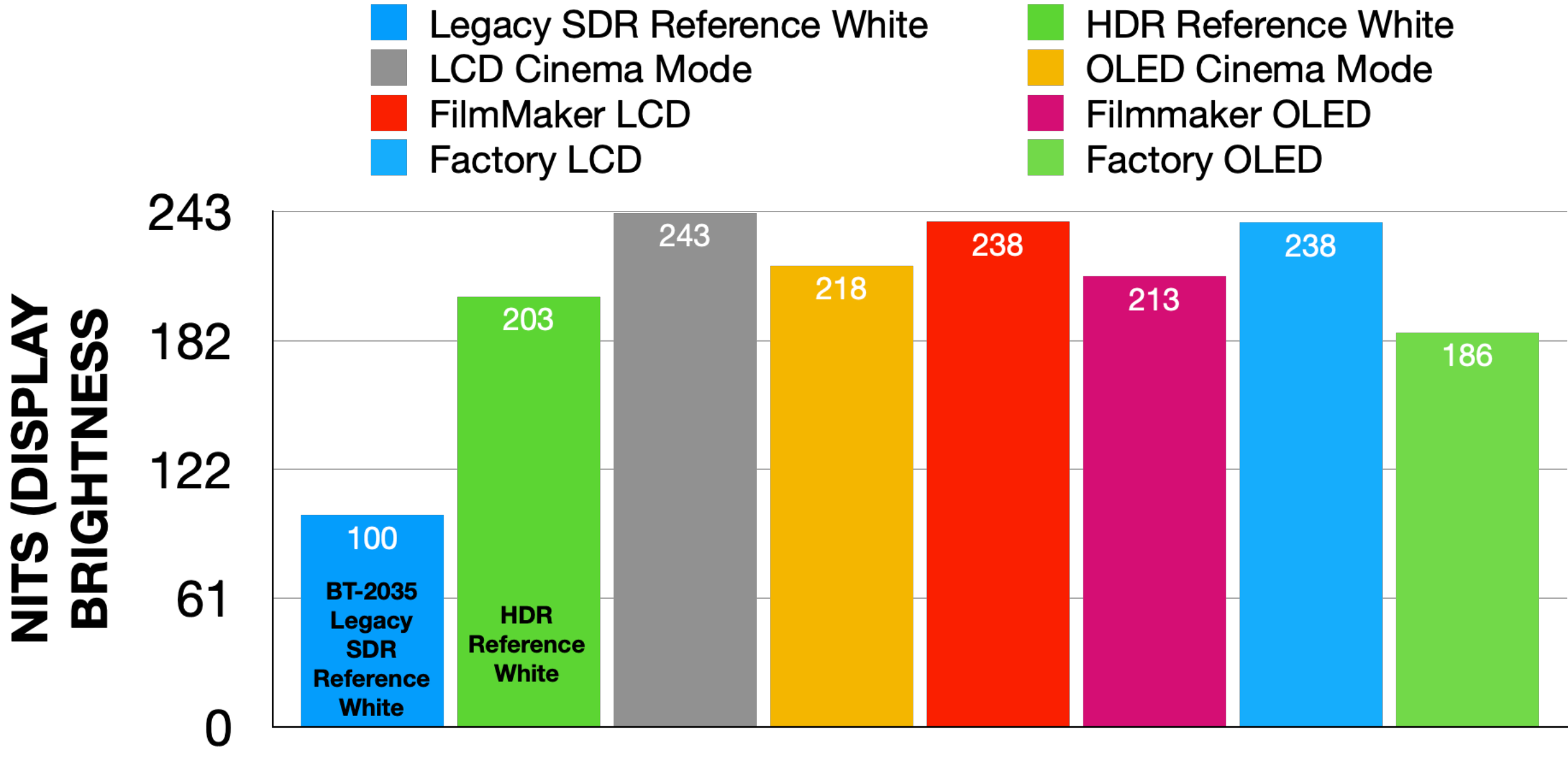
Legacy SDR Reference White
LCD Cinema Mode
FilmMaker LCD
Factory LCD
HDR Reference White
OLED Cinema Mode
Filmmaker OLED
Factory OLED
NITS (DISPLAY BRIGHTNESS
243
182
122
61
0
100
BT-2035 Legacy SDR Reference White
203
HDR Reference White
243
218
238
213
238
186

SDR DISPLAY LUMINANCE AND “EFFECTIVE GAMMA” IN DIFFERENT PICTURE MODES

TV PICTURE MODES

	Cinema			Filmmaker Mode			Factory		
	TV’s Manufactured At/After 2016								
	LCD Full Screen	LCD L32	OLED L32	LCD Full Screen	LCD L32	OLED L32	LCD Full Screen	LCD L32	OLED L32
AVG Nominal Peak White	228.65	242.52	217.50	247.45	238.23	212.50	241.87	237.91	186.00
MAX Nominal Peak White	405.90	416.00	234.00	397.50	390.00	228.80	546.00	541.00	267.00
MIN Nominal Peak White	78.00	125.00	201.00	53.30	64.60	201.80	83.30	79.26	186.00
	AVERAGE “EFFECTIVE GAMMA” using Two HDR->SDR Tone-Mapping Methods (Low Gamma = Midtone Lift) AT/AFTER 2016								
Average Calculated Hybrid-Linear L32	2.25	2.42	2.22	2.33	2.27	2.42	2.16	1.93	
MAX Calculated Hybrid-Linear L32	2.66	2.72	2.22	2.48	2.53	2.54	2.96	2.55	0.00
MIN Calculated Hybrid-Linear L32	0.33	2.20	2.22	2.13	1.72	2.29	1.14	0.84	0.00
Average Calculated Gamma-Adjusted L32	2.00	2.08	1.95	1.94	2.11	2.11	1.86	1.75	1.33
MAX Calculated Gamma Adjusted L32	2.31	2.29	1.95	1.94	2.18	2.18	2.49	2.29	1.33
MIN Calculated Gamma-Adjusted L32	0.70	1.94	1.95	1.93	2.02	2.02	1.02	0.90	1.33
Sample Count	27	26	2	6	6	3	30	30	2
	Traditional Reference Display Luminance	100		Reference Gamma:	2.4		HDR/SDR Unified Reference White Level	203	

Rough Gamma Measurement (Identify midtown lift) ≥ 2016
(Additional Picture Modes)

	Standard	Sports	Vivid	ISF Dark Room	ISF Bright Room
Effective Gamma Hybrid-Linear L32	1.95	1.79	1.92	2.33	2.05
Effective Gamma Gamma-Adjusted L32	1.71	1.44	1.67	2.03	1.78

Traditional SDR Reference Displays	100
Unified Reference White	203

Calculating for BT.1886 (Gamma 2.4 or Optimal Gain-Staging)
Log << MidGray cd/m²>/<Graphic White cd/m²> / Log <% of signal level of measured gray> = <Rough Gamma Level>

EXAMPLE: LOG(26/203)/LOG(0.424658) = 2.4

A lower system gamma indicates a lifted gamma (higher shadows and midtones)