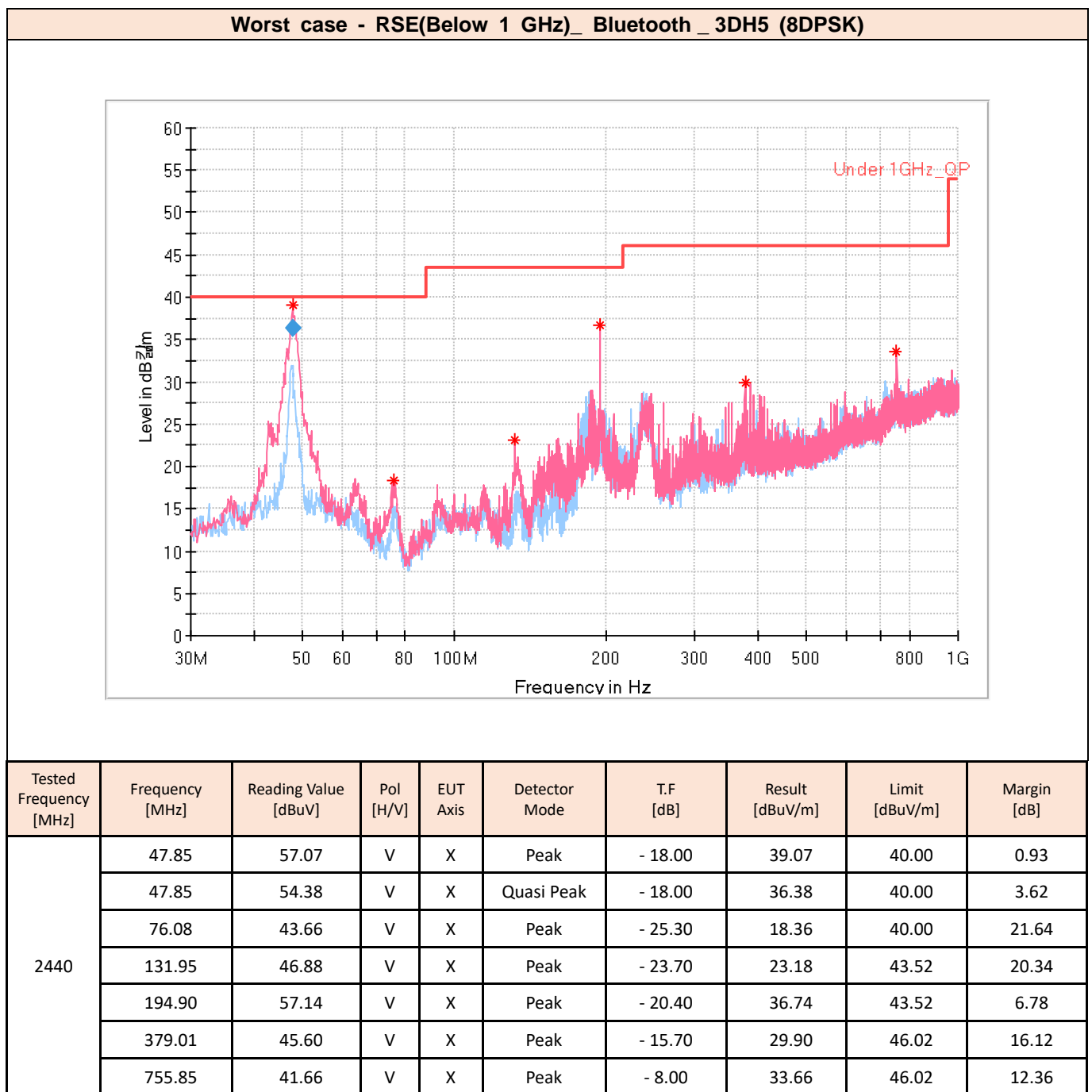


3.7.4 Test Result of Radiated Spurious Emission

Remarks

1. Quasi Peak(dBμV/m) = Quasi Peak Reading Value(dBμV/m) + Correction Factor(dB)
2. Total Factor(dB) = T.F (dB) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin(dB) = (Quasi Peak) Result (dBμV/m) – (Quasi Peak) Limit (dBμV/m)
4. Measurement Distance = 3 m.
6. DCCF = Duty Cycle Correction Factor.
7. No other spurious and harmonic emissions were found greater than listed emissions on above table

3.7.4.1 Radiated Emissions (Below 1 GHz)





3.7.4.2 Radiated Emissions (Above 1 GHz)

TM 1 (DH5 / GFSK) _ 12 V

Tested Frequency [MHz]	Frequency [MHz]	Reading Value [dBuV]	Pol [H/V]	EUT Axis	Detector Mode	DCCF [dB]	T.F [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
2402	2 389.43	44.88	V	X	Peak	0.00	3.05	47.93	74.00	26.07
	2 389.43	44.88	V	X	Average	-24.82	3.05	23.11	54.00	30.89
	4 804.32	55.78	V	X	Peak	0.00	4.57	60.35	74.00	13.65
	4 804.32	55.78	V	X	Average	-24.82	4.57	35.53	54.00	18.47
2440	4 880.30	59.99	V	X	Peak	0.00	5.12	65.11	74.00	8.89
	4 880.30	59.99	V	X	Average	-24.82	5.12	40.29	54.00	13.71
2480	2 485.30	45.55	V	X	Peak	0.00	3.44	48.99	74.00	25.01
	2 485.30	45.55	V	X	Average	-24.82	3.44	24.16	54.00	29.84
	4 960.29	61.50	V	X	Peak	0.00	5.34	66.84	74.00	7.16
	4 960.29	61.50	V	X	Average	-24.82	5.34	42.02	54.00	11.98

TM 1 (DH5 / GFSK) _ 24 V

Tested Frequency [MHz]	Frequency [MHz]	Reading Value [dBuV]	Pol [H/V]	EUT Axis	Detector Mode	DCCF [dB]	T.F [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
2402	2 489.76	44.55	V	X	Peak	0.00	3.45	48.00	74.00	26.00
	2 489.76	44.55	V	X	Average	-24.82	3.45	23.18	54.00	30.82
	4 804.25	56.03	V	X	Peak	0.00	4.57	60.60	74.00	13.40
	4 804.25	56.03	V	X	Average	-24.82	4.57	35.78	54.00	18.22
2440	4 880.29	60.03	V	X	Peak	0.00	5.12	65.15	74.00	8.85
	4 880.29	60.03	V	X	Average	-24.82	5.12	40.33	54.00	13.67
2480	2 483.96	44.92	V	X	Peak	0.00	3.43	48.35	74.00	25.65
	2 483.96	44.92	V	X	Average	-24.82	3.43	23.53	54.00	30.47
	4 960.29	61.39	V	X	Peak	0.00	5.34	66.73	74.00	7.27
	4 960.29	61.39	V	X	Average	-24.82	5.34	41.91	54.00	12.09



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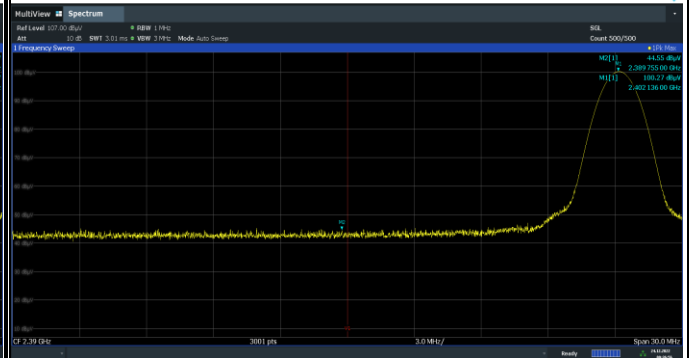
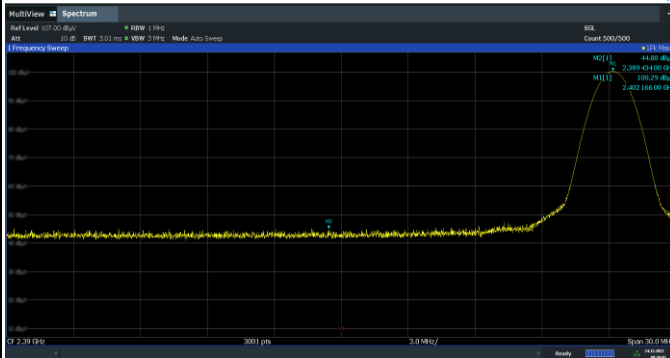
DH5 / GFSK

12 V

24 V

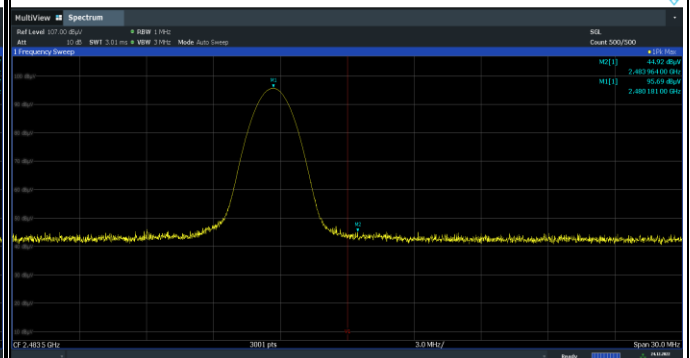
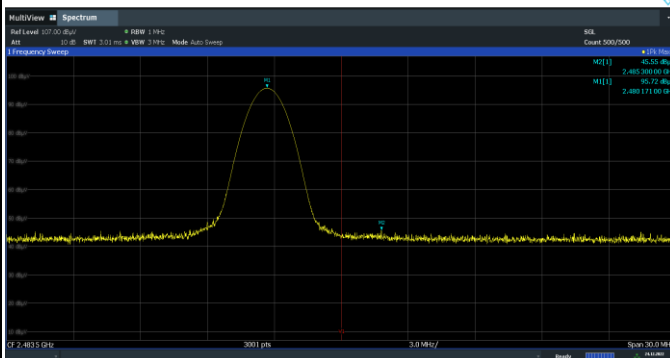
Bandedge_2 402 MHz

Bandedge_2 402 MHz



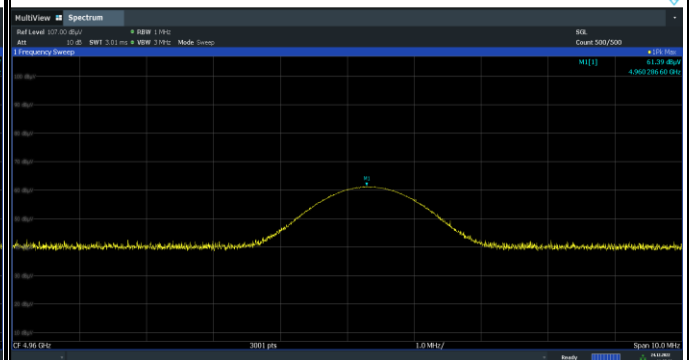
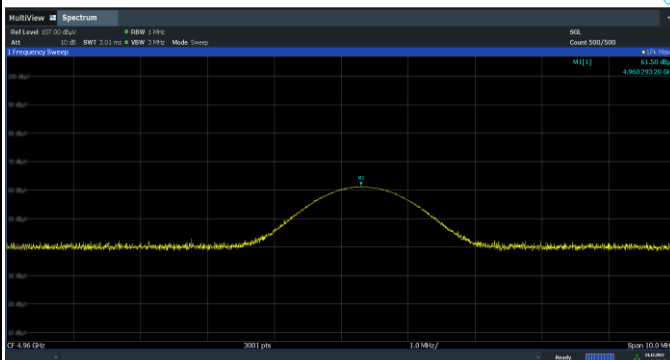
Bandedge_2 480 MHz

Bandedge_2 480 MHz



Spurious _ Worst case

Spurious _ Worst case





TM 2 (2DH5 / π /4DQPSK) _ 12 V

Tested Frequency [MHz]	Frequency [MHz]	Reading Value [dBuV]	Pol [H/V]	EUT Axis	Detector Mode	DCCF [dB]	T.F [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
2402	2 389.18	44.84	V	X	Peak	0.00	3.05	47.89	74.00	26.11
	2 389.18	44.84	V	X	Average	-24.79	3.05	23.10	54.00	30.90
	4 803.41	55.54	V	X	Peak	0.00	4.57	60.11	74.00	13.89
	4 803.41	55.54	V	X	Average	-24.79	4.57	35.32	54.00	18.68
2440	4 879.44	59.25	V	X	Peak	0.00	5.12	64.37	74.00	9.63
	4 879.44	59.25	V	X	Average	-24.79	5.12	39.58	54.00	14.42
2480	2 484.12	45.01	V	X	Peak	0.00	3.43	48.44	74.00	25.56
	2 484.12	45.01	V	X	Average	-24.79	3.43	23.65	54.00	30.35
	4 959.46	58.92	V	X	Peak	0.00	5.34	64.26	74.00	9.74
	4 959.46	58.92	V	X	Average	-24.79	5.34	39.47	54.00	14.53

TM 2 (2DH5 / π /4DQPSK) _ 24 V

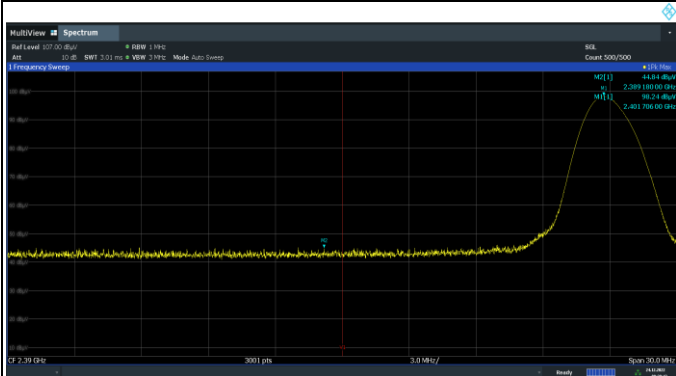
Tested Frequency [MHz]	Frequency [MHz]	Reading Value [dBuV]	Pol [H/V]	EUT Axis	Detector Mode	DCCF [dB]	T.F [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
2402	2 389.13	44.31	V	X	Peak	0.00	3.05	47.36	74.00	26.64
	2 389.13	44.31	V	X	Average	-24.79	3.05	22.57	54.00	31.43
	4 803.41	55.77	V	X	Peak	0.00	4.57	60.34	74.00	13.66
	4 803.41	55.77	V	X	Average	-24.79	4.57	35.55	54.00	18.45
2440	4 879.44	59.17	V	X	Peak	0.00	5.12	64.29	74.00	9.71
	4 879.44	59.17	V	X	Average	-24.79	5.12	39.50	54.00	14.50
2480	2 484.30	44.65	V	X	Peak	0.00	3.43	48.08	74.00	25.92
	2 484.30	44.65	V	X	Average	-24.79	3.43	23.29	54.00	30.71
	4 959.46	58.81	V	X	Peak	0.00	5.34	64.15	74.00	9.85
	4 959.46	58.81	V	X	Average	-24.79	5.34	39.36	54.00	14.64



2DH5 / $\pi/4$ DQPSK

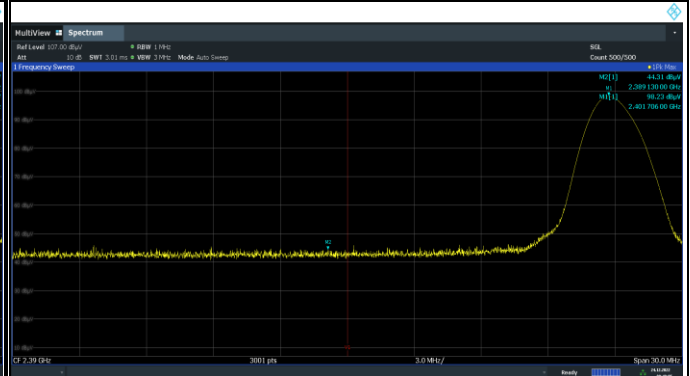
12 V

Bandedge_2 402 MHz

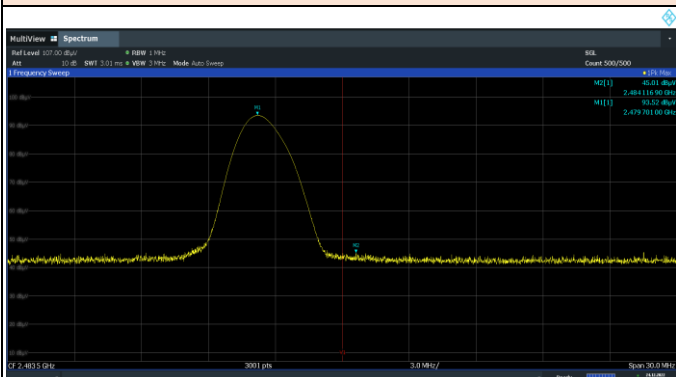


24 V

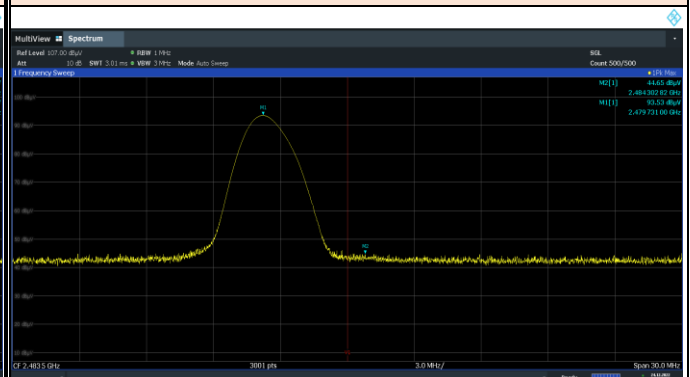
Bandedge_2 402 MHz



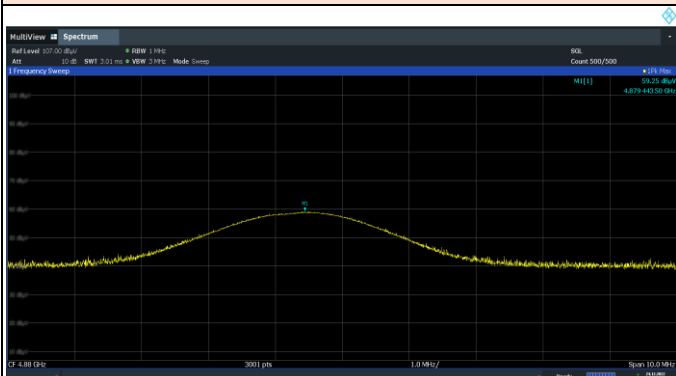
Bandedge_2 480 MHz



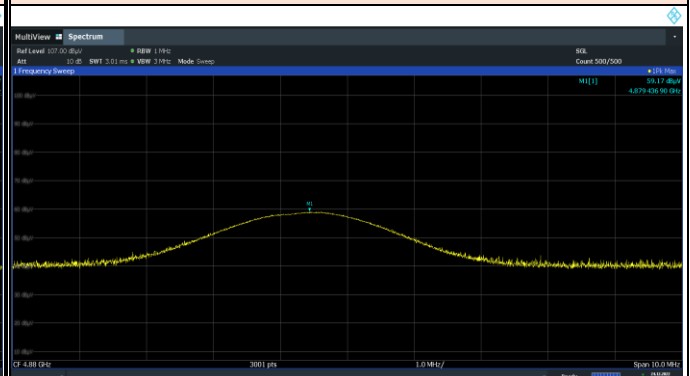
Bandedge_2 480 MHz



Spurious _ Worst case



Spurious _ Worst case





TM 3 (3DH5 / 8DPSK) _ 12 V

Tested Frequency [MHz]	Frequency [MHz]	Reading Value [dBuV]	Pol [H/V]	EUT Axis	Detector Mode	DCCF [dB]	T.F [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
2402	2 389.62	44.20	V	X	Peak	0.00	3.05	47.25	74.00	26.75
	2 389.62	44.20	V	X	Average	-24.79	3.05	22.46	54.00	31.54
	4 803.47	55.65	V	X	Peak	0.00	4.57	60.22	74.00	13.78
	4 803.47	55.65	V	X	Average	-24.79	4.57	35.43	54.00	18.57
2440	4 879.56	59.11	V	X	Peak	0.00	5.12	64.23	74.00	9.77
	4 879.56	59.11	V	X	Average	-24.79	5.12	39.44	54.00	14.56
2480	2 483.58	45.83	V	X	Peak	0.00	3.43	49.26	74.00	24.74
	2 483.58	45.83	V	X	Average	-24.79	3.43	24.47	54.00	29.53
	4 959.50	59.06	V	X	Peak	0.00	5.34	64.40	74.00	9.60
	4 959.50	59.06	V	X	Average	-24.79	5.34	39.61	54.00	14.39

TM 3 (3DH5 / 8DPSK) _ 24 V

Tested Frequency [MHz]	Frequency [MHz]	Reading Value [dBuV]	Pol [H/V]	EUT Axis	Detector Mode	DCCF [dB]	T.F [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]
2402	2 389.57	44.23	V	X	Peak	0.00	3.05	47.28	74.00	26.72
	2 389.57	44.23	V	X	Average	-24.79	3.05	22.49	54.00	31.51
	4 803.39	55.54	V	X	Peak	0.00	4.57	60.11	74.00	13.89
	4 803.39	55.54	V	X	Average	-24.79	4.57	35.32	54.00	18.68
2440	4 879.48	59.19	V	X	Peak	0.00	5.12	64.31	74.00	9.69
	4 879.48	59.19	V	X	Average	-24.79	5.12	39.52	54.00	14.48
2480	2 484.76	44.78	V	X	Peak	0.00	3.43	48.21	74.00	25.79
	2 484.76	44.78	V	X	Average	-24.79	3.43	23.42	54.00	30.58
	4 959.50	58.80	V	X	Peak	0.00	5.34	64.14	74.00	9.86
	4 959.50	58.80	V	X	Average	-24.79	5.34	39.35	54.00	14.65

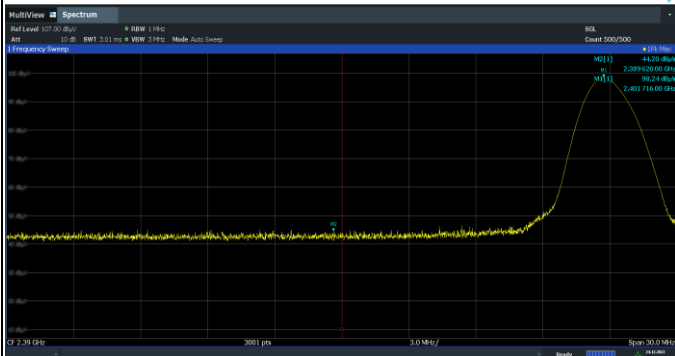


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3DH5 / 8DPSK

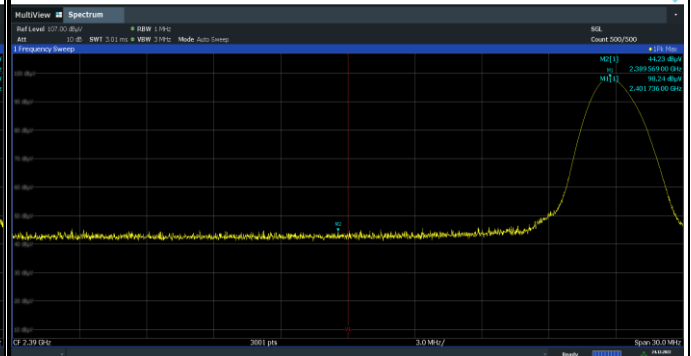
12 V

Bandedge_2 402 MHz

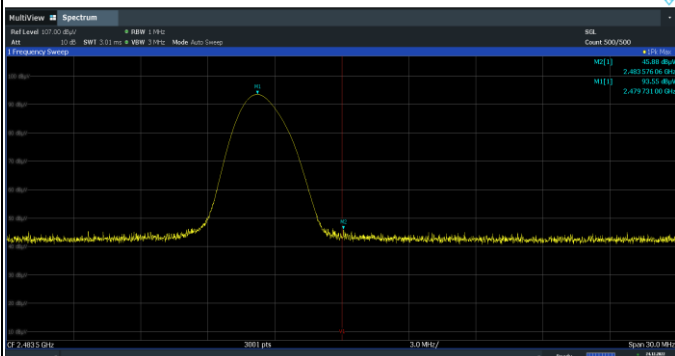


24 V

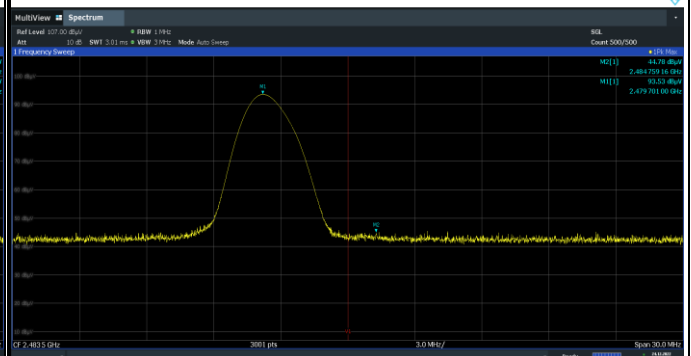
Bandedge_2 402 MHz



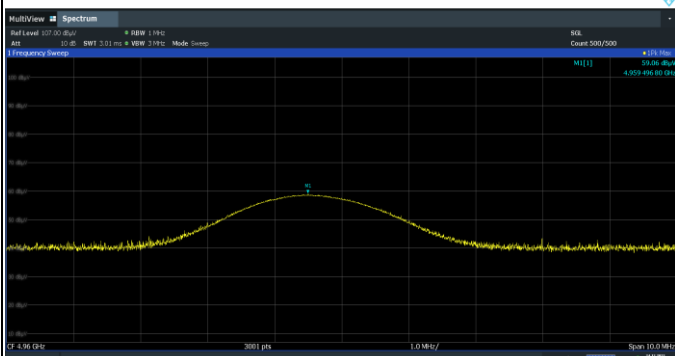
Bandedge_2 480 MHz



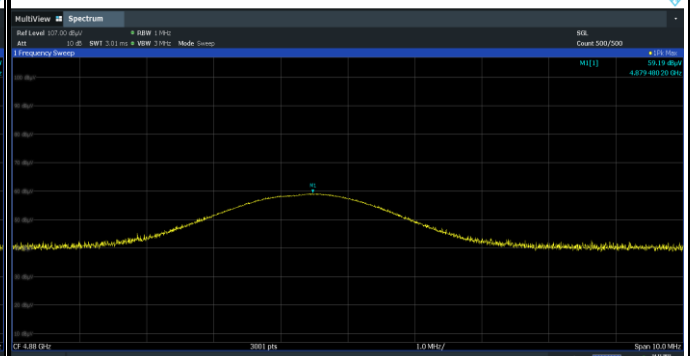
Bandedge_2 480 MHz



Spurious _ Worst case



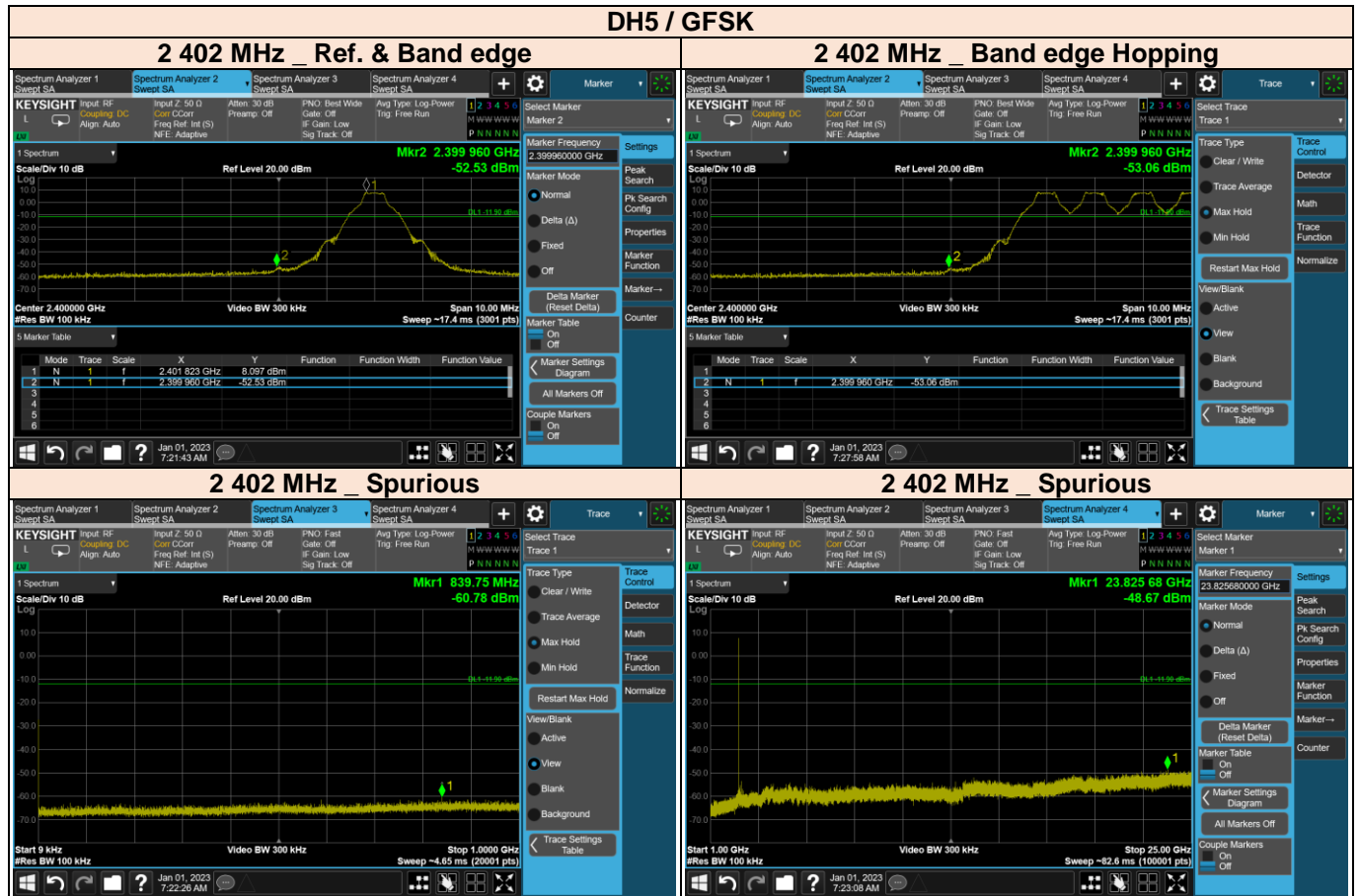
Spurious _ Worst case





3.7.5 Test Result of Conducted Spurious Emission

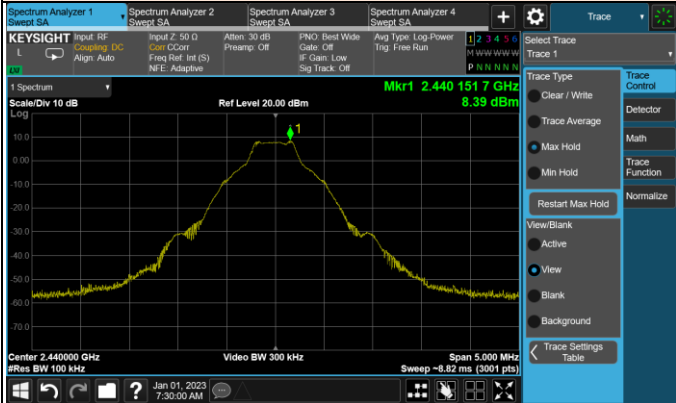
[DC 12 V Spurious Emission]



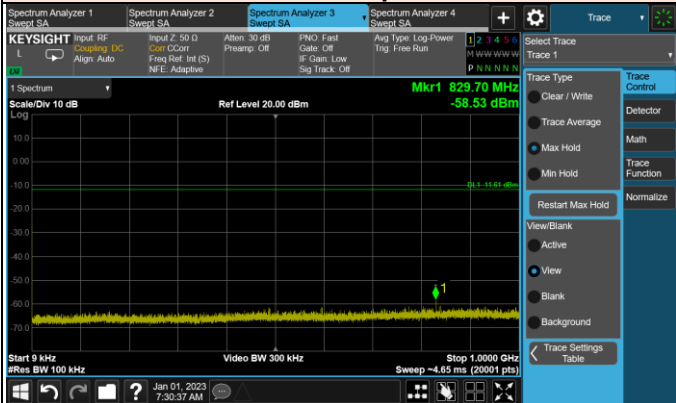


DH5 / GFSK

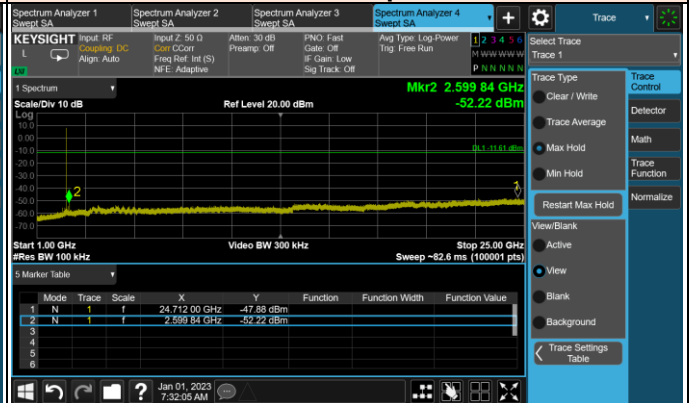
2 440 MHz _ Ref.



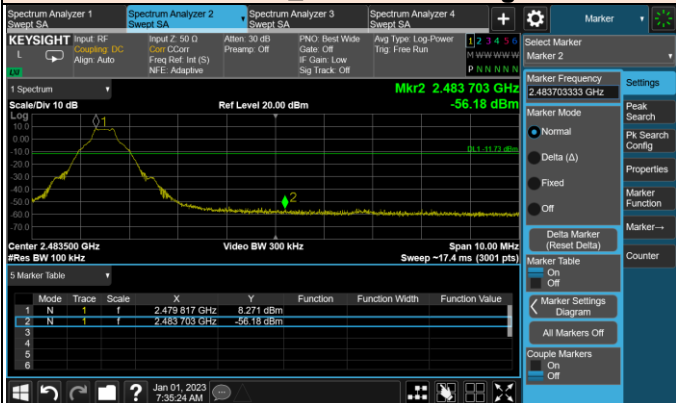
2 440 MHz _ Spurious



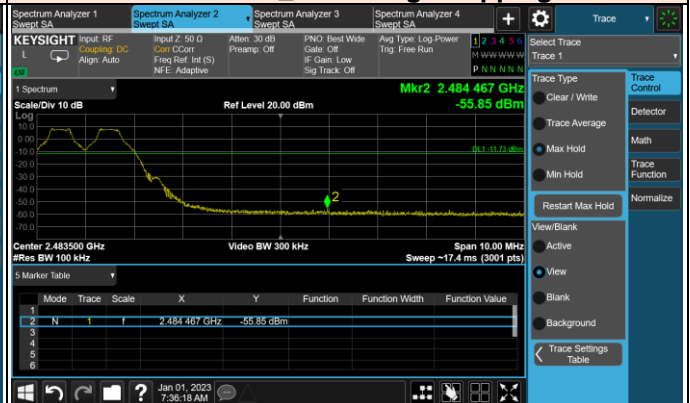
2 440 MHz _ Spurious



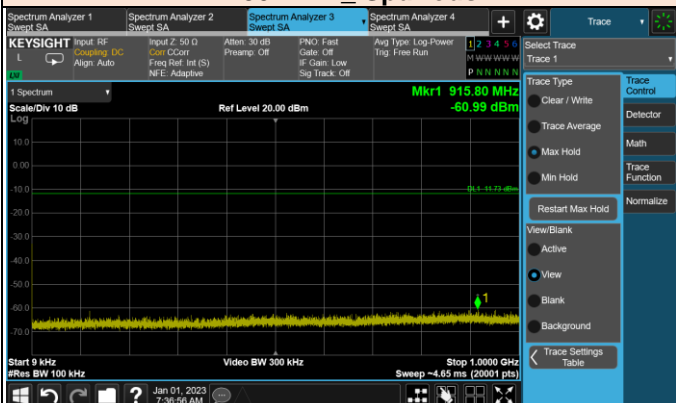
2 480 MHz _ Ref. & Band edge



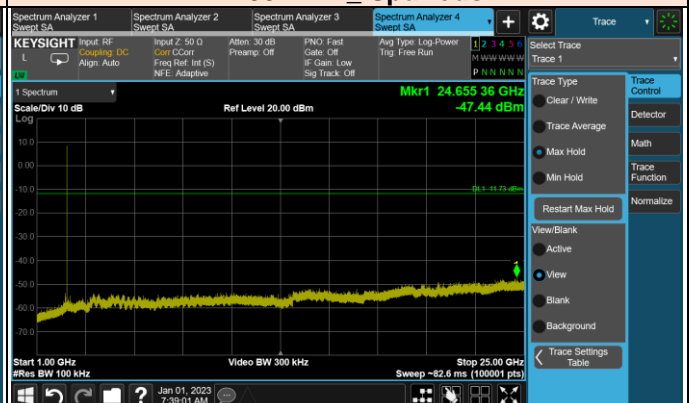
2 480 MHz _ Band edge Hopping



2 480 MHz _ Spurious



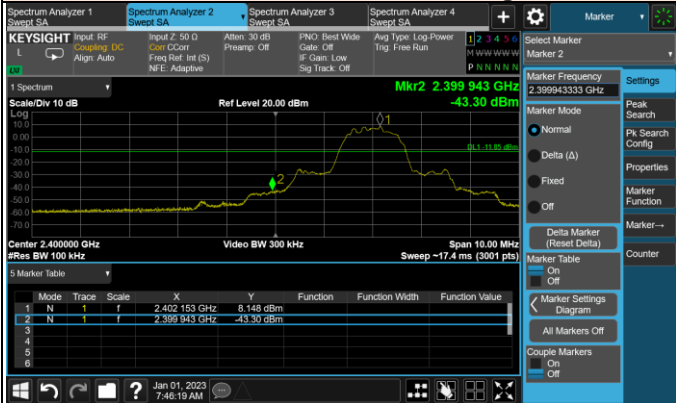
2 480 MHz _ Spurious





2DH5 / $\pi/4$ DQPSK

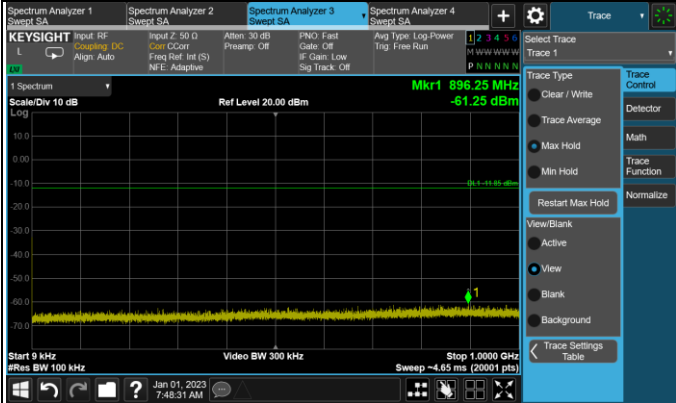
2 402 MHz _ Ref. & Band edge



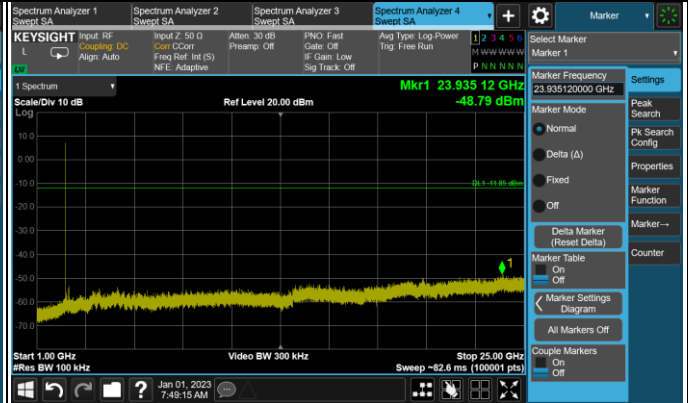
2 402 MHz _ Band edge Hopping



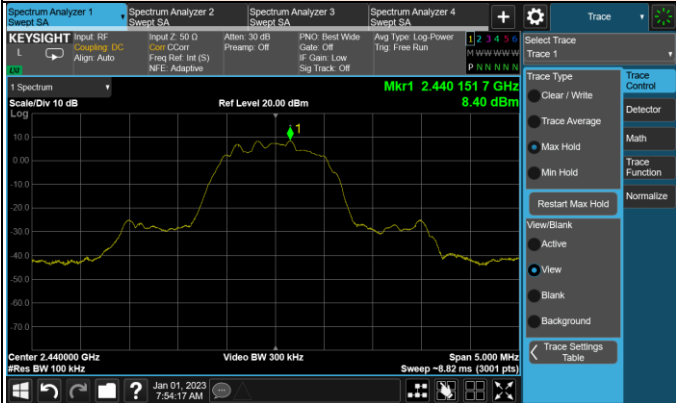
2 402 MHz _ Spurious



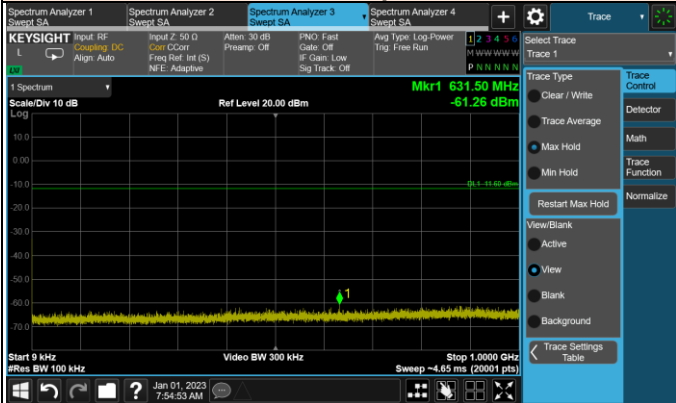
2 402 MHz _ Spurious



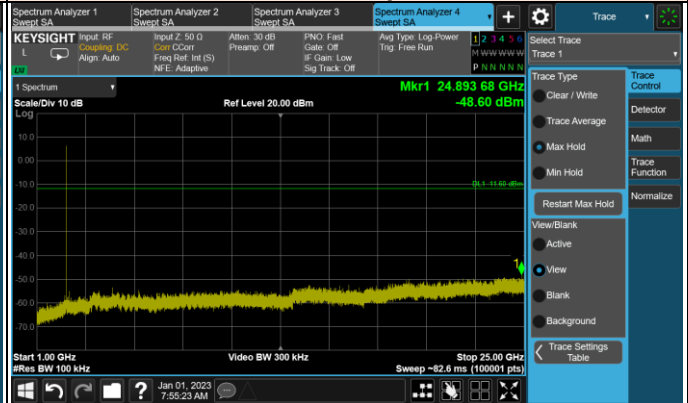
2 440 MHz _ Ref.



2 440 MHz _ Spurious



2 440 MHz _ Spurious





2DH5 / $\pi/4$ DQPSK

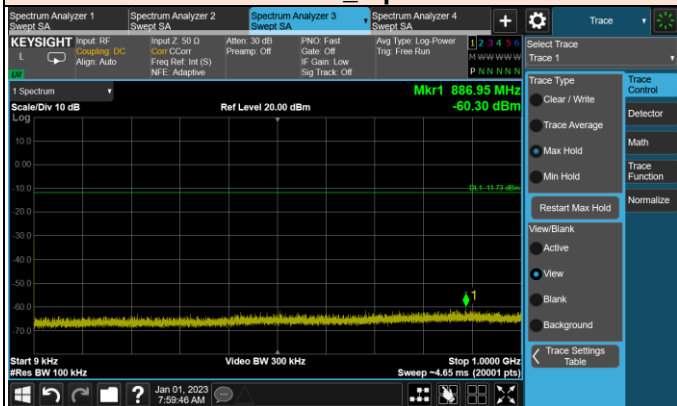
2 480 MHz _ Ref. & Band edge



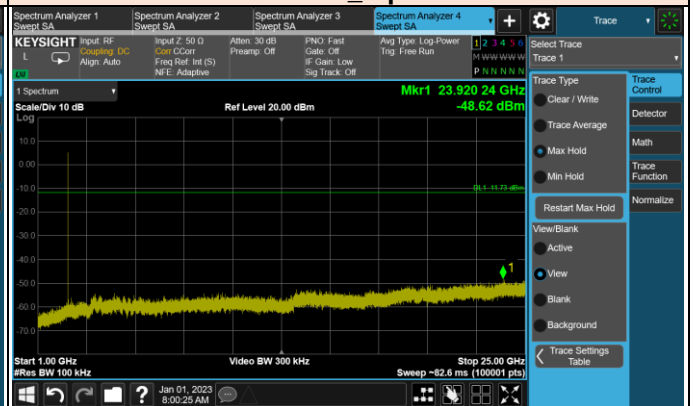
2 480 MHz _ Band edge Hopping



2 480 MHz _ Spurious



2 480 MHz _ Spurious

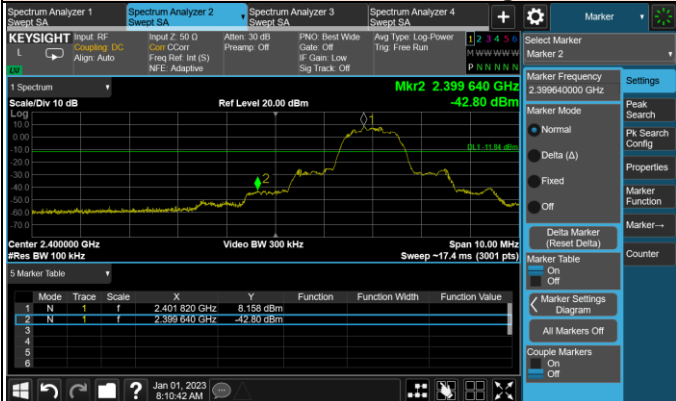




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3DH5 / 8DPSK

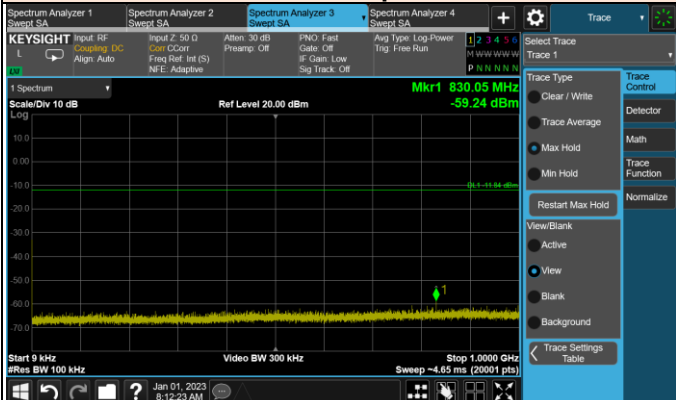
2 402 MHz _ Ref. & Band edge



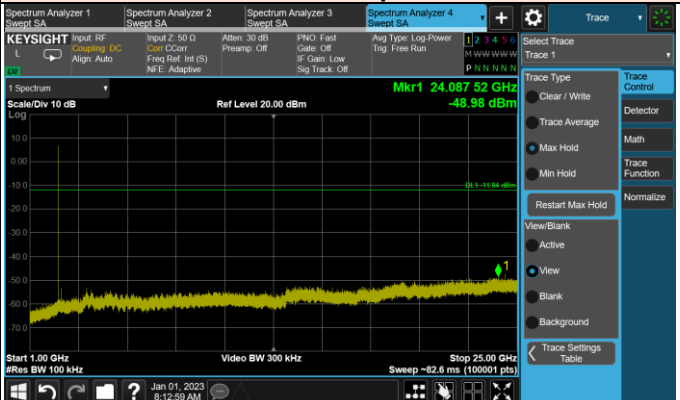
2 402 MHz _ Band edge Hopping



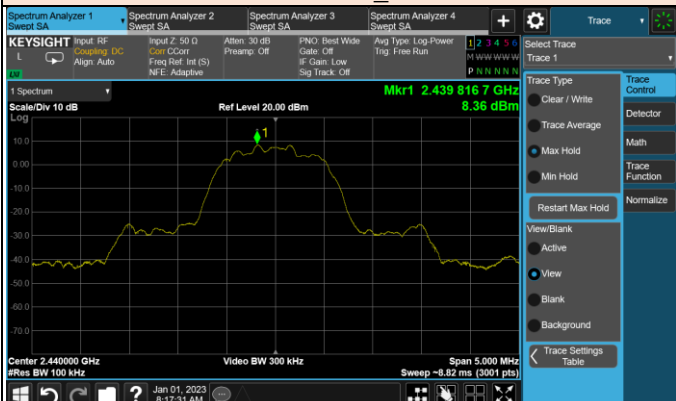
2 402 MHz _ Spurious



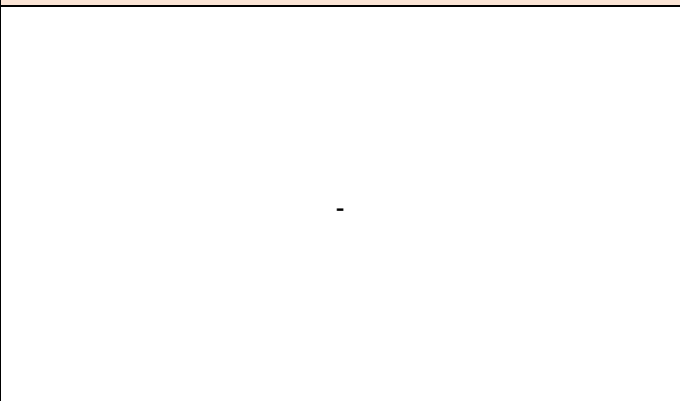
2 402 MHz _ Spurious



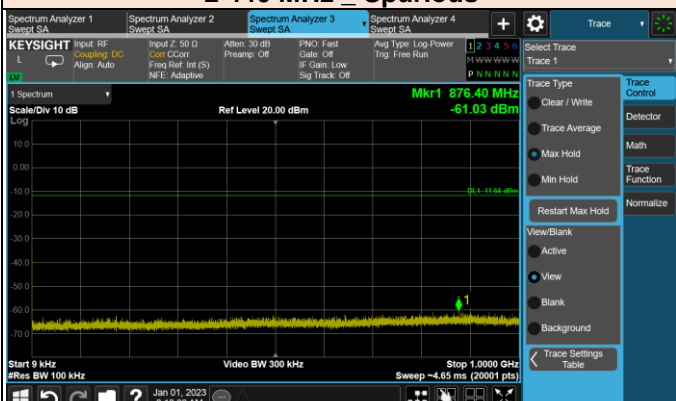
2 440 MHz _ Ref.



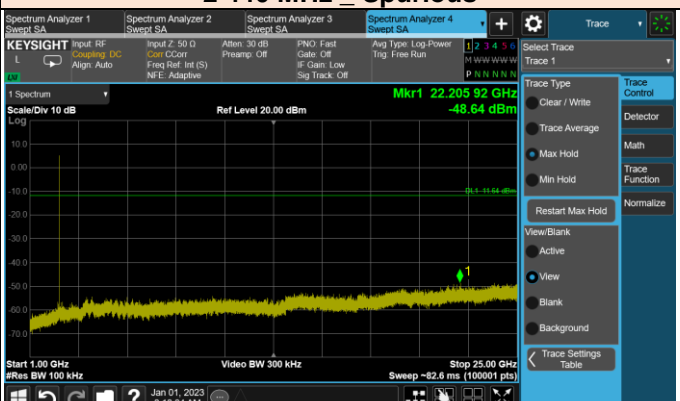
2 440 MHz _ Spurious



2 440 MHz _ Spurious



2 440 MHz _ Spurious

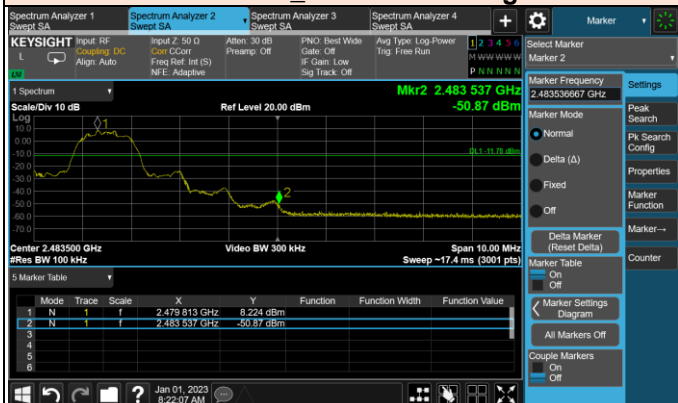




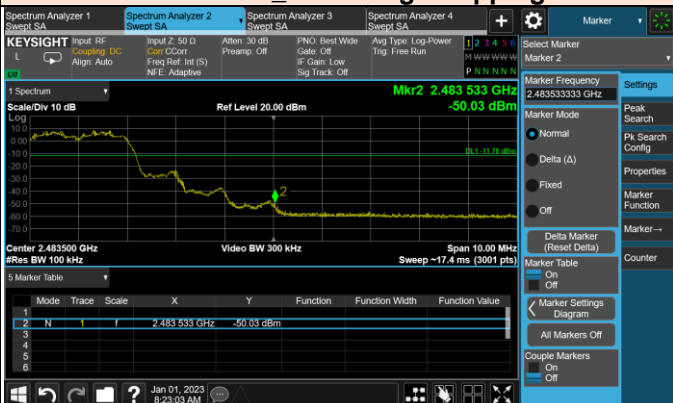
BUREAU VERITAS

3DH5 / 8DPSK

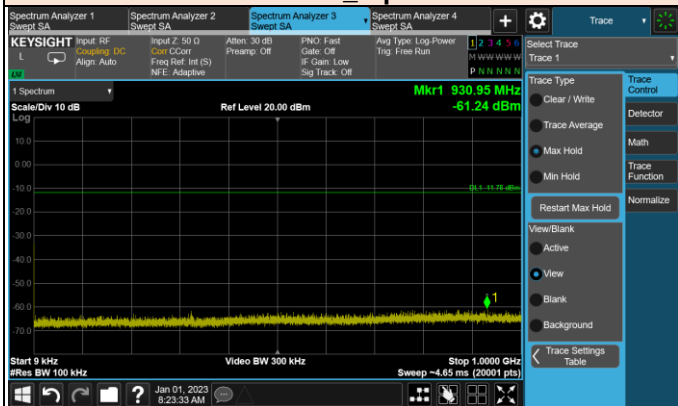
2 480 MHz _ Ref. & Band edge



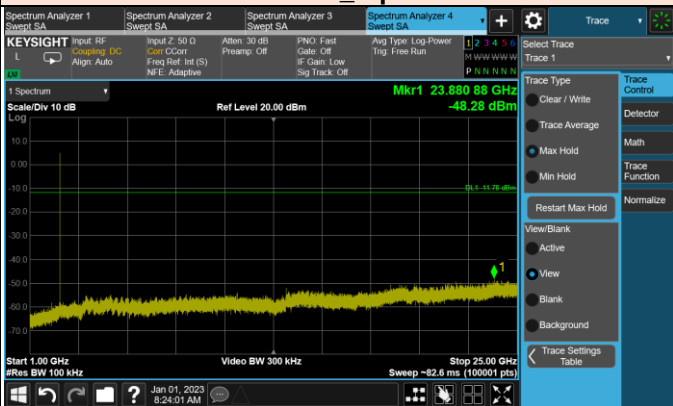
2 480 MHz _ Band edge Hopping



2 480 MHz _ Spurious



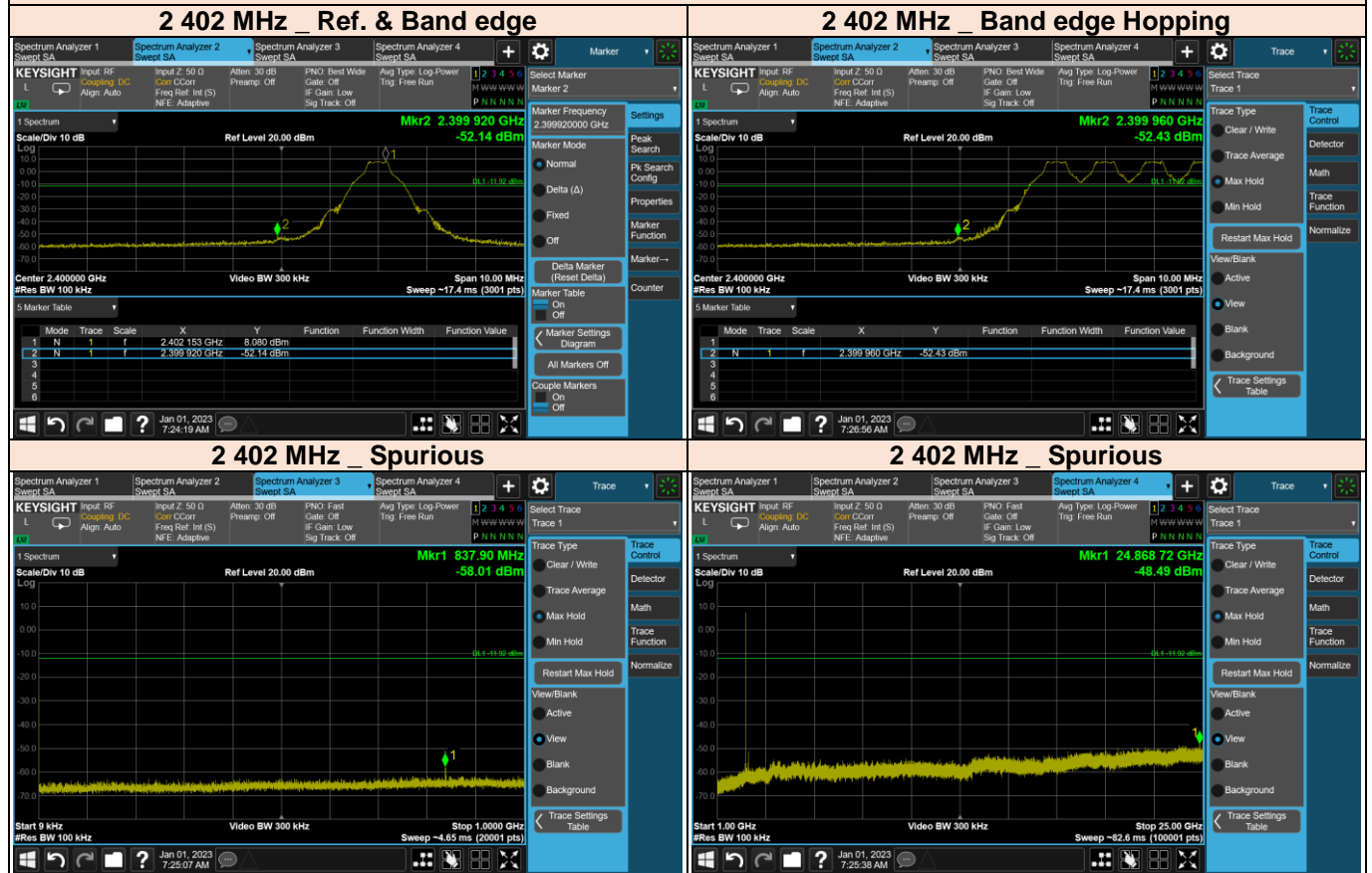
2 480 MHz _ Spurious





[DC 24 V Spurious Emission]

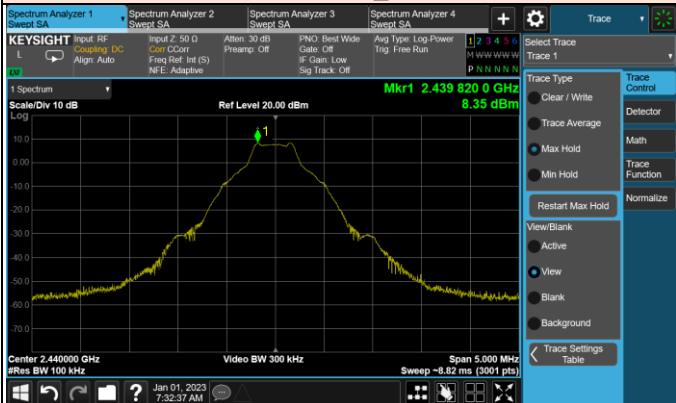
DH5 / GFSK



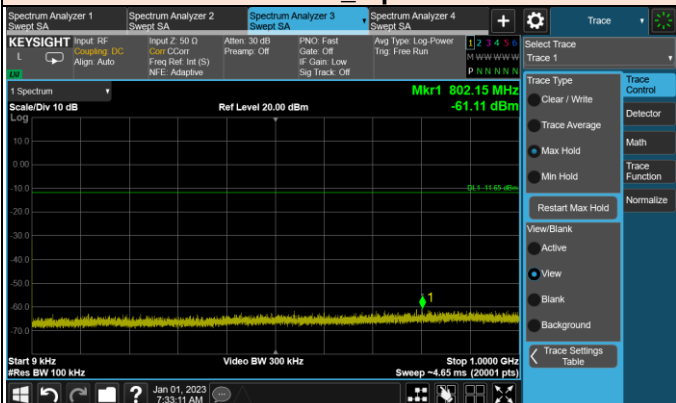


DH5 / GFSK

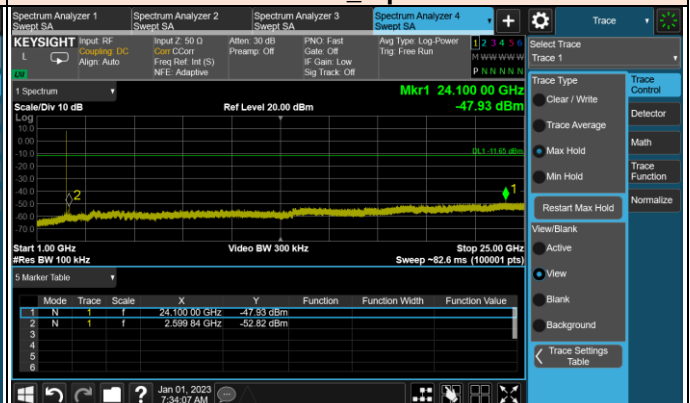
2 440 MHz _ Ref.



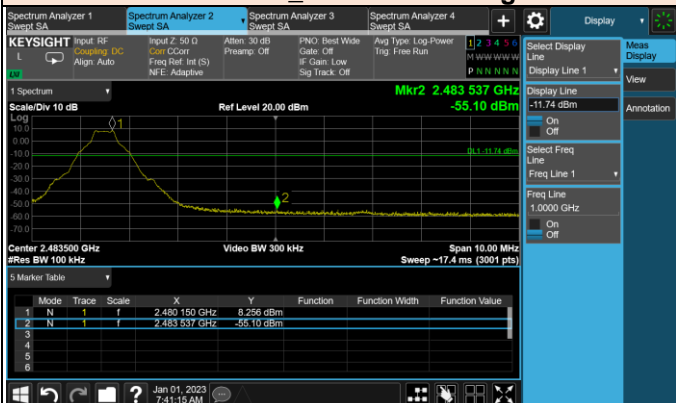
2 440 MHz _ Spurious



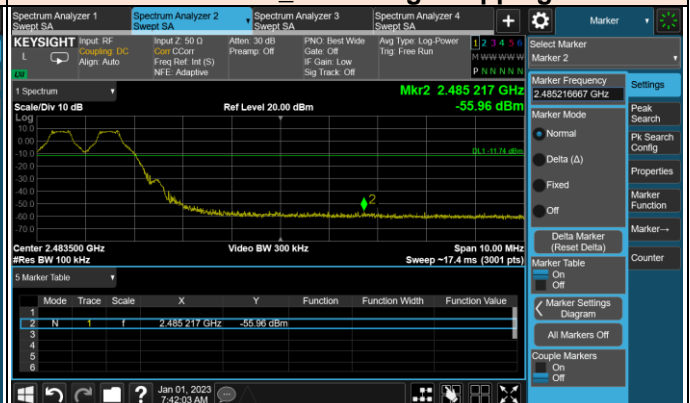
2 440 MHz _ Spurious



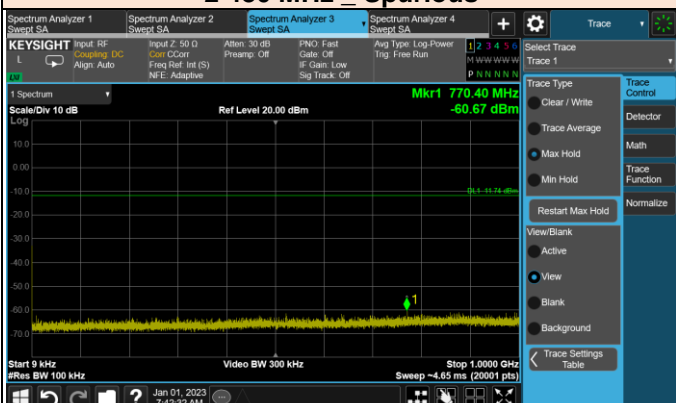
2 480 MHz _ Ref. & Band edge



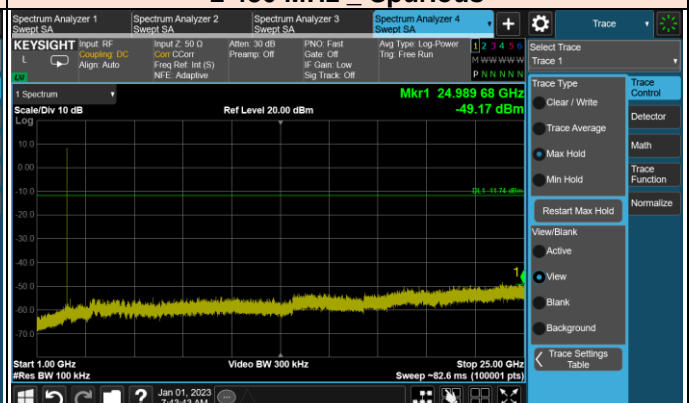
2 480 MHz _ Band edge Hopping



2 480 MHz _ Spurious



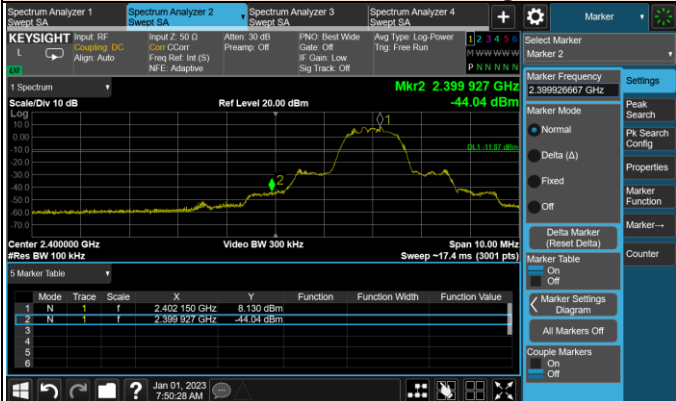
2 480 MHz _ Spurious





2DH5 / $\pi/4$ DQPSK

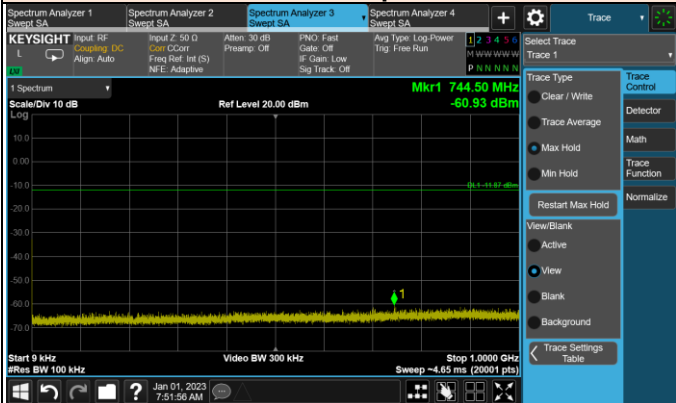
2 402 MHz _ Ref. & Band edge



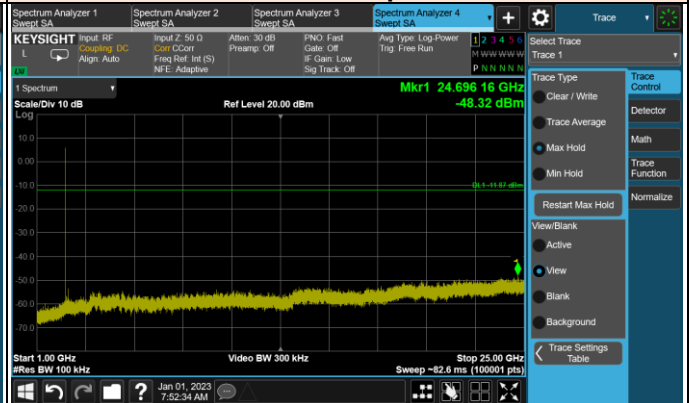
2 402 MHz _ Band edge Hopping



2 402 MHz _ Spurious



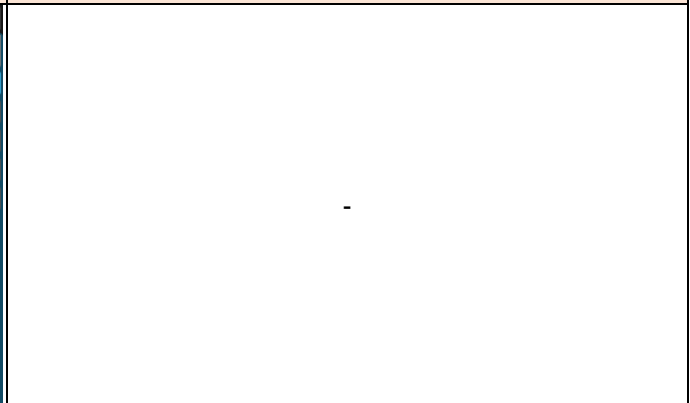
2 402 MHz _ Spurious



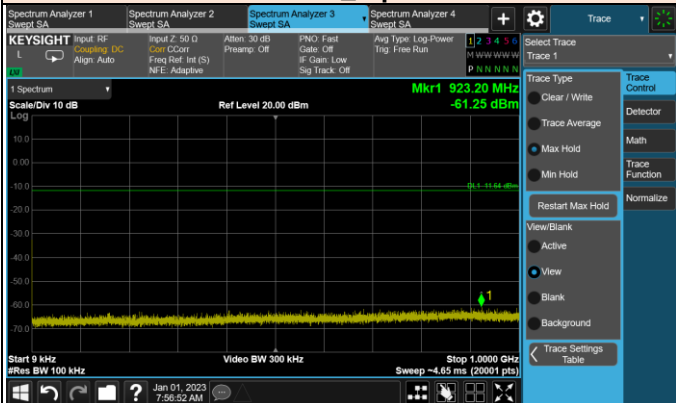
2 440 MHz _ Ref.



2 440 MHz _ Spurious



2 440 MHz _ Spurious



2 440 MHz _ Spurious

