

Appendix for WCDMA Band 4

Product Name: Smart Phone

Model No: Black S

AppendixA: Average Power Output Data

Test Result

WCDMA - Average Power (dBm)			
Band	WCDMA Band IV		
Channel	1313	1413	1512
Frequency (MHz)	1712.4	1732.6	1752.6
RMC 12.2k	21.16	21.36	21.49
HSDPA Subtest-1	20.85	19.84	21.11
HSDPA Subtest-2	20.40	19.35	20.66
HSDPA Subtest-3	20.12	19.15	20.31
HSDPA Subtest-4	19.72	18.75	19.90
HSUPA Subtest-1	20.82	19.82	20.99
HSUPA Subtest-2	20.36	19.37	20.44
HSUPA Subtest-3	20.04	19.14	20.12
HSUPA Subtest-4	19.78	18.94	19.96
HSUPA Subtest-5	19.41	18.57	19.60

AppendixB:Peak-to-Average Ratio

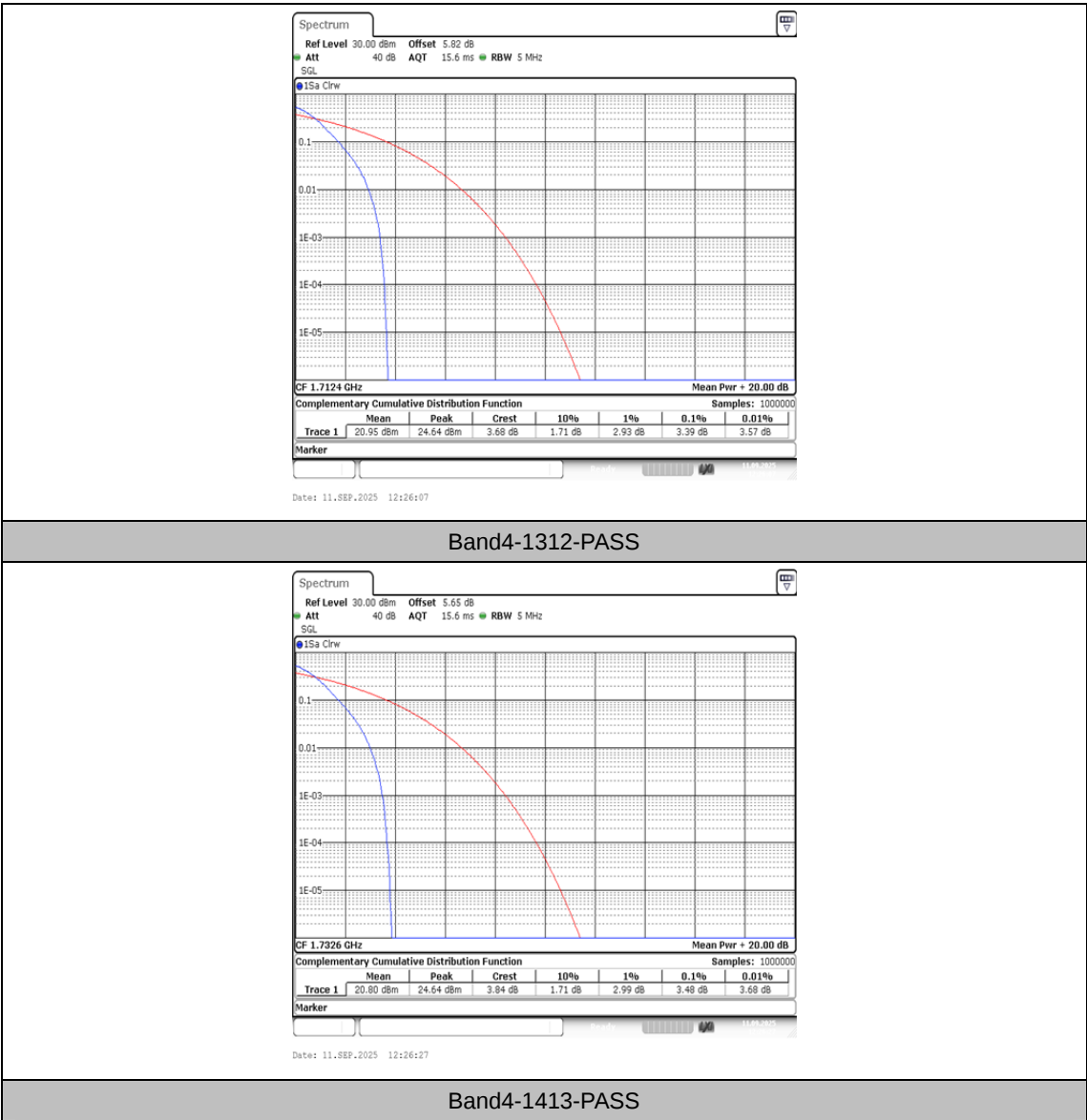
Test Result

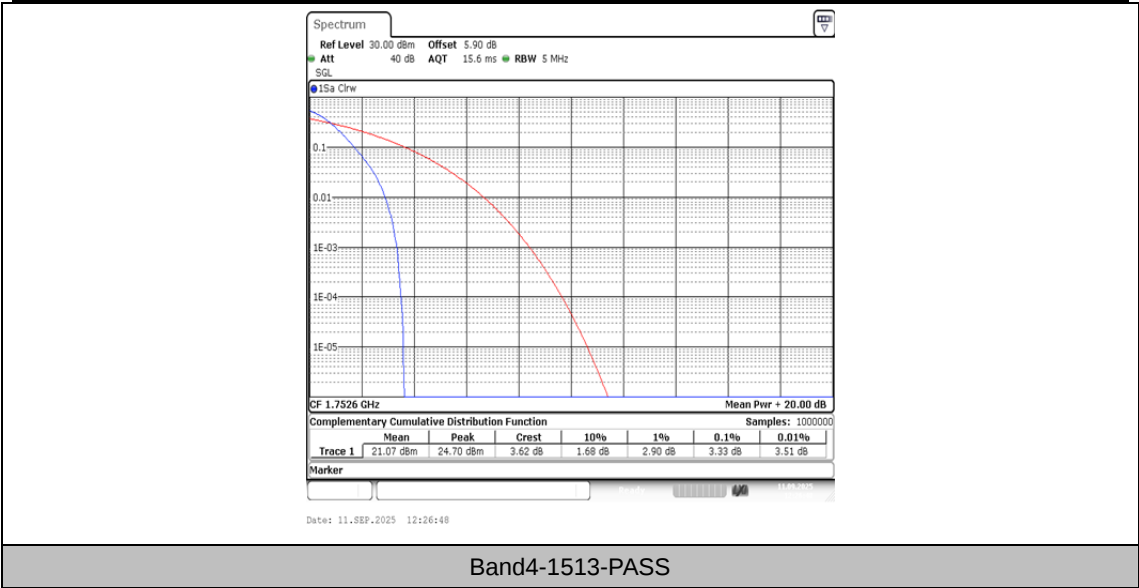
Band	Channel	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band4	1312	3.39	13	PASS
Band4	1413	3.48	13	PASS
Band4	1513	3.33	13	PASS

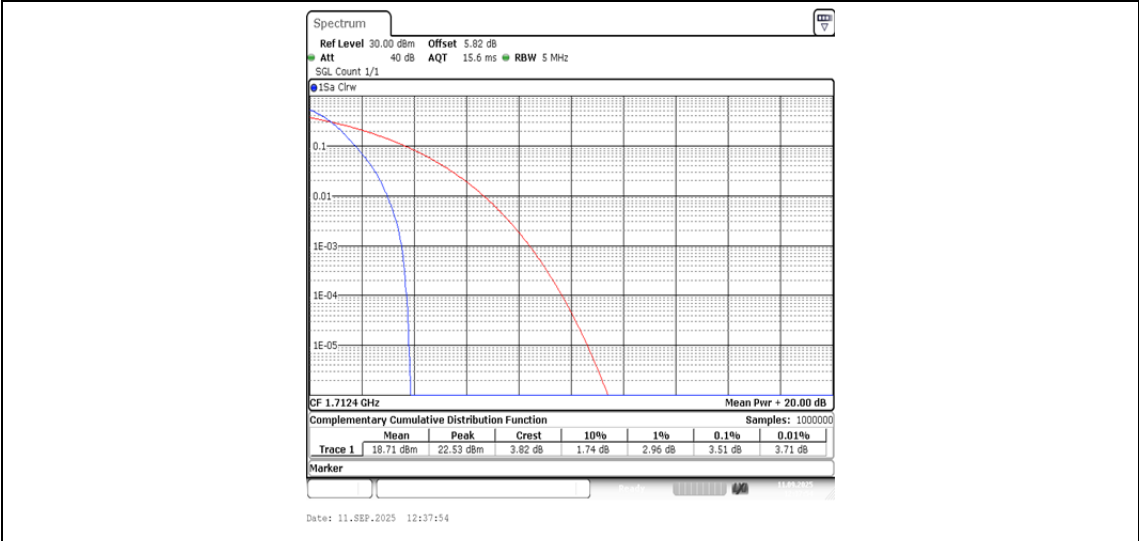
Band	Channel	SubTest	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band4	1312	1	3.51	13	PASS
Band4	1312	2	3.59	13	PASS
Band4	1312	3	3.74	13	PASS
Band4	1312	4	3.77	13	PASS
Band4	1413	1	3.51	13	PASS
Band4	1413	2	3.62	13	PASS
Band4	1413	3	3.77	13	PASS
Band4	1413	4	3.83	13	PASS
Band4	1513	1	3.48	13	PASS
Band4	1513	2	3.59	13	PASS
Band4	1513	3	3.74	13	PASS
Band4	1513	4	3.77	13	PASS

Band	Channel	SubTest	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band4	1312	1	4.84	13	PASS
Band4	1312	2	5.8	13	PASS
Band4	1312	3	5.48	13	PASS
Band4	1312	4	5.97	13	PASS
Band4	1312	5	4.58	13	PASS
Band4	1413	1	4.84	13	PASS
Band4	1413	2	5.86	13	PASS
Band4	1413	3	5.51	13	PASS
Band4	1413	4	5.94	13	PASS
Band4	1413	5	4.64	13	PASS
Band4	1513	1	4.78	13	PASS
Band4	1513	2	5.77	13	PASS
Band4	1513	3	5.39	13	PASS
Band4	1513	4	5.91	13	PASS
Band4	1513	5	4.55	13	PASS

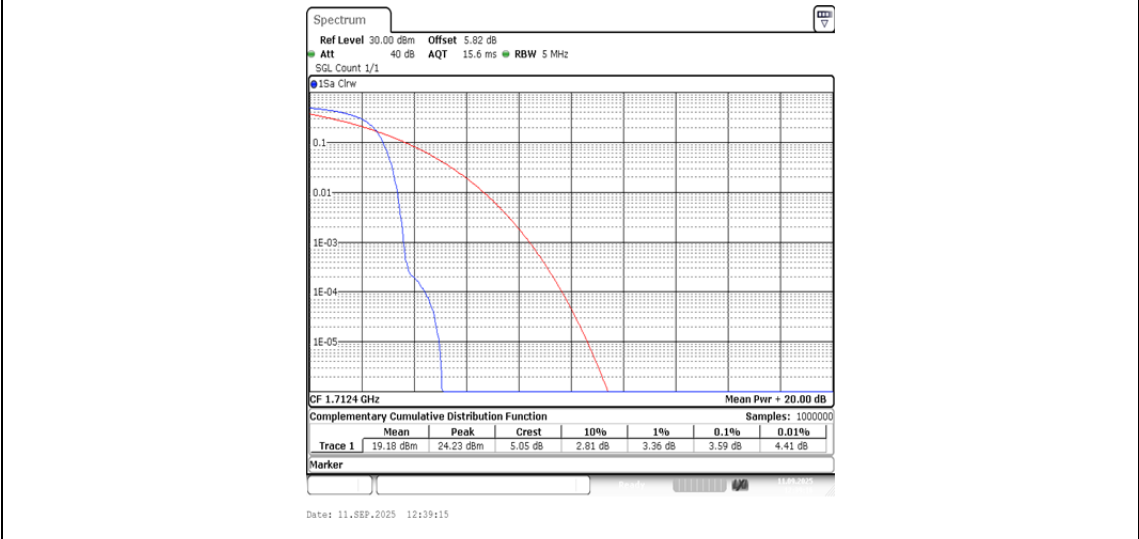
Test Graphs



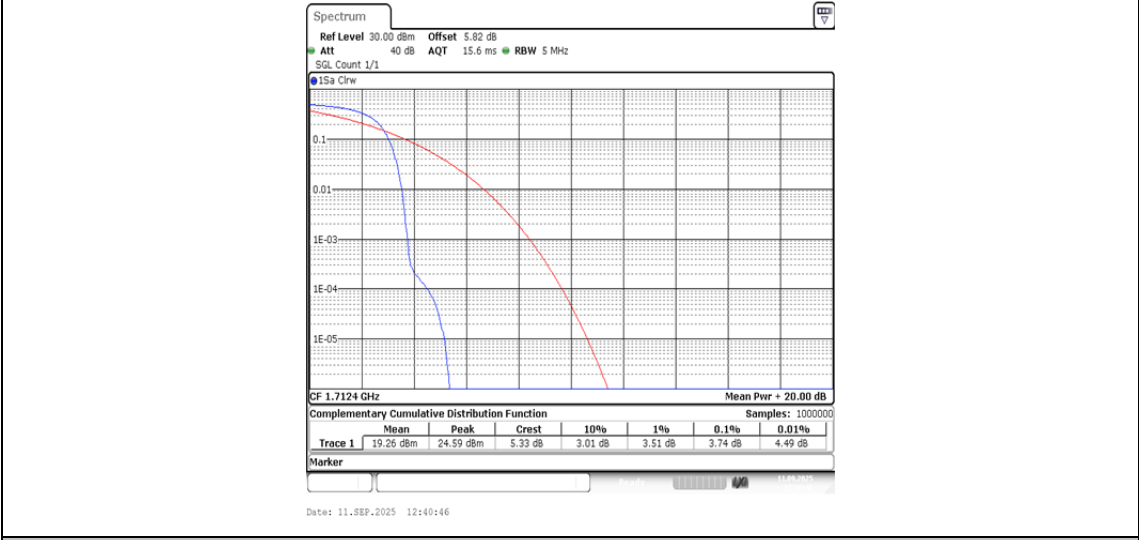




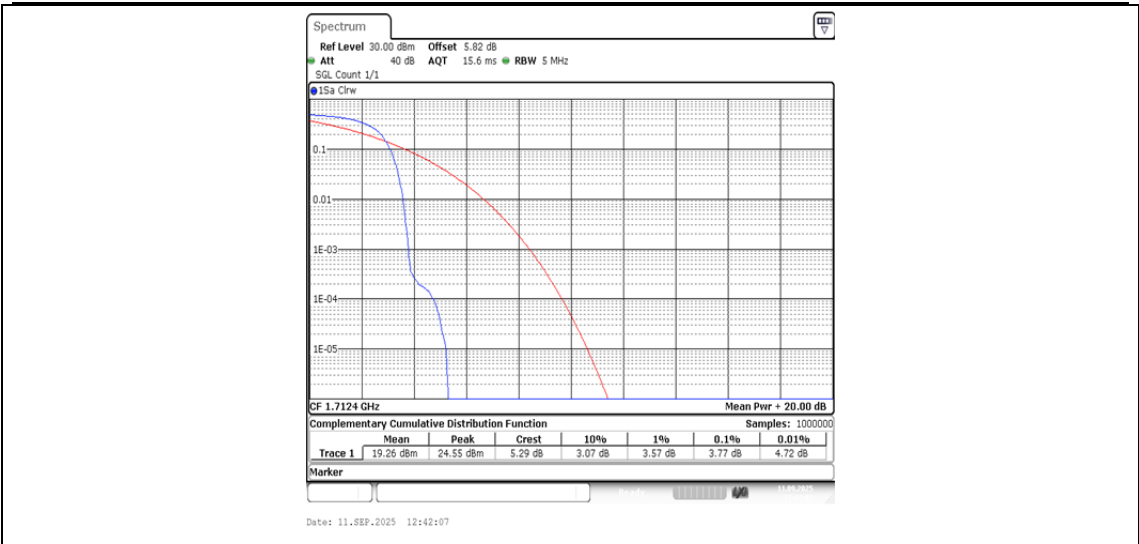
Band4-1312-1-PASS



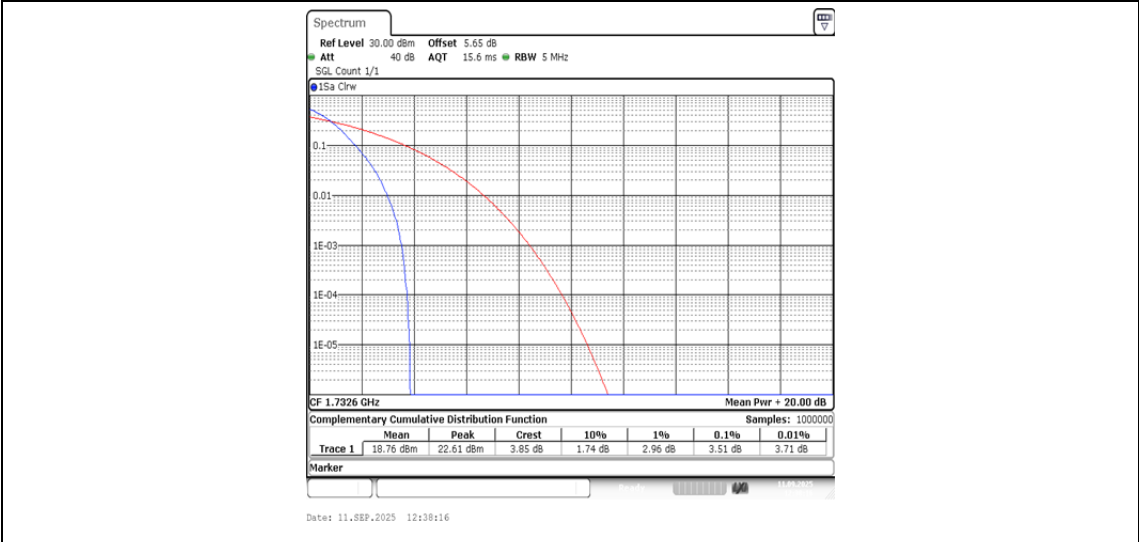
Band4-1312-2-PASS



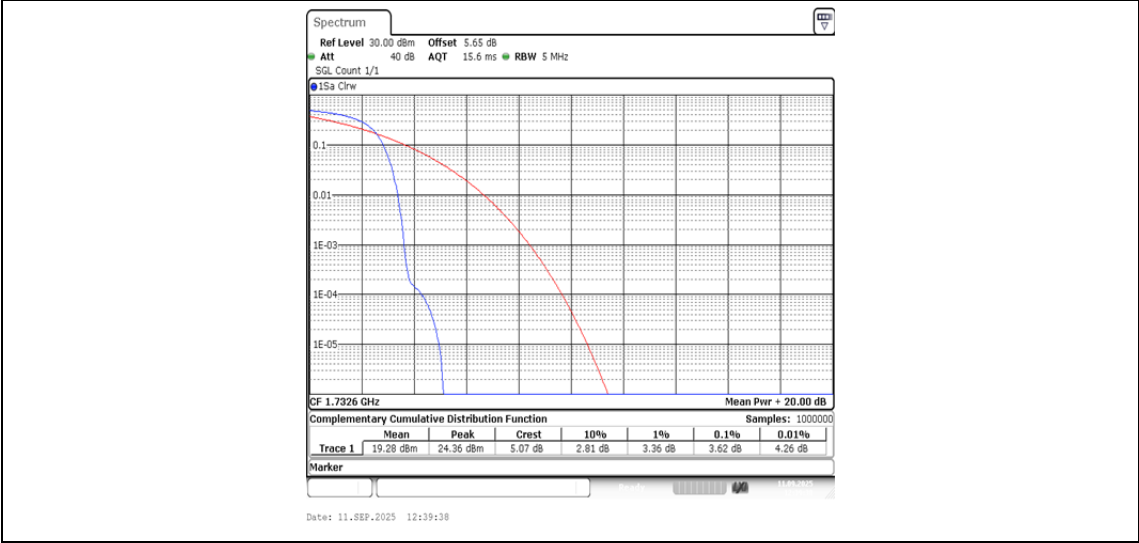
Band4-1312-3-PASS



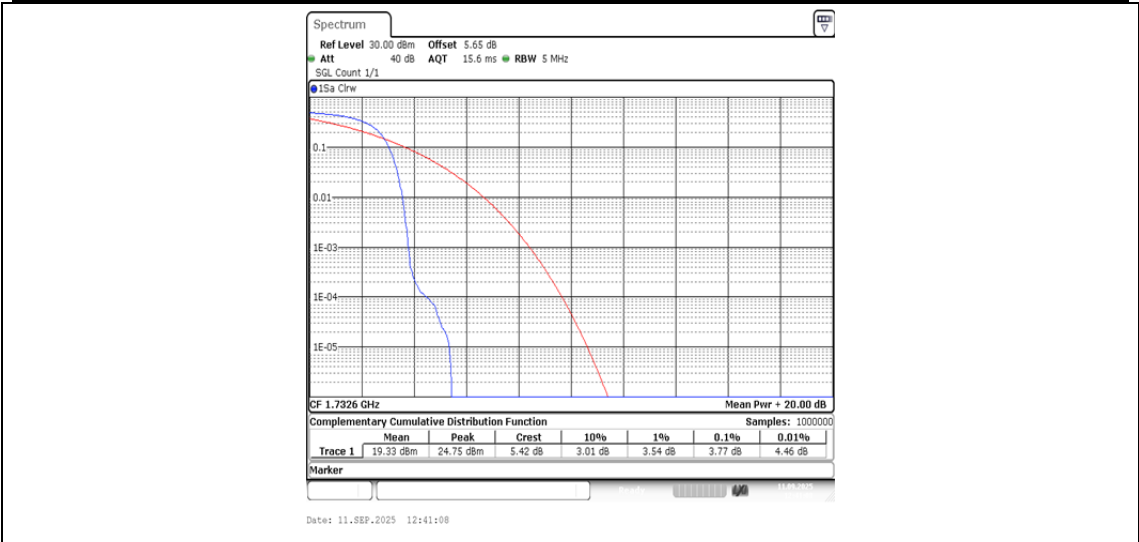
Band4-1312-4-PASS



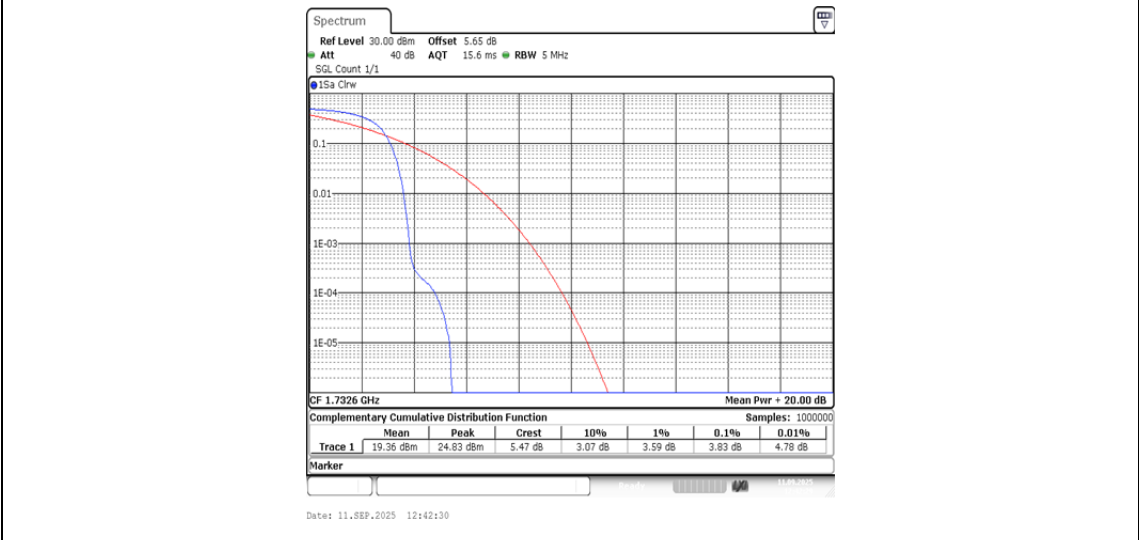
Band4-1413-1-PASS



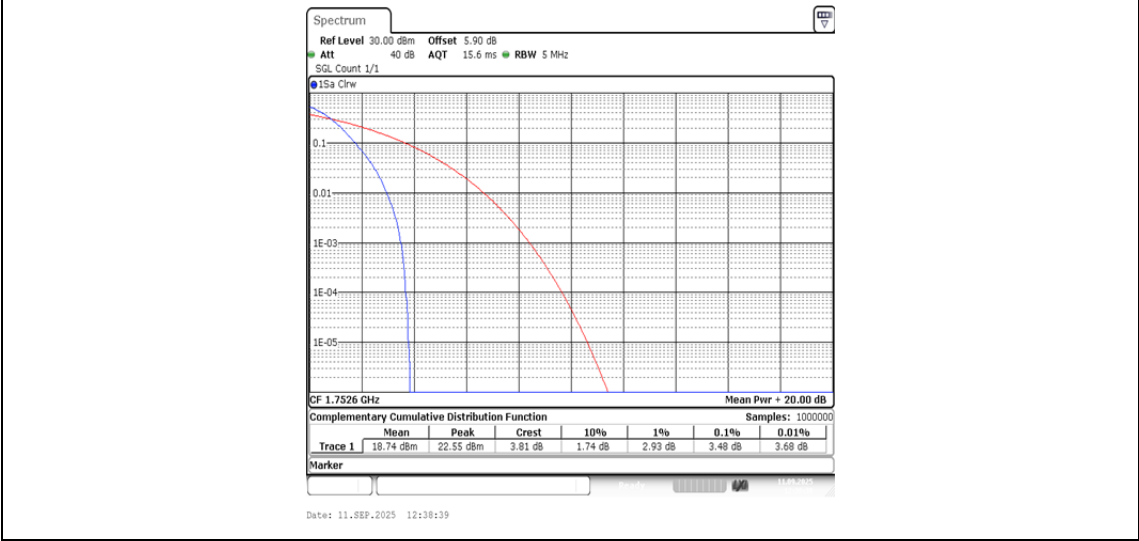
Band4-1413-2-PASS



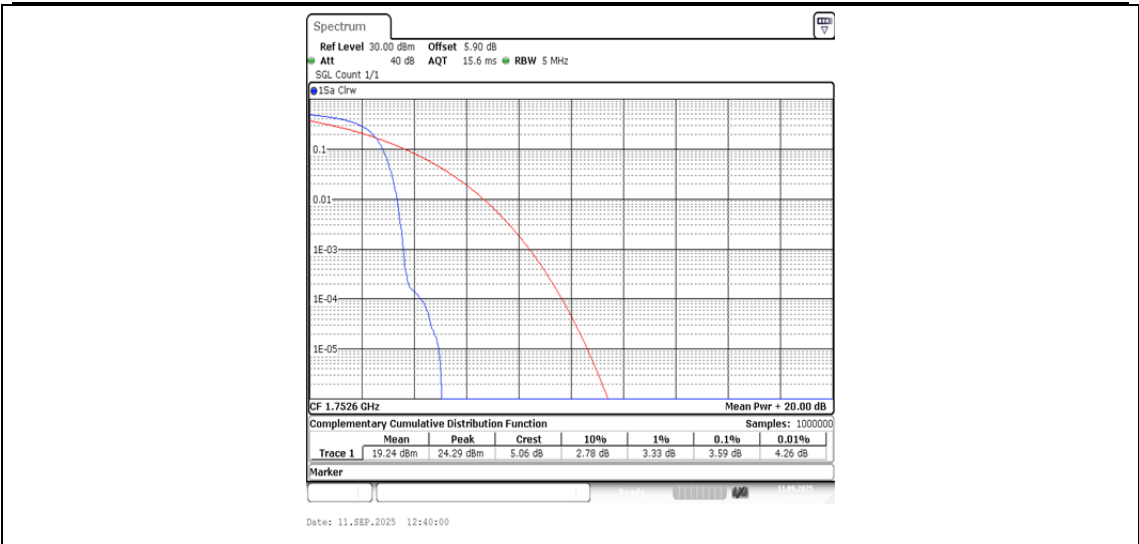
Band4-1413-3-PASS



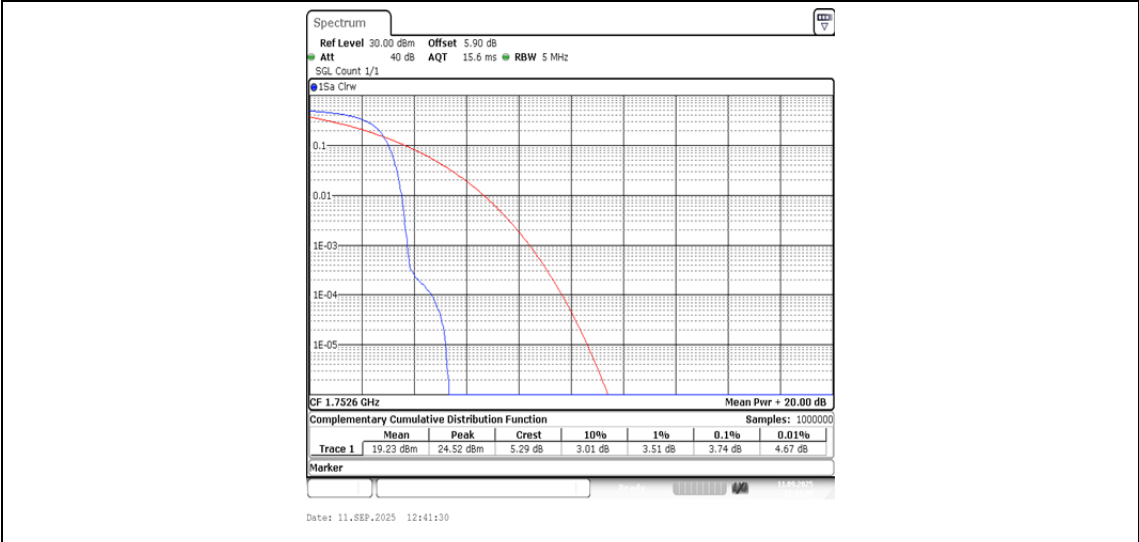
Band4-1413-4-PASS



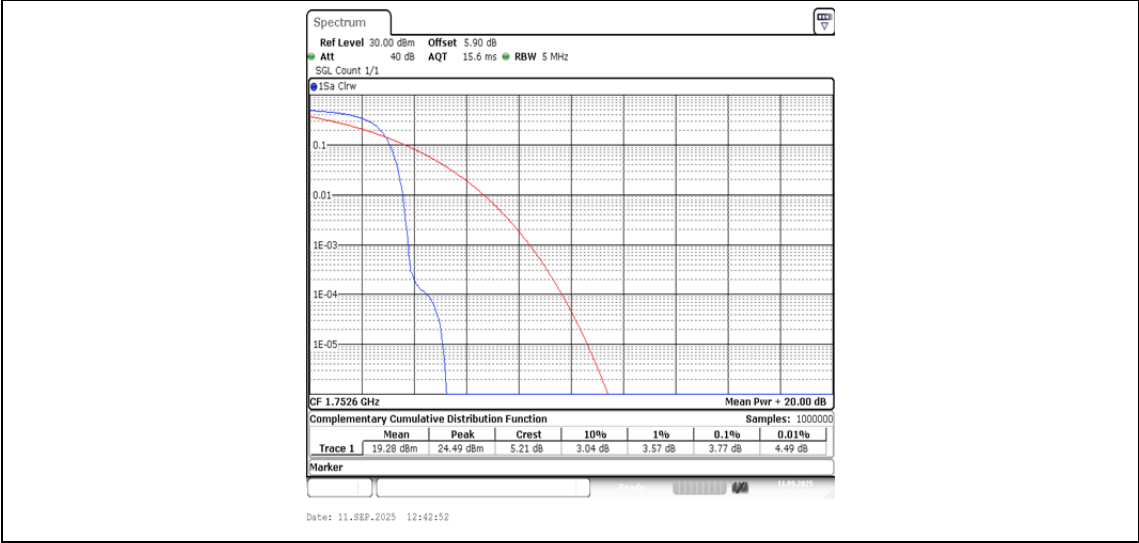
Band4-1513-1-PASS



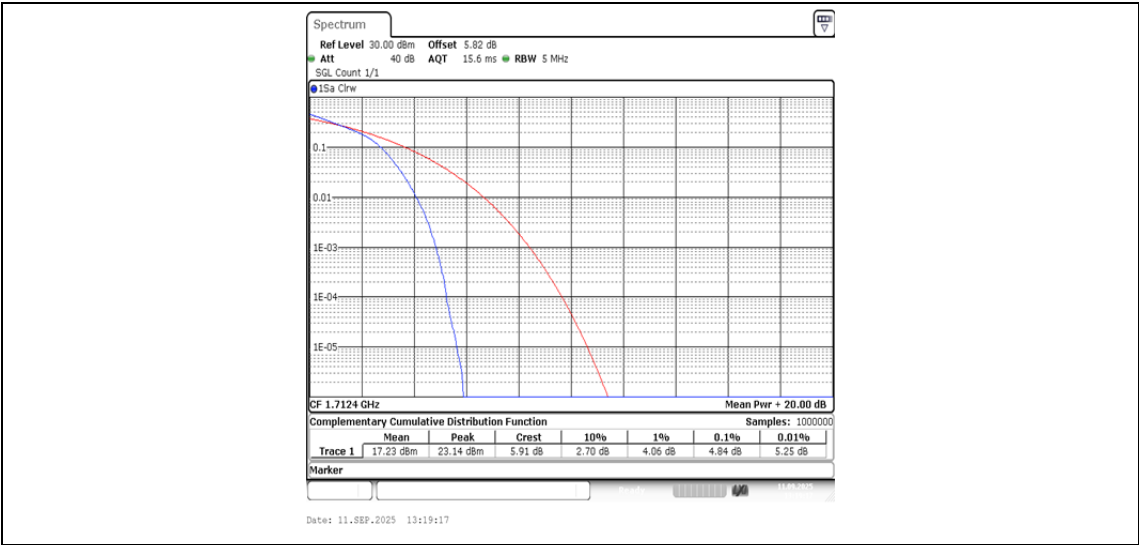
Band4-1513-2-PASS



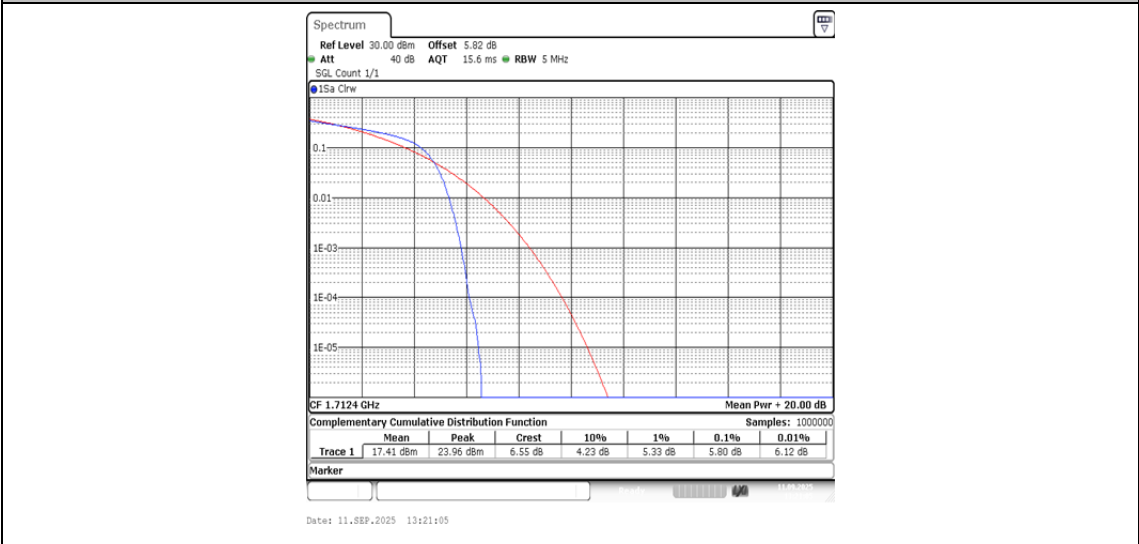
Band4-1513-3-PASS



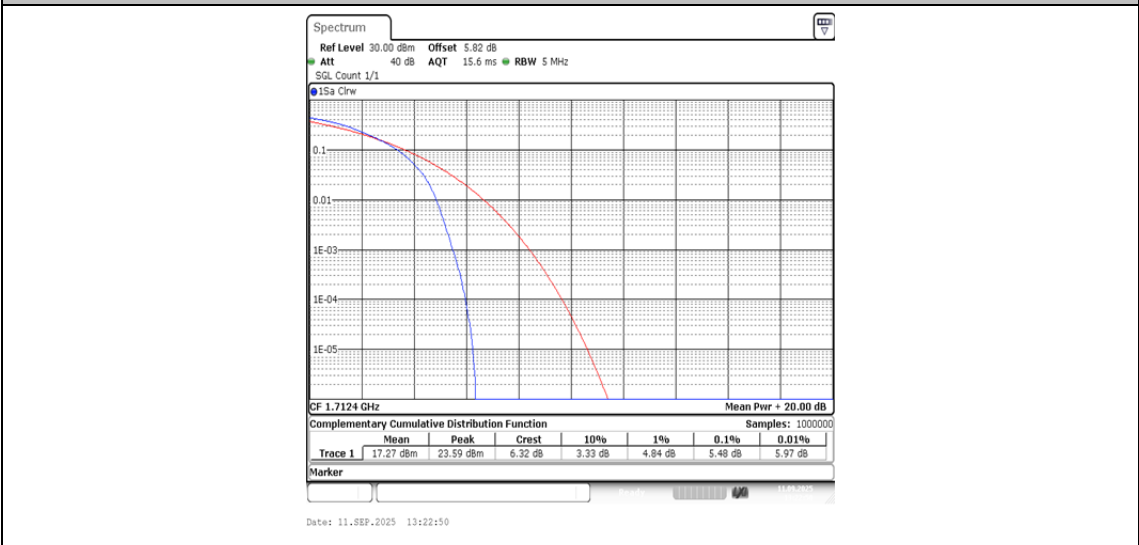
Band4-1513-4-PASS

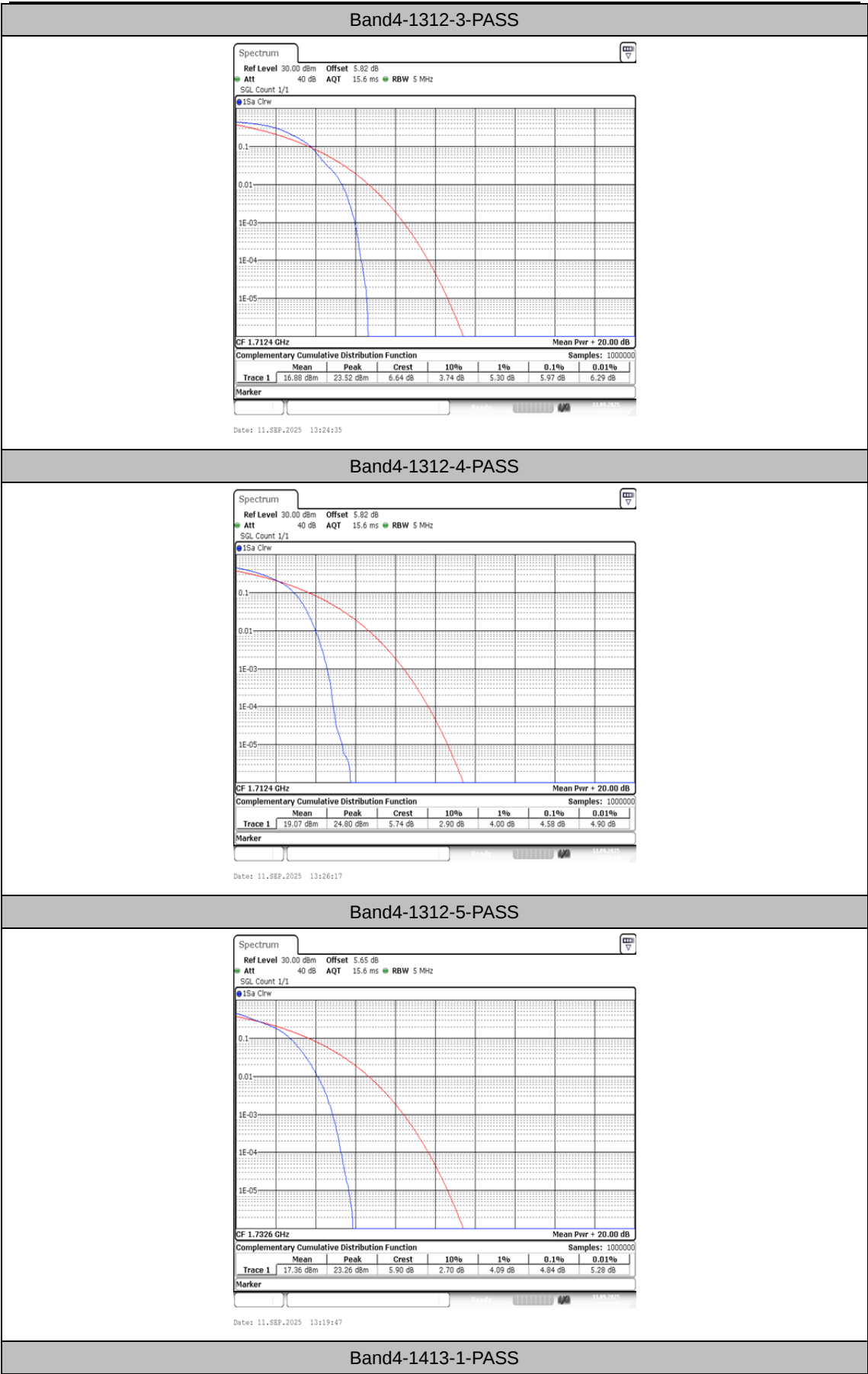


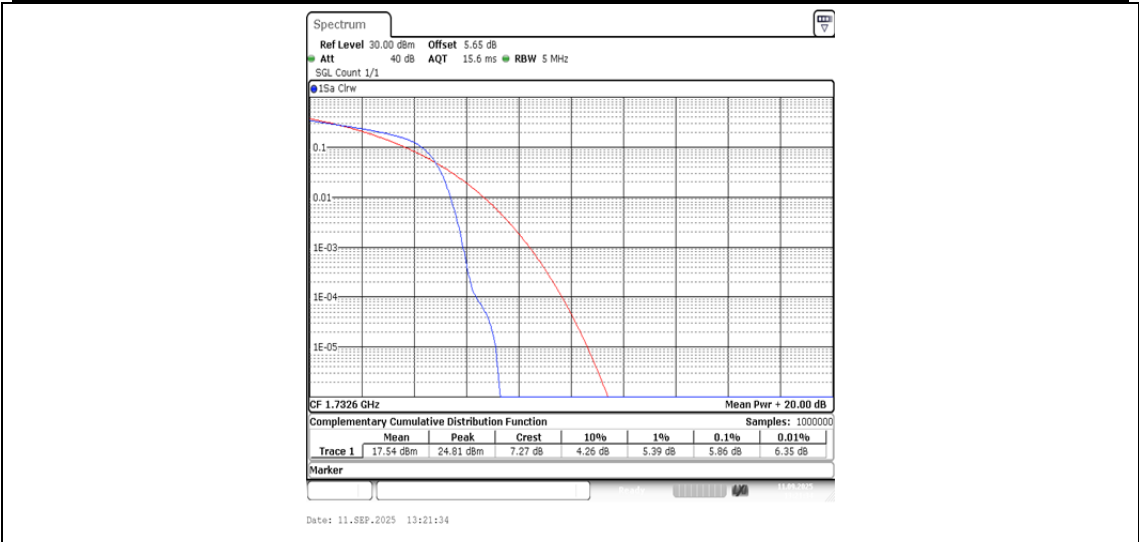
Band4-1312-1-PASS



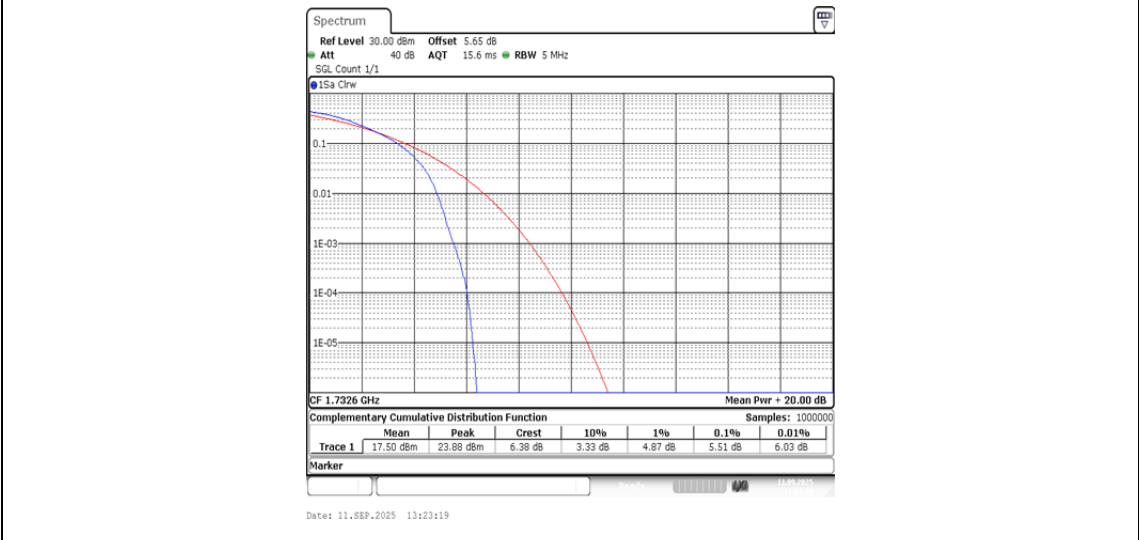
Band4-1312-2-PASS



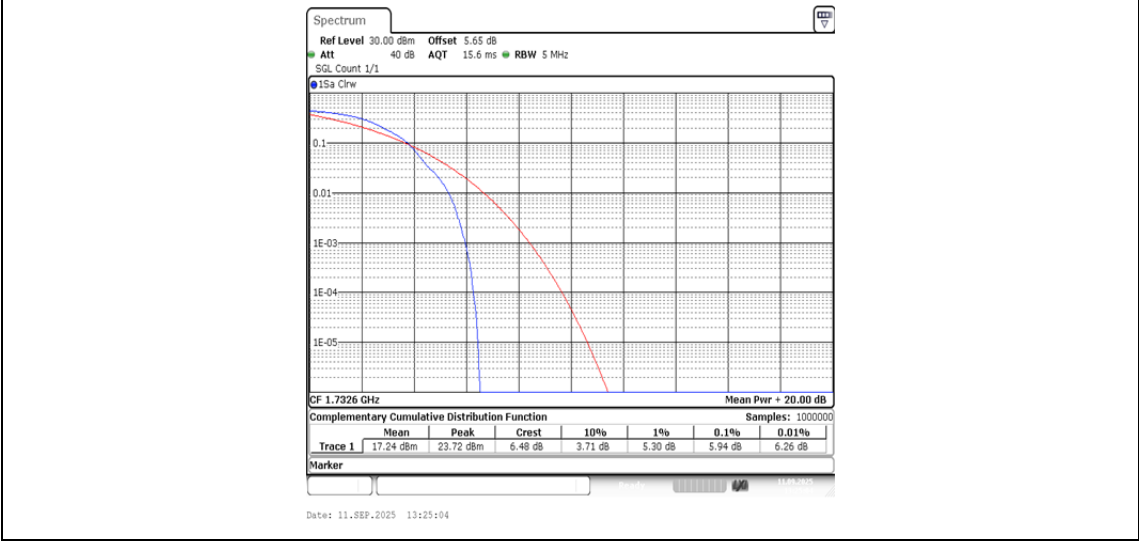




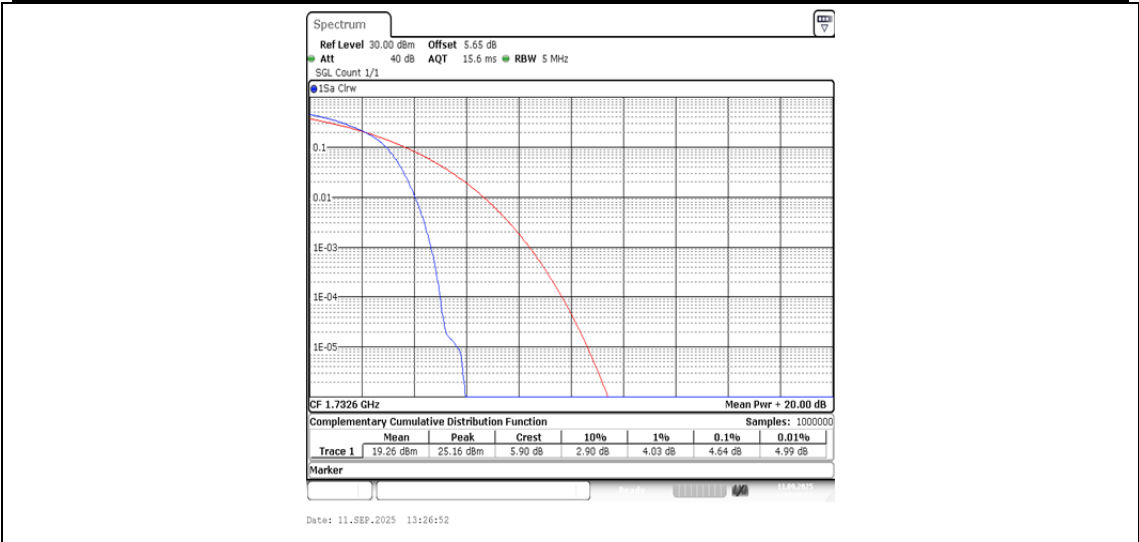
Band4-1413-2-PASS



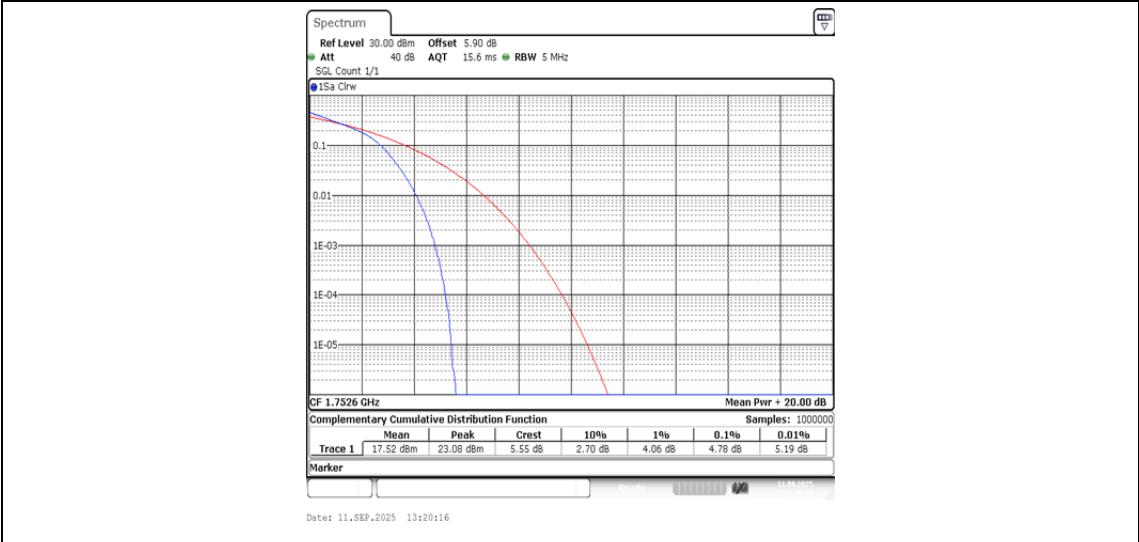
Band4-1413-3-PASS



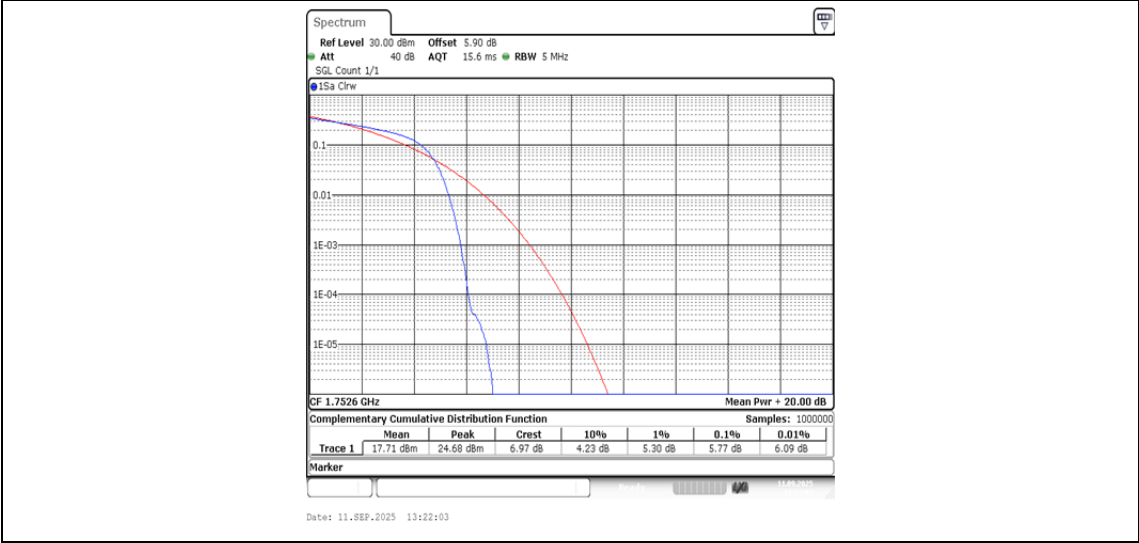
Band4-1413-4-PASS



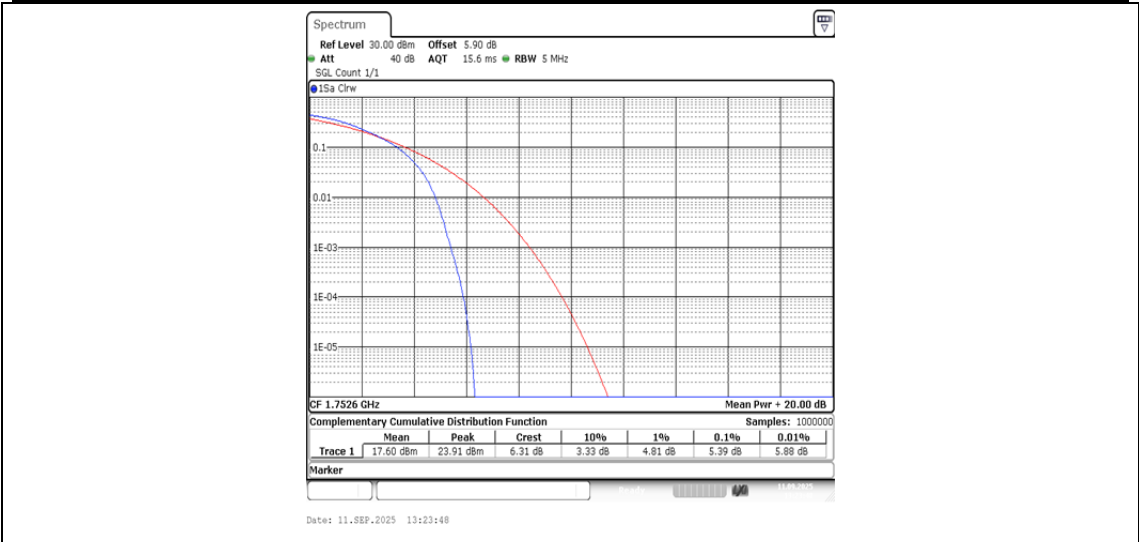
Band4-1413-5-PASS



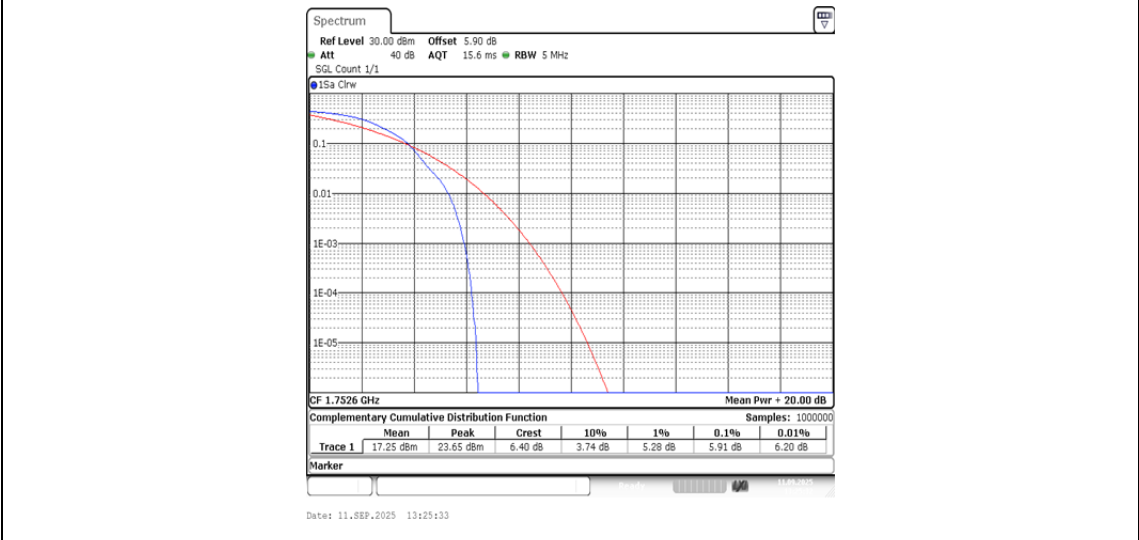
Band4-1513-1-PASS



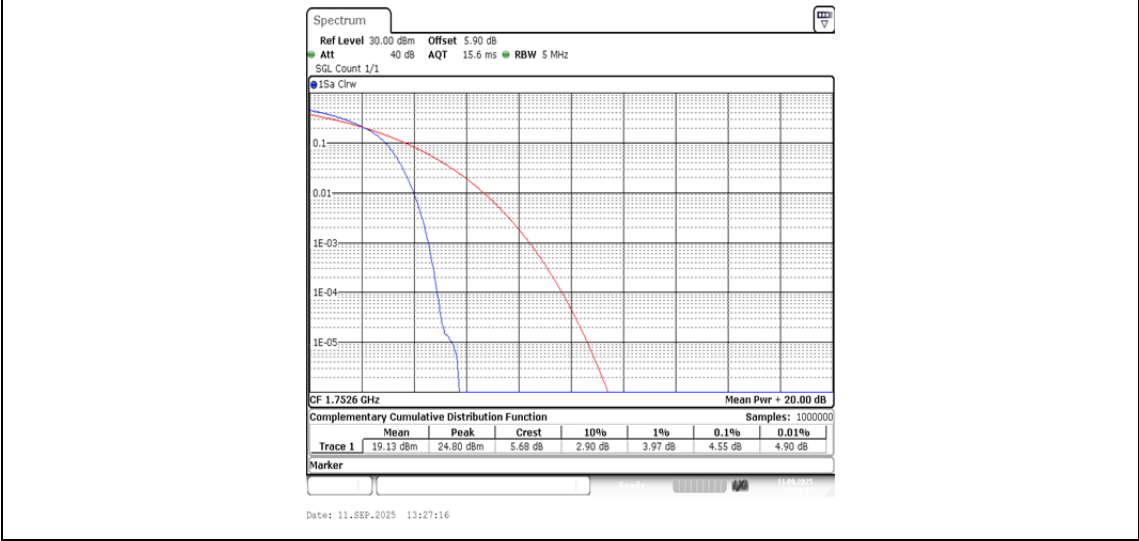
Band4-1513-2-PASS



Band4-1513-3-PASS



Band4-1513-4-PASS



Band4-1513-5-PASS

AppendixC:26dB Bandwidth andOccupied Bandwidth

Test Result

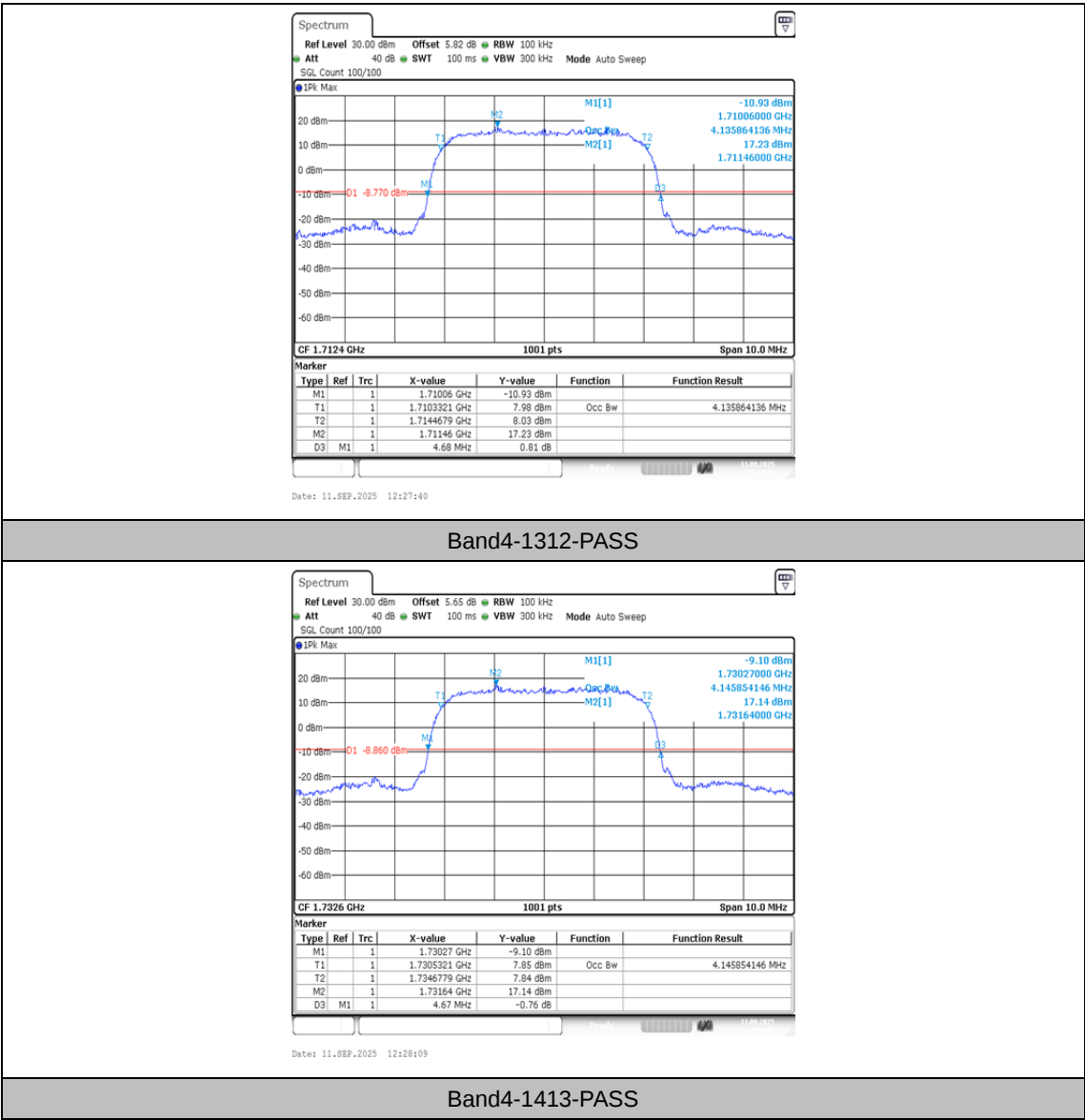
Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band4	1312	4.136	4.68	---	PASS
Band4	1413	4.146	4.67	---	PASS
Band4	1513	4.146	4.67	---	PASS

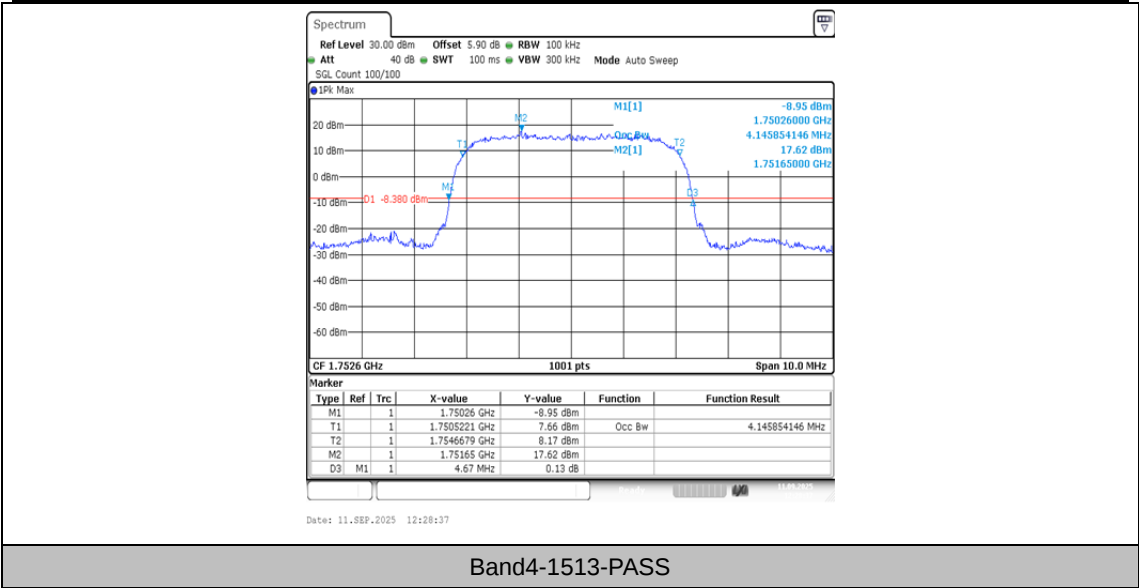
Band	Channel	SubTest	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band4	1312	1	4.146	4.68	---	PASS
Band4	1312	2	4.146	4.70	---	PASS
Band4	1312	3	4.156	4.70	---	PASS
Band4	1312	4	4.166	4.71	---	PASS
Band4	1413	1	4.136	4.69	---	PASS
Band4	1413	2	4.156	4.70	---	PASS
Band4	1413	3	4.156	4.72	---	PASS
Band4	1413	4	4.166	4.70	---	PASS
Band4	1513	1	4.146	4.67	---	PASS
Band4	1513	2	4.166	4.70	---	PASS
Band4	1513	3	4.146	4.70	---	PASS
Band4	1513	4	4.156	4.70	---	PASS

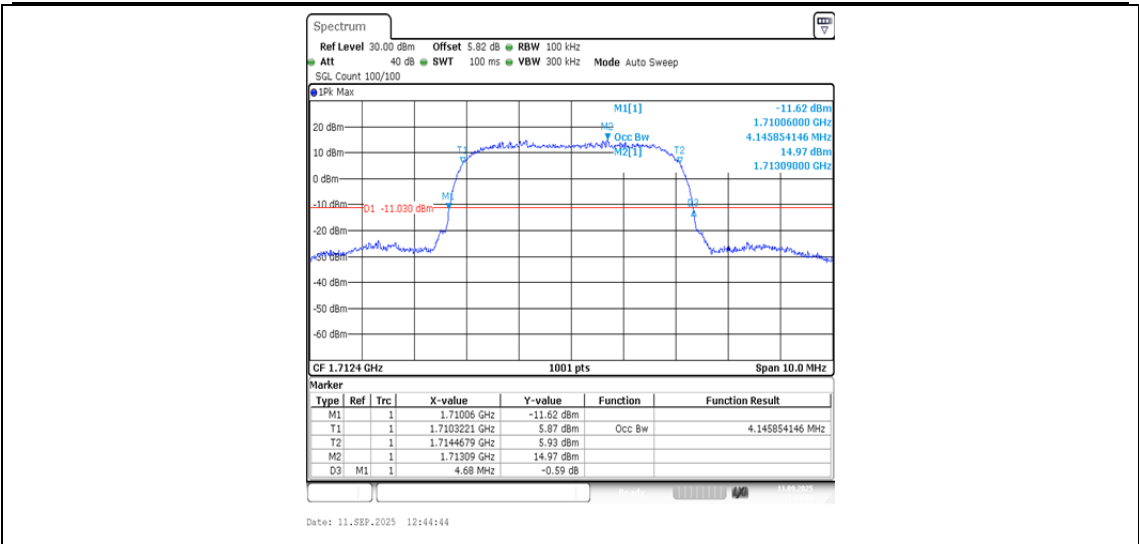
Band	Channel	SubTest	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band4	1312	1	4.156	4.67	---	PASS
Band4	1312	2	4.176	4.73	---	PASS
Band4	1312	3	4.176	4.70	---	PASS
Band4	1312	4	4.186	4.70	---	PASS
Band4	1312	5	4.146	4.69	---	PASS
Band4	1413	1	4.176	4.69	---	PASS
Band4	1413	2	4.186	4.72	---	PASS
Band4	1413	3	4.166	4.70	---	PASS
Band4	1413	4	4.176	4.72	---	PASS
Band4	1413	5	4.156	4.70	---	PASS

Band4	1513	1	4.156	4.69	---	PASS
Band4	1513	2	4.186	4.71	---	PASS
Band4	1513	3	4.176	4.70	---	PASS
Band4	1513	4	4.176	4.71	---	PASS
Band4	1513	5	4.156	4.68	---	PASS

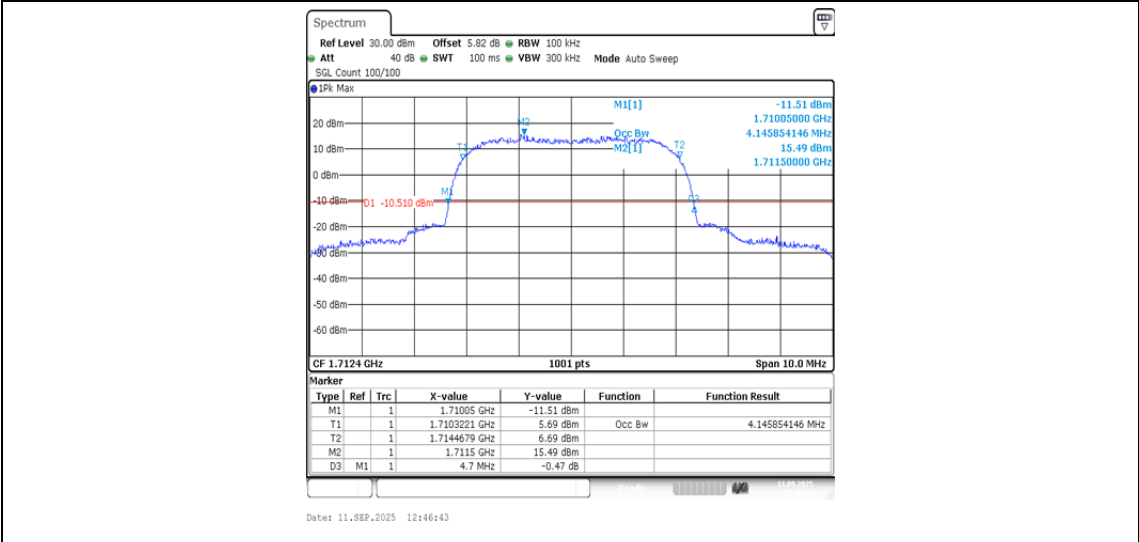
Test Graphs



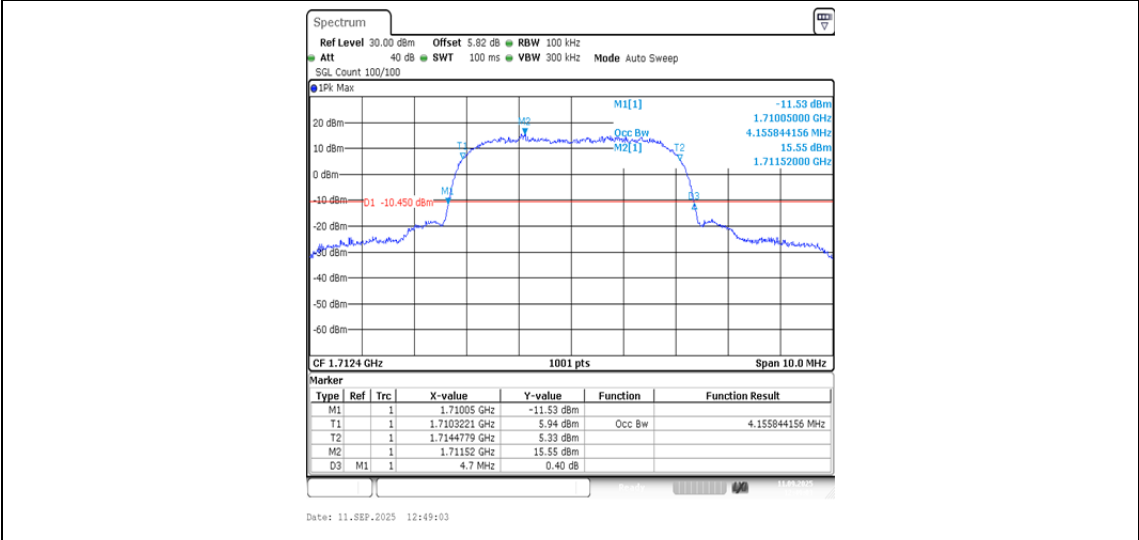




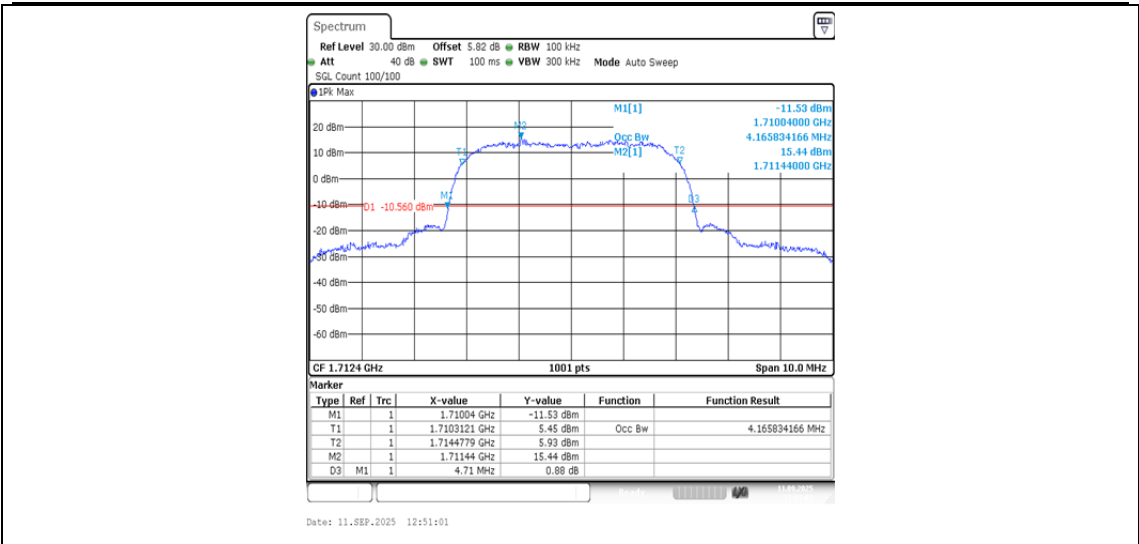
Band4-1312-1-PASS



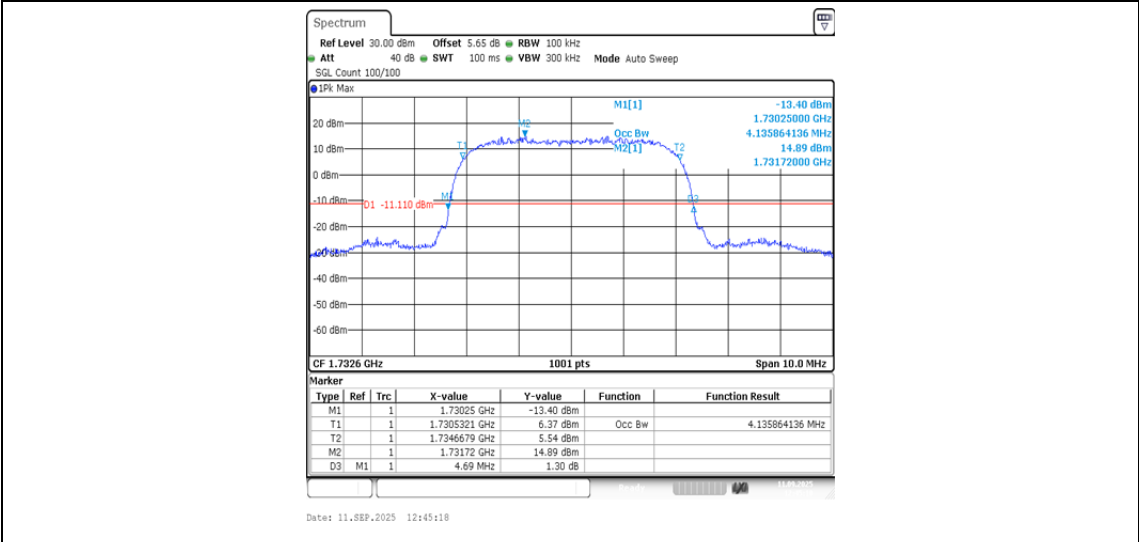
Band4-1312-2-PASS



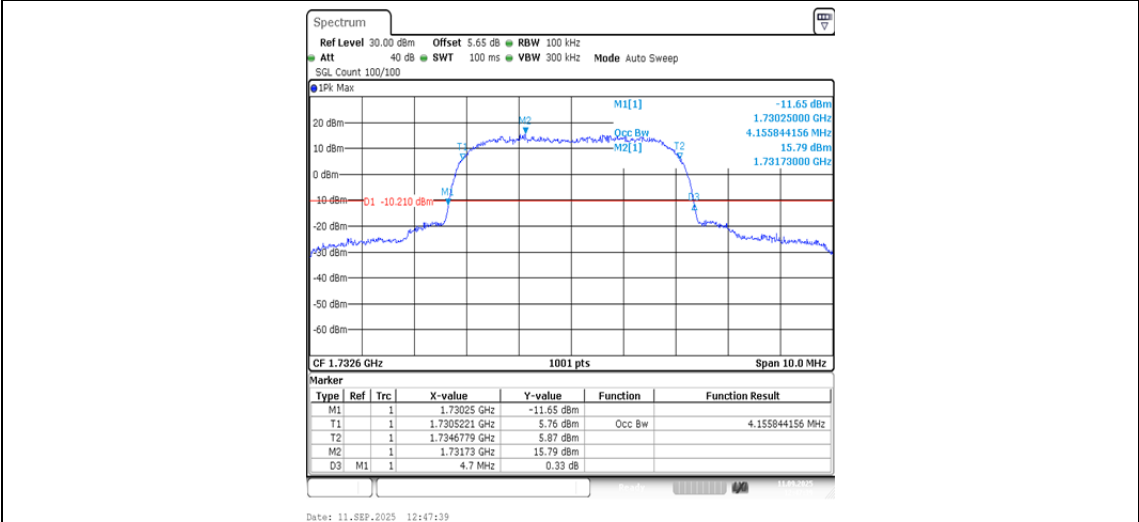
Band4-1312-3-PASS



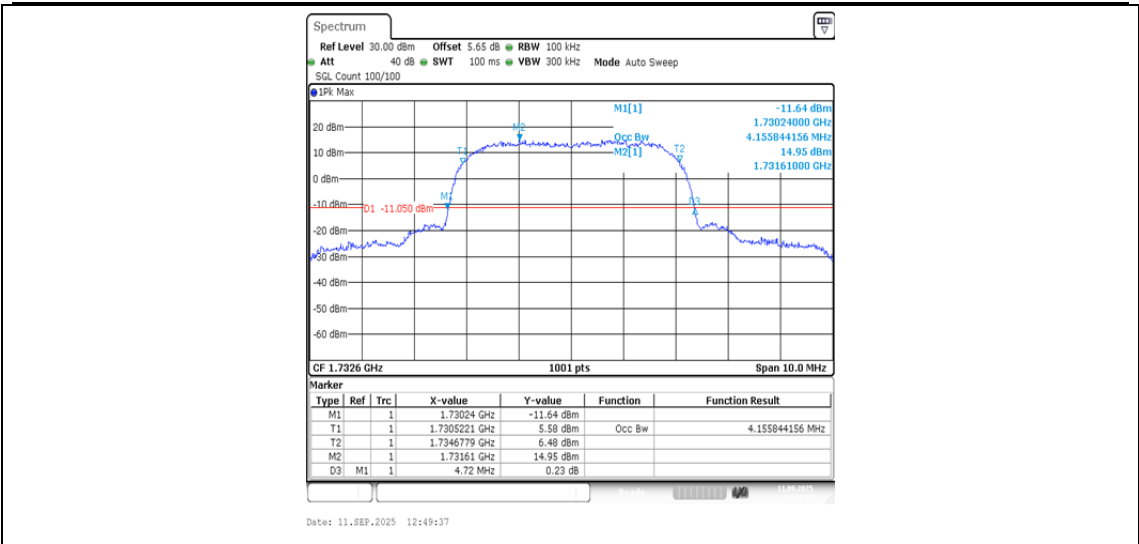
Band4-1312-4-PASS



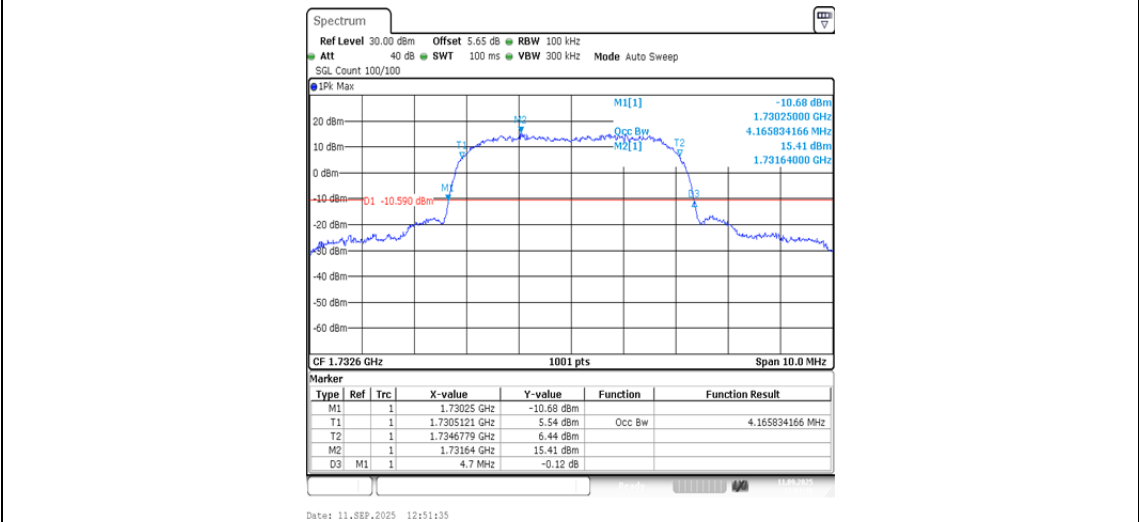
Band4-1413-1-PASS



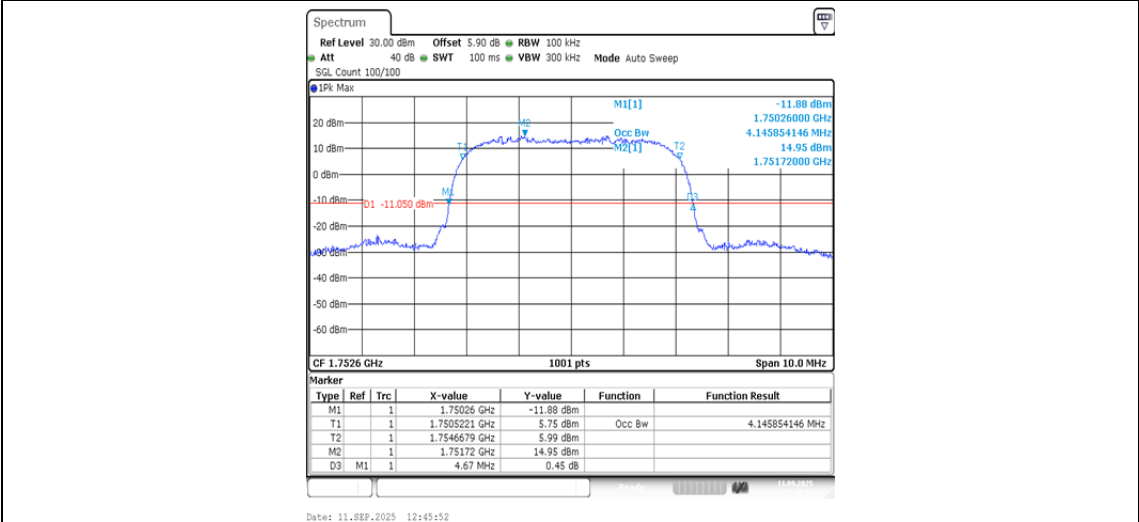
Band4-1413-2-PASS



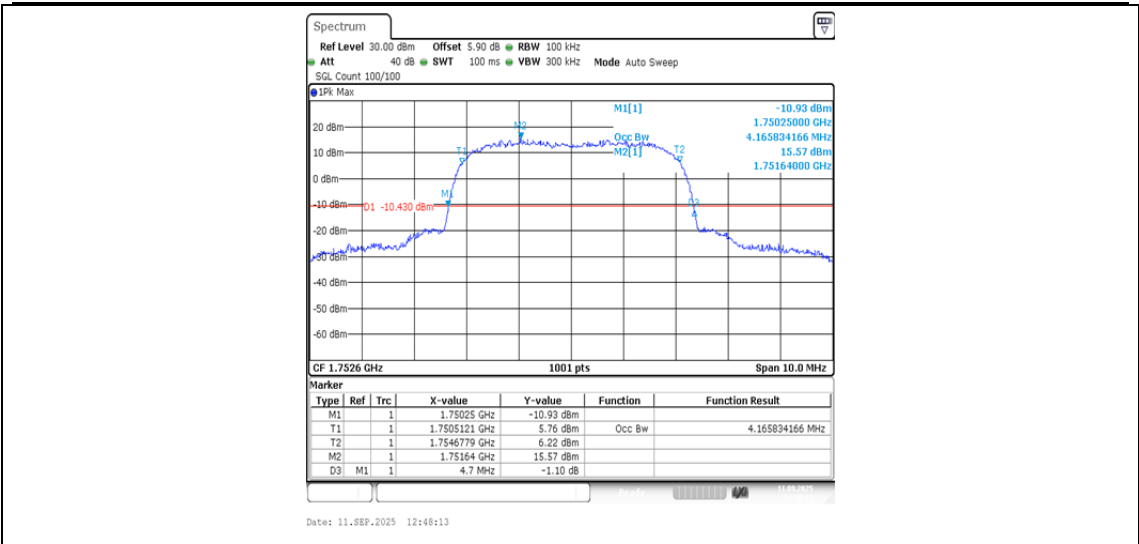
Band4-1413-3-PASS



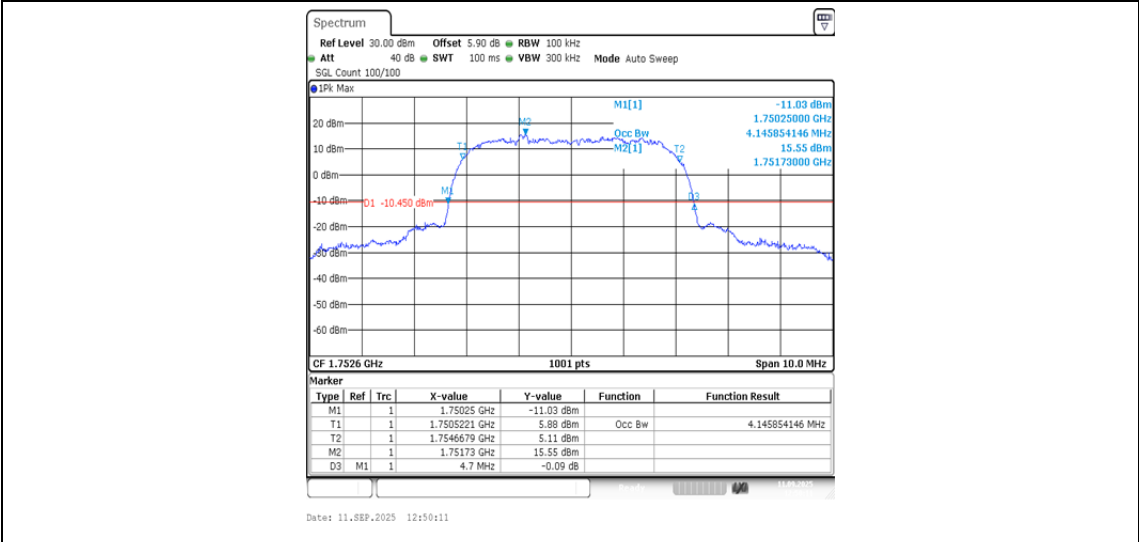
Band4-1413-4-PASS



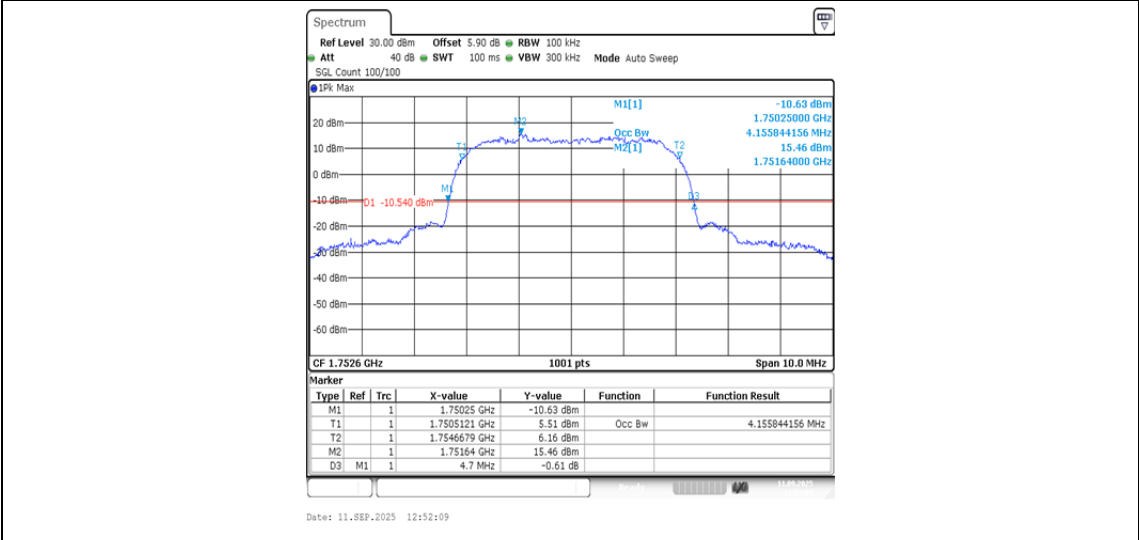
Band4-1513-1-PASS



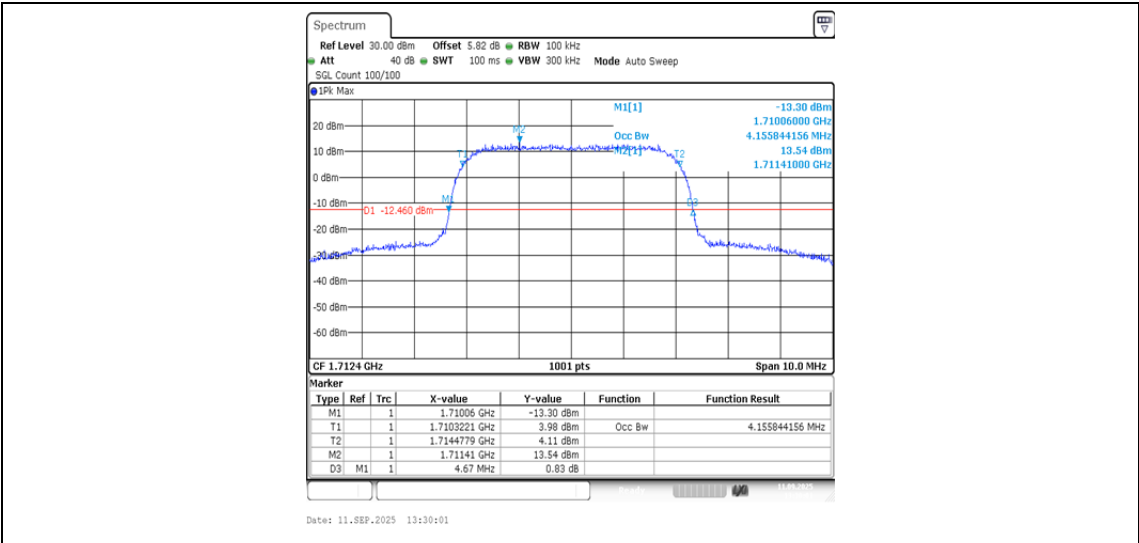
Band4-1513-2-PASS



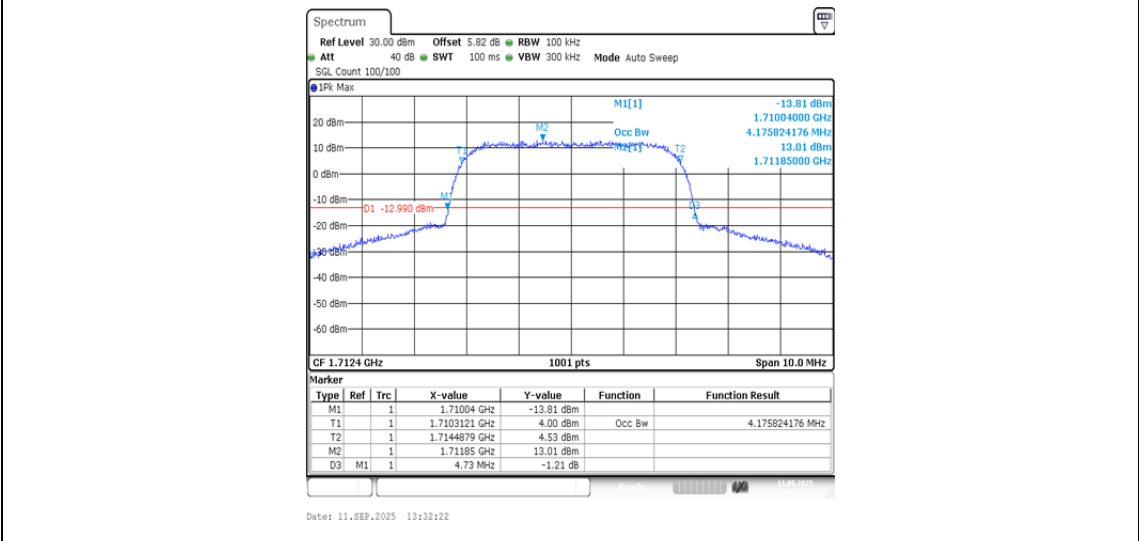
Band4-1513-3-PASS



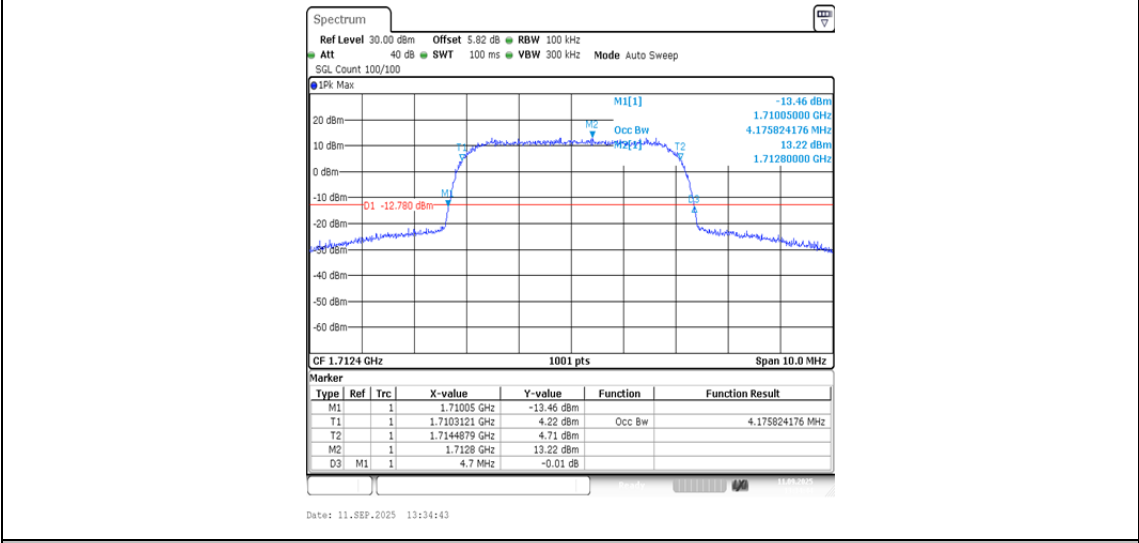
Band4-1513-4-PASS



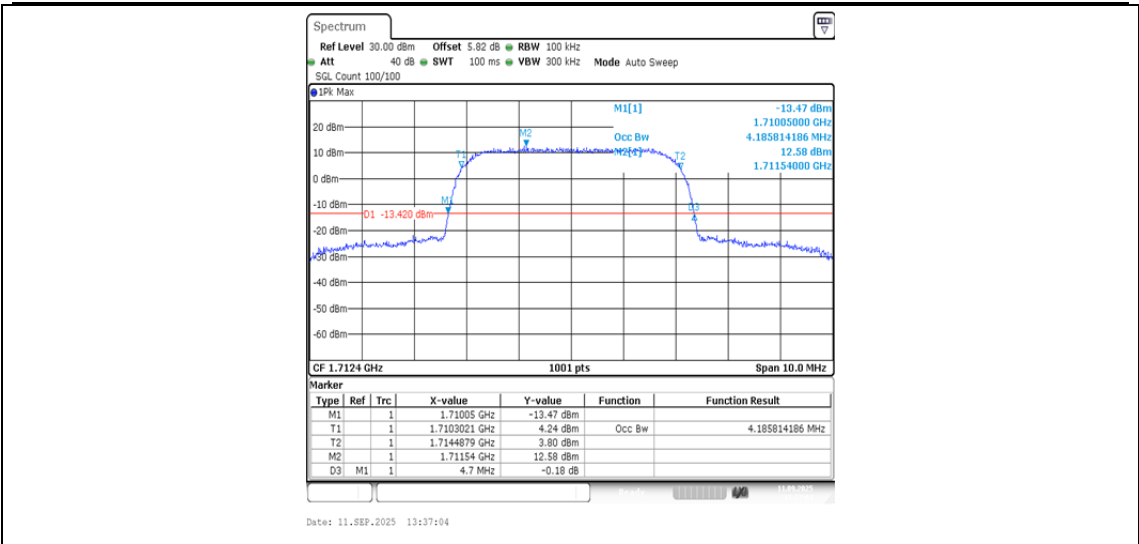
Band4-1312-1-PASS



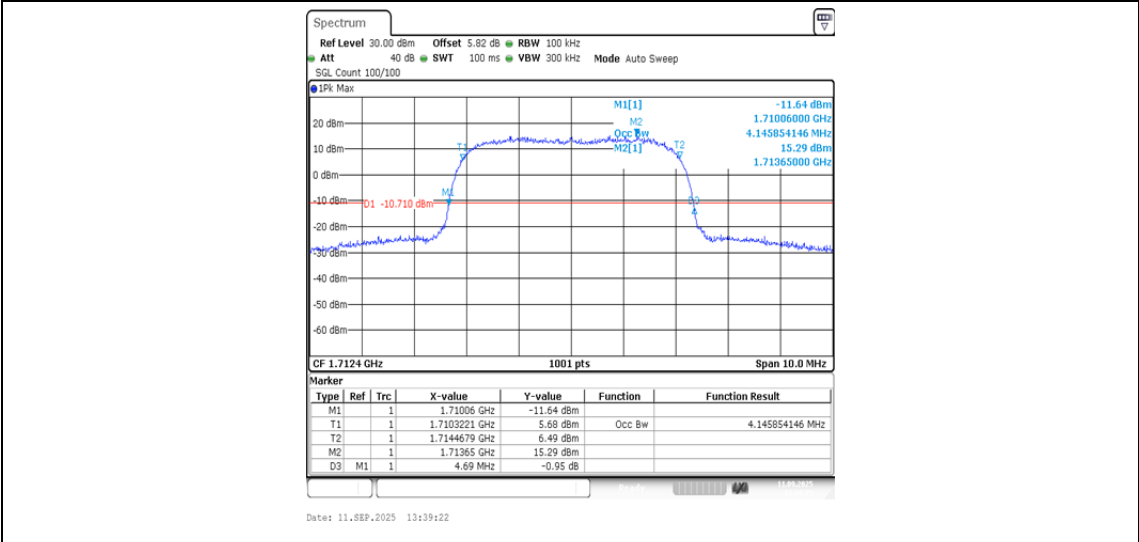
Band4-1312-2-PASS



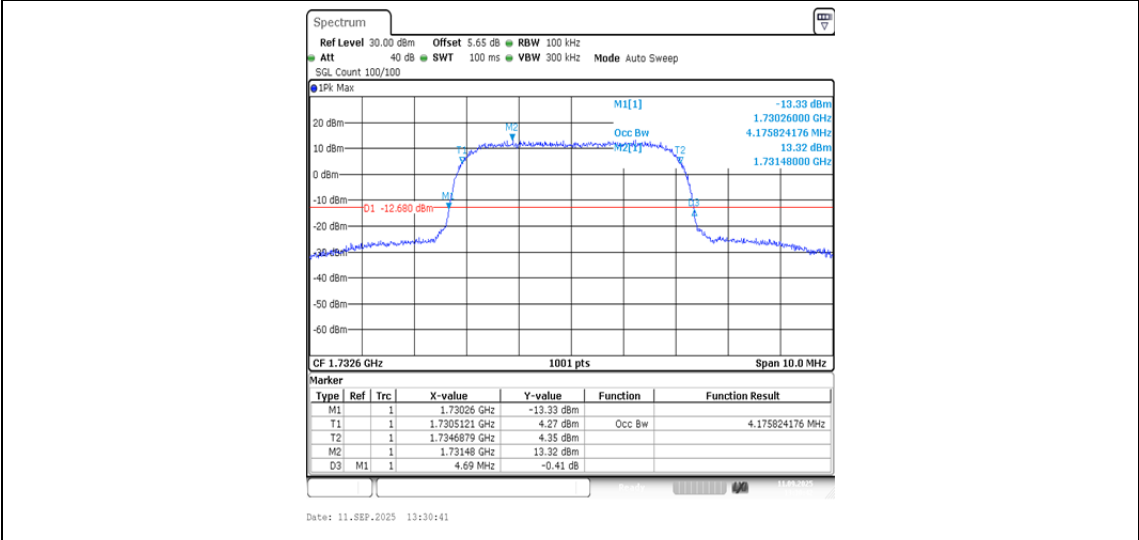
Band4-1312-3-PASS



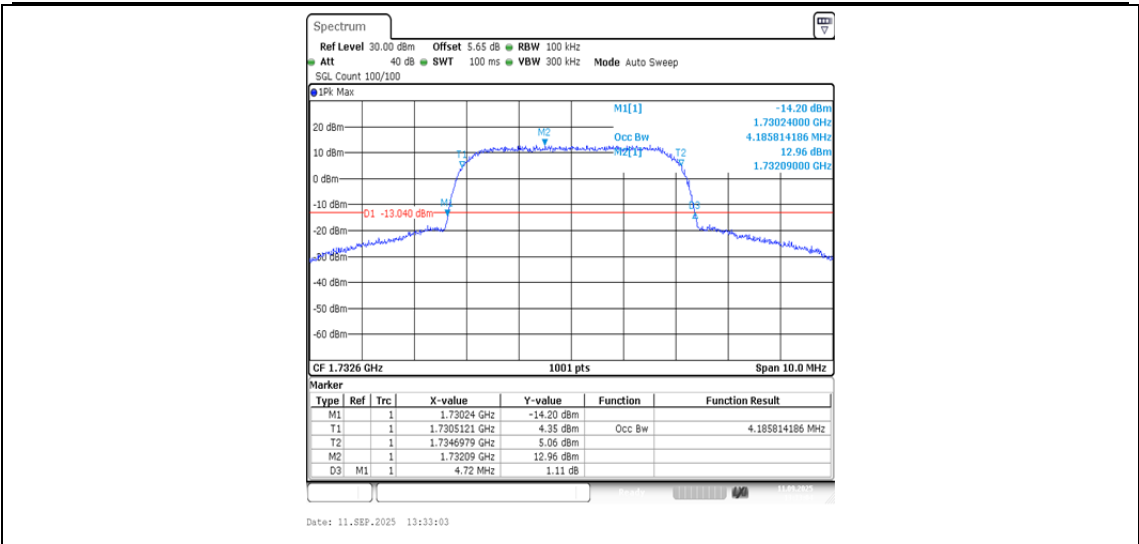
Band4-1312-4-PASS



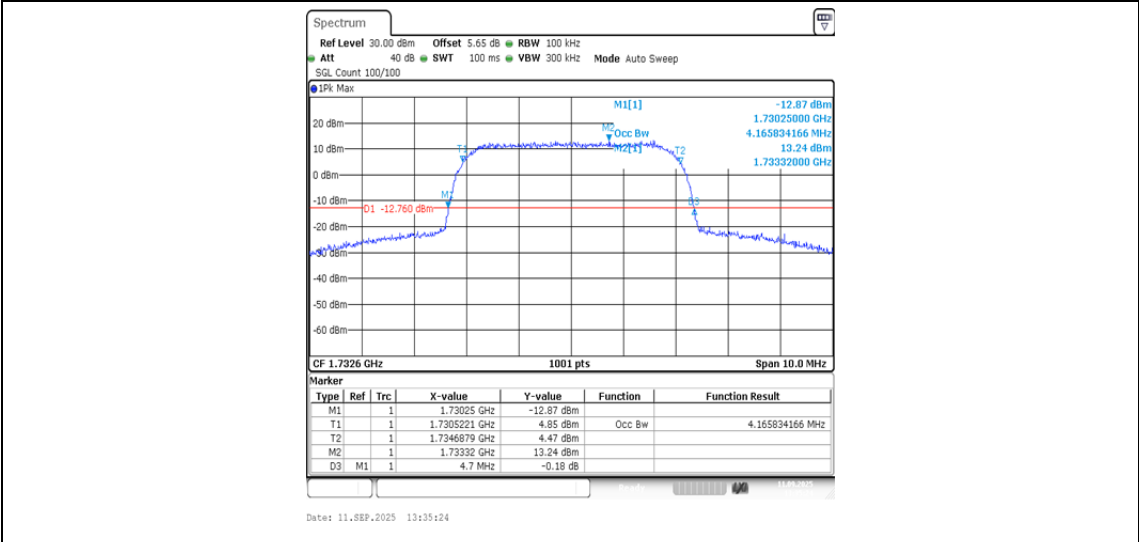
Band4-1312-5-PASS



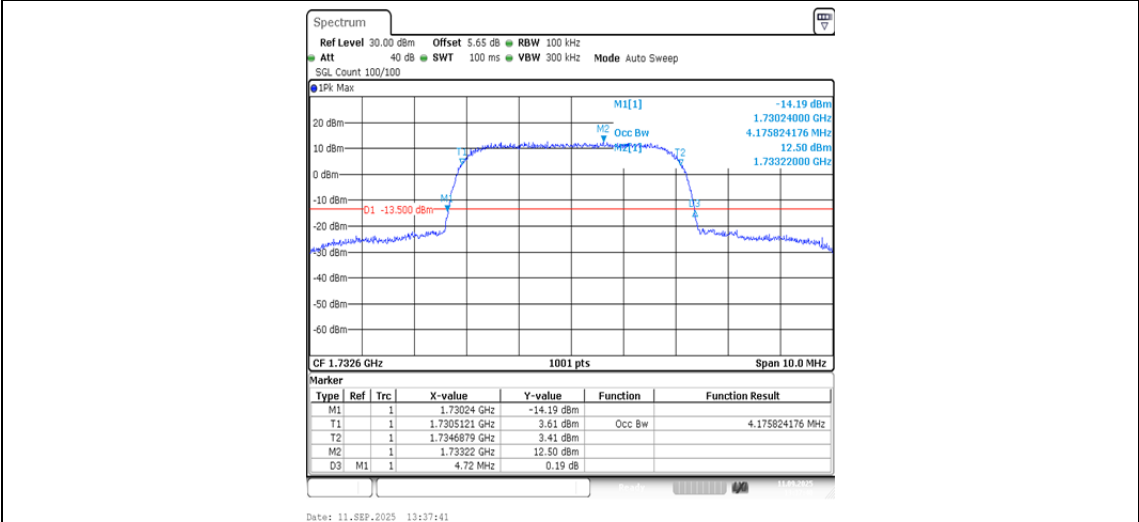
Band4-1413-1-PASS



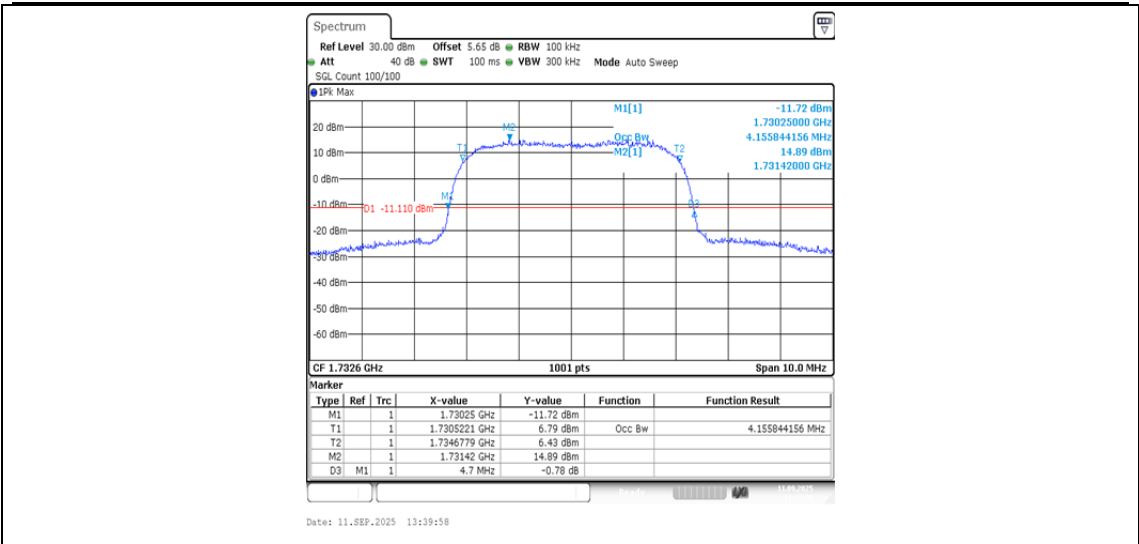
Band4-1413-2-PASS



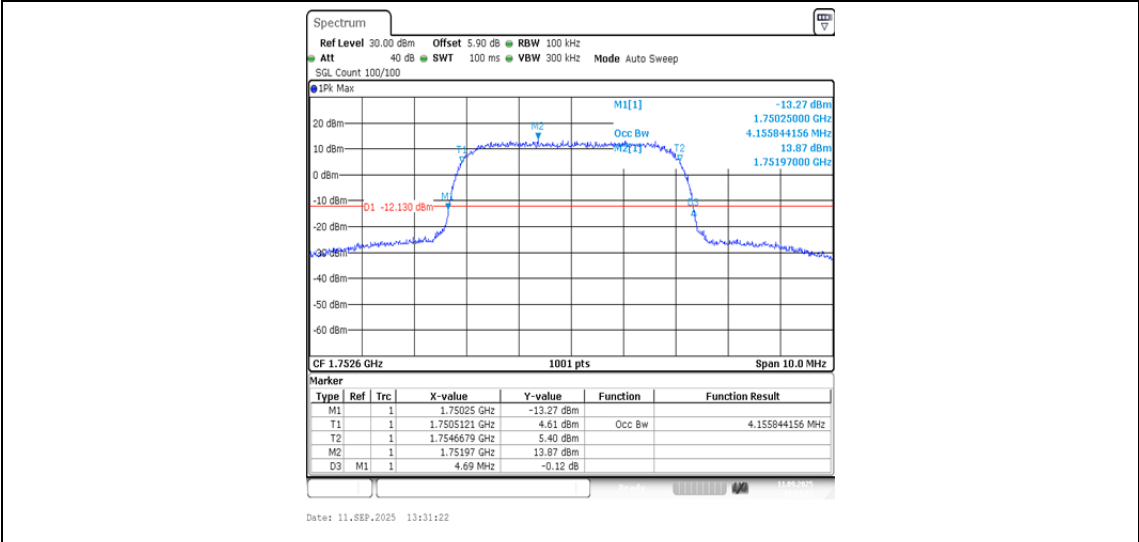
Band4-1413-3-PASS



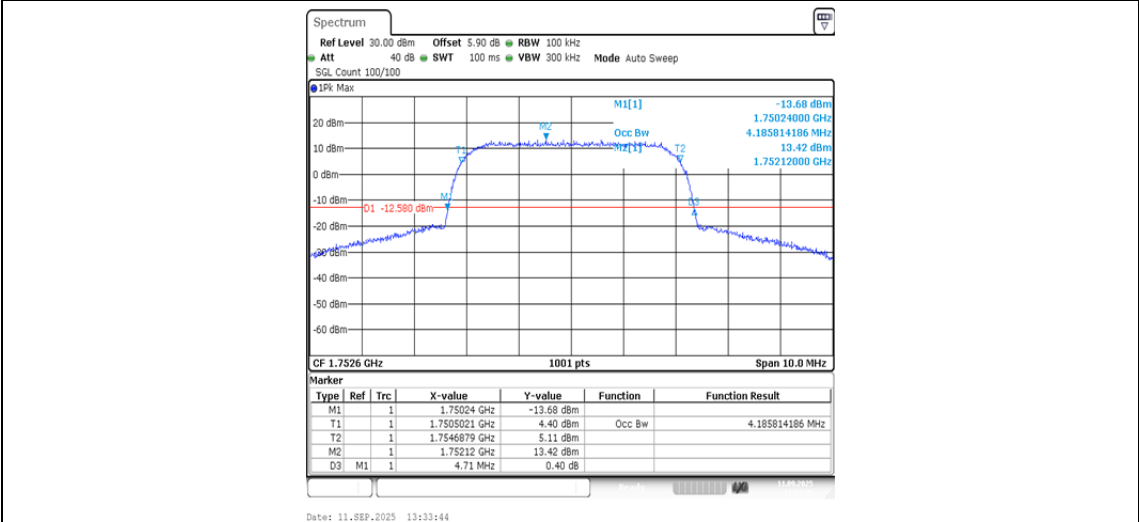
Band4-1413-4-PASS



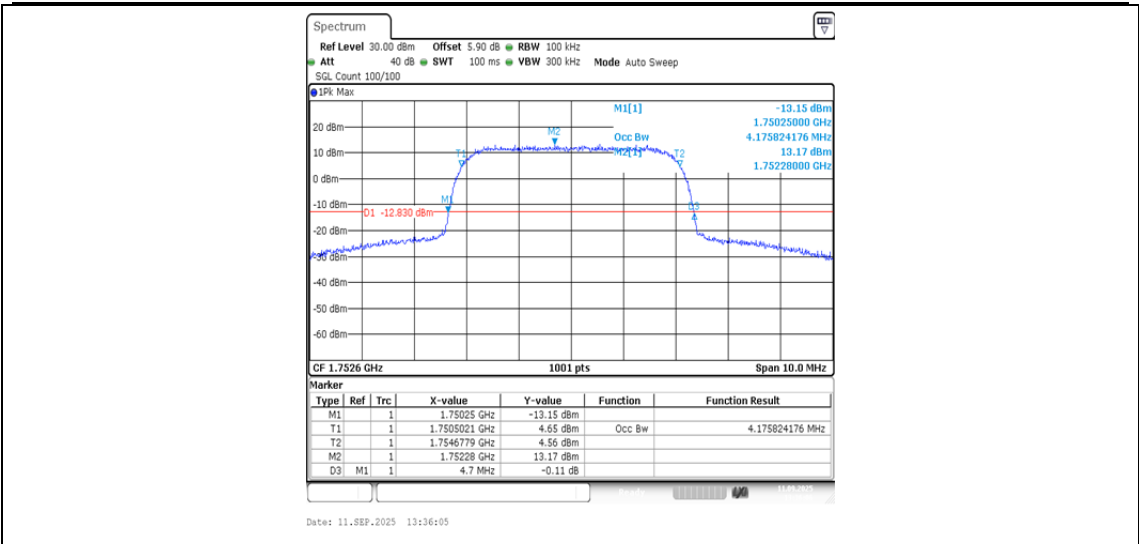
Band4-1413-5-PASS



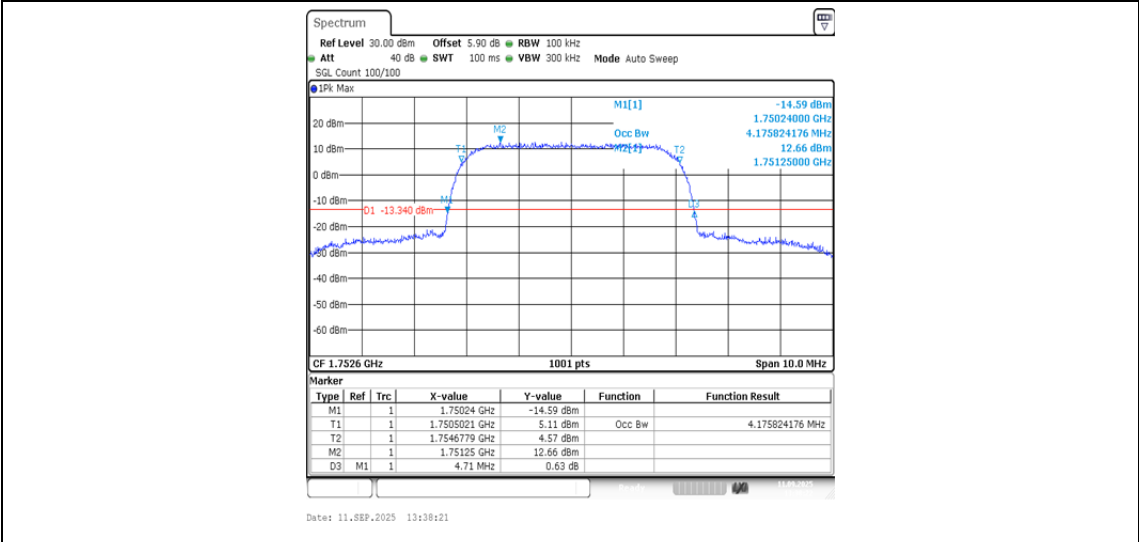
Band4-1513-1-PASS



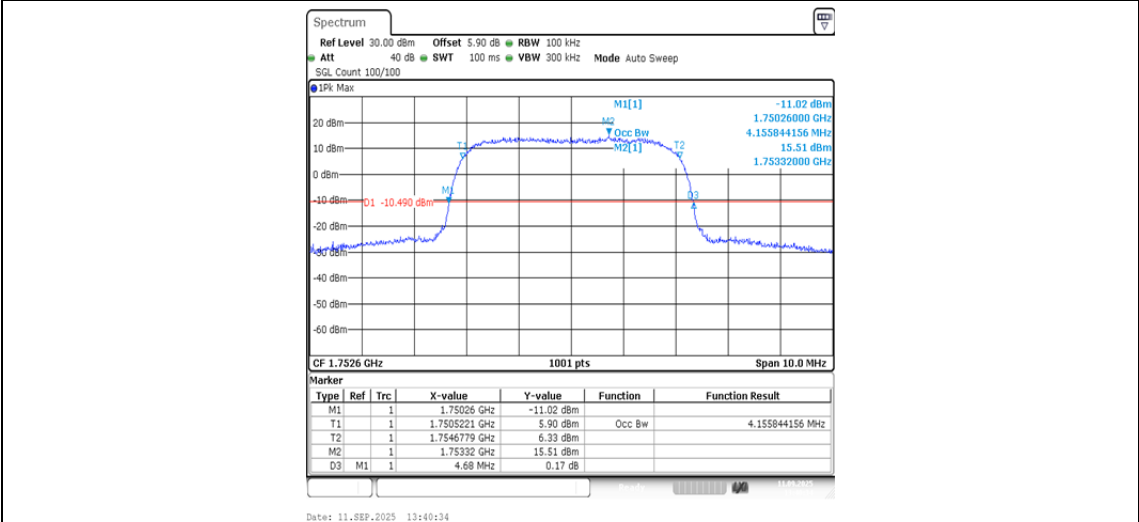
Band4-1513-2-PASS



Band4-1513-3-PASS



Band4-1513-4-PASS



Band4-1513-5-PASS

AppendixD:Band Edge

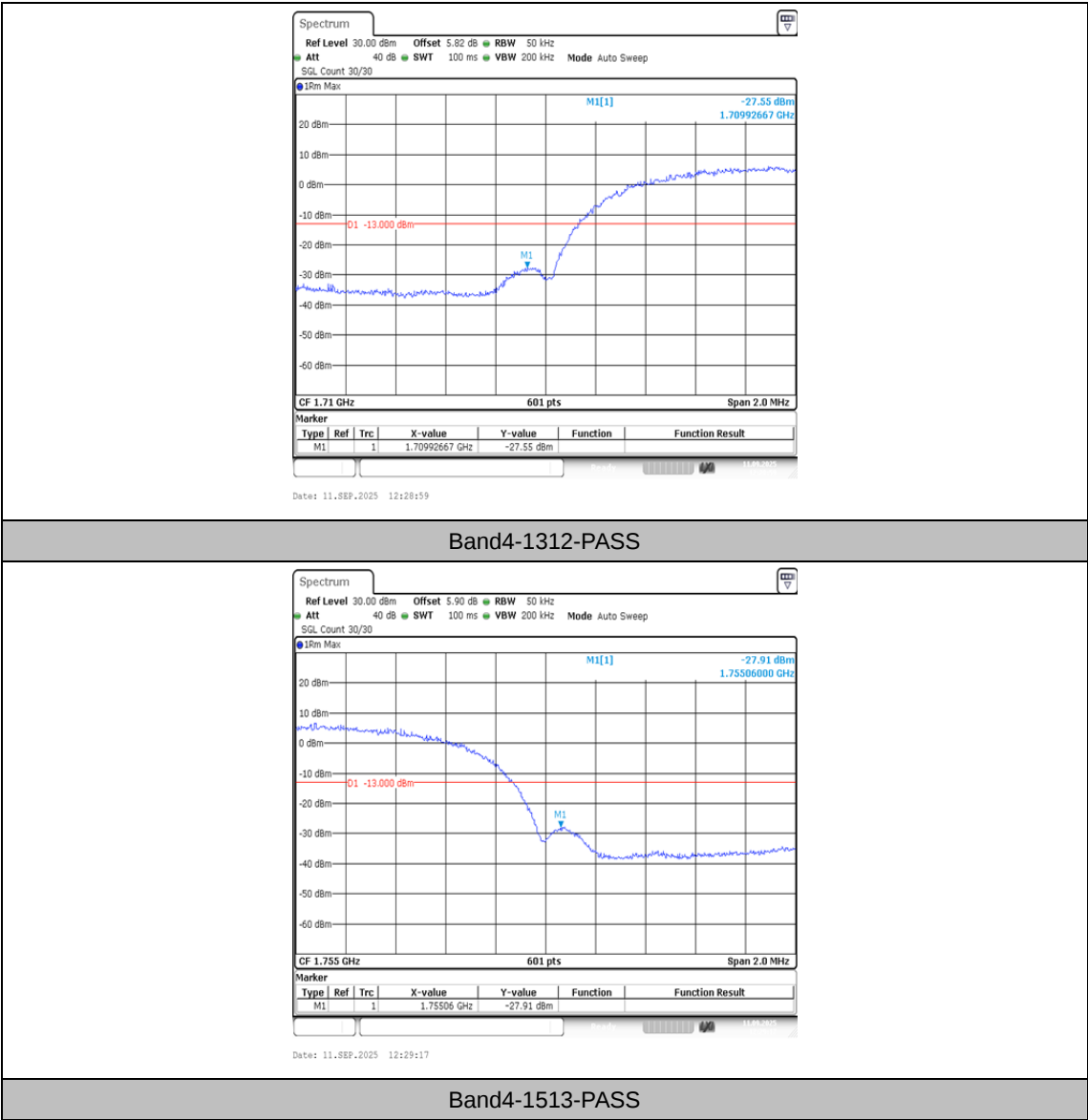
Test Result

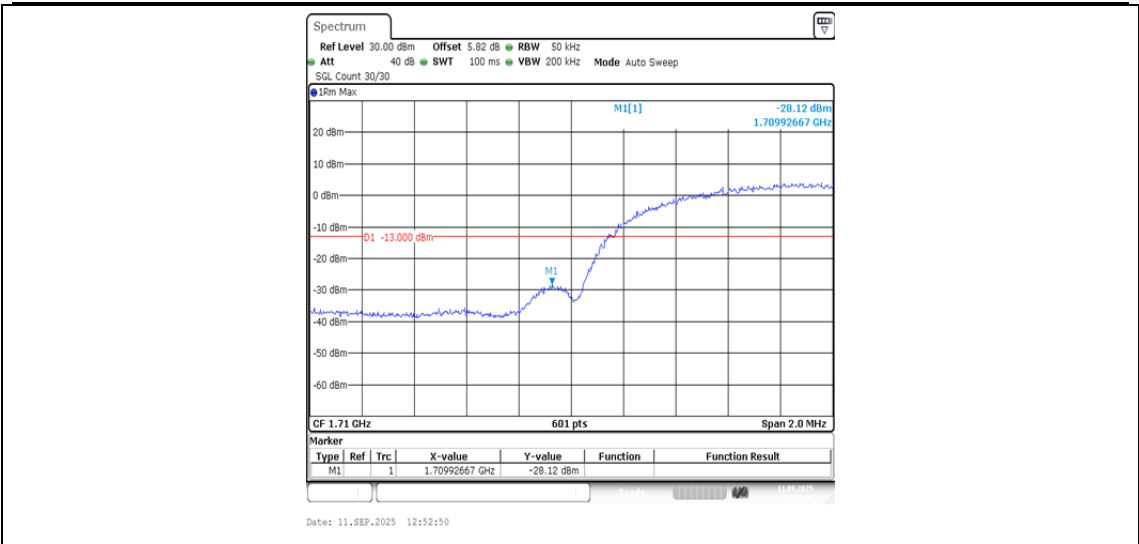
Band	Channel	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band4	1312	1709.93	-27.55	-13	PASS
Band4	1513	1755.06	-27.91	-13	PASS

Band	Channel	SubTest	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band4	1312	1	1709.93	-28.12	-13	PASS
Band4	1312	2	1709.75	-26.93	-13	PASS
Band4	1312	3	1709.75	-25.80	-13	PASS
Band4	1312	4	1709.78	-25.68	-13	PASS
Band4	1513	1	1755.06	-28.80	-13	PASS
Band4	1513	2	1755.32	-28.18	-13	PASS
Band4	1513	3	1755.28	-26.57	-13	PASS
Band4	1513	4	1755.18	-26.96	-13	PASS

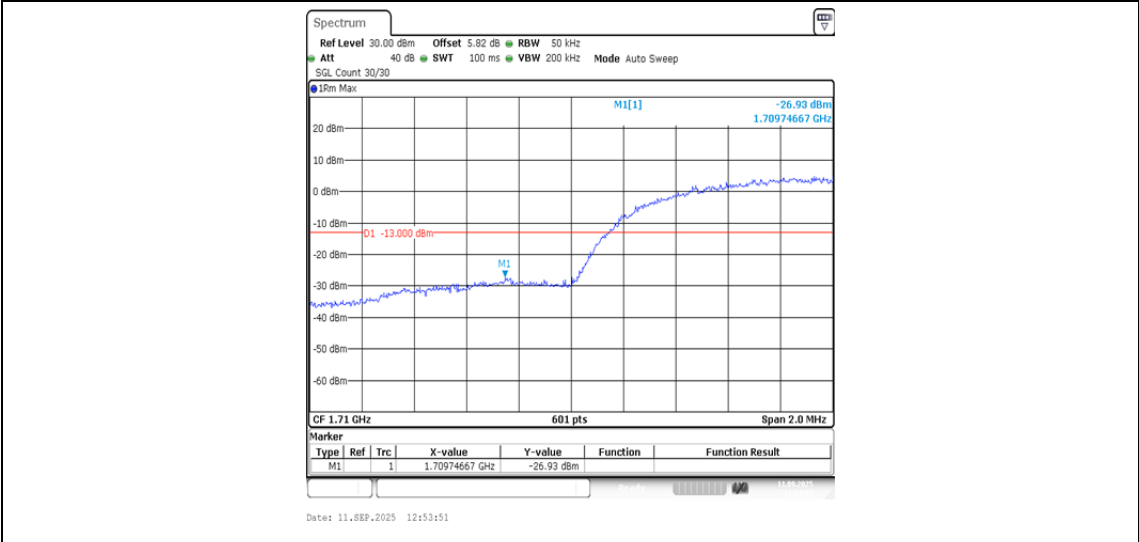
Band	Channel	SubTest	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band4	1312	1	1709.96	-30.02	-13	PASS
Band4	1312	2	1709.75	-29.03	-13	PASS
Band4	1312	3	1709.92	-30.55	-13	PASS
Band4	1312	4	1709.69	-30.71	-13	PASS
Band4	1312	5	1709.95	-29.64	-13	PASS
Band4	1513	1	1755.08	-31.61	-13	PASS
Band4	1513	2	1755.20	-28.40	-13	PASS
Band4	1513	3	1755.09	-30.71	-13	PASS
Band4	1513	4	1755.25	-31.08	-13	PASS
Band4	1513	5	1755.06	-30.33	-13	PASS

Test Graphs

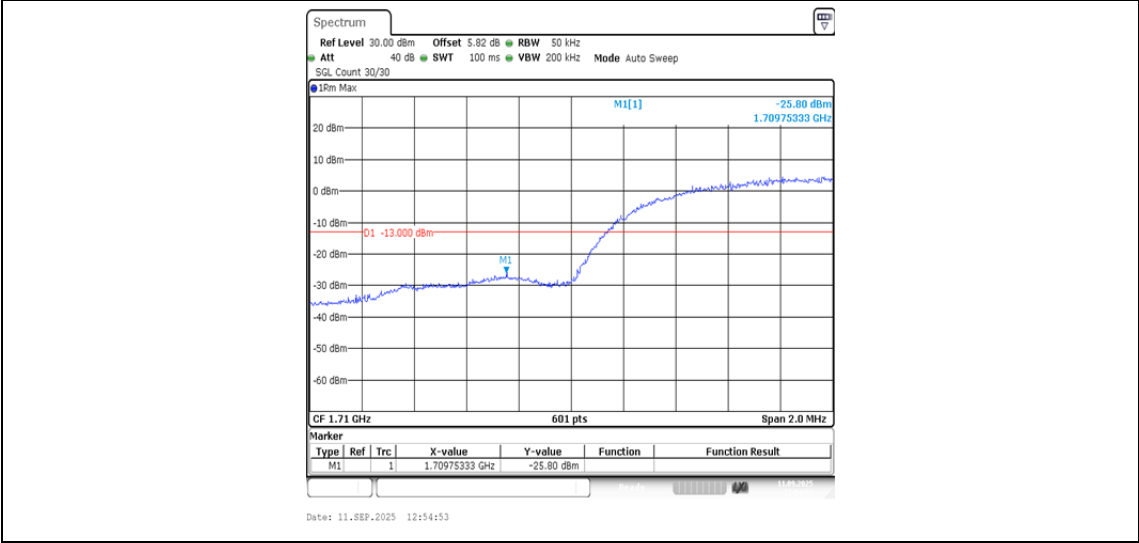




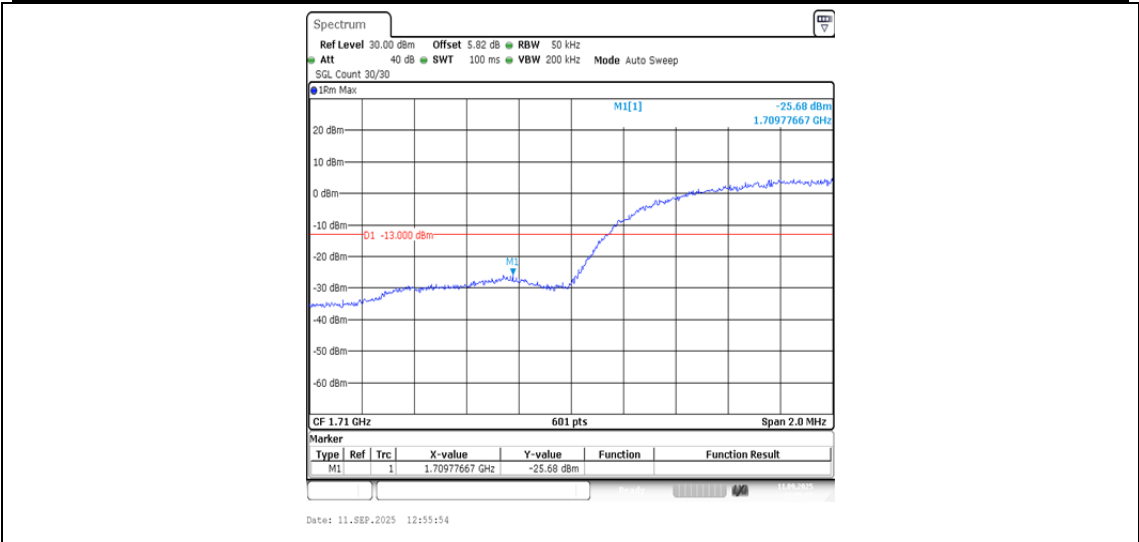
Band4-1312-1-PASS



Band4-1312-2-PASS



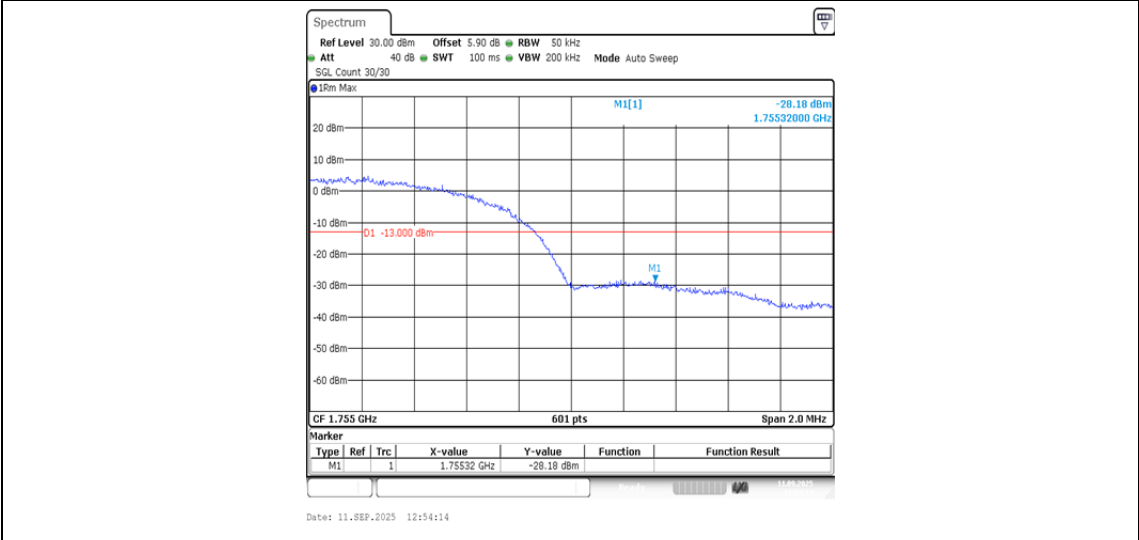
Band4-1312-3-PASS



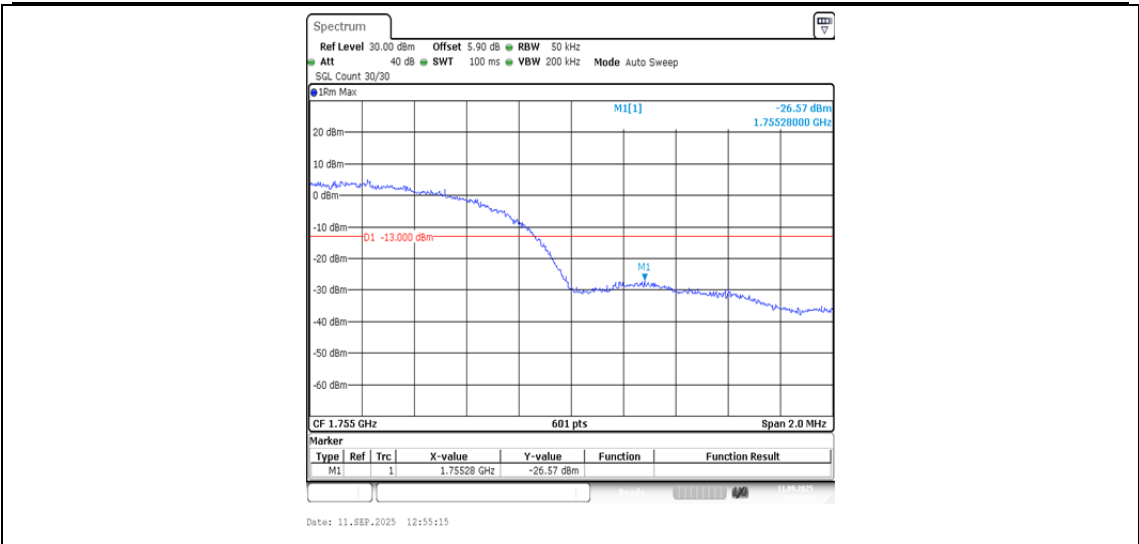
Band4-1312-4-PASS



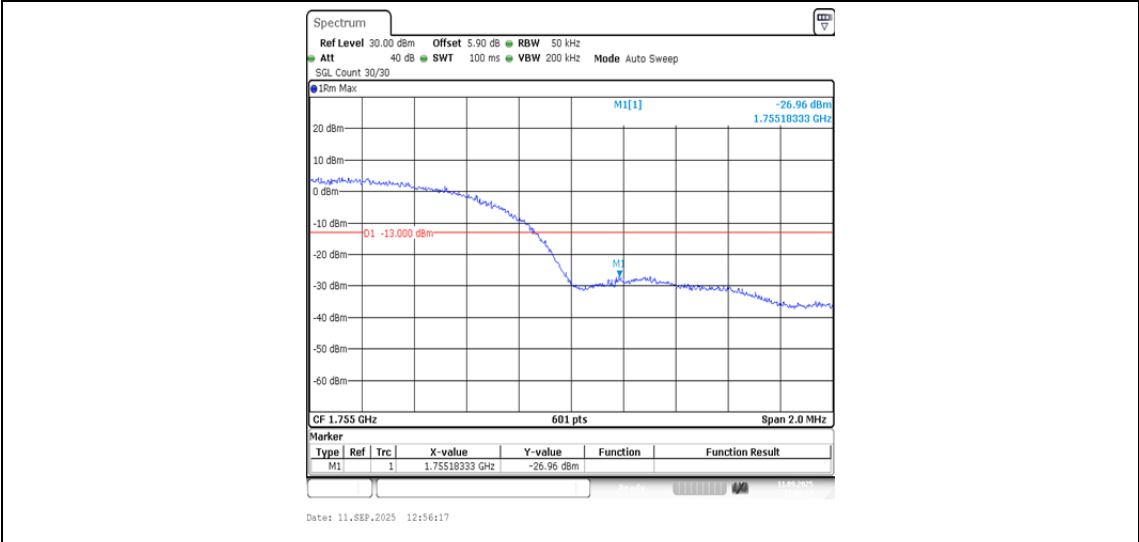
Band4-1513-1-PASS



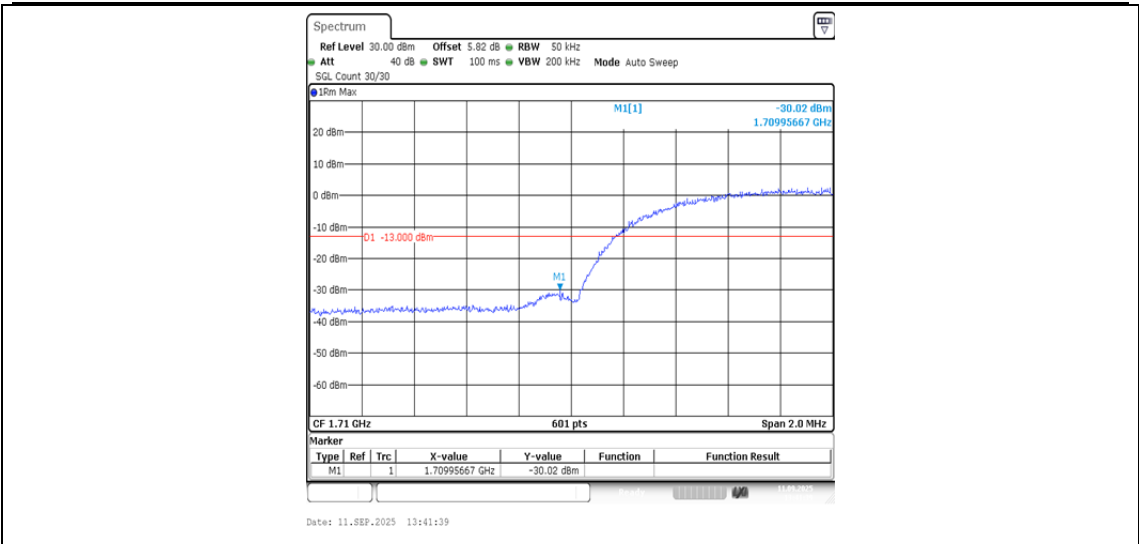
Band4-1513-2-PASS



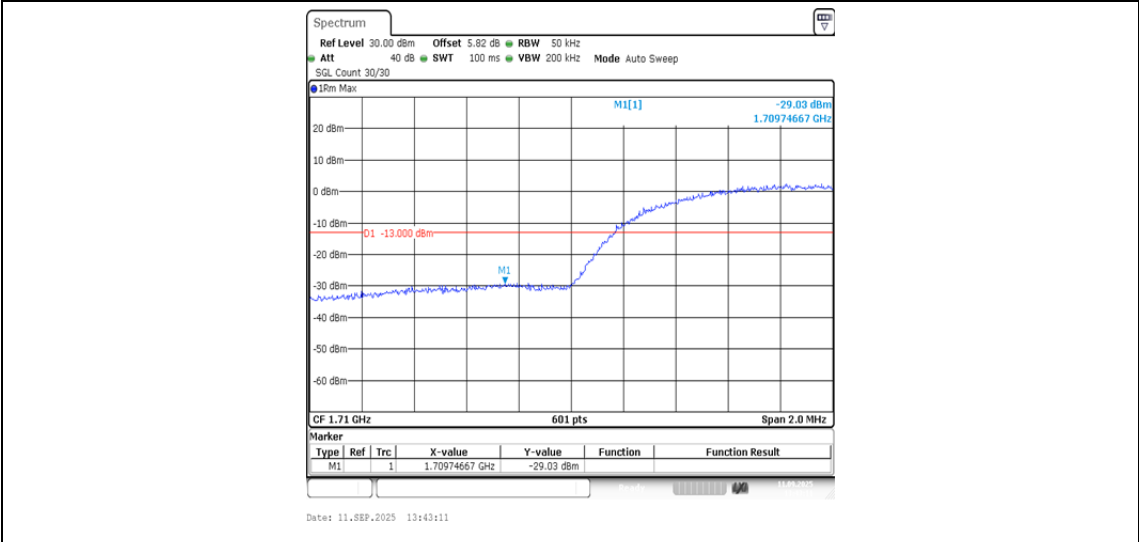
Band4-1513-3-PASS



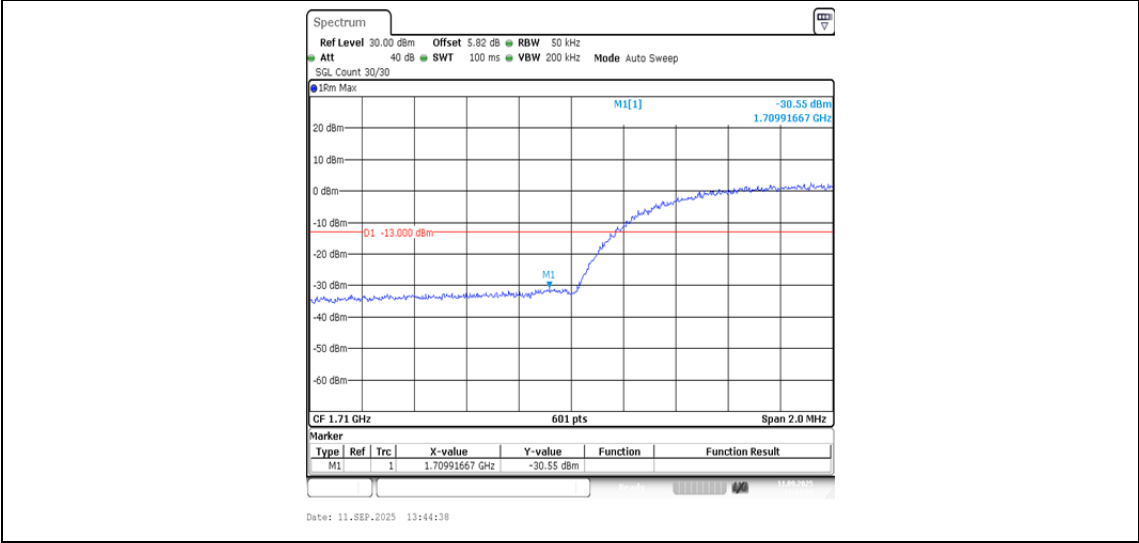
Band4-1513-4-PASS



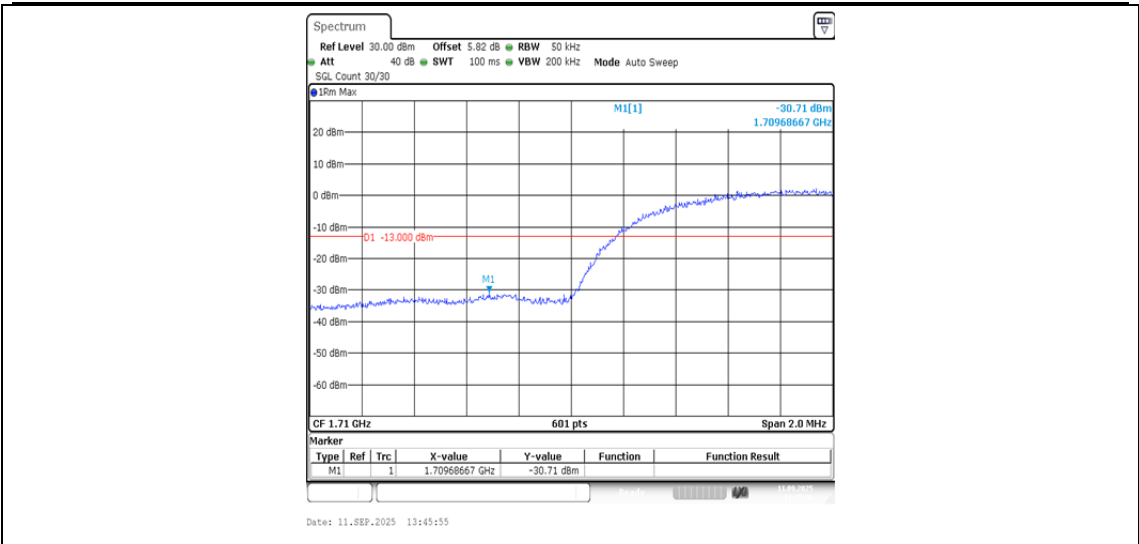
Band4-1312-1-PASS



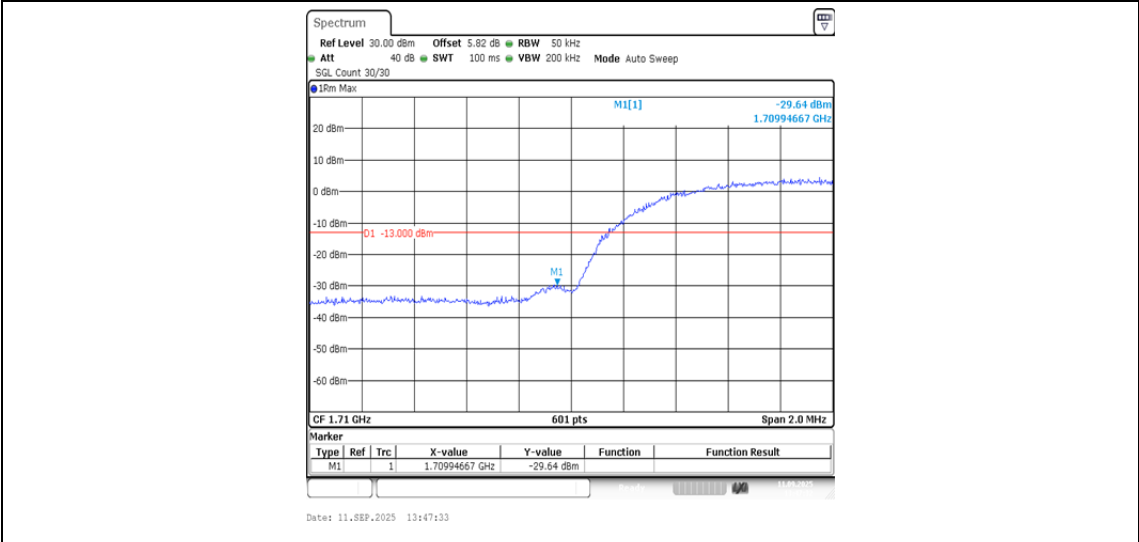
Band4-1312-2-PASS



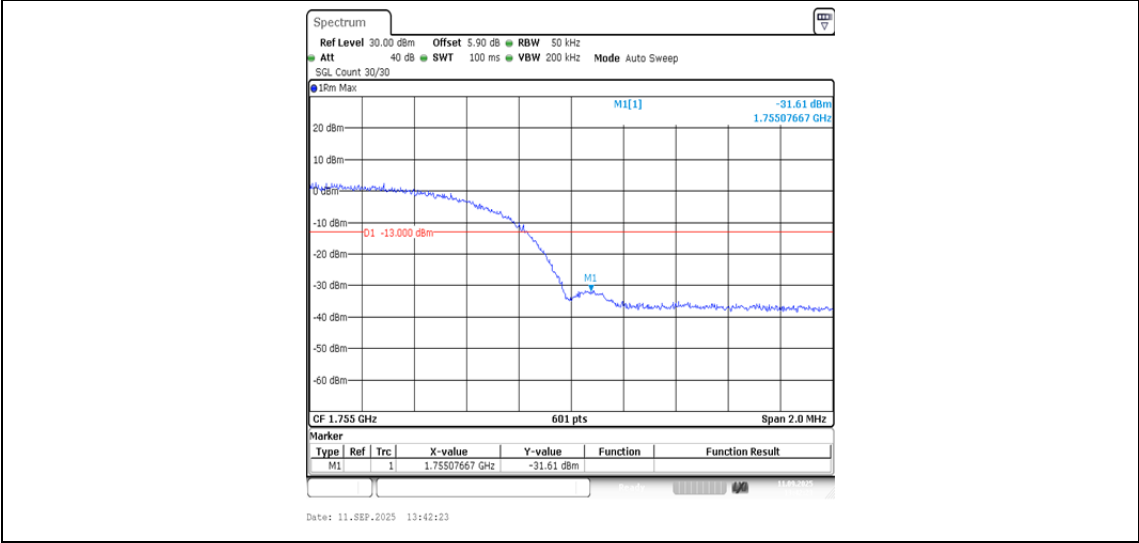
Band4-1312-3-PASS



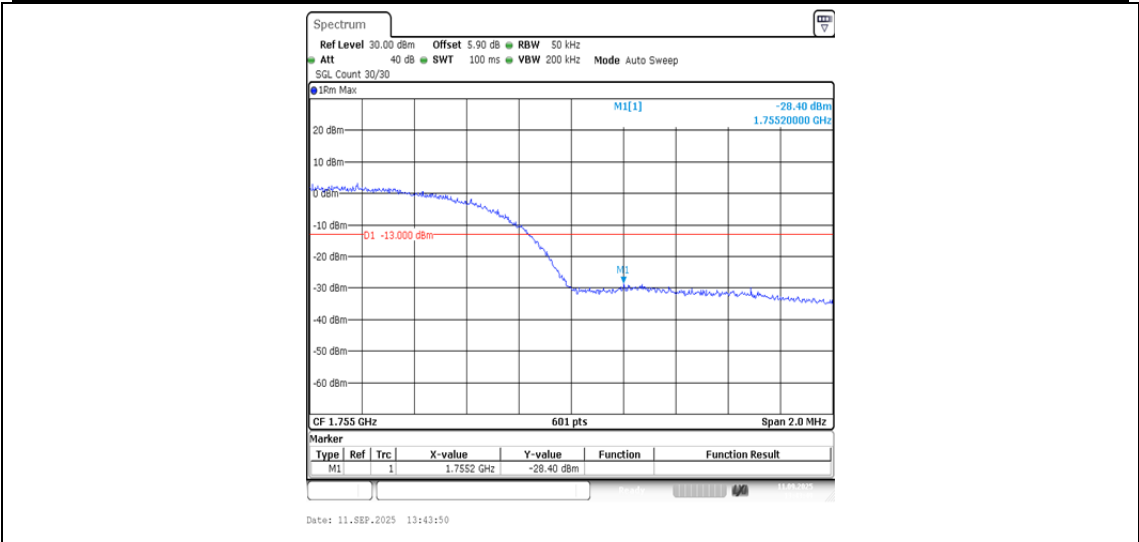
Band4-1312-4-PASS



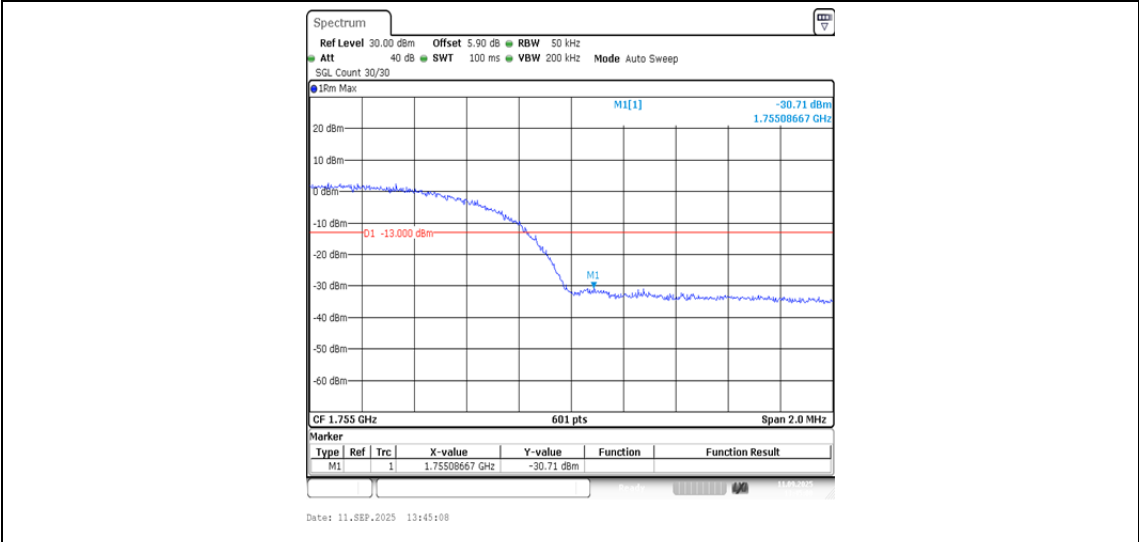
Band4-1312-5-PASS



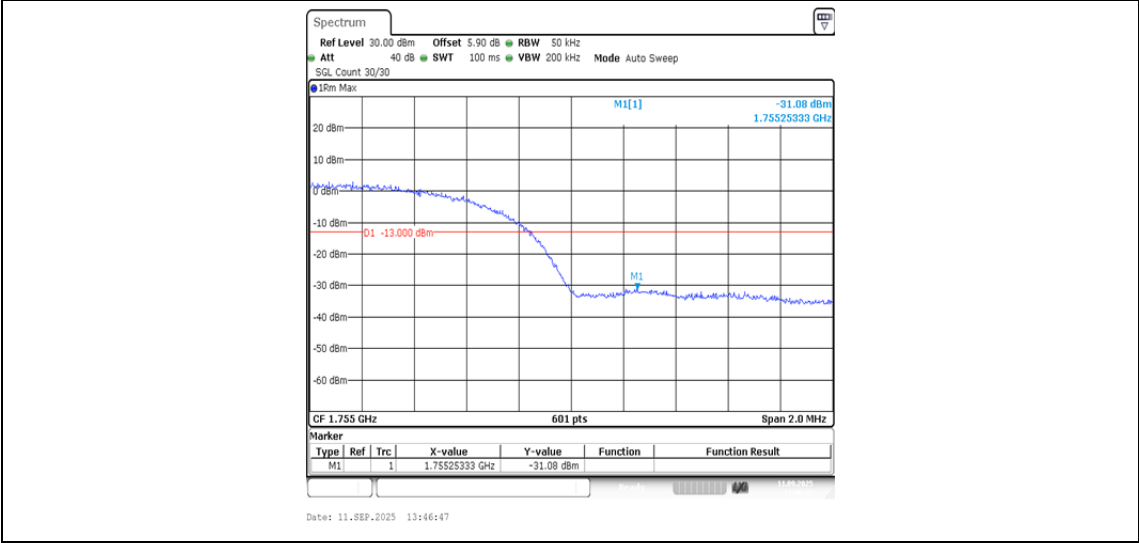
Band4-1513-1-PASS



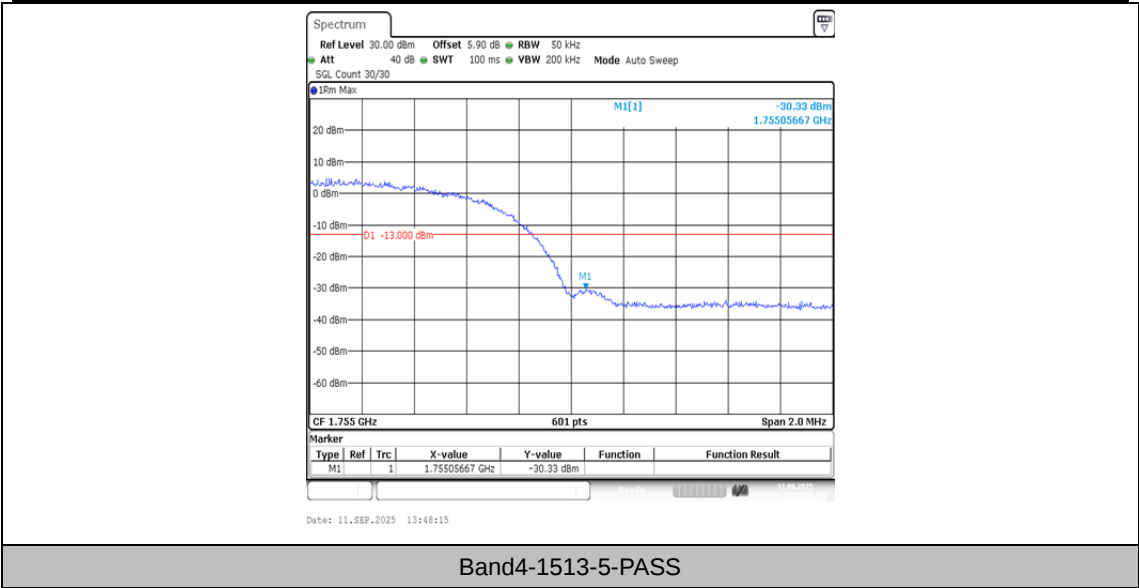
Band4-1513-2-PASS



Band4-1513-3-PASS



Band4-1513-4-PASS



AppendixE:Conducted SpuriousEmission

Test Result

Band	Channel	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band4	1312	0.009~0.15MHz	0.01	-69.55	-43	PASS
Band4	1312	0.15~30MHz	24.28	-64.54	-33	PASS
Band4	1312	30~1000MHz	978.23	-49.7	-13	PASS
Band4	1312	1000~30000MHz	6860.9	-40.61	-13	PASS
Band4	1312	3000~20000MHz	6239	-37.45	-13	PASS
Band4	1413	0.009~0.15MHz	0.02	-67.76	-43	PASS
Band4	1413	0.15~30MHz	29.19	-65.39	-33	PASS
Band4	1413	30~1000MHz	957.66	-49.47	-13	PASS
Band4	1413	1000~30000MHz	6794.2	-40.61	-13	PASS
Band4	1413	3000~20000MHz	6543.3	-37.66	-13	PASS
Band4	1513	0.009~0.15MHz	0.01	-68.21	-43	PASS
Band4	1513	0.15~30MHz	21.35	-64.05	-33	PASS
Band4	1513	30~1000MHz	920.42	-49.73	-13	PASS
Band4	1513	1000~30000MHz	6489.7	-40.62	-13	PASS
Band4	1513	3000~20000MHz	6511	-37.74	-13	PASS

Band	Channel	SubTest	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band4	1312	1	0.009~0.15MHz	0.01	-69.94	-43	PASS
Band4	1312	1	0.15~30MHz	26.1	-64.97	-33	PASS
Band4	1312	1	30~1000MHz	940.69	-49.54	-13	PASS
Band4	1312	1	1000~30000MHz	6820.3	-40.52	-13	PASS
Band4	1312	1	3000~20000MHz	6896.9	-37.6	-13	PASS
Band4	1312	2	0.009~0.15MHz	0.02	-67.69	-43	PASS
Band4	1312	2	0.15~30MHz	21.39	-64.32	-33	PASS
Band4	1312	2	30~1000MHz	903.06	-49.64	-13	PASS
Band4	1312	2	1000~30000MHz	6536.1	-40.63	-13	PASS
Band4	1312	2	3000~20000MHz	6720.1	-37.79	-13	PASS
Band4	1312	3	0.009~0.15MHz	0.01	-68.18	-43	PASS
Band4	1312	3	0.15~30MHz	23.13	-64.96	-33	PASS
Band4	1312	3	30~1000MHz	946.9	-49.76	-13	PASS
Band4	1312	3	1000~30000MHz	6515.8	-40.69	-13	PASS
Band4	1312	3	3000~20000MHz	6837.4	-37.74	-13	PASS
Band4	1312	4	0.009~0.15MHz	0.01	-69.81	-43	PASS
Band4	1312	4	0.15~30MHz	21.35	-65.2	-33	PASS
Band4	1312	4	30~1000MHz	959.22	-49.52	-13	PASS

Band4	1312	4	1000~30000MHz	6904.4	-40.71	-13	PASS
Band4	1312	4	3000~20000MHz	6937.7	-37.74	-13	PASS
Band4	1413	1	0.009~0.15MHz	0.03	-66.65	-43	PASS
Band4	1413	1	0.15~30MHz	26.27	-64.01	-33	PASS
Band4	1413	1	30~1000MHz	991.22	-49.76	-13	PASS
Band4	1413	1	1000~30000MHz	6486.8	-40.43	-13	PASS
Band4	1413	1	3000~20000MHz	6533.1	-37.67	-13	PASS
Band4	1413	2	0.009~0.15MHz	0.02	-67.7	-43	PASS
Band4	1413	2	0.15~30MHz	24.61	-65.57	-33	PASS
Band4	1413	2	30~1000MHz	997.53	-49.72	-13	PASS
Band4	1413	2	1000~30000MHz	6750.7	-40.53	-13	PASS
Band4	1413	2	3000~20000MHz	6514.4	-37.68	-13	PASS
Band4	1413	3	0.009~0.15MHz	0.01	-68.04	-43	PASS
Band4	1413	3	0.15~30MHz	26.54	-65.86	-33	PASS
Band4	1413	3	30~1000MHz	945.93	-49.67	-13	PASS
Band4	1413	3	1000~30000MHz	6527.4	-40.43	-13	PASS
Band4	1413	3	3000~20000MHz	6777.9	-37.62	-13	PASS
Band4	1413	4	0.009~0.15MHz	0.01	-69.09	-43	PASS
Band4	1413	4	0.15~30MHz	0.16	-65.77	-33	PASS
Band4	1413	4	30~1000MHz	886.47	-49.59	-13	PASS
Band4	1413	4	1000~30000MHz	6570.9	-40.5	-13	PASS
Band4	1413	4	3000~20000MHz	6862.9	-37.7	-13	PASS
Band4	1513	1	0.009~0.15MHz	0.01	-66.71	-43	PASS
Band4	1513	1	0.15~30MHz	29.06	-65.02	-33	PASS
Band4	1513	1	30~1000MHz	997.04	-49.63	-13	PASS
Band4	1513	1	1000~30000MHz	6837.7	-40.48	-13	PASS
Band4	1513	1	3000~20000MHz	6835.7	-37.65	-13	PASS
Band4	1513	2	0.009~0.15MHz	0.03	-69.54	-43	PASS
Band4	1513	2	0.15~30MHz	25.12	-65.46	-33	PASS
Band4	1513	2	30~1000MHz	985.79	-49.55	-13	PASS
Band4	1513	2	1000~30000MHz	6515.8	-40.48	-13	PASS
Band4	1513	2	3000~20000MHz	6854.4	-37.72	-13	PASS
Band4	1513	3	0.009~0.15MHz	0.02	-69.25	-43	PASS
Band4	1513	3	0.15~30MHz	27.11	-64.95	-33	PASS
Band4	1513	3	30~1000MHz	974.64	-49.66	-13	PASS
Band4	1513	3	1000~30000MHz	6863.8	-40.71	-13	PASS
Band4	1513	3	3000~20000MHz	6798.3	-37.65	-13	PASS
Band4	1513	4	0.009~0.15MHz	0.01	-69.73	-43	PASS
Band4	1513	4	0.15~30MHz	27.69	-64.85	-33	PASS
Band4	1513	4	30~1000MHz	994.91	-49.55	-13	PASS
Band4	1513	4	1000~30000MHz	6492.6	-40.47	-13	PASS
Band4	1513	4	3000~20000MHz	6497.4	-37.53	-13	PASS

Band	Channel	SubTest	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band4	1312	1	0.009~0.15MHz	0.01	-67.31	-43	PASS
Band4	1312	1	0.15~30MHz	26.13	-64.95	-33	PASS
Band4	1312	1	30~1000MHz	995.1	-49.57	-13	PASS
Band4	1312	1	1000~30000MHz	6869.6	-40.36	-13	PASS
Band4	1312	1	3000~20000MHz	6864.6	-37.71	-13	PASS
Band4	1312	2	0.009~0.15MHz	0.01	-68.83	-43	PASS
Band4	1312	2	0.15~30MHz	21.92	-65.14	-33	PASS
Band4	1312	2	30~1000MHz	955.24	-49.72	-13	PASS
Band4	1312	2	1000~30000MHz	6559.3	-40.5	-13	PASS
Band4	1312	2	3000~20000MHz	6800	-37.76	-13	PASS
Band4	1312	3	0.009~0.15MHz	0.01	-68.69	-43	PASS
Band4	1312	3	0.15~30MHz	26.68	-65.51	-33	PASS
Band4	1312	3	30~1000MHz	939.43	-49.58	-13	PASS
Band4	1312	3	1000~30000MHz	6846.4	-40.67	-13	PASS
Band4	1312	3	3000~20000MHz	6512.7	-37.47	-13	PASS
Band4	1312	4	0.009~0.15MHz	0.01	-67.27	-43	PASS
Band4	1312	4	0.15~30MHz	24.53	-65.31	-33	PASS
Band4	1312	4	30~1000MHz	923.23	-49.71	-13	PASS
Band4	1312	4	1000~30000MHz	6872.5	-39.92	-13	PASS
Band4	1312	4	3000~20000MHz	6864.6	-37.8	-13	PASS
Band4	1312	5	0.009~0.15MHz	0.01	-67.48	-43	PASS
Band4	1312	5	0.15~30MHz	25.14	-64.36	-33	PASS
Band4	1312	5	30~1000MHz	989.77	-49.84	-13	PASS
Band4	1312	5	1000~30000MHz	6860.9	-40.42	-13	PASS
Band4	1312	5	3000~20000MHz	6883.3	-37.42	-13	PASS
Band4	1413	1	0.009~0.15MHz	0.01	-69.13	-43	PASS
Band4	1413	1	0.15~30MHz	24.21	-65.62	-33	PASS
Band4	1413	1	30~1000MHz	953.3	-49.61	-13	PASS
Band4	1413	1	1000~30000MHz	6939.2	-40.69	-13	PASS
Band4	1413	1	3000~20000MHz	6813.6	-37.56	-13	PASS
Band4	1413	2	0.009~0.15MHz	0.01	-67.49	-43	PASS
Band4	1413	2	0.15~30MHz	26.9	-65.29	-33	PASS
Band4	1413	2	30~1000MHz	872.12	-49.89	-13	PASS
Band4	1413	2	1000~30000MHz	6562.2	-40.38	-13	PASS
Band4	1413	2	3000~20000MHz	6810.2	-37.76	-13	PASS
Band4	1413	3	0.009~0.15MHz	0.01	-68.54	-43	PASS
Band4	1413	3	0.15~30MHz	24.29	-65.11	-33	PASS
Band4	1413	3	30~1000MHz	949.23	-49.6	-13	PASS

Band4	1413	3	1000~30000MHz	6802.9	-40.46	-13	PASS
Band4	1413	3	3000~20000MHz	6504.2	-37.66	-13	PASS
Band4	1413	4	0.009~0.15MHz	0.02	-68.13	-43	PASS
Band4	1413	4	0.15~30MHz	26.47	-64.34	-33	PASS
Band4	1413	4	30~1000MHz	999.86	-49.86	-13	PASS
Band4	1413	4	1000~30000MHz	6504.2	-40.43	-13	PASS
Band4	1413	4	3000~20000MHz	6505.9	-37.61	-13	PASS
Band4	1413	5	0.009~0.15MHz	0.01	-68.9	-43	PASS
Band4	1413	5	0.15~30MHz	27.63	-65.66	-33	PASS
Band4	1413	5	30~1000MHz	987.63	-49.71	-13	PASS
Band4	1413	5	1000~30000MHz	6512.9	-40.02	-13	PASS
Band4	1413	5	3000~20000MHz	6888.4	-37.7	-13	PASS
Band4	1513	1	0.009~0.15MHz	0.02	-69.6	-43	PASS
Band4	1513	1	0.15~30MHz	29.08	-64.71	-33	PASS
Band4	1513	1	30~1000MHz	999.66	-49.73	-13	PASS
Band4	1513	1	1000~30000MHz	6541.9	-40.59	-13	PASS
Band4	1513	1	3000~20000MHz	6913.9	-37.73	-13	PASS
Band4	1513	2	0.009~0.15MHz	0.01	-68.2	-43	PASS
Band4	1513	2	0.15~30MHz	22.68	-65.74	-33	PASS
Band4	1513	2	30~1000MHz	992.1	-49.49	-13	PASS
Band4	1513	2	1000~30000MHz	6568	-40.51	-13	PASS
Band4	1513	2	3000~20000MHz	6536.5	-37.63	-13	PASS
Band4	1513	3	0.009~0.15MHz	0.01	-67.29	-43	PASS
Band4	1513	3	0.15~30MHz	29.41	-65.67	-33	PASS
Band4	1513	3	30~1000MHz	995.01	-49.8	-13	PASS
Band4	1513	3	1000~30000MHz	6489.7	-40.72	-13	PASS
Band4	1513	3	3000~20000MHz	6881.6	-37.34	-13	PASS
Band4	1513	4	0.009~0.15MHz	0.01	-68.59	-43	PASS
Band4	1513	4	0.15~30MHz	24.22	-64.08	-33	PASS
Band4	1513	4	30~1000MHz	992.68	-49.55	-13	PASS
Band4	1513	4	1000~30000MHz	6527.4	-40.24	-13	PASS
Band4	1513	4	3000~20000MHz	6857.8	-37.38	-13	PASS
Band4	1513	5	0.009~0.15MHz	0.01	-65.68	-43	PASS
Band4	1513	5	0.15~30MHz	25.3	-64.81	-33	PASS
Band4	1513	5	30~1000MHz	974.54	-49.53	-13	PASS
Band4	1513	5	1000~30000MHz	6869.6	-40.61	-13	PASS
Band4	1513	5	3000~20000MHz	6606.2	-37.79	-13	PASS

Test Graphs

