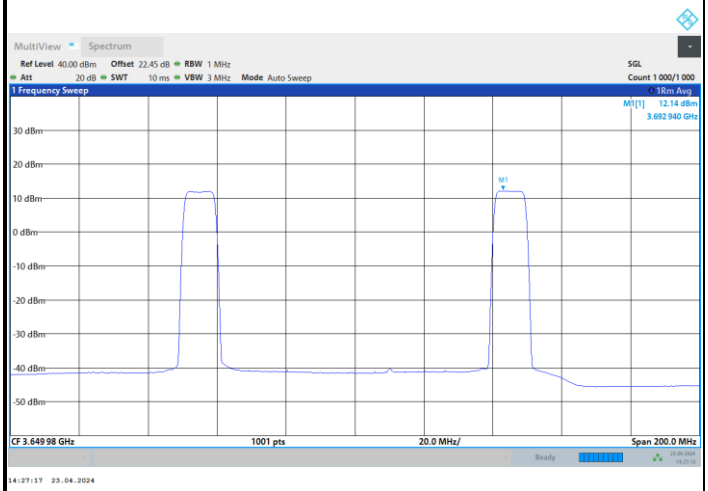
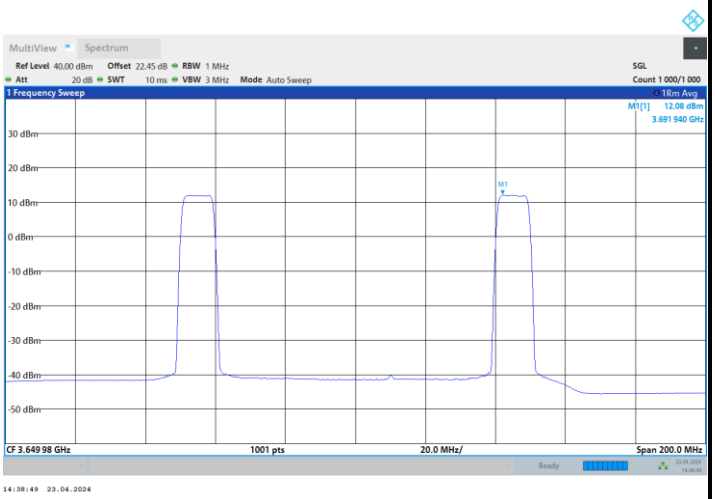
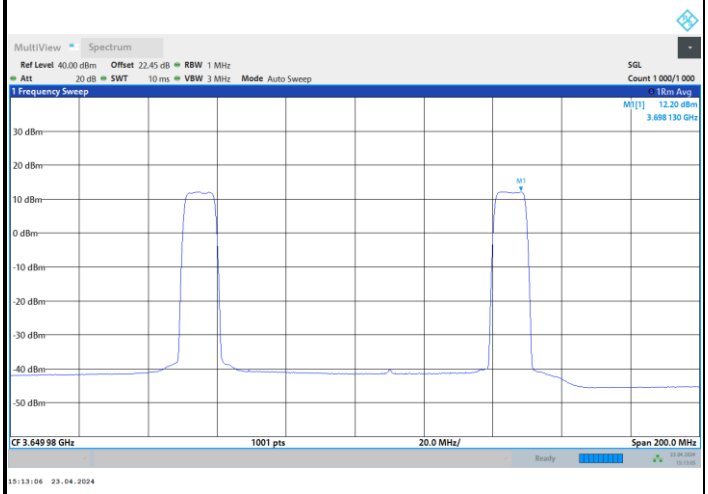
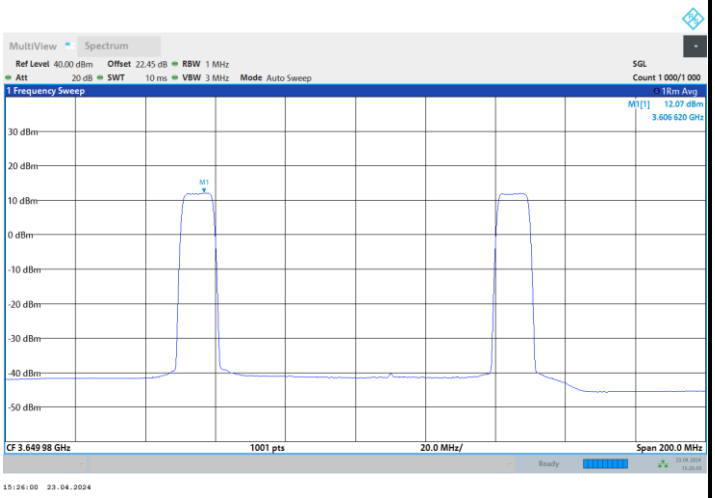
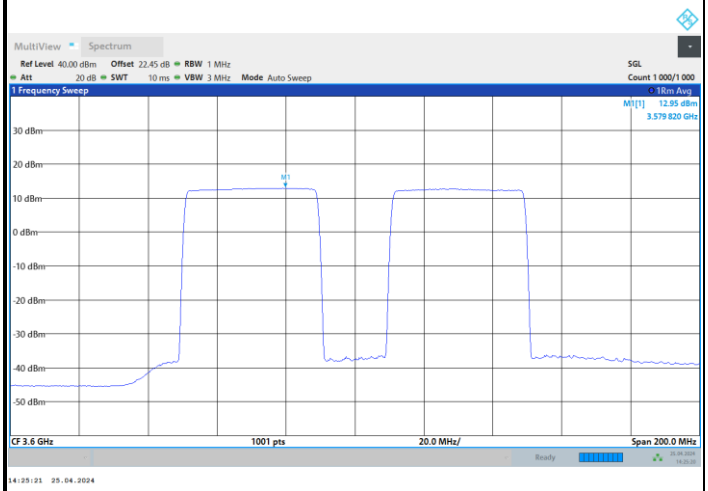
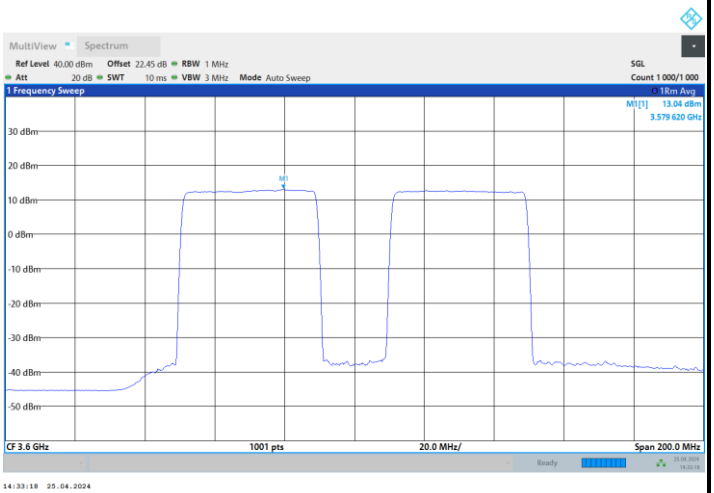
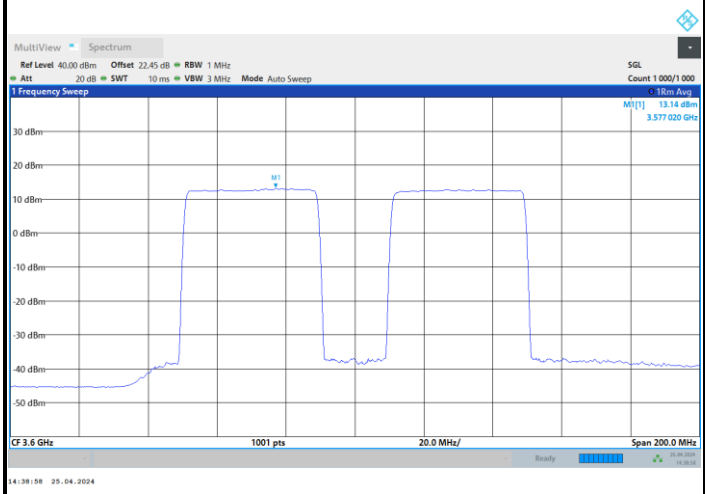
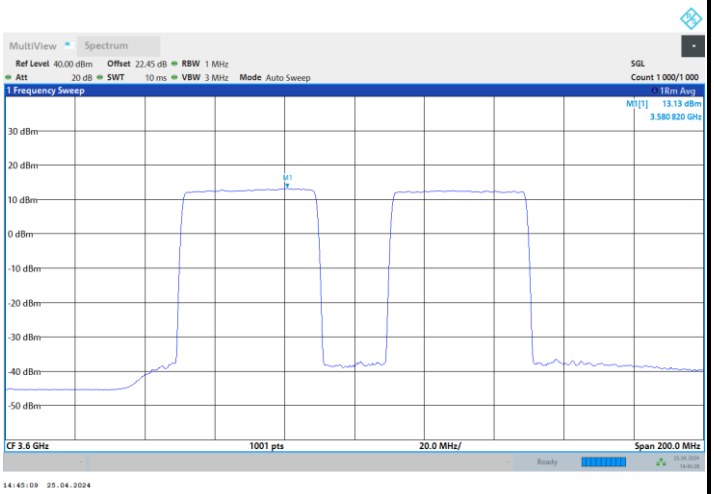
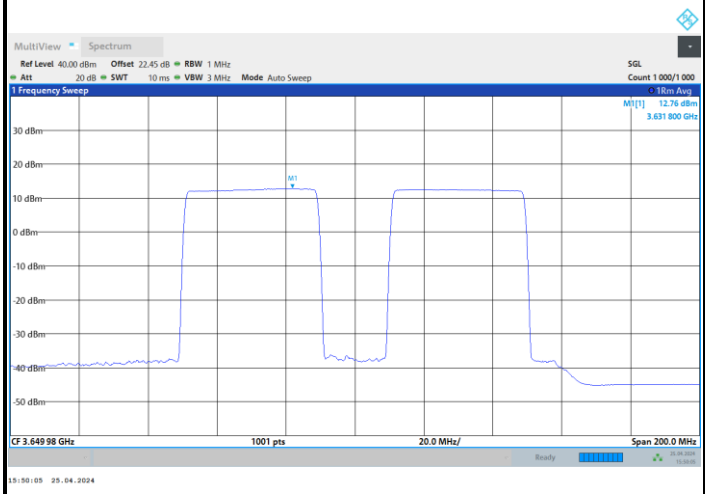
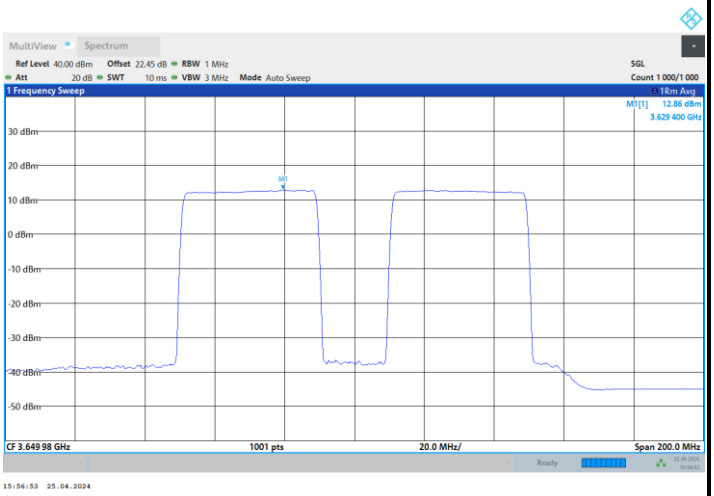
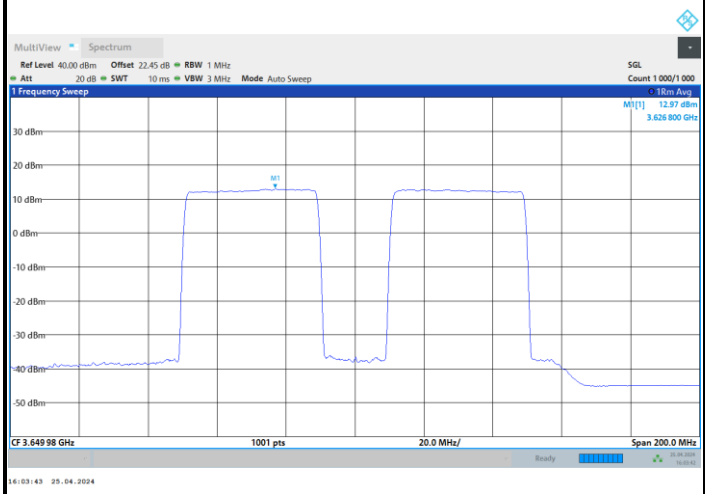
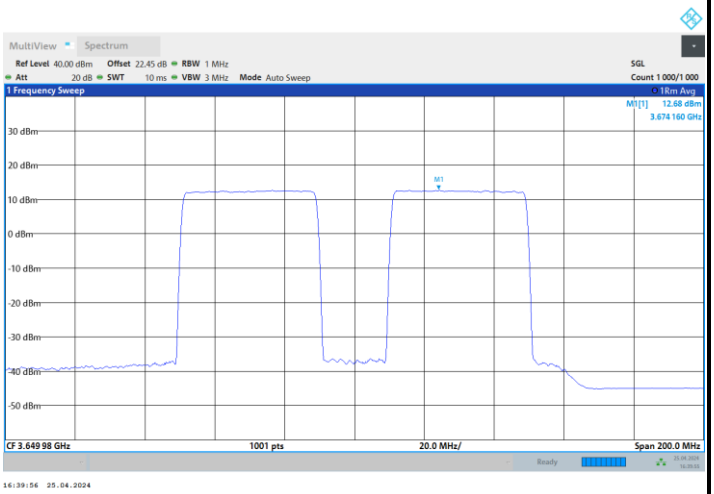
FR1 n48 / 10MHz+10MHz (Non Contiguous) / Highest Channel / PSD	
QPSK	16QAM
	
64QAM	256QAM
	

FR1 n48 / 40MHz+40MHz (Non Contiguous) / Lowest Channel / PSD	
QPSK	16QAM
	
64QAM	256QAM
	

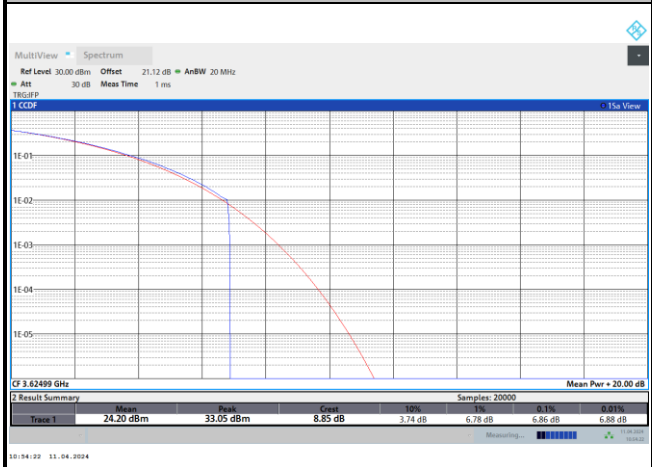
FR1 n48 / 40MHz+40MHz (Non Contiguous) / Highest Channel / PSD	
QPSK	16QAM
	
64QAM	256QAM
	

Peak-to-Average Ratio

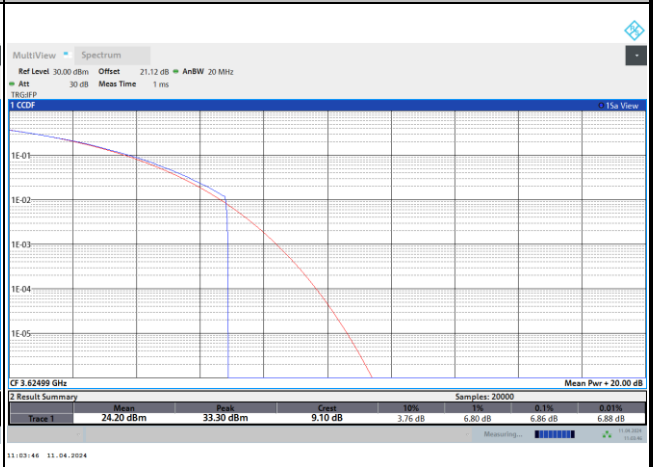
Mode	FR1 n48 / 10MHz+10MHz / PAR (dB)				Limit: 13dB
Mod.	QPSK	16QAM	64QAM	256QAM	Result
Middle CH	6.86	6.86	6.68	6.68	PASS

FR1 n48 / 10MHz+10MHz / Middle Channel / PAR

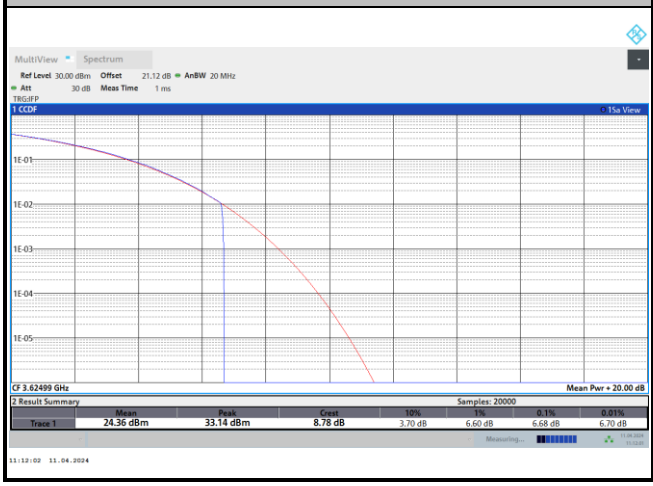
QPSK



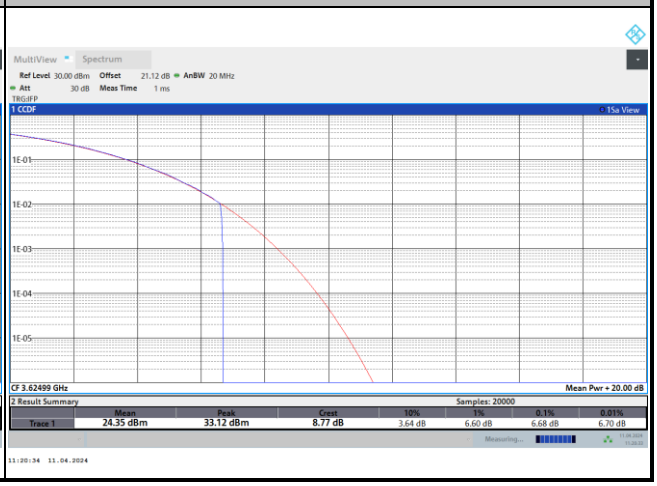
16QAM



64QAM



256QAM

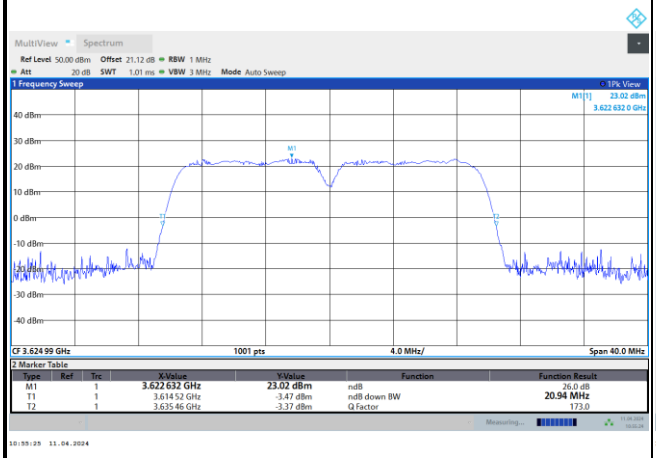


26dB Bandwidth

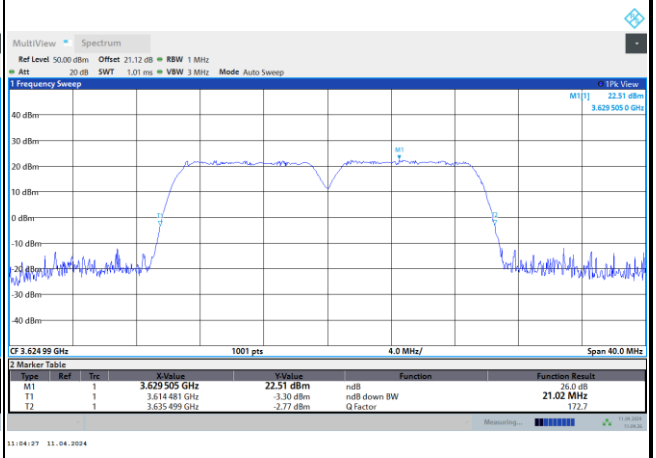
Mode	FR1 n48 : 26dB BW(MHz)							
BW	10MHz+10MHz		10MHz+20MHz		10MHz+40MHz		20MHz+10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	20.94	21.02	30.81	30.69	50.65	50.55	30.69	30.81
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	20.94	21.10	30.87	30.75	50.75	50.55	30.81	30.75
BW	20MHz+20MHz		20MHz+40MHz		40MHz+10MHz		40MHz+20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	40.84	40.92	60.78	60.66	50.65	50.65	60.54	60.66
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	40.76	40.76	60.66	60.66	50.55	50.45	60.42	60.66
BW	40MHz+40MHz							
Mod.	QPSK	16QAM						
Middle CH	80.56	80.56						
Mod.	64QAM	256QAM						
Middle CH	80.72	80.56						

FR1 n48 / 10MHz+10MHz / Middle Channel / 26dB BW

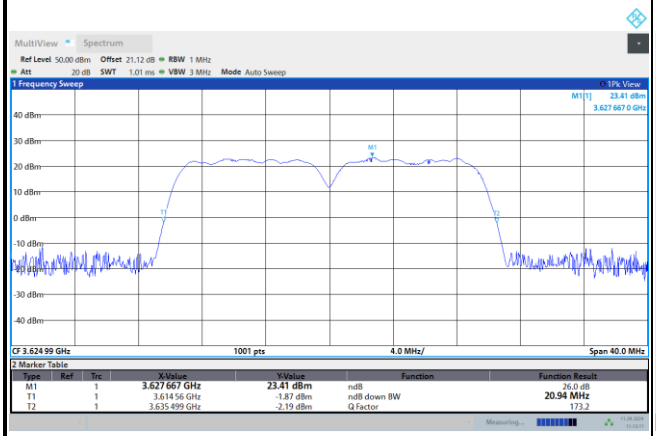
QPSK



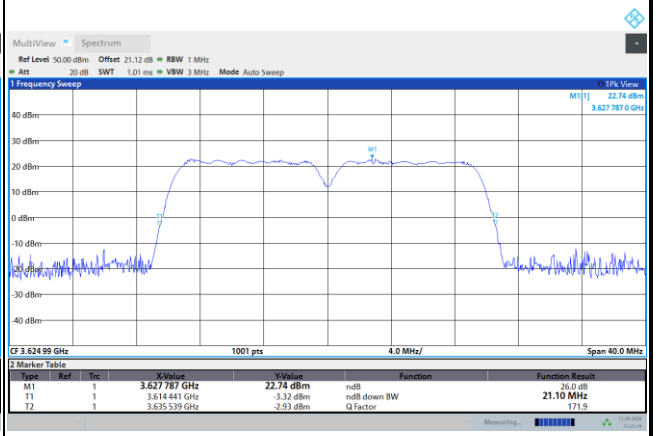
16QAM



64QAM

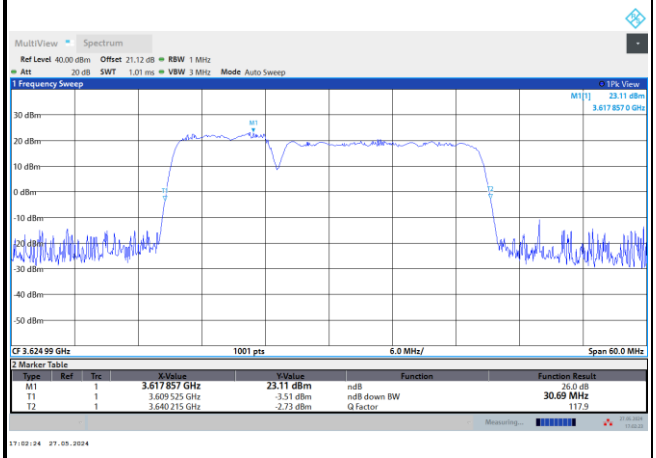


256QAM



FR1 n48 / 10MHz+20MHz / Middle Channel / 26dB BW

QPSK



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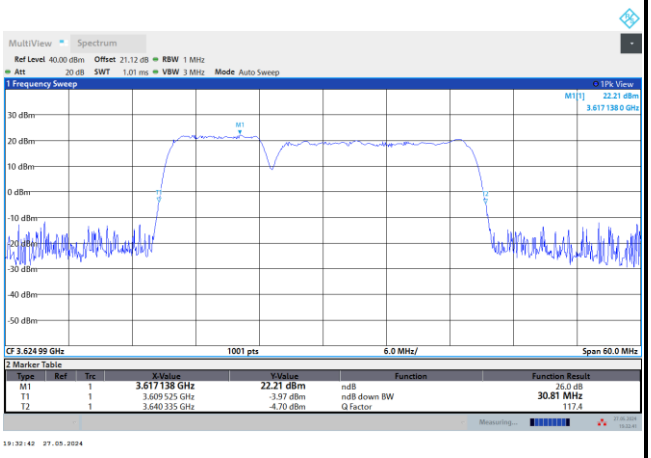

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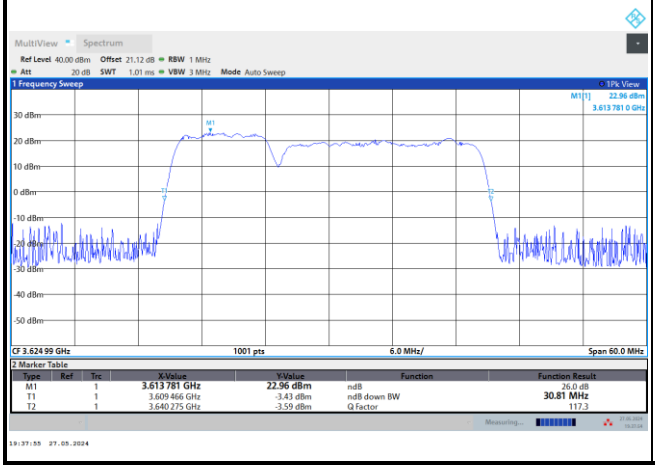

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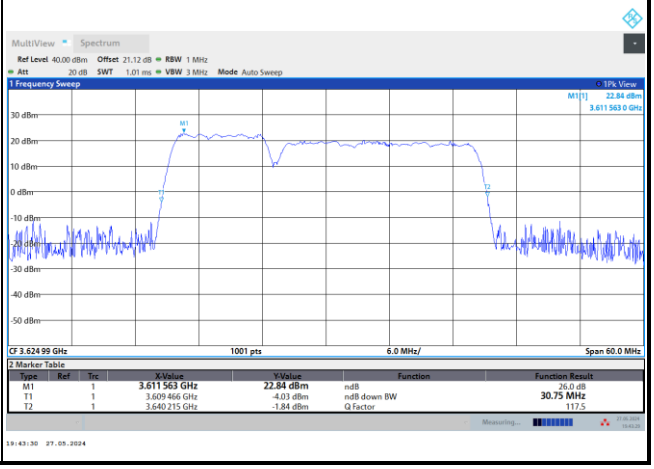
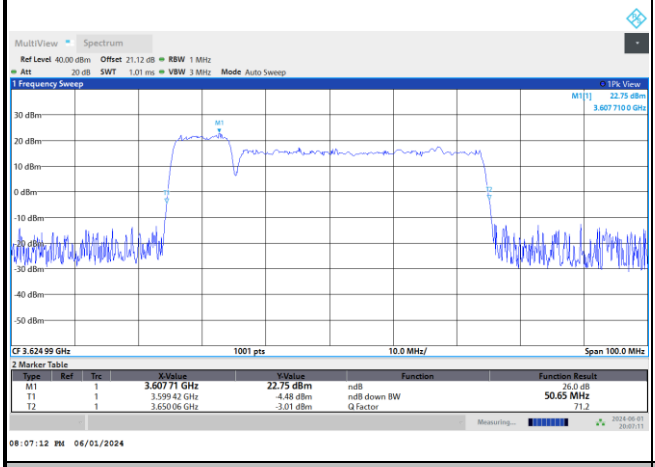


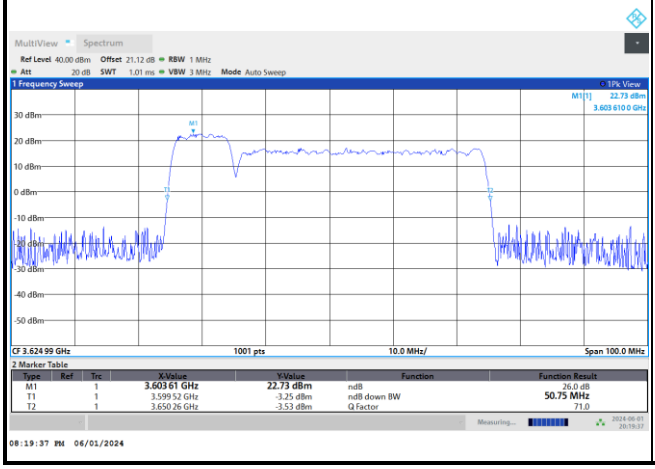
FR1 n48 / 10MHz+40MHz / Middle Channel / 26dB BW

QPSK

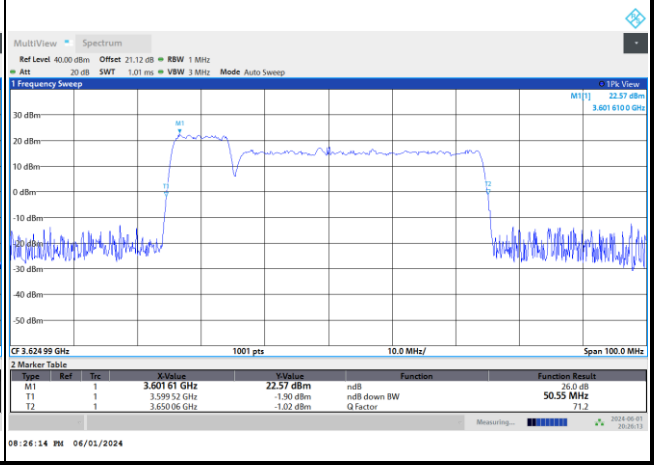


16QAM

64QAM

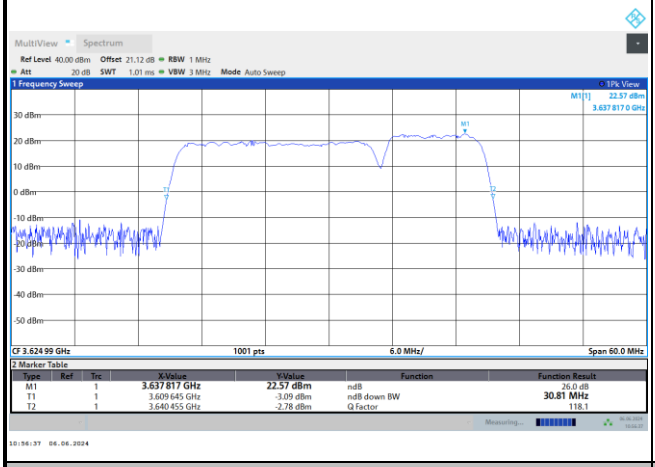


256QAM



FR1 n48 / 20MHz+10MHz / Middle Channel / 26dB BW

QPSK



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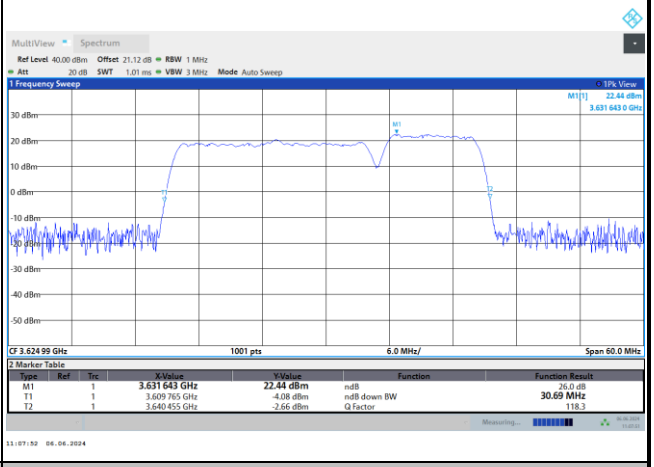

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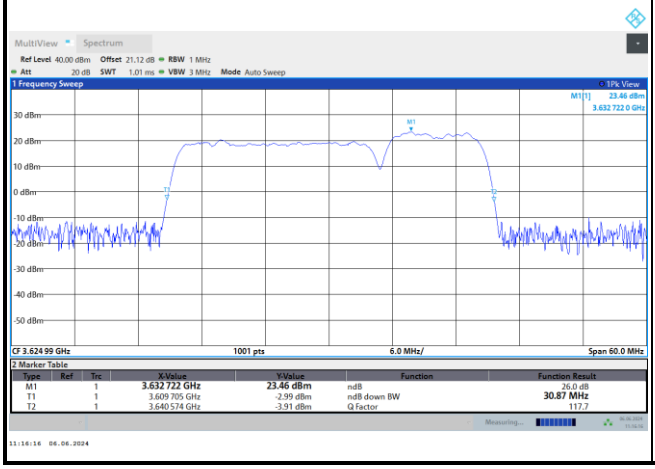

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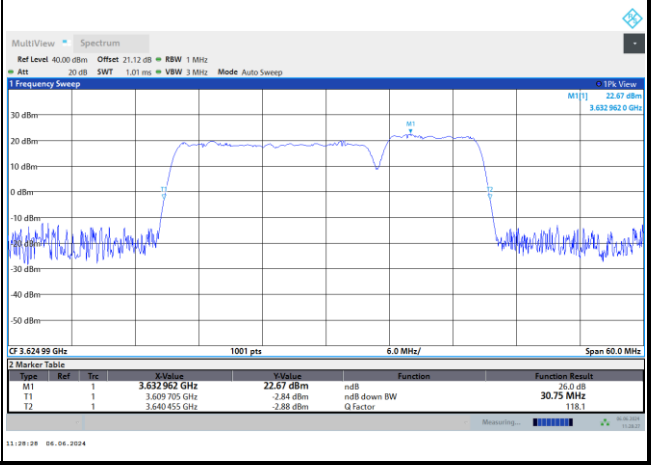
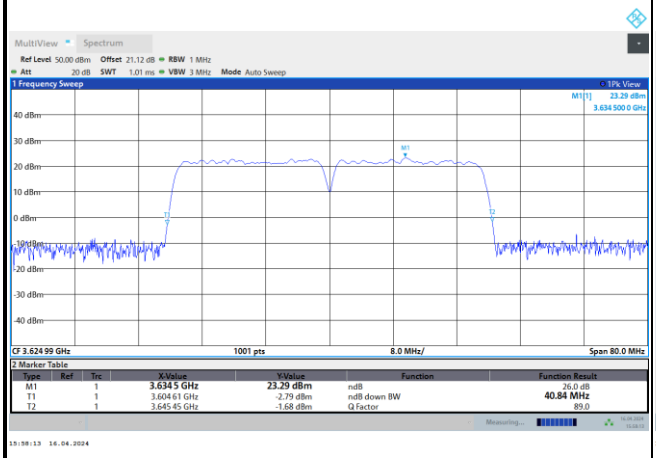
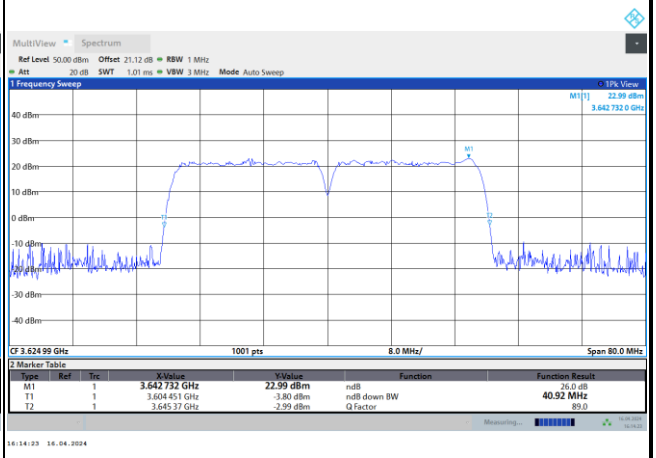


FR1 n48 / 20MHz+20MHz / Middle Channel / 26dB BW

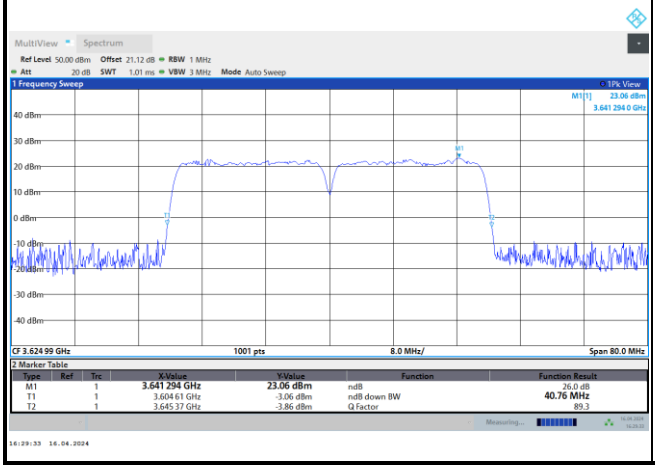
QPSK



16QAM



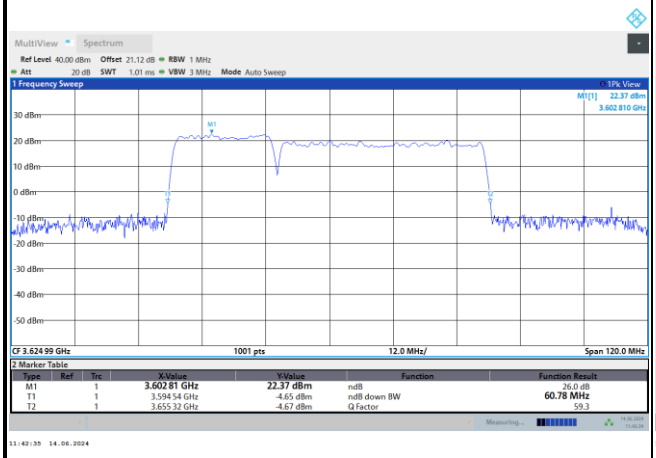
64QAM



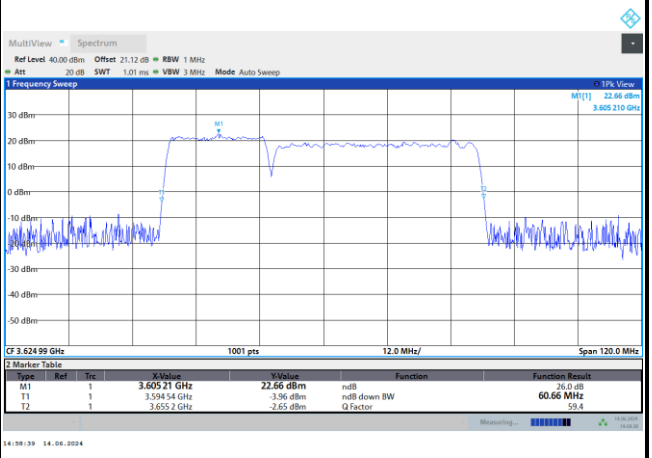
256QAM

FR1 n48 / 20MHz+40MHz / Middle Channel / 26dB BW

QPSK

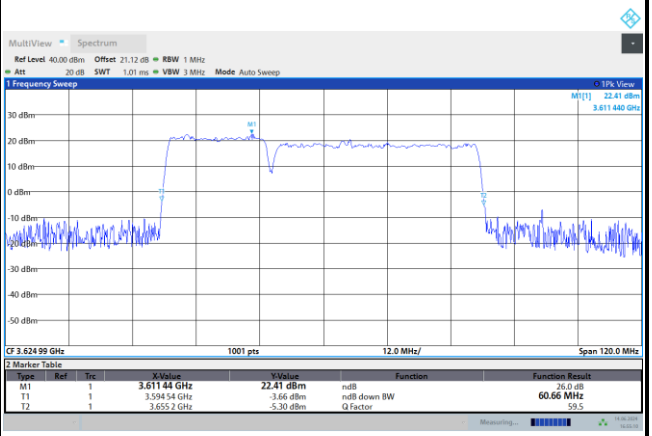


16QAM



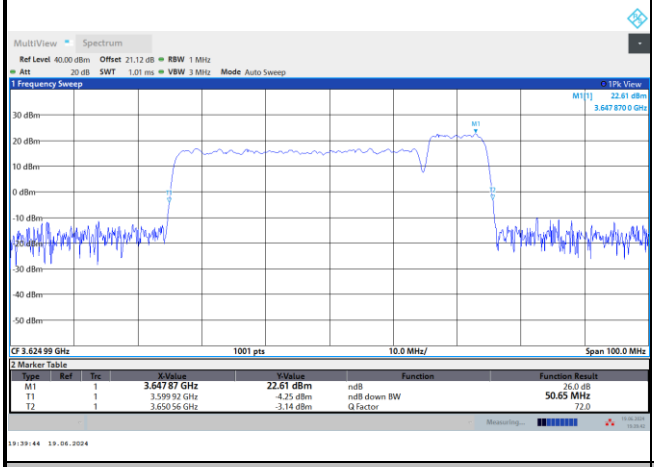
64QAM

256QAM



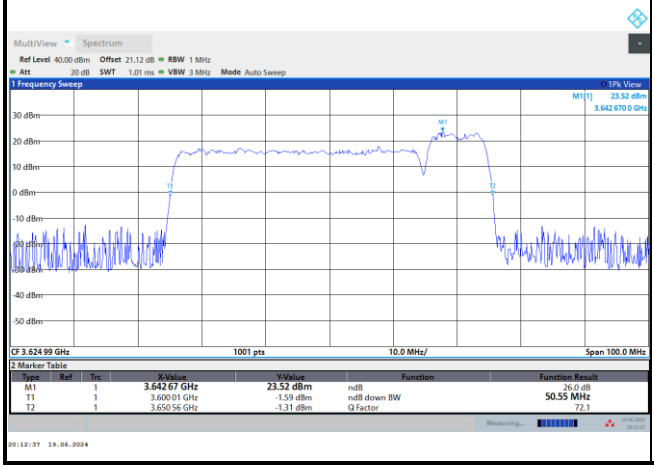
FR1 n48 / 40MHz+10MHz / Middle Channel / 26dB BW

QPSK

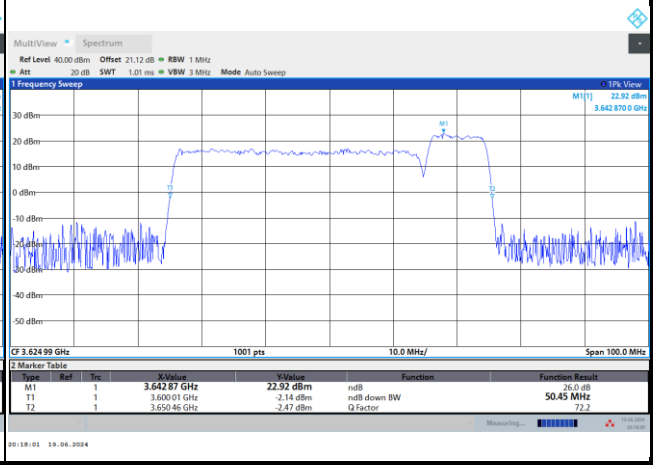


16QAM

64QAM

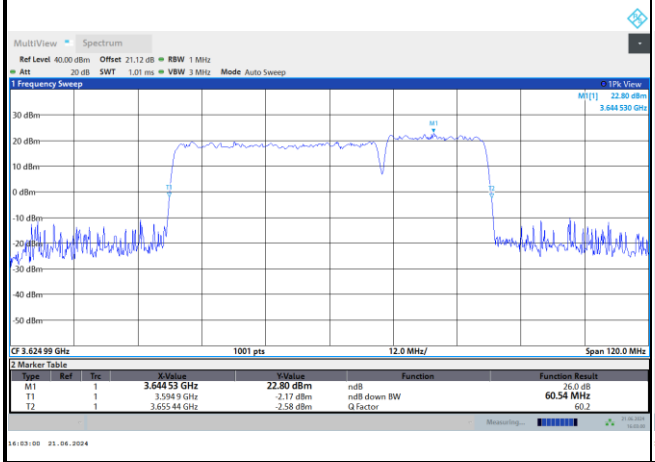


256QAM

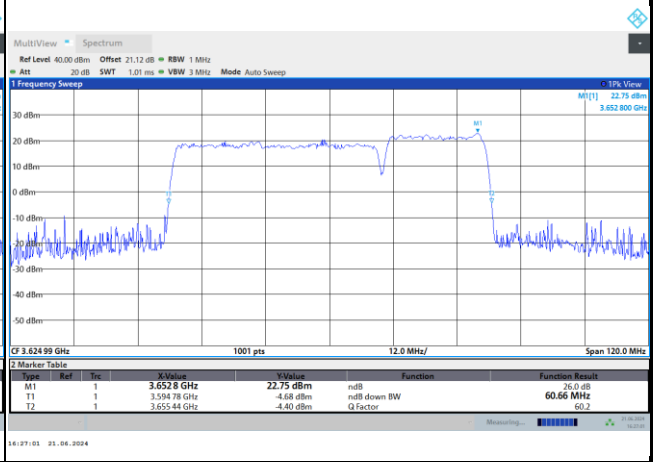


FR1 n48 / 40MHz+20MHz / Middle Channel / 26dB BW

QPSK



16QAM



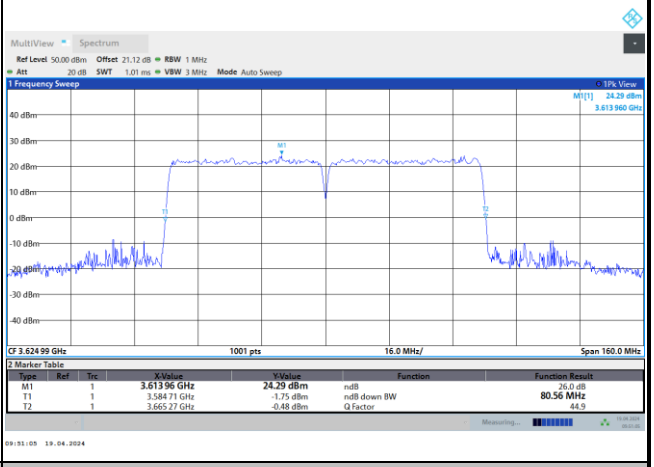
64QAM

256QAM

FR1 n48 / 40MHz+40MHz / Middle Channel / 26dB BW

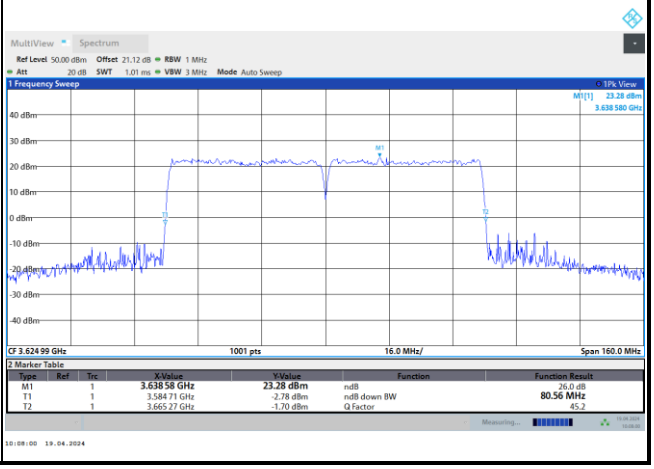
QPSK

16QAM



64QAM

256QAM

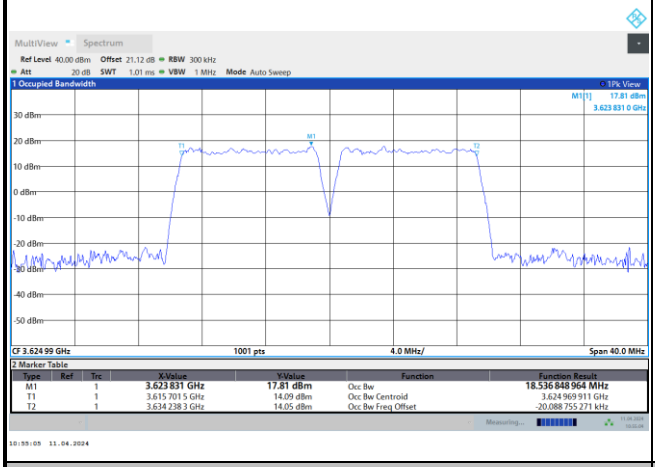


Occupied Bandwidth

Mode	FR1 n48 : 99%OBW (MHz)							
BW	10MHz+10MHz		10MHz+20MHz		10MHz+40MHz		20MHz+10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	18.53	18.55	28.60	28.56	48.30	48.23	28.61	28.61
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	18.55	18.50	28.62	28.61	48.44	48.31	28.65	28.68
BW	20MHz+20MHz		20MHz+40MHz		40MHz+10MHz		40MHz+20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	38.24	38.19	57.87	57.84	48.28	48.16	57.89	57.73
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	38.26	38.31	58.07	57.98	48.20	48.35	57.88	57.92
BW	40MHz+40MHz							
Mod.	QPSK	16QAM						
Middle CH	77.60	77.53						
Mod.	64QAM	256QAM						
Middle CH	77.68	77.61						

FR1 n48 / 10MHz+10MHz / Middle Channel / 99%OBW

QPSK



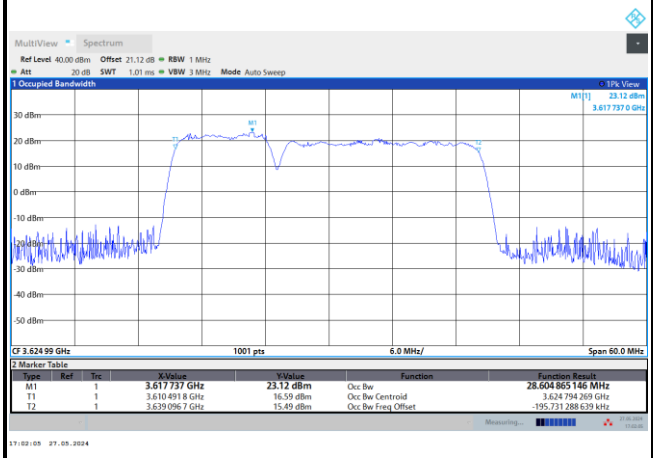
16QAM

64QAM

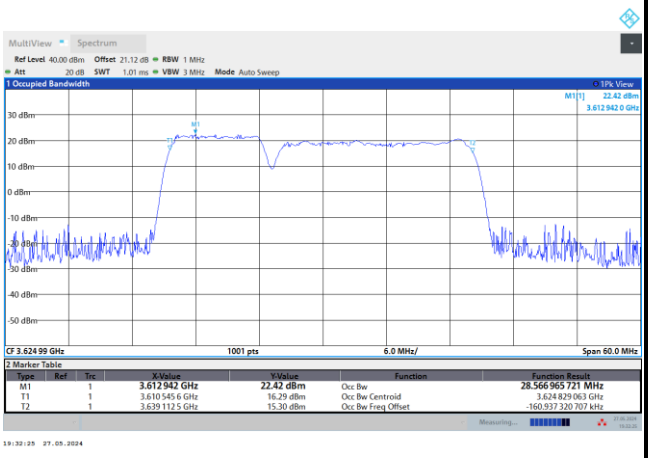
256QAM

FR1 n48 / 10MHz+20MHz / Middle Channel / 99%OBW

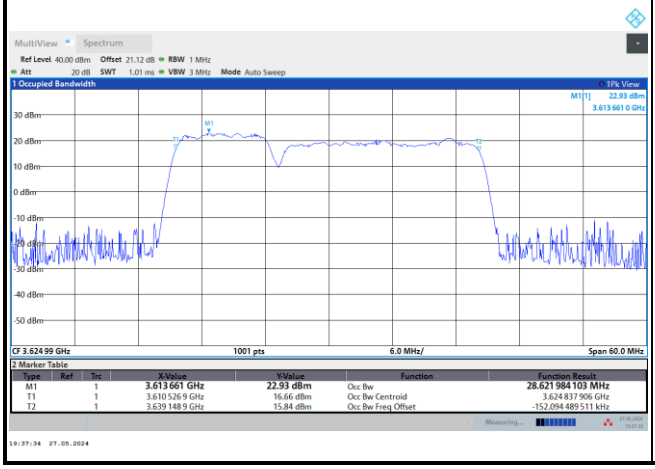
QPSK



16QAM



64QAM



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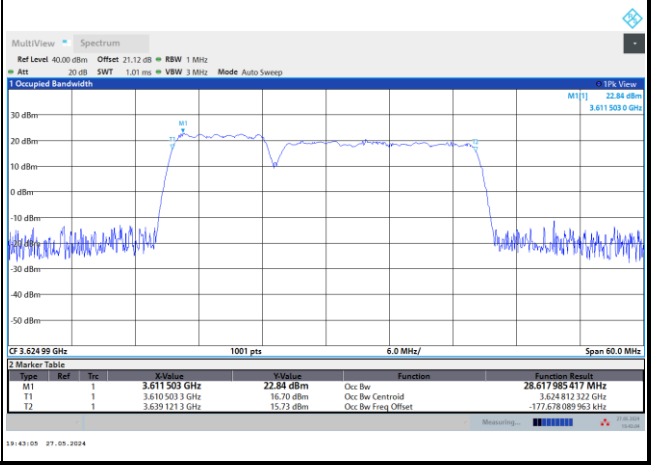
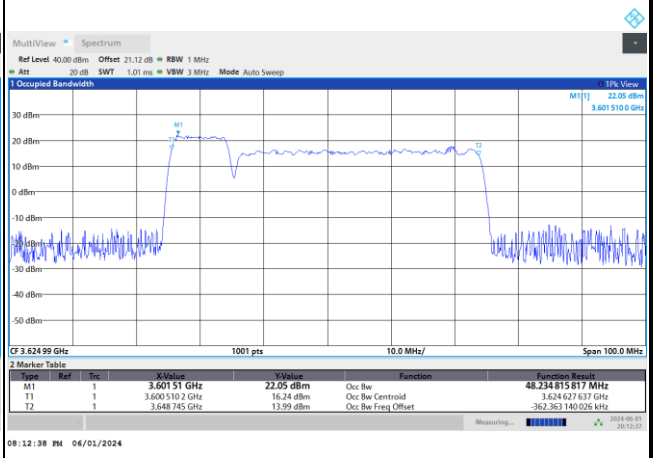


FR1 n48 / 10MHz+40MHz / Middle Channel / 99%OBW

QPSK

16QAM



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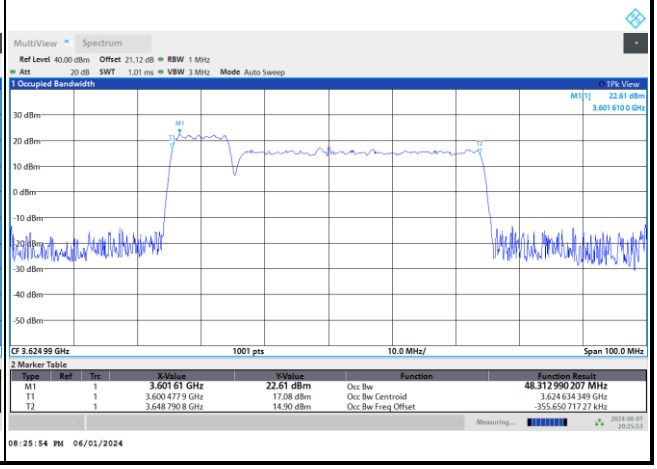
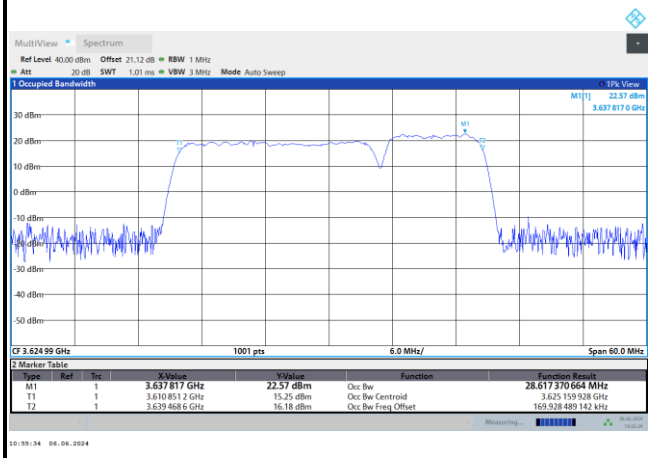


FR1 n48 / 20MHz+10MHz / Middle Channel / 99%OBW

QPSK



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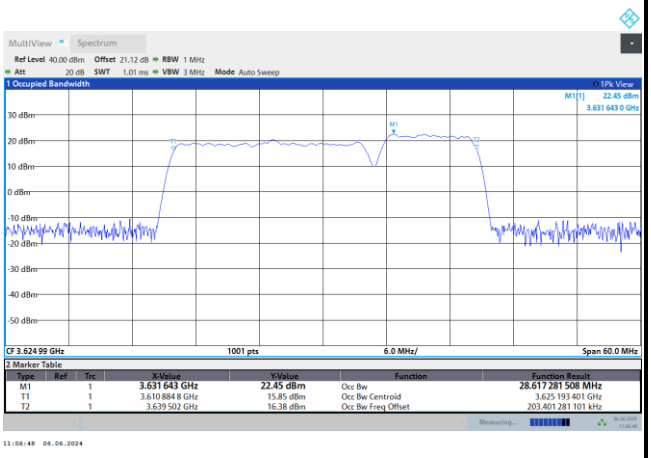

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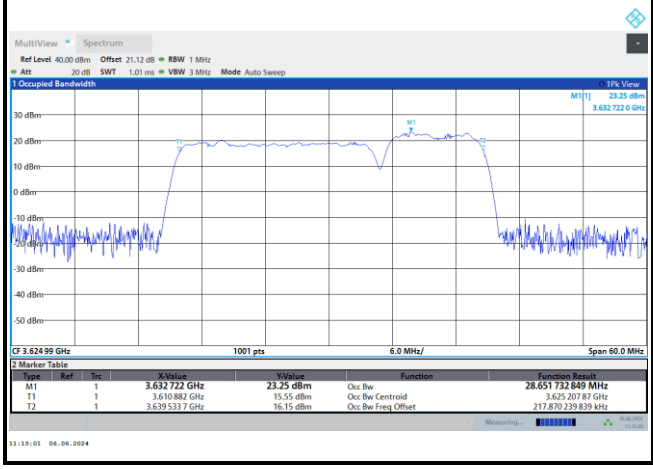

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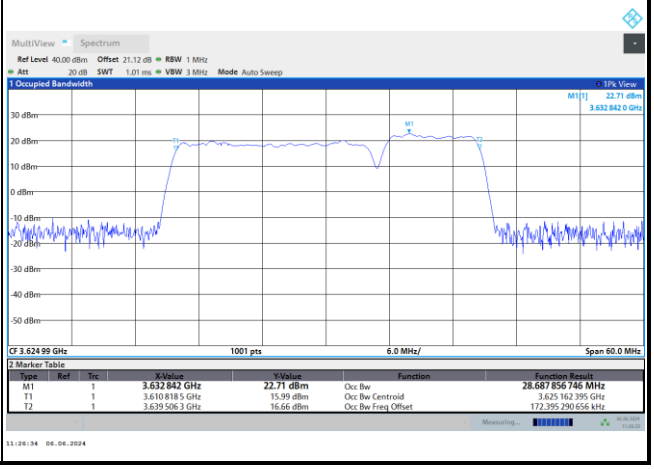
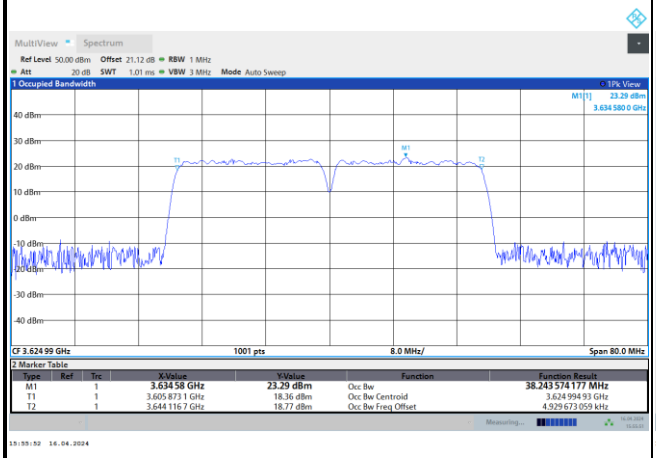


FR1 n48 / 20MHz+20MHz / Middle Channel / 99%OBW

QPSK



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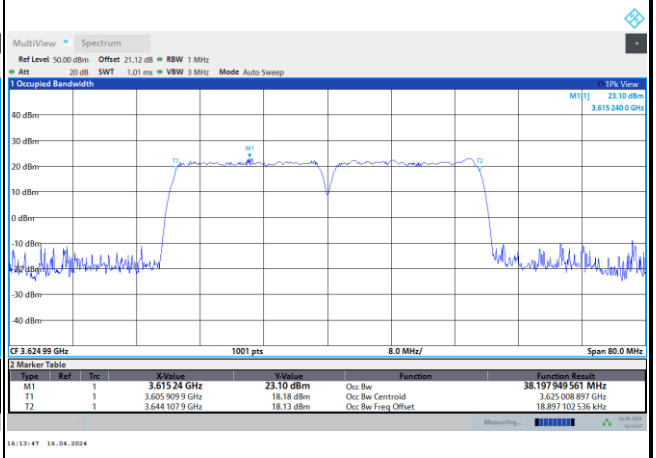

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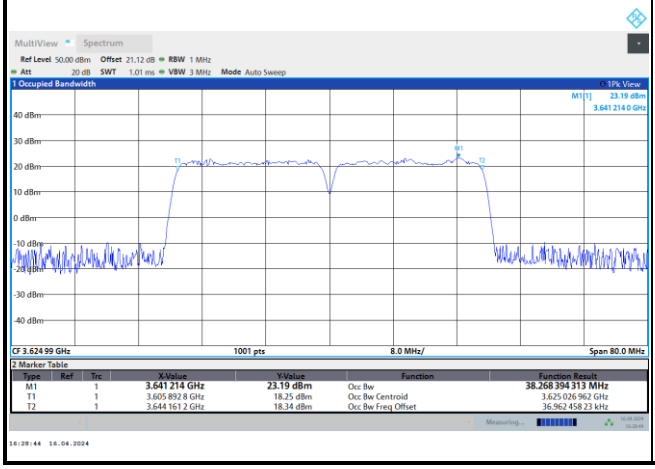

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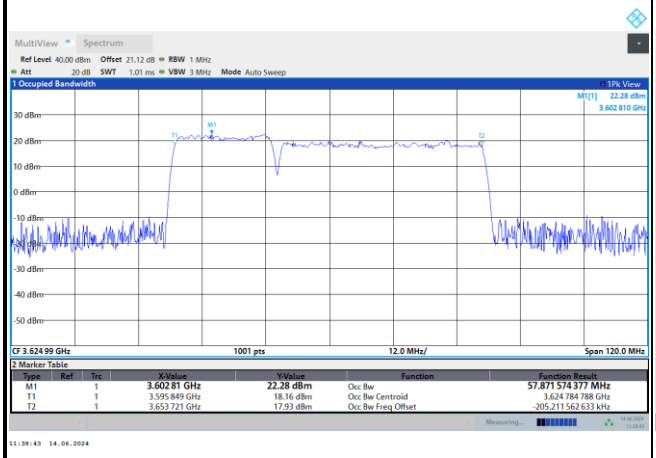
FR1 n48 / 20MHz+40MHz / Middle Channel / 99%OBW

QPSK



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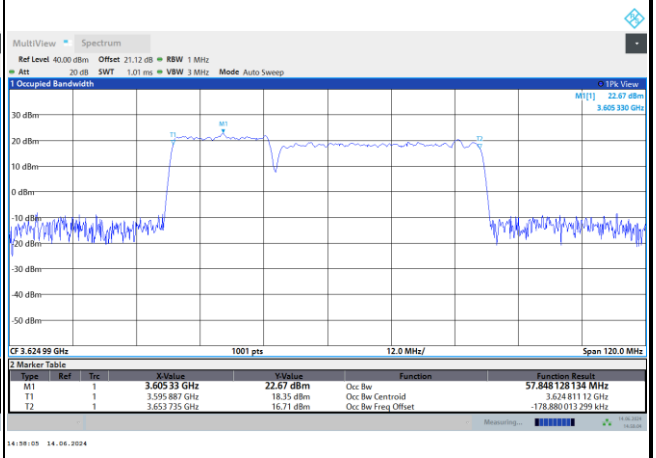

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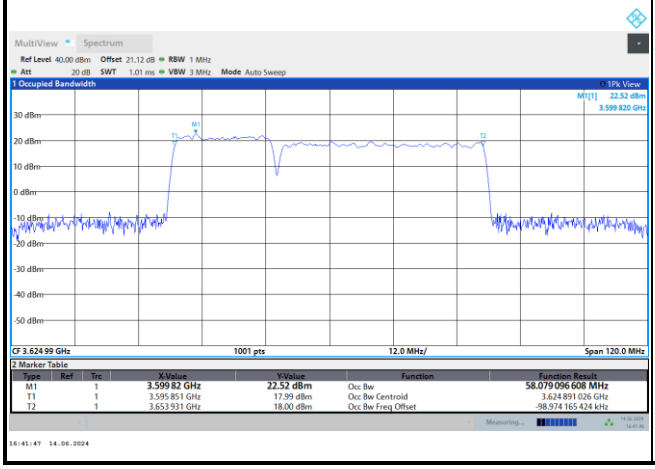

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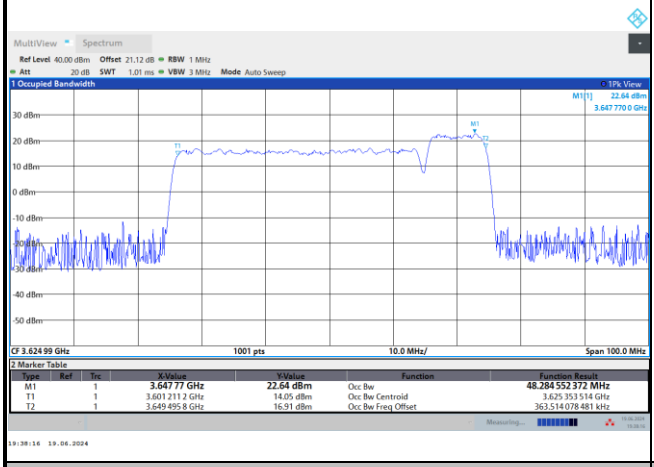
FR1 n48 / 40MHz+10MHz / Middle Channel / 99%OBW

QPSK



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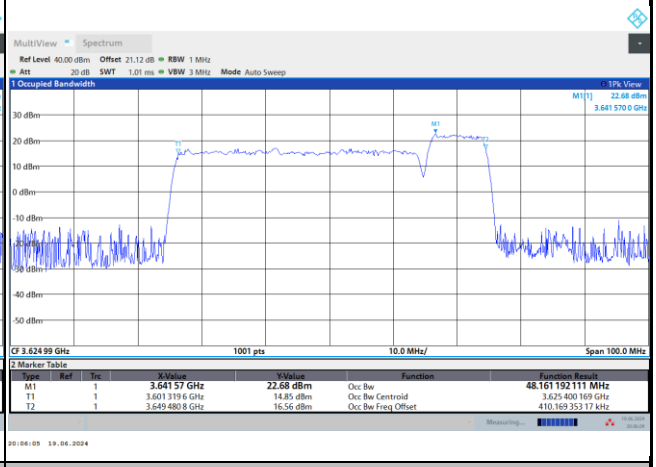

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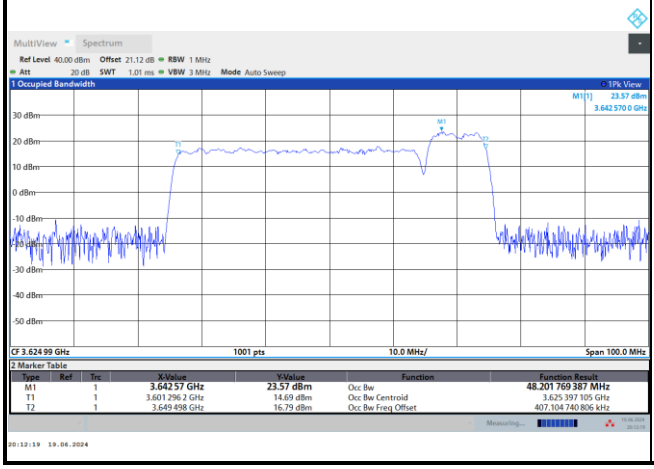

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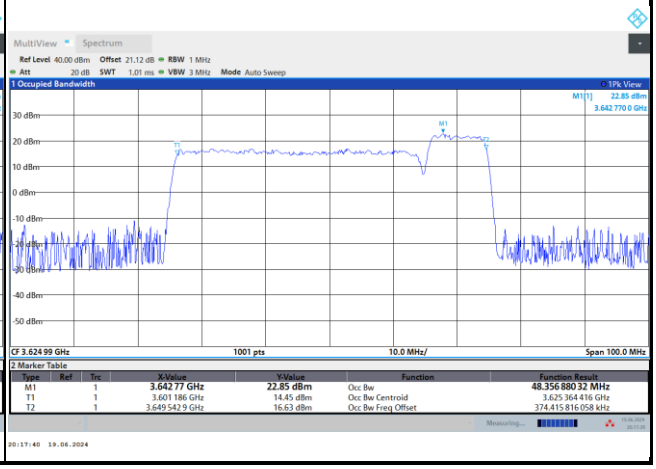
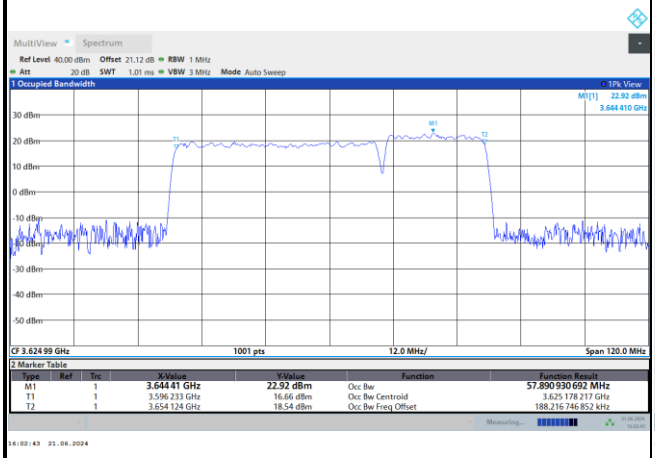


FR1 n48 / 40MHz+20MHz / Middle Channel / 99%OBW

QPSK



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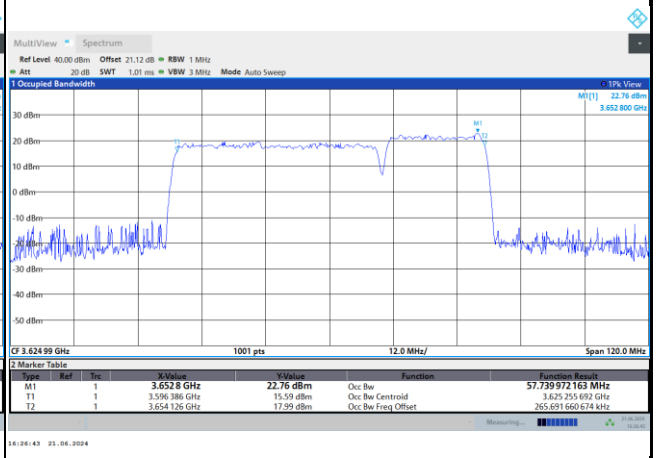

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FR1 n48 / 40MHz+40MHz / Middle Channel / 99%OBW

QPSK

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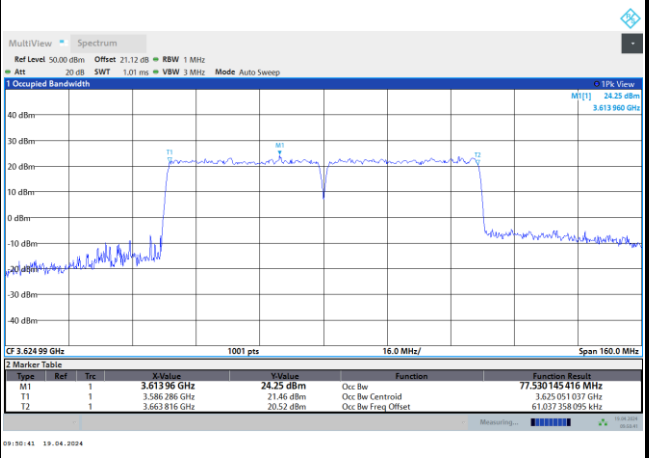

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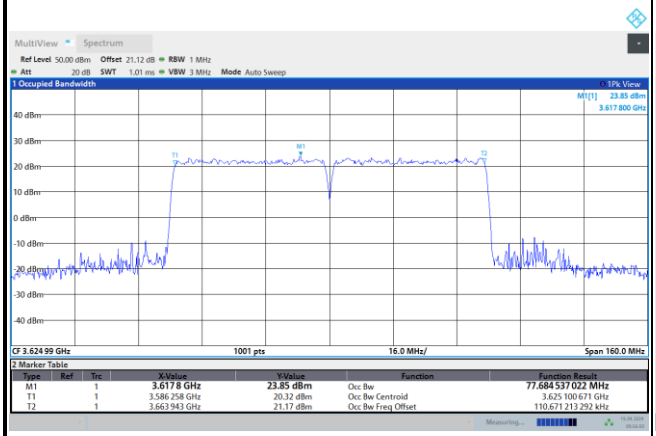

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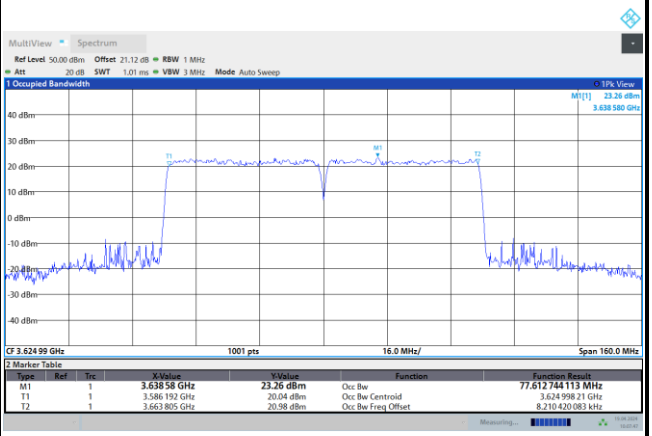
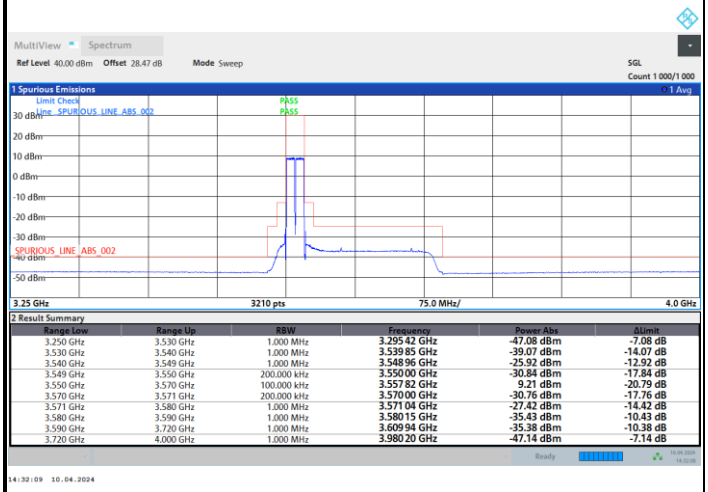


Unwanted Emission (MASK)

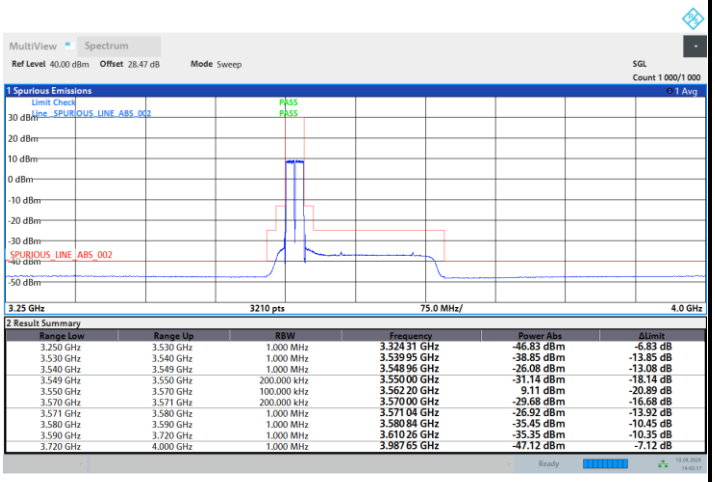
FR1 n48 / 10MHz+10MHz / Lowest Channel / MASK

QPSK



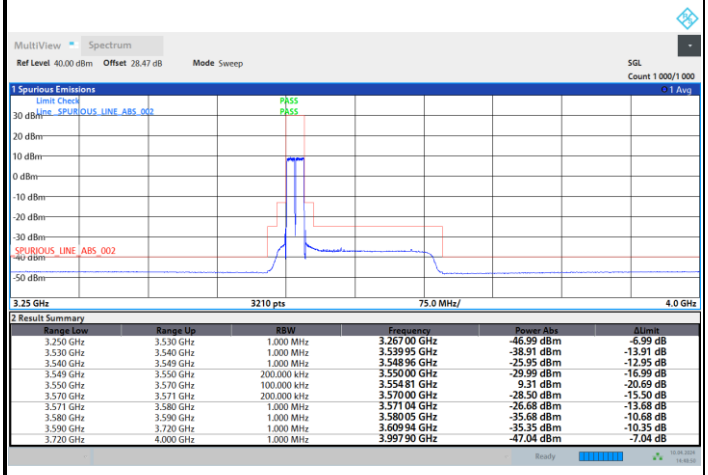
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.250 GHz	3.530 GHz	1.000 MHz	3.295 42 GHz	-47.08 dBm	-7.08 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.539 85 GHz	-39.07 dBm	-14.07 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.548 96 GHz	-25.92 dBm	-12.92 dB
3.549 GHz	3.550 GHz	200.000 kHz	3.550 00 GHz	-30.84 dBm	-17.84 dB
3.550 GHz	3.570 GHz	100.000 kHz	3.557 82 GHz	9.21 dBm	-20.79 dB
3.570 GHz	3.571 GHz	200.000 kHz	3.570 00 GHz	-30.76 dBm	-17.76 dB
3.571 GHz	3.580 GHz	1.000 MHz	3.571 04 GHz	-27.42 dBm	-14.42 dB
3.580 GHz	3.590 GHz	1.000 MHz	3.580 15 GHz	-35.43 dBm	-10.43 dB
3.590 GHz	3.720 GHz	1.000 MHz	3.609 94 GHz	-35.38 dBm	-10.38 dB
3.720 GHz	4.000 GHz	1.000 MHz	3.980 20 GHz	-47.14 dBm	-7.14 dB

16QAM



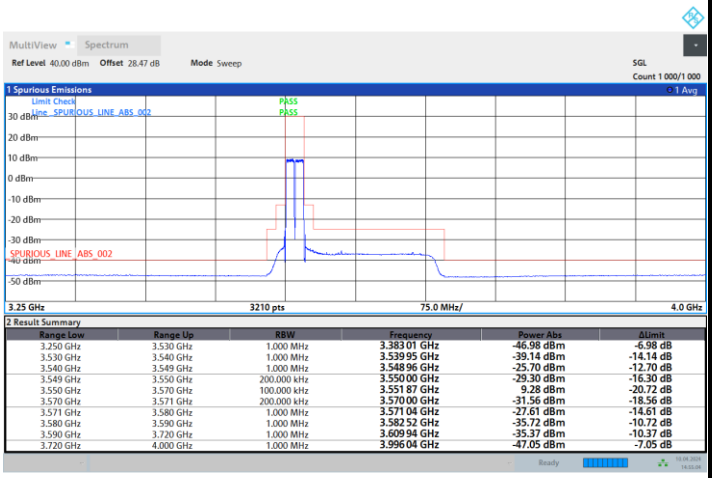
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.250 GHz	3.530 GHz	1.000 MHz	3.324 31 GHz	-46.83 dBm	-6.83 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.539 95 GHz	-38.85 dBm	-13.85 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.548 96 GHz	-26.08 dBm	-13.08 dB
3.549 GHz	3.550 GHz	200.000 kHz	3.550 00 GHz	-31.14 dBm	-18.14 dB
3.550 GHz	3.570 GHz	100.000 kHz	3.562 20 GHz	9.11 dBm	-20.89 dB
3.570 GHz	3.571 GHz	200.000 kHz	3.570 00 GHz	-29.68 dBm	-16.68 dB
3.571 GHz	3.580 GHz	1.000 MHz	3.571 04 GHz	-26.92 dBm	-13.92 dB
3.580 GHz	3.590 GHz	1.000 MHz	3.580 84 GHz	-35.45 dBm	-10.45 dB
3.590 GHz	3.720 GHz	1.000 MHz	3.610 26 GHz	-35.35 dBm	-10.35 dB
3.720 GHz	4.000 GHz	1.000 MHz	3.987 65 GHz	-47.12 dBm	-7.12 dB

64QAM



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.250 GHz	3.530 GHz	1.000 MHz	3.267 00 GHz	-46.99 dBm	-6.99 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.539 95 GHz	-38.91 dBm	-13.91 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.548 96 GHz	-25.95 dBm	-12.95 dB
3.549 GHz	3.550 GHz	200.000 kHz	3.550 00 GHz	-29.99 dBm	-16.99 dB
3.550 GHz	3.570 GHz	100.000 kHz	3.554 81 GHz	9.31 dBm	-20.69 dB
3.570 GHz	3.571 GHz	200.000 kHz	3.570 00 GHz	-28.50 dBm	-15.50 dB
3.571 GHz	3.580 GHz	1.000 MHz	3.571 04 GHz	-26.68 dBm	-13.68 dB
3.580 GHz	3.590 GHz	1.000 MHz	3.580 05 GHz	-35.68 dBm	-10.68 dB
3.590 GHz	3.720 GHz	1.000 MHz	3.609 94 GHz	-35.35 dBm	-10.35 dB
3.720 GHz	4.000 GHz	1.000 MHz	3.997 90 GHz	-47.04 dBm	-7.04 dB

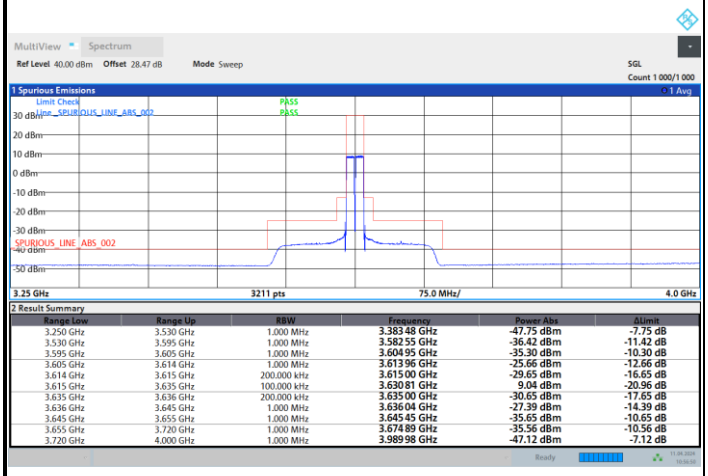
256QAM



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.250 GHz	3.530 GHz	1.000 MHz	3.383 01 GHz	-46.98 dBm	-6.98 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.539 95 GHz	-39.14 dBm	-14.14 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.548 96 GHz	-25.70 dBm	-12.70 dB
3.549 GHz	3.550 GHz	200.000 kHz	3.550 00 GHz	-29.30 dBm	-16.30 dB
3.550 GHz	3.570 GHz	100.000 kHz	3.551 87 GHz	9.28 dBm	-20.72 dB
3.570 GHz	3.571 GHz	200.000 kHz	3.570 00 GHz	-31.56 dBm	-18.56 dB
3.571 GHz	3.580 GHz	1.000 MHz	3.571 04 GHz	-27.61 dBm	-14.61 dB
3.580 GHz	3.590 GHz	1.000 MHz	3.582 52 GHz	-35.72 dBm	-10.72 dB
3.590 GHz	3.720 GHz	1.000 MHz	3.609 94 GHz	-35.37 dBm	-10.37 dB
3.720 GHz	4.000 GHz	1.000 MHz	3.996 04 GHz	-47.05 dBm	-7.05 dB

FR1 n48 / 10MHz+10MHz / Middle Channel / MASK

QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.250 GHz	3.530 GHz	1.000 MHz	3.383 48 GHz	-47.75 dBm	-7.75 dB
3.530 GHz	3.595 GHz	1.000 MHz	3.582 55 GHz	-36.42 dBm	-11.42 dB
3.595 GHz	3.605 GHz	1.000 MHz	3.604 95 GHz	-35.30 dBm	-10.30 dB
3.605 GHz	3.614 GHz	1.000 MHz	3.613 96 GHz	-25.66 dBm	-12.66 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.615 00 GHz	-29.65 dBm	-16.65 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.630 81 GHz	9.04 dBm	-20.96 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.635 00 GHz	-30.65 dBm	-17.65 dB
3.636 GHz	3.645 GHz	1.000 MHz	3.636 04 GHz	-27.39 dBm	-14.39 dB
3.645 GHz	3.655 GHz	1.000 MHz	3.645 45 GHz	-35.65 dBm	-10.65 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.674 89 GHz	-35.56 dBm	-10.56 dB
3.720 GHz	4.000 GHz	1.000 MHz	3.989 98 GHz	-47.12 dBm	-7.12 dB

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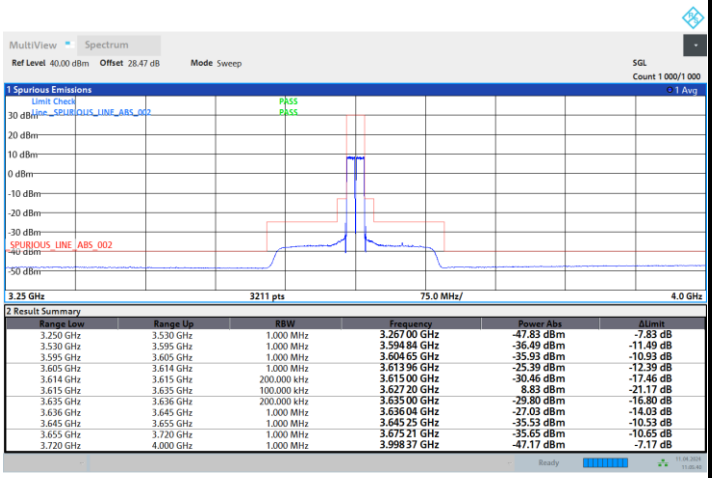
16QAM



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.250 GHz	3.530 GHz	1.000 MHz	3.267 00 GHz	-47.83 dBm	-7.83 dB
3.530 GHz	3.595 GHz	1.000 MHz	3.594 84 GHz	-36.49 dBm	-11.49 dB
3.595 GHz	3.605 GHz	1.000 MHz	3.604 65 GHz	-35.93 dBm	-10.93 dB
3.605 GHz	3.614 GHz	1.000 MHz	3.613 96 GHz	-25.39 dBm	-12.39 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.615 00 GHz	-30.46 dBm	-17.46 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.627 20 GHz	8.83 dBm	-21.17 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.635 00 GHz	-29.80 dBm	-16.80 dB
3.636 GHz	3.645 GHz	1.000 MHz	3.636 04 GHz	-27.03 dBm	-14.03 dB
3.645 GHz	3.655 GHz	1.000 MHz	3.645 25 GHz	-35.53 dBm	-10.53 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.675 21 GHz	-35.65 dBm	-10.65 dB
3.720 GHz	4.000 GHz	1.000 MHz	3.998 37 GHz	-47.17 dBm	-7.17 dB

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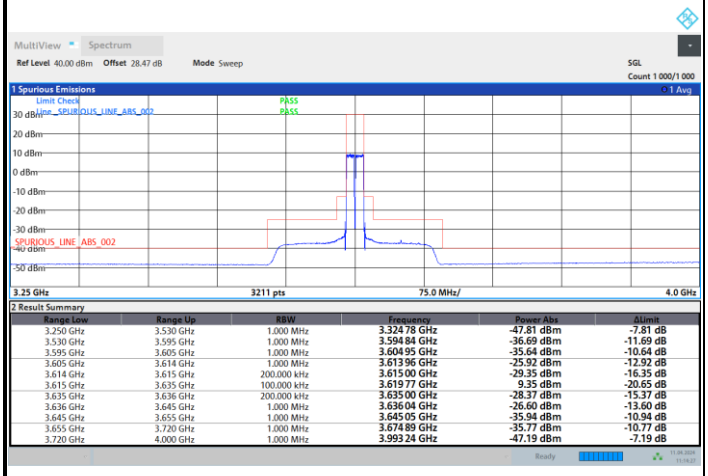
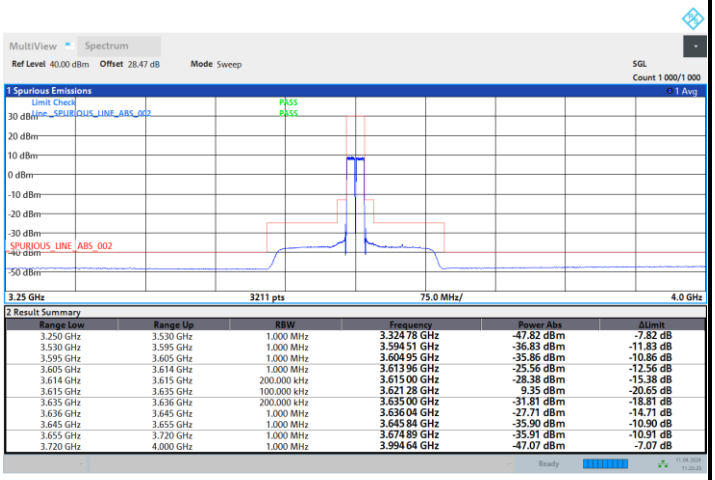
64QAM



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.250 GHz	3.530 GHz	1.000 MHz	3.324 78 GHz	-47.81 dBm	-7.81 dB
3.530 GHz	3.595 GHz	1.000 MHz	3.594 84 GHz	-36.69 dBm	-11.69 dB
3.595 GHz	3.605 GHz	1.000 MHz	3.604 95 GHz	-35.64 dBm	-10.64 dB
3.605 GHz	3.614 GHz	1.000 MHz	3.613 96 GHz	-25.92 dBm	-12.92 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.615 00 GHz	-29.35 dBm	-16.35 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.619 77 GHz	9.35 dBm	-20.65 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.635 00 GHz	-28.37 dBm	-15.37 dB
3.636 GHz	3.645 GHz	1.000 MHz	3.636 04 GHz	-26.60 dBm	-13.60 dB
3.645 GHz	3.655 GHz	1.000 MHz	3.645 05 GHz	-35.94 dBm	-10.94 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.674 89 GHz	-35.77 dBm	-10.77 dB
3.720 GHz	4.000 GHz	1.000 MHz	3.993 24 GHz	-47.19 dBm	-7.19 dB

11:14:27 11.04.2024

256QAM



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.250 GHz	3.530 GHz	1.000 MHz	3.324 78 GHz	-47.82 dBm	-7.82 dB
3.530 GHz	3.595 GHz	1.000 MHz	3.594 51 GHz	-36.83 dBm	-11.83 dB
3.595 GHz	3.605 GHz	1.000 MHz	3.604 95 GHz	-35.86 dBm	-10.86 dB
3.605 GHz	3.614 GHz	1.000 MHz	3.613 96 GHz	-25.56 dBm	-12.56 dB
3.614 GHz	3.615 GHz	200.000 kHz	3.615 00 GHz	-28.38 dBm	-15.38 dB
3.615 GHz	3.635 GHz	100.000 kHz	3.621 28 GHz	9.35 dBm	-20.65 dB
3.635 GHz	3.636 GHz	200.000 kHz	3.635 00 GHz	-31.81 dBm	-18.81 dB
3.636 GHz	3.645 GHz	1.000 MHz	3.636 04 GHz	-27.71 dBm	-14.71 dB
3.645 GHz	3.655 GHz	1.000 MHz	3.645 84 GHz	-35.90 dBm	-10.90 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.674 89 GHz	-35.91 dBm	-10.91 dB
3.720 GHz	4.000 GHz	1.000 MHz	3.994 64 GHz	-47.07 dBm	-7.07 dB

11:22:26 11.04.2024