#	Topic	Stakeholder Comment	DOE Comments
1	High Port Count Test	A stakeholder commented that the proposed High Port Count product definition threshold of 200 10GbE ports imposes a prohibitively large cost-burden for most test labs or smaller companies. The stakeholder recommends that the high port-count product definition threshold be set at 32 10GbE ports. Another stakeholder commented that if 40 GbE ports are excluded from scope, the proposed High Port Count product definition threshold of 200 10GbE ports may not be problematic. However, the stakeholder noted that the threshold may need to be updated if higher speed ports are included in future versions of the specification.	The High Port Count testing, which includes the use of snaked data traffic, is included in the test method to reduce the cost of testing products that have many high-speed data ports. However, the nature of this testing makes it compatible only with modular products, and it cannot be performed on fixed products. After examining LNE products currently on the market, DOE believes that 32 10GbE ports is too low of a threshold for defining High Port Count products since fixed LNE products are available with more than 32 10 GbE ports. Based on the market assessment, DOE believes the minimum threshold to avoid including fixed products to be 104 ports. For this reason, the Final Test Method requires a product to have more than 104 ports that are at least 10 GbE in order to be meet the definition of High Port Count Product.
2	Ambient Temperature	A stakeholder commented that the proposed ambient temperature limit would require the use of a thermal chamber, which will increase the cost of testing and place the UUT in forced air streams within the chamber. Another stakeholder commented that test labs are generally able to meet an ambient temperature of +/- 1 degrees C. However, the stakeholder commented that these labs probably would not be able to meet this requirement if at the UUT air inlet due to HVAC airflow and localized heating from UUT. The stakeholder commented that requiring the temperature to be controlled at the UUT air inlets would require an environmental chamber for testing, but that chamber testing would have much higher airflow around UUT, which would likely cause inlet temperature variation issues. Finally, the stakeholder noted that thermal chamber testing would increase the cost of testing and limit the number of labs that could perform testing. Another stakeholder commented that the proposed ambient temperature requirement appears reasonably achievable at minimal test cost, and is consistent with ATIS and other power input measurement specifications for which LNE may be subjected. Stakeholders commented that LNE products are often deployed in the same environment as servers and storage, so the ambient temperature requirement in the respective test methods for each of these three products should be harmonized. One stakeholder suggested that the ambient temperature requirement from ENERGY STAR Servers be adopted for Large Network Equipment.	DOE recognizes that there are challenges involved with meeting a narrow ambient temperature requirement measured at the UUT air inlet. For this reason, the Final Test Method now requires the ambient temperature to be between 25.0 and 30.0 C during testing. Furthermore, the Final Test Method now requires that the ambient air temperature be measured from within 2 meters of a UUT air inlet. The updated ambient temperature range in the Final Test Method overlaps by 5 degrees C with the Servers requirement, and by 3 degrees C with the Storage requirement. DOE believes that this should allow labs to test all three products without unreasonable burden. Furthermore, although the ambient temperature requirements are not currently the same for these three ENERGY STAR products, the requirements can eventually be harmonized during the development of future ENERGY STAR program updates.
3	Non-drop rate	A stakeholder commented that the Final Draft Test Method is only applicable for products that don't have a wide variety of different port types, such as switches or high-end routers. However, the stakeholder opined that the variety of ports installed in edge and aggregation routers makes it impossible to use the non-drop rate (NDR) test on all ports. The stakeholder proposes that when testing such products, max NDR only be measured for higher-speed ports, and with only power measured for lower-speed modules.	DOE recognizes that certain LNE products include, or can be equipped with, a variety of data port types, including those that have very low data transfer rates. However, such products are not included in the scope of the specification, which only covers products with Ethernet ports. Further, the test method requires all traffic to be generated as IPv4 via Ethernet. Therefore, DOE has not included updates in the Final Test Method to handle products with non-Ethernet data ports.
4	Half-port test	Stakeholders commented that the test method's half-port test is mainly applicable to copper access switches, but not to most aggregation, core, and data center products. These stakeholders propose that this test be limited to access switches.	The test method includes full-port and half-port testing, but does not require that a UUT be tested with one, the other, or both. The determination of whether a product follows the half-port test, the full-port test, or both is left to the discretion of the manufacturer, as indicated in the specification.
5	Snaked traffic stream	A stakeholder commented that during High Port Count testing, all ports in a single snaked traffic stream have to be the same line speed and the same expected max throughput, since simultaneous throughput can be limited by the backplane.	DOE agrees with the comment. The Final Test Method now includes updated language indicating that all ports connected using a single snaked traffic stream must have the same line speed and the same expected maximum throughput.
6	Half-port testing	Stakeholders recommend only performing the very low utilization (VLU) power measurement during half-port testing. These stakeholders commented that when NDR is determined for a fully-loaded system, it reflects the best performance at max load, so it is unclear what the goal is finding NDR on a half-loaded system. Finally, these stakeholders commented that since EEE is required by the specification, the physical layer will be controlled and UUT ports will be in low-power mode.	DOE recognizes that a maximum NDR test may not demonstrate a UUT's full capability when it is tested using the half-port test. However, DOE believes that power and throughput information at multiple utilization levels is still very relevant information to purchasers of LNE, regardless of whether a product is tested using the full-port or the half-port test. For this reason, the Final Test Method still includes multiple utilization levels, including max NDR, during the half-port test.
7	High Port Count Test Aggregate Throughput Definition	A stakeholder commented that the equation used for aggregating throughput in the High Port Count test is inconsistent with the system throughput definition presented earlier in the test method.	DOE believes that the equation used for aggregating throughput in the High Port Count Test is consistent with the system throughput definition, but has updated the supporting text for the equation to clarify what each variable represents in the formula.
8	Selection of Pluggable Modules	A stakeholder commented that it is not clear how products with pluggable transceivers should be tested, since multiple types are available for each port. The stakeholder noted that the use of optical transceivers is preferable for High Port Count products, since the use of copper connections for systems with many high-speed ports would be difficult to manage.	DOE recognizes that there are many different types of pluggable transceivers available, and that the selection of pluggable transceiver used can affect the UUT's functionality and power use. However, the selection of pluggable transceivers is a matter of product configurability, and handled by the Specification. For this reason, the Final Test Method does not include requirements or guidelines regarding pluggable transceivers.