



VESA CERTIFIED

DisplayHDR™

Summary of DisplayHDR Specs

DisplayHDR v1.2 Criteria		Classic					True Black					Units
	Min/Max	400	500	600	1000	1400	400	500	600	1000	1400	
MINIMUM LUMINANCE LEVEL												
8% Center Patch Test Luminance with 2% APL Background	Min	400	500	600	1000	1400	400	500	600	1000	1400	cd/m ²
Full-screen Flash Test Luminance	Min	400	500	600	1000	1400	250	300	350	500	700	cd/m ²
Full-screen Long-time Test Luminance	Min	320	320	350	600	900	250	300	350	500	700	cd/m ²
BLACK LEVEL												
Dual Corner Box Test - Screen Center, Maximum Luminance Level (cd/m ²)	Max	0.4	0.1	0.1	0.05	0.02	0.0005					cd/m ²
Dual Corner Box Test - Both White Corners, Minimum Luminance Level (cd/m ²)	Min	300	375	450	750	1050	300	375	450	750	1050	cd/m ²
ACTIVE DIMMING / CHECKERBOARD TEST												
Active Dimming – Ratio of maximum white to black at 50 cd/m ²	Min	11	11.6	12	13	13.5	N / A					stops
Active Dimming – Ratio of maximum white to black at 5 cd/m ²	Min	12	12.6	13	14	14.5	N / A					stops
Checkerboard – Max Black Level Luminance	Min	N / A					0.0005					cd/m ²
COLOR GAMUT AND ADDITIVE MINIMUM LUMINANCE SPECIFICATIONS												
ITU-R BT.709 Coverage for Both 10% and Full Screen	Min	99%										coverage
DCI-P3 (D65) Coverage for Both 10% and Full Screen	Min	90%	95%									coverage
Additive RGB Color Luminance at 10% (Lr+Lg+Lb)	Min	400	500	600	1000	1400	400	500	600	1000	1400	cd/m ²
Additive RGB Color Luminance at 100% (Lr+Lg+Lb)	Min	320	320	350	600	900	250	300	350	500	750	cd/m ²
MINIMUM BIT-DEPTH SEPCIFICATIONS												
10-bit Video Signal, per Channel		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	Y / N
Minimum Driver-IC Bit Depth (+2b Dithering)	Min	8b + 2										bits
Minimum 8-bit Digital-to-Analog Conversion		☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	Y / N
Backlight Control 8-bit Accuracy		☑	☑	☑	☑	☑	N / A					Y / N
DISPLAYHDR RISE-TIME SPECIFICATIONS												
Rise from Black to Max, Luminance	Max	8					2					frames
LUMINANCE AND WHITE POINT ACCURACY												
ΔITP error for tests at 1 and 5 cd/m ²	Max	20										ΔITP
ΔITP error for tests at 15 cd/m ²	Max	15										ΔITP
ΔITP error for tested luminances at 50 and above cd/m ²	Max	10										ΔITP
STATIC CONTRAST RATIO												
1D backlights	Min	1300 : 1	7000 : 1	8000 : 1	N / A			N / A				ratio
2D backlights	Min	N / A			30,000 : 1	50,000 : 1	N / A					ratio
XRITE® COLOR TEST PATCHES												
Average ΔTP color error for each set of 96 colors at 50 & 100 cd/m ² , and 50% of tier	Max	8			6		8			6		ΔTP
HDR VS SDR BLACK LEVEL												
	Max	CR _{HDR} > 0.9 x CR _{SDR}										
BLACK CRUSH												
Display luminance increasing 0, 0.05, 0.1, 0.3, 0.5 cd/m ²	Min	Measure and view monotonically increasing luminance										cd/m ²
SUBTITLE FLICKER												
Luminance of patch when subtitle is ON vs OFF	Max	13%				10%						Diff

NEW IN v1.2