

## Appendix A: Effective (Isotropic) Radiated Power Output Data

### Test Result

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	3	1	33.12	31.47	38.5	PASS
GPRS850	128	3	2	30.95	29.3	38.5	PASS
GPRS850	128	3	3	29.02	27.37	38.5	PASS
GPRS850	128	3	4	26.85	25.2	38.5	PASS
GPRS850	190	3	1	32.82	31.17	38.5	PASS
GPRS850	190	3	2	30.77	29.12	38.5	PASS
GPRS850	190	3	3	28.89	27.24	38.5	PASS
GPRS850	190	3	4	26.74	25.09	38.5	PASS
GPRS850	251	3	1	32.86	31.21	38.5	PASS
GPRS850	251	3	2	30.82	29.17	38.5	PASS
GPRS850	251	3	3	28.93	27.28	38.5	PASS
GPRS850	251	3	4	26.80	25.15	38.5	PASS
GPRS1900	512	0	1	29.71	30.81	33	PASS
GPRS1900	512	0	2	27.13	28.23	33	PASS
GPRS1900	512	0	3	25.49	26.59	33	PASS
GPRS1900	512	0	4	23.28	24.38	33	PASS
GPRS1900	661	0	1	29.82	30.92	33	PASS
GPRS1900	661	0	2	26.99	28.09	33	PASS
GPRS1900	661	0	3	25.31	26.41	33	PASS
GPRS1900	661	0	4	23.10	24.2	33	PASS
GPRS1900	810	0	1	29.50	30.6	33	PASS
GPRS1900	810	0	2	26.61	27.71	33	PASS
GPRS1900	810	0	3	24.92	26.02	33	PASS
GPRS1900	810	0	4	22.72	23.82	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	25.49	23.84	38.5	PASS
EGPRS850	128	8	2	25.32	23.67	38.5	PASS
EGPRS850	128	8	3	24.08	22.43	38.5	PASS
EGPRS850	128	8	4	21.74	20.09	38.5	PASS
EGPRS850	190	8	1	25.46	23.81	38.5	PASS
EGPRS850	190	8	2	25.53	23.88	38.5	PASS
EGPRS850	190	8	3	24.27	22.62	38.5	PASS

EGPRS850	190	8	4	21.98	20.33	38.5	PASS
EGPRS850	251	8	1	25.32	23.67	38.5	PASS
EGPRS850	251	8	2	25.38	23.73	38.5	PASS
EGPRS850	251	8	3	24.15	22.5	38.5	PASS
EGPRS850	251	8	4	21.90	20.25	38.5	PASS
EGPRS1900	512	2	1	26.18	27.28	33	PASS
EGPRS1900	512	2	2	26.50	27.6	33	PASS
EGPRS1900	512	2	3	24.90	26	33	PASS
EGPRS1900	512	2	4	21.91	23.01	33	PASS
EGPRS1900	661	2	1	26.74	27.84	33	PASS
EGPRS1900	661	2	2	26.75	27.85	33	PASS
EGPRS1900	661	2	3	25.19	26.29	33	PASS
EGPRS1900	661	2	4	22.41	23.51	33	PASS
EGPRS1900	810	2	1	26.14	27.24	33	PASS
EGPRS1900	810	2	2	26.18	27.28	33	PASS
EGPRS1900	810	2	3	24.70	25.8	33	PASS
EGPRS1900	810	2	4	21.87	22.97	33	PASS

Remark:  $EIRP (dBm) = \text{Conducted power (dBm)} + \text{Antenna Gain (dBi)}$ . (For GPRS1900)

$ERP (dBm) = EIRP (dBm) - 2.15 (dB)$ . (For GPRS850)

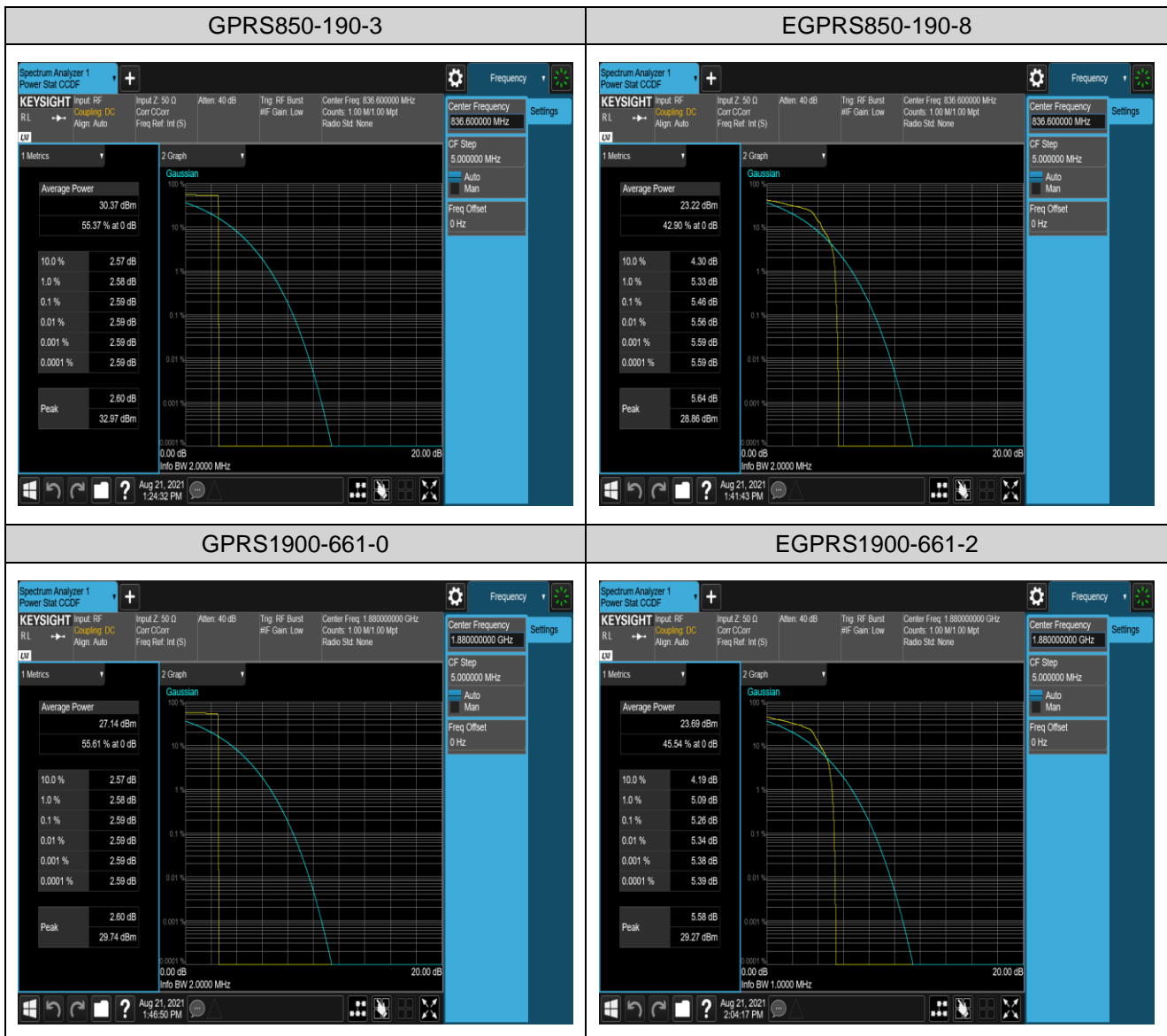
## Appendix B: Peak-to-Average Ratio(CCDF)

### Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GPRS850	190	3	2.59	13	PASS
EGPRS850	190	8	5.46	13	PASS
GPRS1900	661	0	2.59	13	PASS
EGPRS1900	661	2	5.26	13	PASS

Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

### Test Graphs

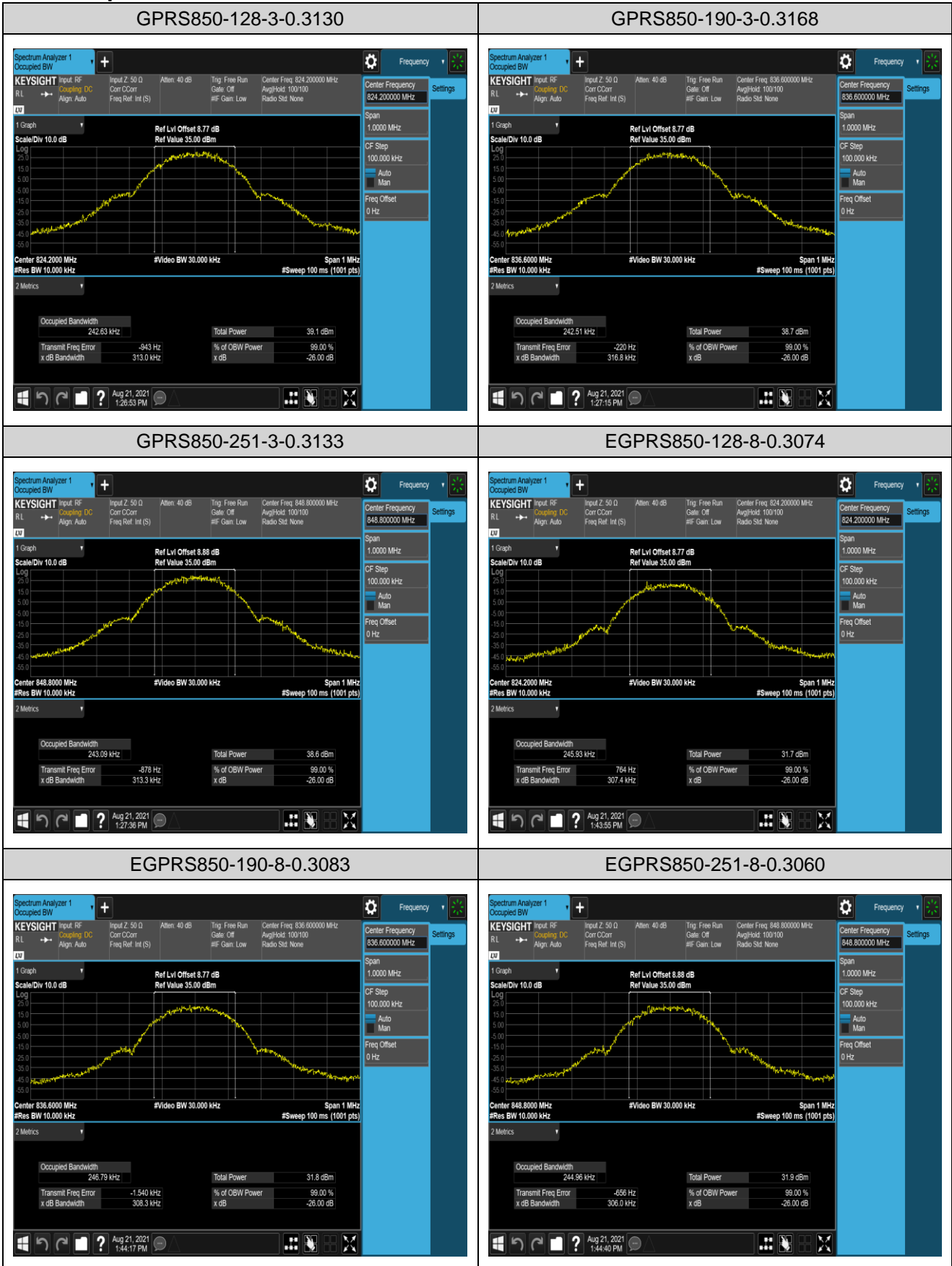


## Appendix C: 26dB Bandwidth and Occupied Bandwidth

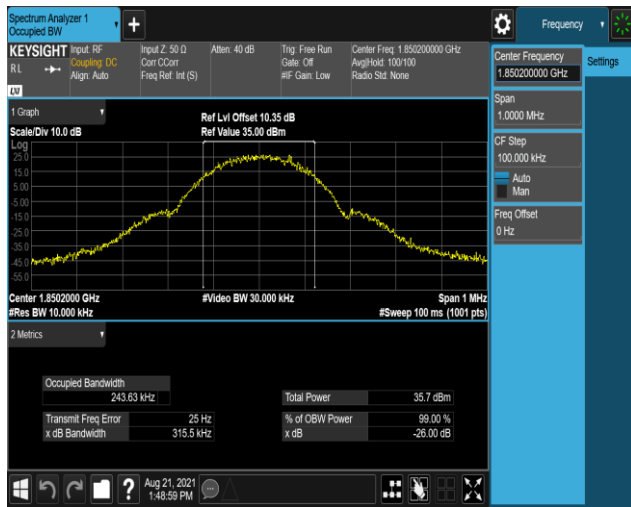
### Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GPRS850	128	3	0.24263	0.3130	---	PASS
GPRS850	190	3	0.24251	0.3168	---	PASS
GPRS850	251	3	0.24309	0.3133	---	PASS
EGPRS850	128	8	0.24593	0.3074	---	PASS
EGPRS850	190	8	0.24679	0.3083	---	PASS
EGPRS850	251	8	0.24496	0.3060	---	PASS
GPRS1900	512	0	0.24363	0.3155	---	PASS
GPRS1900	661	0	0.24322	0.3136	---	PASS
GPRS1900	810	0	0.24304	0.3178	---	PASS
EGPRS1900	512	2	0.25141	0.3182	---	PASS
EGPRS1900	661	2	0.25012	0.3204	---	PASS
EGPRS1900	810	2	0.25578	0.3234	---	PASS

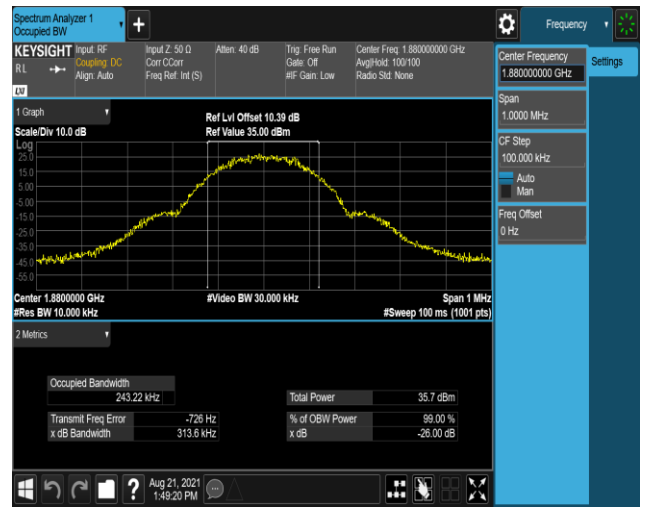
Test Graphs



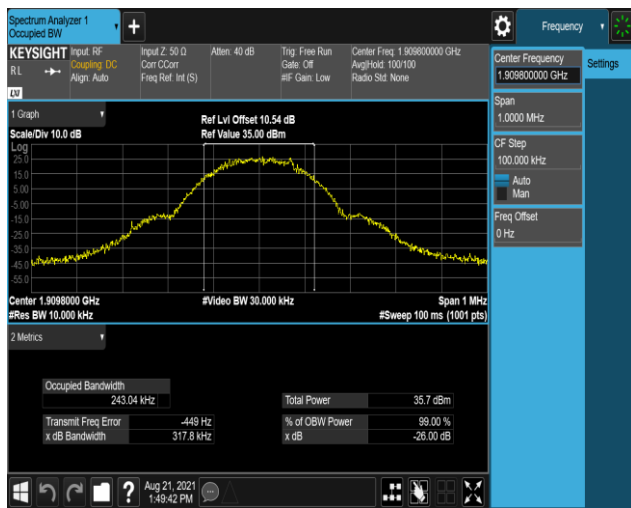
GPRS1900-512-0-0.3155



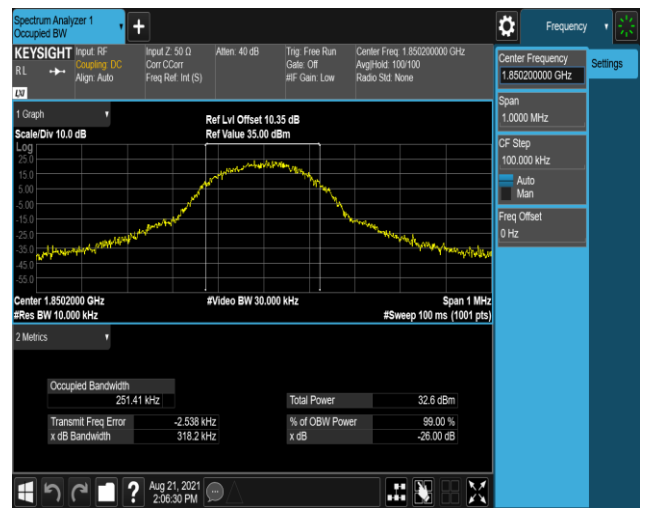
GPRS1900-661-0-0.3136



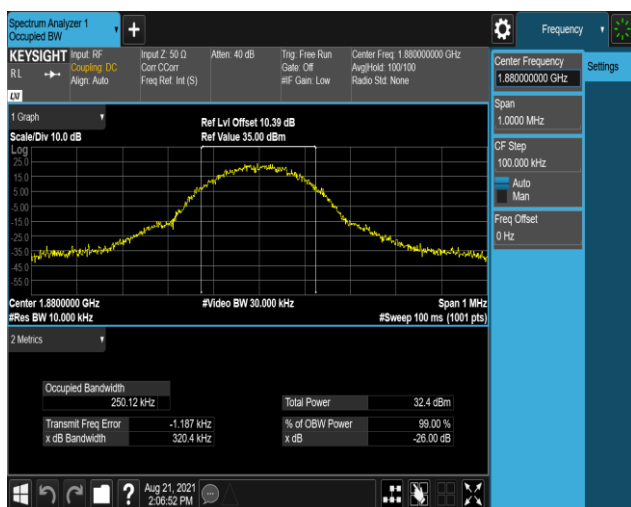
GPRS1900-810-0-0.3178



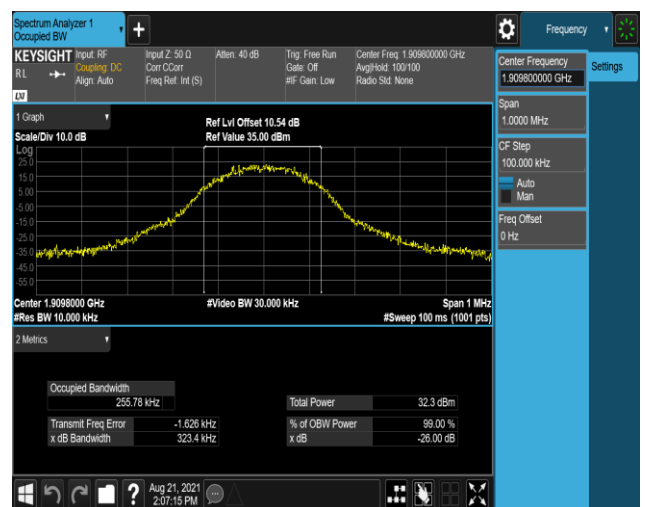
EGPRS1900-512-2-0.3182



EGPRS1900-661-2-0.3204



EGPRS1900-810-2-0.3234

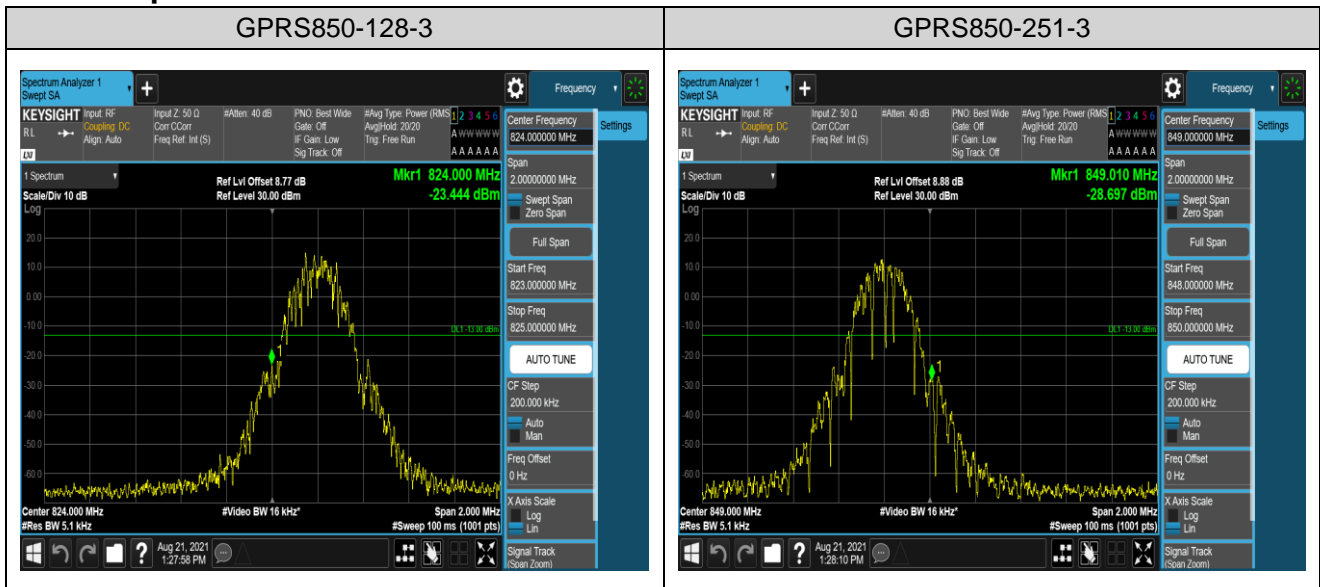


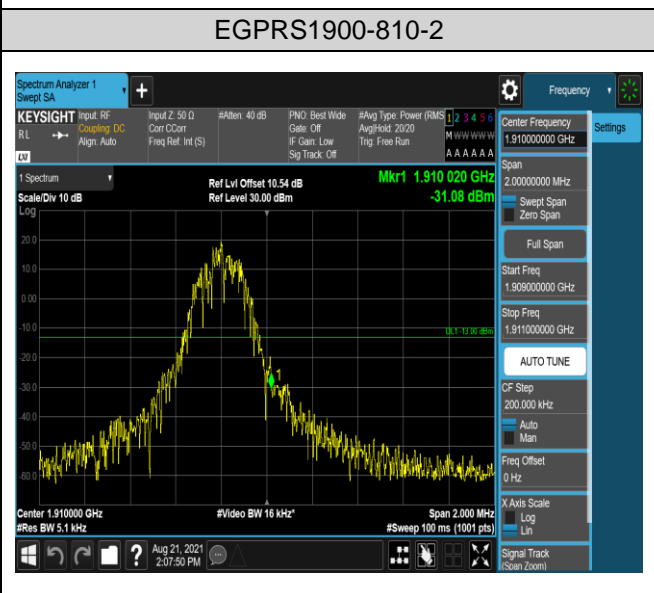
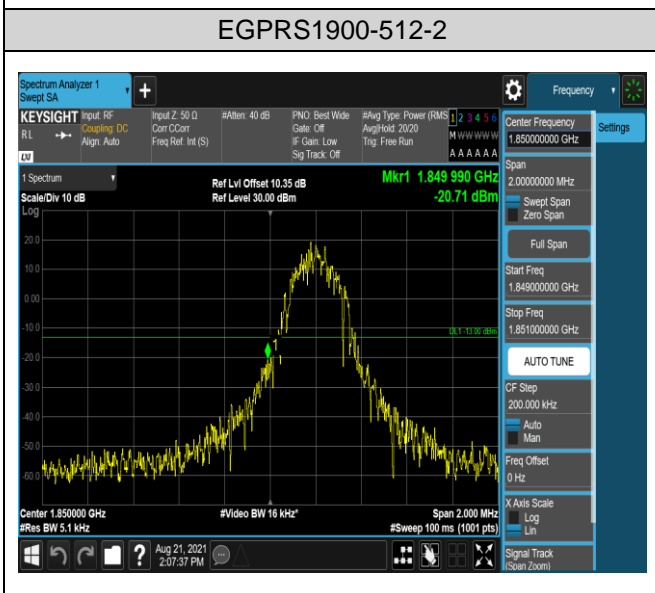
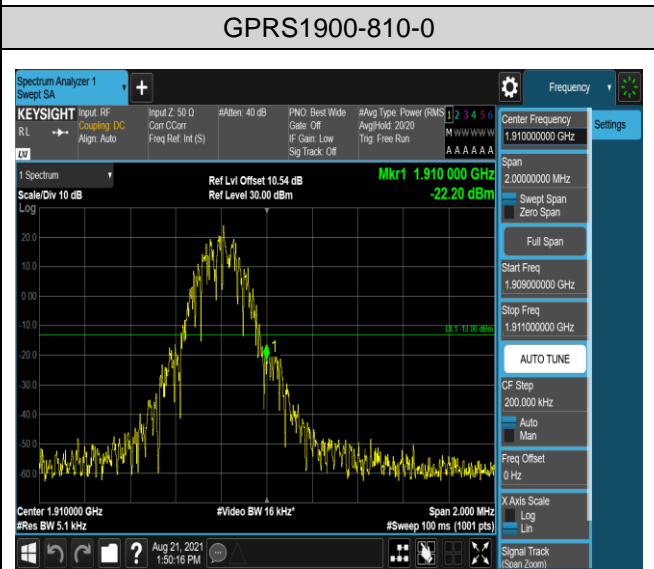
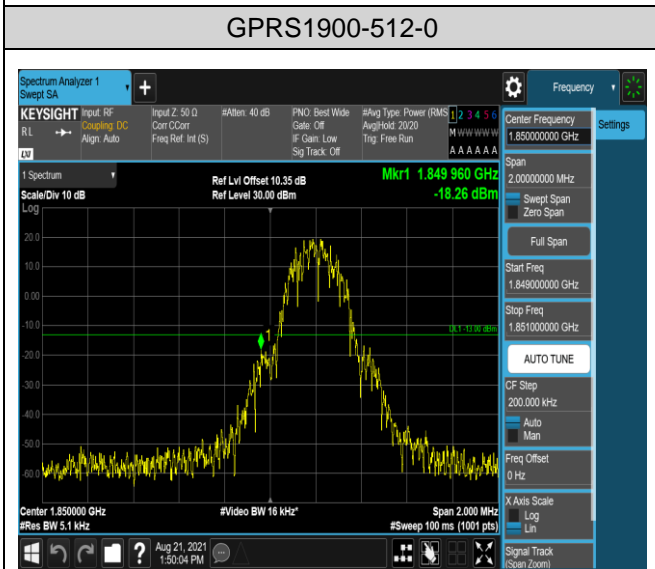
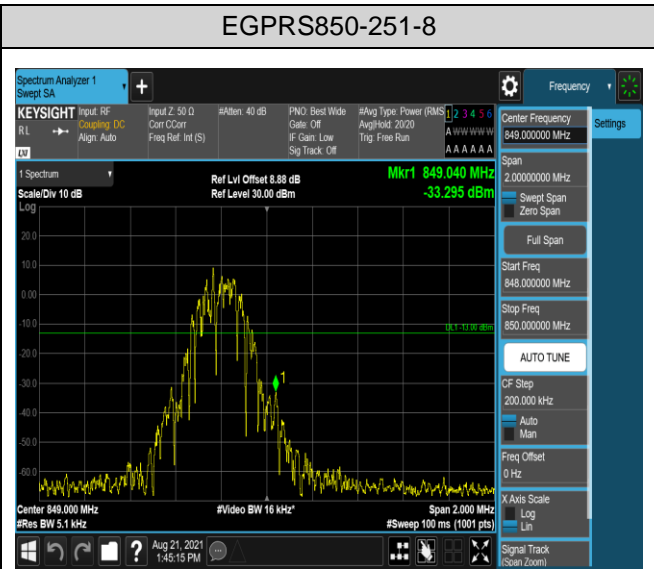
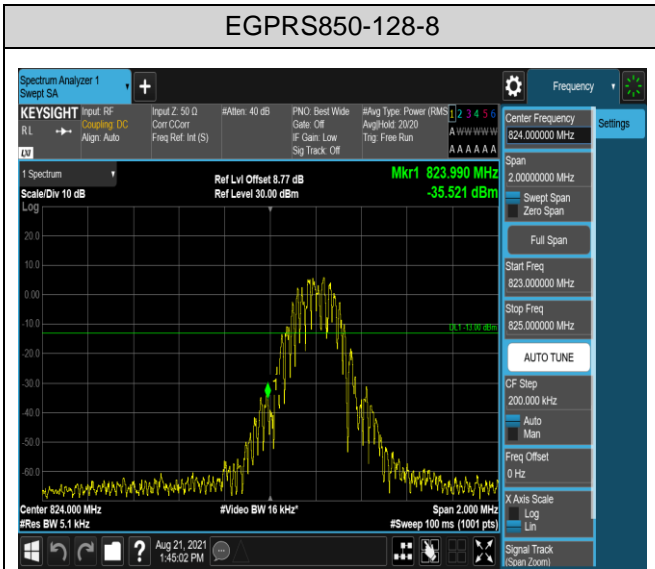
## Appendix D: Band Edge

### Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GPRS850	128	3	824.00	-23.44	-13	PASS
GPRS850	251	3	849.01	-25.71	-13	PASS
EGPRS850	128	8	823.99	-33.02	-13	PASS
EGPRS850	251	8	849.04	-33.29	-13	PASS
GPRS1900	512	0	1849.96	-18.26	-13	PASS
GPRS1900	810	0	1910.00	-16.65	-13	PASS
EGPRS1900	512	2	1849.99	-20.71	-13	PASS
EGPRS1900	810	2	1910.02	-19.67	-13	PASS

### Test Graphs







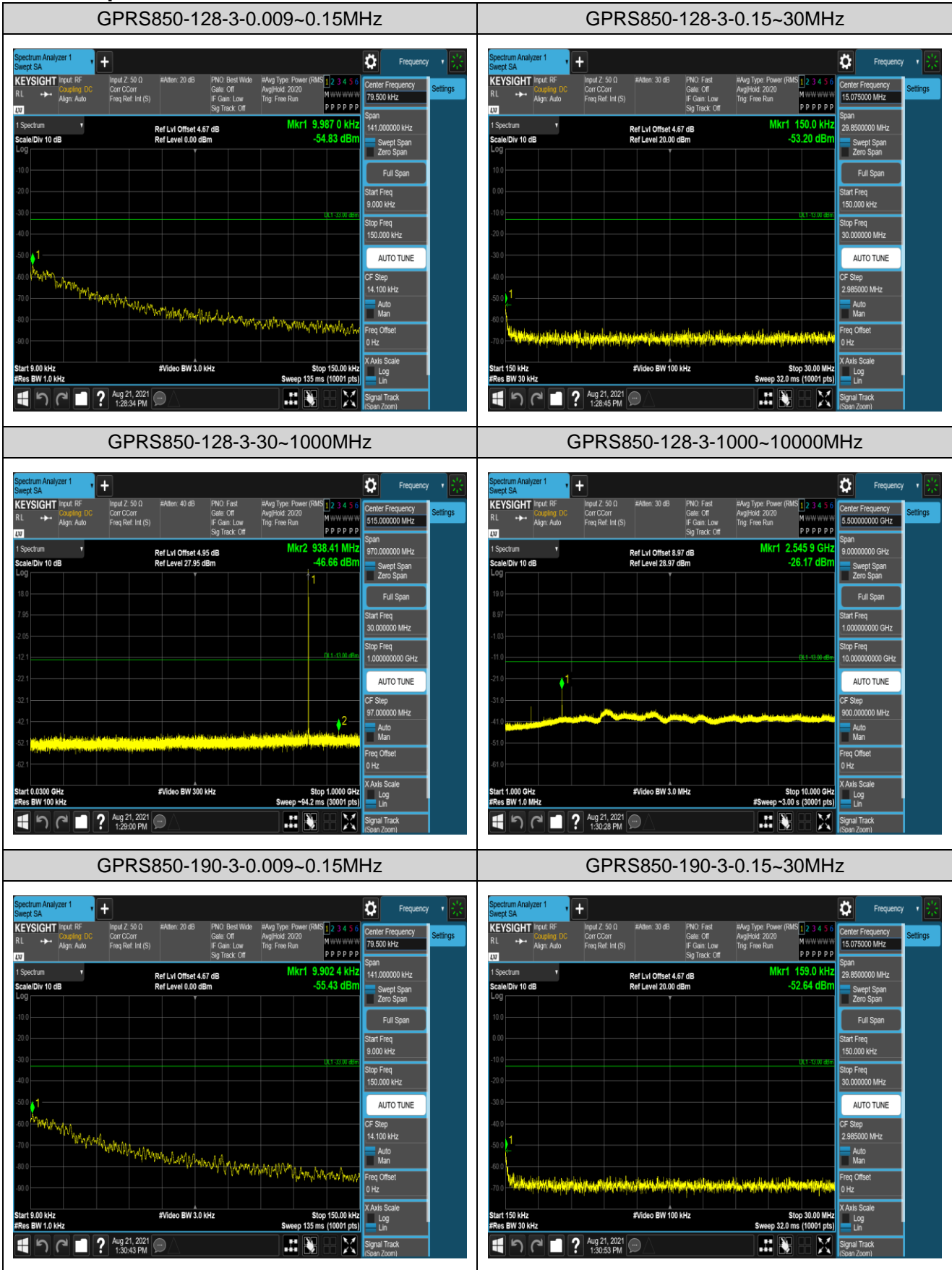
## Appendix E: Conducted Spurious Emission

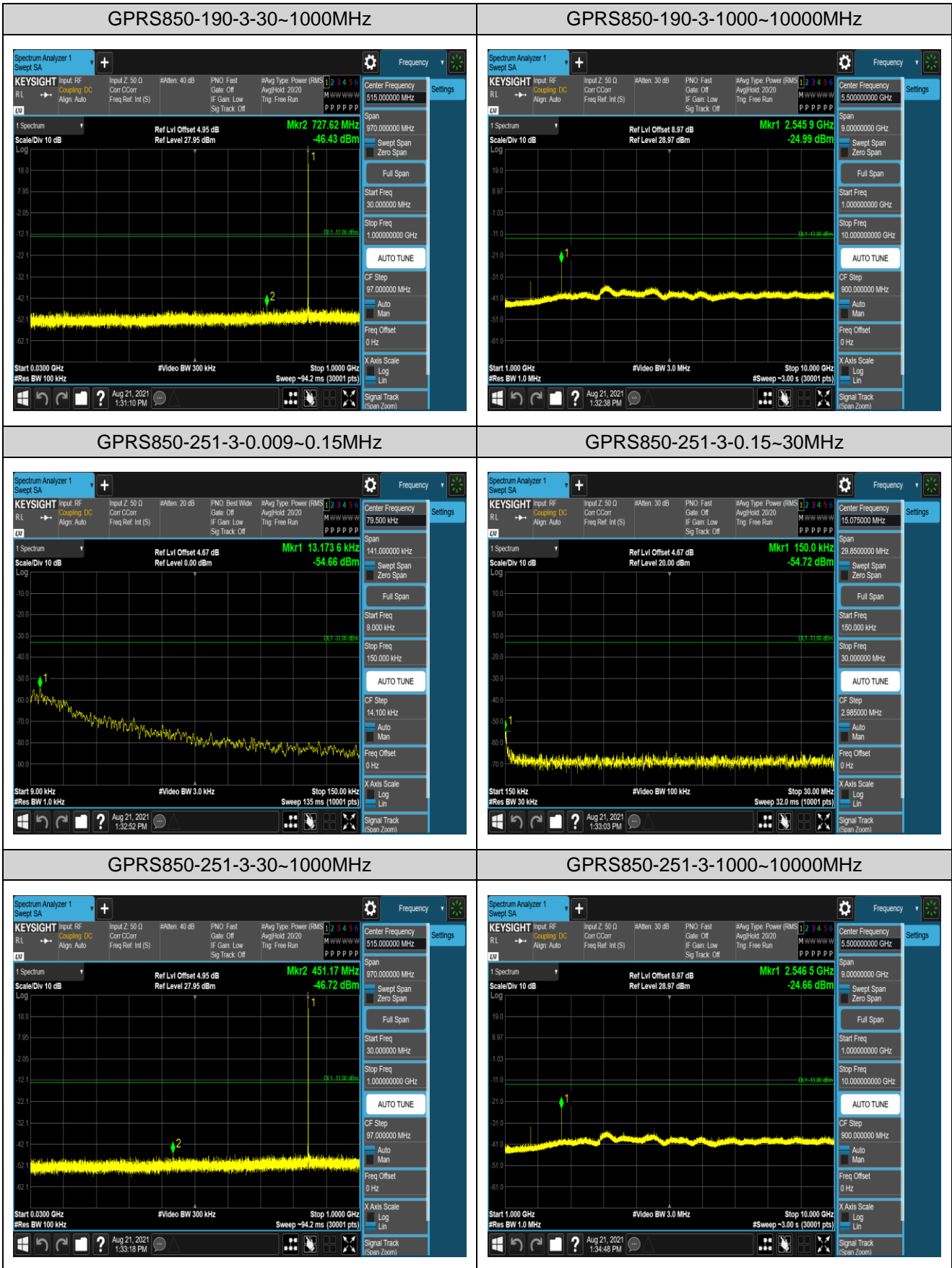
### Test Result

Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GPRS850	128	3	0.009~0.15MHz	0.01	-54.83	-33	PASS
GPRS850	128	3	0.15~30MHz	0.15	-53.2	-13	PASS
GPRS850	128	3	30~1000MHz	938.41	-46.66	-13	PASS
GPRS850	128	3	1000~10000MHz	2545.9	-26.17	-13	PASS
GPRS850	190	3	0.009~0.15MHz	0.01	-55.43	-33	PASS
GPRS850	190	3	0.15~30MHz	0.16	-52.64	-13	PASS
GPRS850	190	3	30~1000MHz	727.62	-46.43	-13	PASS
GPRS850	190	3	1000~10000MHz	2545.9	-24.99	-13	PASS
GPRS850	251	3	0.009~0.15MHz	0.01	-54.66	-33	PASS
GPRS850	251	3	0.15~30MHz	0.15	-54.72	-13	PASS
GPRS850	251	3	30~1000MHz	451.17	-46.72	-13	PASS
GPRS850	251	3	1000~10000MHz	2546.5	-24.66	-13	PASS
GPRS1900	512	0	0.009~0.15MHz	0.01	-58.29	-43	PASS
GPRS1900	512	0	0.15~30MHz	0.15	-51.77	-23	PASS
GPRS1900	512	0	30~1000MHz	795.85	-47.2	-13	PASS
GPRS1900	512	0	1000~18000MHz	3805	-34.7	-13	PASS
GPRS1900	661	0	0.009~0.15MHz	0.01	-55.74	-43	PASS
GPRS1900	661	0	0.15~30MHz	0.15	-52.63	-23	PASS
GPRS1900	661	0	30~1000MHz	858.02	-47.7	-13	PASS
GPRS1900	661	0	1000~18000MHz	3738.13	-34.48	-13	PASS
GPRS1900	810	0	0.009~0.15MHz	0.01	-55.61	-43	PASS
GPRS1900	810	0	0.15~30MHz	0.17	-52.43	-23	PASS
GPRS1900	810	0	30~1000MHz	923.66	-46.66	-13	PASS
GPRS1900	810	0	1000~18000MHz	3819.17	-34.01	-13	PASS

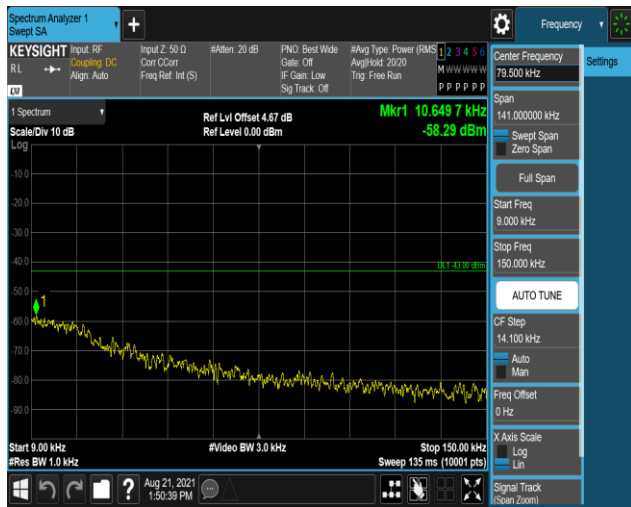
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

Test Graphs

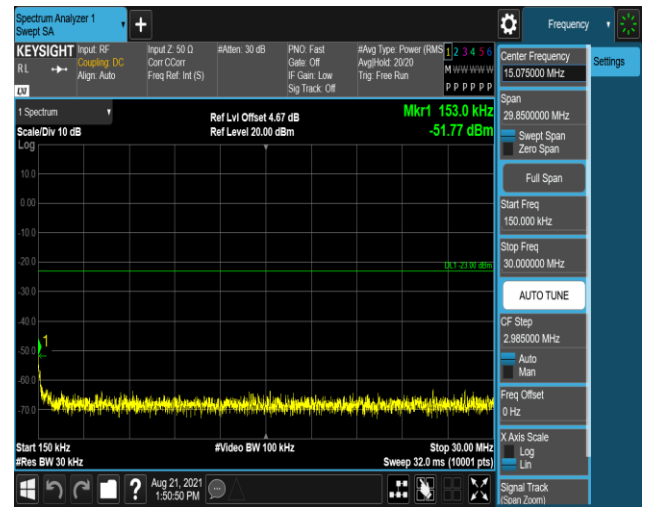




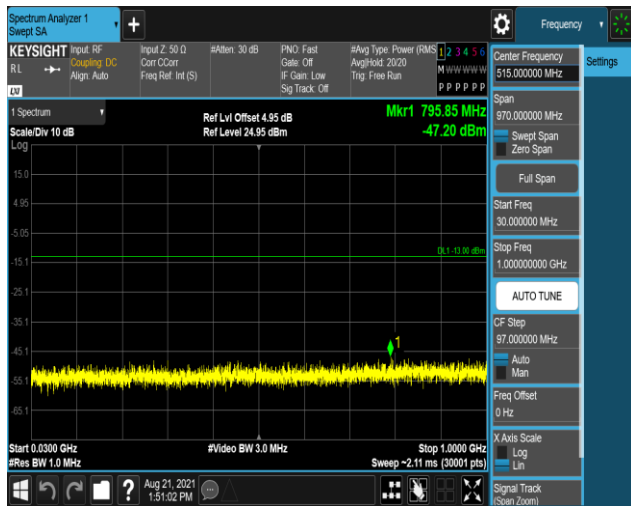
GPRS1900-512-0-0.009~0.15MHz



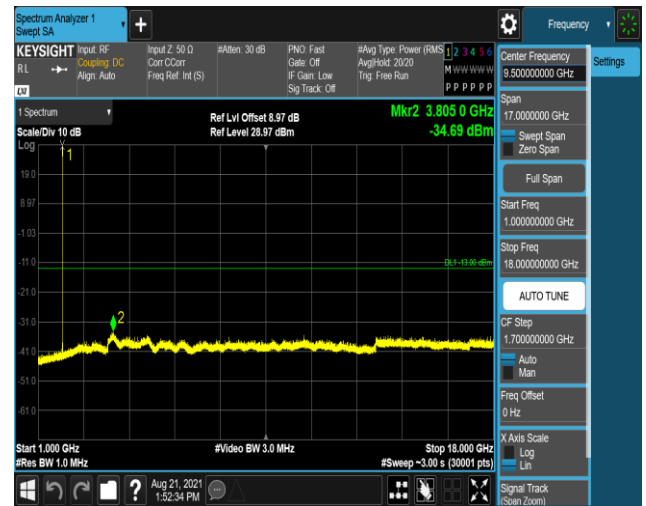
GPRS1900-512-0-0.15~30MHz



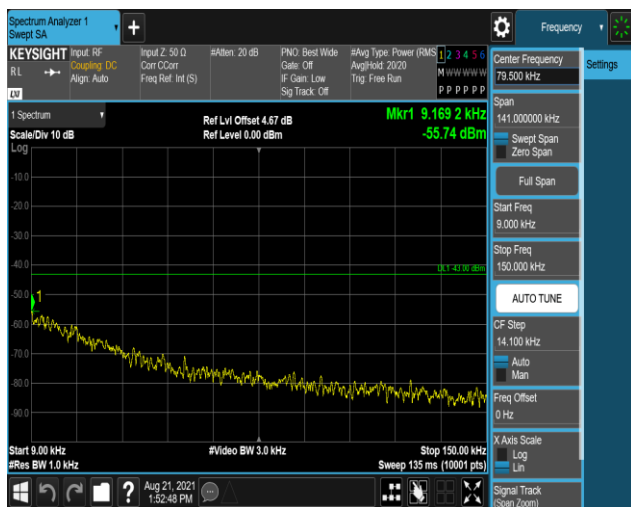
GPRS1900-512-0-30~1000MHz



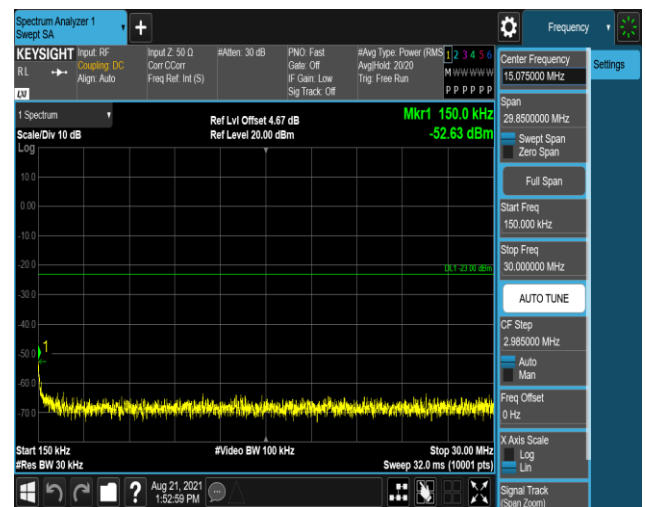
GPRS1900-512-0-1000~18000MHz

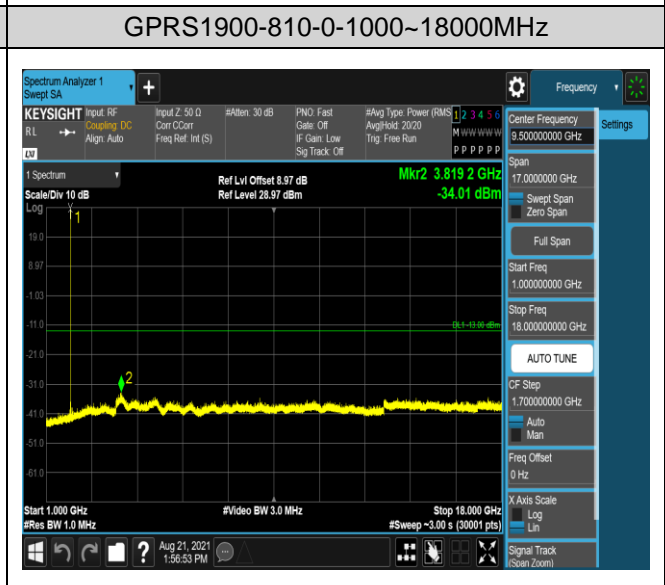
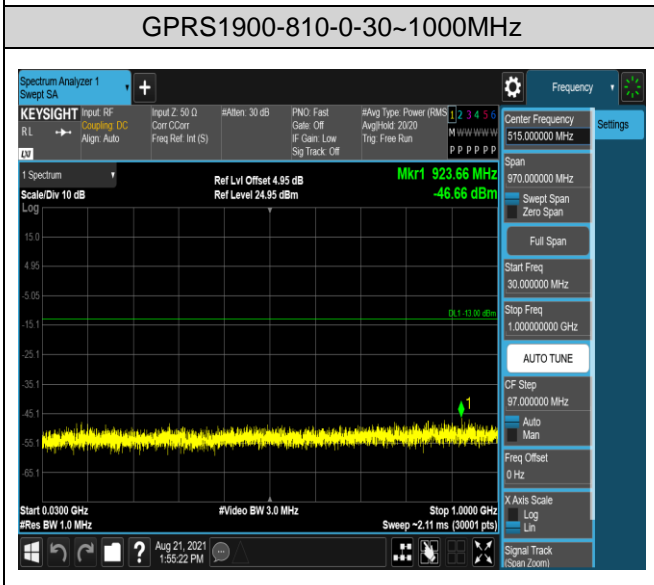
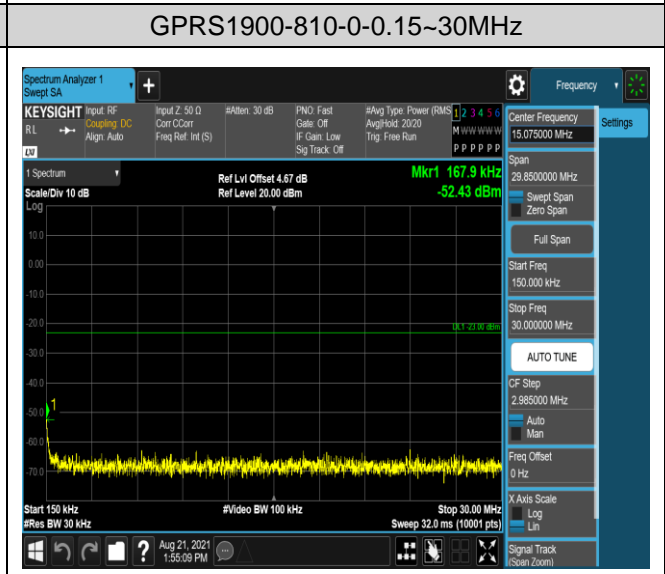
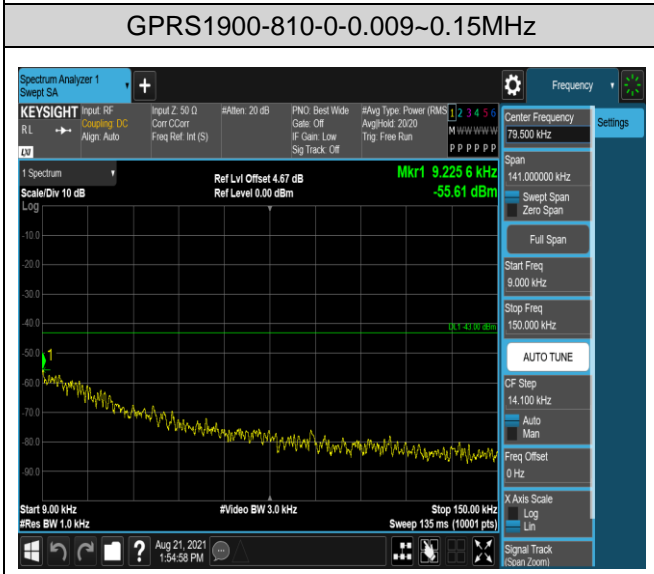
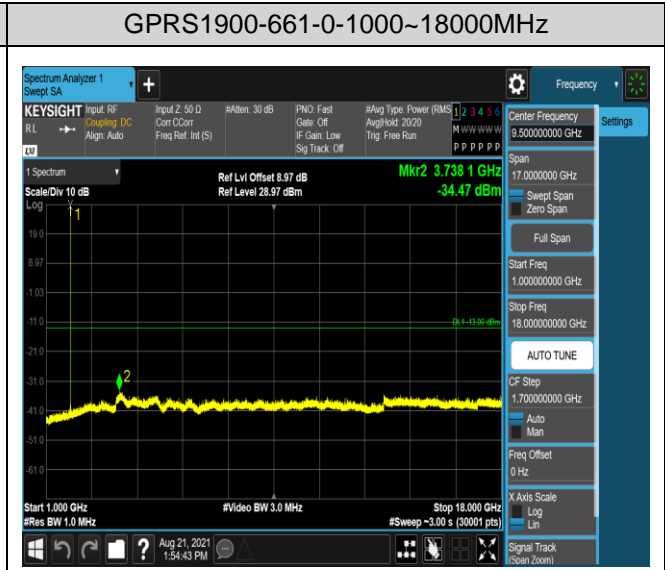
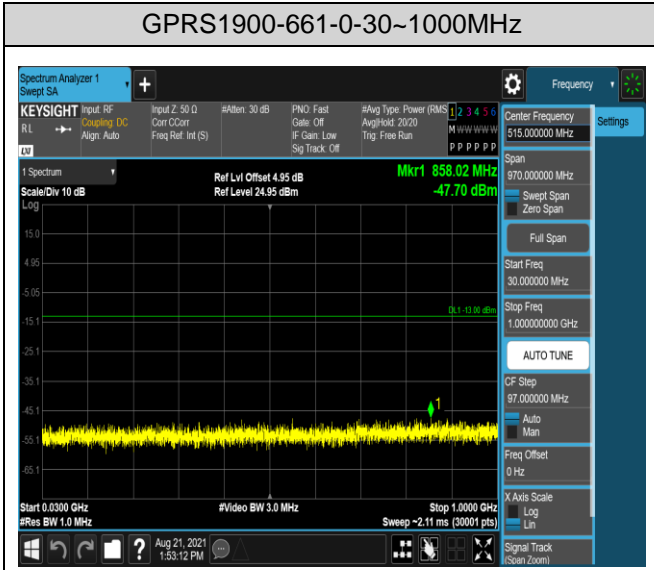


GPRS1900-661-0-0.009~0.15MHz



GPRS1900-661-0-0.15~30MHz





## Appendix F: Frequency Stability

### Test Result

Reference Frequency: GPRS850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	5.33	0.006371	±2.5	Pass
	-20	9.43	0.011272		
	-10	1.49	0.001781		
	0	3.29	0.003933		
	10	4.26	0.005092		
	20	2.62	0.003132		
	30	8.94	0.010686		
	40	3.75	0.004482		
	50	5.23	0.006251		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-63.93	-0.076416	±2.5	Pass
	3.70	9.75	0.011654		
	4.20	4.33	0.005176		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Reference Frequency: EGPRS850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	11.91	0.014236	±2.5	Pass
	-20	7.26	0.008678		
	-10	3.81	0.004554		
	0	3.81	0.004554		
	10	8.72	0.010423		
	20	3.26	0.003897		
	30	4.68	0.005594		
	40	9.17	0.010961		
	50	4.65	0.005558		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	12.14	0.014511	±2.5	Pass
	3.70	7.20	0.008606		
	4.20	13.53	0.016173		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Reference Frequency: PCS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	10.23	0.005441	Within authorized band for PCS 1900	Pass
	-20	-2.07	-0.001101		
	-10	3.13	0.001665		
	0	-8.07	-0.004293		
	10	8.52	0.004532		
	20	1.03	0.000548		
	30	2.16	0.001149		
	40	12.62	0.006713		
	50	-3.33	-0.001771		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-3.71	-0.001973	Within authorized band for PCS 1900	Pass
	3.70	-1.16	-0.000617		
	4.20	-0.74	-0.000394		
<i>Remark: All channel had been tested, but only the worst case data displayed in this report.</i>					



Reference Frequency: EGPRS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	12.46	0.006628	Within authorized band for PCS 1900	Pass
	-20	0.19	0.000101		
	-10	-2.65	-0.001410		
	0	2.10	0.001117		
	10	16.76	0.008915		
	20	2.00	0.001064		
	30	6.26	0.003330		
	40	1.58	0.000840		
	50	6.46	0.003436		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-3.20	-0.001702	Within authorized band for PCS 1900	Pass
	3.70	-4.04	-0.002149		
	4.20	11.40	0.006064		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

## Appendix G: Modulation Characteristics

### Test Result

Band	Channel	Result	Verdict
GPRS850	190	PASS	PASS
EGPRS850	190	PASS	PASS
GPRS1900	661	PASS	PASS
EGPRS1900	661	PASS	PASS

Remark: All channel had been tested, but only the worst case data displayed in this report.

### Test Graphs

