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**WiMAX Forum™ User Equipment
Coexistence Emission Mask
for 2496-2690 MHz Band
for 10 MHz and 5 MHz Channels**

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WiMAX Forum™ User Equipment Coexistence Emission Mask for 2496-2690 MHz Band for 10 MHz and 5 MHz Channels

1. Introduction

The scope of this document is to specify a spectral emission mask for user equipment operating in 5 and 10 MHz channels.

2. Spectral Emission Mask Specification

For 10 MHz channel bandwidths, the WiMAX minimum requirements mask is considered to be the minimum necessary required to meet the regulatory conditions for the majority of the addressable market for WiMAX products and the mask that devices shall comply with to obtain WiMAX certification.

Table 1 defines the user equipment emission mask for 10 MHz channel bandwidth and Table 2 defines the user equipment emission mask for 5 MHz channel bandwidth.

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Table 1. Spectral emission mask, for 10 MHz channel bandwidth, for 2496-2690 MHz band

Segment Number	Offset from Channel Center Frequency (MHz)	Integration Bandwidth (kHz)	Allowed Emission Level (dBm/Integration Bandwidth)
1	5 to <6	100	-13.00
2	6 to <10	1000	-13.00
3	10 to <11	1000	-13-12(Δf -10)
4	11 to <15	1000	-25.00
5	15 to <20	1000	If $P_{Tx,max} \leq +23$ then -28.58 - 8.42/5 \times (Δf -15) else -25
6	20 to <25	1000	If $P_{Tx,max} \leq +23$ then -37.00 else -25

In Table 1,

- Channel Bandwidth is 10 MHz,
- Integration Bandwidth refers to the frequency range over which the emission power is integrated,
- Δf is defined as the frequency offset in MHz from the Channel Center Frequency,
- $P_{Tx,max}$ is the maximum declared output power for the user equipment

Table 2. Spectral emission mask, for 5 MHz channel bandwidth, for 2496-2690 MHz band

Segment Number	Offset from Channel Center Frequency (MHz)	Integration Bandwidth (kHz)	Allowed Emission Level (dBm/Integration Bandwidth)
1	2.5 to < 3.5	50	-13.00
2	3.5 to < 8	1000	-13.00
3	8 to < 12.5	1000	-25.00

In Table 2,

- Channel Bandwidth is 5 MHz,
- Integration Bandwidth refers to the frequency range over which the emission power is integrated.