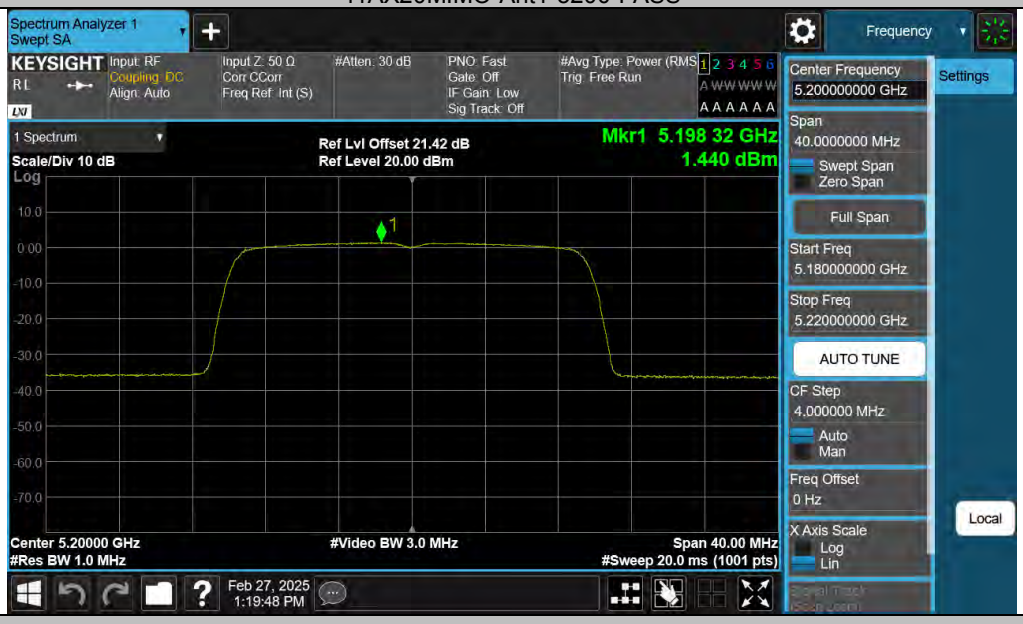
11AC80MIMO-Ant2-5775-PASS

11AX20MIMO-Ant1-5180-PASS

11AX20MIMO-Ant2-5180-PASS

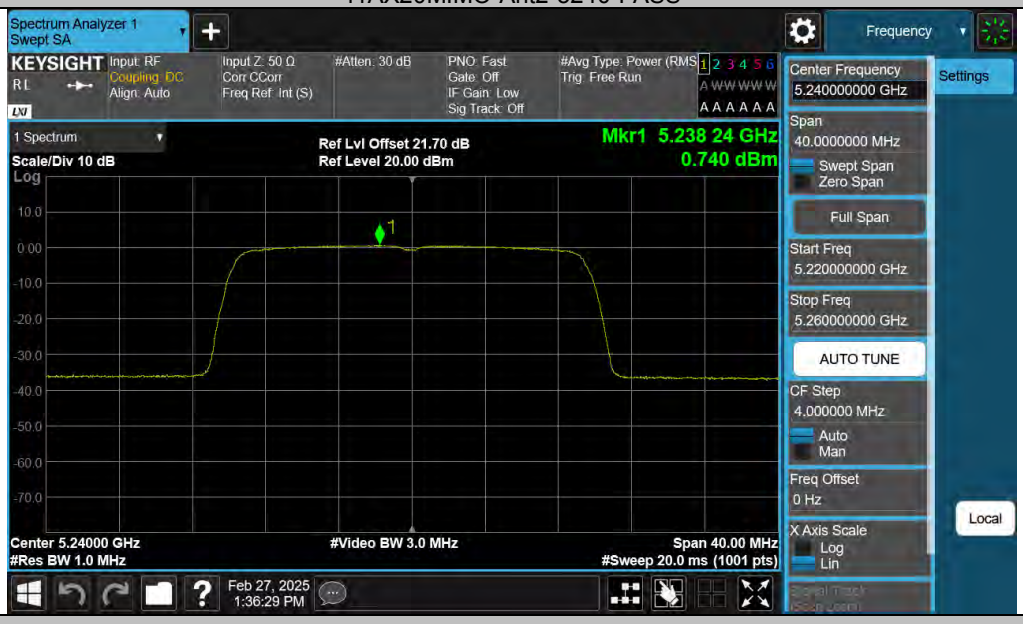
11AX20MIMO-Ant1-5200-PASS



11AX20MIMO-Ant2-5200-PASS

11AX20MIMO-Ant1-5240-PASS

11AX20MIMO-Ant2-5240-PASS



11AX20MIMO-Ant1-5260-PASS

11AX20MIMO-Ant2-5260-PASS

11AX20MIMO-Ant1-5300-PASS

11AX20MIMO-Ant2-5300-PASS

11AX20MIMO-Ant1-5320-PASS

11AX20MIMO-Ant2-5320-PASS

11AX20MIMO-Ant1-5500-PASS

11AX20MIMO-Ant2-5500-PASS

11AX20MIMO-Ant1-5580-PASS

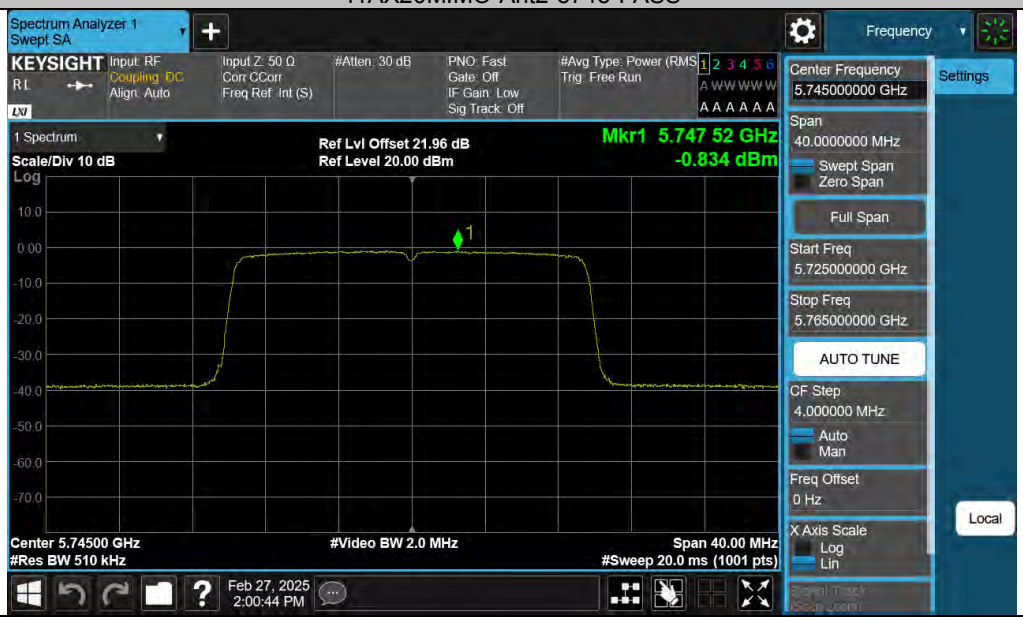
11AX20MIMO-Ant2-5580-PASS

11AX20MIMO-Ant1-5700-PASS

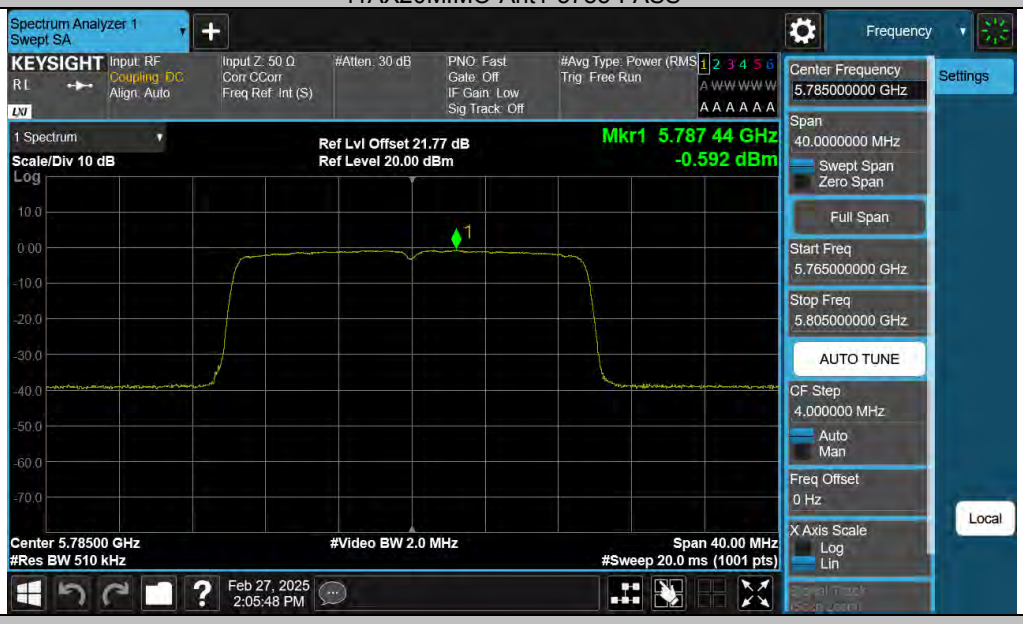
11AX20MIMO-Ant2-5700-PASS

11AX20MIMO-Ant1-5745-PASS

11AX20MIMO-Ant2-5745-PASS

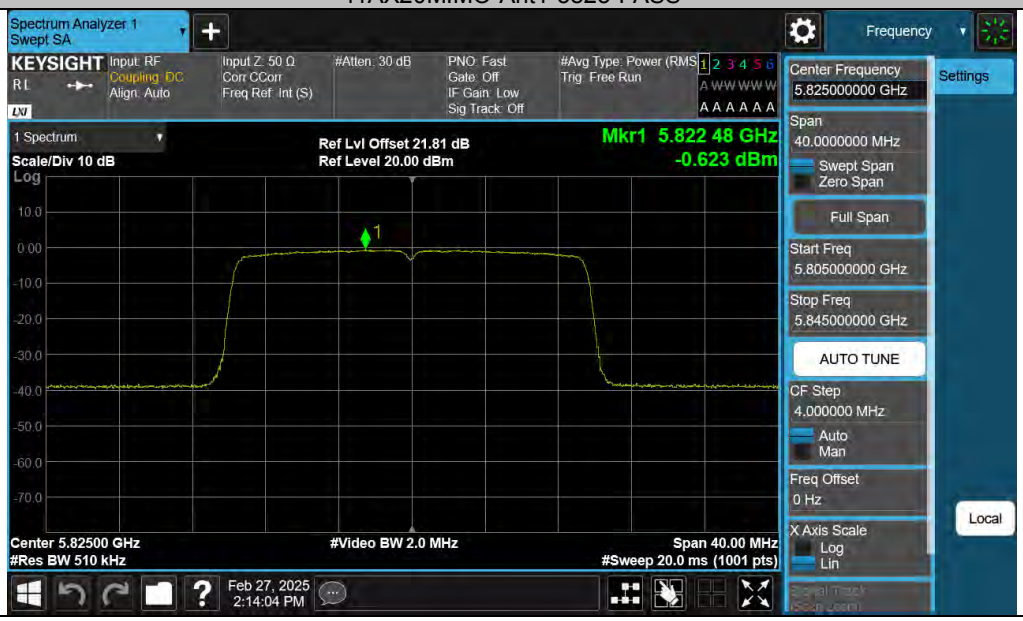


11AX20MIMO-Ant1-5785-PASS



11AX20MIMO-Ant2-5785-PASS

11AX20MIMO-Ant1-5825-PASS



11AX20MIMO-Ant2-5825-PASS

11AX40MIMO-Ant1-5190-PASS

11AX40MIMO-Ant2-5190-PASS

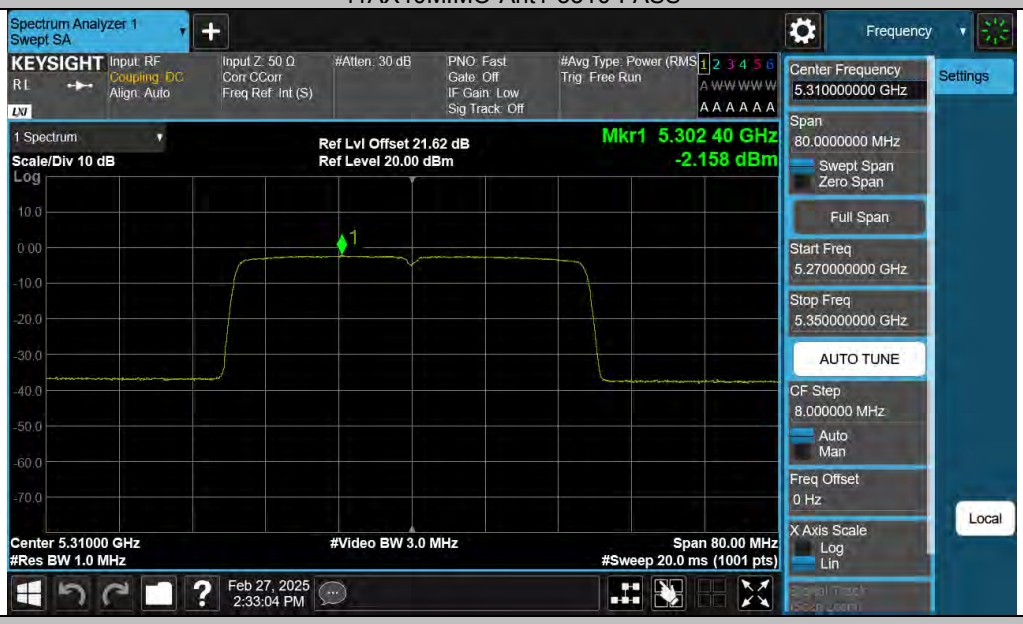
11AX40MIMO-Ant1-5230-PASS

11AX40MIMO-Ant2-5230-PASS

11AX40MIMO-Ant1-5270-PASS

11AX40MIMO-Ant2-5270-PASS

11AX40MIMO-Ant1-5310-PASS

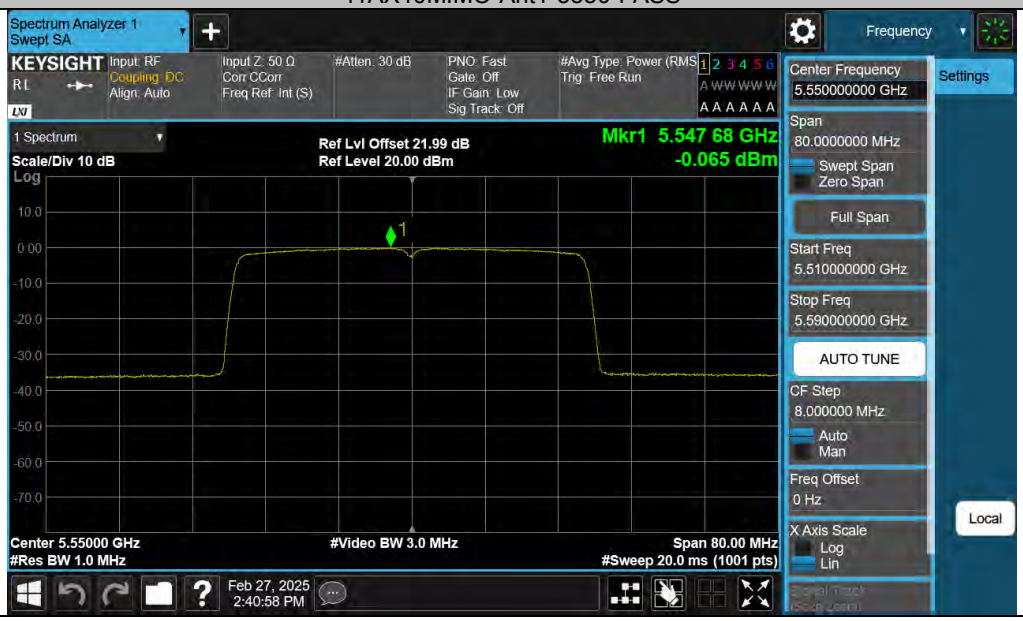


11AX40MIMO-Ant2-5310-PASS

11AX40MIMO-Ant1-5510-PASS

11AX40MIMO-Ant2-5510-PASS

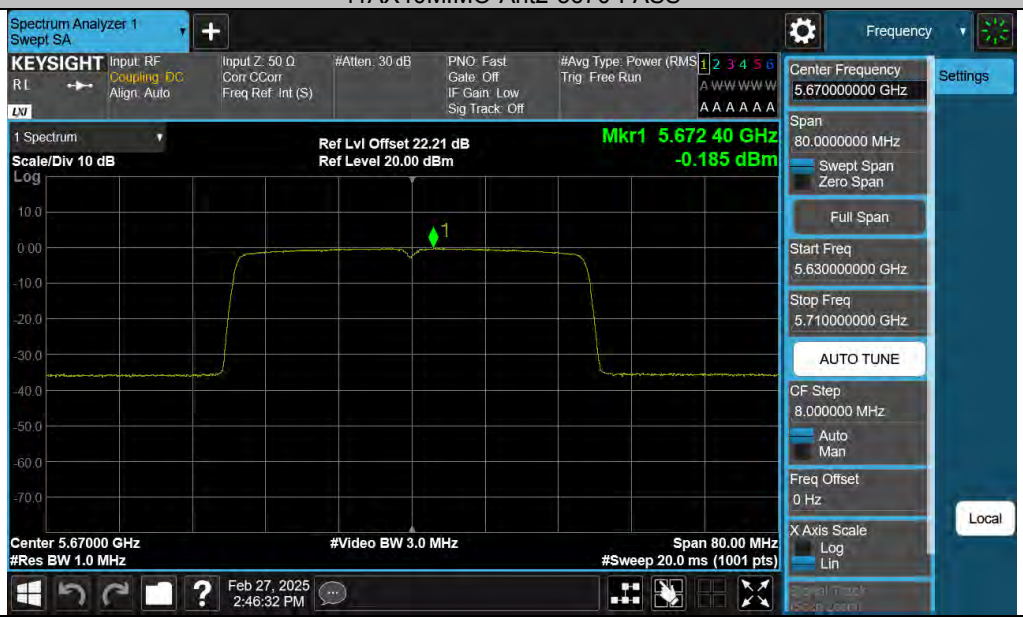
11AX40MIMO-Ant1-5550-PASS



11AX40MIMO-Ant2-5550-PASS

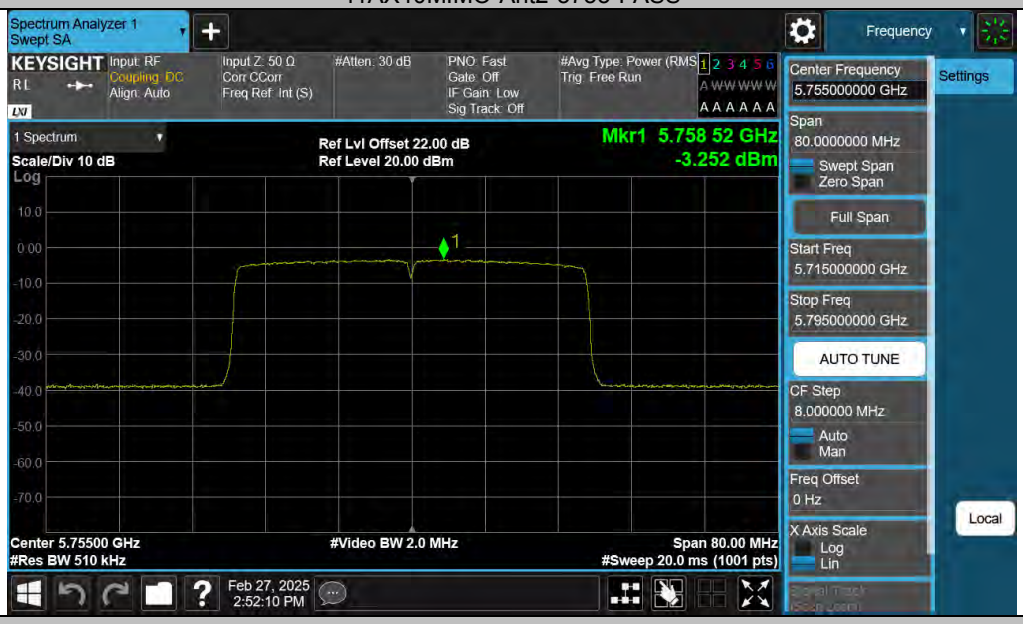
11AX40MIMO-Ant1-5670-PASS

11AX40MIMO-Ant2-5670-PASS

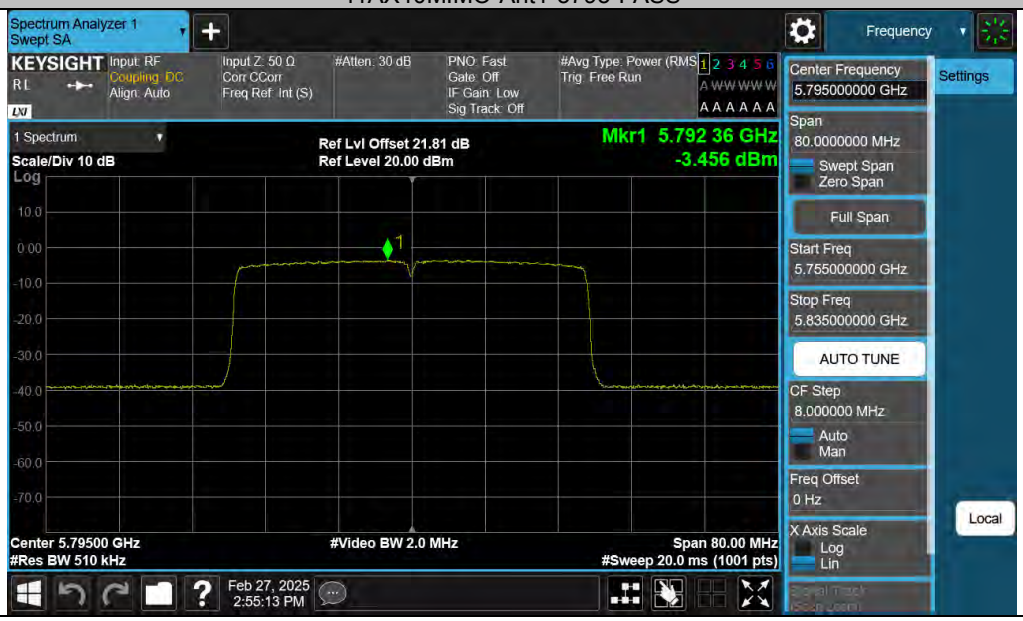


11AX40MIMO-Ant1-5755-PASS

11AX40MIMO-Ant2-5755-PASS



11AX40MIMO-Ant1-5795-PASS



11AX40MIMO-Ant2-5795-PASS

11AX80MIMO-Ant1-5210-PASS

11AX80MIMO-Ant2-5210-PASS

11AX80MIMO-Ant1-5290-PASS

11AX80MIMO-Ant2-5290-PASS

11AX80MIMO-Ant1-5530-PASS

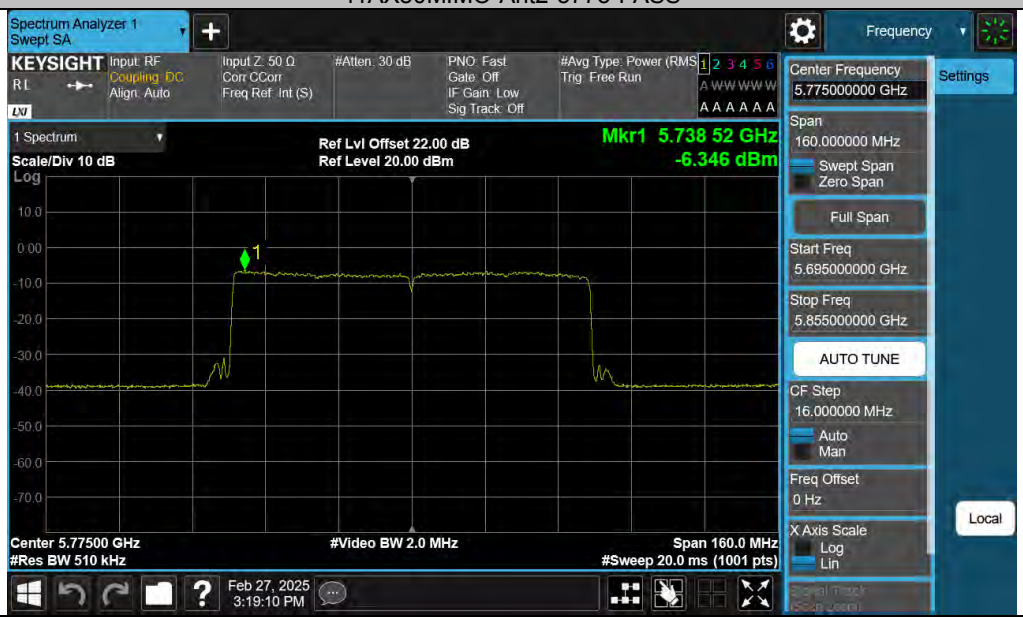
11AX80MIMO-Ant2-5530-PASS

11AX80MIMO-Ant1-5610-PASS

11AX80MIMO-Ant2-5610-PASS

11AX80MIMO-Ant1-5775-PASS

11AX80MIMO-Ant2-5775-PASS



Appendix E: Band edge measurements
Test Result B4

TestMode	Antenna	ChName	Frequency[MHz]	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5720~5725	-31.51	≤15.82	PASS
11A	Ant1	Low	5745	5700~5720	-31.13	≤10.06	PASS
11A	Ant1	Low	5745	5650~5700	-29.13	≤-24.40	PASS
11A	Ant1	Low	5745	5760~5650	-31.27	≤-27	PASS
11A	Ant2	Low	5745	5720~5725	-31.91	≤16.34	PASS
11A	Ant2	Low	5745	5700~5720	-32.23	≤10.12	PASS
11A	Ant2	Low	5745	5650~5700	-31.12	≤-26.87	PASS
11A	Ant2	Low	5745	5760~5650	-30.97	≤-27	PASS
11A	Ant1	High	5825	5850~5855	-32.37	≤16.34	PASS
11A	Ant1	High	5825	5855~5875	-31.26	≤10.17	PASS
11A	Ant1	High	5825	5875~5925	-30.57	≤-26.71	PASS
11A	Ant1	High	5825	5925~5935	-30.08	≤-27	PASS
11A	Ant2	High	5825	5850~5855	-32.35	≤15.73	PASS
11A	Ant2	High	5825	5855~5875	-29.09	≤11.00	PASS
11A	Ant2	High	5825	5875~5925	-29.97	≤-25.81	PASS
11A	Ant2	High	5825	5925~5935	-29.43	≤-27	PASS
11N20MIMO	Ant1	Low	5745	5720~5725	-31.74	≤16.08	PASS
11N20MIMO	Ant1	Low	5745	5700~5720	-30.37	≤10.22	PASS
11N20MIMO	Ant1	Low	5745	5650~5700	-31.38	≤-26.62	PASS
11N20MIMO	Ant1	Low	5745	5760~5650	-30.65	≤-27	PASS
11N20MIMO	Ant2	Low	5745	5720~5725	-30.71	≤16.87	PASS
11N20MIMO	Ant2	Low	5745	5700~5720	-31.8	≤10.02	PASS
11N20MIMO	Ant2	Low	5745	5650~5700	-30.9	≤-26.19	PASS
11N20MIMO	Ant2	Low	5745	5760~5650	-30.97	≤-27	PASS
11N20MIMO	Ant1	High	5825	5850~5855	-30.36	≤16.34	PASS
11N20MIMO	Ant1	High	5825	5855~5875	-30.58	≤10.44	PASS
11N20MIMO	Ant1	High	5825	5875~5925	-31.62	≤-26.71	PASS
11N20MIMO	Ant1	High	5825	5925~5935	-31.26	≤-27	PASS
11N20MIMO	Ant2	High	5825	5850~5855	-32.06	≤15.73	PASS
11N20MIMO	Ant2	High	5825	5855~5875	-30.81	≤10.02	PASS
11N20MIMO	Ant2	High	5825	5875~5925	-31.44	≤-26.91	PASS
11N20MIMO	Ant2	High	5825	5925~5935	-30.06	≤-27	PASS
11N40MIMO	Ant1	Low	5755	5720~5725	-24.45	≤16.04	PASS
11N40MIMO	Ant1	Low	5755	5700~5720	-24.35	≤14.63	PASS
11N40MIMO	Ant1	Low	5755	5650~5700	-32.16	≤-26.70	PASS
11N40MIMO	Ant1	Low	5755	5780~5650	-30.82	≤-27	PASS
11N40MIMO	Ant2	Low	5755	5720~5725	-38.95	≤16.04	PASS
11N40MIMO	Ant2	Low	5755	5700~5720	-40	≤10.36	PASS
11N40MIMO	Ant2	Low	5755	5650~5700	-40.9	≤-26.70	PASS
11N40MIMO	Ant2	Low	5755	5780~5650	-40.17	≤-27	PASS
11N40MIMO	Ant1	High	5795	5850~5855	-32.83	≤15.66	PASS
11N40MIMO	Ant1	High	5795	5855~5875	-31.23	≤10.57	PASS
11N40MIMO	Ant1	High	5795	5875~5925	-31.55	≤-26.95	PASS
11N40MIMO	Ant1	High	5795	5925~5935	-31.46	≤-27	PASS
11N40MIMO	Ant2	High	5795	5850~5855	-31.8	≤16.79	PASS
11N40MIMO	Ant2	High	5795	5855~5875	-29.79	≤10.53	PASS
11N40MIMO	Ant2	High	5795	5875~5925	-30.45	≤-25.73	PASS
11N40MIMO	Ant2	High	5795	5925~5935	-31.49	≤-27	PASS
11AC20MIMO	Ant1	Low	5745	5720~5725	-30.54	≤17.39	PASS
11AC20MIMO	Ant1	Low	5745	5700~5720	-31.28	≤10.12	PASS
11AC20MIMO	Ant1	Low	5745	5650~5700	-32.38	≤-26.96	PASS
11AC20MIMO	Ant1	Low	5745	5760~5650	-31.43	≤-27	PASS

11AC20MIMO	Ant2	Low	5745	5720~5725	-31.56	≤16.08	PASS
11AC20MIMO	Ant2	Low	5745	5700~5720	-31.73	≤10.02	PASS
11AC20MIMO	Ant2	Low	5745	5650~5700	-31.32	≤-26.10	PASS
11AC20MIMO	Ant2	Low	5745	5760~5650	-30.79	≤-27	PASS
11AC20MIMO	Ant1	High	5825	5850~5855	-31.44	≤16.34	PASS
11AC20MIMO	Ant1	High	5825	5855~5875	-31.55	≤10.44	PASS
11AC20MIMO	Ant1	High	5825	5875~5925	-30.73	≤-25.61	PASS
11AC20MIMO	Ant1	High	5825	5925~5935	-30.54	≤-27	PASS
11AC20MIMO	Ant2	High	5825	5850~5855	-31.55	≤15.73	PASS
11AC20MIMO	Ant2	High	5825	5855~5875	-30.93	≤10.78	PASS
11AC20MIMO	Ant2	High	5825	5875~5925	-31.13	≤-26.71	PASS
11AC20MIMO	Ant2	High	5825	5925~5935	-30.65	≤-27	PASS
11AC40MIMO	Ant1	Low	5755	5720~5725	-30.34	≤15.74	PASS
11AC40MIMO	Ant1	Low	5755	5700~5720	-31.08	≤10.17	PASS
11AC40MIMO	Ant1	Low	5755	5650~5700	-31.59	≤-26.20	PASS
11AC40MIMO	Ant1	Low	5755	5780~5650	-32.17	≤-27	PASS
11AC40MIMO	Ant2	Low	5755	5720~5725	-31	≤15.74	PASS
11AC40MIMO	Ant2	Low	5755	5700~5720	-30.35	≤11.53	PASS
11AC40MIMO	Ant2	Low	5755	5650~5700	-31.81	≤-26.20	PASS
11AC40MIMO	Ant2	Low	5755	5780~5650	-32.28	≤-27	PASS
11AC40MIMO	Ant1	High	5795	5850~5855	-32.52	≤15.66	PASS
11AC40MIMO	Ant1	High	5795	5855~5875	-30.73	≤11.40	PASS
11AC40MIMO	Ant1	High	5795	5875~5925	-30.88	≤-26.22	PASS
11AC40MIMO	Ant1	High	5795	5925~5935	-30.77	≤-27	PASS
11AC40MIMO	Ant2	High	5795	5850~5855	-31.89	≤15.66	PASS
11AC40MIMO	Ant2	High	5795	5855~5875	-30.16	≤10.85	PASS
11AC40MIMO	Ant2	High	5795	5875~5925	-31.56	≤-26.83	PASS
11AC40MIMO	Ant2	High	5795	5925~5935	-30.93	≤-27	PASS
11AC80MIMO	Ant1	Low	5775	5720~5725	-28.91	≤15.65	PASS
11AC80MIMO	Ant1	Low	5775	5700~5720	-26.88	≤10.96	PASS
11AC80MIMO	Ant1	Low	5775	5650~5700	-30.84	≤-26.11	PASS
11AC80MIMO	Ant1	Low	5775	5800~5650	-30.75	≤-27	PASS
11AC80MIMO	Ant1	High	5775	5850~5855	-27.72	≤16.26	PASS
11AC80MIMO	Ant1	High	5775	5855~5875	-24.13	≤12.68	PASS
11AC80MIMO	Ant1	High	5775	5875~5925	-29.47	≤-26.19	PASS
11AC80MIMO	Ant1	High	5775	5925~5935	-30.61	≤-27	PASS
11AC80MIMO	Ant2	Low	5775	5720~5725	-30.66	≤15.65	PASS
11AC80MIMO	Ant2	Low	5775	5700~5720	-30.82	≤10.35	PASS
11AC80MIMO	Ant2	Low	5775	5650~5700	-31.01	≤-25.88	PASS
11AC80MIMO	Ant2	Low	5775	5800~5650	-31.45	≤-27	PASS
11AC80MIMO	Ant2	High	5775	5850~5855	-26.9	≤18.79	PASS
11AC80MIMO	Ant2	High	5775	5855~5875	-25.67	≤11.12	PASS
11AC80MIMO	Ant2	High	5775	5875~5925	-31.06	≤-26.60	PASS
11AC80MIMO	Ant2	High	5775	5925~5935	-30.57	≤-27	PASS
11AX20MIMO	Ant1	Low	5745	5720~5725	-30.45	≤16.08	PASS
11AX20MIMO	Ant1	Low	5745	5700~5720	-31.03	≤10.47	PASS
11AX20MIMO	Ant1	Low	5745	5650~5700	-32.16	≤-26.70	PASS
11AX20MIMO	Ant1	Low	5745	5760~5650	-30.61	≤-27	PASS
11AX20MIMO	Ant2	Low	5745	5720~5725	-30.8	≤16.08	PASS
11AX20MIMO	Ant2	Low	5745	5700~5720	-29.56	≤10.99	PASS
11AX20MIMO	Ant2	Low	5745	5650~5700	-32.27	≤-26.87	PASS
11AX20MIMO	Ant2	Low	5745	5760~5650	-31.26	≤-27	PASS
11AX20MIMO	Ant1	High	5825	5850~5855	-31.74	≤16.03	PASS
11AX20MIMO	Ant1	High	5825	5855~5875	-31.13	≤10.40	PASS
11AX20MIMO	Ant1	High	5825	5875~5925	-30.15	≤-26.41	PASS
11AX20MIMO	Ant1	High	5825	5925~5935	-30.33	≤-27	PASS
11AX20MIMO	Ant2	High	5825	5850~5855	-31.71	≤15.73	PASS

11AX20MIMO	Ant2	High	5825	5855~5875	-30.4	≤10.32	PASS
11AX20MIMO	Ant2	High	5825	5875~5925	-30.63	≤-26.81	PASS
11AX20MIMO	Ant2	High	5825	5925~5935	-30.86	≤-27	PASS
11AX40MIMO	Ant1	Low	5755	5720~5725	-30.16	≤15.74	PASS
11AX40MIMO	Ant1	Low	5755	5700~5720	-31.08	≤10.70	PASS
11AX40MIMO	Ant1	Low	5755	5650~5700	-31.27	≤-26.50	PASS
11AX40MIMO	Ant1	Low	5755	5780~5650	-30.5	≤-27	PASS
11AX40MIMO	Ant2	Low	5755	5720~5725	-32.04	≤16.04	PASS
11AX40MIMO	Ant2	Low	5755	5700~5720	-31.16	≤10.51	PASS
11AX40MIMO	Ant2	Low	5755	5650~5700	-32.33	≤-26.80	PASS
11AX40MIMO	Ant2	Low	5755	5780~5650	-30.65	≤-27	PASS
11AX40MIMO	Ant1	High	5795	5850~5855	-31.69	≤16.03	PASS
11AX40MIMO	Ant1	High	5795	5855~5875	-30.97	≤10.66	PASS
11AX40MIMO	Ant1	High	5795	5875~5925	-31.18	≤-26.22	PASS
11AX40MIMO	Ant1	High	5795	5925~5935	-31.2	≤-27	PASS
11AX40MIMO	Ant2	High	5795	5850~5855	-31.41	≤15.66	PASS
11AX40MIMO	Ant2	High	5795	5855~5875	-29.66	≤10.48	PASS
11AX40MIMO	Ant2	High	5795	5875~5925	-28.27	≤-25.73	PASS
11AX40MIMO	Ant2	High	5795	5925~5935	-29.24	≤-27	PASS
11AX80MIMO	Ant1	Low	5775	5720~5725	-31.74	≤15.65	PASS
11AX80MIMO	Ant1	Low	5775	5700~5720	-30.02	≤10.57	PASS
11AX80MIMO	Ant1	Low	5775	5650~5700	-32.77	≤-26.91	PASS
11AX80MIMO	Ant1	Low	5775	5800~5650	-31.15	≤-27	PASS
11AX80MIMO	Ant1	High	5775	5850~5855	-31.82	≤15.84	PASS
11AX80MIMO	Ant1	High	5775	5855~5875	-28.57	≤10.35	PASS
11AX80MIMO	Ant1	High	5775	5875~5925	-30.42	≤-25.78	PASS
11AX80MIMO	Ant1	High	5775	5925~5935	-29.18	≤-27	PASS
11AX80MIMO	Ant2	Low	5775	5720~5725	-30.14	≤15.65	PASS
11AX80MIMO	Ant2	Low	5775	5700~5720	-30.64	≤10.48	PASS
11AX80MIMO	Ant2	Low	5775	5650~5700	-31.29	≤-25.08	PASS
11AX80MIMO	Ant2	Low	5775	5800~5650	-32.11	≤-27	PASS
11AX80MIMO	Ant2	High	5775	5850~5855	-31.31	≤15.84	PASS
11AX80MIMO	Ant2	High	5775	5855~5875	-29.1	≤11.07	PASS
11AX80MIMO	Ant2	High	5775	5875~5925	-30.41	≤-26.32	PASS
11AX80MIMO	Ant2	High	5775	5925~5935	-31.11	≤-27	PASS

Test Graphs B4

11A-Ant1-5745-PASS

11A-Ant2-5745-PASS

11A-Ant1-5825-PASS

11A-Ant2-5825-PASS

11N20MIMO-Ant1-5745-PASS

11N20MIMO-Ant2-5745-PASS

11N20MIMO-Ant1-5825-PASS

11N20MIMO-Ant2-5825-PASS

11N40MIMO-Ant1-5755-PASS

11N40MIMO-Ant2-5755-PASS

11N40MIMO-Ant1-5795-PASS

11N40MIMO-Ant2-5795-PASS

11AC20MIMO-Ant1-5745-PASS

11AC20MIMO-Ant2-5745-PASS

11AC20MIMO-Ant1-5825-PASS

11AC20MIMO-Ant2-5825-PASS

11AC40MIMO-Ant1-5755-PASS

11AC40MIMO-Ant2-5755-PASS

11AC40MIMO-Ant1-5795-PASS

11AC40MIMO-Ant2-5795-PASS

11AC80MIMO-Ant1-5775-PASS

11AC80MIMO-Ant1-5775-PASS

11AC80MIMO-Ant2-5775-PASS

11AC80MIMO-Ant2-5775-PASS

11AX20MIMO-Ant1-5745-PASS

11AX20MIMO-Ant2-5745-PASS

11AX20MIMO-Ant1-5825-PASS

11AX20MIMO-Ant2-5825-PASS

11AX40MIMO-Ant1-5755-PASS

11AX40MIMO-Ant2-5755-PASS

11AX40MIMO-Ant1-5795-PASS

11AX40MIMO-Ant2-5795-PASS

11AX80MIMO-Ant1-5775-PASS

11AX80MIMO-Ant1-5775-PASS

11AX80MIMO-Ant2-5775-PASS

11AX80MIMO-Ant2-5775-PASS

Appendix G: Frequency Stability

Test Result

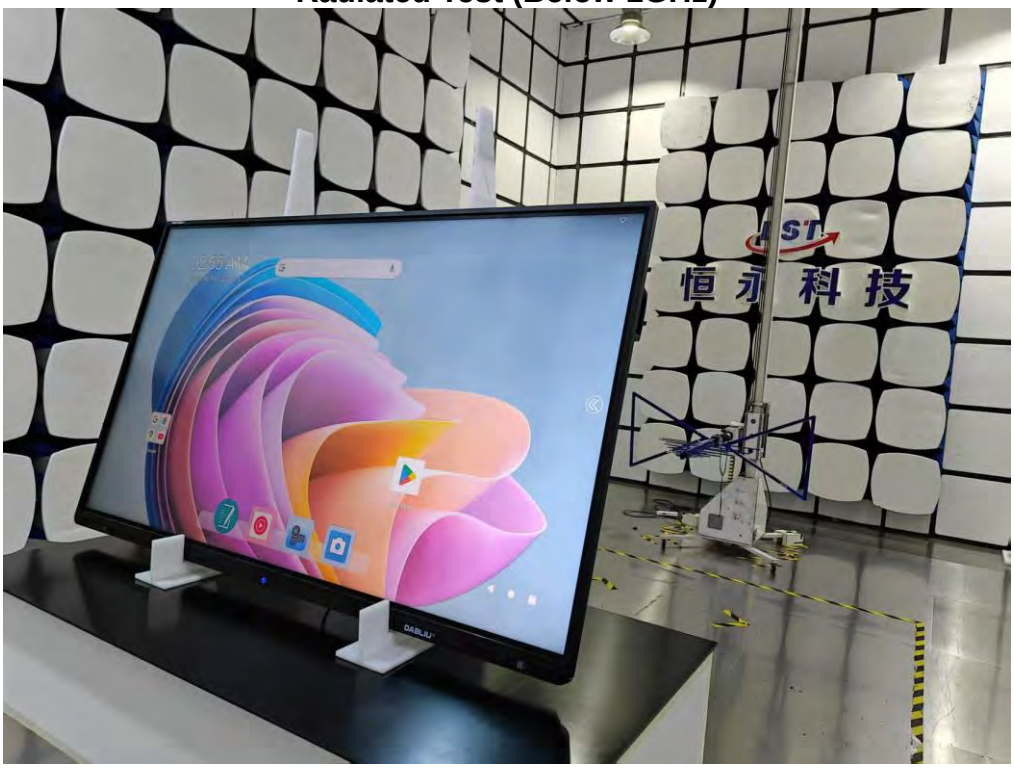
TestMode	Antenna	Frequency[MHz]	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	-60000.00	-11.583012	20	PASS
11A	Ant1	5180	LV	NT	-60000.00	-11.583012	20	PASS
11A	Ant1	5180	HV	NT	-40000.00	-7.722008	20	PASS
11A	Ant1	5260	NV	NT	-60000.00	-11.406844	20	PASS
11A	Ant1	5260	LV	NT	-40000.00	-7.604563	20	PASS
11A	Ant1	5260	HV	NT	-40000.00	-7.604563	20	PASS
11A	Ant1	5500	NV	NT	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	LV	NT	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	HV	NT	-60000.00	-10.909091	20	PASS
11A	Ant1	5745	NV	NT	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	LV	NT	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	HV	NT	-60000.00	-10.443864	20	PASS

TestMode	Antenna	Frequency[MHz]	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	-30	-60000.00	-11.583012	20	PASS
11A	Ant1	5180	NV	-20	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	-10	-60000.00	-11.583012	20	PASS
11A	Ant1	5180	NV	0	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	10	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	20	-60000.00	-11.583012	20	PASS
11A	Ant1	5180	NV	30	-40000.00	-7.722008	20	PASS
11A	Ant1	5180	NV	40	-60000.00	-11.583012	20	PASS
11A	Ant1	5180	NV	50	-60000.00	-11.583012	20	PASS
11A	Ant1	5260	NV	-30	-40000.00	-7.604563	20	PASS
11A	Ant1	5260	NV	-20	-60000.00	-11.406844	20	PASS
11A	Ant1	5260	NV	-10	-60000.00	-11.406844	20	PASS
11A	Ant1	5260	NV	0	-60000.00	-11.406844	20	PASS
11A	Ant1	5260	NV	10	-60000.00	-11.406844	20	PASS
11A	Ant1	5260	NV	20	-60000.00	-11.406844	20	PASS
11A	Ant1	5260	NV	30	-60000.00	-11.406844	20	PASS
11A	Ant1	5260	NV	40	-60000.00	-11.406844	20	PASS
11A	Ant1	5260	NV	50	-60000.00	-11.406844	20	PASS
11A	Ant1	5500	NV	-30	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	-20	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	-10	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	0	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	10	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	20	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	30	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	40	-60000.00	-10.909091	20	PASS
11A	Ant1	5500	NV	50	-60000.00	-10.909091	20	PASS
11A	Ant1	5745	NV	-30	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	-20	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	-10	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	0	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	10	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	20	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	30	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	40	-60000.00	-10.443864	20	PASS
11A	Ant1	5745	NV	50	-60000.00	-10.443864	20	PASS

11. TEST SETUP PHOTO

Conducted Test

Radiated Test (Below 1GHz)



Radiated Test (Above 1GHz)

12. EUT PHOTO

Refer to report no. ESTE-R2503271

End of Test Report