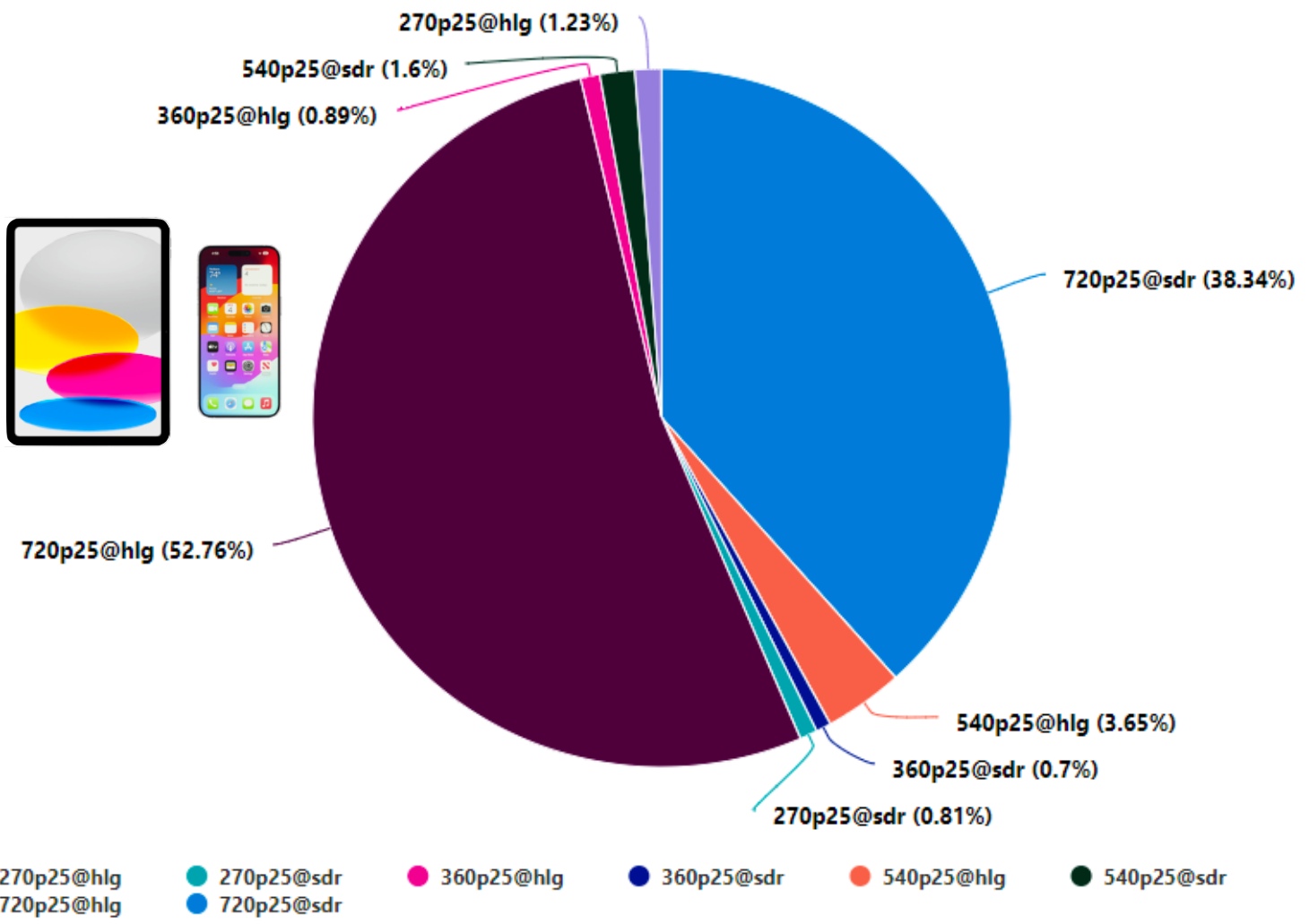


- 1080p25@hlg
- 1080p25@sdr
- 270p25@hlg
- 270p25@sdr
- 360p25@hlg
- 360p25@sdr
- 540p25@hlg
- 540p25@sdr
- 720p25@hlg
- 720p25@sdr

maybeHDR (61.89%)



Sno'fall



Sno'fall



Sneofall



Thank you