

**SCA Coffee Sensation Standard: Major Parameters and Quantitative Ranges**

The Specialty Coffee Association (SCA) coffee evaluation system encompasses multiple assessment methodologies with specific quantitative parameters and ranges. The system has evolved from the traditional 2004 cupping protocol to the new Coffee Value Assessment (CVA) system each with distinct scoring mechanisms and parameter specifications.

**Traditional SCA Cupping Form Parameters**

The traditional SCA cupping form utilizes a **6-10 point scale** for quality assessment across multiple sensory attributes[[1]](#fn1)[[2]](#fn2). Each parameter is scored with specific quality descriptors:

* **Fragrance/Aroma**: 6.00 (Good) → 7.00 (Very Good) → 8.00 (Excellent) → 9.00 (Outstanding)[[1]](#fn1)[[2]](#fn2)
* **Flavor**: Same 6-10 scale with identical quality descriptors[[3]](#fn3)[[1]](#fn1)
* **Aftertaste**: 6-10 points following the standard quality progression[[1]](#fn1)
* **Acidity**: Evaluated for intensity (High/Low) and quality (6-10 points)[[1]](#fn1)[[3]](#fn3)
* **Body**: Assessed for level (Heavy/Thin) and quality (6-10 points)[[1]](#fn1)[[3]](#fn3)
* **Balance**: Overall harmony rated on 6-10 scale[[1]](#fn1)[[3]](#fn3)
* **Overall**: Final impression scored 6-10 points[[1]](#fn1)[[3]](#fn3)

**Uniformity and Defect Parameters:**

* **Uniformity**: 2 points per uniform cup across 5 cups (maximum 10 points)[[3]](#fn3)[[1]](#fn1)
* **Clean Cup**: 2 points per clean cup across 5 cups (maximum 10 points)[[3]](#fn3)[[1]](#fn1)
* **Sweetness**: 2 points per sweet cup across 5 cups (maximum 10 points)[[3]](#fn3)[[1]](#fn1)

**Defect Penalties:**

* **Taint defects**: -2 points per affected cup[[1]](#fn1)[[2]](#fn2)
* **Fault defects**: -4 points per affected cup[[1]](#fn1)[[2]](#fn2)

**New CVA System Parameters**

**CVA Descriptive Assessment (15-Point Intensity Scale)**

The new CVA descriptive assessment employs a **15-point intensity scale** (0-15) for measuring the strength of sensory perceptions[[4]](#fn4)[[5]](#fn5):

**Intensity Ratings:**

* **Fragrance Intensity**: 0 (Low) → 5-10 (Medium) → 15 (High)[[4]](#fn4)
* **Aroma Intensity**: 0-15 scale with same progression[[4]](#fn4)
* **Flavor Intensity**: 0-15 scale measuring combined taste and retronasal perception[[4]](#fn4)
* **Aftertaste Intensity**: 0-15 scale for lingering sensations[[4]](#fn4)
* **Acidity Intensity**: 0-15 scale for sourness perception[[4]](#fn4)
* **Sweetness Intensity**: 0-15 scale for sweet taste/aroma[[4]](#fn4)
* **Mouthfeel Intensity**: 0-15 scale for tactile sensations[[4]](#fn4)

**Check-All-That-Apply (CATA) Selections:**

* **Olfactory categories**: Up to 5 descriptors from predefined flavor categories[[4]](#fn4)
* **Retronasal perceptions**: Up to 5 descriptors for flavor/aftertaste[[4]](#fn4)
* **Main tastes**: Up to 2 selections from salty, sour, sweet, bitter, umami[[4]](#fn4)
* **Mouthfeel descriptors**: Up to 2 tactile characteristics (metallic, rough, oily, smooth, mouth-drying)[[4]](#fn4)

**CVA Affective Assessment (9-Point Quality Scale)**

The CVA affective assessment uses a **9-point scale** for impression of quality ratings[[6]](#fn6):

**9-Point Scale Structure:**

* **1**: Extremely Low impression of quality[[6]](#fn6)
* **2**: Very Low[[6]](#fn6)
* **3**: Moderately Low[[6]](#fn6)
* **4**: Slightly Low[[6]](#fn6)
* **5**: Neither High nor Low (neutral point)[[6]](#fn6)
* **6**: Slightly High[[6]](#fn6)
* **7**: Moderately High[[6]](#fn6)
* **8**: Very High[[6]](#fn6)
* **9**: Extremely High impression of quality[[6]](#fn6)

**Evaluated Sections:**  
All eight sections (Fragrance, Aroma, Flavor, Aftertaste, Acidity, Sweetness, Mouthfeel, Overall) are rated using this 9-point scale[[6]](#fn6).

**Score Calculation and Ranges**

**CVA Affective Score Calculation**

The CVA employs a specific mathematical formula for score calculation[[6]](#fn6):

**Formula**: S = 6.25 × (Σhi) + 37.5 - 2u - 4d

Where:

* **S** = Final cupping score (rounded to nearest 0.25)
* **Σhi** = Sum of all eight 9-point section scores
* **u** = Number of non-uniform cups
* **d** = Number of defective cups

**Score Ranges:**

* **Minimum possible**: 58.00 points (all sections scored 1)[[6]](#fn6)
* **Neutral baseline**: 79.00 points (all sections scored 5)[[6]](#fn6)
* **Maximum possible**: 100.00 points (all sections scored 9)[[6]](#fn6)