MCS Index 20MHz 40MHz							M (Prior 11ax) 80MHz 160MHz					20MHz			40MHz	OFDM (8		80MHz			160MHz		26-1	tone RU		52-tone RI	J	10	MU- 06-tone RU		(802.11ax)) 2-tone Rl		48	84-tone RL	U I	90	996-tone RU		
HT VHT H	∃E Spatial Stre		3 0	.8µs Gl(0.8µs GI					0.4µs Gl	اسطنت سمد		سحدسه	استساسه	1.6µs GI	سعد سد			ے سعد سد	0.8µs GI	1.6µs Gl	ىد سىسى	.8µs Gl 1.	.6µs Gl 3.	2μs GI 0.8μs (3.2µs Gl	0.8µs GI		.2µs Gl			3.2µs Gl	0.8µs Gl				1.6µs GI 3	3.2µs G
0 0 0		BPSK QPSK	1/2 1/2	6.5 13	7.2 14.4	13.5 27	15 30	29.3 58.5	32.5 65	58.5 117	65 130	8.6 17.2	8.1 16.3	7.3 14.6	17.2 34.4	16.3 32.5	14.6 29.3	36 72.1	34 68.1	30.6 61.3	72.1 144.1	68.1 136.1	61.3 122.5	0.9 1.8	0.8 1.7	0.8 1.8 1.5 3.5	1.7 3.3	1.5 3	3.8 7.5	3.5 7.1	3.2 6.4	8.6 17.2	8.1 16.3	7.3 14.6	17.2 34.4	16.3 32.5	14.6 29.3	36 72.1		30.6 61.3
2 2 2		QPSK	3/4	19.5	21.7	40.5	45	87.8	97.5	175.5	195	25.8	24.4	21.9	51.6	48.8	43.9	108.1	102.1	91.9	216.2	204.2	183.8	2.6	2.5	2.3 5.3	5	4.5	11.3	10.6	9.6	25.8	24.4	21.9	51.6	48.8	43.9	108.1		91.9
3 3 3		16-QAM 16-QAM	1/2 3/4	26 39	28.9 43.3	54 81	60 90	117 175.5	130 195	234 351	260 390	34.4 51.6	32.5 48.8	29.3 43.9	68.8 103.2	65 97.5	58.5 87.8	144.1 216.2	136.1 204.2	122.5 183.8	288.2 432.4	272.2 408.3	245 367.5	5.3	5	3 7.1 4.5 10.6	6.7	6 9	15 22.5	14.2 21.3	12.8 19.1	34.4 51.6	32.5 48.8	29.3 43.9	68.8 103.2	65 97.5	58.5 87.8	144.1 216.2		122.5 183.8
5 5 5		64-QAM	2/3	52	57.8	108	120	234	260	468	520	68.8	65	58.5	137.6	130	117	288.2	272.2	245	576.5	544.4	490	7.1	6.7	6 14.1	13.3	12	30	28.3	25.5	68.8	65	58.5	137.6	130	117	288.2		245
6 6 6 7 7		64-QAM 64-QAM	3/4 5/6	58.5 65	65 72.2	121.5 135	135 150	263.3 292.5	292.5 325	526.5 585	585 650	77.4 86	73.1 81.3	65.8 73.1	154.9 172.1	146.3 162.5	131.6 146.3	324.3 360.3	306.3 340.3	275.6 306.3	648.5 720.6	612.5 680.6	551.3 612.5	7.9 8.8	7.5 8.3	6.8 15.9 7.5 17.6	15 16.7	13.5 15	33.8 37.5	31.9 35.4	28.7 31.9	77.4 86	73.1 81.3	65.8 73.1	154.9 172.1	146.3 162.5	131.6 146.3	324.3 360.3		275.6 306.3
8 8	8 1	256-QAM	3/4	78	86.7	162	180	351	390	702	780	103.2	97.5	87.8	206.5	195	175.5	432.4	408.3	367.5	864.7	816.7	735	10.6	10	9 21.2	20	18	45	42.5	38.3	103.2	97.5	87.8	206.5	195	175.5	432.4	408.3	367.5
9 9	9 1 10 1	256-QAM 1024-QAM	5/6 3/4	N/A	N/A	180	200	390	433.3	780	866.7	114.7 129	108.3 121.9	97.5 109.7	229.4 258.1	216.7 243.8	195 219.4	480.4 540.4	453.7 510.4	408.3 459.4	960.8 1080.9	907.4	918.8	11.8 13.2	11.1	10 23.5 11.3 26.5	22.2 25	20 22.5	50 56.3		42.5 47.8	114.7 129	108.3	97.5 109.7	229.4 258.1	216.7 243.8	195 219 4	480.4 540.4		408.3 459.4
1	11 1	1024-QAM	5/6									143.4	135.4	121.9	286.8	270.8	243.8	600.5	567.1	510.4	1201	1134.3			13.9	12.5 29.4	27.8	25	62.5	59	53.1	143.4	135.4	121.9	286.8	270.8	243.8	600.5	567.1	510.4
8 0 0		BPSK QPSK	1/2	13 26	14.4 28.9	27 54	30 60	58.5 117	65 130	117 234	130 260	17.2 34.4	16.3 32.5	14.6 29.3	34.4 68.8	32.5 65	29.3 58.5	72.1 144 1	68.1 136.1	61.3 122.5	144.1 288.2	136.1 272.2	122.5 245	1.8 3.5	1.7 3.3	1.5 3.5 3 7.1	3.3 6.7	3 6	7.5 15	7.1 14.2	6.4	17.2 34.4	16.3 32.5	14.6 29.3	34.4 68.8	32.5 65	29.3 58.5	72.1 144 1		61.3 122.5
10 2		QPSK	3/4	39	43.3	81	90	175.5	195	351	390	51.6	48.8	43.9	103.2	97.5	87.8	216.2	204.2	183.8	432.4	408.3	367.5	5.3	5	4.5 10.6	10	9	22.5	21.3	19.1	51.6	48.8	43.9	103.2	97.5	87.8	216.2	204.2	183.8
11 3 3 12 4 4		16-QAM 16-QAM	1/2 3/4	52 78	57.8 86.7	108 162	120 180	234	260 390	468 702	520 780	68.8 103.2	65 97.5	58.5 87.8	137.6 206.5	130	117 175.5	288.2 432.4	272.2	245 367.5	576.5 864.7	544.4 816.7	490 735	7.1	6.7	6 14.1	13.3	12 18	30 45	28.3	25.5	68.8	65 97.5	58.5 87.8	137.6	130	117 175 5	288.2		245 367.5
13 5		64-QAM	2/3	104	115.6	216	240	468	520	936	1040	137.6	130	117	275.3	260	234	576.5	544.4	490	1152.9	1088.9	980		13.3	12 28.2	26.7	24	60	56.7	51	137.6	130	117	275.3	260	234	576.5	544.4	490
14 6 0 15 7		64-QAM 64-QAM	3/4 5/6	117 130	130 144 4	243	270 300	526.5 585	585 650	1053 1170	1170 1300	154.9 172.1	146.3 162.5	131.6 146.3	309.7 344.1	292.5 325	263.3 292.5	648.5 720.6	612.5 680.6	551.3 612.5	1297.1 1441 2	1225 1361.1	1102.5 1225	15.9 17.6	15 16.7	13.5 31.8 15 35.3	30 33.3	27 30	67.5 75	63.8 70.8	57.4 63.8	154.9 172.1	146.3 162.5	131.6 146.3	309.7 344.1	292.5 325	263.3 292.5	648.5 720.6		551.3 612.5
8 8		256-QAM	3/4	156	173.3	324	360	702	780	1404	1560	206.5	195	175.5	412.9	390	351	864.7	816.7		1729.4	1633.3	1470	21.2	20	18 42.4	40	36	90	85	76.5	206.5	195	175.5	412.9	390	351	864.7	816.7	735
9 9	9 2	256-QAM 1024-QAM	5/6 3/4	N/A	N/A	360	400	780	866.7	1560	1733.3	229.4 258.1	216.7 243.8	195 219.4	458.8 516.2	433.3 487.5	390 438.8	960.8	907.4	816.7 918.8		1814.8 2041.7	1633.3 1837.5	23.5	22.2	20 47.1	44.4 50	40 45	100 112.5	94.4	85 95.6	229.4	216.7	195 219.4	458.8 516.2	433.3 487.5	390 438.8	960.8		816.7 918.8
1	11 2	1024-QAM										286.8	270.8	243.8	573.5	541.7	487.5	1201	1134.3	1020.8			2041.7	29.4	27.8	25 58.8	55.6	50	125	118.1	106.3	286.8	270.8	243.8	573.5	541.7	487.5	1201	1134.3	1020.8
16 0 0 17 1		BPSK QPSK	1/2 1/2	19.5	21.7	40.5 81	45 90	87.8 175.5	97.5 195	175.5 351	195 390	25.8 51.6	24.4 48.8	21.9 43.9	51.6 103.2	48.8 97.5	43.9 87.8	108.1 216.2	102.1 204.2	91.9 183.8	216.2 432.4	204.2 408.3	183.8 367.5	2.6	2.5	2.3 5.3 4.5 10.6	5 10	4.5 9	11.3 22.5	10.6	9.6 19.1	25.8 51.6	24.4 48.8	21.9	51.6 103.2	48.8 97.5	43.9 87.8	108.1		91.9 183.8
18 2	2 3	QPSK	3/4	58.5	65	121.5	135	263.3	292.5	526.5	585	77.4	73.1	65.8	154.9	146.3	131.6	324.3	306.3	275.6	648.5	612.5	551.3	7.9	7.5	6.8 15.9	15	13.5	33.8	31.9	28.7	77.4	73.1	65.8	154.9	146.3	131.6	324.3	306.3	275.6
19 3 3 20 4		16-QAM 16-QAM	1/2 3/4	78 117	86.7 130	162 243	180	351 526.5	390 585	702 1053	780 1170	103.2 154.9	97.5 146.3	87.8 131.6	206.5 309.7	195 292.5	175.5 263.3	432.4 648.5	408.3 612.5	367.5 551.3	864.7 1297 1	816.7 1225	735 1102.5	10.6 15.9	10 15	9 21.2	20 30	18 27	45 67.5	42.5 63.8	38.3 57.4	103.2 154.9	97.5 146.3	87.8 131.6	206.5 309.7	195 292.5	175.5 263.3	432.4 648.5		367.5 551.3
21 5	5 3	64-QAM	2/3	156	173.3	324	360	702	780	1404	1560	206.5	195	175.5	412.9	390	351	864.7	816.7		1729.4	1633.3	1470	21.2	20	18 42.4	40	36	90	85	76.5	206.5	195	175.5	412.9	390	351	864.7	816.7	735
22 6 0		64-QAM 64-QAM	3/4 5/6	175.5 195	195 216.7	364.5	405 450	N/A 877.5	N/A 975	1579.5 1755	1755 1950	232.3 258.1	219.4	197.4 219.4	464.6 516.2	438.8 487.5	394.9 438.8	972.8 1080.9	918.8	826.9 918.8	1945.6 2161.8	1837.5 2041.7	1653.8 1837.5	23.8	22.5	20.3 47.6	45 50	40.5 45	101.3	95.6 106.3	86.1 95.6	232.3 258.1	219.4	197.4 219.4	464.6 516.2	438.8 487.5	394.9 438.8	972.8 1080.9		826.9 918.8
8 8		256-QAM	3/4	234	260	486	540	1053	1170	2106	2340	309.7	292.5	263.3	619.4	585	526.5	1297.1	1225	1102.5	2594.1	2450	2205	31.8	30	27 63.5	60	54	135	127.5	114.8	309.7	292.5	263.3	619.4	585	526.5	1297.1	1225	1102.5
9 9	9 3 10 3	256-QAM 1024-QAM	5/6 3/4	260	288.9	540	600	1170	1300	N/A	N/A	344.1 387.1	325 365.6	292.5 329.1	688.2 774.3	650 731.3	585 658 1	1441.2 1621.3	1361.1 1531.3	1225 1378.1		2722.2 3062.5	2450 2756.3	35.3 39.7	33.3 37.5	30 70.6 33.8 79.4	66.7 75	60 67.5	150 168.8	141.7 159.4	127.5 143.4	344.1 387.1	325 365.6	292.5 329.1	688.2 774.3	650 731.3	585 658 1	1441.2 1621.3		1225 1378.1
1	11 3	1024-QAM	5/6									430.1	406.3	365.6	860.3	812.5	731.3	1801.5	1701.4	1531.3		3402.8	3062.5	44.1	41.7	37.5 88.2	83.3	75	187.5	177.1	159.4	430.1	406.3	365.6	860.3	812.5	731.3	1801.5	1701.4	1531.3
24 0 0 25 1		BPSK QPSK	1/2 1/2	26 52	28.9 57.8	54 108	60 120	117 234	130 260	234 468	260 520	34.4 68.8	32.5 65	29.3 58.5	68.8 137.6	65 130	58.5 117	144.1 288.2	136.1 272.2	122.5 245	288.2 576.5	272.2 544.4	245 490	3.5	3.3 6.7	3 7.1 6 14.1	6.7 13.3	6 12	15 30	14.2 28.3	12.8 25.5	34.4 68.8	32.5 65	29.3 58.5	68.8 137.6	65 130	58.5 117	144.1 288.2		122.5 245
26 2 2	2 4	QPSK	3/4	78	86.7	162	180	351	390	702	780	103.2	97.5	87.8	206.5	195	175.5	432.4	408.3	367.5		816.7	735	10.6	10	9 21.2	20	18	45		38.3	103.2	97.5	87.8	206.5	195	175.5	432.4	408.3	367.5
27 3 3	3 4	16-QAM 16-QAM	1/2 3/4	104 156	115.6	216	240 360	468 702	520 780	936 1404	1040 1560	137.6 206.5	130 195	117 175.5		260 390	234 351	576.5 864.7			1152.9		980 1470			12 28.2 18 42.4		24 36	60 90			137.6 206.5	130 195		275.3 412.9	260 390	234 351	576.5 864.7		490 735
29 5	5 4	64-QAM	2/3	208	231.1	432	480	936	1040	1872	2080	275.3	260	234	550.6	520		1152.9	1088.9			2177.8	1960	28.2		24 56.5	53.3	48	120	113.3	102	275.3	260	234	550.6	520	468	1152.9	1088.9	980
30 6 0 31 7		64-QAM 64-QAM	3/4 5/6	234	260	486 540	540 600	1053	1170	2106	2340	309.7 344.1	292.5 325	263.3 292.5	619.4 688.2	585 650		1297.1 1441.2		1102.5 1225	2594.1 2882.4					27 63.5 30 70.6		54 60	135 150			309.7 344.1	292.5 325	263.3 292.5	619.4 688.2	585 650	526.5 585	1297.1		1102.5 1225
8 8		256-QAM			346.7	648	720	1404	1560	2808	3120	412.9	390	351	825.9	780				1470					40	36 84.7	80	72	180	170	153	412.9	390	351	825.9	780	702		1633.3	1470
9 9	9 4 10 4	256-QAM 1024-QAM	5/6 3/4	N/A	N/A	720	800	1560	1733.3	3120	3466.7	458.8 516.2	433.3 487.5	390 438.8	917.6 1032.4	866.7 975	780 877.5			1633.3 1837.5						40 94.1 45 105.9	88.9 100	80 90	200 225	188.9 212.5		458.8 516.2	433.3 487.5	390 438.8	917.6 1032.4	866.7	780 877.5			1633.3 1837.5
	11 4	1024-QAM													1147.1		975			2041.7						50 117.6		100	250				541.7			1083.3	975		2268.5	
0 (BPSK QPSK	1/2 1/2	32.5 65	36.1 72.2	67.5 135	75 150	146.3 292.5	162.5 325	292.5 585	325 650	43 86	40.6 81.3	36.6 73.1	86 172.1	81.3 162.5	73.1 146.3	180.1 360.3	170.1 340.3				000.0			3.8 8.8 7.5 17.6	8.3 16.7	7.5 15	18.8 37.5		15.9 31.9	43 86	40.6 81.3	36.6 73.1	86 172.1	81.3 162.5	73.1	180.1	170.1 340.3	153.1
2		QPSK	3/4	97.5		202.5	225		487.5	877.5	975	129	121.9		258.1		219.4						918.8	13.2	12.5	11.3 26.5	25	22.5	56.3		47.8	129	121.9	109.7		243.8	219.4	540.4	510.4	459.4
3 3	-	16-QAM 16-QAM	1/2 3/4	130 195	144.4 216.7	270 405	300 450	585 877 5	650 975	1170	1300 1950	172.1 258.1	162.5 243.8	146.3 219.4	344.1 516.2			720.6 1080.9		612.5 918.8	1441.2 2161.8				16.7 25	15 35.3 22.5 52.9	33.3 50	30 45	75 112.5			172.1 258.1	162.5 243.8	146.3 219.4	344.1 516.2	325 487.5	292.5 438.8	720.6	680.6 1020.8	
5	5 5	64-QAM	2/3	260	288.9	540	600	1170	1300	2340	2600	344.1	325	292.5	688.2	650		1441.2			2882.4			35.3	33.3	30 70.6		60	150			344.1	325	292.5	688.2	650	585	1441.2	1361.1	1225
6 7	6 5 7 5	64-QAM 64-QAM	3/4 5/6	292.5 325	325	607.5 675	675 750	1316.3	1462.5 1625	2632.5	2925 3250	387.1 430.1	365.6 406.3	329.1 365.6	774.3 860.3		658.1 731.3			1378.1 1531.3						33.8 79.4 37.5 88.2	75 83.3	67.5 75	168.8 187.5			387.1 430.1	365.6 406.3	329.1 365.6	774.3 860.3	731.3	658.1 731.3	1621.3	1531.3 1701.4	1378.1 1531.3
8		256-QAM	3/4	390	433.3	810	900	1755	1950	3510	3900	516.2	487.5	438.8	1032.4	975	877.5	2161.8	2041.7	1837.5	4323.5	4083.3	3675	52.9	50	45 105.9	100	90	225	212.5	191.3	516.2	487.5	438.8	1032.4	975	877.5		2041.7	1837.5
9 9	9 5 10 5	256-QAM 1024-QAM	5/6 3/4	N/A	N/A	900	1000	1950	2166.7	3900	4333.3				1147.1 1290.4		975 1096 9			2041.7 2296.9				00.0		50 117.6 56.3 132.4		100 112.5	250 281.3				541.7 609.4		1147.1 1290.4	1083.3	975 1096.9		2268.5 2552.1	
1	11 5	1024-QAM	5/6									716.9	677.1	609.4	1433.8	1354.2	1218.8	3002.5	2835.6	2552.1	6004.9	5671.3	5104.2	73.5	69.4	62.5 147.1	138.9	125	312.5	295.1	265.6	716.9	677.1	609.4	1433.8	1354.2	1218.8	3002.5	2835.6	2552.1
0 (BPSK QPSK	1/2 1/2	39 78	43.3 86.7	81 162	90 180	175.5 351	195 390	351 702	390 780	51.6 103.2	48.8 97.5		103.2 206.5	97.5 195	87.8 175.5	216.2 432.4			432.4 864.7	408.3 816.7		5.3 10.6	5 10	4.5 10.6 9 21.2	10 20	9 18	22.5 45		19.1 38.3	51.6 103.2	48.8 97.5	43.9 87.8	103.2 206.5	97.5 195	87.8 175.5	216.2 432.4	204.2 408.3	183.8 367.5
2	2 6	QPSK	3/4	117	130	243	270	526.5	585	1053	1170	154.9	146.3	131.6	309.7	292.5	263.3	648.5	612.5	551.3	1297.1	1225	1102.5	15.9		13.5 31.8	30	27	67.5	63.8	57.4	154.9	146.3	131.6	309.7	292.5	263.3	648.5	612.5	551.3
3 3		16-QAM 16-QAM	1/2 3/4	156 234	173.3 260	324 486	360 540	702 1053	780 1170	1404 2106	1560 2340	206.5 309.7	195 292.5	175.5 263.3	412.9 619.4	390 585	351 526.5		816.7 1225	735 1102.5						18 42.4 27 63.5	40 60	36 54	90 135			206.5 309.7	195 292.5	175.5 263.3	412.9 619.4	390 585	351 526.5	864.7 1297.1		735 1102.5
5	5 6	64-QAM	2/3	312	346.7	648	720	1404	1560	2808	3120	412.9	390	351	825.9	780	702	1729.4	1633.3	1470	3458.8	3266.7	2940	42.4	40	36 84.7	80	72	180	170	153	412.9	390	351	825.9	780	702	1729.4	1633.3	1470
7	5 6 7 6	64-QAM 64-QAM	3/4 5/6	351 390	390 433.3	729 810	810 900	1579.5 1755	1755 1950	3159 3510	3510 3900	464.6 516.2	438.8 487.5	394.9 438.8	929.1 1032.4	877.5 975	789.8 877.5	1945.6 2161.8	1837.5 2041.7	1653.8 1837.5						40.5 95.3 45 105.9	90 100	81 90	202.5 225			464.6 516.2	438.8 487.5	394.9 438.8	929.1 1032.4	877.5 975	789.8 877.5	1945.6 2161.8		1653.8 1837.5
8 8	8 6	256-QAM	3/4	468	520	972	1080	2106	2340	4212	4680	619.4	585		1238.8	1170						4900		63.5	60	54 127.1	120	108	270		229.5	619.4	585			1170		2594.1	2450	2205
9 9	9 6 10 6	256-QAM 1024-QAM		520	577.8	1080	1200	N/A	N/A	4680	5200	688.2 774.3	650 731.3	585 658.1	1376.5 1548.5	1300 1462.5		2882.4 3242.6		2450 2756.3		•				60 141.2 67.5 158.8		120 135	300 337.5	283.3 318.8	255 286.9	688.2 774.3	650 731.3		1376.5 1548.5	1300 1462.5			2722.2 3062.5	
1	11 6	1024-QAM	5/6	4F 5	E0.0	04.5	405	004.0	007.5	400.5	455	860.3	812.5	731.3	1720.6	1625	1462.5	3602.9	3402.8	3062.5	7205.9	6805.6	6125	88.2	83.3	75 176.5	166.7	150	375	354.2	318.8	860.3	812.5	731.3	1720.6		1462.5	3602.9	3402.8	3062.5
1	-	BPSK QPSK	1/2 1/2	45.5 91	50.6 101.1	94.5 189	105 210	409.5	227.5 455	409.5 819	455 910	60.2 120.4	56.9 113.8		120.4 240.9					214.4 428.8			428.8 857.5			5.3 12.4 10.5 24.7		10.5 21	26.3 52.5		22.3 44.6	60.2 120.4	56.9 113.8	51.2 102.4		113.8 227.5	102.4 204.8	252.2 504.4	238.2 476.4	
2	2 7	QPSK	3/4 1/2		151.7 202.2	283.5	315 420	614.3	682.5	1228.5	1365	180.7	170.6					756.6								15.8 37.1		31.5	78.8			180.7	170.6			341.3	307.1		714.6	643.1 857.5
4 4	4 7	16-QAM 16-QAM			303.3	567	630	1228.5	1365	2457	1820 2730	240.9 361.3	227.5 341.3	204.8 307.1	481.8 722.6	455 682.5	409.5 614.3		952.8 1429.2	857.5 1286.3						21 49.4 31.5 74.1	46.7 70	42 63	105 157.5		89.3 133.9	240.9 361.3	227.5 341.3	204.8 307.1	481.8 722.6	455 682.5	614.3	1008.8 1513.2	002.0	000
5	5 7	64-QAM 64-QAM	2/3 3/4	364 400.5	404.4	756 850 5	840	1638 N/A	1820 N/A	3276	3640	481.8 542	455 511.9	409.5 460.7	963.5 1084	910 1023.8				1715 1929.4						42 98.8 47.3 111.2		84 94.5	210 236.3		178.5 200.8	481.8 542	455 511.9	409.5	963.5	910 1023.8			1905.6 2143.8	
7	7 7	64-QAM 64-QAM	5/6	409.5 455	505.6	945	1050	2047.5	2275	4095	4095 4550	602.2								1929.4 2143.8						47.3 111.2 52.5 123.5		94.5 105	262.5			602.2	0	460.7 511.9				2522.1	2381.9	2143.8
8 8	8 7	256-QAM	3/4			1134	1260	2457	2730	4914	5460 6066 7	722.6	682.5	614.3	1445.3					2572.5						63 148.2		126 140	315	297.5		722.6	682.5	614.3		1365	1228.5		2858.3 3175.9	
	9 7 10 7	256-QAM 1024-QAM	3/4	IV/A	N/A	1200	1400	2730	3033.3	5460		903.3					1535.6	3783.1	3572.9	2858.3 3215.6	7566.2	7145.8	6431.3	92.6	87.5	70 164.7 78.8 185.3	175	157.5		371.9								3783.1	3572.9	3215.6
1	7	1024-QAM	_	FO	E7.0	100	400	20.4	200	400			947.9													87.5 205.9			437.5				947.9							
1	1 8	BPSK QPSK	1/2 1/2	104	115.6	216	120 240	234 468	260 520	468 936	520 1040	68.8 137.6	65 130	58.5 117	137.6 275.3	130 260	117 234		272.2 544.4			544.4 1088.9	490 980		6.7 13.3	6 14.1 12 28.2	13.3 26.7	12 24	60	28.3 56.7	25.5 51	68.8 137.6	65 130	58.5 117	137.6 275.3	130 260	117 234	288.2 576.5		245 490
2		QPSK	3/4	156	173.3	324	360	702	780	1404	1560	206.5	195	175.5	412.9	390	351	864.7	816.7	735	1729.4	1633.3	1470	21.2	20	18 42.4	40	36	90	85	76.5	206.5	195	175.5	412.9	390	351	864.7	816.7	735
		16-QAM 16-QAM	1/2 3/4	208 312	231.1 346.7	432 648	480 720	936 1404	1040 1560	1872 2808	2080 3120	275.3 412.9	260 390	234 351	550.6 825.9	520 780	468 702		1088.9 1633.3		2305.9 3458.8	2177.8 3266.7		28.2 42.4	26.7 40	24 56.5 36 84.7	53.3 80	48 72	120 180	113.3 170	102 153	275.3 412.9	260 390	234 351	550.6 825.9	520 780	468 702		1088.9 1633.3	980 1470
3 3	4 0	64-QAM	2/3	416	462.2	864	960	1872	2080	3744	4160	550.6	520	468	1101.2	1040	936	2305.9	2177.8	1960	4611.8	4355.6	3920	56.5	53.3	48 112.9		96	240	226.7	204	550.6	520	468	1101.2	1040			2177.8	1960
5	5 8		611	400	E00	070	4000	0400	00.10	10.15	1000					1170	1053	2594.1	2450	- 1/1/1/2	5188.2	4000	0.000					100							4000	4.4	40-0	0=0.1		
4 4 5 5 6 6	5 8 6 8	64-QAM 64-QAM	3/4 5/6	468 520	520 577.8	972 1080	1080 1200	2106 2340	2340 2600	4212 4680	4680 5200	619.4 688.2	585 650	526.5 585	1238.8 1376.5	1300		2882.4			5764.7	4900 5444.4			60 66.7	54 127.1 60 141.2		108 120	270 300		229.5 255	619.4 688.2	585 650	526.5 585	1238.8 1376.5	1170 1300			2450 2722.2	2205 2450
4 4 5 8 6 7 7 8 8 8	5 8 6 8 7 8 8 8	64-QAM 64-QAM 256-QAM	5/6 3/4	624	0_0		1080 1200 1440	2106 2340 2808	2600 3120	4680 5616	6240	688.2 825.9	650 780	585 702	1376.5 1651.8	1300 1560	1170 1404	2882.4 3458.8	2722.2 3266.7	2450 2940	5764.7 6917.6	5444.4 6533.3	4900 5880	70.6 84.7	66.7 80	60 141.2 72 169.4	133.3 160	120 144	300 360	283.3 340	255 306	688.2 825.9		585 702	1376.5 1651.8	1300 1560	1170 1404	2882.4 3458.8	2722.2 3266.7	2450 2940
4 4 5 5 6 6 7 7 8 8 8 9 9 9	5 8 6 8 7 8 8 8	64-QAM 64-QAM	5/6 3/4 5/6	468 520 624 N/A	0_0		1080 1200 1440 1600	2106 2340 2808 3120	2600	4680 5616	4680 5200 6240 6933.3	688.2	650 780 866.7	585 702 780	1376.5 1651.8	1300	1170 1404 1560	2882.4 3458.8 3843.1	2722.2 3266.7 3629.6	2450	5764.7 6917.6 7686.3	5444.4 6533.3 7259.3	4900 5880 6533.3	70.6 84.7 94.1	66.7 80 88.9		133.3 160 177.8	120	300	283.3 340 377.8	255 306	688.2	650	585 702 780	1376.5 1651.8	1300	1170 1404 1560	2882.4 3458.8 3843.1	2722.2	2450 2940 3266.7