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2023 Annual Report

Voluntary Agreement for Ongoing Improvement to the Energy Efficiency of Small Network Equipment

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EXECUTIVE SUMMARY

In 2015, the largest U.S. residential broadband Internet service providers and manufacturers of small network equipment (SNE), such as modems and routers used by consumers to access such services, led by NCTA — The Internet & Television Association, the Consumer Technology Association (CTA), and CableLabs®, signed the Voluntary Agreement for Ongoing Improvement to the Energy Efficiency of Small Network Equipment. This agreement is modeled after the successful Voluntary Agreement for Ongoing Improvement to the Energy Efficiency of Set-Top Boxes. The primary objective of the agreement is to increase the energy efficiency of SNE while promoting rapid innovation and timely introduction of new and improved features. The service provider signatories served approximately 92.5 million residential U.S. Internet subscribers at the end of 2023, accounting for nearly 85% of the wireline Internet access market.

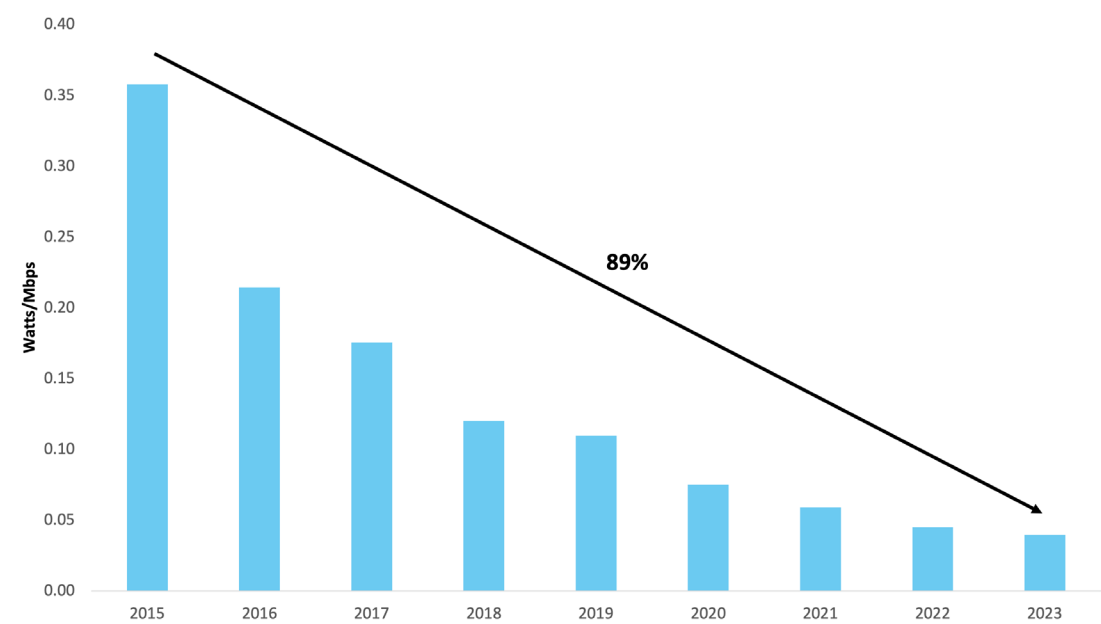
One of the requirements of the Voluntary Agreement is the publication of an annual report that summarizes developments for the previous calendar year. This ninth annual report has been prepared by the Independent Administrator and Auditor, D+R International, Ltd. (D+R).

Under the Voluntary Agreement, signatories commit that at least 90% of all SNE purchased by each service provider or sold by each manufacturer at retail each year will meet the energy-efficiency levels established under the Voluntary Agreement. In 2022, the Voluntary Agreement was extended through 2025 with a new schedule of more stringent “Tier 3” allowances that became effective in 2023, developed in partnership with the Energy Advocate signatory, Pacific Gas and Electric Company (PG&E).

This report is the first report to evaluate the parties’ satisfaction of their commitments under the Tier 3 efficiency levels that became applicable in 2023. The findings of this report are supported by D+R’s review of data from the signatories, including an audit of one randomly selected signatory’s records. Overall, 98.6% of SNE purchased or sold by the signatories in 2023 met these Tier 3 levels, and all of the reporting signatories met the 90% commitment individually.

It is difficult to make useful comparisons in the absolute power used by SNE devices over time because the devices are highly varied (even within the three reported categories) and change significantly over time to support consumer demand for increased speed and Wi-Fi coverage. For that reason, these reports have evaluated power levels measured against increased performance and capability. The weighted average power across all categories of new SNE relative to broadband speed delivered has decreased by 89%, and has declined every year under the Voluntary Agreement, as shown in Figure 1.

Figure 1: Weighted Average Idle Power of New SNE Purchases Relative to Broadband Speeds



These figures were calculated by dividing the weighted average power across all equipment types, as verified by D+R in this report, by the mean fixed wireline consumer broadband download speed for each year as measured by Ookla.

With increased speeds and functionality of devices, this report finds that the signatories are delivering SNE functionalities more efficiently. SNE has evolved to stay ahead of consumer demand for faster broadband services, reduced latency, improved Wi-Fi signal strength, and increased capacity for more devices at higher speeds within the home. Support for these features and increased speeds requires more energy for processing, memory, and other functions. To maintain the trend of delivering increasingly robust broadband services while still meeting the commitments of the Voluntary Agreement, the signatories will need to continue to prioritize and invest in energy-efficiency improvements. Consumers and other stakeholders will be able to monitor the parties' progress at www.energy-efficiency.us, which includes links to energy-efficiency information for SNE purchased or sold by each commercial signatory, as well as all previously published annual reports.

OVERVIEW OF THE VOLUNTARY AGREEMENT

Guided by the objective of improved energy efficiency, the signatories crafted the Voluntary Agreement for Ongoing Improvement to the Energy Efficiency of Small Network Equipment in 2015 to reduce energy consumption and environmental impact, save their customers money, increase the reliability of their networks, and preserve flexibility conducive to rapid innovation and timely introduction of new features. The Voluntary Agreement provides a framework for the broadband Internet industry to deliver market-based energy-efficiency gains that keep pace with technological innovation and is modeled on the successful Voluntary Agreement for Ongoing Improvement to the Energy Efficiency of Set-Top Boxes that was signed in 2012.

The Internet service provider signatories provided wired broadband Internet services to approximately 92.5 million U.S. residential customers, or 85% of that market in 2023.¹ The service provider coverage of the Voluntary Agreement declined for this 2023 report due to the withdrawal of Lumen, but the overall coverage of the market has been strengthened by the addition of numerous vendor signatories since the start of 2020.

The Voluntary Agreement classifies SNE into three categories:

- **Broadband Modems:** Simple network devices that enable high-speed data service with a Wide Area Network (WAN) interface to a service provider wired or optical network, and typically a single Local Area Network (LAN) interface for the customer premise network. The Broadband Modem category does not include devices with integrated router or IEEE 802.11 (Wi-Fi) wireless access point functionality.
- **Integrated Access Devices (IAD):** Broadband network devices include a WAN interface to a service provider wired or optical network, and one or more of the following functions on the LAN interface: multiport routing, Wi-Fi wireless access point functionality, and/or Voice over Internet Protocol (VoIP).
- **Local Network Equipment (LNE):** Devices that do not have a direct interface to a service provider wired or optical network. This category consists principally of routers, but includes wireless access points, switches, and network extenders that bridge or extend a LAN beyond its physical limitations.²

Voluntary Agreement Objectives

The objectives of the Voluntary Agreement are to continue improvements in the energy efficiency of SNE, and to foster device and service functionality, while encouraging innovation and competition. The Voluntary Agreement aims to achieve these goals through flexible approaches that allow the delivery of high quality, innovative services to consumers.

Voluntary Agreement Signatories and Steering Committee

The signatories and participants in the Voluntary Agreement are listed below. The service provider and vendor signatories together may be referred to as the commercial signatories.

¹Based on data provided by the service provider signatories, NCTA - The Internet & Television Association, and the Consumer Technology Association.

²For the full definitions of these categories, see Appendix A of this report or Annex 1 of the Voluntary Agreement.

Energy Advocate Signatory

- Pacific Gas and Electric Company

Service Provider Signatories

- Altice USA
- AT&T
- Charter Communications d/b/a Spectrum
- Comcast
- Cox Communications
- Frontier Communications
- Verizon

Vendor Signatories

- Actiontec Electronics
- ASUSTeK Computer Inc. d/b/a ASUS
- CommScope³
- eero
- Google
- Linksys USA
- Netgear
- Plume
- Sagemcom Broadband
- TP-Link
- Ubee Interactive
- Vantiva

Other Organizations

- Cable Television Laboratories (CableLabs)
- Consumer Technology Association (CTA)
- NCTA - The Internet & Television Association

The Voluntary Agreement obligates the Steering Committee to designate an Independent Administrator and Auditor to publish an annual report. The Steering Committee designated D+R as the Independent Administrator and Auditor in 2015, and D+R has continued in this role for 2023. This report is the ninth annual report.

The Voluntary Agreement requires that the Steering Committee meet at least once each year. The Steering Committee convened two times in 2023. Additional responsibilities of the Steering Committee include the following:

- Managing the Voluntary Agreement
- Hiring the Independent Administrator
- Reviewing proposals for energy allowances based on new features, which the Steering Committee can approve, reject, or add to the Voluntary Agreement as appropriate
- Evaluating the effectiveness of the Voluntary Agreement in achieving its purposes
- Adopting new or revised efficiency measures, courses of action, and amendments to the Voluntary Agreement as technologies and services change

In 2022, the signatories renewed the Agreement, extending the term through 2025 with a report in 2026. The amended agreement also defines a more rigorous Tier 3 schedule of allowances that went into effect beginning in 2023. This is the first report on Tier 3 levels.

³CommScope's consumer broadband equipment division was purchased by Vantiva in January 2024. A separate CommScope report was provided to D+R for this 2023 report, but CommScope will no longer appear as a separate signatory after this report.

Signatory Commitments

The primary commitment is to procure and sell energy-efficient SNE. Specifically, beginning January 1, 2016, the commercial signatories committed that 90% of new SNE purchased by service providers or sold at retail by vendors each year will meet the energy-efficiency levels established in the Voluntary Agreement. These efficiency levels became more rigorous in 2020 under a Tier 2 schedule of allowances and were further tightened in 2023 under the new Tier 3 schedule of allowances. The signatories also committed to provide subscribers and prospective customers with reasonable access to energy-efficiency information for SNE, furnish the Independent Administrator with annual data and test results, and participate in third-party lab testing and audits to verify the information in their annual data reports.

Independent Administrator and Auditor Role

The Independent Administrator is a third party appointed by the Steering Committee. Under the Voluntary Agreement, the Independent Administrator must aggregate and compile confidential procurement and sales data submitted by the signatories. If the Voluntary Agreement procurement or sales commitments are not met, the Independent Administrator is responsible for working with the signatory to develop a remedial plan under procedures set out in the Voluntary Agreement.

The Independent Administrator is also charged with conducting an audit of one randomly selected service provider's procurement figures or one vendor's sales figures each year. The successful results of the 2023 audit are presented in Appendix C.

New Feature Process for Small Network Equipment

The New Feature Process is intended to encourage innovation and competition by service provider and vendor signatories, and to encourage energy efficiency by design. This process provides a path for signatories to innovate and add new features, including features with no assigned allowances and features in the early stages of design, without being treated as being in violation of Voluntary Agreement energy allowances or commitments. If a service provider signatory deploys, or a vendor signatory sells, SNE that includes a new feature with no allowance, and the presence of the feature causes the device to exceed the prescribed allowances, the signatory may set and report an appropriate initial allowance for the power consumption of that feature when it reports the device under the Voluntary Agreement. When such information is reported, the Steering Committee will propose appropriate allowances and effective dates. For the 2023 reporting period, one new feature allowance was proposed.

Remediation and Alternative Energy-Efficiency Strategies

A signatory that fails to meet its procurement or sales commitment must either seek advance credits for alternative energy-efficiency measures or must undertake a remedial plan that secures energy savings that offset the incremental energy associated with devices purchased or sold in excess of the commitment. All signatories met this commitment in 2023. As indicated in our prior report, the signatory that narrowly missed its commitment in 2022 developed a remedial plan that was approved by a subcommittee that includes PG&E as the Energy Advocate. D+R verified in 2024 that the signatory successfully implemented and completed its remedial plan and offset the excess energy associated with its non-compliant devices.

REPORT ON 2023 PROCUREMENT AND SALES COMMITMENTS

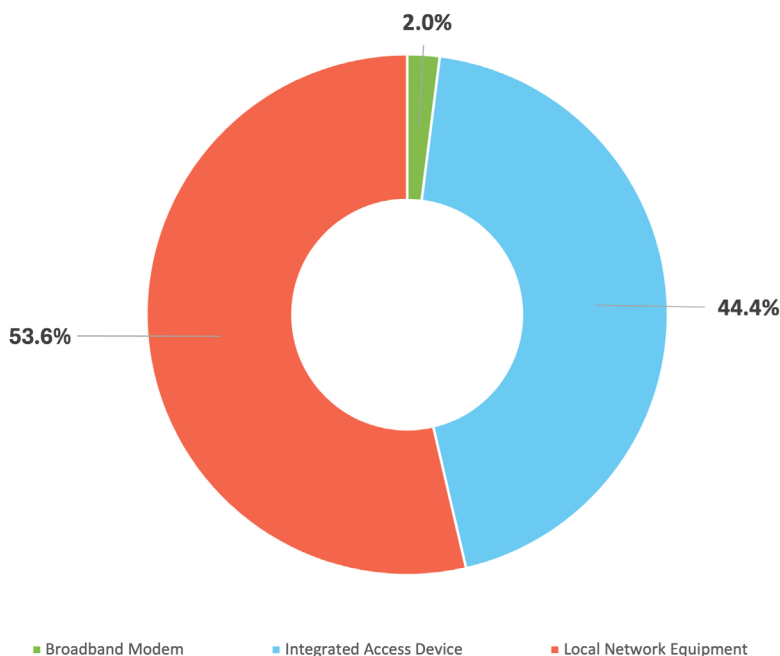
Under the Voluntary Agreement, the commercial signatories committed that 90% of the new SNE purchased or sold at retail each year will meet specified energy-efficiency levels. The Independent Administrator collected data from the service provider and retail vendor signatories to measure satisfaction of these commitments in 2023. Overall, 98.6% of reported units satisfied the Tier 3 energy-efficiency levels of the Voluntary Agreement in 2023. All signatories met the 90% threshold individually, and the majority of signatories had 100% of their new purchases or sales meet the energy-efficiency levels of the Agreement. IADs and LNEs had the greatest percentage of SNE meeting Tier 3 at 98.9% and 98.7% respectively, and 89.9% of broadband modems met Tier 3 levels as shown in Table 1. These results demonstrate that the signatories met their procurement and sales commitments under the Voluntary Agreement in 2023.

Table 1: Total Number of Reported Units and Number of Units Meeting Energy-Efficiency Levels, by Equipment Type

Year	2023		
Category	Reported Units	Number Meeting Tier 3 Levels	Percent Meeting Tier 3 Levels
Broadband Modem	739,833	665,154	89.9%
Integrated Access Device	16,392,479	16,212,109	98.9%
Local Network Equipment	19,817,210	19,556,283	98.7%
Total	36,949,522	36,433,546	98.6%

Continuing the trend from the previous year, LNEs and IADs each represent approximately half of reported products purchased or sold in 2023, followed by Broadband Modems at 2%. Figure 2 shows the category breakdown, by percentage, of the units purchased or sold in 2023.

Figure 2: New Small Network Equipment, by Equipment Type



Energy Efficiency of Small Network Equipment

Details of each model of SNE purchased or sold by the signatories in 2023 are provided in Appendix A. The energy efficiency of each model is assessed based upon its particular suite of functions and capabilities, which vary widely. The overall trend in the average power (weighted based upon the volume of new units) of each of the three categories of SNE defined by the Voluntary Agreement is shown in Table 2.

To meet consumers' increased demands for higher-speed broadband services and increased Wi-Fi capacity in the home, the design and features of SNE have changed substantially since the Voluntary Agreement was adopted. These changes make it difficult to draw useful comparisons in the absolute power used by SNE devices over time, and that challenge is compounded by the fact that the devices are highly varied even within the three reported categories. For these reasons, we not only report changes in total power but also evaluate the efficiency of SNE products relative to their capability.

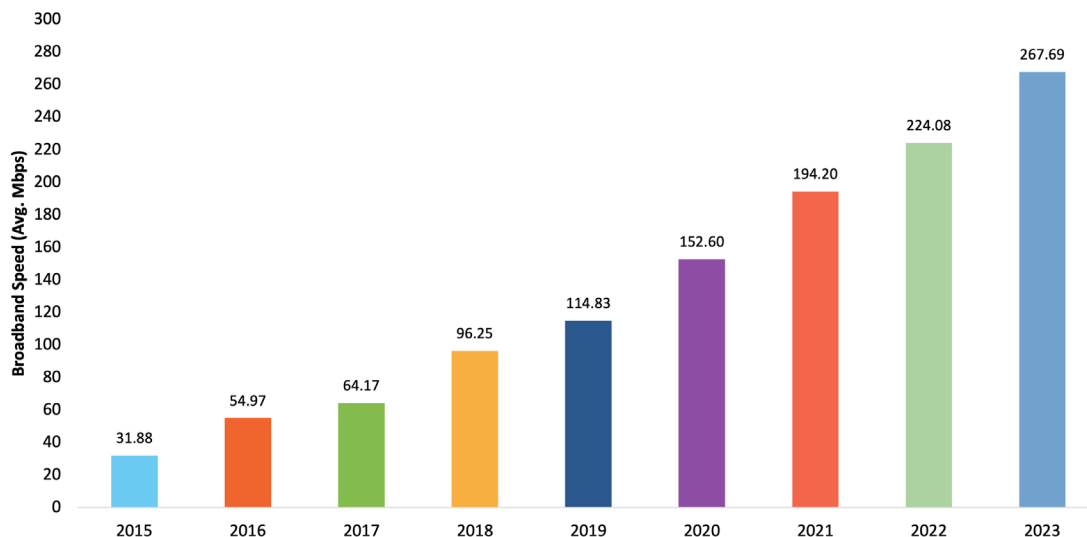
The weighted average power of SNE devices purchased or sold by the signatories increased by 6% from 2022 to 2023, though the weighted average power in 2023 is still 6% lower than in 2015 when the Voluntary Agreement began even though the newer SNE supports substantially more robust features and functionalities. The year-over-year increase is primarily attributable to a 15% rise in the weighted average power of reported LNE devices which represent a slight majority of the reported devices in 2023. Even with this increase, LNE continues to measure the lowest weighted average power of the three categories, at 7.3 watts.

Table 2: Weighted Average Power Consumption for Small Network Equipment Categories 2015-2023

SNE Category	Average Weighted Power (in Watts)								
	2015	2016	2017	2018	2019	2020	2021	2022	2023
Broadband Modem	6.67	7.11	8.12	9.36	9.65	9.43	9.76	9.21	9.41
Integrated Access Device	13.30	13.53	13.65	13.73	14.49	13.87	13.51	14.40	14.68
Local Network Equipment	6.44	5.62	5.28	6.79	7.64	7.21	7.55	6.36	7.31
Total Weighted Average	11.36	11.79	11.26	11.55	12.59	11.49	11.49	10.09	10.62

The increase in nominal power of SNE in 2023 can be attributed to the power requirements of supporting much faster broadband speeds and stronger Wi-Fi. New WAN technologies such as 10G EPON and GPON, new Wi-Fi technologies such as Wi-Fi 6E, and devices with more radios, antennas, and MIMO spatial streams, can require more power. The signatories have made improvements to deliver these new functionalities more efficiently over time. Consumers are bringing an increasing number and variety of connected devices into their homes and streaming an increasing amount of video content to mobile devices. In the home, this streamed content is typically delivered through the consumer's IAD or modem. To support these devices and content, the average broadband connection speed for U.S. residential households has increased more than eightfold in just eight years, as shown in Figure 3.

Figure 3: Annual Growth of Fixed Consumer Broadband Download Speeds

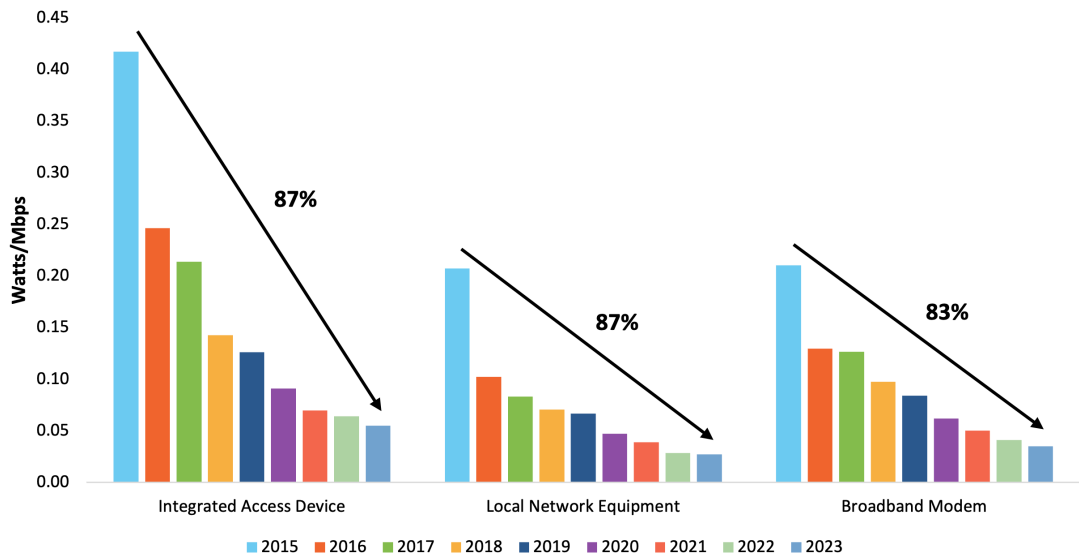


Mean fixed broadband download speeds per year obtained from Ookla.

Moreover, the signatories strive to provide equipment that will be capable of supporting the speeds and services that their customers are predicted to want over the next several years, not just current demand. Service providers wish to give customers the opportunity to upgrade their Internet service without having to wait for a service provider technician to visit and replace their equipment. In addition, it would be environmentally and economically wasteful to procure new SNE today that would be quickly rendered obsolete by changes in consumer demand. As a result, SNE is designed and manufactured to support more demanding speeds and capabilities prior to their widespread adoption by consumers.

These reports have accordingly evaluated the efficiency of SNE products relative to their capability. The weighted average power of each category of new SNE relative to broadband speed delivered has decreased by 89% overall, and 87% for IADs, 87% for LNE, and 83% for broadband modems since 2015, as shown in Figure 4 below.

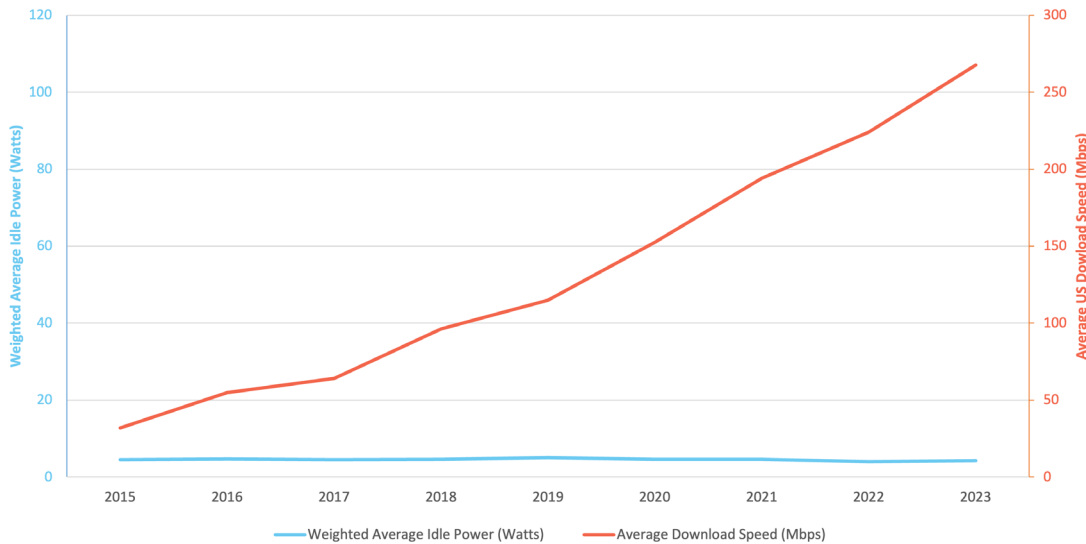
Figure 4: Weighted Average Energy Usage by Equipment Type, Relative to Average Broadband Download Speed



These figures were calculated by dividing the weighted average power of each equipment type, as verified by D+R in this report, by the average fixed wireline consumer broadband mean download speed obtained from Ookla.

Figure 5 below illustrates the contrast between the relative stability of the weighted average power consumption of reported SNE and the rapid increase in average download speeds during the eight years of the Voluntary Agreement. The commercial signatories’ ability to support these higher-speed services without a significant overall increase in power consumption demonstrates that their SNE devices are delivering services more efficiently, and thereby, are accomplishing the core objectives of the Voluntary Agreement.

Figure 5: Weighted Average Power of Small Network Equipment Devices vs. Average Download Speed 2015-2023



To continue to meet consumer demands for higher broadband speeds in the future, the commercial signatories will need to offer devices with greater functionality than those offered today, while still meeting the commitments of the Voluntary Agreement. With Tier 3 levels having become applicable in 2023 and Tier 4 levels already under development, the Voluntary Agreement is expected to continue to drive purchase and retail decisions, increasing the efficiency of equipment in the market and in consumers’ homes.

Lab Verification Testing

Per the Voluntary Agreement, the Independent Administrator is tasked with randomly selecting one model from each commercial signatory for independent lab verification testing. Lab verification testing is conducted in third-party laboratories approved by the Steering Committee or under a supervised signatory testing program with an accredited independent observer approved by the Steering Committee. Test results are compared to the reported value as well as the maximum power consumption under the applicable allowances for that device.

For 2023, every model tested measured within the applicable Tier 3 energy-efficiency levels and within the accepted tolerances of the reported values. These results validate and support the findings in this report.

Consumer Access to Energy-Efficiency Information

All signatories committed to provide subscribers and prospective customers with reasonable access to energy-efficiency information for SNE purchased or sold at retail. This information makes it easy for consumers to learn about energy consumption of recent models.

D+R confirmed that this information is readily available to the public from the links listed in Appendix B. The links are also available at www.energy-efficiency.us.

CONCLUSION

The Voluntary Agreement continues to be successful in improving the energy efficiency of SNE used by American consumers to access home broadband Internet service. 98.6% of reported units satisfied the Tier 3 energy-efficiency levels of the Agreement despite increased consumer demands for robust capabilities that consume power. All signatories met the 90% threshold, and the weighted average power of new SNE relative to broadband speed has decreased by 89% since 2015. As the signatories continue to employ even greater functionality in their devices while still meeting the energy-efficiency levels of the Agreement, the Voluntary Agreement can be expected to continue to promote both product innovation and energy efficiency.

APPENDIX A: SMALL NETWORK EQUIPMENT PURCHASED OR SOLD BY VOLUNTARY AGREEMENT SIGNATORIES IN 2023

Appendix A lists SNE reported by the signatories as purchased or sold in 2023. Please note that the same model could have variances in reported power for several reasons, including differences in reported versus measured power, enabling of different product features, and/or different software deployed in the device by different signatories. Modal power figures in this Appendix are rounded up to the next one-hundredth digit (e.g., 5.126 watts would be rounded up to 5.13 watts).

Vendor reports include only the models that were sold via retail channels. Models sold to service providers are reported by the service providers.

The Voluntary Agreement establishes the following categories of SNE subject to the Agreement:

- **Broadband Modem.** A simple network device that enables high-speed data service with a Wide Area Network (WAN) interface to a service provider wired or optical network, and typically a single Local Area Network (LAN) interface for the customer premise network. The Broadband Modem category does not include devices with integrated router or IEEE 802.11 (Wi-Fi) wireless access point functionality.
- **Integrated Access Device (IAD).** A network device that enables high-speed data service with a WAN interface to a service provider wired or optical network and one or more of the following functions on the LAN interface: multiport routing, IEEE 802.11 (Wi-Fi) wireless access point functionality, and/or VoIP.
- **Local Network Equipment (LNE).** The following local network devices that do not have a direct interface to a Service Provider wired or optical network:
 - **Wireless Access Point:** A device that typically includes one or more Ethernet interfaces, and that provides IEEE 802.11 (Wi-Fi) wireless network connectivity to multiple clients as its primary function.
 - **Router:** A network device that forwards packets from one network interface to another based on network layer information (typically IP destination address). Devices fitting this definition may provide both wired and wireless network connectivity.
 - **Switch:** A network device that filters and forwards frames based on the Ethernet destination MAC address of each frame as its primary function.
 - **Network Extender:** A device that bridges or extends a local area network beyond its physical limitations using one or more transmission media such as twisted pair, coax, Wi-Fi, or powerline.

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Altice	Altice Labs	XSR250GK	IAD 10GB PON	GigE LAN(4), 10 GigE LAN, 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, FXS(2), USB 3	13.70	Yes
Altice	Altice Labs	XSR150DX	IAD 10GB PON	GigE LAN(4), 10 GigE LAN, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, FXS, USB 3	12.83	Yes
Altice	Altice Labs	XSR150DXM	IAD 10GB PON	GigE LAN(4), 10 GigE LAN, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, FXS, USB 3	13.28	Yes
Altice	Altice Labs	GR140DGM	IAD SFP GPON	GigE LAN(4), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, FXS, USB 3	9.00	Yes
Altice	Altice Labs	GR240JH	IAD Fiber WAN	GigE LAN(3), 2.5 GigE LAN, 2.4 GHz Radio LP, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, FXS(2), USB 3	12.10	Yes
Altice	Ubee	UBC1340	IAD D3.1	GigE LAN(4), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 802.11n 256 QAM, FXS(2), USB 3	16.60	Yes
Altice	Ubee	UBC1338	IAD D3.1	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 802.11n 256 QAM, FXS, USB 3	14.90	Yes
Altice	Altice Labs	D222AH	Advanced LNE	GigE LAN, 2.5 GigE LAN, 2.4 GHz Radio LP, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	8.24	Yes
Altice	Altice Labs	D2260Gv2	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 802.11n 256 QAM	5.96	Yes
Altice	Airties	Air4930	Basic LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM	7.75	No
ASUS	Asus	Blue Cave	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, Bluetooth, PCIe Gen 1 & 2 Base(2)	12.90	No
ASUS	Asus	CM-32	IAD D3.0	D3 above 4x4(7), GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2(2), PCIe Gen 1 & 2 Base(2)	13.50	Yes
ASUS	Asus	CMA6000	IAD D3.1	D3 above 4x4(7), GigE LAN(4), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base(2)	12.67	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
ASUS	Asus	CT8	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	8.73	Yes
ASUS	Asus	EBM68	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	9.02	Yes
ASUS	Asus	EBR63	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	5.70	Yes
ASUS	Asus	ET12	Advanced LNE	GigE LAN(2), 2.5 GigE LAN Active, 2.5 GigE LAN, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 6 GHz Radio (160 MHz) HP, 6 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	14.50	Yes
ASUS	Asus	ET8	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 6 GHz Radio (160 MHz) HP, 6 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	9.00	Yes
ASUS	Asus	GS-AX3000	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	6.50	Yes
ASUS	Asus	GS-AX5400	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	6.90	Yes
ASUS	Asus	GT6	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	11.80	Yes
ASUS	Asus	GT-AC2900	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	10.34	No
ASUS	Asus	GT-AC5300	Advanced LNE	GigE LAN(9), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 3(2), PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	14.31	Yes
ASUS	Asus	GT-AX11000	Advanced LNE	GigE LAN(5), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 3(2), PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(2)	13.21	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
ASUS	Asus	GT-AX11000 PRO	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 10 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(2)	15.80	Yes
ASUS	Asus	GT-AX6000	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.5 GigE LAN, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(2)	11.50	Yes
ASUS	Asus	GT-AXE11000	Advanced LNE	GigE LAN(5), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 3(2), PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	13.60	Yes
ASUS	Asus	GT-AXE16000	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 10 GigE LAN Active, 10 GigE LAN, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(4), 6 GHz Radio (160 MHz) HP, 6 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(4), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(2)	20.00	Yes
ASUS	Asus	GT-BE98 PRO	Advanced LNE	GigE LAN, 2.5 GigE LAN Active(2), 2.5 GigE LAN(2), 10 GigE LAN Active, 10 GigE LAN, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 6 GHz Radio (160 MHz) HP(2), 6 GHz MIMO (160 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(4), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(2)	26.10	Yes
ASUS	Asus	LYRA VOICE	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, Speaker, Voice Control	7.40	Yes
ASUS	Asus	RP-AC1900	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	9.04	Yes
ASUS	Asus	RP-AC51	Advanced LNE	Fast E LAN, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP	2.51	Yes
ASUS	Asus	RP-AC55	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, Bluetooth	2.90	Yes
ASUS	Asus	RP-AX56	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, AP 5K-10K DMIPS	3.20	Yes
ASUS	Asus	RP-AX58	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	3.83	Yes
ASUS	Asus	RP-N12	Advanced LNE	Fast E LAN, 2.4 GHz Radio LP	1.60	Yes
ASUS	Asus	RT-AC1200	Advanced LNE	Fast E LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, USB 2	3.50	Yes
ASUS	Asus	RT-AC1200 V2	Advanced LNE	Fast E LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP	2.32	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
ASUS	Asus	RT-AC1200GE	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) HP, USB 2	4.86	Yes
ASUS	Asus	RT-AC1900P	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	11.90	No
ASUS	Asus	RT-AC3100	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	14.10	No
ASUS	Asus	RT-AC3200	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS	12.94	No
ASUS	Asus	RT-AC5300	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS	16.53	No
ASUS	Asus	RT-AC65	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 3	4.96	Yes
ASUS	Asus	RT-AC66U B1	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	9.49	Yes
ASUS	Asus	RT-AC67P	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 3	4.96	Yes
ASUS	Asus	RT-AC68U	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	10.19	No
ASUS	Asus	RT-AC750	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	8.74	Yes
ASUS	Asus	RT-AC86U	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	10.72	No
ASUS	Asus	RT-ACRH12	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP(2), 5 GHz Radio (20, 40, 80 MHz) HP, USB 2	4.86	Yes
ASUS	Asus	RT-ACRH18	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3	4.96	Yes
ASUS	Asus	RT-AX1800S	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, AP 5K-10K DMIPS	6.11	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
ASUS	Asus	RT-AX3000	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	6.10	Yes
ASUS	Asus	RT-AX3000 V2	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, AP 5K-10K DMIPS	7.00	Yes
ASUS	Asus	RT-AX5400	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	6.13	Yes
ASUS	Asus	RT-AX55	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	5.00	Yes
ASUS	Asus	RT-AX55 V2	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	6.08	Yes
ASUS	Asus	RT-AX56U	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, USB 2, USB 3, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	5.40	Yes
ASUS	Asus	RT-AX57	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	5.60	Yes
ASUS	Asus	RT-AX58U	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	6.10	Yes
ASUS	Asus	RT-AX58U V2	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	7.00	Yes
ASUS	Asus	RT-AX68U	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(2)	8.50	Yes
ASUS	Asus	RT-AX82U	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	6.50	Yes
ASUS	Asus	RT-AX82U V2	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	6.73	Yes
ASUS	Asus	RT-AX86S	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	8.20	Yes
ASUS	Asus	RT-AX86U	Advanced LNE	GigE LAN(5), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3(2), PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(2)	8.75	Yes
ASUS	Asus	RT-AX86U PRO	Advanced LNE	GigE LAN(5), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	8.90	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
ASUS	Asus	RT-AX88U	Advanced LNE	GigE LAN(9), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3(2), PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(2)	11.40	Yes
ASUS	Asus	RT-AX88U PRO	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.5 GigE LAN, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	11.10	Yes
ASUS	Asus	RT-AX89X	Advanced LNE	SFP Backup WAN Present, GigE LAN(9), 10 GigE LAN Active, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(6), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 802.11n 256 QAM, USB 3(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(2)	12.00	Yes
ASUS	Asus	RT-AX92U	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS	10.80	Yes
ASUS	Asus	RT-AXE7800	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 6 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	8.70	Yes
ASUS	Asus	RT-BE96U	Advanced LNE	GigE LAN(4), 10 GigE LAN Active, 10 GigE LAN, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 6 GHz Radio (160 MHz) HP, 6 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(2)	17.50	Yes
ASUS	Asus	RT-N12 D1	Advanced LNE	Fast E LAN(5), 2.4 GHz Radio LP	2.49	Yes
ASUS	Asus	RT-N300 B1	Advanced LNE	Fast E LAN(5), 2.4 GHz Radio LP	1.85	Yes
ASUS	Asus	TUF-AX4200	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	5.87	Yes
ASUS	Asus	TUF-AX5400	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	6.99	Yes
ASUS	Asus	TUF-AX6000	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.5 GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	6.78	Yes
ASUS	Asus	XC5	IAD MoCA	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, MoCA, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	6.54	Yes
ASUS	Asus	XD4	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	5.40	Yes
ASUS	Asus	XD5	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, AP 5K-10K DMIPS	4.60	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
ASUS	Asus	XD6	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	6.50	Yes
ASUS	Asus	XP4	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	7.98	Yes
ASUS	Asus	XT12	Advanced LNE	GigE LAN(2), 2.5 GigE LAN Active, 2.5 GigE LAN, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(4), 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	14.20	Yes
ASUS	Asus	XT8	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	9.08	Yes
ASUS	Asus	XT8 V2	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	9.67	Yes
ASUS	Asus	XT9	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	8.70	Yes
AT&T	ARRIS	BGW210-700	IAD VDSL2	GigE Backup WAN, VDSL2 Simul WAN, GigE LAN(4), 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 802.11n 256 QAM, FXS(2), USB 2, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	14.20	Yes
AT&T	Nokia	BGW320-505	IAD SFP GPON	GigE Backup WAN, GigE LAN(4), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP(2), 5 GHz Radio (20, 40, 80 MHz) LP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(4), 802.11n 256 QAM, FXS(2), USB 2, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS	12.60	Yes
AT&T	Nokia	BGW320-505	IAD GigE	SFP Backup WAN Not Present, GigE LAN(4), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP(2), 5 GHz Radio (20, 40, 80 MHz) LP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(4), 802.11n 256 QAM, FXS(2), USB 2, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS	10.70	Yes
AT&T	Humax	BGW320-500	IAD SFP GPON	GigE Backup WAN, GigE LAN(4), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP(2), 5 GHz Radio (20, 40, 80 MHz) LP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(4), 802.11n 256 QAM, FXS(2), USB 2, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS	13.60	Yes
AT&T	Humax	BGW320-500	IAD GigE	SFP Backup WAN Not Present, GigE LAN(4), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP(2), 5 GHz Radio (20, 40, 80 MHz) LP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(4), 802.11n 256 QAM, FXS(2), USB 2, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS	12.00	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
AT&T	Airties	4971	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, PCIe Gen 1 & 2 Base(2)	7.20	Yes
AT&T	Airties	4981	Advanced LNE	GigE LAN, 2.5 GigE LAN, 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, PCIe Gen 1 & 2 Base(2)	6.40	Yes
Charter	Humax	SONUV1H	IAD 10G EPON	GigE LAN(2), FXS(2)	6.00	Yes
Charter	Sagemcom	SONUV1S	IAD 10G EPON	GigE LAN(2), FXS(2)	6.00	Yes
Charter	Hitron	EN2251	IAD D3.1	2.5 GigE LAN Active, FXS(2)	10.50	Yes
Charter	Sercomm	ES2251	IAD D3.1	2.5 GigE LAN Active, FXS(2)	10.00	Yes
Charter	Vantiva (Technicolor)	ET2251	IAD D3.1	2.5 GigE LAN Active, FXS(2)	10.00	Yes
Charter	Ubee	EU2251	IAD D3.1	2.5 GigE LAN Active, FXS(2)	9.00	Yes
Charter	Askey	SAX1V1K	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS	10.00	Yes
Charter	Sagemcom	SAX1V1S	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS	9.50	Yes
Charter	Sercomm	SAX1V1R	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS	10.00	Yes
Charter	Sagemcom	SAX2V1S	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane, PCIe Gen 3 Base, PCIe Gen 3 Addl Lane, AP 5K-10K DMIPS	12.50	Yes
Charter	Sercomm	SAX2V1R	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane, PCIe Gen 3 Base, PCIe Gen 3 Addl Lane, AP 5K-10K DMIPS	13.00	Yes
Charter	Sagemcom	MAPV1S	Basic LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base(3)	6.75	Yes
Comcast	Commscope	TG4482A	IAD D3.1	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, FXS(2), Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base(2), PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS	23.60	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Comcast	Vantiva (Technicolor)	CGM4331COM	IAD D3.1	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, FXS(2), Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base(2), PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS	17.00	Yes
Comcast	Vantiva (Technicolor)	CGM4981COM	IAD D3.1	GigE LAN(3), 2.5 GigE LAN Active, 6 GHz Radio (20, 40, 80 MHz) LP, 6 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, FXS(2), USB 2, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	18.00	Yes
Comcast	Sagemcom	B3A	Basic LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base(3)	6.50	Yes
Comcast	WNC	WNXL11BWL	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP(2), 5 GHz MIMO (160 MHz) above 2x2 LP(2), 802.11n 256 QAM, BATTERY, Bluetooth, PCIe Gen 1 & 2 Base(3)	8.70	Yes
CommScope	ARRIS	G34	IAD D3.1	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base(2)	14.10	Yes
CommScope	ARRIS	G36	IAD D3.1	GigE LAN(4), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base(2)	16.00	Yes
CommScope	ARRIS	G54	IAD D3.1	GigE LAN(4), 10 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 6 GHz Radio (160 MHz) HP, 6 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 3 Base(2), PCIe Gen 3 Addl Lane(2), AP 5K-10K DMIPS	25.00	Yes
CommScope	ARRIS	S33	Basic D3.1	GigE LAN, 2.5 GigE LAN Active	10.20	Yes
CommScope	ARRIS	SB6183	Basic D3.0	D3 above 4x4(3), GigE LAN	8.45	No
CommScope	ARRIS	SB6190	Basic D3.0	D3 above 4x4(7), GigE LAN	8.60	Yes
CommScope	ARRIS	SB8200	Basic D3.1	GigE LAN(2)	10.80	Yes
CommScope	ARRIS	SBG10	IAD D3.0	D3 above 4x4(3), GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, PCIe Gen 1 & 2 Base(2)	10.60	Yes
CommScope	ARRIS	SBG6950AC2	IAD D3.0	D3 above 4x4(3), GigE LAN(4), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, USB 2	11.10	Yes
CommScope	ARRIS	SBG7400AC2	IAD D3.0	D3 above 4x4(5), GigE LAN(4), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), USB 2	13.20	Yes
CommScope	ARRIS	SBG7600AC2	IAD D3.0	D3 above 4x4(7), GigE LAN(4), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), USB 2, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	14.20	Yes
CommScope	ARRIS	SBG8300	IAD D3.1	GigE LAN(4), 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, AP 5K-10K DMIPS	18.20	Yes
CommScope	ARRIS	SBV2402	IAD D3.0	D3 above 4x4(5), GigE LAN, FXS(2)	7.80	Yes
CommScope	ARRIS	SBV3202	IAD D3.0	D3 above 4x4(7), GigE LAN, FXS(2)	9.20	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
CommScope	ARRIS	SVG2482AC	IAD D3.0	D3 above 4x4(5), GigE LAN(4), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, MoCA, FXS(2), USB 2(2)	14.30	Yes
CommScope	ARRIS	T25	IAD D3.1	GigE LAN(2), FXS(2)	9.40	Yes
CommScope	ARRIS	W11	Basic LNE	2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP	5.80	Yes
CommScope	ARRIS	W21	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), PCIe Gen 1 & 2 Base	7.50	Yes
CommScope	ARRIS	W30	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), PCIe Gen 1 & 2 Base(3)	10.50	Yes
CommScope	ARRIS	W31	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS	11.00	Yes
CommScope	ARRIS	W6U	Advanced LNE	2.5 GigE LAN Active, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), PCIe Gen 3 Base, AP 5K-10K DMIPS	7.40	Yes
CommScope	ARRIS	W6B	Advanced LNE	2.5 GigE LAN Active, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), PCIe Gen 3 Base, AP 5K-10K DMIPS	7.40	Yes
CommScope	ARRIS	W61	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), PCIe Gen 3 Base, AP 5K-10K DMIPS	8.00	Yes
CommScope	ARRIS	WC4T	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP(2), 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	8.50	Yes
Cox	CommScope	TG4482A	IAD D3.1	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, FXS(2), Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base(2), PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS	23.00	Yes
Cox	Vantiva (Technicolor)	CGM4331Cox	IAD D3.1	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, FXS(2), Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base(2), PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS	17.50	Yes
Cox	Vantiva (Technicolor)	CGM4981Cox	IAD D3.1	GigE LAN(3), 2.5 GigE LAN Active, 6 GHz Radio (20, 40, 80 MHz) LP, 6 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, FXS(2), USB 2, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	19.00	Yes
Cox	Vantiva (Technicolor)	CVA4004COX1	Basic D3.1	2.5 GigE LAN Active	11.00	Yes
Cox	CommScope	CM8200A/P2-CX	Basic D3.1	GigE LAN(2)	10.00	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Cox	CommScope	TM9202AP2/CX-204	IAD D3.1	2.5 GigE LAN Active, FXS(2)	12.00	Yes
Cox	Sagemcom	B3A	Basic LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base(3)	6.50	Yes
eero	eero	eero Beacon	Advanced LNE	2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, AP 5K-10K DMIPS	3.40	Yes
eero	eero	eero	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, AP 5K-10K DMIPS	3.60	Yes
eero	eero	eero Pro	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP(2), 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	5.20	Yes
eero	eero	eero 6	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, AP 5K-10K DMIPS	4.40	Yes
eero	eero	eero Pro 6	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, AP 5K-10K DMIPS	7.70	Yes
eero	eero	eero 6+	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	4.50	Yes
eero	eero	eero Pro 6E	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 6 GHz Radio (160 MHz) LP, 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	7.50	Yes
eero	eero	eero PoE 6	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	5.40	Yes
eero	eero	eero Max 7	Advanced LNE	2.5 GigE LAN Active, 2.5 GigE LAN, 10 GigE LAN Active(2), 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 5 GHz MIMO (160 MHz) above 2x2 LP(2), 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, PCIe Gen 3 Base(2), PCIe Gen 3 Add'l Lane(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(6)	21.90	Yes
eero	eero	eero PoE Gateway	Advanced LNE	2.5 GigE LAN Active(4), 2.5 GigE LAN(4), 10 GigE LAN Active(2), USB 2(2), Bluetooth, 802.15.4, PCIe Gen 3 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(6)	23.80	Yes
Frontier	CommScope	NVG448 B	IAD VDSL2	GigE Backup WAN, VDSL2 Simul WAN, GigE LAN(4), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, FXS(2), USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	11.84	Yes
Frontier	CommScope	NVG443 B	IAD VDSL2	GigE Backup WAN, VDSL2 Simul WAN, GigE LAN(4), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	11.71	Yes
Frontier	Frontier	FCA252	Basic LNE	2.5 GigE LAN Active, MoCA	3.49	Yes
Frontier	eero	eero Pro 6	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, AP 5K-10K DMIPS	8.20	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Frontier	eero	eero Pro 6E	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 6 GHz Radio (160 MHz) LP, 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	8.40	Yes
Frontier	eero	eero 6	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, AP 5K-10K DMIPS	4.72	Yes
Frontier	eero	eero 6+	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	4.98	Yes
Frontier	Frontier	F@ST5290V1	IAD MoCA	GigE Backup WAN, GigE LAN(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP, 6 GHz Radio (160 MHz) HP, 6 GHz MIMO (160 MHz) above 2x2 HP, 802.11n 256 QAM, MoCA, FXS(2), USB 3, PCIe Gen 1 & 2 Base(3), PCIe Gen 1 & 2 Add'l Lane, AP Add'l Over 10K DMIPS(2)	15.76	Yes
Frontier	Frontier	FAST399 V1.0	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP, 6 GHz Radio (160 MHz) HP, 6 GHz MIMO (160 MHz) above 2x2 HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base(3), PCIe Gen 1 & 2 Add'l Lane, AP Add'l Over 10K DMIPS(2)	11.21	Yes
Frontier	eero	eero PoE 6	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	6.08	Yes
Frontier	eero	eero Max 7	Advanced LNE	2.5 GigE LAN Active, 2.5 GigE LAN, 10 GigE LAN Active(2), 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 5 GHz MIMO (160 MHz) above 2x2 LP(2), 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 802.11n 256 QAM, USB 2, Bluetooth, 802.15.4, PCIe Gen 3 Base(2), PCIe Gen 3 Add'l Lane(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(6)	22.71	Yes
Google	Google	GJ2CQ	Advanced LNE	GigE LAN(2), 5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM, Bluetooth, AP 5K-10K DMIPS	4.00	Yes
Google	Google	H2D	Advanced LNE	GigE LAN(2), 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, 2.4 GHz Radio HP, 802.11n 256 QAM, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	5.20	Yes
Google	Google	H2E	Advanced LNE	5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Add'l Lane, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS, Speaker, Voice Control	4.30	Yes
Google	Google	A0078	Basic LNE	2.4 GHz Radio LP, Bluetooth, 802.15.4	1.00	Yes
Google	Google	G6ZUC	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 6 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, Bluetooth, 802.15.4, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	8.00	Yes
Linksys	Linksys	E5350	Advanced LNE	Fast E LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP	3.30	Yes
Linksys	Linksys	E5400	Advanced LNE	Fast E LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP	3.30	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Linksys	Linksys	E7350	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, AP 5K-10K DMIPS	5.50	Yes
Linksys	Linksys	EA7200	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 3, AP 5K-10K DMIPS	6.00	Yes
Linksys	Linksys	EA7450	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 3	6.80	Yes
Linksys	Linksys	LGS105V2	Basic LNE	GigE LAN(5)	1.70	Yes
Linksys	Linksys	LGS108V2	Basic LNE	GigE LAN(8)	1.00	Yes
Linksys	Linksys	LGS108PV2	Basic LNE	GigE LAN(8)	2.00	Yes
Linksys	Linksys	MR5500	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, Bluetooth, AP 5K-10K DMIPS	7.30	Yes
Linksys	Linksys	MR6350	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, USB 3, AP 5K-10K DMIPS	6.00	Yes
Linksys	Linksys	MR7350	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, AP 5K-10K DMIPS	7.70	Yes
Linksys	Linksys	MR7500	Advanced LNE	GigE LAN(4), 5 GigE LAN, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, Bluetooth, AP 5K-10K DMIPS	12.00	Yes
Linksys	Linksys	MX4200	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, Bluetooth, AP 5K-10K DMIPS	10.80	Yes
Linksys	Linksys	RE7350	Advanced LNE	GigE LAN, 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 802.11n 256 QAM	4.80	Yes
Linksys	Linksys	WHW03	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 802.11n 256 QAM, Bluetooth, 802.15.4	5.70	Yes
Linksys	Linksys	MR2000	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	9.60	Yes
Linksys	Linksys	MR5500	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, Bluetooth, AP 5K-10K DMIPS	7.30	Yes
Linksys	Linksys	MX2000	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	7.70	Yes
Linksys	Linksys	MX5500	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	9.80	Yes
Linksys	Linksys	MX8500	Advanced LNE	GigE LAN(4), 5 GigE LAN, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	13.00	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Linksys	Linksys	MX6200	Advanced LNE	GigE LAN(2), 6 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	10.50	Yes
Linksys	Linksys	MBE7000	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 6 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	11.70	Yes
Netgear	NETGEAR	C6230-100NAS	IAD D3.0	D3 above 4x4(3), GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, USB 2, PCIe Gen 1 & 2 Base(2)	12.29	No
Netgear	NETGEAR	C6250-1AZNAS	IAD D3.0	D3 above 4x4(3), GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, USB 2, PCIe Gen 1 & 2 Base(2)	14.60	No
Netgear	NETGEAR	C7000-100NAS	IAD D3.0	D3 above 4x4(5), GigE LAN(4), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 2, PCIe Gen 1 & 2 Base(2)	18.13	No
Netgear	NETGEAR	C7100V-100NAS	IAD D3.0	D3 above 4x4(5), GigE LAN(4), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, FXS(2), USB 2(2), PCIe Gen 1 & 2 Base(2)	16.88	No
Netgear	NETGEAR	CAX305-100NAS	IAD D3.1	GigE LAN(4), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	12.72	Yes
Netgear	NETGEAR	CAX80-100NAR	IAD D3.1	GigE LAN(4), 2.5 GigE LAN, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base(2)	10.56	Yes
Netgear	NETGEAR	CBR750-100NAS	IAD D3.1	GigE LAN(4), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM	16.44	Yes
Netgear	NETGEAR	CM500-100NAS	Basic D3.0	D3 above 4x4(3), GigE LAN	8.22	No
Netgear	NETGEAR	CM700-100NAS	Basic D3.0	D3 above 4x4(7), GigE LAN	8.67	Yes
Netgear	NETGEAR	CM1000-100NAS	Basic D3.1	GigE LAN, AP 5K-10K DMIPS	7.24	Yes
Netgear	NETGEAR	CM1100-100NAS	Basic D3.1	GigE LAN	7.31	Yes
Netgear	NETGEAR	CM1200-100NAS	Basic D3.1	GigE LAN(4)	7.32	Yes
Netgear	NETGEAR	CM2000-100NAS	Basic D3.1	2.5 GigE LAN Active	7.80	Yes
Netgear	NETGEAR	CM2050V-100NAS	Basic D3.1	2.5 GigE LAN Active, FXS(2)	7.80	Yes
Netgear	NETGEAR	EAX11-100NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	4.90	Yes
Netgear	NETGEAR	EAX12-100NAR	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	4.90	Yes
Netgear	NETGEAR	EAX14-100NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	4.90	Yes
Netgear	NETGEAR	EAX15-100NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	4.90	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Netgear	NETGEAR	EAX18-100NAS	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	5.20	Yes
Netgear	NETGEAR	EAX20-100NAS	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	5.20	Yes
Netgear	NETGEAR	EAX80-100NAR	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3	7.49	Yes
Netgear	NETGEAR	EAX80-100NAS	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3	7.49	Yes
Netgear	NETGEAR	EX2800-1AZNAS	Advanced LNE	5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM	2.38	Yes
Netgear	NETGEAR	EX3110-100NAS	Advanced LNE	5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM	2.38	Yes
Netgear	NETGEAR	EX3700-100NAS	Advanced LNE	GigE LAN, 5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP	2.85	Yes
Netgear	NETGEAR	EX5000-1AZNAS	Advanced LNE	5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM	2.38	Yes
Netgear	NETGEAR	EX6110-100NAS	Advanced LNE	5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM	2.38	Yes
Netgear	NETGEAR	EX6120-100NAS	Advanced LNE	GigE LAN, 5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP	2.85	Yes
Netgear	NETGEAR	EX6150-100NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP	4.20	Yes
Netgear	NETGEAR	EX6250-100NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM	4.60	Yes
Netgear	NETGEAR	EX6400-100NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM	4.60	Yes
Netgear	NETGEAR	EX7300-100NAR	Advanced LNE	GigE LAN, 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2)	4.60	Yes
Netgear	NETGEAR	EX7700-100NAS	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz Radio (20, 40, 80 MHz) HP	4.69	Yes
Netgear	NETGEAR	EX8000-100NAR	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM	7.23	Yes
Netgear	NETGEAR	GS105E-200NAS	Basic LNE	GigE LAN(5)	0.74	Yes
Netgear	NETGEAR	GS105NA	Basic LNE	GigE LAN(5)	0.92	Yes
Netgear	NETGEAR	GS108-400NAS	Basic LNE	GigE LAN(8)	2.10	Yes
Netgear	NETGEAR	GS108E-300NAS	Basic LNE	GigE LAN(8)	2.20	Yes
Netgear	NETGEAR	GS108LP-100NAS	Basic LNE	GigE LAN(8)	3.40	No
Netgear	NETGEAR	GS108PE-300NAS	Basic LNE	GigE LAN(8)	2.47	Yes
Netgear	NETGEAR	GS108PP-100NAS	Basic LNE	GigE LAN(8)	2.50	Yes
Netgear	NETGEAR	GS108T-200NAS	Advanced LNE	GigE LAN(8)	5.30	No
Netgear	NETGEAR	GS108T-300NAS	Advanced LNE	GigE LAN(8)	4.40	Yes
Netgear	NETGEAR	GS305-300PAS	Basic LNE	GigE LAN(5)	0.61	Yes
Netgear	NETGEAR	GS305E-100NAS	Basic LNE	GigE LAN(5)	1.16	Yes
Netgear	NETGEAR	GS305EP-100NAS	Basic LNE	GigE LAN(5)	2.78	No

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Netgear	NETGEAR	GS308EPP-100NAS	Basic LNE	GigE LAN(5)	3.50	No
Netgear	NETGEAR	GS305P-200NAS	Basic LNE	GigE LAN(5)	2.00	Yes
Netgear	NETGEAR	GS305P-300NAS	Basic LNE	GigE LAN(5)	1.60	Yes
Netgear	NETGEAR	GS305PP-100NAS	Basic LNE	GigE LAN(5)	3.24	No
Netgear	NETGEAR	GS305PP-300NAS	Basic LNE	GigE LAN(5)	1.72	Yes
Netgear	NETGEAR	GS308-300PAS	Basic LNE	GigE LAN(8)	0.60	Yes
Netgear	NETGEAR	GS308E-100NAS	Basic LNE	GigE LAN(8)	2.00	Yes
Netgear	NETGEAR	GS308EP-100NAS	Basic LNE	GigE LAN(8)	4.56	No
Netgear	NETGEAR	GS308EPP-100NAS	Basic LNE	GigE LAN(5)	3.50	No
Netgear	NETGEAR	GS308PP-100NAS	Basic LNE	GigE LAN(8)	2.50	Yes
Netgear	NETGEAR	GS605NA	Basic LNE	GigE LAN(5)	1.14	Yes
Netgear	NETGEAR	LAX20-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, USB 2	5.42	Yes
Netgear	NETGEAR	LM1200-100NAS	Basic LNE	GigE LAN(2)	1.70	Yes
Netgear	NETGEAR	LM1300-100NAS	Basic LNE	GigE LAN(2)	1.70	Yes
Netgear	NETGEAR	MK63-100NAS	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	3.23	Yes
Netgear	NETGEAR	MK72-100NAS	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	5.30	Yes
Netgear	NETGEAR	MK83-100NAS	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM	6.70	Yes
Netgear	NETGEAR	MK935-100NAS	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (160 MHz) HP, 6 GHz Radio (160 MHz) HP, 802.11n 256 QAM	8.37	Yes
Netgear	NETGEAR	MR1100-100NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, USB 3, BATTERY	2.30	Yes
Netgear	NETGEAR	MR6110-1A1NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, USB 3, BATTERY	3.40	Yes
Netgear	NETGEAR	MR6150-100NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, USB 3, BATTERY	6.90	Yes
Netgear	NETGEAR	MR6400-1DNNAS	Advanced LNE	GigE LAN, 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, USB 3, BATTERY	2.06	Yes
Netgear	NETGEAR	MR6500-1A1NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, USB 3, BATTERY	2.28	Yes
Netgear	NETGEAR	MR6520G-111PAS	Advanced LNE	2.5 GigE LAN Active, 5 GHz Radio (160 MHz) LP, 6 GHz Radio (160 MHz) LP, 802.11n 256 QAM, USB 3, BATTERY	2.88	Yes
Netgear	NETGEAR	MR6550-100PAS	Advanced LNE	2.5 GigE LAN Active, 5 GHz Radio (160 MHz) LP, 6 GHz Radio (160 MHz) LP, 802.11n 256 QAM, USB 3, BATTERY	2.88	Yes
Netgear	NETGEAR	MS60-100NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	2.91	Yes
Netgear	NETGEAR	MS70-100NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	4.00	Yes
Netgear	NETGEAR	MS80-100NAS	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM	6.20	Yes
Netgear	NETGEAR	MS90-100NAS	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (160 MHz) HP, 6 GHz Radio (160 MHz) HP, 802.11n 256 QAM	6.44	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Netgear	NETGEAR	M5105-100NAS	Basic LNE	2.5 GigE LAN Active(3), 2.5 GigE LAN(2)	5.80	Yes
Netgear	NETGEAR	M5108EUP-100NAS	Basic LNE	2.5 GigE LAN Active(4), 2.5 GigE LAN(4)	8.23	Yes
Netgear	NETGEAR	M5108UP-100NAS	Basic LNE	2.5 GigE LAN Active(4), 2.5 GigE LAN(4)	8.23	Yes
Netgear	NETGEAR	M5305-100NAS	Basic LNE	2.5 GigE LAN Active(3), 2.5 GigE LAN(2)	5.90	Yes
Netgear	NETGEAR	PL1000-100PAS	Basic LNE	GigE LAN	2.20	No
Netgear	NETGEAR	PL1200-100PAS	Basic LNE	GigE LAN	6.80	No
Netgear	NETGEAR	PLP1200-100PAS	Basic LNE	GigE LAN	2.96	No
Netgear	NETGEAR	PLP2000-100PAS	Basic LNE	GigE LAN(2)	4.62	No
Netgear	NETGEAR	PLW1000-100NAS	Advanced LNE	GigE LAN, 5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP	4.73	Yes
Netgear	NETGEAR	PR60X-100NAS	Basic LNE	2.5 GigE LAN Active(2), 2.5 GigE LAN(2), 10 GigE LAN Active	7.95	Yes
Netgear	NETGEAR	PR460X-111NAS	Basic LNE	2.5 GigE LAN Active(2), 2.5 GigE LAN(2), 10 GigE LAN Active	7.95	Yes
Netgear	NETGEAR	R6020-100NAS	Advanced LNE	GigE LAN(5), 5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP	2.81	Yes
Netgear	NETGEAR	R6080-100NAS	Advanced LNE	GigE LAN(5), 5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP	2.81	Yes
Netgear	NETGEAR	R6230-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) HP, USB 2	4.86	Yes
Netgear	NETGEAR	R6350-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), USB 2	5.30	Yes
Netgear	NETGEAR	R6400-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, USB 2, USB 3	9.40	No
Netgear	NETGEAR	R6700-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, USB 3	9.40	No
Netgear	NETGEAR	R6700AXS-1AZNAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	4.88	Yes
Netgear	NETGEAR	R6850-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), USB 2	5.30	Yes
Netgear	NETGEAR	R6900-200NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 3	6.34	Yes
Netgear	NETGEAR	R7000-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 2, USB 3	9.30	No
Netgear	NETGEAR	R7000P-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2)	9.30	No
Netgear	NETGEAR	R7450-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3	6.34	Yes
Netgear	NETGEAR	R8000P-100NAR	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3	12.81	No

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Netgear	NETGEAR	RAX5-100PAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	5.25	Yes
Netgear	NETGEAR	RAX10-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	4.88	Yes
Netgear	NETGEAR	RAX20-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, USB 3	5.18	Yes
Netgear	NETGEAR	RAX29-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 3	4.82	Yes
Netgear	NETGEAR	RAX30-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 3	4.82	Yes
Netgear	NETGEAR	RAX35-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	4.90	Yes
Netgear	NETGEAR	RAX36S-100PAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	4.88	Yes
Netgear	NETGEAR	RAX38-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	4.90	Yes
Netgear	NETGEAR	RAX40-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	4.90	Yes
Netgear	NETGEAR	RAX41-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	5.10	Yes
Netgear	NETGEAR	RAX42-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	5.20	Yes
Netgear	NETGEAR	RAX43-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.20	Yes
Netgear	NETGEAR	RAX45-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	5.50	Yes
Netgear	NETGEAR	RAX49S-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base	7.40	Yes
Netgear	NETGEAR	RAX50-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	5.50	Yes
Netgear	NETGEAR	RAX54S-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	5.40	Yes
Netgear	NETGEAR	RAX70-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	6.50	Yes
Netgear	NETGEAR	RAX120-100NAS	Advanced LNE	GigE LAN(5), 5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 3(2)	12.69	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Netgear	NETGEAR	RAXE300-100NAS	Advanced LNE	GigE LAN(5), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 6 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	8.42	Yes
Netgear	NETGEAR	RAXE500-100NAS	Advanced LNE	GigE LAN(5), 2.5 GigE LAN Active, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3(2), PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(2)	16.59	Yes
Netgear	NETGEAR	RBE970-100NAS	Advanced LNE	2.5 GigE LAN Active, 2.5 GigE LAN, 10 GigE LAN Active(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(4), 6 GHz Radio (160 MHz) HP, 6 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM	18.90	Yes
Netgear	NETGEAR	RBE972S-100NAS	Advanced LNE	2.5 GigE LAN Active(2), 2.5 GigE LAN(2), 10 GigE LAN Active(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(4), 6 GHz Radio (160 MHz) HP, 6 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM	23.18	Yes
Netgear	NETGEAR	RBK13-100NAS	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	5.71	Yes
Netgear	NETGEAR	RBK23-100NAR	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz Radio (20, 40, 80 MHz) HP	4.71	Yes
Netgear	NETGEAR	RBK43-200NAR	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 802.11n 256 QAM	6.66	Yes
Netgear	NETGEAR	RBK50-100NAS	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base	4.68	Yes
Netgear	NETGEAR	RBK752-100NAS	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM	8.10	Yes
Netgear	NETGEAR	RBK762S-100NAS	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base(2)	7.86	Yes
Netgear	NETGEAR	RBK843S-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM	8.29	Yes
Netgear	NETGEAR	RBK852-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM	11.20	Yes
Netgear	NETGEAR	RBK862S-100NAS	Advanced LNE	GigE LAN(4), 10 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM	12.03	Yes
Netgear	NETGEAR	RBKE962-100NAS	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 10 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 6 GHz Radio (160 MHz) HP, 6 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base	12.16	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Netgear	NETGEAR	RBS10-100NAS	Advanced LNE	2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	4.32	Yes
Netgear	NETGEAR	RBS50-100NAS	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, PCIe Gen 1 & 2 Base	7.33	Yes
Netgear	NETGEAR	RBS750-100NAS	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM	8.50	Yes
Netgear	NETGEAR	RBS760-100NAS	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base(2)	7.20	Yes
Netgear	NETGEAR	RBS850-100NAS	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM	10.10	Yes
Netgear	NETGEAR	RBS860-100NAS	Advanced LNE	GigE LAN(4), 10 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM	10.30	Yes
Netgear	NETGEAR	RBSE960-100NAS	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 6 GHz Radio (160 MHz) HP, 6 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base	9.35	Yes
Netgear	NETGEAR	RS700S-100NAS	Advanced LNE	GigE LAN(4), 10 GigE LAN Active(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 6 GHz Radio (160 MHz) HP, 6 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3	15.10	Yes
Netgear	NETGEAR	WAX202B-100NAS	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base(2)	4.93	Yes
Netgear	NETGEAR	WAX204-100NAS	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	4.60	Yes
Netgear	NETGEAR	WAX214PA-100NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, PCIe Gen 3 Base	5.10	Yes
Netgear	NETGEAR	WAX214PA-200NAS	Advanced LNE	GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	4.83	Yes
Netgear	NETGEAR	WAX218-100NAS	Advanced LNE	2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP(2), 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base	8.00	No
Netgear	NETGEAR	WAX220PA-100NAS	Advanced LNE	2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP, 802.11n 256 QAM	4.50	Yes
Netgear	NETGEAR	WAX610PA-100NAS	Advanced LNE	2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	5.40	Yes
Netgear	NETGEAR	WAX615PA-100NAS	Advanced LNE	2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.30	Yes
Netgear	NETGEAR	WAX618-111NAS	Advanced LNE	2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.30	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Netgear	NETGEAR	WAX620PA-100NAS	Advanced LNE	2.5 GigE LAN Active, 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP(2), 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base	8.00	Yes
Netgear	NETGEAR	WAX625PA-100NAS	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base(2)	6.90	Yes
Netgear	NETGEAR	WAX628-111NAS	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base(2)	6.90	Yes
Netgear	NETGEAR	WAX630-100NAS	Advanced LNE	2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM, PCIe Gen 1 & 2 Base	9.50	Yes
Netgear	NETGEAR	WAX630EP-100NAS	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 6 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	10.88	Yes
Netgear	NETGEAR	WAX630PA-100NAS	Advanced LNE	2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM, PCIe Gen 1 & 2 Base	9.50	Yes
Netgear	NETGEAR	WAX638E-111NAS	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 6 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	10.88	Yes
Netgear	NETGEAR	XR500-100NAR	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base(2)	9.25	Yes
Netgear	NETGEAR	XR1000-100NAS	Advanced LNE	GigE LAN(5), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	5.50	Yes
Netgear	NETGEAR	XS505M-100NAS	Basic LNE	10 GigE LAN Active(3), 10 GigE LAN(2)	8.54	Yes
Netgear	NETGEAR	XS508M-100NAS	Basic LNE	10 GigE LAN Active(4), 10 GigE LAN(4)	17.33	Yes
Netgear	NETGEAR	SXR30-100NAS	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	5.80	Yes
Netgear	NETGEAR	SXK30-100NAS	Advanced LNE	GigE LAN(4), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM	6.00	Yes
Netgear	NETGEAR	SXK50B3-100NAS	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base(2)	8.40	Yes
Netgear	NETGEAR	SXK50B3-100NAS	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base(2)	8.40	Yes
Netgear	NETGEAR	SXK80B4-100NAS	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM, PCIe Gen 1 & 2 Base(3)	12.90	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Netgear	NETGEAR	SXK80B4-100NAS	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM, PCIe Gen 1 & 2 Base(3)	12.90	Yes
Netgear	NETGEAR	GS108X-100NAS	Basic LNE	GigE LAN(8)	3.05	Yes
Netgear	NETGEAR	MS108TUP-100NAS	Basic LNE	2.5 GigE LAN Active(4), 2.5 GigE LAN(4)	12.73	Yes
Netgear	NETGEAR	XS508TM-100NAS	Basic LNE	10 GigE LAN Active(4), 10 GigE LAN(4)	17.39	Yes
Netgear	NETGEAR	NBK752-100NAS	Advanced LNE	GigE LAN(3), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base	10.10	Yes
Plume	Plume	PP203X	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base	6.50	Yes
Plume	Plume	PP403Z	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz Radio (160 MHz) LP, 5 GHz MIMO (160 MHz) above 2x2 LP(2), 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base	7.50	Yes
Plume	Plume	PP603X	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	10.20	Yes
Plume	Plume	PP523Z	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz Radio (160 MHz) LP, 5 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base	7.70	Yes
Plume	Plume	PP513Z	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz Radio (160 MHz) LP, 5 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base	8.20	Yes
TP-Link	TP-Link	Archer A54	Advanced LNE	Fast E LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, PCIe Gen 1 & 2 Base	2.86	Yes
TP-Link	TP-Link	Archer AX3000	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	6.81	Yes
TP-Link	TP-Link	Archer AX1800	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, USB 2, PCIe Gen 1 & 2 Base	6.61	Yes
TP-Link	TP-Link	Archer AX4400	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane	7.15	Yes
TP-Link	TP-Link	Archer AX3000 Pro	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	6.85	Yes
TP-Link	TP-Link	Archer AX1500	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS	5.20	Yes
TP-Link	TP-Link	Archer C4000	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS	13.23	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
TP-Link	TP-Link	Archer C20	Advanced LNE	Fast E LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, PCIe Gen 1 & 2 Base	2.53	Yes
TP-Link	TP-Link	Archer AXE300	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 10 GigE LAN Active, 10 GigE LAN, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 3, Bluetooth, PCIe Gen 1 & 2 Base(2), PCIe Gen 3 Base(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	17.83	Yes
TP-Link	TP-Link	Archer AX11000	Advanced LNE	GigE LAN(8), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 3(2), Bluetooth, PCIe Gen 1 & 2 Base(3), PCIe Gen 1 & 2 Add'l Lane	14.03	Yes
TP-Link	TP-Link	Archer AX6000	Advanced LNE	GigE LAN(8), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3(2), Bluetooth, PCIe Gen 1 & 2 Base(2), PCIe Gen 1 & 2 Add'l Lane	12.29	Yes
TP-Link	TP-Link	Archer AX10000	Advanced LNE	GigE LAN(8), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 3(2), Bluetooth, PCIe Gen 1 & 2 Base(3), PCIe Gen 1 & 2 Add'l Lane	14.05	Yes
TP-Link	TP-Link	Archer AX21	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, USB 2, PCIe Gen 1 & 2 Base	6.62	Yes
TP-Link	TP-Link	Archer GX90	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	10.03	Yes
TP-Link	TP-Link	Archer AX10	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Add'l Lane, AP 5K-10K DMIPS	5.22	Yes
TP-Link	TP-Link	Archer AX55	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base	6.80	Yes
TP-Link	TP-Link	Archer AX75	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	7.85	Yes
TP-Link	TP-Link	Archer AX90	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	10.25	Yes
TP-Link	TP-Link	Archer AX20	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 802.11n 256 QAM, USB 2, PCIe Gen 1 & 2 Base	6.64	Yes
TP-Link	TP-Link	Archer AX55 Pro	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.5 GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 2, AP 5K-10K DMIPS	7.11	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
TP-Link	TP-Link	Archer AX5400 Pro	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane	7.60	Yes
TP-Link	TP-Link	Archer AX72 Pro	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane	7.62	Yes
TP-Link	TP-Link	Archer AX3200	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	9.51	Yes
TP-Link	TP-Link	Archer C90	Advanced LNE	2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 2, PCIe Gen 1 & 2 Base	4.91	Yes
TP-Link	TP-Link	Archer BE900	Advanced LNE	GigE LAN, 2.5 GigE LAN Active(2), 2.5 GigE LAN(2), 10 GigE LAN Active, 10 GigE LAN, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(4), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base, PCIe Gen 3 Base(3), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	26.95	Yes
TP-Link	TP-Link	Archer BE800	Advanced LNE	2.5 GigE LAN Active(2), 2.5 GigE LAN(2), 10 GigE LAN Active, 10 GigE LAN, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 3 Base(3), PCIe Gen 3 Addl Lane(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	16.83	Yes
TP-Link	TP-Link	Archer C50	Advanced LNE	Fast E LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	3.25	Yes
TP-Link	TP-Link	Archer AX1450	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS	5.23	Yes
TP-Link	TP-Link	Archer C1200	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, USB 2, PCIe Gen 1 & 2 Base	7.08	Yes
TP-Link	TP-Link	Archer C2600	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3(2), PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	9.12	Yes
TP-Link	TP-Link	Archer BE9300	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, 2.5 GigE LAN, 6 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 3 Base, PCIe Gen 3 Addl Lane, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	11.80	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
TP-Link	TP-Link	Archer BE550	Advanced LNE	2.5 GigE LAN Active(3), 2.5 GigE LAN(2), 6 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 3 Base, PCIe Gen 3 Add'l Lane, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	12.12	Yes
TP-Link	TP-Link	Archer C3150	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), AP 5K-10K DMIPS	11.56	No
TP-Link	TP-Link	Archer BE805	Advanced LNE	GigE LAN(4), 10 GigE LAN Active, 10 GigE LAN, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3(2), PCIe Gen 3 Base(2), PCIe Gen 3 Add'l Lane(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	15.12	Yes
TP-Link	TP-Link	Archer AX73	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	7.14	Yes
TP-Link	TP-Link	Archer AXE5400	Advanced LNE	GigE LAN(5), 6 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	7.84	Yes
TP-Link	TP-Link	Archer AXE75	Advanced LNE	GigE LAN(5), 6 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	7.84	Yes
TP-Link	TP-Link	Archer AXE95	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 6 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	9.60	Yes
TP-Link	TP-Link	Archer A6	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM	3.56	Yes
TP-Link	TP-Link	Archer A7	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, USB 2, PCIe Gen 1 & 2 Base	4.14	Yes
TP-Link	TP-Link	Archer A8	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, 802.11n 256 QAM	4.08	Yes
TP-Link	TP-Link	Archer A9	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, USB 2, PCIe Gen 1 & 2 Base	4.91	Yes
TP-Link	TP-Link	Archer AC1900	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, 802.11n 256 QAM	4.08	Yes
TP-Link	TP-Link	Archer AX80	Advanced LNE	GigE LAN(4), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, AP Add'l Over 10K DMIPS	7.48	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
TP-Link	TP-Link	Archer C1900	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS	10.59	No
TP-Link	TP-Link	Archer C2300	Advanced LNE	GigE LAN(5), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, USB 3, PCIe Gen 1 & 2 Base(2)	8.68	Yes
TP-Link	TP-Link	Archer C54	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	2.86	Yes
TP-Link	TP-Link	Archer C59	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM	4.75	Yes
TP-Link	TP-Link	Archer C6	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, 802.11n 256 QAM	3.56	Yes
TP-Link	TP-Link	Archer C7	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, USB 2, PCIe Gen 1 & 2 Base	4.04	Yes
TP-Link	TP-Link	Archer C80	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, 802.11n 256 QAM	4.08	Yes
TP-Link	TP-Link	Archer C9	Advanced LNE	GigE LAN(5), 2.4 GHz Radio LP, 2.4 GHz MIMO above 2x2 LP, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP, 802.11n 256 QAM, USB 2, USB 3, PCIe Gen 1 & 2 Base(2), PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS	10.59	No
TP-Link	TP-Link	Deco W7200(2-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	6.35	Yes
TP-Link	TP-Link	Deco X3600(3-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	6.31	Yes
TP-Link	TP-Link	Deco X55 Pro(1-pack)	Advanced LNE	2.5 GigE LAN Active, 2.5 GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, AP 5K-10K DMIPS	6.97	Yes
TP-Link	TP-Link	Deco X55 Pro(3-pack)	Advanced LNE	2.5 GigE LAN Active, 2.5 GigE LAN, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, AP 5K-10K DMIPS	6.97	Yes
TP-Link	TP-Link	Deco X5700(2-pack)	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	8.46	Yes
TP-Link	TP-Link	Deco X68(2-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	6.31	Yes
TP-Link	TP-Link	Deco X90(1-pack)	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	8.46	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
TP-Link	TP-Link	Deco X90(2-pack)	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	8.46	Yes
TP-Link	TP-Link	Deco X95(1-pack)	Advanced LNE	GigE LAN(2), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	8.71	Yes
TP-Link	TP-Link	Deco X95(2-pack)	Advanced LNE	GigE LAN(2), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP(2), 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Addl Lane, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	8.71	Yes
TP-Link	TP-Link	Deco BE16000(3-pack)	Advanced LNE	2.5 GigE LAN Active(2), 2.5 GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 6 GHz Radio (160 MHz) HP(2), 802.11n 256 QAM, USB 2, PCIe Gen 3 Base, PCIe Gen 3 Addl Lane, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	12.59	Yes
TP-Link	TP-Link	Deco M9 Plus(2-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP(2), 802.11n 256 QAM, Bluetooth, PCIe Gen 1 & 2 Base	5.75	Yes
TP-Link	TP-Link	Deco P9(3-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base	6.60	Yes
TP-Link	TP-Link	Deco PX50(3-pack)	Advanced LNE	GigE LAN(3), 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	9.78	No
TP-Link	TP-Link	Deco W4500(3-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (20, 40, 80 MHz) LP, PCIe Gen 1 & 2 Base	4.38	Yes
TP-Link	TP-Link	Deco W6000(2-pack)	Advanced LNE	GigE LAN(3), 5 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	7.62	No
TP-Link	TP-Link	Deco WE10800(2-pack)	Advanced LNE	GigE LAN(3), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 6 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane	8.17	Yes
TP-Link	TP-Link	Deco X25/X50-Outdoor Kit	Advanced LNE	GigE LAN(2), 5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.48	Yes
TP-Link	TP-Link	Deco X4300 Pro(3-pack)	Advanced LNE	GigE LAN(2), 2.5 GigE LAN Active, 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 5 GHz MIMO (160 MHz) above 2x2 LP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base	8.20	Yes
TP-Link	TP-Link	Deco X50(1-pack)	Advanced LNE	GigE LAN(3), 5 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.96	Yes
TP-Link	TP-Link	Deco X5000(3-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 5 GHz MIMO (160 MHz) above 2x2 LP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane	7.62	No
TP-Link	TP-Link	Deco X50-Outdoor(1-pack)	Advanced LNE	GigE LAN(2), 5 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	6.01	Yes
TP-Link	TP-Link	Deco X50-PoE(1-pack)	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 5 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	7.39	Yes
TP-Link	TP-Link	Deco X50-PoE(3-pack)	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 5 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	7.39	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
TP-Link	TP-Link	Deco X5400 Pro(3-pack)	Advanced LNE	GigE LAN(2), 2.5 GigE LAN Active, 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 5 GHz MIMO (160 MHz) above 2x2 LP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base	8.20	Yes
TP-Link	TP-Link	Deco X55(1-pack)	Advanced LNE	GigE LAN(3), 5 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.96	Yes
TP-Link	TP-Link	Deco X55(2-pack)	Advanced LNE	GigE LAN(3), 5 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.96	Yes
TP-Link	TP-Link	Deco X55(3-pack)	Advanced LNE	GigE LAN(3), 5 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.96	Yes
TP-Link	TP-Link	Deco X60(3-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio LP, 5 GHz Radio (160 MHz) LP, 5 GHz MIMO (160 MHz) above 2x2 LP(2), 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane	7.62	No
TP-Link	TP-Link	Deco XE200(1-pack)	Advanced LNE	GigE LAN(2), 10 GigE LAN Active, 5 GHz Radio (160 MHz) LP, 5 GHz MIMO (160 MHz) above 2x2 LP(2), 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 3 Base(3), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	15.25	Yes
TP-Link	TP-Link	Deco XE200(2-pack)	Advanced LNE	GigE LAN(2), 10 GigE LAN Active, 5 GHz Radio (160 MHz) LP, 5 GHz MIMO (160 MHz) above 2x2 LP(2), 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 802.11n 256 QAM, PCIe Gen 3 Base(3), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	15.25	Yes
TP-Link	TP-Link	Deco XE75 Pro(1-pack)	Advanced LNE	GigE LAN(2), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 6 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane	8.47	Yes
TP-Link	TP-Link	Deco XE75 Pro(2-pack)	Advanced LNE	GigE LAN(2), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 6 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane	8.47	Yes
TP-Link	TP-Link	Deco XE75 Pro(3-pack)	Advanced LNE	GigE LAN(2), 2.5 GigE LAN Active, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 6 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane	8.47	Yes
TP-Link	TP-Link	Deco XE75(1-pack)	Advanced LNE	GigE LAN(3), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 6 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane	8.17	Yes
TP-Link	TP-Link	Deco XE75(2-pack)	Advanced LNE	GigE LAN(3), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 6 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane	8.17	Yes
TP-Link	TP-Link	Deco XE75(3-pack)	Advanced LNE	GigE LAN(3), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 6 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Addl Lane	8.17	Yes
TP-Link	TP-Link	Deco X20(1-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.48	Yes
TP-Link	TP-Link	Deco W3600(2-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.48	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
TP-Link	TP-Link	Deco X20(3-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.48	Yes
TP-Link	TP-Link	Deco X20(2-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.48	Yes
TP-Link	TP-Link	Deco XE5300(3-pack)	Advanced LNE	GigE LAN(3), 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 6 GHz Radio (160 MHz) HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base, PCIe Gen 1 & 2 Add'l Lane	8.17	Yes
TP-Link	TP-Link	Deco HC4(1-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base(2)	4.05	Yes
TP-Link	TP-Link	Deco M3(3-pack)	Advanced LNE	Fast E LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base	4.00	Yes
TP-Link	TP-Link	Deco E3(2-pack)	Advanced LNE	Fast E LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base	4.00	Yes
TP-Link	TP-Link	Deco BE63(1-pack)	Advanced LNE	2.5 GigE LAN Active(2), 2.5 GigE LAN(2), 6 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 3 Base(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	11.18	Yes
TP-Link	TP-Link	Deco BE63(2-pack)	Advanced LNE	2.5 GigE LAN Active(2), 2.5 GigE LAN(2), 6 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 3 Base(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	11.18	Yes
TP-Link	TP-Link	Deco BE63(3-pack)	Advanced LNE	2.5 GigE LAN Active(2), 2.5 GigE LAN(2), 6 GHz Radio (160 MHz) LP, 2.4 GHz Radio HP, 5 GHz Radio (160 MHz) HP, 802.11n 256 QAM, USB 3, PCIe Gen 3 Base(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	11.18	Yes
TP-Link	TP-Link	Deco BE85(2-pack)	Advanced LNE	2.5 GigE LAN Active, 2.5 GigE LAN, 10 GigE LAN Active, 10 GigE LAN, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 3 Base, PCIe Gen 3 Add'l Lane(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	18.90	Yes
TP-Link	TP-Link	Deco BE85(3-pack)	Advanced LNE	2.5 GigE LAN Active, 2.5 GigE LAN, 10 GigE LAN Active, 10 GigE LAN, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 3 Base, PCIe Gen 3 Add'l Lane(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	18.90	Yes
TP-Link	TP-Link	Deco BE95(1-pack)	Advanced LNE	2.5 GigE LAN Active, 2.5 GigE LAN, 10 GigE LAN Active, 10 GigE LAN, 6 GHz Radio (160 MHz) LP(2), 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 3 Base, PCIe Gen 3 Add'l Lane(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	22.32	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
TP-Link	TP-Link	Deco BE95(2-pack)	Advanced LNE	2.5 GigE LAN Active, 2.5 GigE LAN, 10 GigE LAN Active, 10 GigE LAN, 6 GHz Radio (160 MHz) LP(2), 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 3 Base, PCIe Gen 3 Add'l Lane(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	22.32	Yes
TP-Link	TP-Link	Deco BE95(3-pack)	Advanced LNE	2.5 GigE LAN Active, 2.5 GigE LAN, 10 GigE LAN Active, 10 GigE LAN, 6 GHz Radio (160 MHz) LP(2), 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, USB 3, PCIe Gen 3 Base, PCIe Gen 3 Add'l Lane(2), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	22.32	Yes
TP-Link	TP-Link	Deco M4(3-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base(2)	4.05	Yes
TP-Link	TP-Link	Deco M5(1-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	4.31	Yes
TP-Link	TP-Link	Deco M5(2-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	4.31	Yes
TP-Link	TP-Link	Deco M5(3-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS	4.31	Yes
TP-Link	TP-Link	Deco S4(1-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base(2)	4.05	Yes
TP-Link	TP-Link	Deco S4(2-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base(2)	4.05	Yes
TP-Link	TP-Link	Deco S4(3-pack)	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base(2)	4.05	Yes
TP-Link	TP-Link	Deco W2400(2-pack)	Advanced LNE	Fast E LAN(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP, PCIe Gen 1 & 2 Base	4.00	Yes
TP-Link	TP-Link	Deco X25(3-pack)	Advanced LNE	GigE LAN(2), 5 GHz Radio (20, 40, 80 MHz) LP, 2.4 GHz Radio HP, 802.11n 256 QAM, PCIe Gen 1 & 2 Base	5.48	Yes
Verizon	Actiontec	GT784WNV	IAD ADSL2+	Fast E LAN(4), 2.4 GHz Radio LP, USB 2	6.09	No
Verizon	Dlink	DGS-1005G	Basic LNE	GigE LAN(5)	1.56	Yes
Verizon	Arcadyan	Fios Extender	Advanced LNE	GigE LAN(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(6), 5 GHz Radio (20, 40, 80 MHz) HP(2), 802.11n 256 QAM, MoCA, PCIe Gen 1 & 2 Base(3), AP 5K-10K DMIPS	10.12	Yes
Verizon	Verizon	Verizon Router (CR1000A)	IAD 10 GigE	2.5 GigE LAN Active, 2.5 GigE LAN, 10 GigE LAN Active, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (20, 40, 80 MHz) HP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP(2), 802.11n 256 QAM, MoCA, USB 3, PCIe Gen 3 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(2)	22.45	Yes
Verizon	Verizon	MoCA Ethernet Adapter (Multiport)	Advanced LNE	GigE LAN(3), 2.5 GigE LAN Active, MoCA	3.97	Yes
Verizon	Verizon	Wi-Fi Extender Mini (CME1000)	Advanced LNE	6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 5 GHz Radio (20, 40, 80 MHz) HP	8.27	Yes

Table 3: Small Network Equipment Purchased/Sold by Voluntary Agreement Signatories in 2023 (Cont.)

Signatory	Manufacturer	Model Number	Base Type	Claimed Allowances	Reported Ready Mode Power (W)	Meets Tier 3 VA Levels
Verizon	Verizon	Verizon Router (CR1000B)	IAD 10 GigE	2.5 GigE LAN Active, 2.5 GigE LAN, 10 GigE LAN Active, 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 5 GHz Radio (160 MHz) HP, 5 GHz MIMO (160 MHz) above 2x2 HP(2), 802.11n 256 QAM, MoCA, USB 3, PCIe Gen 3 Base(3), AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS(5)	26.87	Yes
Verizon	Verizon	Verizon Wi-Fi Extender (CE1000A)	Advanced LNE	GigE LAN, 2.5 GigE LAN Active, 5 GHz Radio (20, 40, 80 MHz) LP, 5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP(2), 5 GHz Radio (160 MHz) LP, 5 GHz MIMO (160 MHz) above 2x2 LP(2), 6 GHz Radio (160 MHz) LP, 6 GHz MIMO (160 MHz) above 2x2 LP(2), 2.4 GHz Radio HP, 2.4 GHz MIMO above 2x2 HP(2), 802.11n 256 QAM, MoCA, PCIe Gen 1 & 2 Base, AP 5K-10K DMIPS, AP Add'l Over 10K DMIPS	12.78	Yes
Verizon	Verizon	MoCA Ethernet Adapter (Singleport)	Advanced LNE	2.5 GigE LAN Active, MoCA	2.31	Yes

Tables 4 and 5 describe the allowances established by the Voluntary Agreement that are applicable for 2023.

Table 4: Voluntary Agreement Allowance Descriptions

Description	Descriptor	Allowance (watts)
Base Allowance: IAD Devices (by WAN interface)		
ADSL2plus	IAD ADSL2+	3.7
VDSL2 (8, 12a, 17a, but not 30a)	IAD VDSL2	4.5
VDSL2 (all above profiles including 30a)	IAD VDSL2 (30a)	6.0
VDSL2 (all above profiles including 35b)	IAD VDSL2 (35b)	6.0
DOCSIS 3.0 basic configuration (4x4)	IAD D3.0	4.5
DOCSIS 3.1 No FDX	IAD D3.1	14.0
MoCA 1.1/2.0	IAD MoCA	3.7
Gigabit Ethernet	IAD GigE	3.7
2.5 GB Ethernet	IAD 2.5 GigE	4.5
5 GB Ethernet	IAD 5 GigE	5.0
10 GB Ethernet	IAD 10 GigE	5.5
SFP with 1000BaseLX/SX	IAD SFP 1000BaseLX/SX	4.0
SFP with GPON	IAD SFP GPON	5.0
10G EPON	IAD 10G EPON	13.0
On-board Fiber WAN (without SFP)	IAD Fiber WAN	5.0
10GB PON WAN (with SFP)	IAD 10GB PON	13.0
Base Allowance: Broadband Modems (by WAN Interface)		
ADSL2plus	Basic ADSL2+	2.2
VDSL2 (8, 12a, 17a, but not 30a)	Basic VDSL2	3.0
VDSL2 (all above profiles including 30a)	Basic VDSL2 (30a)	4.5
DOCSIS 3.0 basic configuration (4x4)	Basic D3.0	3.0
DOCSIS 3.1 No FDX	Basic D3.1	11.0
G.fast	G.fast	4.2
10G EPON	Basic 10G EPON	10.0
Base Allowance: LNE		
LNE other than Advanced LNE	Basic LNE	1.5
Advanced LNE	Advanced LNE	3.5
Adders for Additional Backup WAN Interface		
Gigabit Ethernet WAN	GigE Backup WAN	0.4
SFP Not Present	SFP Backup WAN Not Present	0.7
SFP Present (1000BaseLX/SX or GPON)	SFP Backup WAN Present	2.0
VDSL2 (8, 12a, 17a, but not 30a)	VDSL2 Backup WAN	0.7
Adders for Simultaneous Additional WAN Interface		
VDSL2 (8, 12a, 17a, but not 30a)	VDSL2 Simul WAN	3.2
VDSL (profile 30a)	VDSL2 (30a) Simul WAN	4.7
DOCSIS 3.0 additional power allowance for each additional 4 downstream channels	D3 above 4x4	1.0
Adders for LAN interfaces and Additional Functionality		
1 Fast Ethernet port	Fast E LAN	0.2
1 Gigabit Ethernet port	GigE LAN	0.2
2.5 Gigabit Ethernet port connected (active link)	2.5 GigE LAN Active	2.5
2.5 Gigabit Ethernet port connected (active link)	2.5 GigE LAN	0.8
5 Gigabit Ethernet port connected (active link)	5 GigE LAN Active	2.5
5 Gigabit Ethernet port not connected	5 GigE LAN	0.8
10 Gigabit Ethernet port connected (active link)	10 GigE LAN Active	3.5
10 Gigabit Ethernet port not connected	10 GigE LAN	1.5
Wi-Fi 2.4 GHz radio with a conducted output power of less than 200 mW per chain up to 2x2	2.4 GHz Radio LP	1.0
Additional allowance per RF chain above 2x2 MIMO at 2.4 GHz with a conducted output power of less than 200 mW per chain	2.4 GHz MIMO above 2x2 LP	0.1
Wi-Fi 5 GHz radio up to 80 MHz channel bandwidth with a conducted output power of less than 200 mW per chain up to 2x2	5 GHz Radio (20, 40, 80 MHz) LP	1.6

Description	Descriptor	Allowance (watts)
Adders for LAN interfaces and Additional Functionality		
Additional allowance per RF chain above 2x2 MIMO at 5 GHz up to 80 MHz channel bandwidth with a conducted output power of less than 200 mW per chain	5 GHz MIMO (20, 40, 80 MHz) above 2x2 LP	0.1
Wi-Fi 5 GHz radio at 160 MHz channel bandwidth with a conducted output power of less than 200 mW per chain up to 2x2	5 GHz Radio (160 MHz) LP	2.0
Additional allowance per RF chain above 2x2 MIMO at 5 GHz at 160 MHz channel bandwidth with a conducted output power of less than 200 mW per chain	5 GHz MIMO (160 MHz) above 2x2 LP	0.1
Wi-Fi 6 GHz radio up to 80 MHz channel bandwidth with a conducted output power of less than 200 mW per chain up to 2x2	6 GHz Radio (20, 40, 80 MHz) LP	1.6
Additional allowance per RF chain above 2x2 MIMO at 6 GHz up to 80 MHz channel bandwidth with a conducted output power of less than 200 mW per chain	6 GHz MIMO (20, 40, 80 MHz) above 2x2 LP	0.1
Wi-Fi 6 GHz radio at 160 MHz channel bandwidth with a conducted output power of less than 200 mW per chain up to 2x2	6 GHz Radio (160 MHz) LP	2.0
Additional allowance per RF chain above 2x2 MIMO at 6 GHz at 160 MHz channel bandwidth with a conducted output power of less than 200 mW per chain	6 GHz MIMO (160 MHz) above 2x2 LP	0.1
Wi-Fi 2.4 GHz radio with a conducted output power of greater than or equal to 200 mW per chain up to 2x2	2.4 GHz Radio HP	1.1
Additional allowance per RF chain above 2x2 MIMO at 2.4 GHz with a conducted output power of greater than or equal to 200 mW per chain	2.4 GHz MIMO above 2x2 HP	0.2
Wi-Fi 5 GHz radio up to 80 MHz channel bandwidth with a conducted output power of greater than or equal to 200 mW per chain up to 2x2	5 GHz Radio (20, 40, 80 MHz) HP	2.1
Additional allowance per RF chain above 2x2 MIMO at 5 GHz up to 80 MHz channel bandwidth with a conducted output power of greater than or equal to 200 mW per chain	5 GHz MIMO (20, 40, 80 MHz) above 2x2 HP	0.3
Wi-Fi 5 GHz radio at 160 MHz channel bandwidth with a conducted output power of greater than or equal to 200 mW per chain up to 2x2	5 GHz Radio (160 MHz) HP	2.6
Additional allowance per RF chain above 2x2 MIMO at 5 GHz at 160 MHz channel bandwidth with a conducted output power of greater than or equal to 200 mW per chain	5 GHz MIMO (160 MHz) above 2x2 HP	0.3
Wi-Fi 6 GHz radio up to 80 MHz channel bandwidth with a conducted output power of greater than or equal to 200 mW per chain up to 2x2	6 GHz Radio (20, 40, 80 MHz) HP	2.1
Additional allowance per RF chain above 2x2 MIMO at 6 GHz up to 80 MHz channel bandwidth with a conducted output power of greater than or equal to 200 mW per chain	6 GHz MIMO (20, 40, 80 MHz) above 2x2 HP	0.3
Wi-Fi 6 GHz radio at 160 MHz channel bandwidth with a conducted output power of greater than or equal to 200 mW per chain up to 2x2	6 GHz Radio (160 MHz) HP	2.6
Additional allowance per RF chain above 2x2 MIMO at 6 GHz at 160 MHz channel bandwidth with a conducted output power of greater than or equal to 200 mW per chain	6 GHz MIMO (160 MHz) above 2x2 HP	0.3
Wi-Fi IEEE 802.11n at 2.4GHz supporting 256-QAM	802.11n 256 QAM	0.3
HPNA	HPNA	1.5
G.hn	G.hn	2.0
MoCA 1.1/2.0 Single Channel	MoCA	2.2
FXS	FXS	0.3
DECT	DECT	0.5
USB 2.0 - no load connected	USB 2	0.1
USB 3.0 - no load connected	USB 3	0.2
SATA - no load connected	SATA	0.3
Built-in back-up battery	BATTERY	0.4
Bluetooth	Bluetooth	0.5
Z-wave	Z-wave	0.2
802.15.4 for ZigBee, Thread, etc.	802.15.4	0.2
PCIe Interface Gen 1 & 2 Base (includes first lane)	PCIe Gen 1 & 2 Base	0.2
PCIe Gen 1 & 2 Additional Lane	PCIe Gen 1 & 2 Addl Lane	0.1
PCIe Interface Gen 3 Base (includes first lane)	PCIe Gen 3 Base	0.3
PCIe Gen 3 Additional Lane	PCIe Gen 3 Addl Lane	0.3
Application Processor 5K-10K DMIPS	AP 5K-10K DMIPS	1.0
Application Processor > 10K DMIPS (for every addl. 5K DMIPS)	AP Add'l Over 10K DMIPS	0.5
Speaker < 10 Watts (maximum 2)	Speaker	0.3
Voice Control	Voice Control	0.5

APPENDIX B: CONSUMER ACCESS TO SMALL NETWORK EQUIPMENT ENERGY-EFFICIENCY INFORMATION

SNE energy information for consumers is available at www.energy-efficiency.us, and for each service provider and retail vendor at the links below.

Table 5: Consumer Access to Small Network Equipment Energy-Efficiency Information

Signatory	Consumer information Location	Additional Information
Service Providers		
Altice USA	https://energy.cablelabs.com/alticeusa/	
AT&T	https://www.att.com/scmsassets/upper_funnel/other/att-small-network-equipment-energy-information.pdf	
Charter	https://www.spectrum.net/support/general/energy-usage-your-charter-equipment	
Comcast	https://www.xfinity.com/support/articles/internet-equipment-energy-usage	
Cox	https://energy.Cablelabs.com/cox-sne/	
Frontier	https://content.frontier.com/-/media/documents/helpcenter/tv/fiber-tv/small-network-equipment-efficiency.pdf	
Verizon	https://www.verizon.com/support/residential/tv/equipment/stb-dvr	Scroll down to "Learn about Verizon's Small Network Equipment (SNE) Energy Information" and click the plus sign next to it.
Vendors		
Actiontec	No Retail Products	
ASUS	https://www.asus.com/us/site/SNE-Info/Asus-SNE-Energy-Information.pdf	
CommScope	https://www.commscope.com/globalassets/digizuite/330860-commscope-sne-public-report.pdf	
eero	https://support.eero.com/hc/en-us/articles/207625336-How-much-power-does-eero-use-	
Google	https://services.google.com/fh/files/misc/google_sne_energy_information.pdf	
Linksys	https://www.linksys.com/support-article?articleNum=50594	
Netgear	https://www.netgear.com/about/esg-environmental-social-governance	
Plume	https://www.plume.com/legal/sne-energy-information/	
Vantiva	No Retail Products	
TP-Link	https://www.tp-link.com/us/landing/tp-link-sne-energy-information-2023/	
Ubee Interactive	No Retail Products	
Sagemcom	No Retail Products	

APPENDIX C: 2023 AUDIT REPORT

The Voluntary Agreement requires the service provider and retail vendor signatories to submit annual procurement and sales figures to an Independent Administrator, who collects and analyzes the amounts, then publishes the findings in an annual report. The Administrator aggregates the submissions from the individual signatories for publication in the annual report to protect this highly confidential information. To verify the accuracy of the reported data, the Voluntary Agreement requires an audit of one randomly selected commercial signatory each year. In accordance with the confidentiality requirements of the Voluntary Agreement, the name of the audited party is not published.

D+R conducted an audit of the 2023 report data provided in 2024, which was used to develop the 2023 Annual Report. As part of the audit process, they randomly selected the party by creating an Excel spreadsheet and using the "random" function. D+R then reviewed raw data, including invoice records and specification sheets, from the selected party to verify the quantities provided in the original submission.

D+R, as the Independent Administrator, has determined that the data submitted by the signatory for the audit is consistent with the annual report submitted by that party.

