RFI Test Report – Lighting Device

Manufacturer: Feit Electric  Model: Enhance 100W eq A21 Dimmable LED bulb

Model number: 0M100DM/927CA/2
Description: 17.5 W (100W equivalent) medium base bulb, soft white
Purchased from: Home Depot  Price: $10.90 (2 pack)

Test equipment: Isolation transformer, 50 uH LISN, HP 8560A with 20 dB preamp, Tek TDS320A. Note: Spectrum spikes around 100 MHz are FM band leakage.
Tested by: Gary Johnson, NA6O  Date: Mar 18, 2019

Summary
Recommend for amateur radio stations: YES.
FCC Part 15 conducted emissions: Compliant.
FCC Part 15 labeling: Compliant, listed on package only.

Observations:
Switching frequency about 60 kHz. Normal-mode noise easily meets FCC Part 15 though it’s a bit strong around 10 MHz. Well-balanced so that common-mode is relatively low. I could not detect significant RFI around 10 MHz with my portable radio. There is also some excess common-mode current at the top of the FM band. Overall, this is a low-RFI bulb and should be fine around amateur radio stations.
Common-mode Spectrum

Normal-mode Spectrum
**Normal-mode Waveform**
Peak-detect mode. Bursts are 60 kHz sinewaves, relatively clean. Minimal high-speed glitches. This is a very clean waveform compared with some LED bulbs even though the amplitude is somewhat high. That’s because most of the energy is at low frequencies.