

GSM Test Data

General Description of EUT	
Product Name:	Elevate Telematic Unit
Test Model:	p5
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Yan zhen ming
Note: For a more detailed features description, please refer to the report TBR-C-202307-0089-2 . 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	8
Test Result	8
Test Graphs	9
4. Band Edge	11
Test Result	11
Test Graphs	12
5. Conducted Spurious Emission	14
Test Result	14
Test Graphs	15
6. Frequency Stability	24
Test Result	24
7. Modulation Characteristics	27
Test Result	27
Test Graphs	28

1. Conducted Power Output Data

Test Result

Band	Channel	Slot	Power(dBm)	Limit(dBm)	Verdict
GPRS850	128	1	28.47	38.45	PASS
GPRS850	128	2	25.12	38.45	PASS
GPRS850	128	3	22.93	38.45	PASS
GPRS850	128	4	20.81	38.45	PASS
GPRS850	190	1	30.10	38.45	PASS
GPRS850	190	2	26.69	38.45	PASS
GPRS850	190	3	24.37	38.45	PASS
GPRS850	190	4	21.94	38.45	PASS
GPRS850	251	1	30.05	38.45	PASS
GPRS850	251	2	27.06	38.45	PASS
GPRS850	251	3	24.61	38.45	PASS
GPRS850	251	4	22.49	38.45	PASS
GPRS1900	512	1	22.34	33.00	PASS
GPRS1900	512	2	20.87	33.00	PASS
GPRS1900	512	3	19.29	33.00	PASS
GPRS1900	512	4	17.65	33.00	PASS
GPRS1900	661	1	25.11	33.00	PASS
GPRS1900	661	2	24.14	33.00	PASS
GPRS1900	661	3	22.79	33.00	PASS
GPRS1900	661	4	21.31	33.00	PASS
GPRS1900	810	1	26.11	33.00	PASS
GPRS1900	810	2	24.80	33.00	PASS
GPRS1900	810	3	23.41	33.00	PASS
GPRS1900	810	4	21.85	33.00	PASS

Band	Channel	Slot	Power(dBm)	Limit(dBm)	Verdict
EGPRS850	128	1	21.57	38.45	PASS
EGPRS850	128	2	19.85	38.45	PASS
EGPRS850	128	3	18.67	38.45	PASS
EGPRS850	128	4	17.37	38.45	PASS
EGPRS850	190	1	22.81	38.45	PASS
EGPRS850	190	2	21.15	38.45	PASS
EGPRS850	190	3	19.90	38.45	PASS
EGPRS850	190	4	18.61	38.45	PASS
EGPRS850	251	1	23.14	38.45	PASS
EGPRS850	251	2	21.36	38.45	PASS
EGPRS850	251	3	20.15	38.45	PASS
EGPRS850	251	4	18.92	38.45	PASS
EGPRS1900	512	1	20.13	33.00	PASS
EGPRS1900	512	2	20.00	33.00	PASS
EGPRS1900	512	3	19.84	33.00	PASS
EGPRS1900	512	4	19.39	33.00	PASS
EGPRS1900	661	1	22.21	33.00	PASS
EGPRS1900	661	2	22.12	33.00	PASS
EGPRS1900	661	3	21.93	33.00	PASS
EGPRS1900	661	4	21.44	33.00	PASS
EGPRS1900	810	1	22.71	33.00	PASS
EGPRS1900	810	2	22.54	33.00	PASS
EGPRS1900	810	3	22.36	33.00	PASS
EGPRS1900	810	4	21.91	33.00	PASS

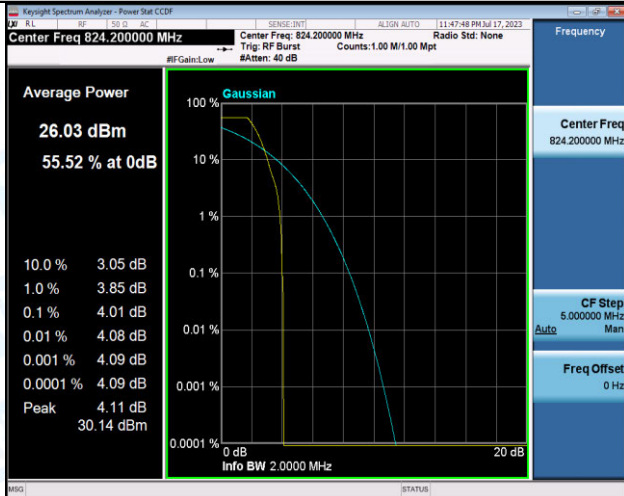
2. Peak-to-Average Ratio(CCDF)

Test Result

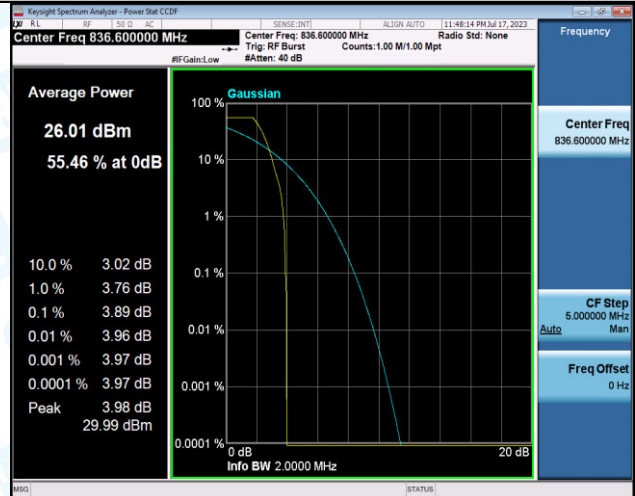
Band	Channel	Result(dB)	Limit(dB)	Verdict
GPRS850	128	4.01	13	PASS
GPRS850	190	3.89	13	PASS
GPRS850	251	3.58	13	PASS
EGPRS850	128	5.87	13	PASS
EGPRS850	190	5.83	13	PASS
EGPRS850	251	5.92	13	PASS
GPRS1900	512	2.88	13	PASS
GPRS1900	661	2.94	13	PASS
GPRS1900	810	3.01	13	PASS
EGPRS1900	512	5.9	13	PASS
EGPRS1900	661	5.9	13	PASS
EGPRS1900	810	5.95	13	PASS

Test Graphs

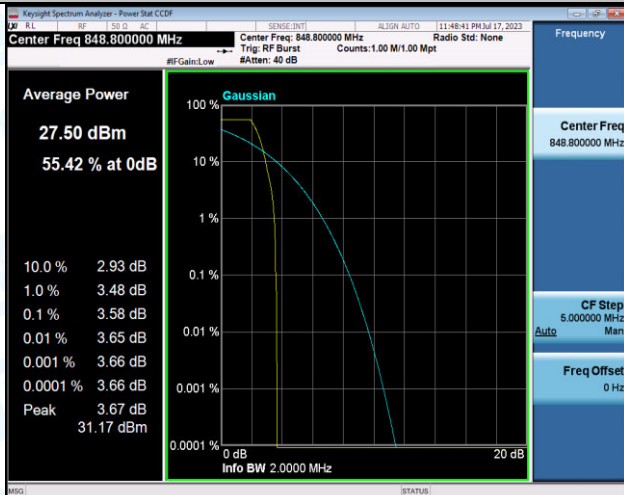
GPRS850-128-5-PASS



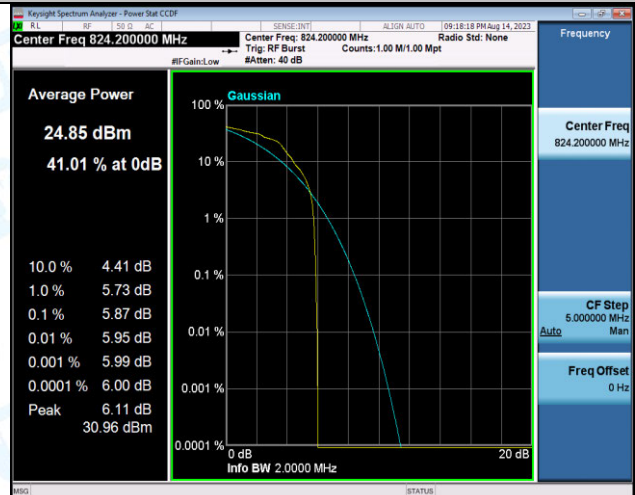
GPRS850-190-5-PASS



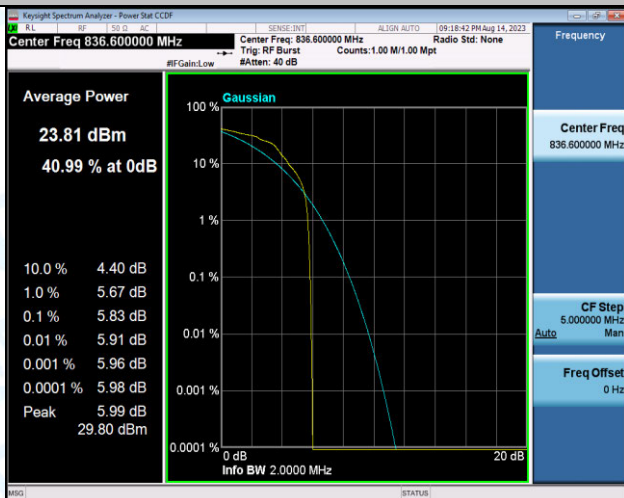
GPRS850-251-5-PASS



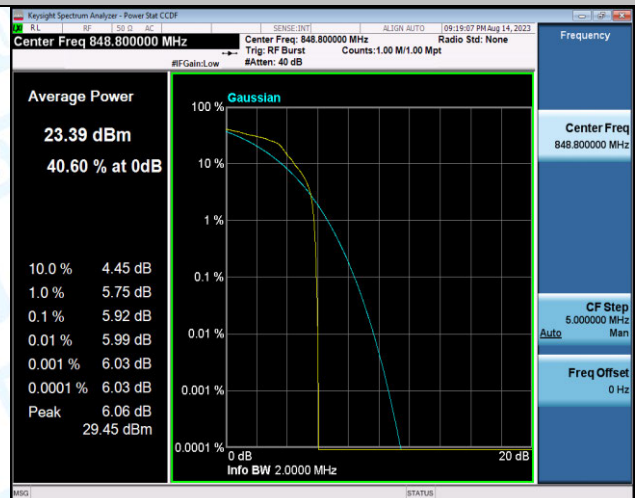
EGPRS850-128-8-PASS



EGPRS850-190-8-PASS



EGPRS850-251-8-PASS

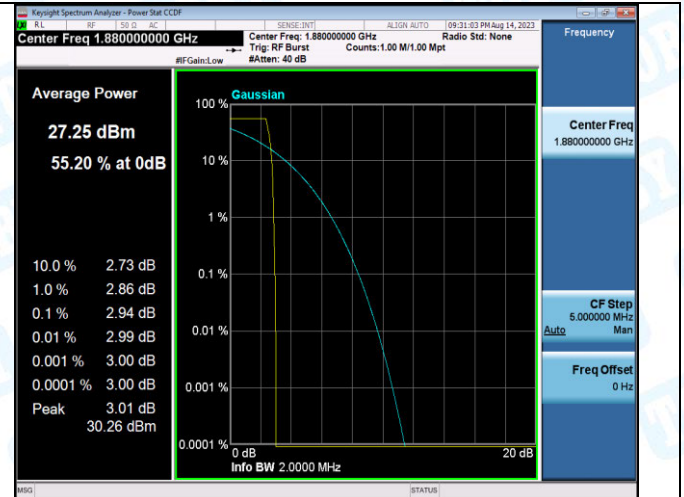


GPRS1900-512-0-PASS

GPRS1900-661-0-PASS



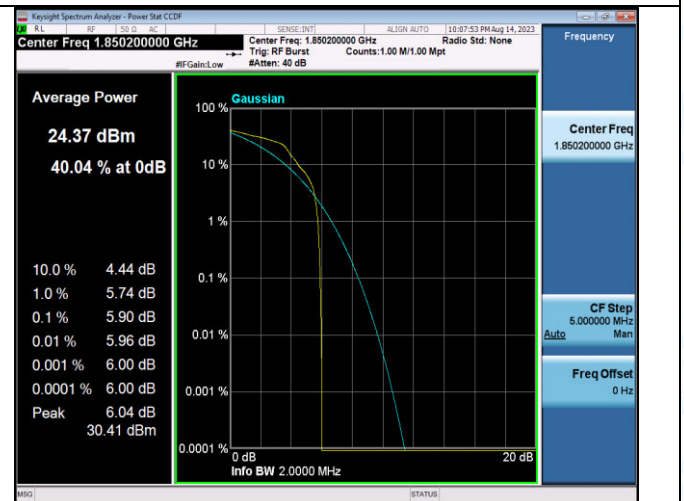
GPRS1900-810-0-PASS



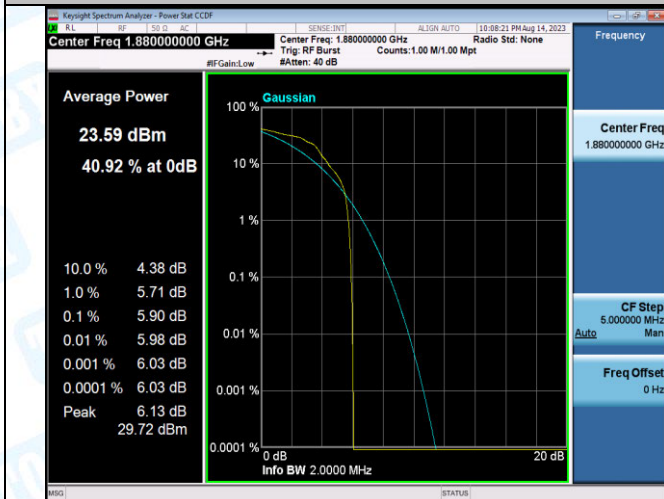
EGPRS1900-512-2-PASS



EGPRS1900-661-2-PASS



EGPRS1900-810-2-PASS

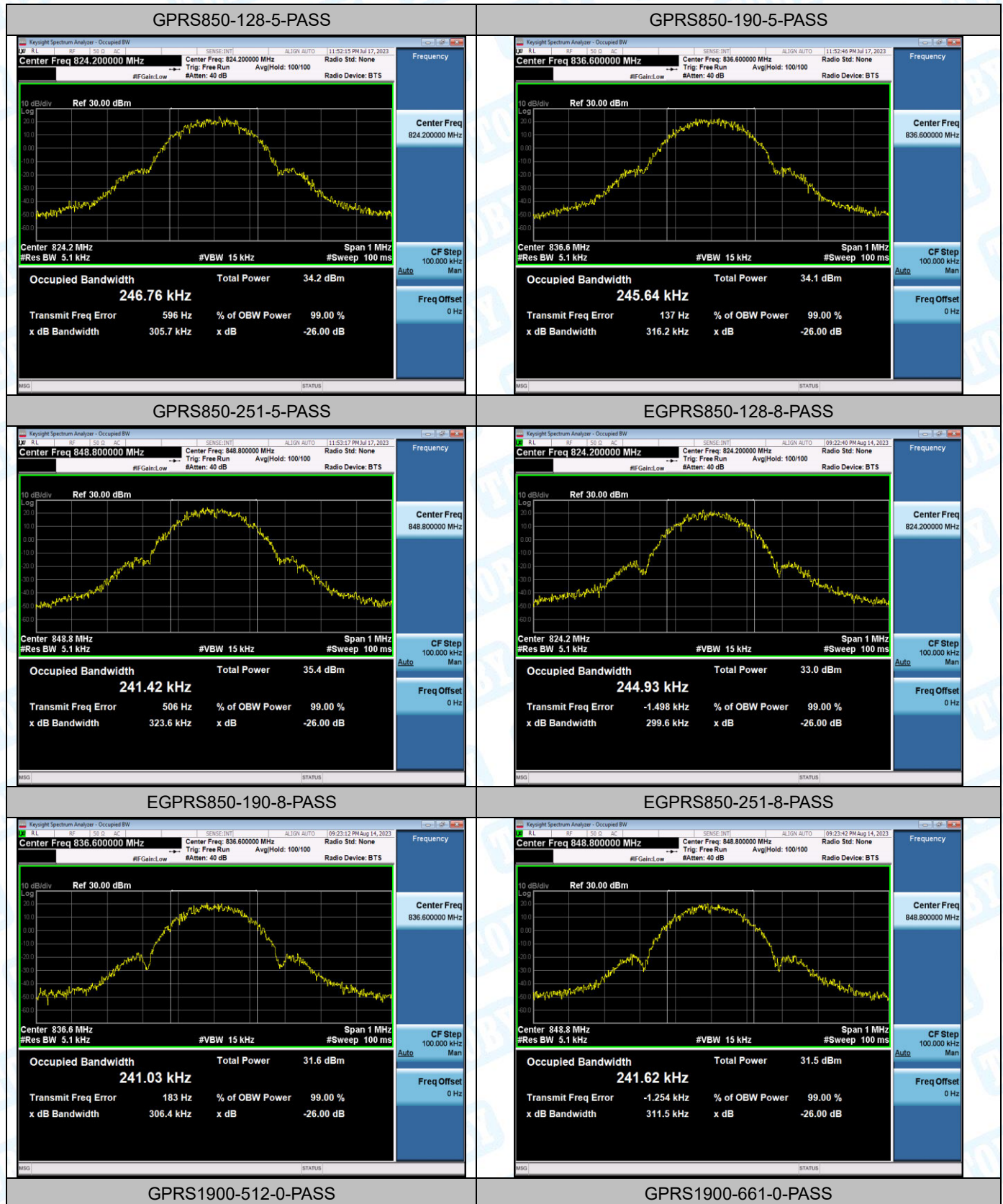


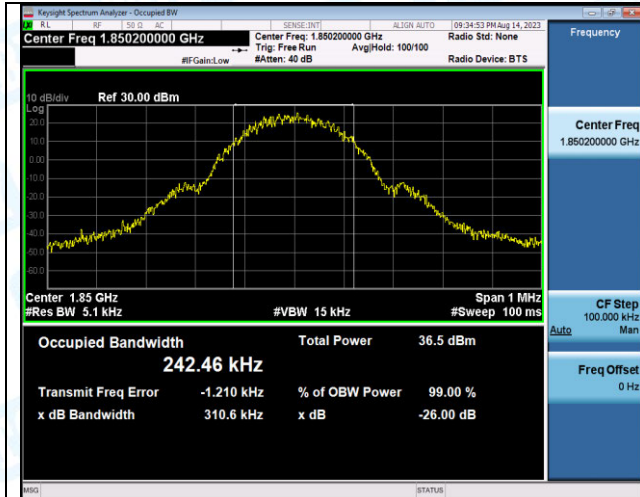
3. 26dB Bandwidth and Occupied Bandwidth

Test Result

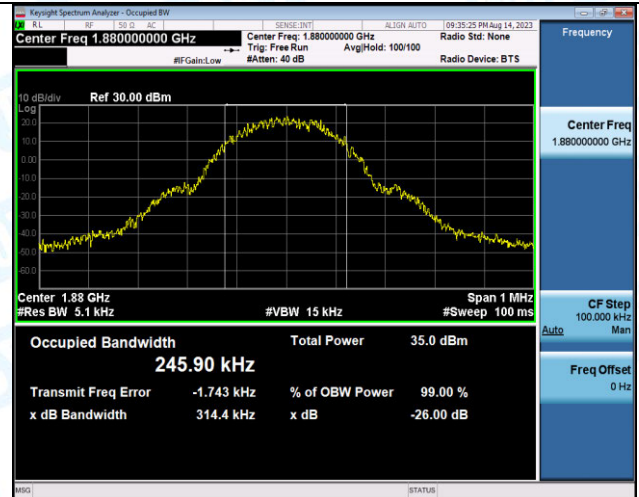
Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GPRS850	128	0.24676	0.3057	---	PASS
GPRS850	190	0.24564	0.3162	---	PASS
GPRS850	251	0.24142	0.3236	---	PASS
EGPRS850	128	0.24493	0.2996	---	PASS
EGPRS850	190	0.24103	0.3064	---	PASS
EGPRS850	251	0.24162	0.3115	---	PASS
GPRS1900	512	0.24246	0.3106	---	PASS
GPRS1900	661	0.24590	0.3144	---	PASS
GPRS1900	810	0.24663	0.3133	---	PASS
EGPRS1900	512	0.23954	0.3058	---	PASS
EGPRS1900	661	0.24389	0.2984	---	PASS
EGPRS1900	810	0.24472	0.3045	---	PASS

Test Graphs

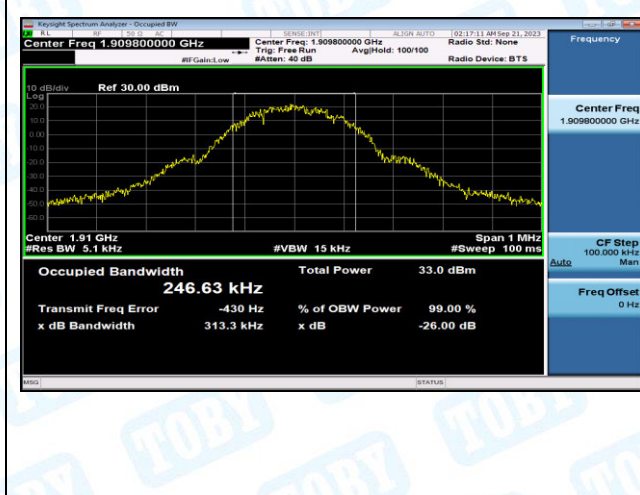




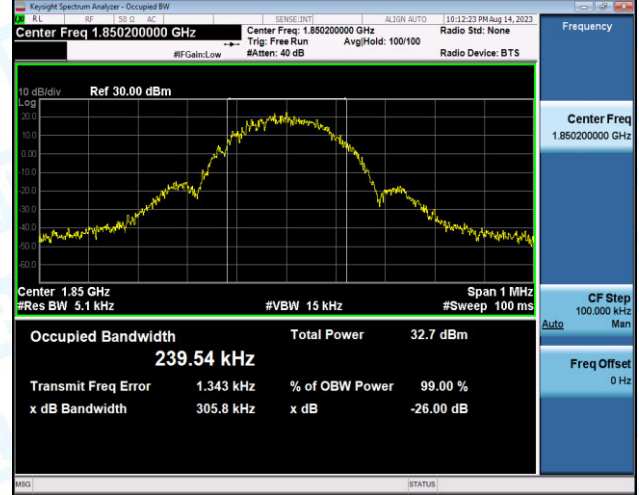
GPRS1900-810-0-PASS



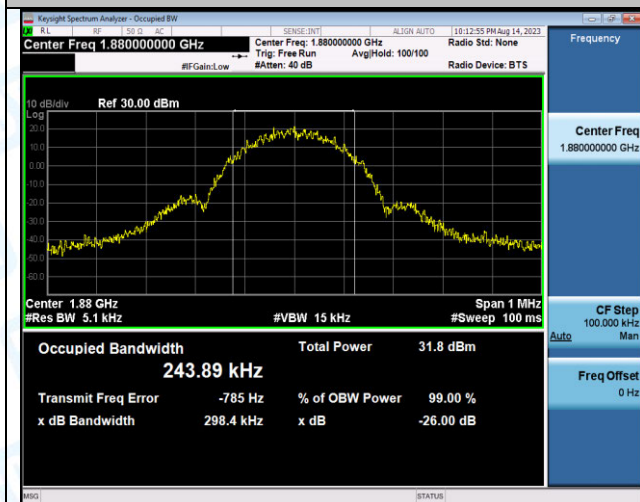
EGPRS1900-512-2-PASS



EGPRS1900-661-2-PASS



EGPRS1900-810-2-PASS



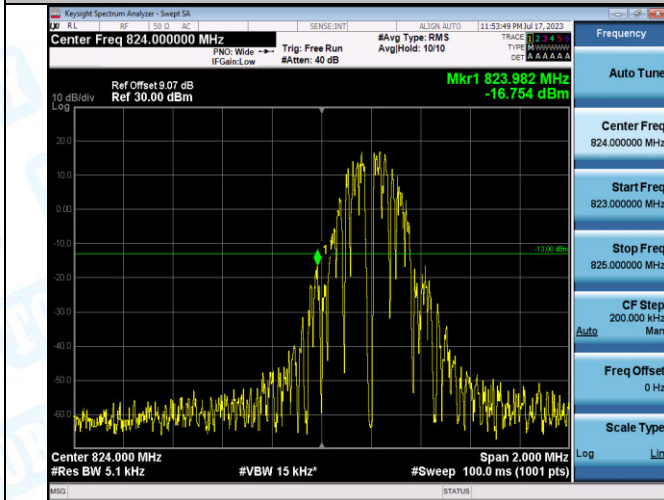
4. Band Edge

Test Result

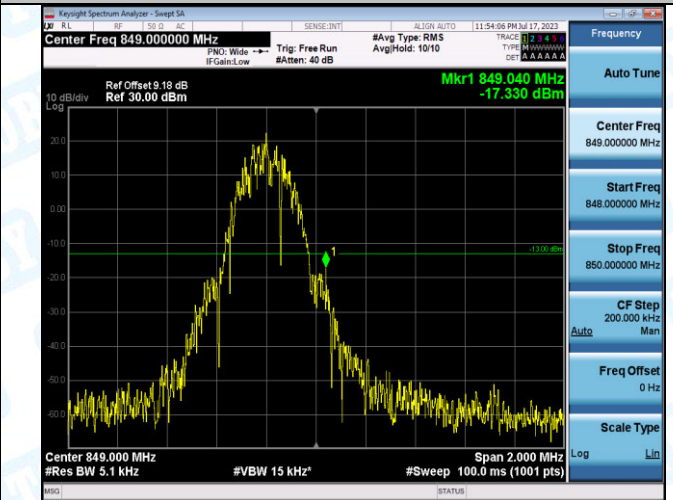
Band	Channel	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GPRS850	128	823.98	-16.75	-13	PASS
GPRS850	251	849.04	-17.33	-13	PASS
EGPRS850	128	823.99	-26.34	-13	PASS
EGPRS850	251	849.04	-25.33	-13	PASS
GPRS1900	512	1850.00	-25.73	-13	PASS
GPRS1900	810	1910.01	-24.92	-13	PASS
EGPRS1900	512	1850.00	-26.51	-13	PASS
EGPRS1900	810	1910.04	-31.31	-13	PASS

Test Graphs

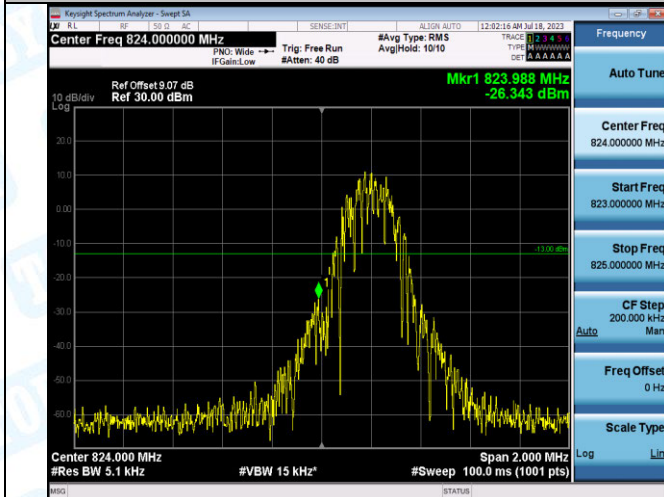
GPRS850-128-5-PASS



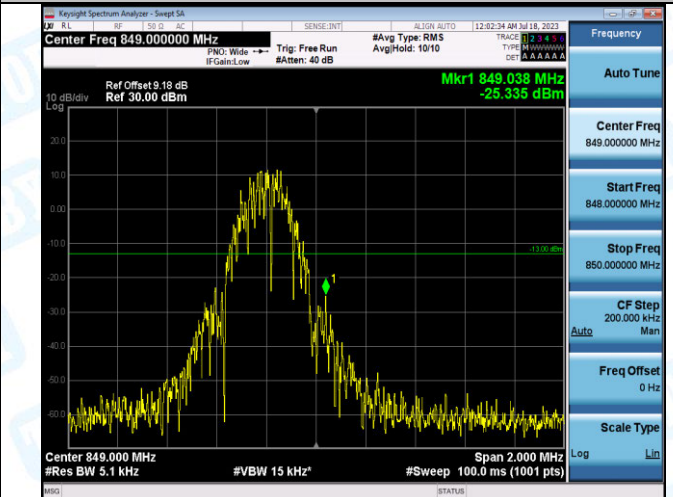
GPRS850-251-5-PASS



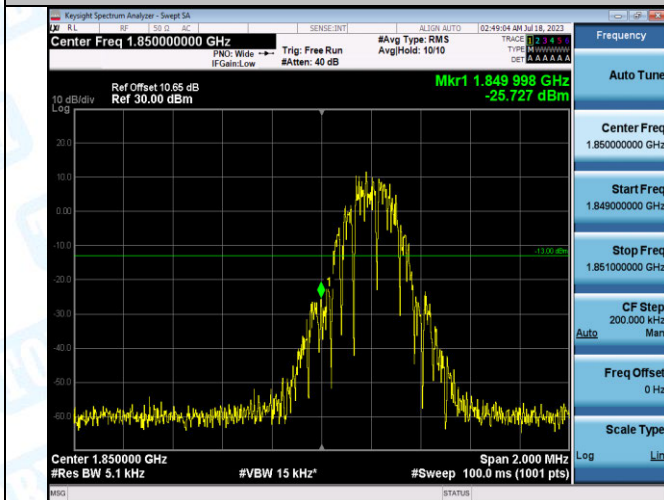
EGPRS850-128-8-PASS



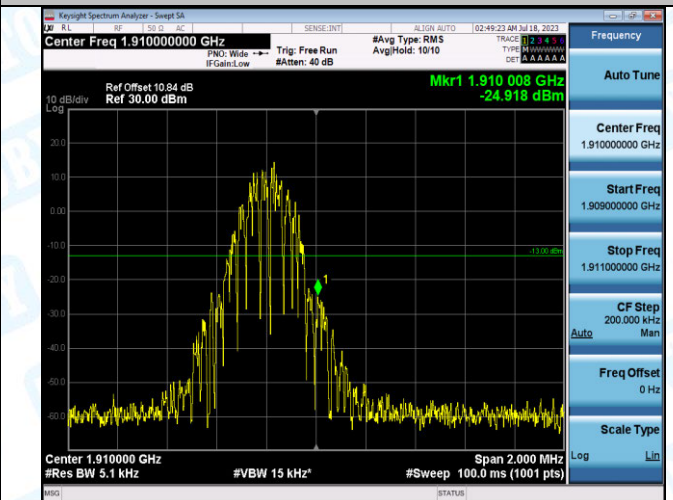
EGPRS850-251-8-PASS



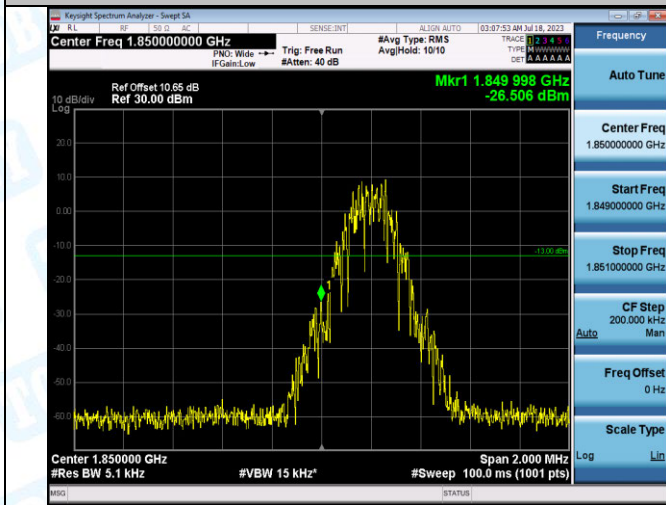
GPRS1900-512-0-PASS



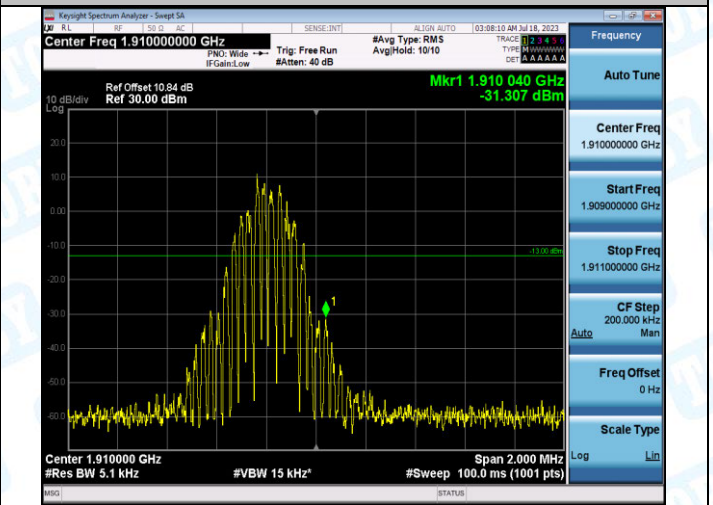
GPRS1900-810-0-PASS



EGPRS1900-512-2-PASS



EGPRS1900-810-2-PASS



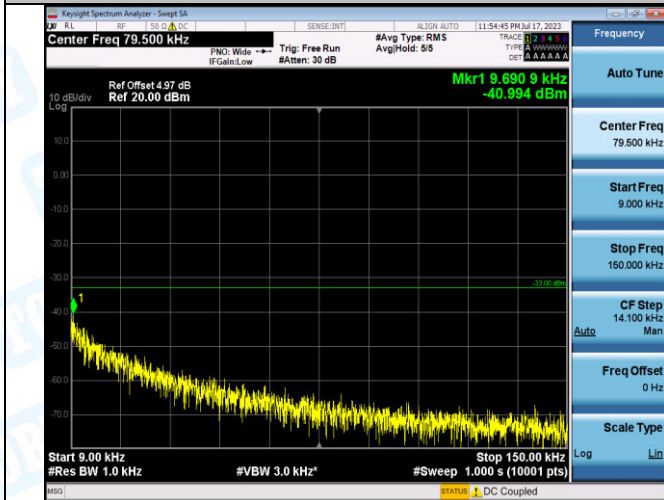
5. Conducted Spurious Emission

Test Result

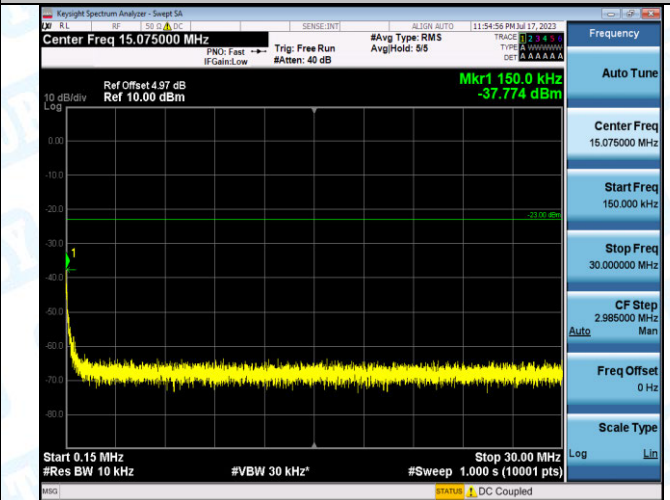
Band	Channel	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GPRS850	128	0.009~0.15MHz	0.01	-40.99	-33	PASS
GPRS850	128	0.15~30MHz	0.15	-37.77	-23	PASS
GPRS850	128	30~1000MHz	933.39	-46.71	-13	PASS
GPRS850	128	1000~10000MHz	1648.3	-46.1	-13	PASS
GPRS850	190	0.009~0.15MHz	0.01	-42.95	-33	PASS
GPRS850	190	0.15~30MHz	0.15	-38.65	-23	PASS
GPRS850	190	30~1000MHz	959.62	-47.14	-13	PASS
GPRS850	190	1000~10000MHz	2509.6	-44.84	-13	PASS
GPRS850	251	0.009~0.15MHz	0.01	-42.24	-33	PASS
GPRS850	251	0.15~30MHz	0.15	-39.31	-23	PASS
GPRS850	251	30~1000MHz	202.69	-47.07	-13	PASS
GPRS850	251	1000~10000MHz	7369.3	-47.67	-13	PASS
EGPRS850	128	0.009~0.15MHz	0.01	-42.29	-33	PASS
EGPRS850	128	0.15~30MHz	0.15	-40.19	-23	PASS
EGPRS850	128	30~1000MHz	970.32	-46.76	-13	PASS
EGPRS850	128	1000~10000MHz	7368.4	-47.55	-13	PASS
EGPRS850	190	0.009~0.15MHz	0.01	-42.59	-33	PASS
EGPRS850	190	0.15~30MHz	0.16	-37.79	-23	PASS
EGPRS850	190	30~1000MHz	970.06	-47.07	-13	PASS
EGPRS850	190	1000~10000MHz	5177.2	-47.54	-13	PASS
EGPRS850	251	0.009~0.15MHz	0.01	-42.71	-33	PASS
EGPRS850	251	0.15~30MHz	0.16	-38.12	-23	PASS
EGPRS850	251	30~1000MHz	966.57	-47.14	-13	PASS
EGPRS850	251	1000~10000MHz	7360.6	-47.57	-13	PASS
GPRS1900	512	0.009~0.15MHz	0.01	-51.88	-43	PASS
GPRS1900	512	0.15~30MHz	0.15	-38.04	-33	PASS
GPRS1900	512	30~1000MHz	926.15	-44.9	-13	PASS
GPRS1900	512	1000~3000MHz	2675.8	-32.84	-13	PASS
GPRS1900	512	3000~18000MHz	5180.5	-47.04	-13	PASS
GPRS1900	661	0.009~0.15MHz	0.01	-52.83	-43	PASS
GPRS1900	661	0.15~30MHz	0.15	-38.68	-33	PASS
GPRS1900	661	30~1000MHz	922.53	-44.86	-13	PASS
GPRS1900	661	1000~3000MHz	2653.2	-32.75	-13	PASS
GPRS1900	661	3000~18000MHz	5179	-47.89	-13	PASS
GPRS1900	810	0.009~0.15MHz	0.01	-51.17	-43	PASS
GPRS1900	810	0.15~30MHz	0.16	-39.62	-33	PASS
GPRS1900	810	30~1000MHz	772.63	-44.78	-13	PASS
GPRS1900	810	1000~3000MHz	2645.47	-32.73	-13	PASS
GPRS1900	810	3000~18000MHz	5176	-47.57	-13	PASS
EGPRS1900	512	0.009~0.15MHz	0.01	-52.56	-43	PASS
EGPRS1900	512	0.15~30MHz	0.17	-39.4	-33	PASS
EGPRS1900	512	30~1000MHz	830.02	-44.67	-13	PASS
EGPRS1900	512	1000~3000MHz	2670.53	-32.48	-13	PASS
EGPRS1900	512	3000~18000MHz	17765	-49.98	-13	PASS
EGPRS1900	661	0.009~0.15MHz	0.01	-50.52	-43	PASS
EGPRS1900	661	0.15~30MHz	0.15	-38.38	-33	PASS
EGPRS1900	661	30~1000MHz	935.98	-44.69	-13	PASS
EGPRS1900	661	1000~3000MHz	2654.2	-32.48	-13	PASS
EGPRS1900	661	3000~18000MHz	3760	-40.87	-13	PASS
EGPRS1900	810	0.009~0.15MHz	0.01	-52.66	-43	PASS
EGPRS1900	810	0.15~30MHz	0.15	-39.43	-33	PASS
EGPRS1900	810	30~1000MHz	928.93	-44.76	-13	PASS
EGPRS1900	810	1000~3000MHz	2646.07	-32.72	-13	PASS
EGPRS1900	810	3000~18000MHz	5176	-47.91	-13	PASS

Test Graphs

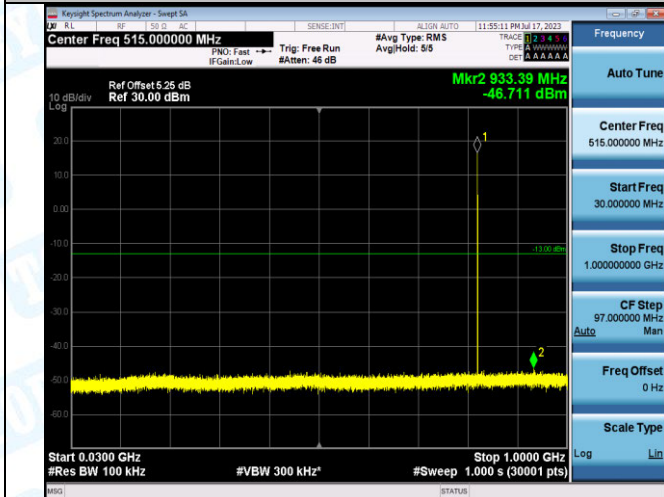
GPRS850-128-5-0.009~0.15MHz-PASS



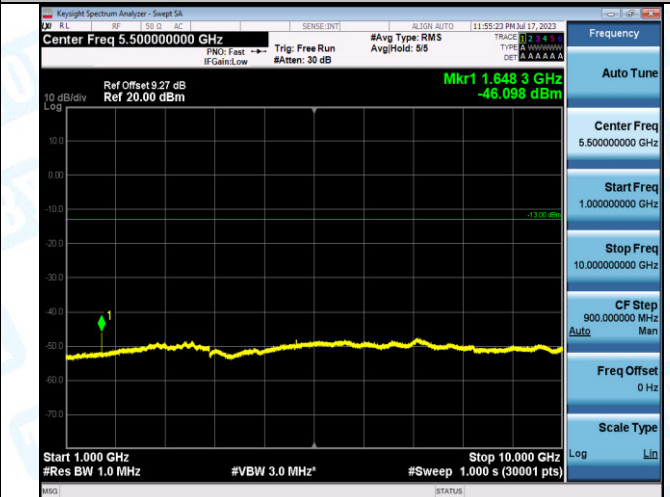
GPRS850-128-5-0.15~30MHz-PASS



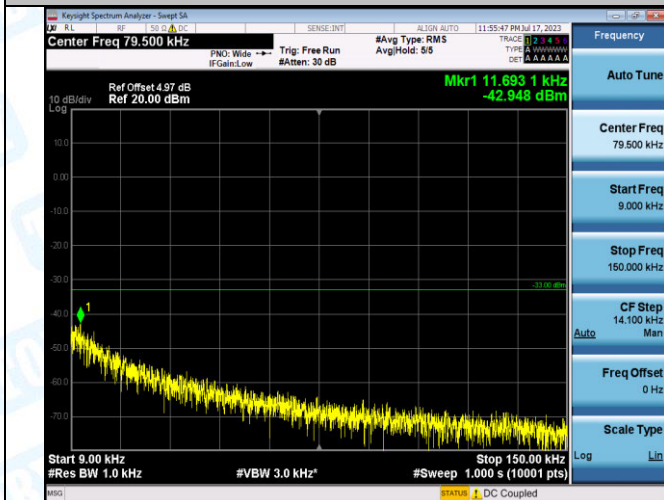
GPRS850-128-5-30~1000MHz-PASS



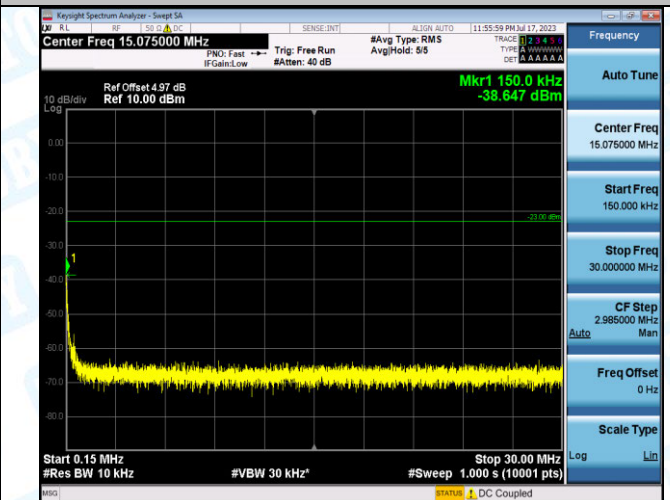
GPRS850-128-5-1000~10000MHz-PASS



GPRS850-190-5-0.009~0.15MHz-PASS



GPRS850-190-5-0.15~30MHz-PASS



GPRS850-190-5-30~1000MHz-PASS

GPRS850-190-5-1000~10000MHz-PASS

