T-2350 Emission Designators

Analog Transmission

Emission Designator – Transmission Characteristics

Per FCC rule Chapter 47 Subpart C Part 2.201

Section (c) (3) - F Section (d) (4) - 3 Section (e) (6) - E

Emission Designator – Necessary Bandwidth

Relevant FCC rules: Chapter 47 Subpart C Part 2.202 section (c) (1)

Section (g) Table III-A 3:

$$Bn = 2 (M+DK)$$

Section (e)

Bn - the necessary bandwidth

M - the maximum modulating frequency in Hertz

- D the peak deviation in Hertz
- K the specified constant for FM sound broadcasting, in this case K =1

For the T-2350 Narrow Band Mode -

M = 3000 D = 2500

Therefore Bn = 2(3000 + (2500*1)) = 11KHz

The Emissions Designator for the T-2350 Narrow Band Analog mode is 11K0F3E

For the T-2350 Wide Band Mode – M = 3000 D = 5000

Therefore Bn = 2(3000 + (2500*1)) = 16KHz

The Emissions Designator for the T-2350 Wide Band Analog mode is 16K0F3E

Digital Transmission

Emission Designator – Transmission Characteristics

Per FCC rule Chapter 47 Subpart C Part 2.201

Section (c) (3) - F Section (d) (2) - 1 Section (e) (6) - E

Emission Designator – Necessary Bandwidth

Relevant FCC rules: Chapter 47 Subpart C Part 2.202 section (c) (4)

Measurements per Rule Part 2.202 Section C (4) were done because Part 2.202 Section g Table III A 1 formulation produces an excessive result using the value of K recommended in the Table. Therefore the 99% energy rule (title 47CFR 2.989) was used for digital mode.

A representative T-2350 was tested using the same setup as in the Occupied Bandwidth findings of this submission. The results are presented in the following figure:



Therefore, the Emissions Designator for T-2350 Digital mode shall be 10K0F1E