hat's in the Box?Overall, the Buds FE is very much a "Eh, it's alright" situation for technical performance. Wireless Performance For the second half of the equation, let's talk about the wireless aspect of the Buds FE. The Buds FE only supports 3 types of Bluetooth codecs: SSC (Samsung Scalable Codec), SBC, and AAC. I'm using a Samsung device so it defaults to Samsung's proprietary SSC. But connecting the Buds FE to my PC defaults either to SBC or AAC and the upper treble quality takes a very noticeable tumble in quality. So I stuck with SSC for this review. Here is the list of fundamental features that I check to see if the wireless quality is any good: Bluetooth stability: Excellent. I only ever once encountered a signal drop while in range and there's no strange artifacting to the sound. Range: Fair. It easily covers an entire floor of the house I'm in. Only when I cross floors does it start to become spotty. Latency: Fantastic. There's practically no delay when starting or stopping tracks. It pairs very quickly and without fuss. Floor noise: None. There's the tiniest bit of electronic whine that might be heard when first pairing but in general, there's pretty much no floor noise that I could hear. Volume: Plenty. The Buds FE delivers more than enough power even at half volume to be loud enough for me. You'll go deaf before maxing it out. Battery: Alright. Samsung boasts 8.5 hours on a single charge and 30 hours total using up the charging case with ANC off. With ANC on, it's 6 and 21 hrs respectively. From my usage, that seems about right. I'd lose about 10 – 15% an hour on a mix of ANC on and off with the charging case holding what looks to be about 4 max charges. Unfortunately, my phone seems to drain a good amount of battery while playing through the Buds FE, about 8 – 10% an hour even with the screen off, and gets a little warm. Note that I haven't been accurately monitoring the battery performance. I'm estimating based on using the Buds FE casually for commutes and lightly at work, maybe 2 hours at max. But if I were to run it all day, I'd probably have to charge my phone twice a day, something I don't particularly fancy. Ironically, this is where a wired IEM might make more sense since I'm likely to already be chained at my desk anyway. But hey, I know plenty of people have totally different use cases so your mileage will vary. I've also had a couple rare cases of glitchiness where one of my buds didn't charge up like the other one. Other Features You primarily control the Buds FE by tapping on its flat faceplates. You can adjust what it does using the settings in the Samsung Wearables app, along with other options. There are quite a few choices available, especially some nice accessibility settings such as left-right channel balancing if you dig deeper. The usual Samsung exclusives like Bixby and SmartThings are also available. I won't go through them all. Instead, here are the features I was expecting that ended up getting left out, in order of importance: No Bluetooth Multipoint. A lot of other TWS don't actually have this option but for a company like Samsung, this is something I would've expected at the minimum. It's rather annoying that I have to fiddle through all the settings if I want to swap between devices, such as my phone and my laptop when I get to the office. There's technically Samsung Auto Switch but once again, it only works for Samsung devices. Limited touch settings. While there's a good range of options in the Samsung Wearables app, the most important ones are how you actually interact with the device i.e. the faceplates. Too bad you're only allowed to change the "Touch and Hold" options.It's a fun, "everyday" tuning suited for genres like modern pop and hip-hop but also manages to hold its own in more complex tracks. Measurement taken with an IEC-711 clone microphone. Comparisons can only be made relative to other measurements taken by this specific microphone. A peak at about 8 – 10 kHz is likely an artifact of the measurement rig

and may not exist as depicted here. Measurements above 8 kHz are not accurate. If possible, reference multiple measurements. Here's the frequency response measurement of the Samsung Galaxy Buds FE taken using the stock settings on Android. As part of our ongoing effort to transition to a new way of visualizing frequency response graphs, I've shown the frequency response as a compensated graph. If you're unfamiliar with this representation, here's a quick primer to reading it: This graph is compensated to a modified diffuse field (DF) head-related transfer function (HRTF) for the IEC-711 clone coupler where we use a population average pinna. Thus, a completely flat line is equal to that modified DF HRTF. This is what a flat speaker in a fully reflective room will sound like at the eardrum. The DF HRTF is less a "reference" curve and more the necessary anatomical baseline compensation needed for headphones.Ultimately, despite what seemed to be quite a lot of menus and options in the Samsung Wearables app, the Buds FE had few meaningful adjustable settings.Research on listening preferences show that people on average tend to prefer an approximate 10 dB downward tilt from bass to treble in both headphones and in speakers.When combined with the significant lower mids elevation, it gives the Buds FE a warm and relaxed midrange.I'm not surprised by this omission as in the more budget Buds FE. No big loss since it only works on very select content that supports it such as Dolby Atmos anyway.There's a substantial bass hump, mild upper mids and treble, and rolled-off upper treble.More importantly, if we look at the 3 kHz region, we can see a sizable dip there that pulls back vocal presence.This means you'll have to decide what's most important to control: volume up/down, ANC/Ambient mode switching, or Spotify.A cool feature that some TWS products are incorporating is a feature that measures your ear and creates an automatic EQ profile for you.Like many modern tech products, the Buds FE comes in a rather minimalist box with a sparse accessory set.Sound and Frequency Response The tonality of the Buds FE is bassy and relaxed.The visualized preference bounds (grey bands) are a more complete picture of that listening preference research beyond the DF + 10 dB slope.They show the limits of how much deviation/tonal color a headphone could have that people still found acceptable without it starting to be perceived as imbalances.It reaches to the edges of the preference bounds and beyond but I didn't find it too overbearing.While the subbass delivers a boomy sound, it does lightens up in transition to the midbass.Mids Looking at the graph, we can see that Buds FE has a bit of a hump around 1 – 2 kHz.It lends itself towards slower paced acoustic tracks or less complicated mixes but can still adequately handle hard rock or metal tracks.If we look at the raw graph (see Appendix), it's essentially a flat plateau from the upper mids to the upper treble.The sustained treble presence here plays a key role in maintaining sufficient note definition and clarity.Stage width horizontally is about on par with most good IEMs and reaches the edges of my ears.Transient sounds and higher frequencies do start sneaking through, but in general the Buds FE's ANC tunes out the world pretty well.Thus, with a more shallow fit plus a weaker tip seal, the Buds FE can feel a little loose, like they're about to fall off.As a side note, the Buds FE is a single dynamic driver (DD) IEM.Note that some of this is theoretical: we had to adapt principles from headphones to IEMs as a result.In actual use while I was commuting to work, I didn't really notice it. But once I'm sitting at home or in a quiet office, I can hear a slight right-side stereo bias.This comes off as a little odd in the kick drum where there's a somewhat mushy beater head contrasted with a solid drum body.This is quite common in many IEMs,

especially those measured using this system so I wouldn't worry about it. It also falls within the preference bounds.Treble Going into the lower and mid treble, the Buds FE's treble has a good amount of energy unlike the 3 kHz dip.As such, the Buds FE is fairly soft in the treble with little airiness or sparkle.While some people might prefer a tame upper treble, I miss the brilliance that comes with these inherently bright instruments.Presentation The soundstage and imaging of the Buds FE is quite fair.The Buds FE communicates with you via beeps.The Buds FE is rated only for IPX2 which is basically water droplets on its surface.Given the advancements in this space, I thought the Buds FE might have included it. No 360 Audio.You need to have both earbuds in to activate it (via proximity sensors).We've visualized that here as a DF + 10 dB slope (see point 3).No wireless charging.