

RF Test Data for GSM (Conducted Measurements)

General Description of EUT	
Product Name:	Smart POS Payment Terminal
Test Model:	CS50
Sample ID:	20211111-01_01-02#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 7.6V
Test Engineer:	Huangjianping
Note: For a more detailed features description, please refer to the report TB-FCC185239	

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A: Conducted Power Output Data

Test Result

Band	Channel	PCL	Conducted Power (dBm)	Verdict
GSM850	128	3	32.89	PASS
GSM850	190	3	32.95	PASS
GSM850	251	3	33.01	PASS
GSM1900	512	0	30.46	PASS
GSM1900	661	0	30.40	PASS
GSM1900	810	0	30.43	PASS

Band	Channel	PCL	Slot	Conducted Power	Verdict
GPRS850	128	3	1	32.96	PASS
GPRS850	128	3	2	32.33	PASS
GPRS850	128	3	3	30.67	PASS
GPRS850	128	3	4	29.50	PASS
GPRS850	190	3	1	32.99	PASS
GPRS850	190	3	2	32.38	PASS
GPRS850	190	3	3	30.74	PASS
GPRS850	190	3	4	29.58	PASS
GPRS850	251	3	1	33.05	PASS
GPRS850	251	3	2	32.45	PASS
GPRS850	251	3	3	30.82	PASS
GPRS850	251	3	4	29.67	PASS
GPRS1900	512	0	1	30.47	PASS
GPRS1900	512	0	2	29.74	PASS
GPRS1900	512	0	3	28.03	PASS
GPRS1900	512	0	4	26.84	PASS
GPRS1900	661	0	1	30.42	PASS
GPRS1900	661	0	2	29.72	PASS
GPRS1900	661	0	3	28.03	PASS
GPRS1900	661	0	4	26.95	PASS
GPRS1900	810	0	1	30.44	PASS
GPRS1900	810	0	2	29.76	PASS
GPRS1900	810	0	3	28.09	PASS
GPRS1900	810	0	4	27.04	PASS

Band	Channel	PCL	Slot	Conducted Power	Verdict
EGPRS850	128	8	1	28.46	PASS
EGPRS850	128	8	2	27.21	PASS
EGPRS850	128	8	3	25.04	PASS
EGPRS850	128	8	4	23.80	PASS
EGPRS850	190	8	1	28.34	PASS
EGPRS850	190	8	2	27.21	PASS
EGPRS850	190	8	3	25.05	PASS
EGPRS850	190	8	4	23.75	PASS
EGPRS850	251	8	1	28.08	PASS
EGPRS850	251	8	2	26.94	PASS
EGPRS850	251	8	3	24.79	PASS
EGPRS850	251	8	4	23.57	PASS
EGPRS1900	512	2	1	29.01	PASS
EGPRS1900	512	2	2	27.84	PASS
EGPRS1900	512	2	3	26.04	PASS
EGPRS1900	512	2	4	24.74	PASS
EGPRS1900	661	2	1	28.83	PASS
EGPRS1900	661	2	2	27.85	PASS
EGPRS1900	661	2	3	25.87	PASS
EGPRS1900	661	2	4	24.56	PASS
EGPRS1900	810	2	1	28.85	PASS
EGPRS1900	810	2	2	27.88	PASS
EGPRS1900	810	2	3	25.89	PASS
EGPRS1900	810	2	4	24.58	PASS

B: Peak-to-Average Ratio(CCDF)

Test Result

Mode	Channel	Frequency (MHz)	Peak Power (dBm)	AVG Power (dBm)	PAPR (dB)	Limit (dB)	Result
GSM 850	128	824.2	33.02	32.89	0.13	13	PASS
	190	836.6	33.07	32.95	0.12	13	PASS
	251	848.8	33.15	33.01	0.14	13	PASS
GPRS 850	128	824.2	33.11	32.96	0.15	13	PASS
	190	836.6	33.16	32.99	0.17	13	PASS
	251	848.8	33.16	33.05	0.11	13	PASS
EGPRS 850	128	824.2	31.61	28.46	3.15	13	PASS
	190	836.6	31.73	28.34	3.39	13	PASS
	251	848.8	31.31	28.08	3.23	13	PASS
PCS 1900	512	1850.2	30.58	30.46	0.12	13	PASS
	661	1880.0	30.59	30.40	0.19	13	PASS
	810	1909.8	30.6	30.43	0.17	13	PASS
GPRS 1900	512	1850.2	30.6	30.47	0.13	13	PASS
	661	1880.0	30.59	30.42	0.17	13	PASS
	810	1909.8	30.65	30.44	0.21	13	PASS
EGPRS 1900	512	1850.2	32.25	29.01	3.24	13	PASS
	661	1880.0	31.98	28.83	3.15	13	PASS
	810	1909.8	32.17	28.85	3.32	13	PASS

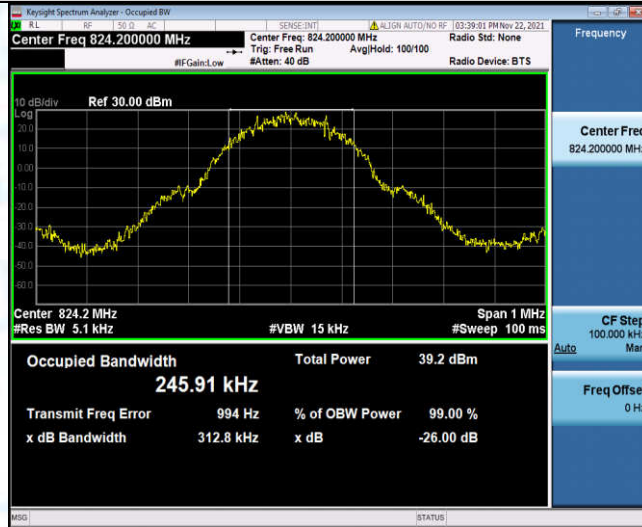
C: 26dB Bandwidth and Occupied Bandwidth

Test Result

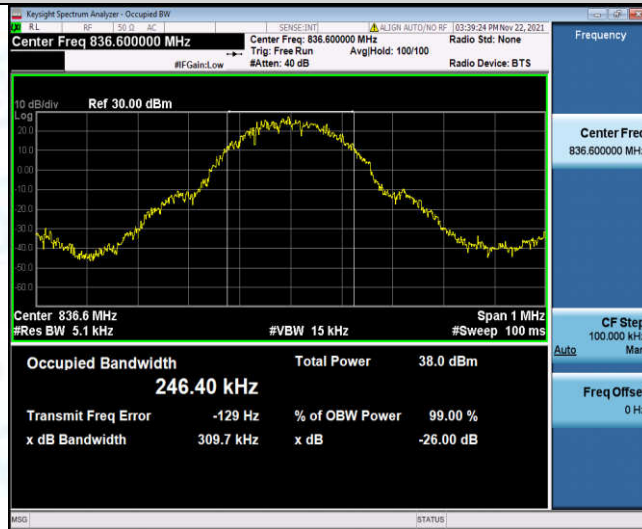
Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	3	0.24591	0.3128	---	PASS
GSM850	190	3	0.24640	0.3097	---	PASS
GSM850	251	3	0.24652	0.3154	---	PASS
GPRS850	128	3	0.24326	0.3161	---	PASS
GPRS850	190	3	0.24445	0.3173	---	PASS
GPRS850	251	3	0.24666	0.3108	---	PASS
EGPRS850	128	8	0.24785	0.3138	---	PASS
EGPRS850	190	8	0.24654	0.3207	---	PASS
EGPRS850	251	8	0.24454	0.3140	---	PASS
GSM1900	512	0	0.24283	0.3137	---	PASS
GSM1900	661	0	0.24608	0.3144	---	PASS
GSM1900	810	0	0.24926	0.3135	---	PASS
GPRS1900	512	0	0.24410	0.3177	---	PASS
GPRS1900	661	0	0.24798	0.3089	---	PASS
GPRS1900	810	0	0.24543	0.3112	---	PASS
EGPRS1900	512	2	0.24939	0.3226	---	PASS
EGPRS1900	661	2	0.25376	0.3153	---	PASS
EGPRS1900	810	2	0.24982	0.3216	---	PASS

Test Graphs

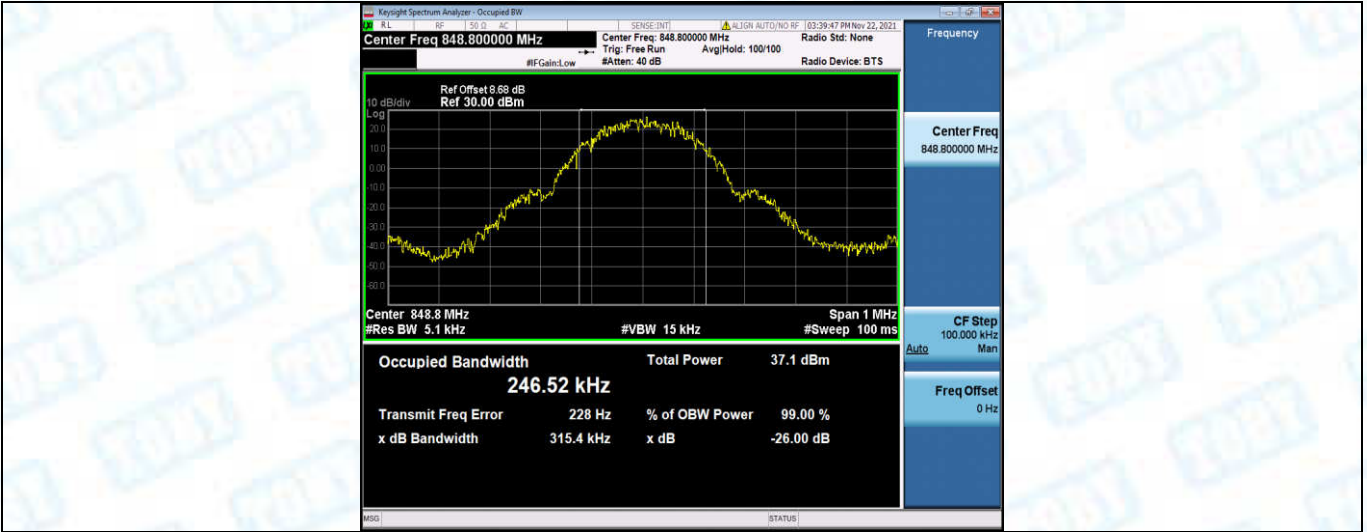
GSM850-128-3-0.3128



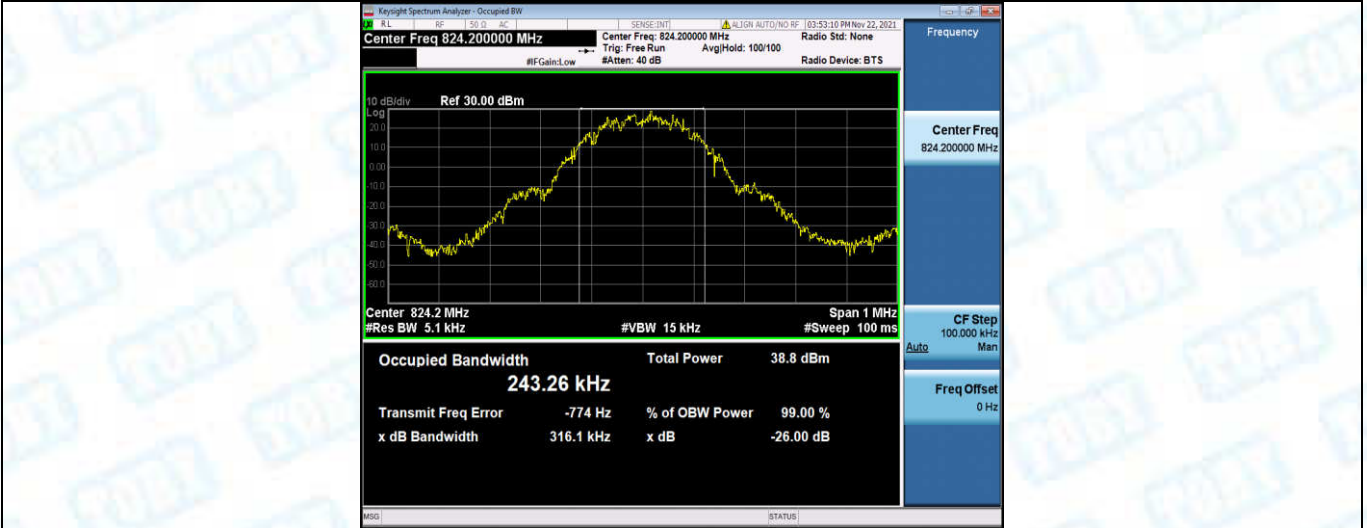
GSM850-190-3-0.3097



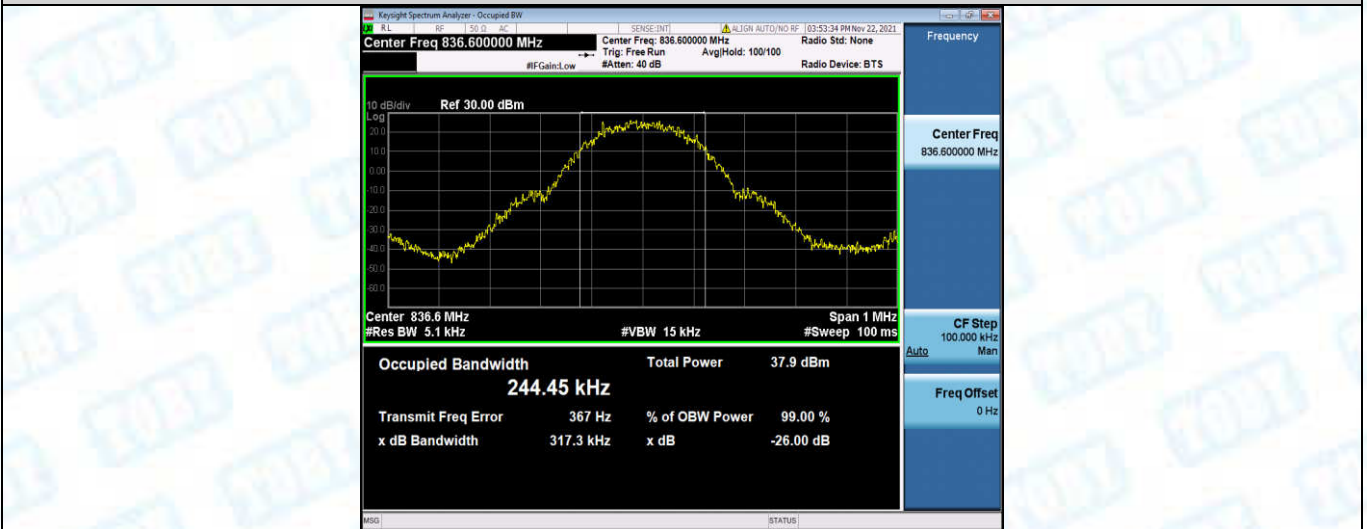
GSM850-251-3-0.3154



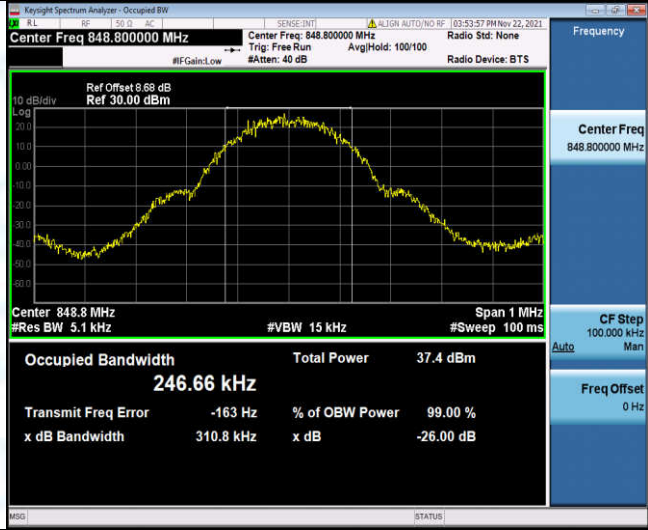
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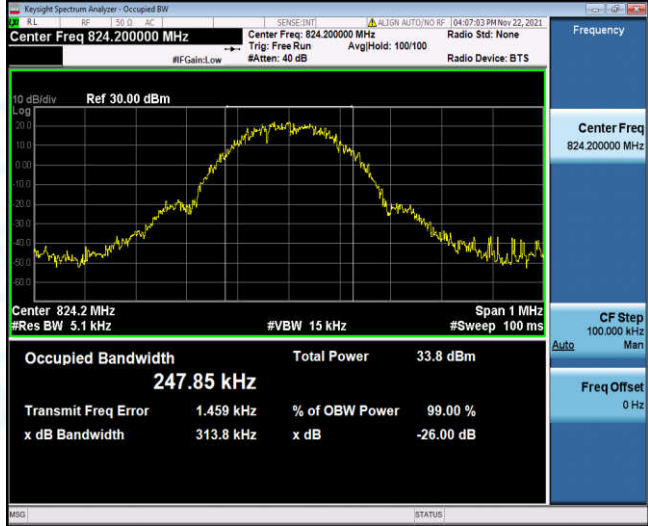
GPRS850-190-3-0.3173



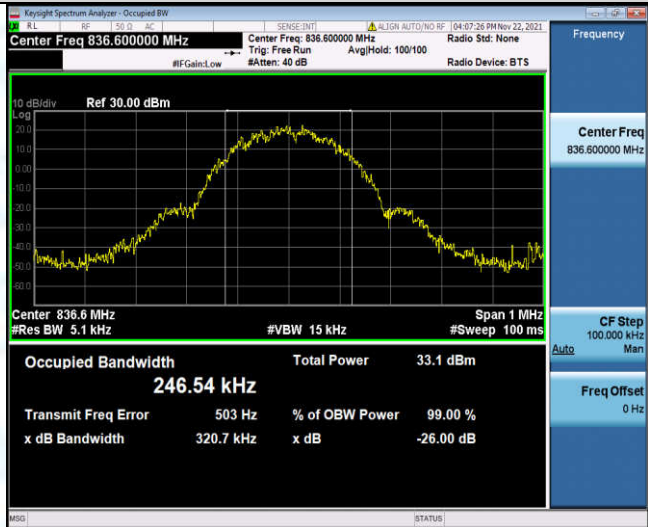
GPRS850-251-3-0.3108



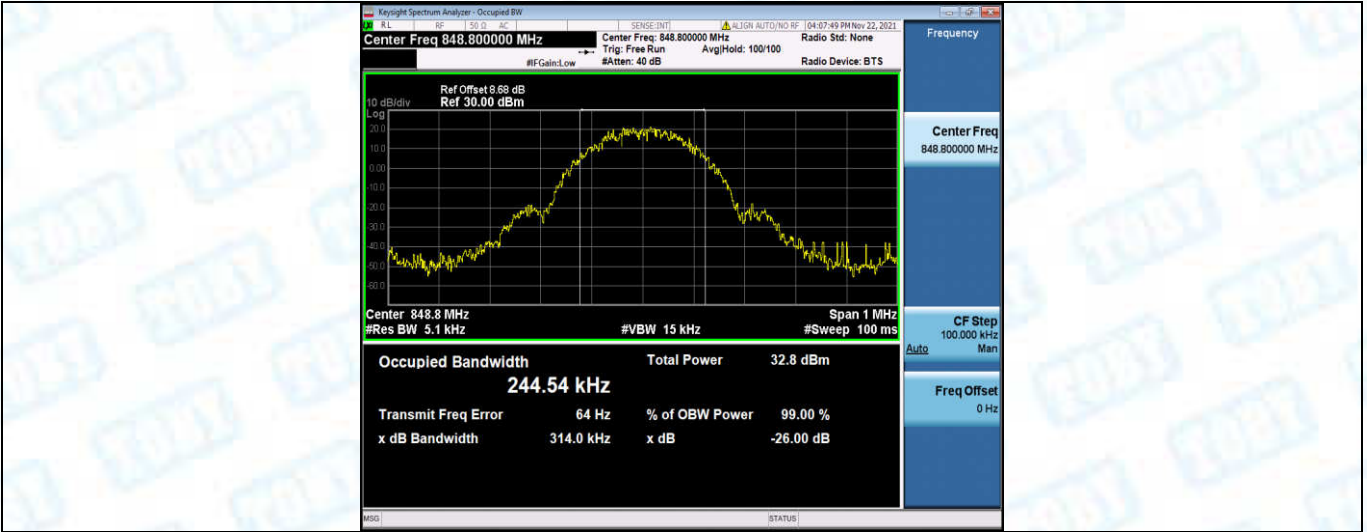
EGPRS850-128-8-0.3138



EGPRS850-190-8-0.3207



EGPRS850-251-8-0.3140



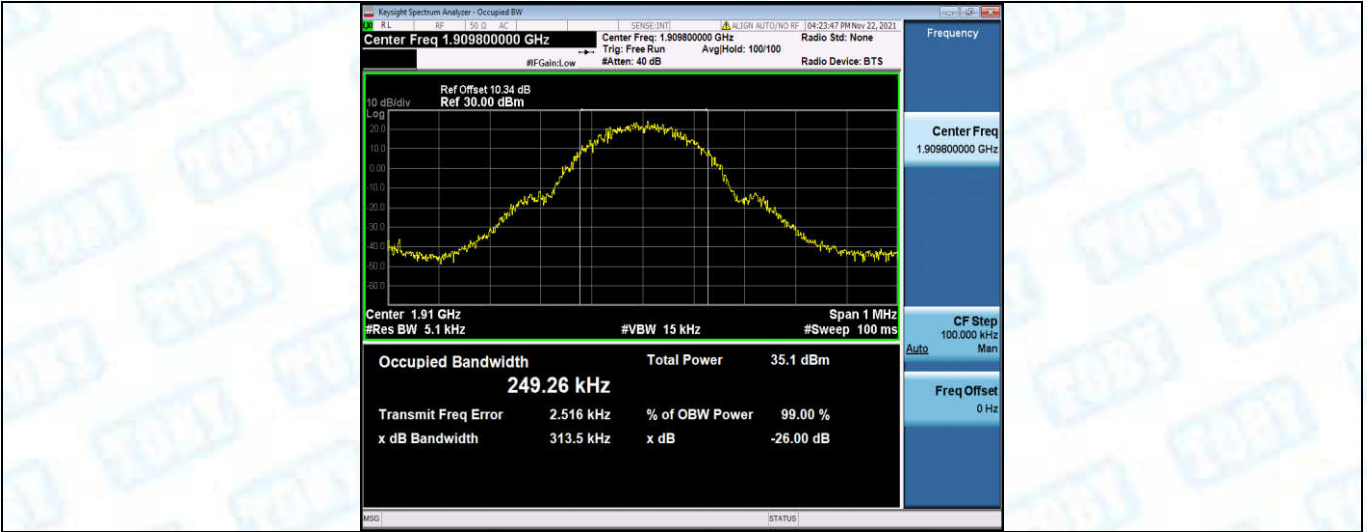
GSM1900-512-0-0.3137



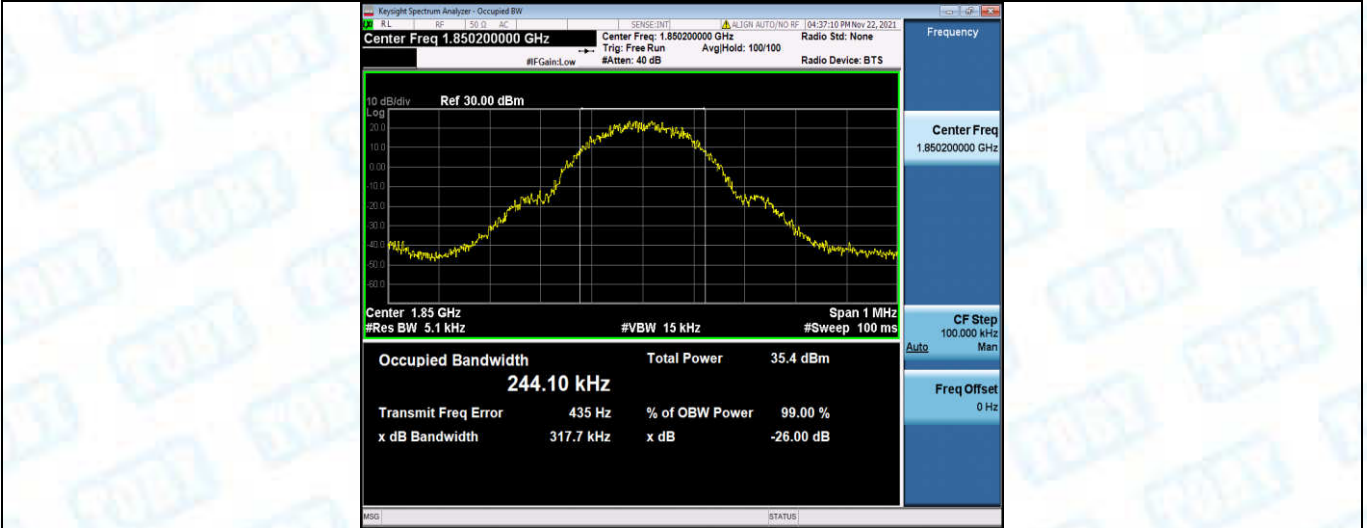
GSM1900-661-0-0.3144



GSM1900-810-0-0.3135



GPRS1900-512-0-0.3177



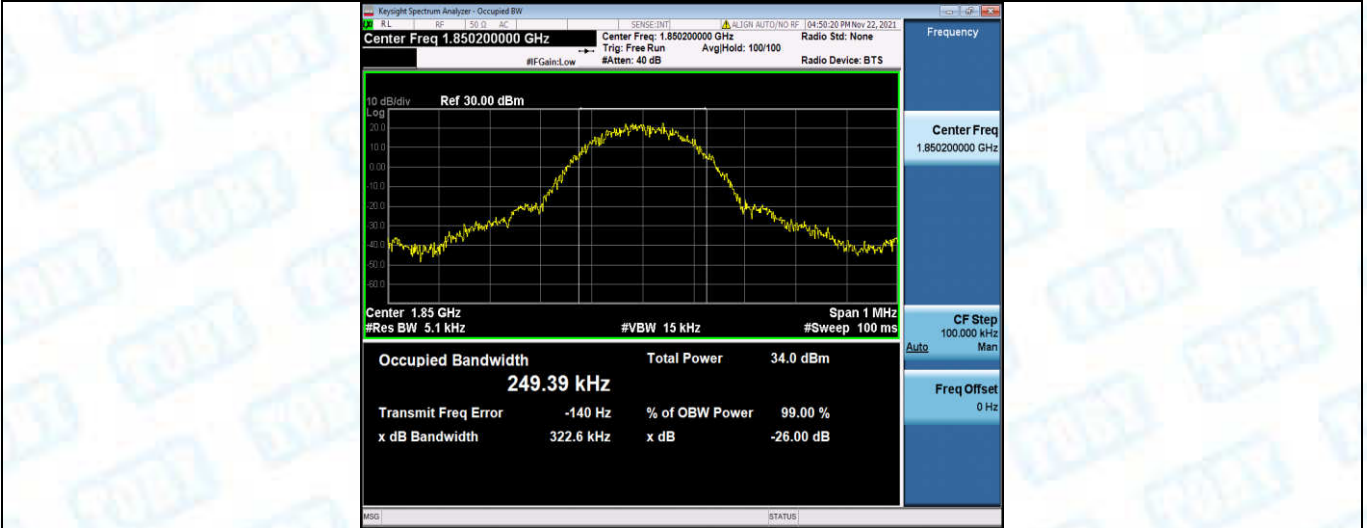
GPRS1900-661-0-0.3089



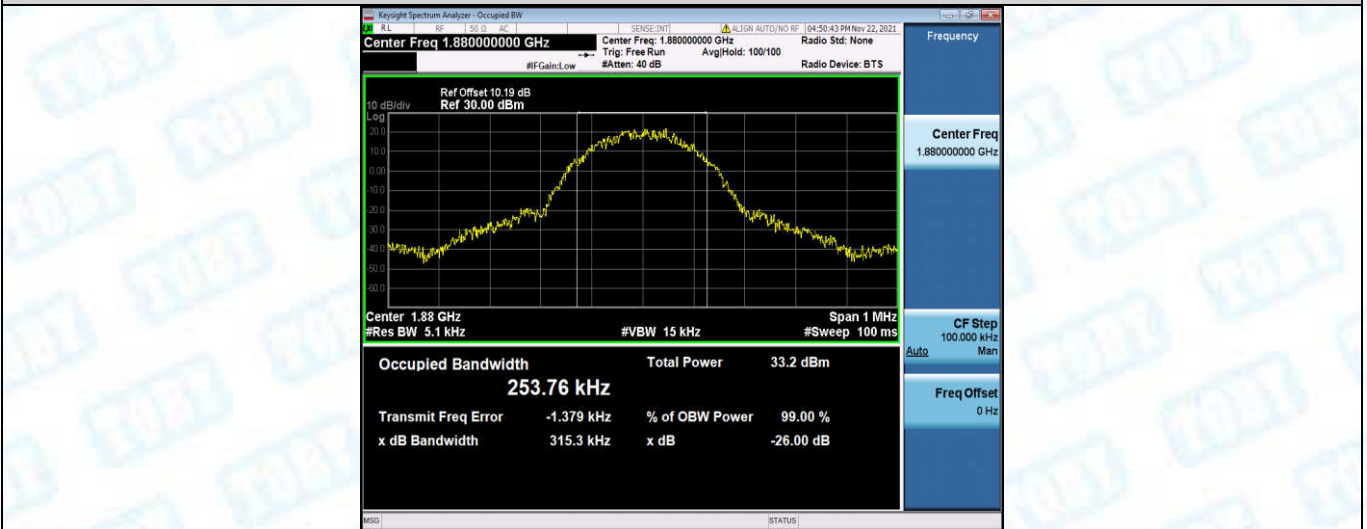
GPRS1900-810-0-0.3112



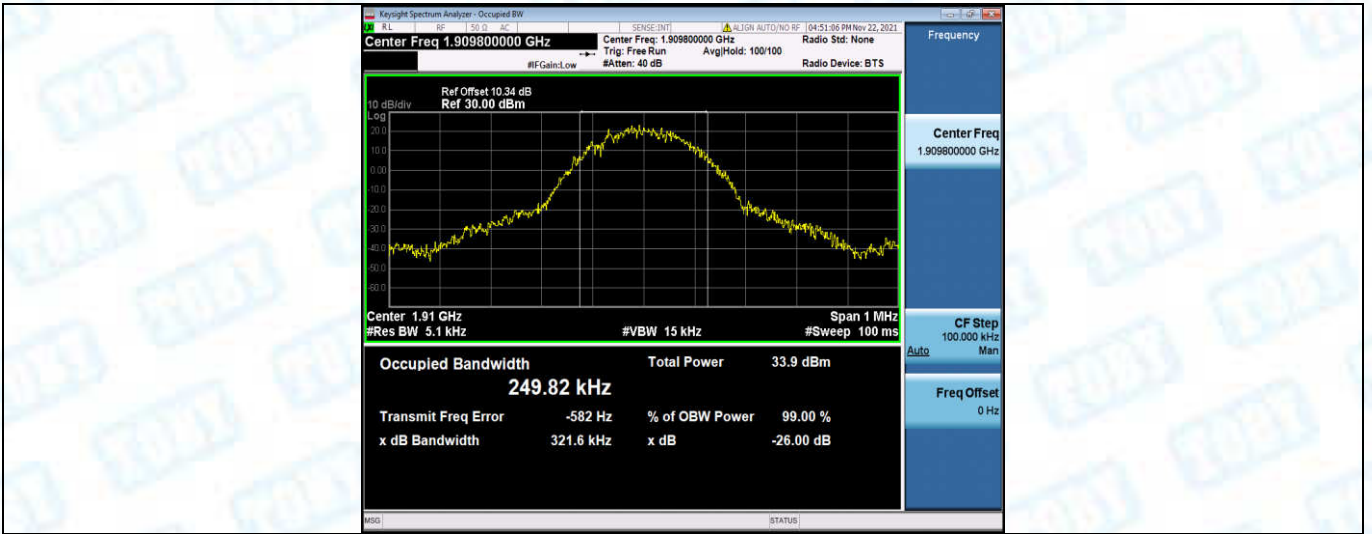
EGPRS1900-512-2-0.3226



EGPRS1900-661-2-0.3153



EGPRS1900-810-2-0.3216

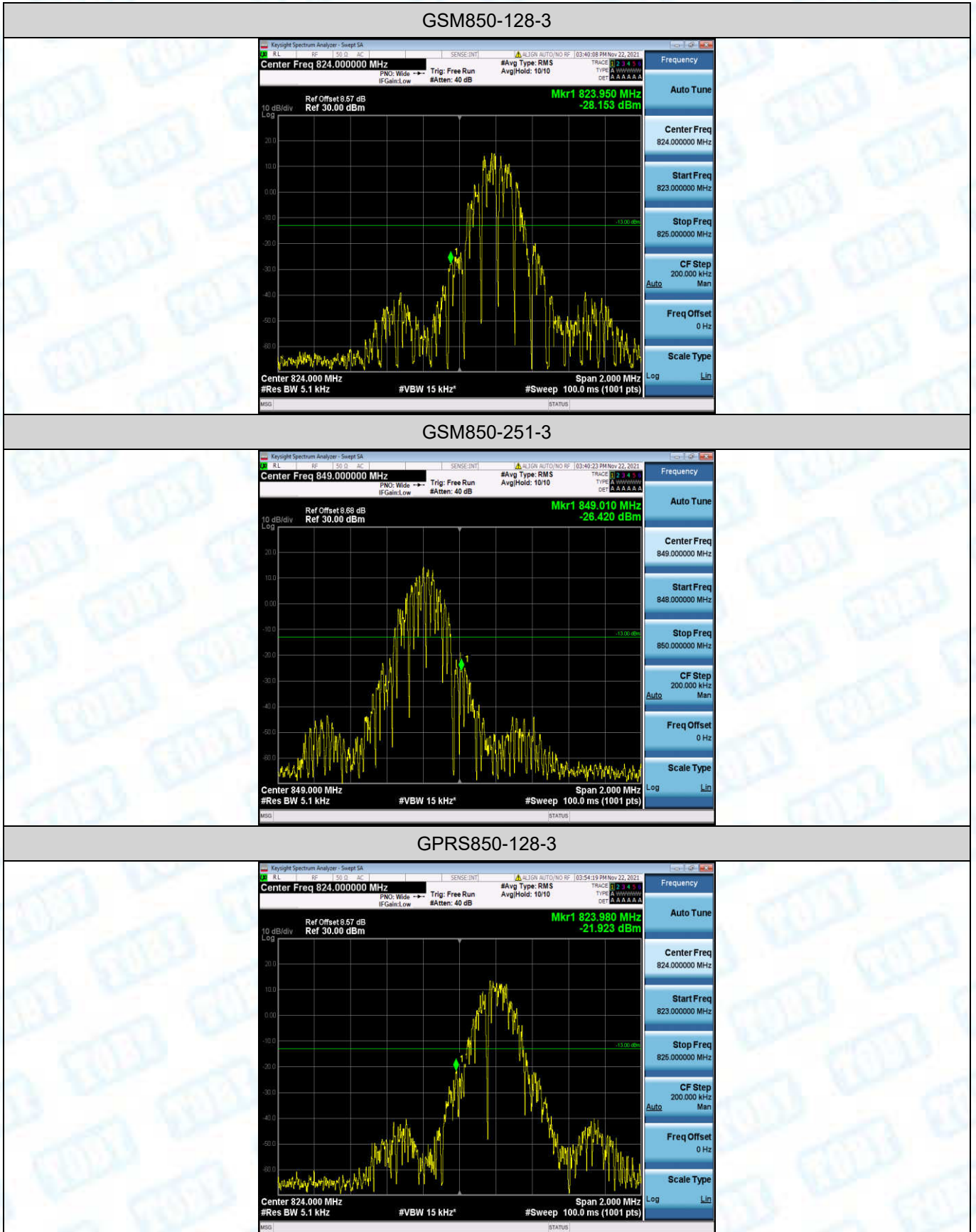


D: Band Edge

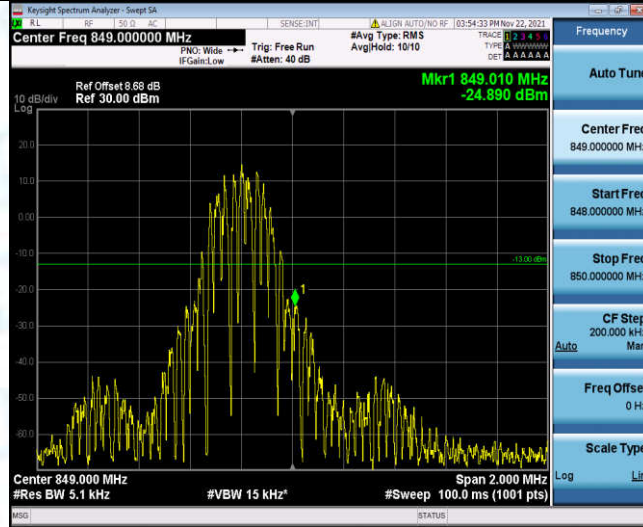
Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	3	823.95	-23.63	-13	PASS
GSM850	251	3	849.01	-18.95	-13	PASS
GPRS850	128	3	823.98	-18.87	-13	PASS
GPRS850	251	3	849.01	-23.79	-13	PASS
EGPRS850	128	8	823.99	-27.44	-13	PASS
EGPRS850	251	8	849.02	-32.31	-13	PASS
GSM1900	512	0	1849.98	-25.91	-13	PASS
GSM1900	810	0	1910.02	-23.82	-13	PASS
GPRS1900	512	0	1850.00	-25.63	-13	PASS
GPRS1900	810	0	1910.01	-25.76	-13	PASS
EGPRS1900	512	2	1849.97	-30.72	-13	PASS
EGPRS1900	810	2	1910.01	-31.19	-13	PASS

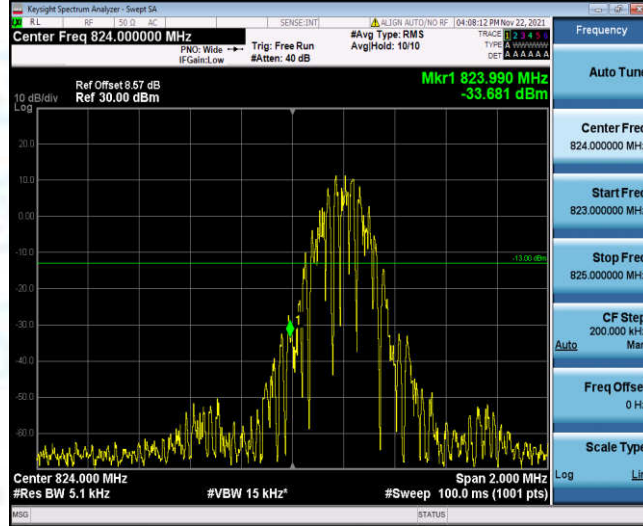
Test Graphs



GPRS850-251-3



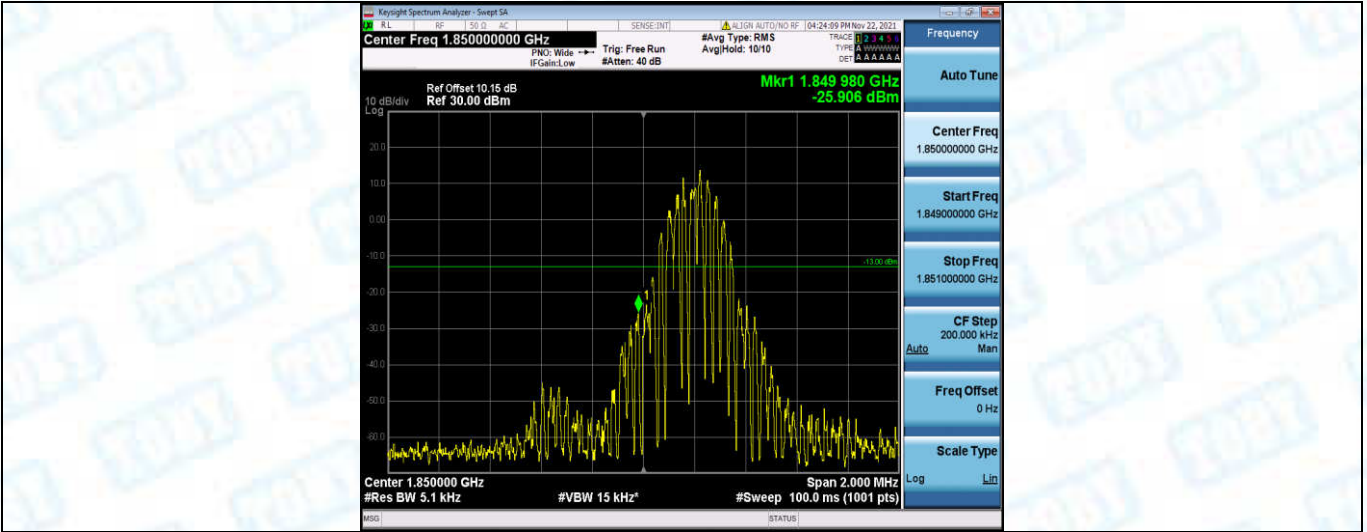
EGPRS850-128-8



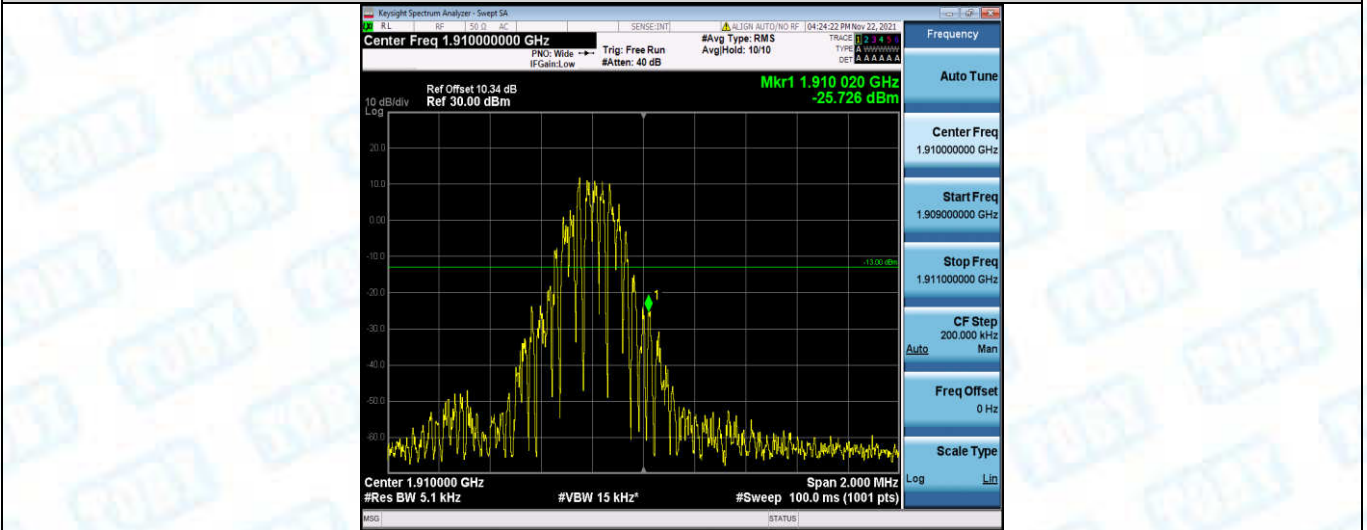
EGPRS850-251-8



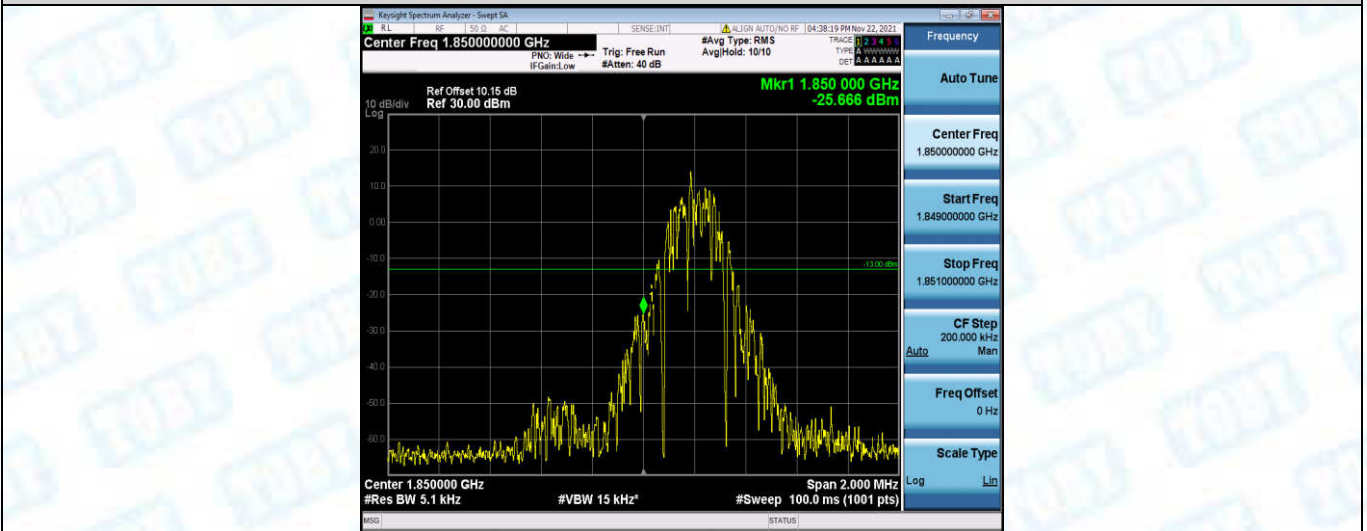
GSM1900-512-0



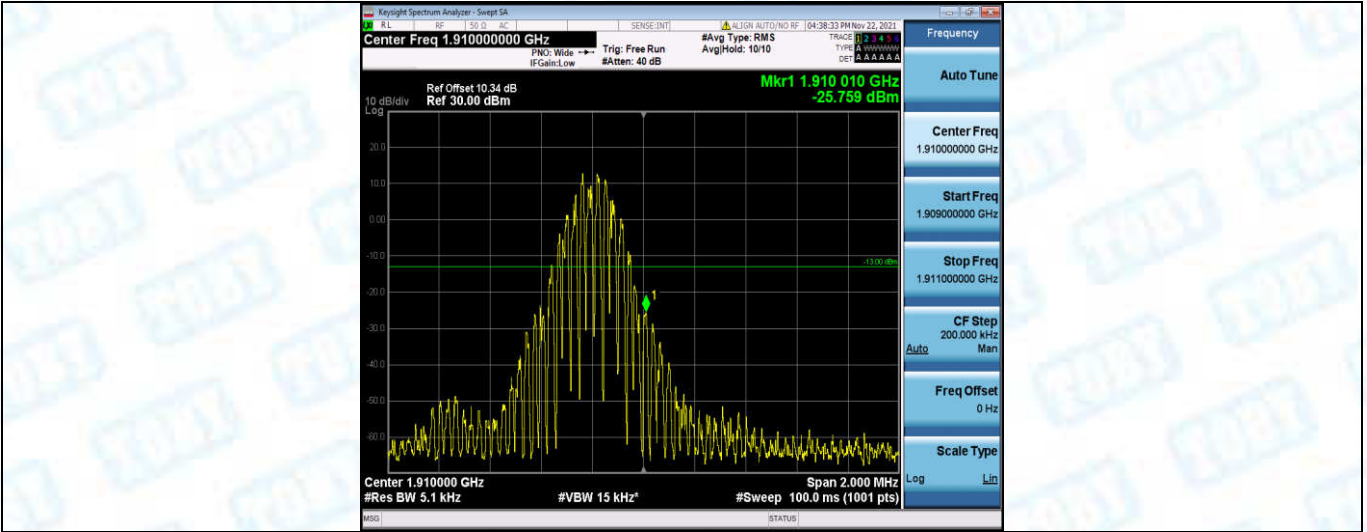
GSM1900-810-0



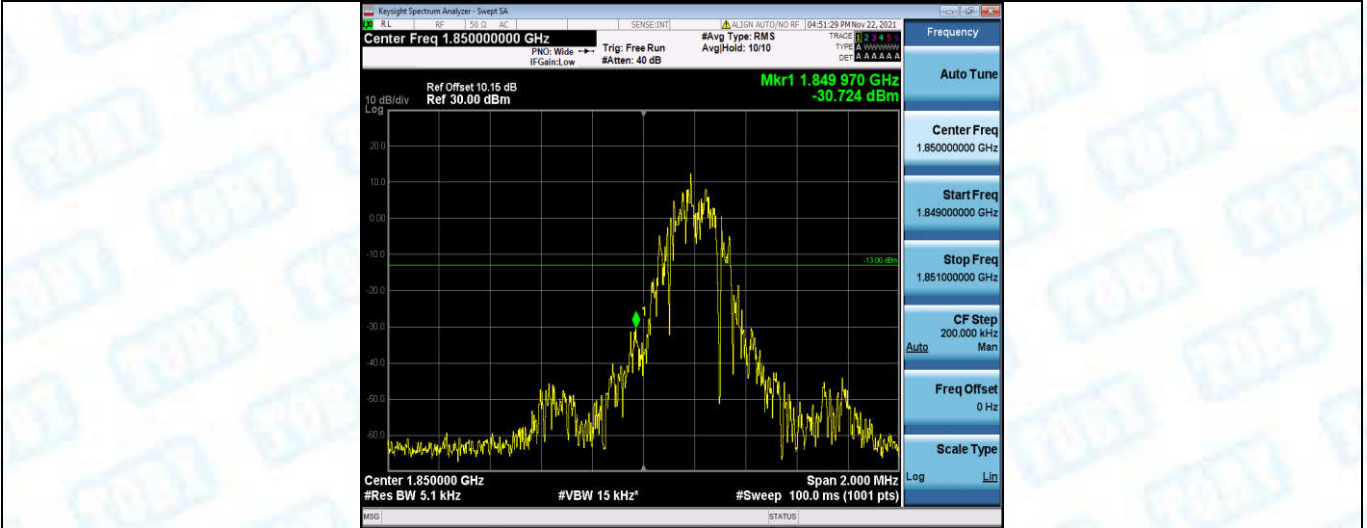
GPRS1900-512-0



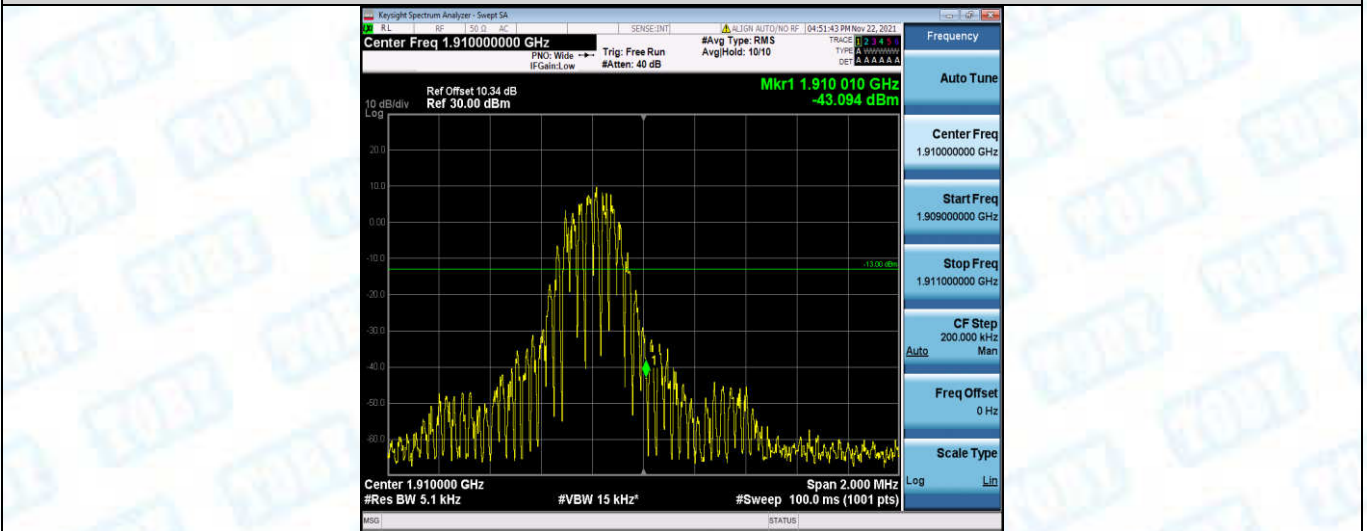
GPRS1900-810-0



EGPRS1900-512-2



EGPRS1900-810-2



E: Conducted Spurious Emission

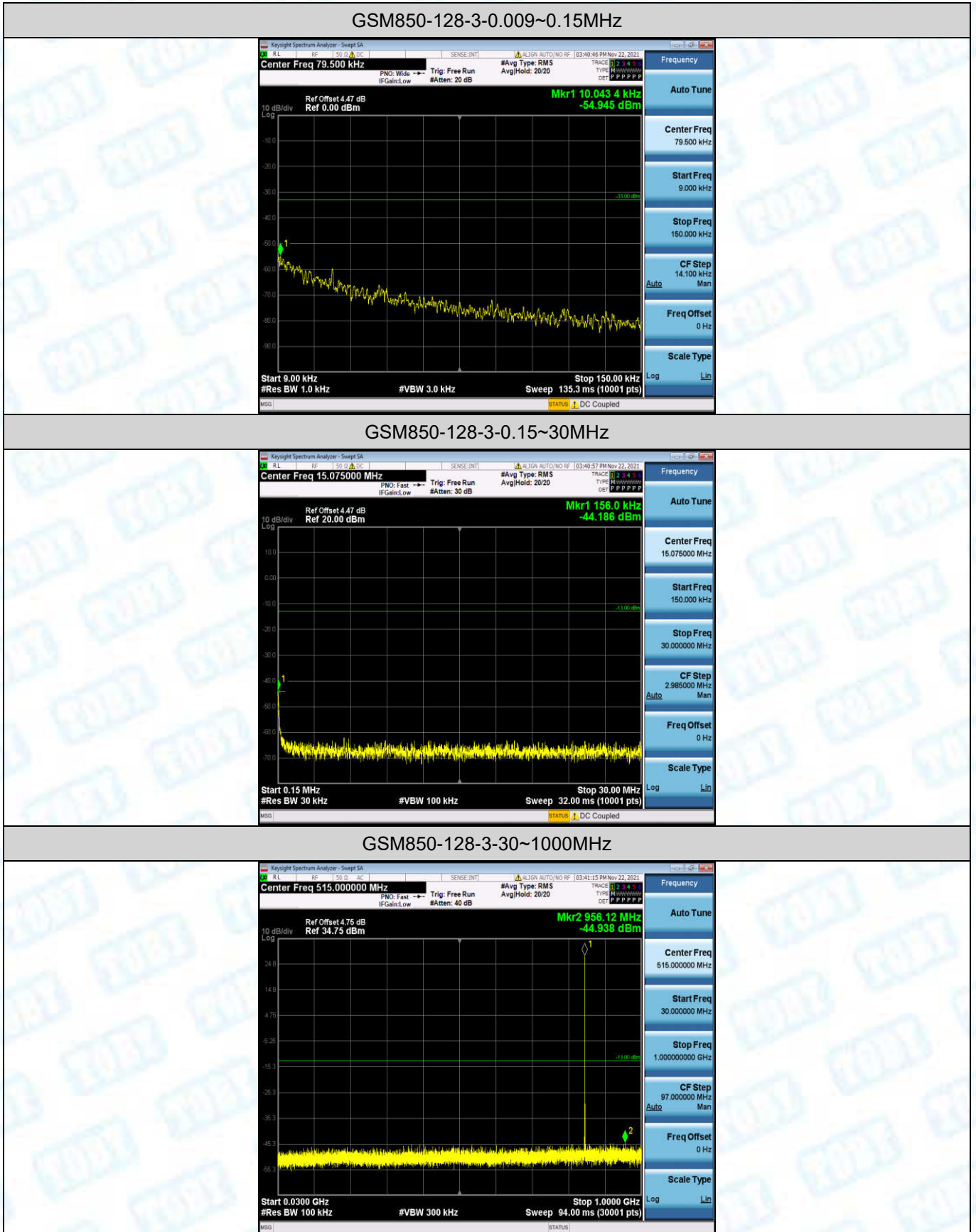
Test Result

Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	3	0.009~0.15MHz	0.01	-54.95	-33	PASS
GSM850	128	3	0.15~30MHz	0.16	-44.19	-13	PASS
GSM850	128	3	30~1000MHz	956.12	-44.94	-13	PASS
GSM850	128	3	1000~10000MHz	2546.5	-31.53	-13	PASS
GSM850	190	3	0.009~0.15MHz	0.01	-53.49	-33	PASS
GSM850	190	3	0.15~30MHz	0.16	-44.76	-13	PASS
GSM850	190	3	30~1000MHz	945.55	-44.82	-13	PASS
GSM850	190	3	1000~10000MHz	2546.8	-31.67	-13	PASS
GSM850	251	3	0.009~0.15MHz	0.01	-55.28	-33	PASS
GSM850	251	3	0.15~30MHz	0.15	-42.94	-13	PASS
GSM850	251	3	30~1000MHz	206.83	-44.63	-13	PASS
GSM850	251	3	1000~10000MHz	2546.2	-31.58	-13	PASS
GPRS850	128	3	0.009~0.15MHz	0.01	-54.86	-33	PASS
GPRS850	128	3	0.15~30MHz	0.16	-45.2	-13	PASS
GPRS850	128	3	30~1000MHz	678.77	-45.21	-13	PASS
GPRS850	128	3	1000~10000MHz	2546.2	-32.08	-13	PASS
GPRS850	190	3	0.009~0.15MHz	0.01	-53.55	-33	PASS
GPRS850	190	3	0.15~30MHz	0.15	-44.83	-13	PASS
GPRS850	190	3	30~1000MHz	118.88	-44.89	-13	PASS
GPRS850	190	3	1000~10000MHz	2546.2	-32.46	-13	PASS
GPRS850	251	3	0.009~0.15MHz	0.01	-54.69	-33	PASS
GPRS850	251	3	0.15~30MHz	0.15	-45.05	-13	PASS
GPRS850	251	3	30~1000MHz	574.46	-44.84	-13	PASS
GPRS850	251	3	1000~10000MHz	2546.2	-31.57	-13	PASS
EGPRS850	128	8	0.009~0.15MHz	0.01	-53.67	-33	PASS
EGPRS850	128	8	0.15~30MHz	0.16	-45.36	-13	PASS
EGPRS850	128	8	30~1000MHz	462.3	-45.49	-13	PASS
EGPRS850	128	8	1000~10000MHz	2546.5	-35.91	-13	PASS
EGPRS850	190	8	0.009~0.15MHz	0.01	-55.62	-33	PASS
EGPRS850	190	8	0.15~30MHz	0.15	-43.58	-13	PASS
EGPRS850	190	8	30~1000MHz	948.43	-45.67	-13	PASS

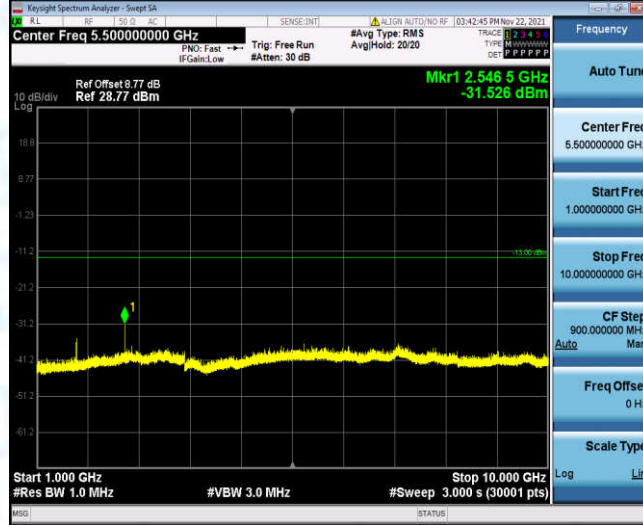
EGPRS850	190	8	1000~10000MHz	2546.5	-34.77	-13	PASS
EGPRS850	251	8	0.009~0.15MHz	0.01	-54.68	-33	PASS
EGPRS850	251	8	0.15~30MHz	0.15	-42.42	-13	PASS
EGPRS850	251	8	30~1000MHz	470.51	-45.49	-13	PASS
EGPRS850	251	8	1000~10000MHz	6085	-36.32	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-54.59	-43	PASS
GSM1900	512	0	0.15~30MHz	0.16	-43.14	-23	PASS
GSM1900	512	0	30~1000MHz	928.41	-45.11	-13	PASS
GSM1900	512	0	1000~18000MHz	17793.17	-32.49	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-54.37	-43	PASS
GSM1900	661	0	0.15~30MHz	0.17	-43.47	-23	PASS
GSM1900	661	0	30~1000MHz	904.97	-45.86	-13	PASS
GSM1900	661	0	1000~18000MHz	17697.97	-32.55	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.48	-43	PASS
GSM1900	810	0	0.15~30MHz	0.16	-42.71	-23	PASS
GSM1900	810	0	30~1000MHz	147.31	-45.66	-13	PASS
GSM1900	810	0	1000~18000MHz	17723.47	-32.65	-13	PASS
GPRS1900	512	0	0.009~0.15MHz	0.01	-56.14	-43	PASS
GPRS1900	512	0	0.15~30MHz	0.15	-44.25	-23	PASS
GPRS1900	512	0	30~1000MHz	948.36	-45.86	-13	PASS
GPRS1900	512	0	1000~18000MHz	17175.5	-31.98	-13	PASS
GPRS1900	661	0	0.009~0.15MHz	0.01	-53.39	-43	PASS
GPRS1900	661	0	0.15~30MHz	0.15	-45.69	-23	PASS
GPRS1900	661	0	30~1000MHz	894.98	-46.16	-13	PASS
GPRS1900	661	0	1000~18000MHz	17850.97	-32.66	-13	PASS
GPRS1900	810	0	0.009~0.15MHz	0.01	-55.17	-43	PASS
GPRS1900	810	0	0.15~30MHz	0.15	-44.45	-23	PASS
GPRS1900	810	0	30~1000MHz	901.45	-46.25	-13	PASS
GPRS1900	810	0	1000~18000MHz	17785.8	-32.75	-13	PASS
EGPRS1900	512	2	0.009~0.15MHz	0.01	-53.82	-43	PASS
EGPRS1900	512	2	0.15~30MHz	0.15	-40.83	-23	PASS
EGPRS1900	512	2	30~1000MHz	766.49	-45.97	-13	PASS
EGPRS1900	512	2	1000~18000MHz	17671.9	-32.78	-13	PASS
EGPRS1900	661	2	0.009~0.15MHz	0.01	-53.56	-43	PASS
EGPRS1900	661	2	0.15~30MHz	0.15	-42.52	-23	PASS
EGPRS1900	661	2	30~1000MHz	798.6	-45.83	-13	PASS
EGPRS1900	661	2	1000~18000MHz	17822.07	-32.46	-13	PASS

EGPRS1900	810	2	0.009~0.15MHz	0.01	-53.54	-43	PASS
EGPRS1900	810	2	0.15~30MHz	0.15	-43.96	-23	PASS
EGPRS1900	810	2	30~1000MHz	783.4	-45.37	-13	PASS
EGPRS1900	810	2	1000~18000MHz	17085.4	-32.05	-13	PASS

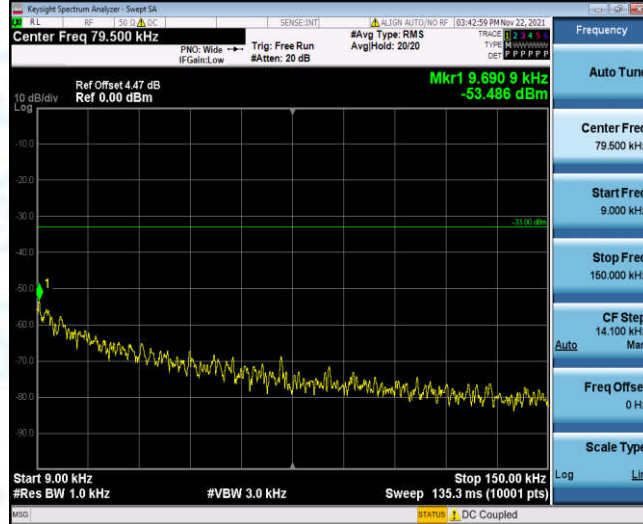
Test Graphs



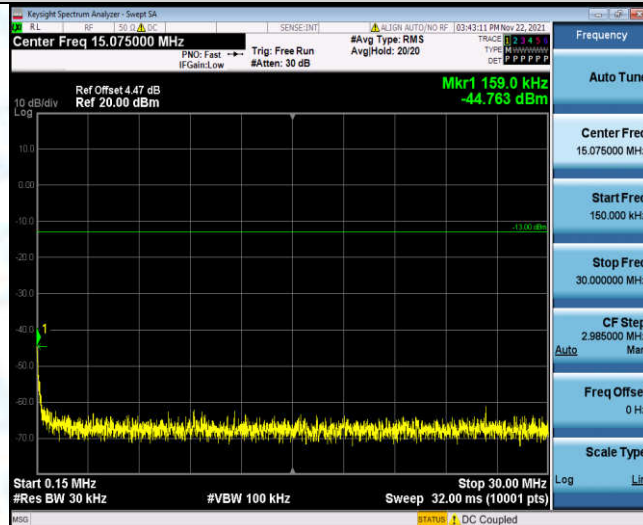
GSM850-128-3-1000~10000MHz



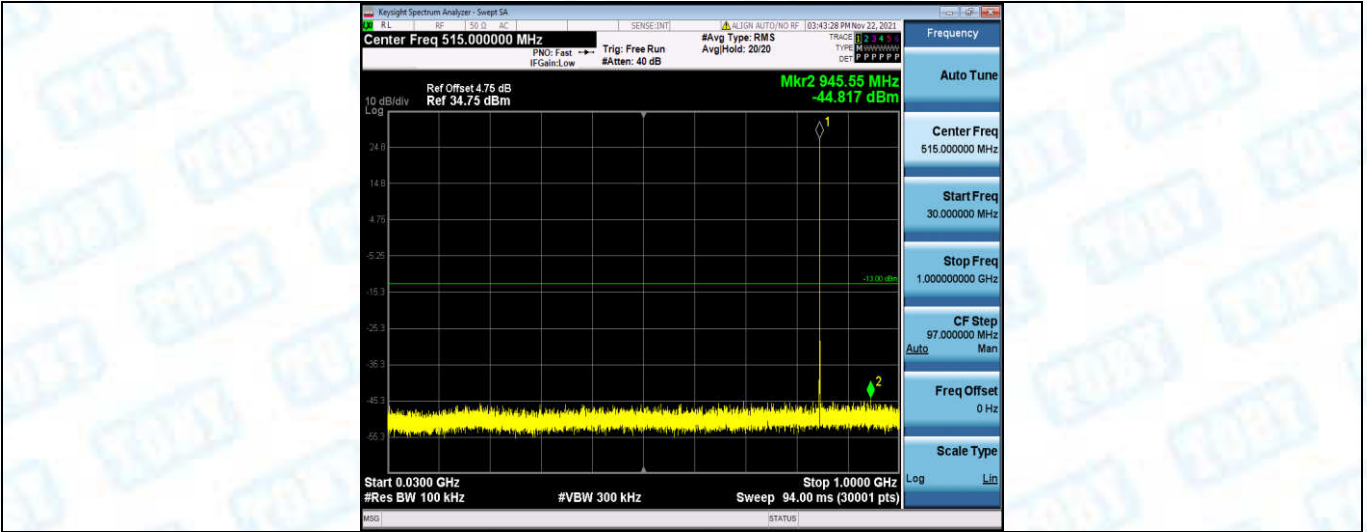
GSM850-190-3-0.009~0.15MHz



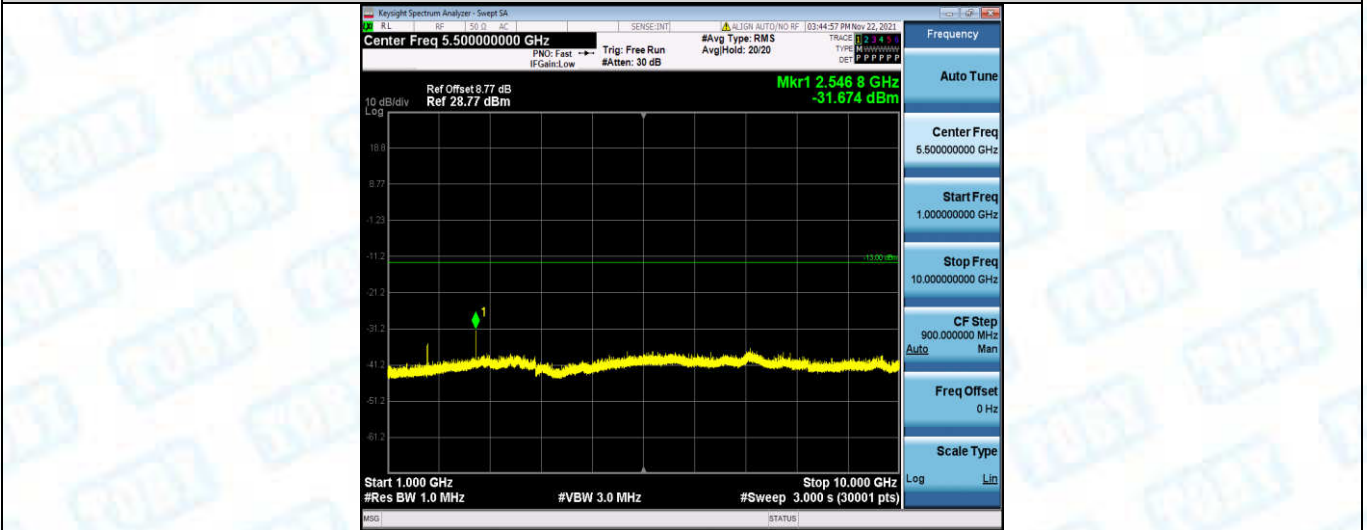
GSM850-190-3-0.15~30MHz



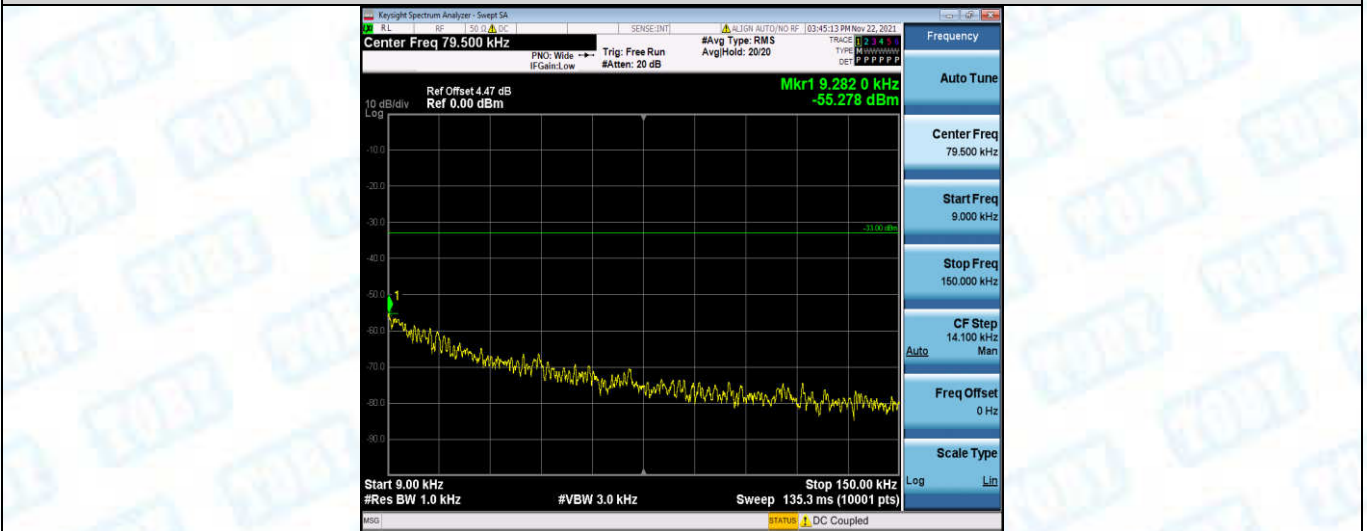
GSM850-190-3-30~1000MHz



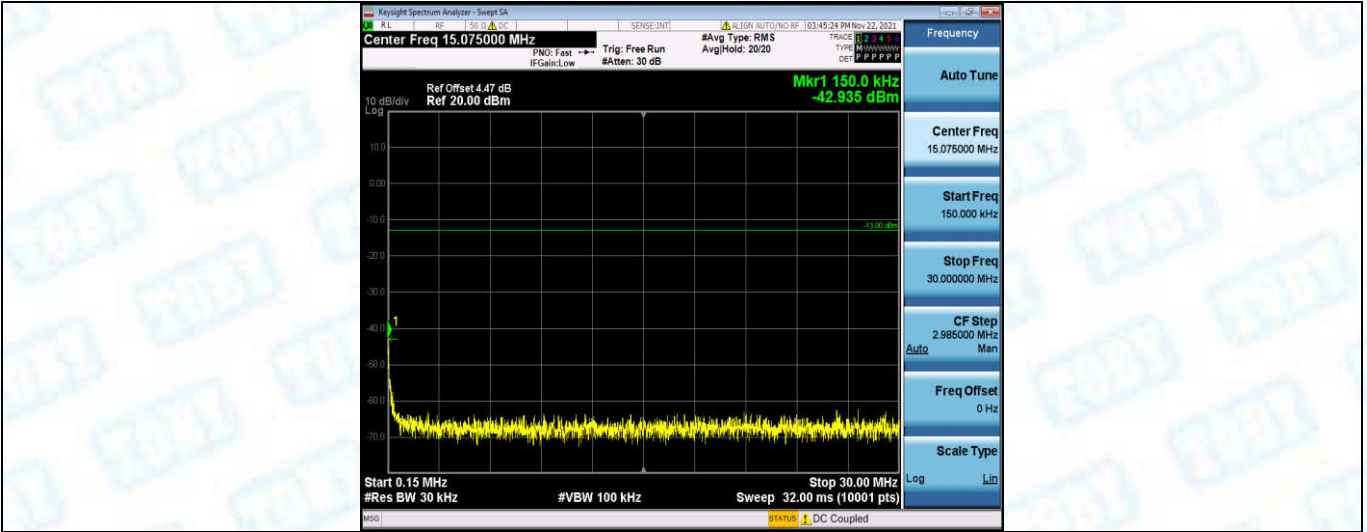
GSM850-190-3-1000~10000MHz



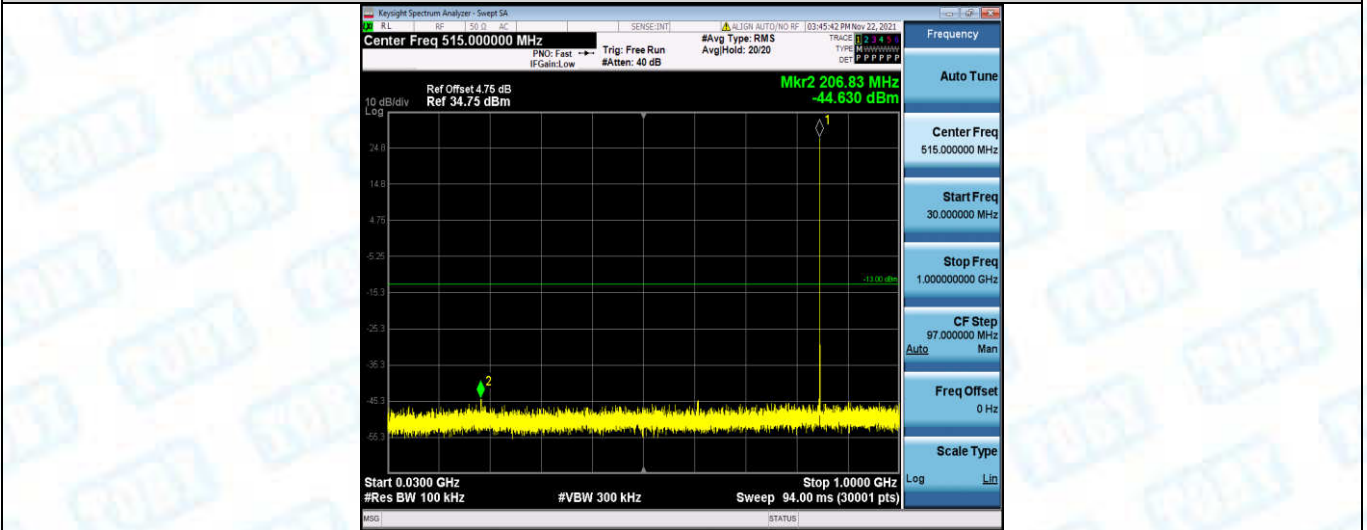
GSM850-251-3-0.009~0.15MHz



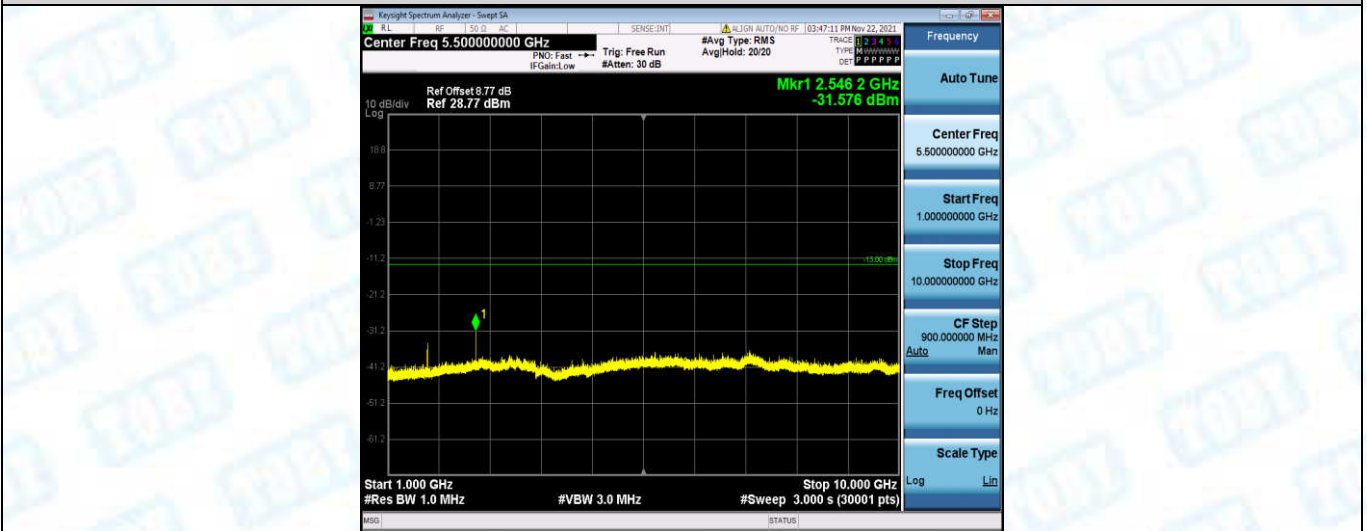
GSM850-251-3-0.15~30MHz



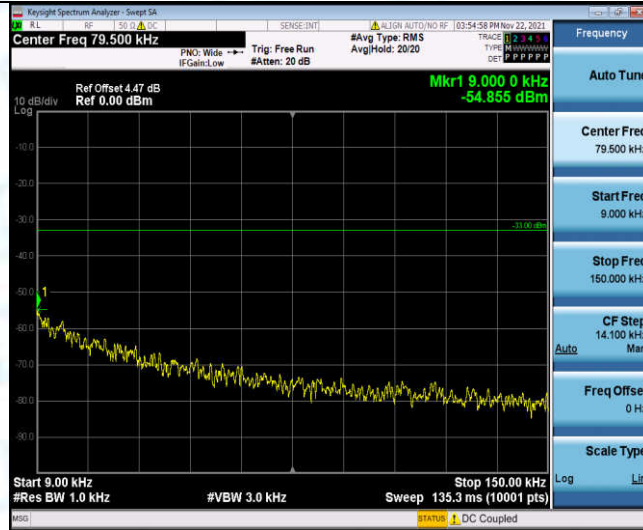
GSM850-251-3-30~1000MHz



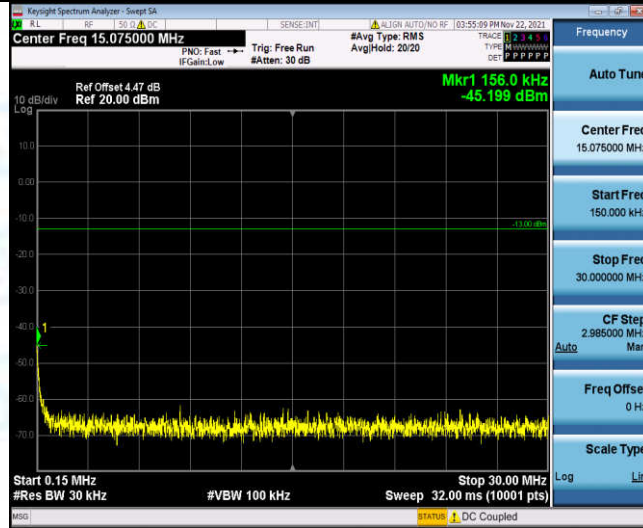
GSM850-251-3-1000~10000MHz



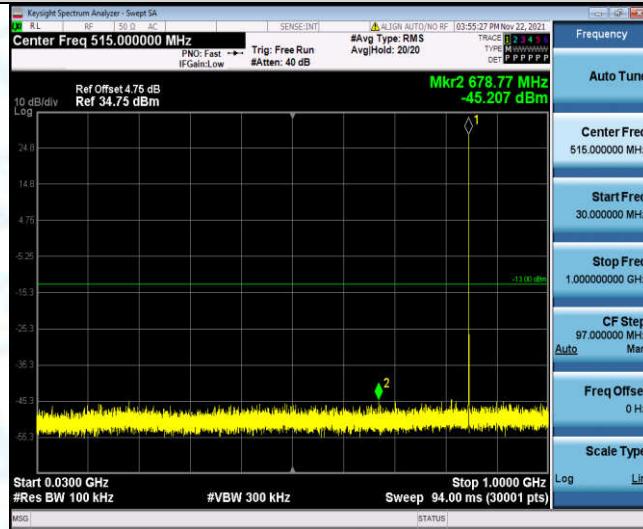
GPRS850-128-3-0.009~0.15MHz



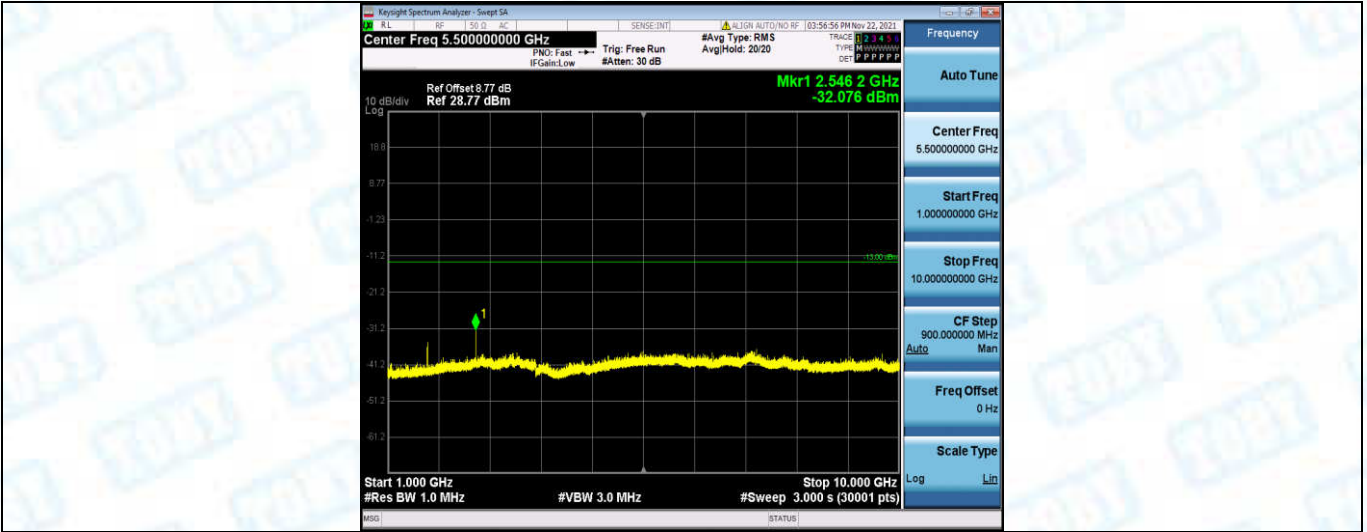
GPRS850-128-3-0.15~30MHz



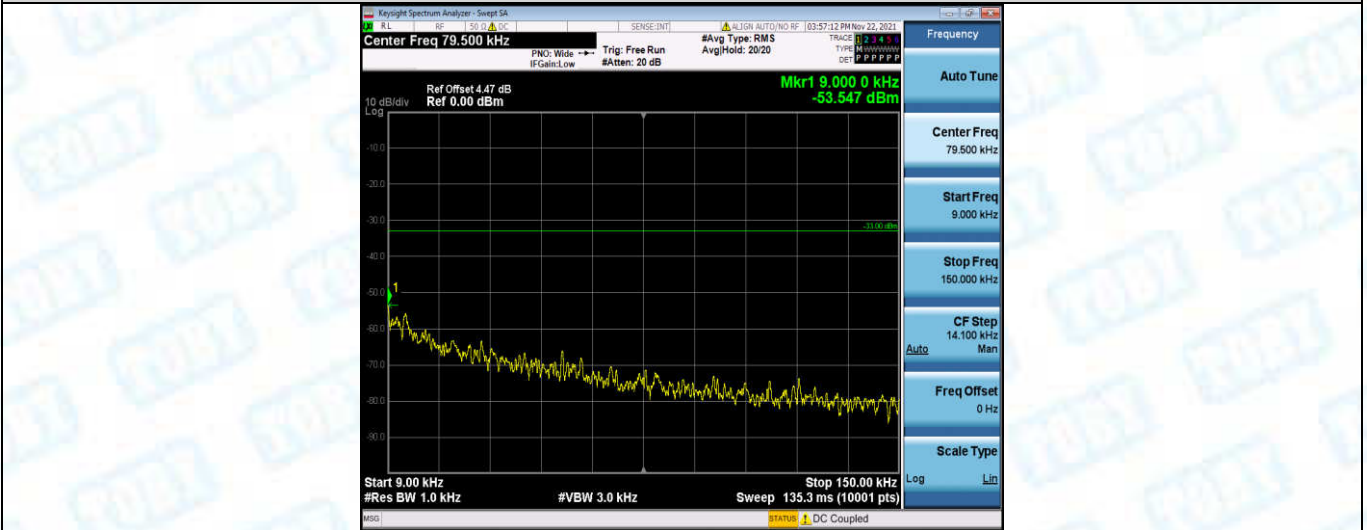
GPRS850-128-3-30~1000MHz



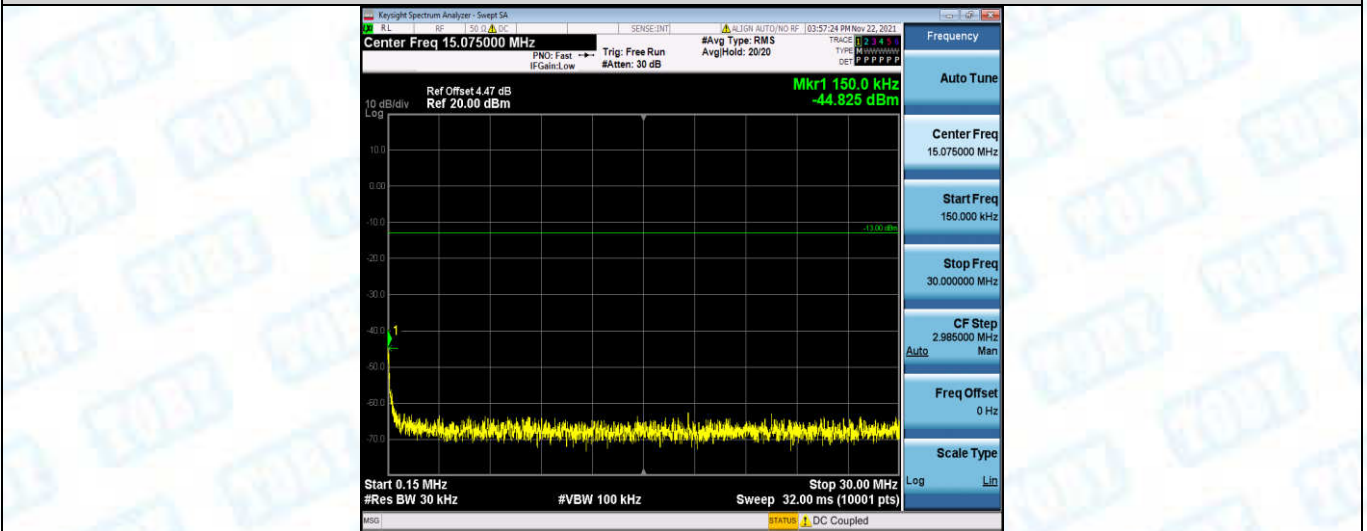
GPRS850-128-3-1000~10000MHz



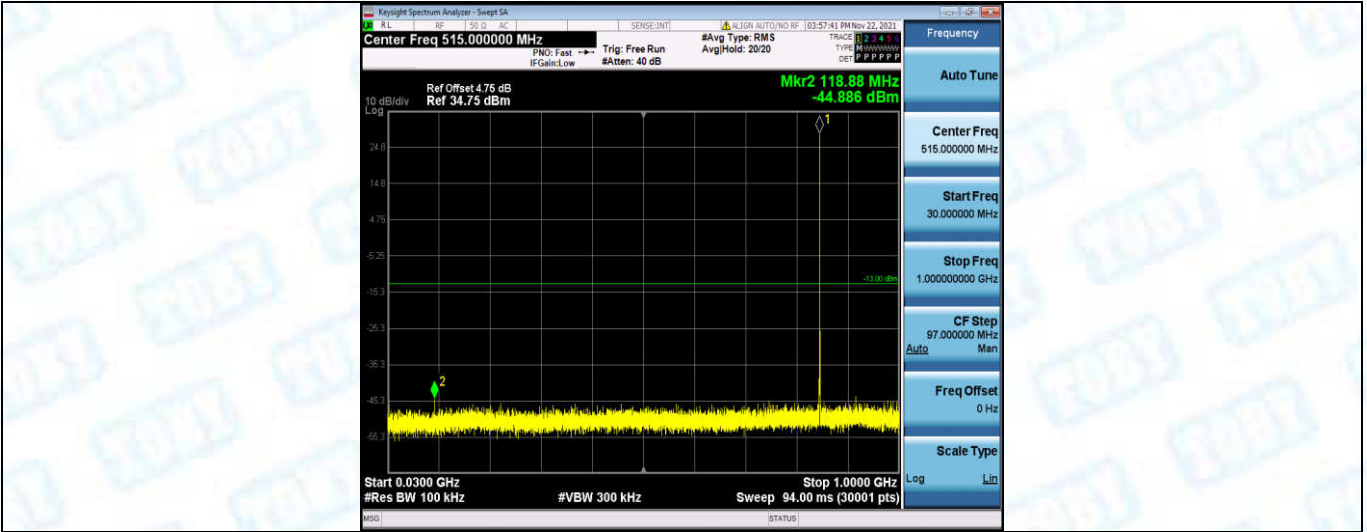
GPRS850-190-3-0.009~0.15MHz



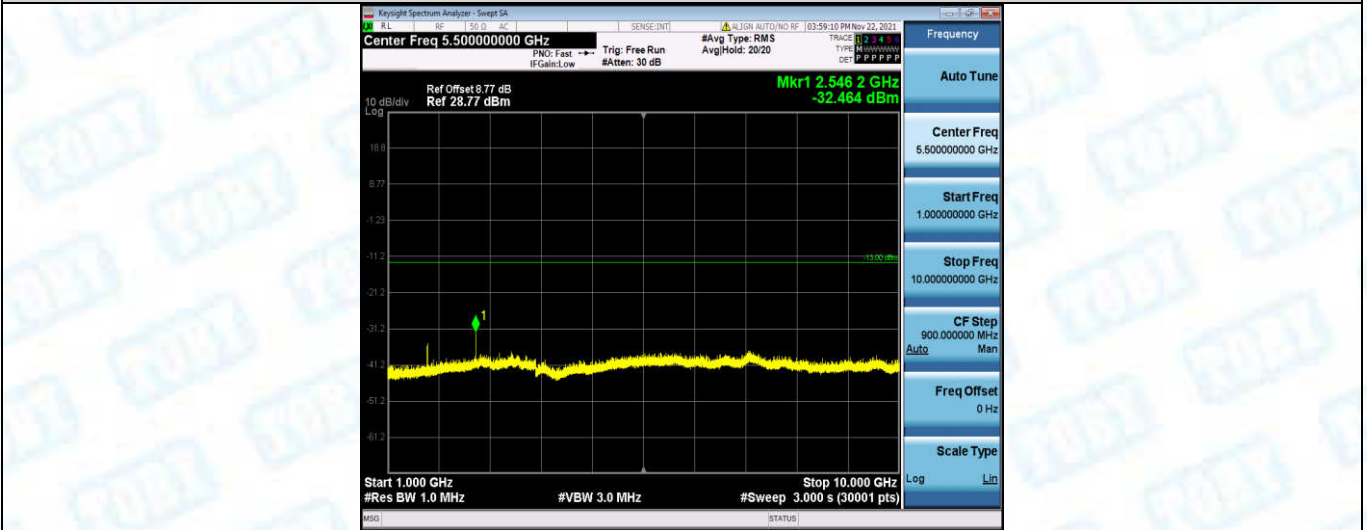
GPRS850-190-3-0.15~30MHz



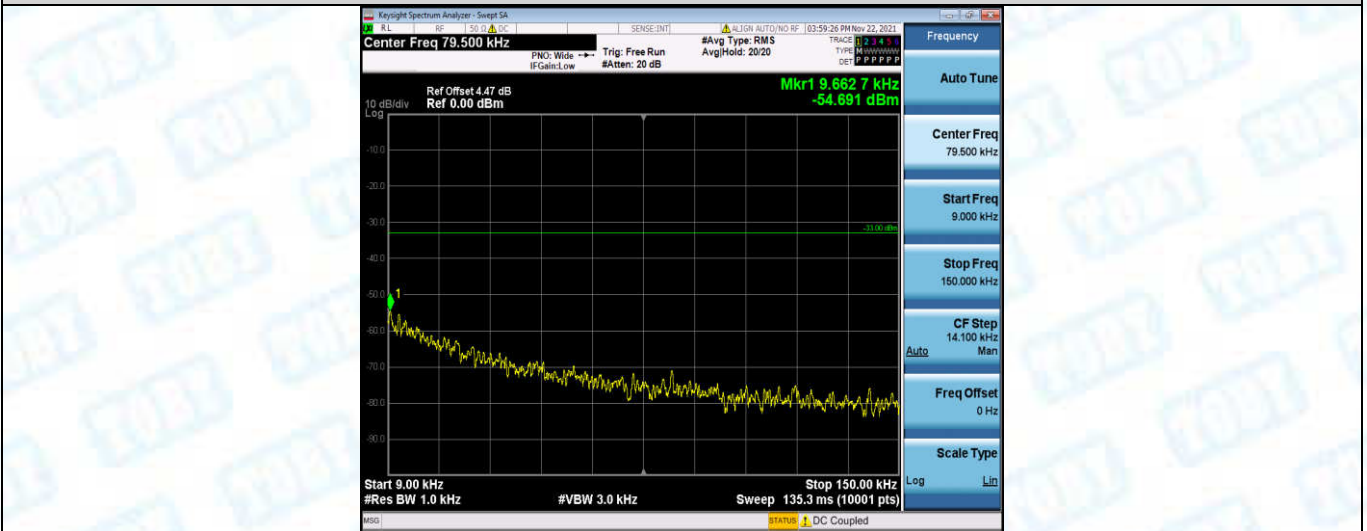
GPRS850-190-3-30~1000MHz



GPRS850-190-3-1000~10000MHz



GPRS850-251-3-0.009~0.15MHz



GPRS850-251-3-0.15~30MHz