

Table 1 Simulation parameters

Basic parameters	3GPP TS 38.101 Clause 5.2.3.1.1 Test 4-1
Modified parameters	No precoding, same information bit payload and binary channel bits for every slot
Data type	Floating point
Channel estimation, synchronization and noise power estimate	Perfect
Equalizer type	LMMSE
LDPC decoder	Belief propagation with 12 iterations

Table 2 Required SNR (dB) at 70% of the maximum throughput

Modulation schemes and correlation matrix configurations	Low	Medium-A	Medium	High	Simulation duration (10 ms)
QPSK	5.4	22.5	34.4	37	100
16QAM	13.5	-	-	-	50
64QAM	18.6	-	-	-	10
256QAM	22.2	-	-	-	10
Note	-				

An advanced receiver is tested for an sample case of 16QAM and low correlation. Substantial gain is observed. So, there is a great chance the coding is right, and needs to be carefully reviewed.