

Annex 4: Intermodulation measurements

1 “B1 Interference” (3rd order intermodulation) to VOR reception

Wanted: **VOR**
 Frequency: 108,2 MHz
 Level: -79 dBm at Rx

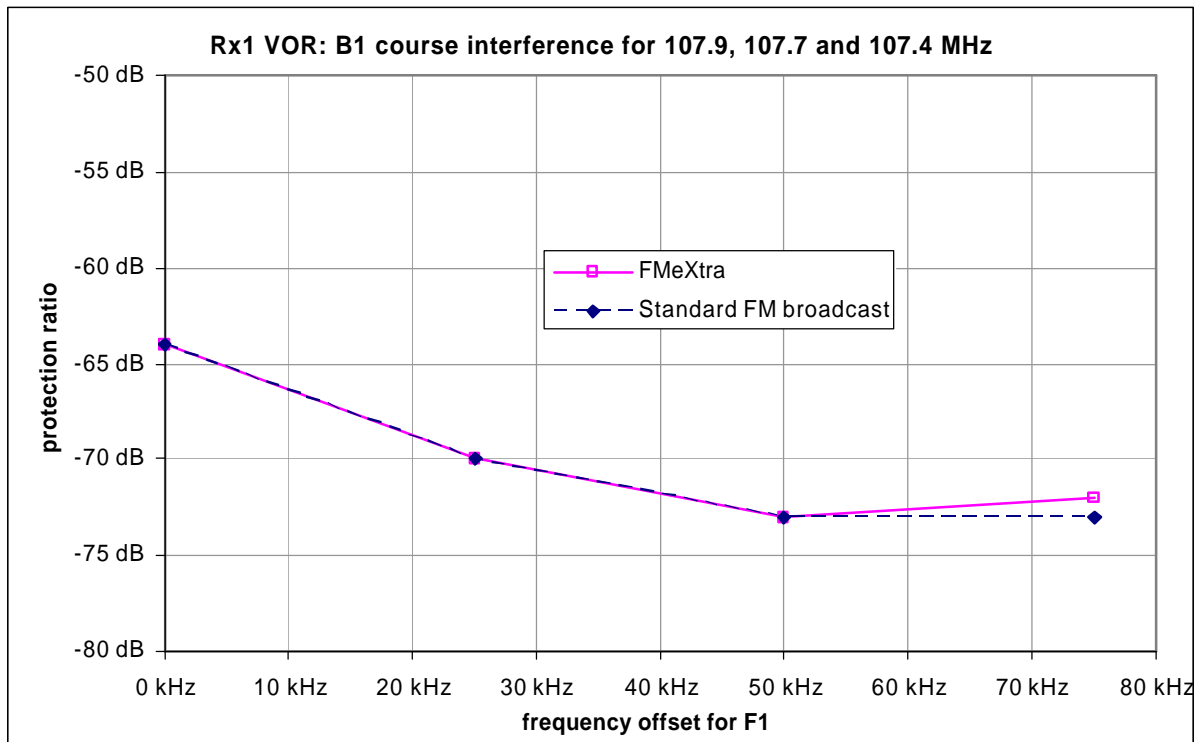
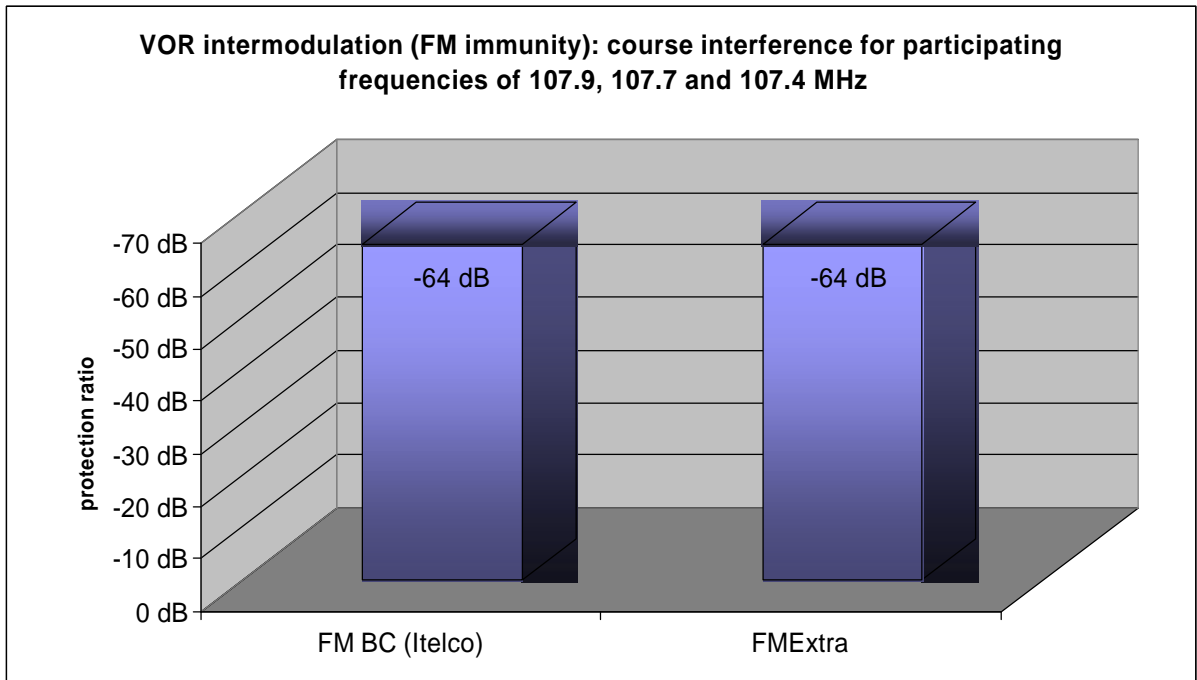
Unwanted F1: **standard FM (ITU-R IS.1140) and FMeXtra**
 Frequency: 107,9 MHz (Center)
 Level: 2 dBm

Unwanted F2: **N0N**
 Frequency: 107,7 MHz
 Level: 2 dBm

Unwanted F3: **N0N**
 Frequency: 107,4 MHz
 Level: 2 dBm

Total level unwanted: 7 dBm at 0 dB atten.

Unwanted	F1 Frequency	F1 Offset	Course Interference		Flag Interference	
			Level	Prot. Ratio	Level	Prot. Ratio
FM BC (Itelco)	107,900 MHz	0 kHz	-15 dBm	-64 dB	-6 dBm	-73 dB
FM BC (Itelco)	107,875 MHz	25 kHz	-9 dBm	-70 dB	-2 dBm	-77 dB
FM BC (Itelco)	107,850 MHz	50 kHz	-6 dBm	-73 dB	2 dBm	-81 dB
FM BC (Itelco)	107,825 MHz	75 kHz	-6 dBm	-73 dB	1 dBm	-80 dB
FMEextra	107,900 MHz	0 kHz	-15 dBm	-64 dB	-5 dBm	-74 dB
FMEextra	107,875 MHz	25 kHz	-9 dBm	-70 dB	-2 dBm	-77 dB
FMEextra	107,850 MHz	50 kHz	-6 dBm	-73 dB	2 dBm	-81 dB
FMEextra	107,825 MHz	75 kHz	-7 dBm	-72 dB	1 dBm	-80 dB



2 “B1 Interference” (3rd order intermodulation) to ILS reception

Wanted: **ILS**
 Frequency: 108,1 MHz
 Level: -86 dBm at Rx

Unwanted F1: **FM stereo (IS.1140) and FMeXtra**
 Frequency: 107,9 MHz (Center)
 Level: 2 dBm

Unwanted F2: **N0N**
 Frequency: 107,5 MHz
 Level: 2 dBm

Unwanted F3: **N0N**
 Frequency: 107,3 MHz
 Level: 2 dBm

Total level unwanted: 7 dBm at 0 dB atten.

Unwanted	F1 Frequency	F1 Offset	Course Interference		Flag Interference	
			Level	Prot. Ratio	Level	Prot. Ratio
FM BC (Itelco)	107,900 MHz	0 kHz	-15 dBm	-71 dB	-7 dBm	-79 dB
FM BC (Itelco)	107,875 MHz	25 kHz	-9 dBm	-77 dB	-3 dBm	-83 dB
FM BC (Itelco)	107,850 MHz	50 kHz	-7 dBm	-79 dB	-1 dBm	-85 dB
FM BC (Itelco)	107,825 MHz	75 kHz	-10 dBm	-76 dB	-3 dBm	-83 dB
FMeXtra	107,900 MHz	0 kHz	-16 dBm	-70 dB	-7 dBm	-79 dB
FMeXtra	107,875 MHz	25 kHz	-9 dBm	-77 dB	-3 dBm	-83 dB
FMeXtra	107,850 MHz	50 kHz	-8 dBm	-78 dB	-1 dBm	-85 dB
FMeXtra	107,825 MHz	75 kHz	-10 dBm	-76 dB	-3 dBm	-83 dB

