

A.2 6dB and 99% Bandwidth

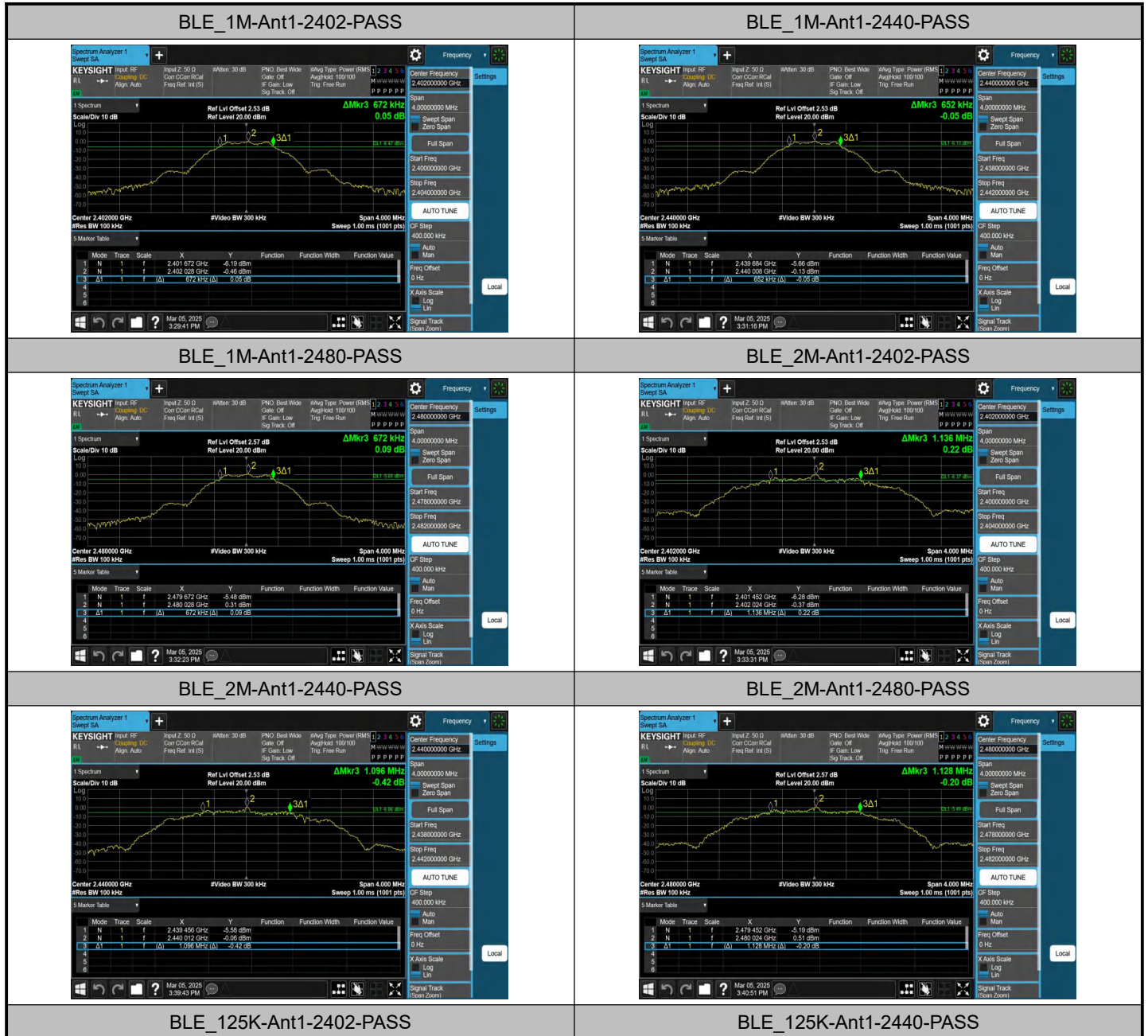
Test Result 6dB Bandwidth

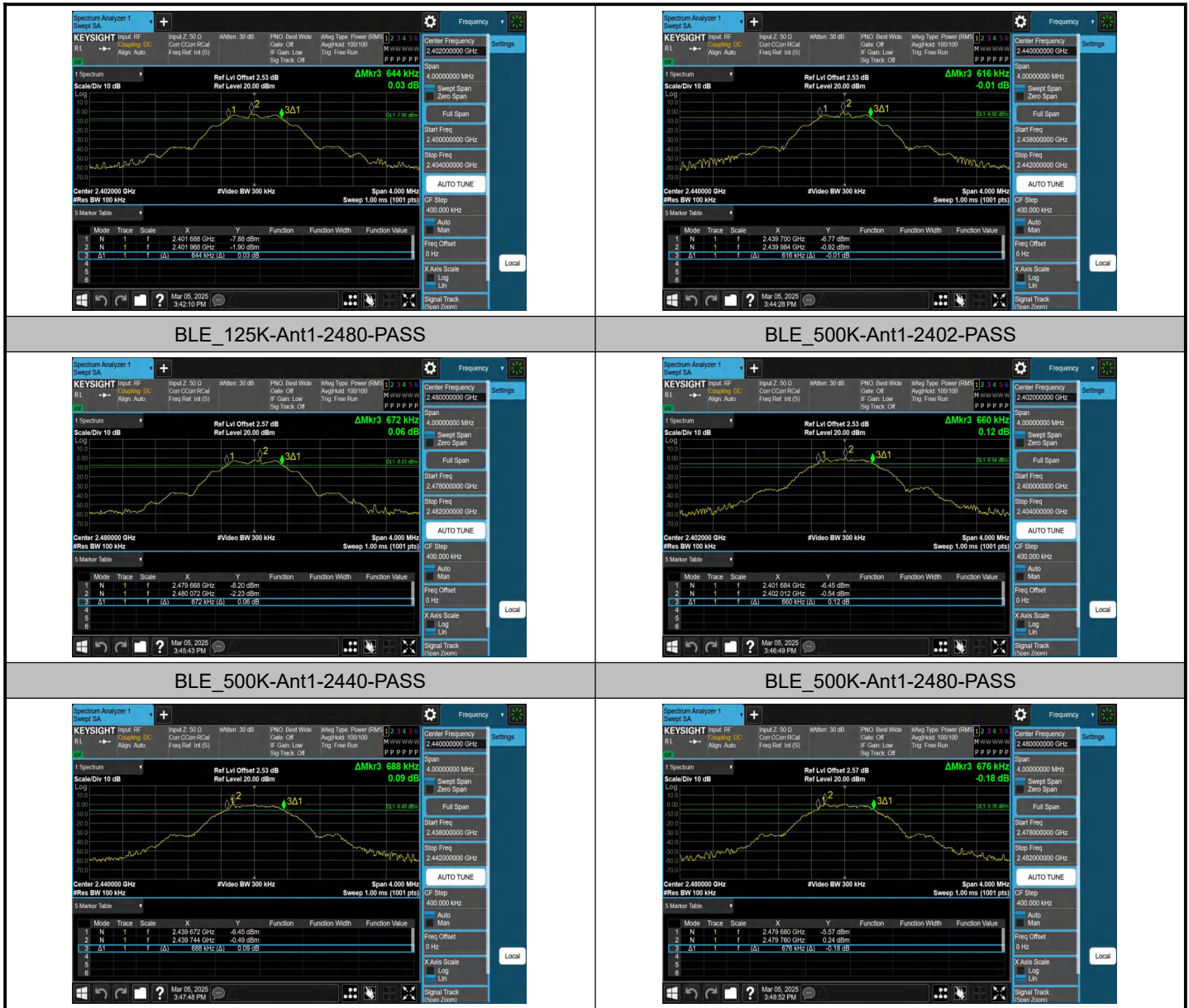
Test Mode	Antenna	Frequency[MHz]	DTS BW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.672	2401.672	2402.344	0.5	PASS
BLE_1M	Ant1	2440	0.652	2439.684	2440.336	0.5	PASS
BLE_1M	Ant1	2480	0.672	2479.672	2480.344	0.5	PASS
BLE_2M	Ant1	2402	1.136	2401.452	2402.588	0.5	PASS
BLE_2M	Ant1	2440	1.096	2439.456	2440.552	0.5	PASS
BLE_2M	Ant1	2480	1.128	2479.452	2480.580	0.5	PASS
BLE_125K	Ant1	2402	0.644	2401.688	2402.332	0.5	PASS
BLE_125K	Ant1	2440	0.616	2439.700	2440.316	0.5	PASS
BLE_125K	Ant1	2480	0.672	2479.668	2480.340	0.5	PASS
BLE_500K	Ant1	2402	0.660	2401.684	2402.344	0.5	PASS
BLE_500K	Ant1	2440	0.688	2439.672	2440.360	0.5	PASS
BLE_500K	Ant1	2480	0.676	2479.680	2480.356	0.5	PASS

Test Result 99% Bandwidth

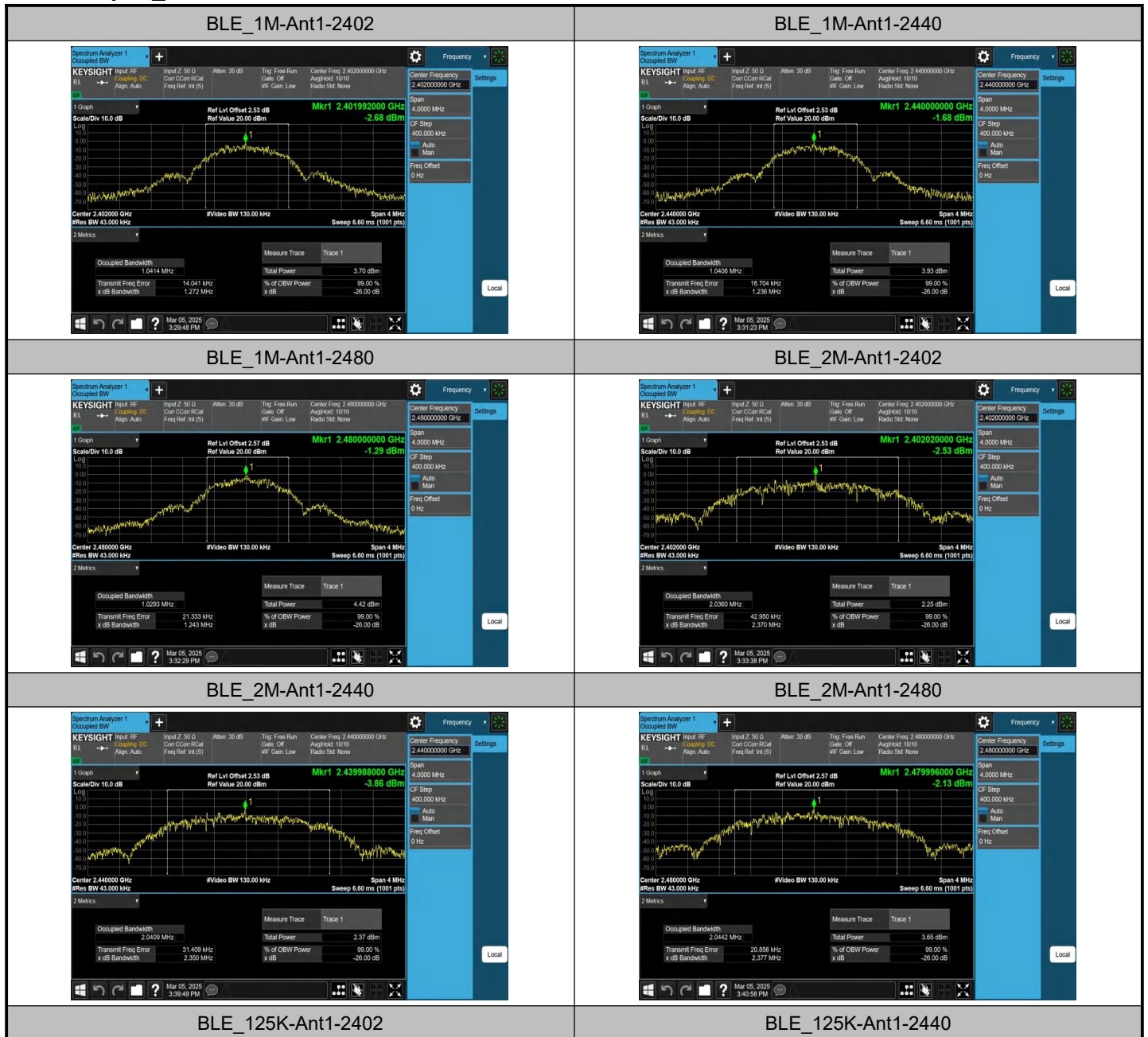
Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0414	2401.4933	2402.5347	---	---
BLE_1M	Ant1	2440	1.0406	2439.4964	2440.5370	---	---
BLE_1M	Ant1	2480	1.0293	2479.5067	2480.5360	---	---
BLE_2M	Ant1	2402	2.0360	2401.0250	2403.0610	---	---
BLE_2M	Ant1	2440	2.0409	2439.0110	2441.0519	---	---
BLE_2M	Ant1	2480	2.0442	2478.9988	2481.0430	---	---
BLE_125K	Ant1	2402	1.0530	2401.4802	2402.5332	---	---
BLE_125K	Ant1	2440	1.0466	2439.4820	2440.5286	---	---
BLE_125K	Ant1	2480	1.0456	2479.4851	2480.5307	---	---
BLE_500K	Ant1	2402	1.0431	2401.4963	2402.5394	---	---
BLE_500K	Ant1	2440	0.99730	2439.5138	2440.5111	---	---
BLE_500K	Ant1	2480	1.0366	2479.4905	2480.5271	---	---

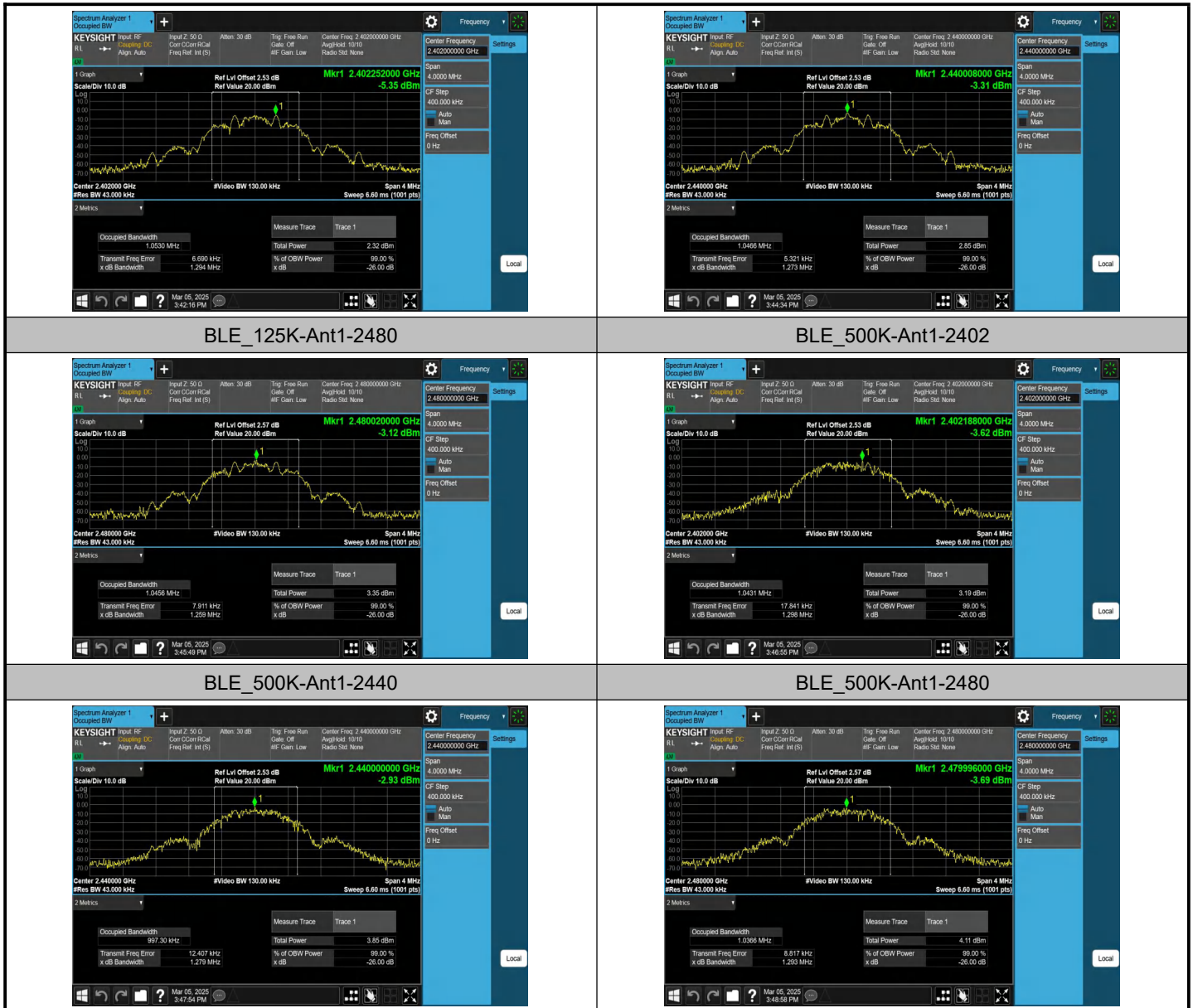
Test Graphs_6dB Bandwidth





Test Graphs_99% Bandwidth



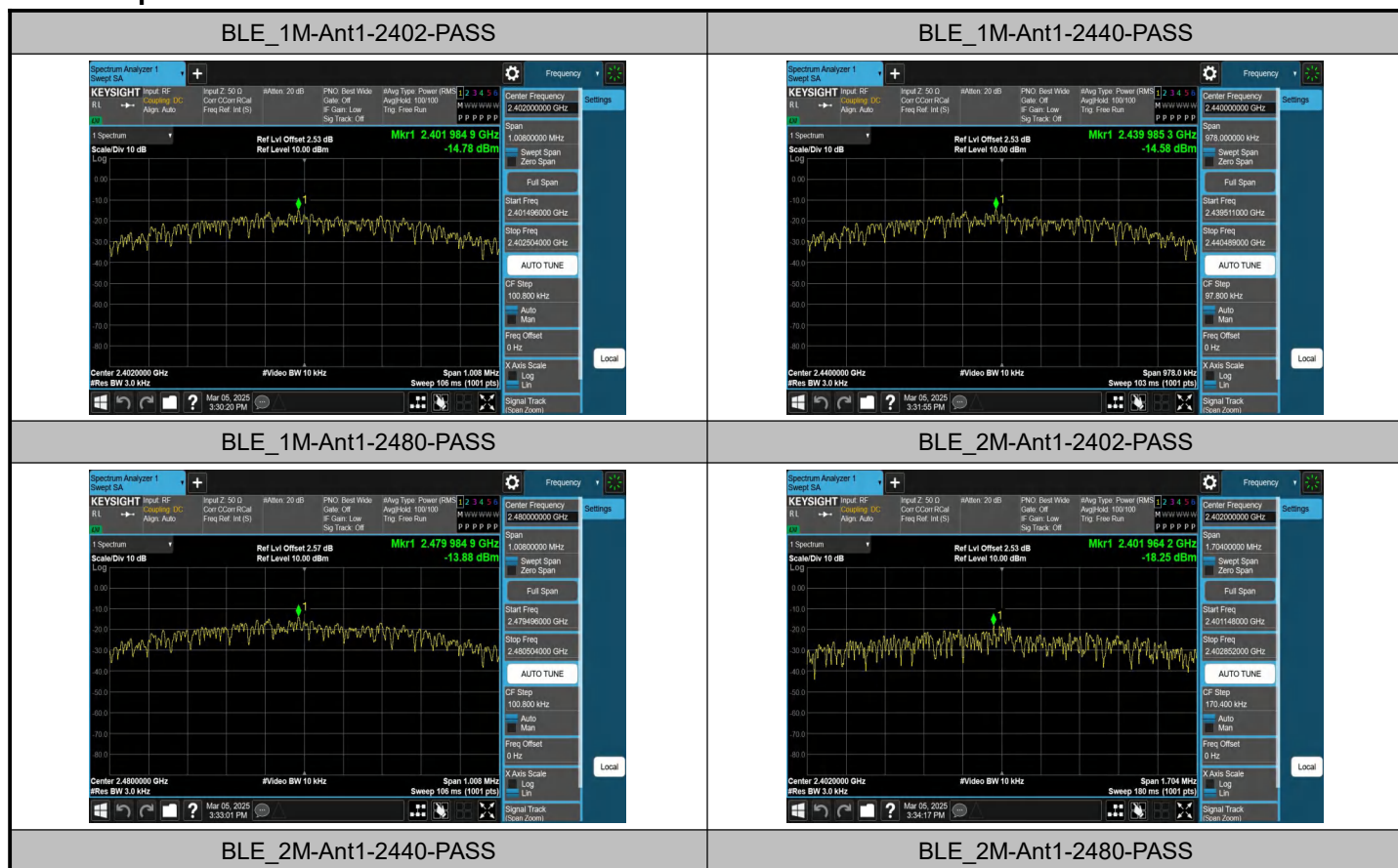


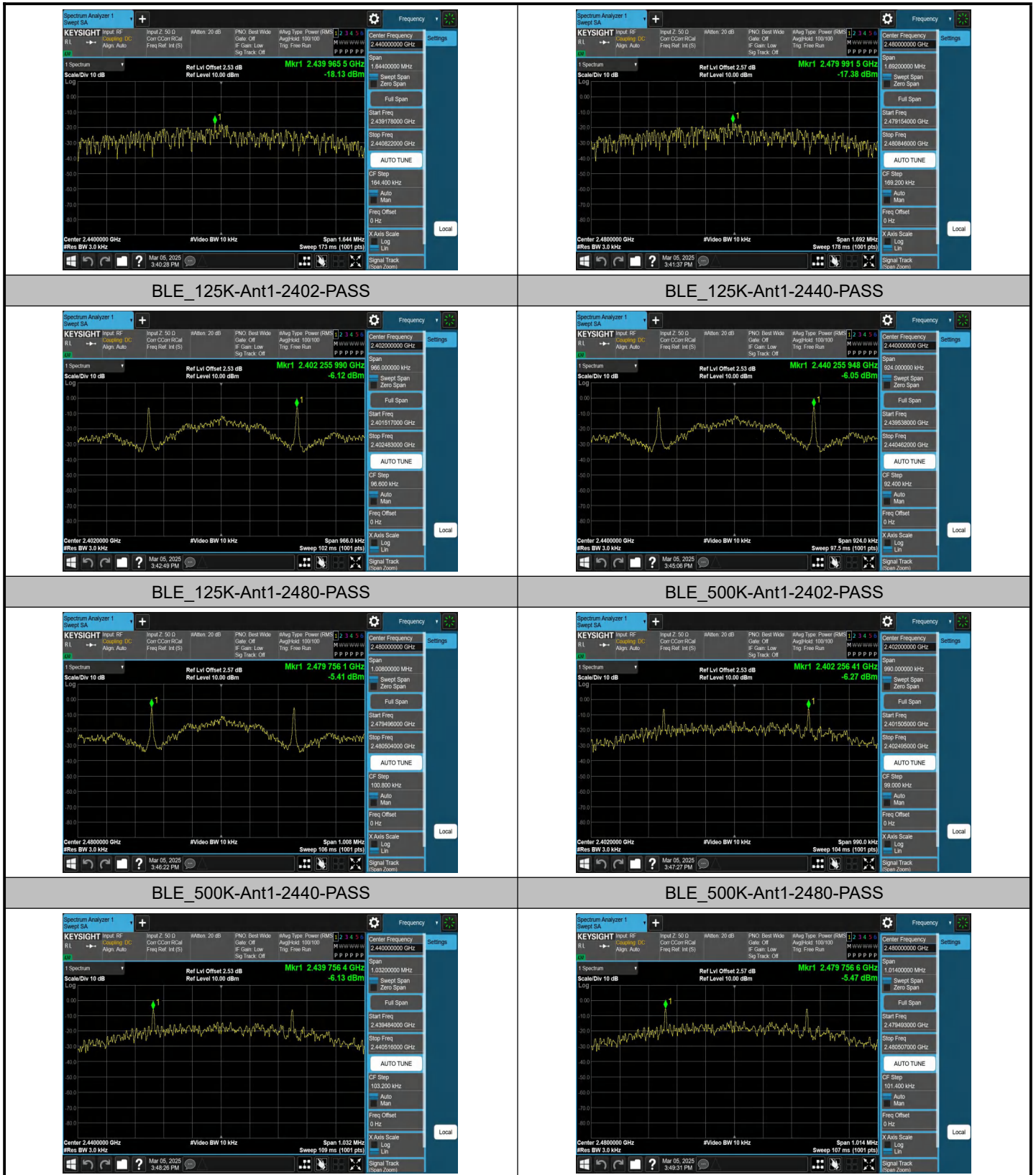
A.3 Power Spectral Density

Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-14.78	≤8.00	PASS
BLE_1M	Ant1	2440	-14.58	≤8.00	PASS
BLE_1M	Ant1	2480	-13.88	≤8.00	PASS
BLE_2M	Ant1	2402	-18.25	≤8.00	PASS
BLE_2M	Ant1	2440	-18.13	≤8.00	PASS
BLE_2M	Ant1	2480	-17.38	≤8.00	PASS
BLE_125K	Ant1	2402	-6.12	≤8.00	PASS
BLE_125K	Ant1	2440	-6.05	≤8.00	PASS
BLE_125K	Ant1	2480	-5.42	≤8.00	PASS
BLE_500K	Ant1	2402	-6.27	≤8.00	PASS
BLE_500K	Ant1	2440	-6.13	≤8.00	PASS
BLE_500K	Ant1	2480	-5.47	≤8.00	PASS

Test Graphs





A.4 Conducted Band Edges and Spurious Emission

Test Result

Band Edges

Test Mode	Antenna	Ch Name	Frequency[MHz]	Ref Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.36	-55.6	≤-20.36	PASS
BLE_1M	Ant1	High	2480	0.57	-56.78	≤-19.43	PASS
BLE_2M	Ant1	Low	2402	-0.28	-41.32	≤-20.28	PASS
BLE_2M	Ant1	High	2480	0.60	-56.25	≤-19.4	PASS
BLE_125K	Ant1	Low	2402	-3.44	-56.81	≤-23.44	PASS
BLE_125K	Ant1	High	2480	0.42	-56.59	≤-19.58	PASS
BLE_500K	Ant1	Low	2402	-0.49	-56.84	≤-20.49	PASS
BLE_500K	Ant1	High	2480	0.79	-56.16	≤-19.21	PASS

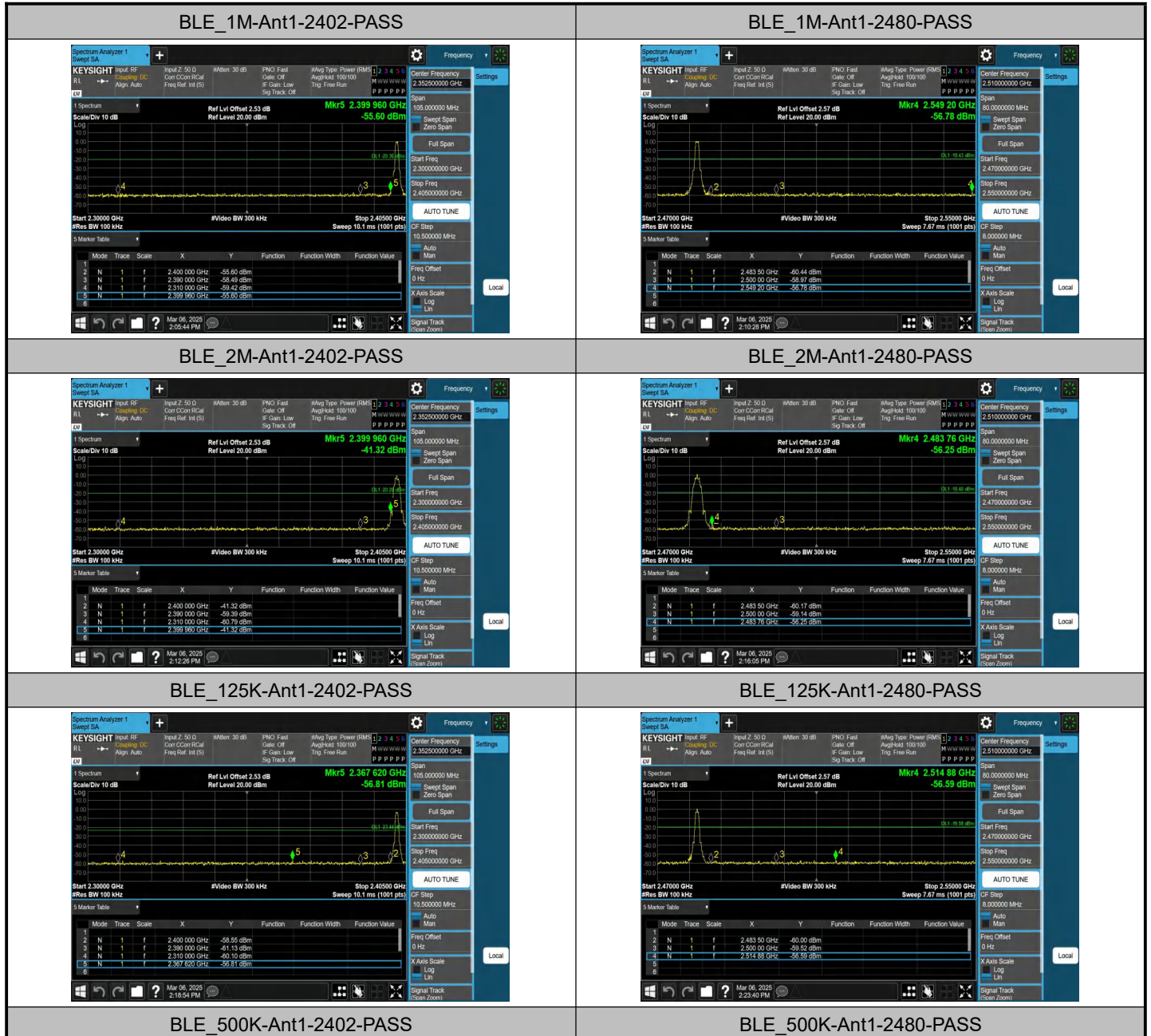
Spurious Emission

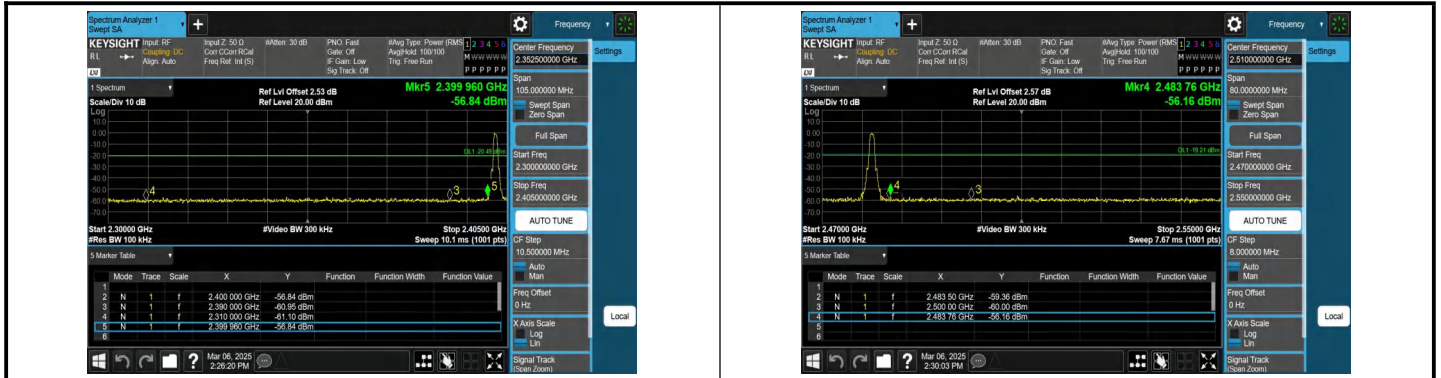
Test Mode	Antenna	Frequency[MHz]	Freq Range[MHz]	Ref Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	30~1000	-0.36	-69.44	≤-20.36	PASS
BLE_1M	Ant1	2402	1000~26500	-0.36	-55.62	≤-20.36	PASS
BLE_1M	Ant1	2440	30~1000	-0.16	-68.81	≤-20.16	PASS
BLE_1M	Ant1	2440	1000~26500	-0.16	-54.76	≤-20.16	PASS
BLE_1M	Ant1	2480	30~1000	0.57	-68.44	≤-19.43	PASS
BLE_1M	Ant1	2480	1000~26500	0.57	-55.36	≤-19.43	PASS
BLE_2M	Ant1	2402	30~1000	-0.28	-68.92	≤-20.28	PASS
BLE_2M	Ant1	2402	1000~26500	-0.28	-44.01	≤-20.28	PASS
BLE_2M	Ant1	2440	30~1000	-0.09	-68.81	≤-20.09	PASS
BLE_2M	Ant1	2440	1000~26500	-0.09	-55.35	≤-20.09	PASS
BLE_2M	Ant1	2480	30~1000	0.60	-69.02	≤-19.4	PASS
BLE_2M	Ant1	2480	1000~26500	0.60	-55.28	≤-19.4	PASS
BLE_125K	Ant1	2402	30~1000	-3.44	-69.07	≤-23.44	PASS
BLE_125K	Ant1	2402	1000~26500	-3.44	-54.8	≤-23.44	PASS
BLE_125K	Ant1	2440	30~1000	-2.49	-69.54	≤-22.49	PASS
BLE_125K	Ant1	2440	1000~26500	-2.49	-55.44	≤-22.49	PASS
BLE_125K	Ant1	2480	30~1000	0.42	-69.16	≤-19.58	PASS
BLE_125K	Ant1	2480	1000~26500	0.42	-54.83	≤-19.58	PASS
BLE_500K	Ant1	2402	30~1000	-0.49	-69.43	≤-20.49	PASS
BLE_500K	Ant1	2402	1000~26500	-0.49	-54.42	≤-20.49	PASS
BLE_500K	Ant1	2440	30~1000	0.02	-68.09	≤-19.98	PASS
BLE_500K	Ant1	2440	1000~26500	0.02	-54.41	≤-19.98	PASS

BLE_500K	Ant1	2480	30~1000	0.79	-67.91	≤ -19.21	PASS
BLE_500K	Ant1	2480	1000~26500	0.79	-55.41	≤ -19.21	PASS

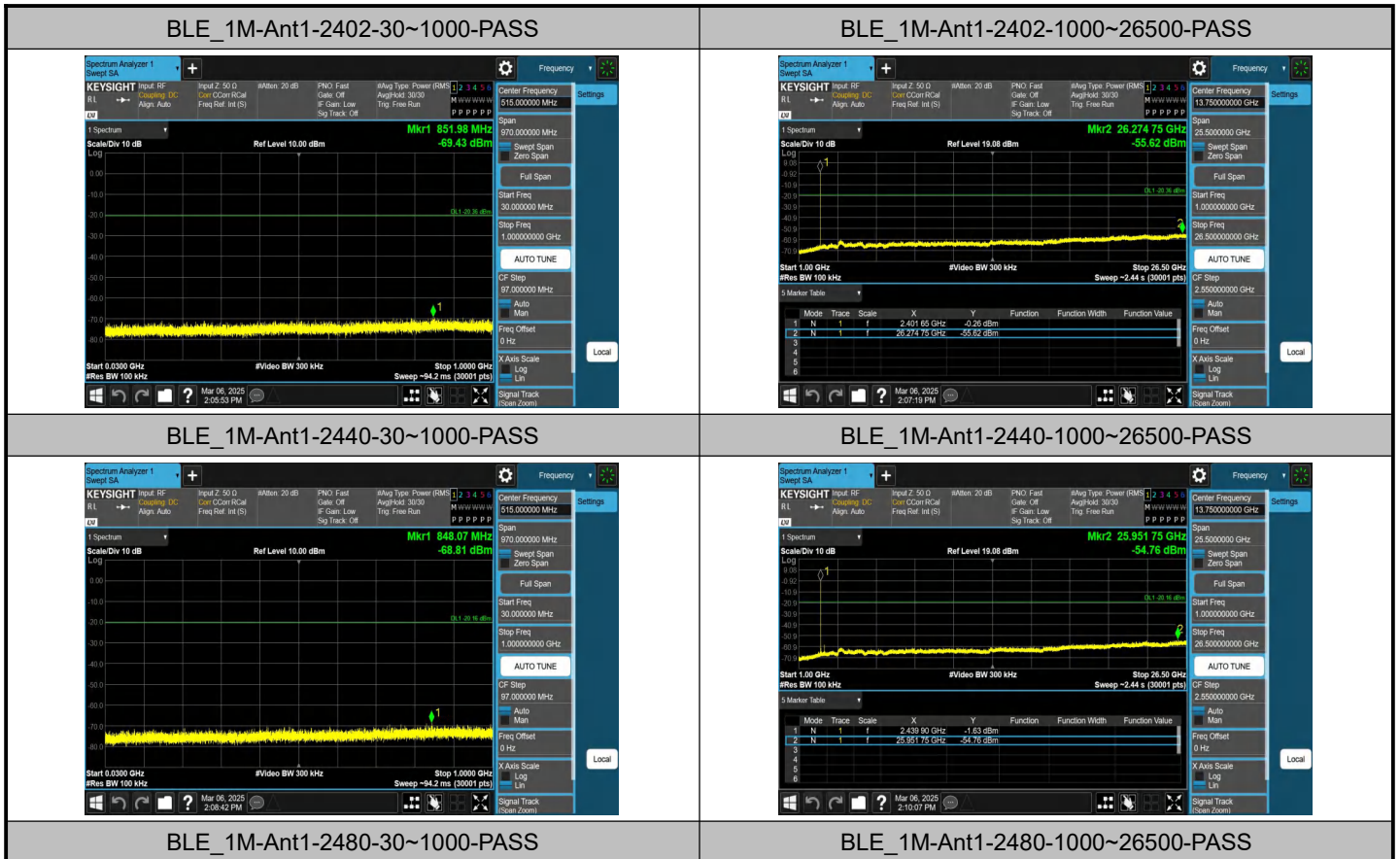
Test Graphs

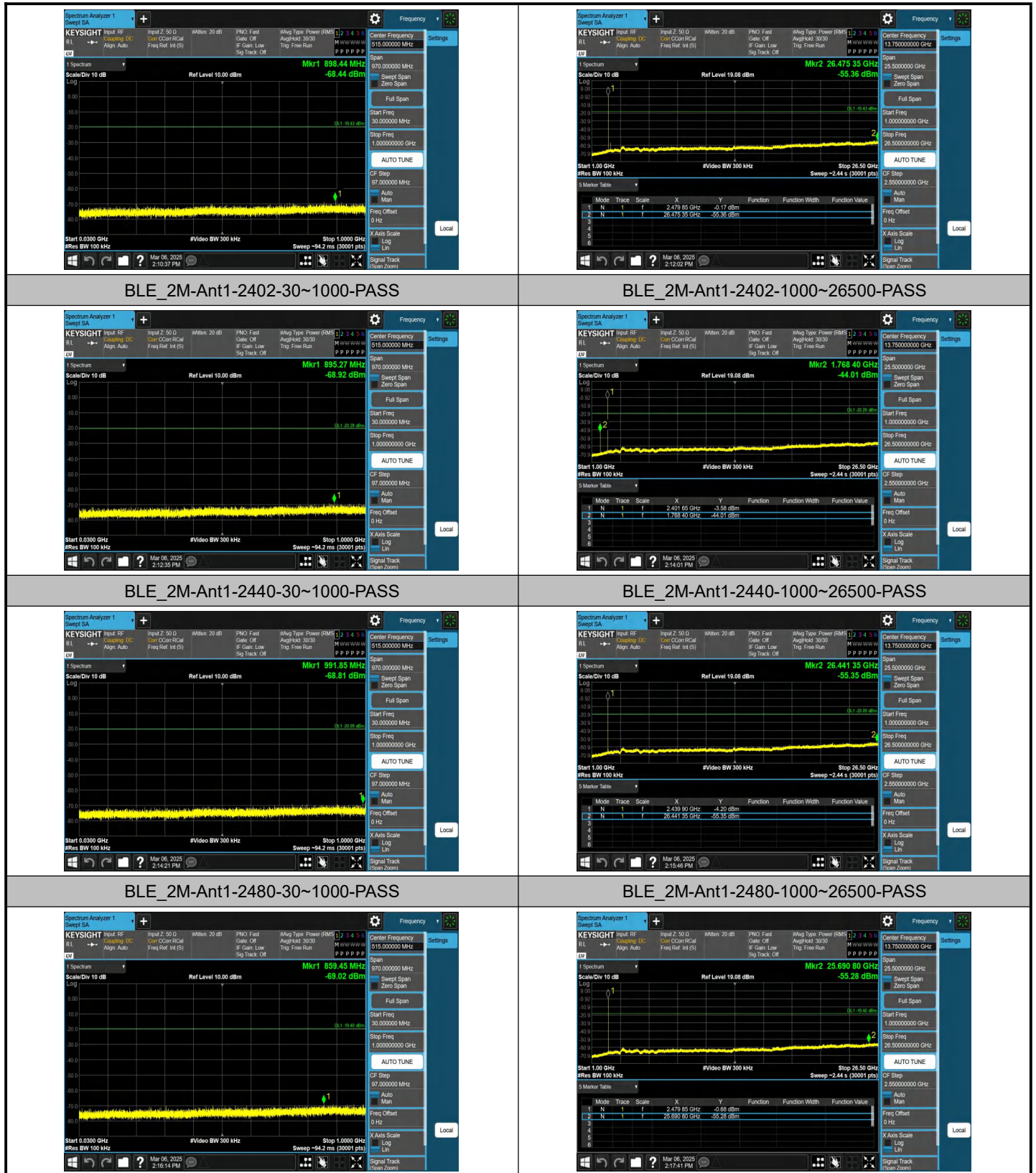
Band Edges



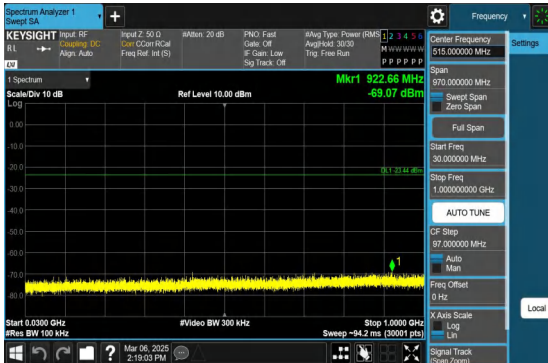


Spurious Emission





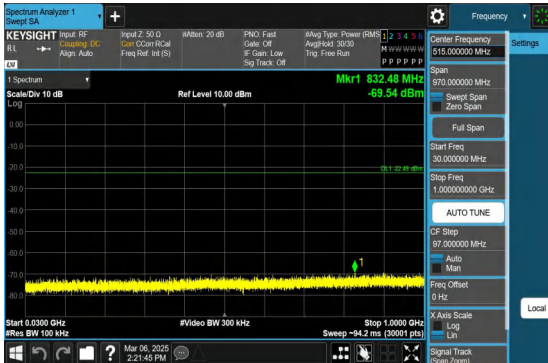
BLE_125K-Ant1-2402-30~1000-PASS



BLE_125K-Ant1-2402-1000~26500-PASS



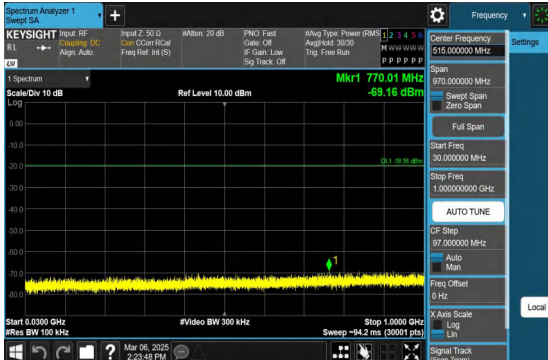
BLE_125K-Ant1-2440-30~1000-PASS



BLE_125K-Ant1-2440-1000~26500-PASS



BLE_125K-Ant1-2480-30~1000-PASS



BLE_125K-Ant1-2480-1000~26500-PASS



BLE_500K-Ant1-2402-30~1000-PASS



BLE_500K-Ant1-2402-1000~26500-PASS



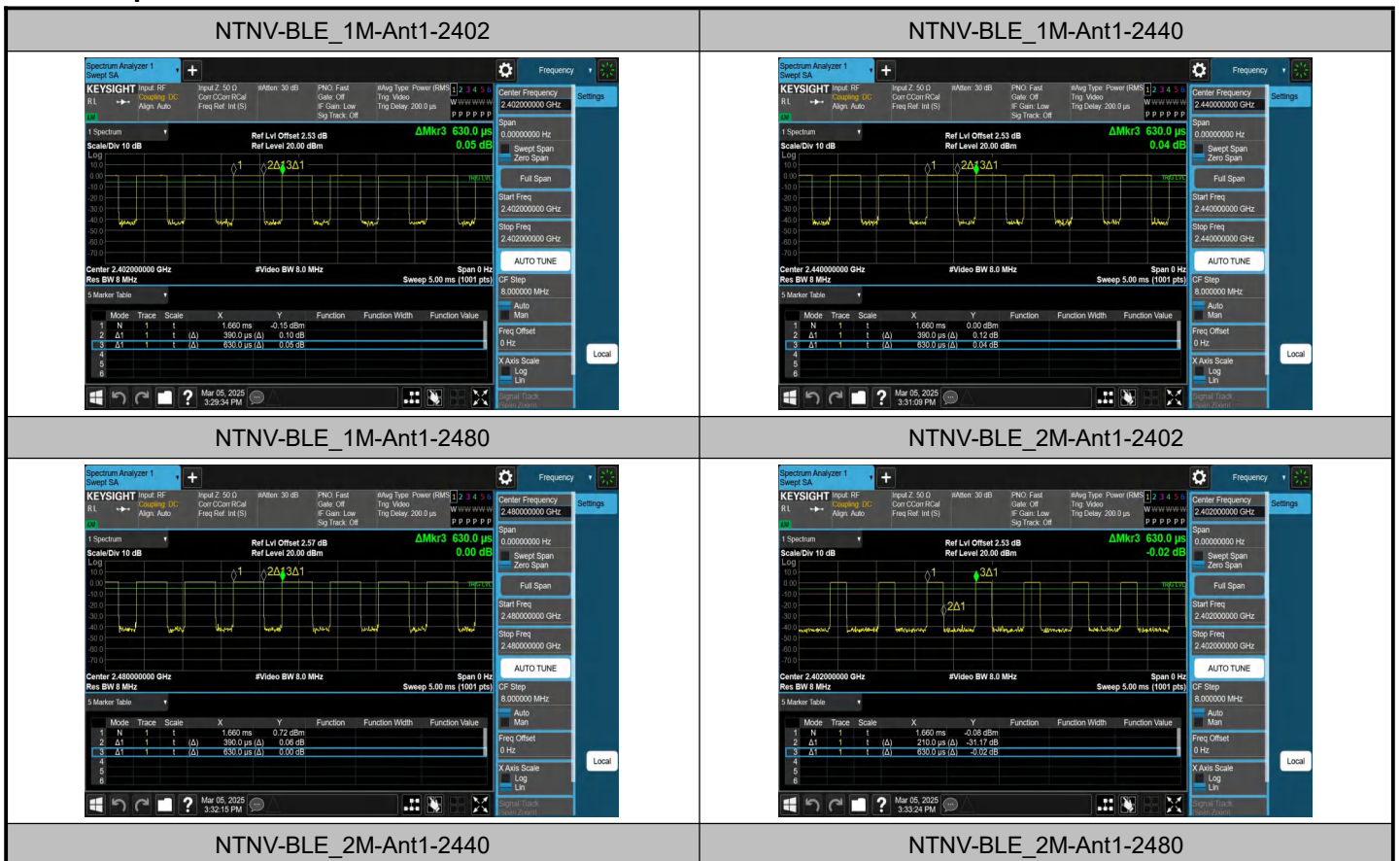


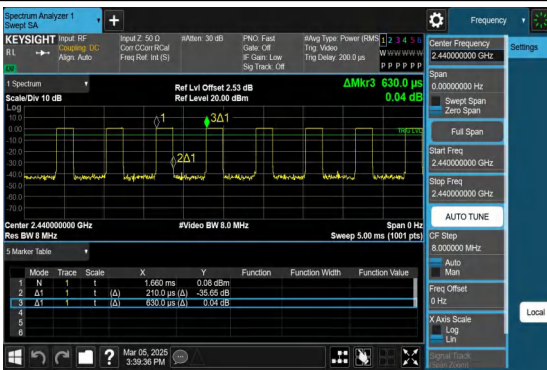
A.5 Duty Cycle

Test Result

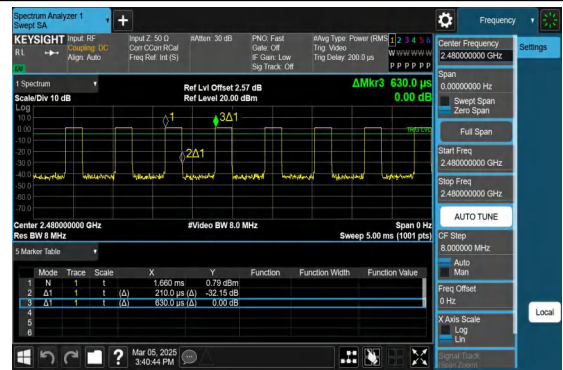
Test Mode	Antenna	Frequency[MHz]	ON Time[ms]	Period[ms]	Duty Cycle[%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.39	0.63	61.90	2.08
BLE_1M	Ant1	2440	0.39	0.63	61.90	2.08
BLE_1M	Ant1	2480	0.39	0.63	61.90	2.08
BLE_2M	Ant1	2402	0.21	0.63	33.33	4.77
BLE_2M	Ant1	2440	0.21	0.63	33.33	4.77
BLE_2M	Ant1	2480	0.21	0.63	33.33	4.77
BLE_125K	Ant1	2402	3.10	3.75	82.67	0.83
BLE_125K	Ant1	2440	3.10	3.75	82.67	0.83
BLE_125K	Ant1	2480	3.10	3.75	82.67	0.83
BLE_500K	Ant1	2402	1.07	1.88	56.91	2.45
BLE_500K	Ant1	2440	1.07	1.88	56.91	2.45
BLE_500K	Ant1	2480	1.07	1.88	56.91	2.45

Test Graphs

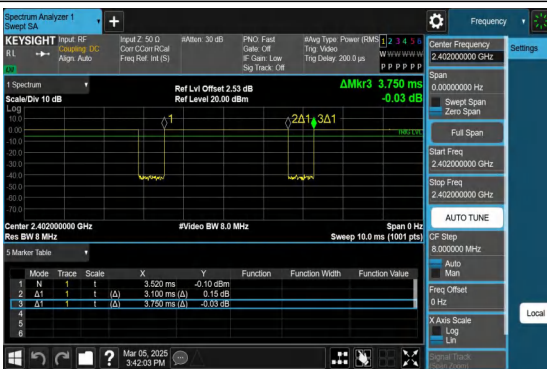




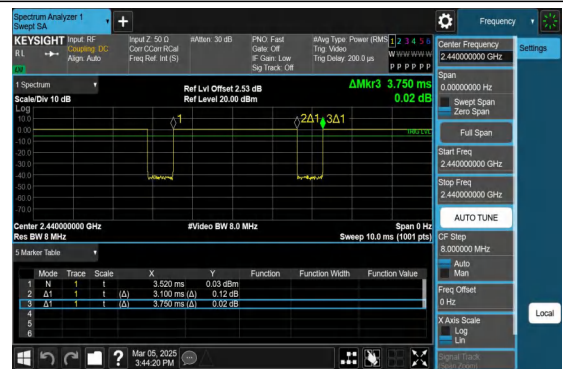
NTNV-BLE_125K-Ant1-2402



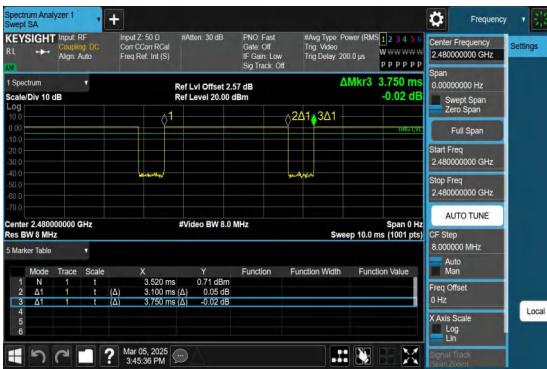
NTNV-BLE_125K-Ant1-2440



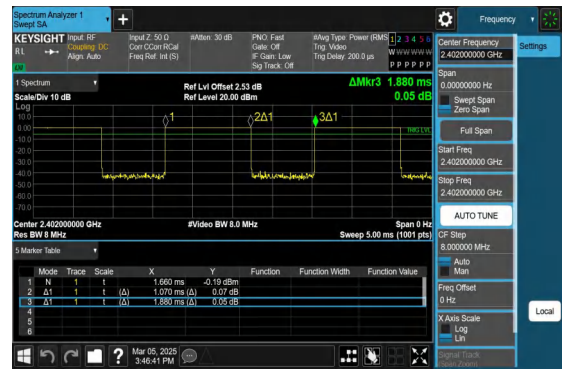
NTNV-BLE_125K-Ant1-2480



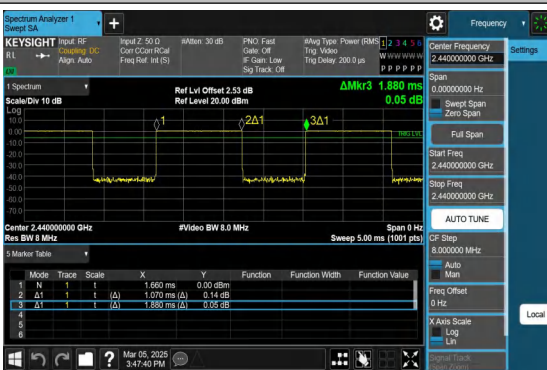
NTNV-BLE_500K-Ant1-2402



NTNV-BLE_500K-Ant1-2440



NTNV-BLE_500K-Ant1-2480



NTNV-BLE_500K-Ant1-2402



NTNV-BLE_500K-Ant1-2440

ANNEX B: Test Results of Radiated Test

B.1 Radiated Band Edges and Spurious Emission

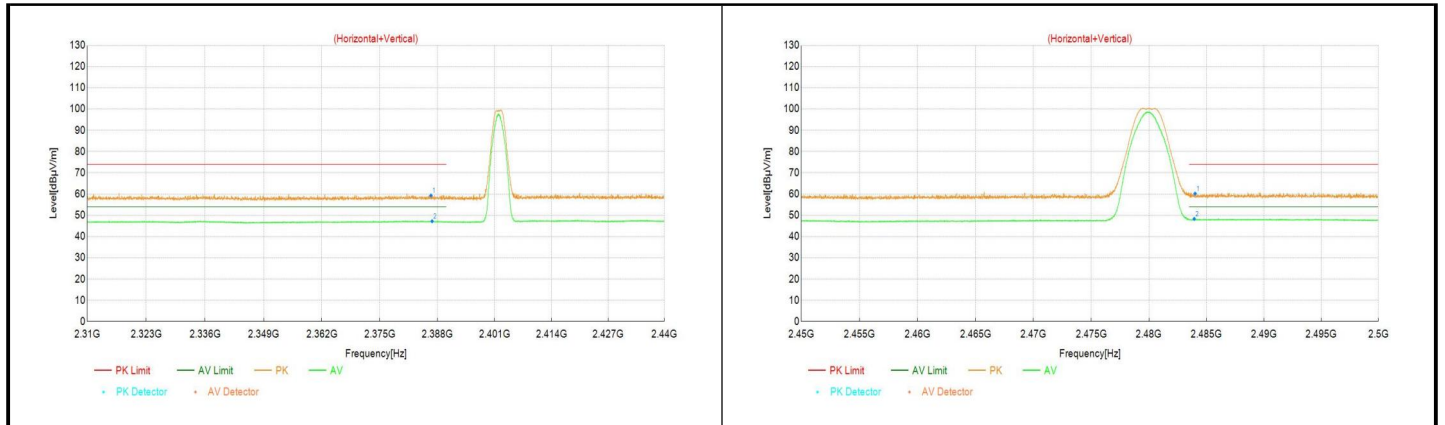
Test Result_Band Edges

Note:Both vertical and horizontal polarities have been evaluated, and the test data only shows the worst-case.
Level=Reading+Factor; Margin=Limit-Level; V=Vertical , H=Horizontal.

Data List								
Test Mode	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Pol.	Det
BLE_125K_2402	2389.105	46.93	58.96	12.03	74.00	15.04	H	PK
	2388.325	35.25	47.31	12.06	54.00	6.69	H	AV
BLE_125K_2480	2483.95	47.13	59.83	12.70	74.00	14.17	H	PK
	2484.2	35.41	48.13	12.72	54.00	5.87	V	AV
BLE_500K_2402	2388.1625	46.93	59.00	12.07	74.00	15.00	H	PK
	2388.0975	35.21	47.28	12.07	54.00	6.72	V	AV
BLE_500K_2480	2484.1125	47.35	60.06	12.71	74.00	13.94	V	PK
	2484.2125	35.34	48.06	12.72	54.00	5.94	V	AV
BLE_1M_2402	2388.39	47.71	59.77	12.06	74.00	14.23	H	PK
	2388.455	35.21	47.26	12.05	54.00	6.74	V	AV
BLE_1M_2480	2483.975	47.75	60.45	12.70	74.00	13.55	V	PK
	2483.9	35.33	48.03	12.70	54.00	5.97	V	AV
BLE_2M_2402	2386.57	47.19	59.33	12.14	74.00	14.67	V	PK
	2386.83	35.11	47.24	12.13	54.00	6.76	V	AV
BLE_2M_2480	2484.0125	47.51	60.21	12.70	74.00	13.79	H	PK
	2483.9375	35.64	48.34	12.70	54.00	5.66	V	AV

Test Graphs_Band Edges





Test Result_Spurious Emission

Note1: Test result Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier the Emissions in the frequency band 9kHz-30MHz and 18GHz-26.5GHz are more than 20dB below the limit are not reported.

Note2: Both vertical and horizontal polarities have been evaluated, and the test data only shows the worst-case. Level=Reading+Factor; Margin=Limit-Level; V=Vertical , H=Horizontal.

Data List

Test Mode	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Pol.	Det
BLE_125K_2402	4804	43.84	51.18	7.34	74.00	22.82	V	PK
	7206	41.74	55.42	13.68	74.00	18.58	V	PK
	9608	33.19	47.90	14.71	74.00	26.10	V	PK
	12010	33.15	48.98	15.83	74.00	25.02	H	PK
	14412	32.04	50.39	18.35	74.00	23.61	H	PK
	16814	31.46	54.70	23.24	74.00	19.30	V	PK
	4804	33.51	40.85	7.34	54.00	13.15	H	AV
	7206	31.18	44.86	13.68	54.00	9.14	V	AV
	9608	22.78	37.49	14.71	54.00	16.51	V	AV
	12010	22.21	38.04	15.83	54.00	15.96	V	AV
	14412	21.31	39.66	18.35	54.00	14.34	V	AV
	16814	20.32	43.56	23.24	54.00	10.44	V	AV
BLE_125K_2440	4880	43.94	51.39	7.45	74.00	22.61	H	PK
	7320	41.79	56.21	14.42	74.00	17.79	V	PK
	9760	34.75	49.75	15.00	74.00	24.25	V	PK
	12200	32.96	48.49	15.53	74.00	25.51	V	PK
	14640	31.88	50.33	18.45	74.00	23.67	V	PK
	17080	30.26	54.78	24.52	74.00	19.22	H	PK
	4880	33.13	40.58	7.45	54.00	13.42	V	AV
	7320	30.97	45.39	14.42	54.00	8.61	H	AV
	9760	22.70	37.70	15.00	54.00	16.30	V	AV
	12200	22.56	38.09	15.53	54.00	15.91	H	AV

	14640	20.82	39.27	18.45	54.00	14.73	V	AV
	17080	18.47	42.99	24.52	54.00	11.01	H	AV
BLE_125K_2480	4960	43.07	50.46	7.39	74.00	23.54	V	PK
	7440	42.20	56.67	14.47	74.00	17.33	H	PK
	9920	33.51	48.55	15.04	74.00	25.45	H	PK
	12400	33.02	49.49	16.47	74.00	24.51	H	PK
	14880	31.61	50.13	18.52	74.00	23.87	V	PK
	17360	29.59	54.41	24.82	74.00	19.59	V	PK
	4960	33.52	40.91	7.39	54.00	13.09	H	AV
	7440	30.90	45.37	14.47	54.00	8.63	V	AV
	9920	22.87	37.91	15.04	54.00	16.09	H	AV
	12400	22.34	38.81	16.47	54.00	15.19	V	AV
	14880	21.60	40.12	18.52	54.00	13.88	H	AV
	17360	18.45	43.27	24.82	54.00	10.73	H	AV
BLE_500K_2402	4804	44.49	51.83	7.34	74.00	22.17	H	PK
	7206	42.18	55.86	13.68	74.00	18.14	H	PK
	9608	33.59	48.30	14.71	74.00	25.70	H	PK
	12010	33.24	49.07	15.83	74.00	24.93	V	PK
	14412	32.26	50.61	18.35	74.00	23.39	H	PK
	16814	31.36	54.60	23.24	74.00	19.40	V	PK
	4804	33.59	40.93	7.34	54.00	13.07	V	AV
	7206	31.37	45.05	13.68	54.00	8.95	H	AV
	9608	22.65	37.36	14.71	54.00	16.64	V	AV
	12010	22.39	38.22	15.83	54.00	15.78	V	AV
	14412	21.30	39.65	18.35	54.00	14.35	V	AV
	16814	21.13	44.37	23.24	54.00	9.63	H	AV
BLE_500K_2440	4880	43.69	51.14	7.45	74.00	22.86	V	PK
	7320	42.87	57.29	14.42	74.00	16.71	H	PK
	9760	34.23	49.23	15.00	74.00	24.77	H	PK

	12200	33.75	49.28	15.53	74.00	24.72	H	PK
	14640	32.48	50.93	18.45	74.00	23.07	V	PK
	17080	29.74	54.26	24.52	74.00	19.74	V	PK
	4880	33.42	40.87	7.45	54.00	13.13	V	AV
	7320	31.41	45.83	14.42	54.00	8.17	V	AV
	9760	22.92	37.92	15.00	54.00	16.08	H	AV
	12200	22.93	38.46	15.53	54.00	15.54	H	AV
	14640	21.18	39.63	18.45	54.00	14.37	V	AV
	17080	18.84	43.36	24.52	54.00	10.64	V	AV
BLE_500K_2480	4960	44.18	51.57	7.39	74.00	22.43	H	PK
	7440	41.75	56.22	14.47	74.00	17.78	V	PK
	9920	33.51	48.55	15.04	74.00	25.45	H	PK
	12400	33.05	49.52	16.47	74.00	24.48	V	PK
	14880	31.75	50.27	18.52	74.00	23.73	H	PK
	17360	29.28	54.10	24.82	74.00	19.90	H	PK
	4960	33.00	40.39	7.39	54.00	13.61	H	AV
	7440	31.14	45.61	14.47	54.00	8.39	V	AV
	9920	22.94	37.98	15.04	54.00	16.02	H	AV
	12400	22.31	38.78	16.47	54.00	15.22	V	AV
	14880	21.26	39.78	18.52	54.00	14.22	V	AV
	17360	18.68	43.50	24.82	54.00	10.50	V	AV
BLE_1M_2402	4804	44.06	51.40	7.34	74.00	22.60	V	PK
	7206	42.52	56.20	13.68	74.00	17.80	H	PK
	9608	33.75	48.46	14.71	74.00	25.54	H	PK
	12010	33.11	48.94	15.83	74.00	25.06	H	PK
	14412	31.60	49.95	18.35	74.00	24.05	H	PK
	16814	30.93	54.17	23.24	74.00	19.83	V	PK
	4804	33.34	40.68	7.34	54.00	13.32	H	AV
	7206	31.21	44.89	13.68	54.00	9.11	H	AV

	9608	22.52	37.23	14.71	54.00	16.77	V	AV
	12010	22.31	38.14	15.83	54.00	15.86	H	AV
	14412	21.20	39.55	18.35	54.00	14.45	H	AV
	16814	20.70	43.94	23.24	54.00	10.06	H	AV
BLE_1M_2440	4880	44.11	51.56	7.45	74.00	22.44	V	PK
	7320	41.71	56.13	14.42	74.00	17.87	H	PK
	9760	33.53	48.53	15.00	74.00	25.47	H	PK
	12200	33.22	48.75	15.53	74.00	25.25	H	PK
	14640	31.70	50.15	18.45	74.00	23.85	H	PK
	17080	28.83	53.35	24.52	74.00	20.65	H	PK
	4880	33.08	40.53	7.45	54.00	13.47	H	AV
	7320	31.19	45.61	14.42	54.00	8.39	H	AV
	9760	22.61	37.61	15.00	54.00	16.39	V	AV
	12200	22.52	38.05	15.53	54.00	15.95	H	AV
	14640	20.87	39.32	18.45	54.00	14.68	V	AV
	17080	17.81	42.33	24.52	54.00	11.67	H	AV
BLE_1M_2480	4960	43.59	50.98	7.39	74.00	23.02	V	PK
	7440	42.24	56.71	14.47	74.00	17.29	H	PK
	9920	33.16	48.20	15.04	74.00	25.80	H	PK
	12400	32.79	49.26	16.47	74.00	24.74	V	PK
	14880	31.69	50.21	18.52	74.00	23.79	V	PK
	17360	28.82	53.64	24.82	74.00	20.36	V	PK
	4960	33.12	40.51	7.39	54.00	13.49	V	AV
	7440	30.59	45.06	14.47	54.00	8.94	V	AV
	9920	22.86	37.90	15.04	54.00	16.10	H	AV
	12400	22.13	38.60	16.47	54.00	15.40	H	AV
	14880	21.10	39.62	18.52	54.00	14.38	V	AV
	17360	18.20	43.02	24.82	54.00	10.98	V	AV
BLE_2M_2402	4804	43.87	51.21	7.34	74.00	22.79	H	PK

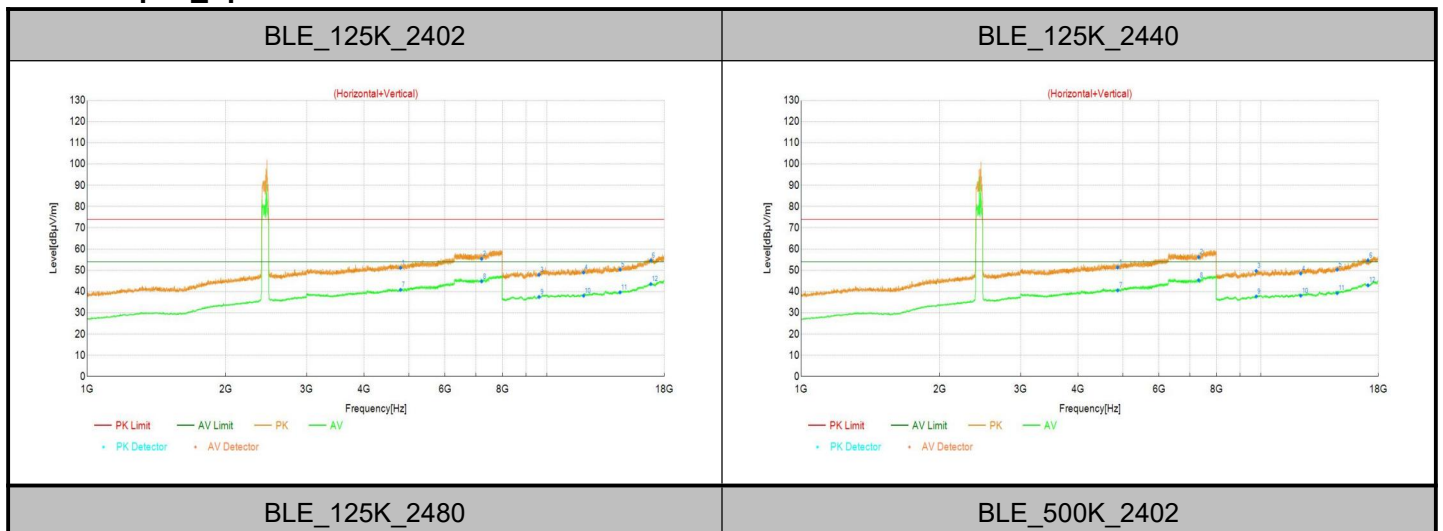
	7206	42.70	56.38	13.68	74.00	17.62	V	PK
	9608	33.01	47.72	14.71	74.00	26.28	H	PK
	12010	32.63	48.46	15.83	74.00	25.54	H	PK
	14412	31.22	49.57	18.35	74.00	24.43	H	PK
	16814	30.49	53.73	23.24	74.00	20.27	V	PK
	4804	33.31	40.65	7.34	54.00	13.35	V	AV
	7206	31.11	44.79	13.68	54.00	9.21	V	AV
	9608	22.58	37.29	14.71	54.00	16.71	H	AV
	12010	22.28	38.11	15.83	54.00	15.89	H	AV
	14412	21.32	39.67	18.35	54.00	14.33	H	AV
	16814	20.58	43.82	23.24	54.00	10.18	V	AV
BLE_2M_2440	4880	43.70	51.15	7.45	74.00	22.85	V	PK
	7320	41.99	56.41	14.42	74.00	17.59	V	PK
	9760	34.53	49.53	15.00	74.00	24.47	V	PK
	12200	33.36	48.89	15.53	74.00	25.11	V	PK
	14640	32.91	51.36	18.45	74.00	22.64	H	PK
	17080	29.87	54.39	24.52	74.00	19.61	H	PK
	4880	33.15	40.60	7.45	54.00	13.40	H	AV
	7320	31.17	45.59	14.42	54.00	8.41	V	AV
	9760	23.00	38.00	15.00	54.00	16.00	V	AV
	12200	22.69	38.22	15.53	54.00	15.78	V	AV
	14640	21.14	39.59	18.45	54.00	14.41	H	AV
	17080	18.72	43.24	24.52	54.00	10.76	V	AV
BLE_2M_2480	4960	44.36	51.75	7.39	74.00	22.25	H	PK
	7440	41.72	56.19	14.47	74.00	17.81	H	PK
	9920	33.03	48.07	15.04	74.00	25.93	H	PK
	12400	33.44	49.91	16.47	74.00	24.09	V	PK
	14880	34.44	52.96	18.52	74.00	21.04	H	PK
	17360	28.92	53.74	24.82	74.00	20.26	V	PK

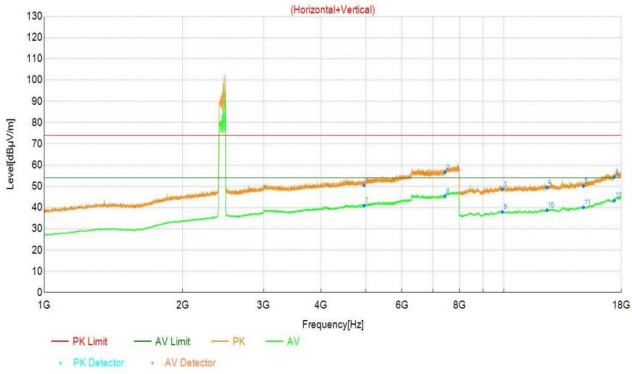
	4960	33.15	40.54	7.39	54.00	13.46	V	AV
	7440	31.06	45.53	14.47	54.00	8.47	V	AV
	9920	23.00	38.04	15.04	54.00	15.96	V	AV
	12400	22.30	38.77	16.47	54.00	15.23	V	AV
	14880	21.32	39.84	18.52	54.00	14.16	H	AV
	17360	18.75	43.57	24.82	54.00	10.43	V	AV

Data List

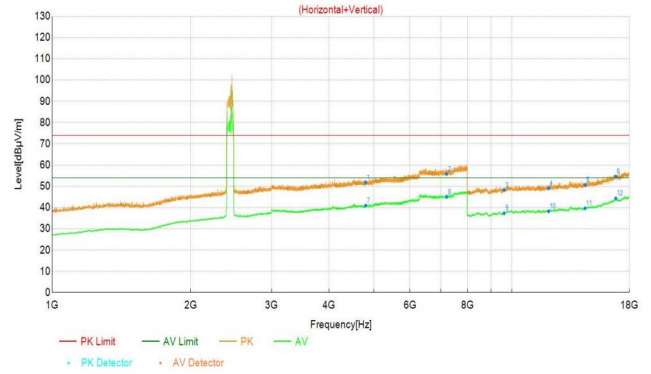
Test Mode	Frequency [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Pol.	Det
BLE_2M_2480	48.224662	36.20	21.05	-15.15	40.00	18.95	V	QP
	61.140036	36.61	20.03	-16.58	40.00	19.97	V	QP
	136.89308	34.68	14.53	-20.15	43.50	28.97	V	QP
	217.158515	24.28	8.59	-15.69	46.00	37.41	H	QP
	523.492283	24.99	14.36	-10.63	46.00	31.64	H	QP
	909.656486	23.27	20.63	-2.64	46.00	25.37	H	QP

Test Graphs_Spurious Emission

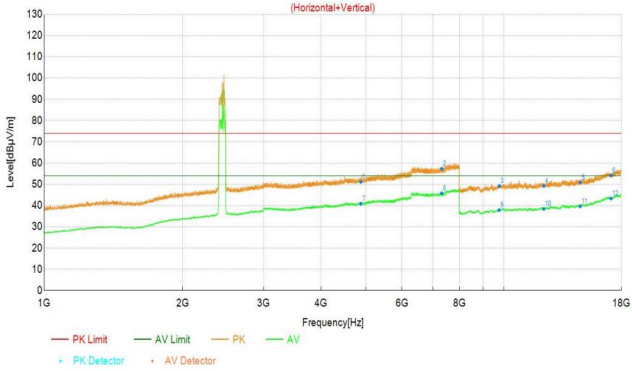




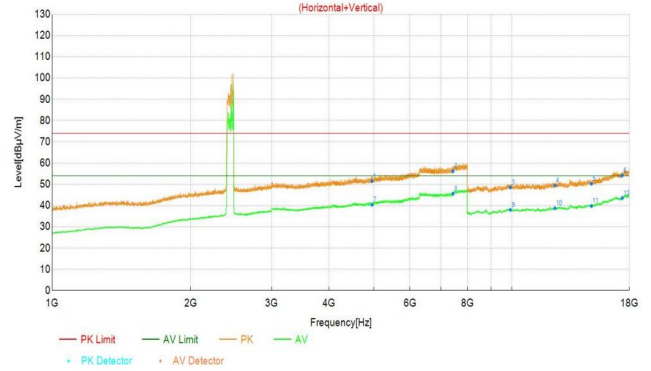
BLE_500K_2440



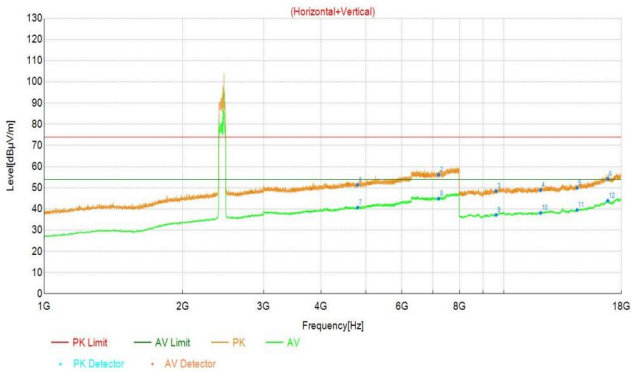
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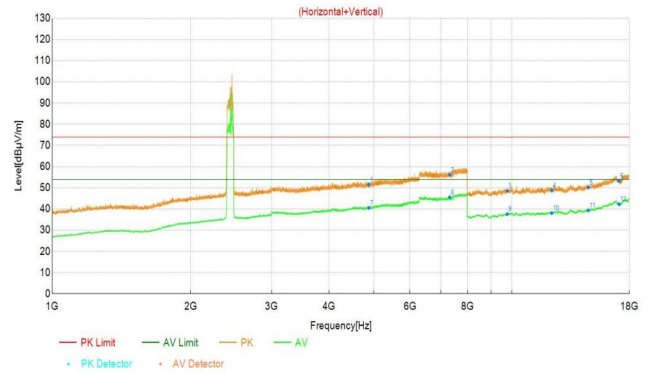
BLE_1M_2402



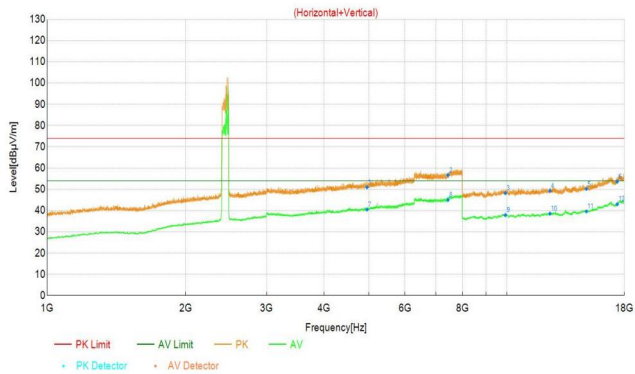
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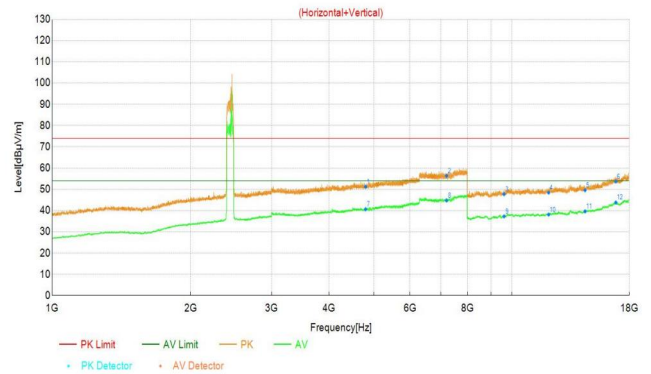
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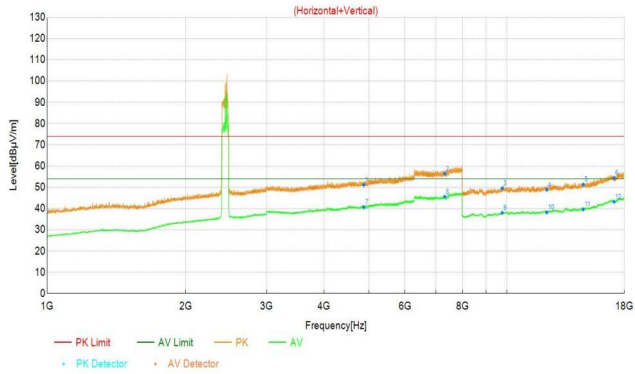
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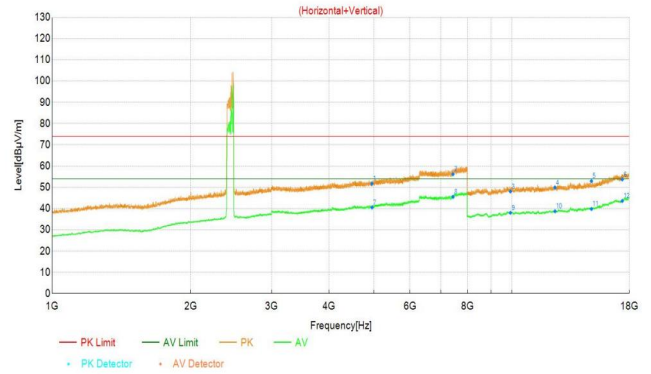
BLE_2M_2440



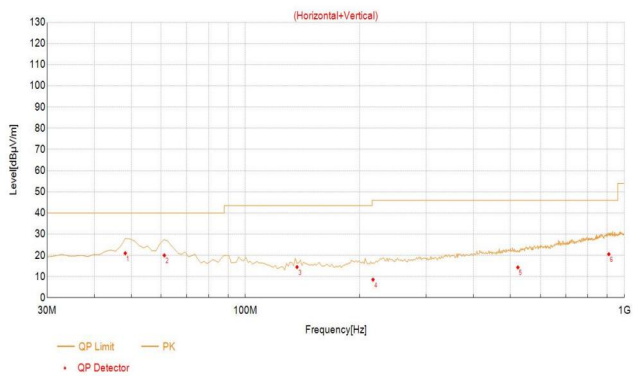
BLE_2M_2480



BLE_2M_2480



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ANNEX C: The EUT Appearance

The EUT Appearance (internal and external photographs) are submitted separately.

ANNEX D: Test Setup Photograph

The Test Setup Photographs are submitted separately.