

GSM Test Data

General Description of EUT	
Product Name:	Smart POS Payment Terminal
Test Model:	CM30
Sample ID:	202311-0170-7-2#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 24V
Test Engineer:	Yan zhen ming
Note: For a more detailed features description, please refer to the report TBR-C-202311-0170-85 . The report only show the worst case data.	

Contents

GSM Test Data	1
1. Conducted Power Output Data	3
Test Result	3
2. Peak-to-Average Ratio(CCDF)	5
Test Result	5
Test Graphs.....	6
3. 26dB Bandwidth and Occupied Bandwidth.....	9
Test Result	9
Test Graphs.....	10
4. Band Edge	13
Test Result	13
Test Graphs.....	14
5. Conducted Spurious Emission	16
Test Result	16
Test Graphs.....	18
6. Frequency Stability	32
Test Result	32
7. Modulation Characteristics.....	37
Test Result	37
Test Graphs.....	38

1. Conducted Power Output Data

Test Result

Band	Channel	Power(dBm)	Limit(dBm)	Verdict
GSM850	128	32.09	38.45	PASS
GSM850	190	30.94	38.45	PASS
GSM850	251	30.92	38.45	PASS
GSM1900	512	30.03	33.00	PASS
GSM1900	661	30.05	33.00	PASS
GSM1900	810	30.11	33.00	PASS

Band	Channel	Slot	Power(dBm)	Limit(dBm)	Verdict
GPRS850	128	1	32.21	38.45	PASS
GPRS850	128	2	30.53	38.45	PASS
GPRS850	128	3	30.79	38.45	PASS
GPRS850	128	4	29.55	38.45	PASS
GPRS850	190	1	31.00	38.45	PASS
GPRS850	190	2	30.32	38.45	PASS
GPRS850	190	3	30.59	38.45	PASS
GPRS850	190	4	29.37	38.45	PASS
GPRS850	251	1	30.96	38.45	PASS
GPRS850	251	2	30.30	38.45	PASS
GPRS850	251	3	30.58	38.45	PASS
GPRS850	251	4	29.35	38.45	PASS
GPRS1900	512	1	30.00	33.00	PASS
GPRS1900	512	2	29.21	33.00	PASS
GPRS1900	512	3	27.35	33.00	PASS
GPRS1900	512	4	26.14	33.00	PASS
GPRS1900	661	1	29.97	33.00	PASS
GPRS1900	661	2	29.21	33.00	PASS
GPRS1900	661	3	27.36	33.00	PASS
GPRS1900	661	4	26.18	33.00	PASS
GPRS1900	810	1	30.03	33.00	PASS
GPRS1900	810	2	29.31	33.00	PASS
GPRS1900	810	3	27.52	33.00	PASS
GPRS1900	810	4	26.38	33.00	PASS

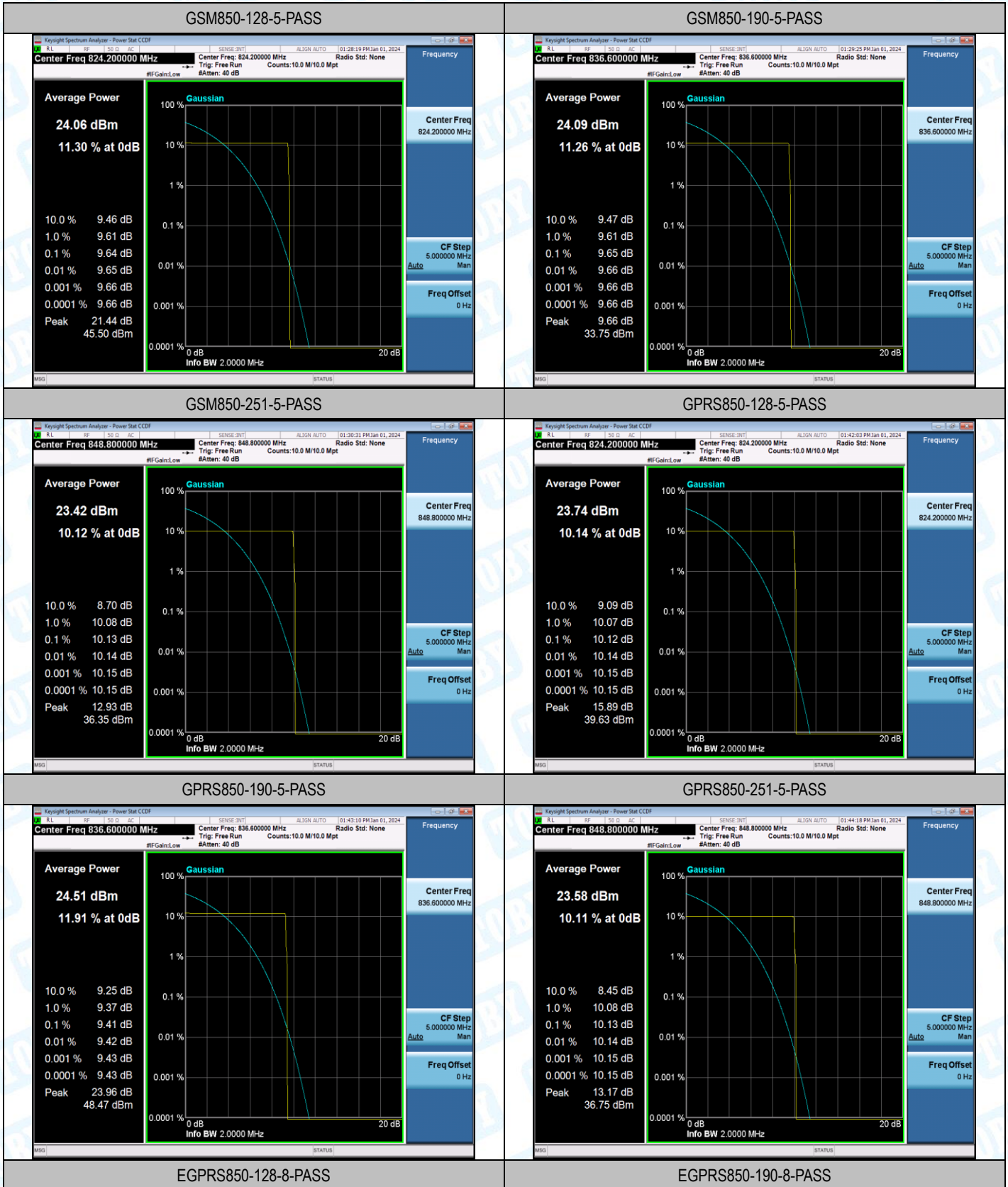
Band	Channel	Slot	Power(dBm)	Limit(dBm)	Verdict
EGPRS850	128	1	28.25	38.45	PASS
EGPRS850	128	2	27.05	38.45	PASS
EGPRS850	128	3	24.78	38.45	PASS
EGPRS850	128	4	23.40	38.45	PASS
EGPRS850	190	1	27.82	38.45	PASS
EGPRS850	190	2	26.73	38.45	PASS
EGPRS850	190	3	24.52	38.45	PASS
EGPRS850	190	4	23.18	38.45	PASS
EGPRS850	251	1	27.81	38.45	PASS
EGPRS850	251	2	26.69	38.45	PASS
EGPRS850	251	3	24.40	38.45	PASS
EGPRS850	251	4	23.11	38.45	PASS
EGPRS1900	512	1	26.45	33.00	PASS
EGPRS1900	512	2	25.28	33.00	PASS
EGPRS1900	512	3	23.13	33.00	PASS
EGPRS1900	512	4	21.95	33.00	PASS
EGPRS1900	661	1	26.13	33.00	PASS
EGPRS1900	661	2	25.06	33.00	PASS
EGPRS1900	661	3	22.89	33.00	PASS
EGPRS1900	661	4	21.61	33.00	PASS
EGPRS1900	810	1	26.58	33.00	PASS
EGPRS1900	810	2	25.44	33.00	PASS
EGPRS1900	810	3	23.24	33.00	PASS
EGPRS1900	810	4	21.99	33.00	PASS

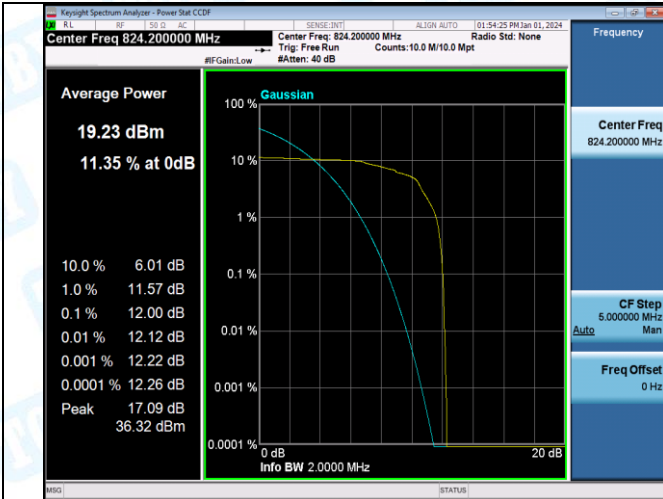
2. Peak-to-Average Ratio(CCDF)

Test Result

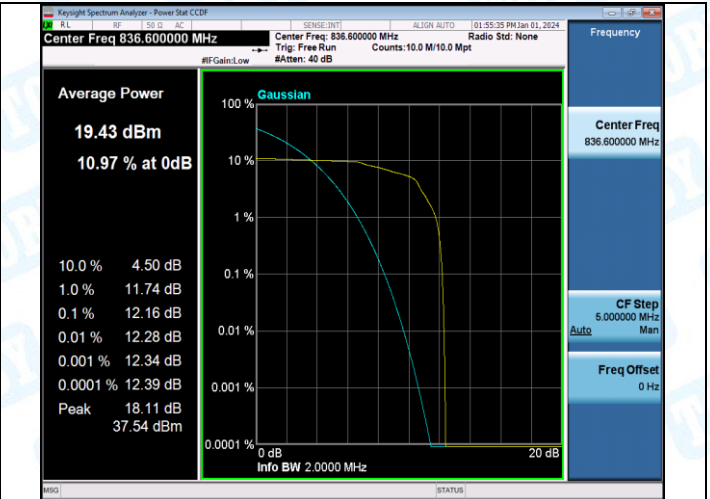
Band	Channel	Result(dB)	Limit(dB)	Verdict
GSM850	128	9.64	13	PASS
GSM850	190	9.65	13	PASS
GSM850	251	10.13	13	PASS
GPRS850	128	10.12	13	PASS
GPRS850	190	9.41	13	PASS
GPRS850	251	10.13	13	PASS
EGPRS850	128	12.00	13	PASS
EGPRS850	190	12.16	13	PASS
EGPRS850	251	12.40	13	PASS
GSM1900	512	9.45	13	PASS
GSM1900	661	9.79	13	PASS
GSM1900	810	9.38	13	PASS
GPRS1900	512	9.23	13	PASS
GPRS1900	661	9.69	13	PASS
GPRS1900	810	9.62	13	PASS
EGPRS1900	512	12.42	13	PASS
EGPRS1900	661	12.46	13	PASS
EGPRS1900	810	12.72	13	PASS

Test Graphs

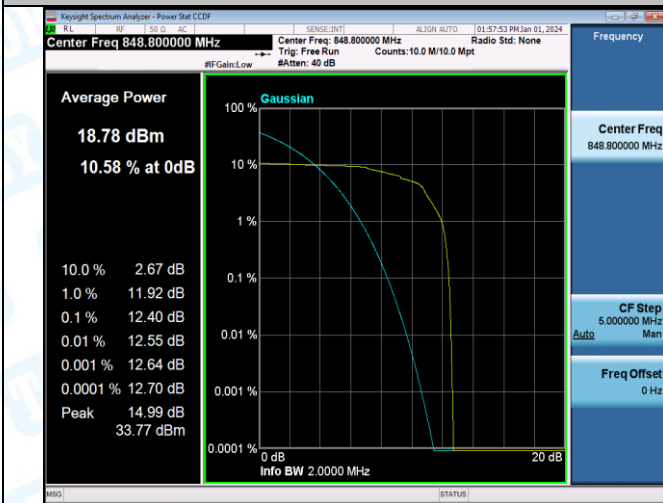




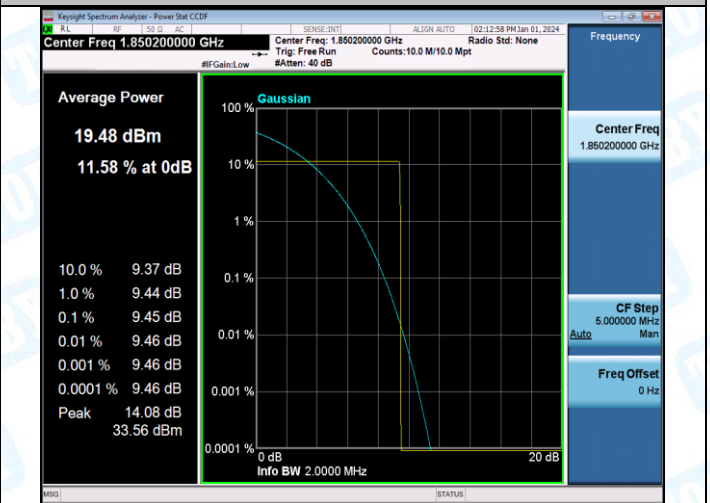
EGPRS850-251-8-PASS



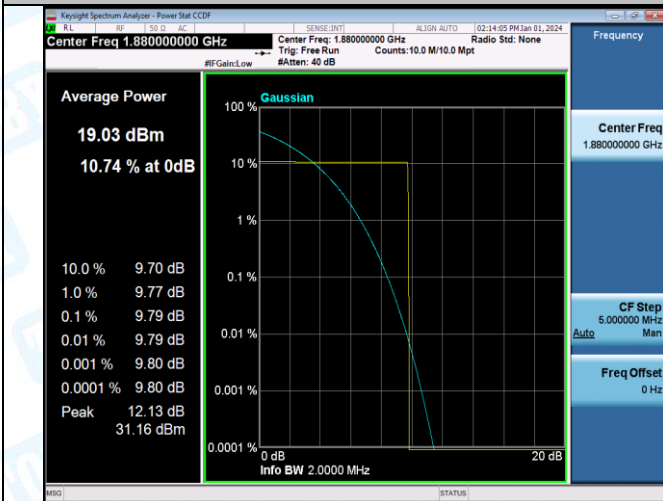
GSM1900-512-0-PASS



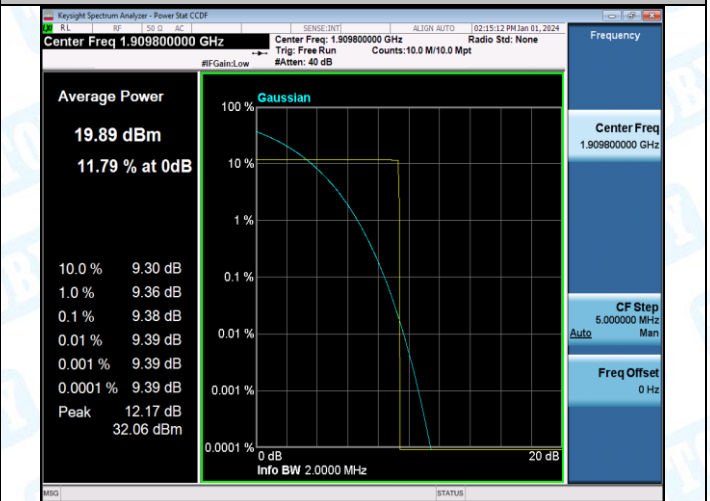
GSM1900-661-0-PASS



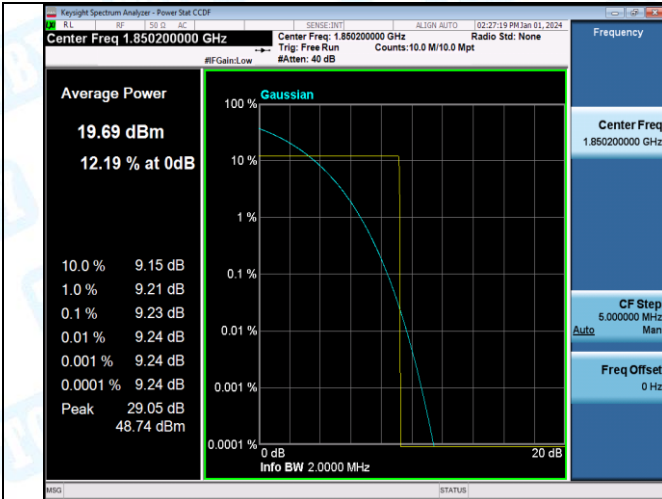
GSM1900-810-0-PASS



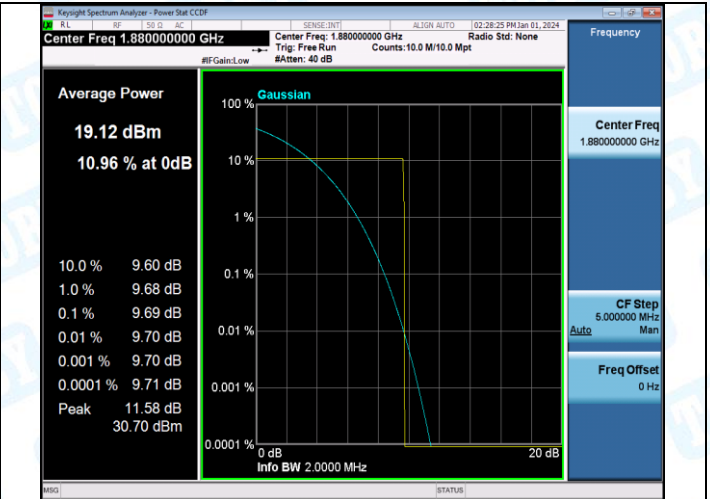
GPRS1900-512-0-PASS



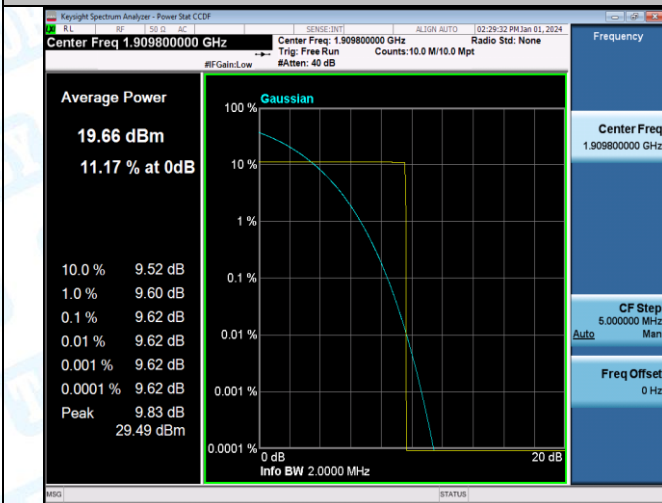
GPRS1900-661-0-PASS



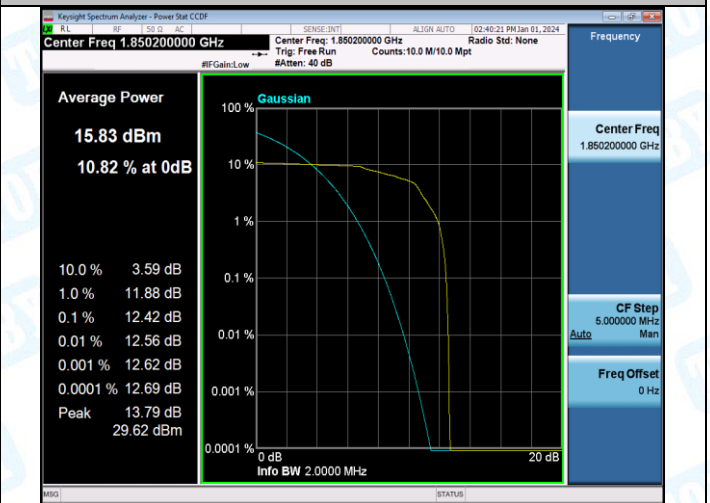
GPRS1900-810-0-PASS



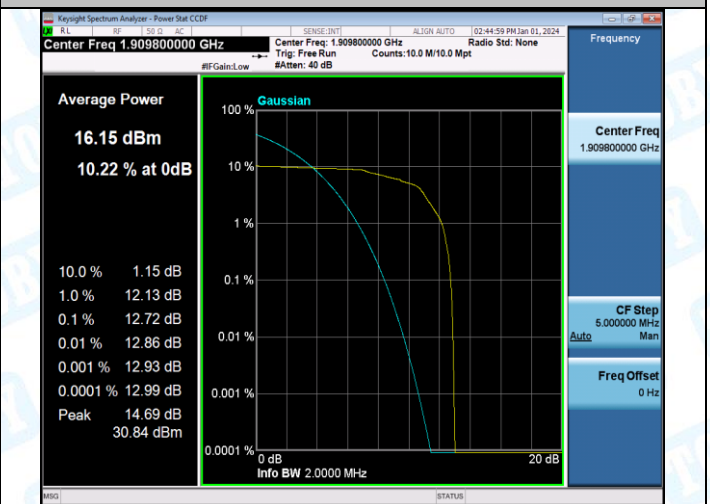
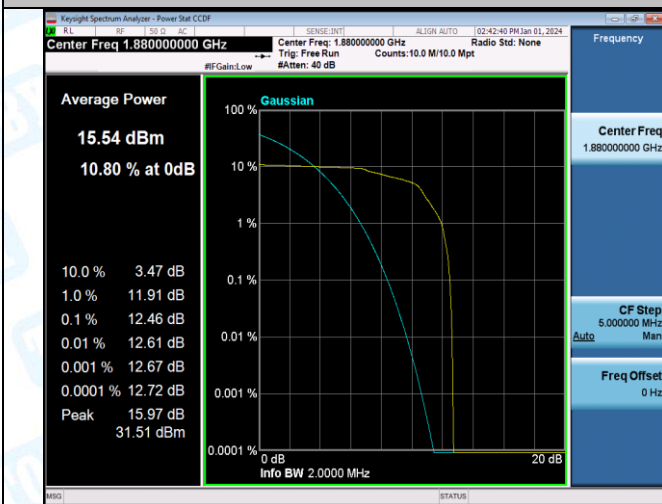
EGPRS1900-512-2-PASS



EGPRS1900-661-2-PASS



EGPRS1900-810-2-PASS

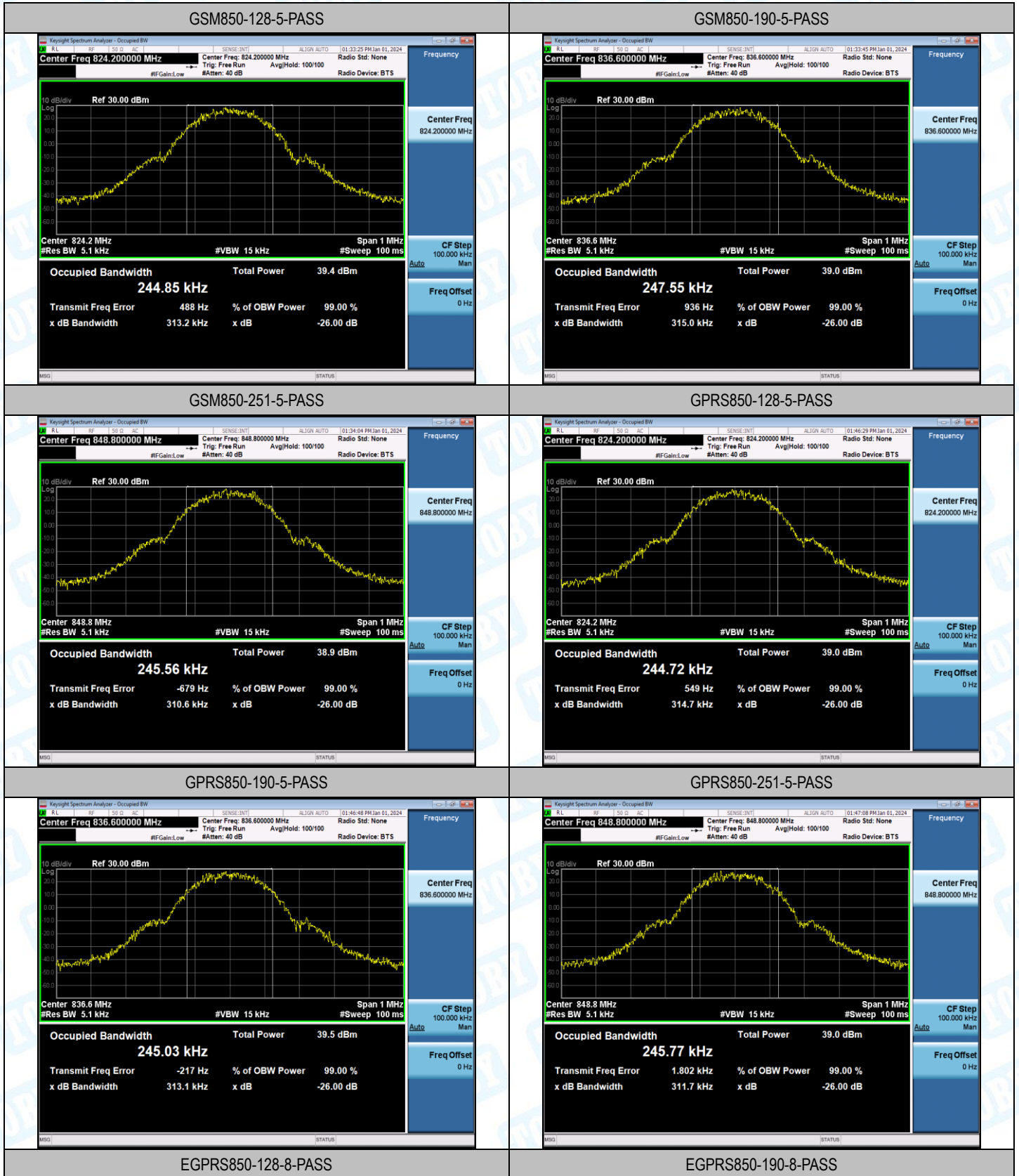


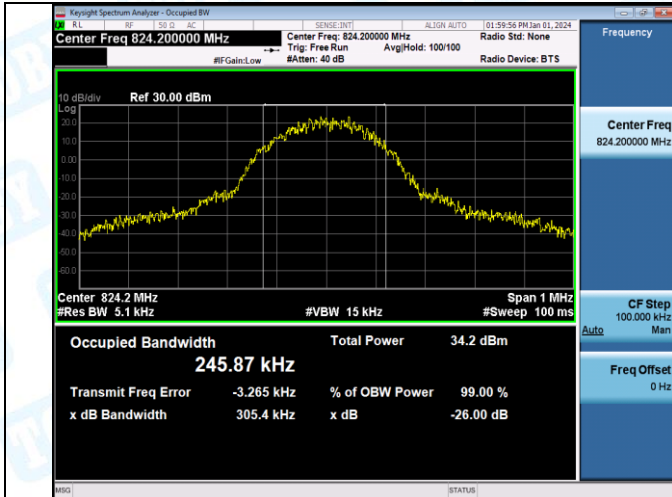
3. 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	0.24485	0.3132	---	PASS
GSM850	190	0.24755	0.3150	---	PASS
GSM850	251	0.24556	0.3106	---	PASS
GPRS850	128	0.24472	0.3147	---	PASS
GPRS850	190	0.24503	0.3131	---	PASS
GPRS850	251	0.24577	0.3117	---	PASS
EGPRS850	128	0.24587	0.3054	---	PASS
EGPRS850	190	0.25073	0.3122	---	PASS
EGPRS850	251	0.24664	0.3091	---	PASS
GSM1900	512	0.24637	0.3143	---	PASS
GSM1900	661	0.24337	0.3142	---	PASS
GSM1900	810	0.24983	0.3136	---	PASS
GPRS1900	512	0.24599	0.3226	---	PASS
GPRS1900	661	0.24388	0.3151	---	PASS
GPRS1900	810	0.24494	0.3099	---	PASS
EGPRS1900	512	0.24667	0.3016	---	PASS
EGPRS1900	661	0.24294	0.3084	---	PASS
EGPRS1900	810	0.25004	0.3190	---	PASS

Test Graphs

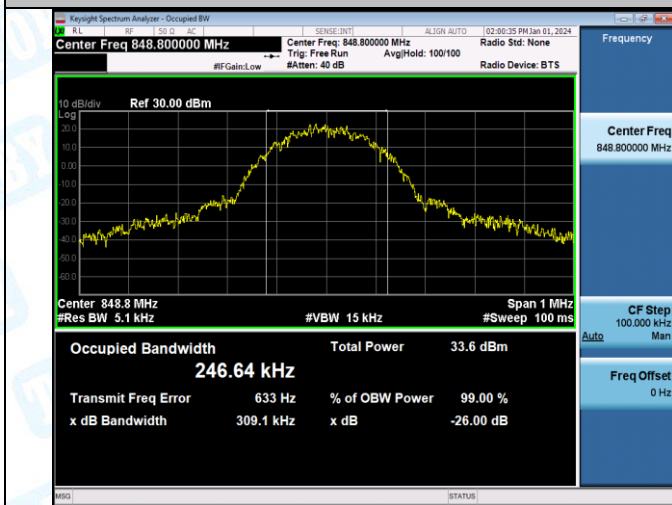




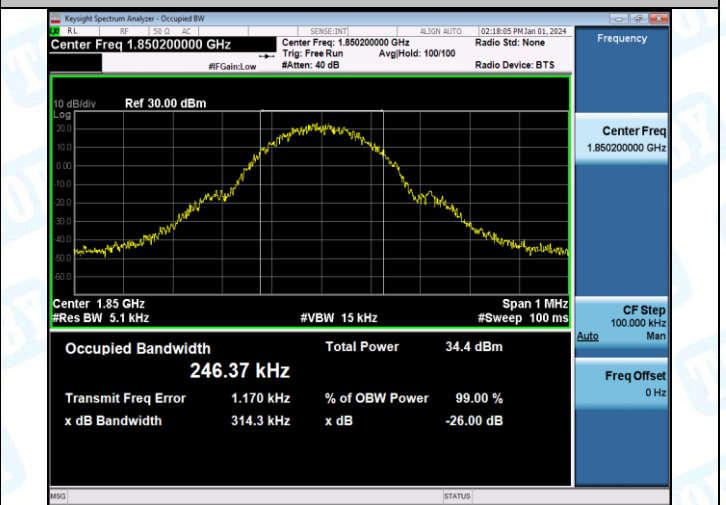
EGPRS850-251-8-PASS



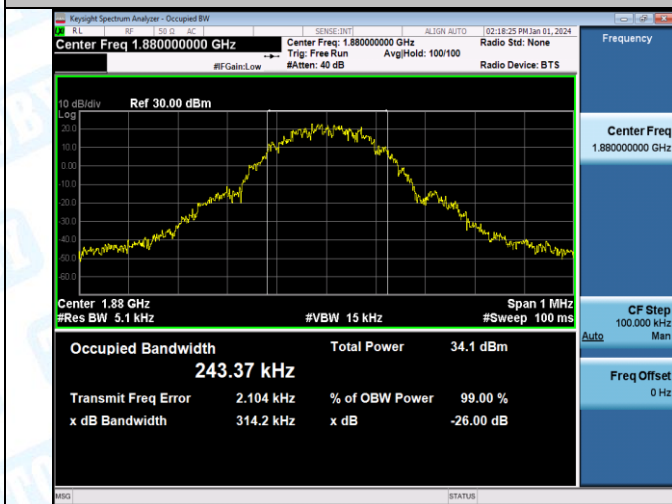
GSM1900-512-0-PASS



GSM1900-661-0-PASS



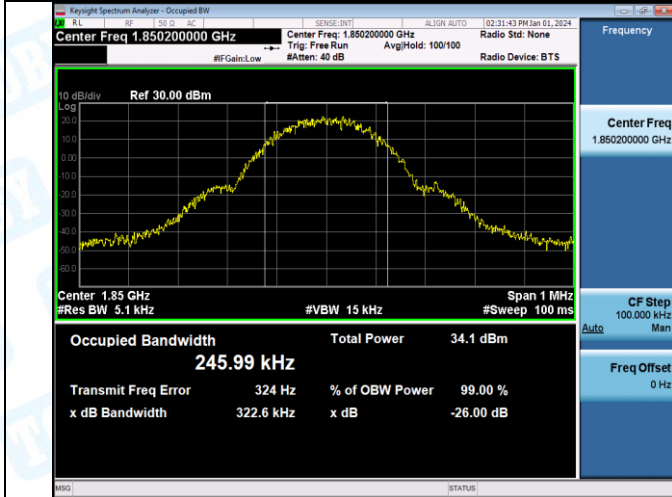
GSM1900-810-0-PASS



GPRS1900-512-0-PASS



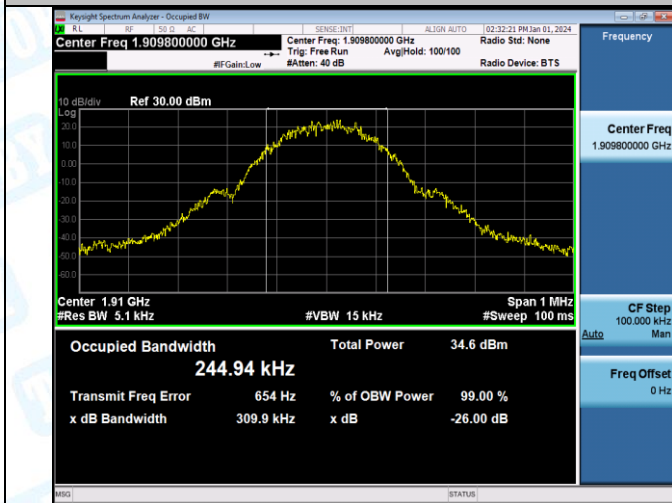
GPRS1900-661-0-PASS



GPRS1900-810-0-PASS



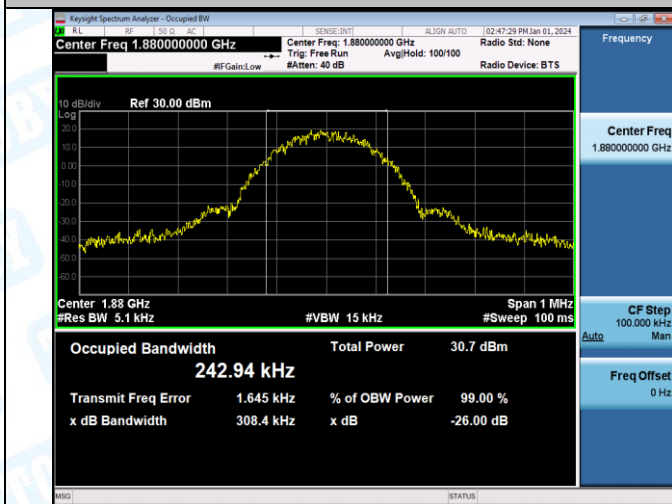
EGPRS1900-512-2-PASS



EGPRS1900-661-2-PASS



EGPRS1900-810-2-PASS



4. Band Edge

Test Result

Band	Channel	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	823.98	-13.40	-13	PASS
GSM850	251	849.02	-14.61	-13	PASS
EGPRS850	128	823.97	-22.09	-13	PASS
EGPRS850	251	849.02	-21.50	-13	PASS
GSM1900	512	1849.97	-18.16	-13	PASS
GSM1900	810	1910.01	-17.77	-13	PASS
GPRS1900	512	1849.99	-17.06	-13	PASS
GPRS1900	810	1910.01	-17.08	-13	PASS
EGPRS1900	512	1849.97	-22.27	-13	PASS
EGPRS1900	810	1910.01	-23.95	-13	PASS
GPRS850	128	823.99	-18.76	-13	PASS
GPRS850	251	849.00	-18.54	-13	PASS