

## OSM/EE DECISION SHEET

Category	Standard:	Clause	Document no.
ITAV	EN 62368-1:2014 + A11:2017 EN IEC 62368-1:2020 + A11:2020 EN IEC 62368-1:2024 + A11:2024	Annex E	OSM-EE 24/1
Subject		Key words	Meeting
Determination of max non-clipped output power		Max non-clipped output power	Helsinki 2024
Question			
<p>Most of the tests and requirements in Annex E are based on non-clipped output power.</p> <p>In the past (5-10 years ago) it was quite easy to determine non-clipped output power. When the amplifier clipped (or reached max output) it would continue to deliver the clipped signal for at least half a minute, usually longer.</p> <p>Today a lot of amplifiers will reduce the output power very soon after they clip or reach max output. Usually within a few seconds sometimes within milliseconds. Sometimes, it happens so fast that it is easily missed by the test engineer, resulting in unrepeatable test results.</p> <p>When determining max non-clipped output power, can we disregard power measurements if the amplifier only can sustain that power for a very short time?</p>			
Decision			
The max non-clipped output power shall be determined as the max non-clipped output power that the amplifier can sustain for at least 2 seconds.			
Explanatory notes			
<p>In 5.2.2.2 (EN IEC 62368-1:2020), steady state is considered established when the voltage or current values persist for 2 s or longer.</p> <p>See clause E.3.1 (edition 2024), first dashed paragraph for further information on maximum non-clipped output power.</p> <p>The decision was confirmed by TC 108 HBSDT on 2024-04-10.</p>			