



**Figure 2.** (a) Frequency domain picture of dual-comb spectroscopy with a single EO modulator: two optical frequency combs of slightly different line spacing, centered at the frequency  $f_c$ , interrogate an absorption line. Each side band is separated by a FBG and their beating signal generates a radio-frequency spectrum; (b),(c) Time domain and frequency domain comparison of multi-tone signals with (b) linear phase distribution and (c) quadratic phase distribution (c).