Annex M: Loudness and True Peak Quick Reference

Table M.1 ATSC A/85 Loudness and True Peak Quick Reference

Content Type	Loudness Measurement Method (Anchor Element)				Maximum True Peak[30] (dBTP)
	Integrated Dialogue Loudness[31] (LKFS)		Full-Program Mix Loudness (LKFS)		
Long Form	Without metadata: –24*	With metadata: dialnorm** = Loudness	Content Dependent[32]		–2
Short Form	N/A		Without metadata: 24*[33]	With metadata: dialnorm** = Loudness	–2

It is strongly recommended that **all** Content be presented to the audience at **only one** specific and consistent Target Loudness[34]. Long-form and Short-form Loudness measurements should be performed per Table M.1, regardless of the source of the Content (e.g., including downstream-inserted Short-form content).

For delivery or exchange of Content without metadata (and where there is no prior arrangement by the parties regarding Target Loudness), the Target Loudness should be –24 LKFS*.

For **Streaming delivery services only**, a single Target Loudness between –23 to –27 LKFS is recommended[35], unless there are other prior arrangements between Content-exchange or delivery parties.

* Measurement tolerance of up to approximately ±2 dB around this value is anticipated, due to measurement variations. Content Loudness should **not** be targeted to the high or low side of this tolerance. (See Section 6 for details.)

** Or equivalent Loudness metadata.

[30] Minor measurement tolerance for True Peak values of up to approximately ±0.5 dB is anticipated, due to meter variations, and is acceptable.

[31] It is vital that the average **Dialogue Level** be measured and reported as the Loudness for Long-form Content. This should be performed using BS.1770-1 (i.e., without the relative-level gate added in subsequent versions), along with a Dialogue-Gating algorithm, and measured over the **entire duration** (not act by act) of the Content's composite mix. (See Section 5.1.1.)

[32] Full-program Mix should **not** be used for Loudness measurement of Long-form Content except in the rare case that the Long-form Content does not contain any dialogue whatsoever. See Section 5.2.4.

[33] Applies to Short-form Content using the ITU-R BS.1770 (-3 or later) measurement method. See Section 5.1.1.

[34] It may not always be possible for a service to be operated at a single Target Loudness. What is vital, however, is that the Loudness of Short-form Content not be greater than that of the Long-form Content it accompanies.

[35] This represents a practical range enabling Loudness consistency while facilitating creative intent. For example, some Streaming Operators use -23 LKFS (conformant to EBU R128 s2 [36]), while others use -27 LKFS (provides greater headroom), and still others use -24 LKFS (the ATSC A/85 recommendation for TV broadcasting, or as a default in the absence of any other agreed-upon value).