

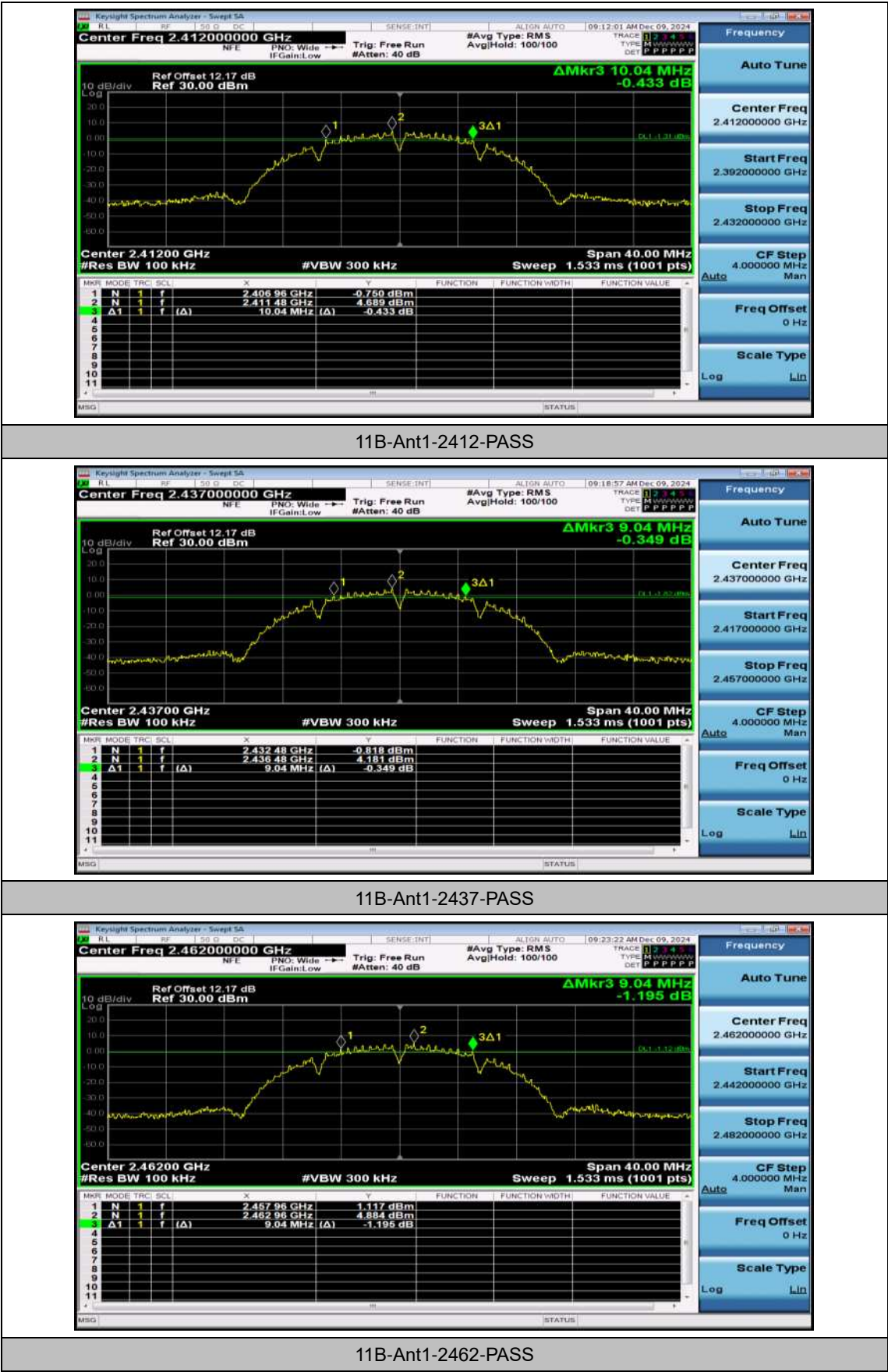
Appendix A of report 2411B2087SHA-001

DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.040	2406.960	2417.000	0.5	PASS
11B	Ant1	2437	9.040	2432.480	2441.520	0.5	PASS
11B	Ant1	2462	9.040	2457.960	2467.000	0.5	PASS
11G	Ant1	2412	16.360	2403.800	2420.160	0.5	PASS
11G	Ant1	2437	16.320	2428.840	2445.160	0.5	PASS
11G	Ant1	2462	16.320	2453.840	2470.160	0.5	PASS
11N20SISO	Ant1	2412	16.880	2403.600	2420.480	0.5	PASS
11N20SISO	Ant1	2437	17.320	2428.440	2445.760	0.5	PASS
11N20SISO	Ant1	2462	17.560	2453.200	2470.760	0.5	PASS
11N40SISO	Ant1	2422	35.120	2404.400	2439.520	0.5	PASS
11N40SISO	Ant1	2437	34.080	2420.440	2454.520	0.5	PASS
11N40SISO	Ant1	2452	35.120	2434.400	2469.520	0.5	PASS

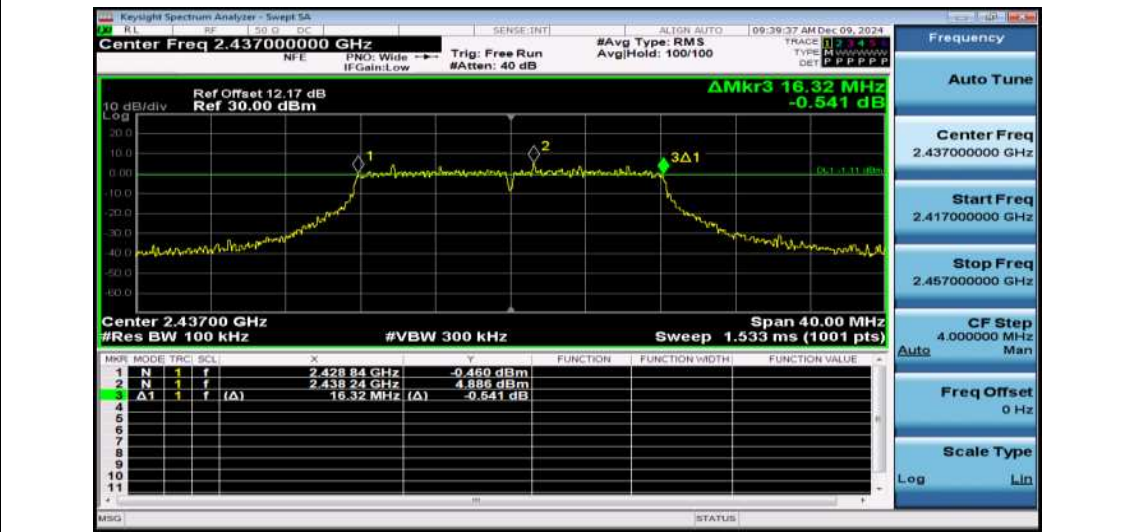
Test Graphs



FCC ID: 2A64B-DEX54
IC: 28593-DEX54



11G-Ant1-2412-PASS



11G-Ant1-2437-PASS



11G-Ant1-2462-PASS

FCC ID: 2A64B-DEX54
IC: 28593-DEX54



11N20SISO-Ant1-2412-PASS

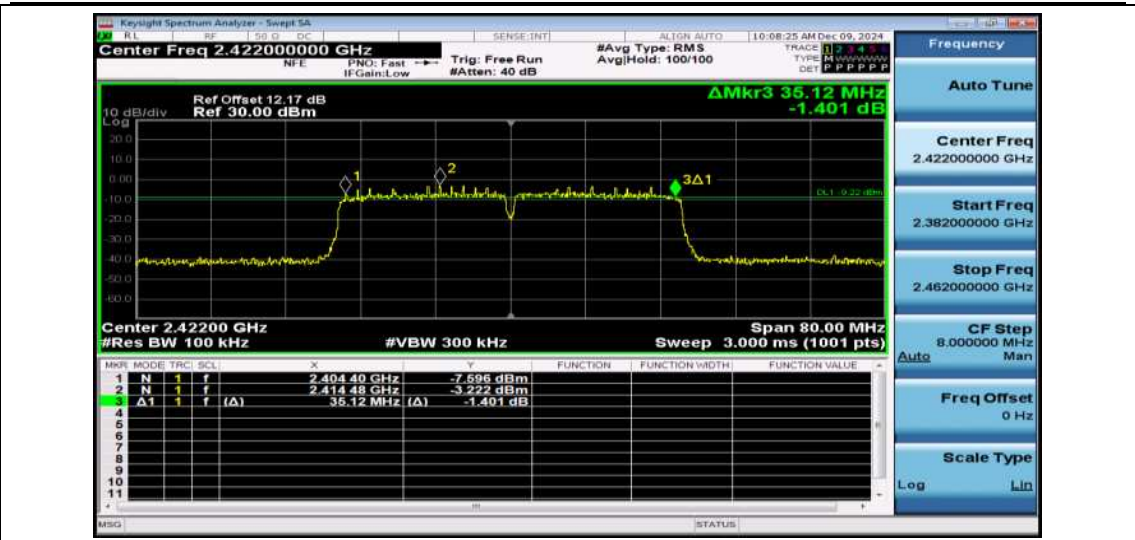


11N20SISO-Ant1-2437-PASS

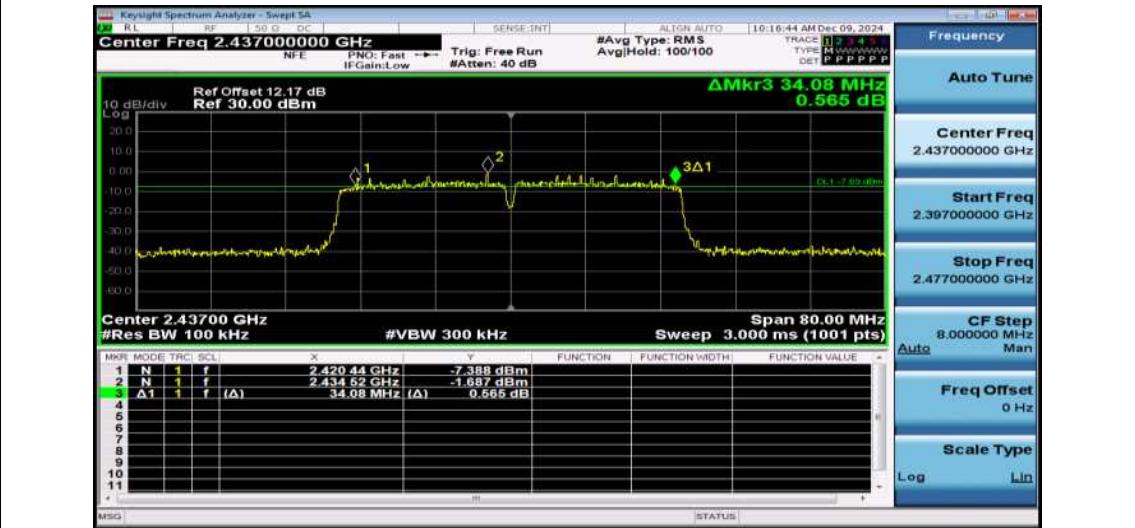


11N20SISO-Ant1-2462-PASS

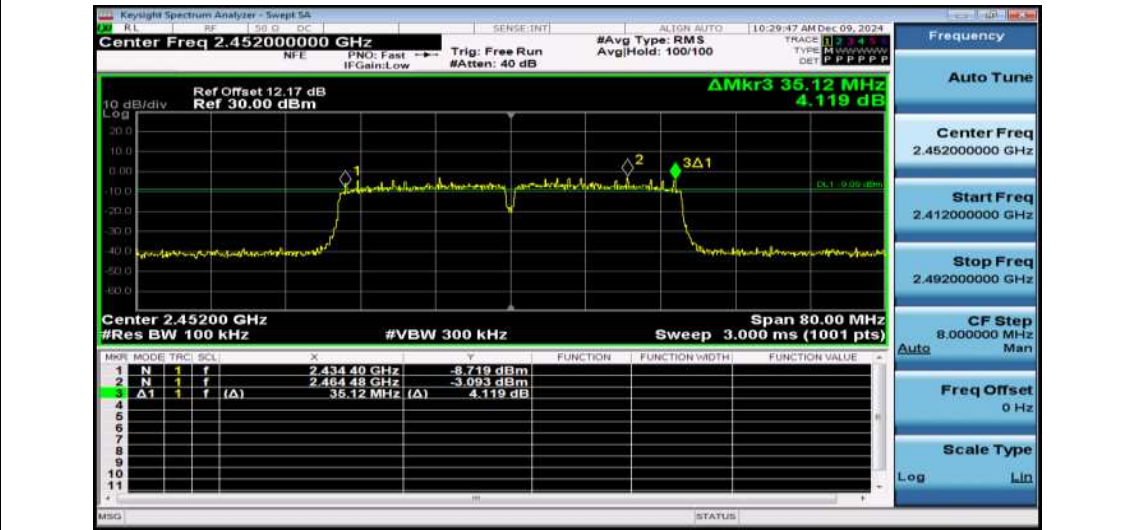
FCC ID: 2A64B-DEX54
IC: 28593-DEX54



11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS

FCC ID: 2A64B-DEX54
IC: 28593-DEX54

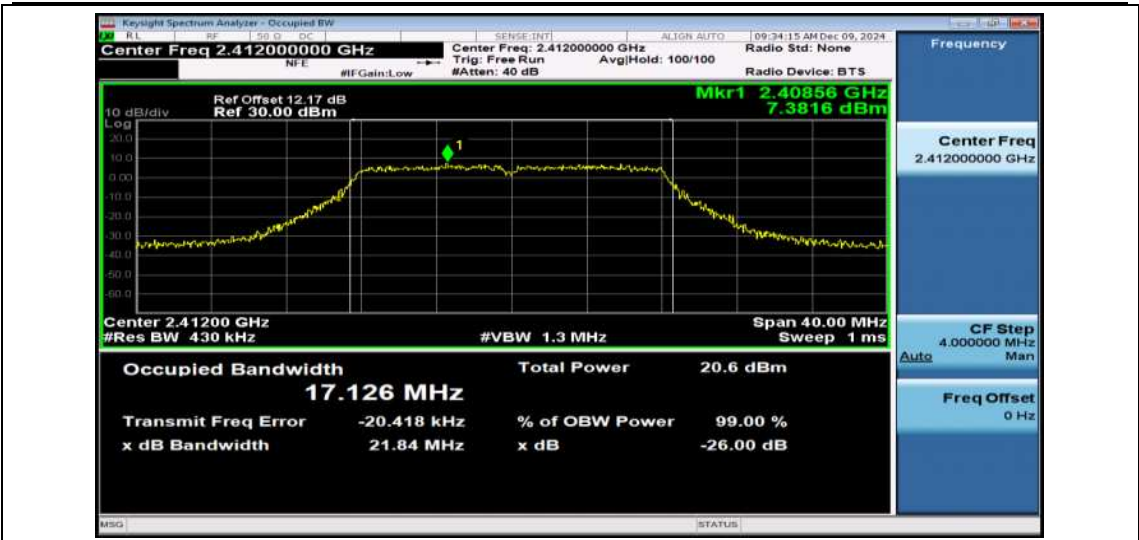
Occupied Channel Bandwidth

Test Result

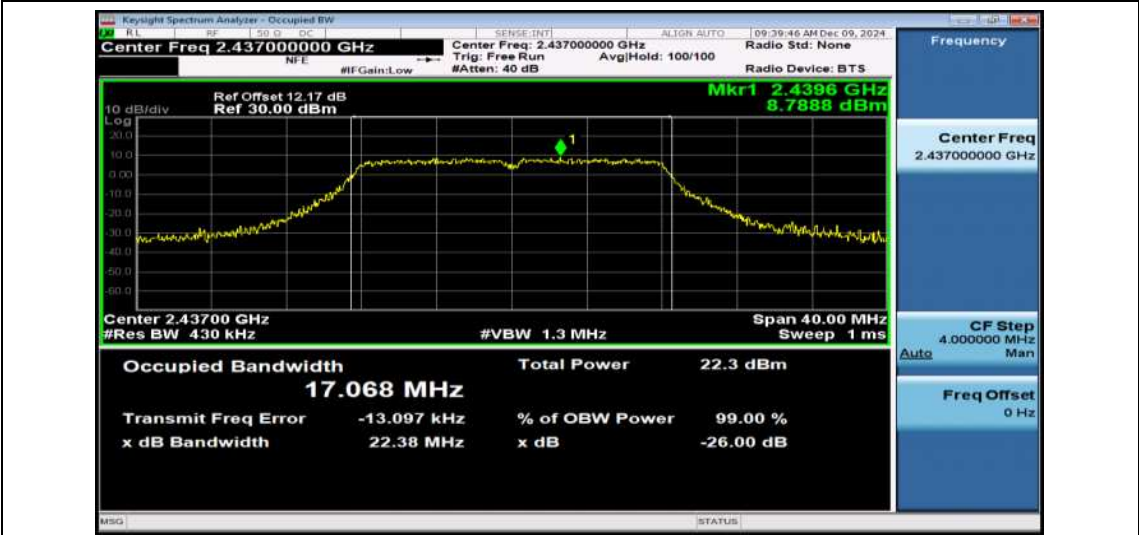
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	14.914	2404.5320	2419.4460	---	---
11B	Ant1	2437	14.964	2429.5209	2444.4849	---	---
11B	Ant1	2462	14.947	2454.5127	2469.4597	---	---
11G	Ant1	2412	17.126	2403.4166	2420.5426	---	---
11G	Ant1	2437	17.068	2428.4529	2445.5209	---	---
11G	Ant1	2462	17.132	2453.4084	2470.5404	---	---
11N20SISO	Ant1	2412	18.060	2402.9514	2421.0114	---	---
11N20SISO	Ant1	2437	18.063	2427.9590	2446.0220	---	---
11N20SISO	Ant1	2462	18.019	2452.9895	2471.0085	---	---
11N40SISO	Ant1	2422	35.903	2404.0605	2439.9635	---	---
11N40SISO	Ant1	2437	35.919	2419.0320	2454.9510	---	---
11N40SISO	Ant1	2452	35.948	2434.0242	2469.9722	---	---

Test Graphs





11G-Ant1-2412

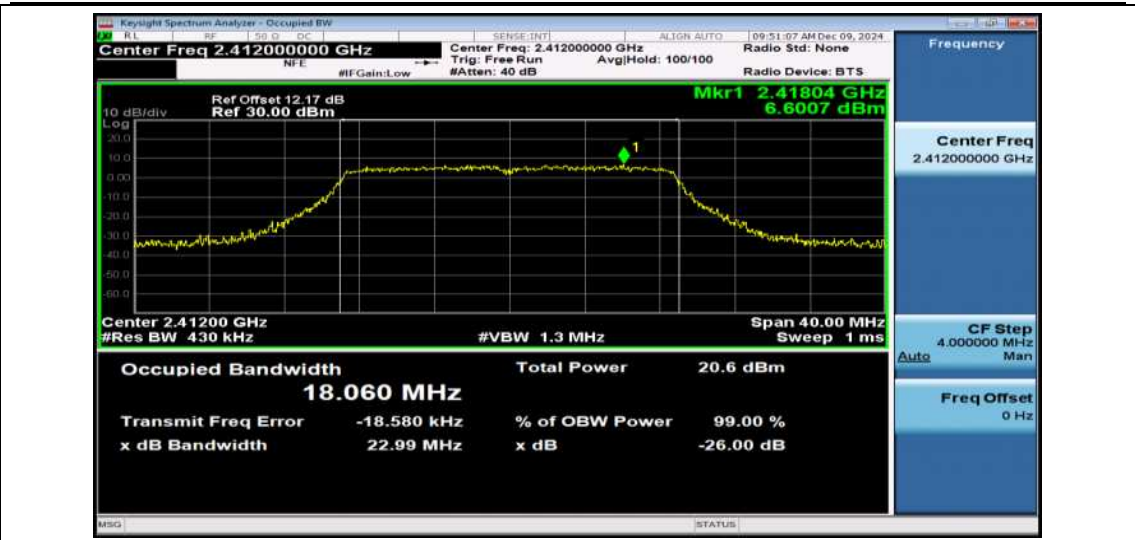


11G-Ant1-2437

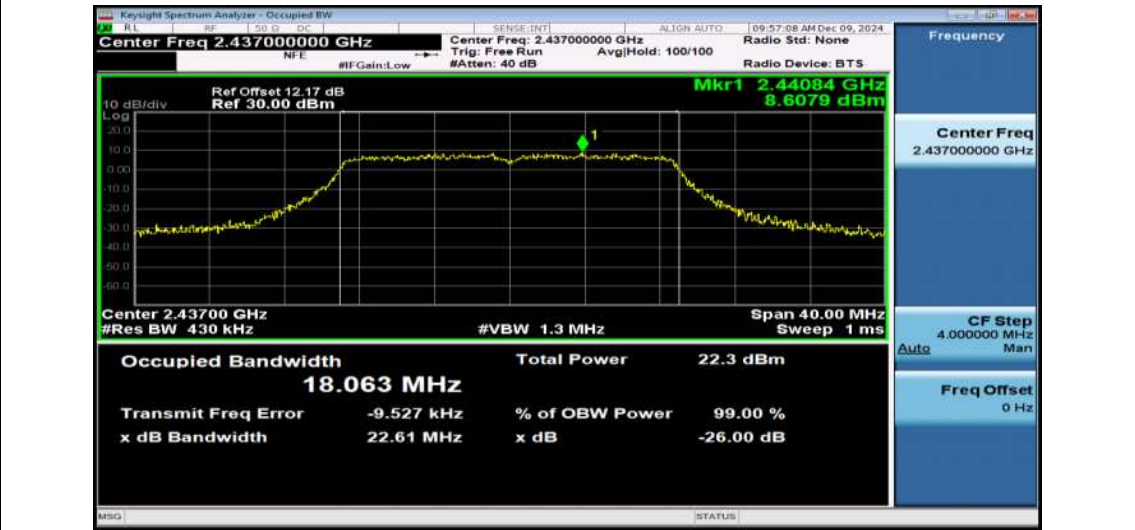


11G-Ant1-2462

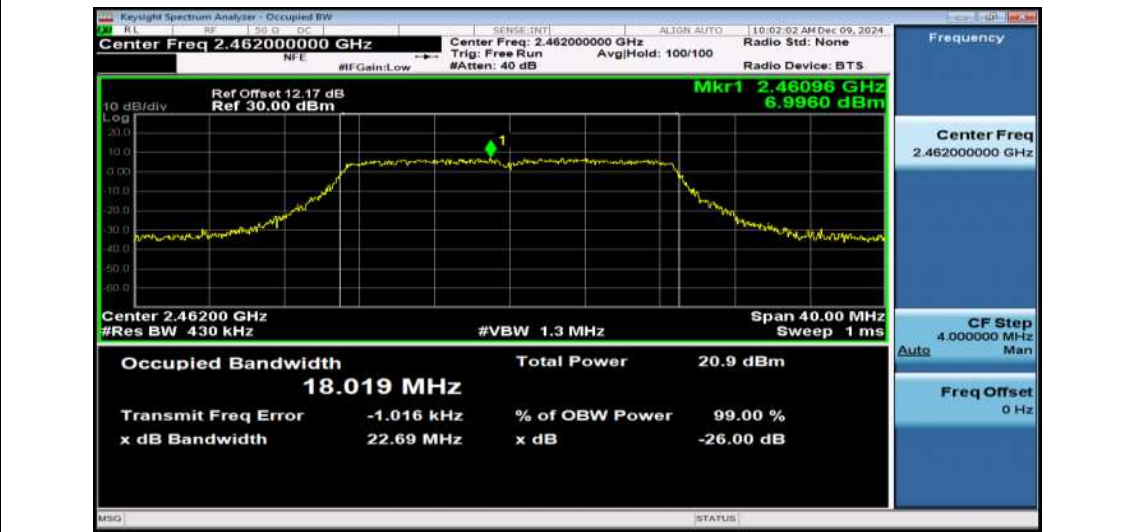
FCC ID: 2A64B-DEX54
IC: 28593-DEX54



11N20SISO-Ant1-2412



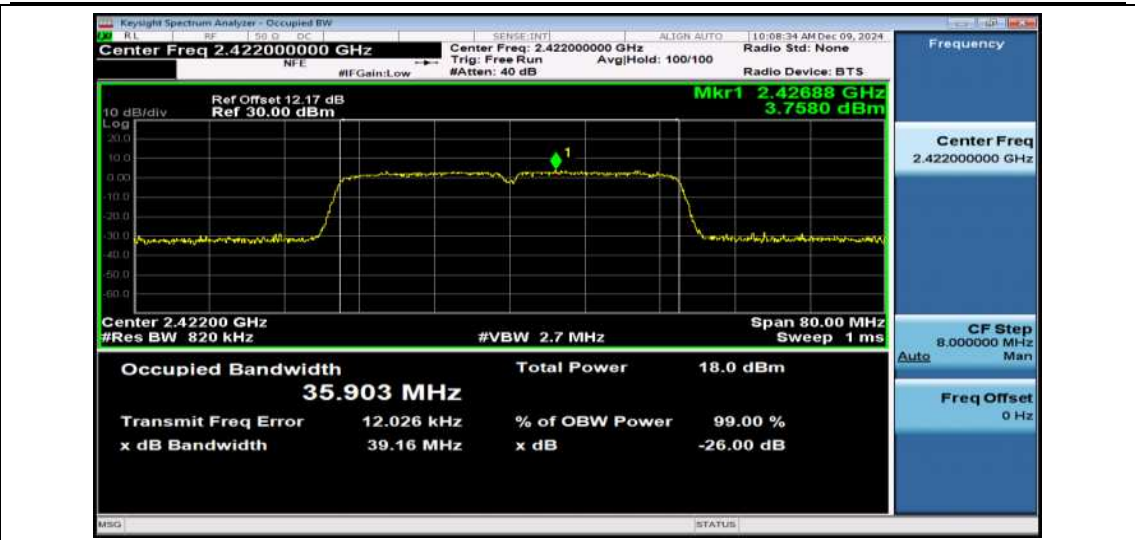
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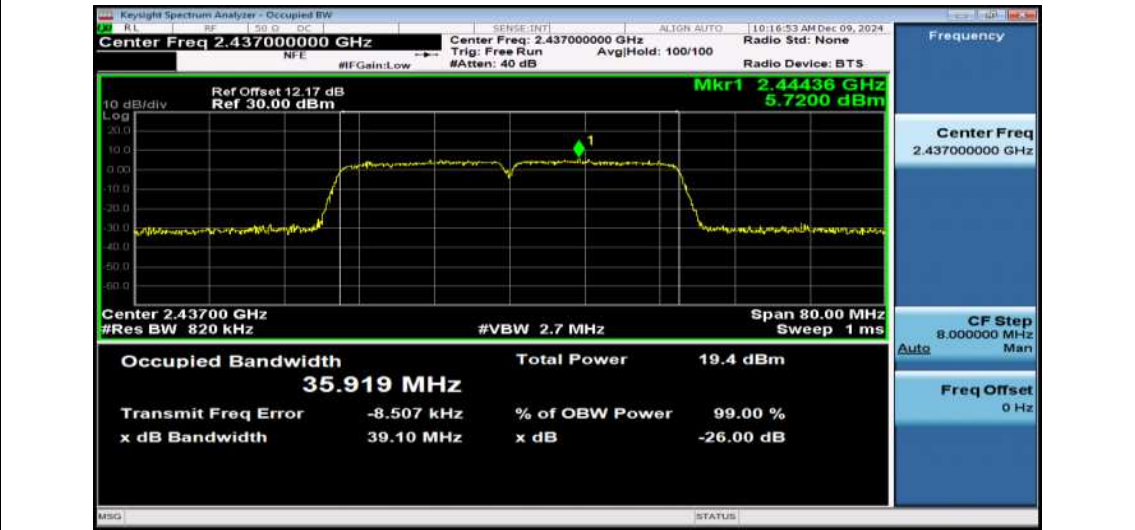
11N20SISO-Ant1-2462

FCC ID:2A64B-DEX54

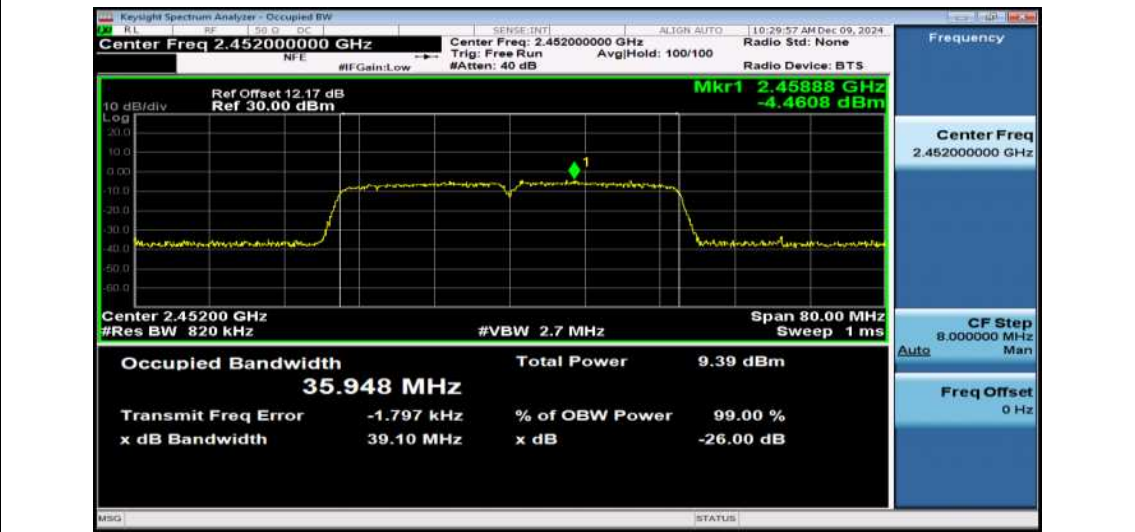
IC:28593-DEX54



11N40SISO-Ant1-2422



11N40SISO-Ant1-2437



11N40SISO-Ant1-2452

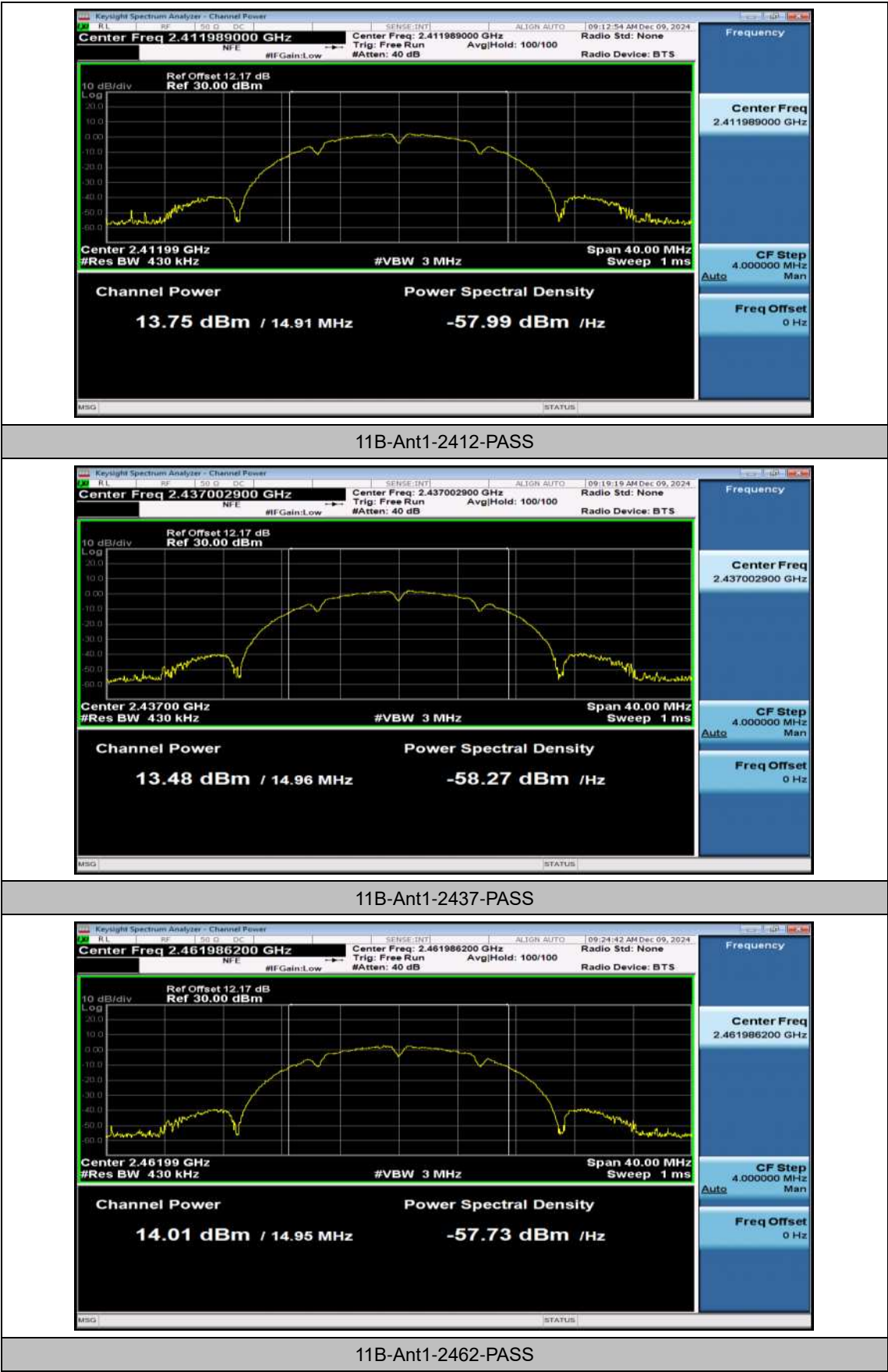
FCC ID: 2A64B-DEX54
IC: 28593-DEX54

Maximum conducted output power

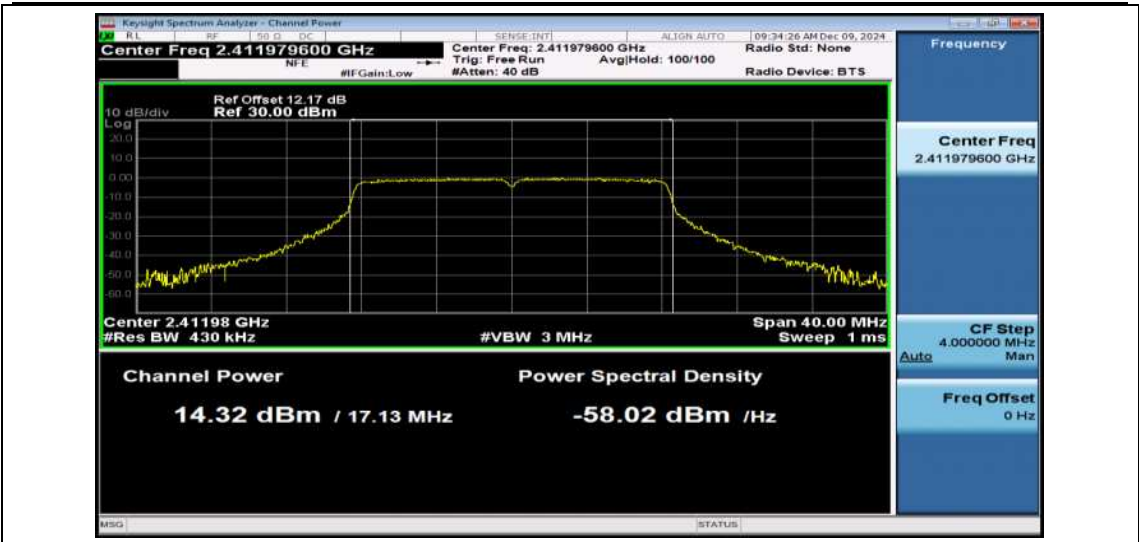
Test Result Average

Test Mode	Antenna	Frequency [MHz]	Average power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11B	Ant1	2412	13.75	99.36	0.03	13.78	≤30.0 0	3.39	17.17	≤36.00	PASS
11B	Ant1	2437	13.48	98.73	0.06	13.54	≤30.0 0	3.39	16.93	≤36.00	PASS
11B	Ant1	2462	14.01	99.04	0.04	14.05	≤30.0 0	3.39	17.44	≤36.00	PASS
11G	Ant1	2412	14.32	91.96	0.36	14.68	≤30.0 0	3.39	18.07	≤36.00	PASS
11G	Ant1	2437	15.02	85.12	0.70	15.72	≤30.0 0	3.39	19.11	≤36.00	PASS
11G	Ant1	2462	14.77	94.50	0.25	15.02	≤30.0 0	3.39	18.41	≤36.00	PASS
11N20SI SO	Ant1	2412	14.31	93.20	0.31	14.62	≤30.0 0	3.39	18.01	≤36.00	PASS
11N20SI SO	Ant1	2437	16.00	93.20	0.31	16.31	≤30.0 0	3.39	19.70	≤36.00	PASS
11N20SI SO	Ant1	2462	14.72	91.87	0.37	15.09	≤30.0 0	3.39	18.48	≤36.00	PASS
11N40SI SO	Ant1	2422	10.60	92.16	0.35	10.95	≤30.0 0	3.39	14.34	≤36.00	PASS
11N40SI SO	Ant1	2437	12.19	87.96	0.56	12.75	≤30.0 0	3.39	16.14	≤36.00	PASS
11N40SI SO	Ant1	2452	10.87	85.59	0.68	11.55	≤30.0 0	3.39	14.94	≤36.00	PASS

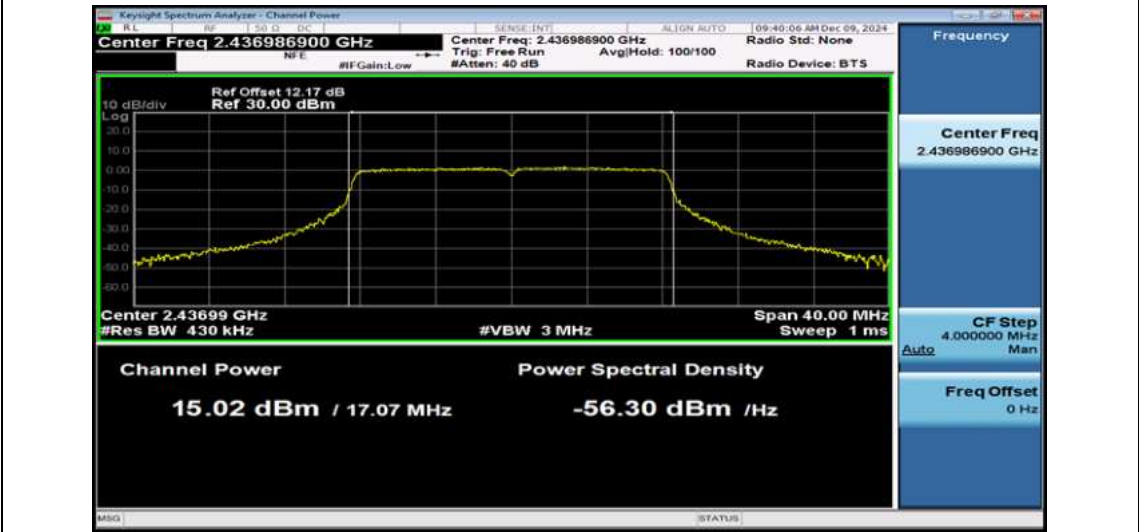
Test Graphs Average



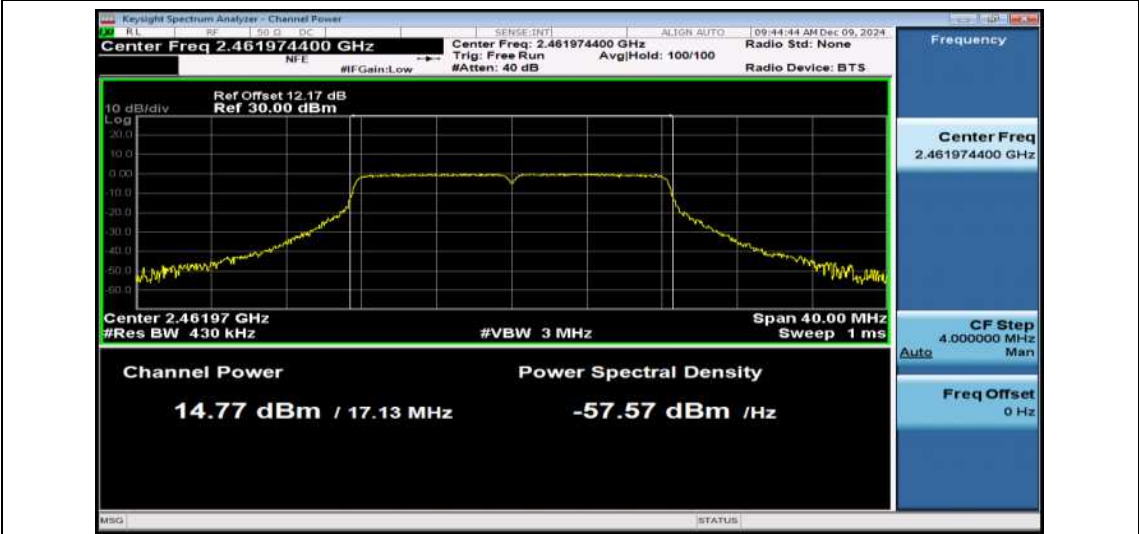
FCC ID: 2A64B-DEX54
IC: 28593-DEX54



11G-Ant1-2412-PASS



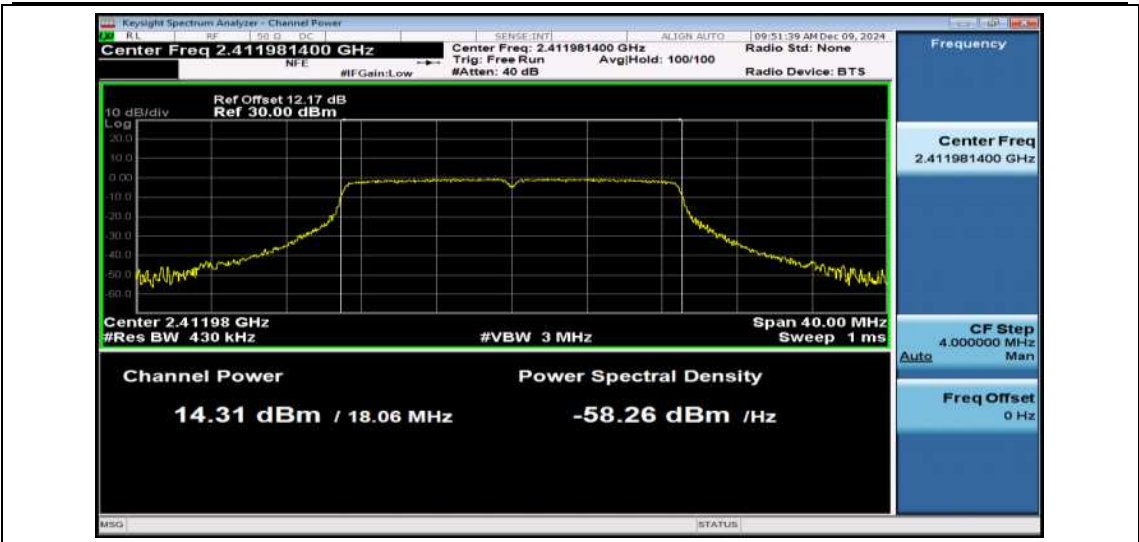
11G-Ant1-2437-PASS



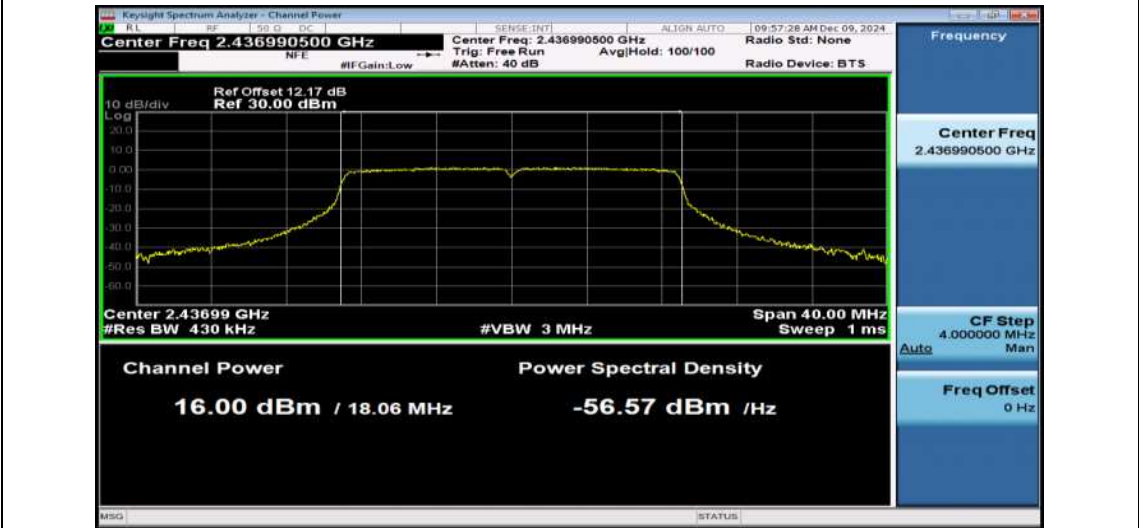
11G-Ant1-2462-PASS

FCC ID:2A64B-DEX54

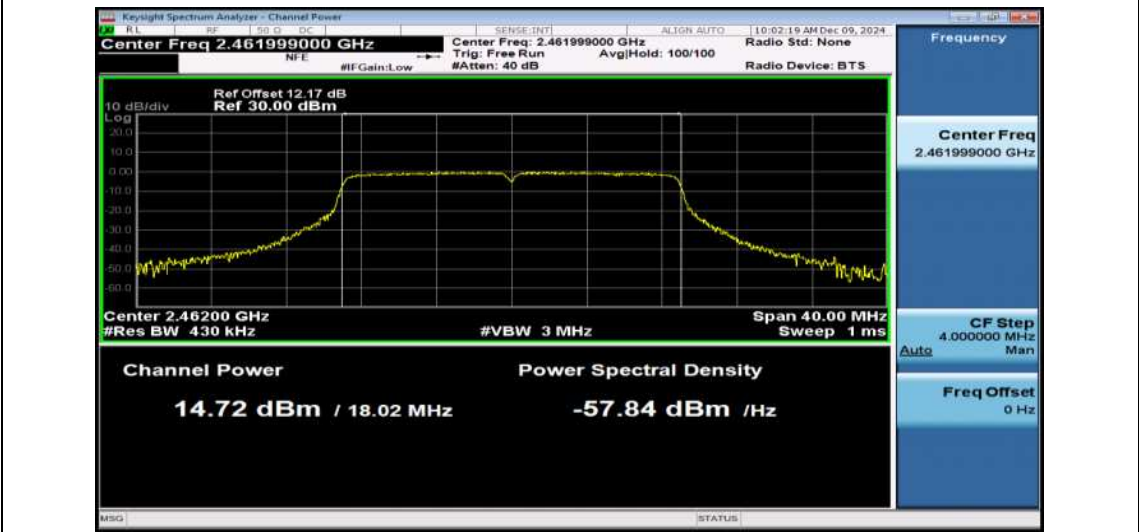
IC:28593-DEX54



11N20SISO-Ant1-2412-PASS

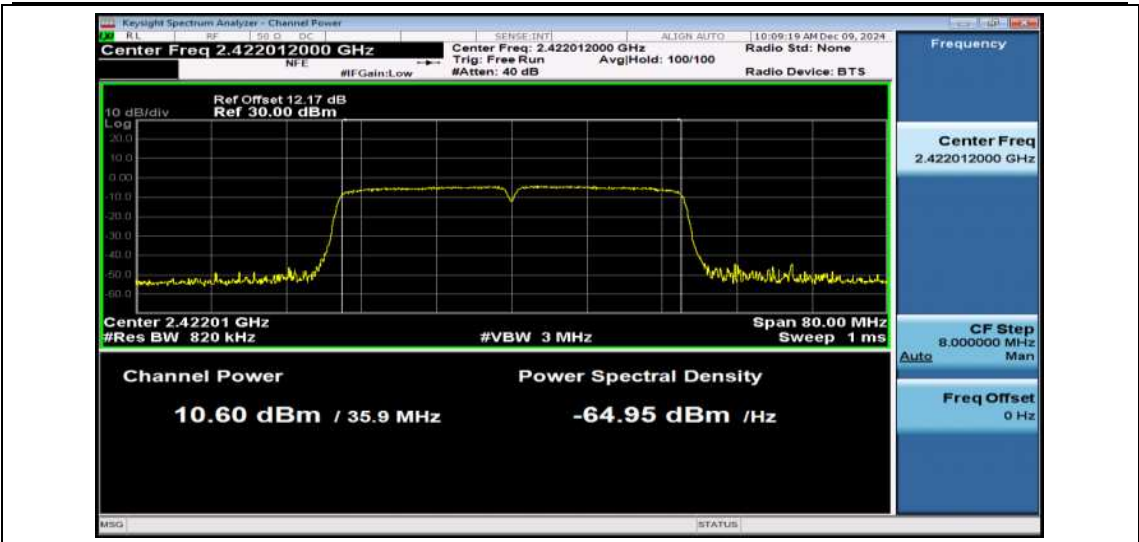


11N20SISO-Ant1-2437-PASS

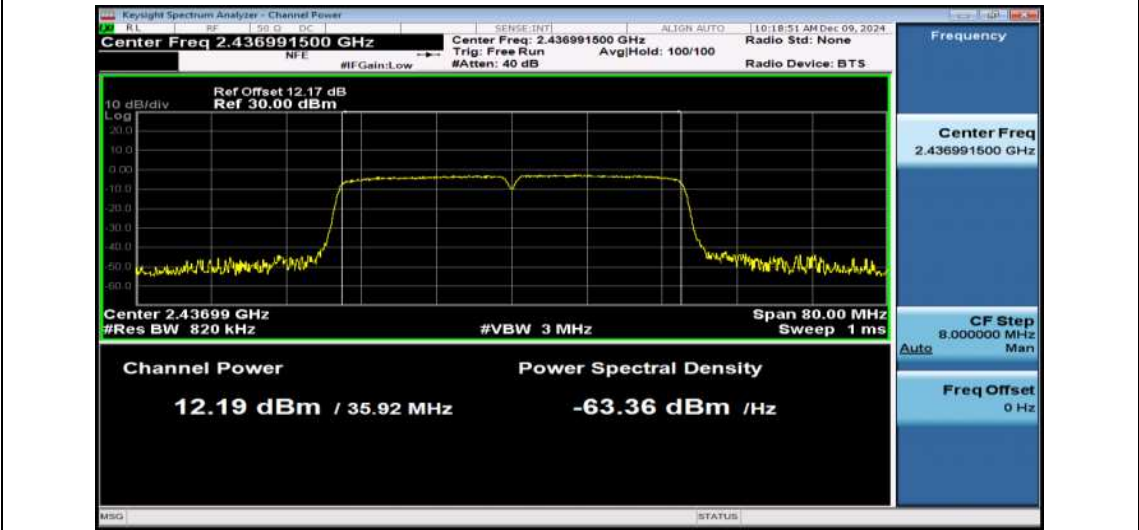


11N20SISO-Ant1-2462-PASS

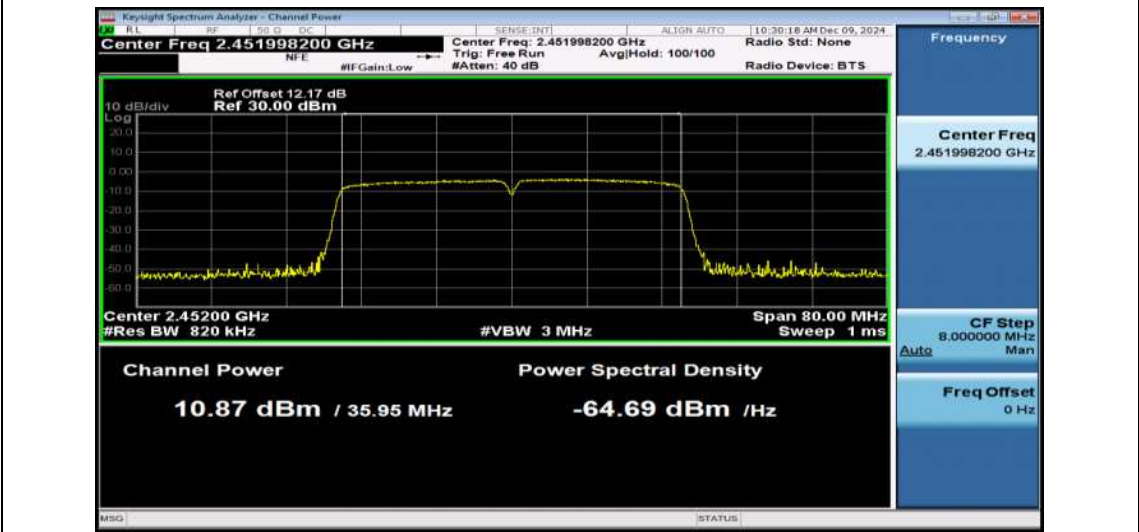
FCC ID: 2A64B-DEX54
IC: 28593-DEX54



11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS

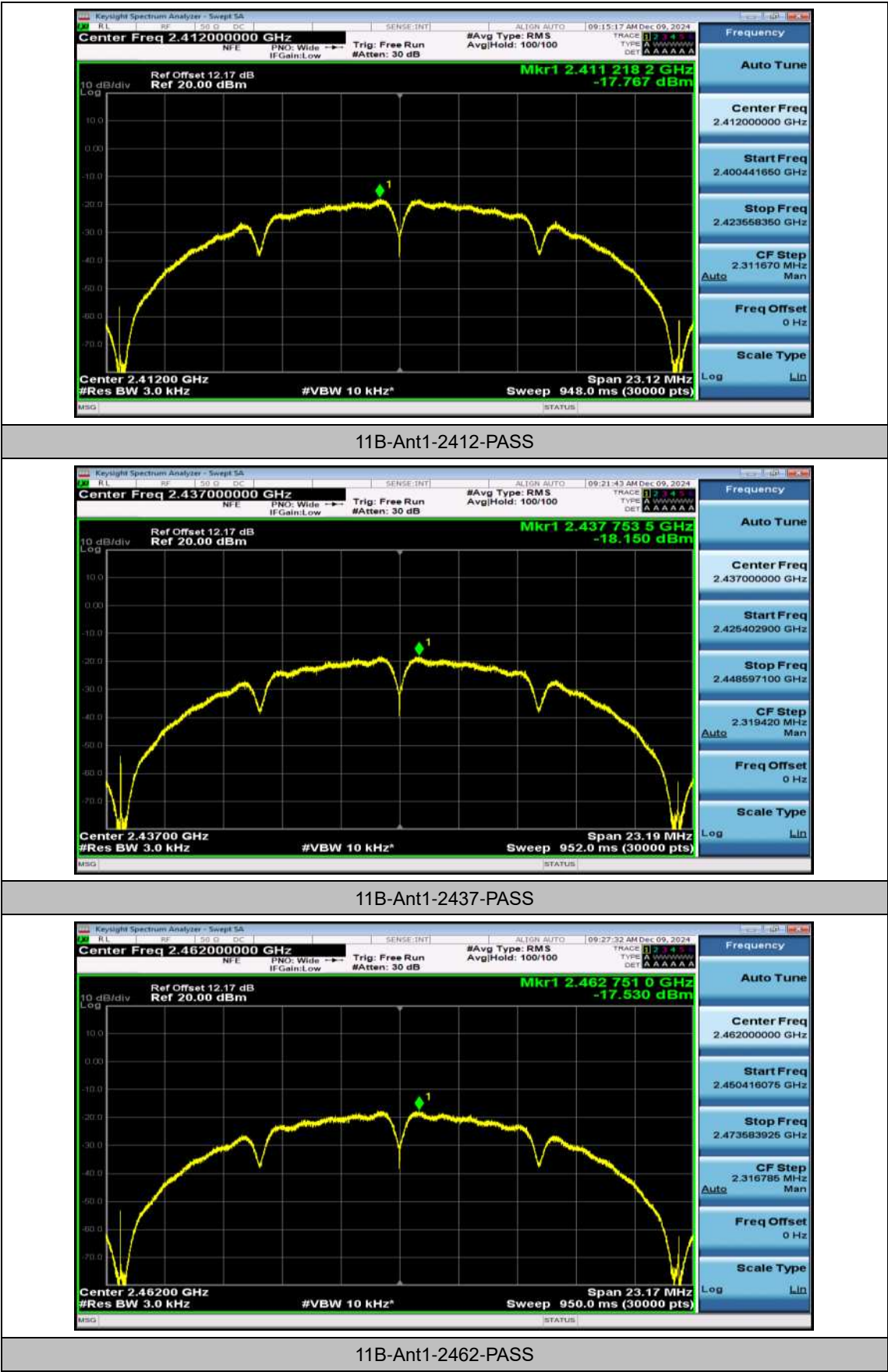
FCC ID: 2A64B-DEX54
IC: 28593-DEX54

Maximum power spectral density

Test Result

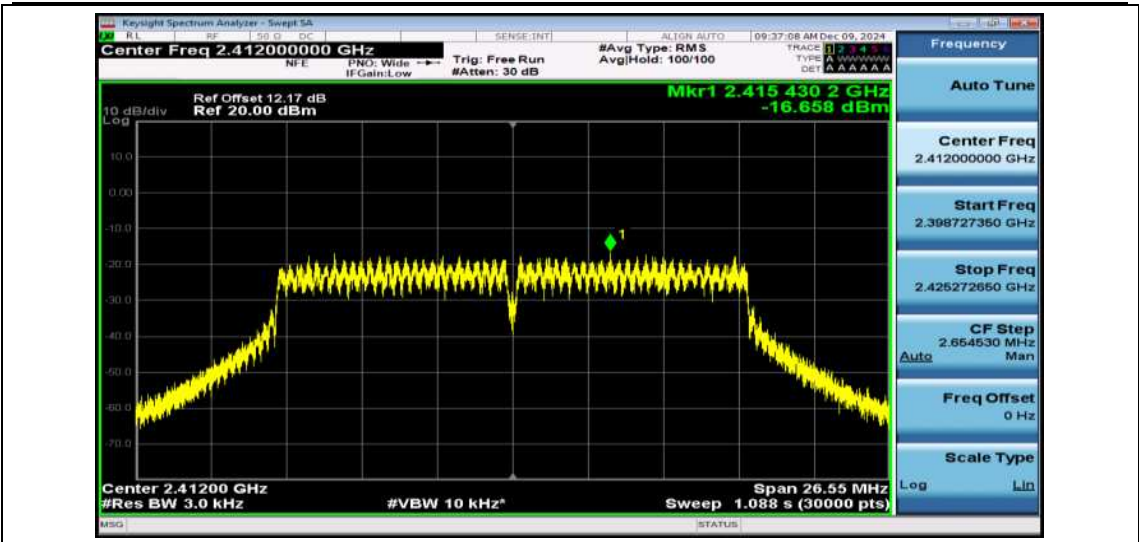
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-17.74	≤8.00	PASS
11B	Ant1	2437	-18.09	≤8.00	PASS
11B	Ant1	2462	-17.49	≤8.00	PASS
11G	Ant1	2412	-16.30	≤8.00	PASS
11G	Ant1	2437	-14.62	≤8.00	PASS
11G	Ant1	2462	-16.06	≤8.00	PASS
11N20SISO	Ant1	2412	-17.03	≤8.00	PASS
11N20SISO	Ant1	2437	-15.10	≤8.00	PASS
11N20SISO	Ant1	2462	-16.25	≤8.00	PASS
11N40SISO	Ant1	2422	-22.24	≤8.00	PASS
11N40SISO	Ant1	2437	-20.42	≤8.00	PASS
11N40SISO	Ant1	2452	-21.36	≤8.00	PASS

Test Graphs

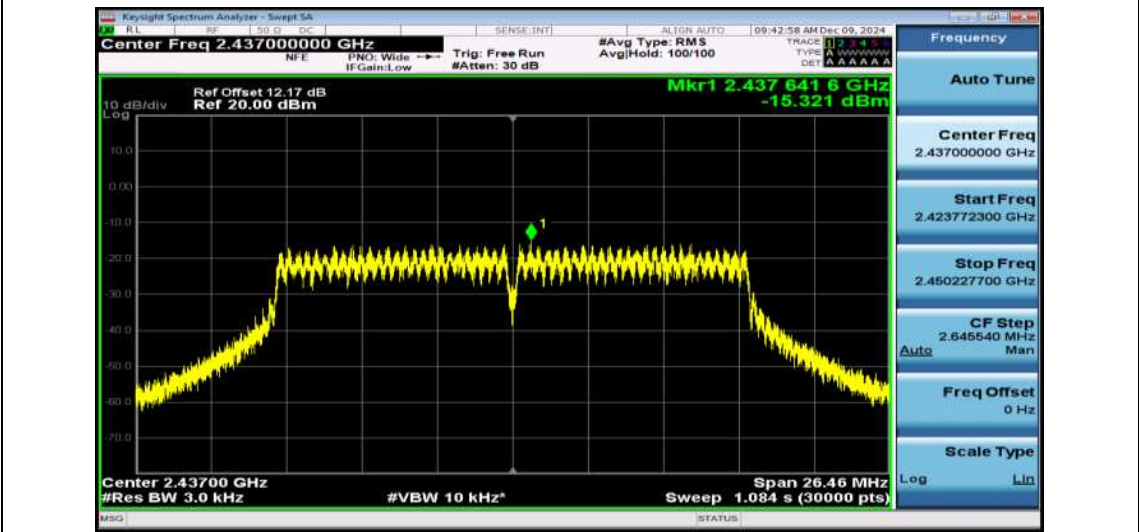


FCC ID:2A64B-DEX54

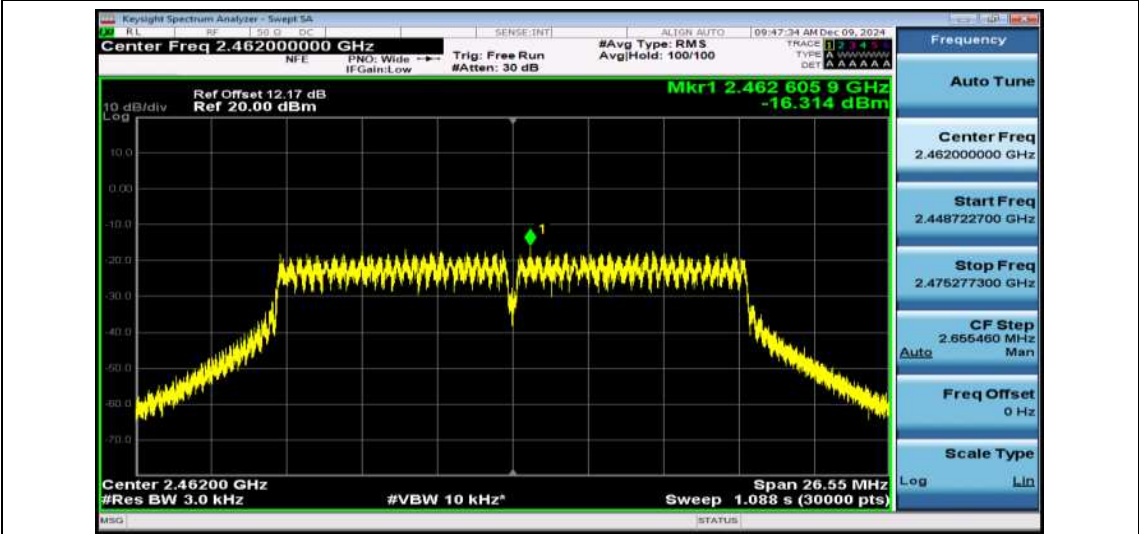
IC:28593-DEX54



11G-Ant1-2412-PASS



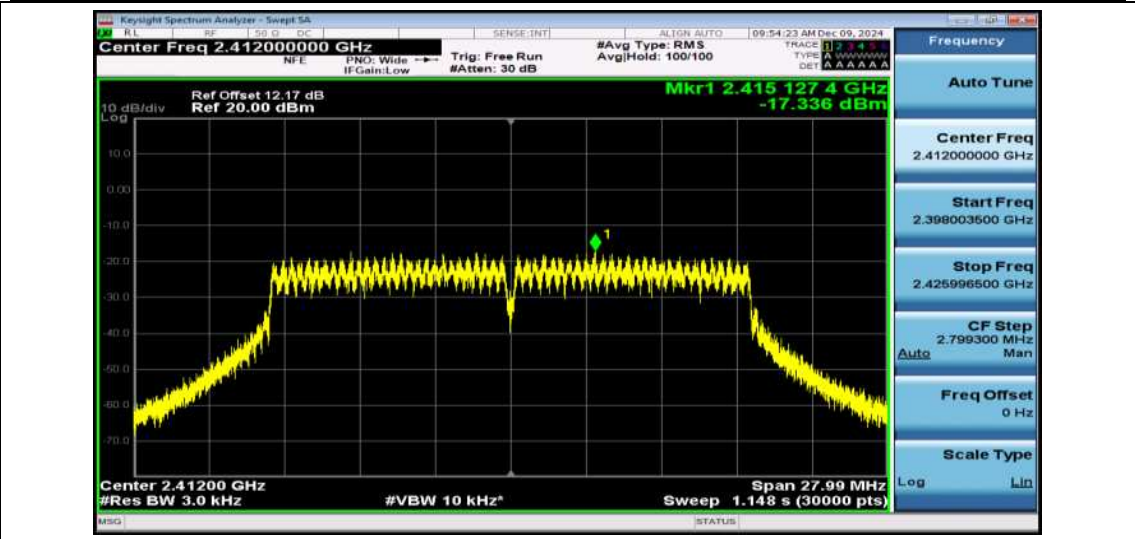
11G-Ant1-2437-PASS



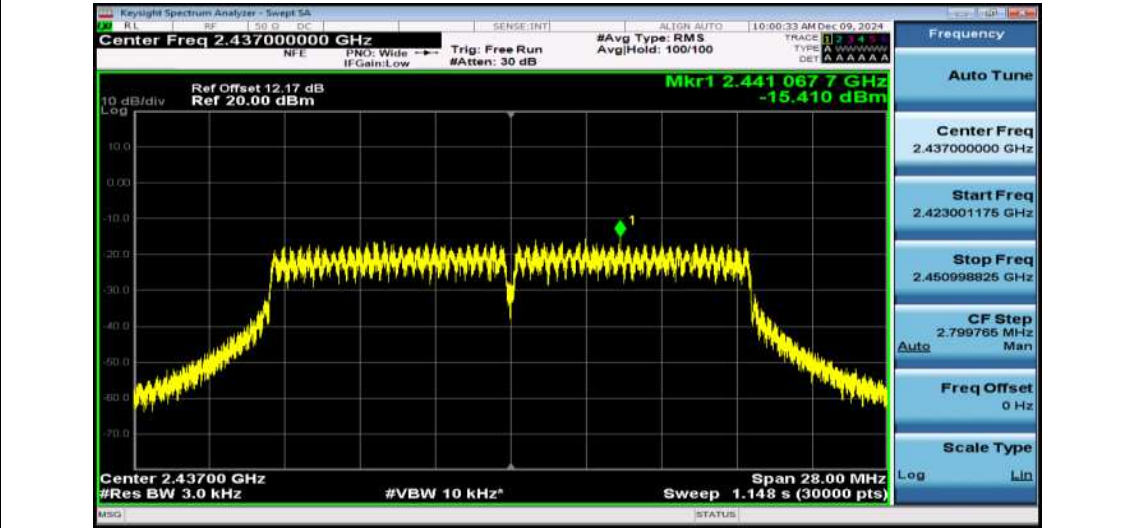
11G-Ant1-2462-PASS

FCC ID:2A64B-DEX54

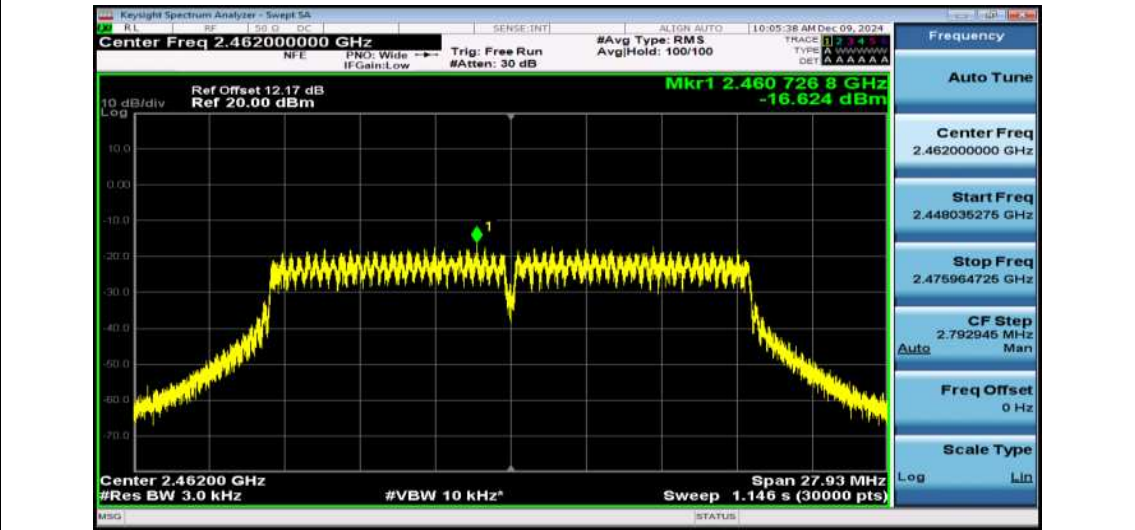
IC:28593-DEX54



11N20SISO-Ant1-2412-PASS



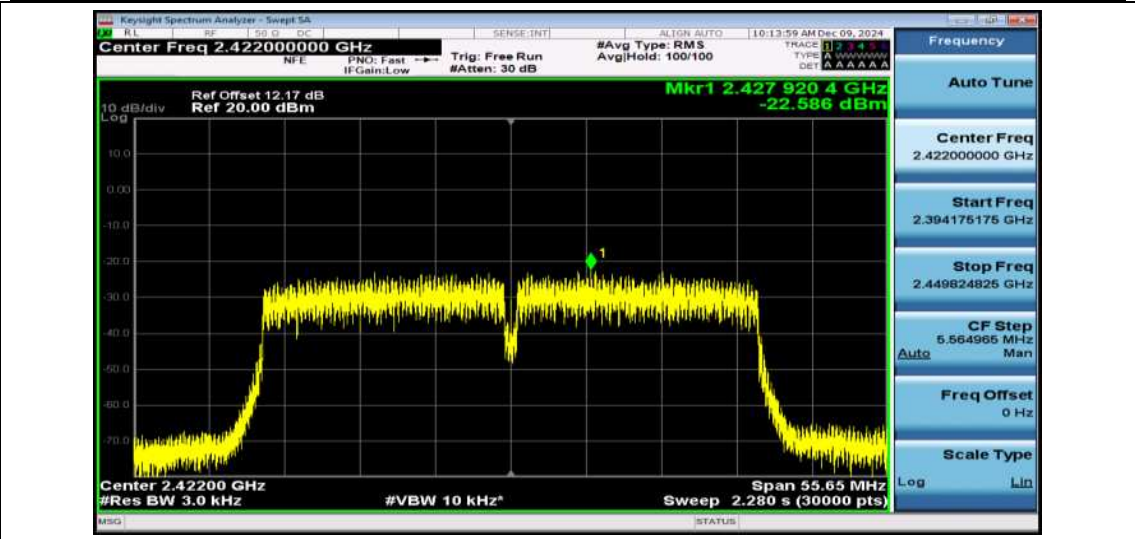
11N20SISO-Ant1-2437-PASS



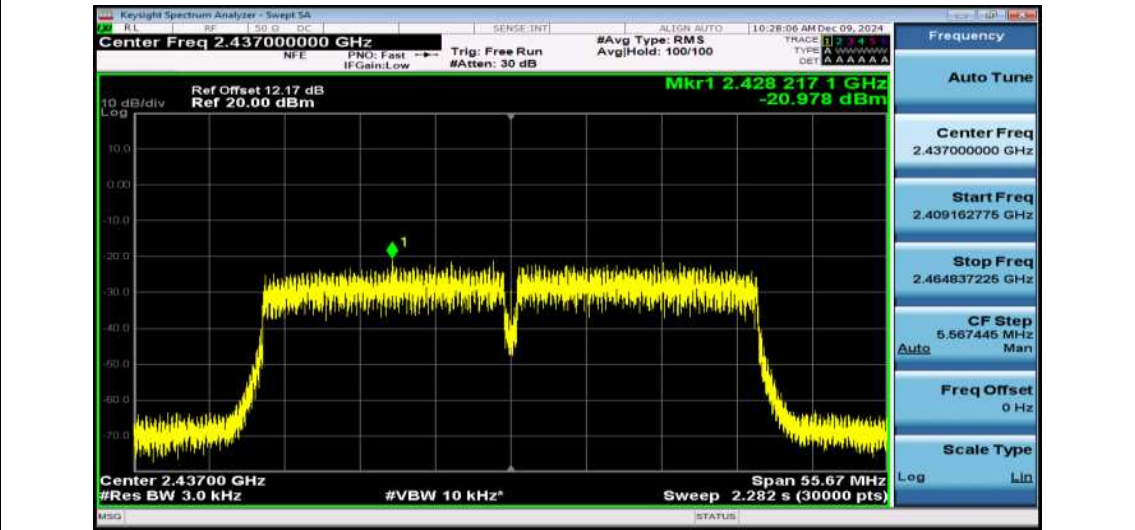
11N20SISO-Ant1-2462-PASS

FCC ID:2A64B-DEX54

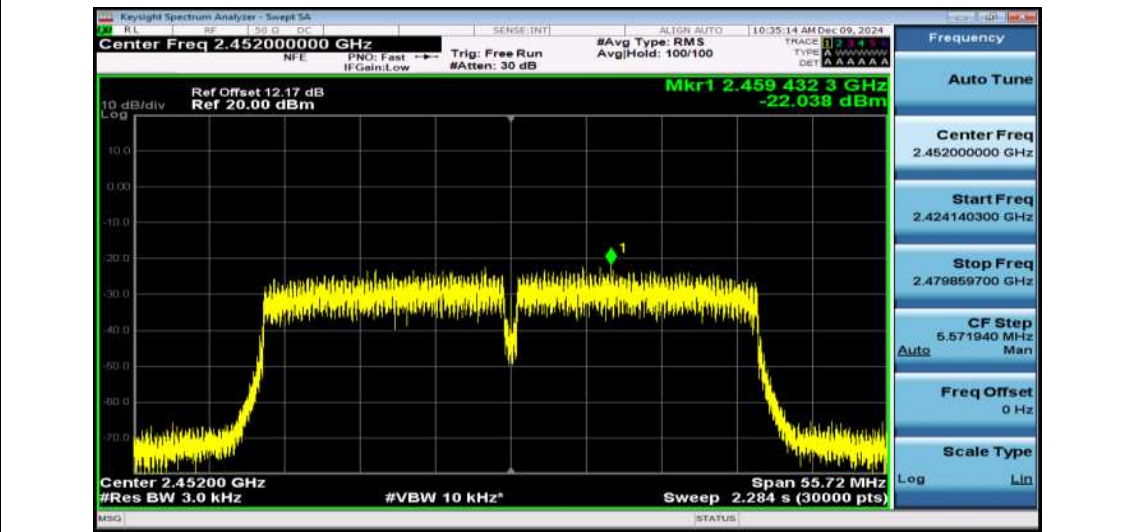
IC:28593-DEX54



11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS

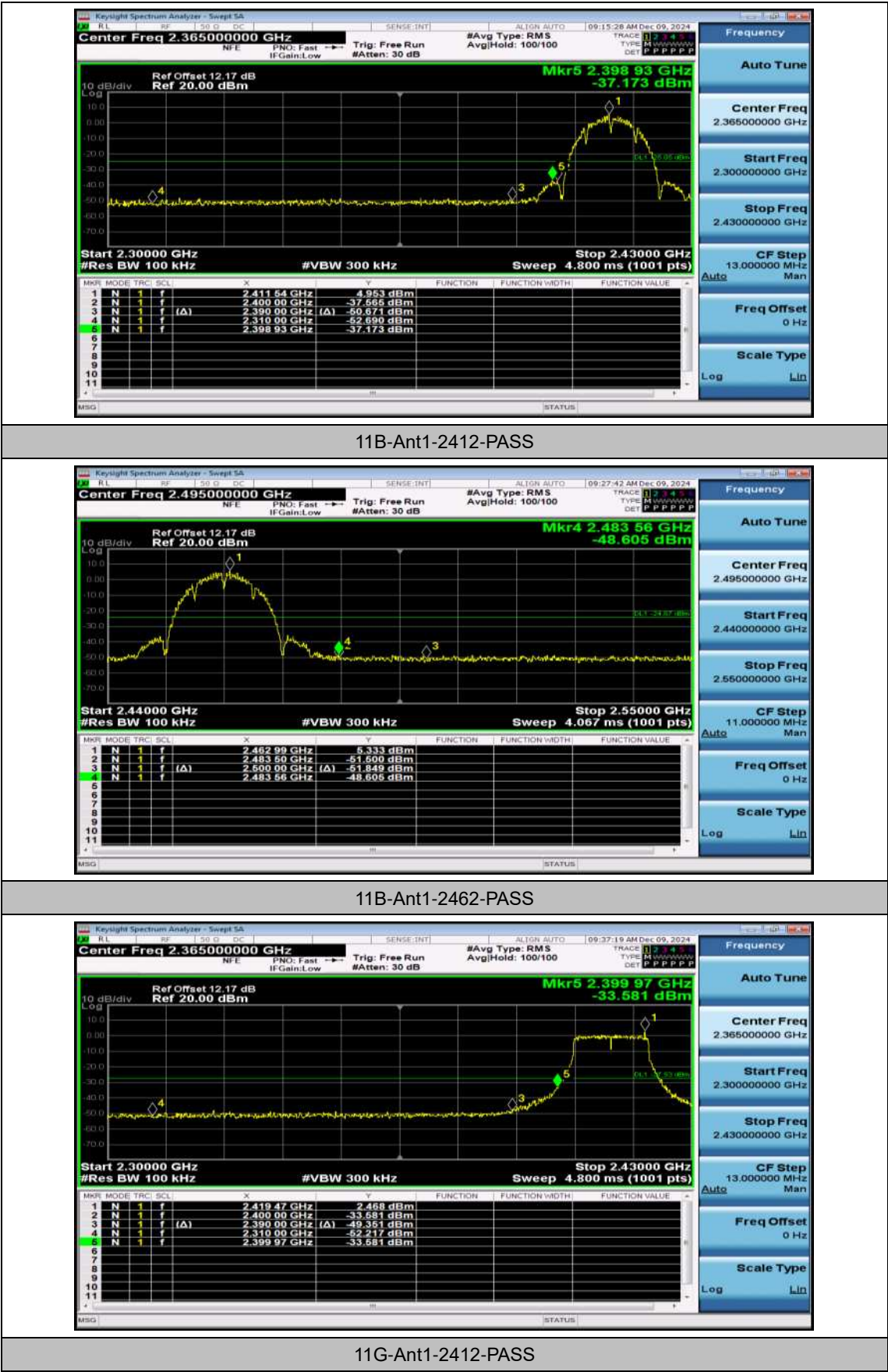
FCC ID: 2A64B-DEX54
IC: 28593-DEX54

Band edge measurements

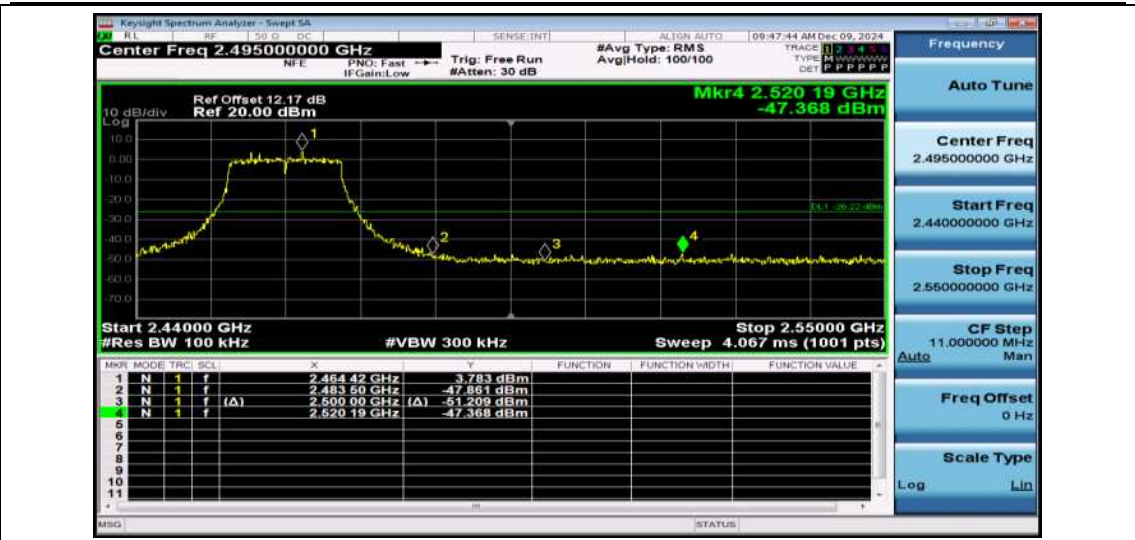
Test Result

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	4.95	-37.17	≤-25.05	PASS
11B	Ant1	High	2462	5.33	-48.61	≤-24.67	PASS
11G	Ant1	Low	2412	2.47	-33.58	≤-27.53	PASS
11G	Ant1	High	2462	3.78	-47.37	≤-26.22	PASS
11N20SISO	Ant1	Low	2412	3.16	-32.46	≤-26.84	PASS
11N20SISO	Ant1	High	2462	3.80	-44.2	≤-26.2	PASS
11N40SISO	Ant1	Low	2422	-2.80	-44.18	≤-32.8	PASS
11N40SISO	Ant1	High	2452	-3.42	-43.3	≤-33.42	PASS

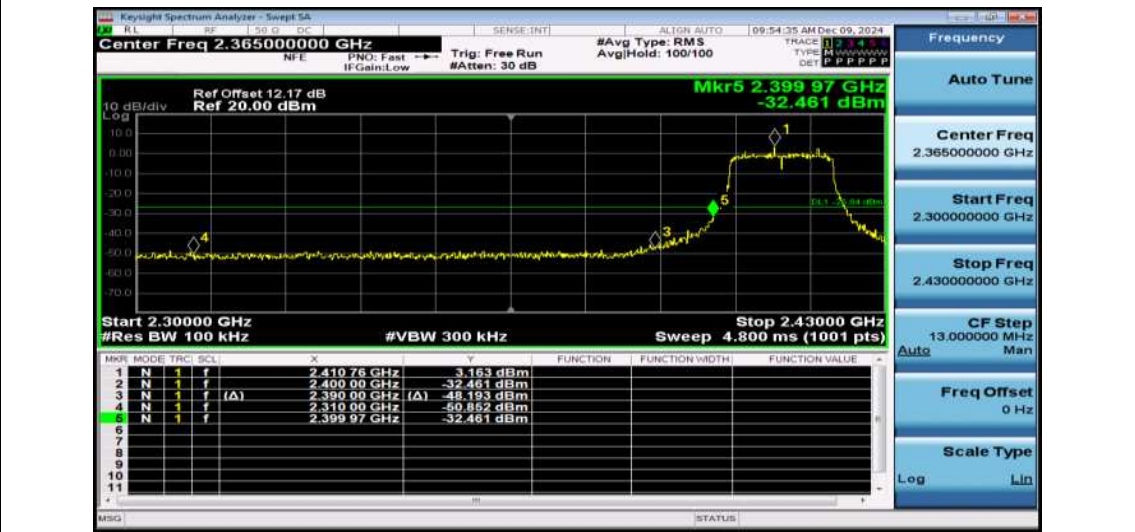
Test Graphs



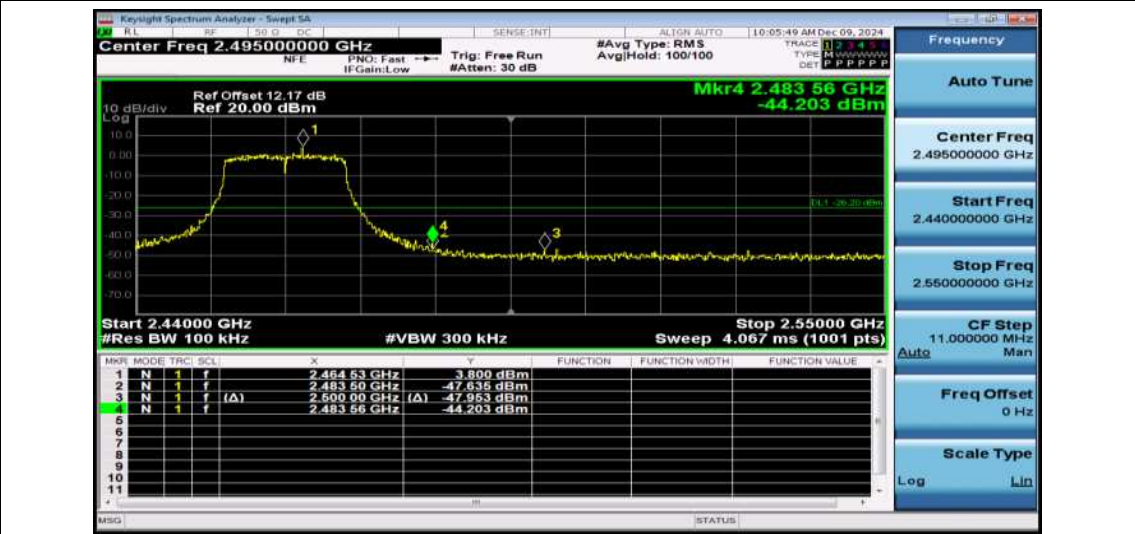
FCC ID: 2A64B-DEX54
IC: 28593-DEX54



11G-Ant1-2462-PASS

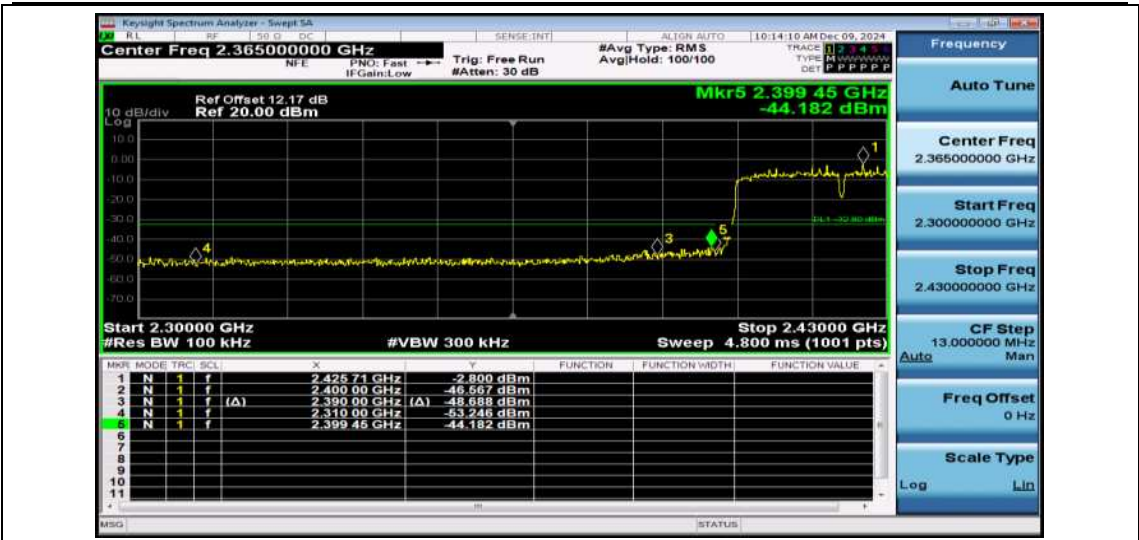


11N20SISO-Ant1-2412-PASS

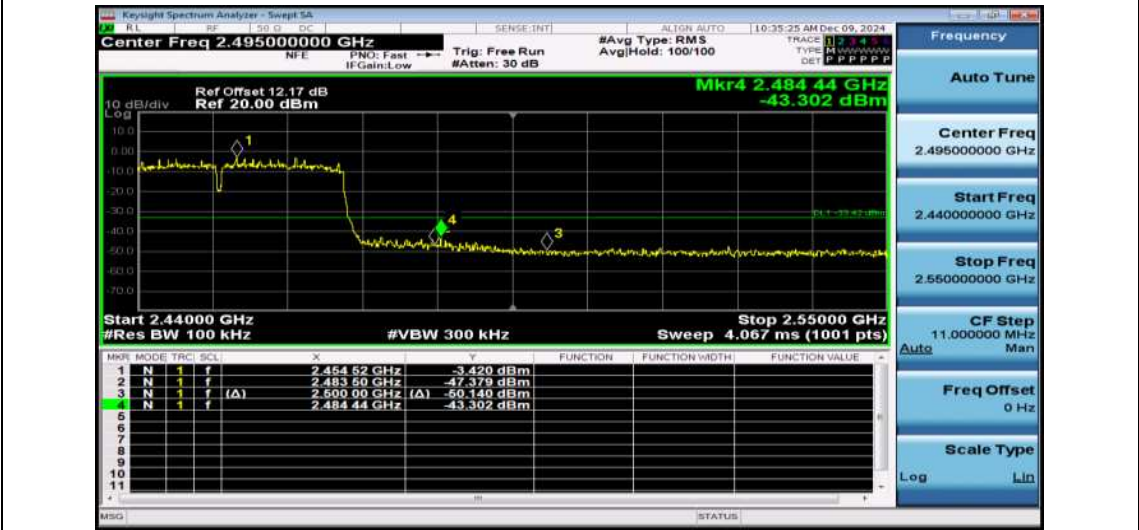


11N20SISO-Ant1-2462-PASS

FCC ID: 2A64B-DEX54
IC: 28593-DEX54



11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2452-PASS

FCC ID: 2A64B-DEX54

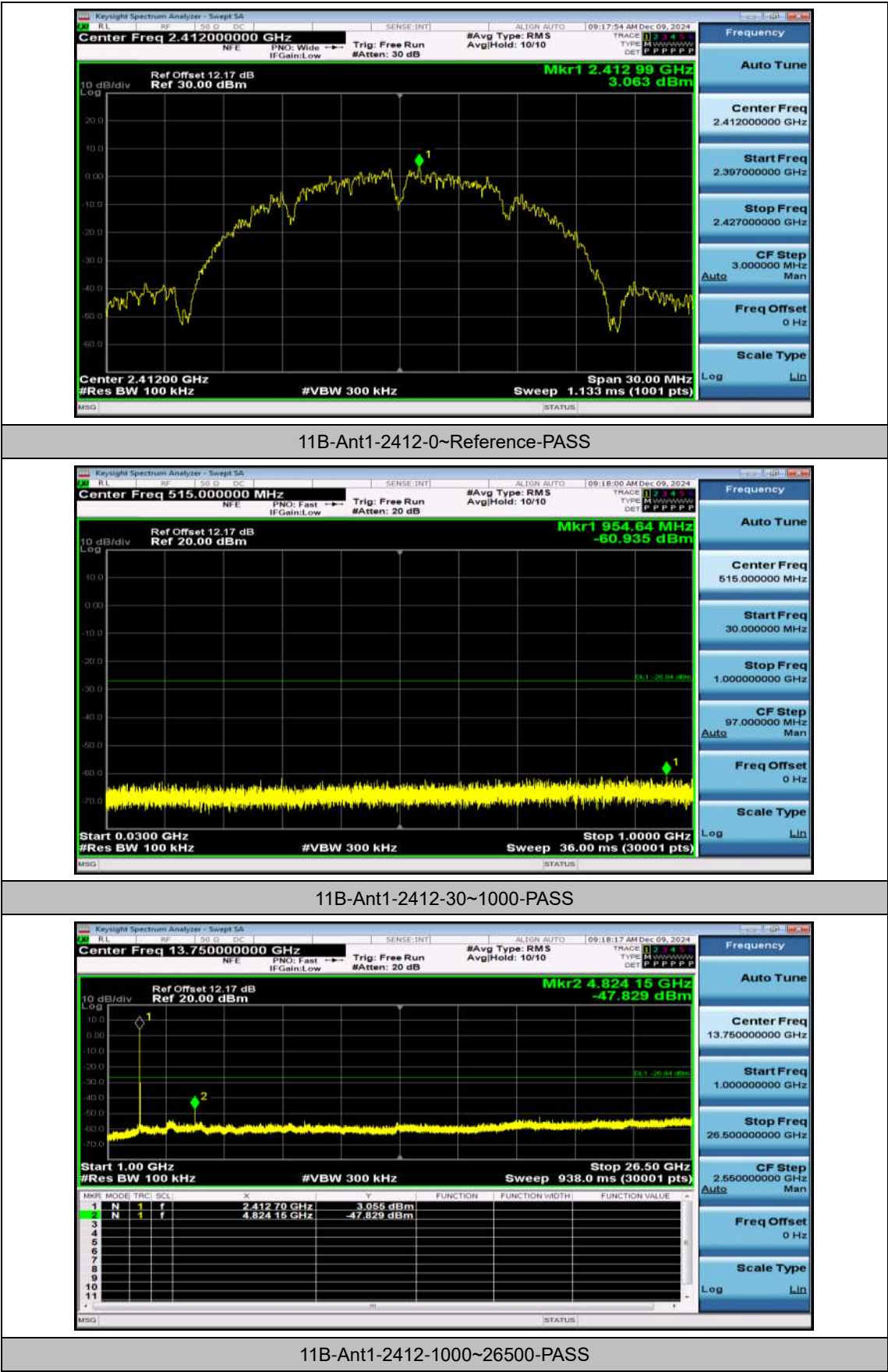
IC: 28593-DEX54

Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	3.06	3.06	---	PASS
11B	Ant1	2412	30~1000	3.06	-60.94	≤-26.94	PASS
11B	Ant1	2412	1000~26500	3.06	-47.83	≤-26.94	PASS
11B	Ant1	2437	0~Reference	3.03	3.03	---	PASS
11B	Ant1	2437	30~1000	3.03	-60.7	≤-26.97	PASS
11B	Ant1	2437	1000~26500	3.03	-49.44	≤-26.97	PASS
11B	Ant1	2462	0~Reference	2.96	2.96	---	PASS
11B	Ant1	2462	30~1000	2.96	-61.23	≤-27.04	PASS
11B	Ant1	2462	1000~26500	2.96	-51.14	≤-27.04	PASS
11G	Ant1	2412	0~Reference	0.70	0.70	---	PASS
11G	Ant1	2412	30~1000	0.70	-60.64	≤-29.3	PASS
11G	Ant1	2412	1000~26500	0.70	-50.69	≤-29.3	PASS
11G	Ant1	2437	0~Reference	2.17	2.17	---	PASS
11G	Ant1	2437	30~1000	2.17	-59.94	≤-27.83	PASS
11G	Ant1	2437	1000~26500	2.17	-50.69	≤-27.83	PASS
11G	Ant1	2462	0~Reference	3.06	3.06	---	PASS
11G	Ant1	2462	30~1000	3.06	-60.75	≤-26.94	PASS
11G	Ant1	2462	1000~26500	3.06	-52.03	≤-26.94	PASS
11N20SISO	Ant1	2412	0~Reference	2.87	2.87	---	PASS
11N20SISO	Ant1	2412	30~1000	2.87	-60.23	≤-27.13	PASS
11N20SISO	Ant1	2412	1000~26500	2.87	-50.67	≤-27.13	PASS
11N20SISO	Ant1	2437	0~Reference	1.84	1.84	---	PASS
11N20SISO	Ant1	2437	30~1000	1.84	-61.11	≤-28.16	PASS
11N20SISO	Ant1	2437	1000~26500	1.84	-51.77	≤-28.16	PASS
11N20SISO	Ant1	2462	0~Reference	2.57	2.57	---	PASS
11N20SISO	Ant1	2462	30~1000	2.57	-61.02	≤-27.43	PASS
11N20SISO	Ant1	2462	1000~26500	2.57	-51.68	≤-27.43	PASS
11N40SISO	Ant1	2422	0~Reference	-3.53	-3.53	---	PASS
11N40SISO	Ant1	2422	30~1000	-3.53	-60.9	≤-33.53	PASS
11N40SISO	Ant1	2422	1000~26500	-3.53	-52.14	≤-33.53	PASS
11N40SISO	Ant1	2437	0~Reference	-1.95	-1.95	---	PASS
11N40SISO	Ant1	2437	30~1000	-1.95	-60.67	≤-31.95	PASS
11N40SISO	Ant1	2437	1000~26500	-1.95	-52	≤-31.95	PASS
11N40SISO	Ant1	2452	0~Reference	-3.11	-3.11	---	PASS
11N40SISO	Ant1	2452	30~1000	-3.11	-60.73	≤-33.11	PASS
11N40SISO	Ant1	2452	1000~26500	-3.11	-51.67	≤-33.11	PASS

Test Graphs

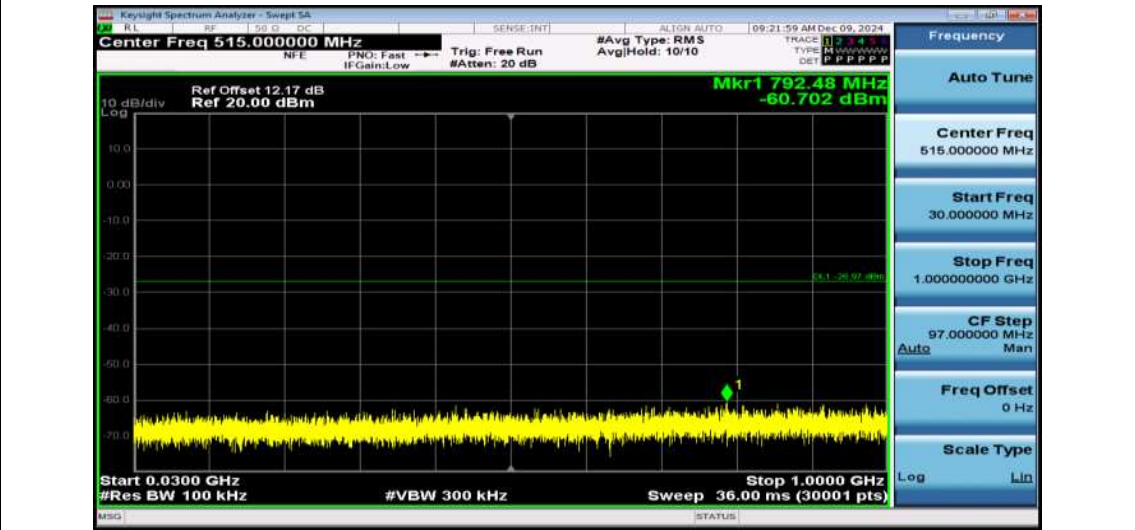


FCC ID:2A64B-DEX54

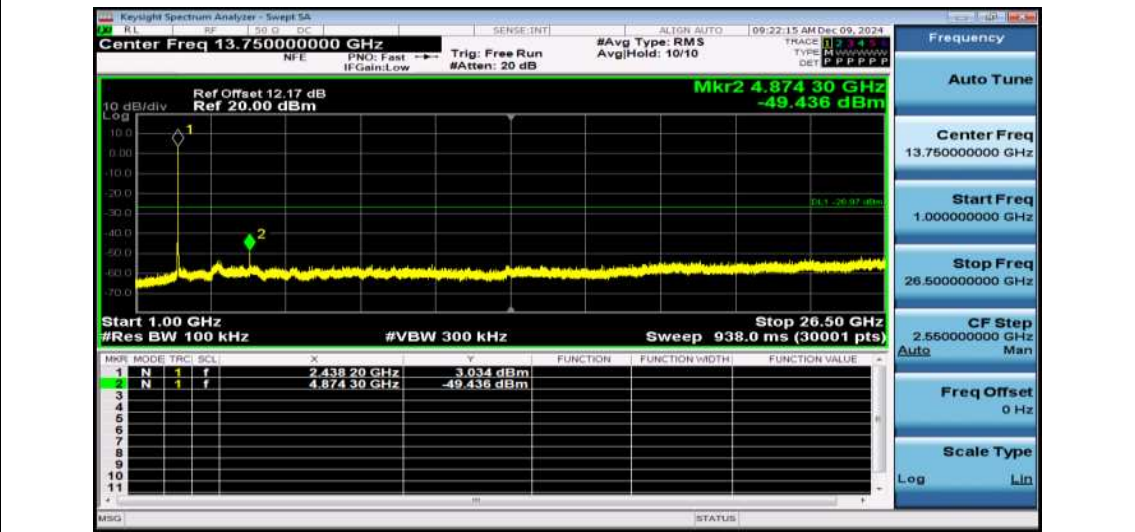
IC:28593-DEX54



11B-Ant1-2437-0~Reference-PASS



11B-Ant1-2437-30~1000-PASS



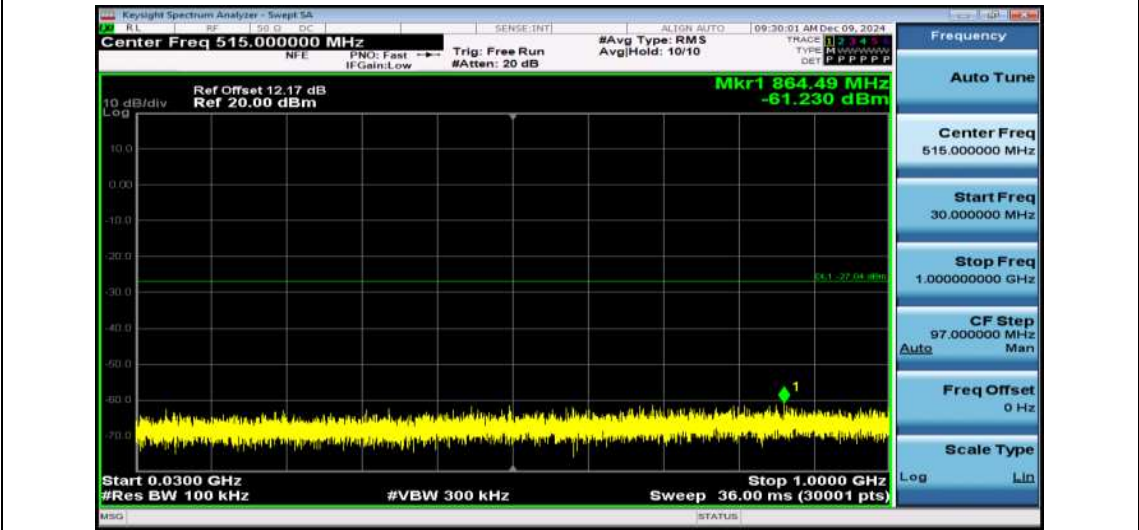
11B-Ant1-2437-1000~26500-PASS

FCC ID:2A64B-DEX54

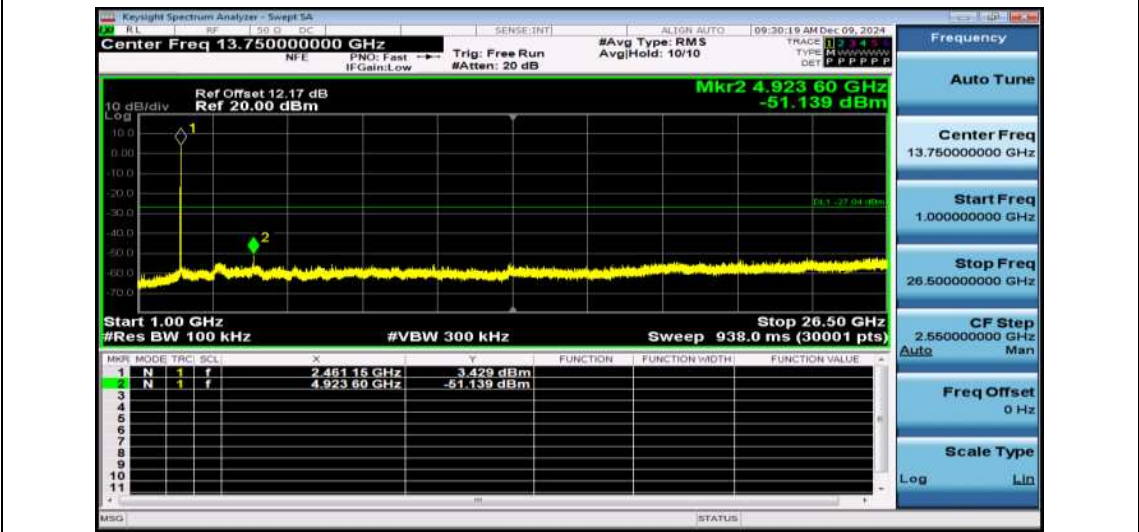
IC:28593-DEX54



11B-Ant1-2462-0~Reference-PASS

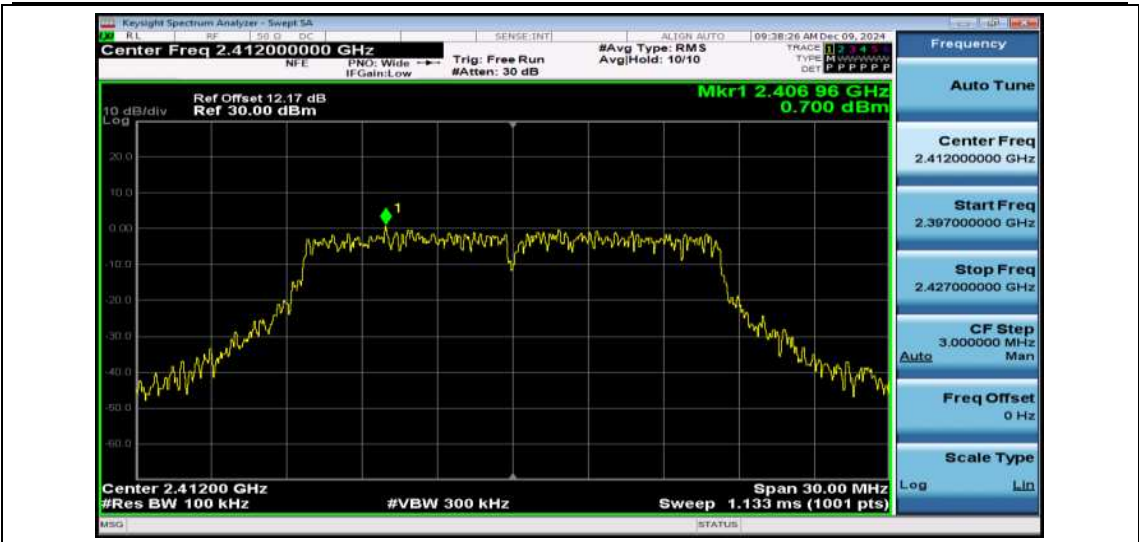


11B-Ant1-2462-30~1000-PASS

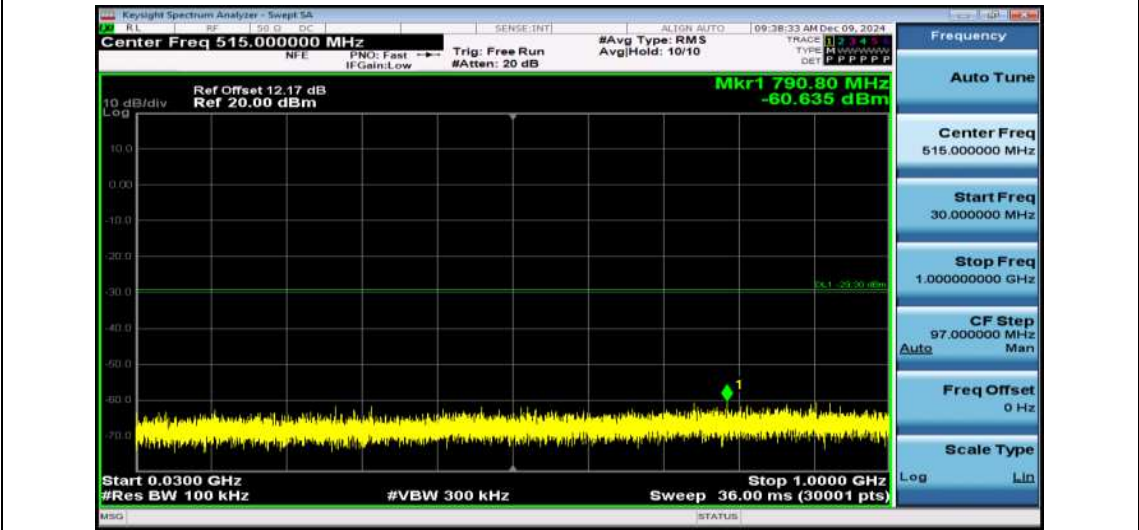


11B-Ant1-2462-1000~26500-PASS

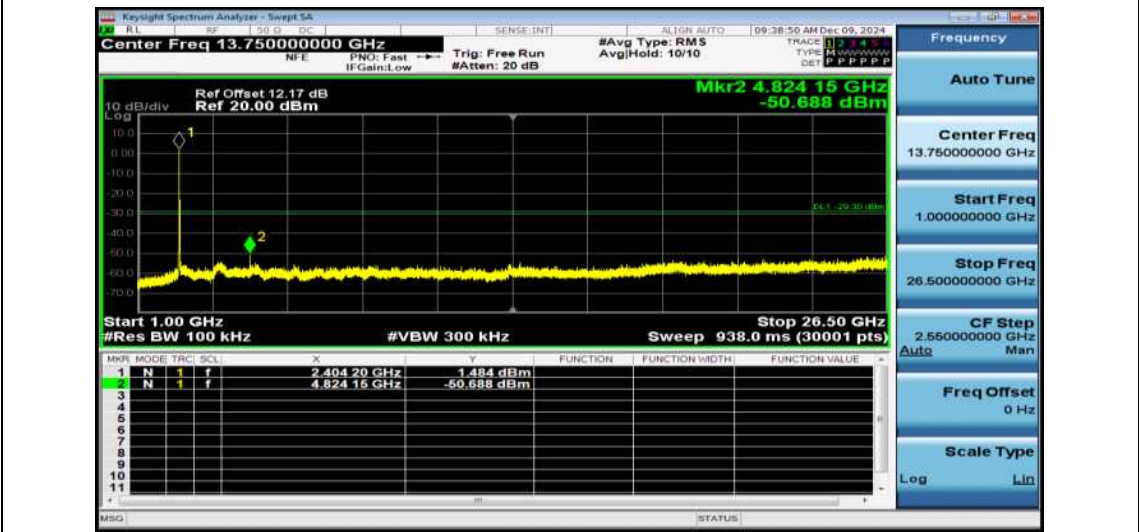
FCC ID: 2A64B-DEX54
IC: 28593-DEX54



11G-Ant1-2412-0~Reference-PASS



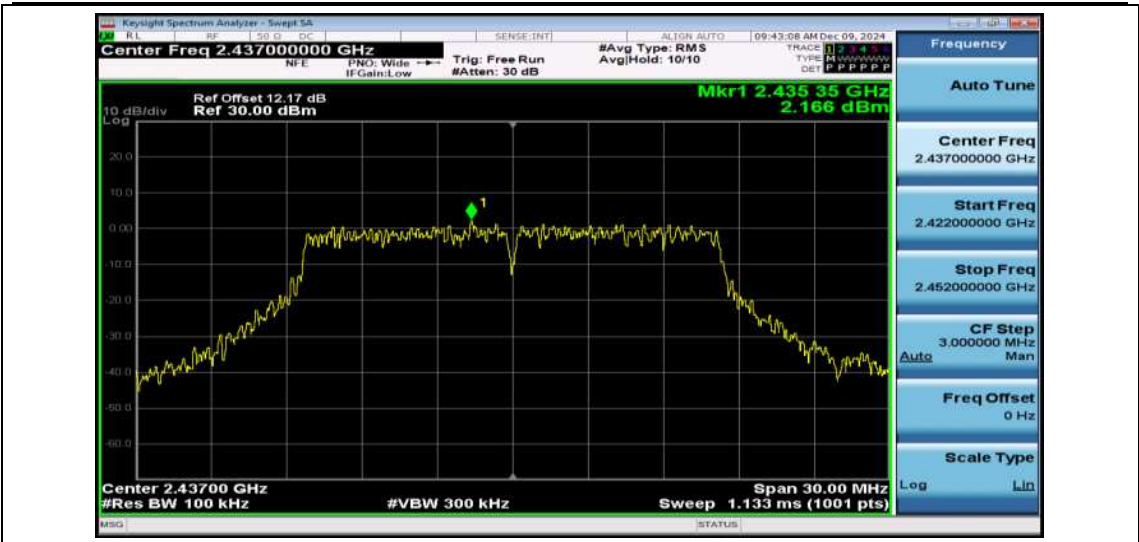
11G-Ant1-2412-30~1000-PASS



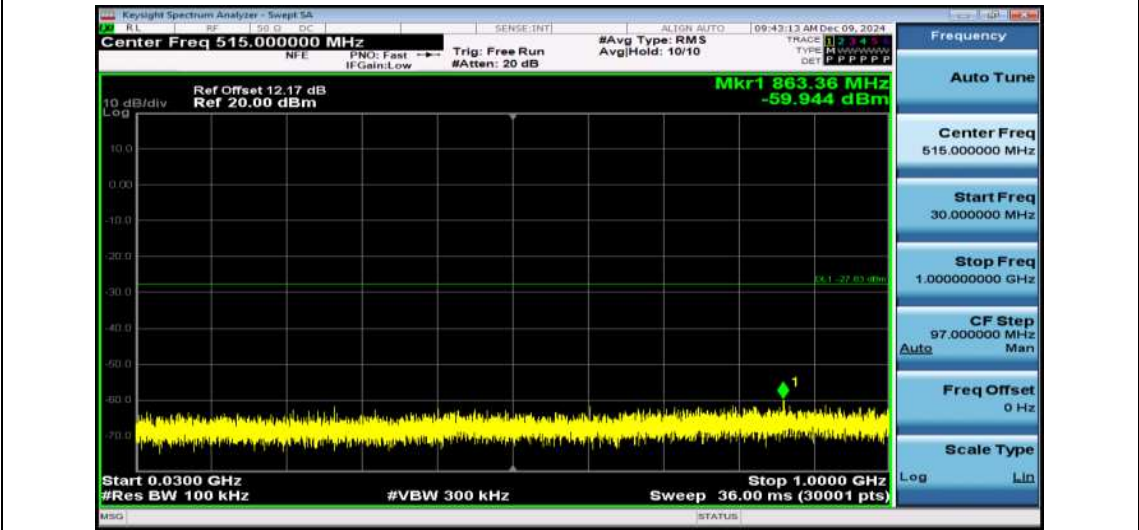
11G-Ant1-2412-1000~26500-PASS

FCC ID:2A64B-DEX54

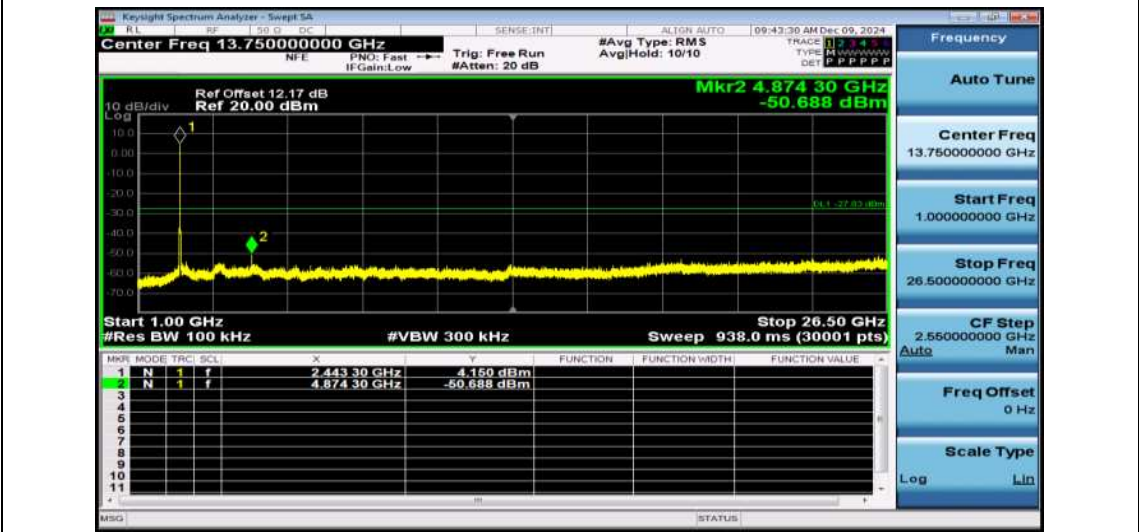
IC:28593-DEX54



11G-Ant1-2437-0~Reference-PASS



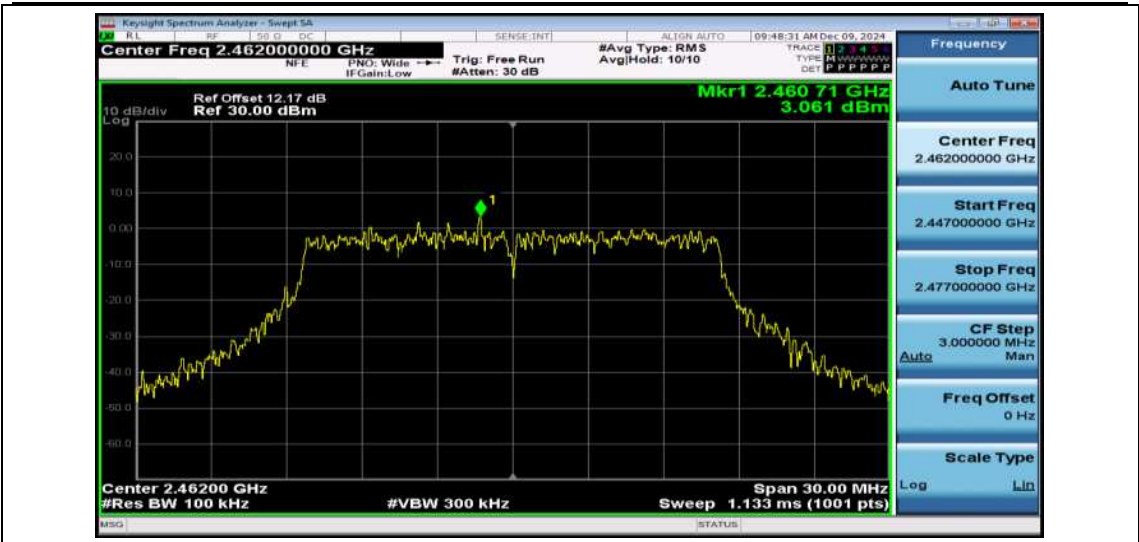
11G-Ant1-2437-30~1000-PASS



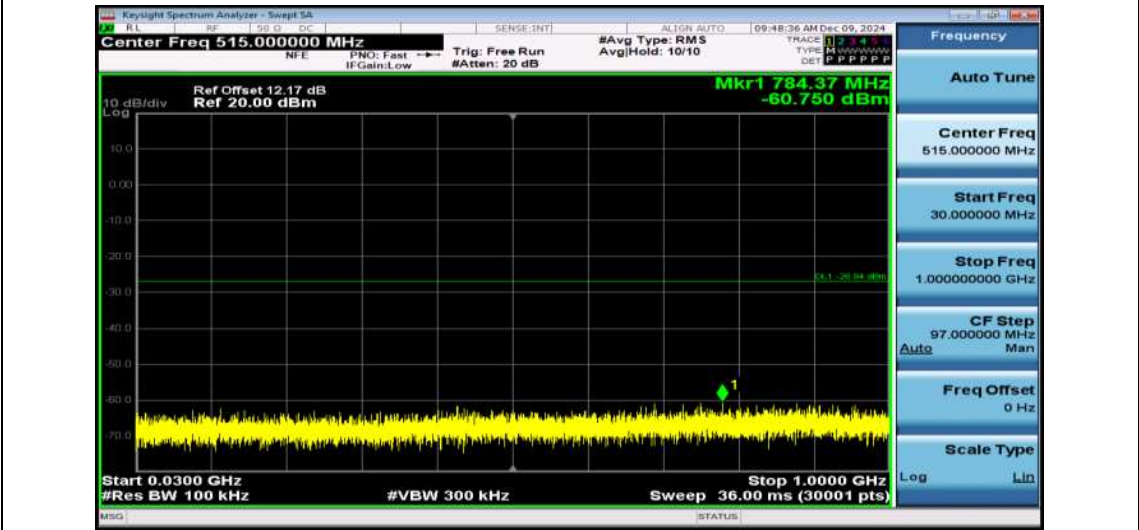
11G-Ant1-2437-1000~26500-PASS

FCC ID:2A64B-DEX54

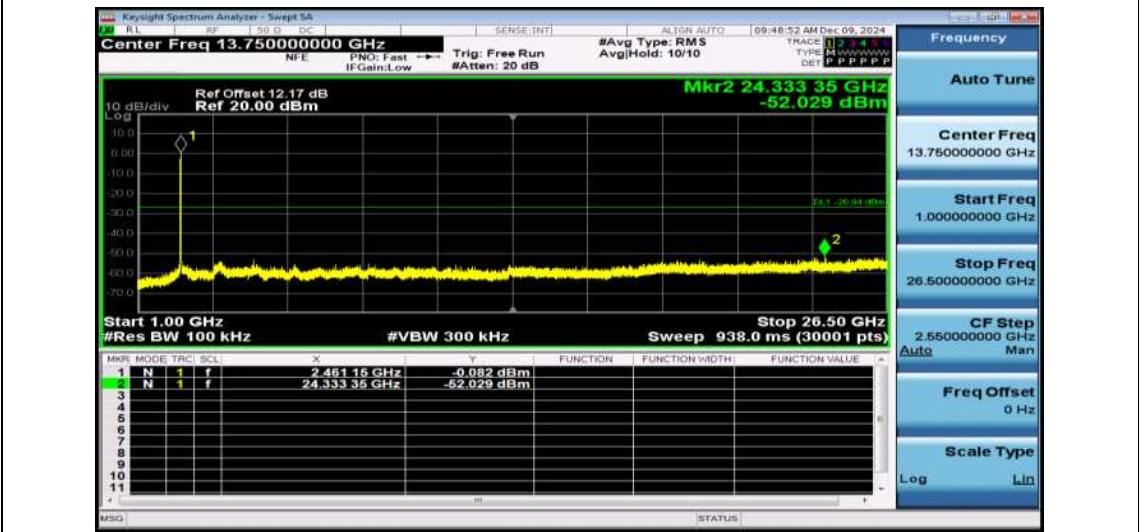
IC:28593-DEX54



11G-Ant1-2462-0~Reference-PASS



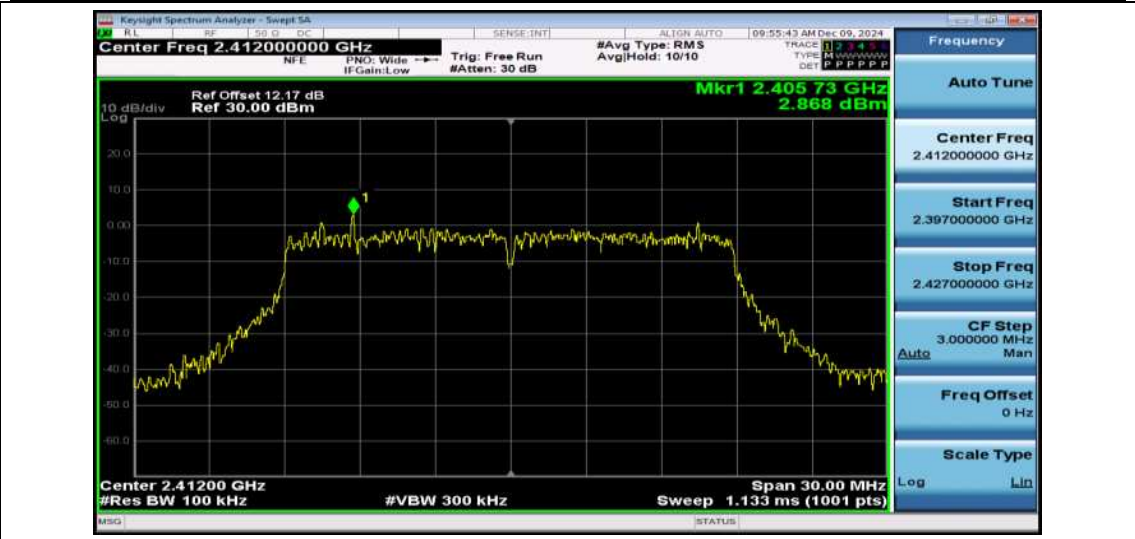
11G-Ant1-2462-30~1000-PASS



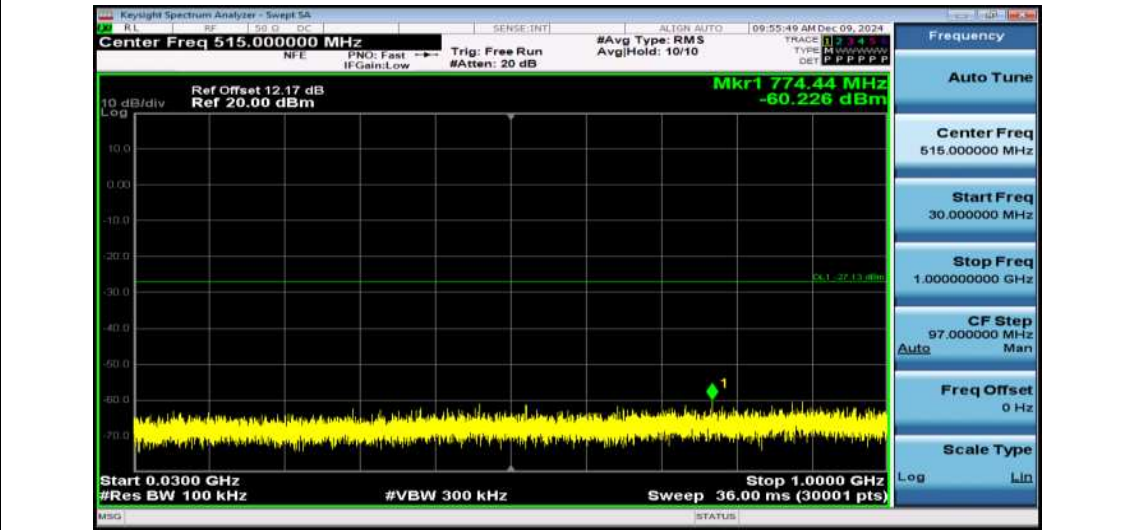
11G-Ant1-2462-1000~26500-PASS

FCC ID:2A64B-DEX54

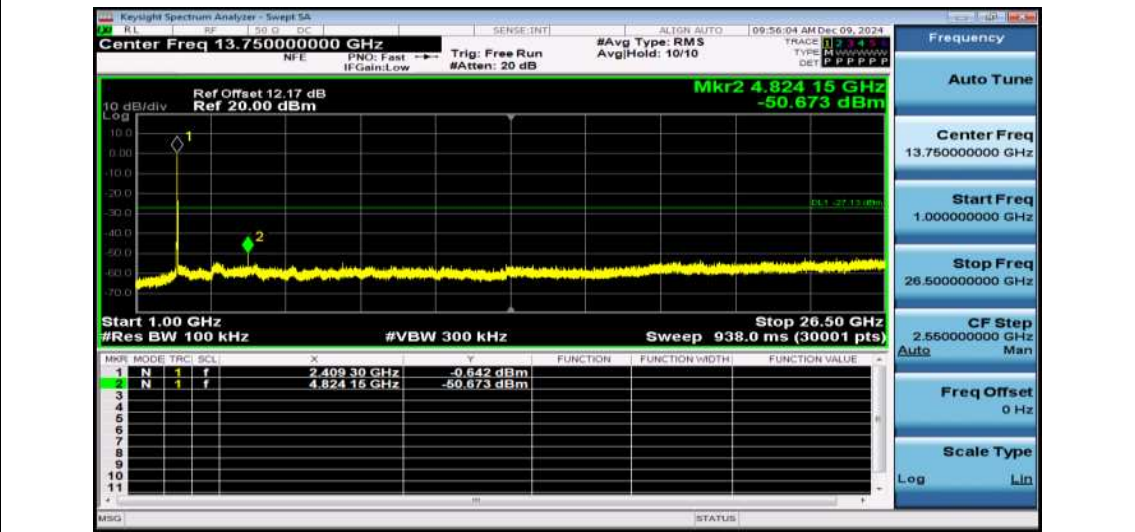
IC:28593-DEX54



11N20SISO-Ant1-2412-0~Reference-PASS



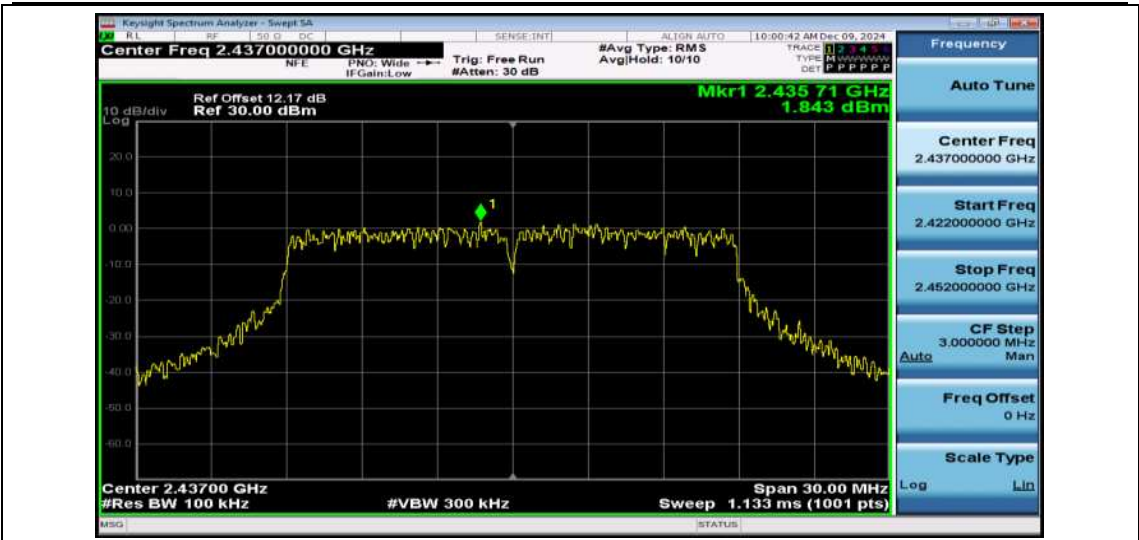
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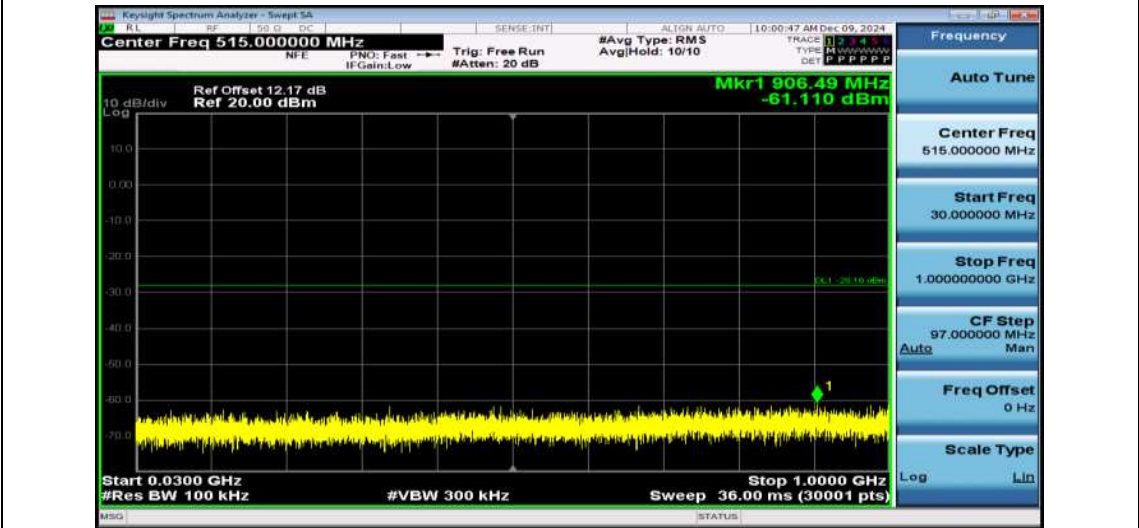
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FCC ID:2A64B-DEX54

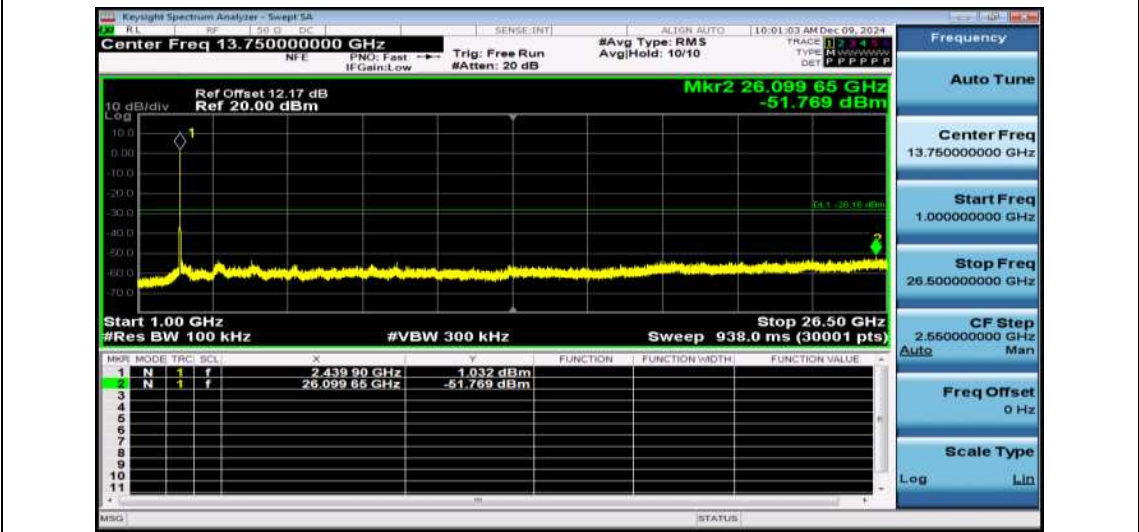
IC:28593-DEX54



11N20SISO-Ant1-2437-0~Reference-PASS



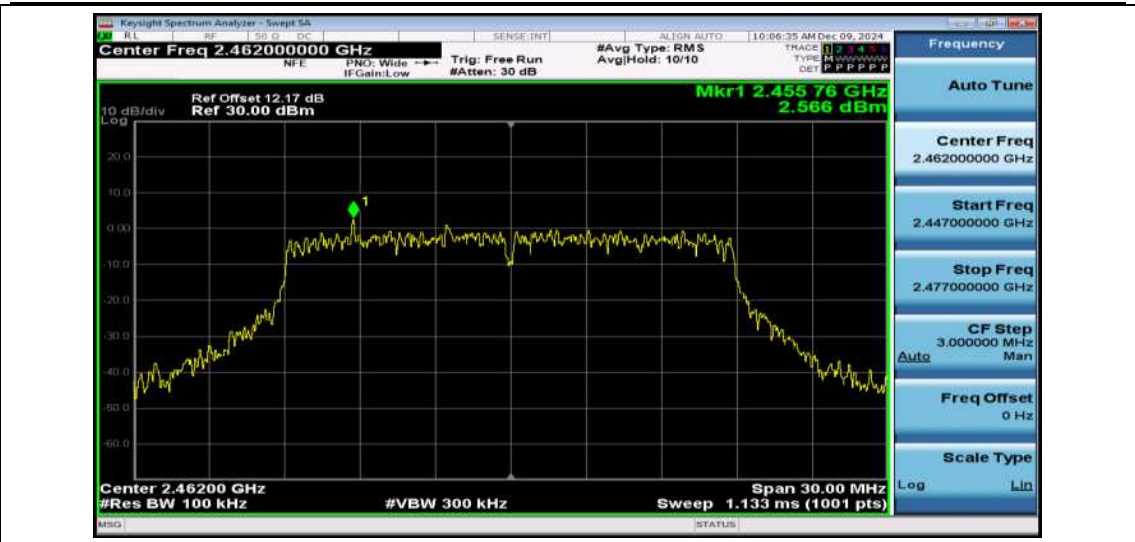
11N20SISO-Ant1-2437-30~1000-PASS



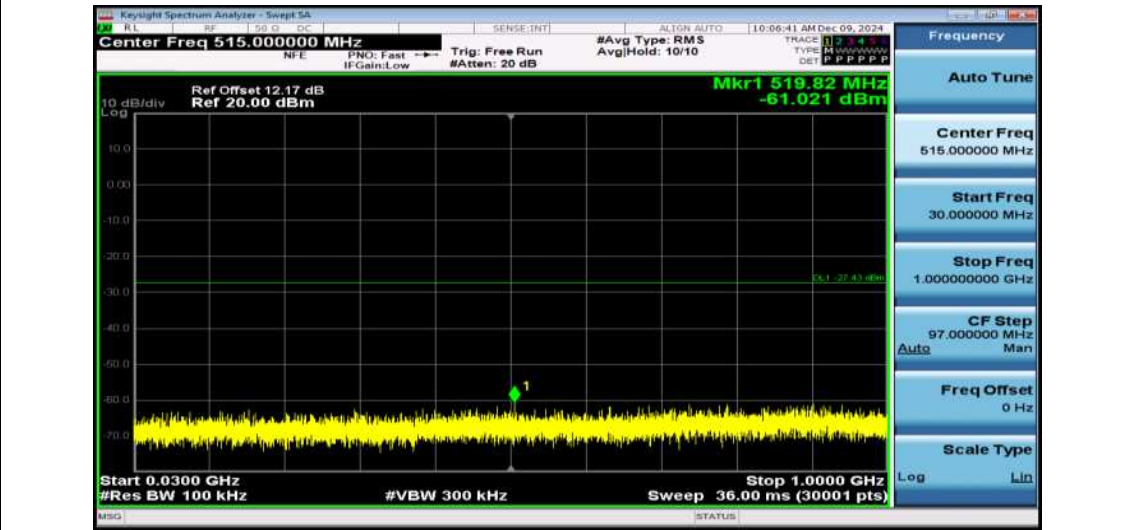
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FCC ID:2A64B-DEX54

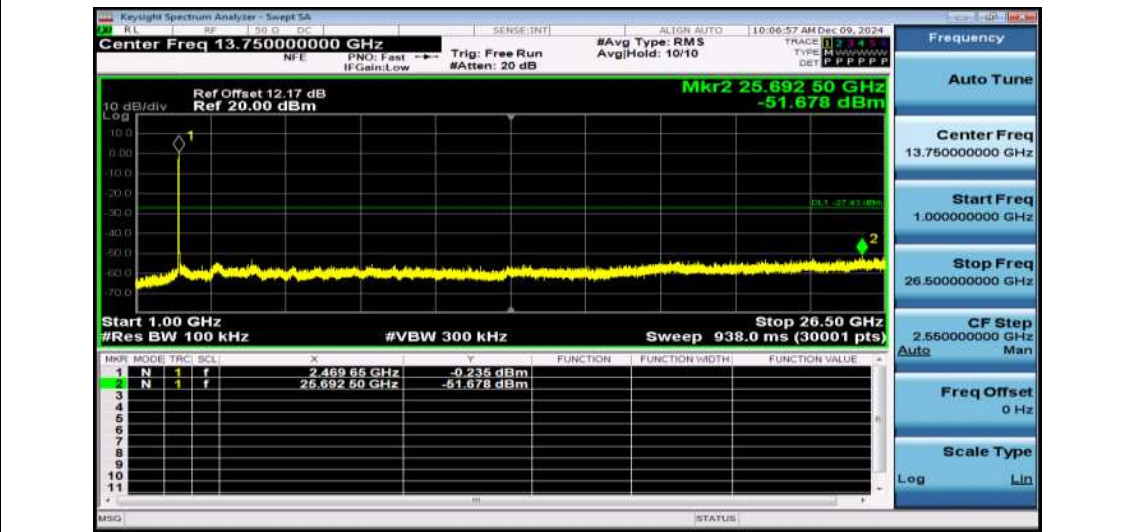
IC:28593-DEX54



11N20SISO-Ant1-2462-0~Reference-PASS



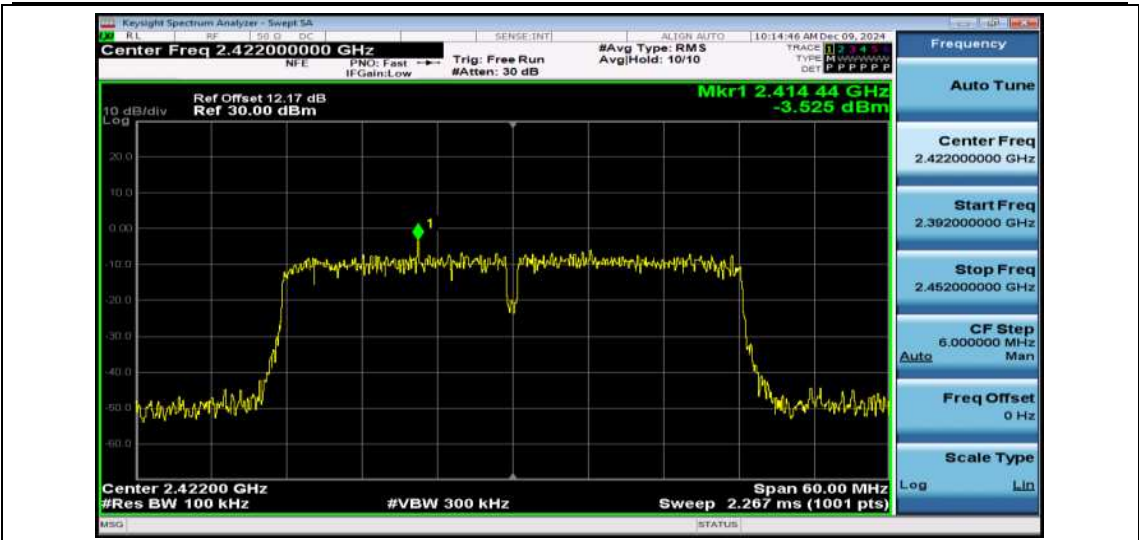
11N20SISO-Ant1-2462-30~1000-PASS



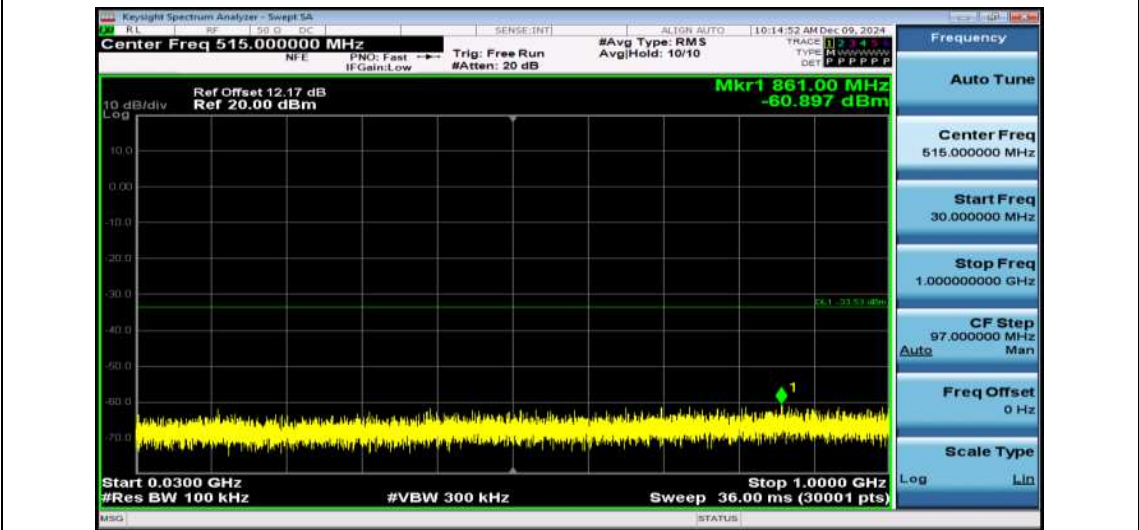
11N20SISO-Ant1-2462-1000~26500-PASS

FCC ID:2A64B-DEX54

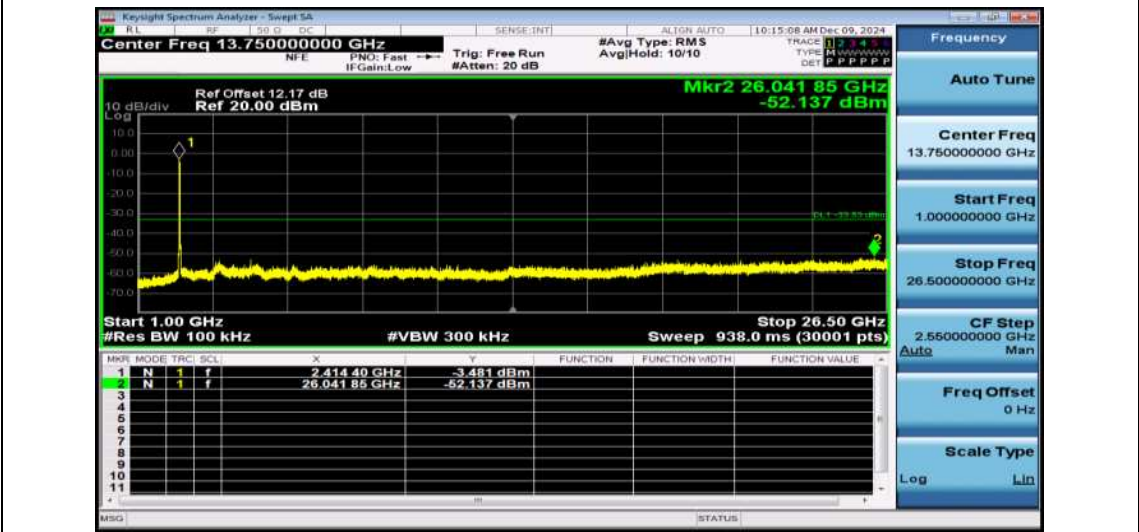
IC:28593-DEX54



11N40SISO-Ant1-2422-0~Reference-PASS



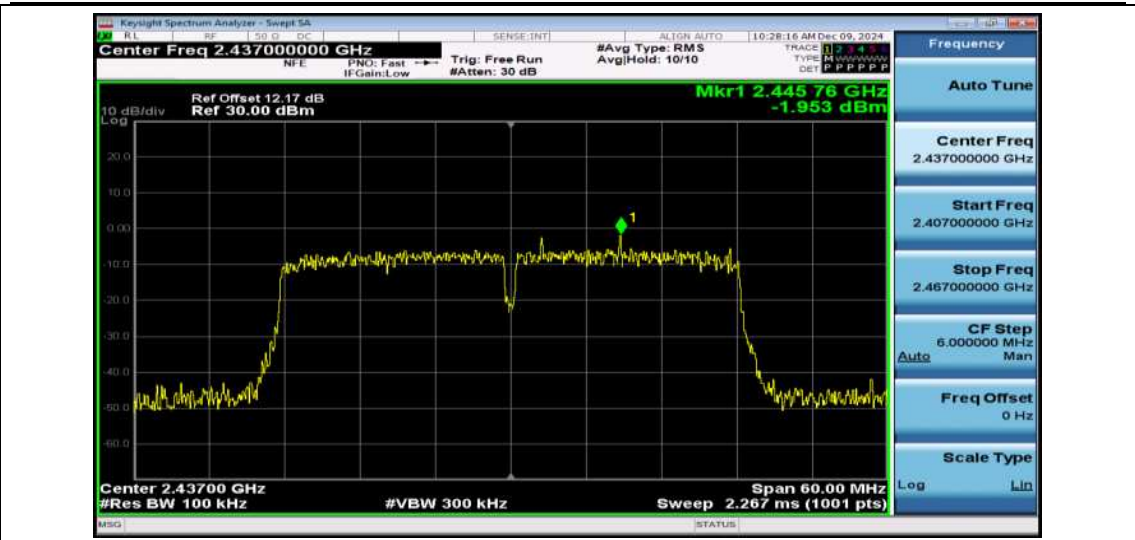
11N40SISO-Ant1-2422-30~1000-PASS



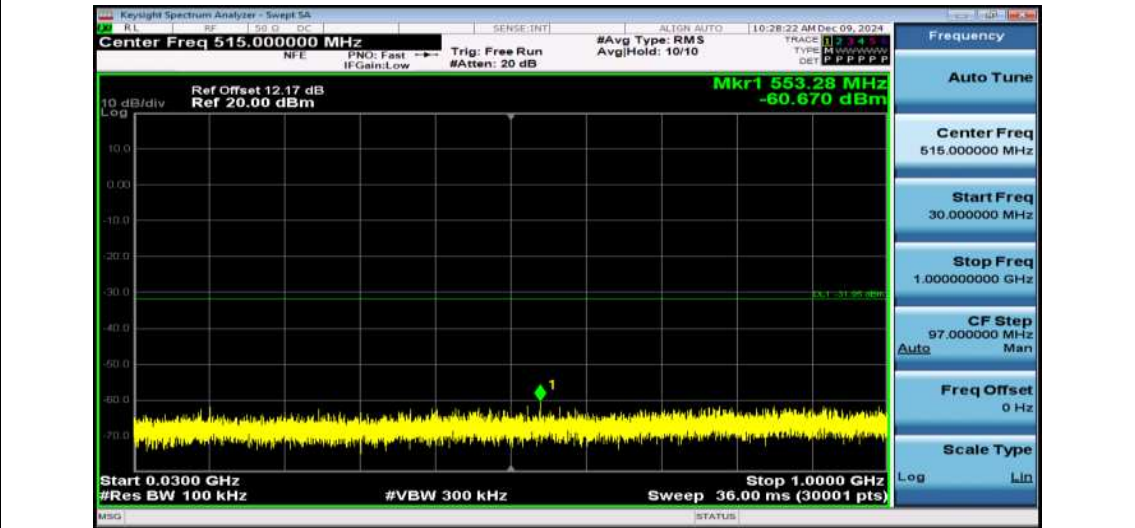
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FCC ID:2A64B-DEX54

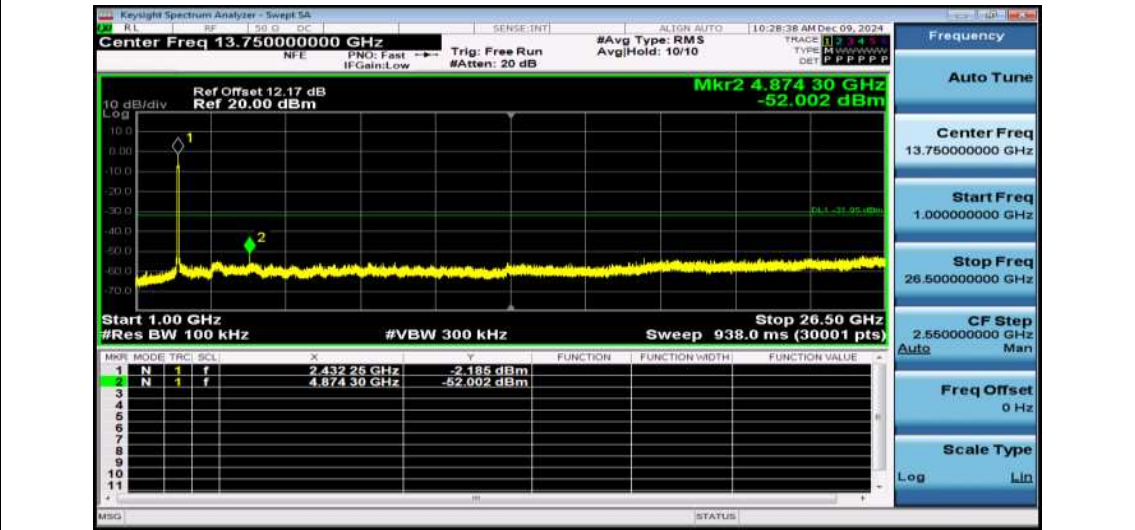
IC:28593-DEX54



11N40SISO-Ant1-2437-0~Reference-PASS



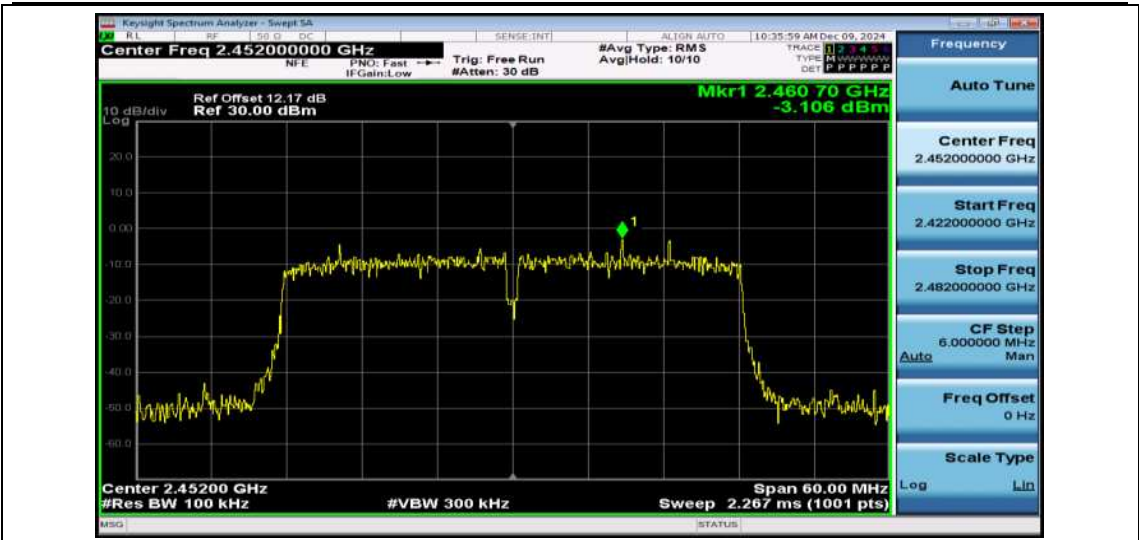
11N40SISO-Ant1-2437-30~1000-PASS



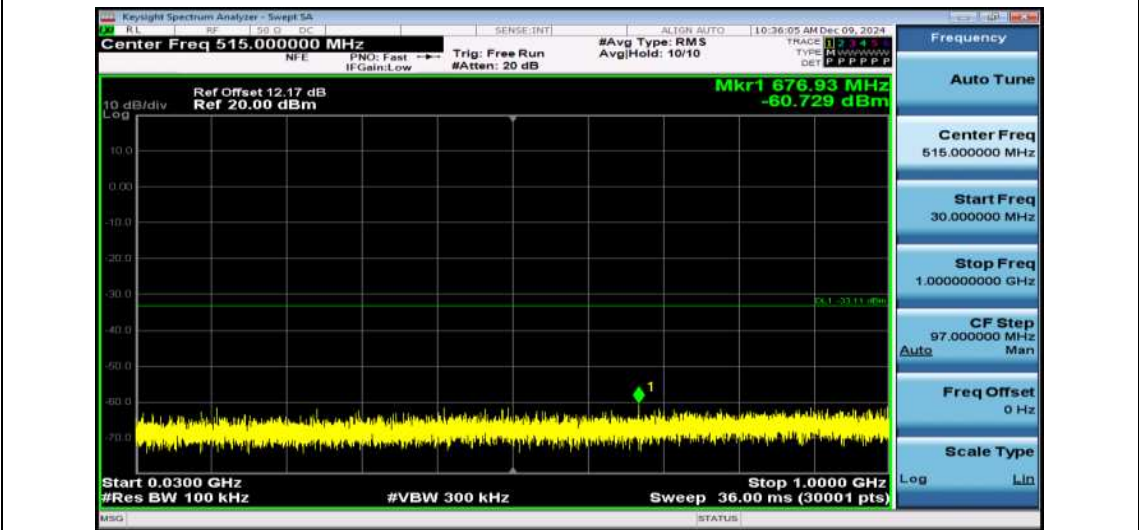
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FCC ID:2A64B-DEX54

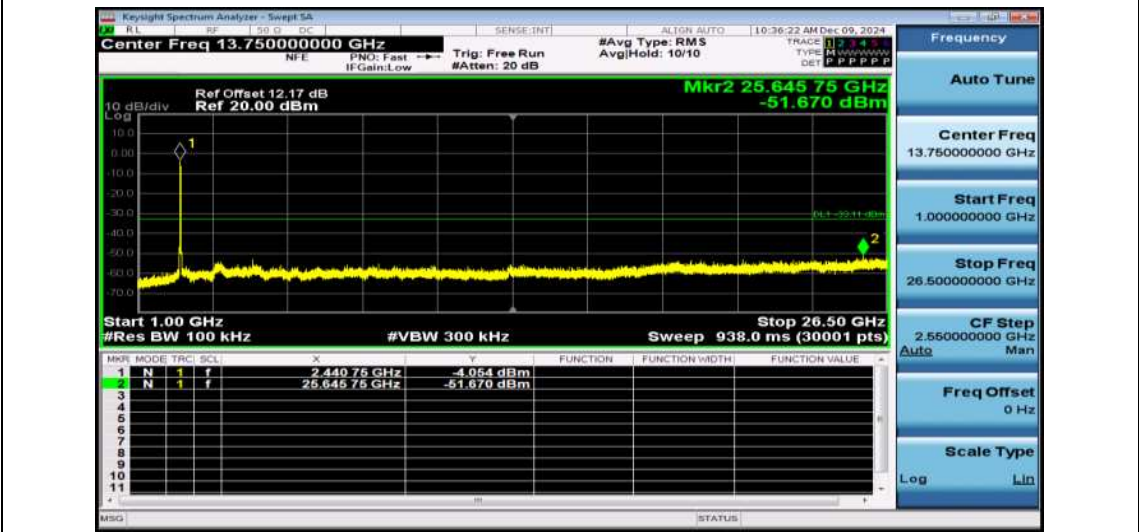
IC:28593-DEX54



11N40SISO-Ant1-2452-0~Reference-PASS



11N40SISO-Ant1-2452-30~1000-PASS



11N40SISO-Ant1-2452-1000~26500-PASS

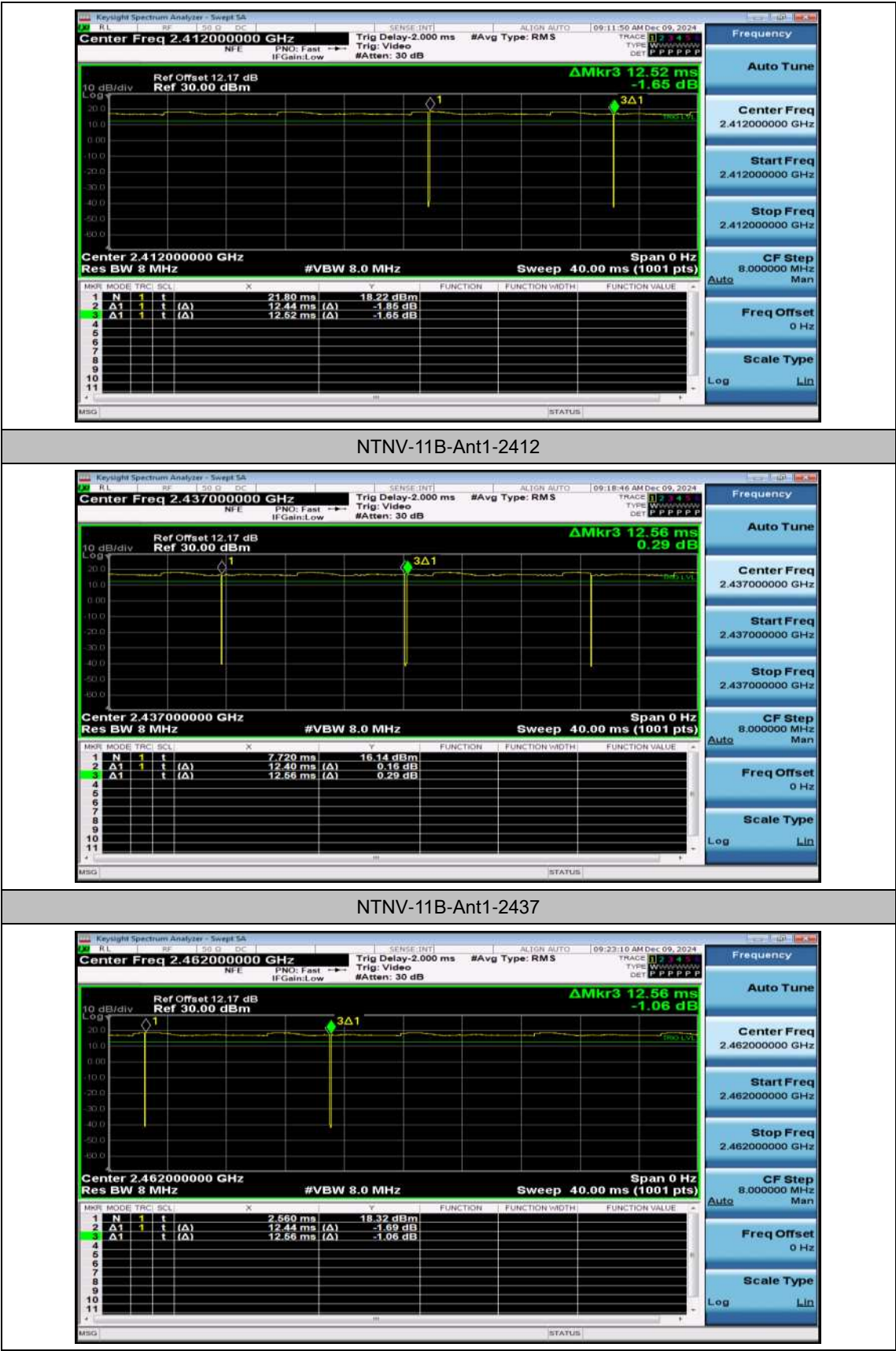
FCC ID: 2A64B-DEX54
IC: 28593-DEX54

Duty Cycle

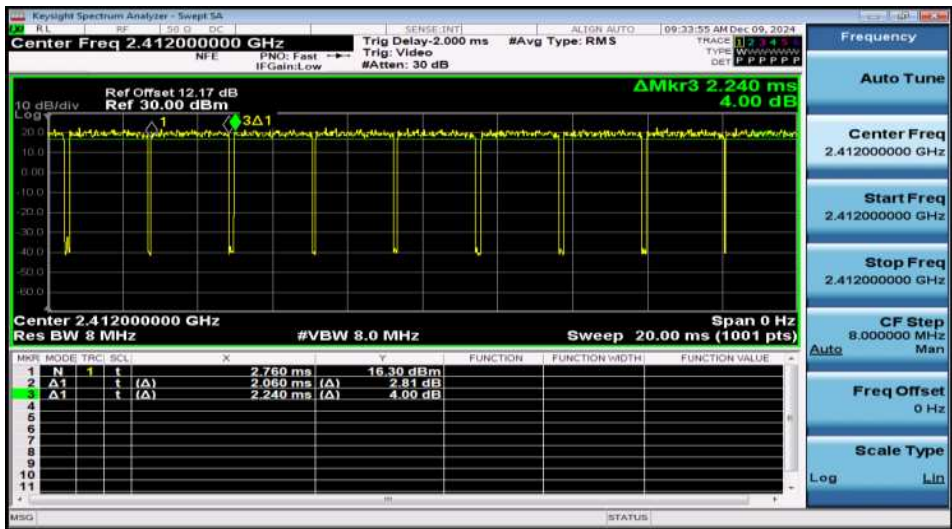
Test Result

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	12.44	12.52	99.36	0.03
11B	Ant1	2437	12.40	12.56	98.73	0.06
11B	Ant1	2462	12.44	12.56	99.04	0.04
11G	Ant1	2412	2.06	2.24	91.96	0.36
11G	Ant1	2437	2.06	2.42	85.12	0.70
11G	Ant1	2462	2.06	2.18	94.50	0.25
11N20SISO	Ant1	2412	1.92	2.06	93.20	0.31
11N20SISO	Ant1	2437	1.92	2.06	93.20	0.31
11N20SISO	Ant1	2462	1.92	2.09	91.87	0.37
11N40SISO	Ant1	2422	0.94	1.02	92.16	0.35
11N40SISO	Ant1	2437	0.95	1.08	87.96	0.56
11N40SISO	Ant1	2452	0.95	1.11	85.59	0.68

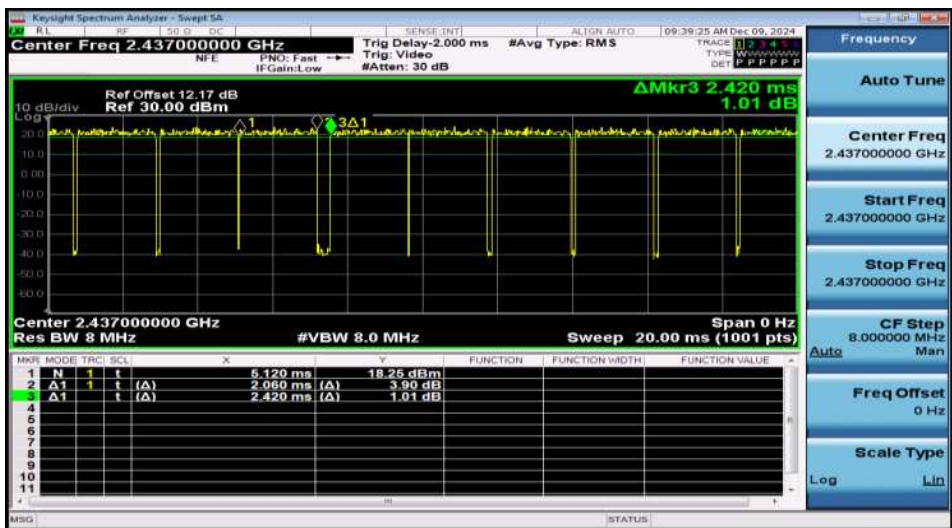
Test Graphs



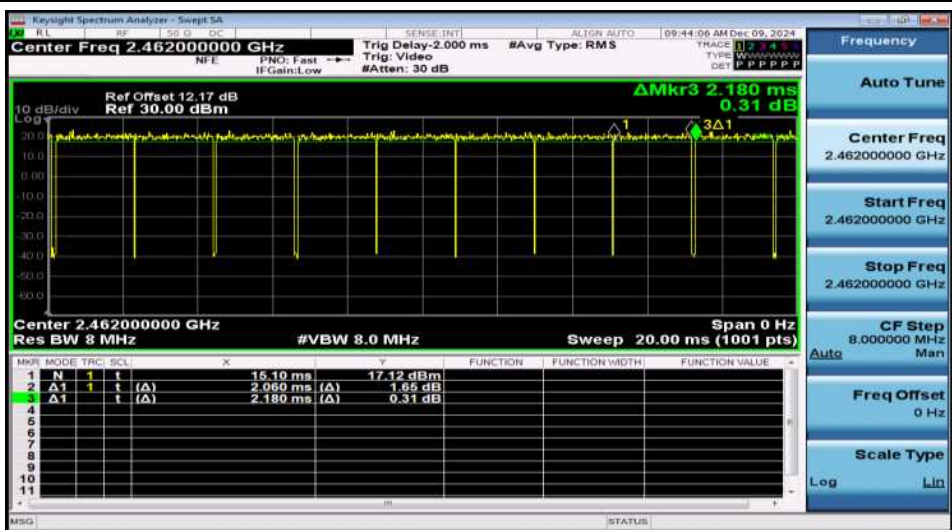
NTNV-11B-Ant1-2462



NTNV-11G-Ant1-2412

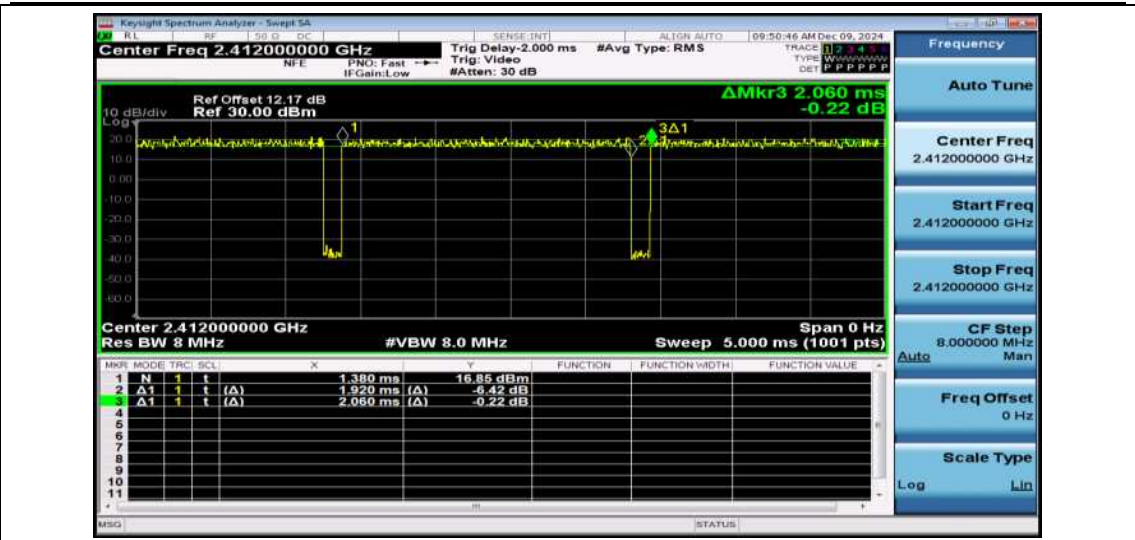


NTNV-11G-Ant1-2437

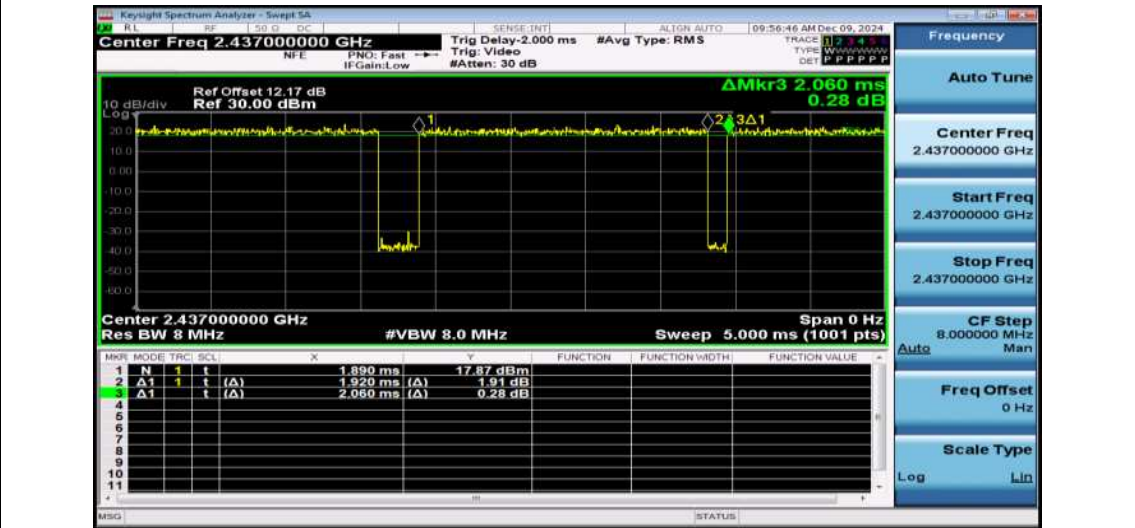


NTNV-11G-Ant1-2462

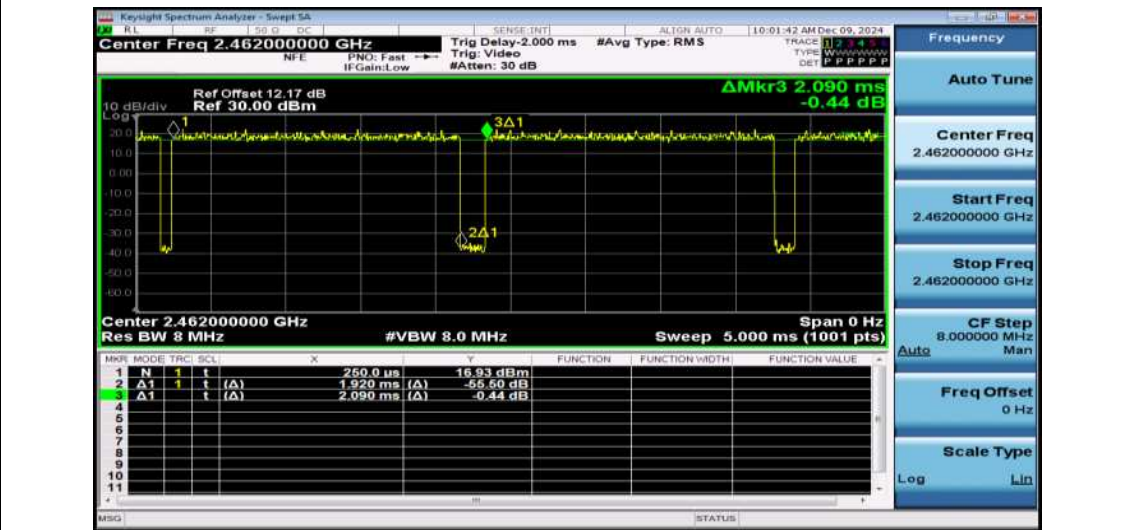
FCC ID: 2A64B-DEX54
IC: 28593-DEX54



NTNV-11N20SISO-Ant1-2412

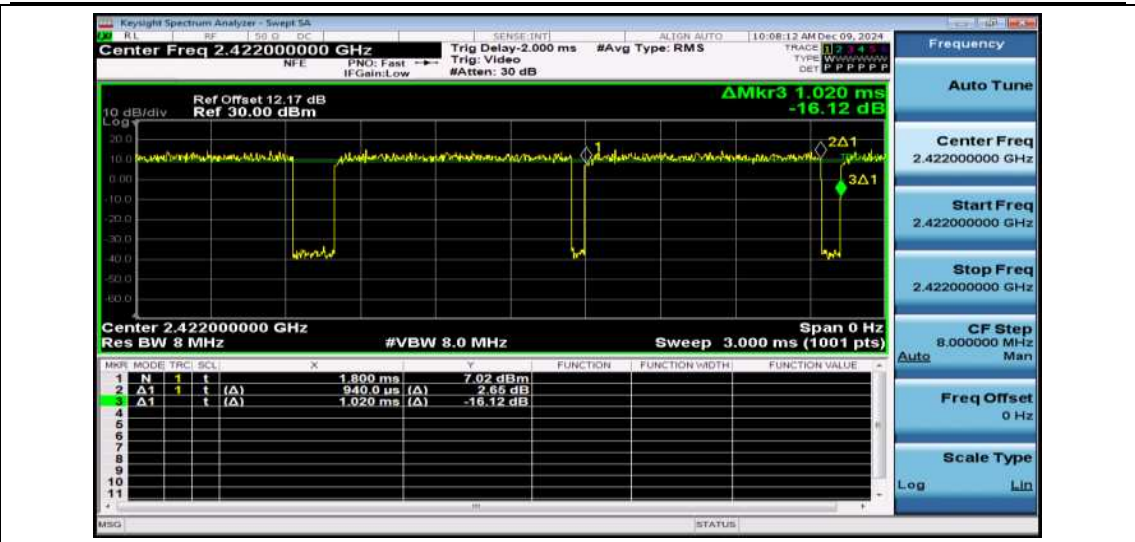


NTNV-11N20SISO-Ant1-2437

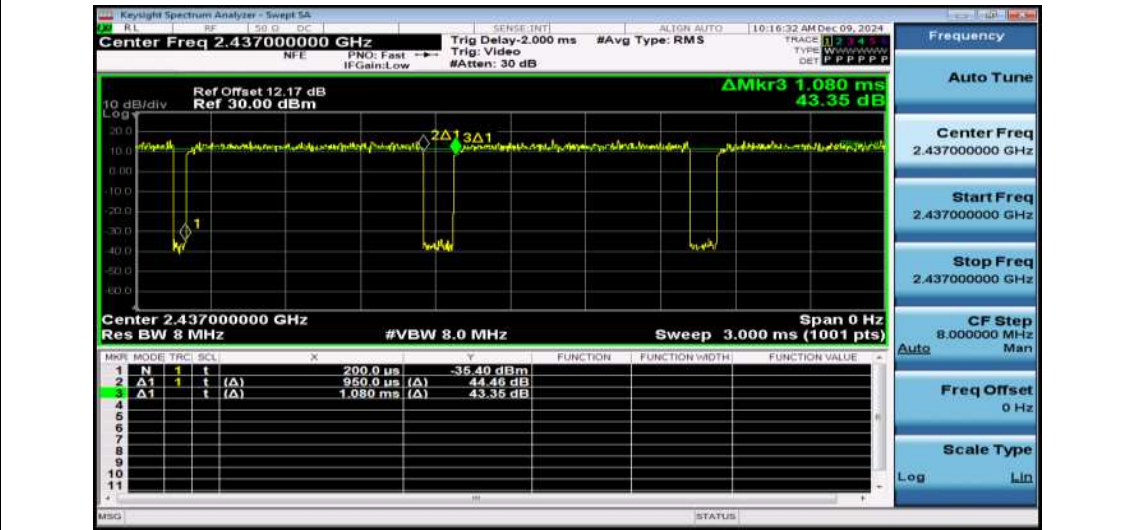


NTNV-11N20SISO-Ant1-2462

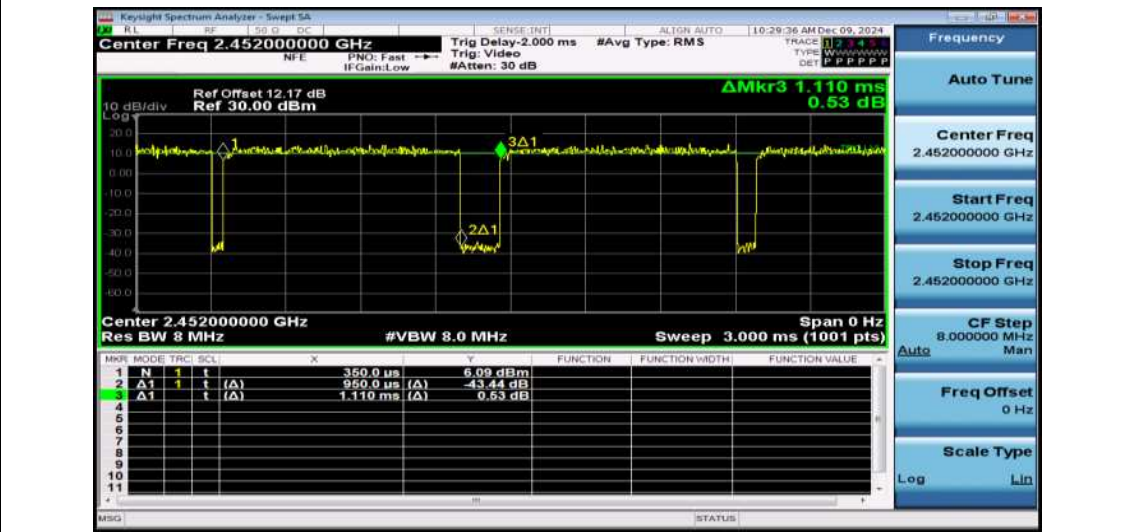
FCC ID: 2A64B-DEX54
IC: 28593-DEX54



NTNV-11N40SISO-Ant1-2422



NTNV-11N40SISO-Ant1-2437



NTNV-11N40SISO-Ant1-2452