

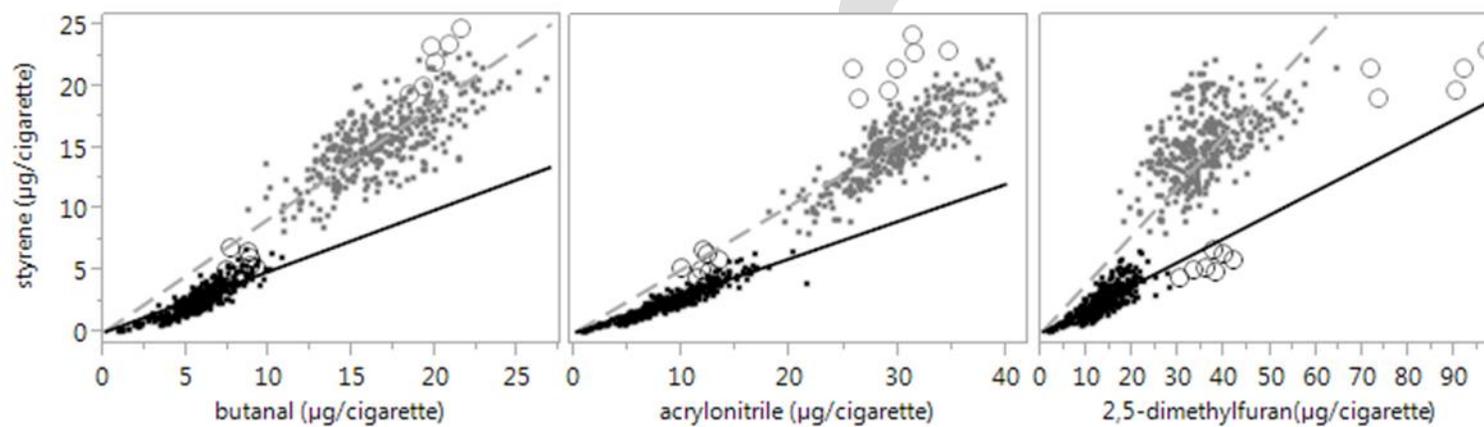
**Supplemental Table I.** Unsaturated and nitro compound median (interquartile range) amounts (µg/cigarette) for 1R5F and 3R4F research cigarettes and 50 U. S. commercial brand varieties

Brand Variety	% Filter ventilation	Puff number		acrylonitrile		furan		1,3-butadiene		2,5-dimethylfuran		vinyl chloride		nitromethane	
		ISO	CI	ISO	CI	ISO	CI	ISO	CI	ISO	CI	ISO	CI	ISO	CI
3R4F	29	8.1 (0.3)	10.1 (0.8)	7.50 (1.96)	27.8 (3.0)	23.3 (4.5)	57.5 (6.2)	35.8 (7.4)	90.3 (15.7)	13.8 (3.2)	38.0 (7.0)	0.030 (0.006)	0.079 (0.014)	2.16 (0.84)	6.57 (0.88)
1R5F	69	6.1 (0.6)	6.0 (0.3)	1.86 (0.59)	27.9 (3.9)	6.6 (1.4)	40.8 (5.1)	11.7 (2.7)	82.0 (19.0)	2.6 (0.7)	16.1 (2.6)	0.008 (0.002)	0.056 (0.012)	0.66 (0.41)	5.92 (1.09)
Newport Green king box menthol	0.1	6.0 (0.8)	8.1 (1.0)	11.34 (2.27)	31.3 (4.3)	25.2 (1.4)	48.5 (4.9)	44.6 (11.5)	90.6 (17.4)	13.1 (1.0)	30.8 (3.3)	0.025 (0.009)	0.054 (0.009)	3.07 (0.65)	4.96 (0.86)
Newport Green king soft menthol	0.1	7.3 (0.9)	9.2 (1.6)	13.48 (3.68)	35.5 (4.5)	33.2 (3.8)	56.1 (4.0)	51.3 (4.2)	103.8 (11.9)	16.3 (4.4)	36.7 (2.1)	0.032 (0.014)	0.062 (0.011)	3.26 (1.43)	5.31 (1.34)
Marlboro Red king box	8.9	7.3 (0.2)	9.2 (1.4)	12.28 (2.78)	29.4 (7.3)	30.2 (6.9)	56.9 (5.0)	50.0 (13.4)	96.9 (16.6)	19.2 (5.2)	42.2 (6.6)	0.034 (0.008)	0.077 (0.013)	2.61 (0.63)	6.18 (0.97)
Marlboro Red 100 box	12.8	9.0 (1.0)	11.2 (1.1)	12.57 (4.07)	33.8 (2.8)	26.2 (7.1)	62.5 (7.3)	43.7 (16.2)	108.8 (21.3)	18.6 (4.2)	46.7 (7.1)	0.038 (0.006)	0.082 (0.012)	2.72 (0.59)	6.74 (1.06)
Salem Green king box menthol	13.1	8.7 (0.9)	9.1 (0.8)	14.05 (4.52)	33.2 (4.8)	28.8 (7.2)	56.2 (2.8)	54.6 (13.5)	101.6 (25.0)	16.5 (5.6)	33.1 (2.2)	0.035 (0.005)	0.075 (0.013)	2.99 (0.37)	6.09 (0.28)
Marlboro Red 100 soft	14.0	9.0 (1.2)	12.1 (1.6)	12.59 (2.46)	35.1 (3.6)	32.6 (7.3)	64.8 (8.5)	47.3 (19.7)	106.2 (7.3)	19.2 (5.1)	49.2 (10.9)	0.041 (0.014)	0.098 (0.013)	2.92 (0.47)	7.26 (1.77)
Marlboro Red king soft	14.6	7.5 (1.6)	9.2 (1.0)	10.33 (2.33)	30.4 (4.0)	26.4 (6.8)	55.0 (6.5)	42.1 (4.8)	95.6 (19.0)	15.3 (4.6)	41.5 (4.7)	0.034 (0.005)	0.080 (0.015)	2.49 (0.91)†	6.42 (0.42)
Marlboro Green king box menthol	15.2	7.8 (0.8)	10.0 (1.1)	10.57 (1.84)	31.4 (3.6)	29.2 (3.6)	58.5 (5.3)	42.7 (10.1)	97.0 (24.6)	18.8 (5.9)	47.5 (5.7)	0.032 (0.007)	0.083 (0.015)	1.89 (0.86)	6.42 (0.84)
Winston Red king box	17.2	9.3 (0.3)	10.2 (0.3)	15.34 (2.97)	37.7 (3.7)	34.1 (5.5)	59.9 (6.2)	58.2 (12.2)	112.9 (5.6)	16.7 (4.5)	35.2 (4.5)	0.042 (0.006)	0.081 (0.011)	2.97 (1.03)	6.75 (0.90)
USA Gold 100 soft	18.9	7.5 (0.4)	8.8 (1.0)	10.89 (0.87)	31.8 (3.8)	21.7 (3.3)	53.8 (5.1)	39.8 (9.4)	108.3 (28.2)	12.8 (3.1)	32.7 (7.3)	0.028 (0.008)	0.073 (0.016)	2.44 (0.58)	5.17 (1.14)
Winston Red 100 box	19.1	10.0 (1.0)	11.3 (1.2)	14.90 (2.66)	37.2 (3.5)	27.9 (13.0)	64.8 (4.2)	54.6 (14.6)	110.9 (16.0)	16.3 (2.4)	37.8 (9.3)	0.036 (0.014)	0.093 (0.015)	2.54 (0.98)	7.49 (2.14)
Kool Green king box menthol	20.0	8.2 (0.8)	9.0 (1.1)	11.99 (3.15)	31.9 (4.3)	23.3 (5.8)	55.5 (6.8)	42.7 (13.5)	99.2 (23.3)	16.3 (2.9)	37.8 (7.7)	0.031 (0.006)	0.077 (0.010)	2.26 (0.98)	6.01 (0.80)
Kool Green king soft menthol	20.4	8.0 (0.6)	9.4 (0.8)	12.38 (1.02)	32.4 (5.1)	25.7 (2.9)	54.3 (7.9)	46.8 (6.8)	106.4 (23.6)	20.0 (4.9)	40.2 (9.6)	0.035 (0.009)	0.079 (0.014)	2.44 (0.80)	4.97 (1.06)
Basic Gold 100 box	20.5	8.0 (1.6)	9.6 (1.9)	9.25 (1.00)	28.1 (5.6)	22.6 (6.8)	57.8 (9.9)	36.8 (9.3)	92.7 (20.7)	14.4 (1.1)	36.1 (5.9)	0.030 (0.005)	0.081 (0.011)	2.40 (1.17)	5.78 (0.76)
Camel filter king box	21.0	8.2 (1.6)	10.5 (0.6)	12.41 (1.94)	32.6 (4.1)	25.7 (6.9)	59.2 (8.2)	40.6 (6.8)	99.5 (14.0)	17.4 (3.9)	49.6 (5.6)	0.031 (0.003)	0.074 (0.012)	2.29 (1.25)	6.18 (1.70)
Newport Green 100 box menthol	21.1	8.1 (1.1)	10.1 (1.1)	12.77 (3.72)	34.5 (8.4)	31.5 (9.9)	58.5 (10.5)	52.1 (19.3)	101.3 (9.2)	16.1 (5.3)	35.8 (7.4)	0.026 (0.005)	0.062 (0.007)	3.06 (0.98)	7.66 (6.22)
Basic Green 100 box menthol	21.7	8.0 (1.0)	9.2 (0.9)	8.00 (2.73)	27.9 (3.2)	21.3 (4.0)	58.5 (4.2)	36.2 (5.1)	90.5 (19.0)	12.4 (2.7)	37.3 (2.9)	0.027 (0.010)§	0.077 (0.007)	1.87 (0.75)	5.17 (2.63)
Natural American Spirit king box	21.9	11.4 (0.5)	16.4 (0.9)	12.03 (1.09)	29.9 (5.2)	36.7 (5.7)	68.3 (12.6)	60.4 (13.9)	118.3 (20.3)	37.6 (6.4)	92.2 (26.5)	0.041 (0.007)	0.086 (0.014)	0.99 (0.31)	2.13 (0.69)
Marlboro Gold king box menthol	22.1	7.7 (0.4)	8.2 (1.1)	8.27 (3.02)	23.7 (3.6)	22.7 (7.4)	48.7 (6.2)	40.0 (15.1)	92.9 (13.5)	14.9 (3.0)	36.9 (2.9)	0.028 (0.006)	0.064 (0.006)	1.81 (0.73)	5.06 (0.96)
Marlboro Gold king soft	23.2	7.0 (0.3)	8.1 (0.9)	9.33 (1.28)	27.2 (3.5)	19.7 (3.1)	52.4 (8.0)	37.6 (9.3)	100.1 (16.6)	12.5 (2.3)	35.7 (3.6)	0.030 (0.009)	0.069 (0.018)	1.73 (0.84)	5.93 (1.26)
Basic Gold 100 soft	23.5	7.3 (0.3)	8.3 (0.4)	8.16 (1.95)	26.6 (5.3)	20.6 (1.8)	51.4 (9.6)	33.5 (5.7)	108.4 (26.5)	12.1 (1.2)	33.2 (7.6)	0.031 (0.005)	0.080 (0.017)	1.90 (0.51)	6.27 (1.98)
Marlboro Red-Label king box	23.9	7.0 (0.3)	8.3 (0.5)	8.18 (2.48)	29.9 (4.0)	21.1 (2.5)	54.0 (6.4)	36.0 (6.7)	102.0 (24.6)	13.2 (1.3)	37.2 (3.6)	0.028 (0.004)	0.080 (0.017)	2.07 (0.95)	5.86 (1.80)
Doral Gold king box	24.1	7.2 (0.3)	7.3 (0.9)	9.57 (1.63)	26.1 (2.7)	20.8 (7.6)	48.1 (7.3)	43.2 (16.8)	94.7 (34.4)	13.7 (3.2)	29.1 (3.6)	0.024 (0.006)†	0.056 (0.019)†	2.05 (0.77)	4.93 (0.86)
Marlboro Gold king box	25.2	7.0 (0.6)	8.4 (0.7)	8.30 (2.62)	27.1 (1.2)	21.7 (4.9)	53.5 (6.9)	41.4 (17.1)	96.7 (18.9)	12.3 (1.6)	37.9 (9.4)	0.027 (0.013)†	0.070 (0.005)	1.59 (1.31)	4.91 (1.52)
Camel Blue king box	25.5	7.4 (0.8)	8.2 (1.1)	9.59 (2.22)	28.1 (2.6)	21.8 (3.0)	48.1 (5.1)	41.4 (9.2)	99.2 (13.0)	13.4 (3.3)	32.9 (4.7)	0.026 (0.007)	0.061 (0.008)	1.86 (0.34)	5.27 (1.48)
Benson Hedges Green 100 box menthol	26.7	9.0 (0.9)	10.5 (0.7)	9.32 (1.36)	34.1 (5.2)	24.4 (5.9)	68.2 (8.7)	39.4 (8.3)	104.7 (19.2)	15.9 (4.2)	48.4 (5.7)	0.027 (0.013)	0.086 (0.021)	2.19 (0.79)	6.66 (1.37)
Benson Hedges Gold 100 soft	28.4	8.2 (0.6)	10.0 (1.2)	8.96 (1.25)	31.8 (7.5)	23.8 (7.5)	60.7 (10.6)	34.8 (7.8)	111.9 (39.9)	15.7 (4.6)	45.0 (9.6)	0.029 (0.014)	0.090 (0.020)	2.13 (1.35)	5.81 (0.91)
Marlboro Gold 100 soft	29.4	8.0 (0.5)	9.2 (1.6)	7.22 (2.82)	27.3 (3.3)	20.9 (2.9)	54.7 (7.0)	37.3 (9.2)	90.7 (14.2)	12.6 (3.2)	38.4 (8.9)	0.029 (0.014)	0.077 (0.021)	2.15 (0.86)	5.63 (1.32)
Marlboro Gold 100 box	30.1	9.0 (1.1)	10.2 (1.9)	10.68 (1.32)	30.6 (2.5)	28.8 (9.6)	59.3 (5.1)	45.8 (4.7)	100.3 (13.7)	16.5 (1.8)	45.1 (8.4)	0.035 (0.007)	0.087 (0.008)	2.16 (1.08)	6.10 (2.47)
Salem Gold king box menthol	32.6	8.0 (0.6)	9.1 (2.0)	9.66 (1.86)	27.3 (3.7)	26.2 (6.0)	53.0 (5.1)	46.2 (19.0)	88.5 (26.0)	12.1 (3.4)	29.0 (3.8)	0.030 (0.009)	0.064 (0.012)	2.10 (1.48)	5.85 (1.25)
Marlboro Silver king box	33.9	7.2 (0.3)	8.0 (1.0)	5.28 (1.45)	21.9 (2.4)	13.9 (1.4)	45.4 (7.8)	23.6 (3.2)	78.5 (29.9)	8.7 (2.2)	30.9 (4.8)	0.016 (0.002)	0.068 (0.025)†	1.12 (0.41)	4.41 (0.40)
Winston Gold king box	33.9	8.1 (0.4)	9.1 (1.9)	9.44 (2.61)	32.3 (6.9)	22.0 (5.2)†	52.6 (12.8)	37.1 (5.3)	106.0 (19.4)	11.1 (3.3)	29.3 (8.8)	0.026 (0.013)	0.072 (0.014)	1.95 (1.25)	5.69 (0.42)
Vantage Multi king soft	34.9	8.1 (0.3)	8.3 (0.9)	9.84 (3.88)	27.6 (5.2)	25.0 (9.6)	50.9 (4.3)	48.7 (32.0)	94.2 (27.9)	14.0 (4.1)	31.9 (4.0)	0.026 (0.013)	0.056 (0.007)	2.11 (0.83)	5.17 (0.48)
Virginia Slims, gold box	36.7	8.0 (1.0)	8.2 (1.0)	5.54 (0.91)	25.6 (3.7)	18.5 (1.2)	46.4 (2.5)	27.1 (5.7)	74.2 (26.3)	12.0 (1.2)	29.7 (5.4)	0.022 (0.007)	0.061 (0.014)	1.40 (0.43)	5.22 (0.39)
Parliament Blue king box	36.7	6.6 (0.7)	7.4 (0.7)	7.08 (1.10)	25.7 (3.1)	21.0 (4.0)	51.3 (6.0)	30.5 (4.6)	82.7 (23.4)	9.8 (2.9)	26.8 (5.1)	0.022 (0.006)	0.064 (0.015)	1.63 (0.33)	4.85 (0.55)
Pall Mall Blue king box	37.5	8.4 (1.0)	9.8 (1.1)	8.27 (1.62)	29.0 (3.5)	19.4 (5.7)	54.6 (3.7)	37.9 (5.2)	99.9 (16.7)	13.4 (2.8)	37.0 (7.2)	0.020 (0.002)	0.058 (0.010)	1.92 (0.85)	5.77 (2.35)
Merit Gold, filter box	38.5	8.0 (0.3)	8.0 (0.8)	7.25 (1.56)	26.4 (2.9)	20.0 (4.3)	47.8 (3.9)	33.4 (6.0)	71.3 (14.6)	12.1 (2.7)	31.4 (4.1)	0.023 (0.007)	0.062 (0.006)	1.52 (0.65)	4.25 (1.09)
Kent Golden king soft	41.3	6.6 (1.0)	7.7 (0.7)	7.98 (2.42)	27.8 (2.9)	19.3 (4.0)	50.6 (4.9)	35.4 (7.5)	84.3 (18.7)	9.3 (3.1)	27.7 (4.1)	0.022 (0.006)	0.057 (0.004)	1.98 (0.69)	4.61 (2.04)
Misty Blue slims box	43.6	9.0 (1.1)	10.1 (0.9)	7.23 (0.19)	30.3 (3.8)	22.4 (3.9)	57.7 (4.1)	35.2 (2.2)	95.3 (12.5)	13.0 (3.4)	36.7 (4.5)	0.019 (0.009)	0.060 (0.006)	2.00 (0.88)	6.18 (1.47)
Basic Blue 100 box	43.7	9.0 (1.3)	9.2 (2.3)	5.21 (1.43)	29.8 (7.1)	19.8 (3.4)	55.6 (19.1)	29.9 (5.6)	86.8 (47.1)	10.3 (3.4)	33.6 (11.2)	0.021 (0.005)	0.081 (0.041)	1.22 (0.57)	5.40 (2.88)
Maverick Gold 100 box	43.7	9.0 (0.7)	10.2 (1.9)	6.47 (1.25)	34.8 (6.9)	20.3 (4.2)	63.1 (9.8)	31.5 (6.3)	92.3 (22.4)	8.5 (3.5)	30.6 (4.0)	0.016 (0.002)†	0.050 (0.014)	1.60 (1.34)	6.97 (1.61)
Marlboro Silver 100 box	45.1	8.0 (0.4)	9.3 (1.6)	4.70 (0.61)	24.6 (2.3)	15.5 (1.6)	49.9 (13.6)	26.1 (6.5)	86.1 (12.0)	10.6 (1.9)	33.6 (6.2)	0.017 (0.003)	0.069 (0.016)†	1.10 (0.58)	5.97 (1.18)
Salem Gold 100 box menthol	46.6	10.0 (1.6)	11.1 (1.9)	7.36 (2.34)	35.0 (3.7)	24.5 (2.8)	66.0 (11.0)	37.9 (11.4)	103.3 (30.9)	12.3 (3.7)	37.0 (6.7)	0.025 (0.004)†	0.074 (0.010)	2.20 (1.73)	7.60 (1.50)
Salem Silver 100 box menthol	50.1	10.6 (1.5)	11.0 (1.5)	5.90 (1.99)	30.2 (0.9)	19.5 (5.7)	64.0 (8.4)	34.2 (13.6)	99.6 (18.5)	10.1 (3.1)	33.2 (7.0)	0.019 (0.010)	0.080 (0.010)†	1.38 (1.13)	7.21 (1.31)
Doral Silver 100 box	51.6	10.3 (0.2)	11.1 (1.8)	4.96 (1.43)	30.6 (4.5)	18.3 (2.6)	62.1 (10.8)	26.9 (4.0)	102.5 (27.3)	9.6 (1.9)	38.5 (7.7)	0.016 (0.007)	0.065 (0.013)	1.33 (1.10)	6.56 (1.77)
Now 100 soft	55.1	10.2 (1.5)	9.0 (0.9)	2.25 (0.54)	27.8 (2.6)	9.0 (1.5)	47.9 (4.7)	16.5 (4.2)	92.0 (11.6)	4.9 (2.4)	24.3 (2.7)	0.008 (0.002)	0.062 (0.002)	0.96 (0.37)	4.07 (0.59)
Winston White 100 box	59.0	11.4 (1.0)	10.7 (1.7)	5.48 (2.74)	31.0 (4.4)	18.1 (3.7)	60.9 (8.3)	35.8 (11.8)	104.6 (10.8)	8.9 (3.2)	30.5 (3.9)	0.021 (0.006)	0.076 (0.014)†	1.52 (0.89)	6.35 (1.67)
Capri Magenta slims box	60.6	7.2 (2.0)	9.0 (2.2)	6.04 (2.00)	19.7 (3.2)	13.7 (2.9)	32.4 (1.5)	26.6 (5.3)	67.8 (16.9)	7.1 (2.4)	20.6 (3.3)	0.017 (0.008)	0.046 (0.010)	1.09 (0.82)	3.12 (0.71)
True Silver king soft	66.6	8.3 (1.9)	9.2 (0.1)	3.23 (0.63)	29.0 (2.2)	10.2 (1.4)	50.9 (5.8)	18.1 (11.1)	84.9 (3.2)	4.7 (1.5)	24.6 (2.5)	0.009 (0.004)	0.058 (0.007)	0.92 (0.51)	4.93 (1.14)
Carlton 10															

Brand Varieties	Puff number		acetaldehyde		butanal		crotonaldehyde		2-butanone		2-pentanone		3-pentanone		vinyl acetate	
	ISO	CI	ISO	CI	ISO	CI	ISO	CI	ISO	CI	ISO	CI	ISO	CI	ISO	CI
3R4F	8.1 (0.3)	10.1 (0.8)	610 (170)	1734 (323)	5.72 (0.85)	18.1 (2.9)	9.36 (1.68)	41.8 (5.5)	55.7 (8.5)	172 (18)	7.46 (1.16)	26.1 (2.3)	3.04 (0.54)	10.810 (1.31)	0.310 (0.057)	0.847 (0.108)
1R5F	6.1 (0.6)	6.0 (0.3)	194 (54)	1294 (321)	1.67 (0.36)	15.6 (3.7)	1.65 (0.40)	31.4 (4.2)	14.9 (3.1)	130 (20)	1.54 (0.35)	17.7 (2.2)	0.61 (0.15)	7.26 (1.10)	0.099 (0.023)	0.672 (0.077)
Newport Green king box menthol	6.0 (0.8)	8.1 (1.0)	914 (288)	1736 (105)	7.34 (1.48)	17.1 (2.2)	15.47 (1.61)	35.8 (4.8)	68.8 (15.9)	146 (16)	9.07 (2.03)	22.3 (1.4)	3.83 (0.82)	9.30 (0.73)	0.376 (0.027)	0.816 (0.074)
Newport Green king soft menthol	7.3 (0.9)	9.2 (1.6)	1143 (346)	1961 (393)	8.00 (0.62)	18.3 (2.2)	16.87 (1.46)	41.7 (4.7)	71.6 (5.3)	159 (28)	10.47 (0.60)	24.1 (5.0)	4.25 (0.31)	10.06 (2.67)	0.434 (0.082)	0.940 (0.097)
Marlboro Red king box	7.3 (0.2)	9.2 (1.4)	854 (174)	1685 (156)	6.47 (1.17)	16.6 (1.9)	14.16 (3.07)	39.6 (6.4)	58.4 (7.9)	146 (16)	8.27 (1.70)	21.5 (2.1)	3.23 (0.71)	8.65 (1.42)	0.400 (0.048)	0.910 (0.125)
Marlboro Red 100 box	9.0 (1.0)	11.2 (1.1)	820 (199)	1655 (418)	6.91 (0.73)	19.0 (3.8)	15.31 (2.73)	44.8 (5.1)	67.7 (12.4)	161 (20)	9.26 (1.87)	25.2 (3.5)	3.81 (0.50)	9.96 (1.87)	0.439 (0.087)	1.015 (0.091)
Salem Green king box menthol	8.7 (0.9)	9.1 (0.8)	802 (205)	2070 (300)	7.76 (1.14)	19.1 (2.1)	16.73 (4.59)	46.8 (2.2)	75.2 (19.7)	175 (10)	10.70 (2.27)	25.8 (1.7)	4.53 (0.92)	9.62 (1.81)	0.427 (0.136)	0.922 (0.055)
Marlboro Red 100 soft	9.0 (1.2)	12.1 (1.6)	972 (119)	2105 (200)	6.99 (0.54)	21.0 (2.1)	14.29 (3.16)	48.2 (6.2)	63.3 (6.0)	185 (16)	9.14 (1.48)	26.8 (2.8)	3.45 (0.71)	11.46 (1.41)	0.442 (0.087)	1.147 (0.192)
Marlboro Red king soft	7.5 (1.6)	9.2 (1.0)	769 (84)	1712 (227)	5.77 (1.30)	16.6 (2.0)	12.17 (2.77)	38.3 (1.6)	49.2 (10.1)	146 (19)	7.18 (2.20)	22.0 (1.6)	2.83 (0.87)	9.04 (1.64)	0.390 (0.053)	0.931 (0.042)
Marlboro Green king box menthol	7.8 (0.8)	10.0 (1.1)	651 (150)	1968 (498)	6.74 (1.46)	18.5 (2.0)	15.57 (4.09)	47.1 (3.1)	63.3 (17.8)	167 (11)	8.58 (1.76)	24.7 (2.3)	3.44 (0.87)	9.30 (2.41)	0.353 (0.053)	0.890 (0.077)
Winston Red king box	9.3 (0.3)	10.2 (0.3)	914 (415)	2069 (160)	8.64 (1.31)	22.2 (2.4)	17.31 (4.91)	49.4 (3.9)	75.6 (7.6)	184 (16)	11.21 (1.04)	26.9 (2.0)	4.76 (0.76)	11.26 (2.05)	0.487 (0.049)	1.039 (0.051)
USA Gold 100 soft	7.5 (0.4)	8.8 (1.0)	610 (78)	1837 (652)	6.28 (1.09)	17.0 (2.7)	12.11 (3.04)	43.6 (6.0)	58.4 (12.6)	168 (25)	7.94 (1.43)	23.8 (3.6)	3.31 (0.44)	9.07 (2.09)	0.370 (0.050)	0.965 (0.165)
Winston Red 100 box	10.0 (1.0)	11.3 (1.2)	738 (160)	2244 (337)	8.27 (1.41)	20.6 (2.6)	17.45 (2.69)	52.7 (3.5)	76.4 (13.5)	194 (8)	11.03 (1.56)	27.8 (1.5)	4.83 (0.87)	10.99 (2.75)	0.477 (0.057)	1.079 (0.111)
Kool Green king box menthol	8.2 (0.8)	9.0 (1.1)	722 (273)	2026 (396)	6.39 (1.03)	18.9 (1.9)	13.14 (2.05)	46.2 (4.8)	60.4 (5.9)	167 (14)	8.28 (0.66)	24.4 (2.8)	3.34 (0.44)	9.36 (1.01)	0.373 (0.049)	0.912 (0.115)
Kool Green king soft menthol	8.0 (0.6)	9.4 (0.8)	680 (298)	1972 (567)	6.59 (0.57)	16.8 (3.2)	15.52 (1.36)	43.7 (2.5)	65.2 (6.1)	154 (11)	9.16 (1.01)	23.0 (1.4)	3.93 (0.66)	9.03 (0.88)	0.414 (0.056)	0.968 (0.074)
Basic Gold 100 box	8.0 (1.6)	9.6 (1.9)	511 (266)	1550 (199)	5.81 (0.85)	16.3 (5.9)	10.76 (0.94)	41.5 (4.5)	53.5 (4.3)	157 (20)	7.07 (0.81)	22.6 (5.2)	3.02 (0.32)	9.72 (1.06)	0.355 (0.034)	0.849 (0.109)
Camel filter king box	8.2 (1.6)	10.5 (0.6)	603 (57)	1900 (370)	6.41 (0.82)	18.1 (3.8)	14.24 (2.20)	47.1 (6.3)	60.3 (7.1)	170 (23)	8.26 (0.86)	25.2 (3.3)	3.29 (0.29)	9.50 (2.52)	0.409 (0.039)	1.020 (0.076)
Newport Green 100 box menthol	8.1 (1.1)	10.1 (1.1)	924 (180)	2039 (316)	7.75 (2.63)	20.9 (4.1)	13.64 (6.33)	45.5 (10.5)	71.5 (27.1)	175 (39)	9.70 (3.28)	27.2 (4.6)	3.70 (1.93)	10.50 (1.75)	0.409 (0.080)	0.999 (0.275)
Basic Green 100 box menthol	8.0 (1.0)	9.2 (0.9)	567 (56)	1822 (284)	5.76 (1.16)	19.2 (4.0)	9.18 (2.30)	43.6 (4.8)	52.0 (4.5)	163 (9)	7.07 (1.21)	23.3 (2.4)	2.79 (0.47)	9.96 (1.50)	0.321 (0.044)	0.918 (0.098)
Natural American Spirit king box	11.4 (0.5)	16.4 (0.9)	1015 (495)	2141 (208)	8.71 (1.27)	20.0 (1.6)	17.04 (3.29)	47.1 (4.3)	75.1 (10.7)	190 (15)	11.47 (1.23)	31.3 (2.5)	4.55 (0.55)	11.30 (2.22)	0.497 (0.079)	1.272 (0.118)
Marlboro Gold king box menthol	7.7 (0.4)	8.2 (1.1)	675 (63)	1465 (139)	5.50 (0.61)	14.5 (2.0)	9.45 (1.18)	37.5 (6.2)	50.5 (7.4)	137 (13)	6.58 (0.72)	20.0 (1.3)	2.69 (0.26)	8.16 (0.37)	0.314 (0.078)	0.783 (0.120)
Marlboro Gold king soft	7.0 (0.3)	8.1 (0.9)	499 (103)	1392 (238)	4.87 (1.23)	14.8 (4.8)	10.10 (0.67)	39.9 (3.0)	46.7 (4.7)	140 (17)	6.14 (0.27)	20.3 (2.8)	2.48 (0.28)	8.43 (1.78)	0.313 (0.073)	0.805 (0.085)
Basic Gold 100 soft	7.3 (0.3)	8.3 (0.4)	553 (152)	1420 (531)	5.55 (0.50)	16.5 (3.2)	9.69 (1.41)	39.3 (8.8)	52.3 (6.1)	145 (37)	6.68 (1.18)	20.8 (2.7)	2.63 (0.27)	8.50 (2.15)	0.335 (0.040)	0.836 (0.161)
Marlboro Red-Label king box	7.0 (0.3)	8.3 (0.5)	543 (126)	1501 (331)	5.24 (0.71)	14.5 (2.1)	10.80 (2.05)	41.4 (9.0)	49.3 (4.7)	142 (21)	6.81 (0.70)	20.6 (1.0)	2.61 (0.31)	8.81 (0.97)	0.334 (0.039)	0.885 (0.117)
Doral Gold king box	7.2 (0.3)	7.3 (0.9)	517 (86)	1427 (387)	5.60 (0.49)	14.6 (4.6)	11.47 (2.49)	35.9 (4.6)	56.5 (3.9)	135 (14)	7.59 (0.67)	19.8 (4.3)	3.09 (0.82)	8.27 (1.25)	0.295 (0.065)	0.700 (0.094)
Marlboro Gold king box	7.0 (0.6)	8.4 (0.7)	548 (151)	1485 (260)	5.38 (0.60)	14.1 (2.4)	9.51 (1.72)	36.4 (9.0)	48.1 (9.0)	132 (16)	6.13 (1.00)	19.4 (2.3)	2.40 (0.50)	8.13 (1.09)	0.302 (0.075)	0.846 (0.113)
Camel Blue king box	7.4 (0.8)	8.2 (1.1)	599 (154)	1363 (212)	6.07 (0.55)	13.9 (2.8)	11.67 (2.66)	35.9 (5.6)	56.4 (7.8)	132 (6)	7.68 (1.54)	19.7 (2.6)	3.10 (0.32)	8.27 (1.02)	0.375 (0.065)	0.835 (0.070)
Benson Hedges Green 100 box menthol	9.0 (0.9)	10.5 (0.7)	660 (150)	1812 (504)	6.11 (0.65)	17.9 (5.9)	11.36 (2.09)	50.7 (7.8)	53.3 (10.4)	175 (45)	7.26 (1.50)	27.2 (3.7)	2.81 (0.62)	11.17 (1.37)	0.379 (0.085)	1.160 (0.179)
Benson Hedges Gold 100 soft	8.2 (0.6)	10.0 (1.2)	533 (213)	2017 (543)	4.93 (1.72)	15.8 (3.7)	10.90 (0.79)	45.5 (9.7)	48.7 (2.6)	163 (28)	6.84 (0.57)	23.5 (5.7)	2.74 (0.18)	9.49 (1.91)	0.348 (0.056)	1.081 (0.178)
Marlboro Gold 100 soft	8.0 (0.5)	9.2 (1.6)	660 (78)	1728 (230)	5.55 (0.55)	15.8 (1.6)	8.74 (0.83)	38.6 (7.0)	49.0 (6.6)	145 (22)	6.27 (1.27)	21.4 (2.1)	2.58 (0.53)	8.93 (1.32)	0.318 (0.058)	0.907 (0.212)
Marlboro Gold 100 box	9.0 (1.1)	10.2 (1.9)	595 (262)	1702 (320)	6.72 (2.11)	16.4 (4.6)	10.62 (3.55)	39.8 (6.7)	60.1 (8.5)	154 (16)	7.94 (1.48)	23.6 (1.2)	3.01 (0.88)	9.97 (1.22)	0.382 (0.032)	0.976 (0.075)
Salem Gold king box menthol	8.0 (0.6)	9.1 (2.0)	496 (136)	1581 (339)	5.68 (0.67)	16.1 (2.5)	11.04 (3.51)	38.5 (6.0)	51.5 (8.1)	148 (12)	6.77 (1.67)	21.9 (1.5)	2.66 (0.62)	9.41 (1.01)	0.354 (0.076)	0.893 (0.102)
Marlboro Silver king box	7.2 (0.3)	8.0 (1.0)	351 (80)	1349 (209)	3.19 (0.33)	11.8 (0.8)	4.72 (0.39)	29.4 (2.5)	29.2 (2.2)	107 (15)	3.38 (0.51)	15.4 (3.0)	1.26 (0.18)	6.96 (0.84)	0.203 (0.031)	0.722 (0.067)
Winston Gold king box	8.1 (0.4)	9.1 (1.9)	508 (432)	1593 (482)	5.76 (1.64)	16.4 (2.4)	10.84 (4.09)	42.9 (13.1)	54.7 (12.9)	162 (30)	7.53 (1.98)	23.7 (4.2)	2.89 (0.95)	9.48 (1.38)	0.363 (0.120)	0.916 (0.280)
Vantage Multi king soft	8.1 (0.3)	8.3 (0.9)	673 (86)	1559 (105)	6.28 (1.52)	15.8 (2.3)	10.80 (4.20)	34.0 (6.9)	57.2 (8.7)	134 (18)	7.60 (0.77)	19.6 (1.5)	2.92 (1.03)	7.79 (0.81)	0.322 (0.096)	0.800 (0.107)
Virginia Slims gold box	8.0 (1.0)	8.2 (1.0)	490 (173)	1450 (154)	4.28 (0.72)	15.7 (2.0)	6.43 (1.00)	34.9 (4.0)	37.0 (5.2)	120 (15)	4.72 (0.85)	17.9 (2.5)	1.90 (0.29)	7.41 (0.93)	0.253 (0.045)	0.752 (0.145)
Parliament Blue king box	6.6 (0.7)	7.4 (0.7)	563 (184)	1505 (269)	4.37 (0.87)	14.9 (1.2)	8.81 (1.61)	38.1 (7.6)	39.1 (6.5)	131 (26)	5.43 (0.55)	19.1 (1.9)	2.07 (0.32)	7.61 (0.96)	0.285 (0.044)	0.788 (0.122)
Pall Mall Blue king box	8.4 (1.0)	9.8 (1.1)	616 (153)	1689 (346)	5.62 (0.81)	17.2 (4.4)	9.66 (2.75)	41.2 (7.2)	54.3 (6.2)	161 (5)	7.72 (1.76)	24.8 (1.4)	2.96 (0.48)	10.17 (0.43)	0.301 (0.034)	0.927 (0.035)
Merit Gold filter box	8.0 (0.3)	8.0 (0.8)	529 (118)	1335 (157)	4.73 (0.52)	15.2 (4.5)	7.15 (1.12)	35.5 (1.7)	42.6 (7.0)	133 (12)	5.46 (0.98)	19.1 (3.0)	2.06 (0.43)	7.55 (1.03)	0.281 (0.059)	0.761 (0.076)
Kent Golden king soft	6.6 (1.0)	7.7 (0.7)	540 (145)	1532 (99)	5.43 (0.89)	15.7 (4.9)	9.06 (2.37)	36.2 (0.9)	47.2 (11.9)	144 (27)	6.17 (1.61)	20.3 (2.7)	2.38 (0.74)	8.12 (1.06)	0.347 (0.094)	0.810 (0.097)
Misty Blue slims box	9.0 (1.1)	10.1 (0.9)	598 (133)	1745 (177)	5.09 (1.02)	17.4 (3.4)	8.18 (0.62)	40.8 (3.5)	43.4 (6.2)	143 (14)	5.81 (0.55)	22.2 (1.8)	2.39 (0.45)	9.03 (0.92)	0.298 (0.034)	0.909 (0.047)
Basic Blue 100 box	9.0 (1.3)	9.2 (2.3)	513 (120)	1592 (533)	4.43 (0.83)	17.5 (5.8)	5.25 (2.33)	40.1 (16.8)	38.8 (5.7)	147 (55)	4.58 (0.95)	21.3 (6.4)	1.77 (0.48)	8.67 (3.46)	0.250 (0.092)	0.926 (0.389)
Maverick Gold 100 box	9.0 (0.7)	10.2 (1.9)	570 (166)	1856 (389)	4.92 (0.49)	21.3 (6.4)	7.08 (2.75)	46.1 (6.6)	45.8 (6.9)	179 (23)	5.72 (1.14)	28.2 (5.7)	2.33 (0.53)	11.29 (1.26)	0.250 (0.068)	0.934 (0.200)
Marlboro Silver 100 box	8.0 (0.4)	9.3 (1.6)	454 (145)	1454 (255)	3.70 (0.38)	13.4 (2.1)	4.81 (0.24)	31.9 (6.7)	32.4 (5.3)	115 (28)	3.81 (0.87)	17.0 (3.8)	1.51 (0.19)	7.53 (0.94)	0.217 (0.012)	0.782 (0.113)
Salem Gold 100 box menthol	10.0 (1.6)	11.1 (1.9)	647 (212)	1973 (363)	5.60 (1.30)	20.1 (5.9)	8.06 (1.18)	47.6 (7.4)	50.8 (19.2)	184 (42)	6.71 (2.35)	27.7 (6.4)	2.59 (1.05)	12.52 (1.61)	0.320 (0.049)	1.050 (0.078)
Salem Silver 100 box menthol	10.6 (1.5)	11.0 (1.5)	558 (252)	1925 (304)	4.92 (1.70)	17.6 (2.5)	5.74 (2.44)	43.0 (6.2)	44.9 (12.1)	155 (19)	5.48 (1.75)	23.0 (4.7)	2.17 (0.78)	10.77 (2.15)	0.270 (0.117)	0.950 (0.099)
Doral Silver 100 box	10.3 (0.2)	11.1 (1.8)	483 (210)	1940 (503)	4.19 (1.06)	17.7 (3.1)	5.68 (1.45)	40.9 (5.4)	38.1 (9.3)	151 (24)	4.93 (1.15)	22.9 (3.4)	1.80 (0.37)	10.87 (1.54)	0.221 (0.050)	0.899 (0.095)
Now 100 soft	10.2 (1.5)	9.0 (0.9)	222 (56)	1791 (189)	1.89 (0.28)	13.5 (1.1)	2.18 (0.06)	33.2 (2.8)	17.0 (5.8)	123 (4)	1.92 (0.16)	18.5 (1.5)	0.75 (0.17)	8.68 (0.37)	0.124 (0.033)	0.830 (0.069)
Winston White 100 box	11.4 (1.0)	10.7 (1.7)	46													

Brand Varieties	puff number		benzene		toluene		ethylbenzene		m/p-xylene		o-xylene		styrene		3-ethyltoluene	
	ISO	CI	ISO	CI	ISO	CI	ISO	CI	ISO	CI	ISO	CI	ISO	CI	ISO	CI
3R4F	8.1 (0.3)	10.1 (0.8)	35.0 (6.0)	97.7 (10.4)	39.3 (8.3)	139 (16)	3.19 (0.83)	16.5 (2.1)	5.53 (1.58)	27.7 (2.5)	1.06 (0.32)	6.03 (0.81)	2.03 (0.48)	15.4 (1.8)	0.490 (0.127)	3.32 (0.44)
1R5F	6.1 (0.6)	6.0 (0.3)	11.0 (2.5)	75.3 (8.8)	8.8 (2.4)	102 (12)	0.67 (0.21)	11.7 (2.1)	1.24 (0.40)	17.3 (2.6)	0.23 (0.07)	3.71 (0.50)	0.45 (0.14)	11.3 (1.7)	0.103 (0.030)	2.02 (0.35)
Newport Green king box menthol	6.0 (0.8)	8.1 (1.0)	39.2 (4.0)	82.3 (10.2)	44.8 (4.1)	117 (11)	4.55 (0.73)	14.6 (1.9)	7.42 (2.00)	22.5 (2.0)	1.43 (0.34)	5.08 (0.61)	3.53 (0.71)	15.6 (2.1)	0.706 (0.062)	2.90 (0.34)
Newport Green king soft menthol	7.3 (0.9)	9.2 (1.6)	46.1 (4.6)	94.3 (9.1)	52.6 (9.4)	131 (16)	5.15 (0.94)	16.5 (2.0)	8.31 (1.33)	25.5 (6.9)	1.64 (0.29)	5.70 (1.17)	4.16 (1.25)	17.5 (3.8)	0.832 (0.241)	3.26 (0.70)
Marlboro Red king box	7.3 (0.2)	9.2 (1.4)	41.0 (4.8)	86.7 (10.9)	46.9 (8.7)	122 (18)	4.43 (0.68)	15.2 (3.0)	7.37 (0.69)	26.0 (2.2)	1.43 (0.21)	5.71 (0.94)	3.52 (1.79)	16.1 (2.7)	0.696 (0.161)	3.31 (0.60)
Marlboro Red 100 box	9.0 (1.0)	11.2 (1.1)	42.7 (13.3)	109.7 (13.7)	48.9 (13.9)	157 (27)	4.50 (1.19)	17.4 (2.5)	7.49 (3.24)	28.9 (4.2)	1.46 (0.49)	6.64 (0.93)	3.65 (0.92)	18.3 (2.3)	0.686 (0.210)	3.83 (0.56)
Salem Green king box menthol	8.7 (0.9)	9.1 (0.8)	43.8 (12.1)	101.6 (6.3)	53.5 (7.6)	136 (11)	5.22 (0.85)	17.6 (1.5)	8.20 (1.34)	25.3 (2.5)	1.82 (0.21)	6.09 (0.43)	4.57 (0.92)	17.3 (1.4)	1.000 (0.128)	3.45 (0.41)
Marlboro Red 100 soft	9.0 (1.2)	12.1 (1.6)	45.7 (7.0)	109.2 (9.7)	52.3 (7.7)	149 (15)	4.72 (1.07)	18.4 (1.8)	7.93 (1.72)	32.3 (5.5)	1.63 (0.37)	6.91 (1.04)	3.74 (0.55)	18.7 (2.7)	0.886 (0.140)	4.03 (0.55)
Marlboro Red king soft	7.5 (1.6)	9.2 (1.0)	39.3 (4.3)	91.5 (10.7)	41.5 (11.1)	123 (12)	4.00 (1.61)	15.4 (2.1)	6.36 (2.63)	26.3 (3.1)	1.29 (0.48)	5.62 (0.47)	3.29 (1.10)	15.5 (0.8)	0.721 (0.286)	3.32 (0.28)
Marlboro Green king box menthol	7.8 (0.8)	10.0 (1.1)	41.9 (6.9)	97.4 (9.0)	47.1 (5.1)	135 (10)	4.43 (0.86)	17.5 (1.6)	7.61 (0.94)	26.9 (2.7)	1.45 (0.23)	6.29 (0.28)	3.19 (0.81)	17.2 (1.3)	0.691 (0.126)	3.72 (0.28)
Winston Red king box	9.3 (0.3)	10.2 (0.3)	51.9 (4.8)	107.4 (5.7)	61.5 (8.6)	146 (10)	5.66 (1.30)	18.5 (1.7)	11.18 (2.53)	29.7 (2.8)	2.04 (0.56)	6.76 (0.47)	5.07 (1.32)	19.9 (1.4)	1.198 (0.271)	3.95 (0.28)
USA Gold 100 soft	7.5 (0.4)	8.8 (1.0)	35.7 (1.9)	91.2 (10.9)	40.5 (3.0)	124 (13)	3.71 (0.64)	16.4 (2.6)	5.49 (1.36)	22.6 (2.6)	1.12 (0.26)	5.28 (0.38)	2.91 (0.70)	15.5 (1.5)	0.577 (0.139)	3.15 (0.28)
Winston Red 100 box	10.0 (1.0)	11.3 (1.2)	48.7 (10.0)	117.1 (3.4)	60.3 (9.4)	163 (8)	5.79 (1.13)	21.1 (1.9)	9.34 (2.25)	31.8 (1.9)	1.89 (0.53)	7.33 (0.37)	4.94 (0.65)	20.5 (1.4)	1.113 (0.287)	4.12 (0.35)
Kool Green king box menthol	8.2 (0.8)	9.0 (1.1)	38.6 (3.6)	100.2 (16.9)	44.6 (6.3)	129 (23)	4.25 (0.74)	18.0 (3.4)	6.53 (0.92)	25.2 (4.7)	1.41 (0.22)	6.13 (1.39)	3.53 (0.48)	17.3 (3.6)	0.694 (0.140)	3.44 (0.59)
Kool Green king soft menthol	8.0 (0.6)	9.4 (0.8)	42.4 (9.5)	98.1 (9.6)	50.0 (11.5)	129 (6)	4.96 (1.28)	17.2 (1.0)	7.95 (2.16)	25.4 (2.3)	1.63 (0.54)	5.72 (0.66)	4.45 (0.95)	16.4 (1.3)	0.889 (0.253)	3.57 (0.30)
Basic Gold 100 box	8.0 (1.6)	9.6 (1.9)	35.9 (7.3)	95.3 (20.7)	39.9 (3.2)	144 (32)	3.33 (0.27)	15.8 (3.6)	5.25 (0.69)	24.5 (6.3)	1.06 (0.14)	5.81 (1.50)	2.32 (0.37)	15.5 (3.8)	0.475 (0.052)	3.04 (0.68)
Camel filter king box	8.2 (1.6)	10.5 (0.6)	41.0 (4.1)	103.3 (8.4)	46.3 (3.2)	139 (10)	4.53 (0.86)	19.7 (1.4)	7.61 (1.47)	28.7 (2.0)	1.48 (0.26)	6.64 (0.62)	3.75 (0.94)	18.5 (1.8)	0.763 (0.139)	3.94 (0.38)
Newport Green 100 box menthol	8.1 (1.1)	10.1 (1.1)	41.6 (12.7)	105.6 (16.6)	50.6 (20.7)	147 (20)	5.38 (2.48)	19.1 (3.3)	8.08 (3.94)	26.4 (2.7)	1.62 (0.81)	6.18 (0.90)	3.77 (1.57)	20.0 (3.8)	0.782 (0.351)	3.58 (0.39)
Basic Green 100 box menthol	8.0 (1.0)	9.2 (0.9)	35.5 (5.3)	96.0 (9.1)	40.2 (9.7)	136 (6)	3.35 (1.02)	15.4 (1.1)	5.67 (1.42)	23.7 (1.6)	1.07 (0.25)	5.69 (0.59)	2.19 (0.44)	15.2 (2.2)	0.435 (0.079)	3.09 (0.40)
Natural American Spirit king box	11.4 (0.5)	16.4 (0.9)	61.3 (9.7)	128.5 (10.5)	65.6 (5.5)	178 (20)	6.13 (0.98)	21.6 (3.0)	13.44 (2.17)	45.3 (4.3)	2.80 (0.50)	9.96 (1.08)	5.36 (1.18)	22.0 (2.4)	1.693 (0.211)	6.47 (0.54)
Marlboro Gold king box menthol	7.7 (0.4)	8.2 (1.1)	38.6 (7.9)	90.1 (11.6)	37.7 (7.4)	116 (4)	3.24 (0.64)	12.7 (1.5)	5.53 (1.21)	21.1 (1.7)	1.09 (0.18)	4.86 (0.54)	2.20 (0.42)	12.9 (1.8)	0.465 (0.098)	2.62 (0.38)
Marlboro Gold king soft	7.0 (0.3)	8.1 (0.9)	34.1 (5.3)	92.0 (10.7)	36.8 (2.2)	123 (16)	3.02 (0.40)	13.8 (1.1)	5.15 (0.84)	22.4 (2.2)	0.96 (0.20)	5.09 (0.61)	2.27 (0.23)	14.0 (1.5)	0.438 (0.075)	2.77 (0.24)
Basic Gold 100 soft	7.3 (0.3)	8.3 (0.4)	33.5 (3.8)	91.5 (16.9)	36.1 (5.3)	121 (25)	2.99 (0.61)	13.1 (3.2)	4.66 (0.56)	21.4 (5.7)	0.88 (0.10)	5.01 (1.28)	1.94 (0.60)	12.6 (3.2)	0.392 (0.068)	2.71 (0.77)
Marlboro Red-Label king box	7.0 (0.3)	8.3 (0.5)	34.0 (5.6)	96.4 (8.7)	38.0 (2.4)	133 (8)	3.58 (0.60)	15.1 (1.2)	5.80 (0.88)	24.6 (2.1)	1.12 (0.20)	5.76 (0.43)	2.61 (0.32)	15.7 (1.9)	0.532 (0.072)	3.16 (0.42)
Doral Gold king box	7.2 (0.3)	7.3 (0.9)	33.7 (6.9)	84.5 (9.0)	40.4 (7.4)	112 (16)	3.77 (1.01)	12.9 (2.1)	5.85 (1.82)	20.5 (2.6)	1.21 (0.44)	4.78 (0.71)	2.99 (1.13)	13.3 (2.1)	0.548 (0.229)	2.64 (0.40)
Marlboro Gold king box	7.0 (0.6)	8.4 (0.7)	34.4 (9.3)	90.8 (9.5)	38.8 (7.7)	126 (14)	3.16 (0.63)	14.0 (1.5)	5.82 (1.30)	23.5 (3.2)	1.00 (0.27)	5.32 (0.98)	2.18 (0.77)	14.1 (2.2)	0.432 (0.114)	2.92 (0.71)
Camel Blue king box	7.4 (0.8)	8.2 (1.1)	37.0 (6.9)	90.7 (4.1)	43.1 (6.3)	127 (11)	4.14 (1.10)	14.4 (0.9)	7.05 (2.14)	23.7 (1.6)	1.32 (0.28)	5.52 (0.37)	3.31 (0.77)	15.1 (0.2)	0.645 (0.041)	3.02 (0.23)
Benson&Hedges Green 100 box menthol	9.0 (0.9)	10.5 (0.7)	37.8 (7.7)	115.6 (16.3)	42.7 (4.7)	157 (22)	3.62 (0.41)	17.4 (2.1)	5.97 (1.30)	28.0 (2.2)	1.16 (0.19)	6.60 (0.61)	2.43 (0.30)	18.6 (2.4)	0.501 (0.123)	3.65 (0.28)
Benson&Hedges Gold 100 soft	8.2 (0.6)	10.0 (1.2)	33.5 (6.9)	98.2 (20.9)	37.5 (6.7)	137 (30)	3.40 (0.88)	19.2 (4.8)	5.52 (1.45)	28.6 (7.2)	1.05 (0.36)	6.18 (1.57)	2.52 (0.24)	17.3 (4.3)	0.494 (0.151)	3.55 (0.95)
Marlboro Gold 100 soft	8.0 (0.5)	9.2 (1.6)	33.5 (2.3)	92.9 (12.7)	35.1 (5.2)	129 (17)	2.91 (0.52)	14.1 (2.3)	5.05 (0.56)	22.6 (3.8)	0.88 (0.14)	5.36 (0.92)	1.73 (0.49)	13.9 (1.8)	0.400 (0.076)	2.89 (0.40)
Marlboro Gold 100 box	9.0 (1.1)	10.2 (1.9)	39.7 (4.9)	103.0 (5.4)	47.5 (10.2)	145 (13)	3.74 (0.74)	16.3 (1.8)	6.54 (1.78)	26.8 (2.6)	1.19 (0.25)	6.34 (0.94)	2.52 (0.28)	16.3 (2.0)	0.572 (0.089)	3.39 (0.76)
Salem Gold king box menthol	8.0 (0.6)	9.1 (2.0)	36.8 (5.9)	92.0 (6.9)	40.7 (10.1)	127 (15)	3.71 (1.03)	14.7 (1.3)	5.89 (1.27)	23.9 (4.0)	1.25 (0.36)	5.51 (0.76)	3.03 (1.02)	15.7 (0.9)	0.585 (0.156)	3.03 (0.48)
Marlboro Silver king box	7.2 (0.3)	8.0 (1.0)	22.7 (3.7)	77.0 (6.1)	21.6 (8.2)	97 (17)	1.62 (0.90)	11.8 (1.4)	2.85 (1.58)	20.8 (1.3)	0.52 (0.25)	3.70 (0.82)	0.99 (0.33)	10.6 (1.0)	0.244 (0.104)	2.19 (0.18)
Winston Gold king box	8.1 (0.4)	9.1 (1.9)	34.8 (8.9)	109.9 (22.5)	41.0 (16.4)	154 (28)	3.77 (1.44)	17.0 (4.4)	6.86 (2.20)	28.4 (8.3)	1.25 (0.46)	6.70 (1.81)	3.03 (0.90)	18.7 (5.3)	0.638 (0.241)	3.62 (1.00)
Vantage Multi king soft	8.1 (0.3)	8.3 (0.9)	40.2 (10.0)	89.8 (6.3)	42.9 (11.0)	116 (11)	3.97 (1.08)	13.4 (2.0)	6.97 (1.54)	20.5 (1.3)	1.41 (0.37)	4.96 (0.74)	2.78 (0.96)	13.2 (2.0)	0.662 (0.213)	2.60 (0.44)
Virginia Slims gold box	8.0 (1.0)	8.2 (1.0)	26.3 (7.7)	75.8 (8.8)	29.0 (9.7)	108 (15)	2.21 (0.97)	12.0 (1.3)	3.80 (1.46)	19.9 (1.7)	0.73 (0.18)	4.34 (0.69)	1.46 (0.34)	12.1 (1.2)	0.343 (0.082)	2.26 (0.34)
Parliament Blue king box	6.6 (0.7)	7.4 (0.7)	28.9 (10.0)	84.8 (13.0)	31.0 (14.3)	113 (11)	2.87 (1.20)	13.4 (1.8)	4.90 (2.85)	21.7 (1.7)	1.01 (0.44)	4.40 (0.30)	2.05 (0.54)	13.5 (2.2)	0.451 (0.140)	2.61 (0.28)
Pall Mall Blue king box	8.4 (1.0)	9.8 (1.1)	37.2 (5.9)	103.8 (8.8)	39.4 (5.7)	143 (7)	3.80 (0.92)	16.9 (1.5)	6.40 (1.63)	25.9 (2.8)	1.26 (0.35)	6.21 (0.45)	2.77 (0.93)	17.9 (1.9)	0.574 (0.197)	3.39 (0.33)
Merit Gold filter box	8.0 (0.3)	8.0 (0.8)	31.4 (8.2)	84.5 (5.6)	34.8 (5.7)	115 (12)	2.67 (0.57)	12.6 (1.7)	4.78 (0.89)	20.9 (2.1)	0.88 (0.20)	4.49 (0.82)	1.78 (0.57)	12.2 (1.6)	0.400 (0.156)	2.33 (0.43)
Kent Golden king soft	6.6 (1.0)	7.7 (0.7)	36.5 (14.0)	89.5 (10.0)	36.7 (13.4)	119 (15)	2.96 (1.22)	13.7 (0.6)	5.08 (2.83)	21.2 (2.5)	0.92 (0.48)	4.86 (0.40)	2.27 (0.98)	13.8 (1.2)	0.434 (0.180)	2.54 (0.21)
Misty Blue slims box	9.0 (1.1)	10.1 (0.9)	30.9 (6.9)	94.4 (5.9)	35.1 (15.4)	129 (9)	3.13 (1.48)	15.6 (1.0)	5.27 (3.04)	24.7 (2.7)	1.00 (0.45)	5.72 (0.50)	1.99 (0.75)	16.6 (1.5)	0.474 (0.165)	3.01 (0.20)
Basic Blue 100 box	9.0 (1.3)	9.2 (2.3)	29.7 (11.8)	92.2 (33.8)	26.6 (16.0)	126 (44)	1.91 (1.20)	14.4 (4.8)	3.48 (2.04)	22.9 (6.8)	0.63 (0.35)	5.07 (1.82)	1.22 (0.40)	13.4 (4.5)	0.266 (0.140)	2.51 (0.92)
Maverick Gold 100 box	9.0 (0.7)	10.2 (1.9)	27.9 (15.4)	107.4 (15.2)	29.5 (19.7)	157 (20)	2.37 (1.59)	18.1 (2.0)	3.81 (2.94)	28.4 (5.2)	0.82 (0.51)	6.29 (0.56)	1.98 (1.28)	19.4 (2.6)	0.436 (0.233)	3.25 (0.28)
Marlboro Silver 100 box	8.0 (0.4)	9.3 (1.6)	26.0 (5.2)	84.9 (16.4)	25.0 (4.5)	107 (21)	1.56 (0.22)	13.1 (4.1)	2.79 (0.74)	22.2 (7.6)	0.52 (0.10)	3.87 (1.52)	1.03 (0.26)	11.9 (4.8)	0.232 (0.062)	2.36 (0.59)
Salem Gold 100 box menthol	10.0 (1.6)	11.1 (1.9)	35.6 (13.2)	112.7 (14.3)	36.9 (17.5)	161 (21)	3.14 (1.48)	19.0 (3.1)	5.54 (3.38)	29.3 (5.8)	1.11 (0.56)	7.01 (1.12)	2.08 (0.79)	19.6 (3.3)	0.518 (0.231)	3.68 (0.67)
Salem Silver 100 box menthol	10.6 (1.5)	11.0 (1.5)	31.5 (8.4)	106.6 (15.1)	36.6 (12.0)	130 (13)	2.87 (1.08)	15.7 (2.6)	5.13 (2.14)	26.0 (5.5)	0.98 (0.27)	4.98 (0.80)	1.53 (0.43)	15.1 (2.8)	0.431 (0.137)	2.89 (0.69)
Doral Silver 100 box	10.3 (0.2)	11.1 (1.8)	25.8 (5.7)	106.4 (22.6)	26.7 (5.4)	128 (27)	2.41 (0.77)	16.7 (2.9)	4.06 (1.01)	28.6 (6.2)	0.87 (0.22)	5.31 (0.96)	1.59 (0.42)	15.6 (3.0)	0.373 (0.090)	3.07 (0.53)
Now 100 soft	10.2 (1.5)	9.0 (0.9)	13.8 (7.2)	91.4 (5.9)	15.1 (8.2)	111 (4)	1.04 (0.55)	14.4 (1.2)	2.53 (1.67)	23.6 (2.8)	0.37 (0.19)	4.53 (0.39)	0.60 (0.35)	14.3 (0.9)	0.157 (0.098)	2.61 (0.10)
Winston White 100 box	11.4 (1.0)	10.7 (1.7)	31.7 (11.6)	106.9 (13.4)	31.7 (1											

**Supplemental Figure 1.** Comparison of scatter plots across compound classes for styrene with representative carbonyl, nitro, and unsaturated compounds between the ISO (black) and Canadian Intense (grey) protocols. Natural American Spirit cigarettes are represented with open circles. Curves are least square fit of ISO (black line) and Canadian Intense (grey dashed line) forcing through zero



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