SUPPLEMENTAL TABLES

Brands Purchased In Each Country

| Country      | Brand          | Flavor          | Nominal Nicotine (mg/ml) | Mean Nicotine (mg/ml) |
|--------------|----------------|-----------------|--------------------------|-----------------------|
| United States| Vuse           | Menthol         | None                     | 54.5                  |
| United States| Vuse           | Original        | None                     | 58.6                  |
| United States| Vuse           | Original        | None                     | 52.5                  |
| United States| Vuse           | Original        | None                     | 22.1                  |
| United States| Vuse           | Mint            | None                     | 45.6                  |
| United States| Mark Ten XL    | Classic         | 24                       | 37.7                  |
| United States| Mark Ten XL    | Menthol         | 40                       | 36                    |
| United States| Mark Ten XL    | Classic         | 40                       | 35.8                  |
| United States| Blu            | Classic Tobacco | 24                       | 19.3                  |
| United States| Blu            | Classic Tobacco | 24                       | 24.6                  |
| United States| Blu            | Classic Tobacco | 24                       | 25.8                  |
| United States| Blu            | Glacier Mint    | 24                       | 24.5                  |
| United States| Blu            | Cherry Crush    | 24                       | 25                    |
| United States| V2             | Red Tobacco Flavor | 18                     | 12.3                  |
| United States| V2             | Menthol         | 18                       | 15.9                  |
| United States| V2             | Red Tobacco Flavor | 18                     | 14.9                  |
| United States| My Start E-Liquid | Menthol     | 0                        | ND                    |
| United States| My Start E-Liquid | Menthol     | 0                        | ND                    |
| United States| My Start E-Liquid | Menthol     | 0                        | ND                    |
| United States| My Start E-Liquid | Menthol     | 6                        | 6                     |
| United States| My Start E-Liquid | Menthol     | 6                        | 5.5                   |
| United States| My Start E-Liquid | Menthol     | 6                        | 5.4                   |
| United States| My Start E-Liquid | Menthol     | 11                       | 10.2                  |
| United States| My Start E-Liquid | Menthol     | 11                       | 10.5                  |
| United States| My Start E-Liquid | Menthol     | 11                       | 10.2                  |
| United States| My Start E-Liquid | Menthol     | 18                       | 16.7                  |
| Country     | Brand                        | Flavor                     | C91 | C91.1 |
|-------------|------------------------------|----------------------------|-----|-------|
| United States | My Start E-Liquid       | Menthol                    | 18  | 17    |
| United States | My Start E-Liquid       | Menthol                    | 18  | 17.2  |
| United States | My Start E-Liquid       | USA Mix, Full Flavor       | 0   | ND    |
| United States | My Start E-Liquid       | USA Mix, Full Flavor       | 0   | ND    |
| United States | My Start E-Liquid       | USA Mix, Full Flavor       | 0   | ND    |
| United States | My Start E-Liquid       | USA Mix, Full Flavor       | 6   | 6.1   |
| United States | My Start E-Liquid       | USA Mix, Full Flavor       | 6   | 6.3   |
| United States | My Start E-Liquid       | USA Mix, Full Flavor       | 11  | 11.3  |
| United States | My Start E-Liquid       | USA Mix, Full Flavor       | 11  | 11.2  |
| United States | My Start E-Liquid       | USA Mix, Full Flavor       | 11  | 11.2  |
| United States | My Start E-Liquid       | USA Mix, Full Flavor       | 18  | 17.9  |
| United States | My Start E-Liquid       | USA Mix, Full Flavor       | 18  | 18.1  |
| United States | My Start E-Liquid       | USA Mix, Full Flavor       | 18  | 18.1  |
| United States | My Start E-Liquid       | Cherry Crush               | 0   | ND    |
| United States | My Start E-Liquid       | Cherry Crush               | 0   | ND    |
| United States | My Start E-Liquid       | Cherry Crush               | 0   | ND    |
| United States | My Start E-Liquid       | Cherry Crush               | 6   | 5.8   |
| United States | My Start E-Liquid       | Cherry Crush               | 6   | 5.2   |
| United States | My Start E-Liquid       | Cherry Crush               | 6   | 5.4   |
| United States | My Start E-Liquid       | Cherry Crush               | 11  | 9.8   |
| United States | My Start E-Liquid       | Cherry Crush               | 11  | 10    |
| United States | My Start E-Liquid       | Cherry Crush               | 11  | 10.2  |
| United States | My Start E-Liquid       | Cherry Crush               | 18  | 16.2  |
| United States | My Start E-Liquid       | Cherry Crush               | 18  | 15.8  |
| United States | My Start E-Liquid       | Cherry Crush               | 18  | 15.9  |
| Australia    | Bake It Vapor            | Nana Pie’ (Banana)         | 0   | ND    |
| Australia    | Frooty E-Liquid          | Fresh Mango                | 0   | ND    |
| Australia    | Liqua Premium Vape Liquid | Apple                      | 0   | ND    |
| Australia    | Liqua Premium Vape Liquid | Two Mints                  | 0   | ND    |
| Australia    | Liquia Premium Vape Liquid | American Blend            | 0   | ND    |
| Australia    | Royale E-Juice           | Apple                      | None| ND    |
| Australia    | Royale E-Juice           | Menthol                    | None| ND    |
| Australia    | Royale E-Juice           | B&H Flavor                 | None| ND    |
| Australia    | str8 Premium ejuice      | Menthol                    | 0   | ND    |
| Australia    | Byron Bay Cloud Co.      | Peaches & Pineapple        | 0   | ND    |
| Australia    | MT Baker Vapor           | Extreme Ice                | None| ND    |
| Australia | Clouds Down Under | 0 | ND |
|-----------|-------------------|---|----|
| Australia | Cool Culture Royale | 0 | ND |
| Australia | Mount Baker Vapor | East Coast Tobacco | None | ND |
| Australia | Mount Baker Vapor | Thug Juice | None | ND |
| Canada    | Kloud-E-Juice | Smooth Smoke | 0 | ND |
| Canada    | PurELiquid | Cooling Menthol | 0 | ND |
| Canada    | Mad Dog Juice | Cherry Garcia | 0 | ND |
| Canada    | Naked 100 Brain Freeze | Menthol | 0 | ND |
| Canada    | Flavour Crafters | Black Cherry Tobacco | 0 | ND |
| Canada    | Prizm | Menthol | 0 | ND |
| Canada    | Blackwood Duke | Tobacco | 0 | ND |
| Canada    | Darts Canadian | Tobacco | 0 | ND |
| Canada    | Darts Canadian | Menthol | 0 | ND |
| England   | Blu | Tobacco | 18 | 18.8 |
| England   | Blu | Tobacco | 18 | 18.1 |
| England   | Blu | Tobacco | 18 | 18.5 |
| England   | E-Lites | Regular/TruTaste | 24 | 14.9 |
| England   | E-Lites | Regular/TruTaste | 24 | 15.5 |
| England   | E-Lites | Regular/TruTaste | 24 | 14.7 |
| England   | Ten Motives | | 16 | 13.4 |
| England   | Ten Motives | | 16 | 8.3 |
| England   | Ten Motives | | 16 | 13.6 |
| England   | Vype | | 12 | 12.5 |
| England   | Vype | | 6 | 7.6 |
| England   | Vype | | 6 | 6.2 |
| England   | Vype | | 6 | 6 |
| England   | Vype | | 18 | 14 |
| England   | Vype | | 18 | 13.9 |
| England   | Vype | | 18 | 13.1 |
| England   | Vype | | None | 23.8 |
| England   | Vype | | 12 | 12.8 |
| England   | Vype | | 12 | 12.5 |
| England   | Vype | | None | 21.9 |
| England   | Vype | | None | 25.6 |
| England   | Vype | | None | 31.1 |
| England   | Vype | | None | 21 |
| England | Vype          | Tobacco  | None  | 24.3 |
|---------|--------------|----------|-------|------|
| England| Liberty Flights | Tobacco  | 0     | ND   |
| England| Liberty Flights | Tobacco  | 6     | 5.3  |
| England| Liberty Flights | Tobacco  | 12    | 7.2  |
| England| Liberty Flights | Tobacco  | 18    | 11.1 |
| England| Liberty Flights | Cherry   | 0     | ND   |
| England| Liberty Flights | Cherry   | 6     | 3.3  |
| England| Liberty Flights | Cherry   | 12    | 7.3  |
| England| Liberty Flights | Cherry   | 18    | 11.7 |
| England| Liberty Flights | Menthol  | 0     | ND   |
| England| Liberty Flights | Menthol  | 12    | 10.2 |
| England| Liberty Flights | Menthol  | 18    | 11.8 |
| England| Pure E-Liquid  | Tobacco (Mab) | 0     | ND   |
| England| Pure E-Liquid  | Tobacco (Mab) | 5     | 3.4  |
| England| Pure E-Liquid  | Tobacco (Mab) | 10    | 6.9  |
| England| Pure E-Liquid  | Tobacco (Mab) | 15    | 10.8 |
| England| Pure E-Liquid  | Cherry   | 0     | ND   |
| England| Pure E-Liquid  | Cherry   | 0     | ND   |
| England| Pure E-Liquid  | Cherry   | 5     | 3    |
| England| Pure E-Liquid  | Cherry   | 10    | 6.2  |
| England| Pure E-Liquid  | Cherry   | 15    | 14   |
| England| Pure E-Liquid  | Menthol  | 0     | ND   |
| England| Pure E-Liquid  | Menthol  | 5     | 3.8  |
| England| Pure E-Liquid  | Menthol  | 10    | 10.6 |
| England| Pure E-Liquid  | Menthol  | 15    | 11.7 |
| England| Pure E-Liquid  | Menthol  | 16    | 12.3 |
| England| Nicocig       | Tobacco  | 16    | 8.7  |
| England| Nicocig       | Tobacco  | 16    | 1.6  |
| England| Vapourdays    | Tobacco  | 16    | 8.6  |
| England| Vapourdays    | Tobacco  | 16    | 8.5  |
| England| Vapourdays    | Cherry   | 18    | 11.2 |
| England| Vapourdays    | Menthol  | 18    | 118  |
| England| Vapourdays    | Menthol  | 0     | ND   |
| Country | Brand     | Flavor       | Value_1 | Value_2 |
|---------|-----------|--------------|---------|---------|
| England | Vapourdays| Tobacco Blend| 18      | 18      |
| England | Vapourdays| Tobacco Blend| 6       | 6.1     |
| England | Vapourdays| Tobacco Blend| 12      | 12      |
| England | Vapourdays| Tobacco Blend| 0       | ND      |
| England | Vapourdays| Cherry        | 12      | 12.8    |
| England | Vapourdays| Cherry        | 0       | ND      |
| England | Vapourdays| Cherry        | 6       | 5.9     |
| England | Vapourdays| Menthol       | 6       | 6       |
| England | Vapourdays| Menthol       | 12      | 11.2    |
| England | Ten Motives| Menthol    | 11      | 9.1     |
| England | Ten Motives| Cherry     | 16      | 15.2    |
| England | Ten Motives| Regular    | 11      | 9.5     |
| England | Ten Motives| Regular    | 18      | 14.7    |
| England | Blu       | Tobacco      | 18      | 18.8    |
| England | Ten Motives| Menthol    | 16      | 13.5    |
| England | Ten Motives| Cherry     | 16      | 14.3    |
| England | Ten Motives| Regular    | 16      | 13.3    |
| England | Ten Motives| Menthol    | 16      | 13.6    |
| England | Vype      | Dark Cherry  | 18      | 18.8    |
| England | Vype      | Crisp Mint   | 18      | 19.3    |
| England | Vype      | Crisp Mint   | 18      | 18.8    |
| England | Vype      | Golden Tobacco| 6      | 5.6     |
| England | Ten Motives| Regular    | 18      | 14.4    |
| England | Ten Motives| Regular    | 18      | 14.1    |
| England | Ten Motives| Menthol    | 16      | 12      |
| England | Vype      | Dark Cherry  | 18      | 16.9    |
| England | Blu       | Tobacco      | 8       | 8.1     |
| England | Blu       | Tobacco      | 16      | 16.7    |
| England | Blu       | Tobacco      | 17      | 16.4    |
| England | Ten Motives| Regular    | 18      | 14.9    |
| England | Blu       | Cherry       | 0       | ND      |
| England | Blu       | Cherry       | 8       | 8.1     |
| England | Blu       | Menthol      | 8       | 8.1     |
| England | Blu       | Menthol      | 16      | 16.7    |
| England | Blu       | Menthol      | 18      | 17.2    |
| England | Blu       | Cherry       | 18      | 17.1    |
| England | Blu       | Tobacco      | 18      | 17.1    |
| England | Blu   | Menthol | 18 | 16.8 |
|---------|-------|---------|----|------|
| England | Blu   | Menthol | 9  | 8.3  |
| England | Blu   | Cherry  | 9  | 8.8  |
| England | Blu   | Cherry  | 18 | 18   |
| England | Blu   | Tobacco | 9  | 8.8  |
| England | Vype  | Crisp Mint | 18 | 19.7 |
| England | Blu   | Tobacco | 18 | 17.8 |
| England | Blu   | Menthol | 18 | 18.3 |
| England | Blu   | Tobacco | 9  | 8.3  |
| England | Blu   | Menthol | 9  | 8.2  |
| England | Logic | Light   | 12 | 8.2  |
| England | E-Lites | Light | 16 | 12.2 |
| England | Logic | Lights  | 12 | 12.8 |
| England | E-Lites | Regular | 24 | 18.2 |
| England | Ten Motives | Regular | 16 | 12.7 |
| England | E-Lites | Menthol | 16 | 11.4 |
| England | Elites | Menthol | 16 | 12.1 |
| England | Elites | Menthol | 16 | 11.8 |
| England | Logic | Tobacco | 6  | 4.7  |
| England | Logic | Cherry  | 6  | 4.6  |
| England | Logic | Cherry  | 12 | 9.3  |
| England | Logic | Tobacco | 18 | 13.9 |
| England | Logic | Cherry  | 6  | 4.3  |
| England | Logic | Tobacco | 6  | 4.7  |
| England | E-Lites | Regular | 24 | 18.6 |
| England | Vype  | Crisp Mint | 36 | 31.2 |
| England | Logic | Menthol | 12 | 9.1  |
| England | Logic | Tobacco | 18 | 13.4 |
| England | Logic | Cherry  | 12 | 8.9  |
| England | Logic | Menthol | 12 | 9.1  |
| England | Vype  | Dark Cherry | 18 | 17.9 |
| England | Vype  | Dark Cherry | 18 | 17.5 |
| England | Vype  | Dark Cherry | 12 | 28.4 |
| England | Vype  | Golden Tobacco | 18 | 18.36 |
| England | Vype  | Dark Cherry | 6  | 5.9  |
| England | Vype  | Crisp Mint | 6  | 5.9  |
| Country | Brand   | Flavor         | Type  | Price |
|---------|---------|----------------|-------|-------|
| England| Vype    | Dark Cherry    | 6     | 6.1   |
| England| Vype    | Crisp Mint     | 6     | 5.7   |
| England| Vype    | Crisp Mint     | 0     | 5.5   |
| England| Vype    | Crisp Mint     | 6     | 12    |
| England| Vype    | Crisp Mint     | 12    | 7.3   |
| England| Vype    | Golden Tobacco | 6     | 11.8  |
| England| Vype    | Golden Tobacco | 12    | 5.9   |
| England| Vype    | Dark Cherry    | 6     | 11.3  |
| England| Vype    | Dark Cherry    | 12    | 11.8  |
| England| Vype    | Golden Tobacco | 0     | 11.3  |
| England| Vype    | Golden Tobacco | 12    | 11.6  |
| England| Vype    | Crisp Mint     | 12    | 11.9  |
| England| Vype    | Crisp Mint     | 0     | 13.3  |
| England| Vype    | Crisp Mint     | 12    | 17.4  |
| England| Vype    | Dark Cherry    | 0     | 5.7   |
| England| Ten Motives | Regular      | 16    | 17.5  |
| England| Logic   | Tobacco        | 18    | 13.3  |
| England| Vype    | Dark Cherry    | 18    | 17.4  |
| England| Vype    | Golden Tobacco | 6     | 5.7   |
| England| Vype    | Golden Tobacco | 0     | ND    |
| England| Vype    | Golden Tobacco | 18    | 17.5  |
| England| Vype    | Dark Cherry    | 18    | 17    |
| England| Vype    | Dark Cherry    | 6     | 17.6  |
| England| Vype    | Dark Cherry    | 12    | 18.2  |
| England| Vype    | Golden Tobacco | 0     | 18.3  |
| England| Vype    | Crisp Mint     | 18    | 17.4  |
| England| Vype    |                | 18    | 19    |
| England| Vype    |                | 18    | 19    |
| England| Vype    |                | 18    | 19.3  |
| England| Vype    |                | 18    | 18.9  |
| England| Vype    |                | 18    | 19.1  |
| England| Logic   | Tobacco        | 12    | 9.3   |
| Country | Chemical         | CAS #    | Components                                                                 | Occurrence | Potential Respiratory Irritant |
|---------|------------------|----------|-----------------------------------------------------------------------------|------------|--------------------------------|
|         | Australia (n=15) |          |                                                                            |            |                                |
|         | Levomenthol      | 2216-51-5| cooling, camphoreous, minty, clean, spicy                                 | 40.0%      | X                              |
|         | Menthol          | 1490-04-6| cooling, mentholic, minty                                                  | 40.0%      | X                              |
|         | Maltol           | 118-71-8 | sweet, cotton candy, caramelic with jammy fruity and berry                  | 40.0%      | X                              |
|         | Vanillin         | 121-33-5 | vanilla, vanillin, sweet, creamy, spicy, phenolic, milky                    | 40.0%      |                                |
|         | Ethyl Vanillin   | 121-32-4 | sweet, creamy, vanilla, smooth, caramelic                                   | 26.7%      | X                              |
|         | Canada (n=10)    |          |                                                                            |            |                                |
|         | Vanillin         | 121-33-5 | vanilla, vanillin, sweet, creamy, spicy, phenolic, milky                    | 42.9%      |                                |
|         | Hydroxyacetone   | 116-09-6 | sweet, slightly green, burnt                                               | 42.9%      |                                |
|         | Maple Lactone    | 765-70-8 | sweet, maple, bready, caramelic with nutty nuances                          | 42.9%      |                                |
|         | 2-methyl-Butanoic acid | 116-53-0 | fruity, dirty, acidic with a dairy buttery and cheesey nuance               | 35.7%      |                                |
|         | Ethyl Acetate    | 141-78-6 | etherial, fruity, sweet with a grape and cherry nuance                      | 28.6%      |                                |
|         | England (n=166)  |          |                                                                            |            |                                |
|         | Propyl Methyl Ketone | 107-87-9 | sweet, fruity and banana-like with a fermented nuance                       | 98.4%      |                                |
|         | Isopropyl Methyl Ketone | 563-80-4 | Camphor                                                                    | 99.0%      |                                |
|         | Acetone Alcohol  | 116-09-6 | sweet, slightly green, burnt                                               | 88.0%      |                                |
|         | Menthol          | 1490-04-6| cooling, mentholic, minty                                                  | 65.1%      | X                              |
|         | Ethyl Acetate    | 141-78-6 | etherial, fruity, sweet with a grape and cherry nuance                      | 80.7%      |                                |
|         | US (n=54)        |          |                                                                            |            |                                |
|         | Vanillin         | 121-33-5 | vanilla, vanillin, sweet, creamy, spicy, phenolic, milky                    | 55.6%      |                                |
|         | Maple Lactone    | 765-70-8 | sweet, maple, bready, caramelic with nutty nuances                          | 35.2%      |                                |
|         | Levomenthol      | 2216-51-5| cooling, camphoreous, minty, clean, spicy                                 | 31.5%      | X                              |
|         | Potato Pyrazine   | 14667-55-1| raw, musty, nutty, potato                                                   | 29.6%      | X                              |
|         | Benzyl Alcohol   | 100-51-6 | chemical, fruity, cherry, almond, balsamic, bitter                         | 21.1%      | X                              |
