

Appendix -

Test Data and Result for report

GZCR260100019003

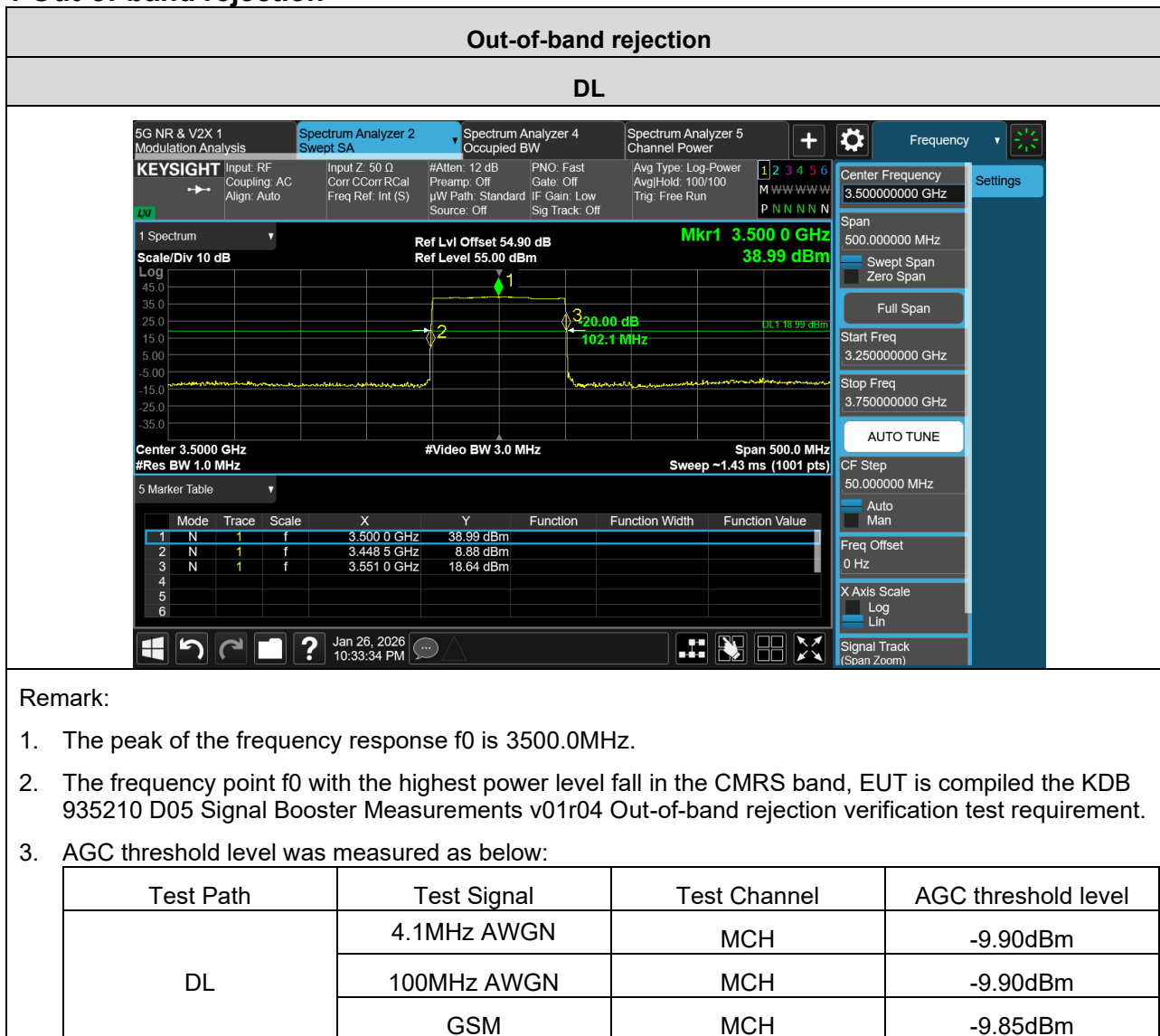
(For 3.45GHz band DL)



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1 Out-of-band rejection



2 Input versus Output comparison

Occupied Bandwidth				
Test Path	Test Signal	Test Channel	Signal Level	Verdict
DL	4.1MHz AWGN	MCH	Pre-AGC	PASS
			3dB above AGC	PASS
	100MHz AWGN	MCH	Pre-AGC	PASS
			3dB above AGC	PASS
	GSM	MCH	Pre-AGC	PASS
			3dB above AGC	PASS

Remark:
Compare the spectral plot of the input signal to the output signal affirm that they are similar (in passband and roll off characteristic features and relative spectral locations). The test result complies with the requirement.

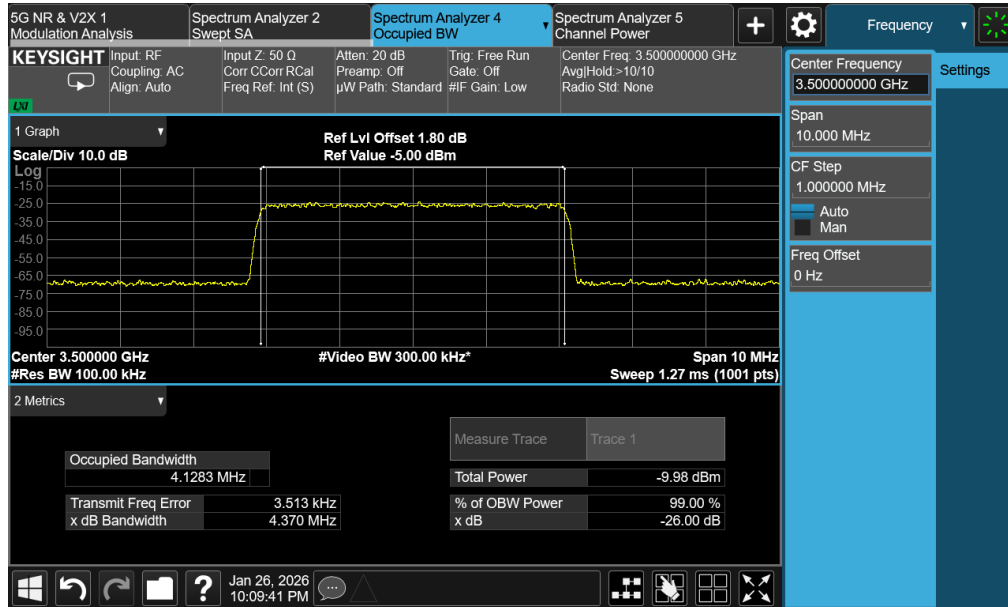


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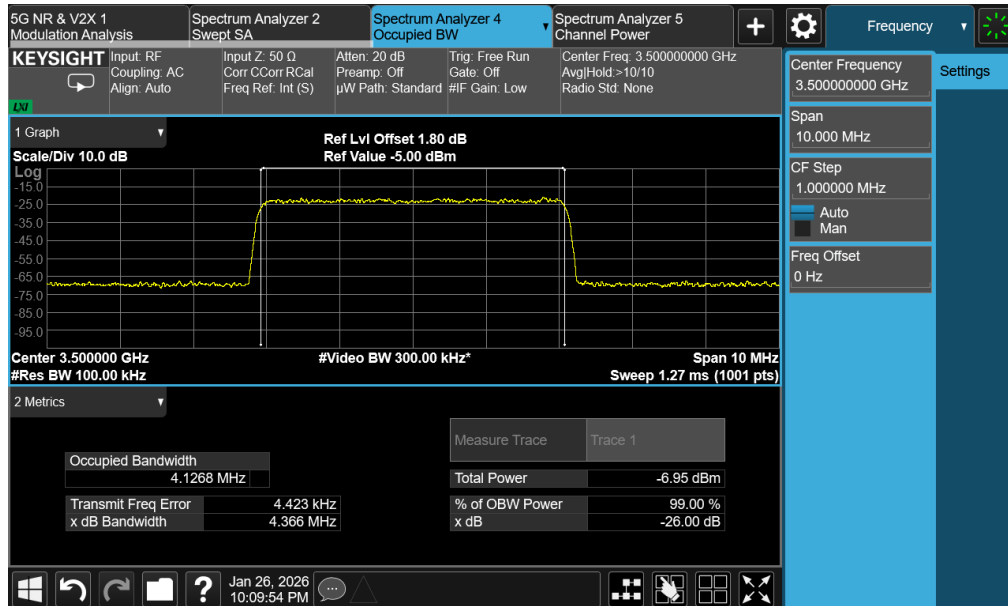
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99% OBW

DL_4.1MHz AWGN_MCH_Input_Pre-AGC

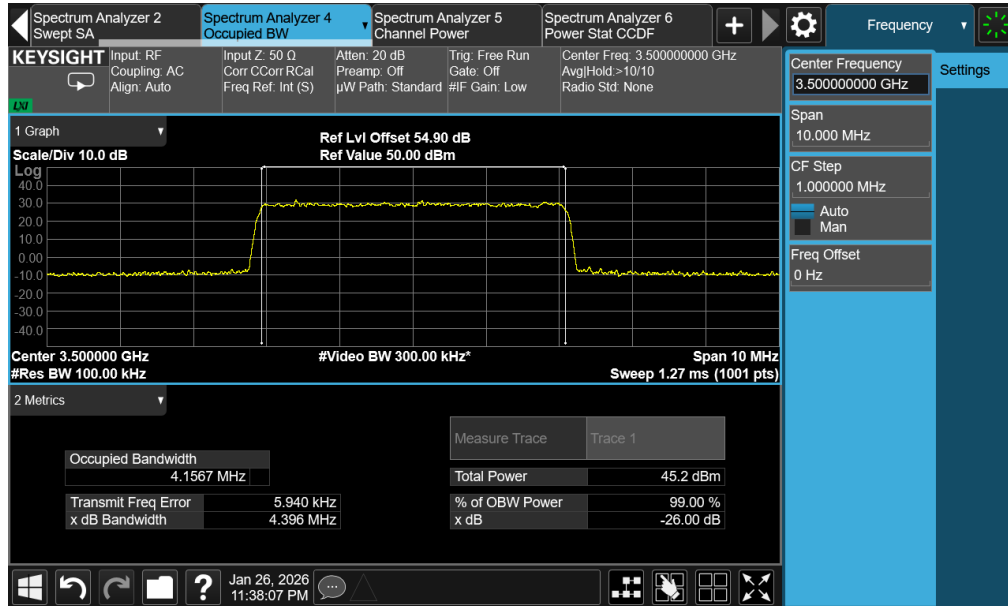


DL_4.1MHz AWGN_MCH_Input_3dB above AGC

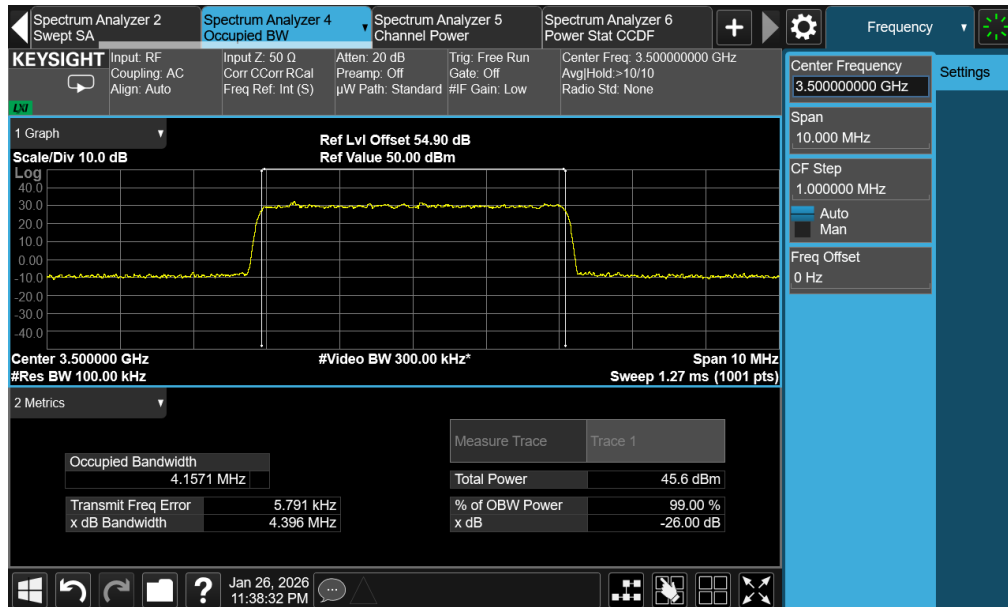


99% OBW

DL_4.1MHz AWGN_MCH_Output_Pre-AGC

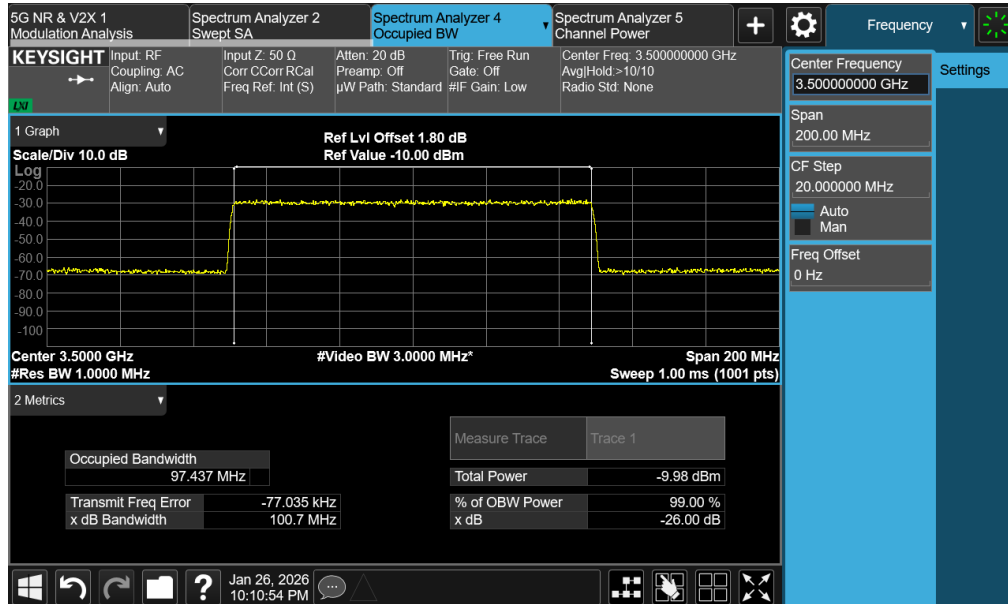


DL_4.1MHz AWGN_MCH_Output_3dB above AGC

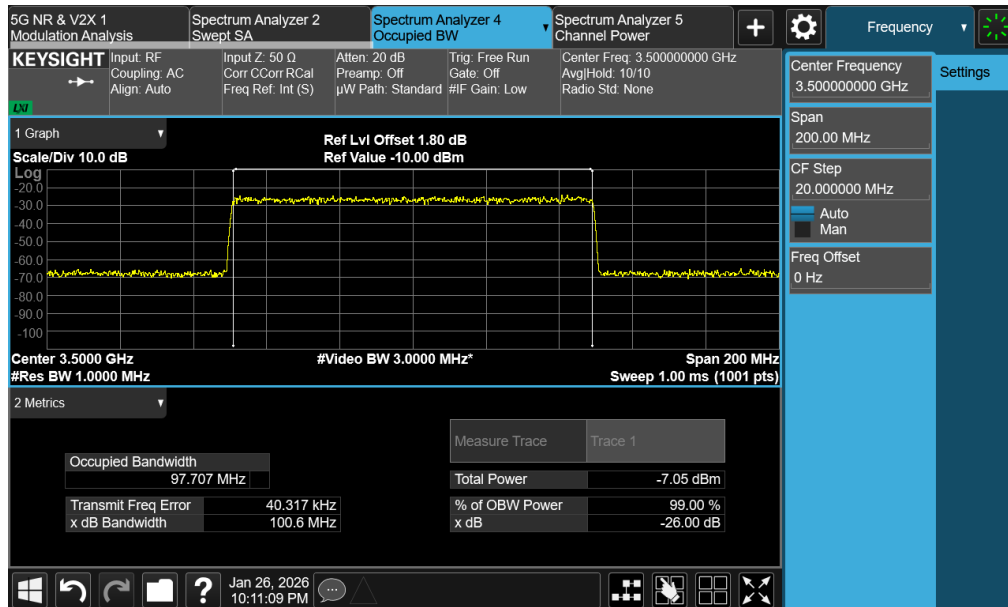


99% OBW

DL_100MHz AWGN_MCH_Input_Pre-AGC

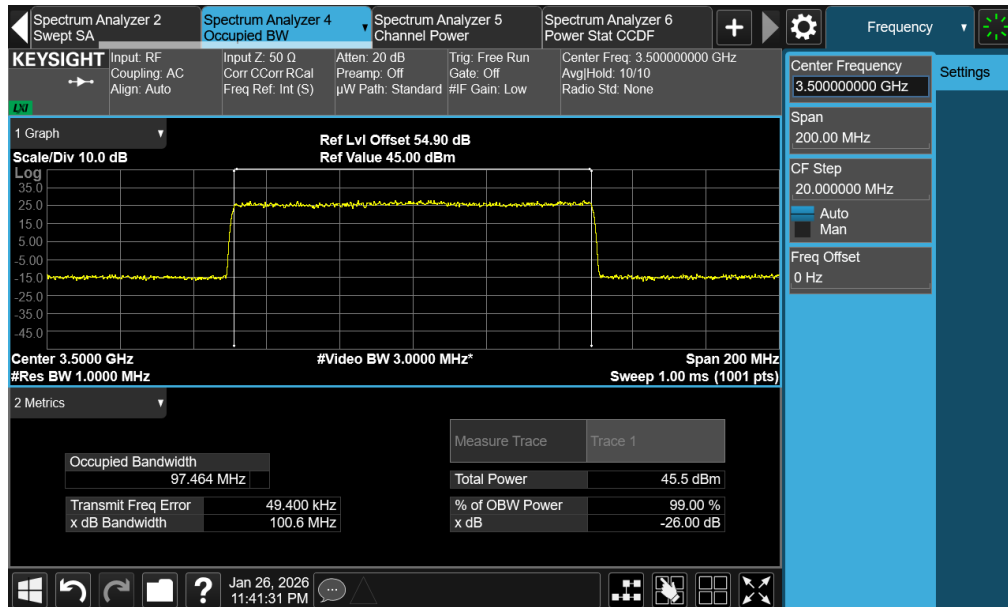


DL_100MHz AWGN_MCH_Input_3dB above AGC

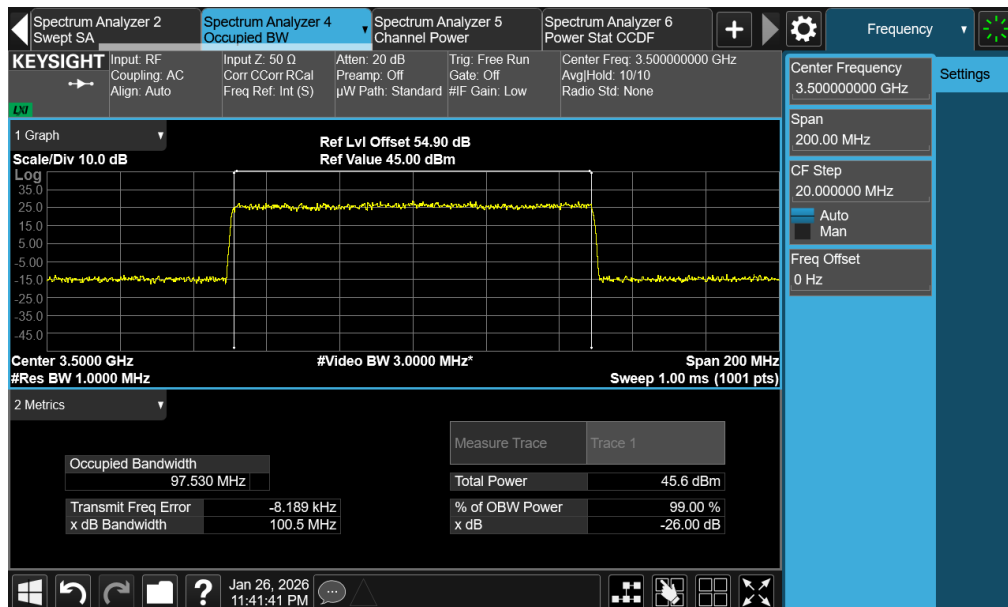


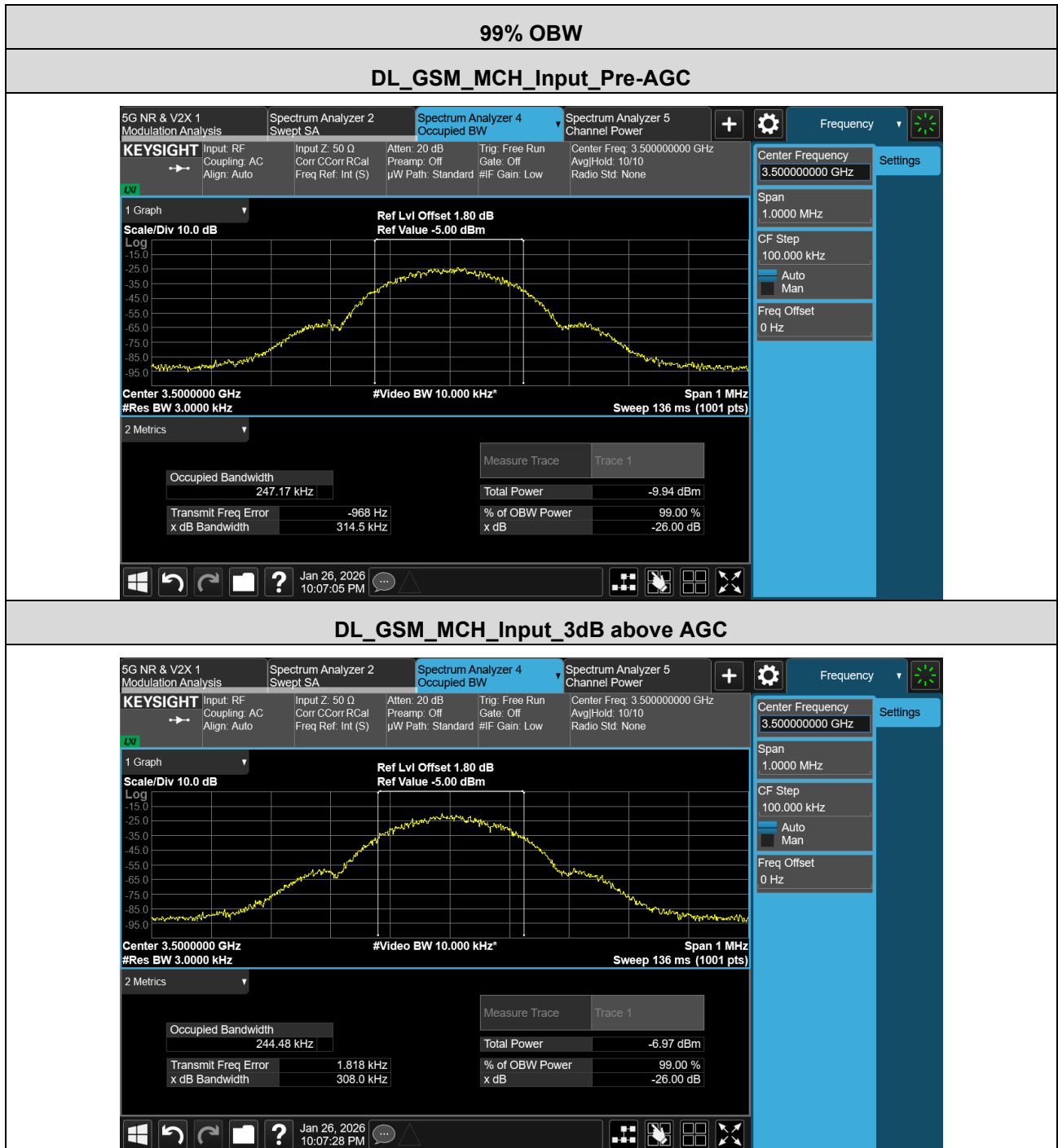
99% OBW

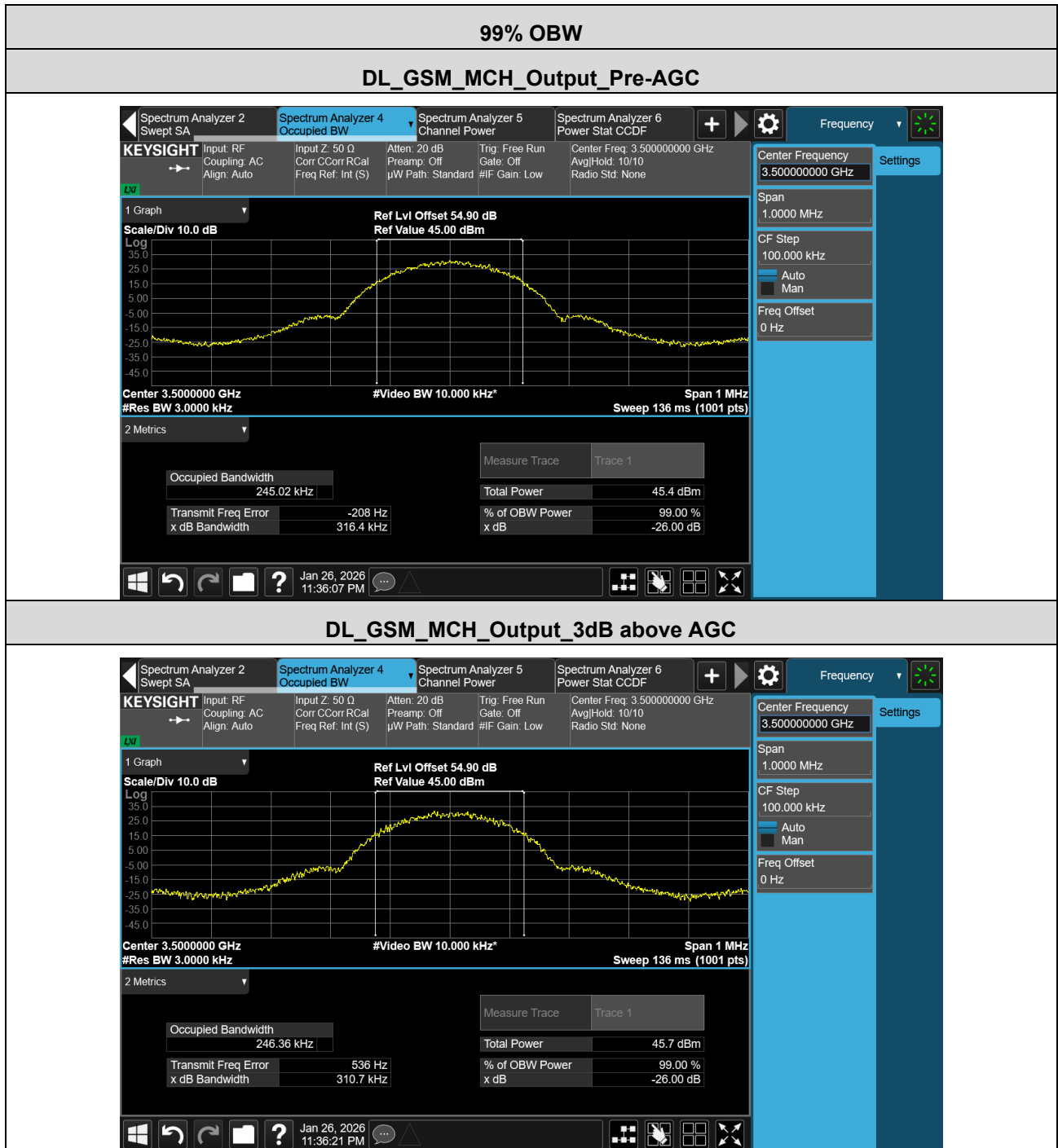
DL_100MHz AWGN_MCH_Output_Pre-AGC



DL_100MHz AWGN_MCH_Output_3dB above AGC







3 Mean output power and amplifier/booster gain

Mean output power and gain								
Test Path	Test Freq. f0 (MHz)	Test Signal	Signal Level	Input power (dBm)	Output Power (dBm)	EIRP (dBm)	EIRP (W)	Gain (dB)
DL	3500.0	4.1MHz AWGN	Pre-AGC	-10	45.05	50.05	101.16	55.05
			3dB above AGC	-7	45.12	50.12	102.81	/
		100MHz AWGN	Pre-AGC	-10	45.61	50.61	115.09	55.61
			3dB above AGC	-7	45.67	50.67	116.69	/
		GSM	Pre-AGC	-10	45.46	50.46	111.18	55.46
			3dB above AGC	-7	45.43	50.43	110.41	/
Remark: 1. f0 is from Out-of-band Rejection test in the report. 2. EIRP= output power (dBm)+ antenna gain (dBi), the antenna gain is 5dBi declared by the manufacturer.								

Mean output power							
Test Path	Test Freq. f0 (MHz)	Test Signal	Signal Level	Output Power (dBm/MHz)	EIRP (dBm/MHz)	EIRP (W/MHz)	Verdict
DL	3500.0	4.1MHz AWGN	Pre-AGC	38.54	43.54	22.60	PASS
			3dB above AGC	39.01	44.01	25.18	PASS
		100MHz AWGN	Pre-AGC	30.72	35.72	1.19	PASS
			3dB above AGC	30.77	35.77	1.20	PASS
		GSM	Pre-AGC	45.46	50.46	111.18	PASS
			3dB above AGC	45.43	50.43	110.41	PASS
Remark: 1. f0 is from Out-of-band Rejection test in the report. 2. EIRP= output power (dBm)+ antenna gain (dBi), the antenna gain is 5dBi declared by the manufacturer. 3. The output power is limited to an EIRP of 1640W/MHz.							



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Peak-to-average ratio (PAR)						
Test path	Test freq. f0 (MHz)	Test Signal	Signal level	PAR (dB)	Limit (dB)	Verdict
DL	3500.0	4.1MHz AWGN	Pre-AGC	9.88	≤13	PASS
			3dB above AGC	9.89		PASS
		100MHz AWGN	Pre-AGC	8.55		PASS
			3dB above AGC	8.54		PASS
Remark: The GSM signal is narrow band signal with extremity low PAR values (the worst case is lower than 0.3dB), so only the test plots for 4.1MHz and 100MHz AWGN were record in the report for demonstrate PAR compliance.						

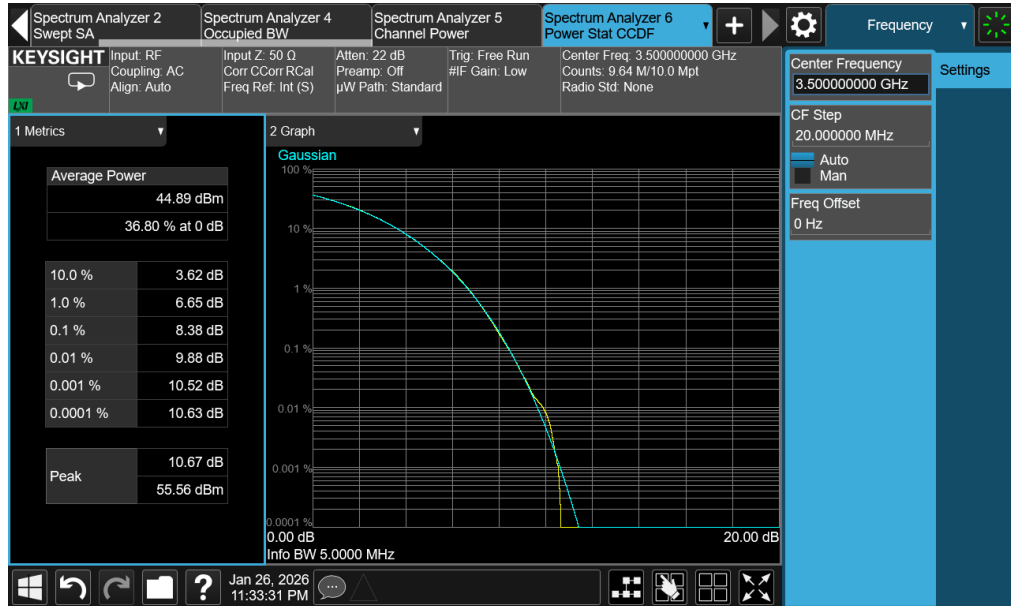


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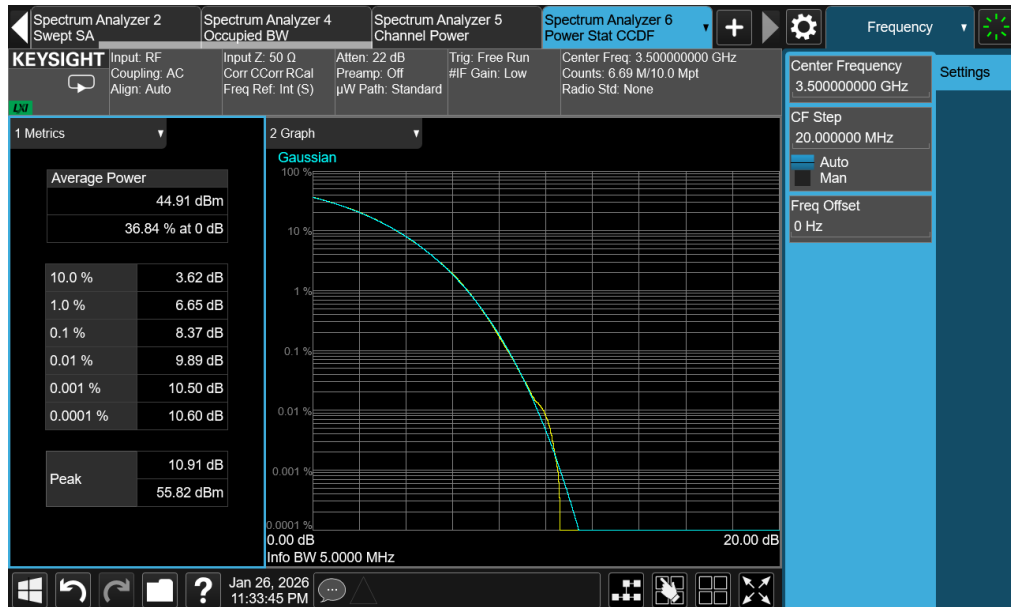
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Peak-to-average ratio (PAR)

DL_4.1MHz AWGN_Pre-AGC



DL_4.1MHz AWGN_3dB above AGC



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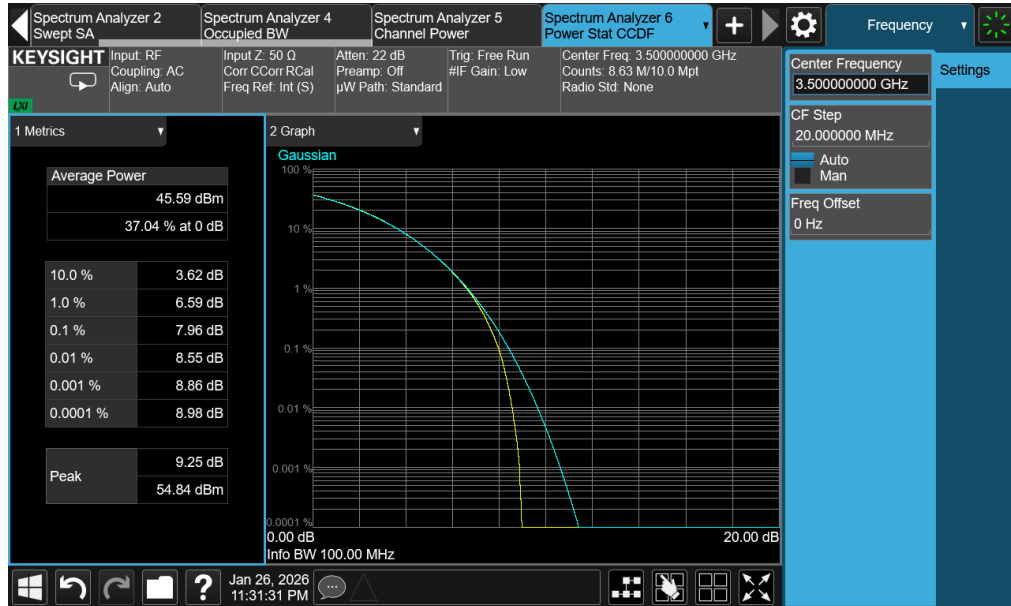
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中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

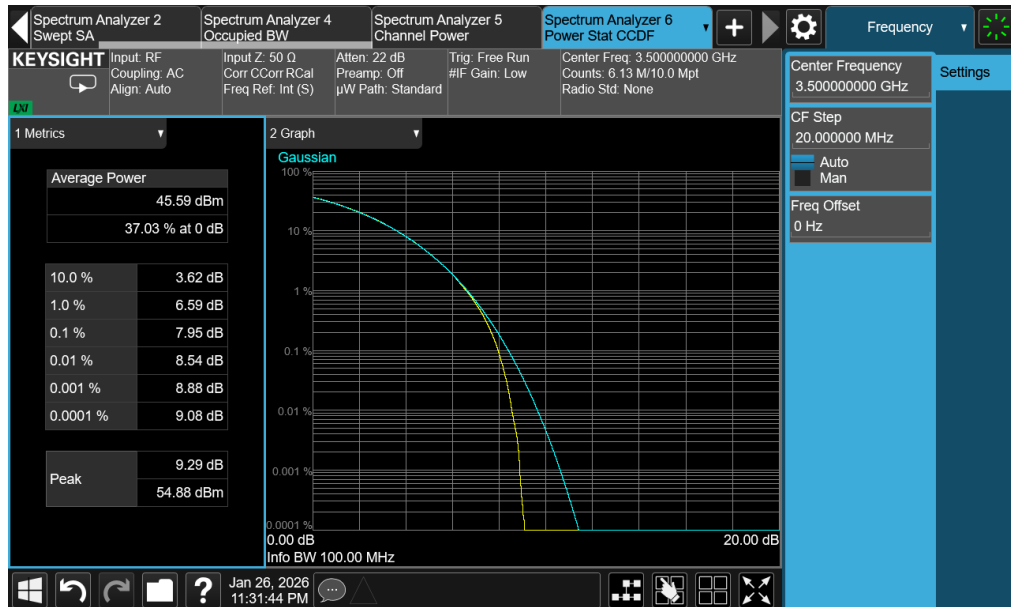
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t (86-20) 82155555 sgs.china@sgs.com

Peak-to-average ratio (PAR)

DL_100MHz AWGN_Pre-AGC



DL_100MHz AWGN_3dB above AGC



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4 Out-of-band/out-of-block(including intermodulation) emissions

Out-of-band/out-of-block(including intermodulation) emissions							
Test Path	Test Channel	Test Signal	Stimulus Condition	Signal Level	Worst conducted test level (dBm)	Limit (dBm)	Verdict
DL	LCH	4.1MHz AWGN	One signal input	Pre-AGC	-19.92	≤-13	PASS
				3dB above AGC	-19.14		PASS
			Two signals input	Pre-AGC	-21.64		PASS
				3dB above AGC	-19.50		PASS
	HCH		One signal input	Pre-AGC	-17.92		PASS
				3dB above AGC	-17.59		PASS
			Two signals input	Pre-AGC	-20.85		PASS
				3dB above AGC	-20.52		PASS
DL	LCH	100MHz AWGN	One signal input	Pre-AGC	-20.74	≤-13	PASS
				3dB above AGC	-19.89		PASS
	HCH		One signal input	Pre-AGC	-19.31		PASS
				3dB above AGC	-18.72		PASS
DL	LCH	GSM	One signal input	Pre-AGC	-21.80	≤-13	PASS
				3dB above AGC	-20.67		PASS
			Two signals input	Pre-AGC	-19.39		PASS
				3dB above AGC	-19.03		PASS
	HCH		One signal input	Pre-AGC	-19.61		PASS
				3dB above AGC	-18.77		PASS
			Two signals input	Pre-AGC	-21.03		PASS
				3dB above AGC	-20.85		PASS

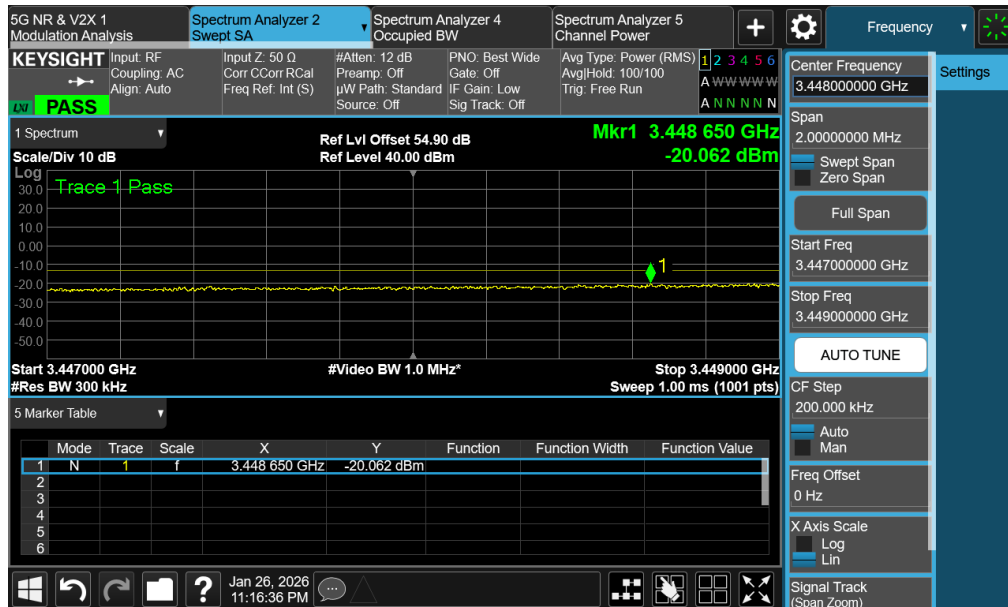
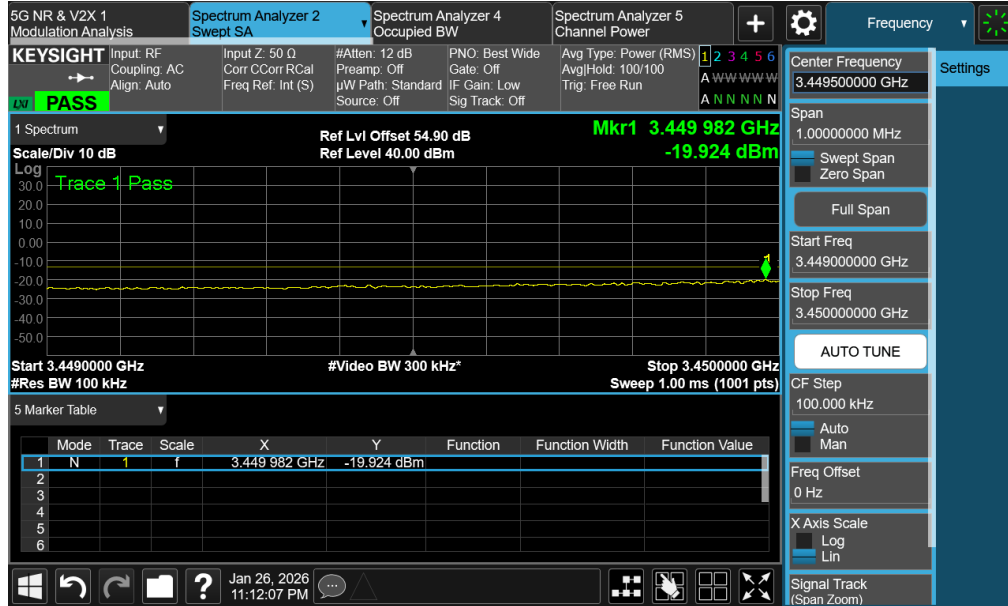


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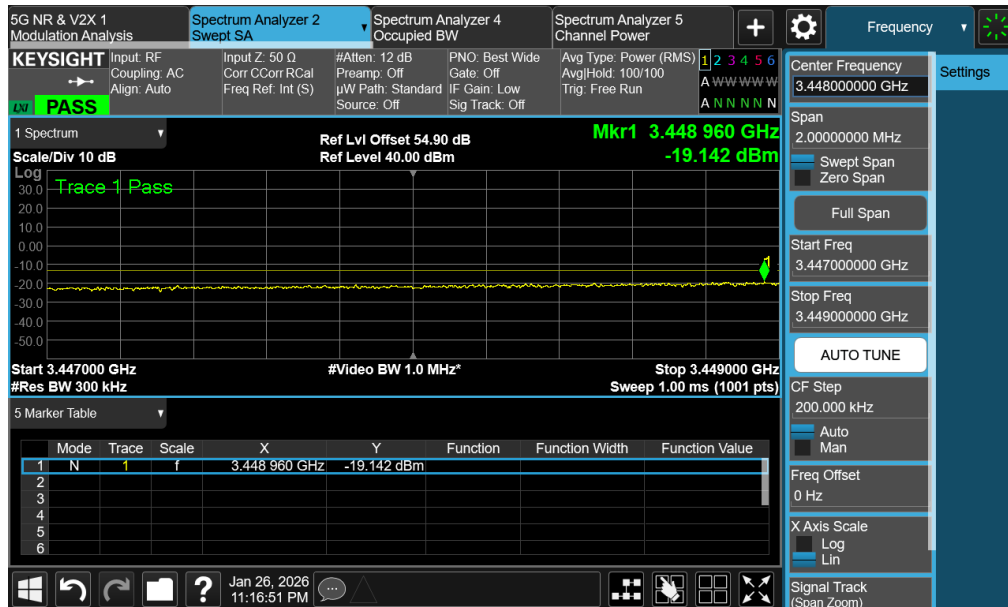
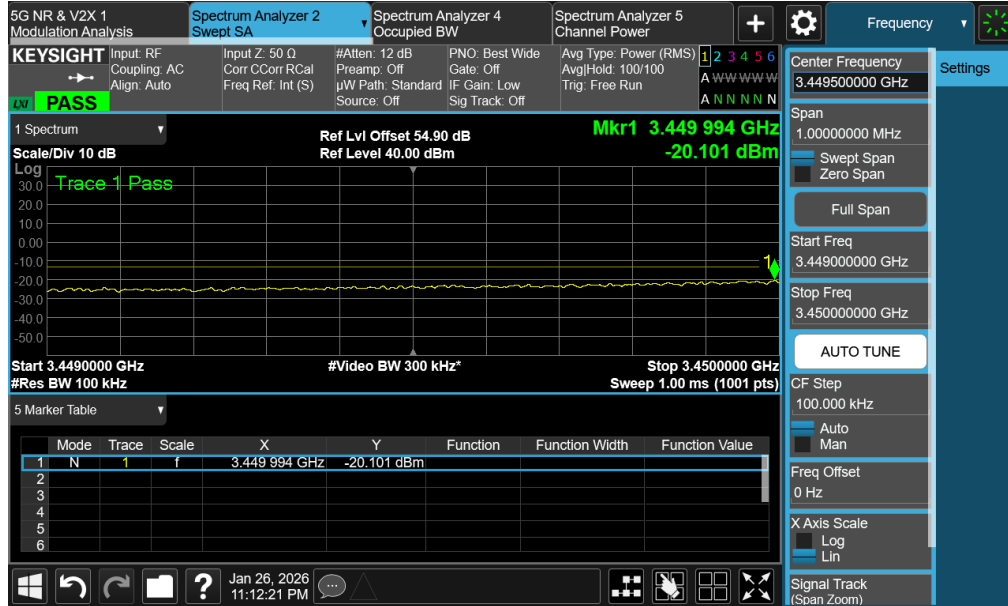
Out-of-band/out-of-block emissions

DL_4.1MHz AWGN_LCH_a single test signal_Pre-AGC



Out-of-band/out-of-block emissions

DL_4.1MHz AWGN_LCH_a single test signal_3dB above AGC

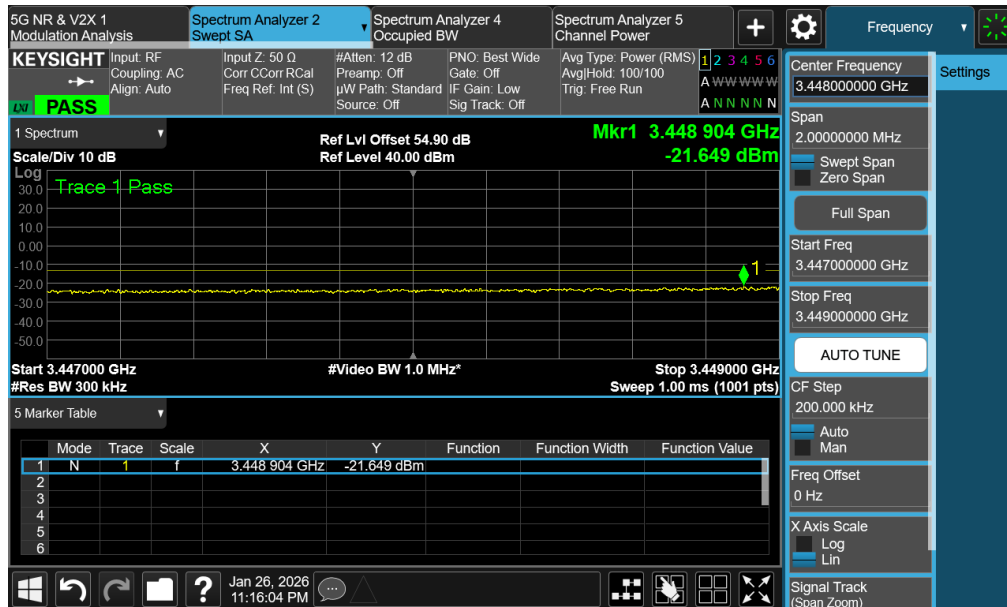
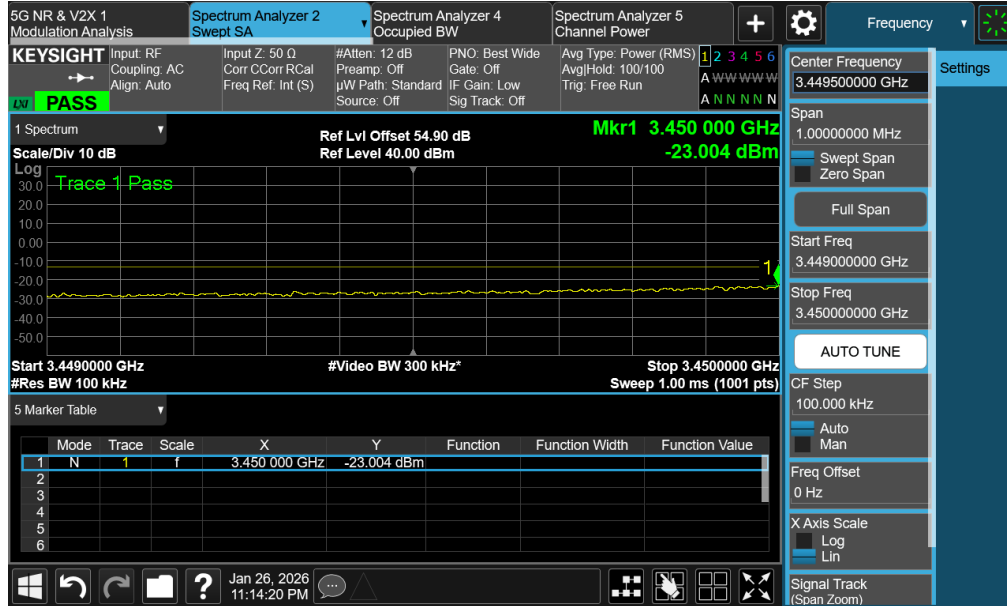


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Out-of-band/out-of-block emissions

DL_4.1MHz AWGN_LCH_two adjacent test signals_Pre-AGC

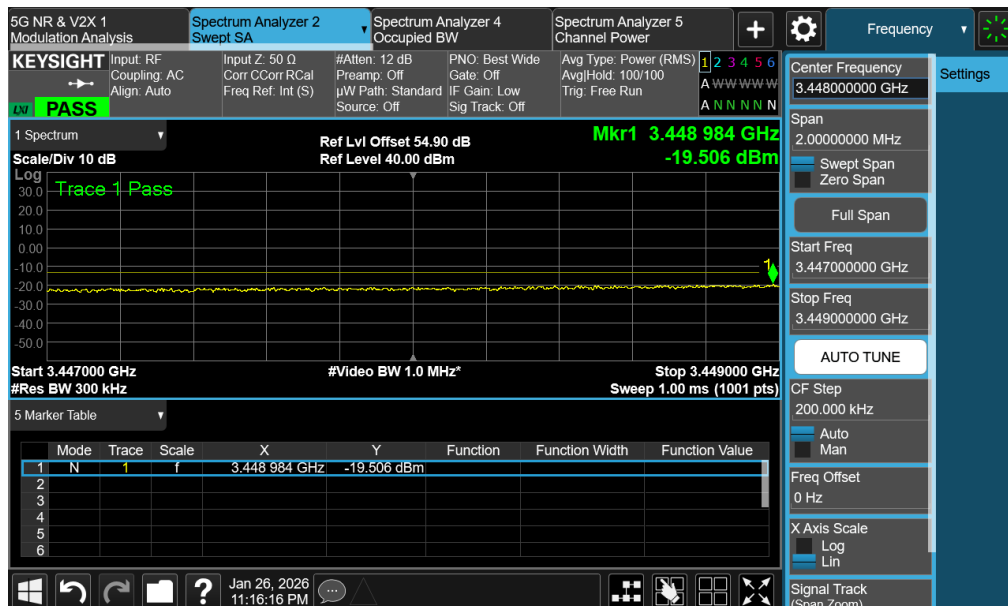
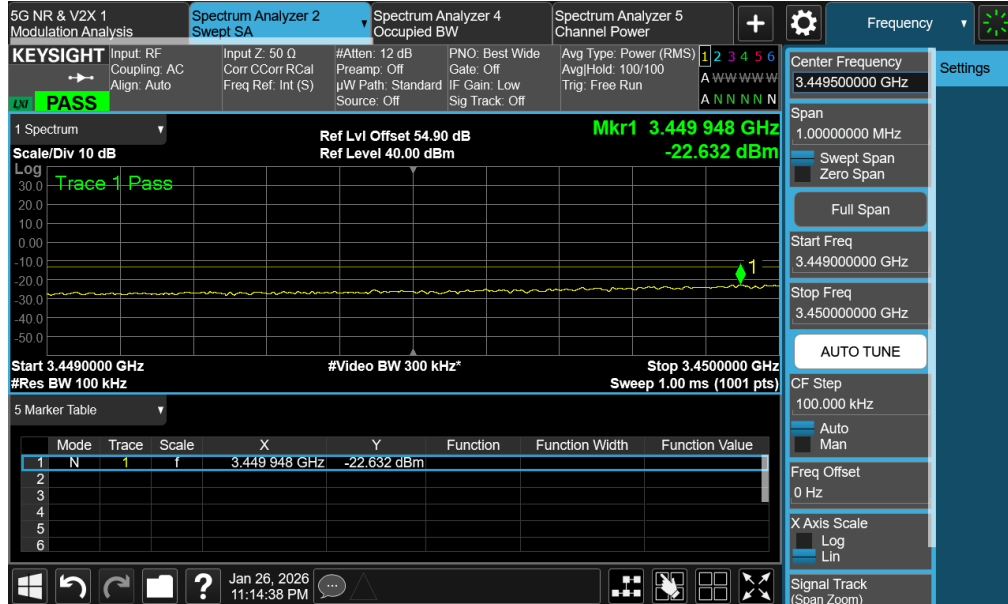


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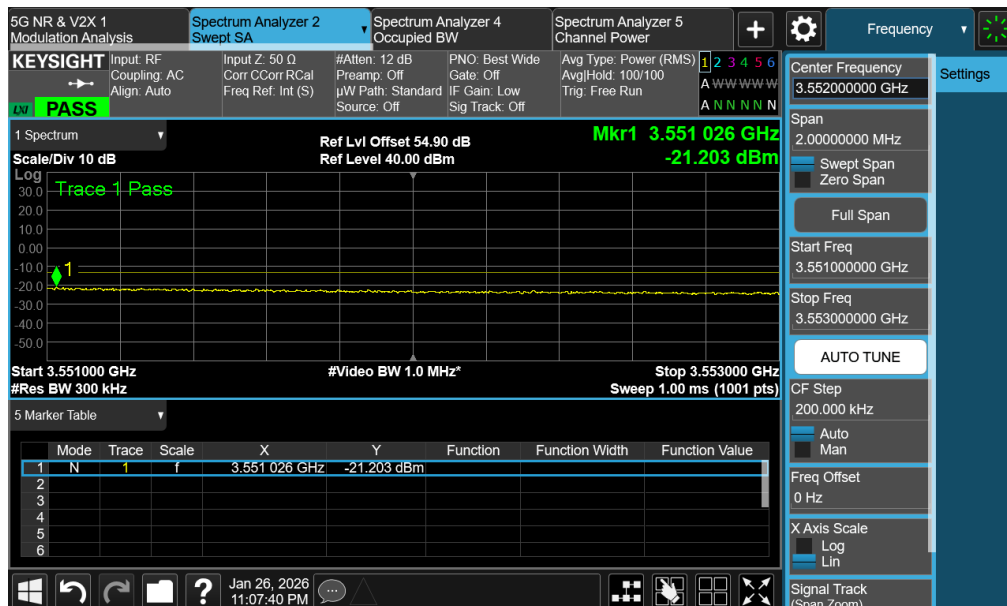
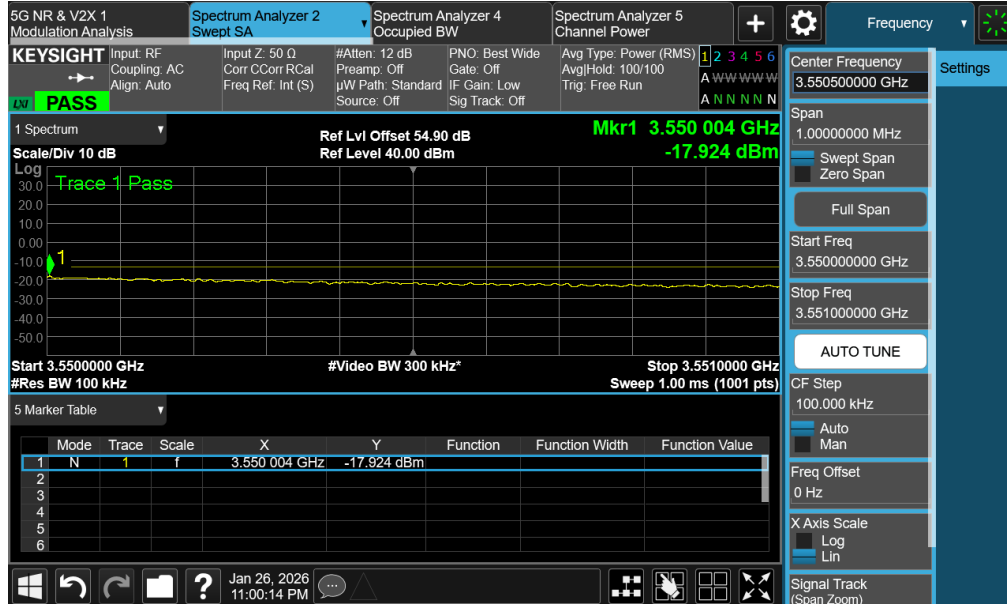
Out-of-band/out-of-block emissions

DL_4.1MHz AWGN_LCH_two adjacent test signals_3dB above AGC



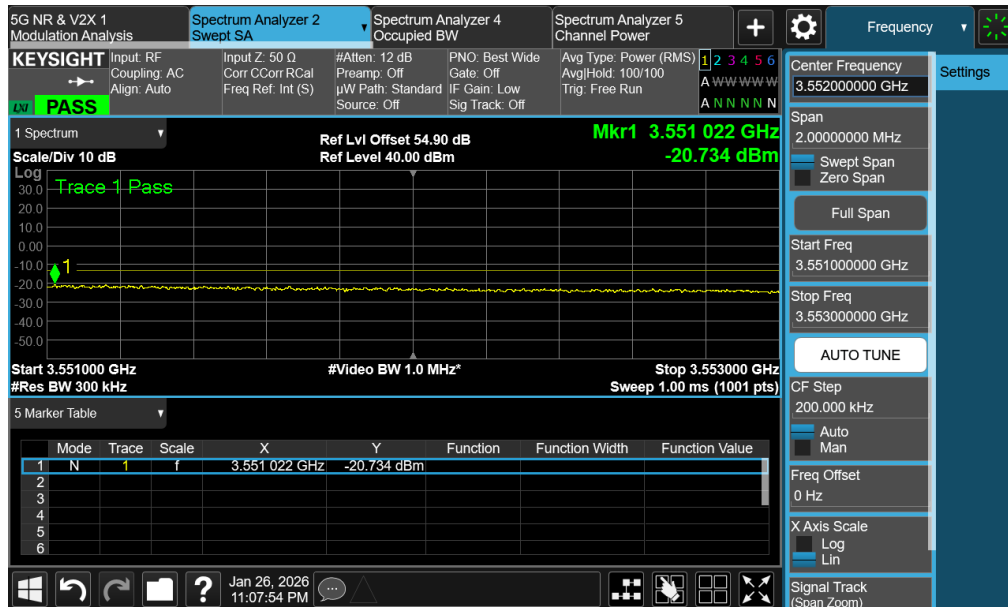
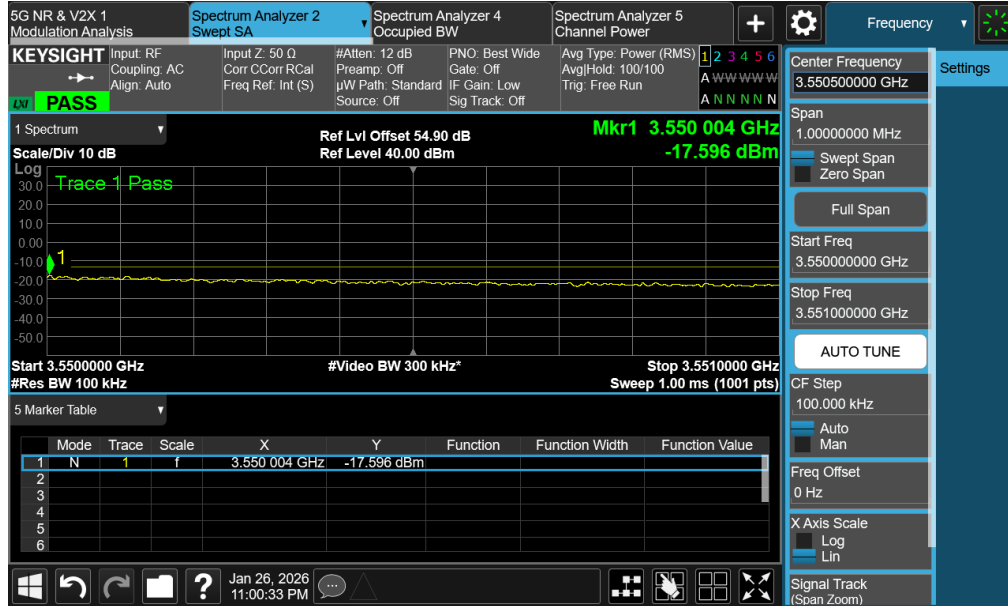
Out-of-band/out-of-block emissions

DL_4.1MHz AWGN_HCH_a single test signal_Pre-AGC



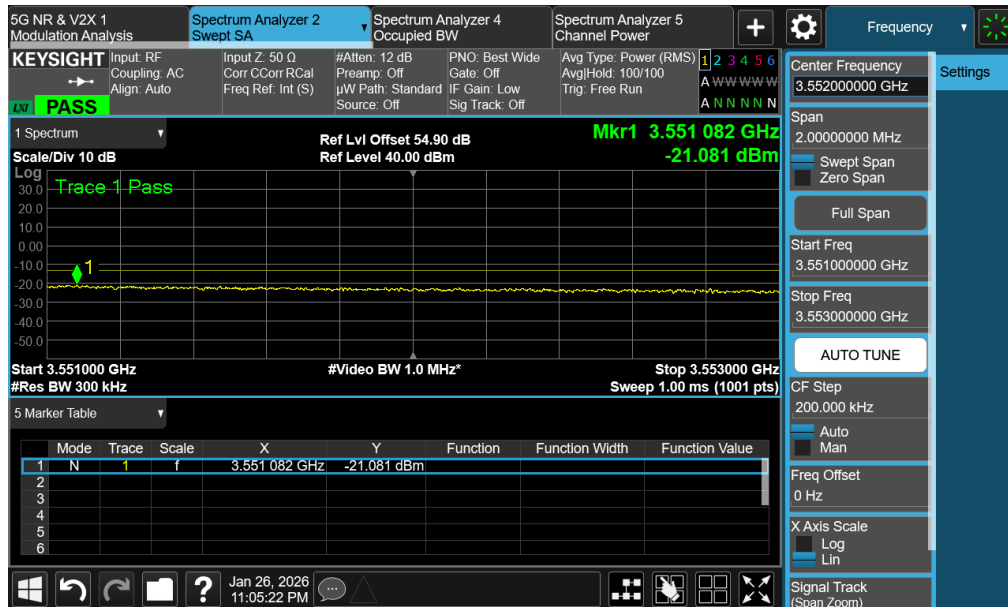
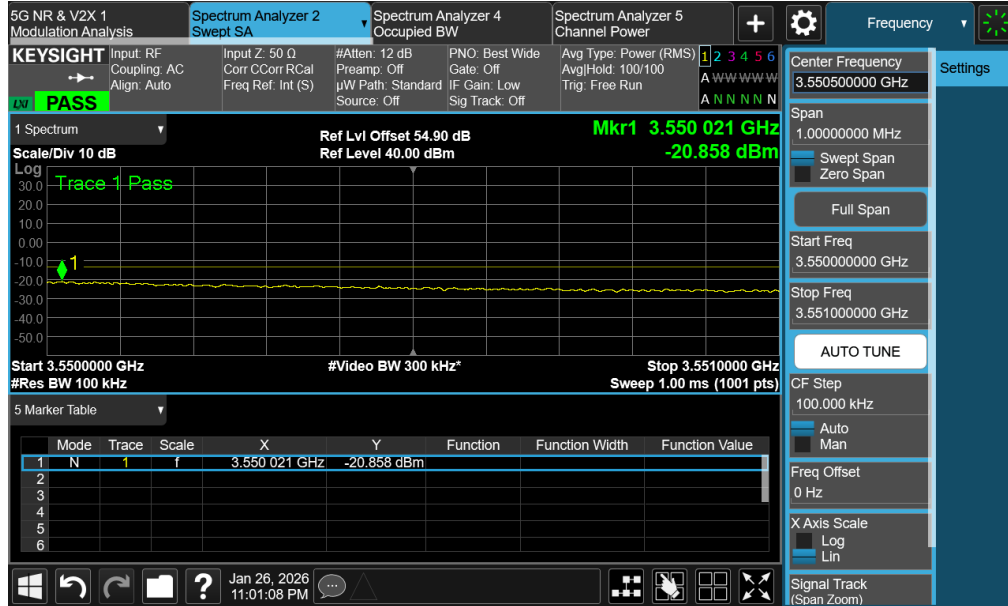
Out-of-band/out-of-block emissions

DL_4.1MHz AWGN_HCH_a single test signal_3dB above AGC



Out-of-band/out-of-block emissions

DL_4.1MHz AWGN_HCH_two adjacent test signals_Pre-AGC

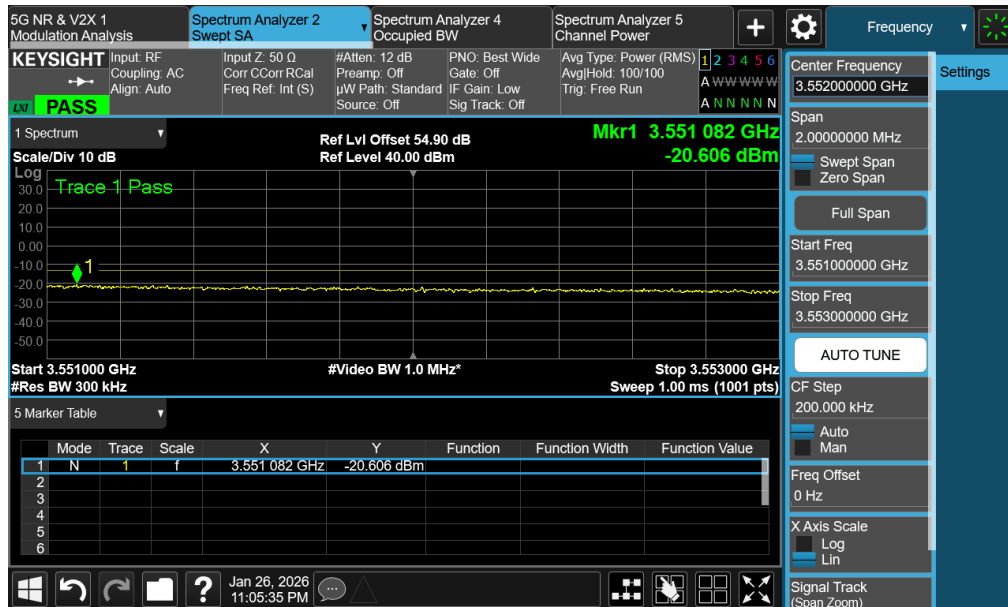
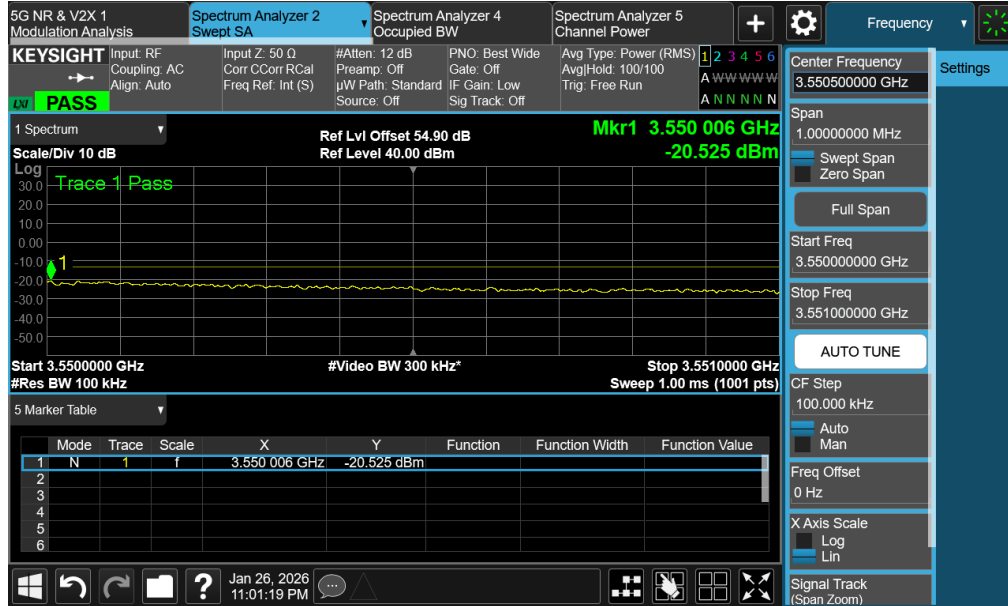


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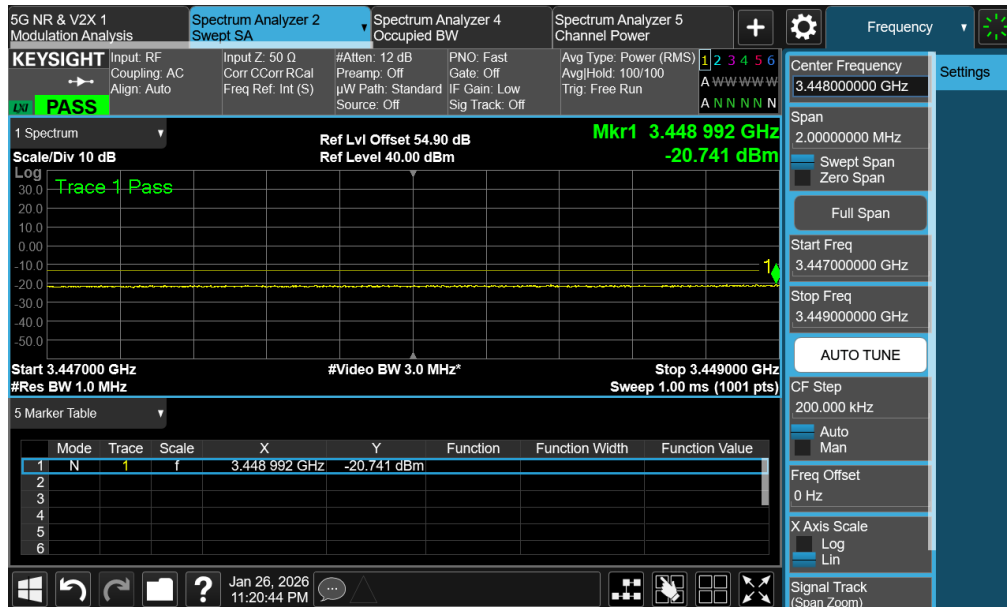
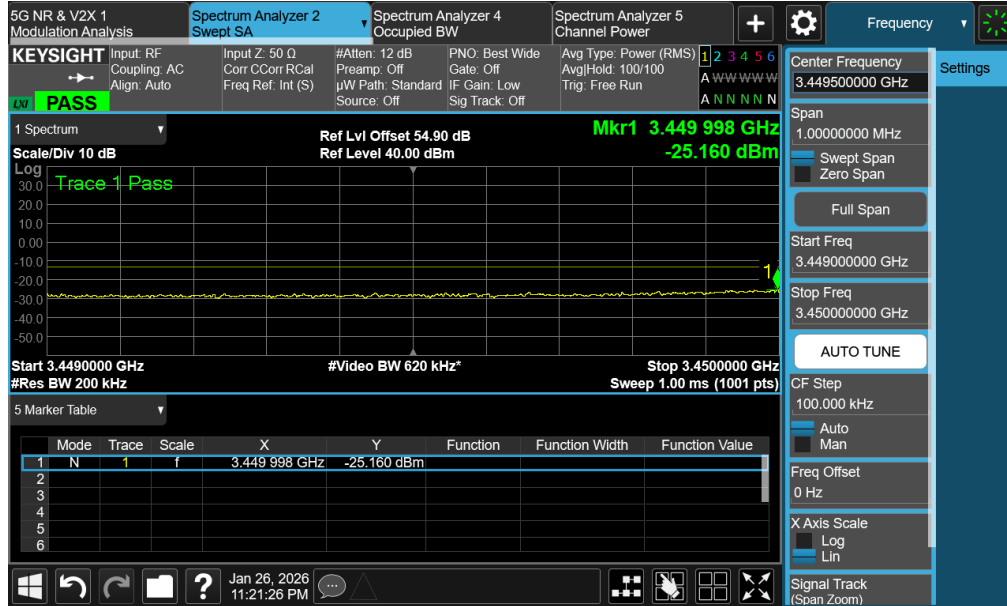
Out-of-band/out-of-block emissions

DL_4.1MHz AWGN_HCH_two adjacent test signals_3dB above AGC



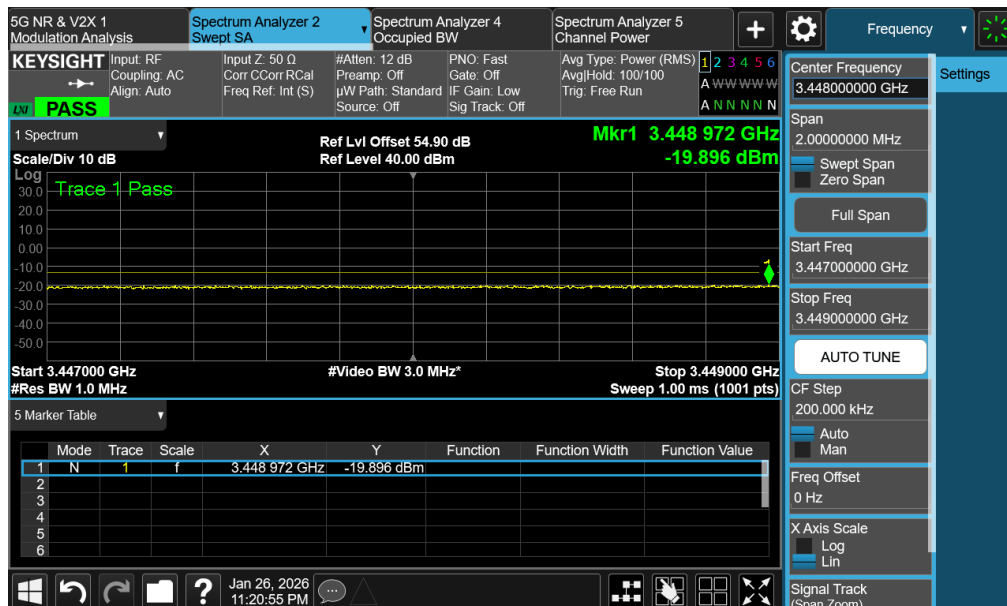
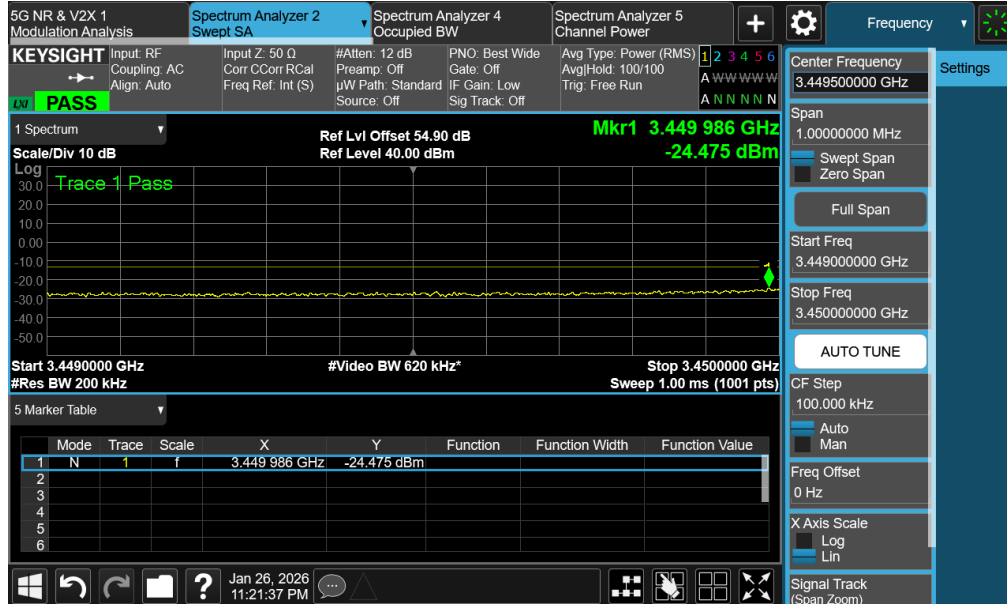
Out-of-band/out-of-block emissions

DL_100MHz AWGN_LCH_a single test signal_Pre-AGC



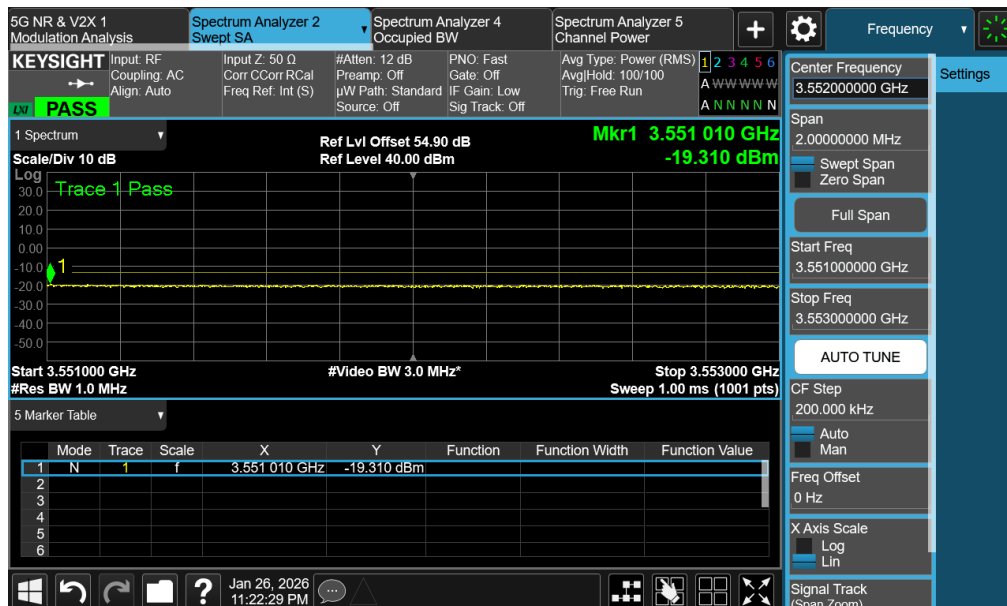
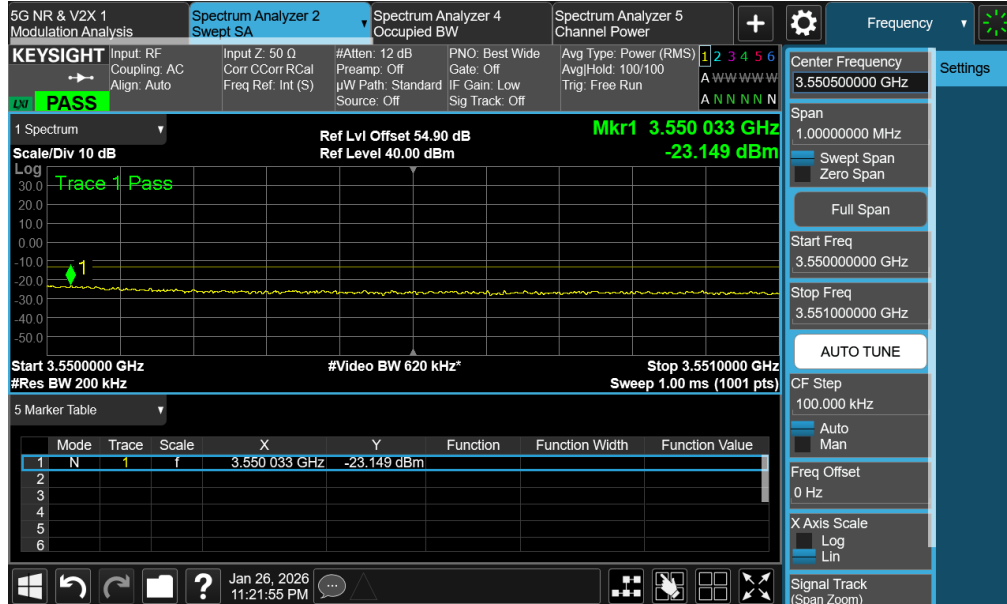
Out-of-band/out-of-block emissions

DL_100MHz AWGN_LCH_a single test signal_3dB above AGC



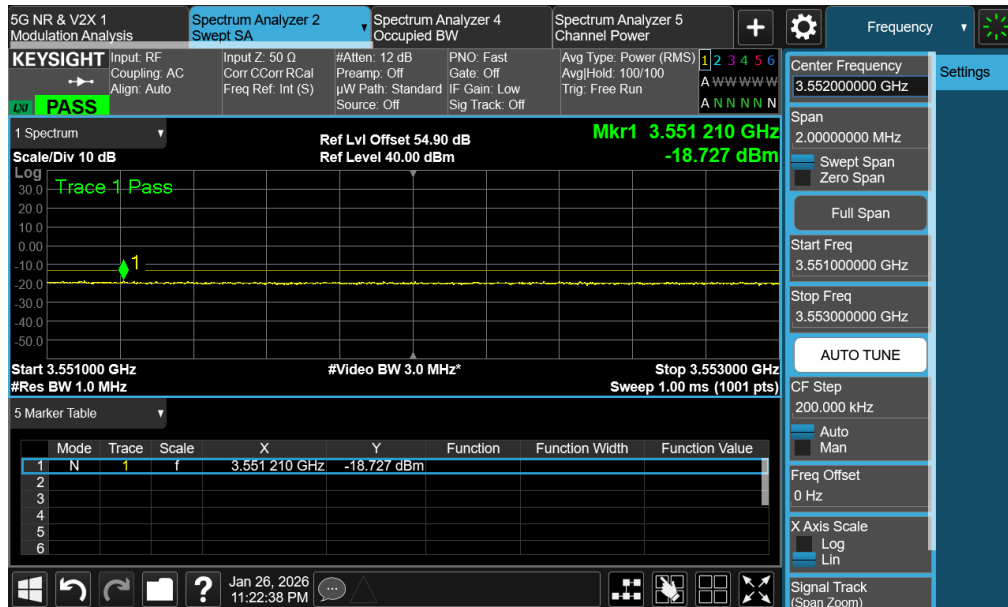
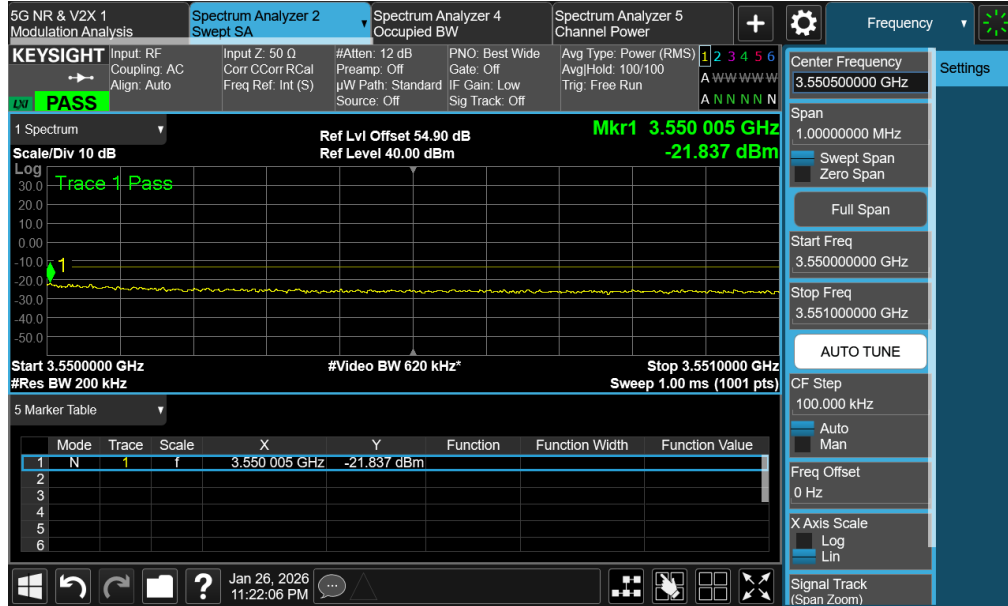
Out-of-band/out-of-block emissions

DL_100MHz AWGN_HCH_a single test signal_Pre-AGC



Out-of-band/out-of-block emissions

DL_100MHz AWGN_HCH_a single test signal_3dB above AGC

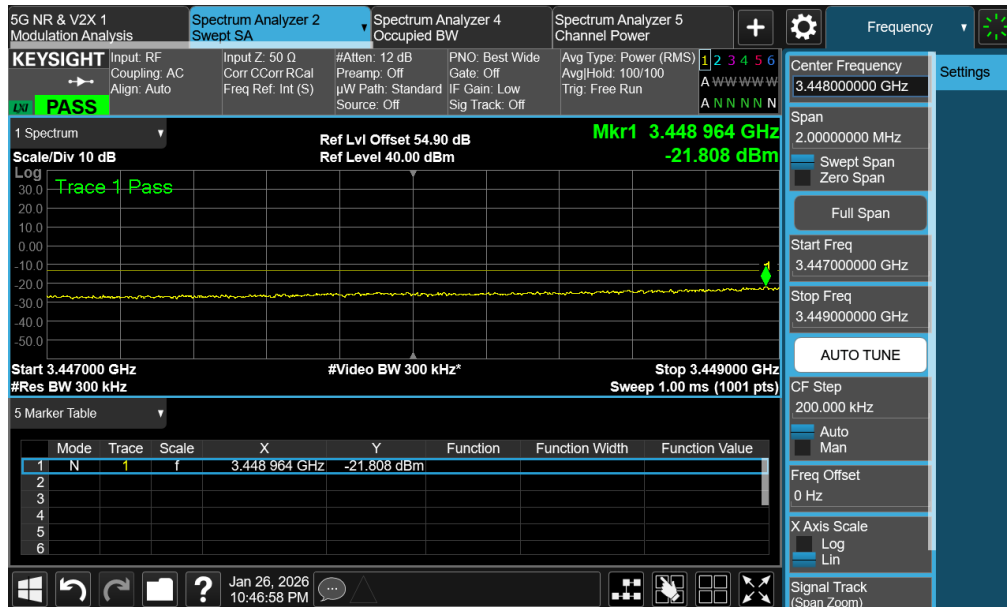
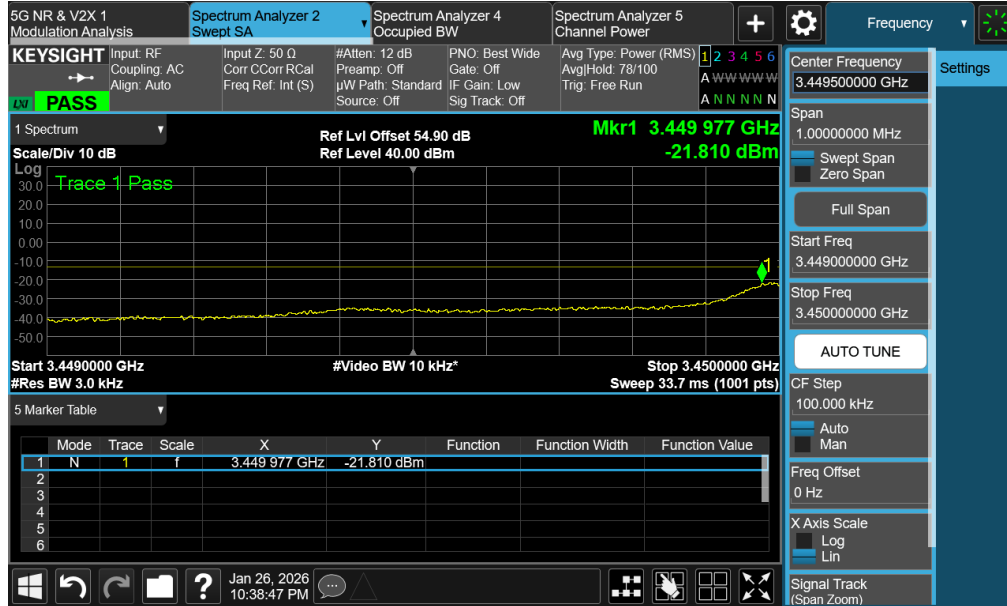


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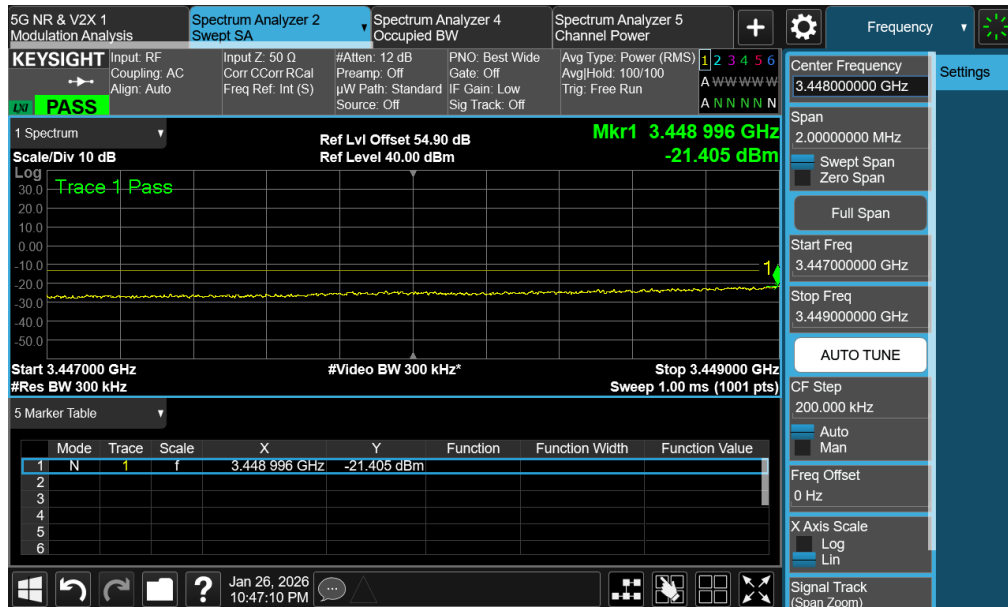
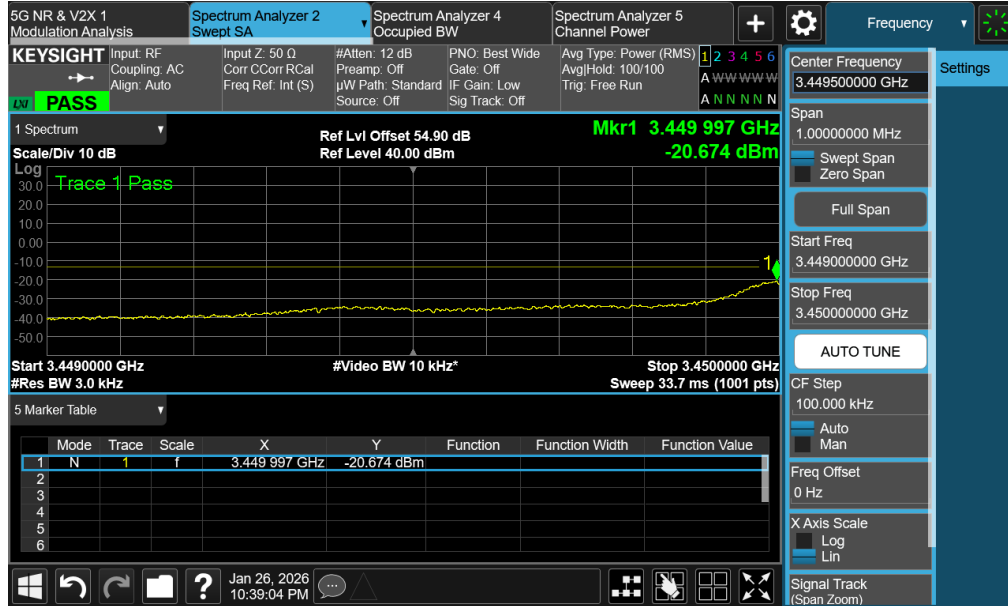
Out-of-band/out-of-block emissions

DL_GSM_LCH_a single test signal_Pre-AGC



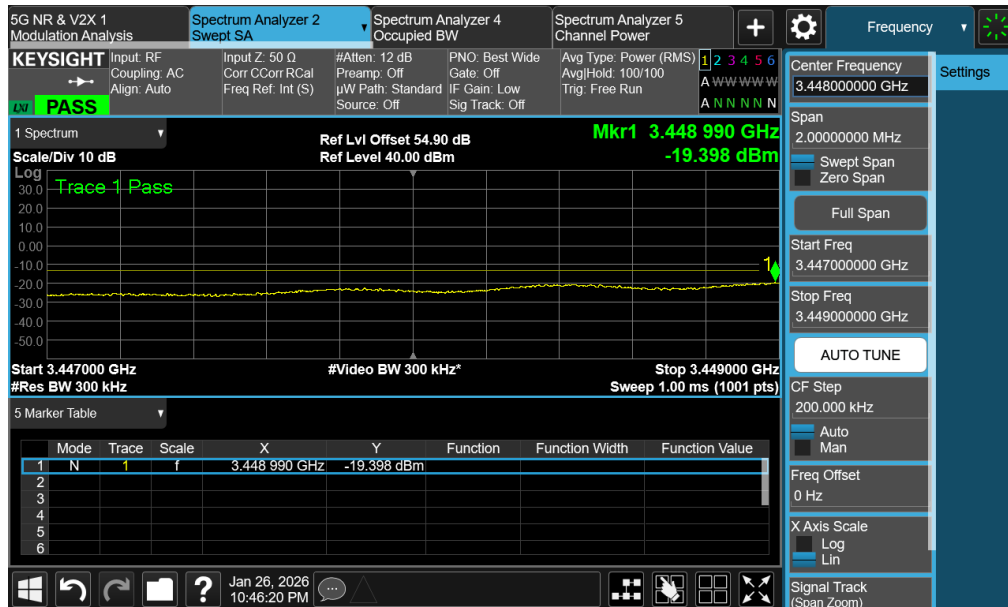
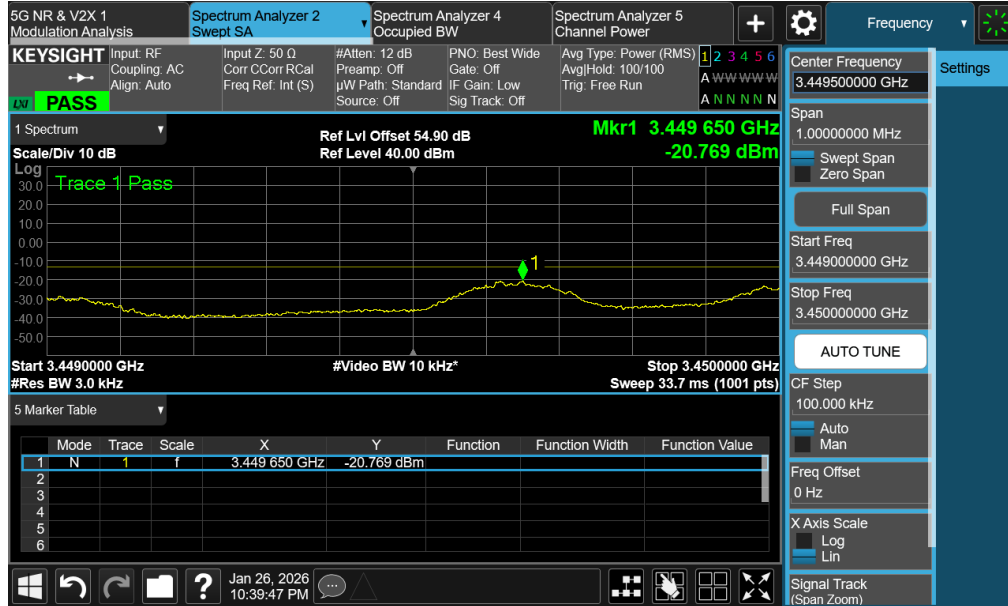
Out-of-band/out-of-block emissions

DL_GSM_LCH_a single test signal_3dB above AGC



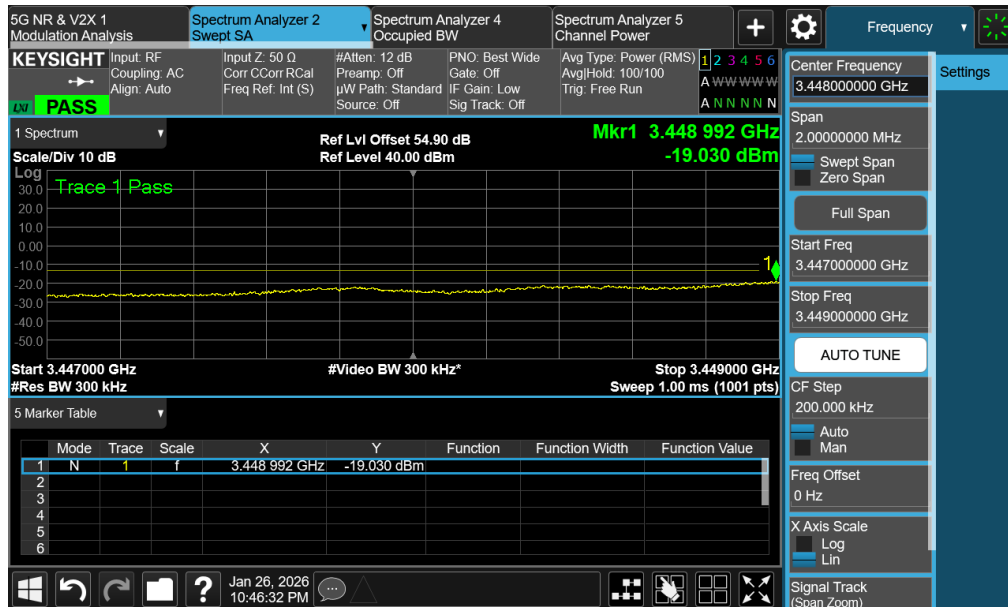
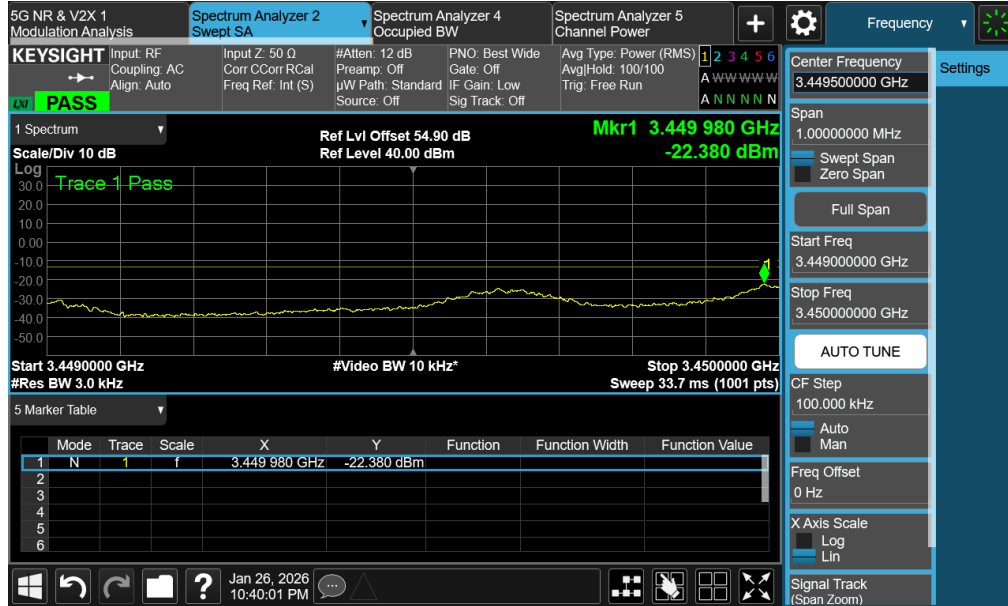
Out-of-band/out-of-block emissions

DL_GSM_LCH_two adjacent test signals_Pre-AGC



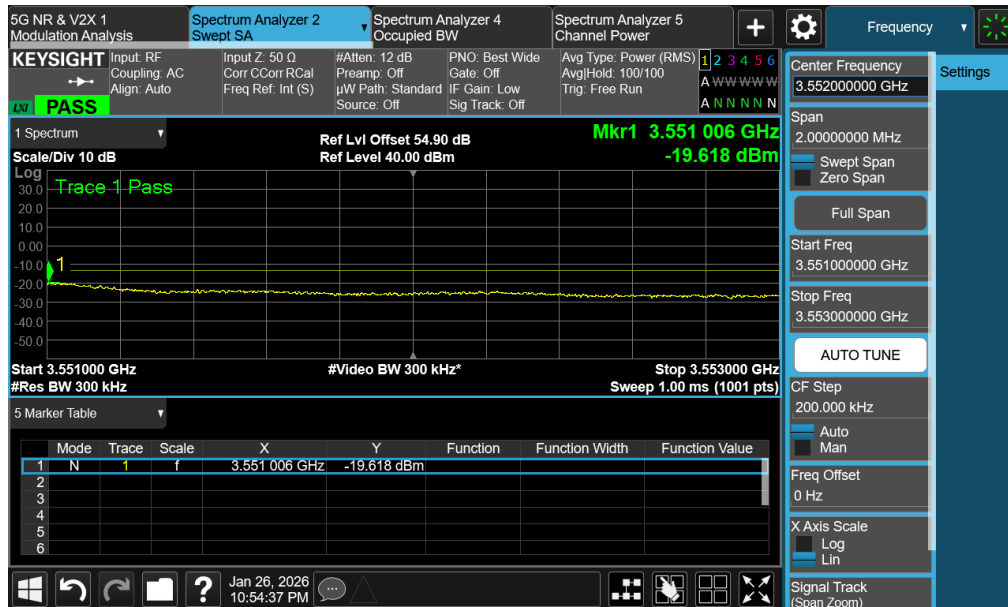
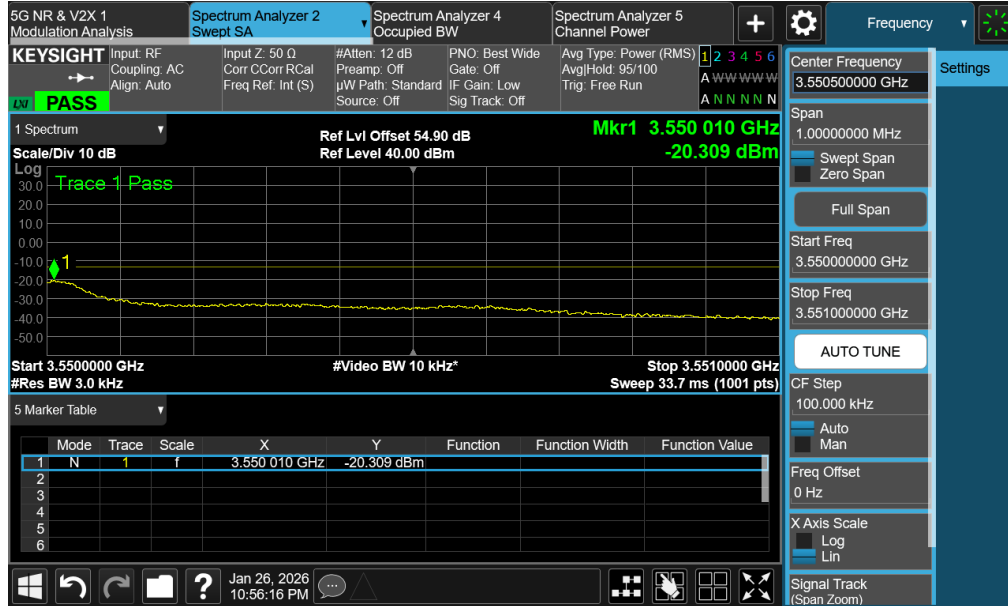
Out-of-band/out-of-block emissions

DL_GSM_LCH_two adjacent test signals_3dB above AGC



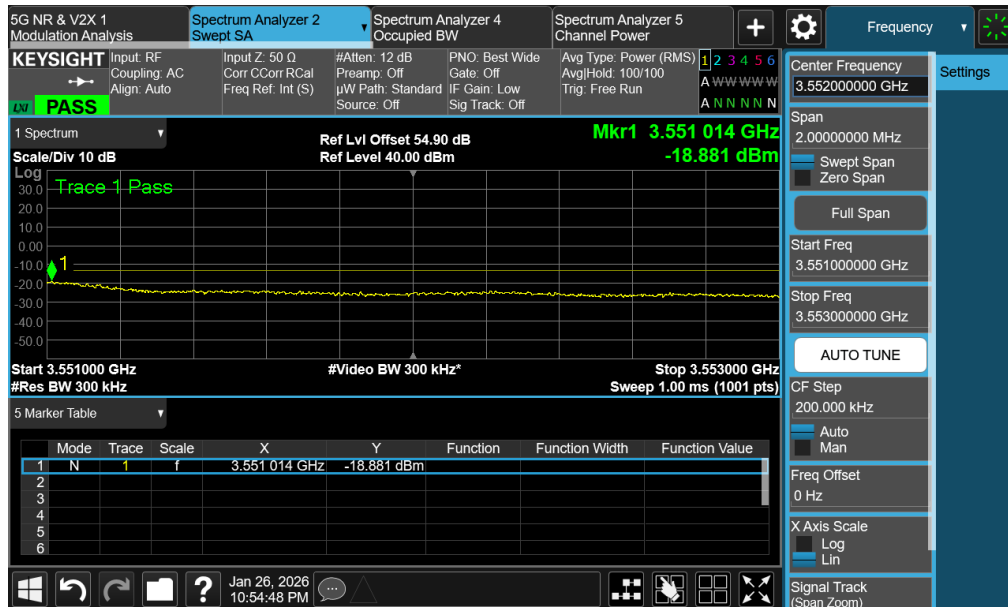
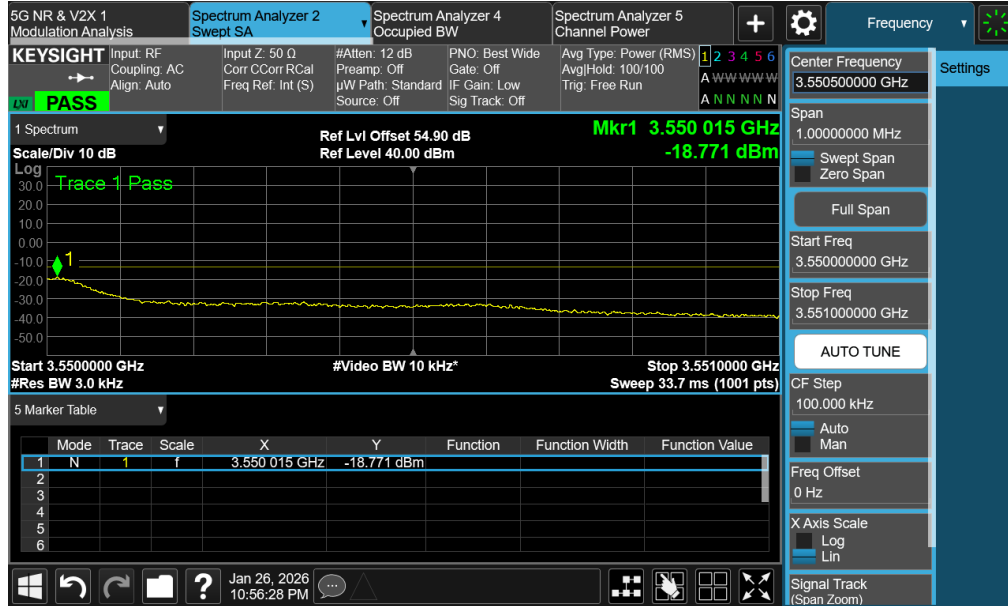
Out-of-band/out-of-block emissions

DL_GSM_HCH_a single test signal_Pre-AGC



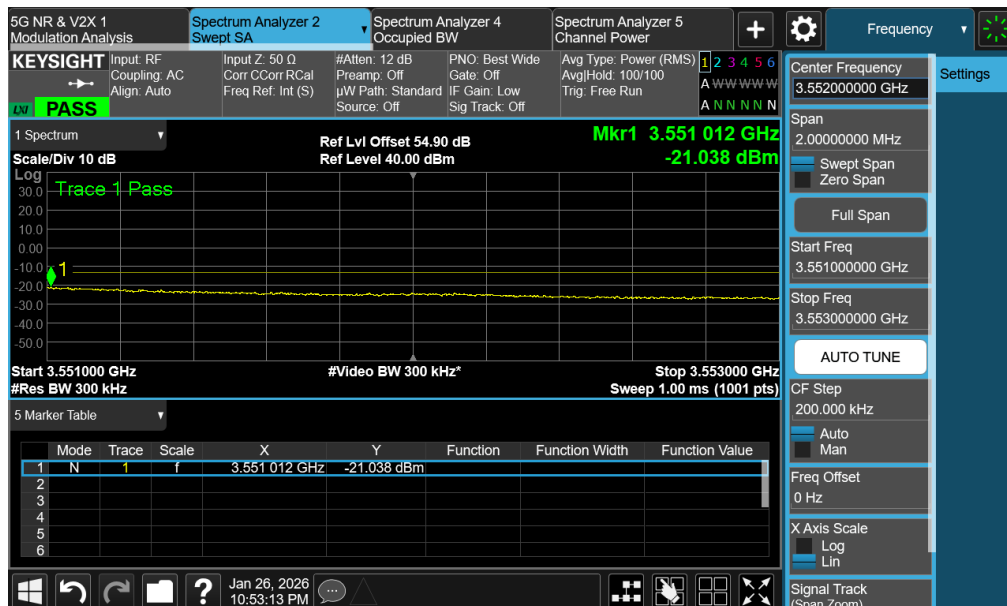
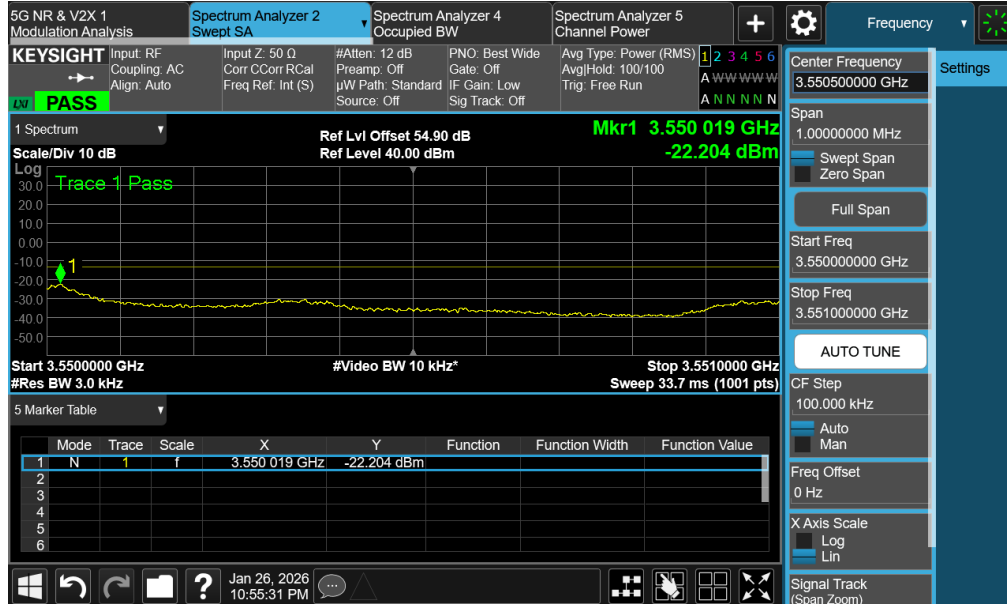
Out-of-band/out-of-block emissions

DL_GSM_HCH_a single test signal_3dB above AGC



Out-of-band/out-of-block emissions

DL_GSM_HCH_two adjacent test signals_Pre-AGC



Out-of-band/out-of-block emissions

DL_GSM_HCH_two adjacent test signals_3dB above AGC

