

	Aurora Standard	Aurora Pro
Syntax Checks		
Content layout	✓	✓
Codec Syntax (including buffer analysis)	MPEG-2, H.264, MVC, VC-1, AC-3	MPEG-2, H.264, MVC, VC-1, AC-3, Dolby E
Container Syntax (packet size, compliance tests to specification)	Transport Stream, Program Stream, GXF, MXF (MXF uses optional component)	Transport Stream, Program Stream, GXF, MXF (MXF uses optional component)
Captions (608/708)	Detects/Reports	Detects/Reports and Performs Analysis
Teletext/DVB Subtitles	Detects/Reports	Detects/Reports and Performs Analysis
Container Metadata		
Stream Sum Bit Rate	✓	✓
File size	✓	✓
Number of PIDs	✓	✓
Compare Stream Lengths	✓	✓
Compare metadata to stream	✓	✓
PID Values	✓	✓
Container Type	✓	✓
Container Contents	✓	✓
Container Timecode Discontinuity	✓	✓
Illegal Word Test (from Captions)		✓
Video Metadata		
Runtime	✓	✓
Resolution, Horizontal Size, Vertical Size, Aspect Ratio	✓	✓
Frame Rate, Bit Rate, Buffer Size	✓	✓
Interlaced Mode	✓	✓
GOP length (max/min/avg)	✓	✓
GOP Structure	✓	✓
GOP closed/open	✓	✓
Quantization (max/min/avg)	✓	✓
Consecutive Picture Length (I/P/B)	✓	✓
Color Space (YUV/RGB/xvYCC)	✓	✓
Chroma Profile (x:x:x)	✓	✓
Luma and Chroma Values (min/max/avg)	✓	✓
Cadence, Detect Cadence Changes		✓
AFD Values, Detect AFD Changes	✓	✓
CGMS-A, TV/MPAA Values	✓	✓
Pixel Aspect Ratio	✓	✓
Crushed Black/Super Whites		✓
Detect Chroma Drop in a Field		✓
Color Gamut (EBU R103)		✓
GOP Size in Bytes	✓	✓
Stream Timecode Discontinuity	✓	✓
Video Quality		
Macroblocking L1 (blocks with visible edges)	✓	✓
Macroblocking L2 (groups of visible edge blocks)		✓
Macroblocking L3 (grouping in a title safe area)		✓
Quantization Based Blocking		✓

Freeze frames	✓	✓
Black frames	✓	✓
Constant Color Frames		✓
Flash Detection (HardingFPA option available)		✓
Letterboxing/Pillarboxing	✓	✓
Edge Detection		✓
Interlace Artifact & Field Order Detection		✓
Color Bar Pattern Detection		✓
Aspect Ratio Changes		✓
Black Line Detection		✓
Tape Hit Detection		✓
Anamorphic Content Detection (using Pixel and Frame Aspect Ratio)		✓
Perception Based Artifact Detection		✓
Audio Metadata		
Runtime	✓	✓
Number of Channels	✓	✓
Language ID	✓	✓
Bit Rate/Bit Depth	✓	✓
Dolby Metadata	✓	✓
Metadata Change Points	✓	✓
Audio Quality		
Peak Audio Levels	✓	✓
Loudness Detection (BS.1770/71, R128, ATSC A/85)		✓
Audio Silence, clipping, mute, test tones	✓	✓
Channel Phase Detection	✓	✓
Snap/Click/Pop Detection	✓	✓
Mono Audio Detection in Stereo Pair		✓
Distribution/Broadcast Restrictions		
DVD constraints	✓	✓
BD constrains for Primary Video	✓	✓
BD constrains for Secondary Video	✓	✓
BD constrains for 3D Video	✓	✓
CableLabs Broadcast constrains	✓	✓
CableLabs VOD constraints	✓	✓
NTSC Video Format	✓	✓
PAL Video Format	✓	✓
ATSC Video & Audio Format	✓	✓
DVB-T Video Format	✓	✓
ISDB-T Video Format	✓	✓
XDCAM (RDD-9)	✓	✓
MXF AS-02	✓	✓
iTunes	✓	✓