

TAC/COM 2005 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:

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

Section (e)

B_n - 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 TAC/COM 2005 Narrow Band Mode –

M = 3000

D = 2000

Therefore $B_n = 2(3000 + (2000 * 1)) = 10\text{KHz}$

The Emissions Designator for the TAC/COM 2005 Narrow Band Analog mode is 10K0F3E

For the TAC/COM 2005 Wide Band Mode –

M = 3000

D = 4000

Therefore $B_n = 2(3000 + (4000 * 1)) = 14\text{KHz}$

The Emissions Designator for the TAC/COM 2005 Wide Band Analog mode is 14K0F3E