The tables below are for quick reference to normative values of cepstral measures from our lab’s publication ([Buckley, D. P., Abur, D., & Stepp, C. E. (In Press). Normative Values of Cepstral Peak Prominence Measures in Typical Speakers by Sex, Speech Stimuli, and Software Type Across the Life Span. *American Journal of Speech-Language Pathology.*](https://sites.bu.edu/stepplab/files/2023/06/2023_ajslp-22-00264_R.pdf)) The first table presents smoothed cepstral peak prominence (CPPS) normative values for Praat, and the second presents cepstral peak prominence (CPP) values for use with Analysis of Dysphonia in Speech and Voice (ADSV). Please see the instructions below the tables in order to confirm your methods for calculating CPP/CPPS are identical, and therefore comparable, to these normative values. Normative values for the vowels /ɑ/ and /i/ were created by averaging the middle 1 second of phonation of three sustained productions per vowel, to exclude the onset or offset of phonation. The Rainbow Passage included the 2nd and 3rd sentences of the passage, which include *“The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above and its two ends apparently beyond the horizon”*.

|  |  |  |  |
| --- | --- | --- | --- |
| **PRAAT - Smoothed Cepstral Peak Prominence (CPPS)** | | | |
| **Stimulus** | **Sex** | **Normative Value** | **Value** |
| /ɑ/ | Males | >11.72 dB |  |
| Females | >11.05 dB |  |
| /i/ | Males | >12.01 dB |  |
| Females | >10.37 dB |  |
| The Rainbow Passage | Males | > 6.40 dB |  |
| Females | > 6.49 dB |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **ADSV - Cepstral Peak Prominence (CPP)** | | | |
| **Stimulus** | **Sex** | **Normative Value** | **Value** |
| /ɑ/ | Males | >8.86 dB |  |
| Females | >8.09 dB |  |
| /i/ | Males | >6.68 dB |  |
| Females | >4.65 dB |  |
| The Rainbow Passage | Males | >5.40 dB |  |
| Females | >5.04 dB |  |

Program Settings:

**Praat**

1. Analyze periodicity 🡪 To PowerCepstrogram…
   1. Pitch floor (Hz): 60.0
   2. Time step (s): 0.002
   3. Maximum frequency (Hz) 5000.0
   4. Pre-emphasis from (Hz): 50
   5. Click “OK”
2. Click on the new file this creates, then Query 🡪 Get CPPS…
   1. Uncheck “Subtract tilt before smoothing”
   2. Time averaging window (s): 0.01
   3. Quefrency averaging window (s): 0.001
   4. Peak search pitch range (Hz): 60.0–330.0
   5. Tolerance: 0.05
   6. Interpolation: Parabolic
   7. Trendline quefrency range (s): 0.001–0.0
   8. Trendy type: Straight
   9. Fit method: Robust

**ADSV**

1. Under “Advanced setup” leave all default settings except:
   1. change the “CPP Threshold (dB)” to 1
   2. Check “Apply Vocalic Event Detection” to turn this function on