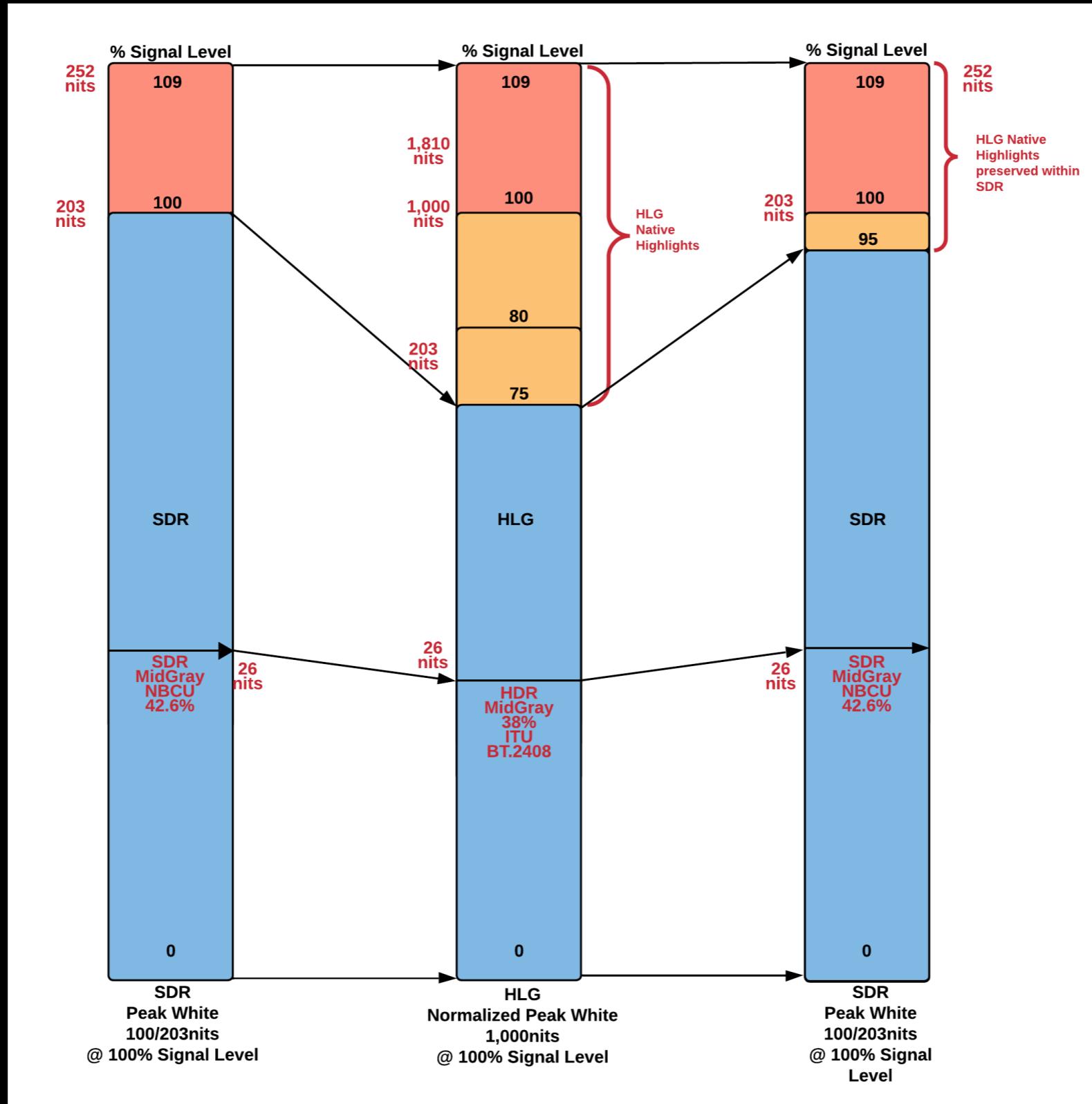


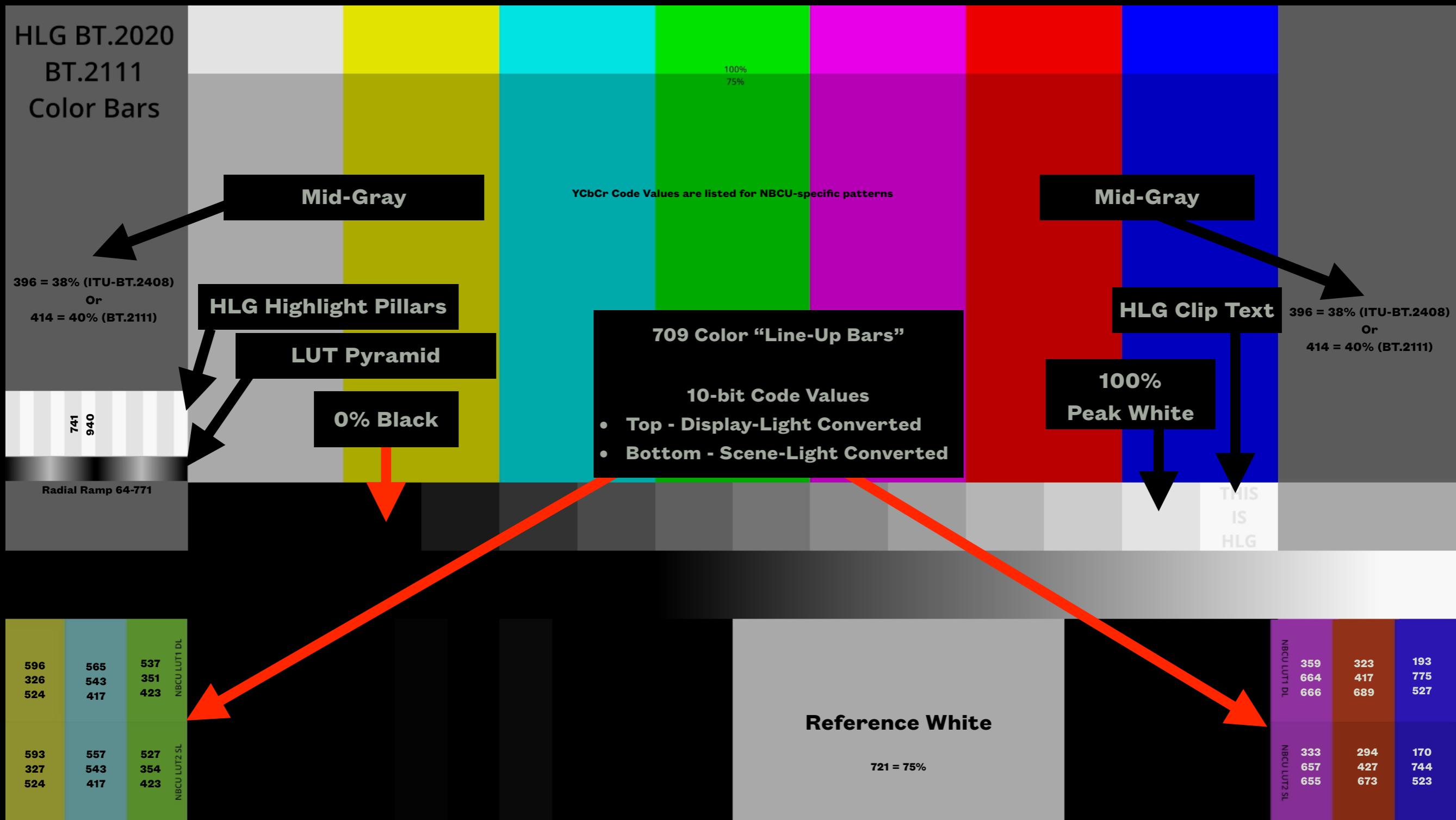
UHD Single-Master HDR-SDR Production

HLG and SDR Video Reference 8-Pager

Unified Reference/Graphics White and MidGray

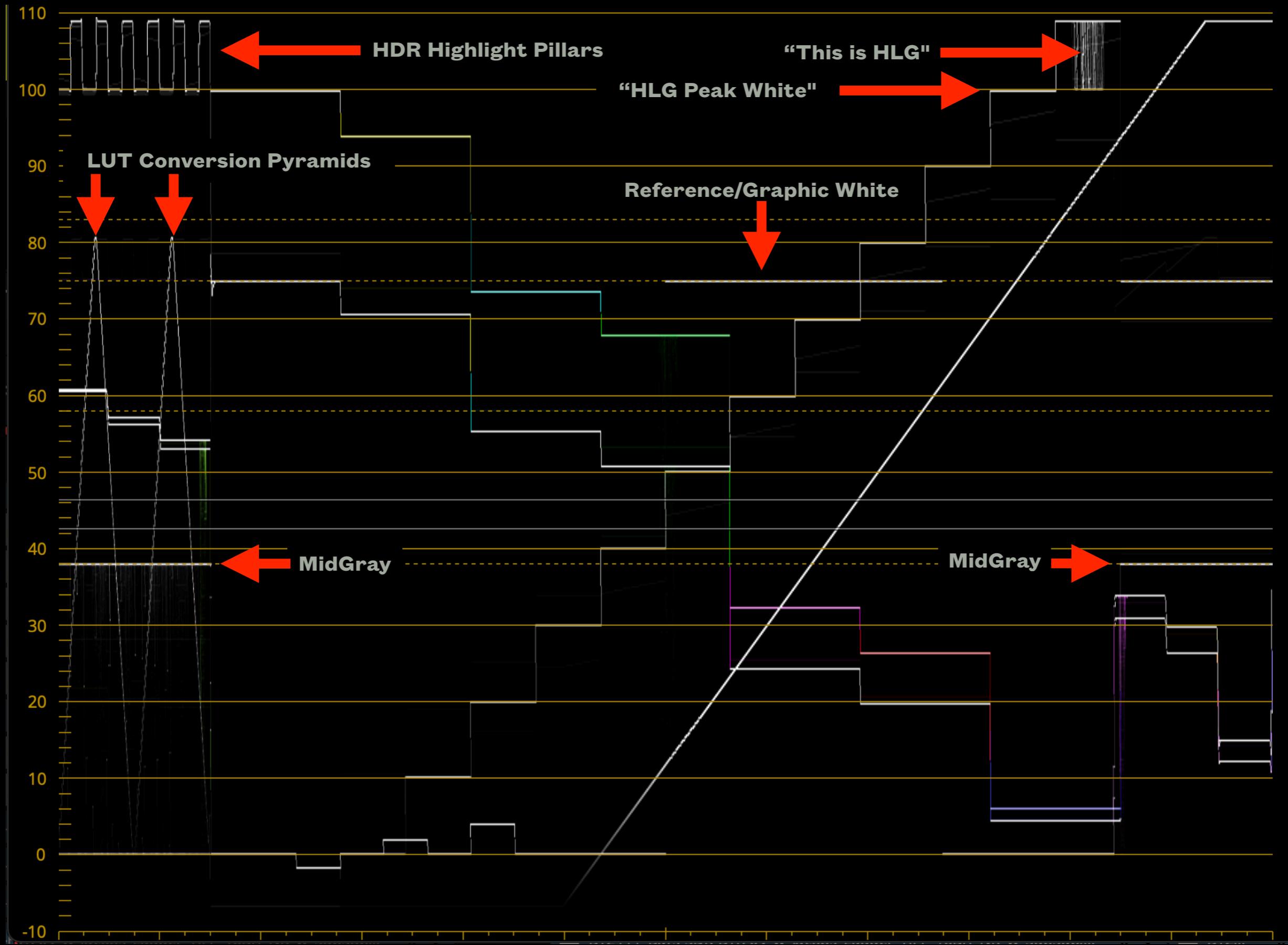


HLG BT.2111 (Fancy) Color Bars



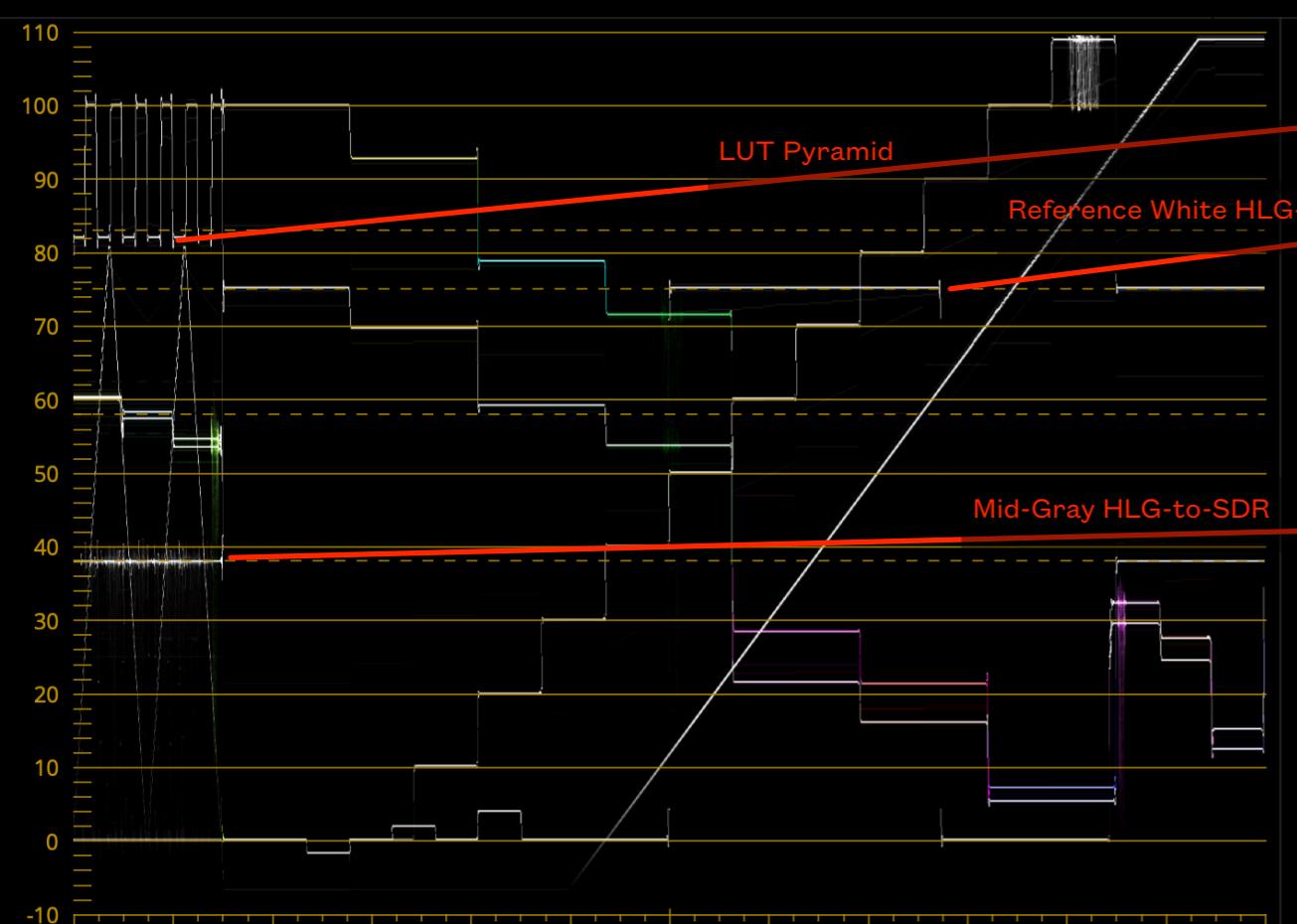
Since this HLG image is viewed in SDR-BT.709 it will not look quite correct

HLG Native BT.2111 (Fancy) Color Bars

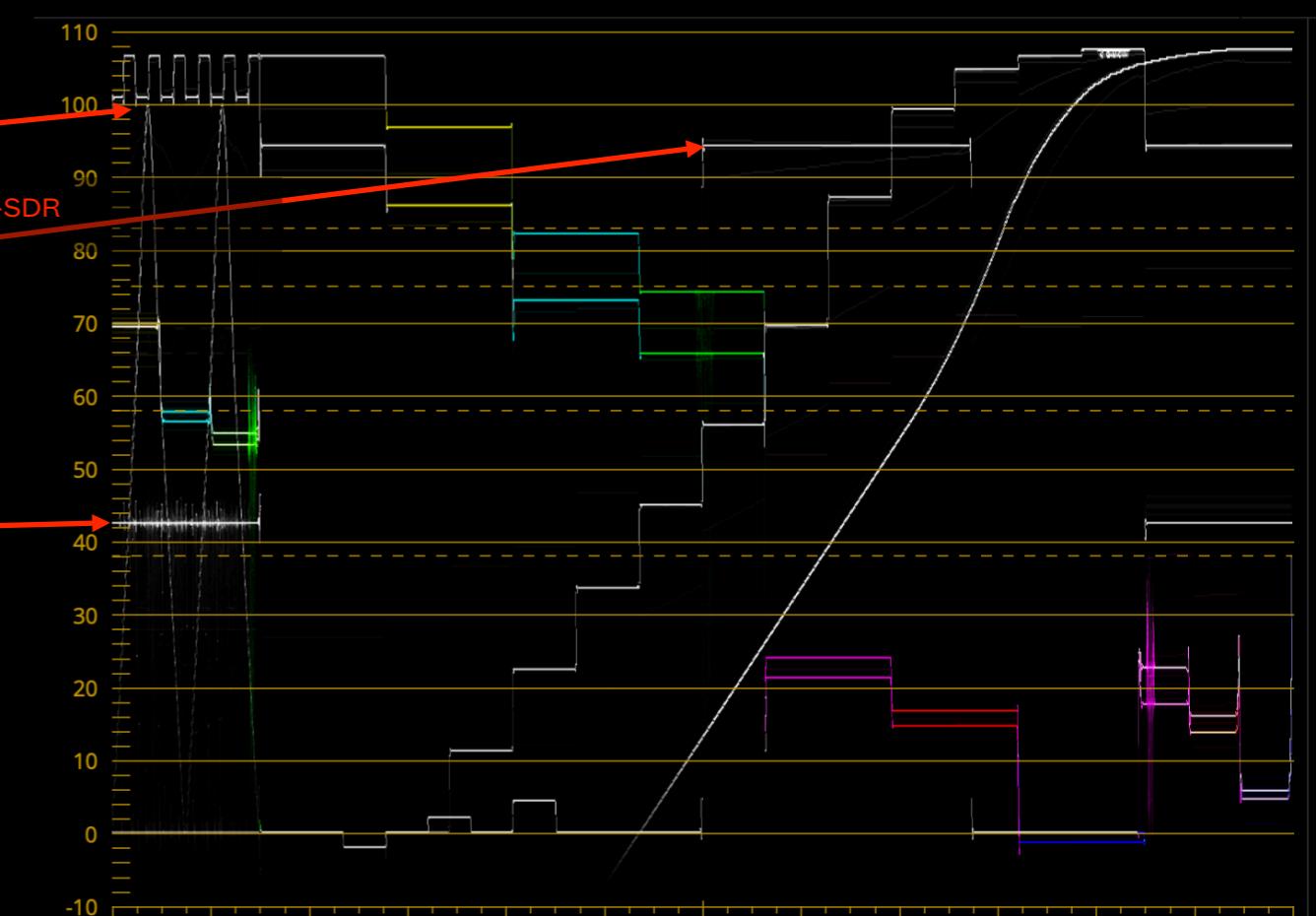


HLG to SDR Conversion: NBCU - LUT3

HLG Native Bars

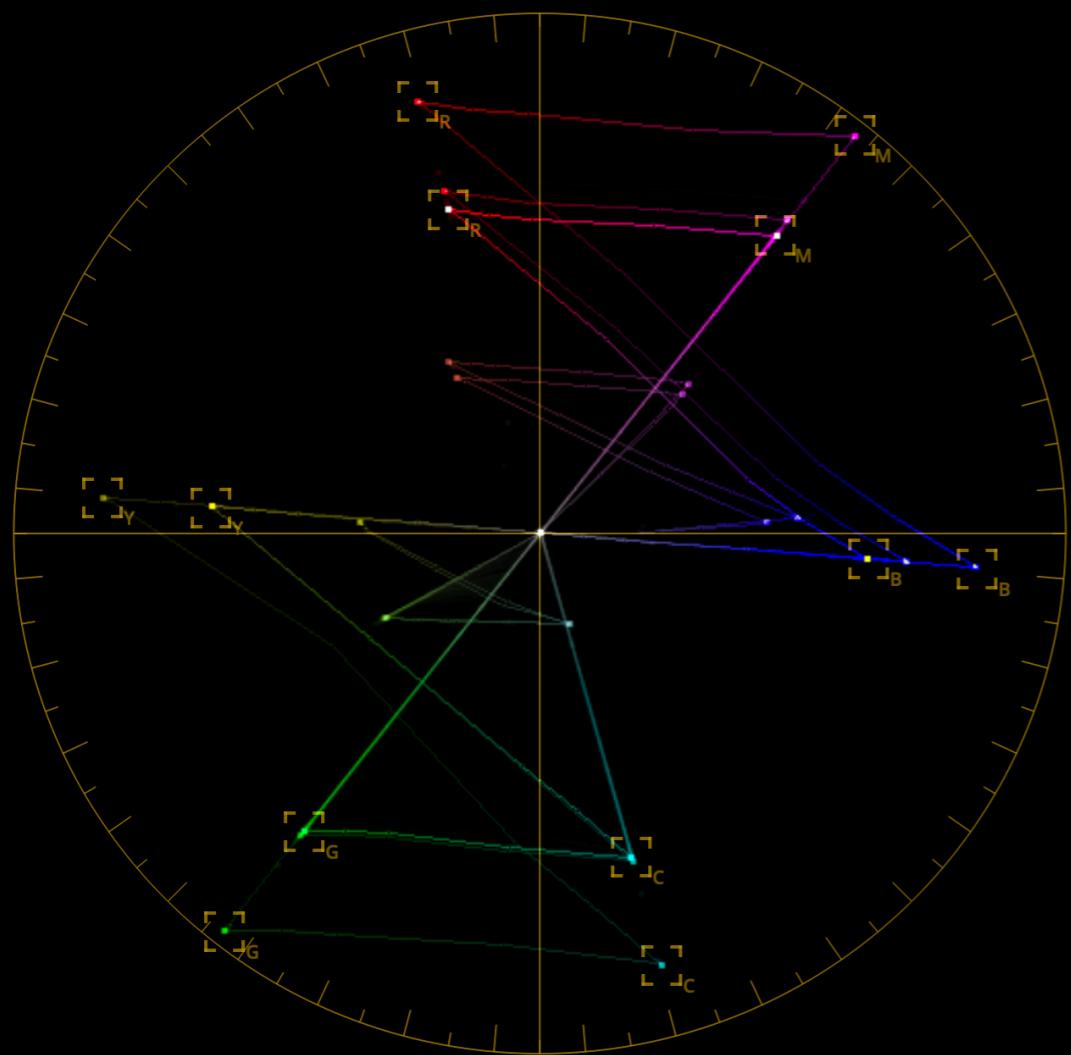


HLG-to-SDR (LUT3)

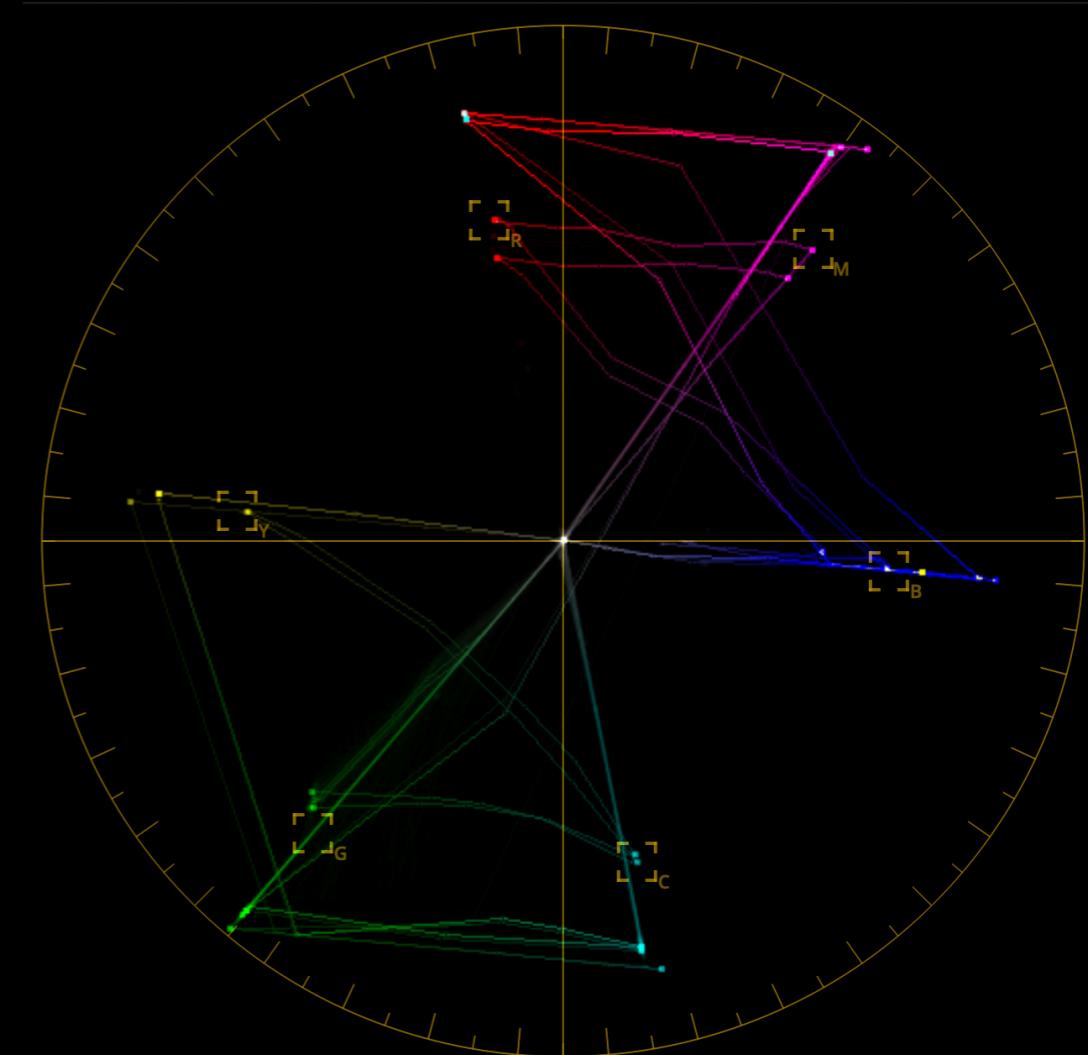


HLG to SDR Conversion: NBCU - LUT3

HLG 100/75%



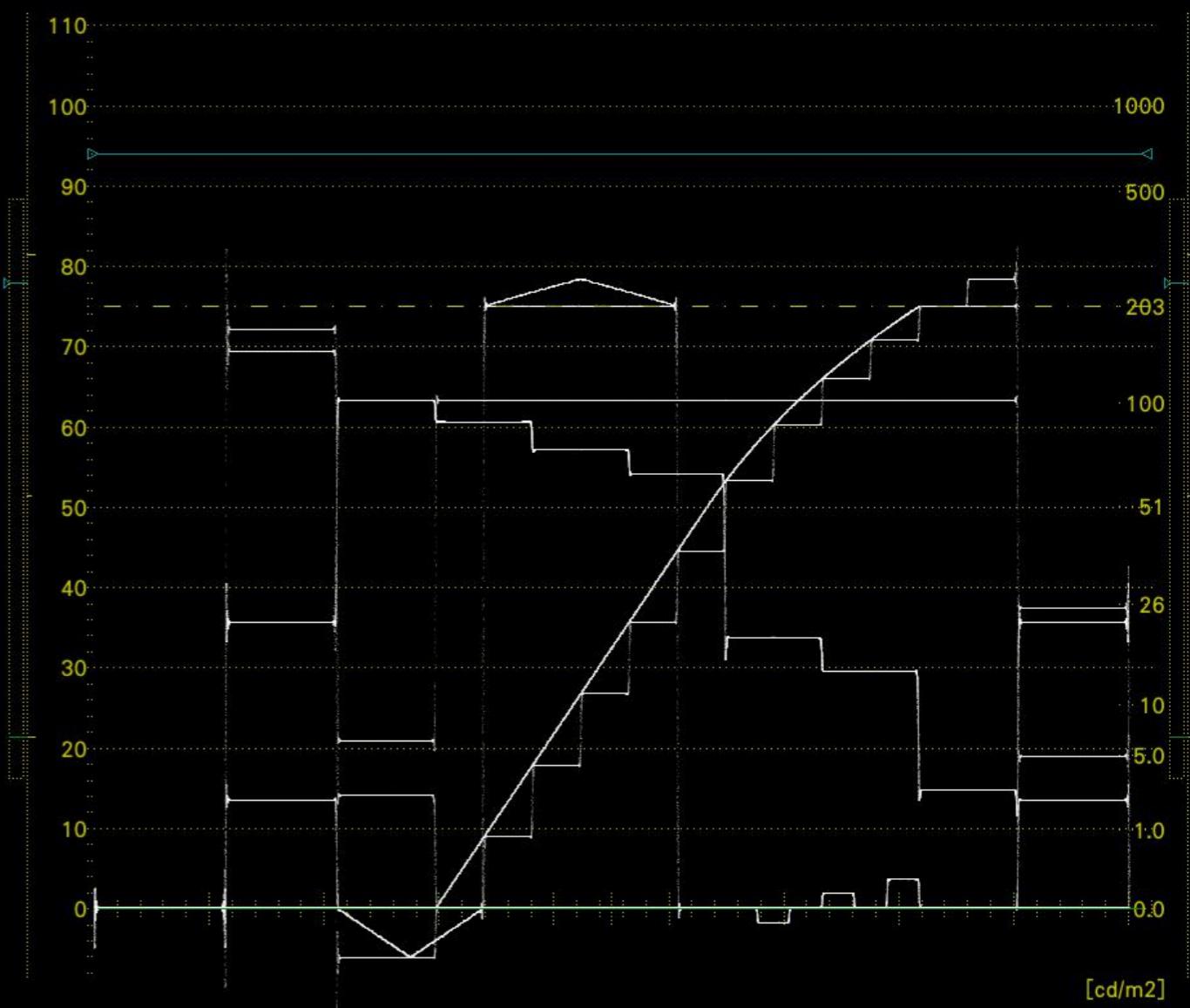
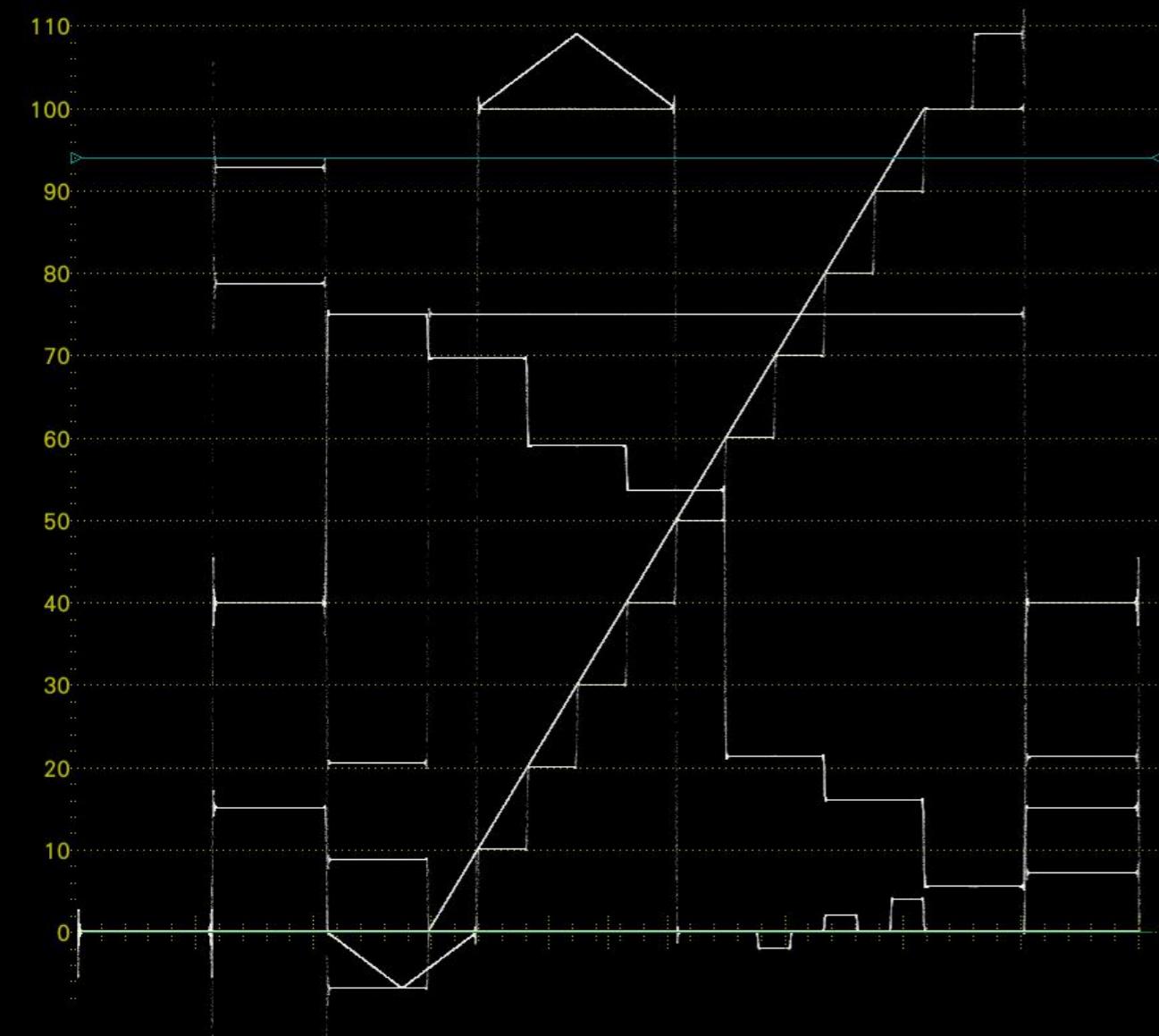
SDR 75%



SDR to HLG Direct Upmapping- NBCU LUT1

SDR

Converted SDR-to-HLG



Monitoring HDR and SDR Side-by-Side With a Unified Reference Graphics White and MidGray

HLG REFERENCE DISPLAY

Peak White = 600-to-1000nits

REFERENCE WHITE CONTRAST ADJUSTMENT = 203 nits



SDR BT.1886 REFERENCE DISPLAY

Peak White = 203nits

CONTRAST ADJUSTMENT TO 203 nits



Set HLG Graphic/Reference White = SDR Graphics White

HLG @ 75%(203nits) = SDR @ 100%(203nits)

Setting a “unified reference white” luminance level between HLG and SDR displays allows comparisons of both images side-by-side and avoids eye adaption issues to the luminance differences in the main focal areas of the images (see display adjustments on the next page).

SDR to HLG Sony Display Contrast Adjustments

SDR / HDR REFERENCE DISPLAY CONTRAST ADJUSTMENT

9/23/22

*** Picture Adjustment: Make PRESETS that follow the HDR or SDR input selection ***

	SDR				HDR			
	CONTRAST VALUE	MAX CONTRAST VALUE	OUTPUT LUMINANCE (nits)	COLOR SPACE / GAMMA	CONTRAST VALUE	MAX CONTRAST VALUE	OUTPUT LUMINANCE (nits)	COLOR SPACE / GAMMA
BVM-HX310	812	1000	203	709 / 2.4	BVM-HX310	400	1000	1000
PVM-X2400	812	1000	203	709 / 2.4	PVM-X2400	400	1000	1000
PVM-X1800	812	1000	203	709 / 2.4	PVM-X1800	400	1000	1000
BVM-X300	812	1000	203	709 / 2.4	BVM-X300	400	1000	1000
BVM-E171	2030	2500	203	709 / 2.4	BVM-E171	1667	2500	1000
PVM-A240	100	tbd	175	709 / 2.4	PVM-A240	80	100	260
PVM-A170	100	250	tbd	709 / 2.4	PVM-A170	85	tbd	tbd
LMD-A240	91	100	tbd	709 / 2.4	LMD-A240	80	100	tbd

Sony CCU: Live-Tone-Controls

Sony Live Tone-Controls enable flexible tone setting in HDR Productions

