Rechargeable e-Cigarettes



Carmines Consulting, LLC

NJOY Exhibit 2039.001
Juul v. NJOY
IPR2024-00160

Executive Summary



Most of the products were designed to appear like conventional cigarettes. There is usually a tipping paper and a cigarette paper area on the exterior of the product. The lit-end LED is usually red or orange. There are a few that are all black with blue or green LEDs. Almost all of the products used a printed paper cover that had a soft touch feel on the tipping area. The power units had a coating, sometimes with added filigree lines to make them look more realistic. The e-cigarette length varied from 80 mm to 140 mm following conventional cigarette dimensions. Most products were 100 - 120 mm long. The average diameter was about 9 mm. One product, Vapor Couture, was designed as a slim product with a diameter of 8 mm. On average, the products weighed 15.5 g, with the lightest weighing 9.1 g and the heaviest 21.2 g. The power unit made up the majority of the product weight.

The rechargeable products are designed as two- (power unit and cartomizer) or three-component (power unit, vaporizer, and cartridge) products. The two-component products use a metal coil to vaporize the e-liquid. The coil is aligned either horizontally or vertically in the disposable cartomizer. All of the products had a polyester mat around the metal coil. Some of the products had an additional paper-like wrap around the coil to enhance wicking of the e-liquid to the coil. The three-component products used a metal lattice vaporizer and a separate reservoir for the e-liquid. The amount of e-liquid in the products (both two- and three-component) varied from 0.36 to 1.94 g. The capacity of the 3.7 volt batteries ranged from 80 to 350 mAh. Most of the products did not make a puff yield or battery charge claim. Presumably the products with the larger amount of e-liquid should last longer and the ones with the higher capacity batteries should be able to last longer between charges. All of the rechargeable e-cigarettes appeared to operate the same. Most had a puff (flow) sensor that turned the product on when it was puffed on. A few of the products offered manual power units in addition to the automatic units. Manual power units appeared as an option on most of the companies' websites. There appeared to be circuitry in most of the products to control charging and over usage. Most of the products arrived in distinctive packaging that was aligned with the price of the kit.

The major difference among the products is the design of the vaporizer. The two-component products use a cartomizer containing the coil and e-liquid. In this design, the coil is intimately associated with the e-liquid reservoir and protected by it. In the three-component design, the vaporizer is separate from the cartridge and the vaporizer needs to be more robust, leading to the use of the metal lattice. These differences, along with the volume of e-liquid and capacity of

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the battery, did not appear to affect the production of smoke. The amount of e-liquid and capacity of the battery will affect the performance characteristics (number of pack equivalents and number of puffs /battery charge) of the product.

One product, Green Nicotine, appeared to be a hybrid design between the two- and three-component products. It was a two-component product using a horizontal coil to vaporize the e-liquid. Instead of the fiberglass tube and polyester wicking material, Green Nicotine had a cartridge containing the e-liquid. The liquid literally dripped on the coil and was wicked away by a long wick that ran through the coil. This product did not appear to produce more smoke than the other products.

Most of the products did not list ingredients on their packaging. A few listed propylene glycol, nicotine, and flavors. One product, Halo G6, listed l-nicotine, suggesting that synthetic or processed nicotine is being used.

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Product Evaluations

A total of 49 rechargeable e-cigarettes were evaluated. The e-cigarettes were purchased mainly over the internet. The products were selected based on internet e-cigarette reviews. The products were purchased as starter packs if available. Either express starter kits or standard starter kits were purchased. The express kits had a minimal number of components (see Packaging below).

Two samples of each product were obtained. One was taken apart, photographed, and cataloged. The second was retained for possible future evaluation. All samples were catalogued and will be turned over to NJOY. The results of the individual product evaluations are listed in Appendix 1. An Access database will be provided with all original pictures and data.

Products Evaluated

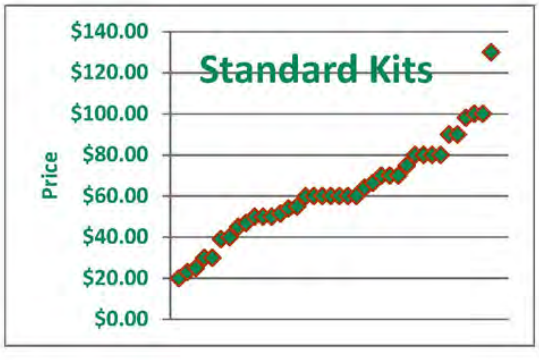
Apollo	Luci
Bedford Slims	Metro Platinum
Bloog	Modern Vapor Sidesho
Blu	New Day
Breathe Fresh eCigs	Nirvana Eco
Bull Smoke Automatic	Ozone Smoke
Bull Smoke Manual	Premium
Cigarti	Prosmoke
Cigavette Premier	Pure
Crown 7	Revolver G2
Duopro	Seminole Rechargeable
E-Lites	Smokeless Delite Premo Cartomizer
Eluma	Smokeless Delite Premo Cartridge
Eon Smoke	Smokesation
ePuffer Colibri	SmokeTip
eSmoke	South Beach Smoke
Eversmoke	Ultra
Fifty-One Trio	V2 Cigs
Firebrand Millennium	Vapage
Frii	Vapor Couture
Green Nicotine	Vapor King
Green Smoke	Victory
Halo G6	White Cloud Cirrus 3
J510L	Zerocig
Logic Power Series	

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Price

The average price of the express kits was $42.50 with a wide range of $19.95 to $59.99. Standard kits, on average cost $62.40, with a range of $19.99 to $129.95. There was no apparent difference in the products to support the wide price range.





Consumer Components

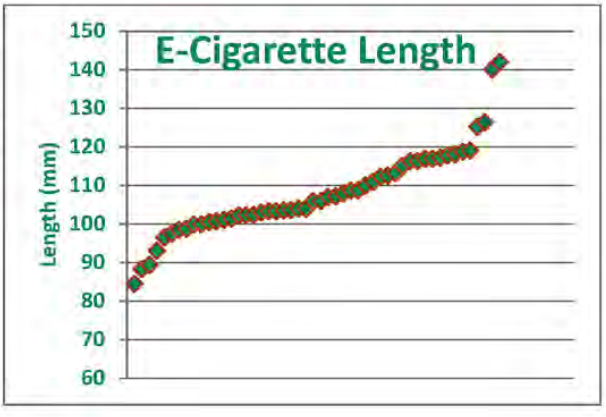
The products generally had either two or three parts for the consumer to assemble. The two-part units had a power unit and cartomizer. The three-part units had a power unit, vaporizer, and cartridge containing the e-liquid. One product, Smokeless Delite Premo, came as a two- and three- component product in the same kit.



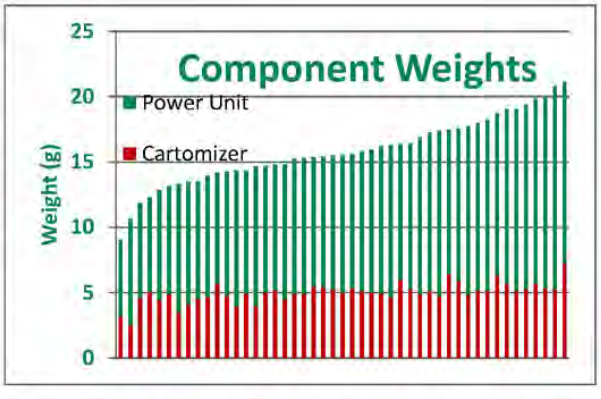
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Physical Attributes

The average length and diameter of the products was 108 mm and 9.1 mm, respectively. Most products were 100 - 120 mm long. One product, Vapor Couture, was designed as a slim product with a diameter of 8 mm.



On average, the products weighed 15.5 g with the lightest weighing 9.1 g and the heaviest 21.2 g. The products were either two-component units (cartomizer and power unit) or three-component units (cartridge, vaporizer, and power unit). Most (44) were made with two components. All but two of the products had automatic puff activation. Bull Smoke and Halo G6 came with an automatic power unit and a manual one. Other products offered the option of a manual power unit on their website. An attempt was made to determine where the center of gravity was for each product to determine if the product was well balanced. A well balanced product would have the center of gravity at about at the center of the product along its length. Most of the products appeared to be well balanced. Bull Smoke was mouth-end heavy and J510L was lit-end heavy. The cartomizer weight averaged 4.9 g (2.5 – 7.3). The power units averaged 10.8 g (5.8 – 15.5). Most of the increases in weight of the different products were due to increases in the weight of the power unit.



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Appearance

Most (30) of the products had markings similar to conventional cigarettes with cork or tan tipping on the cartomizer and a white coating in the cigarette paper area on the power unit. The tipping was usually a soft touch paper. On some products, the white coating had an overlay of filigree lines providing a realistic cigarette paper like appearance.



There also were many products (14) with black markings.



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Cartomizer

A cartomizer is an e-liquid cartridge permanently attached to a vaporizer. In the two-component units, the cartomizer was a metal tube with the vaporizer at the base, a fibrous mat serving as a wick and reservoir for the e-liquid, and a mouthpiece. The cartomizer was usually packaged with rubber stoppers on each end or at least over the mouthpiece end. Some manufacturers packed the cartomizers in blister packs. All of the cartomizers had a paper wrapper that had a soft touch surface.





In the three-component units, a separate cartridge containing the e-liquid is attached to the vaporizer. The cartridge was hard plastic and served as the mouthpiece and a holder for an inner plastic vessel that held the e-liquid. The vaporizer is pushed up into the cartridge to start the wicking process. The cartridges came with stoppers over the vaporizer end. There is a separate air path around the reservoir to the hole in the mouthpiece.



Mouthpiece

In the two-component units, the mouthpieces were constructed of either hard plastic (39) or soft rubber (10). Some (50%) of the ones made with hard plastic had a rubber gasket underneath to keep the e-liquid from leaking out of the mouthpiece. None of the soft rubber mouthpieces had a gasket underneath. Almost of the mouthpieces were white but a few were the same color



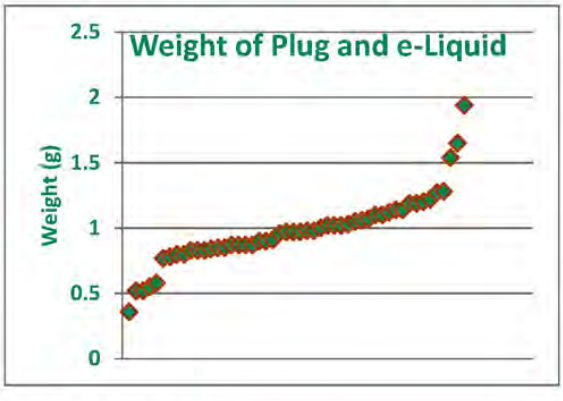
NJOY Exhibit 2039.009
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as the product. In the three piece units, the outer portion of the cartridge served as the mouthpiece.

E-Liquid Reservoir

In all but one of the two-component units, a reservoir to hold the e-liquid is formed by the space between the base of the vaporizer and the mouthpiece. In almost all of the products there was a polyester fiber wrap around the vaporizer that "held" the e-liquid. On average, the plug and e-liquid weighed about 0.98 g. There was a wide variance (0.36 – 1.94 g) in the weight of the plug indicating that some companies are putting much more e-liquid in the product than others.





In one two-component product, Green Nicotine, there was a plastic container that held the e-liquid. There was no polyester mat in the container. The reservoir sat on top of the vaporizer. The e-liquid literally dripped down on the heater coil.



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In the three-component units, a separate plastic reservoir held polyester matting and e-liquid. This reservoir was located inside the mouthpiece making up the replaceable cartridge. In one product, J510L, there were four consumer components: a hard plastic hollow mouthpiece, a replaceable metal foil sealed plastic reservoir, the vaporizer, and the power unit. This product essentially was the same as the three-component products except that instead of replacing the cartridge, you replaced the reservoir in it.



Vaporizer

The vaporizer is the heart of the product. It is wired to the battery and puff sensor and turns on when the puff sensor detects air flow. In the two-component products, the design is generally a horizontal orientation of the coil placed in a woven fiberglass tube. The tube provides support and a channel for the flow of the vapor to the mouthpiece. In most products there was some sort of wicking material that ran through the horizontal coil to get the e-liquid to the coil. The complete configuration appeared like an inverted "T" with the coil resting on the base of the vaporizer. There were 21 products with this layout. An additional 12 products had a "cross" configuration with the coil about halfway up the fiberglass tube.





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There was significant variation in the length of the wick running through the coil from just larger than the width of the fiberglass tube to over an inch on each side. One product had a secondary wick wrapped around the fiberglass tube.







Another variation in the design was the addition of a secondary wrap around the wick and fiberglass tube. This material appeared almost like filter paper. A product was labeled "triple wrapped" if it had the fibrous reservoir plug wrapped around the secondary paper wrap which was wrapped around the fiberglass tube. A "double wrapped" product lacked the secondary paper wrap. There were twelve double wrapped vaporizers and thirty-one triple wrapped.



Seven of the products (eSmoke, Firebrand, Seminole, Bedford Slims, Vapor King, Breathe Fresh, and Smokeless Delite) had a different orientation of the heating coil. Instead of being placed horizontally, the coil was placed vertically in the fiberglass tube. These vaporizers did not have a wick running through the coil. All had a secondary wrap around the coil.



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There was one other vaporizer design in the two-component product series. As mentioned above, Green Nicotine had a cartridge that sat on top of the heater coil. The coil had a long wick extending on each side of the cartridge. The wick appeared to act as a secondary reservoir for the e-liquid.



All of the three-component products used a metal lattice heater that protruded into the e-liquid cartridge when the product was assembled. Each reservoir had an exterior path allowing the vapor to flow to the mouthpiece.



Power Unit

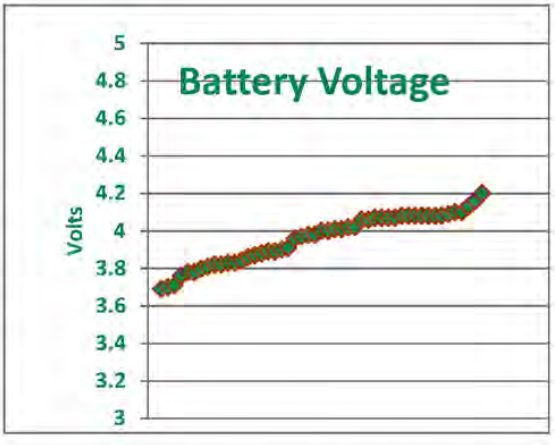
The power unit contained the lit-end LED and lens, battery, and puff sensor. If the product was manually operated there was a push button switch on the side of unit. The battery was contained within a metal tube. The tube had a coating rather than a paper wrapper. One product, Cigarti, had a white coating on the metal tube. This was covered by a patterned clear wrapper.

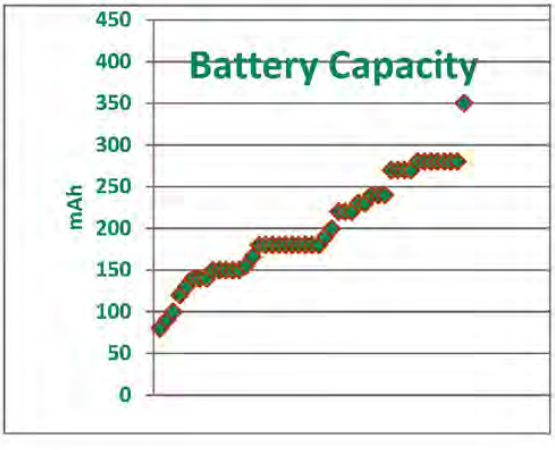


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Battery

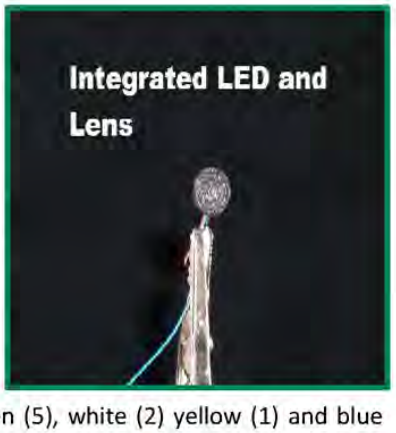
All of the batteries were lithium polymer and appeared to be designed to produce 3.7 volts. The actual average voltage was 3.9 volts. There was a wide variation in the actual voltage. A better measure of the battery would be the milliamp hour (mAh) rating. Some of the batteries listed the rating on the battery but many did not. An attempt was made to determine the rating based off of the model number on the battery. The smallest appeared to be Blu at 80 mAh and the largest was Bull Smoke at 350 mAh. There was a wide distribution of batteries used in the products with no single rating dominating the group. The products with the metal lattice vaporizers tended to use batteries on the lower end of the range with an average rating of 160 mAh.





LED and Puff Sensor

The LED and puff (flow) sensor were integrated into one unit in thirty-three of the products. In the other sixteen products the puff sensor was a separate unit usually located between the battery and the vaporizer in the power unit. It was apparent from the manuals there is logic built into the circuitry of some of the products. The capabilities included turning the product off or signaling to the consumer if it was over-smoked (too many puffs per minute or too long of a puff), flashing the LED when the battery unit needed charging, and flashing the LED when the atomizer is being cleaned (metal lattice atomizers). The colors of the LEDs included red (17), orange (13), green (5), white (2) yellow (1) and blue



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(11). The red and orange had a dark lens at the lit-end and it was difficult to discern a difference in the appearance when smoked. There was a lens at the lit-end that gave the appearance of ash in most products. The lenses varied from non-descript gray to a very realistic gray and black. In all of the products, the lens was separate from the LED/puff sensor unit. In a few of the products the lens was a plastic crystal.

Packaging

The products were purchased as "starter kits". There were basically two kinds: express starter kits comprised of a power unit or two, a few cartomizers and a USB plug charger. Standard starter kits contained one or two power units, a package or two of cartomizers, and a selection of chargers including a car charger, wall charger, and USB charger. Some of the units came with a personal charging case which looked like a flip top box. Some of the packages also included a cigarette case. The express kits were minimally packaged in either a blister pack or flip top box. The standard starter kits were mostly packaged in attractive magnetic closure boxes with foam inserts.





Claims

Most of the products (28) did not make a claim about how long the product would last. The products that did make a claim were vague, using terms like one to two packs, less than 20 cigarettes, 12 -15 cigarettes, or 100 -300 puffs. In reading the manuals, some of the claims related to the battery (number of puffs) and others to the cartomizer (cigarette equivalence). The vagueness of the claims and the limited number of products making a claim made it impossible to analyze the claims in relation to the product design.

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Appendix I

Individual e-Cigarette Reviews

NJOY Exhibit 2039.016
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Rechargable e-Cigarettes

Apollo



Description:

This two piece rechargeable unit claims to yield 100 to 300 puffs per cartomizer. It is packaged in cardboard box with a magnetic closure. The starter kit came with a personal charging case. The product is constructed with metal tubes. The power unit had a black coating. The tipping paper on the cartomizer was printed soft touch black. The complete product is 107 mm long and weighs 15.54 g. The reservoir in the cartomizer weighed 980 mg. The product is well balanced with a 57 mm center of gravity. The vaporizer is a double wrapped horizontal configuration. The inner wrap tube channeled air to the wire but did not extend beyond the coil. The notable features of this product are its horizontal vaporizer and personal charging case.

Price: $69.95 www.apolloecigs.com

Attributes:

Weight (g): 15.54	Power Unit Weight (g): 10.55	Cartomizer Weight (g): 4.99
Length (mm): 107	Diameter (mm): 9.26	Center of Gravity (mm): 57
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.017
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Apollo

Parts:

Cartomizer



4.99 g

Power Unit



Black coating 10.55 g



Personal charging case

Exterior Wrapper



Soft touch black

Mouthpiece



Hard white plastic with rubber gasket underneath

Inner Construction



Metal tube

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Apollo

Resevoir Plug



Polyester mat 0.98 g

Vaporizer



Double wrapped horizontal configuration

Battery



4.34 g

4.08 v

"Lit-End" LED



Blue LED

Packaging



Packaging



NJOY Exhibit 2039.019
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Bedford Slims



Description:

This two piece rechargeable unit claims to be equivalent to one pack. The product was packaged in a series of basic boxes. The product is constructed with metal tubes. The power unit had a polished metal appearance. Black soft touch was printed on the tipping paper on the cartomizer. The complete product is 119 mm long and weighs 16.28 g. The product is not a "slim" with a diameter of 9.4 mm. The reservoir weighed 1020 mg in the cartomizer. The product is well balanced with a 57 mm center of gravity. The vaporizer is a triple wrapped linear configuration. Notable attributes included the linear vaporizer configuration and black lens with a mustache profile over the LED.

Price: $51.50 www.bedfordslims.com

Attributes:

Weight (g): 16.28	Power Unit Weight (g): 11.62	Cartomizer Weight (g): 4.67
Length (mm): 118.74	Diameter (mm): 9.4	Center of Gravity (mm): 57
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.020
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Bedford Slims

Parts:

Cartomizer



4.67 g

Power Unit



Polished metal 11.62 g

Exterior Wrapper



Black soft touch

Mouthpiece



Hard plastic with rubber gasket underneath

Inner Construction



Metal Tube

NJOY Exhibit 2039.021
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Bedford Slims

Resevoir Plug



Polyester mat 1.02 g

Vaporizer



Triple wrapped vertical

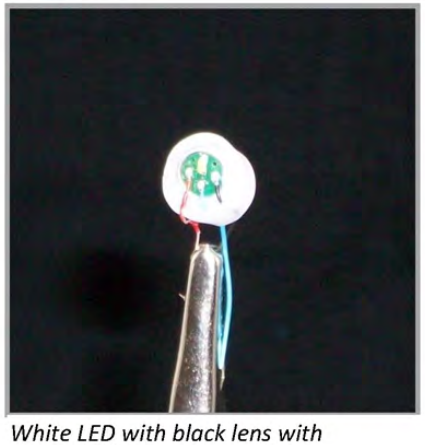
Battery



5.03 g

4.1 v

"Lit-End" LED



White LED with black lens with mustache logo

Packaging



Packaging



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Bloog



Description:

This two piece rechargeable unit does not make a yield claim. It is packaged in a magnetic closure cardboard box with a foam insert. The product is constructed with metal tubes. The power unit had a soft touch black coating. The tipping paper on the cartomizer was printed soft touch black. The complete product is 117 mm long and weighs 19.04 g. The reservoir in the cartomizer weighed 780 mg. The product is well balanced with a 57 mm center of gravity. The vaporizer is a double wrapped inverted T configuration. The notable feature for this product is its unique lit end lens with a product logo.

Price: $53.98 www.bloog.com

Attributes:

Weight (g):	19.04	Power Unit Weight (g):	13.92	Cartomizer Weight (g):	5.13
Length (mm):	116.9	Diameter (mm):	9.23	Center of Gravity (mm):	57
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

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Bloog

Parts:

Cartomizer



5.13 g

Power Unit



Black soft touch coating 13.92 g



Lit-end lens

Exterior Wrapper



Soft touch black

Mouthpiece



White soft rubber

Inner Construction



Metal tube

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Bloog

Resevoir Plug



Polyester mat 0.78 g

Vaporizer



Double wrapped inverted T

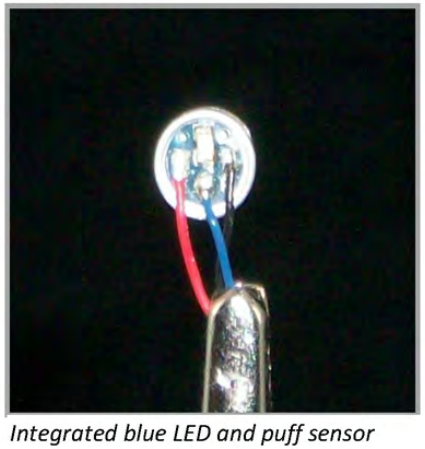
Battery



6.21 g

4.08 v

"Lit-End" LED



Integrated blue LED and puff sensor

Packaging



Packaging



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Blu



Description:

This two piece rechargeable unit claims to yield 250 puffs per cartomizer. The product was packaged in a cardboard box. The product is constructed with metal tubes. There was a glossy white coating on the power unit. The tipping paper on the cartomizer was printed soft touch cork. The complete product is 88 mm long and weighs 11.88 g. The reservoir in the cartomizer weighed 1020 mg. The product is well balanced with a 44 mm center of gravity. The vaporizer is a triple wrapped cross configuration. The notable feature for this product is the social features of the Flip Top Box Charger. The unit activates when there is another user close by, a store that sells Blu, or a venue that accepts the product.

Price: $79.95 www.blucigs.com

Attributes:

Weight (g):	11.88	Power Unit Weight (g):	7.27	Cartomizer Weight (g):	4.62
Length (mm):	88.26	Diameter (mm):	8.65	Center of Gravity (mm):	44
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

NJOY Exhibit 2039.026
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Blu

Parts:

Cartomizer



4.62 g

Power Unit



White coating 7.27 g



FTB charger

Exterior Wrapper



Cork soft touch

Mouthpiece



Hard tan plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.027
Juul v. NJOY
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Blu

Resevoir Plug



Polyester mat 1.02 g

Vaporizer



Triple wrapped cross configuration

Battery



2.58 g

3.76 v

"Lit-End" LED



Separate blue LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.028
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Breathe Fresh eCigs



Description:

This two piece rechargeable unit does not make any yield claims. The product was packaged in a cardboard box with a magnetic closure. The product is constructed with metal tubes. There was a glossy white exterior coating on the power unit. The tipping paper on the cartomizer was printed soft touch cork. The complete product is 118 mm long and weighs 17.97 g. The reservoir in the cartomizer weighed 870 mg. The product is well balanced with a 58 mm center of gravity. The vaporizer is a triple wrapped vertical configuration. The notable feature for this product is its vertical vaporizer.

Price: $24.99 www.breathefreshecigs.com

Attributes:

Weight (g): 17.97	Power Unit Weight (g): 12.79	Cartomizer Weight (g): 5.19
Length (mm): 117.75	Diameter (mm): 9.47	Center of Gravity (mm): 58
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

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Breathe Fresh eCigs

Parts:

Cartomizer



5.19 g

Power Unit



White coating 12.79 g



Second wrapper on vaporizer

Exterior Wrapper



Cork soft touch

Mouthpiece



Soft white rubber

Inner Construction



NJOY Exhibit 2039.030
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Breathe Fresh eCigs

Resevoir Plug



Polyester mat 0.87 g

Vaporizer



Triple wrapped vertical configuration

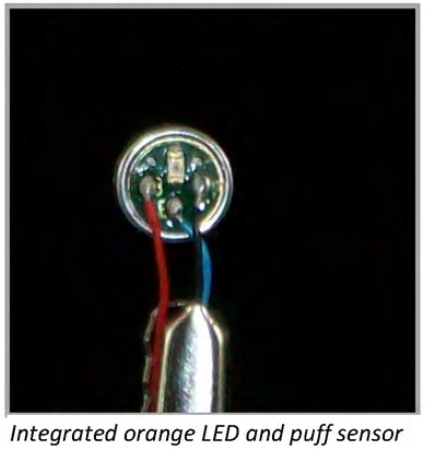
Battery



6.31 g

3.87 v

"Lit-End" LED



Integrated orange LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.031
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Bull Smoke Automatic



Description:

This two piece rechargeable unit makes no yield claims. The product was packaged in a series of boxes with color matching foam inserts. The package came with an automatic battery and a manual one. The product is constructed with metal tubes. There is a white coating on the power unit and yellow is printed on the tipping paper on the cartomizer. The complete product is 140 mm long and weighs 20.85 g. The reservoir in the cartomizer weighed 830 mg. The product is mouth end heavy with a 62 mm center of gravity. The vaporizer is a double wrapped inverted T configuration. Notable attributes included the packaging, the manual and automatic batteries and the separate LED and puff sensor.

Price: $29.95 www.bullsmoke.con

Attributes:

Weight (g): 20.8	Power Unit Weight (g): 15.53	Cartomizer Weight (g): 5.27
Length (mm): 140.08	Diameter (mm): 8.01	Center of Gravity (mm): 62
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.032
Juul v. NJOY
IPR2024-00160

Bull Smoke Automatic

Parts:

Cartomizer



5.27 g

Power Unit



White coating 15.53 g

Exterior Wrapper



Soft touch yellow

Mouthpiece



Hard plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.033
Juul v. NJOY
IPR2024-00160

Bull Smoke Automatic

Resevoir Plug



Polyester mat 0.83 g

Vaporizer



Double wrapped inverted T

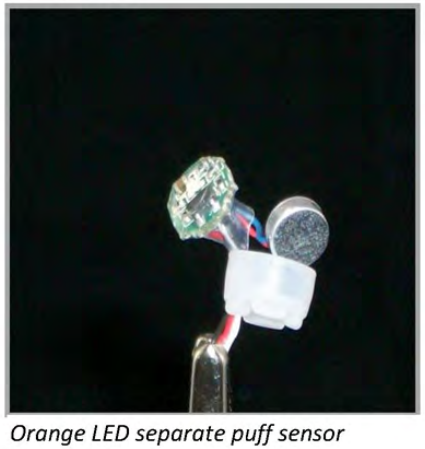
Battery



7.88 g

3.88 v

"Lit-End" LED



Orange LED separate puff sensor

Packaging



Packaging



NJOY Exhibit 2039.034
Juul v. NJOY
IPR2024-00160

Bull Smoke Manual



Description:

This two piece rechargeable unit makes no yield claims. The product was packaged in a series of boxes with color matching foam inserts. The package came with an automatic battery and a manual one. The product is constructed with metal tubes. There is a white exterior coating on the power unit and yellow is printed on the tipping paper on the cartomizer. The complete product is 103 mm long and weighs 15.35 g. The reservoir in the cartomizer weighed 830 mg. The product is well balanced with a 51 mm center of gravity. The vaporizer is a double wrapped inverted T configuration. Notable attributes included the packaging, the manual and automatic batteries and the manual switch.

Price: $29.95 www.bullsmoke.con

Attributes:

Weight (g): 15.35	Power Unit Weight (g): 10.23	Cartomizer Weight (g): 5.27
Length (mm): 103.29	Diameter (mm): 9.44	Center of Gravity (mm): 51
Puff Activation Mode: Manual	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.035
Juul v. NJOY
IPR2024-00160

Bull Smoke Manual

Parts:

Cartomizer



5.27 g

Power Unit



White coating 10.23 g

Exterior Wrapper



Soft touch yellow

Mouthpiece



Hard plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.036
Juul v. NJOY
IPR2024-00160

Bull Smoke Manual

Resevoir Plug



Polyester mat 0.83 g

Vaporizer



Double wrapped inverted T

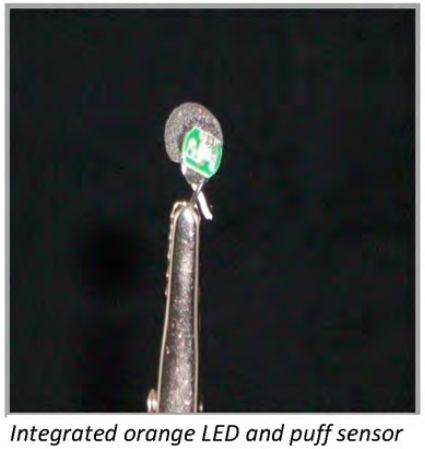
Battery



3.6 g

4.09 v

"Lit-End" LED



Integrated orange LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.037
Juul v. NJOY
IPR2024-00160

Cigarti



Description:

This two piece rechargeable unit claims to be equal to less than 20 cigarettes. The product was packaged in a magnetic closure cardboard box with a foam insert. The product is constructed with metal tubes. The glossy patterned exterior on the power unit was printed on a clear wrapper. Underneath there was a white coating with filigree lines. The tipping paper on the cartomizer was printed soft touch white. The complete product is 102 mm long and weighs 14.8 g. The reservoir in the cartomizer weighed 870 mg. The product is well balanced with a 48 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration. The notable feature of this product was the printed wrapper on the power unit.

Price: $89.99 www.cigarti.com

Attributes:

Weight (g): 14.8	Power Unit Weight (g): 10.35	Cartomizer Weight (g): 4.47
Length (mm): 102.24	Diameter (mm): 8.8	Center of Gravity (mm): 48
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.038
Juul v. NJOY
IPR2024-00160

Cigarti

Parts:

Cartomizer



4.47 g

Power Unit



Glossy pattern printed on paper with white and filigree lines underneath 10.35 g

Exterior Wrapper



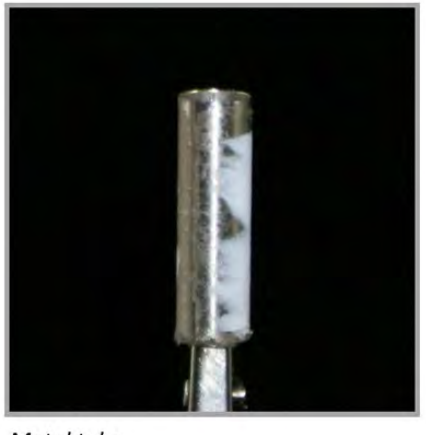
Soft touch white

Mouthpiece



Hard white plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.039
Juul v. NJOY
IPR2024-00160

Cigarti

Resevoir Plug



Polyester mat 0.87 g

Vaporizer



Triple wrapped inverted T

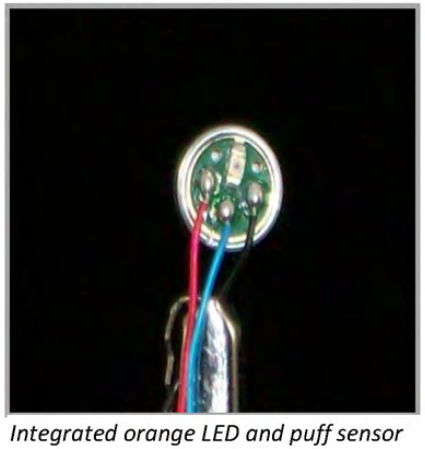
Battery



4.81 g

3.91 v

"Lit-End" LED



Integrated orange LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.040
Juul v. NJOY
IPR2024-00160

Cigavette Premier



Description:

This two piece rechargeable unit makes claims to yield about 75 cigarettes and is packaged in a flip top box. The product is constructed with metal tubes. There is a white coating with filigree lines on the power unit and cork is printed on the tipping paper on the cartomizer. The complete product is 116 mm long and weighs 17.05 g. The reservoir weighed 1190 mg in the cartomizer. The product is well balanced with a 65 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration. There are no notable attributes to this product.

Price: $29.95 www.cigavette.com

Attributes:

Weight (g): 17.05	Power Unit Weight (g): 12.91	Cartomizer Weight (g): 4.83
Length (mm): 116.33	Diameter (mm): 9.37	Center of Gravity (mm): 65
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.041
Juul v. NJOY
IPR2024-00160

Cigavette Premier

Parts:

Cartomizer



4.83 g

Power Unit



White coating with filigree lines 12.91 g

Exterior Wrapper



Soft touch cork tipping

Mouthpiece



Hard plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.042
Juul v. NJOY
IPR2024-00160

Cigavette Premier

Resevoir Plug



Polyester mat 1.19 g

Vaporizer



Triple wrapped inverted T

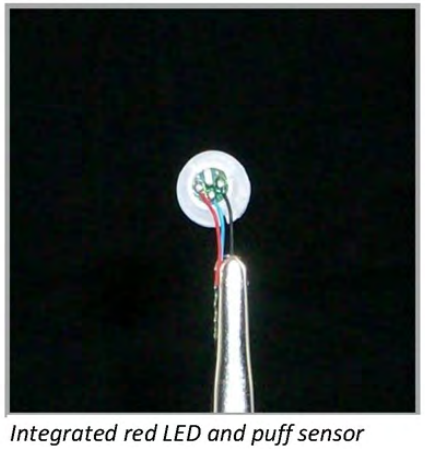
Battery



6.38 g

4.13 v

"Lit-End" LED



Integrated red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.043
Juul v. NJOY
IPR2024-00160

Crown 7



Description:

This two piece rechargeable unit claims that 3 cartridges equal 4 to 5 packs. The product was packaged in a series of boxes. The product is constructed with metal tubes. The white exterior markings are coated on the power unit and white is printed on the tipping paper on the cartomizer. The complete product is 110 mm long and weighs 17.49 g. The reservoir in the cartomizer weighed 1280 mg. The product is well balanced with a 54 mm center of gravity. The vaporizer is a triple wrapped cross configuration. There are no notable attributes to this product.

Price: $98.04 www.crown7.com

Attributes:

Weight (g): 17.49	Power Unit Weight (g): 11.07	Cartomizer Weight (g): 6.42
Length (mm): 109.99	Diameter (mm): 9.38	Center of Gravity (mm): 54
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.044
Juul v. NJOY
IPR2024-00160

Crown 7

Parts:

Cartomizer



6.42 g

Power Unit



White coating 11.07 g



Carrying case

Exterior Wrapper



Soft touch white

Mouthpiece



Soft rubber

Inner Construction



Metal tube

NJOY Exhibit 2039.045
Juul v. NJOY
IPR2024-00160

Crown 7

Resevoir Plug



Polyester mat 1.28 g

Vaporizer



Triple wrapped cross configuration

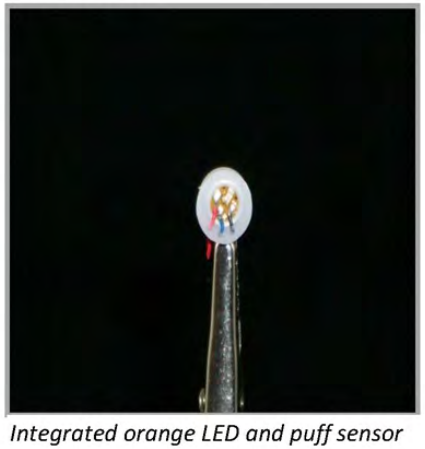
Battery



4.41 g

4.02 v

"Lit-End" LED



Integrated orange LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.046
Juul v. NJOY
IPR2024-00160

Duopro



Description:

This two piece rechargeable unit does not make a yield claim. The product is constructed with metal tubes. There was a black coating on the power unit. The tipping paper on the cartomizer was printed tan and had a lip release layer. The complete product is 117 mm long and weighs 17.44 g. The reservoir in the cartomizer weighed 870mg. The product is well balanced with a 59 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration with the coil at the bottom of the tube wrapper. The notable attribute of this product is lip release layer on the tipping paper.

Price: $54.95 www.ecigsinc.com

Attributes:

Weight (g): 17.44	Power Unit Weight (g): 12.69	Cartomizer Weight (g): 4.76
Length (mm): 116.88	Diameter (mm): 9.19	Center of Gravity (mm): 59
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.047
Juul v. NJOY
IPR2024-00160

Duopro

Parts:

Cartomizer



4.76 g

Power Unit



Black coating 12.69 g

Exterior Wrapper



Tan with separate lip release layer.

Mouthpiece



White hard plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.048
Juul v. NJOY
IPR2024-00160

Duopro

Resevoir Plug



Polyester mat 0.87 g

Vaporizer



Triple wrapped inverted T

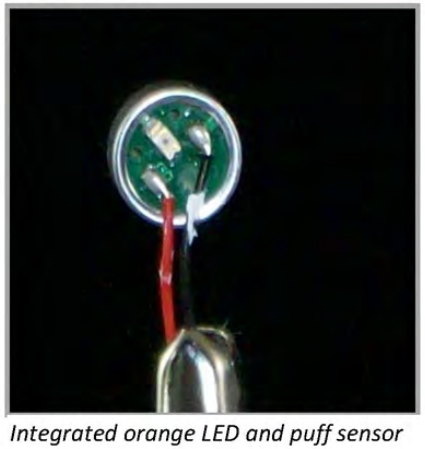
Battery



6.33 g

3.96 v

"Lit-End" LED



Integrated orange LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.049
Juul v. NJOY
IPR2024-00160

E-Lites



Description:

This two piece rechargeable unit claims to be equal to 200 cigarettes. The product was packaged in a cardboard box designed to look like a flip top box. Inside was a plastic flip top box with a USB connector hidden in the base. The product is constructed with metal tubes. There was a glossy white coating on the power unit with filigree lines. The tipping paper on the cartomizer was printed soft touch tan. The complete product is 104 mm long and weighs 15.45 g. The reservoir in the cartomizer weighed 830 mg. The product is well balanced with a 52 mm center of gravity. The vaporizer is a triple wrapped cross configuration. The notable feature for this product is its FTB charging system.

Price: $39.99 www.e-lites.org

Attributes:

Weight (g):	15.45	Power Unit Weight (g):	10.02	Cartomizer Weight (g):	5.42
Length (mm):	103.6	Diameter (mm):	9.31	Center of Gravity (mm):	52
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

NJOY Exhibit 2039.050
Juul v. NJOY
IPR2024-00160

E-Lites

Parts:

Cartomizer



5.42 g

Power Unit



White coating with filigree lines 10.02 g



FTB charger

Exterior Wrapper



Tan soft touch

Mouthpiece



Hard white plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.051
Juul v. NJOY
IPR2024-00160

E-Lites

Resevoir Plug



Polyester mat 0.83 g

Vaporizer



Triple wrapped cross

Battery



4.24 g

3.82 v

"Lit-End" LED



Integrated orange LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.052
Juul v. NJOY
IPR2024-00160

Eluma



Description:

This two piece rechargeable unit does not make a yield claim. It is packaged in a magnetic closure cardboard box with a plastic insert. The product is constructed with metal tubes. There was a glossy white coating on the power unit. The tipping paper on the cartomizer was printed soft touch white. The complete product is 98 mm long and weighs 15.25 g. The reservoir in the cartomizer weighed 1140 mg. The product is well balanced with a 50 mm center of gravity. The vaporizer is a triple wrapped cross configuration. The product has a separate puff sensor located behind the battery. The notable feature for this product is its FTB charging system.

Price: $79.99 www.elumacigs.com

Attributes:

Weight (g):	15.25	Power Unit Weight (g):	10.35	Cartomizer Weight (g):	4.91
Length (mm):	98.47	Diameter (mm):	9.33	Center of Gravity (mm):	50
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

NJOY Exhibit 2039.053
Juul v. NJOY
IPR2024-00160

Eluma

Parts:

Cartomizer

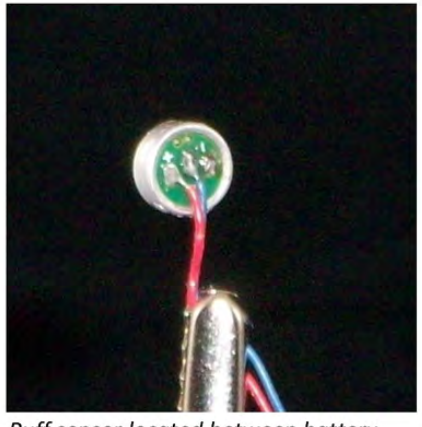


4.91 g

Power Unit



Glossy white coating 10.35 g



Puff sensor located between battery and cartomizer

Exterior Wrapper



Mouthpiece



White hard plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.054
Juul v. NJOY
IPR2024-00160

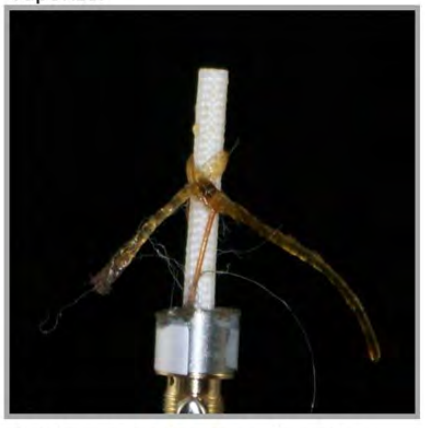
Eluma

Resevoir Plug



Polyester mat 1.14 g

Vaporizer



Triple wrapped cross configuration

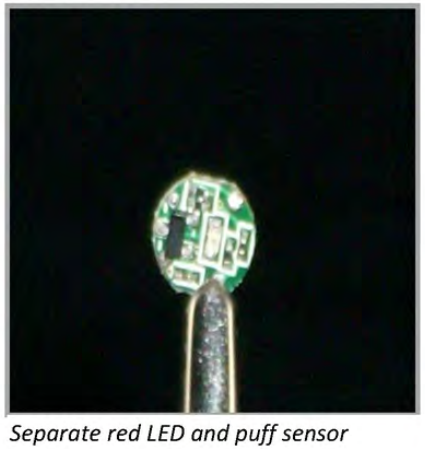
Battery



4.17 g

3.8 v

"Lit-End" LED



Separate red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.055
Juul v. NJOY
IPR2024-00160

Eon Smoke



Description:

This two piece rechargeable unit does not make a yield claim. The product was packaged in a series of boxes. The product is constructed with metal tubes. There is a white exterior coating with filigree lines on the power unit and tan is printed on the tipping paper on the cartomizer. The complete product is 113 mm long and weighs 16.89 g. The reservoir in the cartomizer weighed 1140 mg. The product is well balanced with a 55 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration with the coil at the base of the vaporizer. There are no notable attributes.

Price: $79.95 www.eonsmoke.com

Attributes:

Weight (g): 16.89	Power Unit Weight (g): 12.03	Cartomizer Weight (g): 4.87
Length (mm): 112.59	Diameter (mm): 9.41	Center of Gravity (mm): 55
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.056
Juul v. NJOY
IPR2024-00160

Eon Smoke

Parts:

Cartomizer



4.87 g

Power Unit



White coating with filigree lines 12.03 g



Cartomizer box

Exterior Wrapper



Tan soft touch

Mouthpiece



Hard plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.057
Juul v. NJOY
IPR2024-00160

Eon Smoke

Resevoir Plug



Polyester mat 1.14 g

Vaporizer



Triple wrapped inverted T

Battery



5.98 g

4.06 v

"Lit-End" LED



Integrated orange LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.058
Juul v. NJOY
IPR2024-00160

ePuffer Colibri



Description:

This two piece rechargeable unit claims to be equivalent to 12-15 cigarettes. It is packaged in a magnetic closure cardboard box with a hard foam insert. The product is constructed with metal tubes. The power unit had a white coating with filigree lines. The tipping paper on the cartomizer was printed soft touch cork. The complete product is 84 mm long and weighs 9.11 g. The reservoir in the cartomizer weighed 520 mg. The product is well balanced with a 44 mm center of gravity. The vaporizer is a triple wrapped cross configuration. The product's notable feature is its recharging carrying case.

Price: $39.00 www.epuffer.com

Attributes:

Weight (g): 9.11	Power Unit Weight (g): 5.82	Cartomizer Weight (g): 3.22
Length (mm): 84.46	Diameter (mm): 8.14	Center of Gravity (mm): 44
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargable	Number of Consumer Components: 2

NJOY Exhibit 2039.059
Juul v. NJOY
IPR2024-00160

ePuffer Colibri

Parts:

Cartomizer



3.22 g

Power Unit



White coating with filigree lines 5.82 g



Charging carrying case

Exterior Wrapper



Cork soft touch

Mouthpiece



Hard white plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.060
Juul v. NJOY
IPR2024-00160

ePuffer Colibri

Resevoir Plug



Polyester mat 0.52 g

Vaporizer



Triple wrapped cross

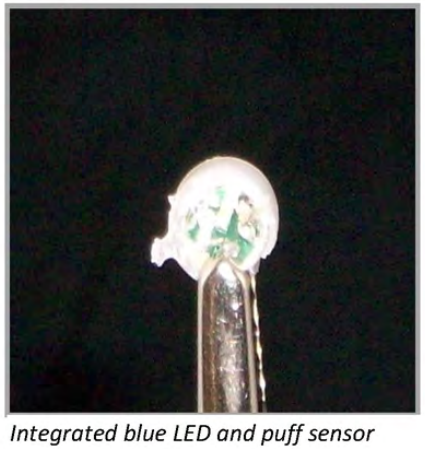
Battery



2.51 g

3.71 v

"Lit-End" LED



Integrated blue LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.061
Juul v. NJOY
IPR2024-00160

eSmoke



Description:

This two piece rechargeable unit did not list any yield claims. It is packaged in cardboard box made to look like a flip top box, but it opens like a regular box. The starter kit came with an additional large battery (with a manual switch). The product is constructed with metal tubes. The power unit had a white coating with filigree lines. The tipping paper on the cartomizer was printed soft touch cork. The complete product is 97 mm long and weighs 13.46 g. The reservoir in the cartomizer weighed 910 mg. The product is well balanced with a 48 mm center of gravity. The vaporizer is a triple wrapped vertical configuration. The wrapping material was woven and tightly wrapped. The product's notable feature is its woven wrapping material and vertical vaporizer.

Price: $49.95 www.esmoke.net

Attributes:

Weight (g):	13.46	Power Unit Weight (g):	9.33	Cartomizer Weight (g):	4.13
Length (mm):	97.45	Diameter (mm):	9.08	Center of Gravity (mm):	48
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

NJOY Exhibit 2039.062
Juul v. NJOY
IPR2024-00160

eSmoke

Parts:

Cartomizer



4.13 g

Power Unit



White coating with filigree lines 9.33 g



Large battery with manual switch

Exterior Wrapper



Cork soft touch

Mouthpiece



Soft white rubber

Inner Construction



Metal tube

NJOY Exhibit 2039.063
Juul v. NJOY
IPR2024-00160

eSmoke

Resevoir Plug



Woven mat 0.91 g

Vaporizer



Triple wrapped vertical

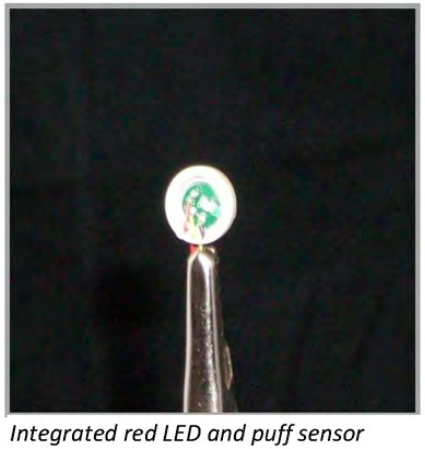
Battery



3.87 g

4.06 v

"Lit-End" LED



Integrated red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.064
Juul v. NJOY
IPR2024-00160

Eversmoke



Description:

This two piece rechargeable unit claims to be equal to one pack of cigarettes. The product was packaged in a magnetic closure cardboard box with a foam insert. The product is constructed with metal tubes. The glossy white exterior on the power unit was printed on with filigree lines. The tipping paper on the cartomizer was printed soft touch cork. The complete product is 102 mm long and weighs 16.42 g. The reservoir in the cartomizer weighed 1030 mg. The product is well balanced with a 54 mm center of gravity. The vaporizer is a double wrapped inverted T configuration. This product had no notable features.

Price: $49.99 www.eversmoke.com

Attributes:

Weight (g): 16.42	Power Unit Weight (g): 11.15	Cartomizer Weight (g): 5.28
Length (mm): 102.26	Diameter (mm): 9.48	Center of Gravity (mm): 54
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.065
Juul v. NJOY
IPR2024-00160

Eversmoke

Parts:

Cartomizer



5.28 g

Power Unit



White coating with filigree lines 11.15 g



Cartomizer box

Exterior Wrapper



Mouthpiece



White hard plastic with a rubber gasket underneath

Inner Construction



NJOY Exhibit 2039.066
Juul v. NJOY
IPR2024-00160

Eversmoke

Resevoir Plug



Polyester mat 1.03 g

Vaporizer



Double wrapped inverted T

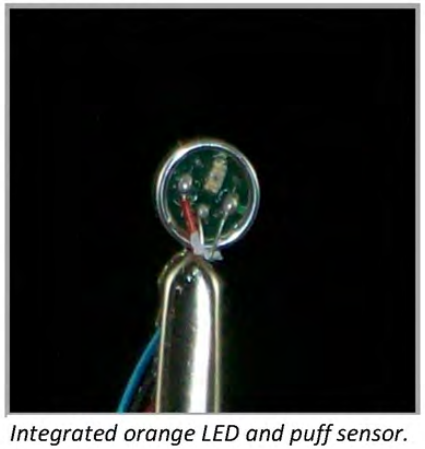
Battery



4.47 g

3.7 v

"Lit-End" LED



Integrated orange LED and puff sensor. Crystal lens.

Packaging



Packaging



NJOY Exhibit 2039.067
Juul v. NJOY
IPR2024-00160

Fifty-One Trio



Description:

This product does not make a yield claim. This is a three piece unit: the power source, the inverted U metal lattice vaporizer, and cartridges. The battery is surrounded by a white metal tube with filigree lines. The cartridge has a tan plastic body. The complete product is 104 mm long and weighs 13.9 g. The reservoir weighed 550 mg in the cartridge. The product is well balanced with a 55 mm center of gravity. The notable features for this product are its unique metal lattice vaporizer and its 3 part construction with a disposable cartridge.

Price: $129.95 www.vapor-corp.com

Attributes:

Weight (g): 13.9	Power Unit Weight (g): 10.15	Cartomizer Weight (g): 0
Length (mm): 103.5	Diameter (mm): 9.12	Center of Gravity (mm): 55
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 3

NJOY Exhibit 2039.068
Juul v. NJOY
IPR2024-00160

Fifty-One Trio

Parts:

Cartomizer



0 g

Power Unit

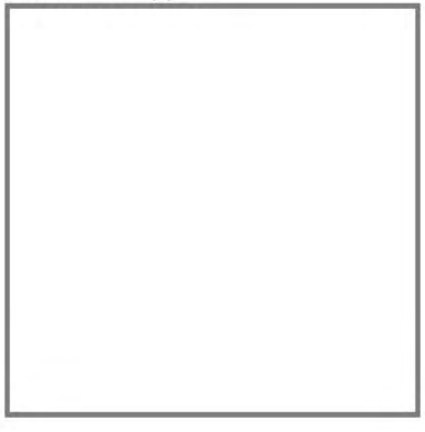


White coating with filigree lines 10.15 g



Cartridge

Exterior Wrapper



Mouthpiece



Hard plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.069
Juul v. NJOY
IPR2024-00160

Fifty-One Trio

Resevoir Plug



Polyester mat 0.55 g

Vaporizer



Inverted U metal lattice

Battery



4.11 g

4 v

"Lit-End" LED



Integrated red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.070
Juul v. NJOY
IPR2024-00160

Firebrand Millennium



Description:

This two piece rechargeable unit did not list any yield claims. It is packaged in cardboard boxes. The product is constructed with metal tubes. The power unit had a black coating. The tipping paper on the cartomizer was printed soft touch black and brown. The complete product is 126 mm long and weighs 19.89 g. The reservoir in the cartomizer weighed 1220 mg. The product was well balanced with a 63 mm center of gravity. The vaporizer is a triple wrapped vertical configuration. The notable feature for this product is its vertical coil vaporizer.

Price: $59.99 www.firebrandcigs.com

Attributes:

Weight (g): 19.89	Power Unit Weight (g): 14.14	Cartomizer Weight (g): 5.74
Length (mm): 126.36	Diameter (mm): 9.36	Center of Gravity (mm): 63
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.071
Juul v. NJOY
IPR2024-00160

Firebrand Millennium

Parts:

Cartomizer



5.74 g

Power Unit



Soft touch black coating 14.14 g

Exterior Wrapper



Black and brown soft touch

Mouthpiece



White soft rubber

Inner Construction



Metal tube

NJOY Exhibit 2039.072
Juul v. NJOY
IPR2024-00160

Firebrand Millennium

Resevoir Plug



Polyester mat 1.22 g

Vaporizer



Triple wrapped vertical

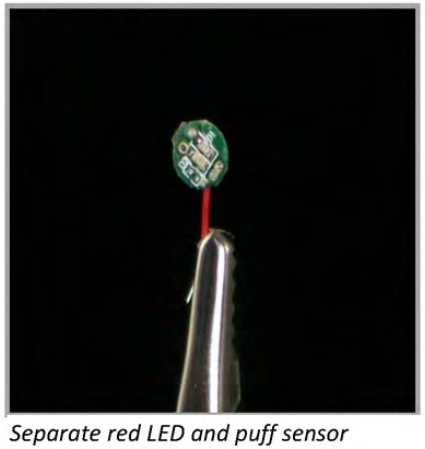
Battery



6.14 g

3.84 v

"Lit-End" LED



Separate red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.073
Juul v. NJOY
IPR2024-00160

Frii



Description:

This two piece rechargeable unit does not make a yield claim. The product was packaged in a series of boxes. The product is constructed with metal tubes. There was a glossy white coating on the power unit and gold is printed on the tipping paper on the cartomizer. The complete product is 101 mm long and weighs 12.86 g. The reservoir in the cartomizer weighed 900 mg. The product is well balanced with a 51 mm center of gravity. The vaporizer is a double wrapped T configuration with the coil at the top of the tube wrapper. The notable attributes of this product are is its vaporizer design its separate puff sensor (located in front of the battery).

Price: $89.95 www.smokefrii.com

Attributes:

Weight (g):	12.86	Power Unit Weight (g):	8.43	Cartomizer Weight (g):	4.44
Length (mm):	100.7	Diameter (mm):	8.5	Center of Gravity (mm):	51
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

NJOY Exhibit 2039.074
Juul v. NJOY
IPR2024-00160

Frii

Parts:

Cartomizer



4.44 g

Power Unit



White coating 8.43 g



Blister pack of cartomizers

Exterior Wrapper



Gold soft touch

Mouthpiece



Hard plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.075
Juul v. NJOY
IPR2024-00160

Frii

Resevoir Plug



Polyester mat 0.9 g

Vaporizer



Double wrapped T configuration

Battery



3.58 g

3.86 v

"Lit-End" LED



Red LED and separate puff sensor

Packaging



Packaging



NJOY Exhibit 2039.076
Juul v. NJOY
IPR2024-00160

Green Nicotine



Description:

This two piece rechargeable unit claims to be equivalent to 2 packs and is packaged in a flip top box. The product is constructed with metal tubes. The exterior markings are coatings. The cartomizer is green and the power unit is white with filigree lines. The complete product is 108 mm long and weighs 13.92 g. The product has a plastic reservoir weighing 1270 mg in the cartomizer. The product is well balanced with a 56 mm center of gravity. The vaporizer is a U configuration. The notable feature of this product is its unique vaporizer configuration.

Price: $40.00 www.greennicotine.com

Attributes:

Weight (g): 13.92	Power Unit Weight (g): 9	Cartomizer Weight (g): 4.52
Length (mm): 107.95	Diameter (mm): 9.3	Center of Gravity (mm): 56
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.077
Juul v. NJOY
IPR2024-00160

Green Nicotine

Parts:

Cartomizer



4.52 g

Power Unit



White coating with filigree lines

9 g

Exterior Wrapper



Painted metal Tube

Mouthpiece



Hard plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.078
Juul v. NJOY
IPR2024-00160

Green Nicotine

Resevoir Plug



Plastic container 1.27 g

Vaporizer



U configuration

Battery



4.33 g

3.98 v

"Lit-End" LED



Integrated green led and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.079
Juul v. NJOY
IPR2024-00160

Green Smoke



Description:

This two piece rechargeable unit came with two batteries of different lengths. The short battery claimed to produce 180 - 220 puffs per charge and the long one 250-300. The product was packaged in a magnetic closure box with a foam insert. The product is constructed with metal tubes. The power unit had a white coating with filigree lines. The tipping paper on the cartomizer was printed soft touch cork. The complete product is 100 mm long and weighs 14.82 g. The reservoir in the cartomizer weighed 1100 mg. The product is well balanced with a 49 mm center of gravity. The vaporizer is a double wrapped cross configuration. There are no notable features for this product.

Price: $99.97 www.greensmoke.com

Attributes:

Weight (g):	14.82	Power Unit Weight (g):	9.62	Cartomizer Weight (g):	5.19
Length (mm):	99.87	Diameter (mm):	9.12	Center of Gravity (mm):	49
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

NJOY Exhibit 2039.080
Juul v. NJOY
IPR2024-00160

Green Smoke

Parts:

Cartomizer



5.19 g

Power Unit



White coating with filigree lines 9.62 g



USB E-cigarette pass-through

Exterior Wrapper



Cork soft touch

Mouthpiece



Hard white plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.081
Juul v. NJOY
IPR2024-00160

Green Smoke

Resevoir Plug



Polyester mat 1.1 g

Vaporizer



Double wrapped cross

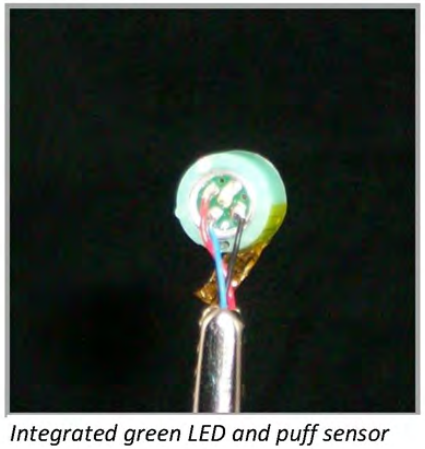
Battery



4.12 g

4.01 v

"Lit-End" LED



Integrated green LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.082
Juul v. NJOY
IPR2024-00160

Halo G6



Description:

This two piece rechargeable unit does not make a yield claim. The ingredients list on the cartomizer box lists l-nicotine as an ingredient. The product was packaged in a padded carrying case. The product is constructed with metal tubes. The black exterior on the power unit appeared to have a rubber like soft texture. The tipping paper on the cartomizer was printed soft touch black. The complete product is 118 mm long and weighs 19.97 g. The reservoir weighed 1050 mg in the cartomizer. The product is well balanced with a 57 mm center of gravity. The vaporizer is a double wrapped inverted T configuration with the coil at the bottom of the tube wrapper. The notable attributes of this product are is its vaporizer design, its manual switch with an integrated circuit, its soft rubber like coating on the power unit and its claim to be using l-nicotine.

Price: $44.99 www.halocigs.com

Attributes:

Weight (g): 19.97	Power Unit Weight (g): 14.6	Cartomizer Weight (g): 5.37
Length (mm): 118.07	Diameter (mm): 9.19	Center of Gravity (mm): 57
Puff Activation Mode: Manual	Disposable/Rechargeable: Rechargable	Number of Consumer Components: 2

NJOY Exhibit 2039.083
Juul v. NJOY
IPR2024-00160

Halo G6

Parts:

Cartomizer

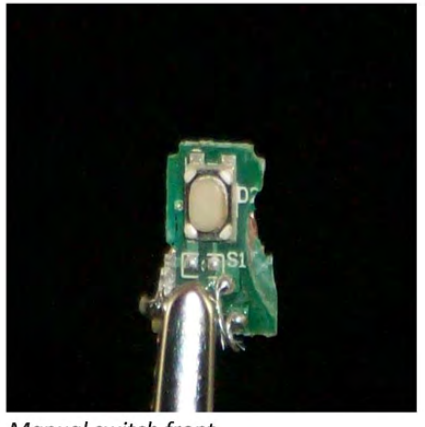


5.37 g

Power Unit



Soft rubber like exterior 14.6 g



Manual switch front

Exterior Wrapper



Black soft touch

Mouthpiece



Soft rubber

Inner Construction



Metal tube

NJOY Exhibit 2039.084
Juul v. NJOY
IPR2024-00160

Halo G6

Resevoir Plug



Polyester mat 1.05 g

Vaporizer



Triple wrapped inverted T

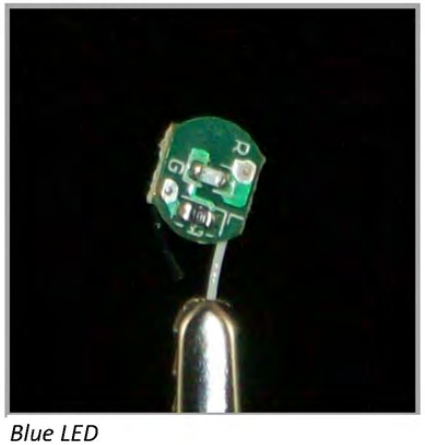
Battery



5.76 g

4.16 v

"Lit-End" LED



Blue LED

Packaging



Packaging



NJOY Exhibit 2039.085
Juul v. NJOY
IPR2024-00160

J510L



Description:

This four piece (power unit, vaporizer, mouthpiece, and cartridge) rechargeable unit did not list any yield claims. It is packaged in cardboard box with a magnetic closure. The starter kit came with a personal charging case. The product is constructed with metal tubes. The whole unit had a black coating. The complete product is 106 mm long and weighs 15.40 g. The cartridge weighed 770 mg. The product is lit-end heavy with a 59 mm center of gravity. The vaporizer is an inverted U metal lattice configuration. The notable feature of this product are that it is a 4 piece unit and has a metal lattice vaporizer.

Price: $46.95 www.firstvapor.com

Attributes:

Weight (g): 15.4	Power Unit Weight (g): 9.89	Cartomizer Weight (g): 5.48
Length (mm): 105.89	Diameter (mm): 9.3	Center of Gravity (mm): 59
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 4

NJOY Exhibit 2039.086
Juul v. NJOY
IPR2024-00160

J510L

Parts:

Cartomizer

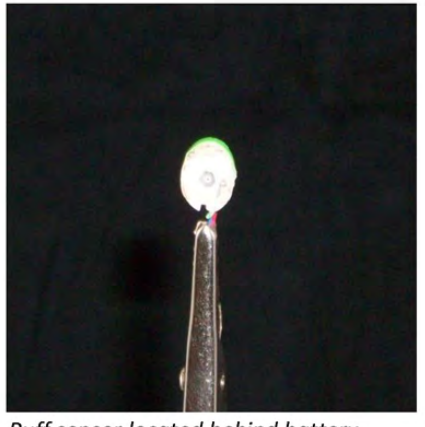


5.48 g

Power Unit



Soft black coating 9.89 g



Puff sensor located behind battery

Exterior Wrapper

Mouthpiece



Hard black plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.087
Juul v. NJOY
IPR2024-00160

J510L

Resevoir Plug



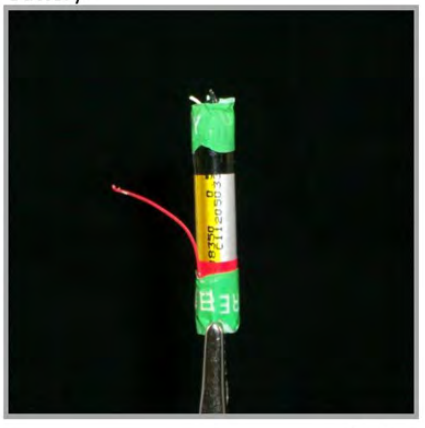
Polyester mat in plastic holder 0.77 g

Vaporizer



Inverted U metal lattice

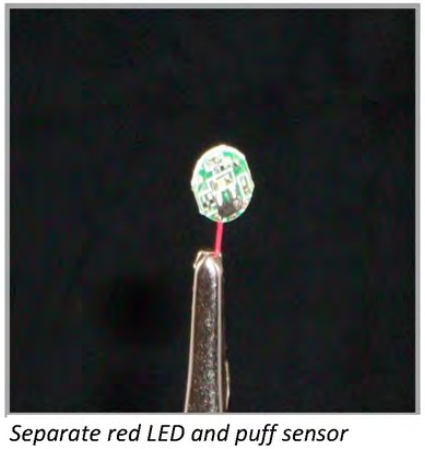
Battery



3.79 g

3.81 v

"Lit-End" LED



Separate red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.088
Juul v. NJOY
IPR2024-00160

Logic Power Series



Description:

This two piece rechargeable unit claims to be equivalent to 2 packs and is packaged in a hanger card. The product is constructed with metal tubes. There is a black exterior coating on the power unit and black printed paper on the cartomizer. The complete product is 125 mm long and weighs 18.83 g. The reservoir weighed 1650 mg in the cartomizer. The product is well balanced with a 63 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration. The vaporizer on this product is slightly different (triple wrapped) from the double wrapped cross configuration in the Logic disposable.

Price: $49.99 www.logicecig.com

Attributes:

Weight (g): 18.83	Power Unit Weight (g): 12.45	Cartomizer Weight (g): 6.28
Length (mm): 125.19	Diameter (mm): 9.42	Center of Gravity (mm): 63
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.089
Juul v. NJOY
IPR2024-00160

Logic Power Series

Parts:

Cartomizer



6.28 g

Power Unit



Black coating 12.45 g

Exterior Wrapper



Slick printed paper

Mouthpiece



Black hard plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.090
Juul v. NJOY
IPR2024-00160

Logic Power Series

Resevoir Plug



Polyester mat 1.65 g

Vaporizer



Triple wrapped inverted T

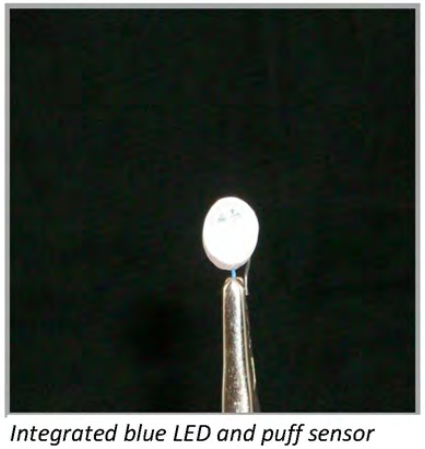
Battery



6.43 g

4.1 v

"Lit-End" LED



Integrated blue LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.091
Juul v. NJOY
IPR2024-00160

Luci



Description:

This product does not make a yield claim. This is a three piece unit: the power source, the inverted U metal lattice vaporizer, and cartridges. The battery is surrounded by a black metal tube. The cartridge has a black plastic body. The complete product is 101 mm long and weighs 10.67 g. The reservoir weighed 360 mg in the cartridge. The product is well balanced with a 53 mm center of gravity. The notable features for this product are its unique metal lattice vaporizer and its 3 part construction with a disposable cartridge.

Price: $99.99 www.myluci.com

Attributes:

Weight (g): 10.67	Power Unit Weight (g): 8.13	Cartomizer Weight (g): 2.54
Length (mm): 101.07	Diameter (mm): 8.58	Center of Gravity (mm): 53
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 3

NJOY Exhibit 2039.092
Juul v. NJOY
IPR2024-00160

Luci

Parts:

Cartomizer

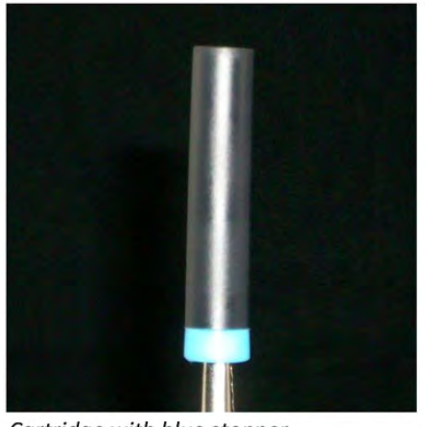


2.54 g

Power Unit



Black coating 8.13 g



Cartridge with blue stopper

Exterior Wrapper



None

Mouthpiece



Black hard plastic molded as part of cartomizer exterior

Inner Construction



Metal tube

NJOY Exhibit 2039.093
Juul v. NJOY
IPR2024-00160

Luci

Resevoir Plug



Plastic cup with polyester mat insert 0.36 g

Vaporizer



Inverted U metal lattice

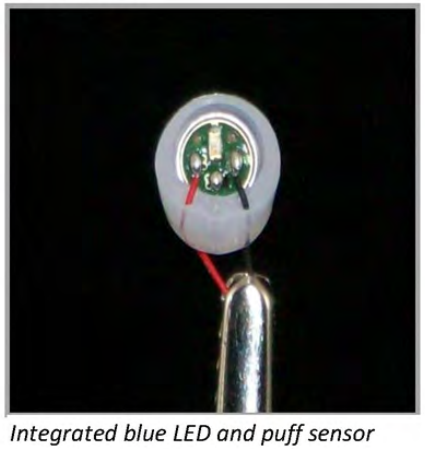
Battery



3.49 g

3.83 v

"Lit-End" LED



Integrated blue LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.094
Juul v. NJOY
IPR2024-00160

Metro Platinum



Description:

This two piece rechargeable unit claims to yield 300 puffs. The product was packaged in a series of boxes. A metal carrying case was included. The product is constructed with metal tubes. There is a white coating on the power unit and bronze is printed on the tipping paper on the cartomizer. The complete product is 109 mm long and weighs 14.36 g. The reservoir in the cartomizer weighed 970 mg. The product is well balanced with a 53 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration with the wire at the base of the vaporizer rather than in the cross. There are no notable attributes.

Price: $22.99 www.metroecigs.com

Attributes:

Weight (g):	14.36	Power Unit Weight (g):	9.37	Cartomizer Weight (g):	4.97
Length (mm):	108.7	Diameter (mm):	9.36	Center of Gravity (mm):	53
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

NJOY Exhibit 2039.095
Juul v. NJOY
IPR2024-00160

Metro Platinum

Parts:

Cartomizer



4.97 g

Power Unit



White coating 9.37 g



Metal carrying case

Exterior Wrapper



Bronze soft touch

Mouthpiece



Hard plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.096
Juul v. NJOY
IPR2024-00160

Metro Platinum

Resevoir Plug



Polyester mat 0.97 g

Vaporizer



Triple wrapped inverted T configuration

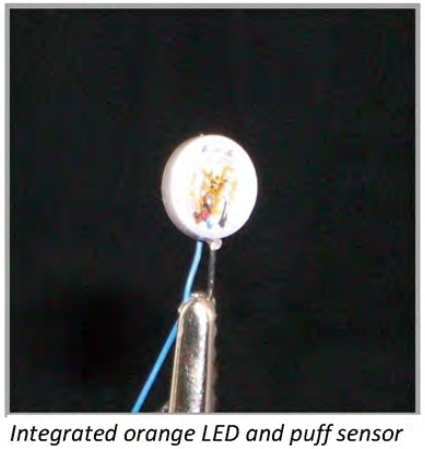
Battery



4.33 g

4 v

"Lit-End" LED



Integrated orange LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.097
Juul v. NJOY
IPR2024-00160

Modern Vapor Sidesho



Description:

This two piece rechargeable unit does not make a yield claim. The product was packaged in a magnetic box and included a smart portable charging case that looked like a flip top box. The product is constructed with metal tubes. There was a glossy black coating on the power unit. The tipping paper on the cartomizer was printed soft touch black. The complete product is 103 mm long and weighs 14.15 g. The reservoir in the cartomizer weighed 900 mg. The product is well balanced with a 52 mm center of gravity. The vaporizer is a triple wrapped cross configuration with an extra wick. The product included a puff sensor between the battery and the vaporizer. The notable attributes of this product are is its vaporizer design and its FTB charger.

Price: $74.95 www.modernvapor.com

Attributes:

Weight (g): 14.15	Power Unit Weight (g): 9.5	Cartomizer Weight (g): 4.76
Length (mm): 102.99	Diameter (mm): 8.73	Center of Gravity (mm): 52
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.098
Juul v. NJOY
IPR2024-00160

Modern Vapor Sidesho

Parts:

Cartomizer



4.76 g

Power Unit



Black coating 9.5 g



Carrying case

Exterior Wrapper



Black soft touch

Mouthpiece



Hard black plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.099
Juul v. NJOY
IPR2024-00160

Modern Vapor Sidesho

Resevoir Plug



Polyester mat 0.9 g

Vaporizer



Triple wrapped cross with extra wick

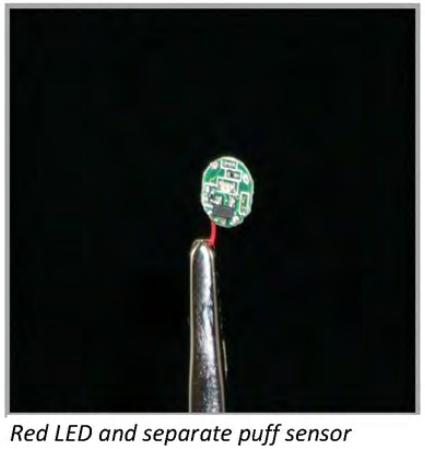
Battery



3.86 g

3.78 v

"Lit-End" LED



Red LED and separate puff sensor

Packaging



Packaging



NJOY Exhibit 2039.100
Juul v. NJOY
IPR2024-00160

New Day



Description:

This two piece rechargeable unit makes no yield claim. It is packaged in a magnetic closure cardboard box with a foam plastic insert. The product is constructed with metal tubes. The power unit was covered with a white coating. The tipping paper on the cartomizer was printed soft touch cork. The complete product is 101 mm long and weighs 15.52 g. The reservoir in the cartomizer weighed 980 mg. The product is well balanced with a 50 mm center of gravity. The vaporizer is a triple wrapped cross configuration with an extra wick. The product's notable feature is its recharging carrying case. The case has a latch that is activated by pushing the logo on the front. Only half of the top opens.

Price: $69.95 www.newdaycigs.com

Attributes:

Weight (g): 15.52	Power Unit Weight (g): 10.29	Cartomizer Weight (g): 5.33
Length (mm): 101.36	Diameter (mm): 9.2	Center of Gravity (mm): 50
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.101
Juul v. NJOY
IPR2024-00160

New Day

Parts:

Cartomizer



5.33 g

Power Unit



White coating 10.29 g



Recharging carrying case

Exterior Wrapper



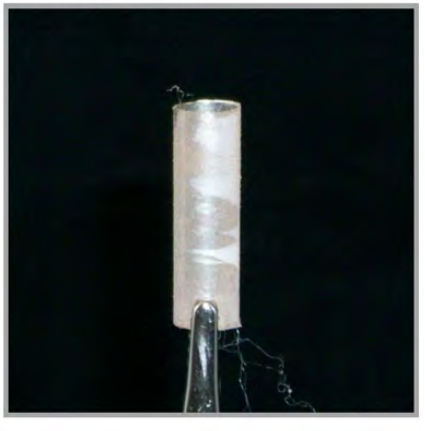
Cork soft touch

Mouthpiece



White hard plastic with rubber gasket underneath

Inner Construction



NJOY Exhibit 2039.102
Juul v. NJOY
IPR2024-00160

New Day

Resevoir Plug



Polyester mat 0.98 g

Vaporizer



Triple wrapped cross with extra wick

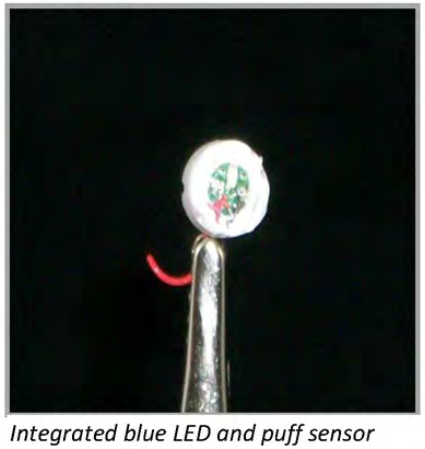
Battery



4.89 g

4.08 v

"Lit-End" LED



Integrated blue LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.103
Juul v. NJOY
IPR2024-00160

Nirvana Eco



Description:

This two piece rechargeable unit makes no yield claim and is packaged in a hanger card. The product is constructed with metal tubes. There is a black exterior coating on the power unit and black printed paper on the cartomizer. The complete product is 89 mm long and weighs 12.33 g. The reservoir weighed 800 mg in the cartomizer. The product is well balanced with a 47 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration. There are no notable attributes to this product.

Price: $19.95 www.envycig.com

Attributes:

Weight (g):	12.33	Power Unit Weight (g):	7.24	Cartomizer Weight (g):	5.09
Length (mm):	89.38	Diameter (mm):	8.57	Center of Gravity (mm):	47
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

NJOY Exhibit 2039.104
Juul v. NJOY
IPR2024-00160

Nirvana Eco

Parts:

Cartomizer



5.09 g

Power Unit



Black coating 7.24 g

Exterior Wrapper



Soft touch

Mouthpiece



Hard plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.105
Juul v. NJOY
IPR2024-00160

Nirvana Eco

Resevoir Plug



Polyester mat 0.8 g

Vaporizer



Triple wrapped inverted T

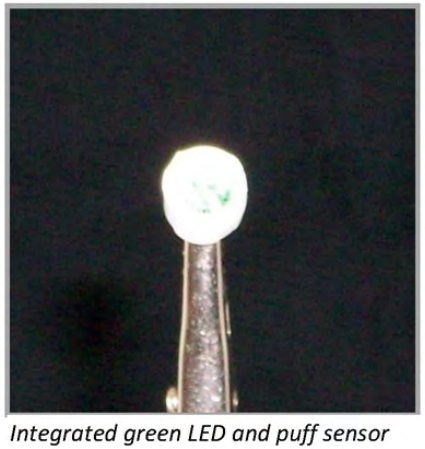
Battery



2.5 g

3.82 v

"Lit-End" LED



Integrated green LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.106
Juul v. NJOY
IPR2024-00160

Ozone Smoke



Description:

This two piece rechargeable unit makes two yield claims: up to 400 puffs and equal to 25 cigarettes. It is packaged in a magnetic closure cardboard box with a foam insert. The product is constructed with metal tubes. The power unit had a soft touch white coating with filigree lines. The tipping paper on the cartomizer was printed soft touch tan. The complete product is 112 mm long and weighs 16.23 g. The reservoir in the cartomizer weighed 850 mg. The product is well balanced with a 54 mm center of gravity. The vaporizer is a triple wrapped cross configuration. The product had no notable features.

Price: $69.95 www.ozonesmoke.com

Attributes:

Weight (g): 16.23	Power Unit Weight (g): 11.29	Cartomizer Weight (g): 4.94
Length (mm): 112.27	Diameter (mm): 9.54	Center of Gravity (mm): 54
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.107
Juul v. NJOY
IPR2024-00160

Ozone Smoke

Parts:

Cartomizer



4.94 g

Power Unit



White coating with filigree lines 11.29 g

Exterior Wrapper



Tan soft touch

Mouthpiece



Hard white plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.108
Juul v. NJOY
IPR2024-00160

Ozone Smoke

Resevoir Plug



Polyester mat 0.85 g

Vaporizer



Triple wrapped cross

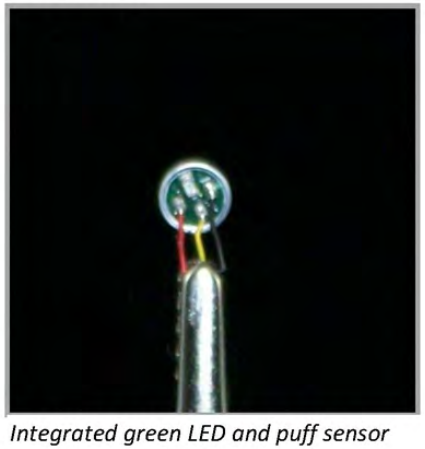
Battery



5.2 g

4.08 v

"Lit-End" LED



Integrated green LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.109
Juul v. NJOY
IPR2024-00160

Premium



Description:

This two piece rechargeable unit did not list any yield claims. It is packaged on a hanger card. The product is constructed with metal tubes. The power unit had a white coating with filigree lines. The tipping paper on the cartomizer was printed soft touch tan. The complete product is 107 mm long and weighs 16.42 g. The reservoir in the cartomizer weighed 870 mg. The product was well balanced with a 52 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration. The product had no notable features. The battery was dead upon delivery.

Price: $49.95 www.premiumecigarette.com

Attributes:

Weight (g): 16.42	Power Unit Weight (g): 10.37	Cartomizer Weight (g): 6.01
Length (mm): 107.18	Diameter (mm): 9.44	Center of Gravity (mm): 52
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.110
Juul v. NJOY
IPR2024-00160

Premium

Parts:

Cartomizer



6.01 g

Power Unit



White coating with filigree lines

10.37 g

Exterior Wrapper



Tan soft touch

Mouthpiece



Hard plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.111
Juul v. NJOY
IPR2024-00160

Premium

Resevoir Plug



Polyester mat 0.87 g

Vaporizer



Triple wrapped inverted T

Battery



4.17 g

1.72 v

"Lit-End" LED



Separate orange LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.112
Juul v. NJOY
IPR2024-00160

Prosmoke



Description:

This product does not make a yield claim. It is packaged in a magnetic closure cardboard box. This is a three piece unit: the power source, the inverted U metal lattice vaporizer, and cartridges. The battery is surrounded by a black metal tube. The cartridge has a black plastic body. The complete product is 96 mm long and weighs 11.06 g. The reservoir weighed 580 mg in the cartridge. The product is well balanced with a 52 mm center of gravity. The notable features for this product are its unique metal lattice vaporizer and its 3 part construction with a disposable cartridge.

Price: $59.99 www.prosmokestore.com

Attributes:

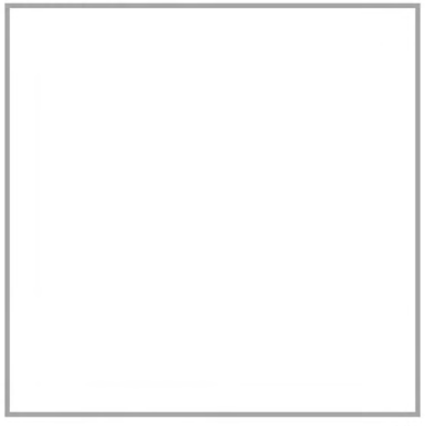
Weight (g):	11.06	Power Unit Weight (g):	7.65	Cartomizer Weight (g):	
Length (mm):	96.48	Diameter (mm):	8.57	Center of Gravity (mm):	52
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	3

NJOY Exhibit 2039.113
Juul v. NJOY
IPR2024-00160

Prosmoke

Parts:

Cartomizer



g

Power Unit



Black coating 7.65 g



Cartridge

Exterior Wrapper



Black plastic (part of cartridge)

Mouthpiece



Hard black plastic

Inner Construction



NJOY Exhibit 2039.114
Juul v. NJOY
IPR2024-00160

Prosmoke

Resevoir Plug



Polyester mat in plastic holder 0.58 g

Vaporizer



Inverted U metal lattice

Battery



3.43 g

3.97 v

"Lit-End" LED



Integrated blue LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.115
Juul v. NJOY
IPR2024-00160

Pure



Description:

This two piece rechargeable unit does not make any yield claims. The product was packaged in a cardboard box. The product is constructed with metal tubes. There was a glossy white coating on the power. The tipping paper on the cartomizer was printed soft touch white. The complete product is 109 mm long and weighs 17.58 g. The reservoir in the cartomizer weighed 1070 mg. The product is well balanced with a 55 mm center of gravity. The vaporizer is a triple wrapped cross configuration. The notable feature of this product was the Flip Top Box carrying case. The box appeared to be the same as the charges provided by other companies but without the internal charger parts.

Price: $19.99 www.purecigs.com

Attributes:

Weight (g): 17.58	Power Unit Weight (g): 11.66	Cartomizer Weight (g): 5.89
Length (mm): 108.62	Diameter (mm): 9.31	Center of Gravity (mm): 55
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.116
Juul v. NJOY
IPR2024-00160

Pure

Parts:

Cartomizer



5.89 g

Power Unit



White coating 11.66 g



FTB carrying case

Exterior Wrapper



Cork soft touch

Mouthpiece



White soft rubber

Inner Construction



Metal tube

NJOY Exhibit 2039.117
Juul v. NJOY
IPR2024-00160

Pure

Resevoir Plug



Polyester mat 1.07 g

Vaporizer



Triple wrapped cross

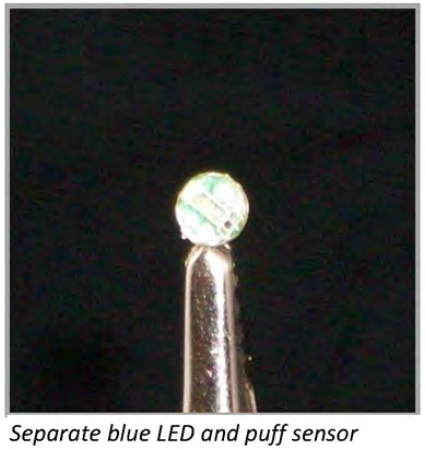
Battery



4.86 g

3.89 v

"Lit-End" LED



Separate blue LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.118
Juul v. NJOY
IPR2024-00160

Revolver G2



Description:

This two piece rechargeable unit does not make a yield claim. The product was packaged in a magnetic box and included a smart portable charging case that looked like a flip top box. The product is constructed with metal tubes. There was a glossy black coating on the power unit. The tipping paper on the cartomizer was printed soft touch black. The complete product is 104 mm long and weighs 15.64 g. The reservoir weighed 1120 mg in the cartomizer. The product is well balanced with a 57 mm center of gravity. The vaporizer is a triple wrapped cross configuration with an extra vertical wick. The product included an integrated circuit between the battery and the vaporizer. The notable attributes of this product are is it's vaporizer design, it's integrated circuit, and its FTB charge.

Price: $59.99 www.revolvercig.com

Attributes:

Weight (g): 15.64	Power Unit Weight (g): 10.91	Cartomizer Weight (g): 5.04
Length (mm): 103.94	Diameter (mm): 9.01	Center of Gravity (mm): 53
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.119
Juul v. NJOY
IPR2024-00160

Revolver G2

Parts:

Cartomizer



5.04 g

Power Unit



Slick black coating 10.91 g



Flip top box charger

Exterior Wrapper



Black soft touch

Mouthpiece



Black hard plastic with rubber gasket underneath

Inner Construction



NJOY Exhibit 2039.120
Juul v. NJOY
IPR2024-00160

Revolver G2

Resevoir Plug



Polyester mat 1.12 g

Vaporizer



Triple wrapped cross with extra vertical wick

Battery



4.22 g

4.01 v

"Lit-End" LED



Integrated red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.121
Juul v. NJOY
IPR2024-00160

Seminole



Description:

This two piece rechargeable unit makes no yield claim. It is packaged in a cardboard box with a hard plastic insert. The product is constructed with metal tubes. The power unit was covered with a printed white paper with filigree lines. The tipping paper on the cartomizer was printed soft touch tan. The complete product is 106 mm long and weighs 14.15 g. The reservoir in the cartomizer weighed 970 mg. The product is well balanced with a 51 mm center of gravity. The vaporizer is a triple wrapped vertical configuration. The products notable features included its vertical coil, yellow led and separate puff sensor behind the battery.

Price: $39.99 www.seminolecigs.com

Attributes:

Weight (g):	14.15	Power Unit Weight (g):	8.48	Cartomizer Weight (g):	5.69
Length (mm):	105.9	Diameter (mm):	9.36	Center of Gravity (mm):	51
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

NJOY Exhibit 2039.122
Juul v. NJOY
IPR2024-00160

Seminole

Parts:

Cartomizer



5.69 g

Power Unit



White paper with filigree lines 8.48 g



Inside packaging

Exterior Wrapper



Tan soft touch tipping and white cigarette paper with filigree lines

Mouthpiece



Hard white plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.123
Juul v. NJOY
IPR2024-00160

Seminole

Resevoir Plug



Polyester mat 0.97 g

Vaporizer



Triple wrapped vertical

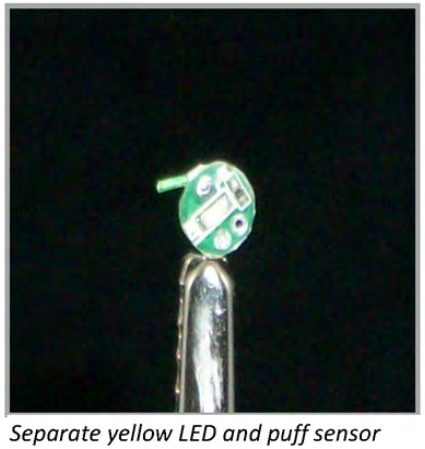
Battery



4.44 g

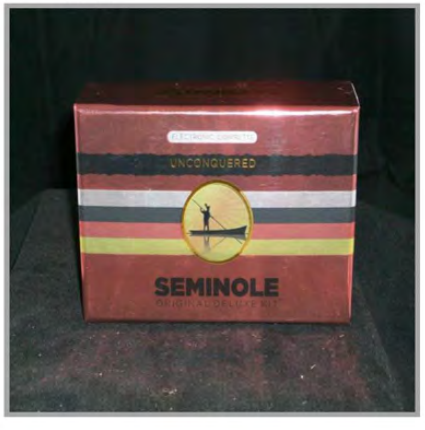
3.89 v

"Lit-End" LED



Separate yellow LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.124
Juul v. NJOY
IPR2024-00160

Smokeless Delite Premo Cartomizer



Description:

The product was packaged in a cardboard box. The product did not make any yield claims. The complete product is 100 mm long and weighs 8.54 g. The product is well balanced with a 49 mm center of gravity. The vaporizer is a vertical configuration. The outer wrapping (1060 mg) was a woven fiberous material different from most other e-cigs. The notable attribute for this product is the vertical coil in the vaporizer.

Price: $29.95 www.smokelessdelite.com

Attributes:

Weight (g):	12.19	Power Unit Weight (g):	10.72	Cartomizer Weight (g):	3.99
Length (mm):	99.88	Diameter (mm):	8.54	Center of Gravity (mm):	49
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

NJOY Exhibit 2039.125
Juul v. NJOY
IPR2024-00160

Smokeless Delite Premo Cartomizer

Parts:

Cartomizer



3.99 g

Power Unit



White coating with filigree lines

10.72 g

Heater with wrap

Exterior Wrapper



Tan soft touch

Mouthpiece



Soft rubber

Inner Construction



Metal tube

NJOY Exhibit 2039.126
Juul v. NJOY
IPR2024-00160

Smokeless Delite Premo Cartomizer

Resevoir Plug



Fiber mat wrapped around heater 1.06 g

Vaporizer



Triple wrapped vertical configuration

Battery



4.98 g

4.07 v

"Lit-End" LED



Integrated red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.127
Juul v. NJOY
IPR2024-00160

Smokeless Delite Premo Cartridge



Description:

This package came with cartomizer and cartridges. The product was packaged in a cardboard box. The product did not make any yield claims. The complete product is 100 mm long and weighs 8.69 g. The product is well balanced with a 49 mm center of gravity. The vaporizer is an inverted U metal lattice. The cartridge (520 mg) contains a plastic holder for the e-juice. The notable attribute for this product is the vaporizer.

Price: $89.95 www.smokelessdelite.com

Attributes:

Weight (g): 12.28	Power Unit Weight (g): 10.72	Cartomizer Weight (g):
Length (mm): 100.49	Diameter (mm): 8.61	Center of Gravity (mm): 49
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 3

NJOY Exhibit 2039.128
Juul v. NJOY
IPR2024-00160

Smokeless Delite Premo Cartridge

Parts:

Cartomizer

g

Power Unit



White coating with filigree lines 10.72 g



Cartridge

Exterior Wrapper

Mouthpiece



Hard plastic on cartridge

Inner Construction

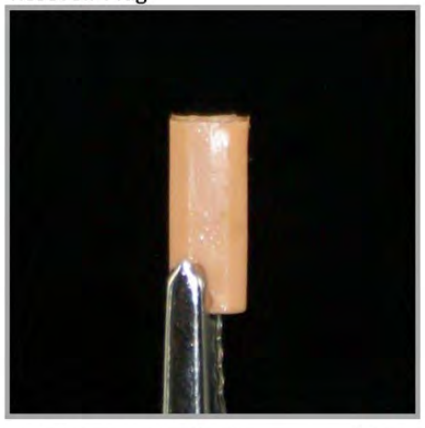


Metal tube

NJOY Exhibit 2039.129
Juul v. NJOY
IPR2024-00160

Smokeless Delite Premo Cartridge

Resevoir Plug



Polyester mat in plastic housing 0.52 g

Vaporizer



Inverted U metal lattice

Battery



4.98 g

4.07 v

"Lit-End" LED



Integrated red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.130
Juul v. NJOY
IPR2024-00160

Smokesation



Description:

This two piece rechargeable unit makes no yield claims. The batteries and chargers were in one box and the cartomizers in another. The product is constructed with metal tubes. There is a white coating with filigree lines on the power unit and orange is printed on the tipping paper on the cartomizer. The complete product is 116 mm long and weighs 18.24 g. The reservoir weighed 1540 mg in the cartomizer. The product is well balanced with a 56 mm center of gravity. The vaporizer is a double wrapped inverted T configuration. There are no notable attributes to this product.

Price: $66.40 www.smokesation.com

Attributes:

Weight (g): 18.24	Power Unit Weight (g): 13.09	Cartomizer Weight (g): 5.16
Length (mm): 116.27	Diameter (mm): 9.29	Center of Gravity (mm): 56
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.131
Juul v. NJOY
IPR2024-00160

Smokesation

Parts:

Cartomizer



5.16 g

Power Unit



White coating with filigree lines 13.09 g

Exterior Wrapper



Soft touch orange

Mouthpiece



Soft rubber

Inner Construction



Metal tube

NJOY Exhibit 2039.132
Juul v. NJOY
IPR2024-00160

Smokesation

Resevoir Plug



Polyester mat 1.54 g

Vaporizer



Double wrapped inverted T

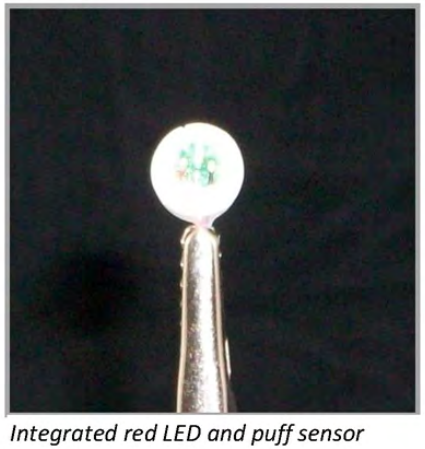
Battery



6.13 g

4.08 v

"Lit-End" LED



Integrated red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.133
Juul v. NJOY
IPR2024-00160

SmokeTip



Description:

This two piece rechargeable unit makes no yield claims. The product was packaged in boxes with foam inserts. The product is constructed with metal tubes. There was a glossy white coating on the power unit with filigree lines and tan is printed on the tipping paper on the cartomizer. The complete product is 104 mm long and weighs 15.23 g. The reservoir weighed 1200 mg in the cartomizer. The product is well balanced with a 50 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration. The notable attributes of this product was the separate LED and puff sensor and tin integrated circuit.

Price: $59.95 www.smoketip.com

Attributes:

Weight (g): 15.23	Power Unit Weight (g): 10.39	Cartomizer Weight (g): 4.91
Length (mm): 103.95	Diameter (mm): 9.44	Center of Gravity (mm): 50
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.134
Juul v. NJOY
IPR2024-00160

SmokeTip

Parts:

Cartomizer



4.91 g

Power Unit



White coating 10.39 g

Exterior Wrapper



Tan soft touch

Mouthpiece



Hard white plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.135
Juul v. NJOY
IPR2024-00160

SmokeTip

Resevoir Plug



Polyester mat 1.2 g

Vaporizer



Triple wrapped inverted T

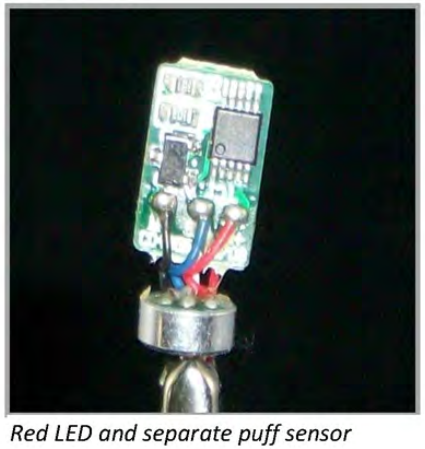
Battery



4.49 g

4.02 v

"Lit-End" LED



Red LED and separate puff sensor

Packaging



Packaging



NJOY Exhibit 2039.136
Juul v. NJOY
IPR2024-00160

South Beach Smoke



Description:

This two piece rechargeable unit claims to be equal to one pack (about 250 puffs). It is packaged in a magnetic closure cardboard box with a foam insert. The product is constructed with metal tubes. There is a glossy white coating with filigree lines on the power unit. The tipping paper on the cartomizer was printed soft touch tan. The complete product is 119 mm long and weighs 19.38 g. The reservoir in the cartomizer weighed 1140 mg. The product is well balanced with a 58 mm center of gravity. The vaporizer is a double wrapped inverted T configuration. The notable feature for this product is its FTB packaging for the cartomizers.

Price: $59.99 www.southbeachsmoke.com

Attributes:

Weight (g): 19.38	Power Unit Weight (g): 14.08	Cartomizer Weight (g): 5.3
Length (mm): 119.01	Diameter (mm): 9.36	Center of Gravity (mm): 58
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.137
Juul v. NJOY
IPR2024-00160

South Beach Smoke

Parts:

Cartomizer



5.3 g

Power Unit



White with filigree lines 14.08 g



FTB for cartomizers

Exterior Wrapper



Tan soft touch

Mouthpiece



Hard white plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.138
Juul v. NJOY
IPR2024-00160

South Beach Smoke

Resevoir Plug



Polyester mat 1.94 g

Vaporizer



Double wrapped inverted T

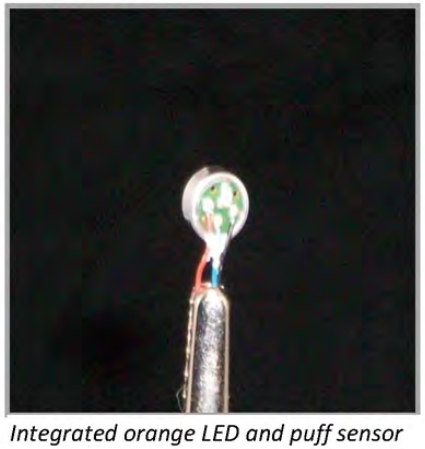
Battery



6.01 g

4.2 v

"Lit-End" LED



Integrated orange LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.139
Juul v. NJOY
IPR2024-00160

Ultra



Description:

This two piece rechargeable unit does not make a yield claim. The product was packaged in a cardboard box and included a smart portable charging case that looked like a flip top box. The product is constructed with metal tubes. There was a glossy black coating on the power unit . The tipping paper on the cartomizer was printed soft touch black. The complete product is 99 mm long and weighs 13.11 g. The reservoir in the cartomizer weighed 840 mg. The product is well balanced with a 50 mm center of gravity. The vaporizer is a double wrapped inverted T configuration. The notable attribute of this product is its FTB charger.

Price: $59.85 www.ultraecigs.com

Attributes:

Weight (g):	13.11	Power Unit Weight (g):	8.27	Cartomizer Weight (g):	4.86
Length (mm):	98.71	Diameter (mm):	8.7	Center of Gravity (mm):	50
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

NJOY Exhibit 2039.140
Juul v. NJOY
IPR2024-00160

Ultra

Parts:

Cartomizer



4.86 g

Power Unit



Black coating 8.27 g



FTB recharger

Exterior Wrapper



Soft touch black

Mouthpiece



Hard black plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.141
Juul v. NJOY
IPR2024-00160

Ultra

Resevoir Plug



Polyester mat 0.84 g

Vaporizer



Double wrapped inverted T

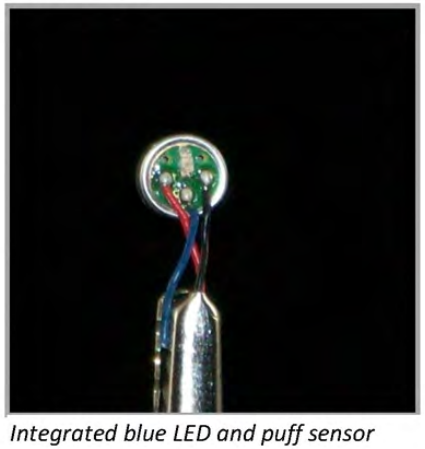
Battery



3.55 g

3.9 v

"Lit-End" LED



Integrated blue LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.142
Juul v. NJOY
IPR2024-00160

V2 Cigs



Description:

This two piece rechargeable unit claimed to be equivalent to one pack (400 puffs). It is packaged in cardboard box with a magnetic closure. The starter kit came with an automatic and manual battery. The product is constructed with metal tubes. The power unit had a glossy white coating. The tipping paper on the cartomizer was printed soft touch red. The complete product is 111 mm long and weighs 17.23 g. The reservoir in the cartomizer weighed 960 mg. The product is well balanced with a 54 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration. The product had no notable features.

Price: $59.95 www.v2cigs.com

Attributes:

Weight (g):	17.23	Power Unit Weight (g):	12.13	Cartomizer Weight (g):	5.11
Length (mm):	110.9	Diameter (mm):	9.4	Center of Gravity (mm):	54
Puff Activation Mode:	Automatic	Disposable/Rechargeable:	Rechargeable	Number of Consumer Components:	2

NJOY Exhibit 2039.143
Juul v. NJOY
IPR2024-00160

V2 Cigs

Parts:

Cartomizer



5.11 g

Power Unit



Glossy white coating 12.13 g



Cartomizer package

Exterior Wrapper



Soft touch red

Mouthpiece



White hard plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.144
Juul v. NJOY
IPR2024-00160

V2 Cigs

Resevoir Plug



Polyester mat 0.96 g

Vaporizer



Triple wrapped inverted T

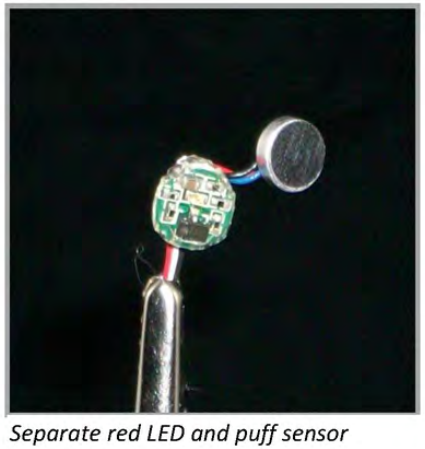
Battery



5.5 g

3.83 v

"Lit-End" LED



Separate red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.145
Juul v. NJOY
IPR2024-00160

Vapage



Description:

This two piece rechargeable unit claims to be equal to one pack. The product was packaged in a flip top box. The product is constructed with metal tubes. There was a glossy white coating on the power unit with filigree lines. The tipping paper on the cartomizer was printed soft touch cork. The complete product is 103 mm long and weighs 15.83 g. The reservoir in the cartomizer weighed 850 mg. The product is well balanced with a 52 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration. There are no notable features for this product.

Price: $29.99 www.vapage.com

Attributes:

Weight (g): 15.83	Power Unit Weight (g): 10.71	Cartomizer Weight (g): 5.13
Length (mm): 103.25	Diameter (mm): 9.3	Center of Gravity (mm): 52
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.146
Juul v. NJOY
IPR2024-00160

Vapage

Parts:

Cartomizer



5.13 g

Power Unit



White coating with filigree lines

10.71 g

Exterior Wrapper



Soft touch cork

Mouthpiece



Hard white plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.147
Juul v. NJOY
IPR2024-00160

Vapage

Resevoir Plug



Polyester mat 0.85 g

Vaporizer



Triple wrapped inverted T

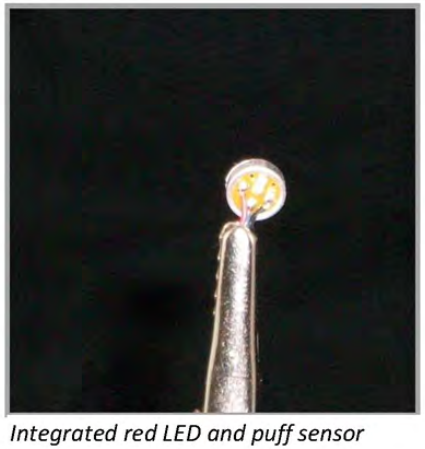
Battery



5.27 g

4.07 v

"Lit-End" LED



Integrated red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.148
Juul v. NJOY
IPR2024-00160

Vapor Couture



Description:

This two piece rechargeable unit makes claims to be equivalent to one pack. The product was packaged in a series of boxes with color matching foam inserts. The cartomizers were in a blister pack in a box. The product is constructed with metal tubes. There is a rose metallic coating on the power unit and platinum is printed on the tipping paper on the cartomizer. The complete product is 115 mm long and weighs 18.35 g. The product has a slim profile with a diameter of 8 mm. The reservoir weighed 800 mg in the cartomizer. The product is well balanced with a 61 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration. Notable attributes included the packaging, slim profile and crystal lens over the LED.

Price: $79.95 www.vaporcoutoure.com

Attributes:

Weight (g): 13.35	Power Unit Weight (g): 9.83	Cartomizer Weight (g): 3.53
Length (mm): 115.09	Diameter (mm): 9.01	Center of Gravity (mm): 61
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.149
Juul v. NJOY
IPR2024-00160

Vapor Couture

Parts:

Cartomizer

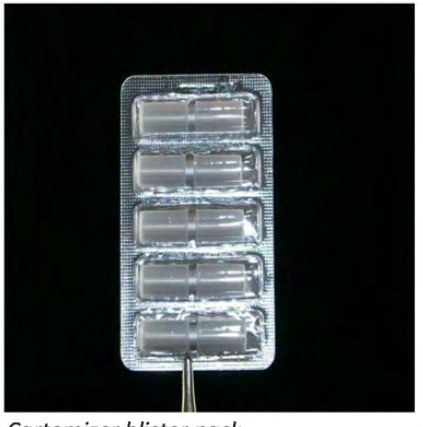


3.53 g

Power Unit



Pink coating 9.83 g



Cartomizer blister pack

Exterior Wrapper



Soft touch platinum color

Mouthpiece



Hard plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.150
Juul v. NJOY
IPR2024-00160

Vapor Couture

Resevoir Plug



Polyester mat 0.8 g

Vaporizer



Triple wrapped inverted T

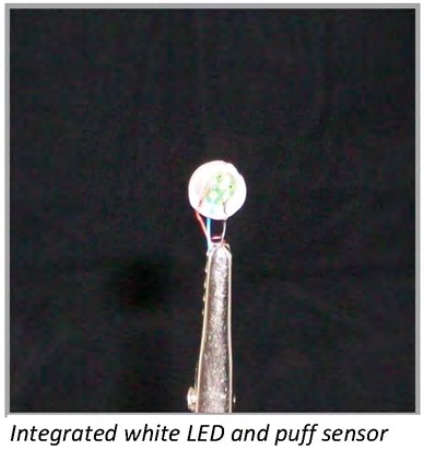
Battery



3.94 g

3.69 v

"Lit-End" LED



Integrated white LED and puff sensor with crystal lens

Packaging



Packaging



NJOY Exhibit 2039.151
Juul v. NJOY
IPR2024-00160

Vapor King



Description:

This two piece rechargeable unit did not list any yield claims. The kit came with a manual and automatic battery. It is packaged in cardboard box with a magnetic closure. The product is constructed with metal tubes. The power unit was brushed metal. The tipping paper on the cartomizer was printed soft touch black. The complete product is 102 mm long and weighs 14.7 g. The reservoir in the cartomizer weighed 1190 mg. The product is well balanced with a 48 mm center of gravity. The vaporizer is a triple wrapped vertical configuration. The notable feature of this product is its vertical vaporizer.

Price: $49.95 www.v4l.com

Attributes:

Weight (g): 14.7	Power Unit Weight (g): 9.72	Cartomizer Weight (g): 5.03
Length (mm): 102.31	Diameter (mm): 9.33	Center of Gravity (mm): 48
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.152
Juul v. NJOY
IPR2024-00160

Vapor King

Parts:

Cartomizer



5.03 g

Power Unit



Brushed metal 9.72 g

Exterior Wrapper



Black soft touch

Mouthpiece



Soft rubber

Inner Construction



Metal tube

NJOY Exhibit 2039.153
Juul v. NJOY
IPR2024-00160

Vapor King

Resevoir Plug



Polyester mat 1.19 g

Vaporizer



Triple wrapped vertical

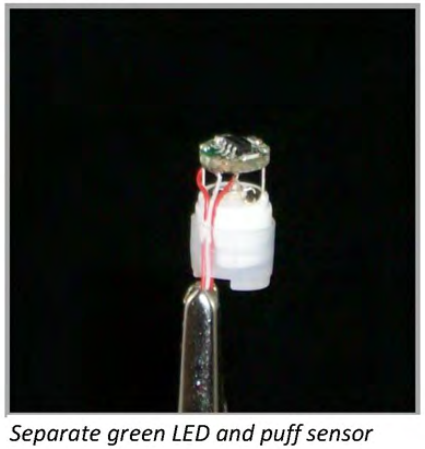
Battery



4.11 g

3.98 v

"Lit-End" LED



Separate green LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.154
Juul v. NJOY
IPR2024-00160

Victory



Description:

This two piece rechargeable unit does not make a yield claim. The product was packaged in a cardboard box with magnetic closure. The product is constructed with metal tubes. There was a glossy white coating on the power unit. The tipping paper on the cartomizer was printed soft touch tan. The complete product is 117 mm long and weighs 19.02 g. The reservoir in the cartomizer weighed 1020 mg. The product is well balanced with a 56 mm center of gravity. The vaporizer is a double wrapped inverted T configuration. There are no notable features to this product.

Price: $59.99 www.victoryecigs.com

Attributes:

Weight (g): 19.02	Power Unit Weight (g): 13.31	Cartomizer Weight (g): 5.71
Length (mm): 117.22	Diameter (mm): 9.14	Center of Gravity (mm): 56
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.155
Juul v. NJOY
IPR2024-00160

Victory

Parts:

Cartomizer



5.71 g

Power Unit



White coating 13.31 g



Carrying cash

Exterior Wrapper



Mouthpiece



Hard white plastic with rubber gasket underneath

Inner Construction



Metal tube

NJOY Exhibit 2039.156
Juul v. NJOY
IPR2024-00160

Victory

Resevoir Plug



Polyester mat 1.02 g

Vaporizer



Double wrapped inverted T

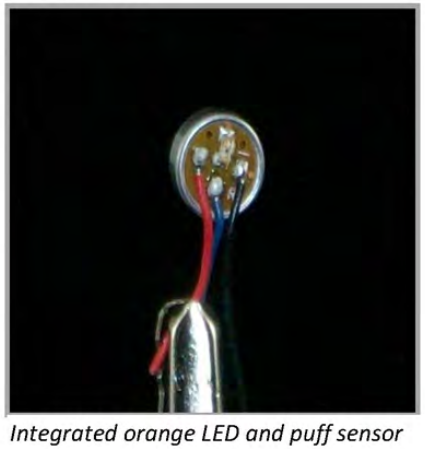
Battery



6.28 g

4.07 v

"Lit-End" LED



Integrated orange LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.157
Juul v. NJOY
IPR2024-00160

White Cloud Cirrus 3



Description:

This two piece rechargeable unit claims to be equal to 40 cigarettes. The product was packaged in a cardboard box with a foam insert. The package came with three batteries. Two with red LED's and one with a white LED and crystal lens. The product is constructed with metal tubes. There was a glossy white coating on the power unit with filigree lines. The tipping paper on the cartomizer was printed soft touch white. The complete product is 93 mm long and weighs 14 g. The reservoir in the cartomizer weighed 1100 mg. The product is well balanced with a 46 mm center of gravity. The vaporizer is a triple wrapped inverted T configuration. The notable features for this product are its triple USB charging system and its twist open cartomizer box.

Price: $63.96 www.whitecloudelectroniccigarettes.com

Attributes:

Weight (g): 14	Power Unit Weight (g): 9.26	Cartomizer Weight (g): 4.71
Length (mm): 93.03	Diameter (mm): 9.42	Center of Gravity (mm): 46
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.158
Juul v. NJOY
IPR2024-00160

White Cloud Cirrus 3

Parts:

Cartomizer



4.71 g

Power Unit



White coating with filigree lines 9.26 g



Triple USB charge

Exterior Wrapper



White soft touch

Mouthpiece



White hard plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.159
Juul v. NJOY
IPR2024-00160

White Cloud Cirrus 3

Resevoir Plug



Polyester mat 1.1 g

Vaporizer



Triple wrapped inverted T

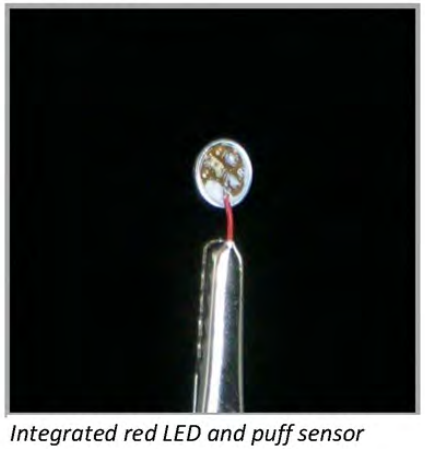
Battery



4.23 g

3.78 v

"Lit-End" LED



Integrated red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.160
Juul v. NJOY
IPR2024-00160

Zerocig



Description:

This two piece rechargeable unit does not make a yield claim. It is packaged in a magnetic closure cardboard box with a foam insert. The product is constructed with metal tubes. There was a glossy white coating on the power unit. The tipping paper on the cartomizer was printed soft touch white. The complete product is 113 mm long and weighs 14.34 g. The reservoir in the cartomizer weighed 970 mg. The product is well balanced with a 56 mm center of gravity. The vaporizer is a double wrapped cross configuration. The product has not notable features.

Price: $49.99 www.zerocig.com

Attributes:

Weight (g): 14.34	Power Unit Weight (g): 10.38	Cartomizer Weight (g): 3.96
Length (mm): 113.19	Diameter (mm): 8.7	Center of Gravity (mm): 56
Puff Activation Mode: Automatic	Disposable/Rechargeable: Rechargeable	Number of Consumer Components: 2

NJOY Exhibit 2039.161
Juul v. NJOY
IPR2024-00160

Zerocig

Parts:

Cartomizer



3.96 g

Power Unit



White coating 10.38 g

Exterior Wrapper



White soft touch

Mouthpiece



Hard white plastic

Inner Construction



Metal tube

NJOY Exhibit 2039.162
Juul v. NJOY
IPR2024-00160

Zerocig

Resevoir Plug



Polyester mat 0.97 g

Vaporizer



Double wrapped cross

Battery



5.17 g

4.08 v

"Lit-End" LED



Integrated red LED and puff sensor

Packaging



Packaging



NJOY Exhibit 2039.163
Juul v. NJOY
IPR2024-00160