

Effective (Isotropic) Radiated Power Output Data

Test Result

Select the higher-powered ANT 1 as the final data.

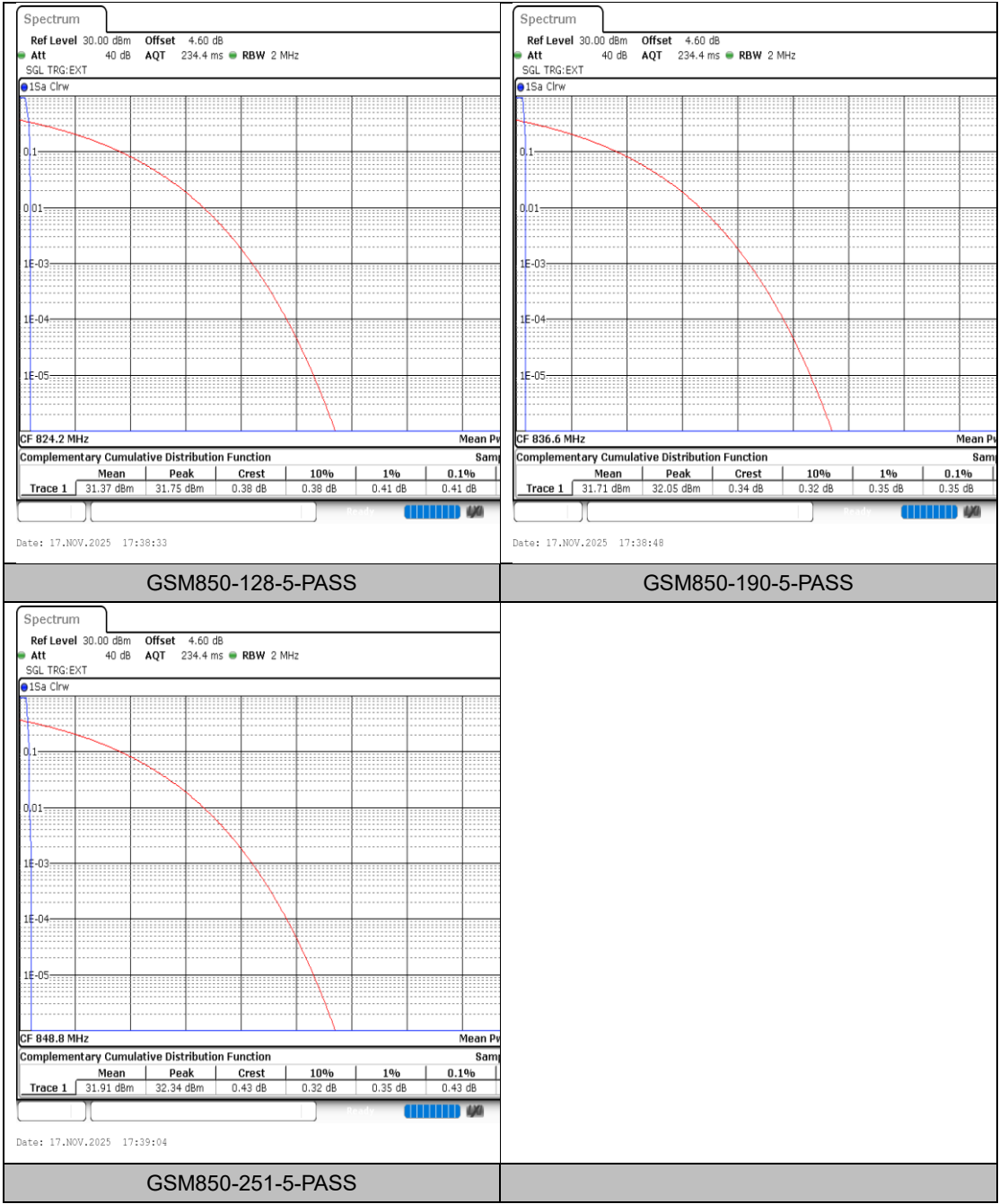
Band	Channel	Power(dBm)	ERP(dBm)	Limit(dBm)	Verdict
GSM850	128	33.19	26.86	38.45	PASS
GSM850	190	33.44	27.11	38.45	PASS
GSM850	251	33.51	27.18	38.45	PASS

Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	Result(dB)	Limit(dB)	Verdict
GSM850	128	0.41	13	PASS
GSM850	190	0.35	13	PASS
GSM850	251	0.43	13	PASS

Test Graphs

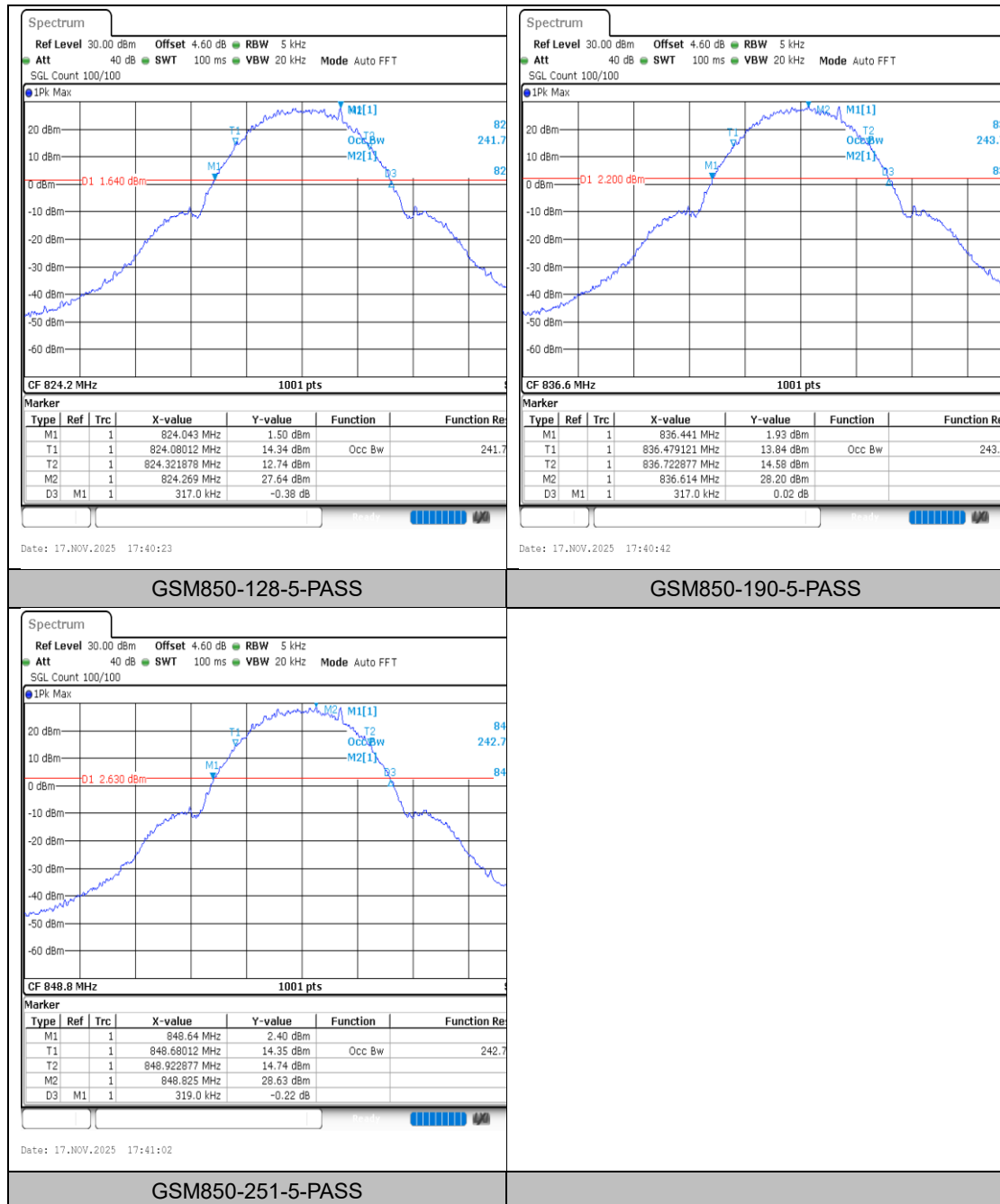


26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	0.242	0.32	---	PASS
GSM850	190	0.244	0.32	---	PASS
GSM850	251	0.243	0.32	---	PASS

Test Graphs

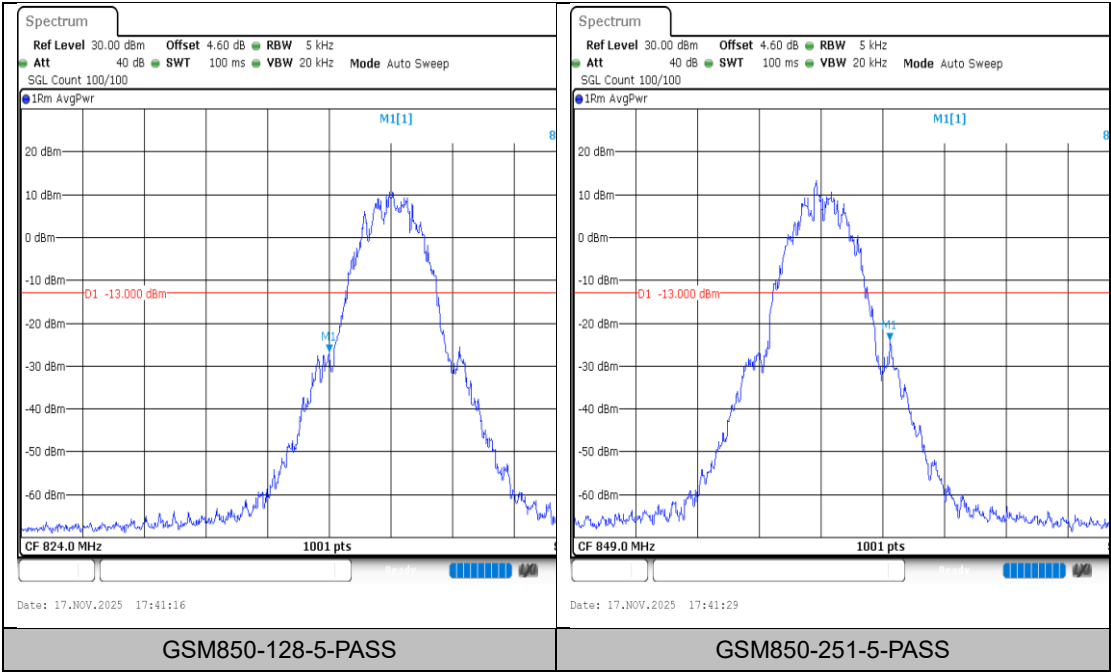


Band Edge

Test Result

Band	Channel	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	824.00	-26.57	-13	PASS
GSM850	251	849.02	-24.00	-13	PASS

Test Graphs

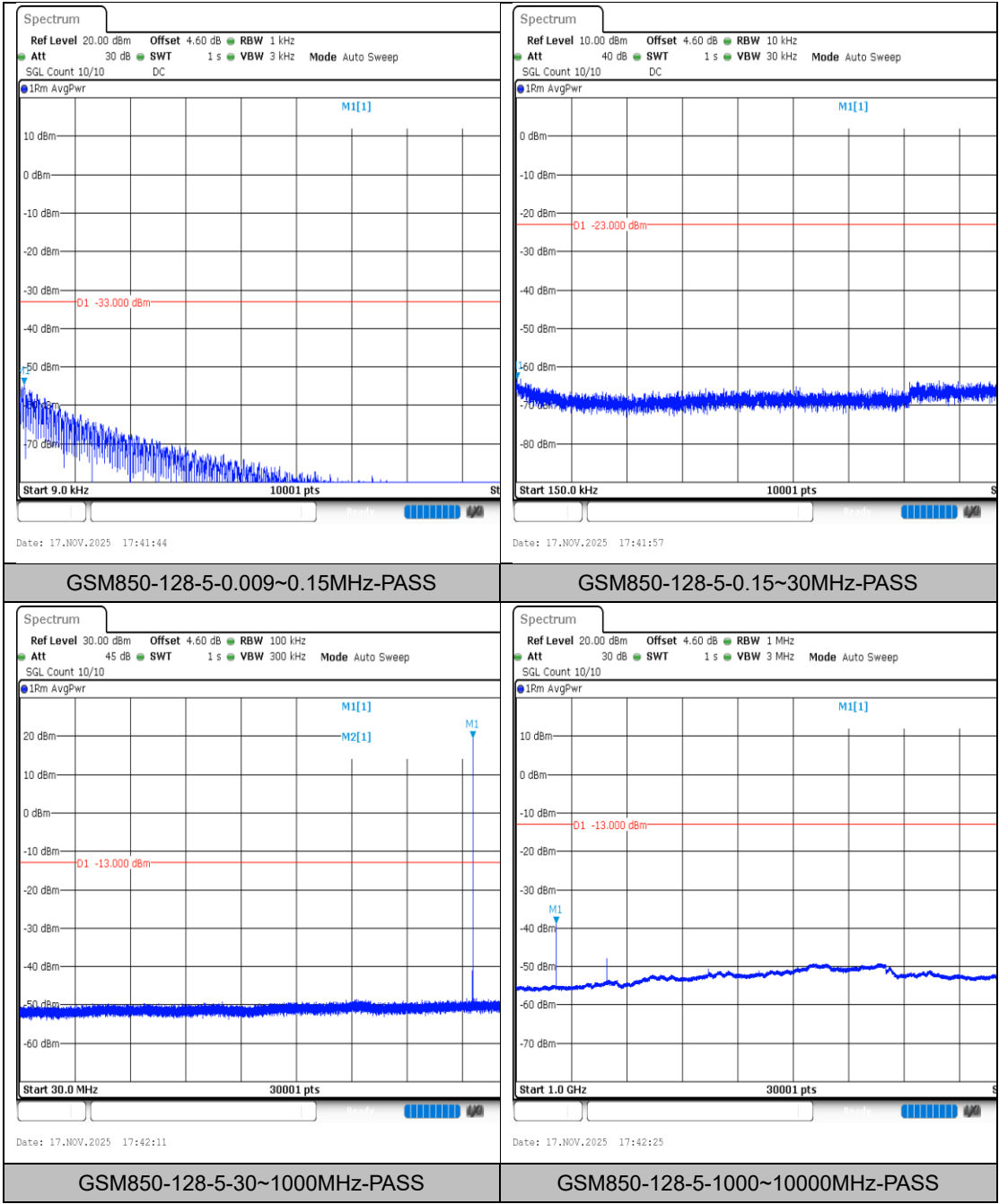


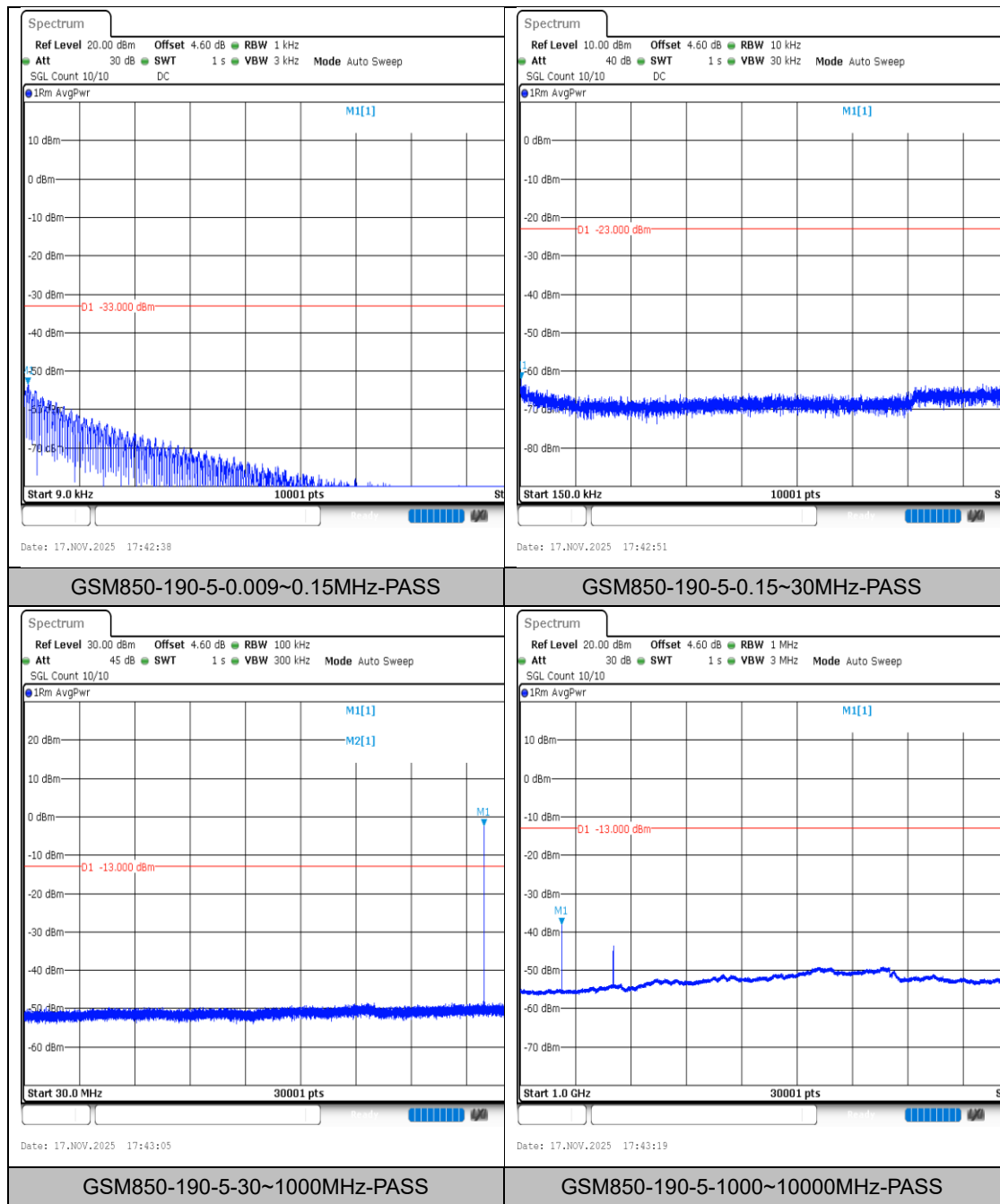
Conducted Spurious Emission

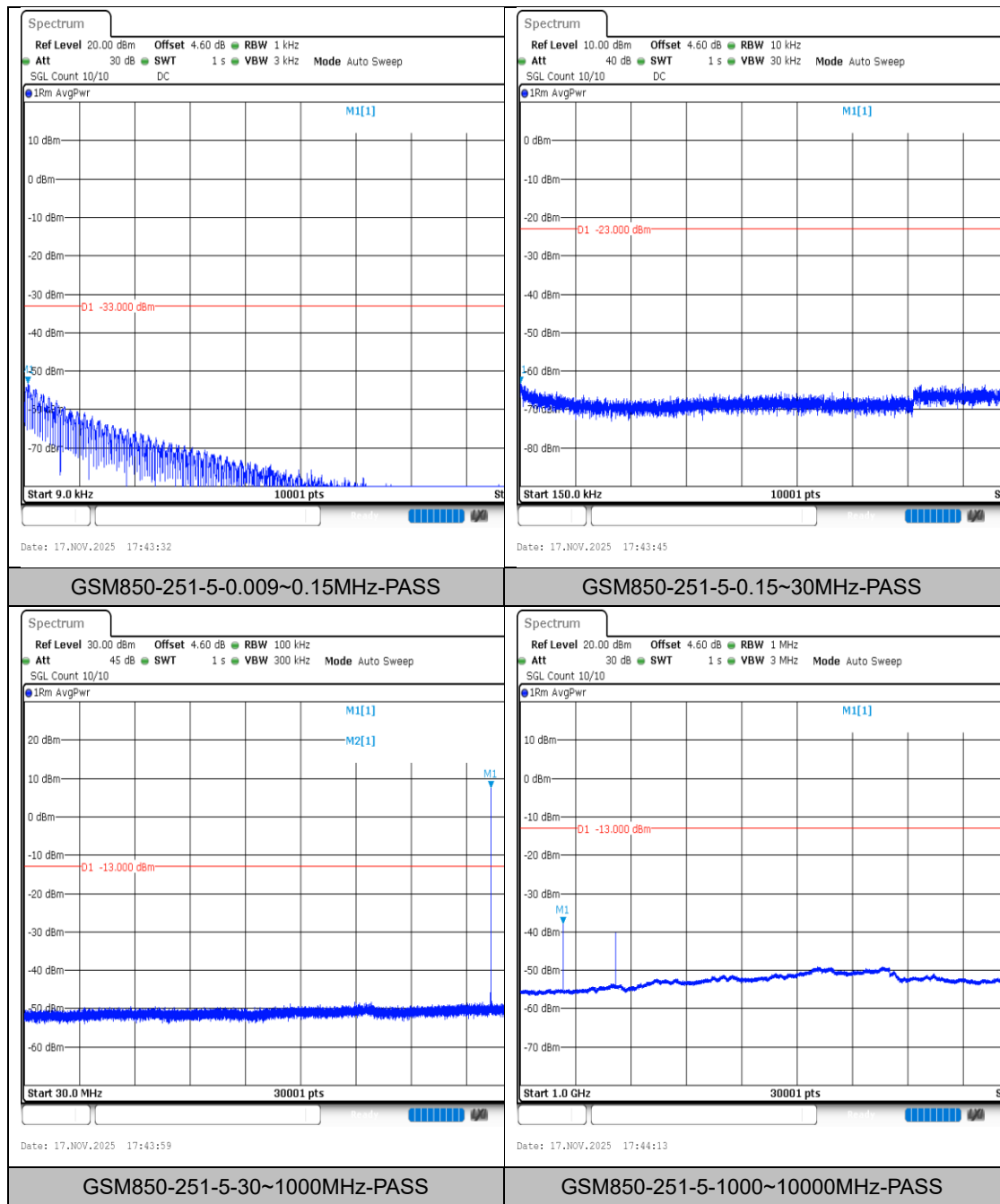
Test Result

Band	Channel	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	0.009~0.15MHz	0.01	-54.58	-33	PASS
GSM850	128	0.15~30MHz	0.19	-63.06	-23	PASS
GSM850	128	30~1000MHz	939.31	-48.31	-13	PASS
GSM850	128	1000~10000MHz	1648.43	-38.66	-13	PASS
GSM850	190	0.009~0.15MHz	0.01	-53.39	-33	PASS
GSM850	190	0.15~30MHz	0.19	-62.06	-23	PASS
GSM850	190	30~1000MHz	946.33	-48.21	-13	PASS
GSM850	190	1000~10000MHz	1673.33	-38.05	-13	PASS
GSM850	251	0.009~0.15MHz	0.01	-53.15	-33	PASS
GSM850	251	0.15~30MHz	0.16	-63.05	-23	PASS
GSM850	251	30~1000MHz	978.43	-48.3	-13	PASS
GSM850	251	1000~10000MHz	1697.93	-37.68	-13	PASS

Test Graphs







Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	VN	NT	1.55	0.001881	±2.5	PASS
GSM850	128	VL	NT	3.42	0.004149	±2.5	PASS
GSM850	128	VH	NT	3.52	0.004271	±2.5	PASS
GSM850	190	VN	NT	8.23	0.009837	±2.5	PASS
GSM850	190	VL	NT	5.81	0.006945	±2.5	PASS
GSM850	190	VH	NT	2.00	0.002391	±2.5	PASS
GSM850	251	VN	NT	4.29	0.005054	±2.5	PASS
GSM850	251	VL	NT	2.07	0.002439	±2.5	PASS
GSM850	251	VH	NT	3.97	0.004677	±2.5	PASS

Temperature							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	NV	-30	4.94	0.005994	±2.5	PASS
GSM850	128	NV	-20	3.10	0.003761	±2.5	PASS
GSM850	128	NV	-10	4.75	0.005763	±2.5	PASS
GSM850	128	NV	0	2.78	0.003373	±2.5	PASS
GSM850	128	NV	10	4.33	0.005254	±2.5	PASS
GSM850	128	NV	20	5.46	0.006625	±2.5	PASS
GSM850	128	NV	30	8.36	0.010143	±2.5	PASS
GSM850	128	NV	40	2.26	0.002742	±2.5	PASS
GSM850	128	NV	50	5.84	0.007086	±2.5	PASS
GSM850	190	NV	-30	2.65	0.003168	±2.5	PASS
GSM850	190	NV	-20	0.71	0.000849	±2.5	PASS
GSM850	190	NV	-10	7.20	0.008606	±2.5	PASS
GSM850	190	NV	0	7.59	0.009072	±2.5	PASS
GSM850	190	NV	10	3.78	0.004518	±2.5	PASS
GSM850	190	NV	20	3.68	0.004399	±2.5	PASS
GSM850	190	NV	30	1.58	0.001889	±2.5	PASS
GSM850	190	NV	40	5.04	0.006024	±2.5	PASS
GSM850	190	NV	50	4.10	0.004901	±2.5	PASS
GSM850	251	NV	-30	7.49	0.008824	±2.5	PASS
GSM850	251	NV	-20	0.55	0.000648	±2.5	PASS
GSM850	251	NV	-10	5.78	0.006810	±2.5	PASS

GSM850	251	NV	0	9.01	0.010615	±2.5	PASS
GSM850	251	NV	10	9.69	0.011416	±2.5	PASS
GSM850	251	NV	20	5.10	0.006008	±2.5	PASS
GSM850	251	NV	30	5.33	0.006279	±2.5	PASS
GSM850	251	NV	40	9.65	0.011369	±2.5	PASS
GSM850	251	NV	50	8.30	0.009779	±2.5	PASS

Effective (Isotropic) Radiated Power Output Data

Test Result

Select the higher-powered ANT 1 as the final data.

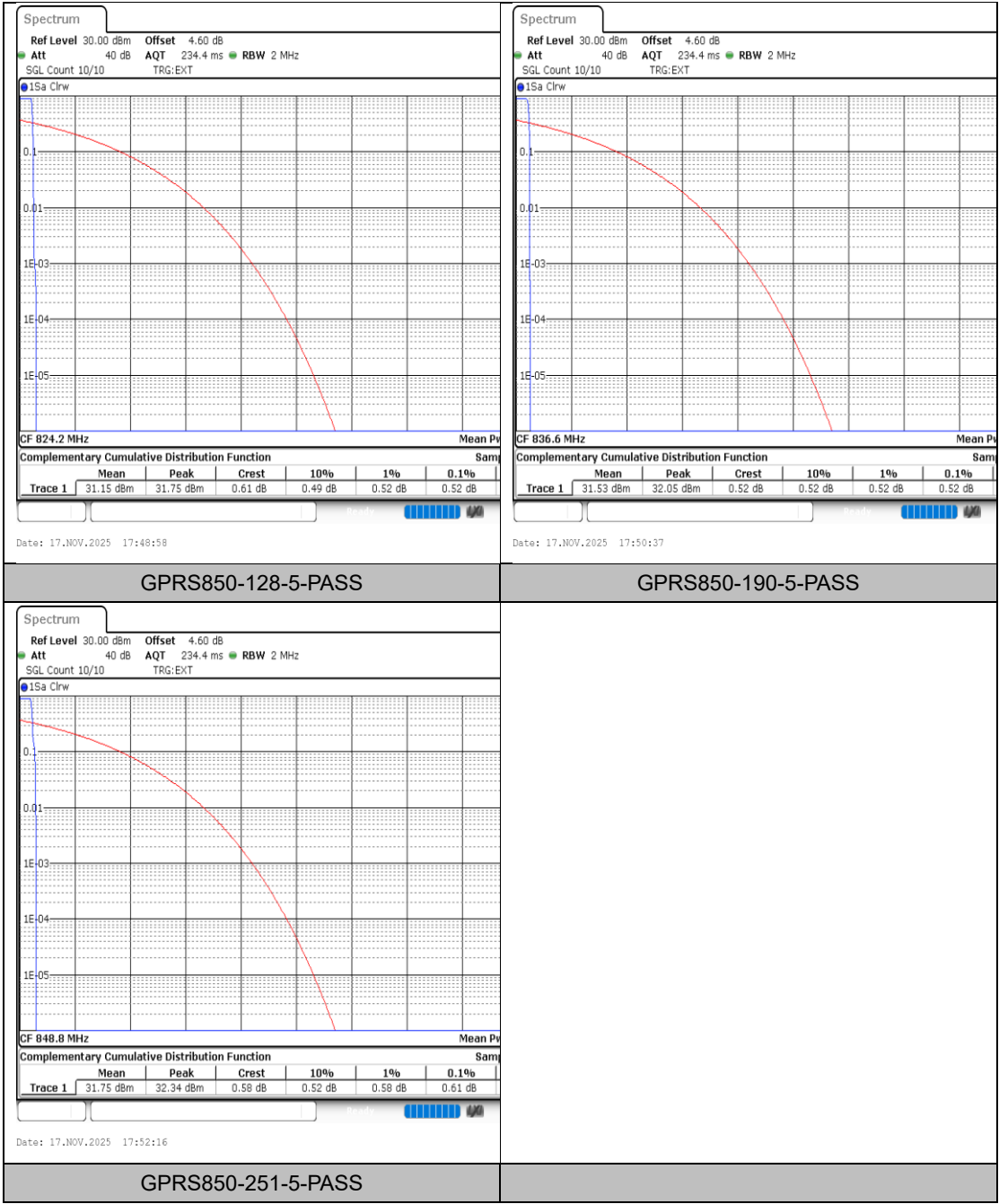
Band	Channel	Up Slot Num	Power (dBm)	ERP (dBm)	Limit(dBm)	Verdict
GPRS850	128	1	33.17	26.84	38.45	PASS
GPRS850	128	2	31.10	24.77	38.45	PASS
GPRS850	128	3	29.34	23.01	38.45	PASS
GPRS850	128	4	27.22	20.89	38.45	PASS
GPRS850	190	1	33.35	27.02	38.45	PASS
GPRS850	190	2	31.36	25.03	38.45	PASS
GPRS850	190	3	29.66	23.33	38.45	PASS
GPRS850	190	4	27.57	21.24	38.45	PASS
GPRS850	251	1	33.44	27.11	38.45	PASS
GPRS850	251	2	31.50	25.17	38.45	PASS
GPRS850	251	3	29.84	23.51	38.45	PASS
GPRS850	251	4	27.82	21.49	38.45	PASS

Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	Result(dB)	Limit(dB)	Verdict
GPRS850	128	0.52	13	PASS
GPRS850	190	0.52	13	PASS
GPRS850	251	0.61	13	PASS

Test Graphs

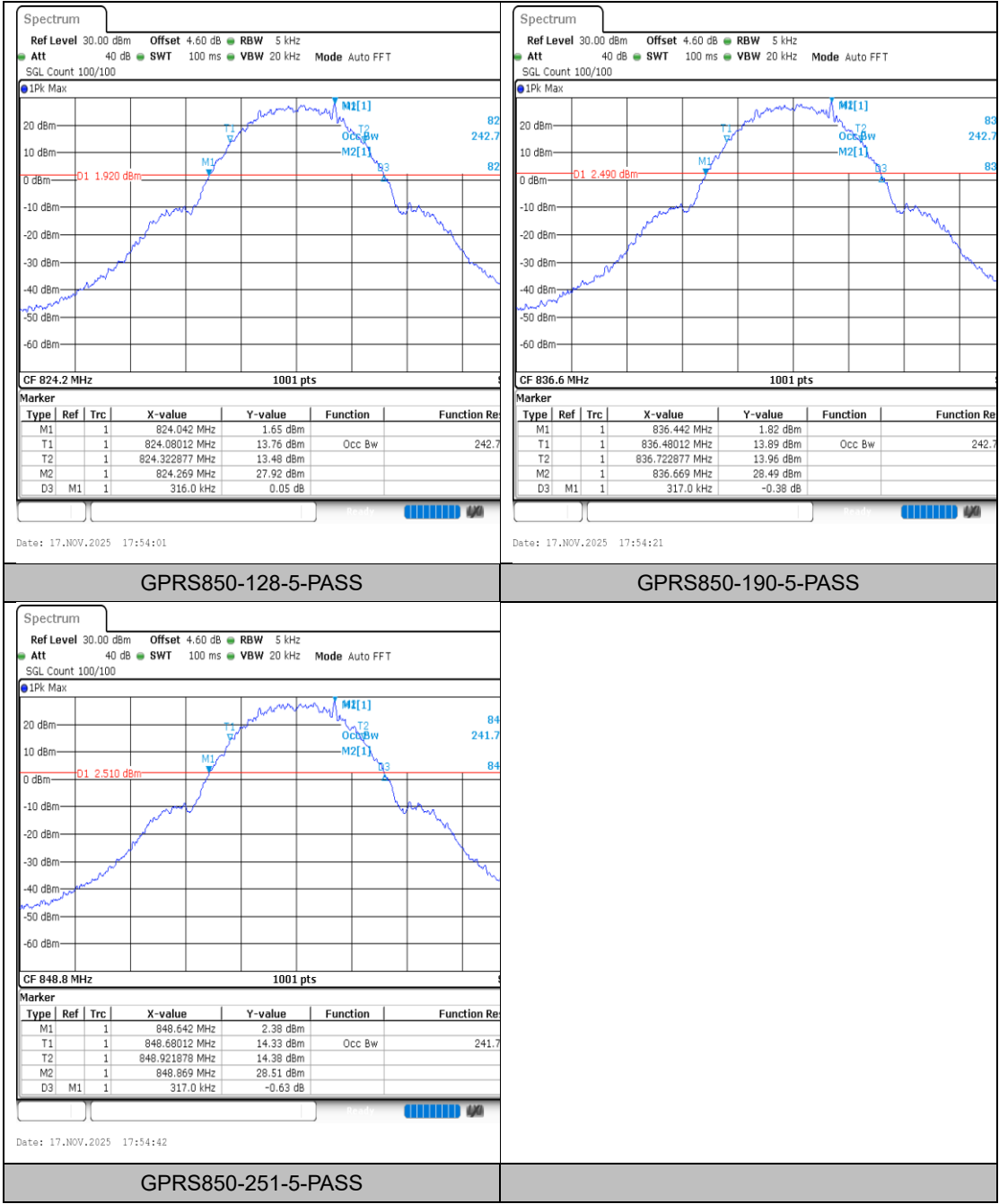


26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GPRS850	128	0.243	0.32	---	PASS
GPRS850	190	0.243	0.32	---	PASS
GPRS850	251	0.242	0.32	---	PASS

Test Graphs

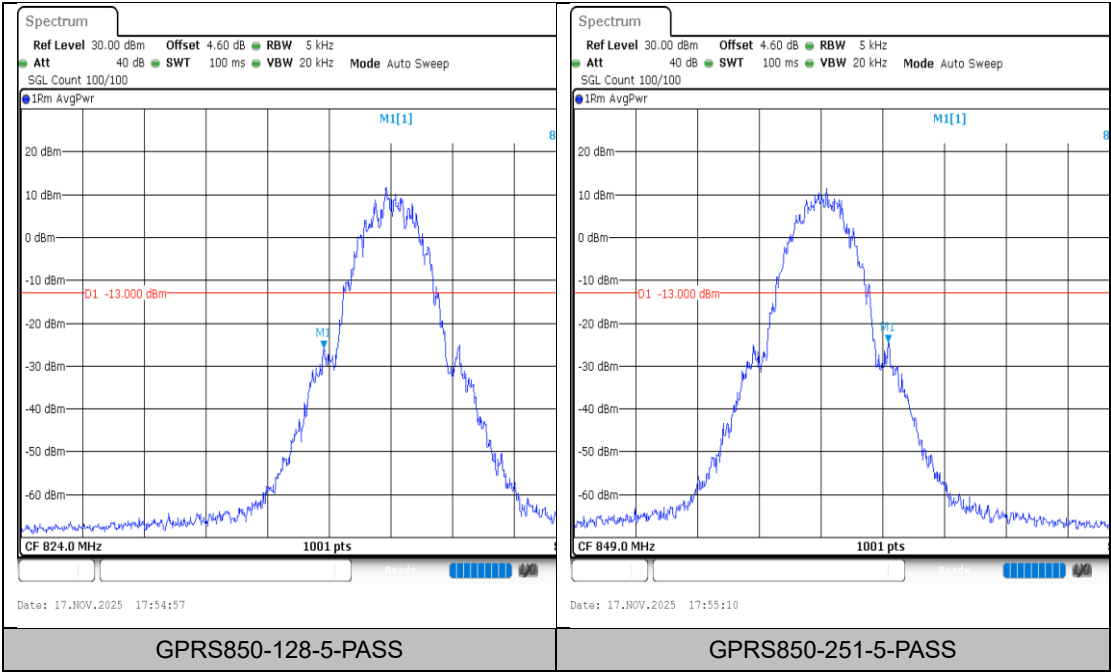


Band Edge

Test Result

Band	Channel	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GPRS850	128	823.98	-25.76	-13	PASS
GPRS850	251	849.02	-24.51	-13	PASS

Test Graphs

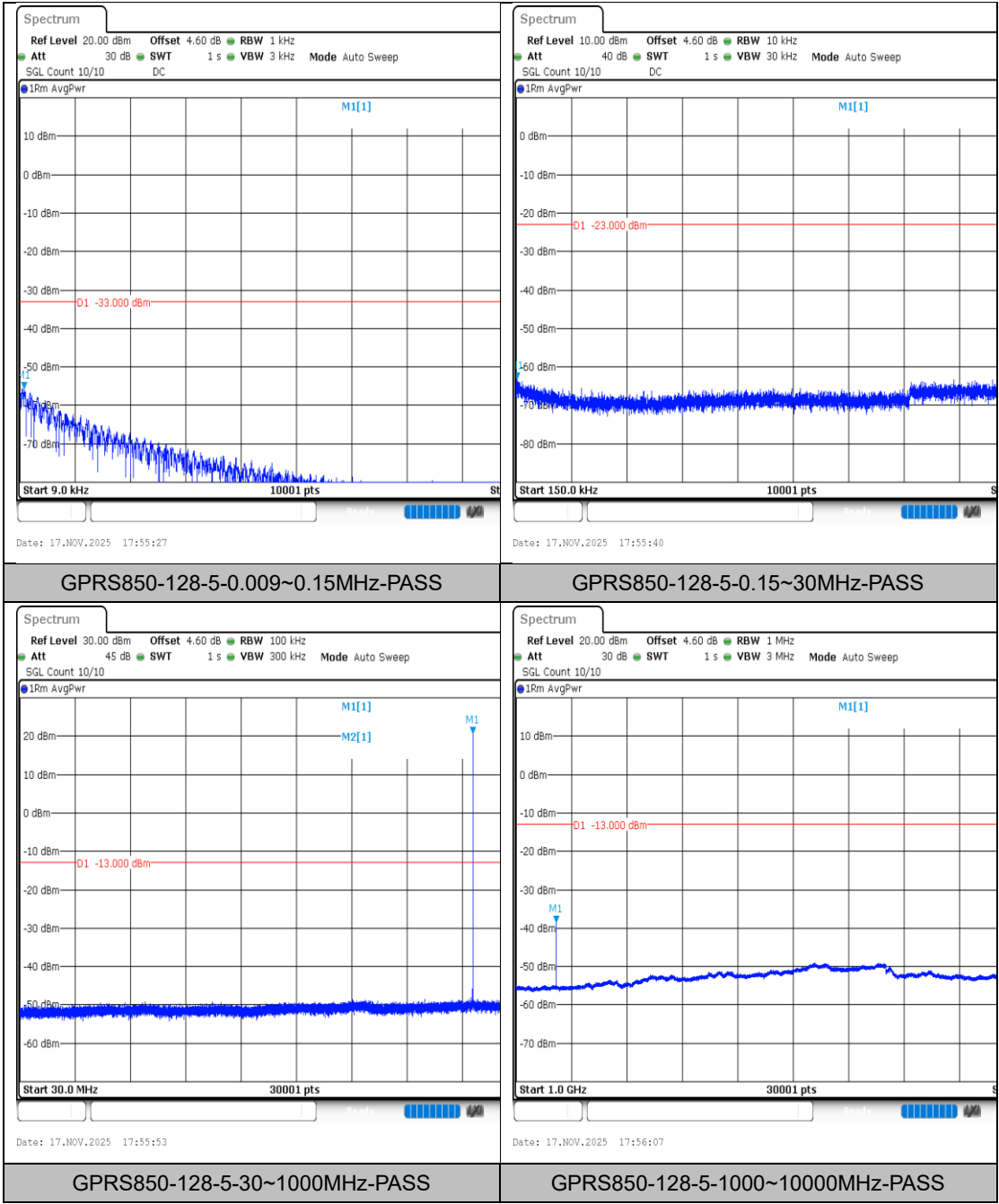


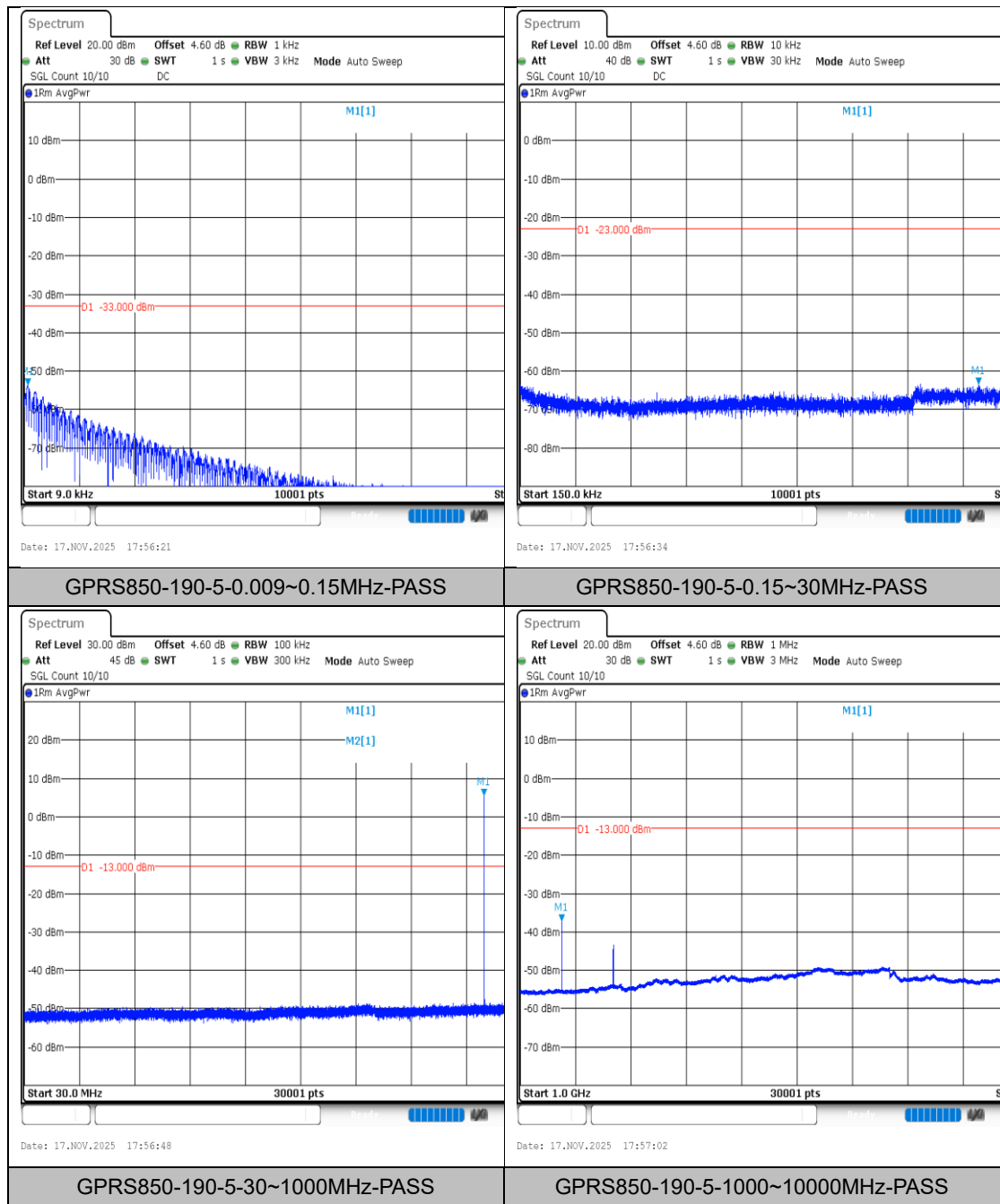
Conducted Spurious Emission

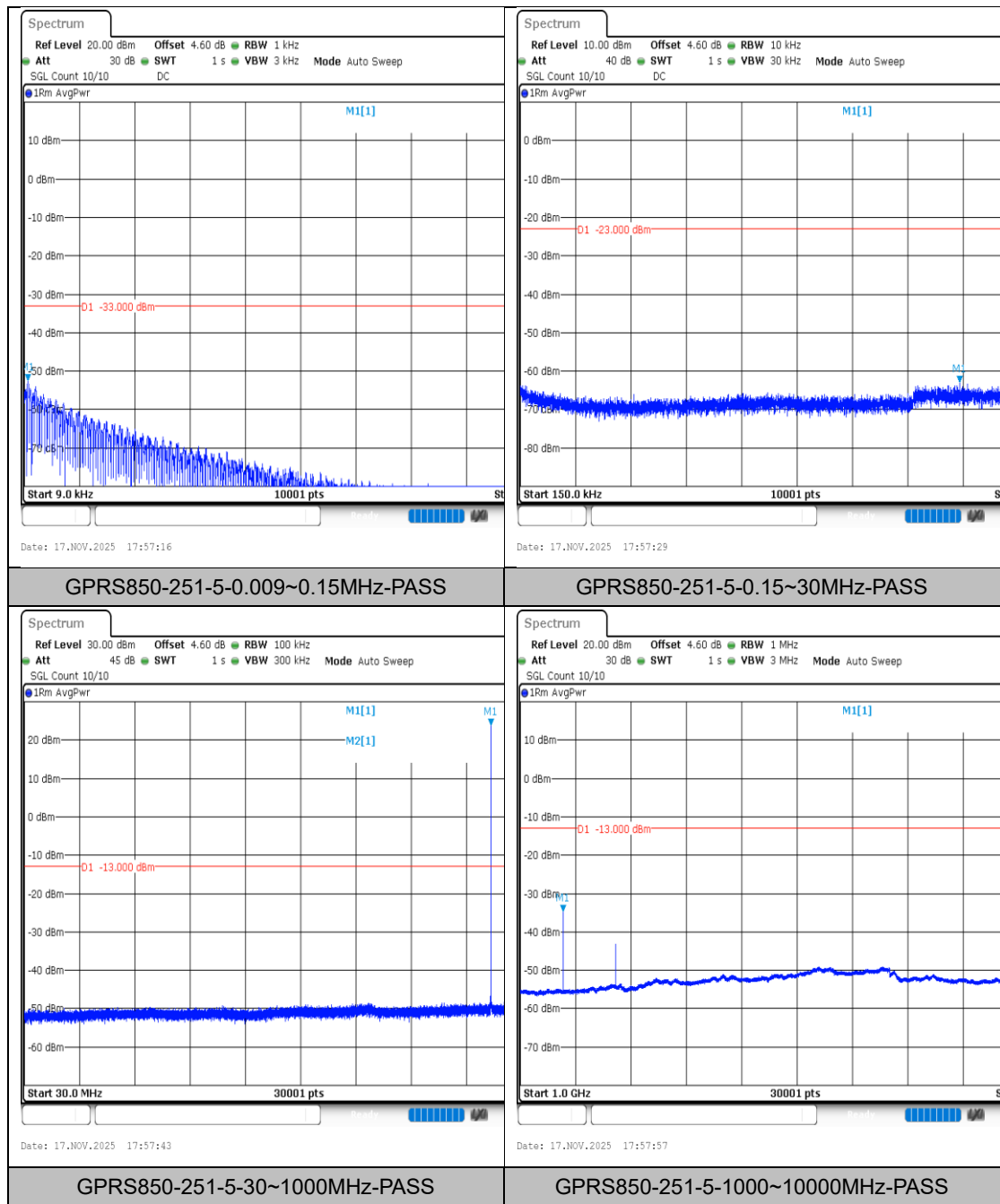
Test Result

Band	Channel	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GPRS850	128	0.009~0.15MHz	0.01	-55.6	-33	PASS
GPRS850	128	0.15~30MHz	0.17	-63.17	-23	PASS
GPRS850	128	30~1000MHz	938.53	-47.99	-13	PASS
GPRS850	128	1000~10000MHz	1648.43	-38.52	-13	PASS
GPRS850	190	0.009~0.15MHz	0.01	-53.67	-33	PASS
GPRS850	190	0.15~30MHz	24.85	-63.34	-23	PASS
GPRS850	190	30~1000MHz	992.56	-48.13	-13	PASS
GPRS850	190	1000~10000MHz	1673.03	-37.18	-13	PASS
GPRS850	251	0.009~0.15MHz	0.01	-52.47	-33	PASS
GPRS850	251	0.15~30MHz	23.85	-62.93	-23	PASS
GPRS850	251	30~1000MHz	958.16	-48.07	-13	PASS
GPRS850	251	1000~10000MHz	1697.63	-34.59	-13	PASS

Test Graphs







Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GPRS850	128	VN	NT	4.46	0.005411	±2.5	PASS
GPRS850	128	VL	NT	7.46	0.009051	±2.5	PASS
GPRS850	128	VH	NT	5.94	0.007207	±2.5	PASS
GPRS850	190	VN	NT	7.30	0.008726	±2.5	PASS
GPRS850	190	VL	NT	9.49	0.011344	±2.5	PASS
GPRS850	190	VH	NT	10.46	0.012503	±2.5	PASS
GPRS850	251	VN	NT	7.07	0.008329	±2.5	PASS
GPRS850	251	VL	NT	2.84	0.003346	±2.5	PASS
GPRS850	251	VH	NT	4.42	0.005207	±2.5	PASS

Temperature							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GPRS850	128	NV	-30	6.13	0.007438	±2.5	PASS
GPRS850	128	NV	-20	7.85	0.009524	±2.5	PASS
GPRS850	128	NV	-10	9.62	0.011672	±2.5	PASS
GPRS850	128	NV	0	10.01	0.012145	±2.5	PASS
GPRS850	128	NV	10	5.68	0.006892	±2.5	PASS
GPRS850	128	NV	20	12.98	0.015749	±2.5	PASS
GPRS850	128	NV	30	9.33	0.011320	±2.5	PASS
GPRS850	128	NV	40	9.78	0.011866	±2.5	PASS
GPRS850	128	NV	50	9.85	0.011951	±2.5	PASS
GPRS850	190	NV	-30	9.91	0.011846	±2.5	PASS
GPRS850	190	NV	-20	7.85	0.009383	±2.5	PASS
GPRS850	190	NV	-10	7.49	0.008953	±2.5	PASS
GPRS850	190	NV	0	6.42	0.007674	±2.5	PASS
GPRS850	190	NV	10	9.65	0.011535	±2.5	PASS
GPRS850	190	NV	20	3.91	0.004674	±2.5	PASS
GPRS850	190	NV	30	6.17	0.007375	±2.5	PASS
GPRS850	190	NV	40	2.00	0.002391	±2.5	PASS
GPRS850	190	NV	50	6.55	0.007829	±2.5	PASS
GPRS850	251	NV	-30	3.00	0.003534	±2.5	PASS
GPRS850	251	NV	-20	4.65	0.005478	±2.5	PASS
GPRS850	251	NV	-10	4.10	0.004830	±2.5	PASS

GPRS850	251	NV	0	5.26	0.006197	±2.5	PASS
GPRS850	251	NV	10	3.42	0.004029	±2.5	PASS
GPRS850	251	NV	20	4.91	0.005785	±2.5	PASS
GPRS850	251	NV	30	3.94	0.004642	±2.5	PASS
GPRS850	251	NV	40	5.23	0.006162	±2.5	PASS
GPRS850	251	NV	50	6.97	0.008212	±2.5	PASS

Effective (Isotropic) Radiated Power Output Data

Test Result

Select the higher-powered ANT 1 as the final data.

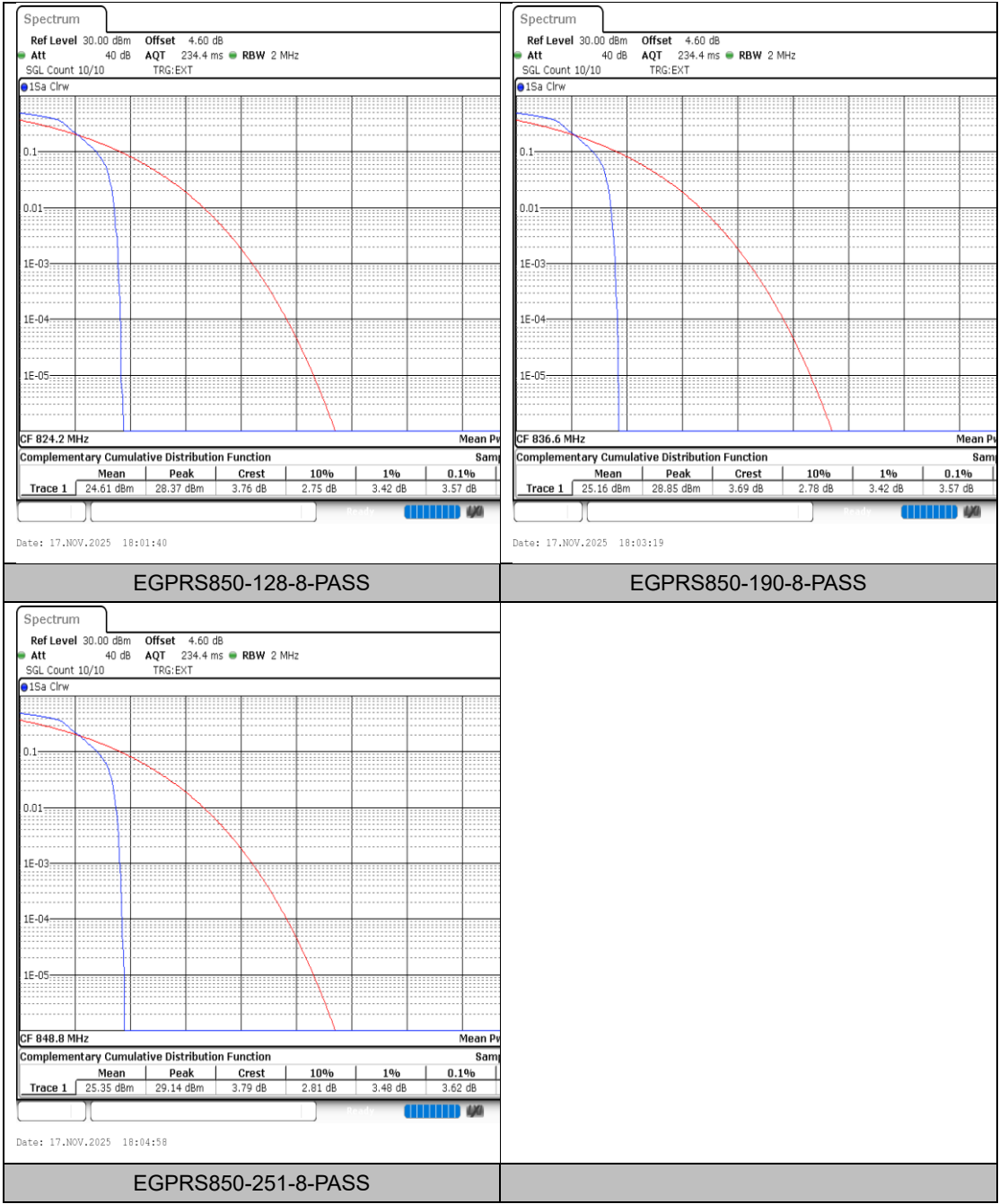
Band	Channel	Up Slot Num	Power(dBm)	ERP (dBm)	Limit(dBm)	Verdict
EGPRS850	128	1	26.69	20.36	38.45	PASS
EGPRS850	128	2	24.55	18.22	38.45	PASS
EGPRS850	128	3	22.36	16.03	38.45	PASS
EGPRS850	128	4	20.21	13.88	38.45	PASS
EGPRS850	190	1	26.87	20.54	38.45	PASS
EGPRS850	190	2	24.93	18.6	38.45	PASS
EGPRS850	190	3	22.78	16.45	38.45	PASS
EGPRS850	190	4	20.57	14.24	38.45	PASS
EGPRS850	251	1	27.01	20.68	38.45	PASS
EGPRS850	251	2	25.03	18.7	38.45	PASS
EGPRS850	251	3	22.82	16.49	38.45	PASS
EGPRS850	251	4	20.64	14.31	38.45	PASS

Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	Result(dB)	Limit(dB)	Verdict
EGPRS850	128	3.57	13	PASS
EGPRS850	190	3.57	13	PASS
EGPRS850	251	3.62	13	PASS

Test Graphs

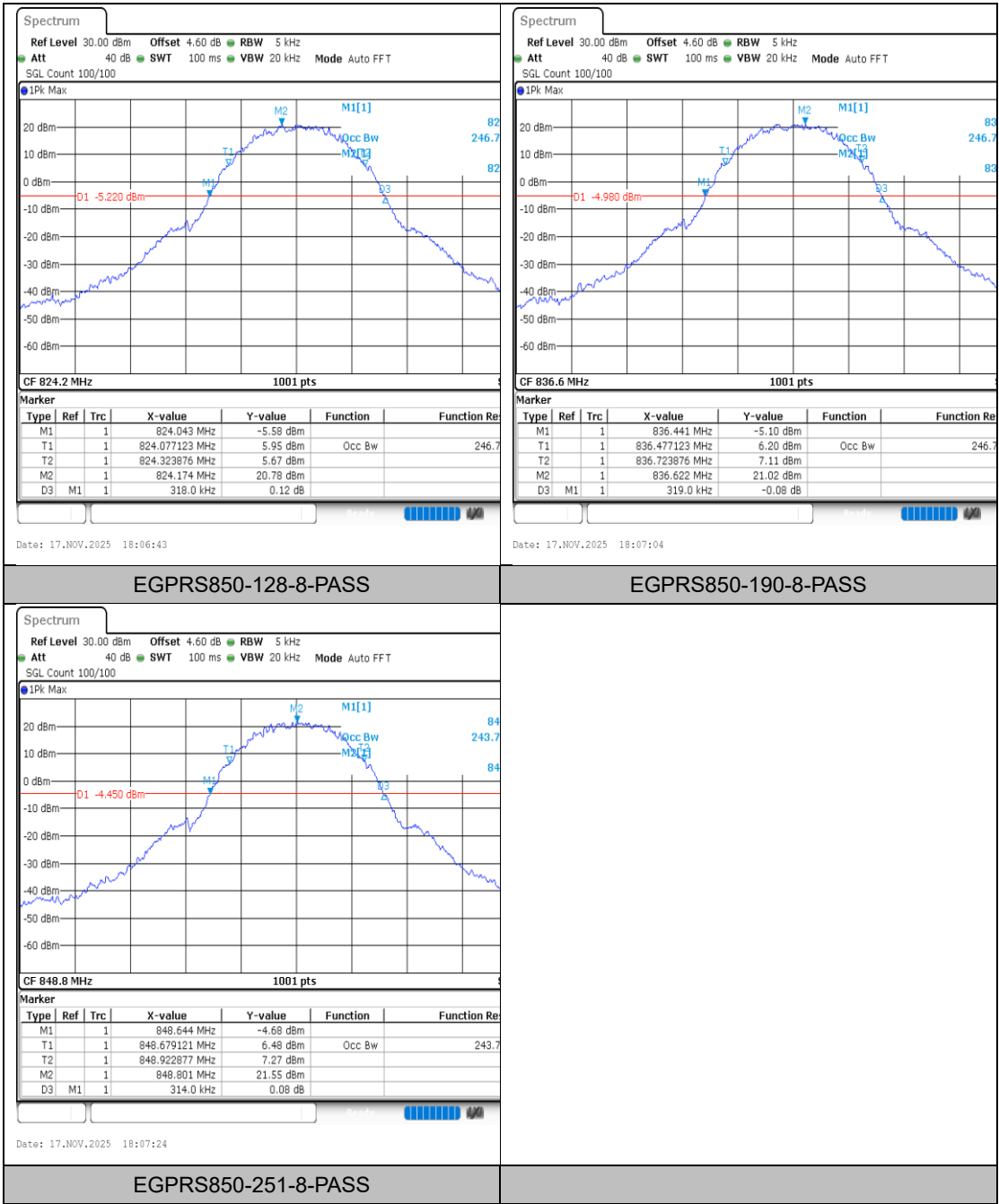


26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
EGPRS850	128	0.247	0.32	---	PASS
EGPRS850	190	0.247	0.32	---	PASS
EGPRS850	251	0.244	0.31	---	PASS

Test Graphs

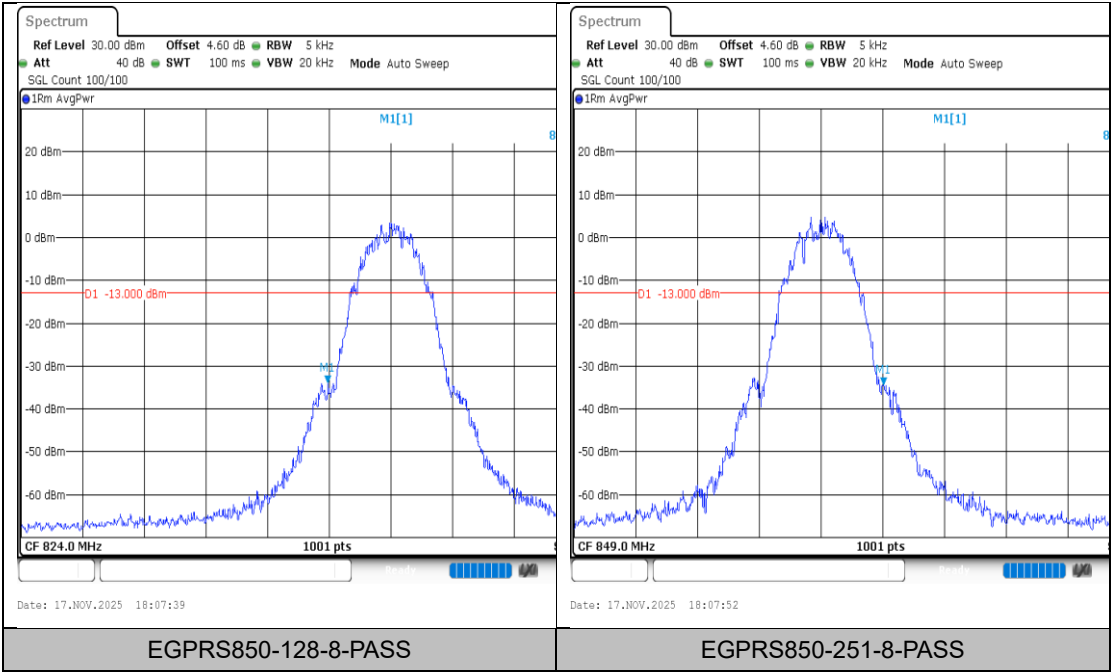


Band Edge

Test Result

Band	Channel	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
EGPRS850	128	824.00	-33.79	-13	PASS
EGPRS850	251	849.00	-34.41	-13	PASS

Test Graphs

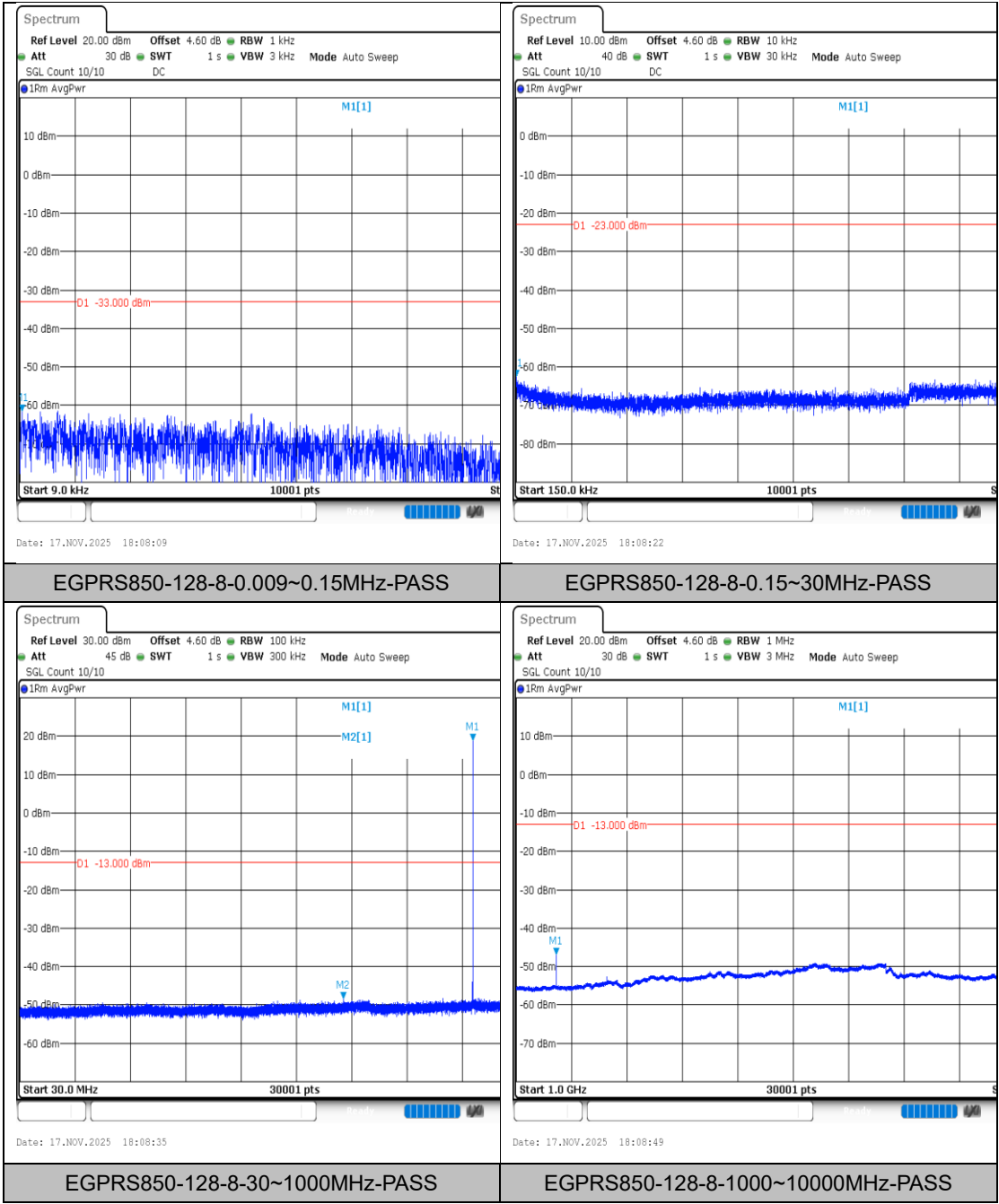


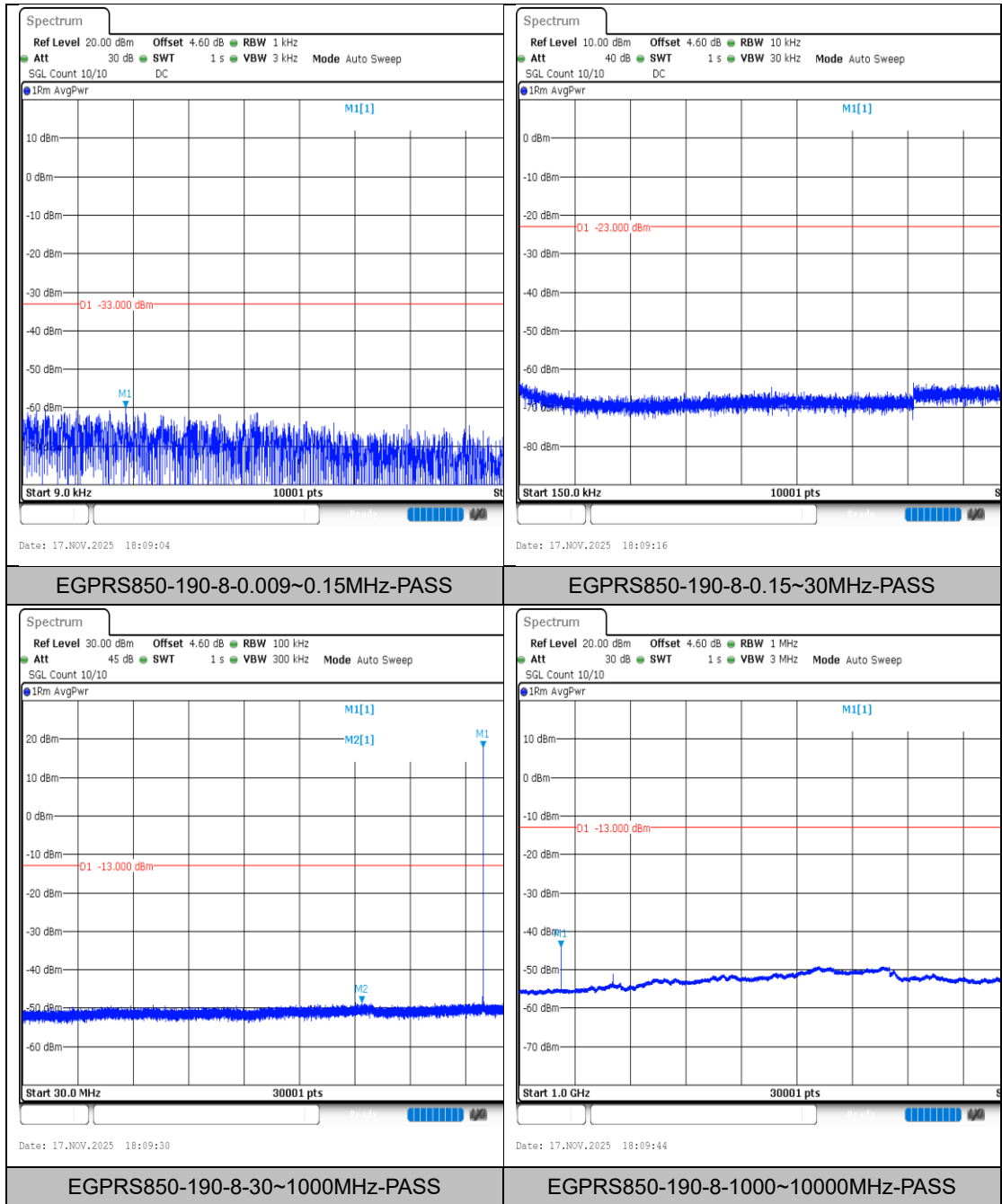
Conducted Spurious Emission

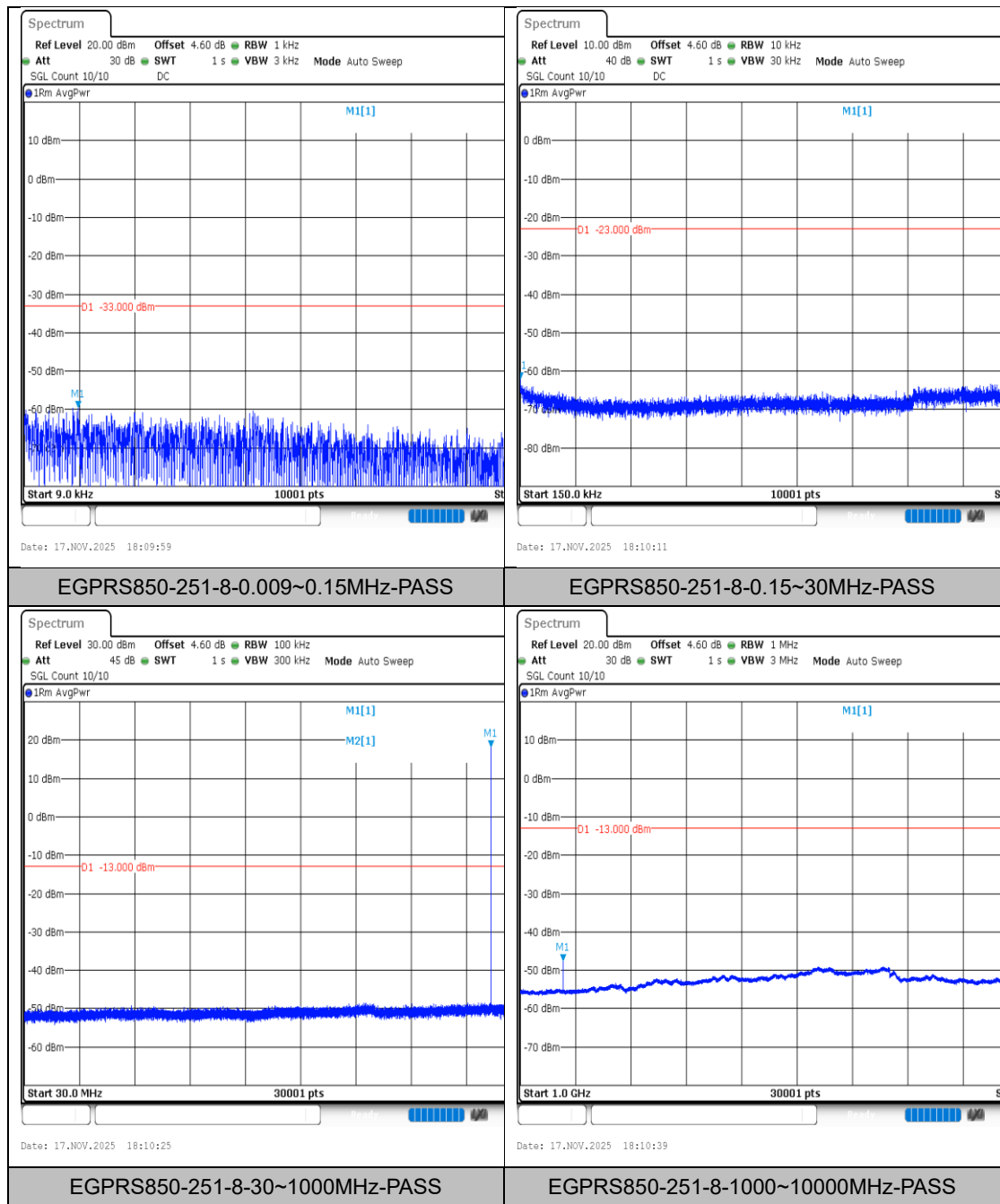
Test Result

Band	Channel	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
EGPRS850	128	0.009~0.15MHz	0.01	-61.45	-33	PASS
EGPRS850	128	0.15~30MHz	0.16	-62.38	-23	PASS
EGPRS850	128	30~1000MHz	597.29	-48.39	-13	PASS
EGPRS850	128	1000~10000MHz	1648.43	-46.89	-13	PASS
EGPRS850	190	0.009~0.15MHz	0.04	-59.97	-33	PASS
EGPRS850	190	0.15~30MHz	27.46	-62.99	-23	PASS
EGPRS850	190	30~1000MHz	624.84	-48.49	-13	PASS
EGPRS850	190	1000~10000MHz	1673.33	-44.17	-13	PASS
EGPRS850	251	0.009~0.15MHz	0.02	-59.51	-33	PASS
EGPRS850	251	0.15~30MHz	0.16	-62.08	-23	PASS
EGPRS850	251	30~1000MHz	972.71	-48.41	-13	PASS
EGPRS850	251	1000~10000MHz	1697.33	-47.48	-13	PASS

Test Graphs







Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
EGPRS850	128	VN	NT	1.65	0.002002	±2.5	PASS
EGPRS850	128	VL	NT	4.26	0.005169	±2.5	PASS
EGPRS850	128	VH	NT	-4.55	-0.005521	±2.5	PASS
EGPRS850	190	VN	NT	4.88	0.005833	±2.5	PASS
EGPRS850	190	VL	NT	-1.03	-0.001231	±2.5	PASS
EGPRS850	190	VH	NT	-3.23	-0.003861	±2.5	PASS
EGPRS850	251	VN	NT	3.20	0.003770	±2.5	PASS
EGPRS850	251	VL	NT	2.71	0.003193	±2.5	PASS
EGPRS850	251	VH	NT	2.16	0.002545	±2.5	PASS

Temperature							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
EGPRS850	128	NV	-30	0.06	0.000073	±2.5	PASS
EGPRS850	128	NV	-20	-2.32	-0.002815	±2.5	PASS
EGPRS850	128	NV	-10	-4.84	-0.005872	±2.5	PASS
EGPRS850	128	NV	0	3.03	0.003676	±2.5	PASS
EGPRS850	128	NV	10	1.94	0.002354	±2.5	PASS
EGPRS850	128	NV	20	4.00	0.004853	±2.5	PASS
EGPRS850	128	NV	30	1.45	0.001759	±2.5	PASS
EGPRS850	128	NV	40	-1.49	-0.001808	±2.5	PASS
EGPRS850	128	NV	50	1.58	0.001917	±2.5	PASS
EGPRS850	190	NV	-30	-0.97	-0.001159	±2.5	PASS
EGPRS850	190	NV	-20	1.07	0.001279	±2.5	PASS
EGPRS850	190	NV	-10	0.68	0.000813	±2.5	PASS
EGPRS850	190	NV	0	0.19	0.000227	±2.5	PASS
EGPRS850	190	NV	10	0.23	0.000275	±2.5	PASS
EGPRS850	190	NV	20	0.13	0.000155	±2.5	PASS
EGPRS850	190	NV	30	-0.90	-0.001076	±2.5	PASS
EGPRS850	190	NV	40	1.49	0.001781	±2.5	PASS
EGPRS850	190	NV	50	1.81	0.002164	±2.5	PASS
EGPRS850	251	NV	-30	1.26	0.001484	±2.5	PASS
EGPRS850	251	NV	-20	3.45	0.004065	±2.5	PASS
EGPRS850	251	NV	-10	3.94	0.004642	±2.5	PASS

EGPRS850	251	NV	0	2.42	0.002851	±2.5	PASS
EGPRS850	251	NV	10	7.01	0.008259	±2.5	PASS
EGPRS850	251	NV	20	4.52	0.005325	±2.5	PASS
EGPRS850	251	NV	30	1.65	0.001944	±2.5	PASS
EGPRS850	251	NV	40	2.00	0.002356	±2.5	PASS
EGPRS850	251	NV	50	2.23	0.002627	±2.5	PASS