

## 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.

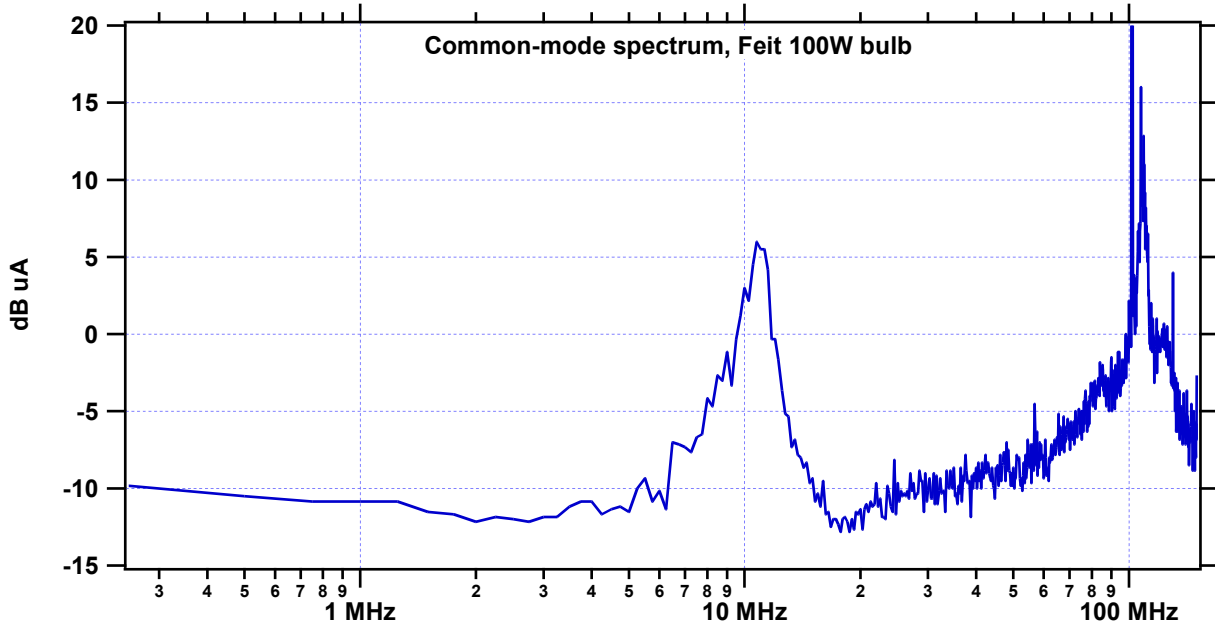
FCC Part 15 labeling: Compliant, listed on package only.

### Observations:

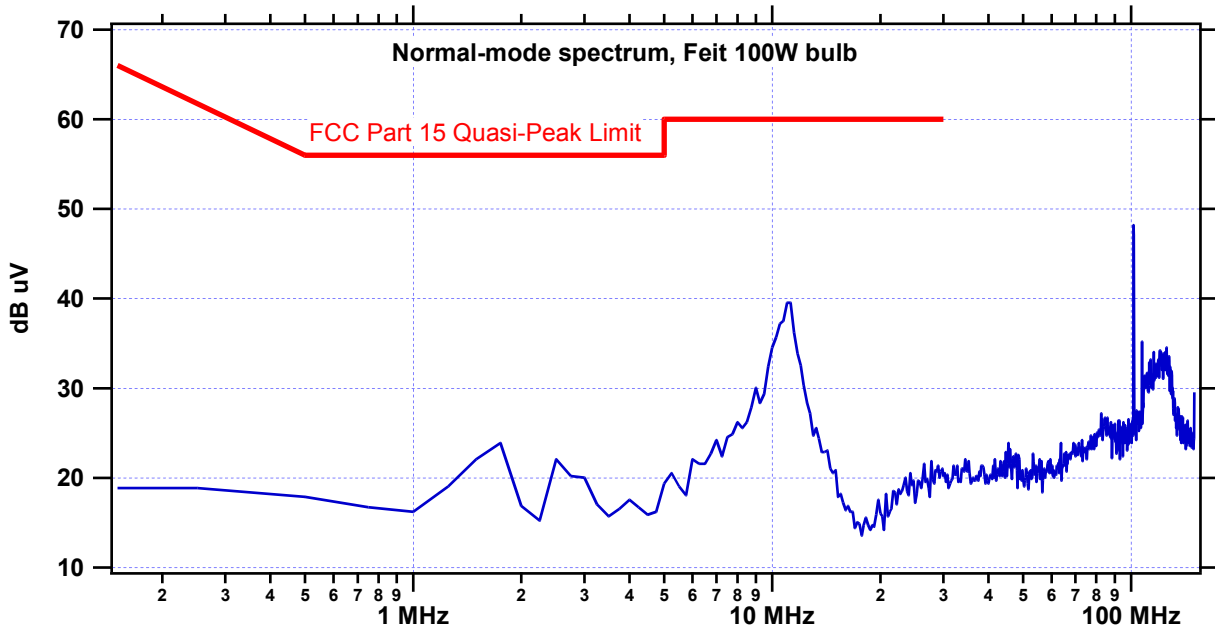
Switching frequency about 60 kHz. Normal-mode noise easily meets FCC Part 15 though it's a bit strong around 10 MHz. Well-balanced so that common-mode is relatively low. I could not detect significant RFI around 10 MHz with my portable radio. There is also some excess common-mode current at the top of 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.

