

Correspondence Reference Number: 26693

Question 1: Please explain the modulation type used and justify the emission designator requested.

Modulation type: TCM (Trellis Coded Modulation)

- This is a coded modulation scheme which allows for larger Euclidean distances between signal sequences thus lowering the probability of error.
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The Emissions designator is justified as follows:

1M25D7W

1M25 is 1.25MHz. This is the necessary bandwidth required for 4 DS1 / 128 TCM. It is also the necessary Bandwidth for 2 DS1 / 128 TCM.

1M25D7W

“D” means the main carrier is amplitude and angle modulated.

1M25D7W

“7” means 2 or more channels containing digital information.

1M25D7W

“W” – the type of information being transmitted is a combination of Data, and telephony