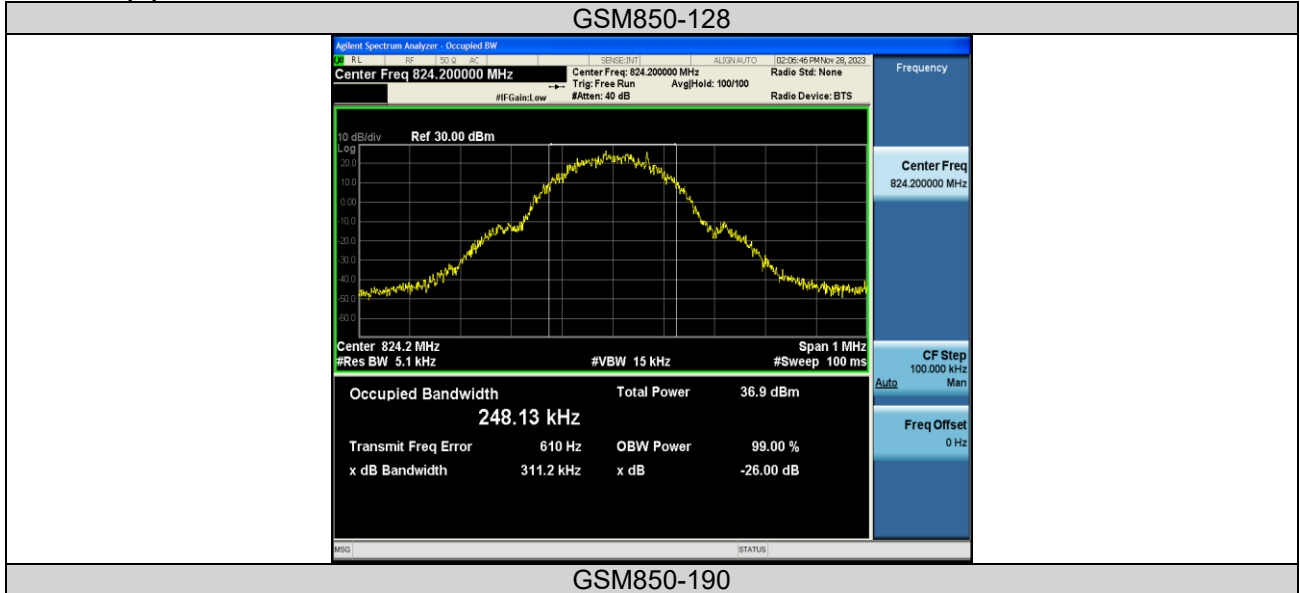
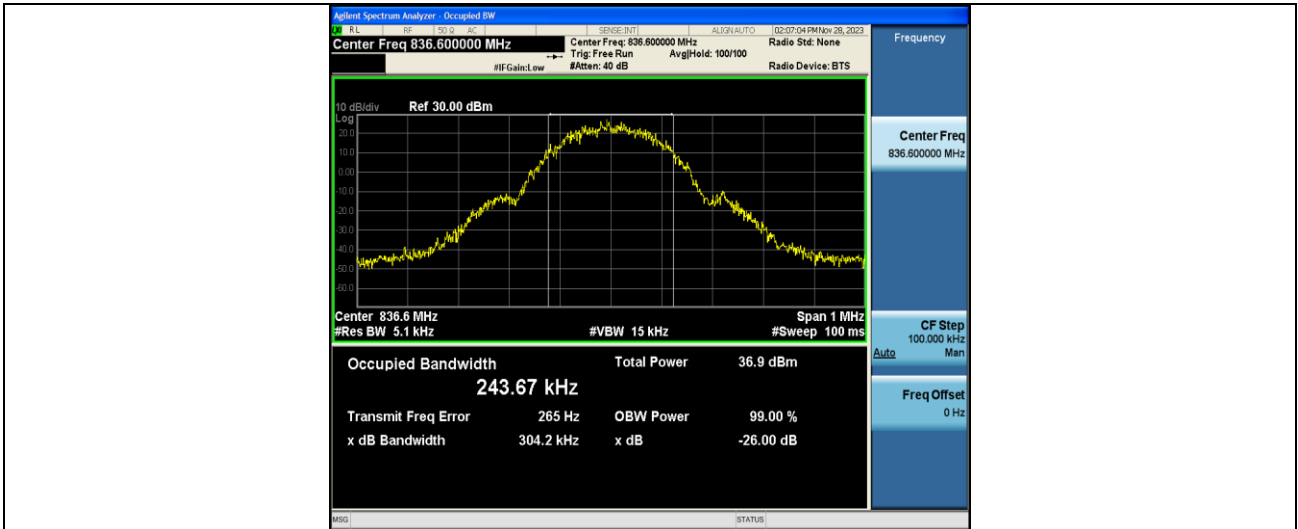


Measurement Result

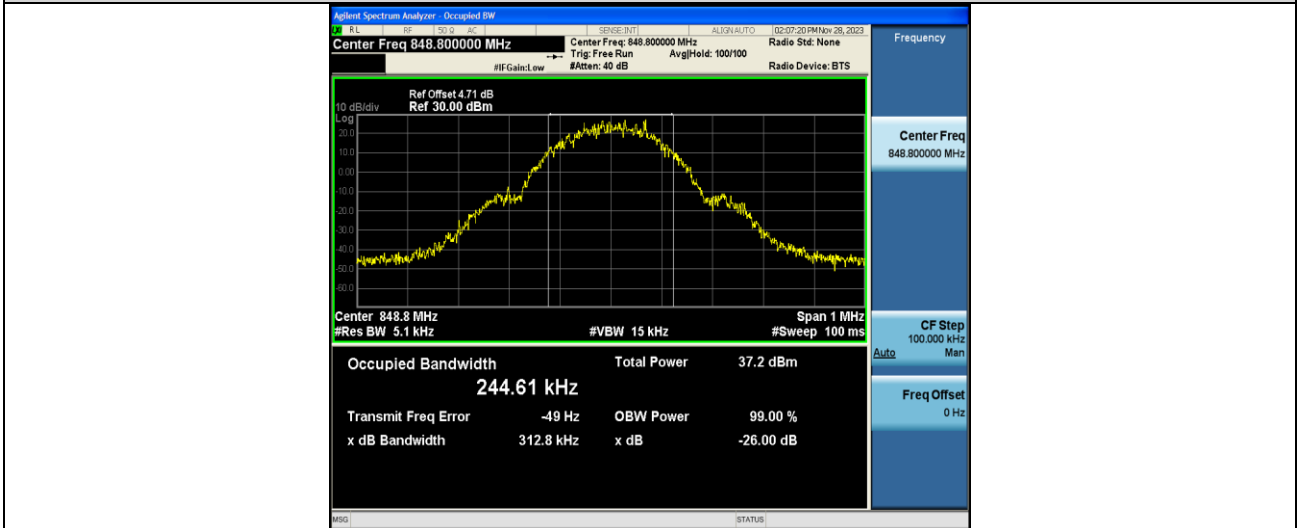
Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	0.24813	0.3112	---	PASS
GSM850	190	0.24367	0.3042	---	PASS
GSM850	251	0.24461	0.3128	---	PASS
GPRS850	128	0.24763	0.3088	---	PASS
GPRS850	190	0.24608	0.3136	---	PASS
GPRS850	251	0.24266	0.3098	---	PASS
EGPRS850	128	0.24589	0.3027	---	PASS
EGPRS850	190	0.24747	0.3156	---	PASS
EGPRS850	251	0.24872	0.3146	---	PASS
GSM1900	512	0.24457	0.3081	---	PASS
GSM1900	661	0.24673	0.3079	---	PASS
GSM1900	810	0.24691	0.3119	---	PASS
GPRS1900	512	0.24430	0.3160	---	PASS
GPRS1900	661	0.24435	0.3167	---	PASS
GPRS1900	810	0.24341	0.3138	---	PASS
EGPRS1900	512	0.25242	0.3074	---	PASS
EGPRS1900	661	0.25051	0.3156	---	PASS
EGPRS1900	810	0.25180	0.3126	---	PASS

Test Plot(s)

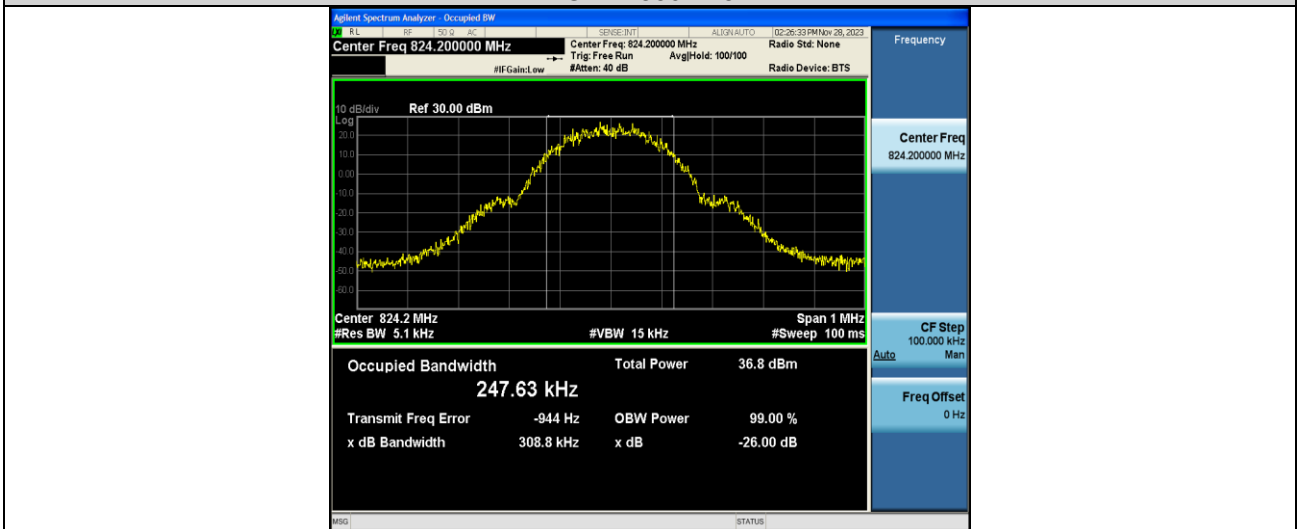




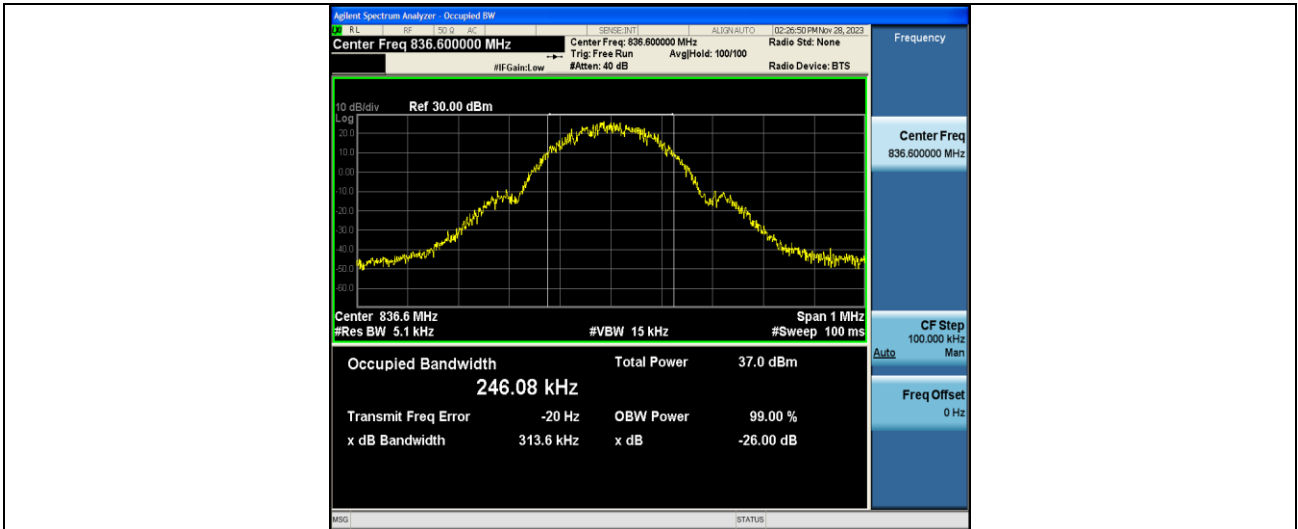
GSM850-251



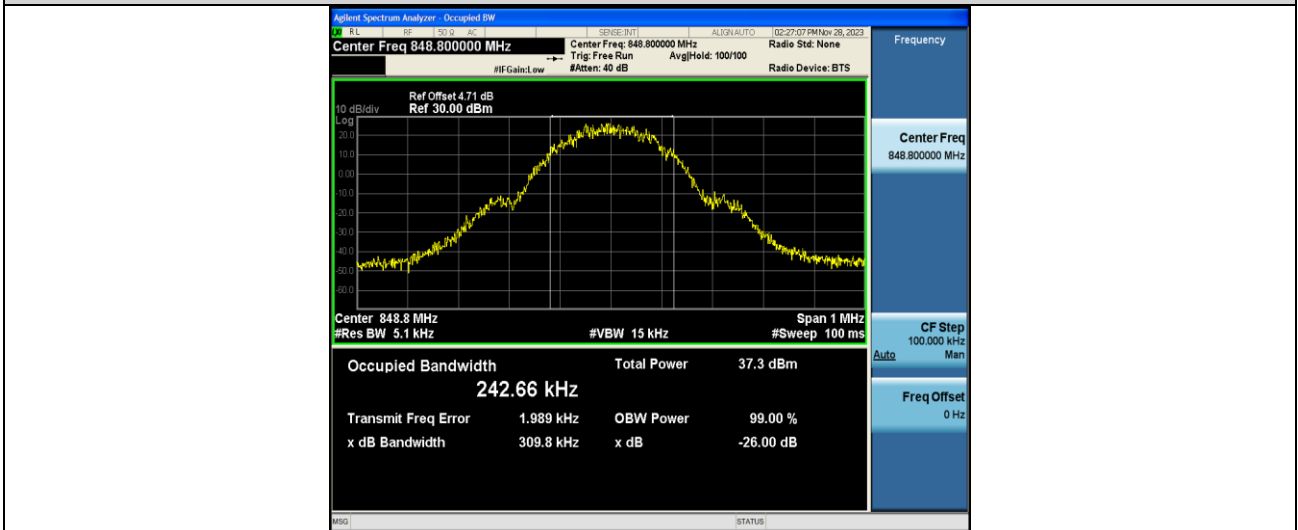
GPRS850-128



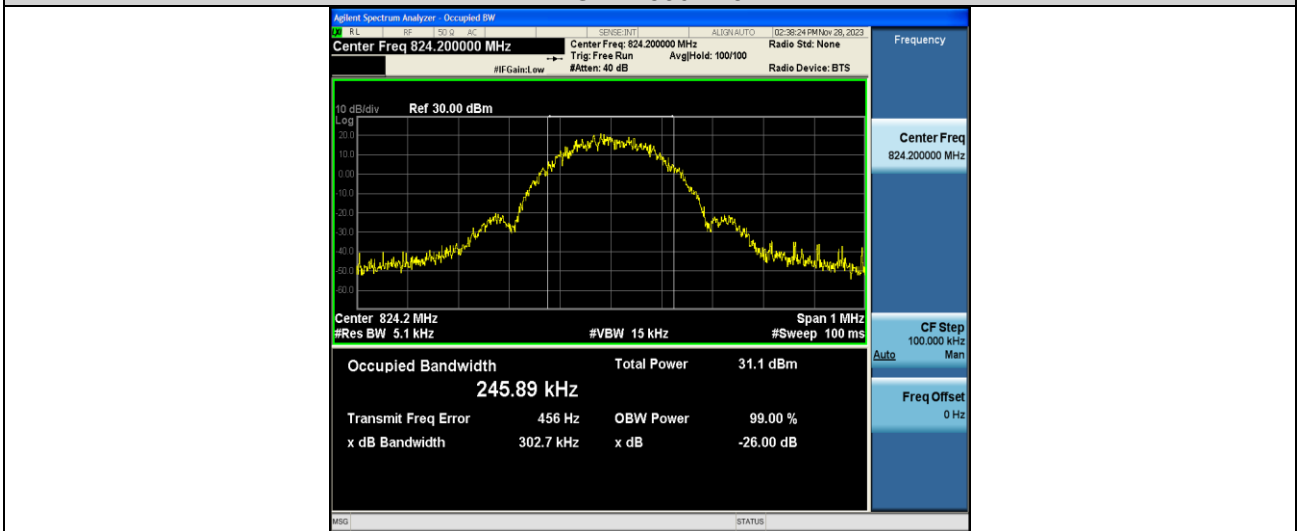
GPRS850-190



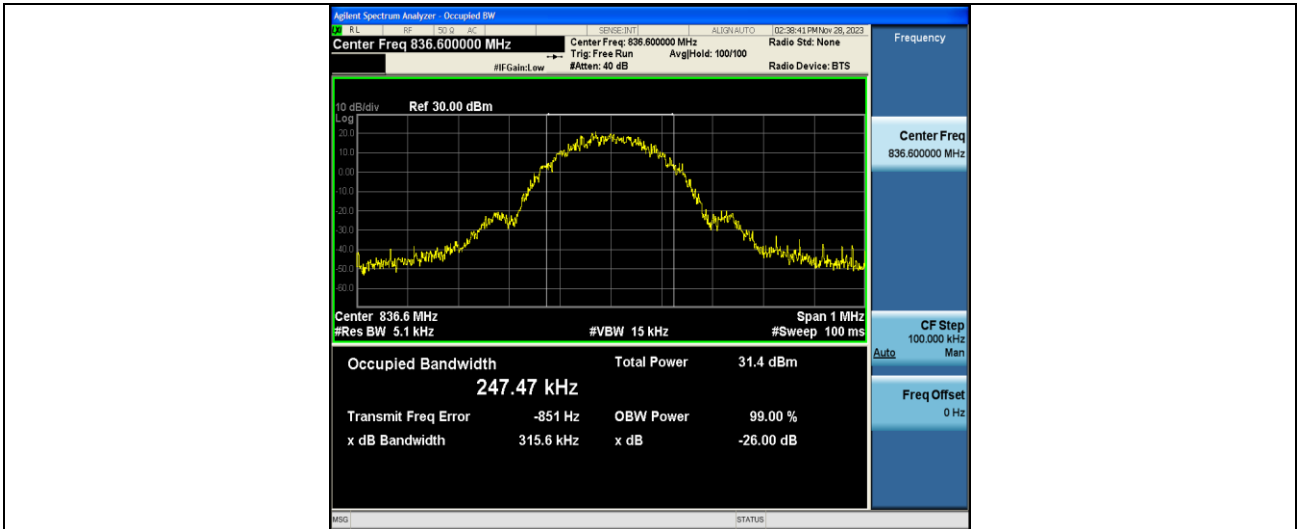
GPRS850-251



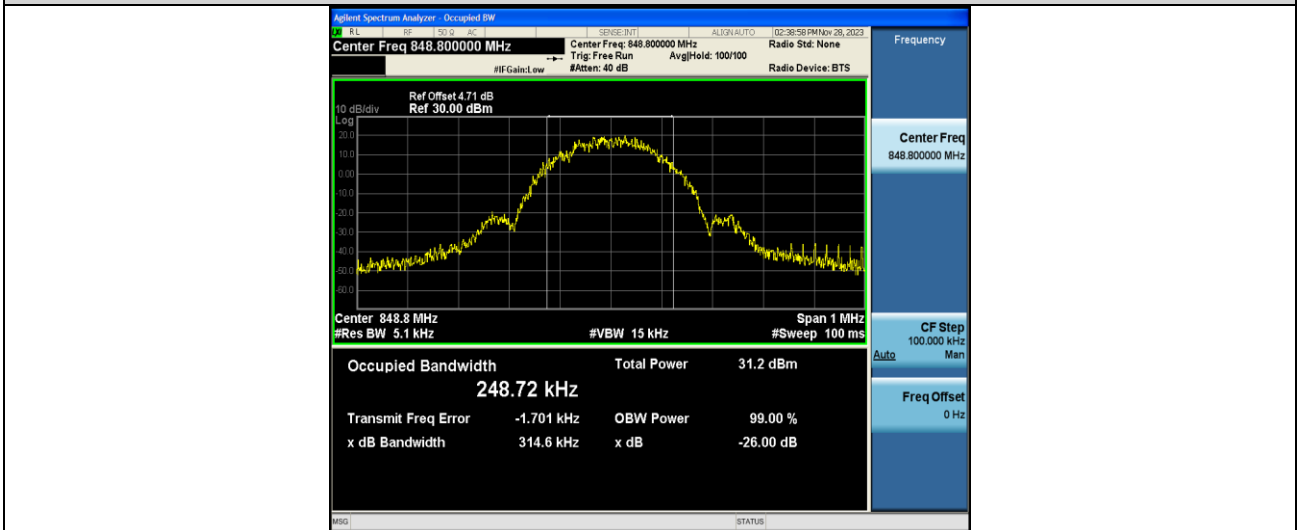
EGPRS850-128



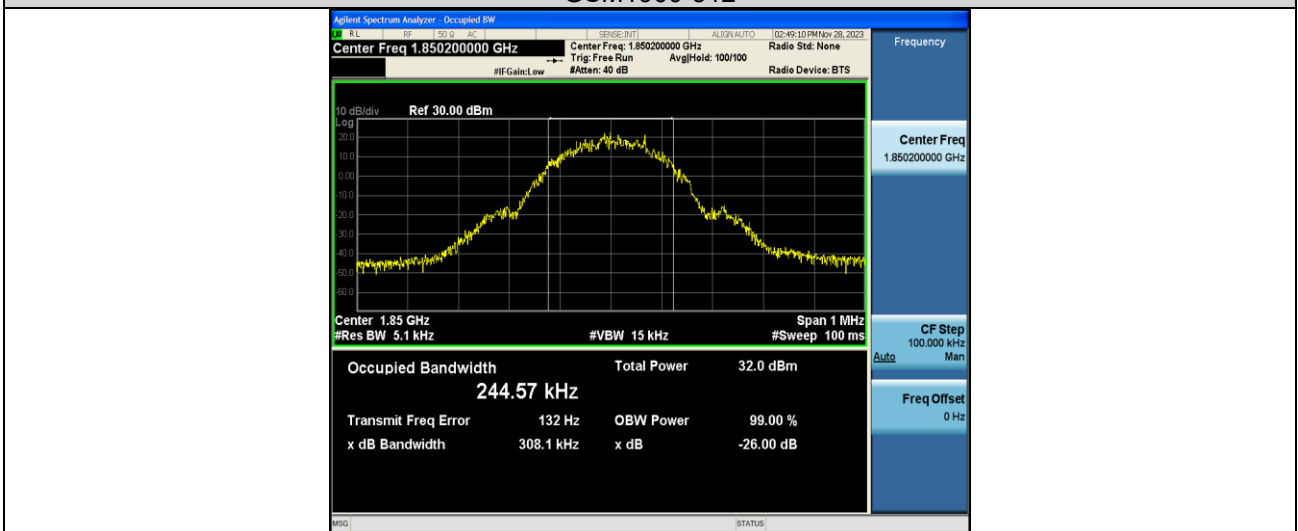
EGPRS850-190



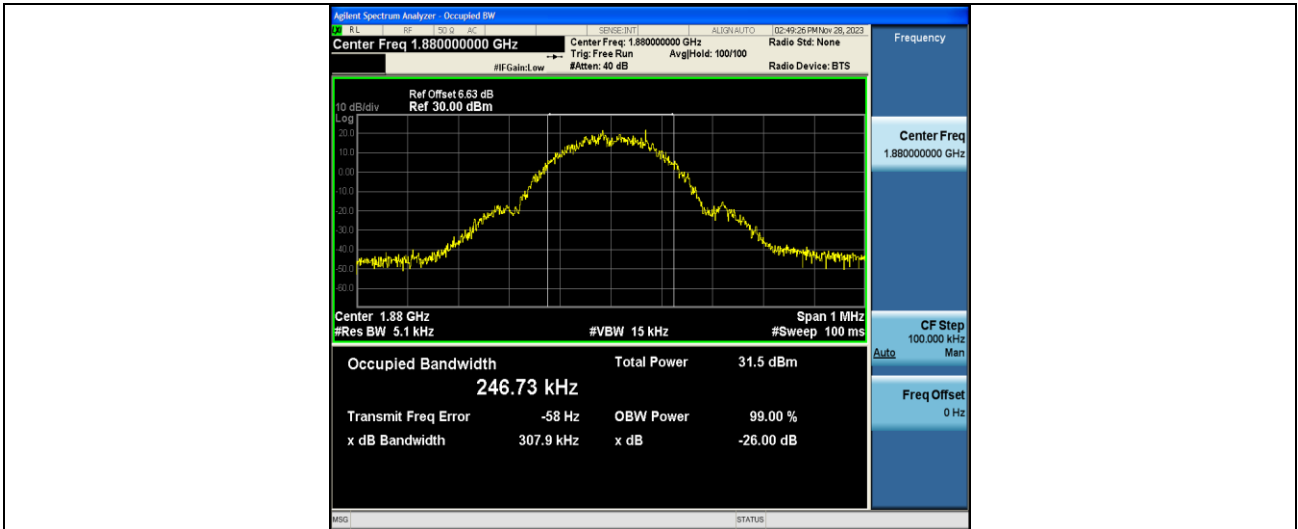
EGPRS850-251



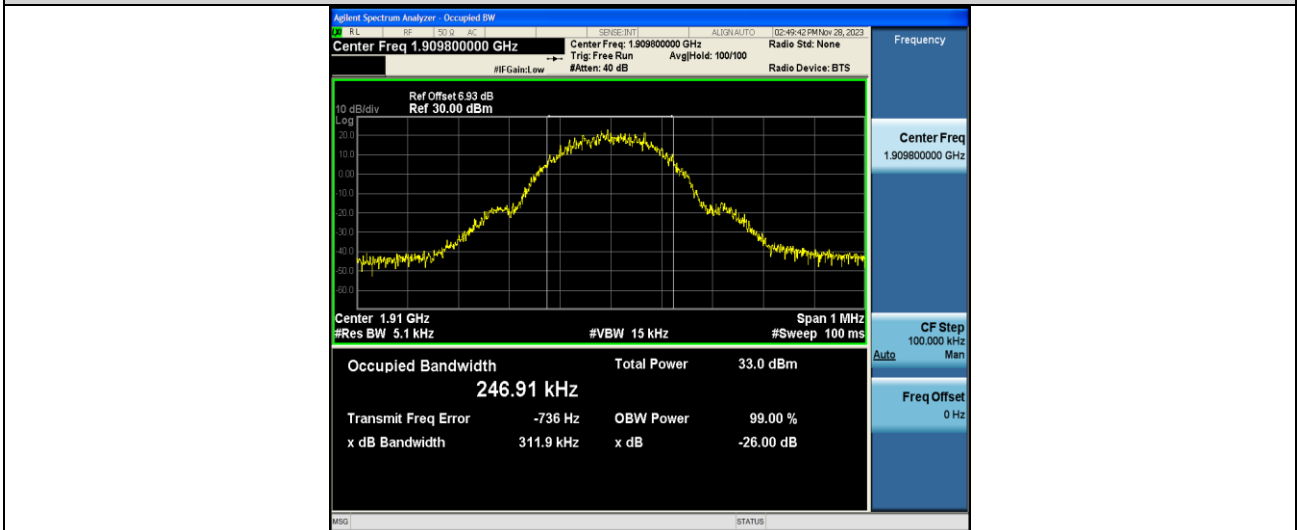
GSM1900-512



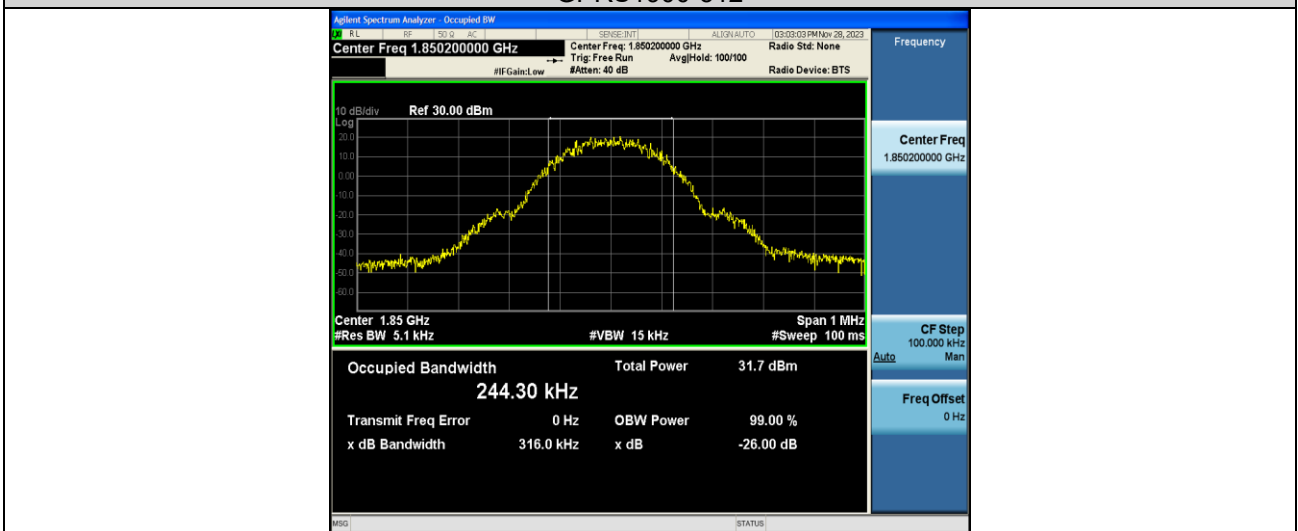
GSM1900-661



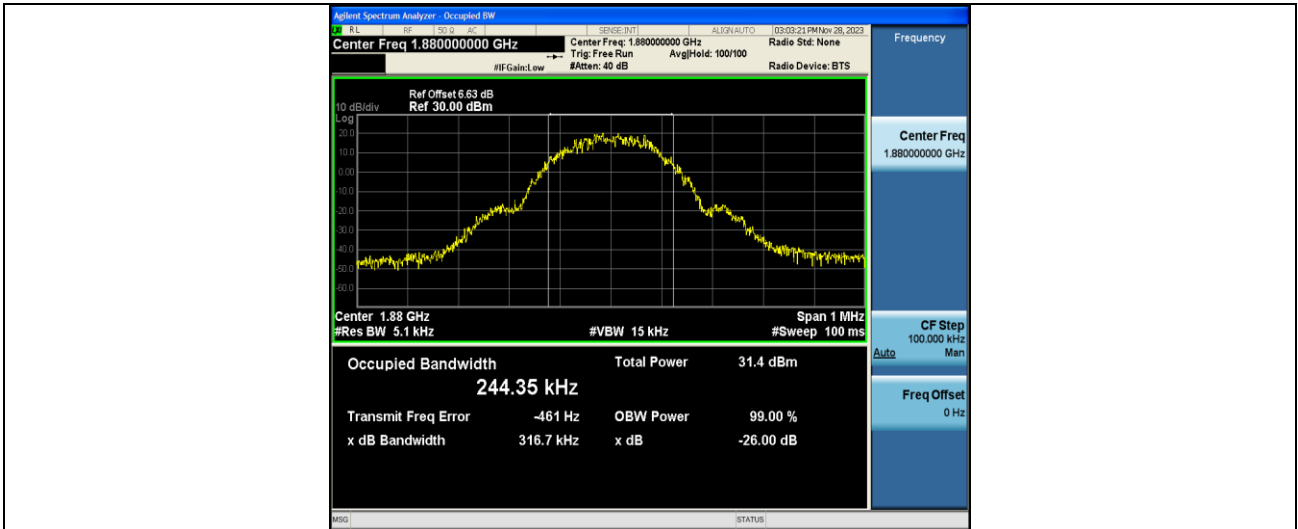
GSM1900-810



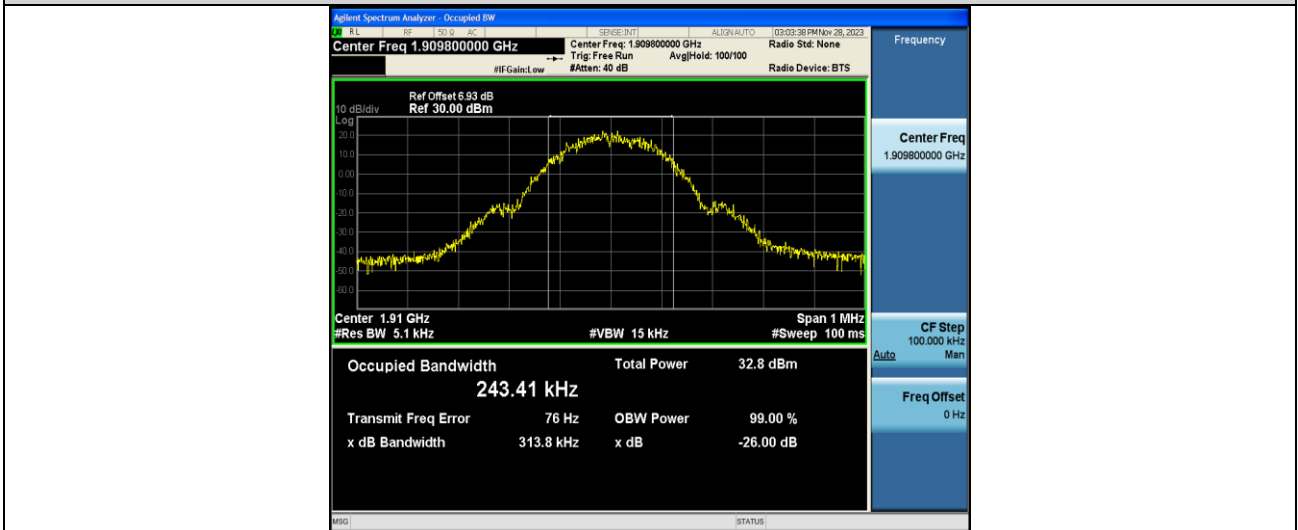
GPRS1900-512



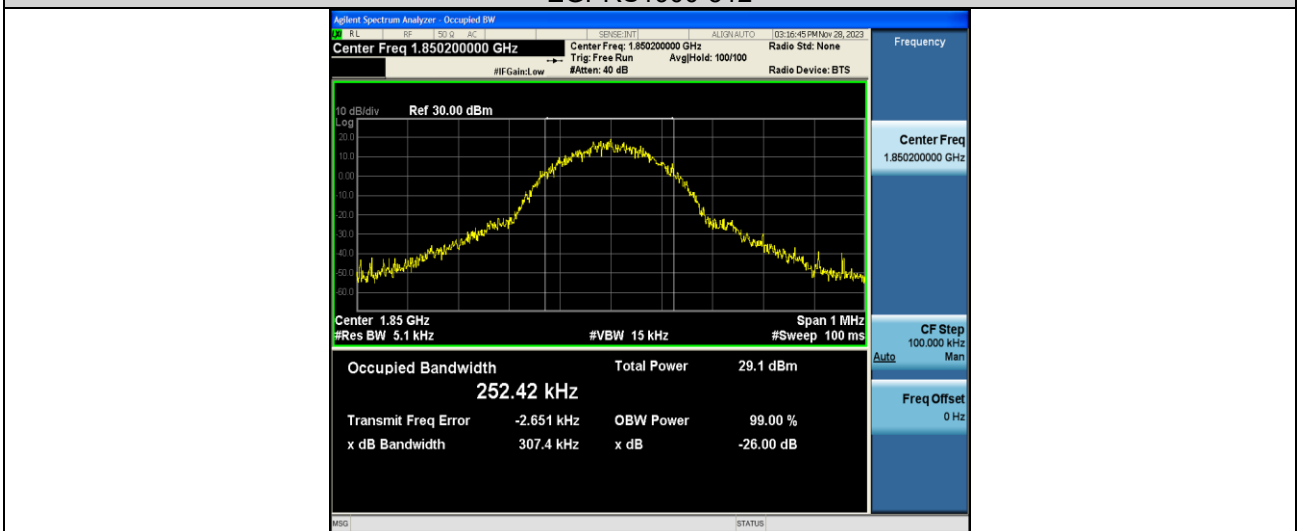
GPRS1900-661



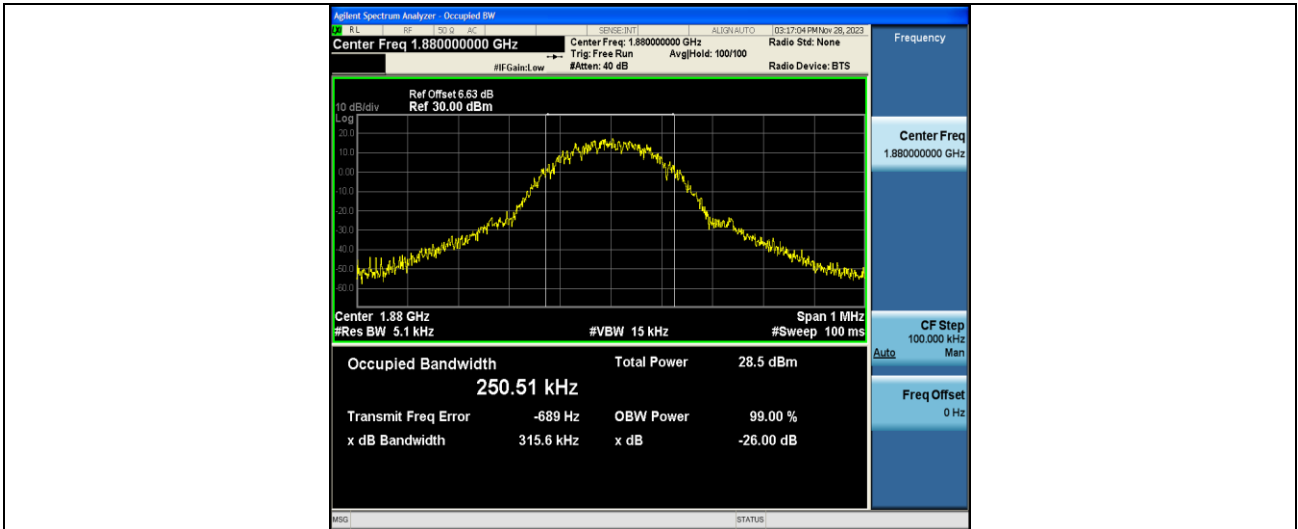
GPRS1900-810



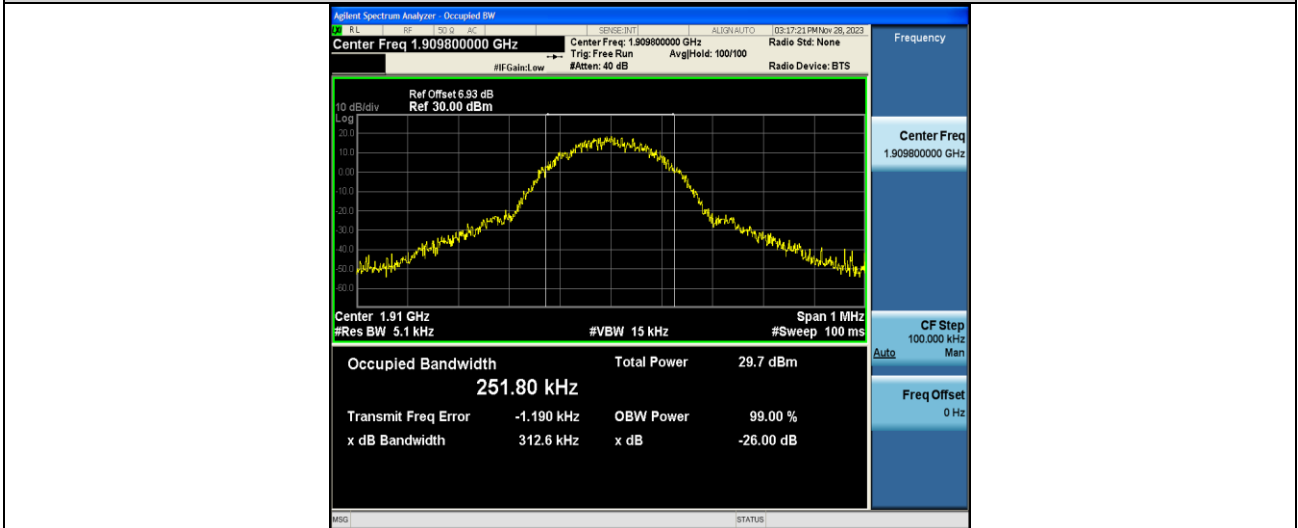
EGPRS1900-512



EGPRS1900-661



EGPRS1900-810



8. Band Edge

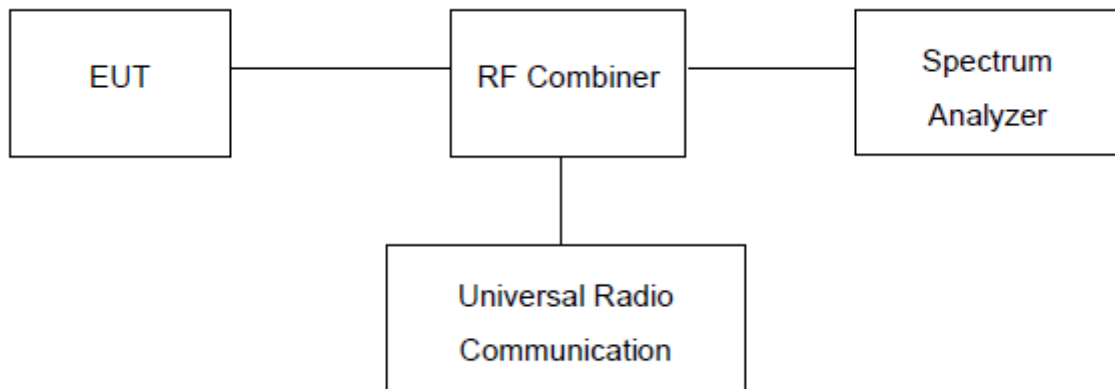
Test Limit:

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly load ed with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is op erated under the conditions specified in §2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified. See section 4.

Test procedure:

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

Test setup:

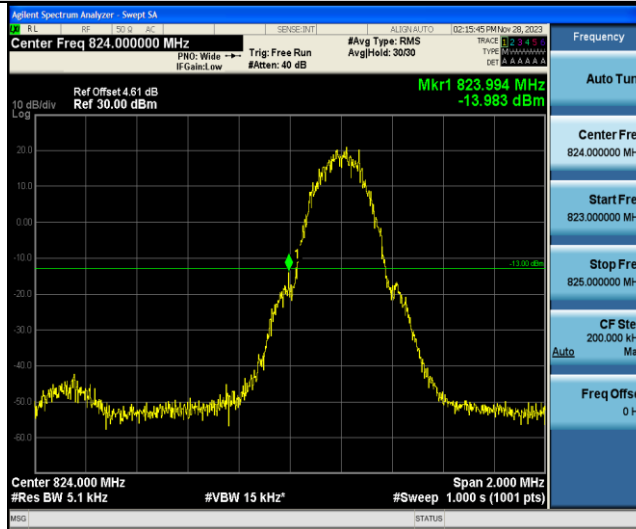


Measurement Result:

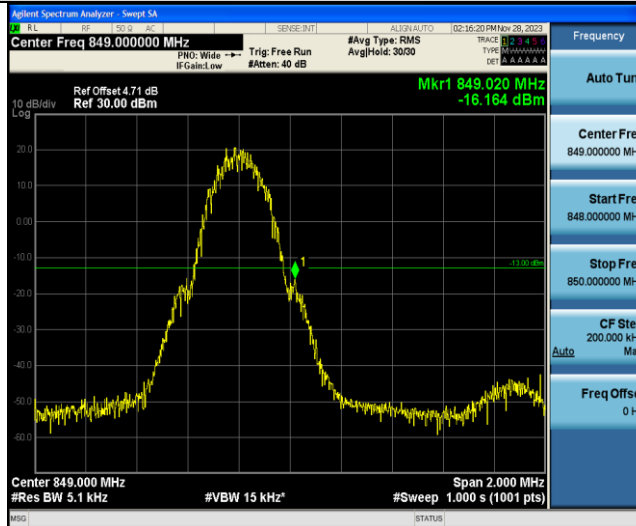
Band	Channel	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	823.99	-13.98	-13	PASS
GSM850	251	849.02	-16.16	-13	PASS
GPRS850	128	823.98	-15.85	-13	PASS
GPRS850	251	849.01	-17.14	-13	PASS
EGPRS850	128	823.97	-27.36	-13	PASS
EGPRS850	251	849.01	-21.79	-13	PASS
GSM1900	512	1850.00	-21.06	-13	PASS
GSM1900	810	1910.02	-18.79	-13	PASS
GPRS1900	512	1850.00	-21.53	-13	PASS
GPRS1900	810	1910.02	-19.90	-13	PASS
EGPRS1900	512	1849.98	-27.06	-13	PASS
EGPRS1900	810	1910.02	-27.15	-13	PASS

Test Graphs:

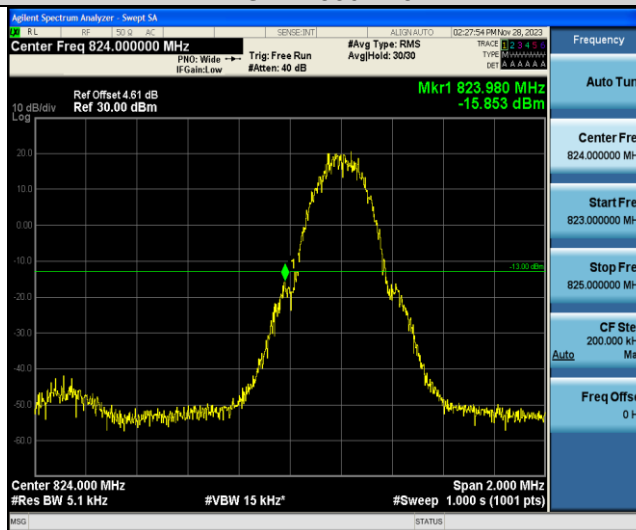
GSM850-128



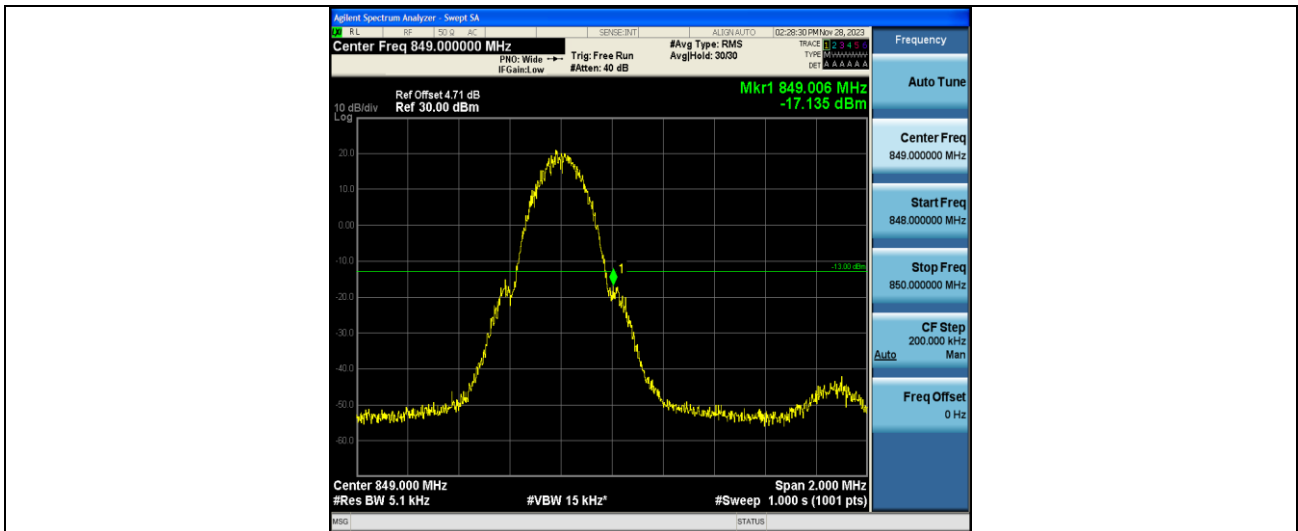
GSM850-251



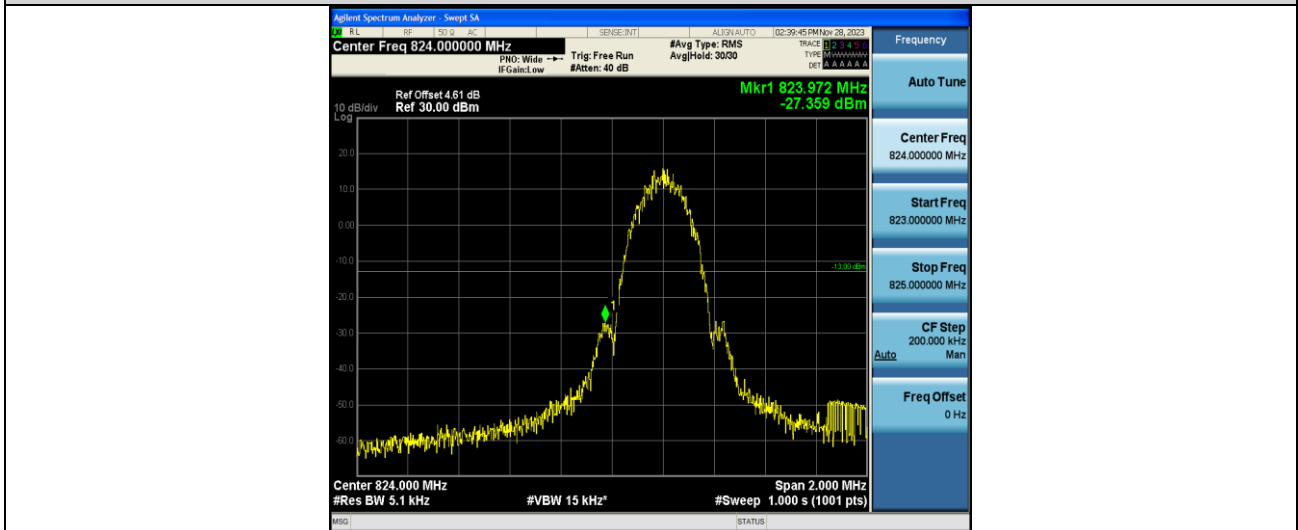
GPRS850-128



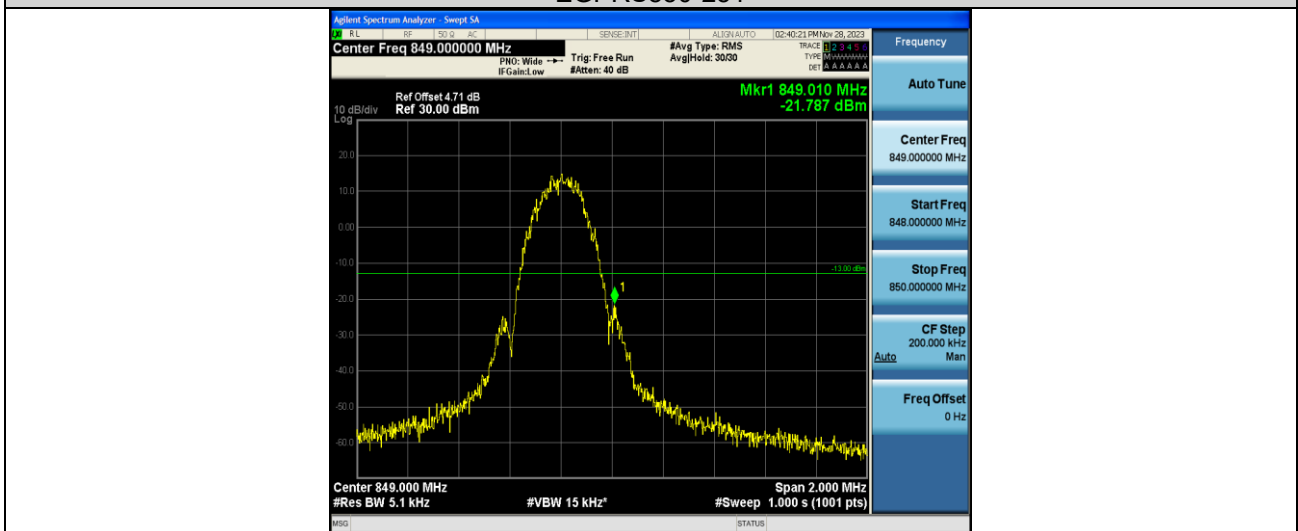
GPRS850-251



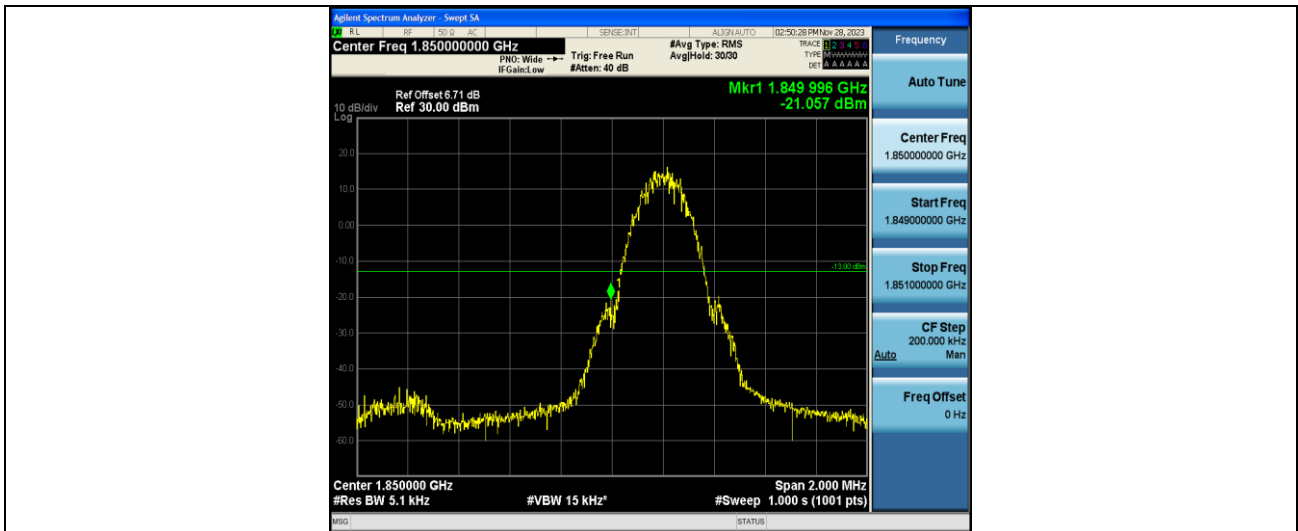
EGPRS850-128



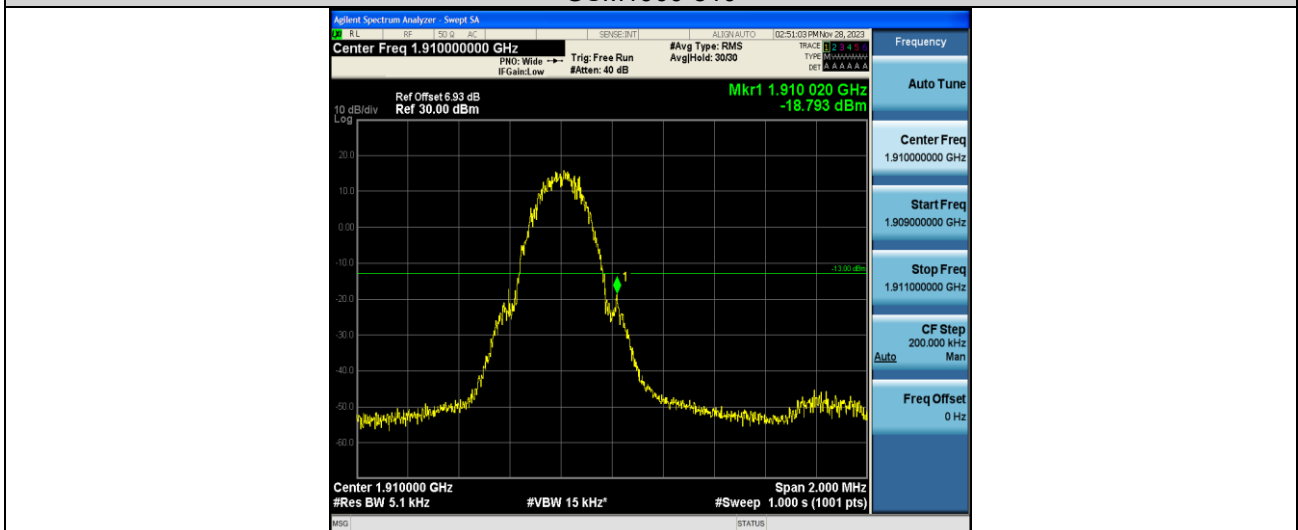
EGPRS850-251



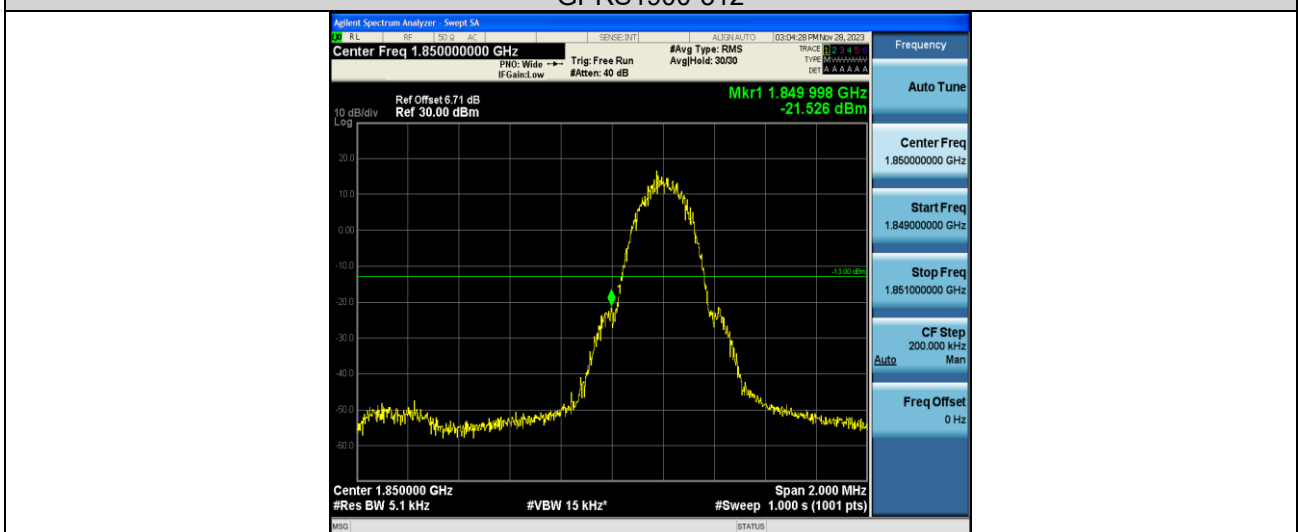
GSM1900-512



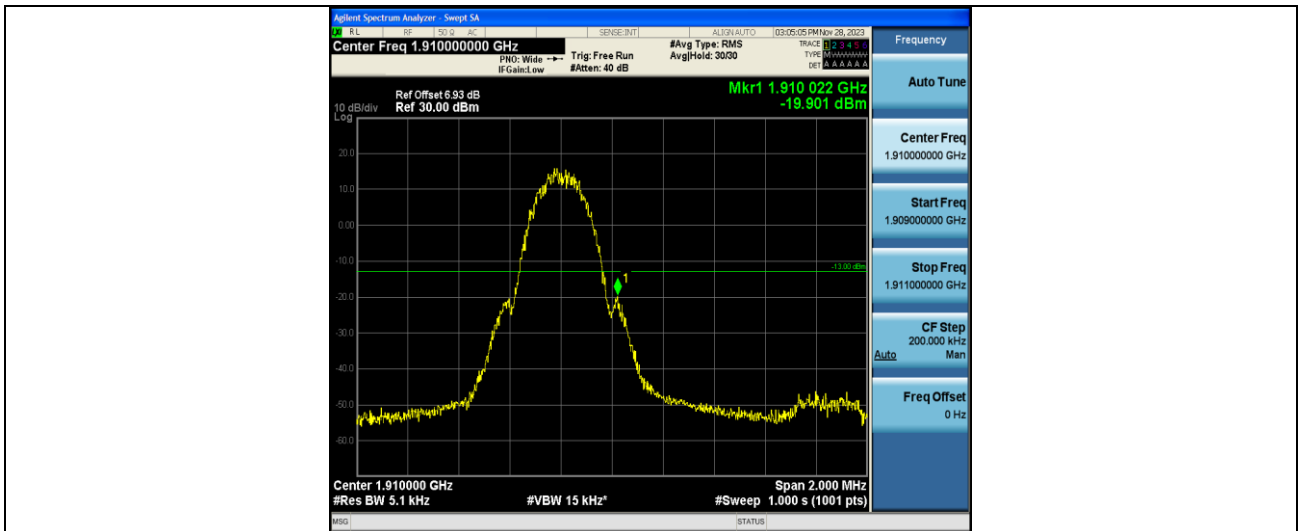
GSM1900-810



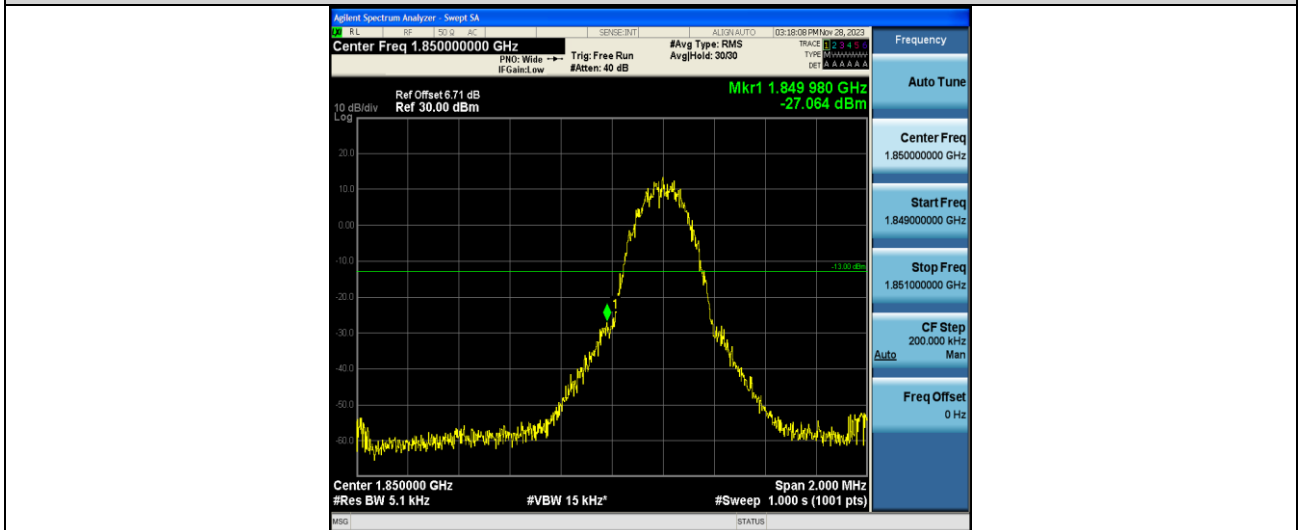
GPRS1900-512



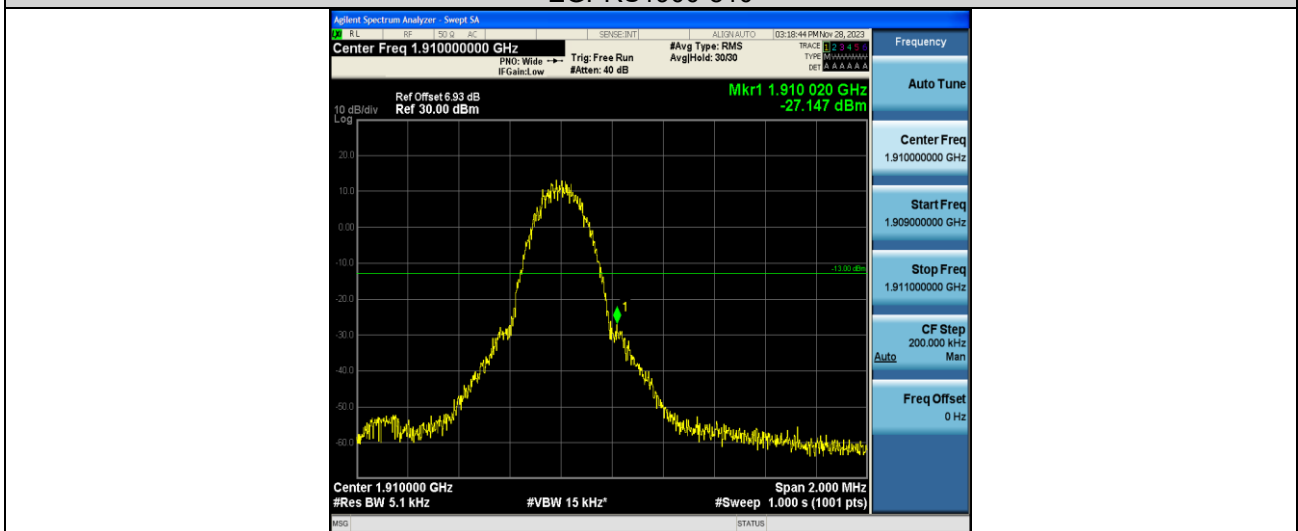
GPRS1900-810



EGPRS1900-512



EGPRS1900-810

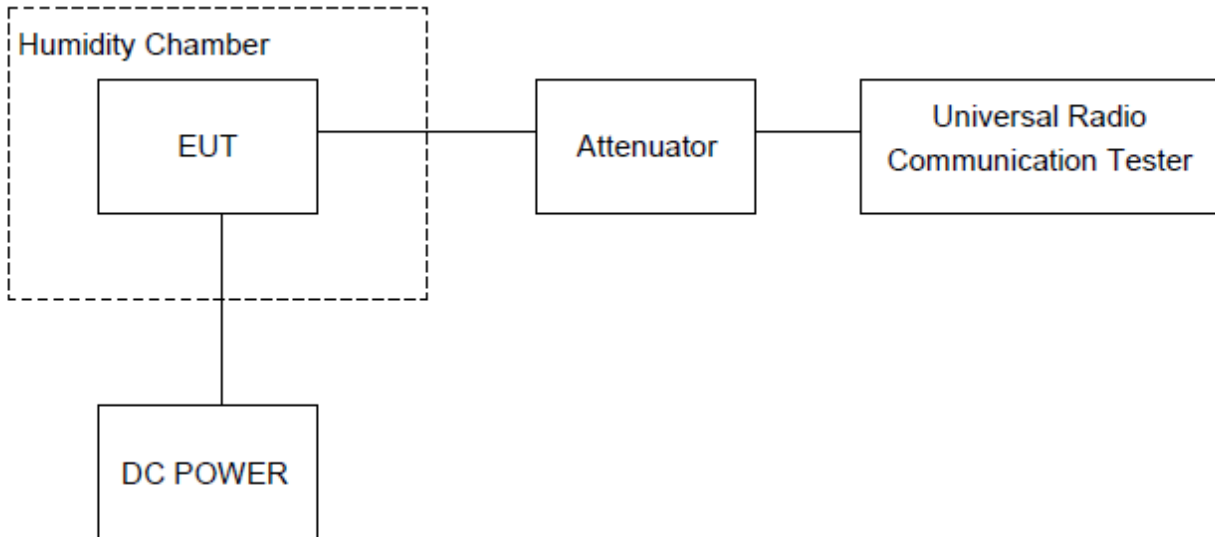


9. Peak-to-Average Ratio(PAR)

Limit

The Peak-to-Average Ratio (PAR) of the transmission may not exceed 13 dB.

Test Configuration:



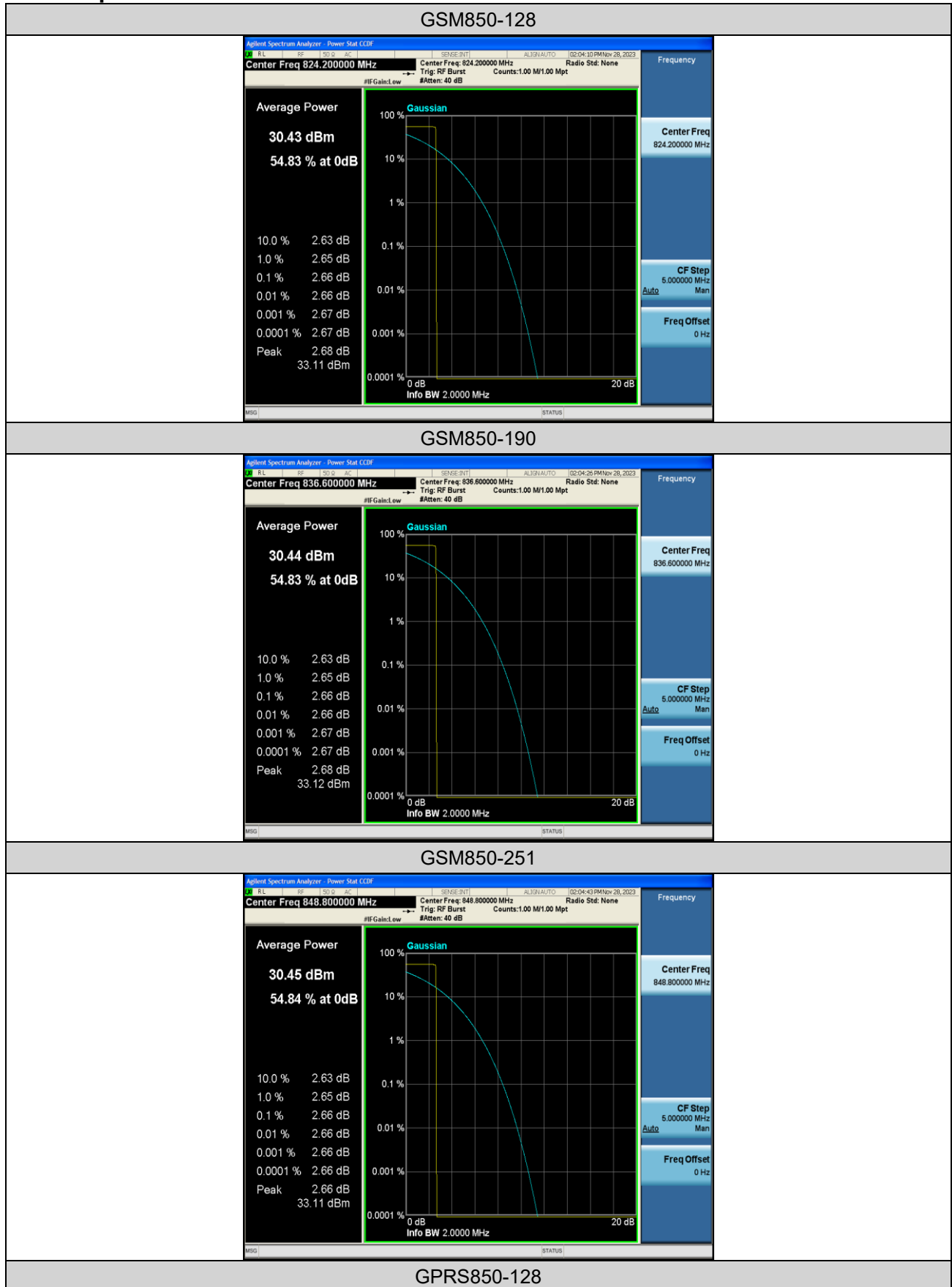
Test Procedure:

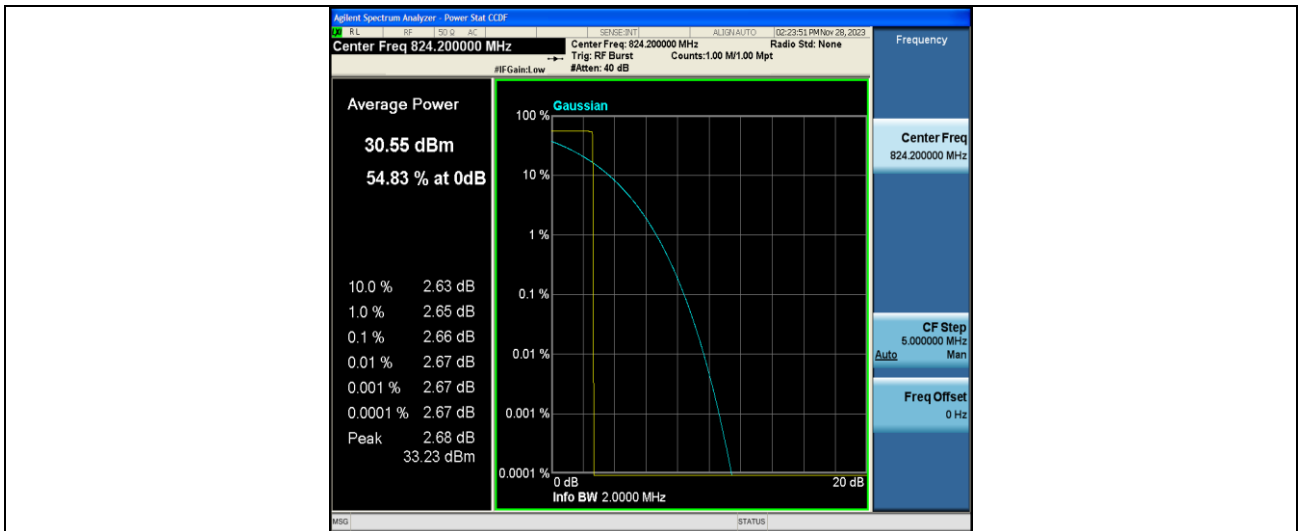
Use spectrum to measure the total peak power and record as P_{pk} . Use spectrum to measure the total average power and record as P_{avg} : Both the peak and average power levels must be expressed in the same logarithmic units(e.g, dBm) Determine the PAPR from: $PAPR(dB) = P_{pk}(dBm) - P_{Avg}(dBm)$ Record the maximum PAPR level associated with a probability of 01%

Test Result:

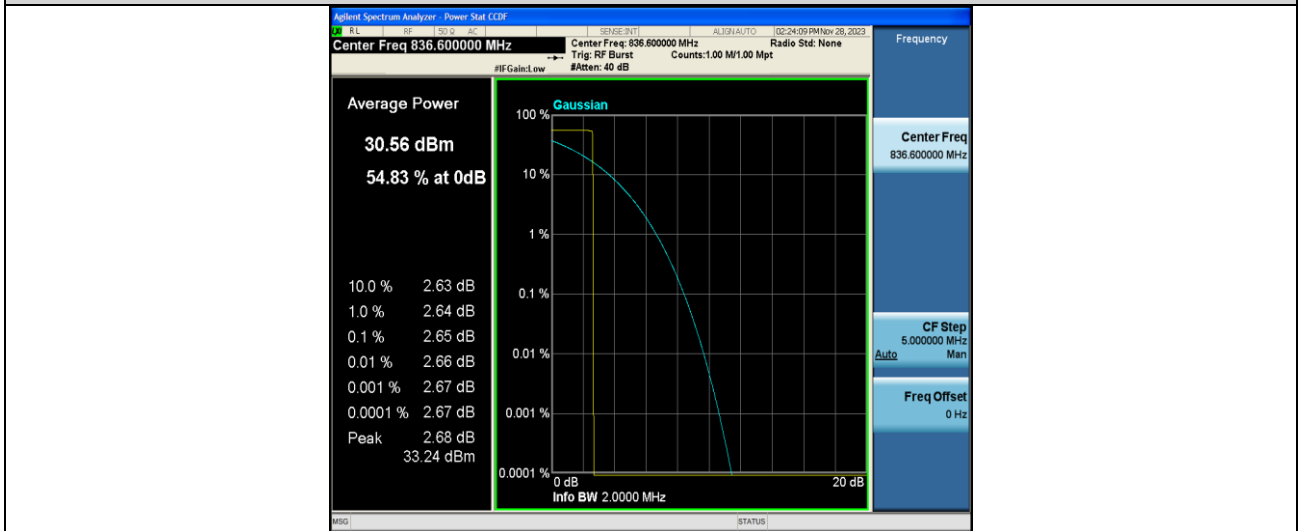
Band	Channel	Result(dB)	Limit(dB)	Verdict
GSM850	128	2.66	13	PASS
GSM850	190	2.66	13	PASS
GSM850	251	2.66	13	PASS
GPRS850	128	2.66	13	PASS
GPRS850	190	2.65	13	PASS
GPRS850	251	2.66	13	PASS
EGPRS850	128	5.51	13	PASS
EGPRS850	190	5.48	13	PASS
EGPRS850	251	5.49	13	PASS
GSM1900	512	2.63	13	PASS
GSM1900	661	2.64	13	PASS
GSM1900	810	2.64	13	PASS
GPRS1900	512	2.63	13	PASS
GPRS1900	661	2.63	13	PASS
GPRS1900	810	2.63	13	PASS
EGPRS1900	512	5.42	13	PASS
EGPRS1900	661	5.51	13	PASS
EGPRS1900	810	5.51	13	PASS

Test Graphs:

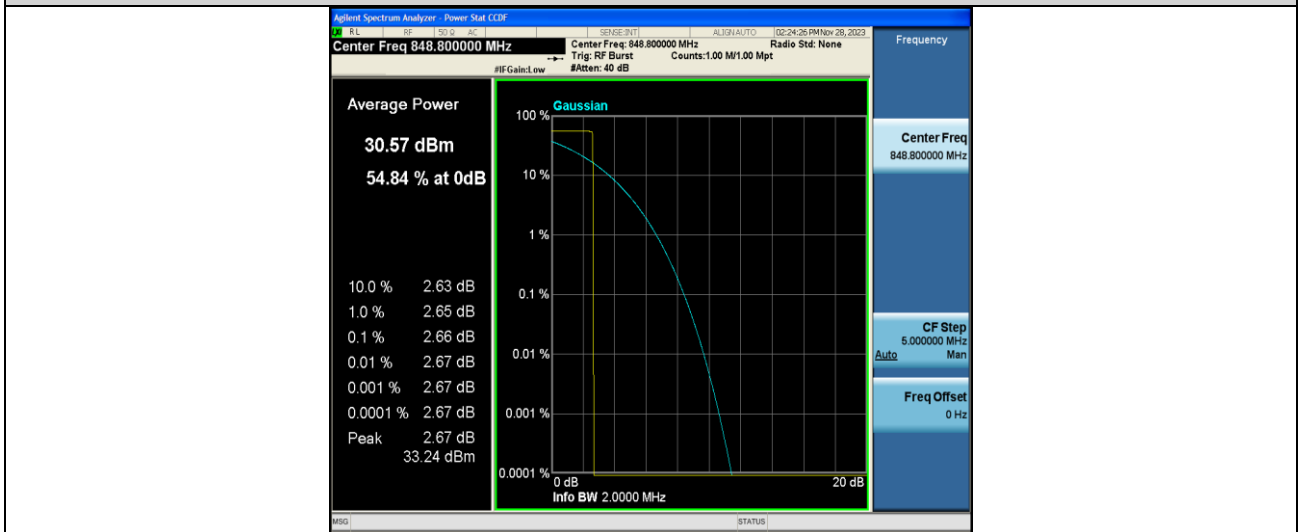




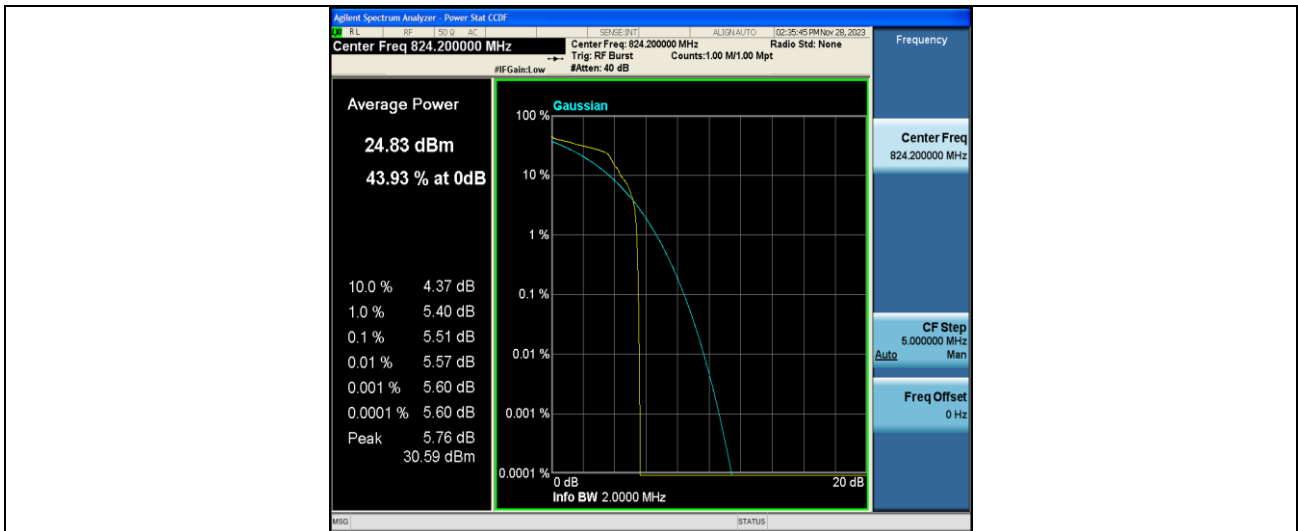
GPRS850-190



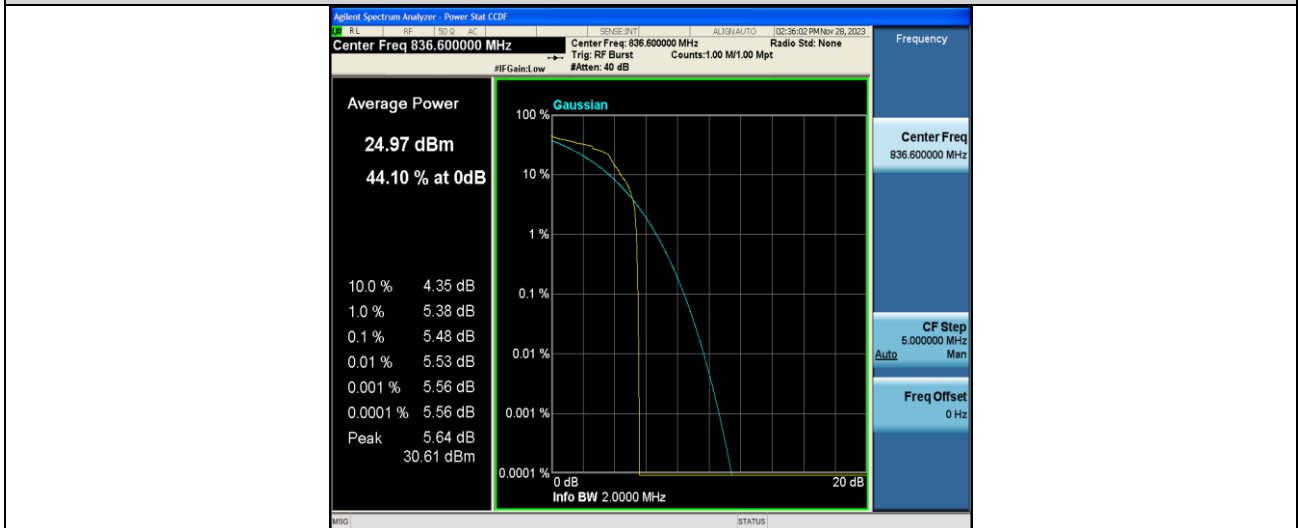
GPRS850-251



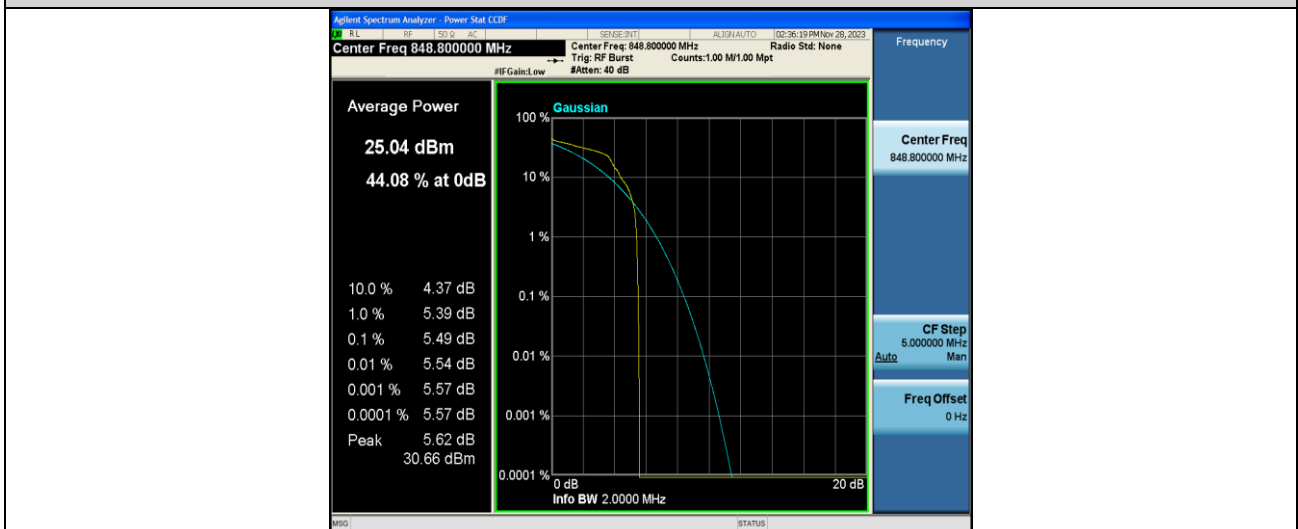
EGPRS850-128



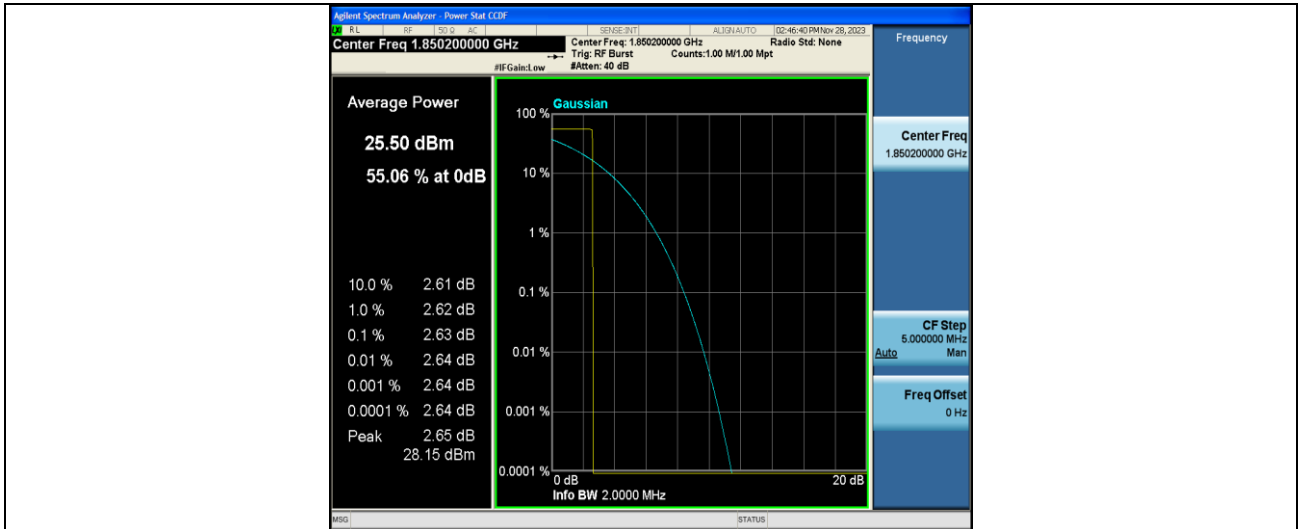
EGPRS850-190



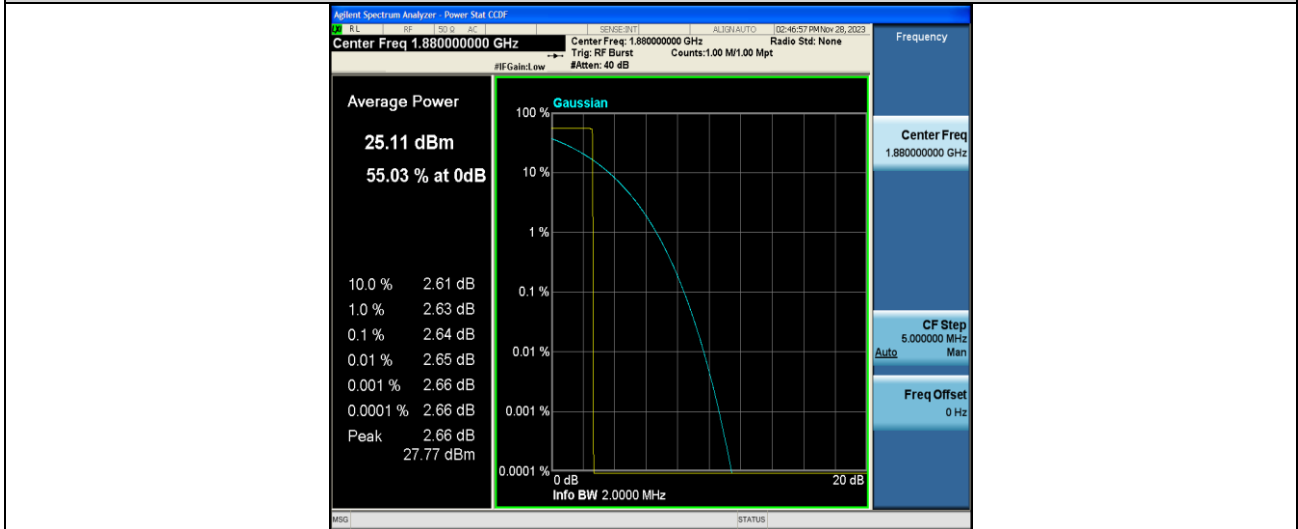
EGPRS850-251



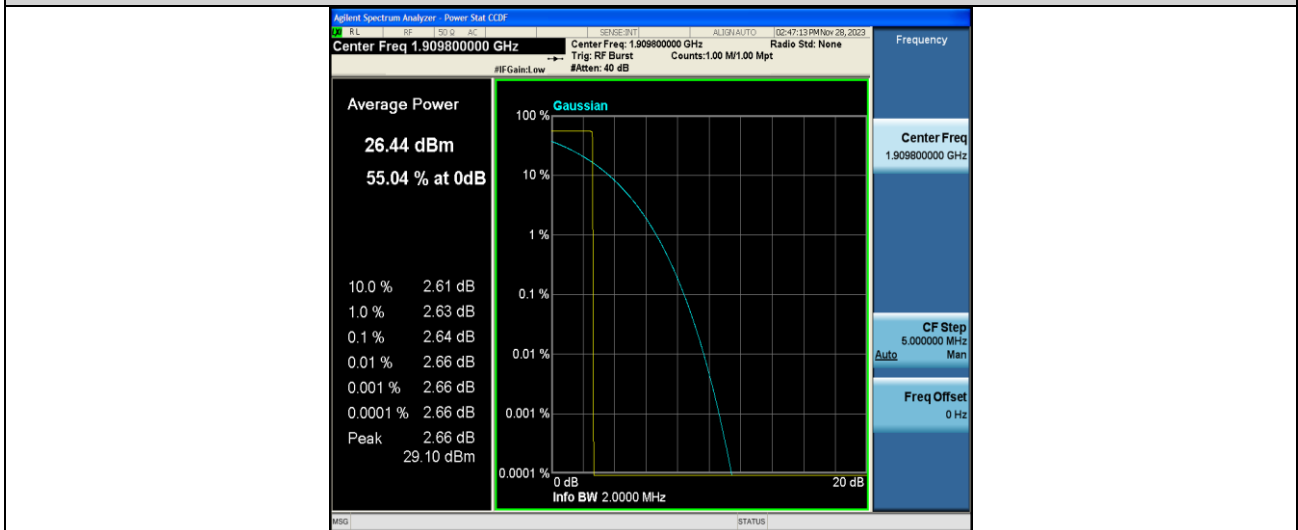
GSM1900-512



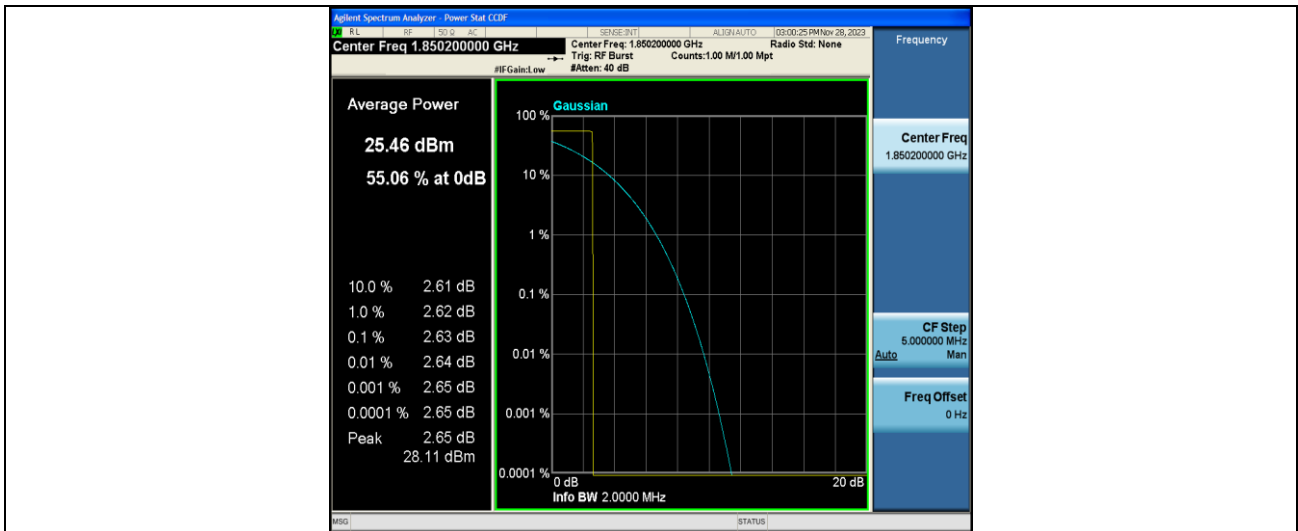
GSM1900-661



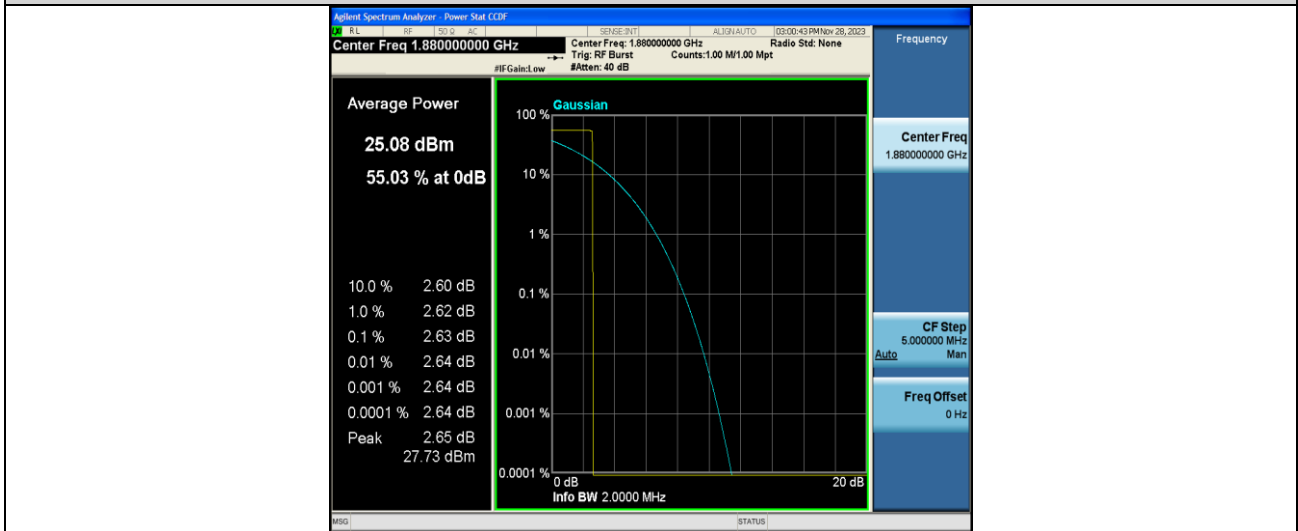
GSM1900-810



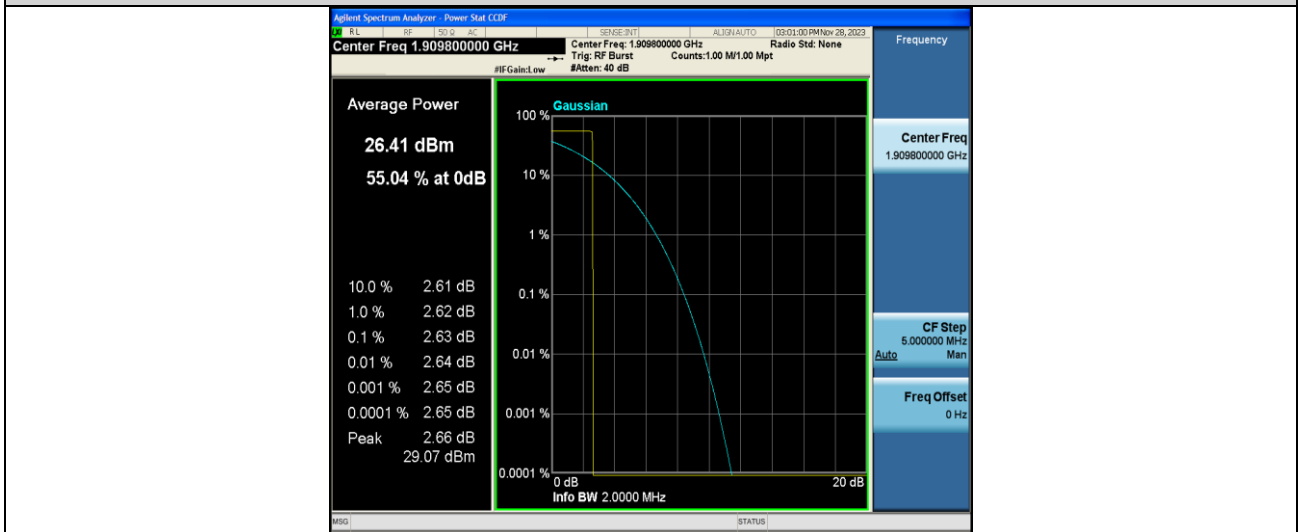
GPRS1900-512



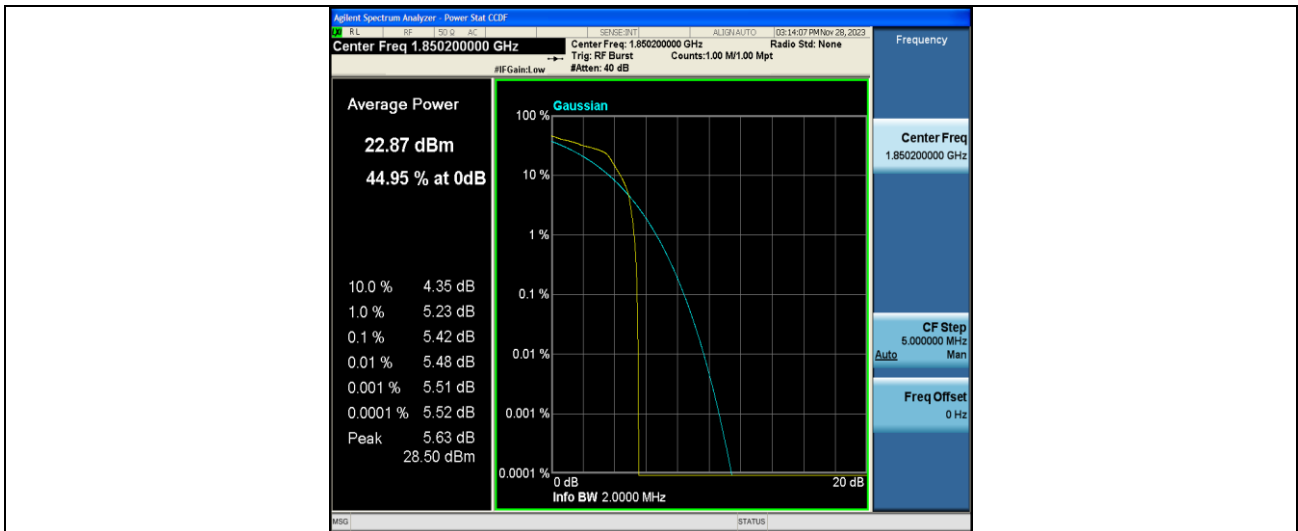
GPRS1900-661



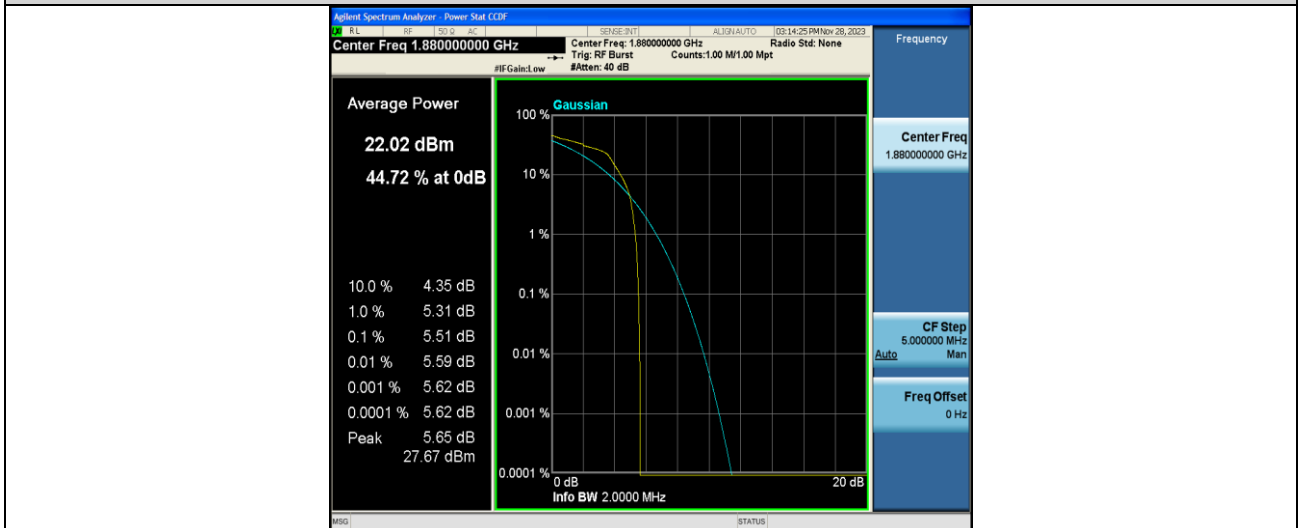
GPRS1900-810



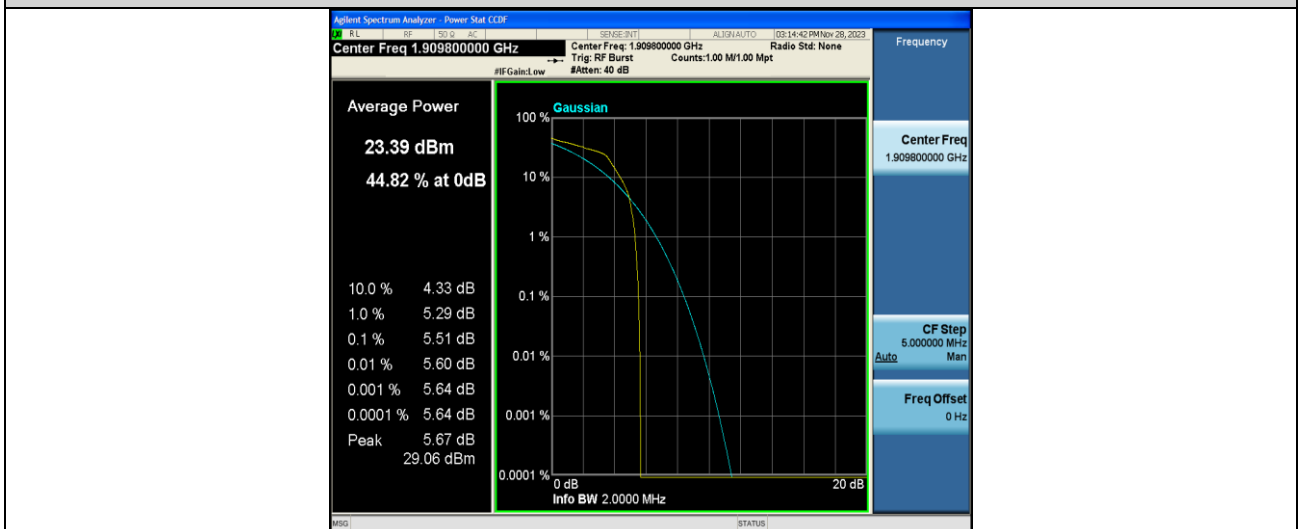
EGPRS1900-512



EGPRS1900-661



EGPRS1900-810



10. Frequency Stability

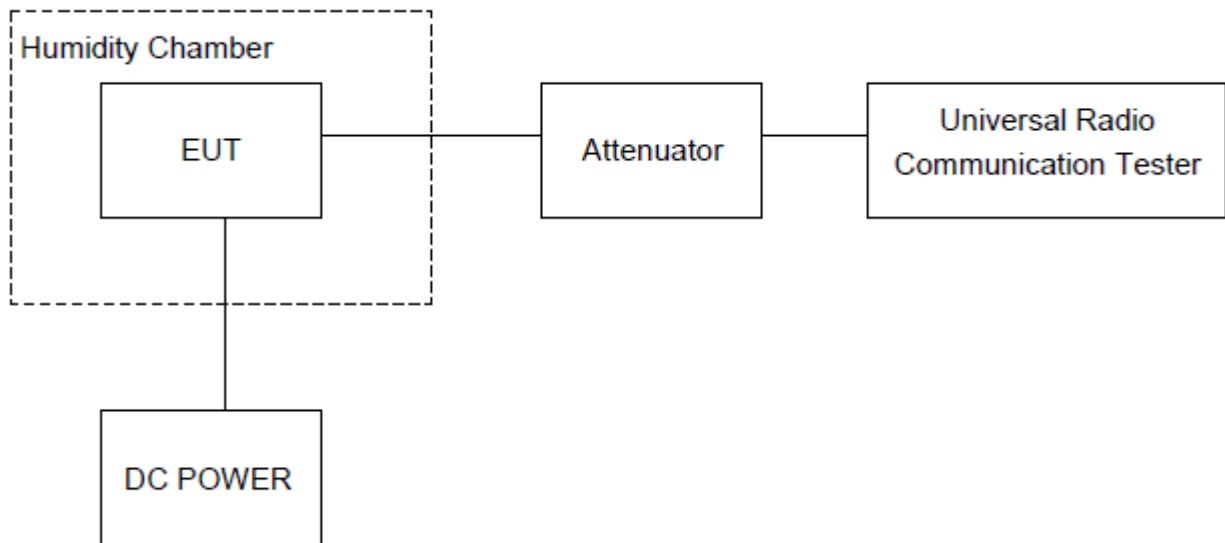
Test limit:

The frequency stability of the transmitter shall be measured while varying the ambient temperatures and supply voltages over the ranges specified in §2.1055. The specific frequency stability limits are provided in the relevant rules section(s). see section 4.

Test procedure:

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable exited the chamber through an opening made for the purpose.

Test setup:



10.1. Measurement Result (Worst)

Voltage							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	VL	NT	-2.65	-0.003215	±2.5	PASS
GSM850	128	VN	NT	0.97	0.001177	±2.5	PASS
GSM850	128	VH	NT	0.48	0.000582	±2.5	PASS
GSM850	190	VL	NT	2.81	0.003359	±2.5	PASS
GSM850	190	VN	NT	1.78	0.002128	±2.5	PASS
GSM850	190	VH	NT	1.71	0.002044	±2.5	PASS
GSM850	251	VL	NT	4.55	0.005361	±2.5	PASS
GSM850	251	VN	NT	-0.32	-0.000377	±2.5	PASS
GSM850	251	VH	NT	5.33	0.006279	±2.5	PASS
GPRS850	128	VL	NT	-4.29	-0.005205	±2.5	PASS
GPRS850	128	VN	NT	-5.46	-0.006625	±2.5	PASS
GPRS850	128	VH	NT	-2.91	-0.003531	±2.5	PASS
GPRS850	190	VL	NT	-0.48	-0.000574	±2.5	PASS
GPRS850	190	VN	NT	-2.74	-0.003275	±2.5	PASS
GPRS850	190	VH	NT	0.90	0.001076	±2.5	PASS
GPRS850	251	VL	NT	-0.06	-0.000071	±2.5	PASS
GPRS850	251	VN	NT	-9.98	-0.011758	±2.5	PASS
GPRS850	251	VH	NT	-1.78	-0.002097	±2.5	PASS
EGPRS850	128	VL	NT	5.07	0.006151	±2.5	PASS
EGPRS850	128	VN	NT	4.16	0.005047	±2.5	PASS
EGPRS850	128	VH	NT	3.42	0.004149	±2.5	PASS
EGPRS850	190	VL	NT	3.91	0.004674	±2.5	PASS
EGPRS850	190	VN	NT	-2.68	-0.003203	±2.5	PASS
EGPRS850	190	VH	NT	2.42	0.002893	±2.5	PASS
EGPRS850	251	VL	NT	-1.36	-0.001602	±2.5	PASS
EGPRS850	251	VN	NT	-1.65	-0.001944	±2.5	PASS
EGPRS850	251	VH	NT	5.10	0.006008	±2.5	PASS
GSM1900	512	VL	NT	13.82	0.007469	±2.5	PASS
GSM1900	512	VN	NT	12.49	0.006751	±2.5	PASS
GSM1900	512	VH	NT	14.33	0.007745	±2.5	PASS
GSM1900	661	VL	NT	16.11	0.008569	±2.5	PASS
GSM1900	661	VN	NT	15.79	0.008399	±2.5	PASS
GSM1900	661	VH	NT	20.66	0.010989	±2.5	PASS
GSM1900	810	VL	NT	12.66	0.006629	±2.5	PASS
GSM1900	810	VN	NT	12.79	0.006697	±2.5	PASS
GSM1900	810	VH	NT	14.53	0.007608	±2.5	PASS
GPRS1900	512	VL	NT	6.78	0.003664	±2.5	PASS
GPRS1900	512	VN	NT	15.17	0.008199	±2.5	PASS
GPRS1900	512	VH	NT	12.30	0.006648	±2.5	PASS
GPRS1900	661	VL	NT	11.11	0.005910	±2.5	PASS
GPRS1900	661	VN	NT	7.39	0.003931	±2.5	PASS
GPRS1900	661	VH	NT	10.14	0.005394	±2.5	PASS
GPRS1900	810	VL	NT	9.36	0.004901	±2.5	PASS
GPRS1900	810	VN	NT	10.49	0.005493	±2.5	PASS
GPRS1900	810	VH	NT	14.33	0.007503	±2.5	PASS

EGPRS1900	512	VL	NT	19.31	0.010437	±2.5	PASS
EGPRS1900	512	VN	NT	18.05	0.009756	±2.5	PASS
EGPRS1900	512	VH	NT	16.53	0.008934	±2.5	PASS
EGPRS1900	661	VL	NT	15.30	0.008138	±2.5	PASS
EGPRS1900	661	VN	NT	11.40	0.006064	±2.5	PASS
EGPRS1900	661	VH	NT	19.60	0.010426	±2.5	PASS
EGPRS1900	810	VL	NT	16.53	0.008655	±2.5	PASS
EGPRS1900	810	VN	NT	15.34	0.008032	±2.5	PASS
EGPRS1900	810	VH	NT	12.62	0.006608	±2.5	PASS

15 APPENDIX I -- TEST SETUP PHOTOGRAPH

Refer to "Test Setup Photos".

16 APPENDIX II -- EUT PHOTOGRAPH

Refer to " External Photos" and "Internal Photos".

*******THE END REPORT*******