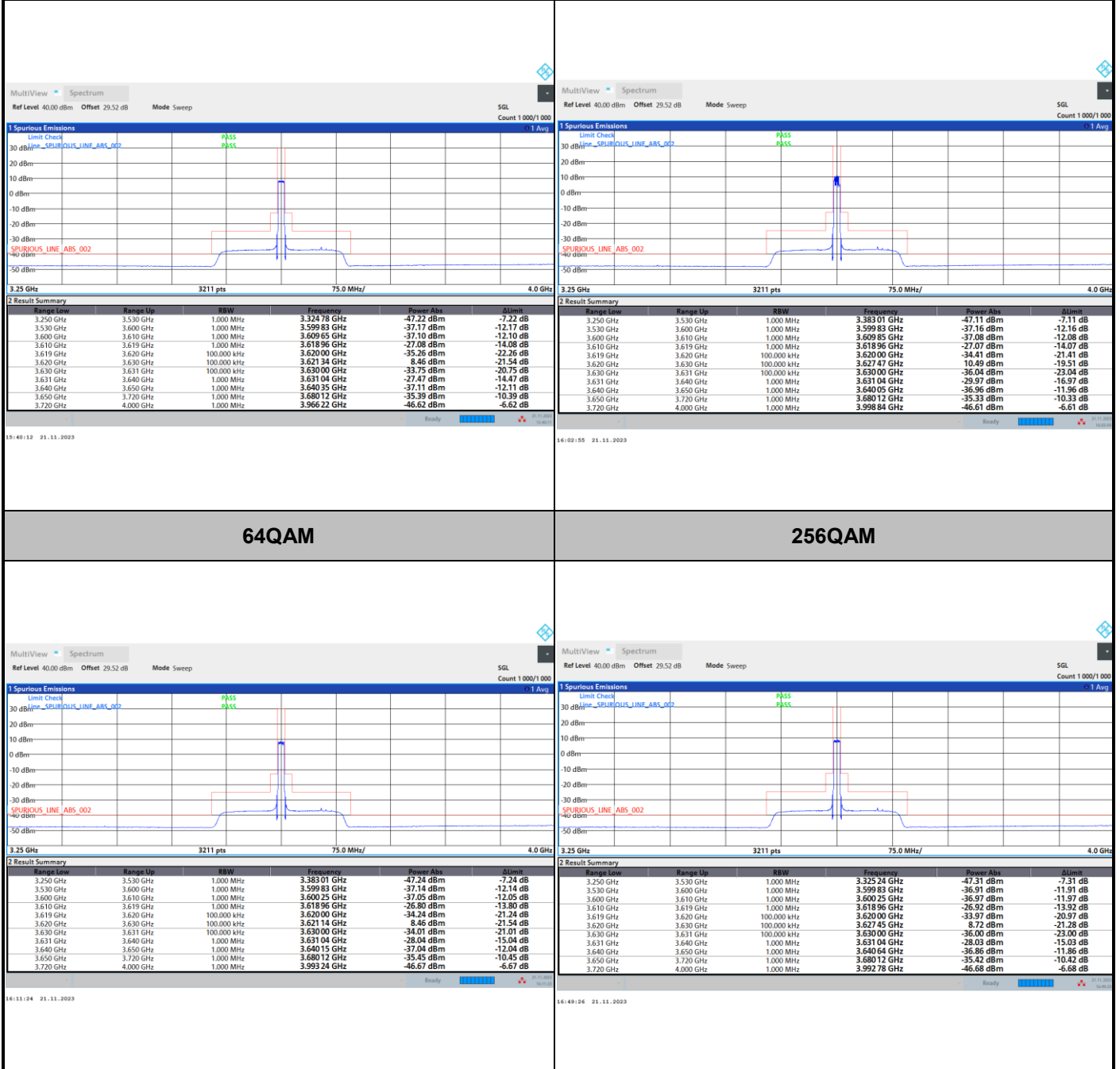




FR1 n48 / 10MHz / Middle Channel / MASK

QPSK

16QAM

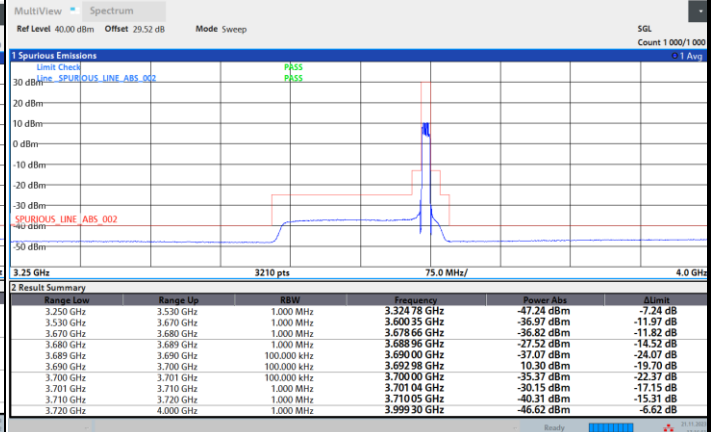
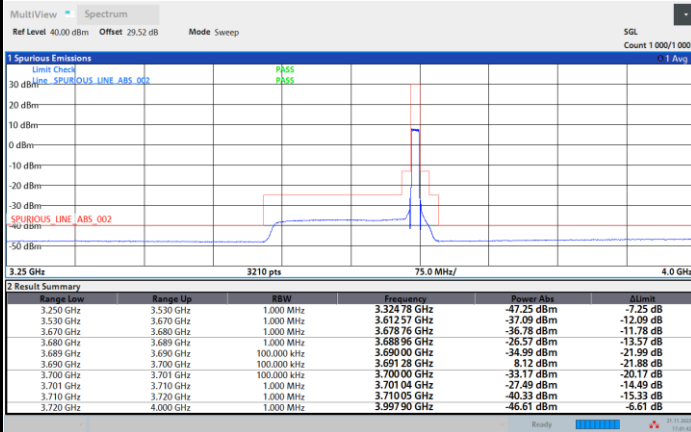




FR1 n48 / 10MHz / Highest Channel / MASK

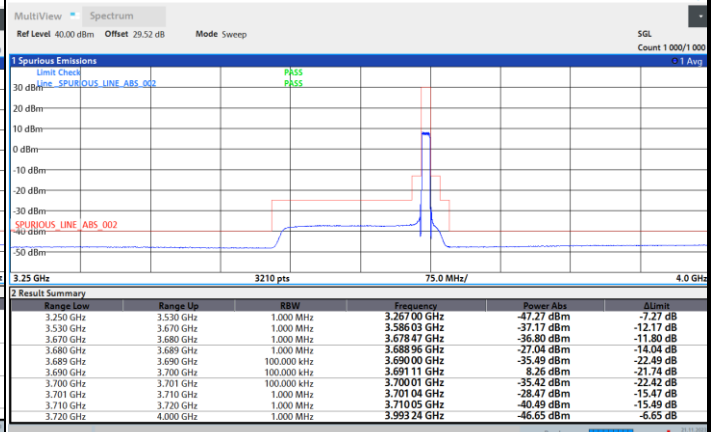
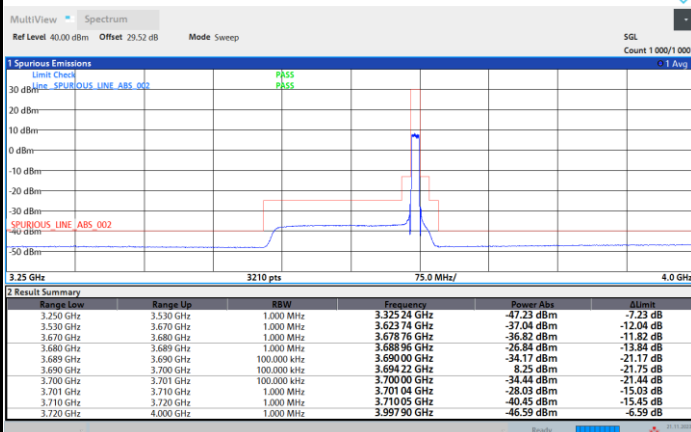
QPSK

16QAM



64QAM

256QAM

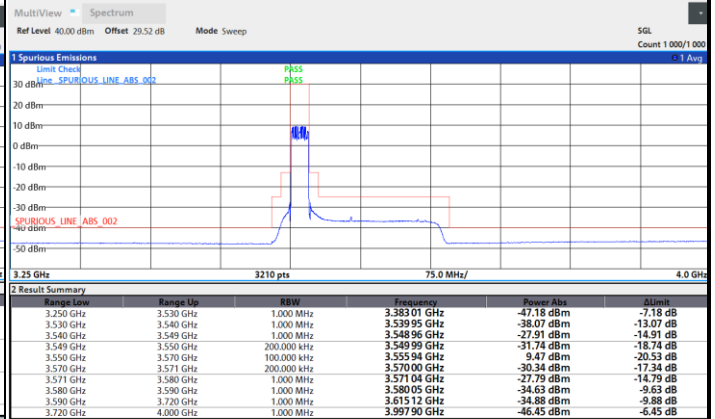
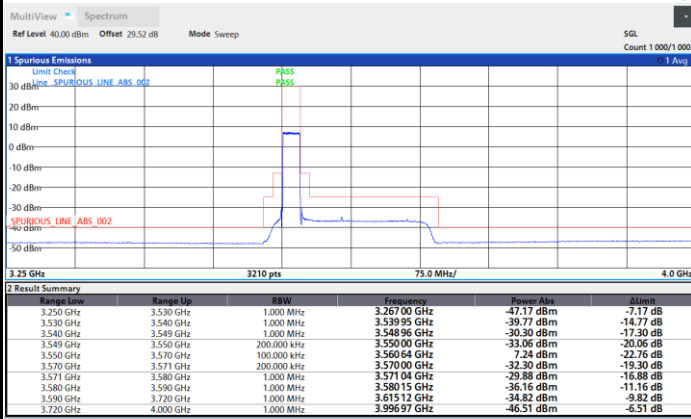




FR1 n48 / 20MHz / Lowest Channel / MASK

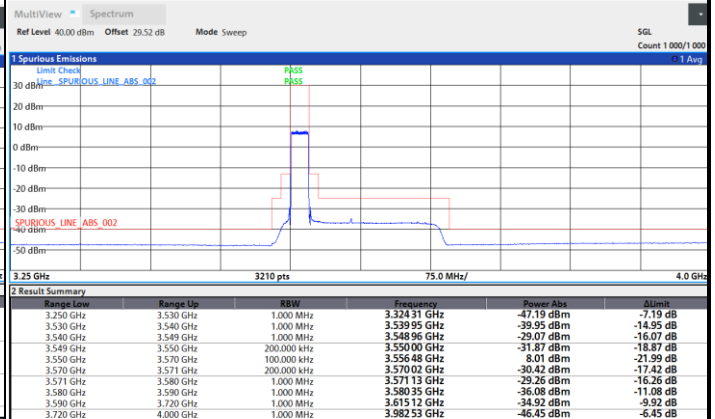
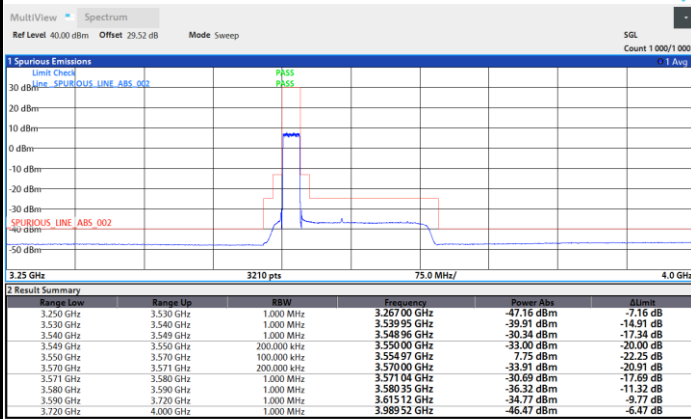
QPSK

16QAM



64QAM

256QAM

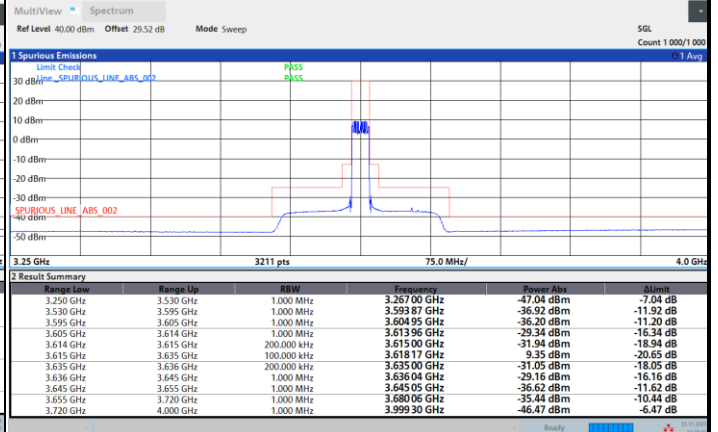
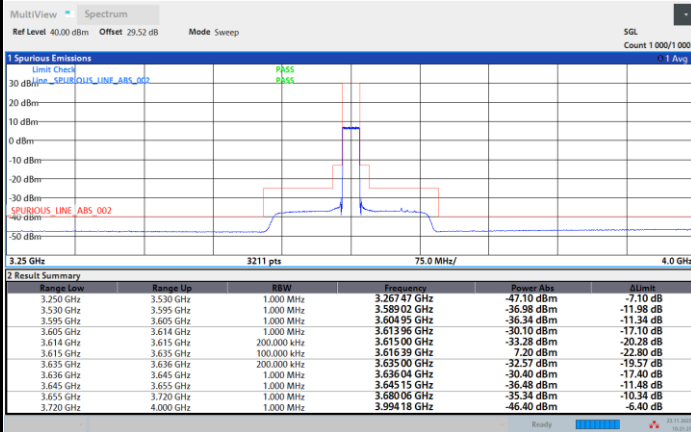




FR1 n48 / 20MHz / Middle Channel / MASK

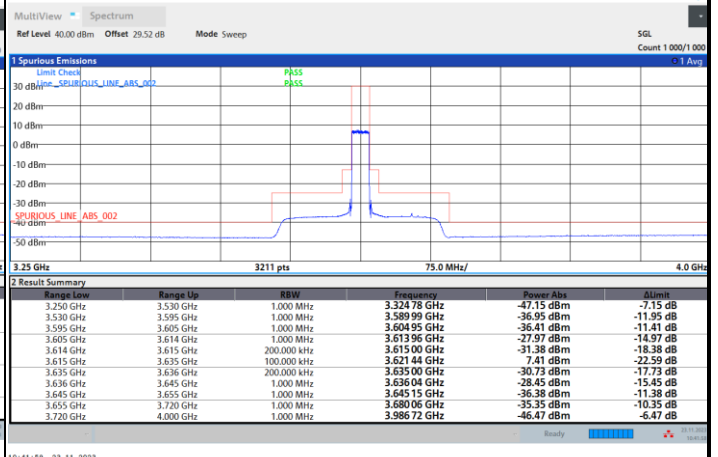
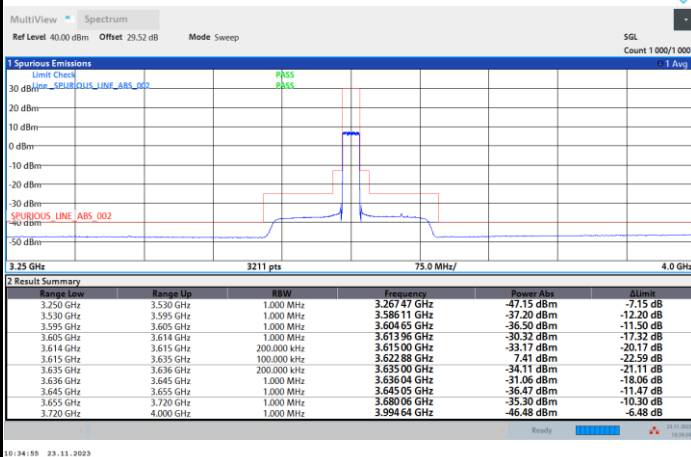
QPSK

16QAM



64QAM

256QAM

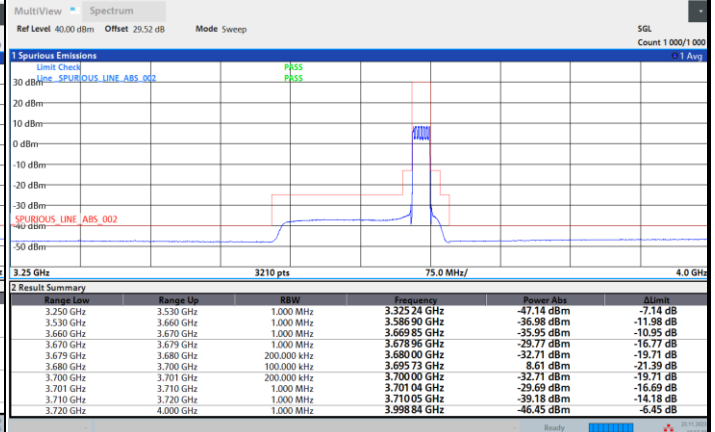
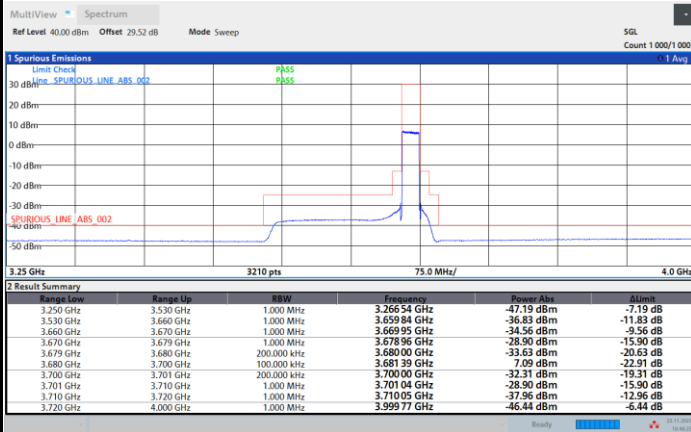




FR1 n48 / 20MHz / Highest Channel / MASK

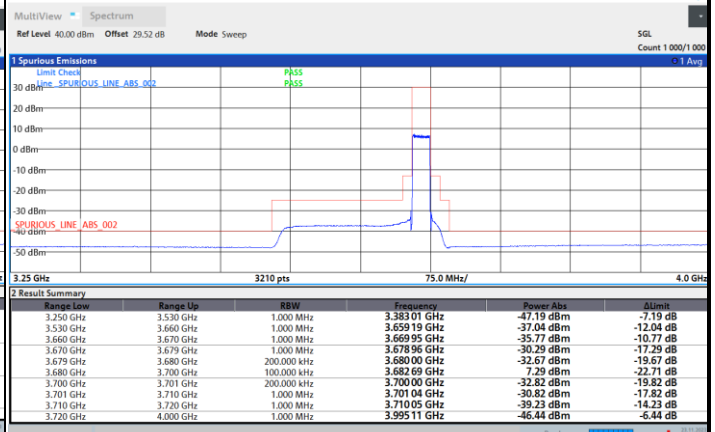
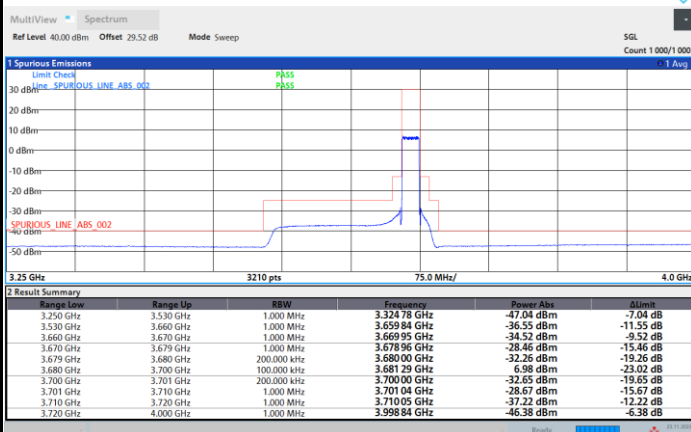
QPSK

16QAM



64QAM

256QAM

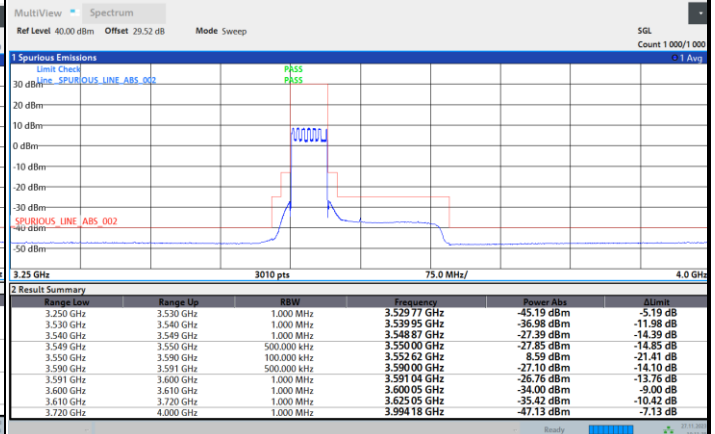
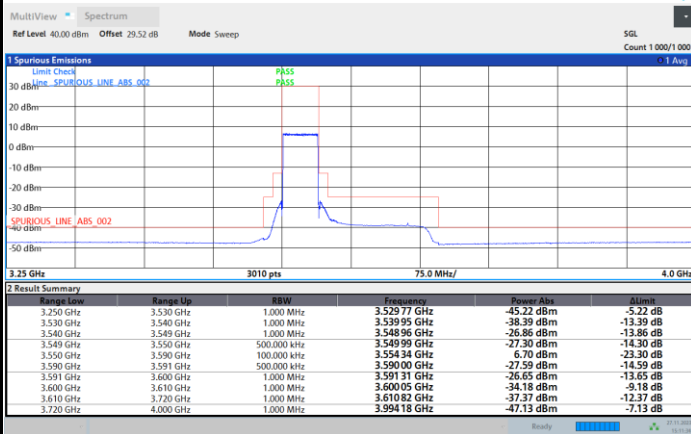




FR1 n48 / 40MHz / Lowest Channel / MASK

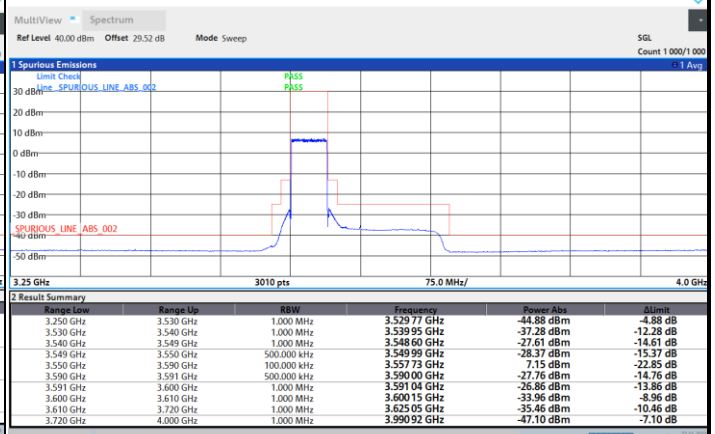
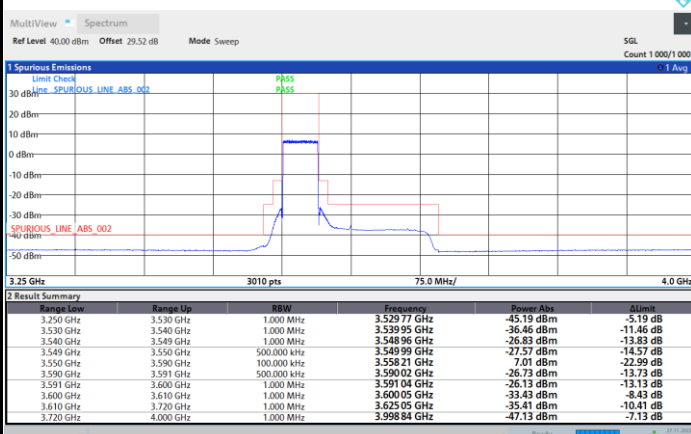
QPSK

16QAM



64QAM

256QAM

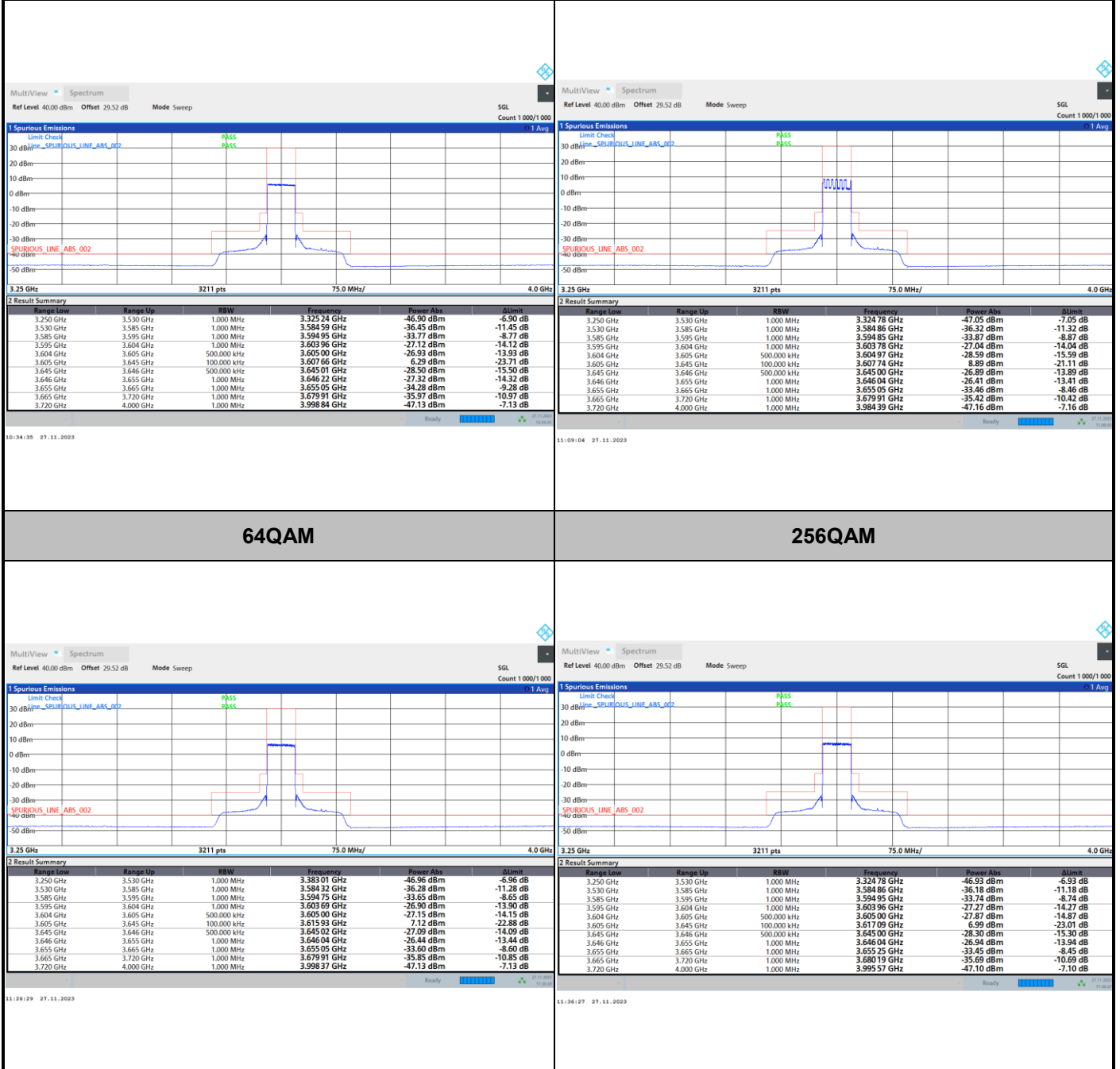




FR1 n48 / 40MHz / Middle Channel / MASK

QPSK

16QAM

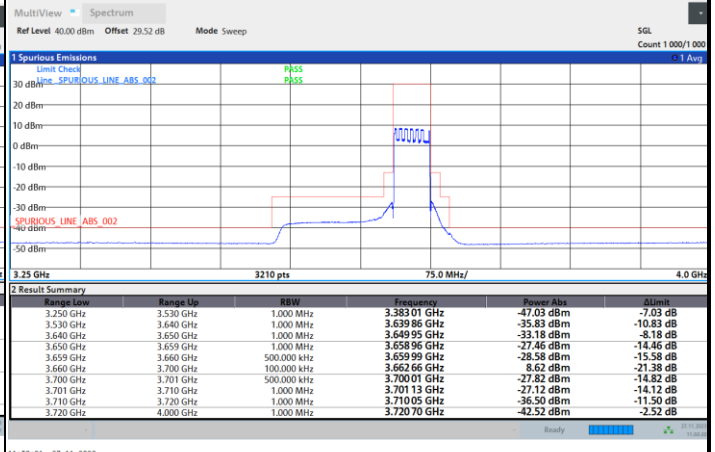
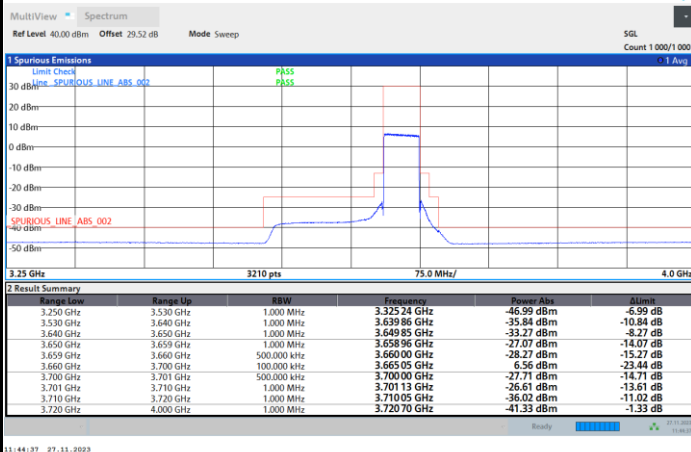




FR1 n48 / 40MHz / Highest Channel / MASK

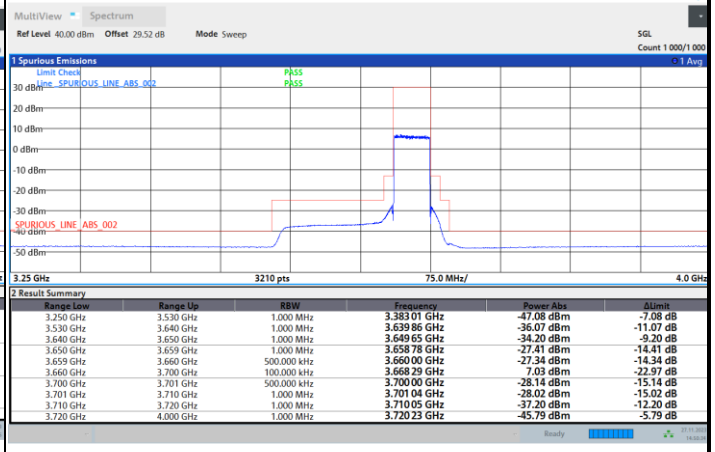
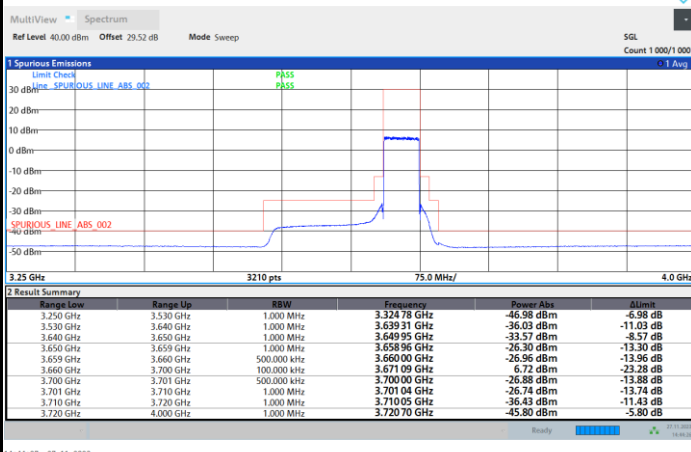
QPSK

16QAM



64QAM

256QAM

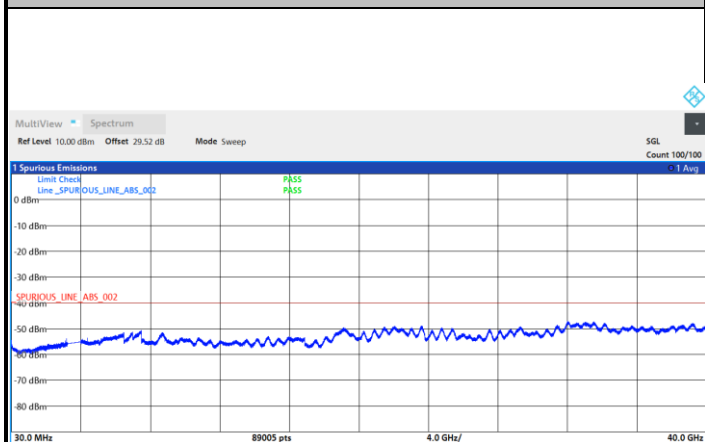




Conducted Spurious Emission

FR1 n48 / 10MHz / QPSK / CSE

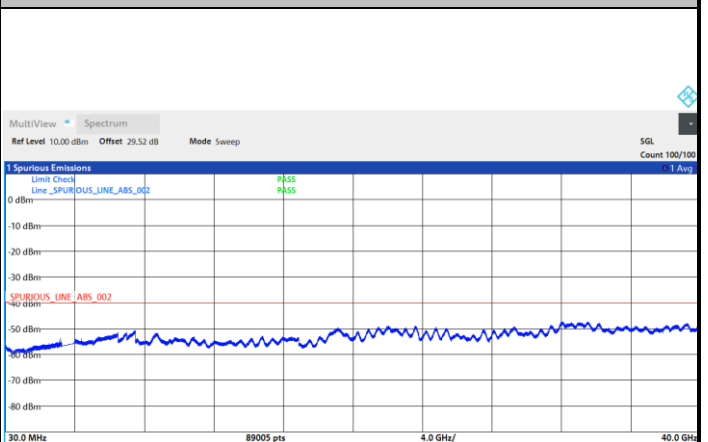
Lowest Channel



2 Result Summary						
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit	
30.000 MHz	1.000 GHz	1.000 MHz	35.57471 MHz	-54.45 dBm	-14.45 dB	
1.000 GHz	3.250 GHz	1.000 MHz	3.20965 GHz	-53.94 dBm	-13.94 dB	
4.000 GHz	10.000 GHz	1.000 MHz	7.49037 GHz	-50.68 dBm	-10.68 dB	
10.000 GHz	25.000 GHz	1.000 MHz	22.04251 GHz	-48.88 dBm	-8.88 dB	
25.000 GHz	40.000 GHz	1.000 MHz	31.99283 GHz	-47.01 dBm	-7.01 dB	

15:11:00 21.11.2023

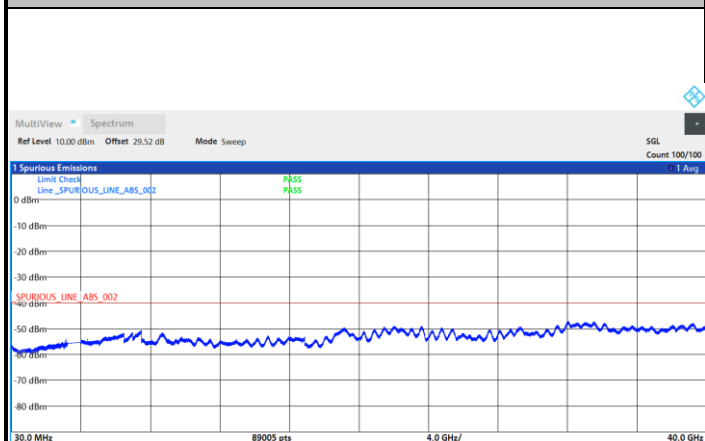
Middle Channel



2 Result Summary						
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit	
30.000 MHz	1.000 GHz	1.000 MHz	35.57471 MHz	-54.49 dBm	-14.49 dB	
1.000 GHz	3.250 GHz	1.000 MHz	3.20993 GHz	-53.54 dBm	-13.54 dB	
4.000 GHz	10.000 GHz	1.000 MHz	7.48557 GHz	-50.63 dBm	-10.63 dB	
10.000 GHz	25.000 GHz	1.000 MHz	22.03830 GHz	-48.89 dBm	-8.89 dB	
25.000 GHz	40.000 GHz	1.000 MHz	31.99752 GHz	-47.16 dBm	-7.16 dB	

15:41:42 21.11.2023

Highest Channel



2 Result Summary						
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit	
30.000 MHz	1.000 GHz	1.000 MHz	35.57471 MHz	-54.61 dBm	-14.61 dB	
1.000 GHz	3.250 GHz	1.000 MHz	3.20993 GHz	-54.11 dBm	-14.11 dB	
4.000 GHz	10.000 GHz	1.000 MHz	7.48597 GHz	-50.64 dBm	-10.64 dB	
10.000 GHz	25.000 GHz	1.000 MHz	22.05751 GHz	-48.97 dBm	-8.97 dB	
25.000 GHz	40.000 GHz	1.000 MHz	32.02470 GHz	-47.15 dBm	-7.15 dB	

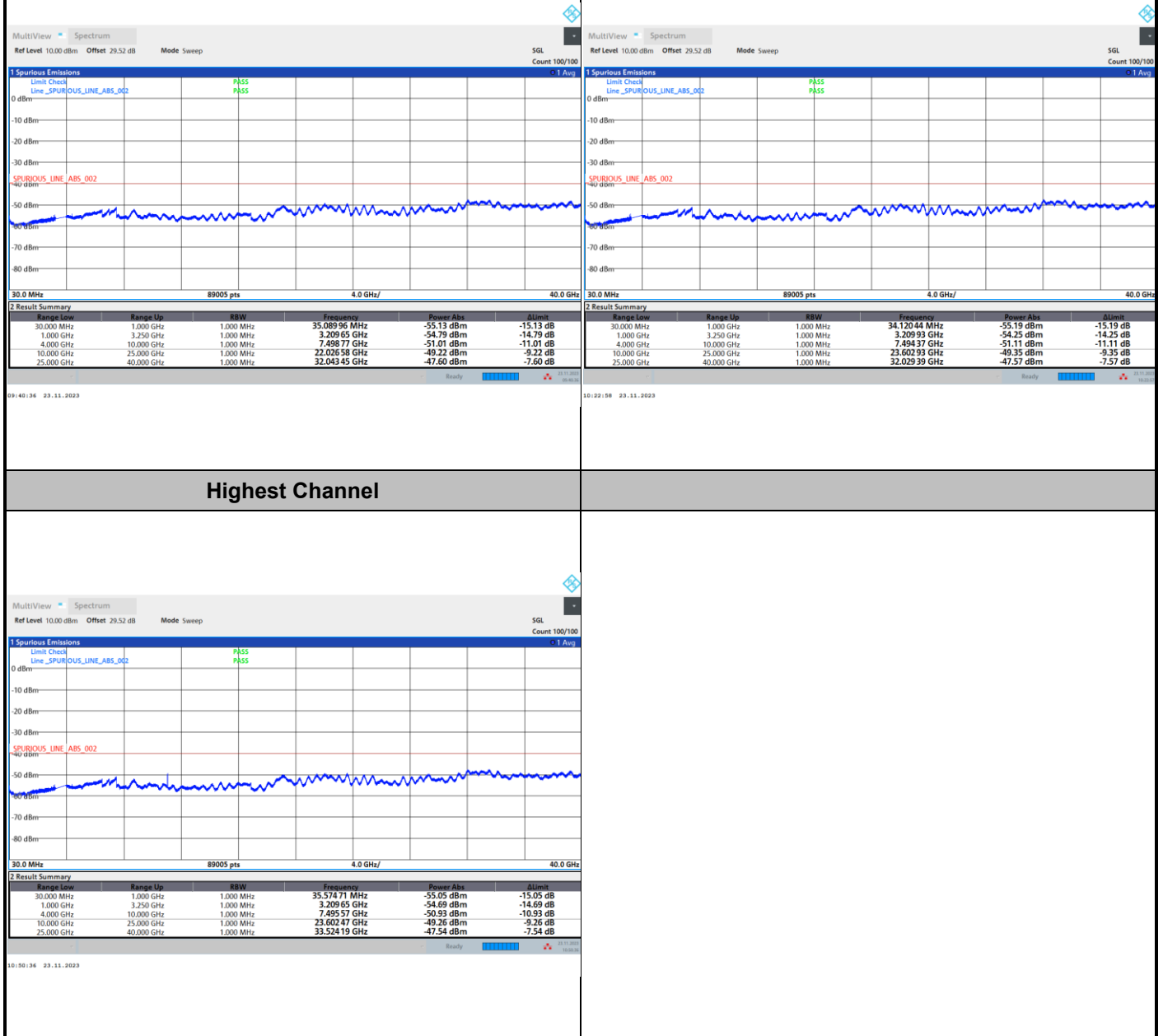
17:07:43 21.11.2023



FR1 n48 / 20MHz / QPSK / CSE

Lowest Channel

Middle Channel

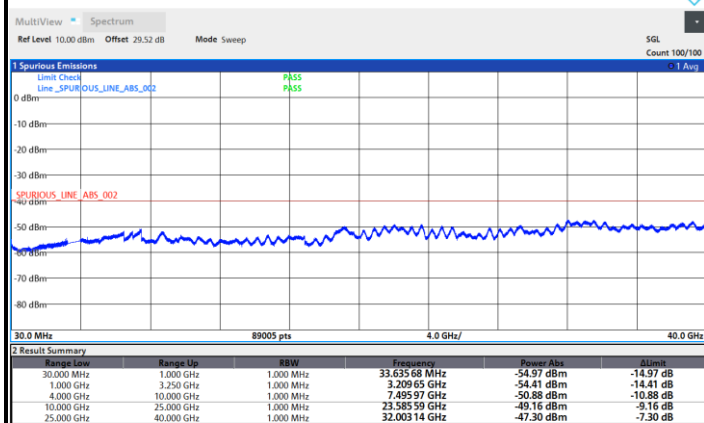




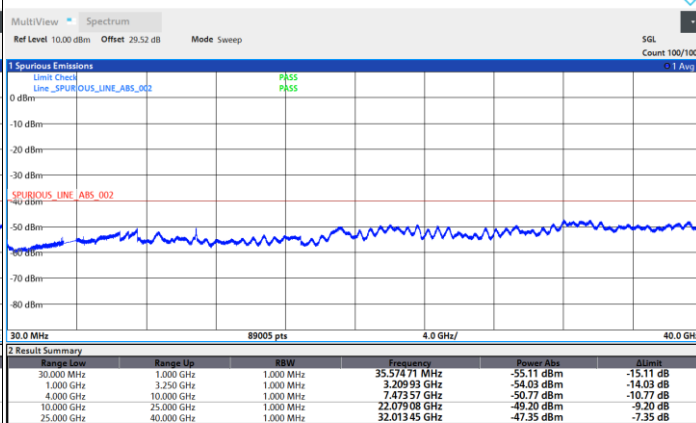
FR1 n48 / 40MHz / QPSK / CSE

Lowest Channel

Middle Channel

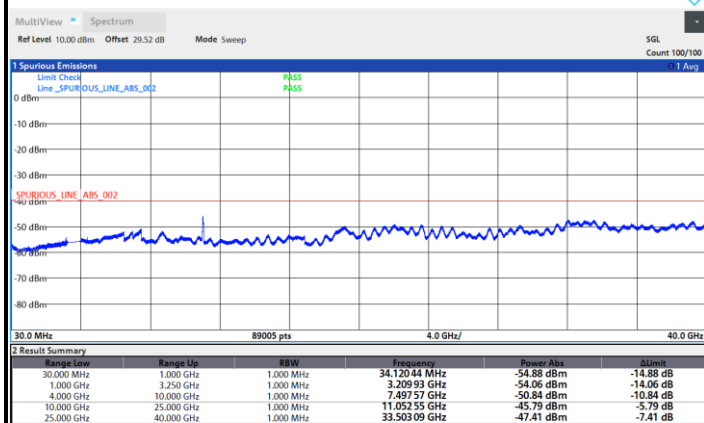


15:33:17 07.11.2023



10:35:49 07.11.2023

Highest Channel



11:45:40 07.11.2023

Frequency Stability

Test Conditions		FR1 n48 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Frequency offset (ppm)	Result
50	Normal Voltage	0.5517	PASS
40	Normal Voltage	0.6069	
30	Normal Voltage	0.5517	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.6621	
0	Normal Voltage	0.3310	
-10	Normal Voltage	1.4345	
-20	Normal Voltage	0.6069	
-30	Normal Voltage	0.3862	
20	Maximum Voltage	0.0552	
20	Normal Voltage	0.1103	
20	Minimum Voltage	0.7724	

Note:

1. Normal Voltage = 115 V. ; Minimum Voltage = 100 V. ; Maximum Voltage = 240 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



<MIMO ANT 2>

Maximum EIRP (dBm/10MHz)

Mode	FR1 n48 : Conducted (dBm/10MHz) <SISO> Lowest Channel							
BW	10MHz		20MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Lowest CH	20.32	20.45	20.48	20.40	19.93	20.24		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Lowest CH	20.20	20.19	20.09	20.07	20.00	19.72		

Mode	FR1 n48 : Maximum EIRP (dBm/10MHz) <MIMO 4TX> Lowest Channel							
BW	10MHz		20MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Lowest CH	43.84	43.97	44.00	43.92	43.45	43.76		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Lowest CH	43.72	43.71	43.61	43.59	43.52	43.24		
Limit	47dBm/10MHz							
Result	PASS							

Note

1. The measured conducted result has included duty cycle offset factor.
2. The Maximum EIRP = conducted result + 6.02dB (4TX) + 17.5dBi MIMO antenna gain.



Mode	FR1 n48 : Conducted (dBm/10MHz) <SISO> Middle Channel							
BW	10MHz		20MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	20.02	20.21	19.74	19.76	19.30	19.82		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	19.98	20.06	19.58	19.49	19.59	19.54		

Mode	FR1 n48 : Maximum EIRP (dBm/10MHz) <MIMO 4TX> Middle Channel							
BW	10MHz		20MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	43.54	43.73	43.26	43.28	42.82	43.34		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	43.50	43.58	43.10	43.01	43.11	43.06		
Limit	47dBm/10MHz							
Result	PASS							

Note

1. The measured conducted result has included duty cycle offset factor.
2. The Maximum EIRP = conducted result + 6.02dB (4TX) + 17.5dBi MIMO antenna gain.



Mode	FR1 n48 : Conducted (dBm/10MHz) <SISO> Highest Channel							
BW	10MHz		20MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Highest CH	19.68	19.88	19.44	19.64	19.32	19.34		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Highest CH	19.63	19.77	19.37	19.41	19.42	19.44		

Mode	FR1 n48 : Maximum EIRP (dBm/10MHz) <MIMO 4TX> Highest Channel							
BW	10MHz		20MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Highest CH	43.20	43.40	42.96	43.16	42.84	42.86		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Highest CH	43.15	43.29	42.89	42.93	42.94	42.96		
Limit	47dBm/10MHz							
Result	PASS							

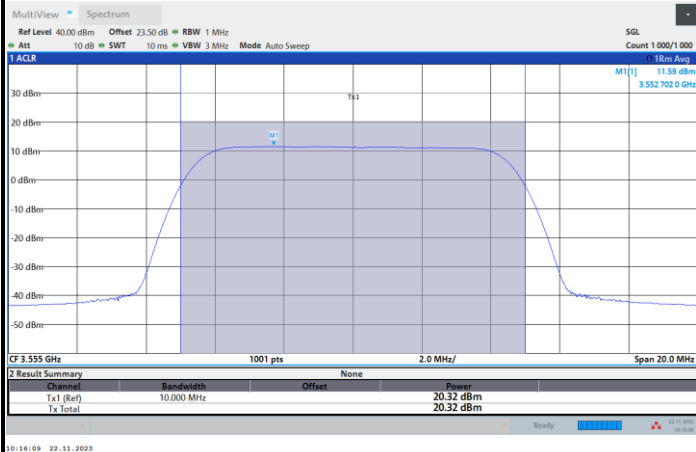
Note

1. The measured conducted result has included duty cycle offset factor.
2. The Maximum EIRP = conducted result + 6.02dB (4TX) + 17.5dBi MIMO antenna gain.

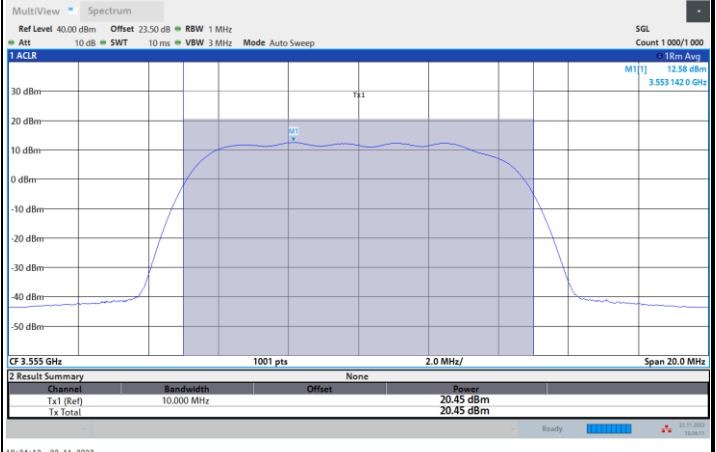


FR1 n48 / 10MHz / Lowest Channel / Conducted (dBm/10MHz)

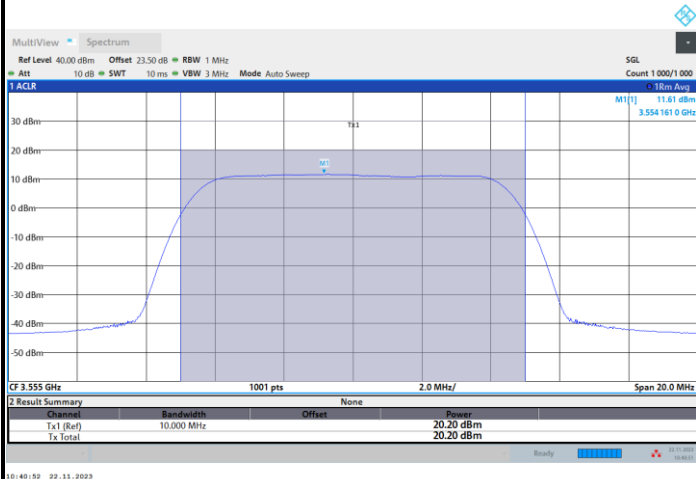
QPSK



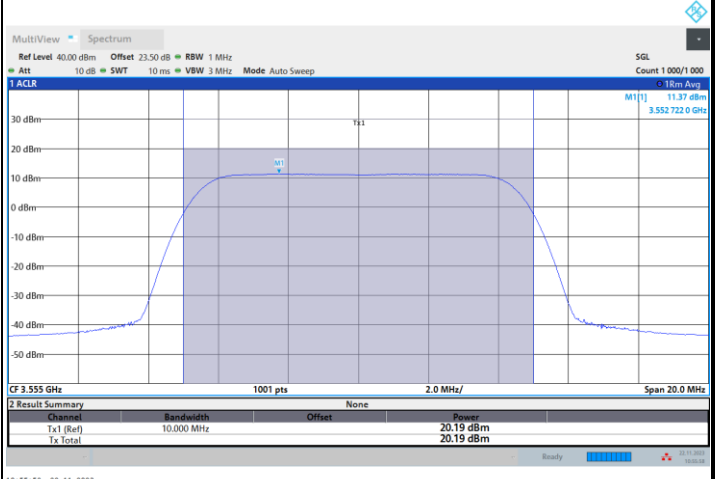
16QAM



64QAM



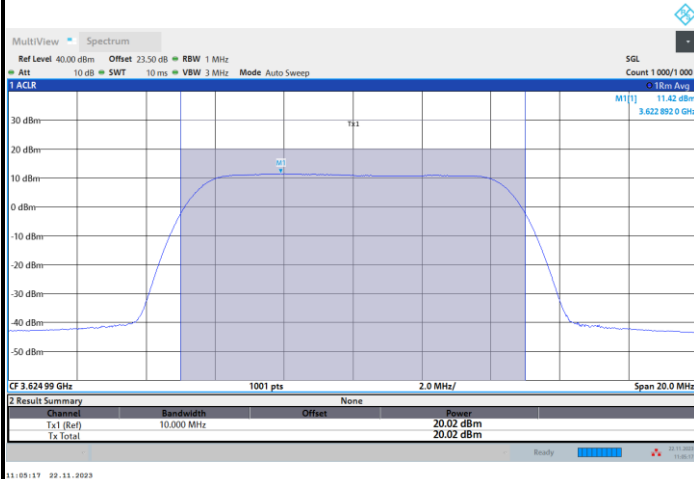
256QAM



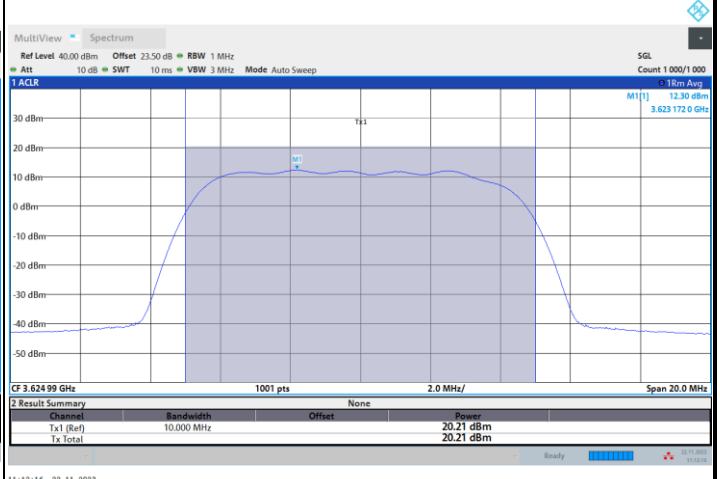


FR1 n48 / 10MHz / Middle Channel / Conducted (dBm/10MHz)

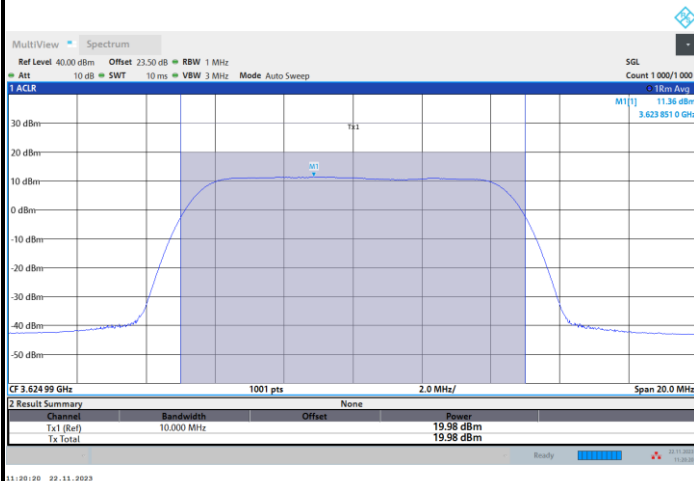
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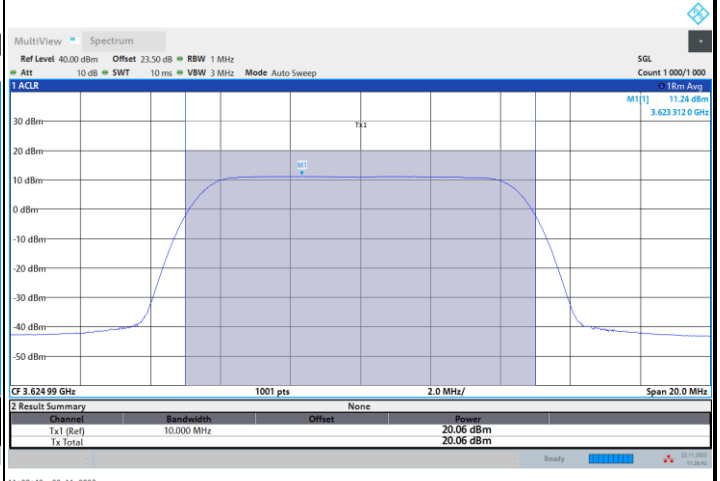
16QAM



64QAM



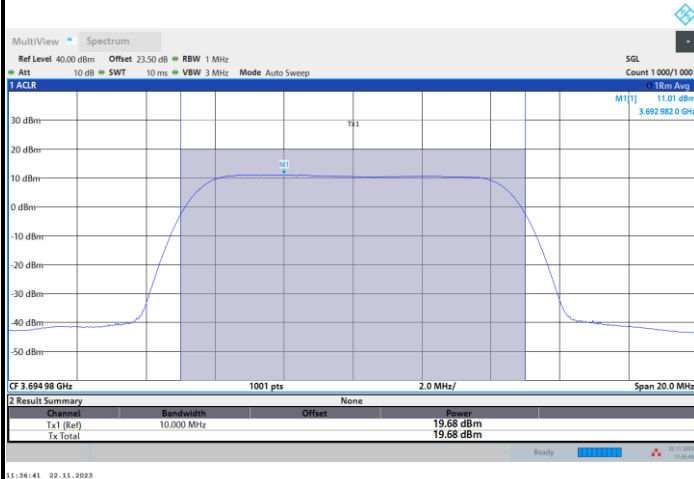
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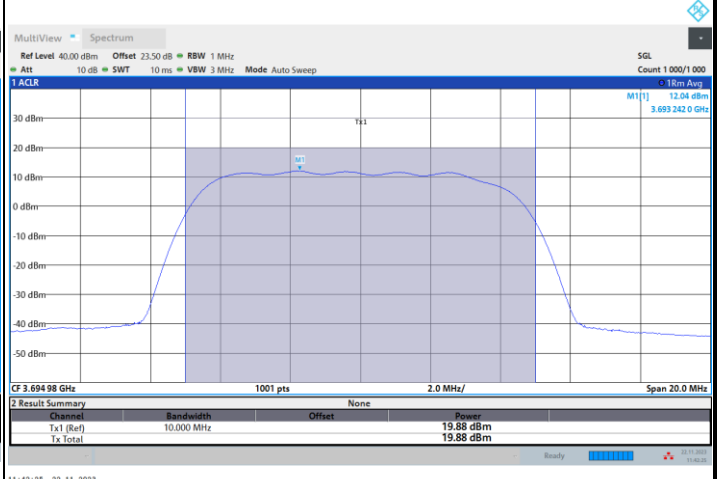


FR1 n48 / 10MHz / Highest Channel / Conducted (dBm/10MHz)

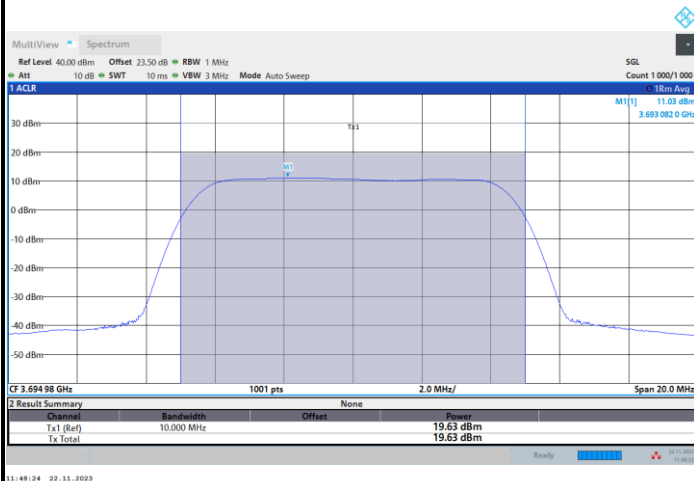
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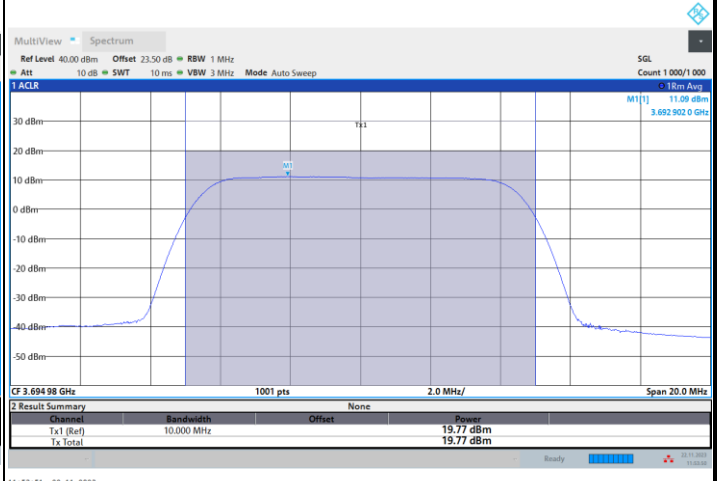
16QAM



64QAM



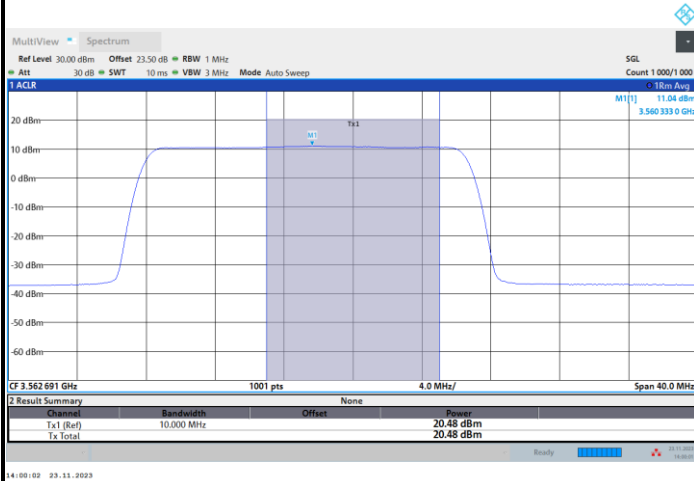
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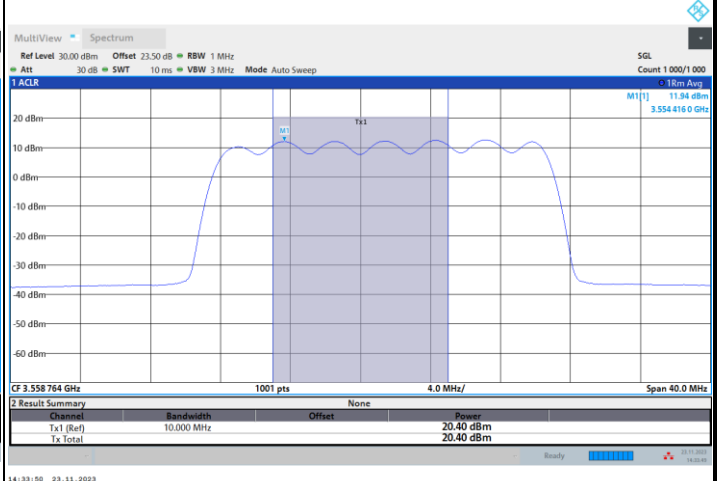


FR1 n48 / 20MHz / Lowest Channel / Conducted (dBm/10MHz)

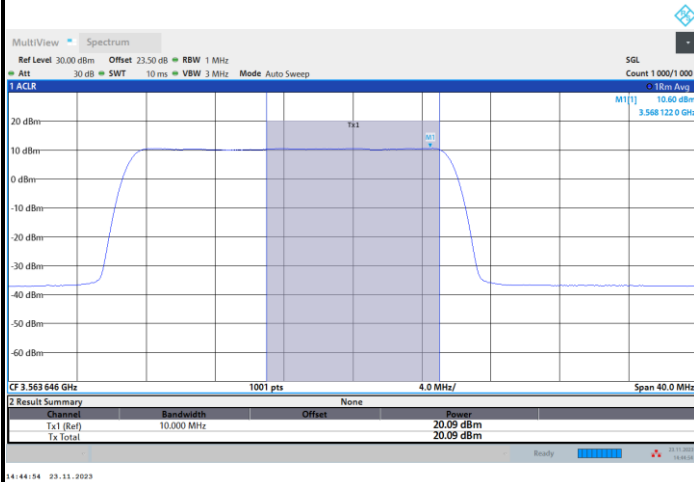
QPSK



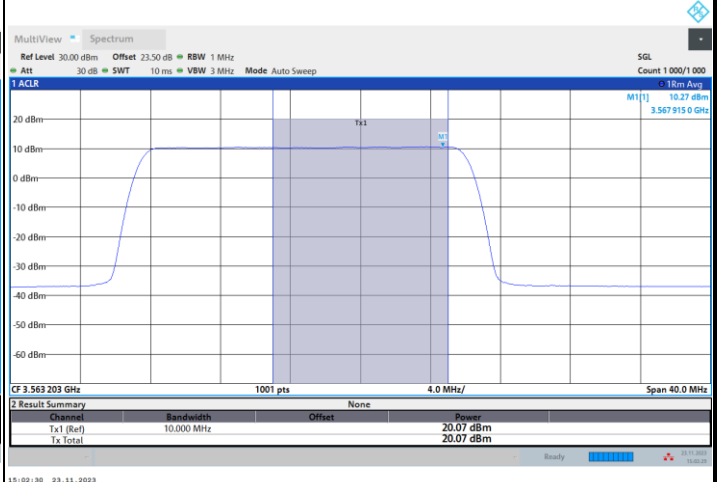
16QAM



64QAM



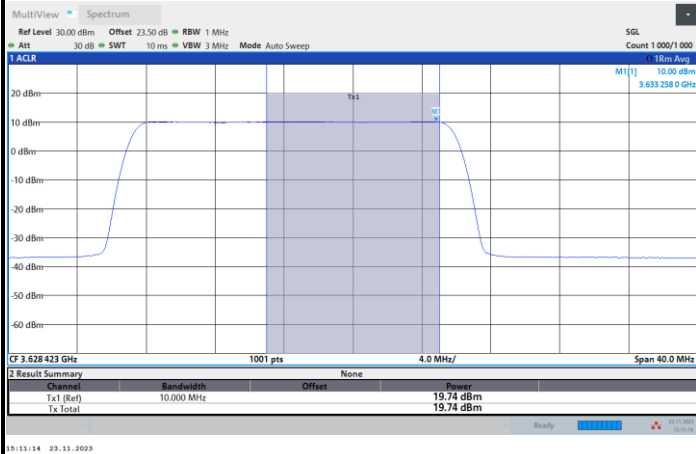
256QAM



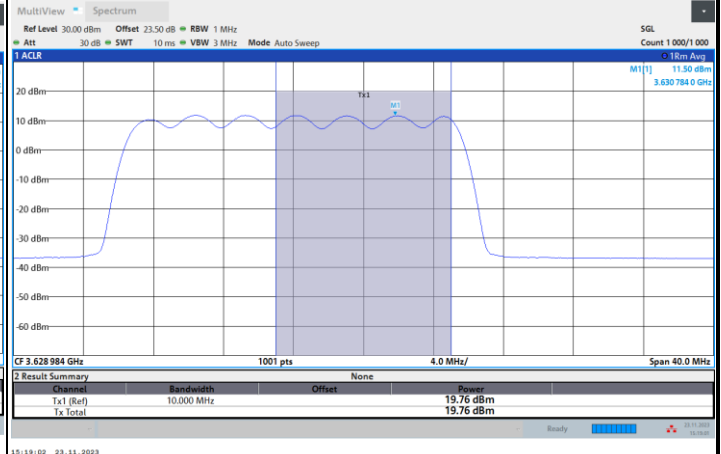


FR1 n48 / 20MHz / Middle Channel / Conducted (dBm/10MHz)

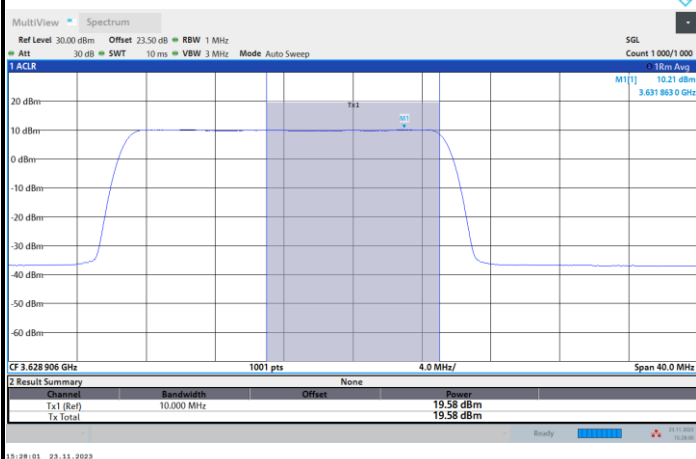
QPSK



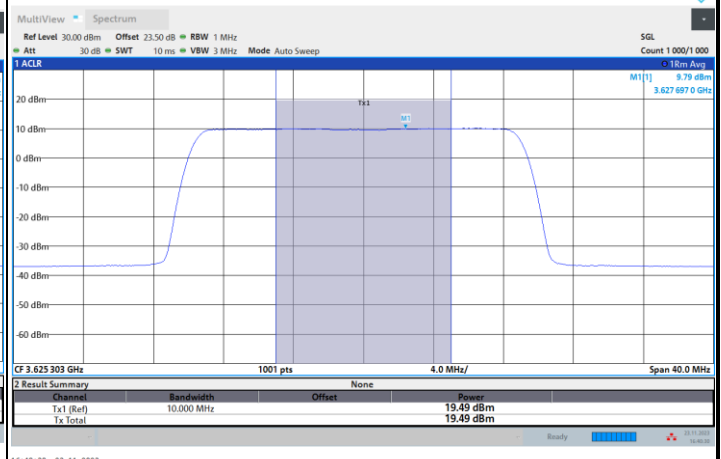
16QAM



64QAM



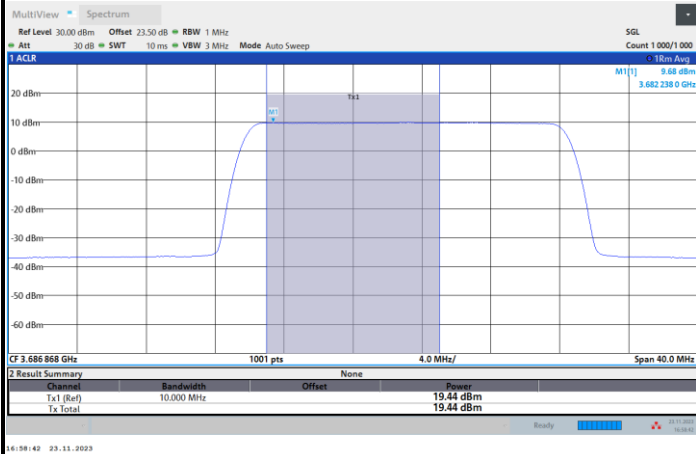
256QAM



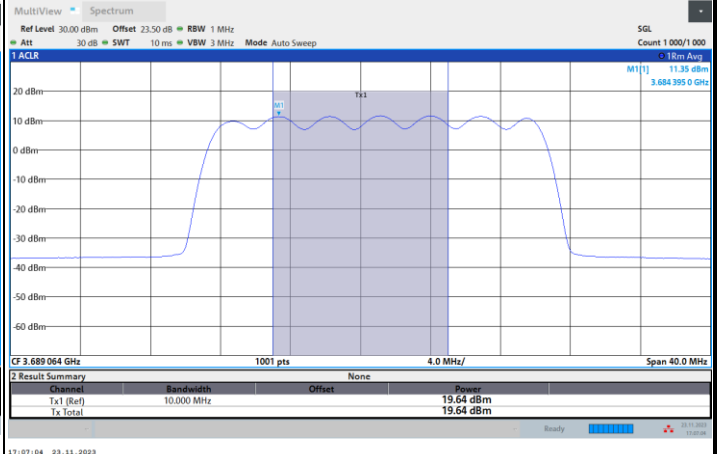


FR1 n48 / 20MHz / Highest Channel / Conducted (dBm/10MHz)

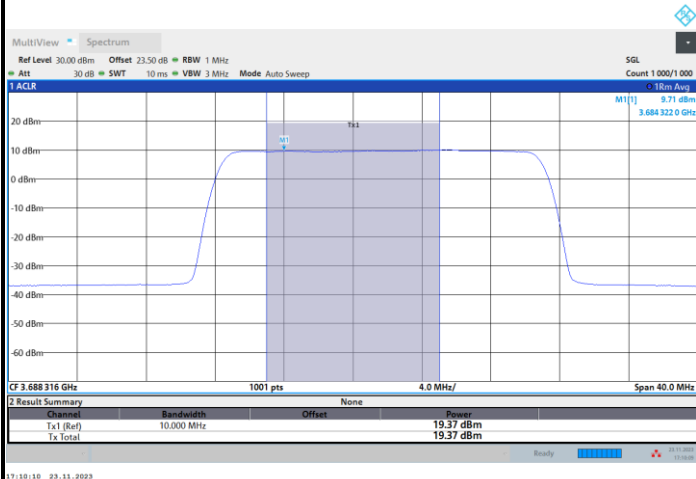
QPSK



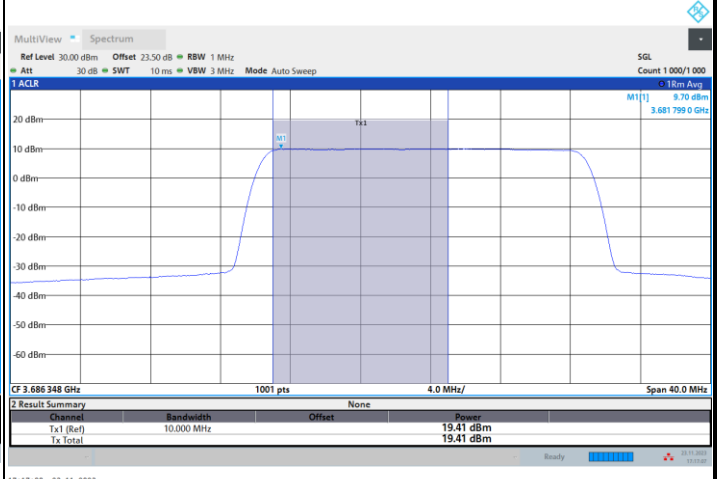
16QAM



64QAM



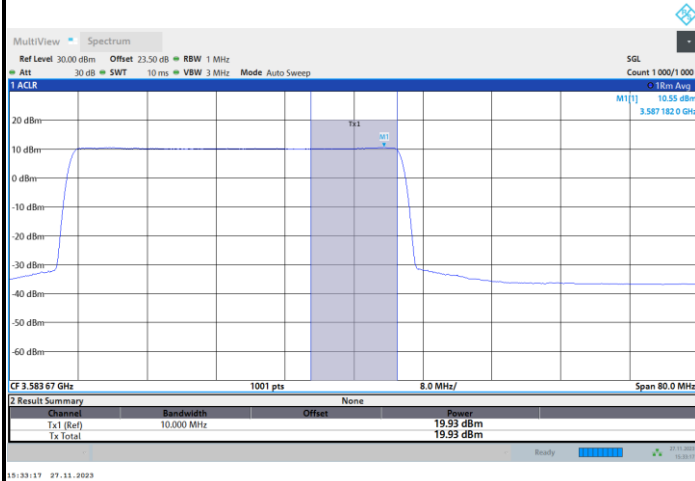
256QAM



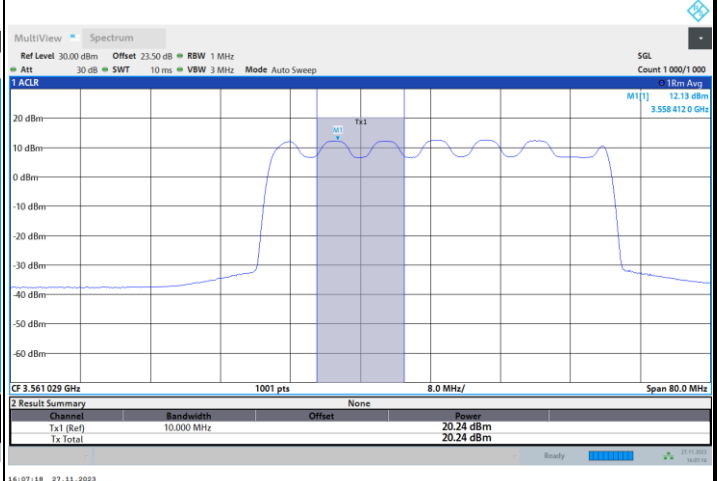


FR1 n48 / 40MHz / Lowest Channel / Conducted (dBm/10MHz)

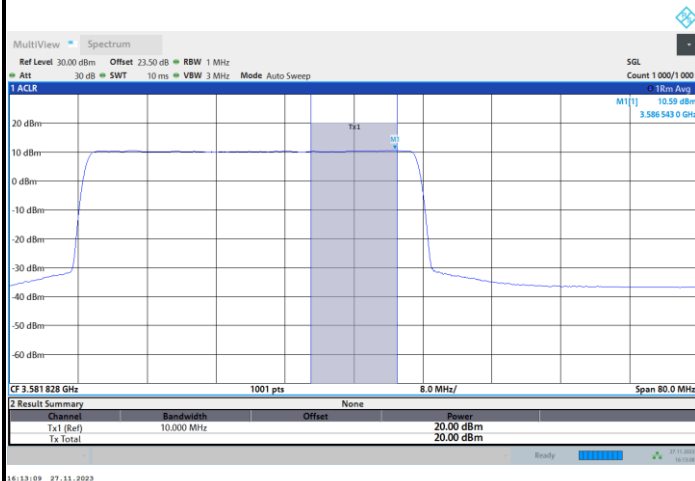
QPSK



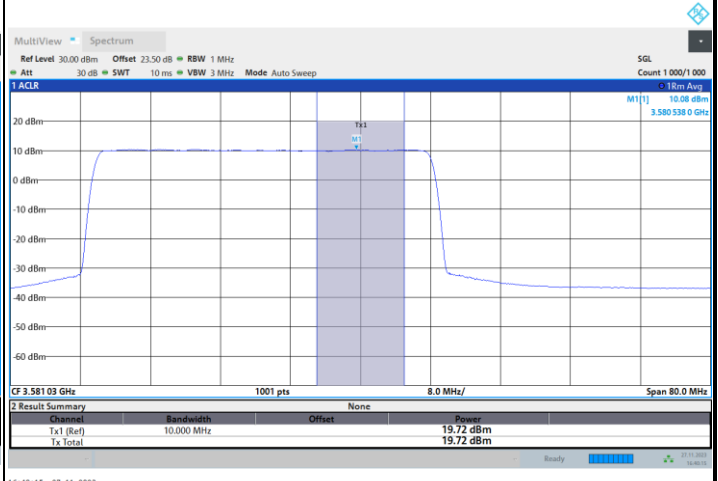
16QAM



64QAM



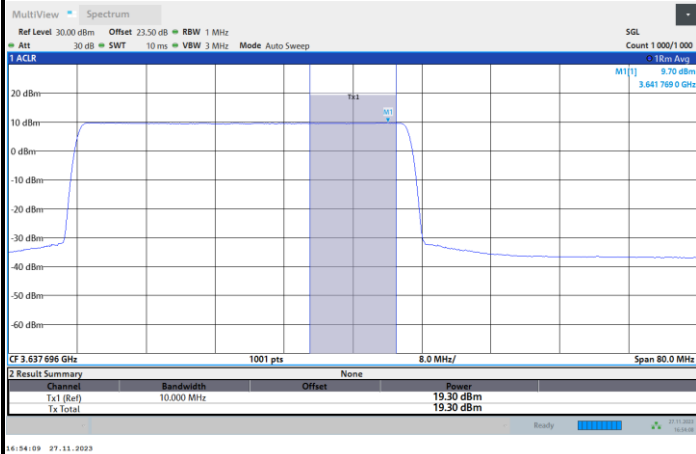
256QAM



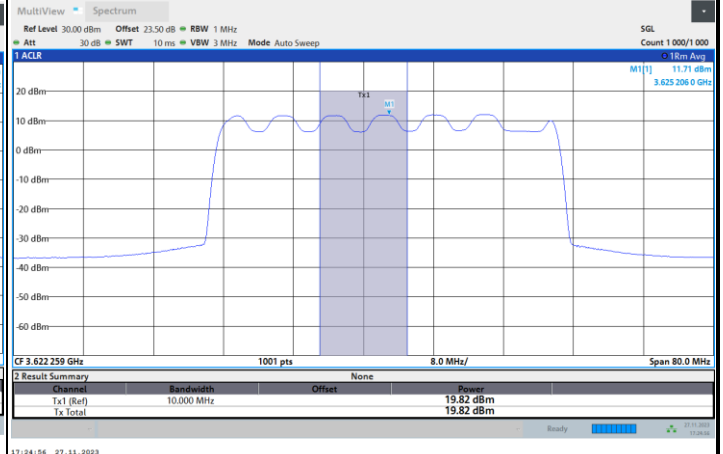


FR1 n48 / 40MHz / Middle Channel / Conducted (dBm/10MHz)

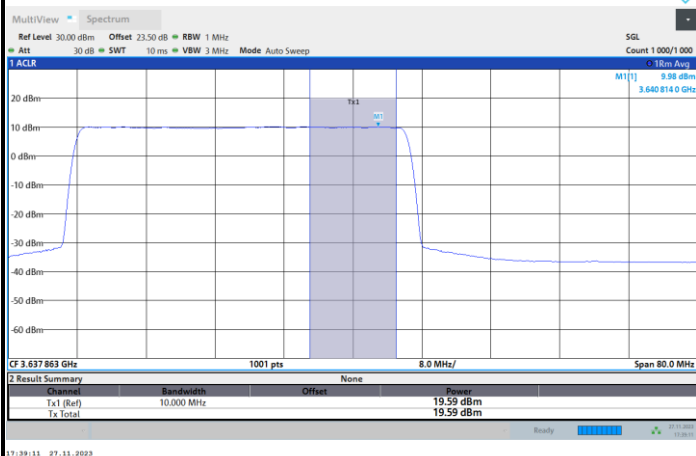
QPSK



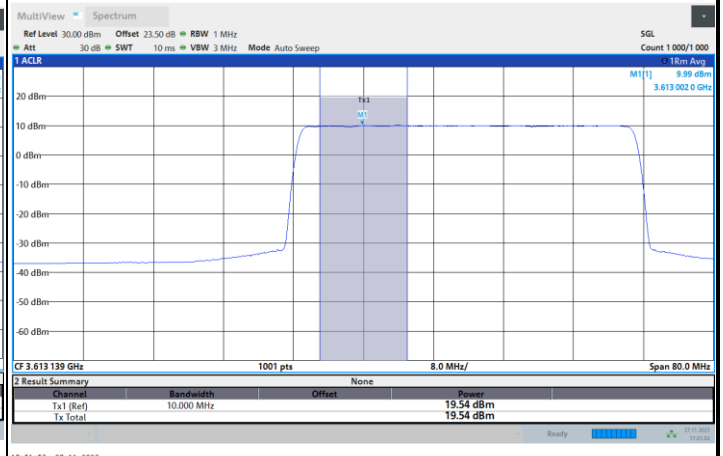
16QAM



64QAM



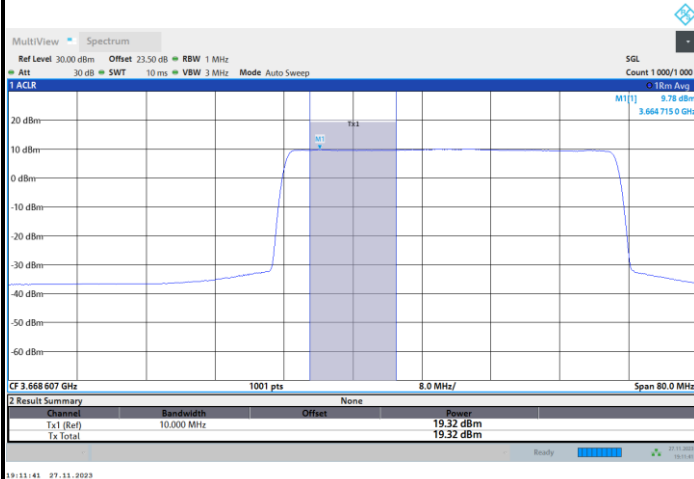
256QAM



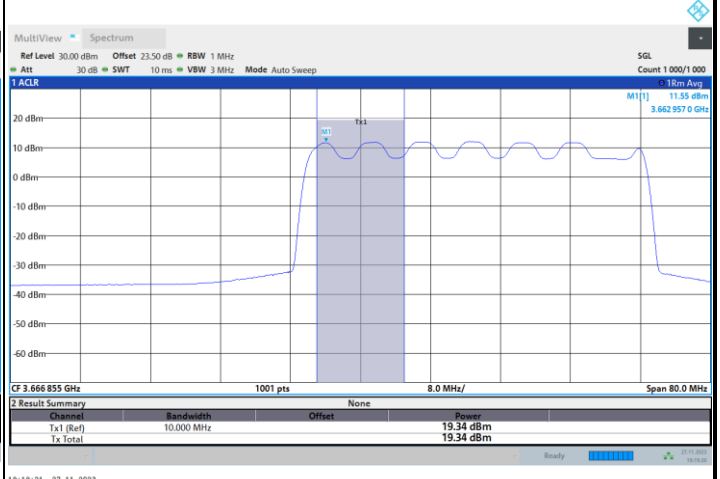


FR1 n48 / 40MHz / Highest Channel / Conducted (dBm/10MHz)

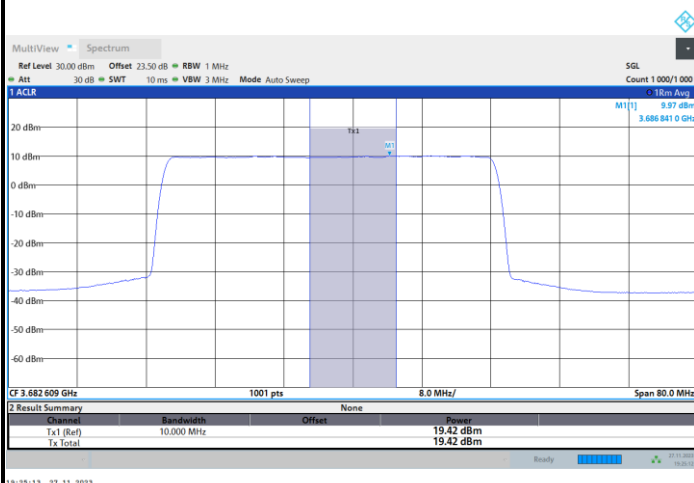
QPSK



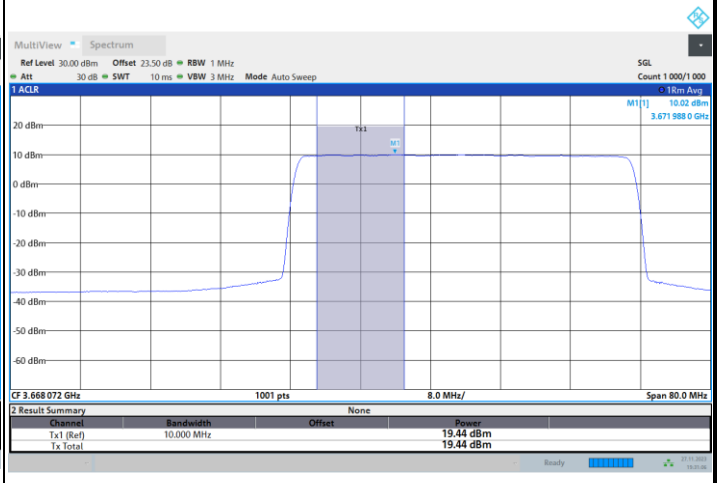
16QAM



64QAM



256QAM



**Power Spectral Density**

Mode	FR1 n48 : Conducted PSD (dBm/MHz) <SISO> Lowest Channel							
BW	10MHz		20MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Lowest CH	11.65	12.81	11.19	12.63	10.61	12.71		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Lowest CH	11.70	12.04	10.96	10.87	10.74	10.52		

Mode	FR1 n48 : EIRP PSD (dBm/MHz) <MIMO 4TX> Lowest Channel							
BW	10MHz		20MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Lowest CH	35.17	36.33	34.71	36.15	34.13	36.23		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Lowest CH	35.22	35.56	34.48	34.39	34.26	34.04		
Limit	37dBm/MHz							
Result	PASS							

Note

1. The measured conducted PSD result has included duty cycle offset factor.
2. The EIRP PSD = conducted PSD result + 6.02dB (4TX) + 17.5dBi MIMO antenna gain.



Mode	FR1 n48 : Conducted PSD (dBm/MHz) <SISO> Middle Channel							
BW	10MHz		20MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	11.59	12.66	10.40	12.21	10.40	12.25		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	11.73	11.73	10.55	10.57	10.20	10.20		

Mode	FR1 n48 : EIRP PSD (dBm/MHz) <MIMO 4TX> Middle Channel							
BW	10MHz		20MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	35.11	36.18	33.92	35.73	33.92	35.77		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	35.25	35.25	34.07	34.09	33.72	33.72		
Limit	37dBm/MHz							
Result	PASS							

Note

1. The measured conducted PSD result has included duty cycle offset factor.
2. The EIRP PSD = conducted PSD result + 6.02dB (4TX) + 17.5dBi MIMO antenna gain.



Mode	FR1 n48 : Conducted PSD (dBm/MHz) <SISO> Highest Channel							
BW	10MHz		20MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Highest CH	11.29	12.34	10.08	12.08	10.12	12.05		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Highest CH	11.35	11.46	10.67	10.30	10.09	10.23		

Mode	FR1 n48 : EIRP PSD (dBm/MHz) <MIMO 4TX> Highest Channel							
BW	10MHz		20MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Highest CH	34.81	35.86	33.60	35.60	33.64	35.57		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Highest CH	34.87	34.98	34.19	33.82	33.61	33.75		
Limit	37dBm/MHz							
Result	PASS							

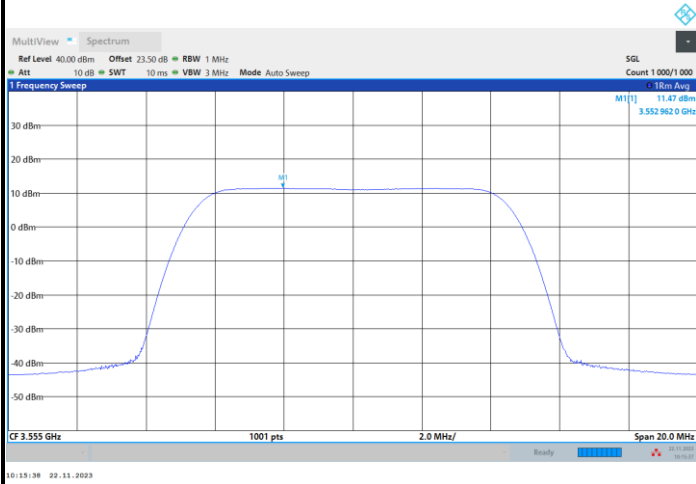
Note

1. The measured conducted PSD result has included duty cycle offset factor.
2. The EIRP PSD = conducted PSD result + 6.02dB (4TX) + 17.5dBi MIMO antenna gain.

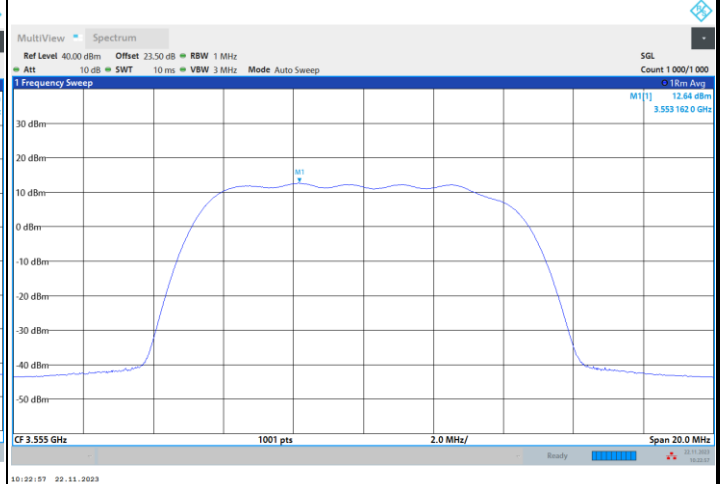


FR1 n48 / 10MHz / Lowest Channel / PSD

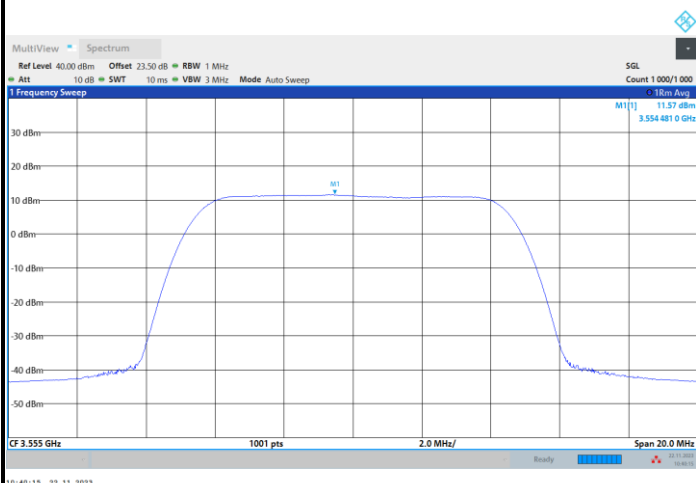
QPSK



16QAM



64QAM



256QAM

