Home Audio & DVD Key Product Criteria

**Definitions:**

**Audio/Video (AV) Product:** A mains-connected product that offers Audio Amplification and/or Optical Disc Player functions.

**Effective Date:** May 1, 2013

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| **Key Efficiency Criteria** | |
| **Product Function** | **Auto Power Down Requirements** |
| Default Auto Power Down | Default Timing < 2 Hours |
| Available Auto Power Down Settings | If APD timing is set by default to no more than 30 minutes and APD cannot be disabled or increased to greater than 30 minutes, product does not have to meet Idle state power consumption requirements. |

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| **Product Function** | **Sleep Mode Power Consumption Limits (W)** |
| Base (All Products) | 1.0 |
| In-use Networking / Control Protocol with Wake Capability | 1.0 |
| In-use Wi-Fi or Gigabit Ethernet Protocols with Wake Capability (Applied to Either Wi-Fi or Gigabit Ethernet, but Not Both Simultaneously) | 2.0 |

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| **Product Function** | **On Mode Power Allowance, PON (watts)** |
| SD or Audio Source Optical Disc Player: Playback Test | 6.0 |
| SD Source to HD Output "Upconversion" Optical Disk Player: Playback Test | 10.0 |
| HD Source Optical Disc Player: Playback Test | 10.5 |

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| **Product Function** | | **On Mode Power Allowance,  PADD\_i (watts, rounded to the nearest 0.1 W for reporting)** |
| High Resolution Display | | equation  Where:  *R is the display resolution (x \* y) in megapixels A is the viewable screen area in square inches* |
| In-use Networking / Control Protocol | | 1.0 |
| In-use Wi-Fi or Gigabit Ethernet Protocols (Applied to Either Wi-Fi or Gigabit Ethernet, but Not Both Simultaneously) | | 2.0 |
| Audio Amplification  Where: *POUT is the output power at 1/8 MUP with 1kHz sinusoidal input* | POUT ≤ 50 watts | 5.0 |
| POUT > 50 watts | (0.1 x *POUT*) |

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| **Product Function** | | **Idle State Power Allowance, *PIDLE\_i* (watts, rounded to the nearest 0.1 W for reporting)** |
| Base (All Products) | | 5.0 |
| In-use Networking / Control Protocol | | 1.0 |
| In-use Wi-Fi or Gigabit Ethernet Protocols (Applied to Either Wi-Fi or Gigabit Ethernet, but Not Both Simultaneously) | | 2.0 |
| Audio Amplification  Where: *POUT is the output power at 1/8 MUP with 1kHz sinusoidal input* | POUT ≤ 50 watts | 5.0 |
| POUT > 50 watts | (0.1 x *POUT*) |

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| **Amplifier Input Power at 1/8 MUP with 1 kHz Sinusoidal Input, PIN (W)** | **Version 3.0 Minimum Amplifier Efficiency, η** |
| PIN < 20 | N/A |
| 20 ≤ PIN < 100 | 0.44 |
| PIN ≥ 100 | 0.55 |

Note: PIN = Output Power @ 1/8 MUP 1kHz Sine Wave