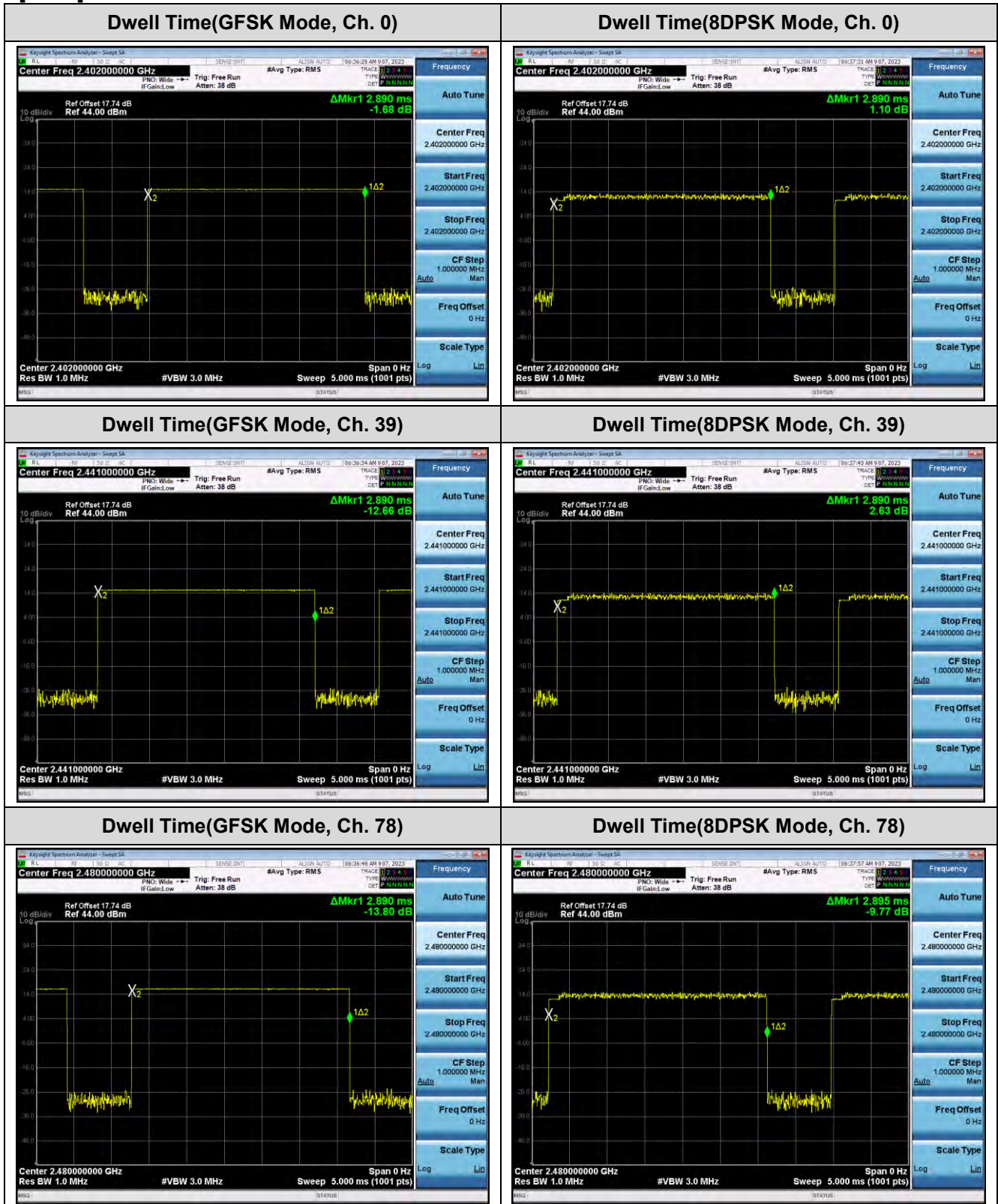
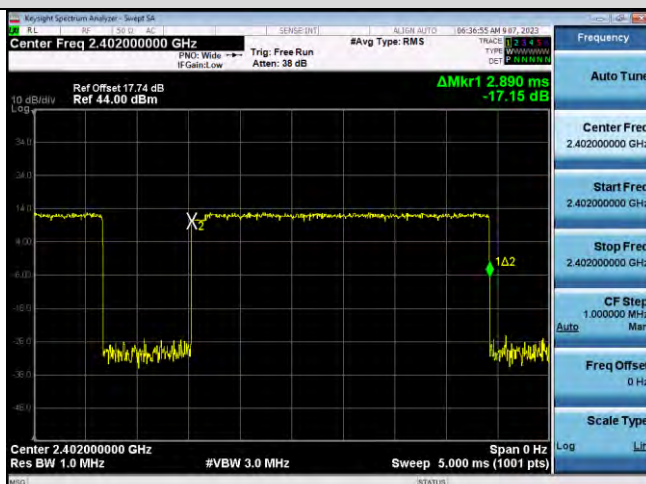


■ TEST PLOTS

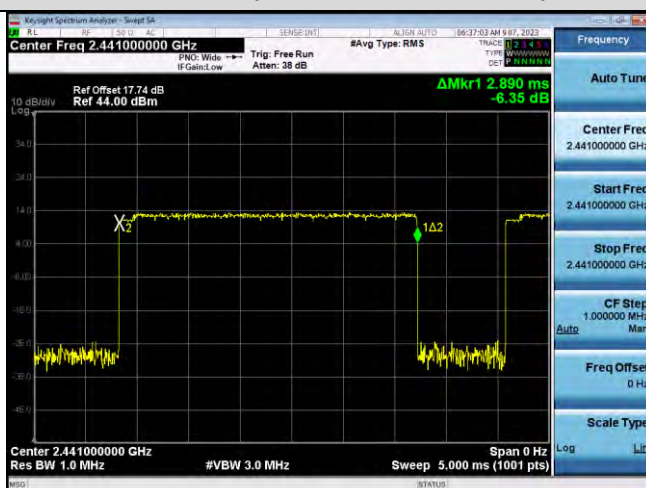
[ANT1]



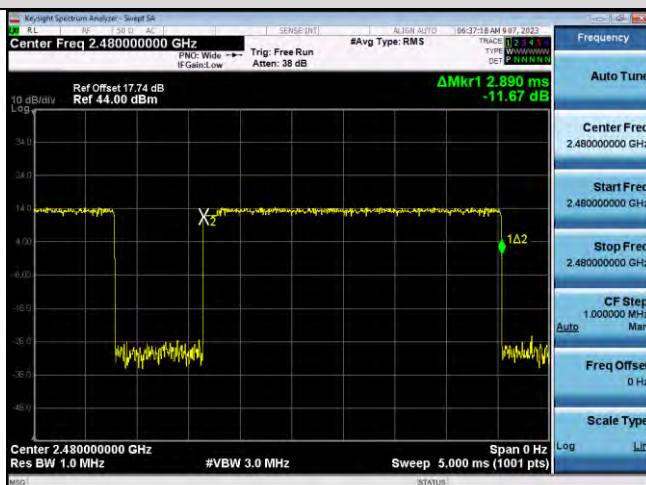
Dwell Time(4DQPSK Mode, Ch. 0)



Dwell Time(4DQPSK Mode, Ch. 39)



Dwell Time(4DQPSK Mode, Ch. 78)

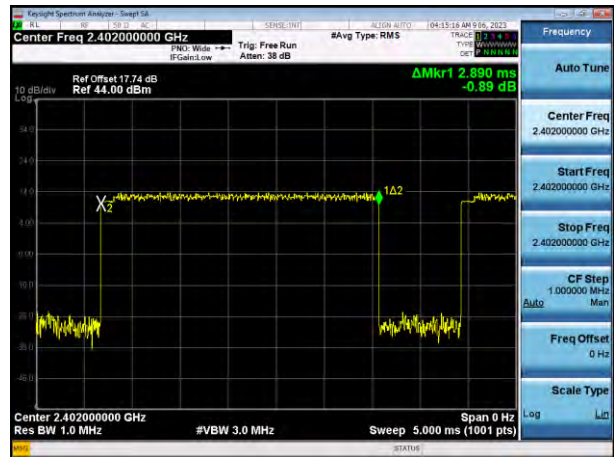


[Ant.2]

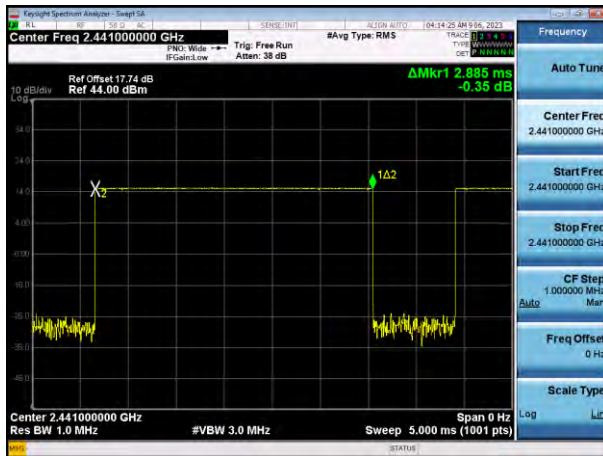
Dwell Time(GFSK Mode, Ch. 0)



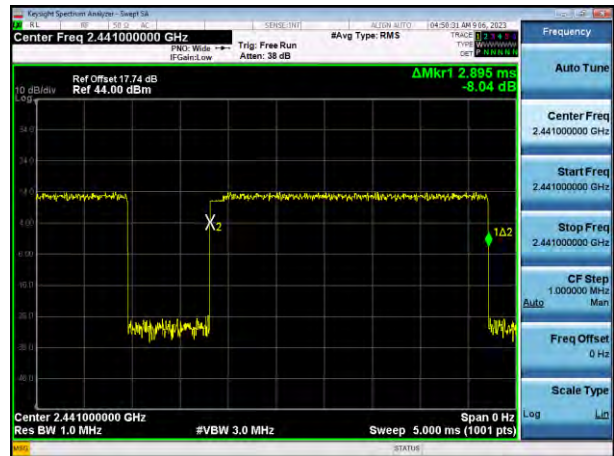
Dwell Time(8DPSK Mode, Ch. 0)



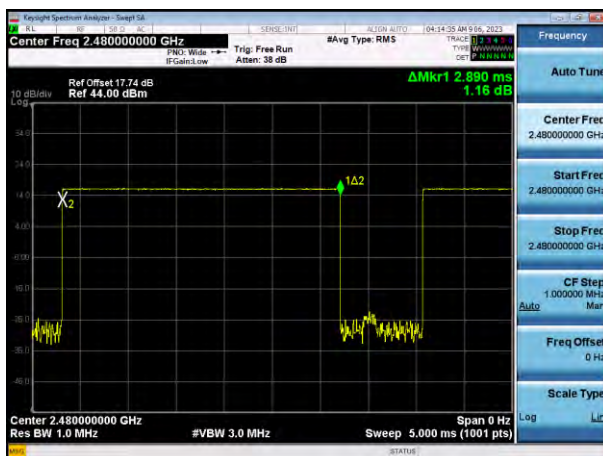
Dwell Time(GFSK Mode, Ch. 39)



Dwell Time(8DPSK Mode, Ch. 39)



Dwell Time(GFSK Mode, Ch. 78)



Dwell Time(8DPSK Mode, Ch. 78)



Dwell Time(4DQPSK Mode, Ch. 0)



Dwell Time(4DQPSK Mode, Ch. 39)

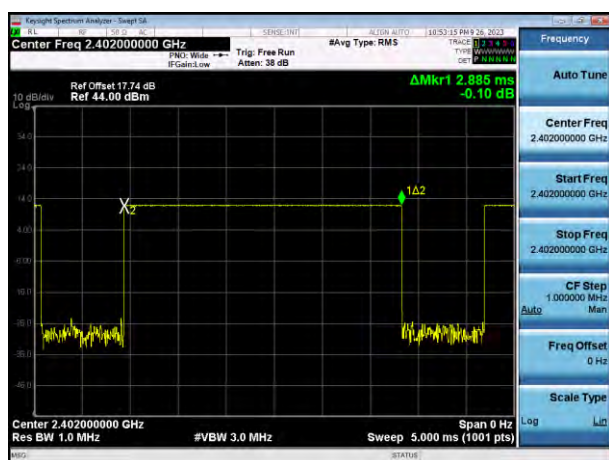


Dwell Time(4DQPSK Mode, Ch. 78)

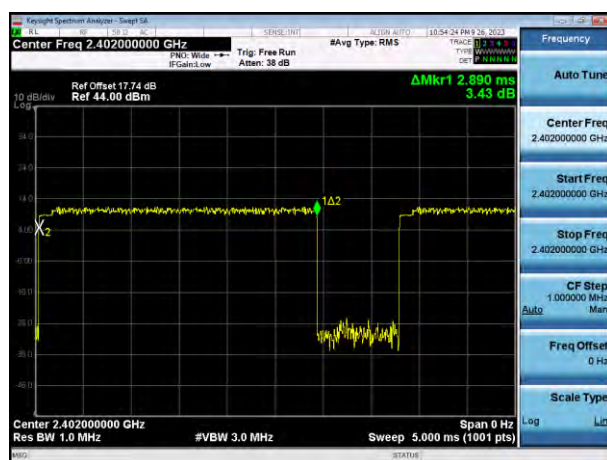


[Dual Ant.1]

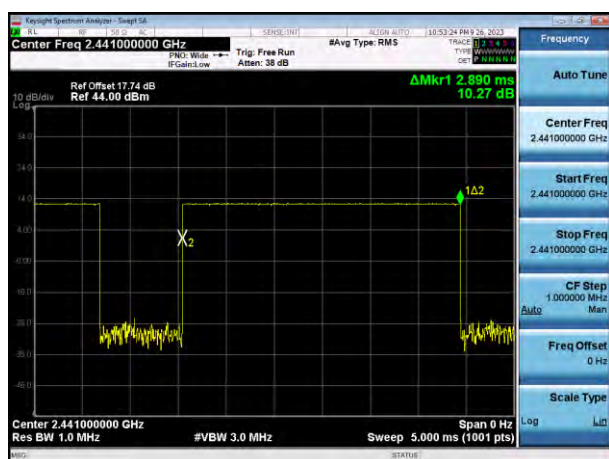
Dwell Time(GFSK Mode, Ch. 0)



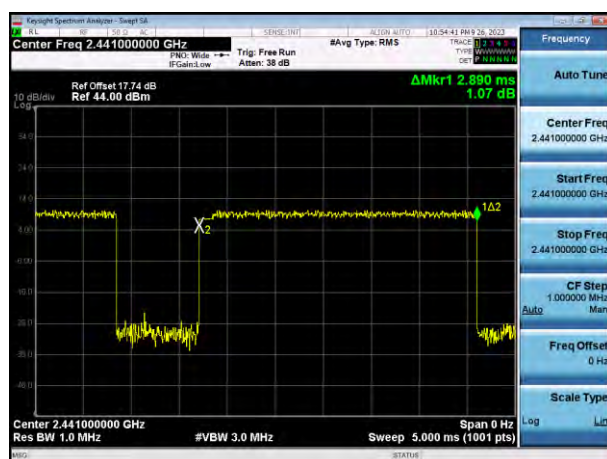
Dwell Time(8DPSK Mode, Ch. 0)



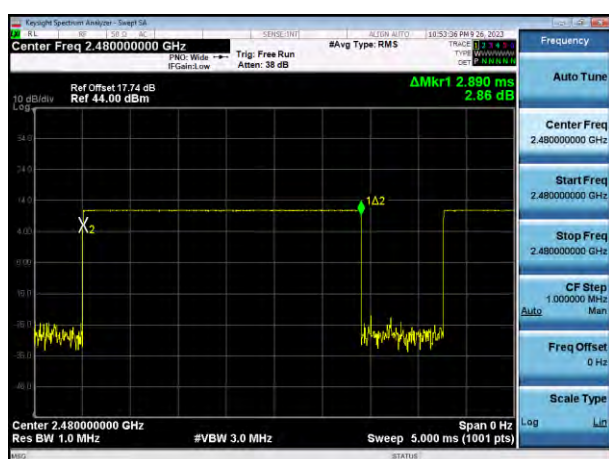
Dwell Time(GFSK Mode, Ch. 39)



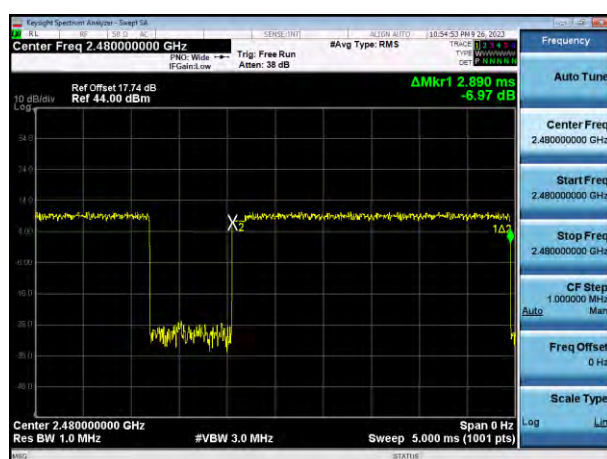
Dwell Time(8DPSK Mode, Ch. 39)



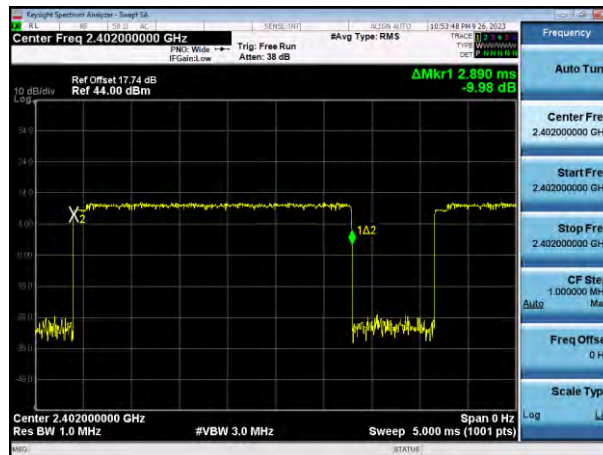
Dwell Time(GFSK Mode, Ch. 78)



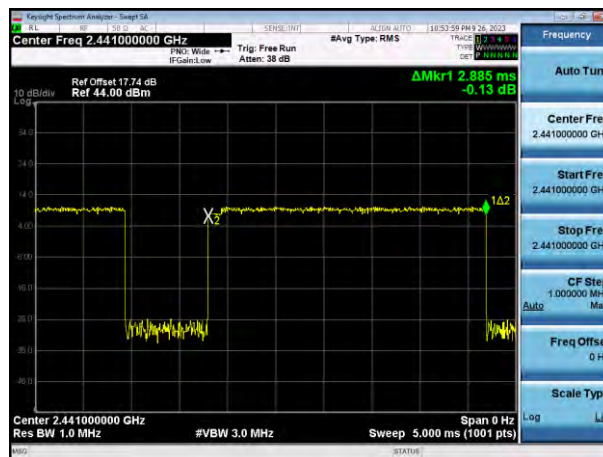
Dwell Time(8DPSK Mode, Ch. 78)



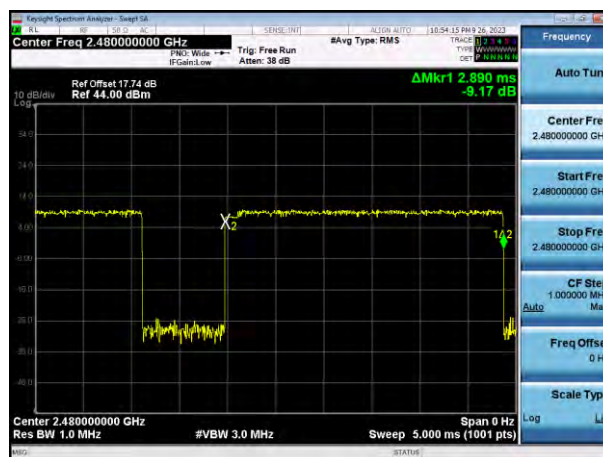
Dwell Time(4DQPSK Mode, Ch. 0)



Dwell Time(4DQPSK Mode, Ch. 39)

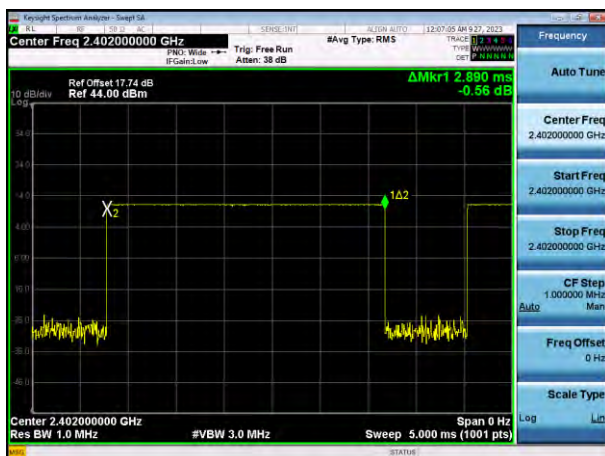


Dwell Time(4DQPSK Mode, Ch. 78)

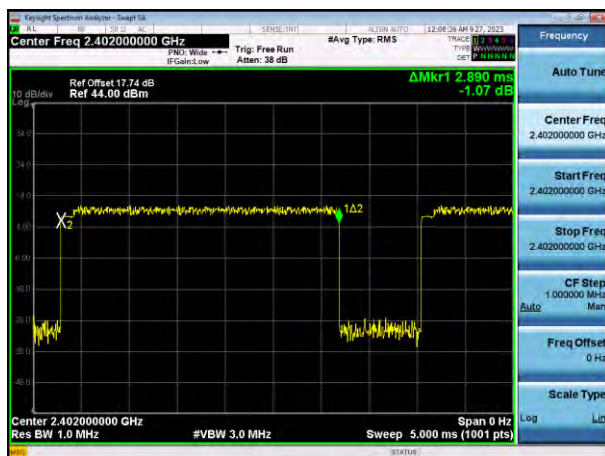


[Dual Ant.2]

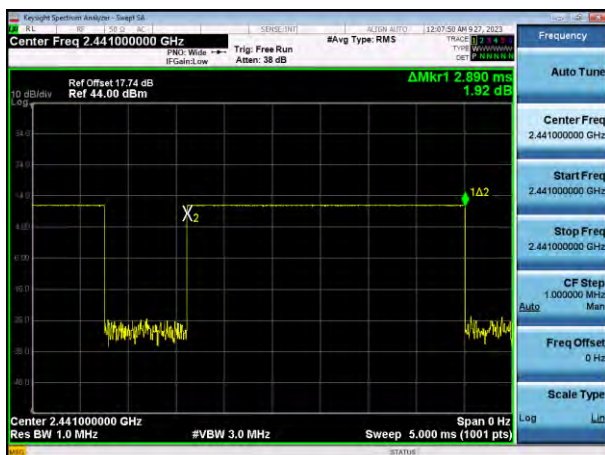
Dwell Time(GFSK Mode, Ch. 0)



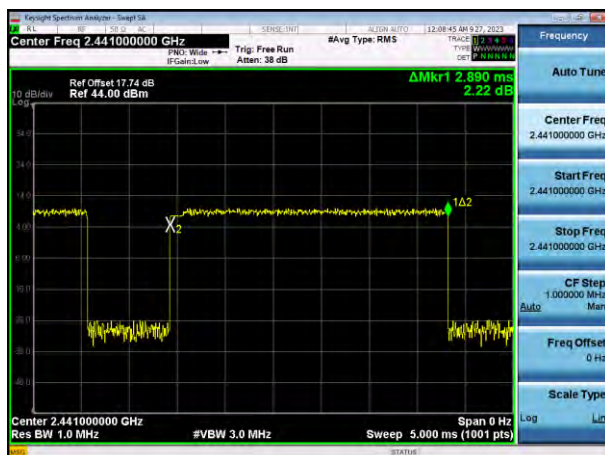
Dwell Time(8DPSK Mode, Ch. 0)



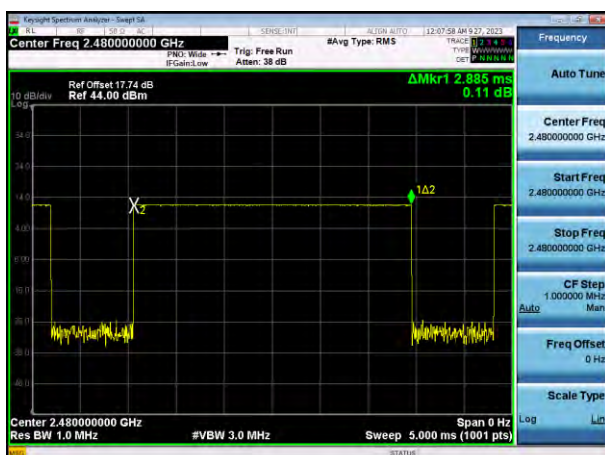
Dwell Time(GFSK Mode, Ch. 39)



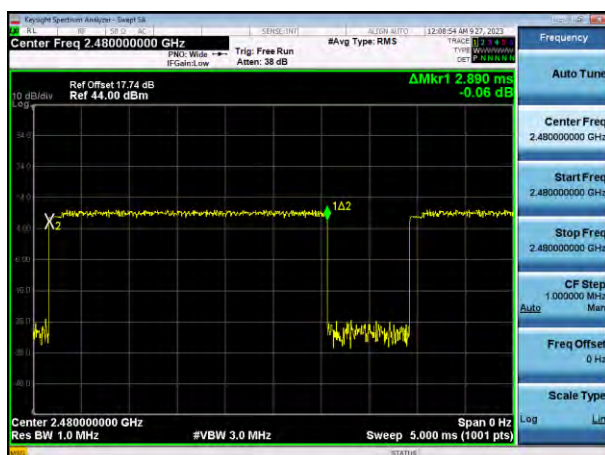
Dwell Time(8DPSK Mode, Ch. 39)



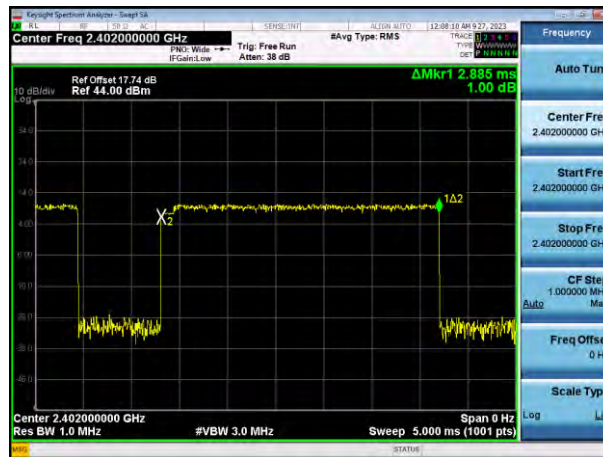
Dwell Time(GFSK Mode, Ch. 78)



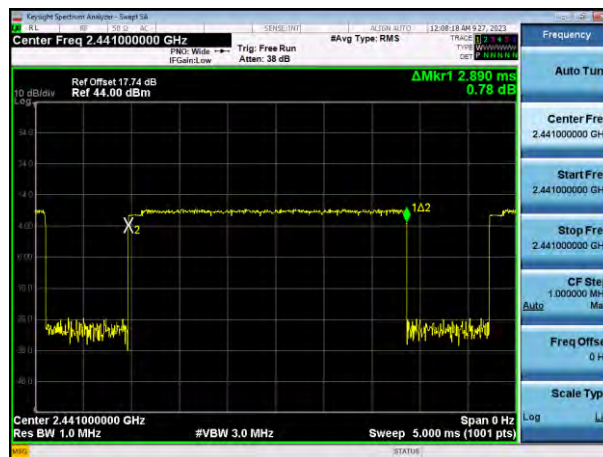
Dwell Time(8DPSK Mode, Ch. 78)



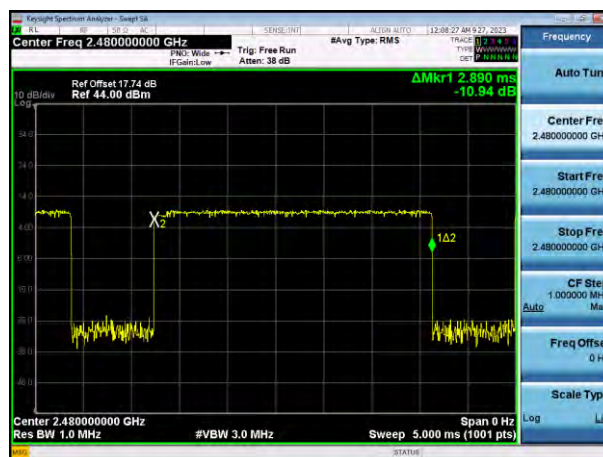
Dwell Time(4DQPSK Mode, Ch. 0)



Dwell Time(4DQPSK Mode, Ch. 39)



Dwell Time(4DQPSK Mode, Ch. 78)



10.6 SPURIOUS EMISSIONS

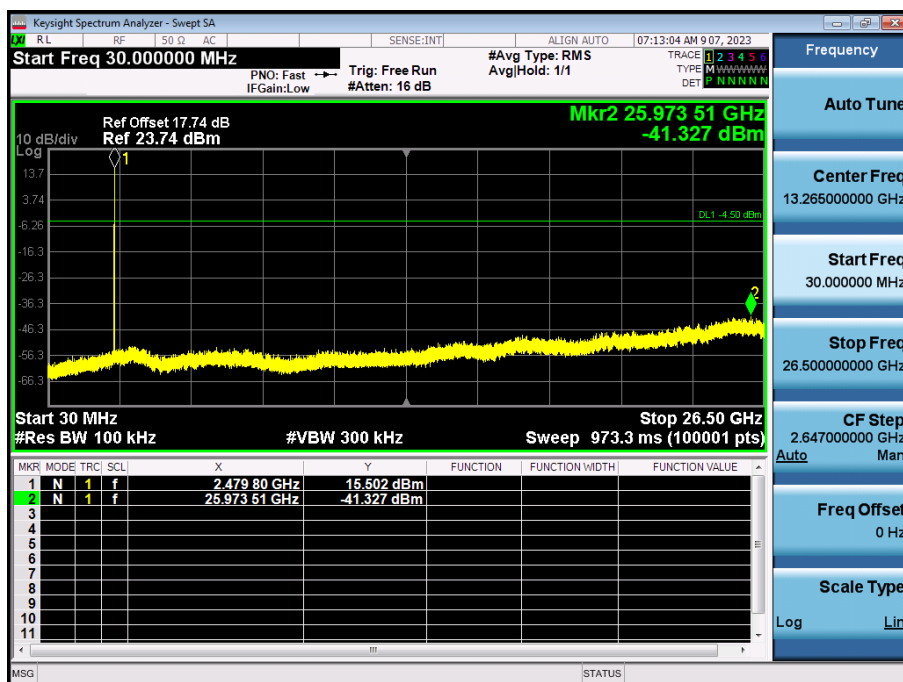
10.6.1 CONDUCTED SPURIOUS EMISSIONS

In order to simplify the report, attached plots were only the worst case channel and data rate.

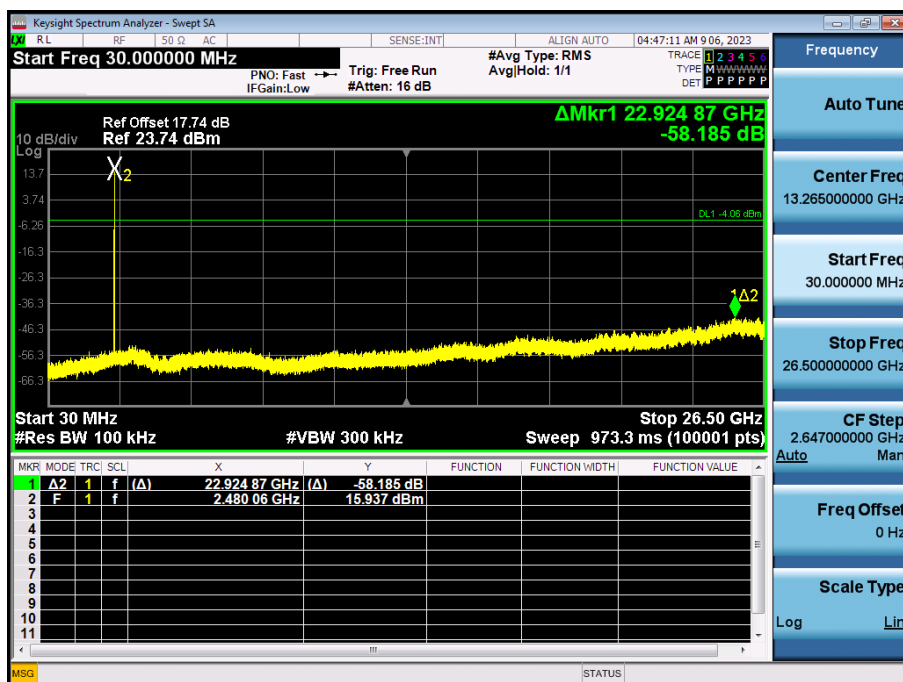
■ TEST PLOTS

(Worst case : GFSK_CH.78)

Spurious Emission (30 MHz – 26.50 GHz) Ant.1



Spurious Emission (30 MHz – 26.50 GHz) Ant.2



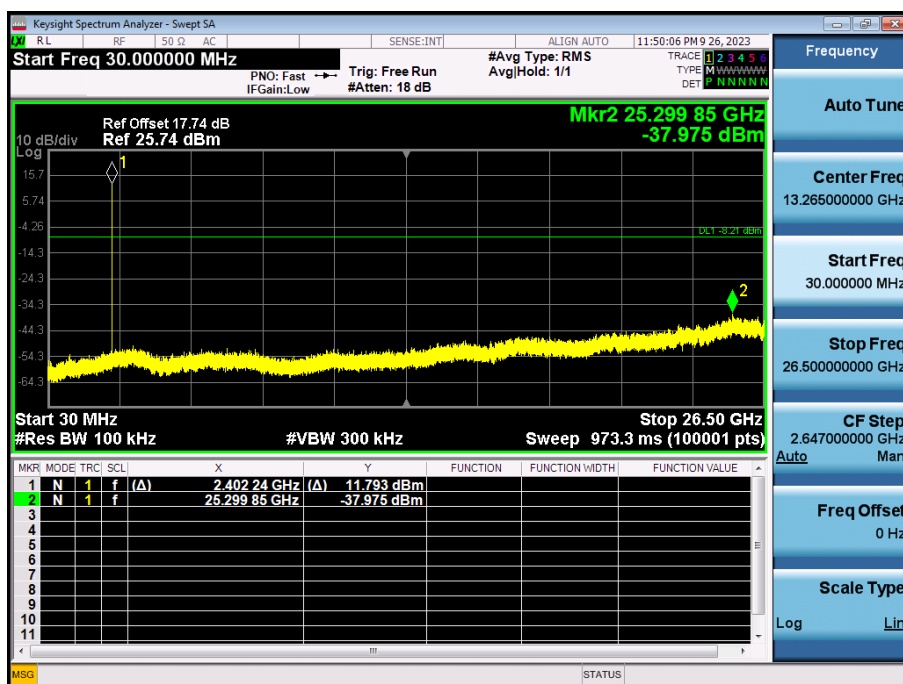
Note

Ant.1: Limit (dBm): -4.498, Ant.2: Limit (dBm): -4.063

TEST PLOTS

(Worst case : GFSK_CH.0)

Spurious Emission (30 MHz – 26.50 GHz) Dual Ant.1



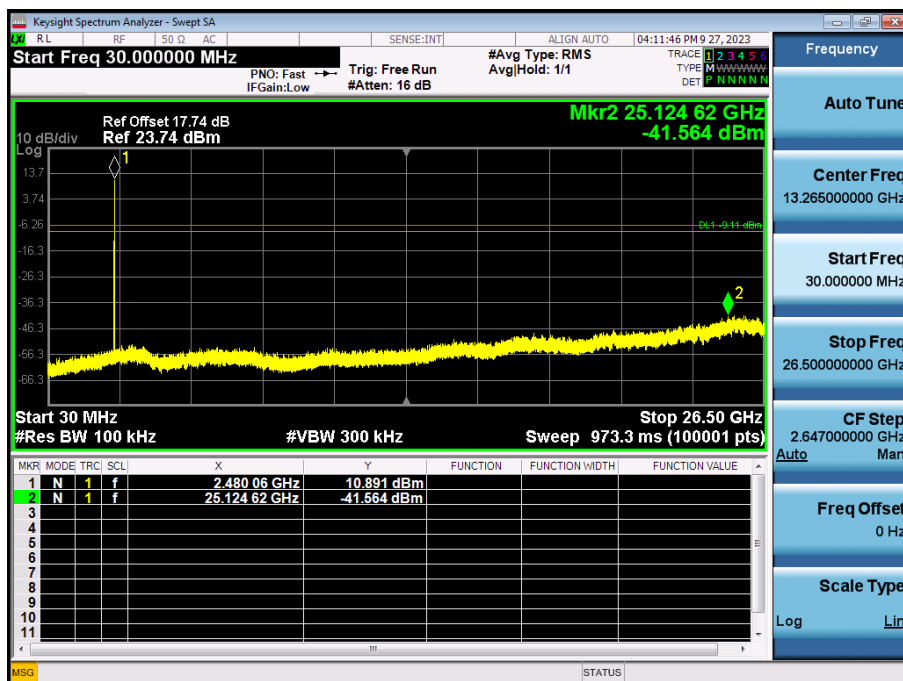
Note

Dual Ant.1: Limit (dBm): -8.207

TEST PLOTS

(Worst case : GFSK_CH.78)

Spurious Emission (30 MHz – 26.50 GHz) Dual Ant.2



Note

Dual Ant.2: Limit (dBm): -9.109

10.6.2 RADIATED SPURIOUS EMISSIONS

Frequency Range : 9 kHz – 30 MHz

Frequency	Measured Value	A.F+C.L+D.F	POL	Total	Limit	Margin
[MHz]	[dBμV]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]
No Critical peaks found						

Note:

1. The Measured of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
2. Distance extrapolation factor = $40\log(\text{specific distance} / \text{test distance})$ (dB)
3. Limit line = specific Limits (dBμV) + Distance extrapolation factor
4. Radiated test is performed with hopping off.

Frequency Range : Below 1 GHz

Frequency	Measured Value	A.F+C.L	POL	Total	Limit	Margin
[MHz]	[dBμV]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]
No Critical peaks found						

Note:

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.
2. Radiated test is performed with hopping off.

Frequency Range : Above 1 GHz

Note:

1. The offset was included in the Sigantl Analyzer.

- The offset = Antenna Factor(A.F) + Cable Loss(C.L) + Distance Factor(D.F) – Amp. Gain(A.G)

[Ant.1]

Operation Mode	Normal(GFSK)
Operating Frequency	2402 MHz
Channel No	CH 0

CH Low

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4804	47.56	V	0.00	47.56	73.98	26.42	PK
4804	47.56	V	-24.73	22.83	53.98	31.15	AV
7206	51.05	V	0.00	51.05	73.98	22.93	PK
7206	51.05	V	-24.73	26.32	53.98	27.66	AV
4804	47.86	H	0.00	47.86	73.98	26.12	PK
4804	47.86	H	-24.73	23.13	53.98	30.85	AV
7206	51.11	H	0.00	51.11	73.98	22.87	PK
7206	51.11	H	-24.73	26.38	53.98	27.60	AV

Operation Mode	Normal(GFSK)
Operating Frequency	2441 MHz
Channel No	CH 39

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4882	46.92	V	0.00	46.92	73.98	27.06	PK
4882	46.92	V	-24.73	22.19	53.98	31.79	AV
7323	52.97	V	0.00	52.97	73.98	21.01	PK
7323	52.97	V	-24.73	28.24	53.98	25.74	AV
4882	46.59	H	0.00	46.59	73.98	27.39	PK
4882	46.59	H	-24.73	21.86	53.98	32.12	AV
7323	52.33	H	0.00	52.33	73.98	21.65	PK
7323	52.33	H	-24.73	27.60	53.98	26.38	AV

Operation Mode	Normal(GFSK)
Operating Frequency	2480 MHz
Channel No	CH 78

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4960	47.75	V	0.00	47.75	73.98	26.23	PK
4960	47.75	V	-24.73	23.02	53.98	30.96	AV
7440	52.53	V	0.00	52.53	73.98	21.45	PK
7440	52.53	V	-24.73	27.80	53.98	26.18	AV
4960	46.79	H	0.00	46.79	73.98	27.19	PK
4960	46.79	H	-24.73	22.06	53.98	31.92	AV
7440	52.20	H	0.00	52.20	73.98	21.78	PK
7440	52.20	H	-24.73	27.47	53.98	26.51	AV

Operation Mode	Normal($\pi/4$ DQPSK)
Operating Frequency	2402 MHz
Channel No	CH 0

Frequency [MHz]	Measured Value [dB μ V]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
4804	46.76	V	0.00	46.76	73.98	27.22	PK
4804	46.76	V	-24.73	22.03	53.98	31.95	AV
7206	50.67	V	0.00	50.67	73.98	23.31	PK
7206	50.67	V	-24.73	25.94	53.98	28.04	AV
4804	47.22	H	0.00	47.22	73.98	26.76	PK
4804	47.22	H	-24.73	22.49	53.98	31.49	AV
7206	51.08	H	0.00	51.08	73.98	22.90	PK
7206	51.08	H	-24.73	26.35	53.98	27.63	AV

Operation Mode	Normal($\pi/4$ DQPSK)
Operating Frequency	2441 MHz
Channel No	CH 39

CH Mid

Frequency [MHz]	Measured Value [dB μ V]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
4882	47.19	V	0.00	47.19	73.98	26.79	PK
4882	47.19	V	-24.73	22.46	53.98	31.52	AV
7323	52.51	V	0.00	52.51	73.98	21.47	PK
7323	52.51	V	-24.73	27.78	53.98	26.20	AV
4882	47.11	H	0.00	47.11	73.98	26.87	PK
4882	47.11	H	-24.73	22.38	53.98	31.60	AV
7323	52.34	H	0.00	52.34	73.98	21.64	PK
7323	52.34	H	-24.73	27.61	53.98	26.37	AV

Operation Mode	Normal($\pi/4$ DQPSK)
Operating Frequency	2480 MHz
Channel No	CH 78

CH High

Frequency [MHz]	Measured Value [dB μ V]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
4960	46.28	V	0.00	46.28	73.98	27.70	PK
4960	46.28	V	-24.73	21.55	53.98	32.43	AV
7440	52.07	V	0.00	52.07	73.98	21.91	PK
7440	52.07	V	-24.73	27.34	53.98	26.64	AV
4960	46.39	H	0.00	46.39	73.98	27.59	PK
4960	46.39	H	-24.73	21.66	53.98	32.32	AV
7440	52.66	H	0.00	52.66	73.98	21.32	PK
7440	52.66	H	-24.73	27.93	53.98	26.05	AV

Operation Mode Normal(8DPSK)

Operating Frequency 2402 MHz

Channel No CH 0

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4804	47.91	V	0.00	47.91	73.98	26.07	PK
4804	47.91	V	-24.73	23.18	53.98	30.80	AV
7206	51.27	V	0.00	51.27	73.98	22.71	PK
7206	51.27	V	-24.73	26.54	53.98	27.44	AV
4804	48.06	H	0.00	48.06	73.98	25.92	PK
4804	48.06	H	-24.73	23.33	53.98	30.65	AV
7206	51.70	H	0.00	51.70	73.98	22.28	PK
7206	51.70	H	-24.73	26.97	53.98	27.01	AV

Operation Mode Normal(8DPSK)

Operating Frequency 2441 MHz

Channel No CH 39

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4882	47.42	V	0.00	47.42	73.98	26.56	PK
4882	47.42	V	-24.73	22.69	53.98	31.29	AV
7323	51.54	V	0.00	51.54	73.98	22.44	PK
7323	51.54	V	-24.73	26.81	53.98	27.17	AV
4882	47.37	H	0.00	47.37	73.98	26.61	PK
4882	47.37	H	-24.73	22.64	53.98	31.34	AV
7323	51.28	H	0.00	51.28	73.98	22.70	PK
7323	51.28	H	-24.73	26.55	53.98	27.43	AV

Operation Mode Normal(8DPSK)
 Operating Frequency 2480 MHz
 Channel No CH 78

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4960	47.34	V	0.00	47.34	73.98	26.64	PK
4960	47.34	V	-24.73	22.61	53.98	31.37	AV
7440	52.51	V	0.00	52.51	73.98	21.47	PK
7440	52.51	V	-24.73	27.78	53.98	26.20	AV
4960	46.76	H	0.00	46.76	73.98	27.22	PK
4960	46.76	H	-24.73	22.03	53.98	31.95	AV
7440	52.26	H	0.00	52.26	73.98	21.72	PK
7440	52.26	H	-24.73	27.53	53.98	26.45	AV

[Ant.2]

Operation Mode Normal(GFSK)

Operating Frequency 2402 MHz

Channel No CH 0

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4804	47.76	V	0.00	47.76	73.98	26.22	PK
4804	47.76	V	-24.73	23.03	53.98	30.95	AV
7206	51.97	V	0.00	51.97	73.98	22.01	PK
7206	51.97	V	-24.73	27.24	53.98	26.74	AV
4804	47.69	H	0.00	47.69	73.98	26.29	PK
4804	47.69	H	-24.73	22.96	53.98	31.02	AV
7206	51.27	H	0.00	51.27	73.98	22.71	PK
7206	51.27	H	-24.73	26.54	53.98	27.44	AV

Operation Mode Normal(GFSK)

Operating Frequency 2441 MHz

Channel No CH 39

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4882	46.91	V	0.00	46.91	73.98	27.07	PK
4882	46.91	V	-24.73	22.18	53.98	31.80	AV
7323	51.63	V	0.00	51.63	73.98	22.35	PK
7323	51.63	V	-24.73	26.90	53.98	27.08	AV
4882	47.12	H	0.00	47.12	73.98	26.86	PK
4882	47.12	H	-24.73	22.39	53.98	31.59	AV
7323	51.74	H	0.00	51.74	73.98	22.24	PK
7323	51.74	H	-24.73	27.01	53.98	26.97	AV

Operation Mode	Normal(GFSK)
Operating Frequency	2480 MHz
Channel No	CH 78

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4960	48.10	V	0.00	48.10	73.98	25.88	PK
4960	48.10	V	-24.73	23.37	53.98	30.61	AV
7440	51.67	V	0.00	51.67	73.98	22.31	PK
7440	51.67	V	-24.73	26.94	53.98	27.04	AV
4960	48.22	H	0.00	48.22	73.98	25.76	PK
4960	48.22	H	-24.73	23.49	53.98	30.49	AV
7440	52.02	H	0.00	52.02	73.98	21.96	PK
7440	52.02	H	-24.73	27.29	53.98	26.69	AV

Operation Mode	Normal($\pi/4$ DQPSK)
Operating Frequency	2402 MHz
Channel No	CH 0

Frequency [MHz]	Measured Value [dB μ V]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
4804	47.38	V	0.00	47.38	73.98	26.60	PK
4804	47.38	V	-24.73	22.65	53.98	31.33	AV
7206	51.49	V	0.00	51.49	73.98	22.49	PK
7206	51.49	V	-24.73	26.76	53.98	27.22	AV
4804	47.25	H	0.00	47.25	73.98	26.73	PK
4804	47.25	H	-24.73	22.52	53.98	31.46	AV
7206	51.24	H	0.00	51.24	73.98	22.74	PK
7206	51.24	H	-24.73	26.51	53.98	27.47	AV

Operation Mode	Normal($\pi/4$ DQPSK)
Operating Frequency	2441 MHz
Channel No	CH 39

Frequency [MHz]	Measured Value [dB μ V]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
4882	46.82	V	0.00	46.82	73.98	27.16	PK
4882	46.82	V	-24.73	22.09	53.98	31.89	AV
7323	52.36	V	0.00	52.36	73.98	21.62	PK
7323	52.36	V	-24.73	27.63	53.98	26.35	AV
4882	47.06	H	0.00	47.06	73.98	26.92	PK
4882	47.06	H	-24.73	22.33	53.98	31.65	AV
7323	52.59	H	0.00	52.59	73.98	21.39	PK
7323	52.59	H	-24.73	27.86	53.98	26.12	AV

Operation Mode	Normal($\pi/4$ DQPSK)
Operating Frequency	2480 MHz
Channel No	CH 78

Frequency [MHz]	Measured Value [dB μ V]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
4960	46.78	V	0.00	46.78	73.98	27.20	PK
4960	46.78	V	-24.73	22.05	53.98	31.93	AV
7440	52.24	V	0.00	52.24	73.98	21.74	PK
7440	52.25	V	-24.73	27.52	53.98	26.46	AV
4960	47.09	H	0.00	47.09	73.98	26.89	PK
4960	47.09	H	-24.73	22.36	53.98	31.62	AV
7440	52.31	H	0.00	52.31	73.98	21.67	PK
7440	52.31	H	-24.73	27.58	53.98	26.40	AV

Operation Mode	Normal(8DPSK)
Operating Frequency	2402 MHz
Channel No	CH 0

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4804	47.02	V	0.00	47.02	73.98	26.96	PK
4804	47.02	V	-24.73	22.29	53.98	31.69	AV
7206	50.54	V	0.00	50.54	73.98	23.44	PK
7206	50.54	V	-24.73	25.81	53.98	28.17	AV
4804	46.91	H	0.00	46.91	73.98	27.07	PK
4804	46.91	H	-24.73	22.18	53.98	31.80	AV
7206	50.28	H	0.00	50.28	73.98	23.70	PK
7206	50.28	H	-24.73	25.55	53.98	28.43	AV

Operation Mode	Normal(8DPSK)
Operating Frequency	2441 MHz
Channel No	CH 39

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4882	46.57	V	0.00	46.57	73.98	27.41	PK
4882	46.57	V	-24.73	21.84	53.98	32.14	AV
7323	51.72	V	0.00	51.72	73.98	22.26	PK
7323	51.72	V	-24.73	26.99	53.98	26.99	AV
4882	46.84	H	0.00	46.84	73.98	27.14	PK
4882	46.84	H	-24.73	22.11	53.98	31.87	AV
7323	52.06	H	0.00	52.06	73.98	21.92	PK
7323	52.06	H	-24.73	27.33	53.98	26.65	AV

Operation Mode	Normal(8DPSK)
Operating Frequency	2480 MHz
Channel No	CH 78

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4960	47.19	V	0.00	47.19	73.98	26.79	PK
4960	47.19	V	-24.73	22.46	53.98	31.52	AV
7440	51.36	V	0.00	51.36	73.98	22.62	PK
7440	51.36	V	-24.73	26.63	53.98	27.35	AV
4960	47.25	H	0.00	47.25	73.98	26.73	PK
4960	47.25	H	-24.73	22.52	53.98	31.46	AV
7440	51.73	H	0.00	51.73	73.98	22.25	PK
7440	51.73	H	-24.73	27.00	53.98	26.98	AV

[Dual Ant.1+ Ant.2]
Operation Mode: (GFSK)

Operation Mode Normal(GFSK)

Operating Frequency 2402 MHz

Channel No CH 0

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4804	47.58	V	0.00	47.58	73.98	26.40	PK
4804	47.58	V	-24.73	22.85	53.98	31.13	AV
7206	51.78	V	0.00	51.78	73.98	22.20	PK
7206	51.78	V	-24.73	27.05	53.98	26.93	AV
4804	47.52	H	0.00	47.52	73.98	26.46	PK
4804	47.52	H	-24.73	22.79	53.98	31.19	AV
7206	53.68	H	0.00	53.68	73.98	20.30	PK
7206	53.68	H	-24.73	28.95	53.98	25.03	AV

Operation Mode Normal(GFSK)

Operating Frequency 2441 MHz

Channel No CH 39

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4882	48.08	V	0.00	48.08	73.98	25.90	PK
4882	48.08	V	-24.73	23.35	53.98	30.63	AV
7323	53.28	V	0.00	53.28	73.98	20.70	PK
7323	53.28	V	-24.73	28.55	53.98	25.43	AV
4882	48.27	H	0.00	48.27	73.98	25.71	PK
4882	48.27	H	-24.73	23.54	53.98	30.44	AV
7323	53.47	H	0.00	53.47	73.98	20.51	PK
7323	53.47	H	-24.73	28.74	53.98	25.24	AV

Operation Mode	Normal(GFSK)
Operating Frequency	2480 MHz
Channel No	CH 78

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4960	45.62	V	0.00	45.62	73.98	28.36	PK
4960	45.62	V	-24.73	20.89	53.98	33.09	AV
7440	52.76	V	0.00	52.76	73.98	21.22	PK
7440	52.76	V	-24.73	28.03	53.98	25.95	AV
4960	45.73	H	0.00	45.73	73.98	28.25	PK
4960	45.73	H	-24.73	21.00	53.98	32.98	AV
7440	52.96	H	0.00	52.96	73.98	21.02	PK
7440	52.96	H	-24.73	28.23	53.98	25.75	AV

Operation Mode	Normal($\pi/4$ DQPSK)
Operating Frequency	2402 MHz
Channel No	CH 0

Frequency [MHz]	Measured Value [dB μ V]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
4804	48.27	V	0.00	48.27	73.98	25.71	PK
4804	48.27	V	-24.73	23.54	53.98	30.44	AV
7206	51.31	V	0.00	51.31	73.98	22.67	PK
7206	51.31	V	-24.73	26.58	53.98	27.40	AV
4804	48.11	H	0.00	48.11	73.98	25.87	PK
4804	48.11	H	-24.73	23.38	53.98	30.60	AV
7206	52.43	H	0.00	52.43	73.98	21.55	PK
7206	52.43	H	-24.73	27.70	53.98	26.28	AV

Operation Mode	Normal($\pi/4$ DQPSK)
Operating Frequency	2441 MHz
Channel No	CH 39

Frequency [MHz]	Measured Value [dB μ V]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
4882	46.27	V	0.00	46.27	73.98	27.71	PK
4882	46.27	V	-24.73	21.54	53.98	32.44	AV
7323	52.31	V	0.00	52.31	73.98	21.67	PK
7323	52.31	V	-24.73	27.58	53.98	26.40	AV
4882	46.42	H	0.00	46.42	73.98	27.56	PK
4882	46.42	H	-24.73	21.69	53.98	32.29	AV
7323	52.36	H	0.00	52.36	73.98	21.62	PK
7323	52.36	H	-24.73	27.63	53.98	26.35	AV

Operation Mode	Normal($\pi/4$ DQPSK)
Operating Frequency	2480 MHz
Channel No	CH 78

Frequency [MHz]	Measured Value [dB μ V]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
4960	45.39	V	0.00	45.39	73.98	28.59	PK
4960	45.39	V	-24.73	20.66	53.98	33.32	AV
7440	51.33	V	0.00	51.33	73.98	22.65	PK
7440	51.33	V	-24.73	26.60	53.98	27.38	AV
4960	45.78	H	0.00	45.78	73.98	28.20	PK
4960	45.78	H	-24.73	21.05	53.98	32.93	AV
7440	51.78	H	0.00	51.78	73.98	22.20	PK
7440	51.78	H	-24.73	27.05	53.98	26.93	AV

Operation Mode Normal(8DPSK)

Operating Frequency 2402 MHz

Channel No CH 0

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4804	47.92	V	0.00	47.92	73.98	26.06	PK
4804	47.92	V	-24.73	23.19	53.98	30.79	AV
7206	51.46	V	0.00	51.46	73.98	22.52	PK
7206	51.46	V	-24.73	26.73	53.98	27.25	AV
4804	47.91	H	0.00	47.91	73.98	26.07	PK
4804	47.91	H	-24.73	23.18	53.98	30.80	AV
7206	51.56	H	0.00	51.56	73.98	22.42	PK
7206	51.56	H	-24.73	26.83	53.98	27.15	AV

Operation Mode Normal(8DPSK)

Operating Frequency 2441 MHz

Channel No CH 39

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4882	46.69	V	0.00	46.69	73.98	27.29	PK
4882	46.69	V	-24.73	21.96	53.98	32.02	AV
7323	51.97	V	0.00	51.97	73.98	22.01	PK
7323	51.97	V	-24.73	27.24	53.98	26.74	AV
4882	46.78	H	0.00	46.78	73.98	27.20	PK
4882	46.78	H	-24.73	22.05	53.98	31.93	AV
7323	52.11	H	0.00	52.11	73.98	21.87	PK
7323	52.11	H	-24.73	27.38	53.98	26.60	AV

Operation Mode	Normal(8DPSK)
Operating Frequency	2480 MHz
Channel No	CH 78

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4960	45.67	V	0.00	45.67	73.98	28.31	PK
4960	45.67	V	-24.73	20.94	53.98	33.04	AV
7440	52.11	V	0.00	52.11	73.98	21.87	PK
7440	52.11	V	-24.73	27.38	53.98	26.60	AV
4960	45.83	H	0.00	45.83	73.98	28.15	PK
4960	45.83	H	-24.73	21.10	53.98	32.88	AV
7440	52.54	H	0.00	52.54	73.98	21.44	PK
7440	52.54	H	-24.73	27.81	53.98	26.17	AV

[DBS]

Scenario 2

Ant.1 Bluetooth_Ch.39_GFSK + Ant.2 WLAN_2.4 GHz_802.11b_Ch.11_1 Mbps

+ MIMO WLAN_5 GHz_802.11a_Ch.100_6 Mbps

Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4882	49.22	V	0.00	49.22	73.98	24.76	PK
4882	49.22	V	-24.73	24.49	53.98	29.49	AV
7323	51.88	V	0.00	51.88	73.98	22.10	PK
7323	51.88	V	-24.73	27.15	53.98	26.83	AV
4882	50.45	H	0.00	50.45	73.98	23.53	PK
4882	50.45	H	-24.73	25.72	53.98	28.26	PK
7323	51.67	H	0.00	51.67	73.98	22.31	AV
7323	51.67	H	-24.73	26.94	53.98	27.04	PK

Note : DTS, UNII RSDB Data refer to [DTS], [UNII] Test Report

Scenario 3

Dual Bluetooth Ant.1+ Ant.2_Ch.0_GFSK + MIMO WLAN_5 GHz_802.11a_Ch.100_6 Mbps

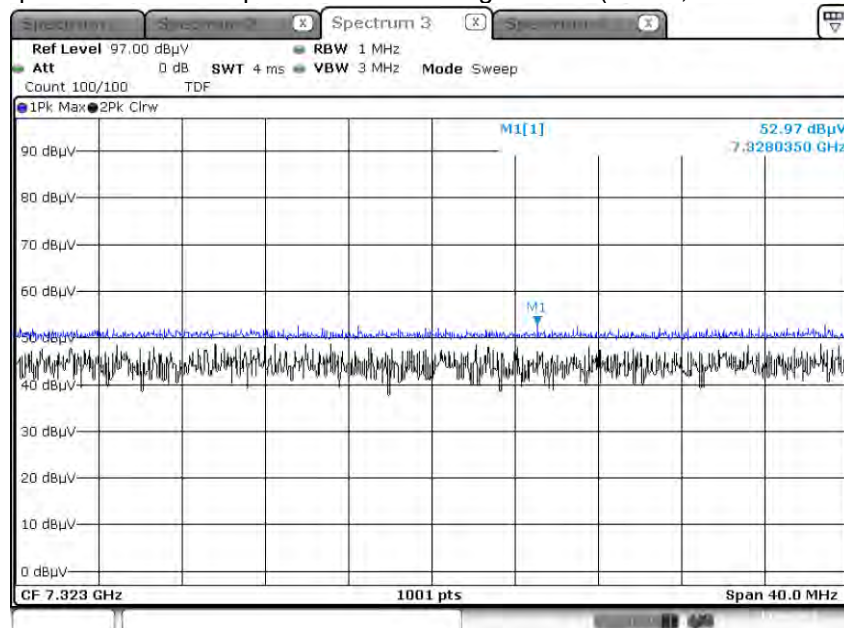
Frequency [MHz]	Measured Value [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
4804	48.74	V	0.00	48.74	73.98	25.24	PK
4804	48.74	V	-24.73	24.01	53.98	29.97	AV
7206	54.07	V	0.00	54.07	73.98	19.91	PK
7206	54.07	V	-24.73	29.34	53.98	24.64	AV
4804	49.04	H	0.00	49.04	73.98	24.94	PK
4804	49.04	H	-24.73	24.31	53.98	29.67	PK
7206	53.94	H	0.00	53.94	73.98	20.04	AV
7206	53.94	H	-24.73	29.21	53.98	24.77	PK

Note : UNII RSDB Data refer to [UNII] Test Report

RESULT PLOTS

[Ant.1]

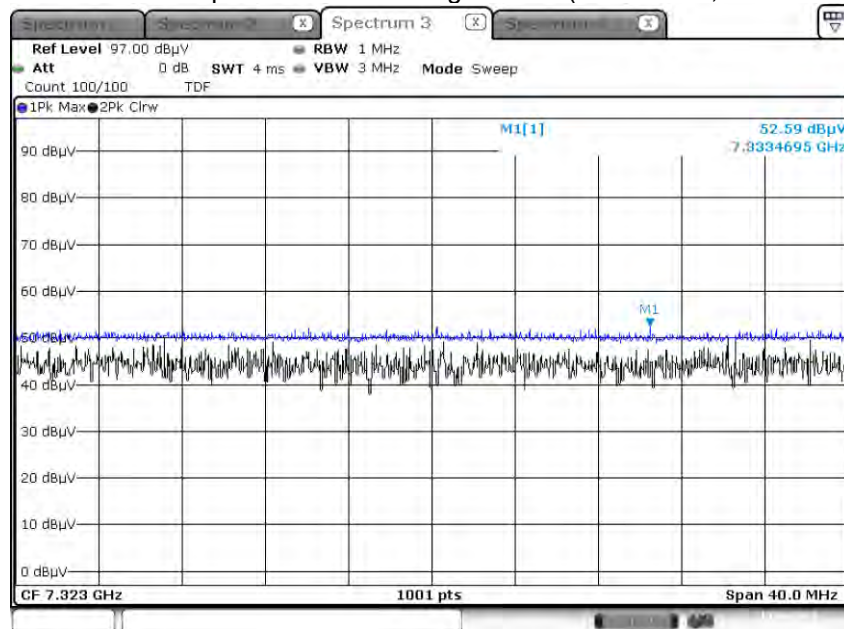
Radiated Spurious Emissions plot – Peak & Average Result (GFSK, Ch.39 3rd Harmonic, V)



Date: 13.SEP.2023 12:45:54

[Ant.2]

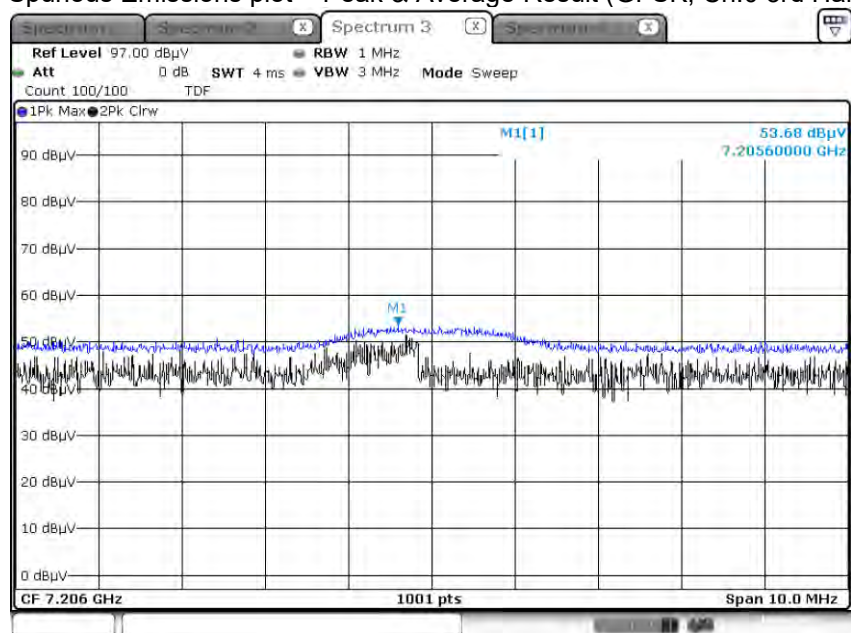
Radiated Spurious Emissions plot – Peak & Average Result ($\pi/4$ DQPSK, Ch.39 3rd Harmonic, H)



Date: 13.SEP.2023 16:33:00

[Dual Ant.1+ Ant.2]

Radiated Spurious Emissions plot – Peak & Average Result (GFSK, Ch.0 3rd Harmonic, H)



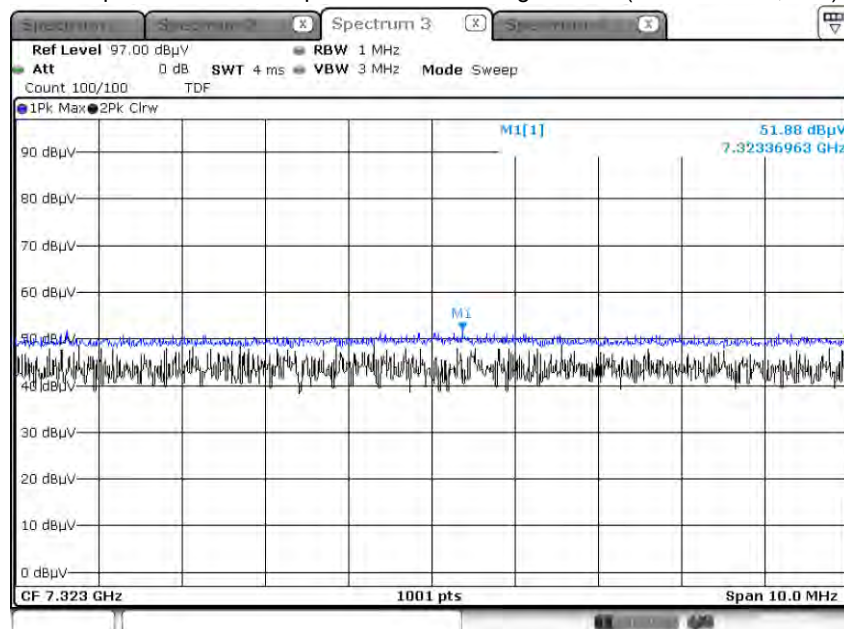
Date: 19 SEP 2023 17:03:52

[DBS]

Scenario 2

Ant.1 Bluetooth_Ch.39_GFSK + Ant.2 WLAN_2.4 GHz_802.11b_Ch.11_1 Mbps
+ MIMO WLAN_5 GHz_802.11a_Ch.100_6 Mbps

Radiated Spurious Emissions plot – Peak & Average Result (3rd Harmonic, X-V)

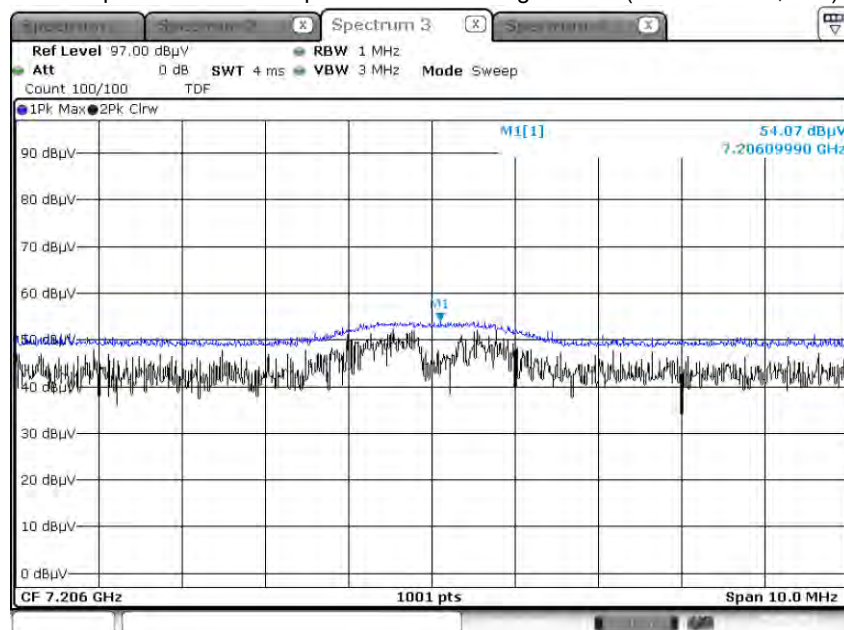


Date: 20.SEP.2023 11:37:30

Scenario 3

Dual Ant.1+ Ant.2 Bluetooth_Ch.0_GFSK + MIMO WLAN_5 GHz_802.11a_Ch.100_6 Mbps

Radiated Spurious Emissions plot – Peak & Average Result (3rd Harmonic, Y-V)



Date: 20.SEP.2023 10:35:41

Note:

Plot of worst case are only reported.

10.6.3 RADIATED RESTRICTED BAND EDGES

Note:

1. The offset was included in the Sigantl Analyzer.

- The offset = Antenna Factor(A.F) + Cable Loss(C.L) + Distance Factor(D.F)

[Ant.1]

Operation Mode	Normal(GFSK)
Operating Frequency	2402 MHz, 2480 MHz
Channel No	CH 0, CH 78

Frequency [MHz]	Measured Level [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
2390.0	54.60	H	0.00	54.60	73.98	19.38	PK
2390.0	54.60	H	-24.73	29.87	53.98	24.11	AV
2390.0	54.18	V	0.00	54.18	73.98	19.80	PK
2390.0	54.18	V	-24.73	29.45	53.98	24.53	AV
2483.5	58.28	H	0.00	58.28	73.98	15.70	PK
2483.5	58.28	H	-24.73	33.55	53.98	20.43	AV
2483.5	54.36	V	0.00	54.36	73.98	19.62	PK
2483.5	57.36	V	-24.73	32.63	53.98	21.35	AV

Operation Mode	EDR($\pi/4$ DQPSK)
Operating Frequency	2402 MHz, 2480 MHz
Channel No	CH 0, CH 78

Frequency [MHz]	Measured Level [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
2390.0	54.56	H	0.00	54.56	73.98	19.42	PK
2390.0	54.56	H	-24.73	29.83	53.98	24.15	AV
2390.0	54.41	V	0.00	54.41	73.98	19.57	PK
2390.0	54.41	V	-24.73	29.68	53.98	24.30	AV
2483.5	65.54	H	0.00	65.54	73.98	8.44	PK
2483.5	65.54	H	-24.73	40.81	53.98	13.17	AV
2483.5	65.18	V	0.00	65.18	73.98	8.80	PK
2483.5	65.18	V	-24.73	40.45	53.98	13.53	AV

Operation Mode EDR(8DPSK)

Operating Frequency 2402 MHz, 2480 MHz

Channel No CH 0, CH 78

Frequency [MHz]	Measured Level [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
2390.0	54.08	H	0.00	54.08	73.98	19.90	PK
2390.0	54.08	H	-24.73	29.35	53.98	24.63	AV
2390.0	53.86	V	0.00	53.86	73.98	20.12	PK
2390.0	53.86	V	-24.73	29.13	53.98	24.85	AV
2483.5	64.72	H	0.00	64.72	73.98	9.26	PK
2483.5	64.72	H	-24.73	39.99	53.98	13.99	AV
2483.5	64.69	V	0.00	64.69	73.98	9.29	PK
2483.5	64.69	V	-24.73	39.96	53.98	14.02	AV

[Ant.2]

Operation Mode	Normal(GFSK)
Operating Frequency	2402 MHz, 2480 MHz
Channel No	CH 0, CH 78

Frequency [MHz]	Measured Level [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
2390.0	54.17	H	0.00	54.17	73.98	19.81	PK
2390.0	54.17	H	-24.73	29.44	53.98	24.54	AV
2390.0	54.02	V	0.00	54.02	73.98	19.96	PK
2390.0	54.02	V	-24.73	29.29	53.98	24.69	AV
2483.5	62.27	H	0.00	62.27	73.98	11.71	PK
2483.5	62.27	H	-24.73	37.54	53.98	16.44	AV
2483.5	61.62	V	0.00	61.62	73.98	12.36	PK
2483.5	61.62	V	-24.73	36.89	53.98	17.09	AV

Operation Mode	EDR($\pi/4$ DQPSK)
Operating Frequency	2402 MHz, 2480 MHz
Channel No	CH 0, CH 78

Frequency [MHz]	Measured Level [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
2390.0	53.96	H	0.00	53.96	73.98	20.02	PK
2390.0	53.96	H	-24.73	29.23	53.98	24.75	AV
2390.0	53.57	V	0.00	53.57	73.98	20.41	PK
2390.0	53.57	V	-24.73	28.84	53.98	25.14	AV
2483.5	65.25	H	0.00	65.25	73.98	8.73	PK
2483.5	65.25	H	-24.73	40.52	53.98	13.46	AV
2483.5	65.14	V	0.00	65.14	73.98	8.84	PK
2483.5	65.14	V	-24.73	40.41	53.98	13.57	AV

Operation Mode EDR(8DPSK)

Operating Frequency 2402 MHz, 2480 MHz

Channel No CH 0, CH 78

Frequency [MHz]	Measured Level [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
2390.0	54.33	H	0.00	54.33	73.98	19.65	PK
2390.0	54.33	H	-24.73	29.60	53.98	24.38	AV
2390.0	53.91	V	0.00	53.91	73.98	20.07	PK
2390.0	53.91	V	-24.73	29.18	53.98	24.80	AV
2483.5	63.94	H	0.00	63.94	73.98	10.04	PK
2483.5	63.94	H	-24.73	39.21	53.98	14.77	AV
2483.5	63.58	V	0.00	63.58	73.98	10.40	PK
2483.5	63.58	V	-24.73	38.85	53.98	15.13	AV

[Dual Ant.1+ Ant.2]

Operation Mode	Normal(GFSK)
Operating Frequency	2402 MHz, 2480 MHz
Channel No	CH 0, CH 78

Frequency [MHz]	Measured Level [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
2390.0	54.22	H	0.00	54.22	73.98	19.76	PK
2390.0	54.22	H	-24.73	29.49	53.98	24.49	AV
2390.0	53.48	V	0.00	53.48	73.98	20.50	PK
2390.0	53.48	V	-24.73	28.75	53.98	25.23	AV
2483.5	55.34	H	0.00	55.34	73.98	18.64	PK
2483.5	55.34	H	-24.73	30.61	53.98	23.37	AV
2483.5	55.24	V	0.00	55.24	73.98	18.74	PK
2483.5	55.24	V	-24.73	30.51	53.98	23.47	AV

Operation Mode	EDR($\pi/4$ DQPSK)
Operating Frequency	2402 MHz, 2480 MHz
Channel No	CH 0, CH 78

Frequency [MHz]	Measured Level [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
2390.0	54.13	H	0.00	54.13	73.98	19.85	PK
2390.0	54.13	H	-24.73	29.40	53.98	24.58	AV
2390.0	53.86	V	0.00	53.86	73.98	20.12	PK
2390.0	53.86	V	-24.73	29.13	53.98	24.85	AV
2483.5	61.07	H	0.00	61.07	73.98	12.91	PK
2483.5	61.07	H	-24.73	36.34	53.98	17.64	AV
2483.5	60.61	V	0.00	60.61	73.98	13.37	PK
2483.5	60.61	V	-24.73	35.88	53.98	18.10	AV

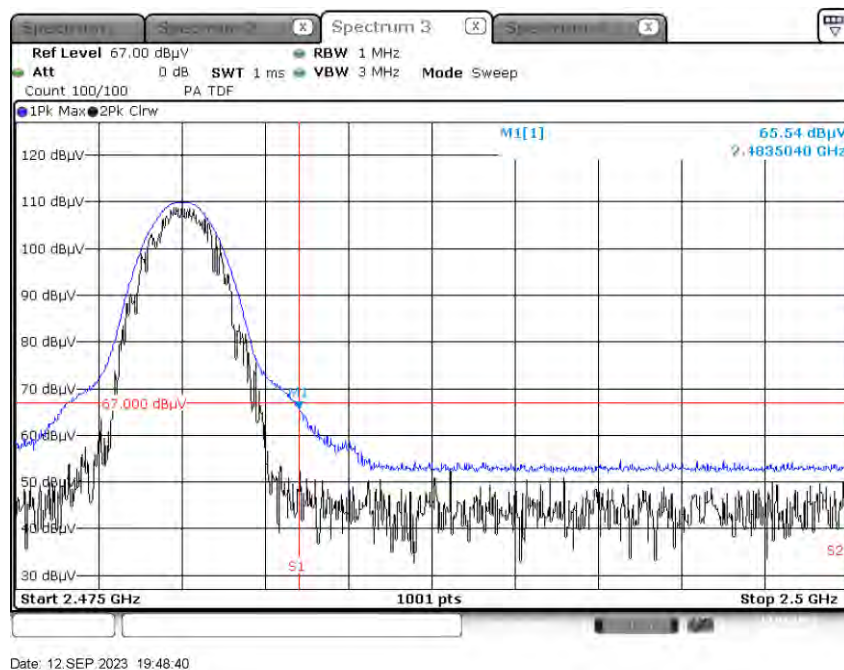
Operation Mode	EDR(8DPSK)
Operating Frequency	2402 MHz, 2480 MHz
Channel No	CH 0, CH 78

Frequency [MHz]	Measured Level [dBμV]	Pol. [H/V]	Duty Cycle Correction [dB]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
2390.0	54.78	H	0.00	54.78	73.98	19.20	PK
2390.0	54.78	H	-24.73	30.05	53.98	23.93	AV
2390.0	54.25	V	0.00	54.25	73.98	19.73	PK
2390.0	54.25	V	-24.73	29.52	53.98	24.46	AV
2483.5	60.36	H	0.00	60.36	73.98	13.62	PK
2483.5	60.36	H	-24.73	35.63	53.98	18.35	AV
2483.5	60.25	V	0.00	60.25	73.98	13.73	PK
2483.5	60.25	V	-24.73	35.52	53.98	18.46	AV

RESULT PLOTS

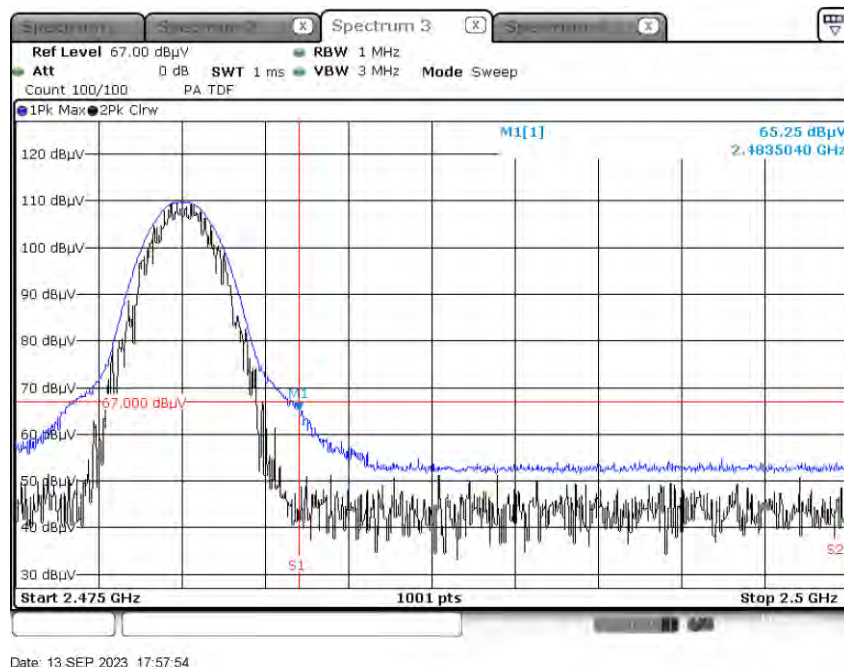
[Ant.1]

Radiated Restricted Band Edges plot – Average & Peak Result ($\pi/4$ DQPSK, Ch.78, H)



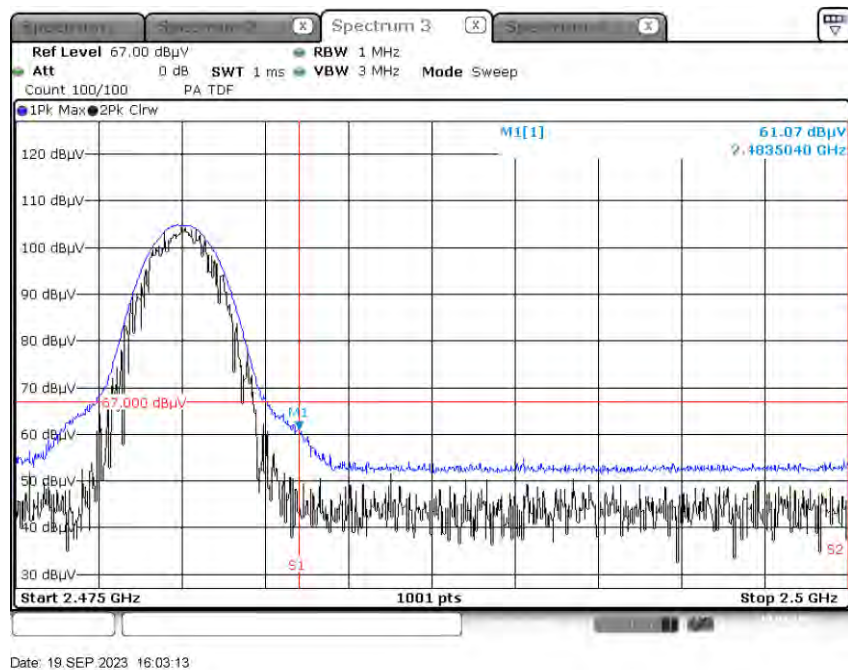
[Ant.2]

Radiated Restricted Band Edges plot – Average & Peak Result ($\pi/4$ DQPSK, Ch.78, H)



[Dual Ant.1+ Ant.2]

Radiated Restricted Band Edges plot – Average & Peak Result ($\pi/4$ DQPSK, Ch.78, H)



Note:

Plot of worst case are only reported.

10.7 POWERLINE CONDUCTED EMISSIONS

Conducted Emissions

Test

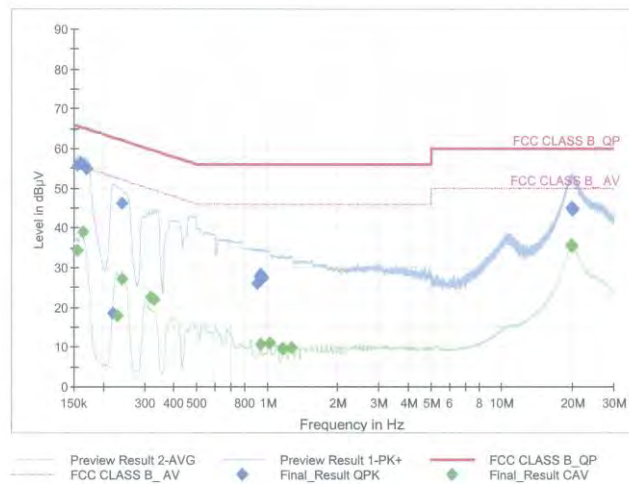
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Test Report

Common Information

EUT : SM-S926B/DS
Operating Conditions : BT Mode
Comment :

Full Spectrum



Final Result QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1545	55.68	65.75	10.08	9.000	L1	9.6
0.1613	56.22	65.40	9.18	9.000	L1	9.6
0.1658	55.75	65.17	9.42	9.000	L1	9.6
0.1703	54.83	64.95	10.12	9.000	L1	9.6
0.2198	18.36	62.83	44.46	9.000	N	9.6
0.2400	46.09	62.10	16.01	9.000	L1	9.6
0.9095	26.07	56.00	29.93	9.000	L1	9.6
0.9140	26.16	56.00	29.84	9.000	L1	9.6
0.9275	27.83	56.00	28.17	9.000	L1	9.6
0.9343	28.24	56.00	27.76	9.000	L1	9.6
0.9478	27.59	56.00	28.41	9.000	L1	9.6
0.9590	27.48	56.00	28.52	9.000	L1	9.6
19.8208	44.89	60.00	15.11	9.000	L1	10.3
19.9198	44.69	60.00	15.31	9.000	L1	10.3
19.9265	44.90	60.00	15.10	9.000	L1	10.3
19.9693	44.53	60.00	15.47	9.000	L1	10.3
20.0390	44.80	60.00	15.20	9.000	L1	10.3
20.0683	44.76	60.00	15.24	9.000	L1	10.3

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Test

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Final Result_CAV

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1545	34.42	55.75	21.34	9.000	N	9.6
0.1635	38.84	55.28	16.45	9.000	L1	9.6
0.2288	17.77	52.50	34.72	9.000	N	9.6
0.2400	27.03	52.10	25.07	9.000	L1	9.6
0.3188	22.38	49.74	27.36	9.000	L1	9.6
0.3300	21.88	49.45	27.57	9.000	L1	9.6
0.9365	10.65	46.00	35.35	9.000	L1	9.6
1.0243	10.91	46.00	35.09	9.000	L1	9.7
1.1683	9.62	46.00	36.38	9.000	L1	9.7
1.1728	9.62	46.00	36.38	9.000	L1	9.7
1.2695	9.87	46.00	36.13	9.000	L1	9.7
19.7510	35.51	50.00	14.49	9.000	L1	10.3
19.7713	35.49	50.00	14.51	9.000	L1	10.3
19.8230	35.64	50.00	14.36	9.000	L1	10.3
19.8838	35.40	50.00	14.60	9.000	L1	10.3
19.9535	35.36	50.00	14.64	9.000	L1	10.3
19.9648	35.45	50.00	14.55	9.000	L1	10.3
20.0390	35.38	50.00	14.62	9.000	L1	10.3

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11. LIST OF TEST EQUIPMENT

Conducted Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
LISN	ENV216	Rohde & Schwarz	102245	08/02/2024	Annual
EMI Test Receiver	ESR	Rohde & Schwarz	101910	05/26/2024	Annual
Temperature Chamber	SU-642	ESPEC	93008124	02/22/2024	Annual
Signal Analyzer	N9030A	Keysight	MY55410508	09/04/2024	Annual
Power Meter	N1911A	Agilent	MY45100523	03/06/2024	Annual
Power Sensor	N1921A	Agilent	MY57820067	03/06/2024	Annual
Directional Coupler	87300B	Agilent	3116A03621	11/02/2023	Annual
Power Splitter	11667B	Hewlett Packard	10545	02/06/2024	Annual
DC Power Supply	E3632A	Agilent	KR75305528	01/03/2024	Annual
Attenuator(10 dB)(DC-26.5 GHz)	8493C-010	Agilent	08285	06/02/2024	Annual
Attenuator(20 dB)	18N-20dB	Rohde & Schwarz	8	03/08/2024	Annual
Software	EMC32	Rohde & Schwarz	N/A	N/A	N/A
FCC WLAN&BT&BLE Conducted Test Software v3.0	N/A	HCT CO., LTD.	N/A	N/A	N/A
Bluetooth Tester	CBT	Rohde & Schwarz	100808	02/16/2024	Annual

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

Radiated Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Controller(Antenna mast)	CO3000	Innco system	CO3000-4p	N/A	N/A
Antenna Position Tower	MA4640/800-XP-EP	Innco system	S3AM	08/03/2025	Biennial
Controller	EM2090	Emco	060520	N/A	N/A
Turn Table	N/A	Ets	N/A	N/A	N/A
Loop Antenna	FMZB 1513	Rohde & Schwarz	1513-333	03/17/2024	Biennial
Hybrid Antenna	VULB 9168	Schwarzbeck	9168-0895	08/16/2024	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	9120D-1191	11/18/2023	Biennial
Horn Antenna(15 GHz ~ 40 GHz)	BBHA9170	Schwarzbeck	BBHA9170124	03/28/2025	Biennial
Amp & Filter Bank Switch Controller	FBSM-01A	TNM system	0	N/A	N/A
Band Reject Filter	WRCJV2400/2483.5-2370/2520-60/12SS	Wainwright Instruments	2	01/05/2024	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	5	06/12/2024	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	6	06/12/2024	Annual
Band Reject Filter	WRCJV5100/5850-40/50-8EEK	Wainwright Instruments	1	02/09/2024	Annual
RF Switching System	FBSR-03A (3G HPF+LNA)	T&M SYSTEM	S3L1	12/05/2023	Annual
RF Switching System	FBSR-03A (10dB ATT+LNA)	T&M SYSTEM	S3L2	12/05/2023	Annual
RF Switching System	FBSR-03A (7G HPF+LNA)	T&M SYSTEM	S3L3	12/05/2023	Annual
RF Switching System	FBSR-03A (3dB ATT+LNA)	T&M SYSTEM	S3L4	12/05/2023	Annual
Power Amplifier	CBL18265035	CERNEX	22966	12/01/2023	Annual
Power Amplifier	CBL26405040	CERNEX	25956	03/02/2024	Annual
Bluetooth Tester	TC-3000C	TESCOM	3000C000175	03/28/2024	Annual
Spectrum Analyzer	FSVA40 (10 Hz ~ 40 GHz)	Rohde & Schwarz	101502	03/17/2024	Annual

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.
3. Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5(Version : 2017).

12. ANNEX A_ TEST SETUP PHOTO

Please refer to test setup photo file no. as follows;

No.	Description
1	HCT-RF-2310-FC059-P