

Throughput

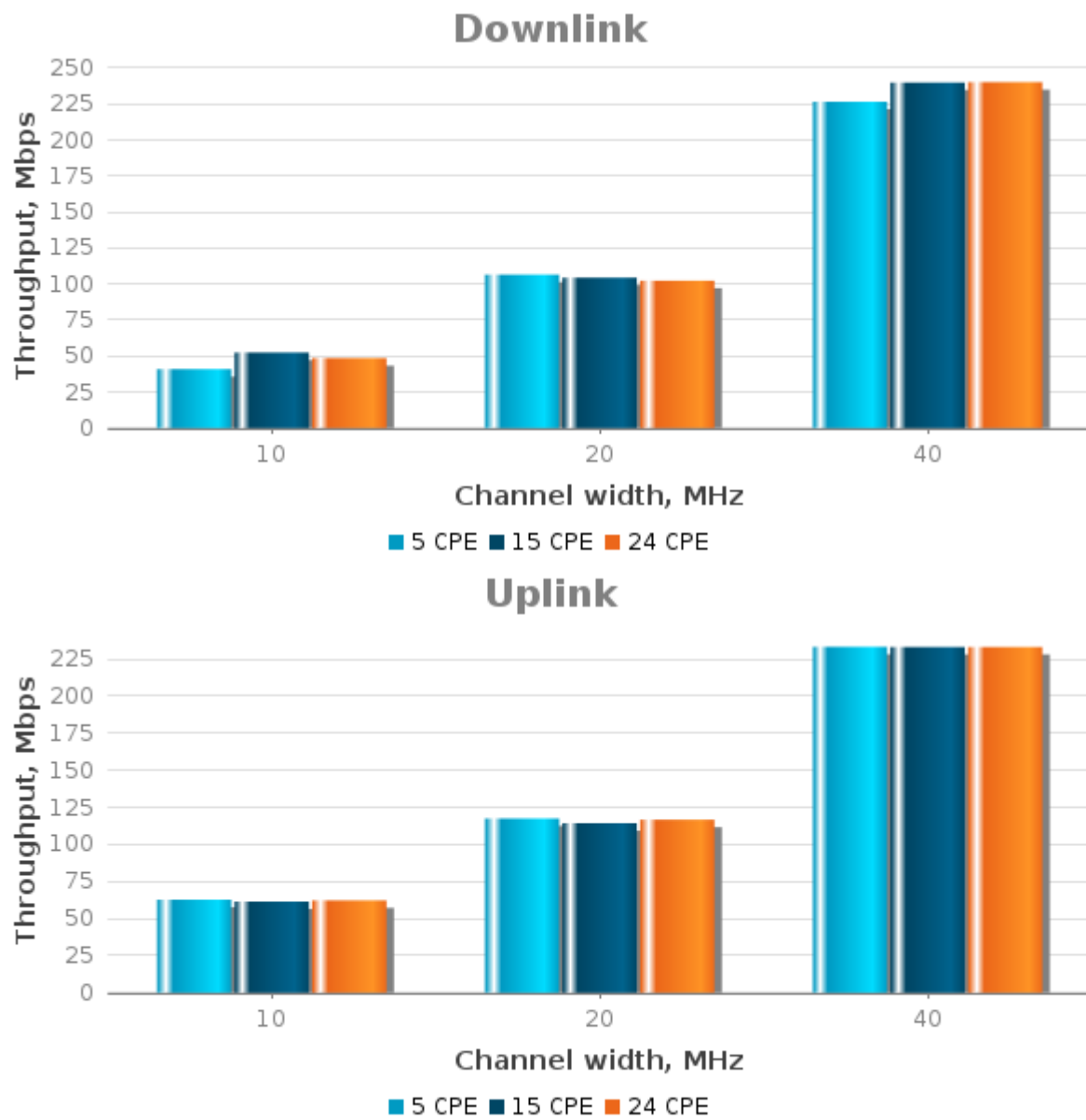
- [Throughput dependence on channel width \(modulation - QAM64 5/6, frame period - 10 ms, max. distance - 1 km\)](#)
- [Throughput dependence on modulation type \(frame period - 10 ms, max. distance - 1 km\)](#)
 - [Channel width 20 MHz](#)
 - [Channel width 40 MHz](#)
- [Throughput dependence on frame period \(modulation QAM64 5/6, max. distance - 1 km\)](#)
 - [Channel width 20 MHz](#)
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 - [Modulation-code scheme BPSK 1/2](#)
 - [Modulation-code scheme QAM64 5/6](#)

Tables and charts with laboratory testing result data are shown below. The devices with TDMA software version were used while testing. Devices settings that did not change during testing:

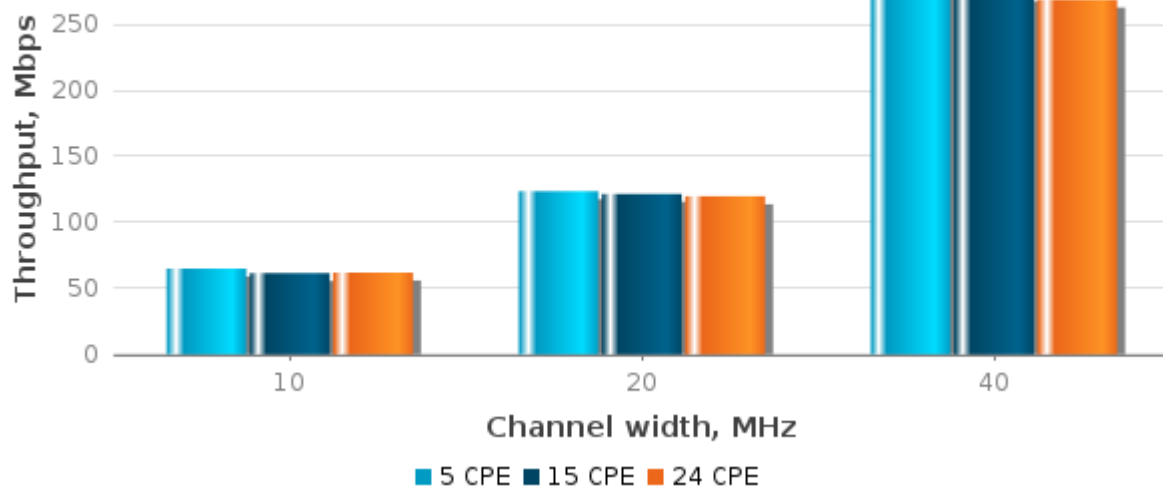
- packet size - 1518 bytes;
- DLP - auto;
- Greenfield - on.

Throughput dependence on channel width (modulation - QAM64 5/6, frame period - 10 ms, max. distance - 1 km)

Subscribers number	Downlink			Uplink			Bidirectional		
	10 MHz	20 MHz	40 MHz	10 MHz	20 MHz	40 MHz	10 MHz	20 MHz	40 MHz
5	40.78	106.4	226.6	62.59	117.5	233.2	64.96	123.6	281.3
15	52.34	104.4	239.9	61.44	114.2	233.1	61.61	121.6	273.8
24	48.40	102.3	240.1	62.19	116.6	233.1	62.0	119.8	268.9



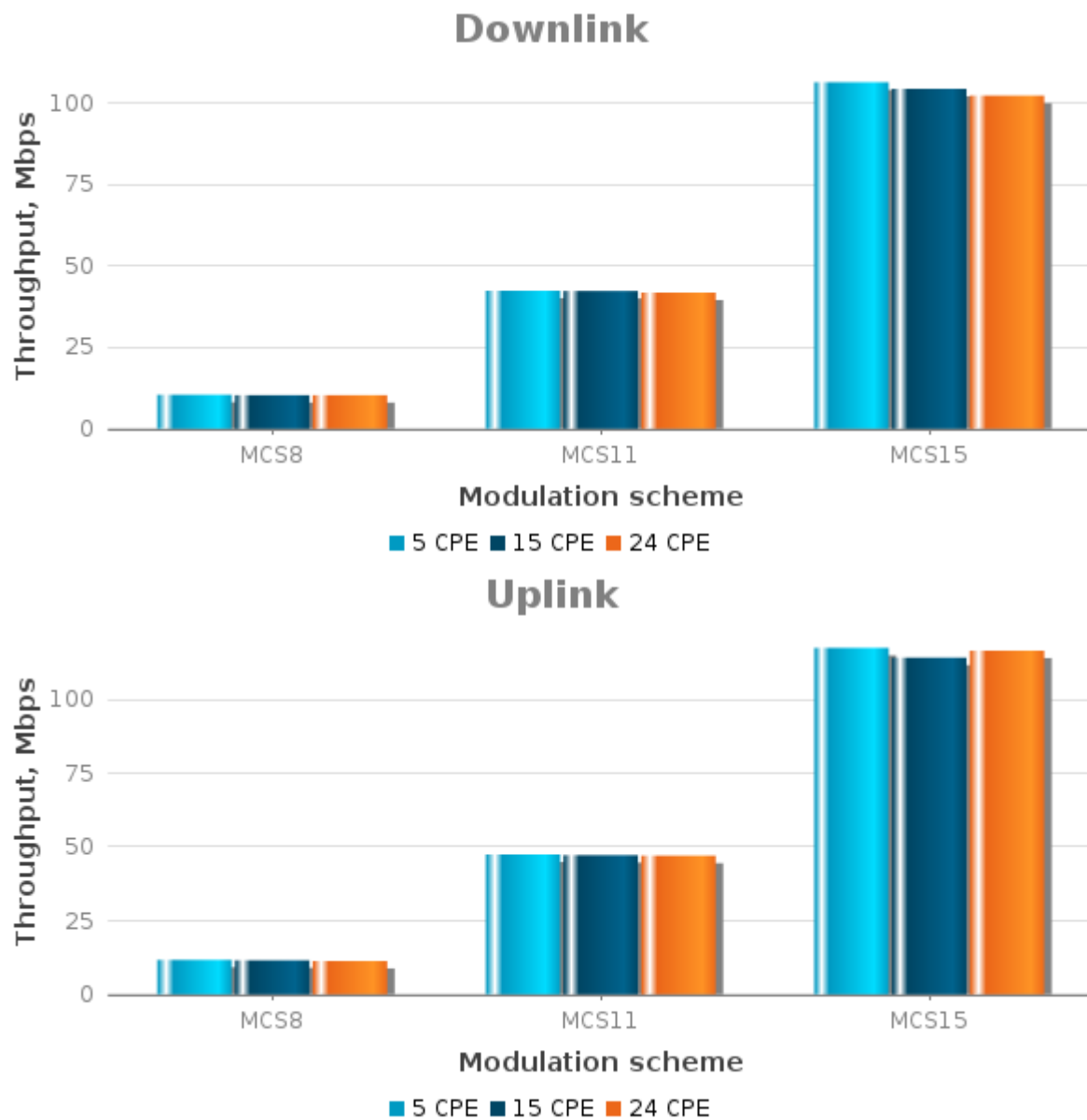
Bidirectional

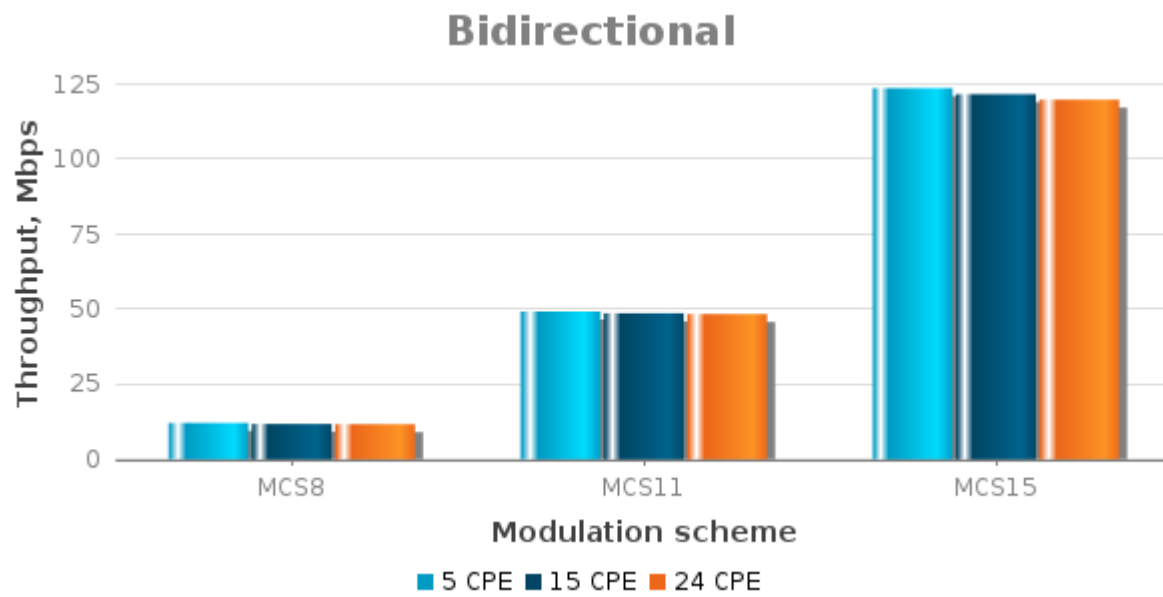


Throughput dependence on modulation type (frame period - 10 ms, max. distance - 1 km)

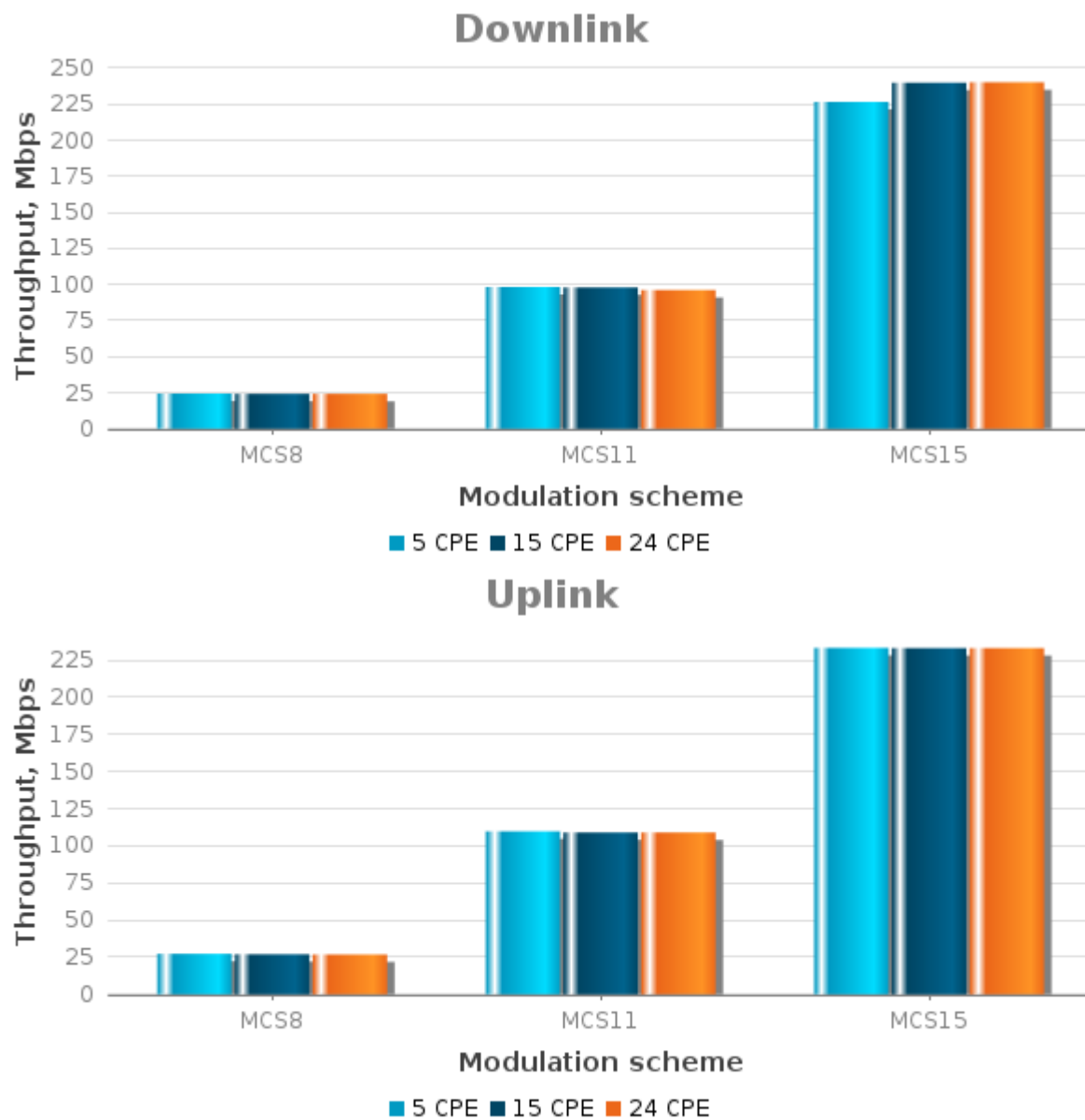
Channel width	Subscribers number	Downlink			Uplink			Bidirectional		
		MCS8	MCS11	MCS15	MCS8	MCS11	MCS15	MCS8	MCS11	MCS15
20 MHz	5	10.4	42.4	106.4	11.7	47.4	117.5	12.1	49.2	123.6
	15	10.3	42.3	104.4	11.5	47.2	114.2	11.8	48.6	121.6
	24	10.3	41.8	102.3	11.3	47.0	116.6	11.7	48.4	119.8
40 MHz	5	24.3	98.2	226.6	27.2	109.7	233.2	28.3	113.5	281.3
	15	24.2	97.9	239.9	27.0	109.0	233.1	27.7	112.0	273.8
	24	24.1	96.1	240.1	26.8	108.9	233.1	27.6	110.8	268.9

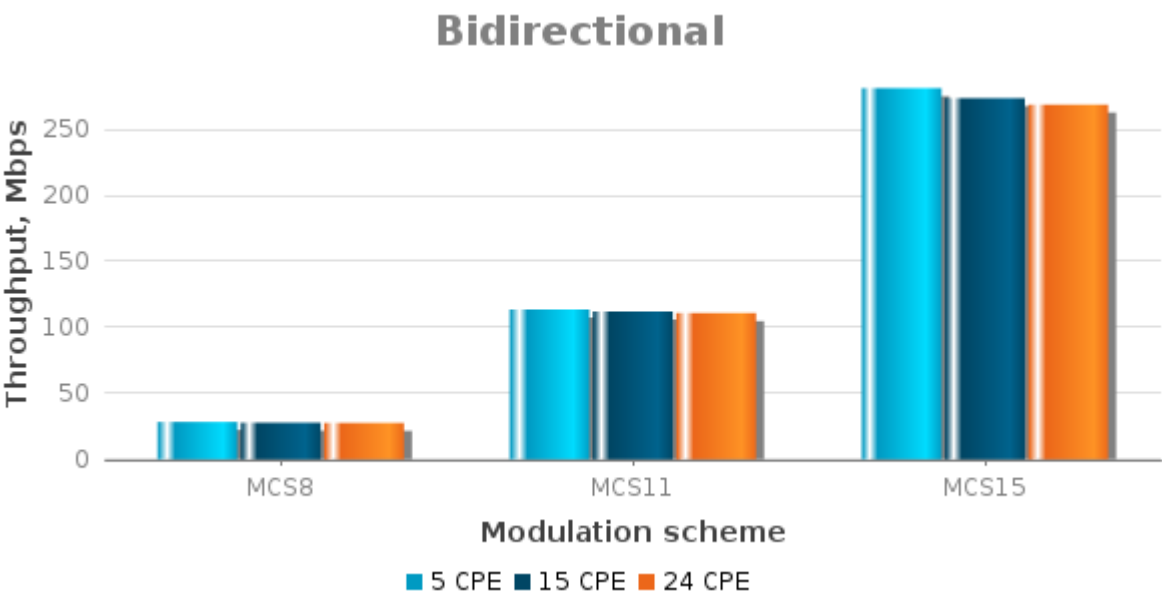
Channel width 20 MHz





Channel width 40 MHz

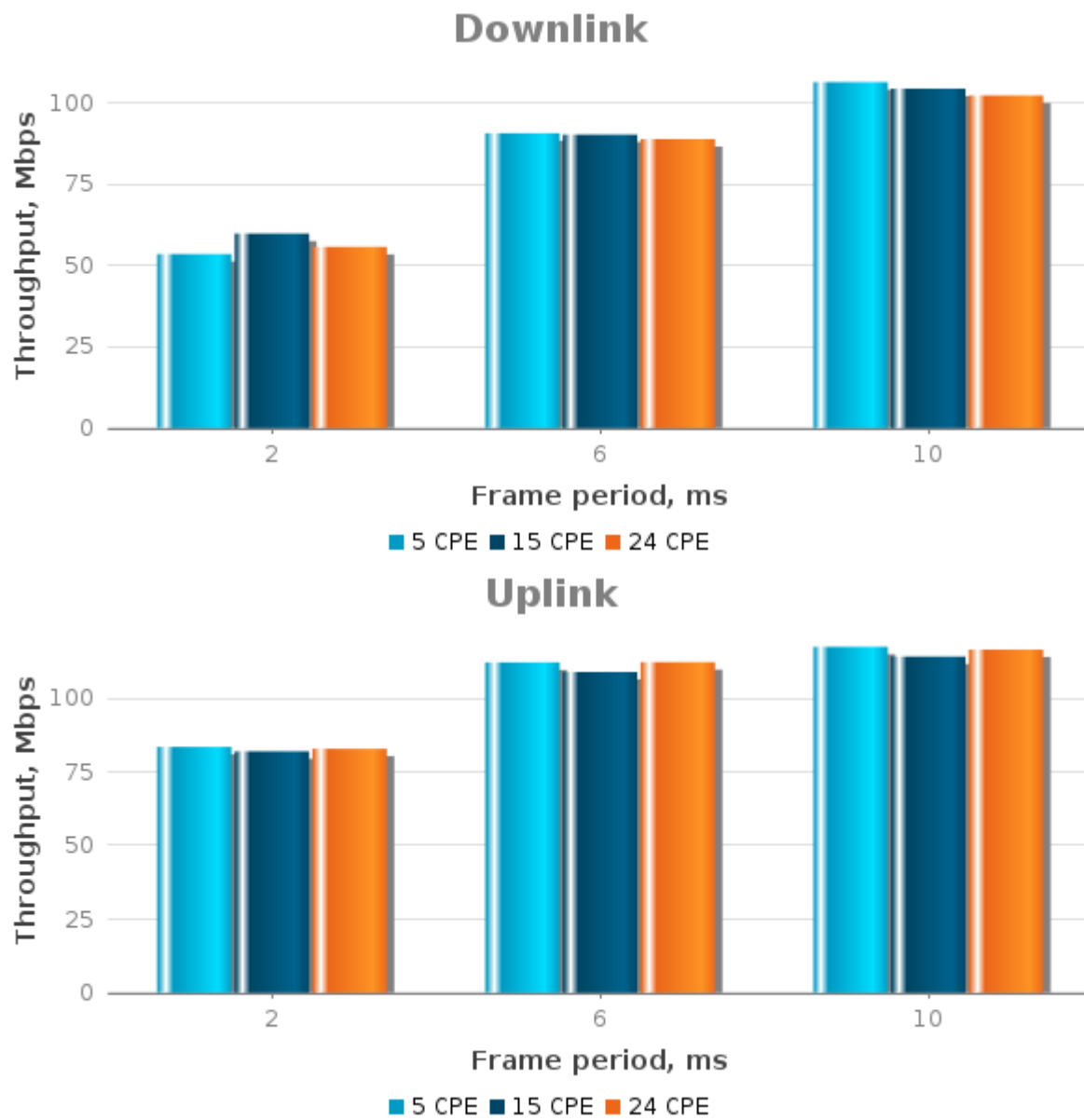


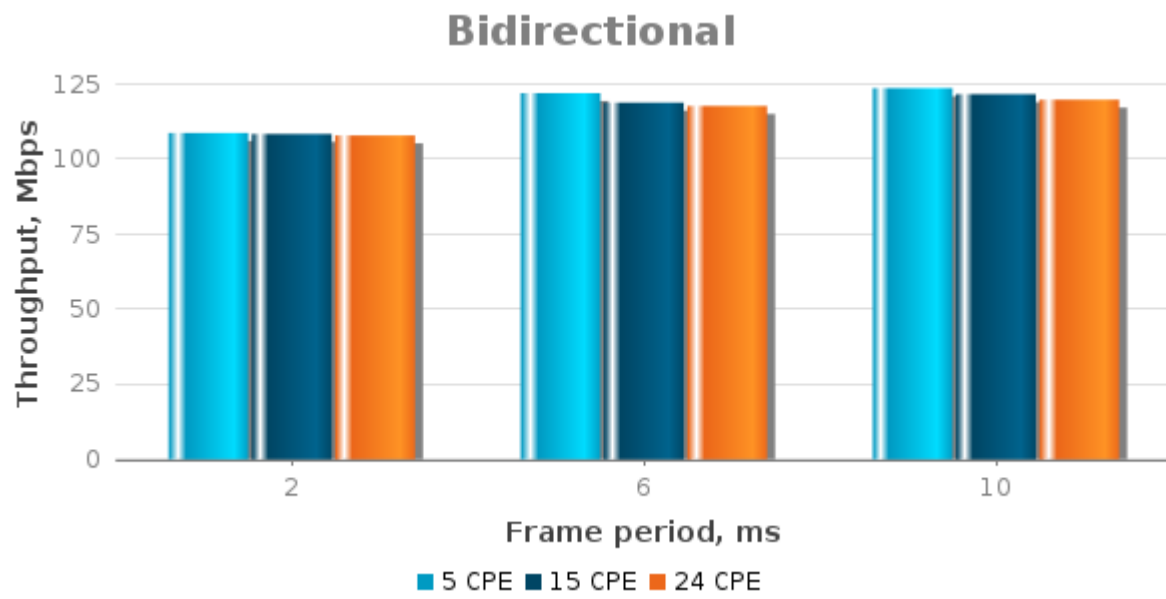


Throughput dependence on frame period (modulation QAM64 5/6, max. distance - 1 km)

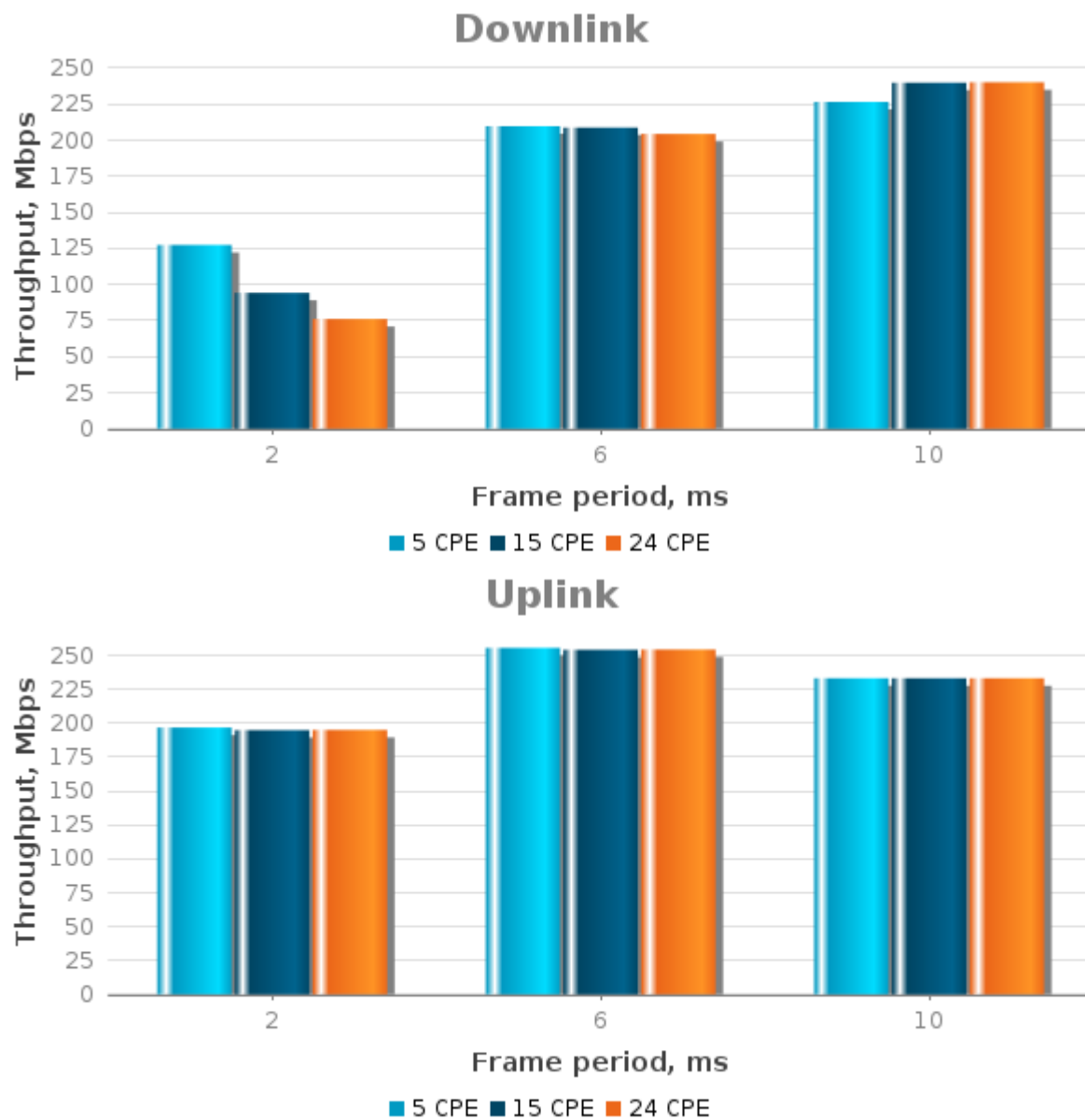
Channel width	Subscribers number	Downlink			Uplink			Bidirectional		
		2 ms	6 ms	10 ms	2 ms	6 ms	10 ms	2 ms	6 ms	10 ms
20 MHz	5	53.5	90.7	106.4	83.5	112.2	117.5	108.7	122.0	123.6
	15	59.8	90.3	104.4	82.0	109.0	114.2	108.4	118.8	121.6
	24	55.7	88.9	102.3	82.9	112.3	116.6	107.9	117.7	119.8
40 MHz	5	127.3	209.7	226.6	196.7	255.5	233.2	245.9	274.5	281.3
	15	94.2	208.8	239.9	194.9	254.1	233.1	245.7	269.7	273.8
	24	76.0	204.3	240.1	195.0	254.4	233.1	243.7	265.7	268.9

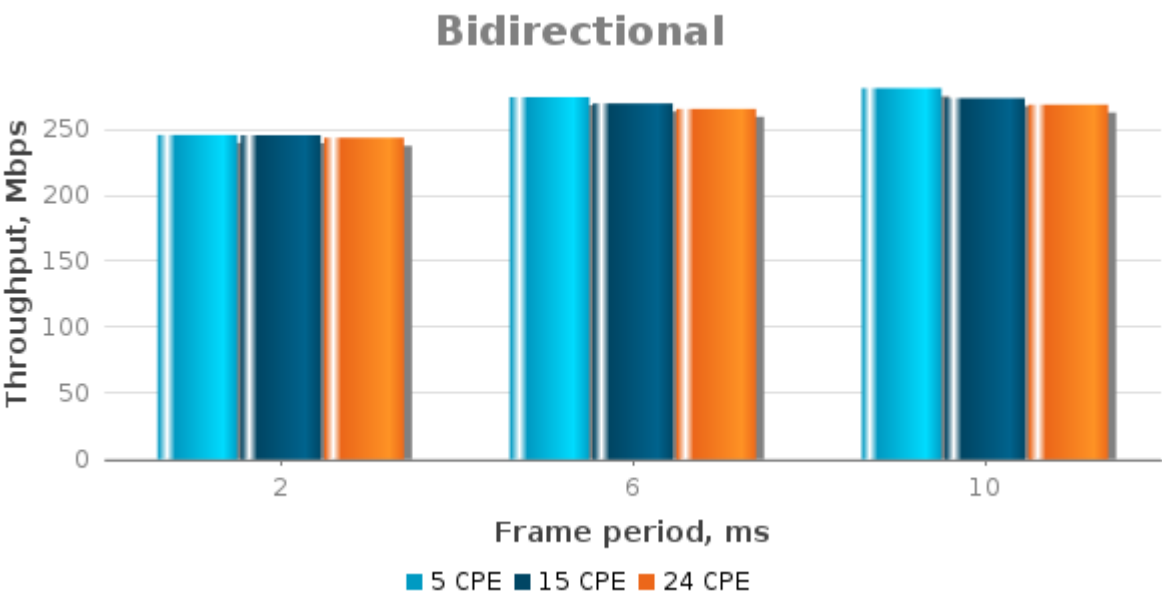
Channel width 20 MHz





Channel width 40 MHz

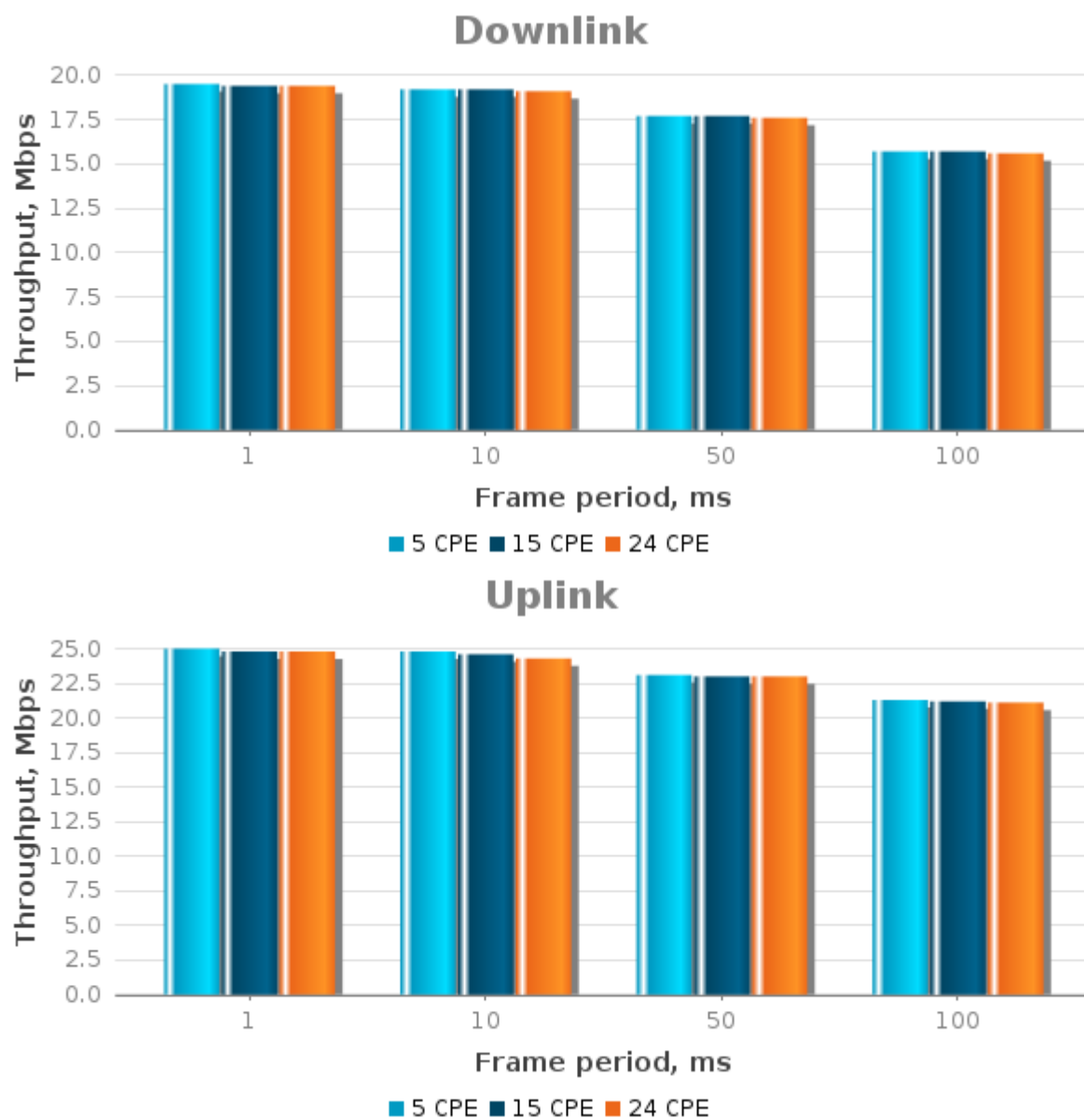


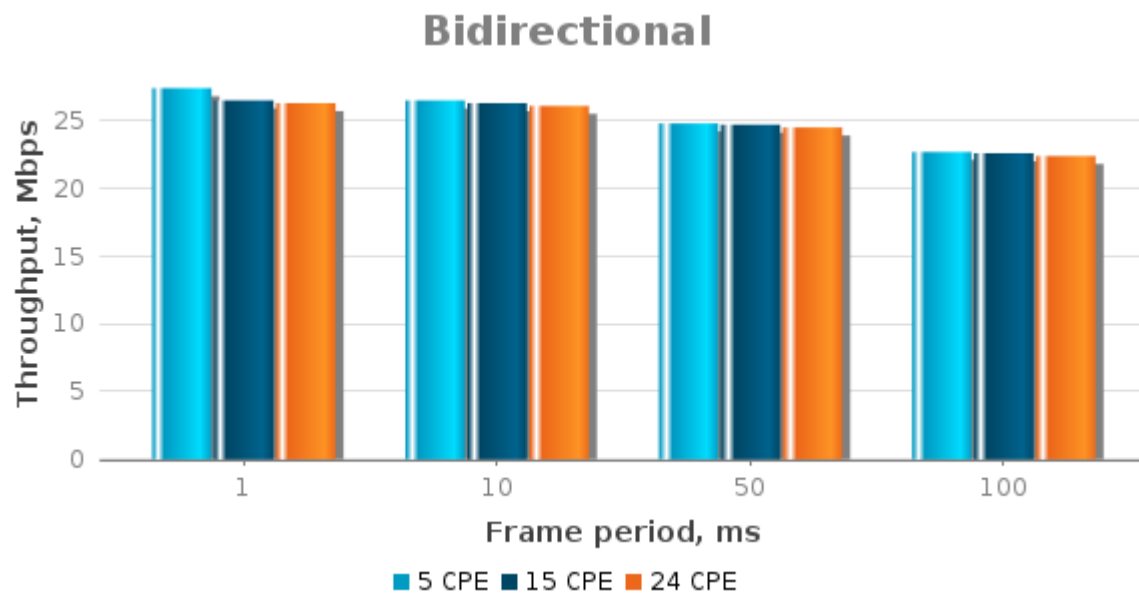


Throughput dependence on maximal distance (channel width 40 MHz, frame period 5ms)

Modulation scheme	Subscribers number	Downlink				Uplink				Bidirectional			
		1 km	10 km	50 km	100 km	1 km	10 km	50 km	100 km	1 km	10 km	50 km	100 km
MCS8	5	19.5	19.2	17.7	15.7	25	24.8	23.1	21.3	27.4	26.5	24.8	22.7
	15	19.4	19.2	17.7	15.7	24.8	24.6	23	21.2	26.5	26.3	24.7	22.6
	24	19.4	19.1	17.6	15.6	24.8	24.3	23	21.1	26.3	26.1	24.5	22.4
MCS15	5	196.1	192.6	176.4	156.4	249.1	242.9	228.9	208.8	272.8	269.4	249.4	229.0
	15	194.8	191.9	176.2	155	249.8	243.9	230.4	209.1	267.3	264.1	248.1	228.1
	24	188.8	185	170.7	151.5	250.3	246.2	229.9	210.5	262.8	260.7	244.2	225.6

Modulation-code scheme BPSK 1/2





Modulation-code scheme QAM64 5/6

