



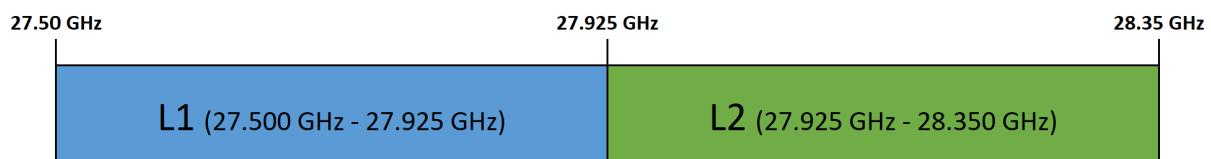
March 2020

Wireless Spectrum Licenses in the 28 GHz Band Ideal for 5G mmWave Fixed/Mobile Wireless Deployments Inquire for Details Regarding Availability

The **28 GHz (27.50 – 28.35 GHz) frequency band** was made available by the FCC via re-allocation of the Local Multipoint Distribution Service (LMDS) A Block sub-band channel, A1, which contained 850 MHz of spectrum between 27.500 – 28.350 GHz.

In response to the increasing demand for additional microwave spectrum, primarily aimed at fixed/mobile 5G applications that require significant amounts of bandwidth to support superior speeds of > 1.0 Gbps with lower latencies, the FCC disaggregated the A1 channel and reassigned it to be a part of the new Upper Microwave Flexible Use License, “UMFUS”, designation. The disaggregated portion has been converted to a new county-based licensing regime, offering two 425 MHz sized blocks (Blocks L1, L2), with remaining FCC held licenses being assigned via Auction 101, which concluded on January 24, 2019.

Then 28 GHz band plan is shown below:



The 28 GHz band, and other millimeter wave (“mmWave”) frequency bands, such as 24 and 37/39 GHz, will play a key role in 5G deployments under the new Upper Microwave Flexible Use License, “UMFUS”, designation. UMFUS bands are 3GPP standardized under the 5G New Radio (NR) guidelines, specifically in the “Frequency Range 2” (FR2) umbrella that includes mmWave frequencies.

UMFUS bands are presently held and/or in use by national mobile carriers, innovative fixed wireless companies, regional telephone operators, and other organizations seeking to deploy mobile networks or provide Fixed Wireless Access (FWA) “last mile” services.

UMFUS bands are subject to Part 30 rules and regulations, which include power limitations on fixed & base stations operating in connection with mobile systems (EIRP density limit of +75dBm/100 MHz). Mobile stations must limit the average power of the sum of all antenna elements to a max EIRP of +43 dBm. Network deployments may use any duplexing scheme desired, provided compliance with other technical/operational requirements is met.

The 28 GHz band is ideal to support a wide variety of applications that leverage the hundreds of Mbps / 1+ Gbps speeds (varying by channel size) that are achievable using UMFUS designated spectrum. High speed backhaul, 5G “to the home” / FWA, and other applications leverage that fixed PTP and PTMP configurations may be deployed. The 28 GHz band also may be utilized for mobile applications which are currently a key pillar for 5G deployments by national carriers and other organizations.

Availability is limited, varying by geographic location. Please inquire today for more information.