

## **Appendix for Band 13**

Product Name: LTE Module  
Model No: Global-7243A4x4CB

## Appendix A: Average Power Output Data

### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	22.68	PASS
Band13	5MHz	QPSK	23205	1RB#12	23.11	PASS
Band13	5MHz	QPSK	23205	1RB#24	22.91	PASS
Band13	5MHz	QPSK	23205	12RB#0	21.97	PASS
Band13	5MHz	QPSK	23205	12RB#6	22.06	PASS
Band13	5MHz	QPSK	23205	12RB#13	22.10	PASS
Band13	5MHz	QPSK	23205	25RB#0	21.91	PASS
Band13	5MHz	QPSK	23230	1RB#0	22.94	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.31	PASS
Band13	5MHz	QPSK	23230	1RB#24	22.91	PASS
Band13	5MHz	QPSK	23230	12RB#0	22.53	PASS
Band13	5MHz	QPSK	23230	12RB#6	22.52	PASS
Band13	5MHz	QPSK	23230	12RB#13	22.07	PASS
Band13	5MHz	QPSK	23230	25RB#0	22.18	PASS
Band13	5MHz	QPSK	23255	1RB#0	22.84	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.10	PASS
Band13	5MHz	QPSK	23255	1RB#24	22.78	PASS
Band13	5MHz	QPSK	23255	12RB#0	22.49	PASS
Band13	5MHz	QPSK	23255	12RB#6	22.48	PASS
Band13	5MHz	QPSK	23255	12RB#13	21.89	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.00	PASS
Band13	5MHz	16QAM	23205	1RB#0	21.68	PASS
Band13	5MHz	16QAM	23205	1RB#12	21.96	PASS
Band13	5MHz	16QAM	23205	1RB#24	21.80	PASS
Band13	5MHz	16QAM	23205	12RB#0	20.97	PASS
Band13	5MHz	16QAM	23205	12RB#6	21.04	PASS
Band13	5MHz	16QAM	23205	12RB#13	21.04	PASS
Band13	5MHz	16QAM	23205	25RB#0	20.92	PASS
Band13	5MHz	16QAM	23230	1RB#0	21.94	PASS
Band13	5MHz	16QAM	23230	1RB#12	22.26	PASS
Band13	5MHz	16QAM	23230	1RB#24	21.86	PASS

Band13	5MHz	16QAM	23230	12RB#0	21.48	PASS
Band13	5MHz	16QAM	23230	12RB#6	21.46	PASS
Band13	5MHz	16QAM	23230	12RB#13	21.01	PASS
Band13	5MHz	16QAM	23230	25RB#0	21.14	PASS
Band13	5MHz	16QAM	23255	1RB#0	21.92	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.20	PASS
Band13	5MHz	16QAM	23255	1RB#24	21.74	PASS
Band13	5MHz	16QAM	23255	12RB#0	21.56	PASS
Band13	5MHz	16QAM	23255	12RB#6	21.56	PASS
Band13	5MHz	16QAM	23255	12RB#13	20.89	PASS
Band13	5MHz	16QAM	23255	25RB#0	20.92	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.02	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.24	PASS
Band13	10MHz	QPSK	23230	1RB#49	23.41	PASS
Band13	10MHz	QPSK	23230	25RB#0	22.25	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.25	PASS
Band13	10MHz	QPSK	23230	25RB#25	22.35	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.26	PASS
Band13	10MHz	16QAM	23230	1RB#0	21.98	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.13	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.41	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.27	PASS
Band13	10MHz	16QAM	23230	25RB#12	21.28	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.40	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.34	PASS

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

### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	6.19	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	5.78	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	5.73	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.42	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	4.94	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.53	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	6.30	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	6.33	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	6.32	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	6.04	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	5.58	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	6.08	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	5.79	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.62	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	6.43	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	6.35	13	PASS

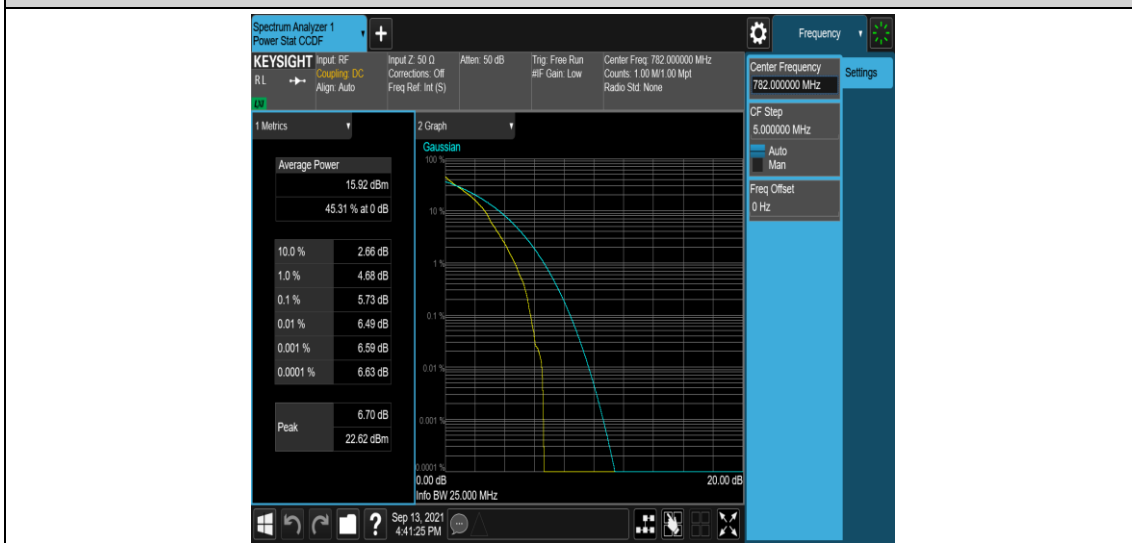
### Test Graphs

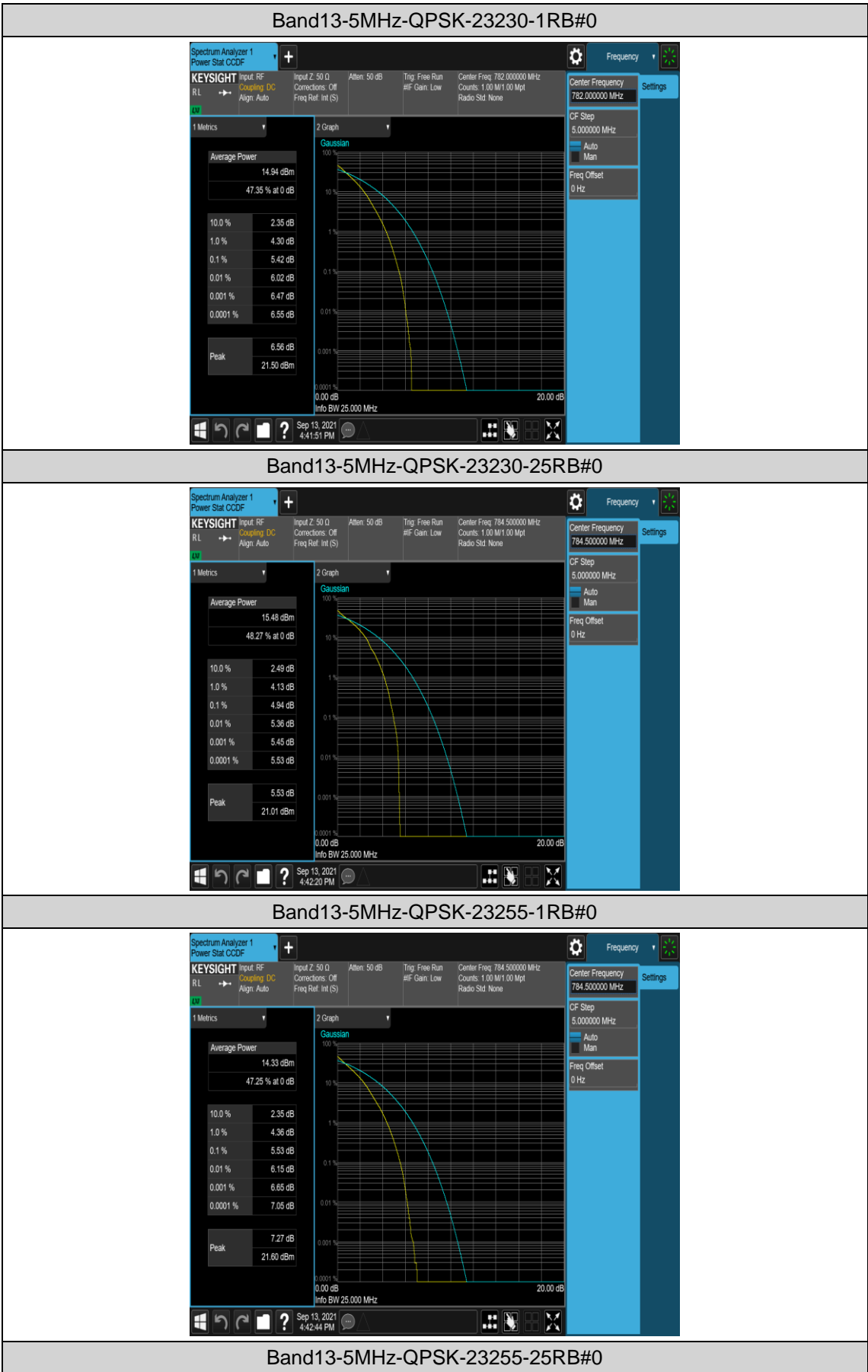


Band13-5MHz-QPSK-23205-1RB#0



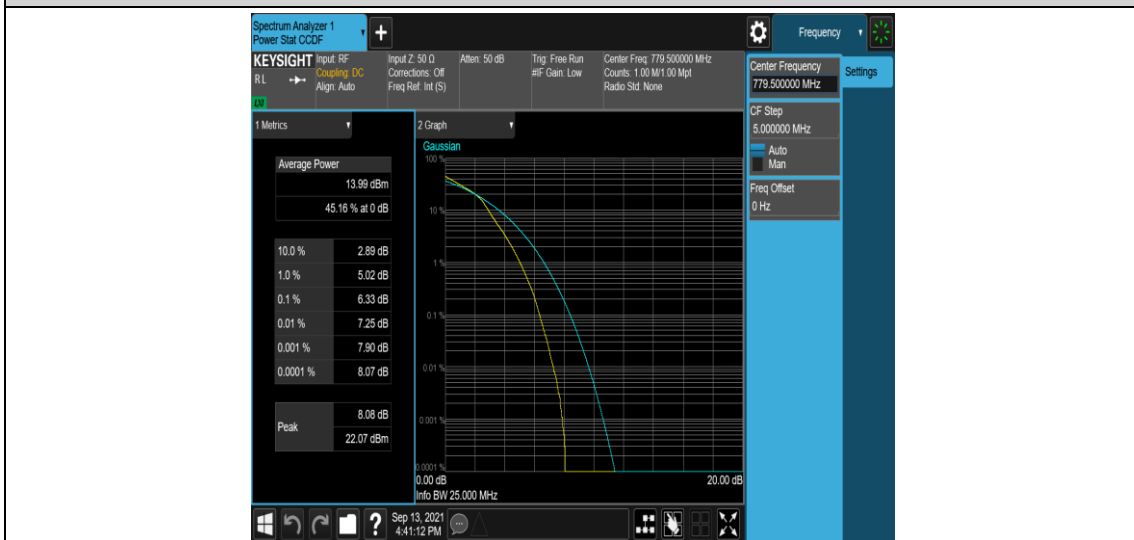
Band13-5MHz-QPSK-23205-25RB#0



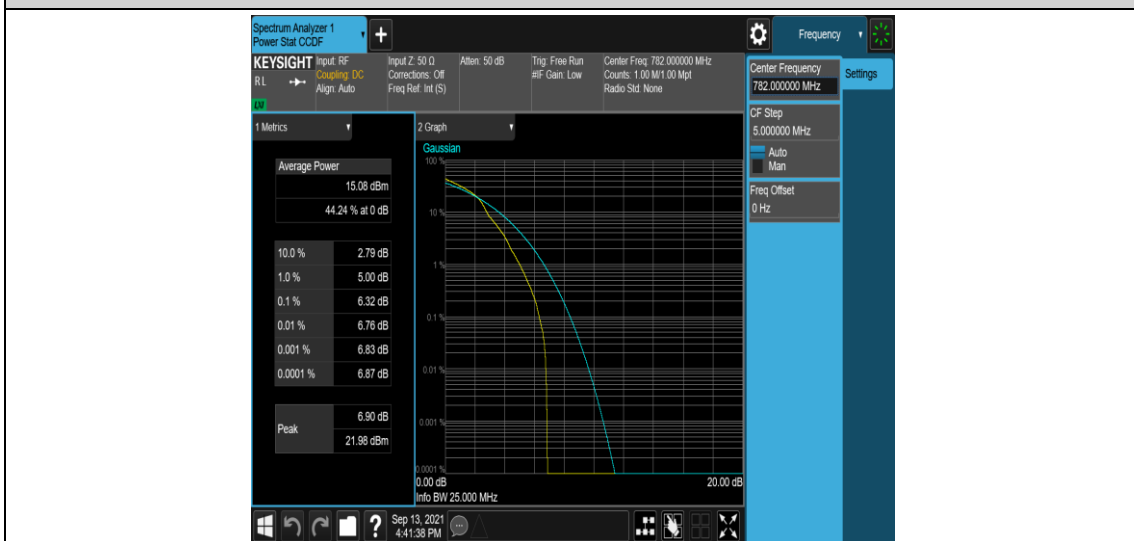




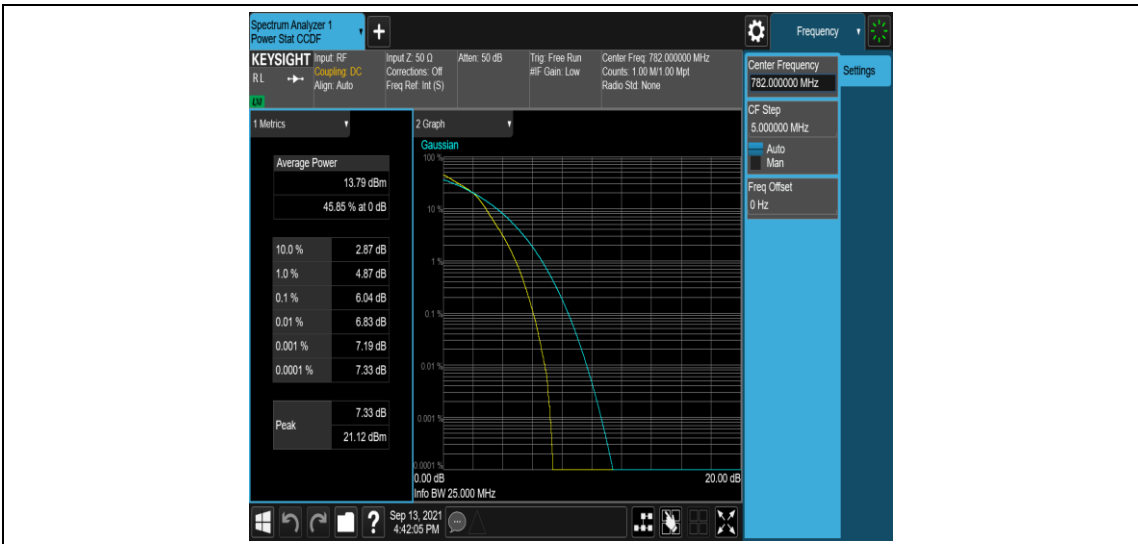
Band13-5MHz-16QAM-23205-1RB#0



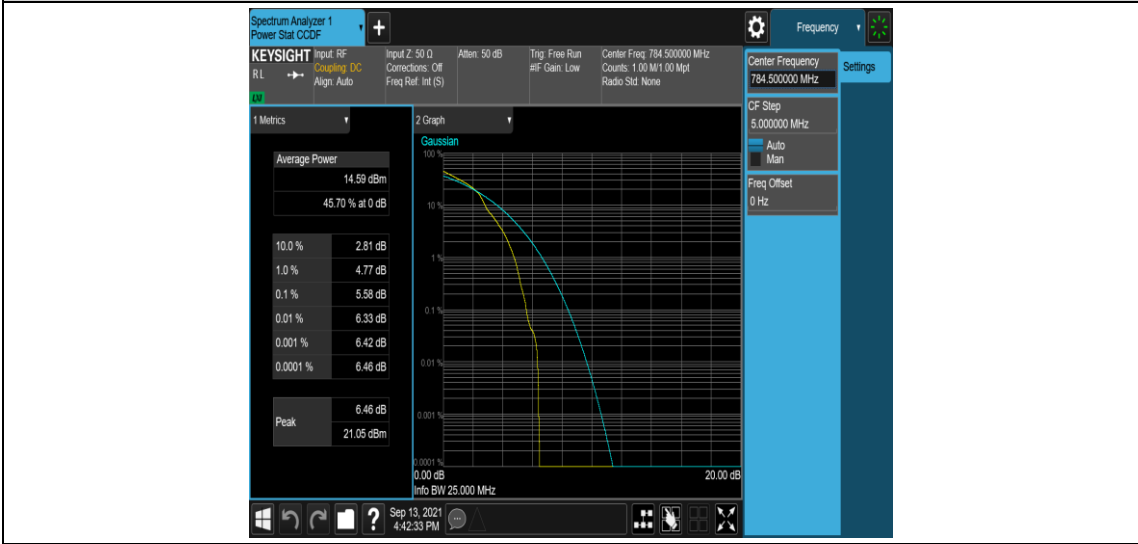
Band13-5MHz-16QAM-23205-25RB#0



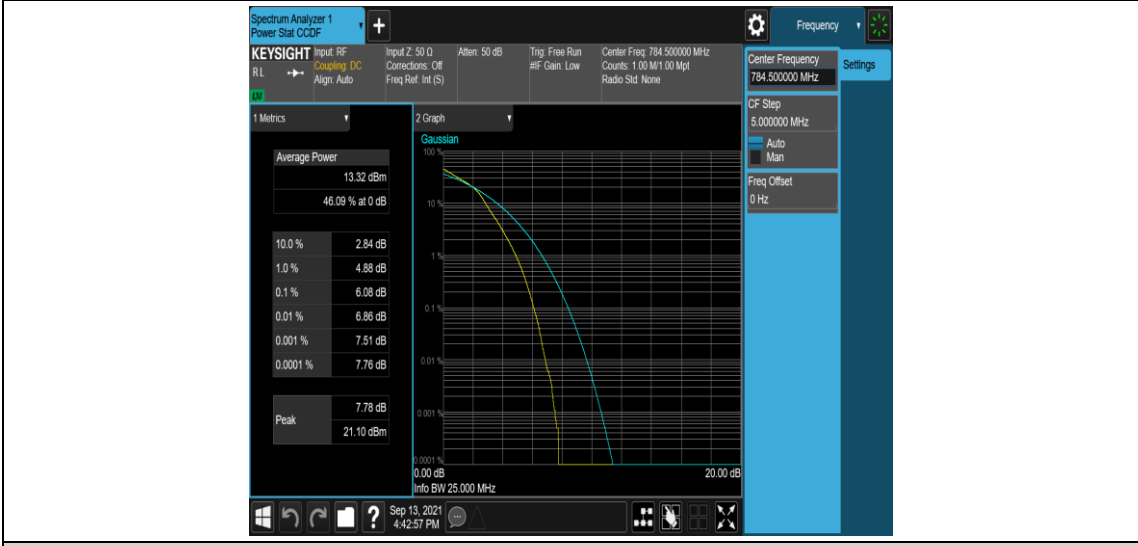
Band13-5MHz-16QAM-23230-1RB#0



Band13-5MHz-16QAM-23230-25RB#0

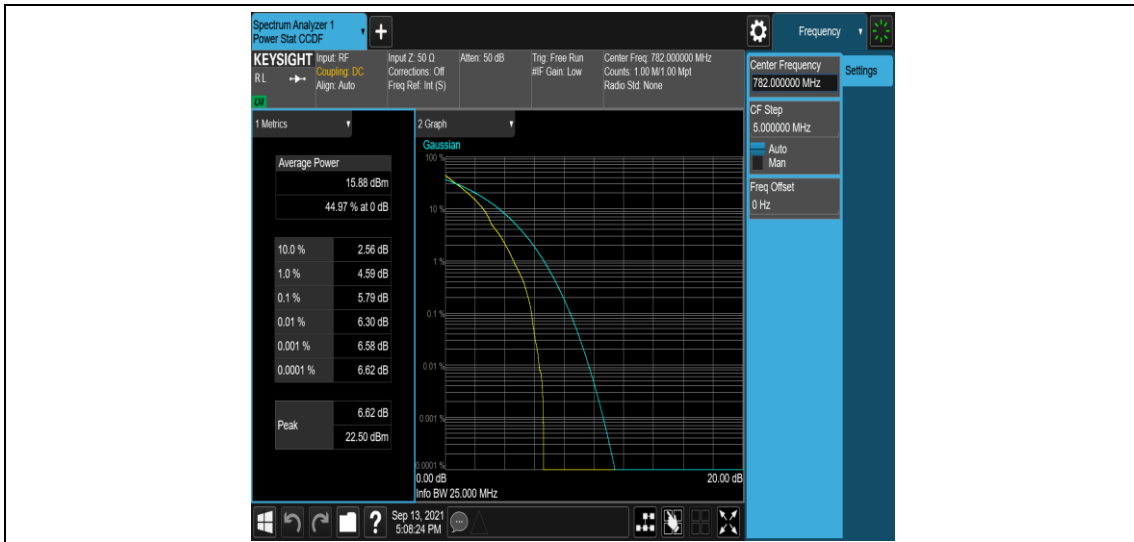


Band13-5MHz-16QAM-23255-1RB#0



Band13-5MHz-16QAM-23255-25RB#0





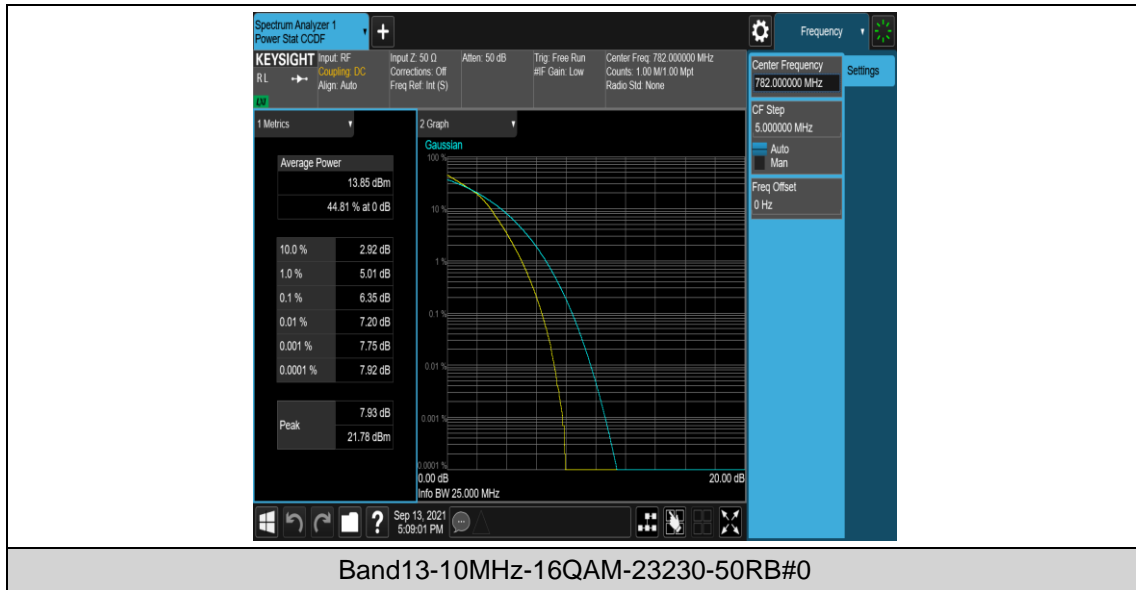
**Band13-10MHz-QPSK-23230-1RB#0**



**Band13-10MHz-QPSK-23230-50RB#0**



**Band13-10MHz-16QAM-23230-1RB#0**



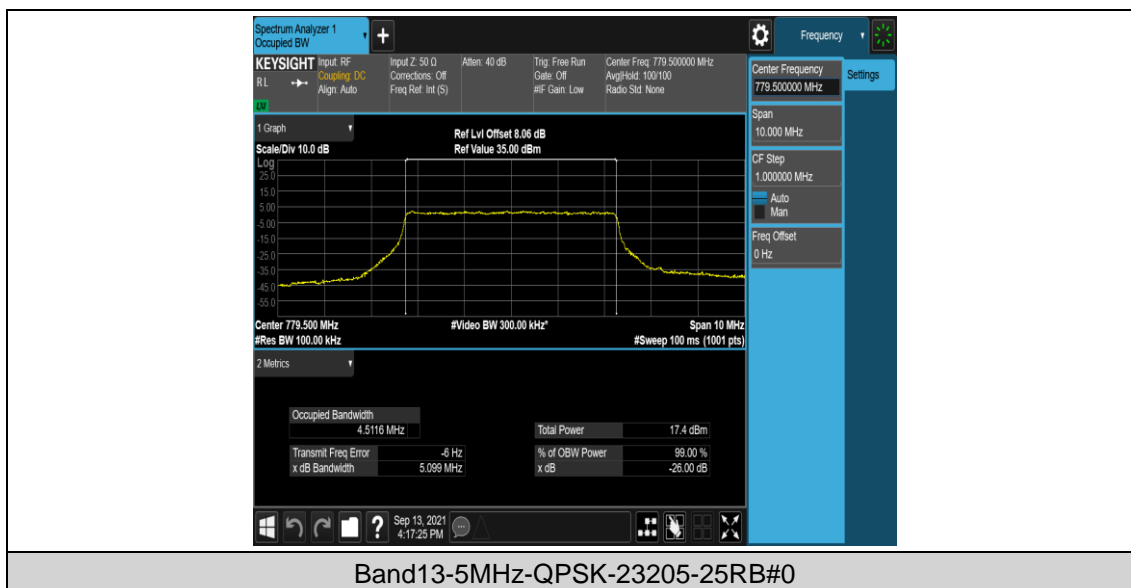
Band13-10MHz-16QAM-23230-50RB#0

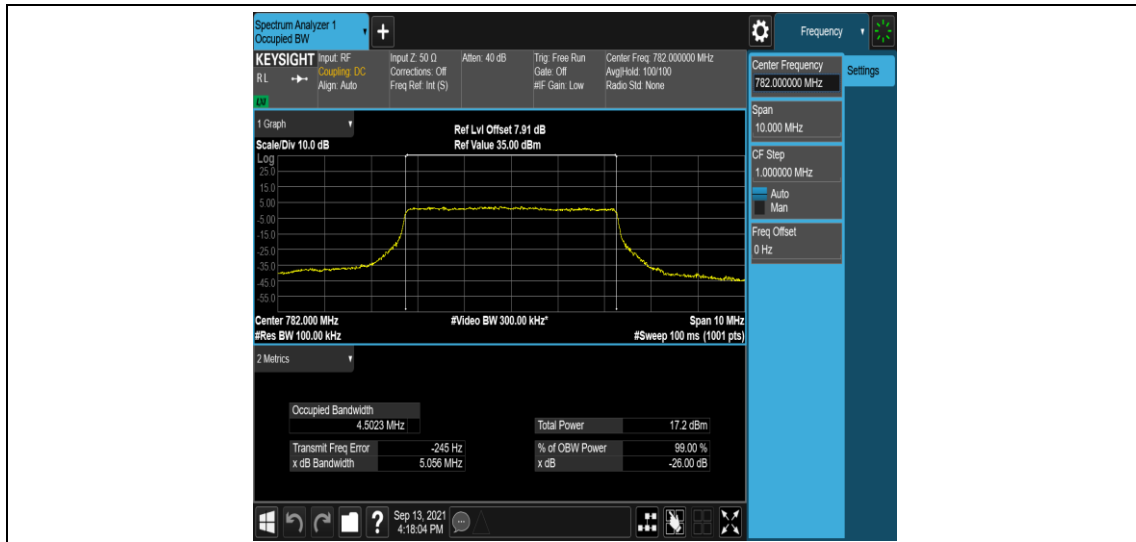
## Appendix C: 26dB Bandwidth and Occupied Bandwidth

### Test Result

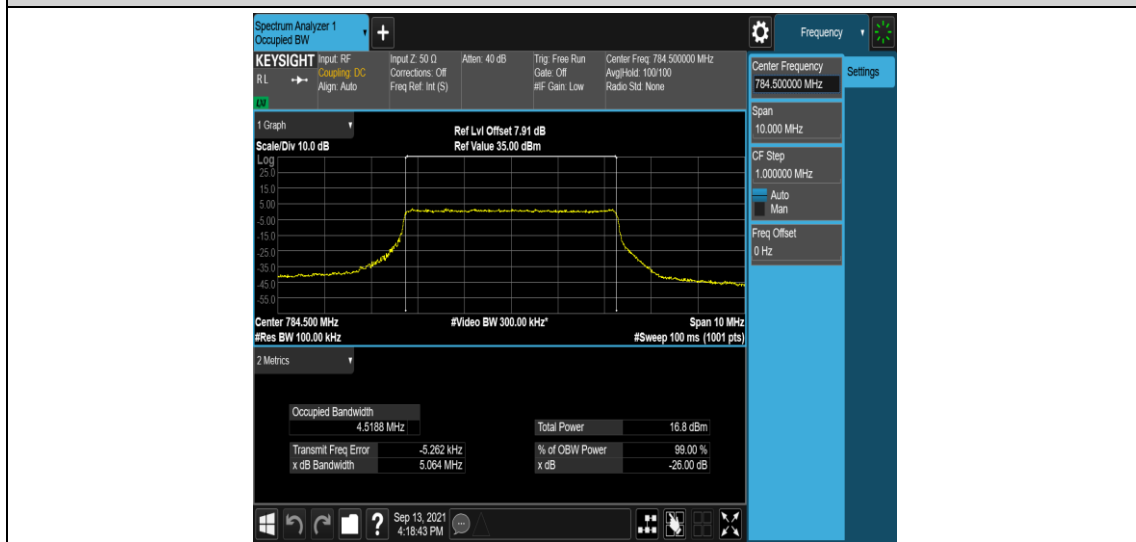
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5116	5.099	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5023	5.056	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5188	5.064	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5130	5.030	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5086	5.066	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5242	5.053	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9848	9.539	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9913	9.560	PASS

### Test Graphs

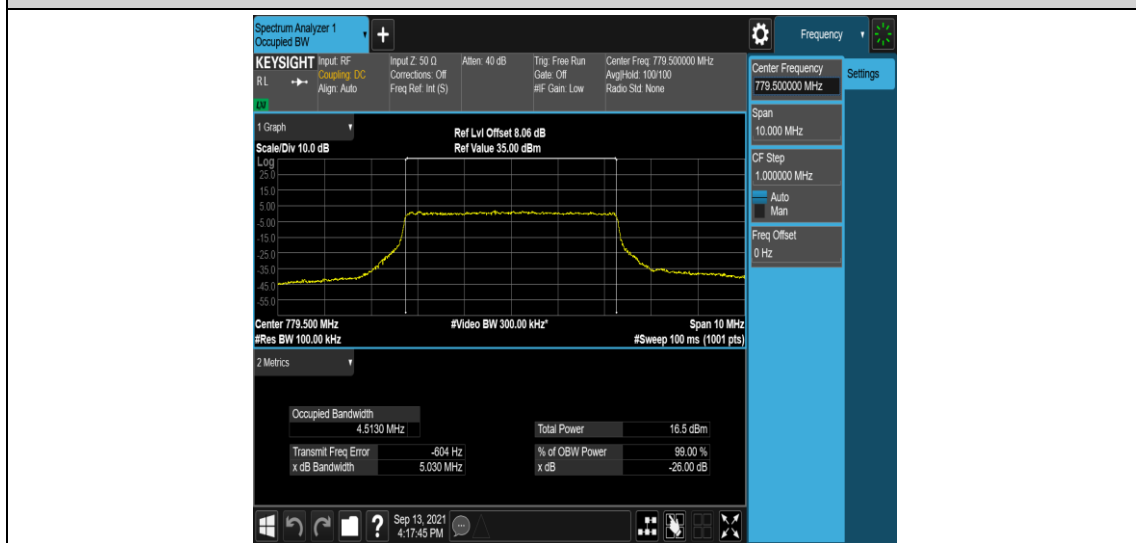




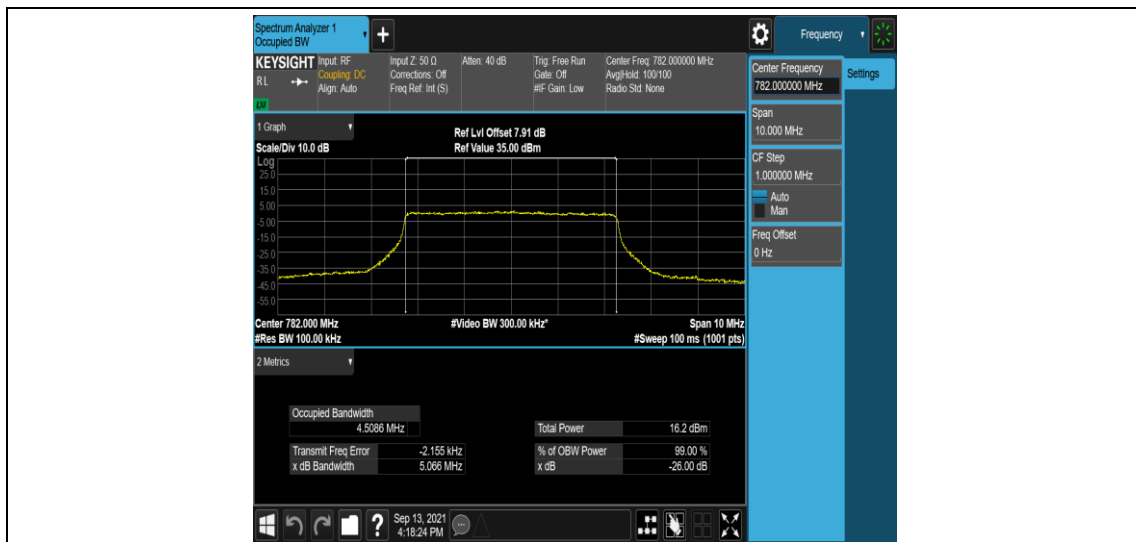
Band13-5MHz-QPSK-23230-25RB#0



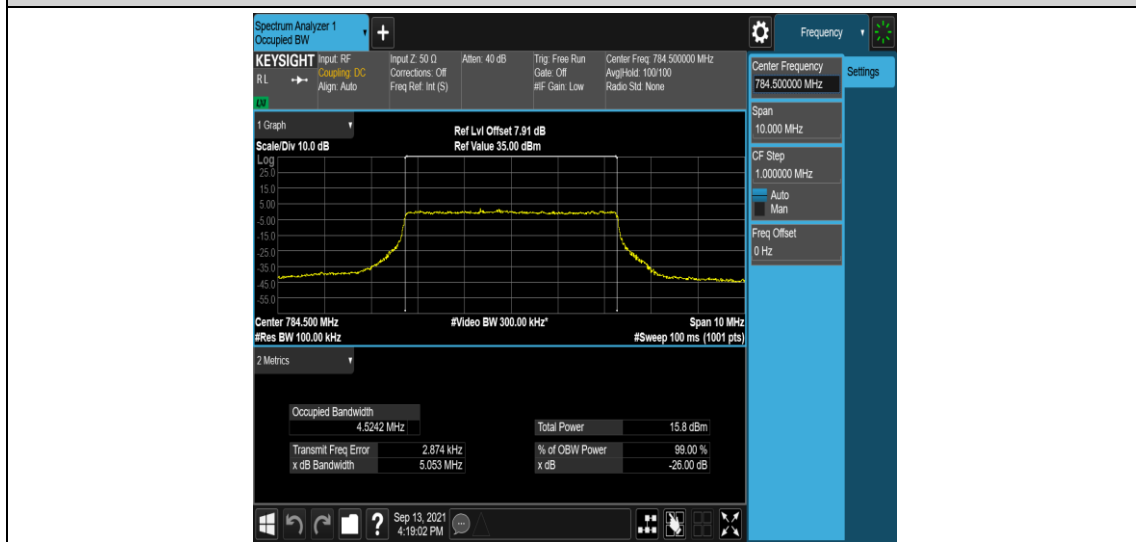
Band13-5MHz-QPSK-23255-25RB#0



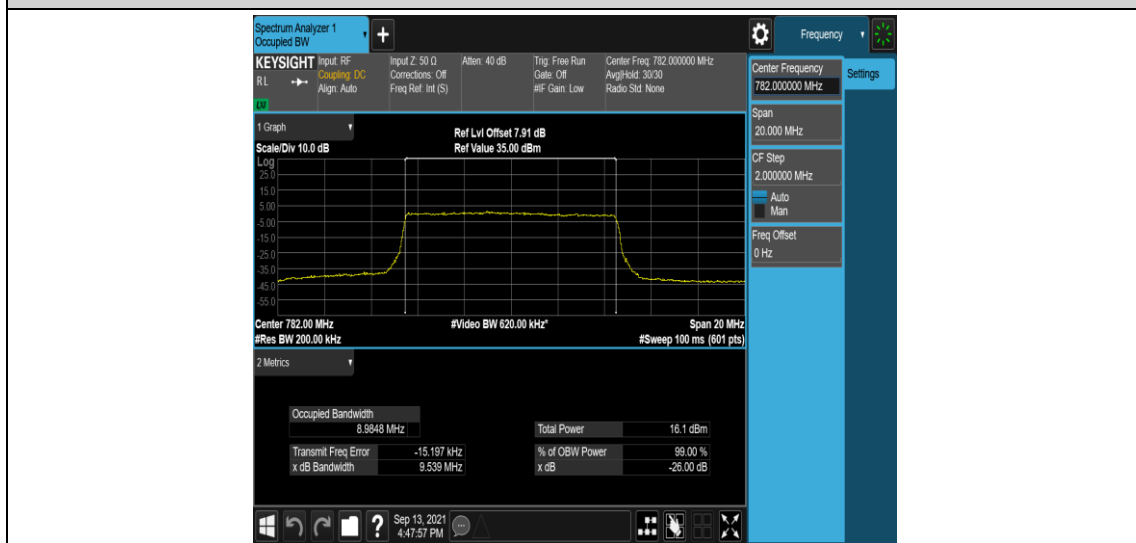
Band13-5MHz-16QAM-23205-25RB#0



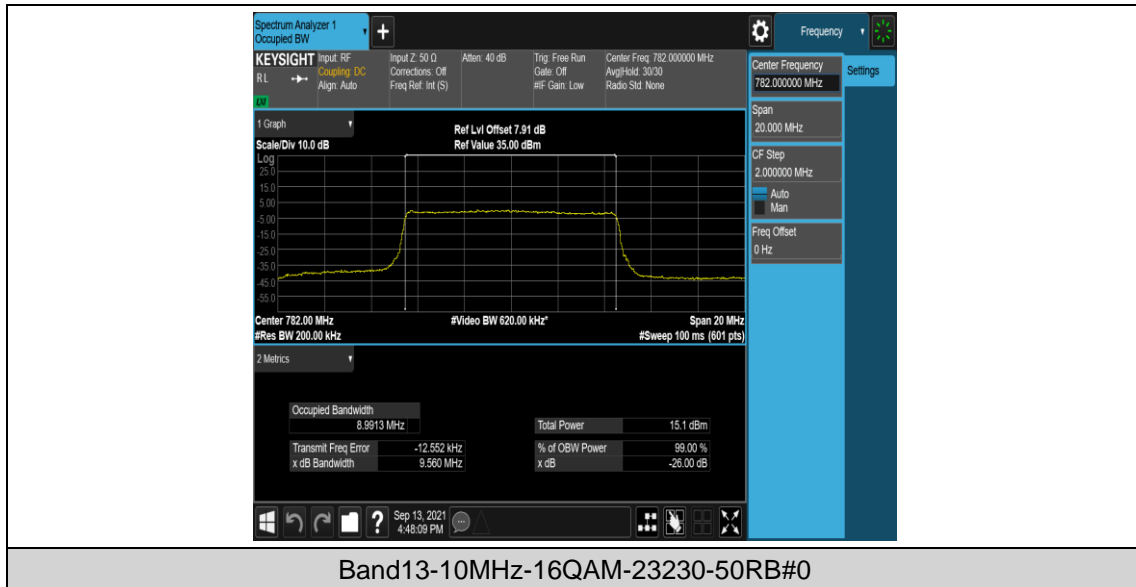
Band13-5MHz-16QAM-23230-25RB#0



Band13-5MHz-16QAM-23255-25RB#0



Band13-10MHz-QPSK-23230-50RB#0

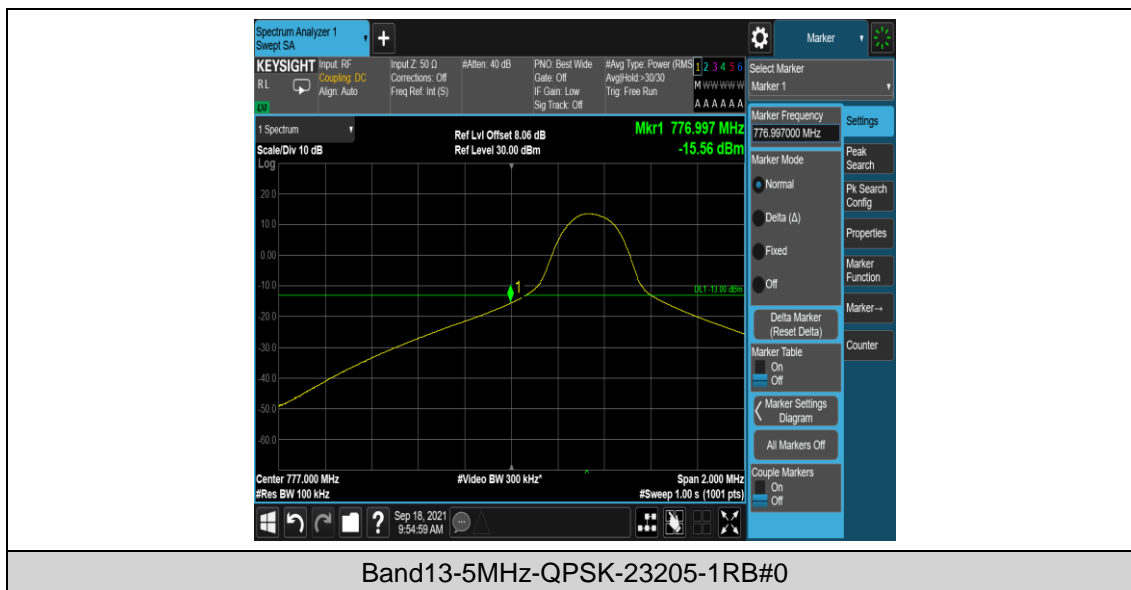


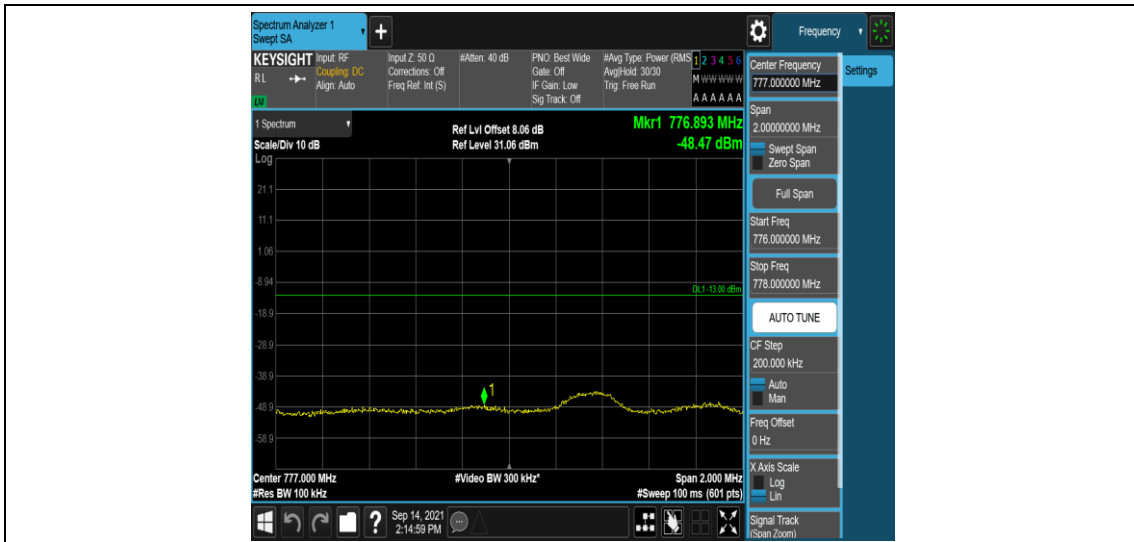
## Appendix D: Band Edge

### Test Result

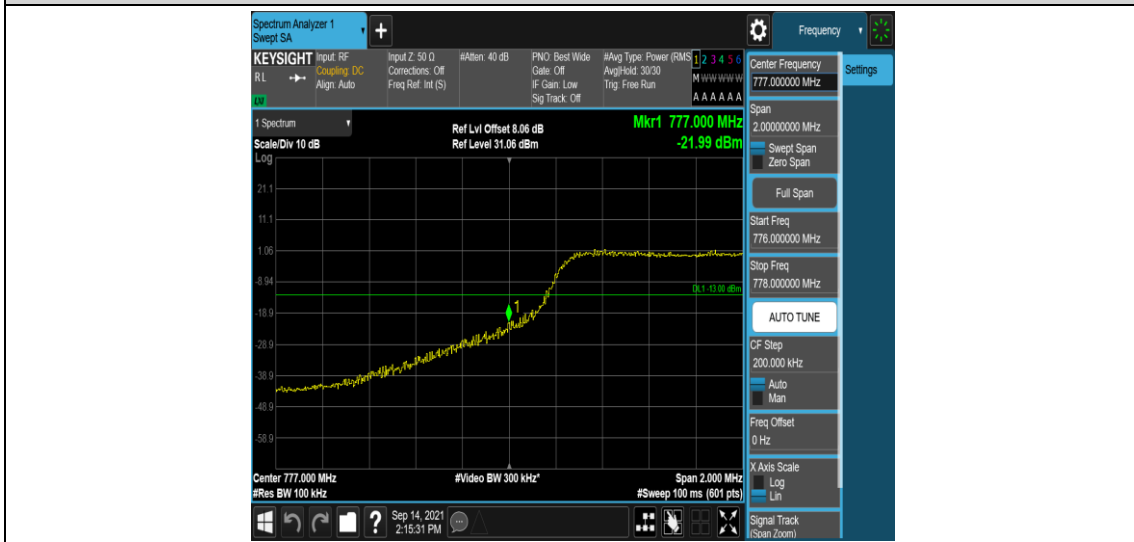
Band	Bandwidth	Modulation	Channel	RB Configuration	Verdict
Band13	5MHz	QPSK	23205	1RB#0	PASS
Band13	5MHz	QPSK	23205	1RB#24	PASS
Band13	5MHz	QPSK	23205	25RB#0	PASS
Band13	5MHz	QPSK	23255	1RB#0	PASS
Band13	5MHz	QPSK	23255	1RB#24	PASS
Band13	5MHz	QPSK	23255	25RB#0	PASS
Band13	5MHz	16QAM	23205	1RB#0	PASS
Band13	5MHz	16QAM	23205	1RB#24	PASS
Band13	5MHz	16QAM	23205	25RB#0	PASS
Band13	5MHz	16QAM	23255	1RB#0	PASS
Band13	5MHz	16QAM	23255	1RB#24	PASS
Band13	5MHz	16QAM	23255	25RB#0	PASS

### Test Graphs

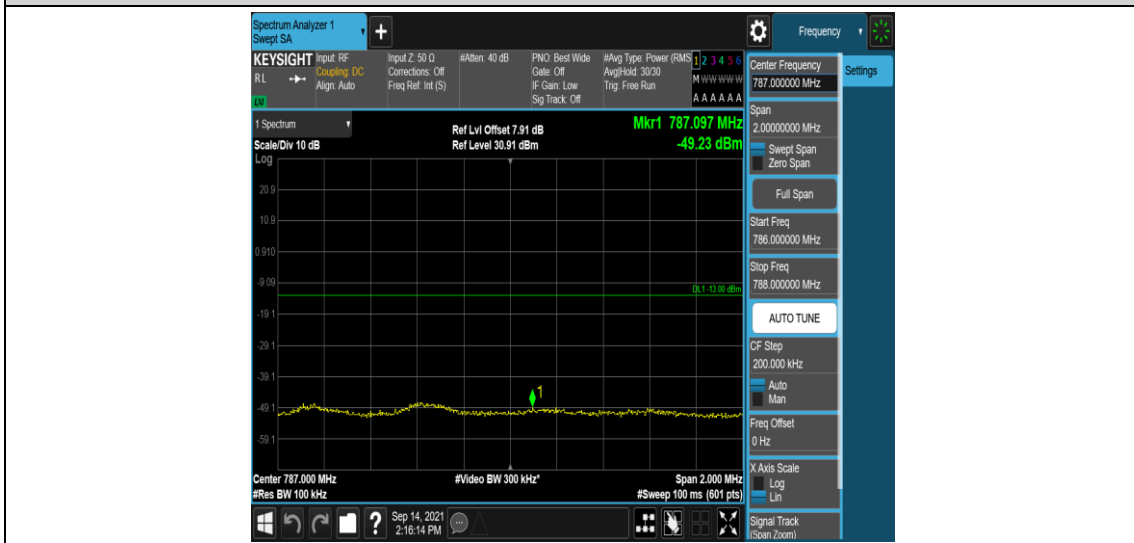




Band13-5MHz-QPSK-23205-1RB#24

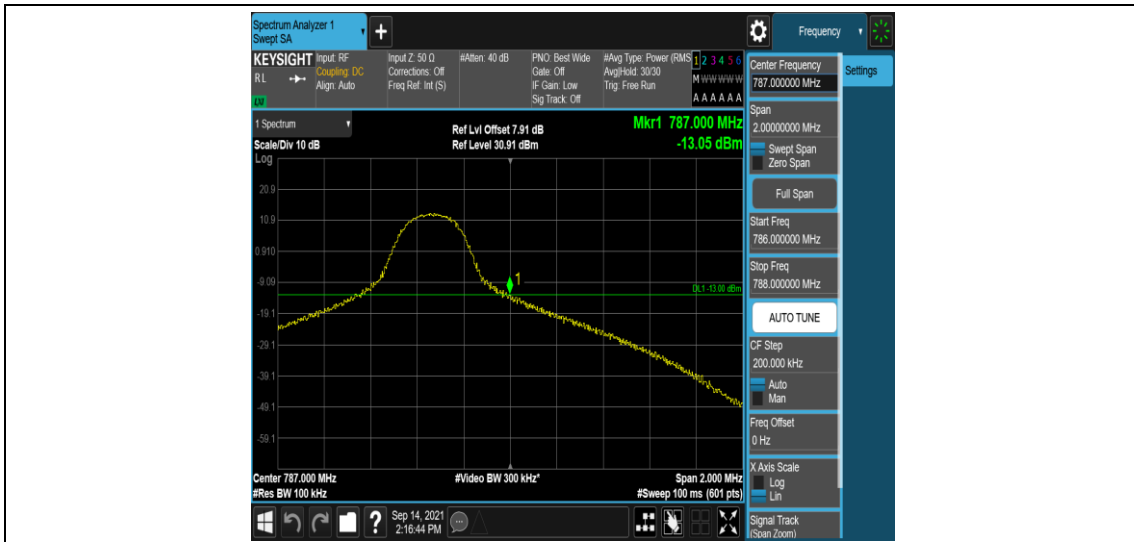


Band13-5MHz-QPSK-23205-25RB#0

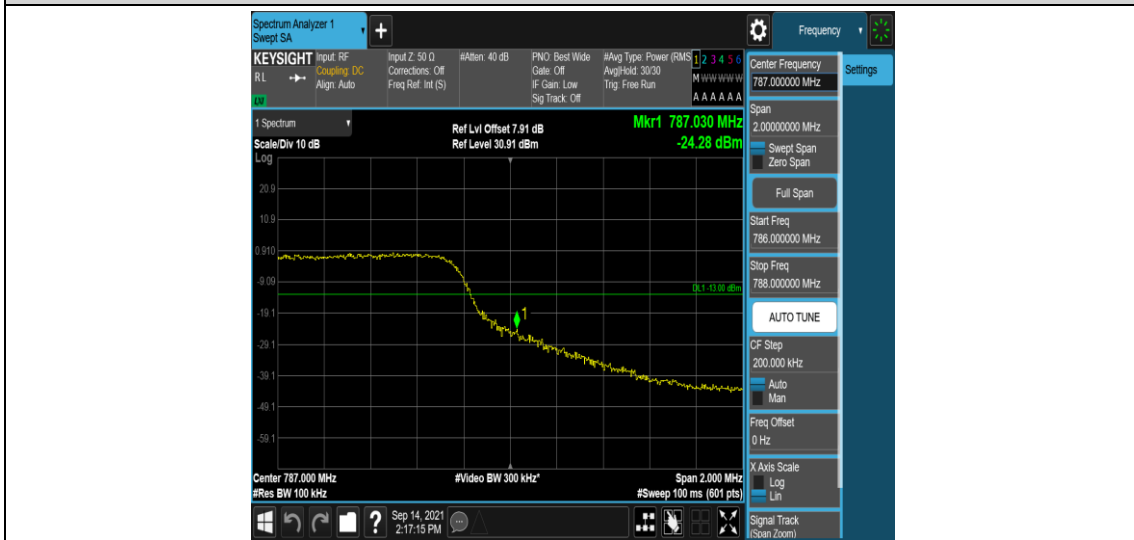


Band13-5MHz-QPSK-23255-1RB#0

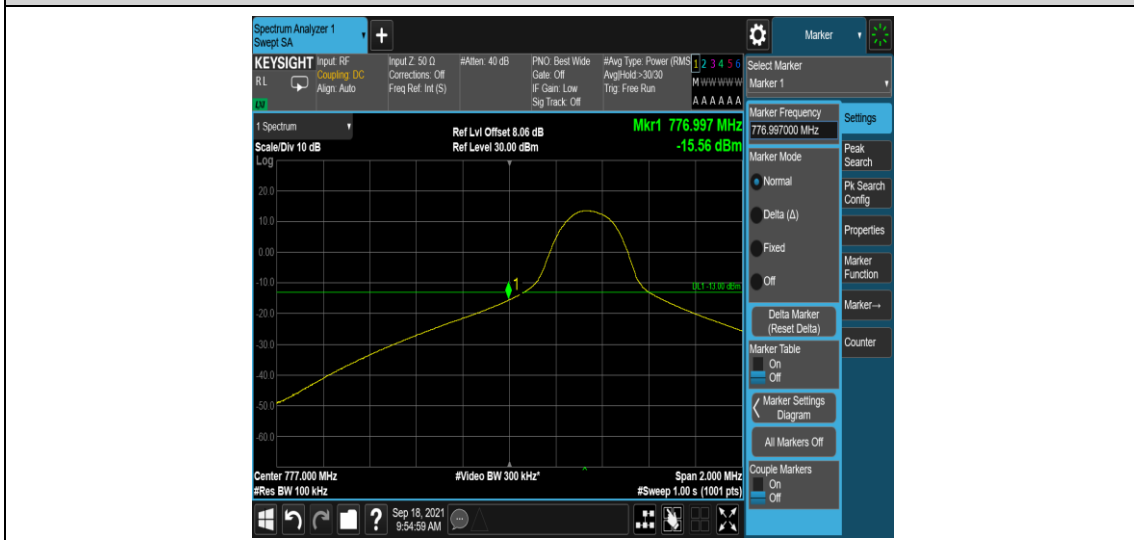




Band13-5MHz-QPSK-23255-1RB#24



Band13-5MHz-QPSK-23255-25RB#0



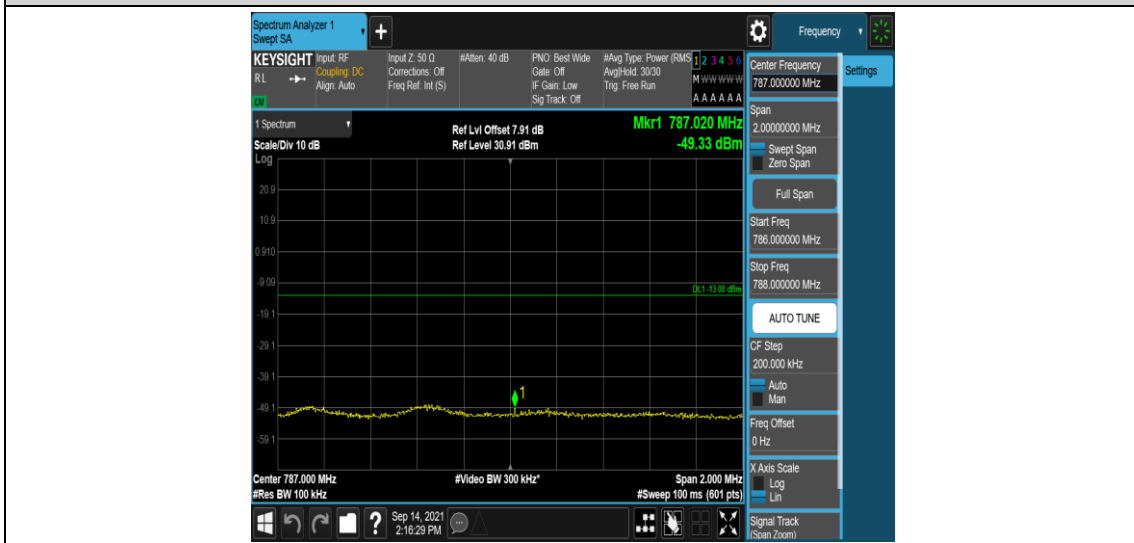
Band13-5MHz-16QAM-23205-1RB#0



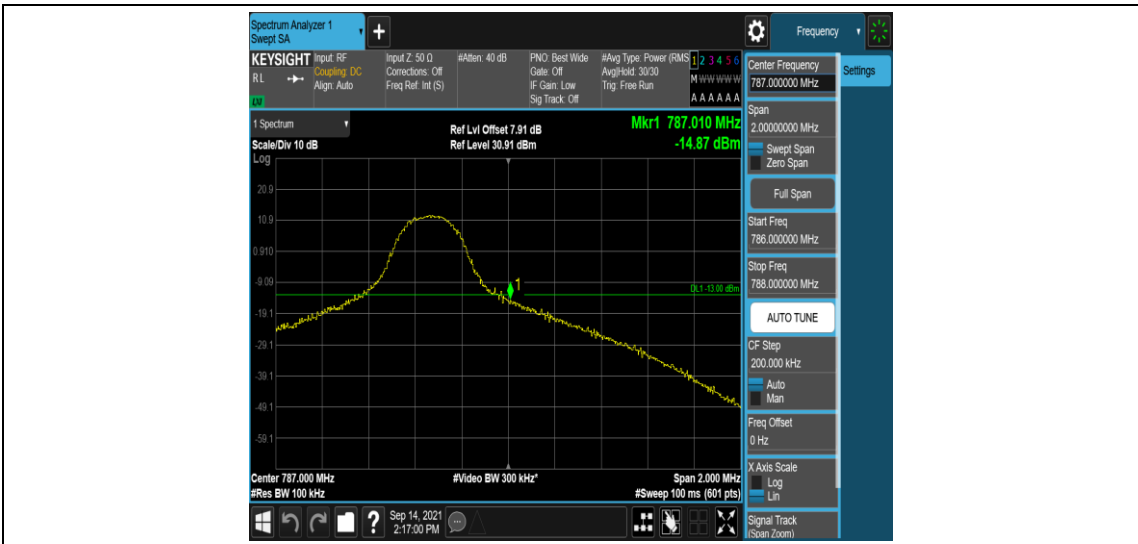
Band13-5MHz-16QAM-23205-1RB#24



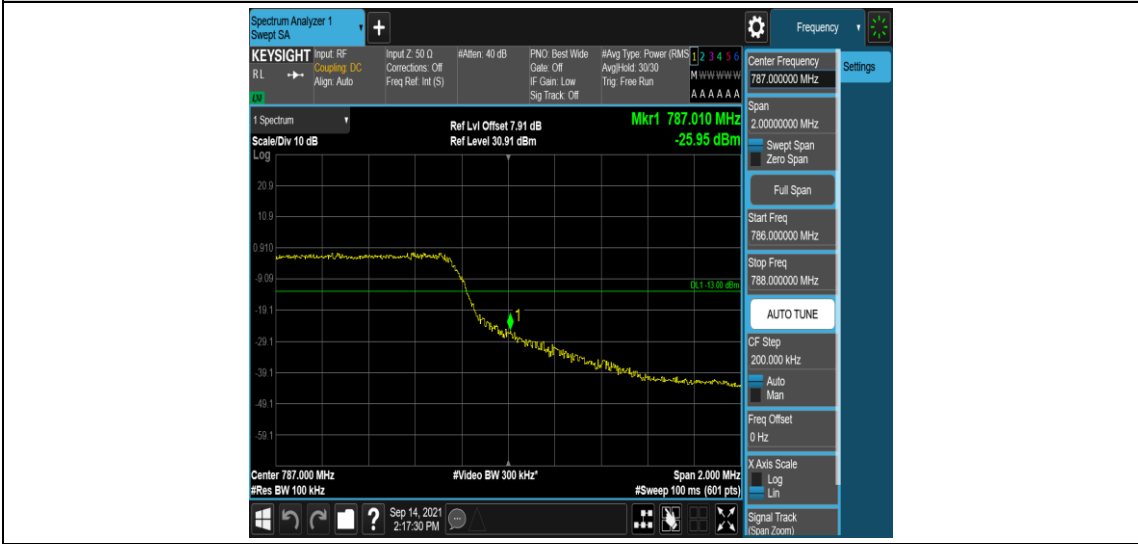
Band13-5MHz-16QAM-23205-25RB#0



Band13-5MHz-16QAM-23255-1RB#0



Band13-5MHz-16QAM-23255-1RB#24



Band13-5MHz-16QAM-23255-25RB#0

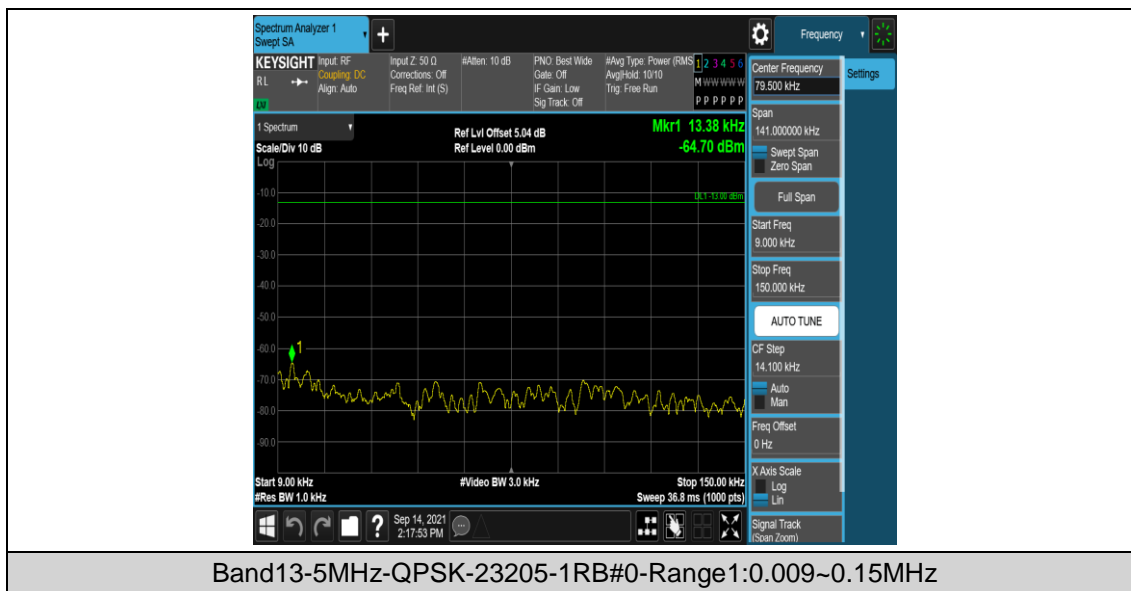
## Appendix E: Conducted Spurious Emission

### Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Verdict
Band13	5MHz	QPSK	23205	1RB#0	Range1:0.009~0.15MHz	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range2:0.15~30MHz	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range3:30~1000MHz	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range5:763~775MHz	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range6:793~805MHz	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range4:1000~10000MHz	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range7:1559~1610MHz	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range1:0.009~0.15MHz	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range2:0.15~30MHz	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range3:30~1000MHz	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range5:763~775MHz	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range6:793~805MHz	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range4:1000~10000MHz	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range7:1559~1610MHz	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range1:0.009~0.15MHz	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range2:0.15~30MHz	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range3:30~1000MHz	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range5:763~775MHz	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range6:793~805MHz	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range4:1000~10000MHz	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range7:1559~1610MHz	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range1:0.009~0.15MHz	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range2:0.15~30MHz	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range3:30~1000MHz	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range5:763~775MHz	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range6:793~805MHz	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range4:1000~10000MHz	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range7:1559~1610MHz	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range1:0.009~0.15MHz	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range2:0.15~30MHz	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range3:30~1000MHz	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range5:763~775MHz	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range6:793~805MHz	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range4:1000~10000MHz	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range7:1559~1610MHz	PASS

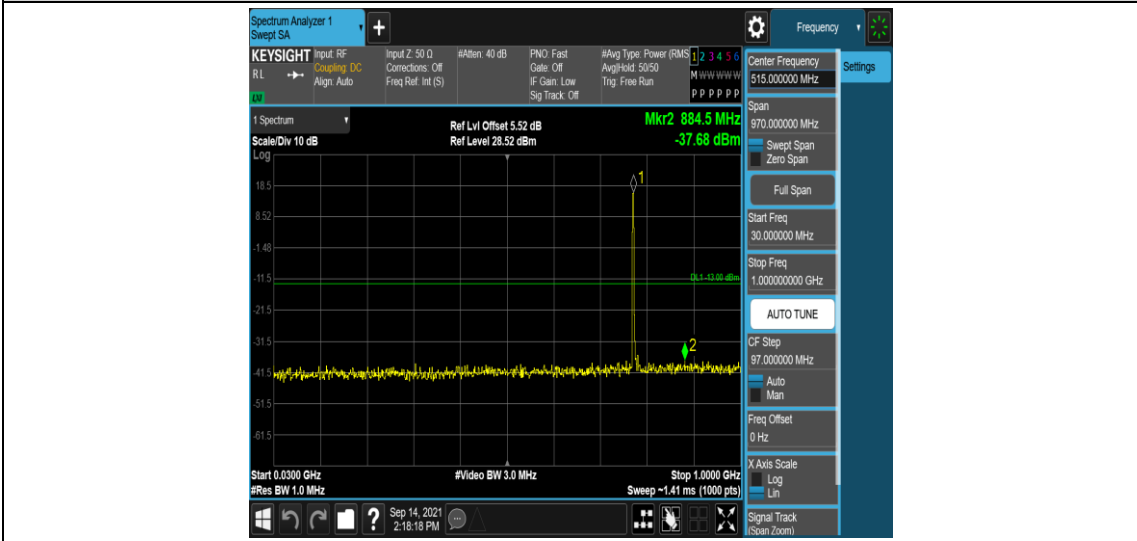
Band13	5MHz	16QAM	23255	1RB#0	Range1:0.009~0.15MHz	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range2:0.15~30MHz	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range3:30~1000MHz	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range5:763~775MHz	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range6:793~805MHz	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range4:1000~10000MHz	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range7:1559~1610MHz	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range1:0.009~0.15MHz	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range2:0.15~30MHz	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range3:30~1000MHz	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range5:763~775MHz	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range6:793~805MHz	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range4:1000~10000MHz	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range7:1559~1610MHz	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range1:0.009~0.15MHz	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range2:0.15~30MHz	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range3:30~1000MHz	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range5:763~775MHz	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range6:793~805MHz	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range4:1000~10000MHz	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range7:1559~1610MHz	PASS

### Test Graphs

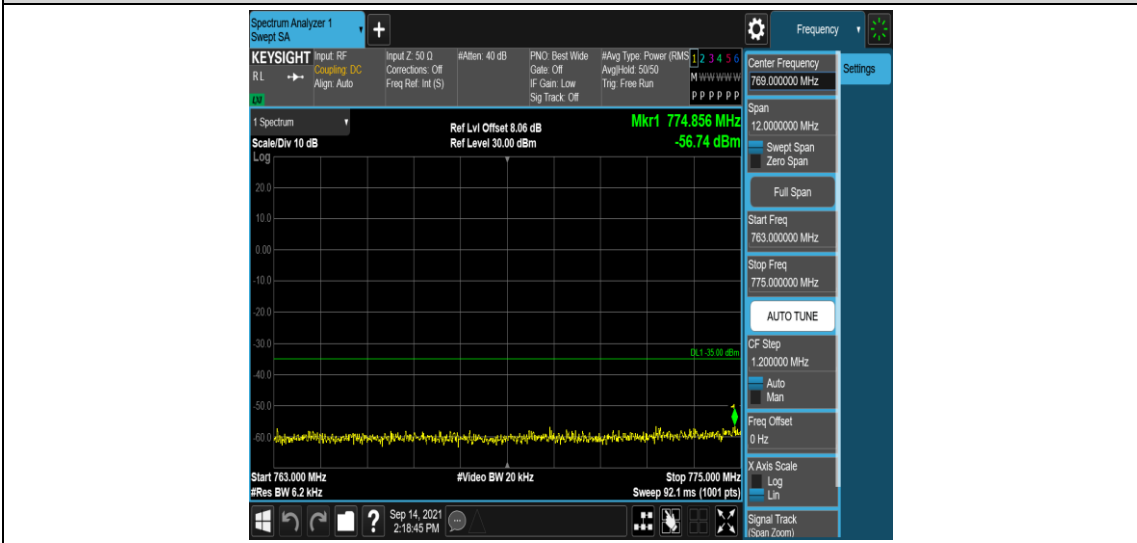




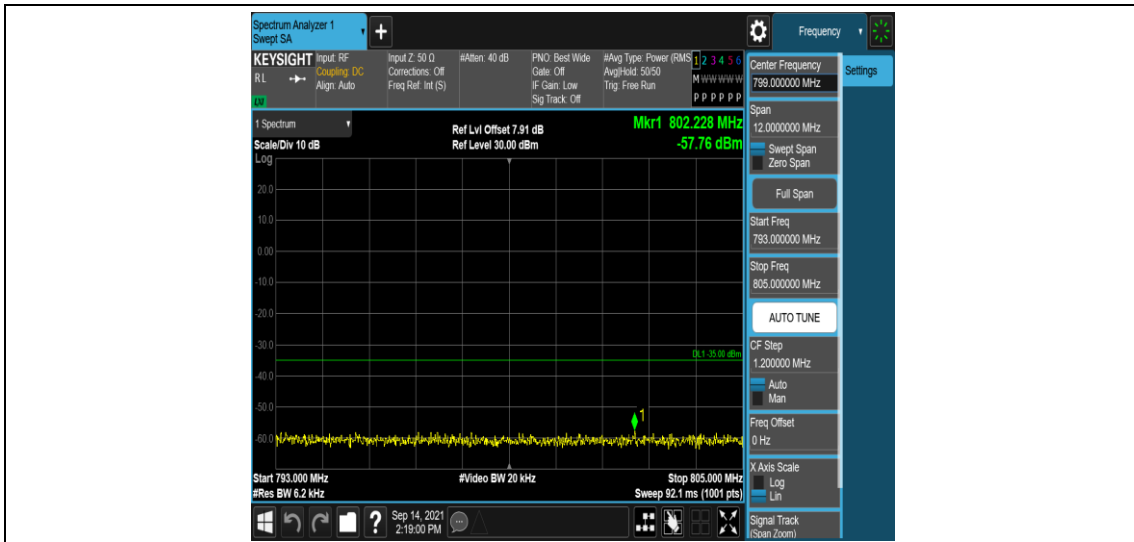
Band13-5MHz-QPSK-23205-1RB#0-Range2:0.15~30MHz



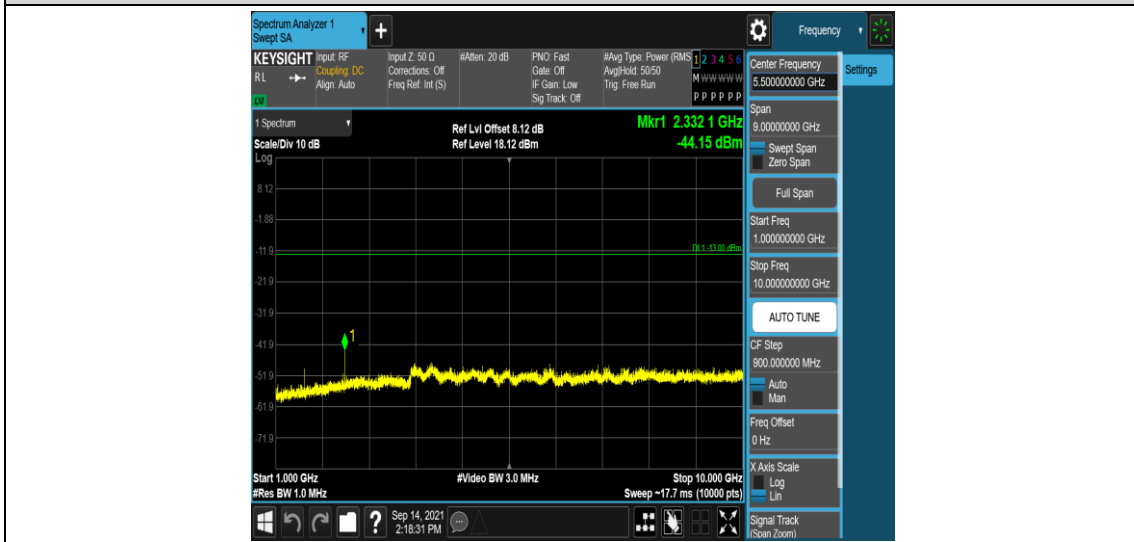
Band13-5MHz-QPSK-23205-1RB#0-Range3:30~1000MHz



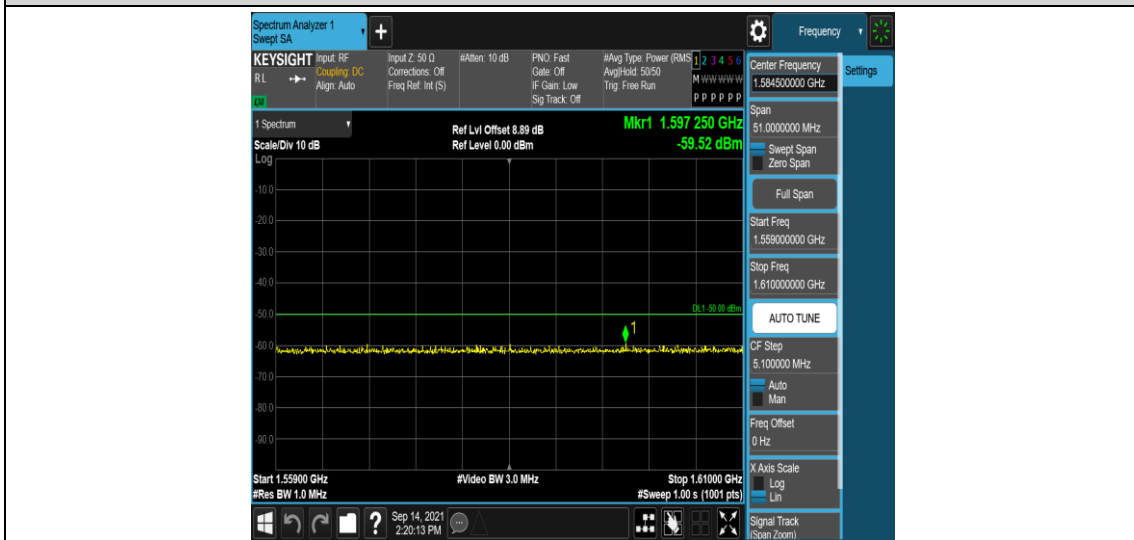
Band13-5MHz-QPSK-23205-1RB#0-Range5:763~775MHz



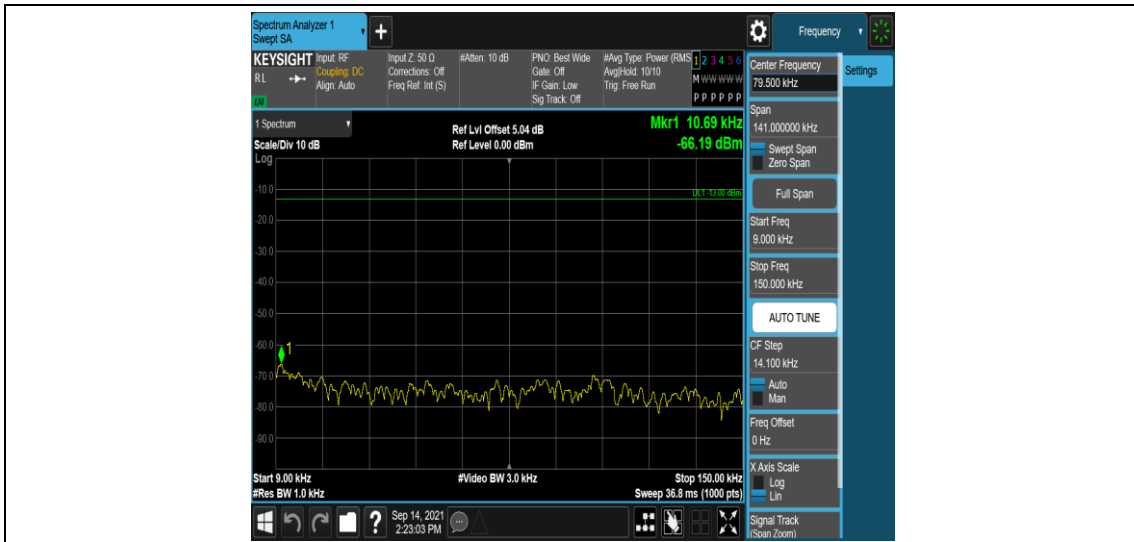
Band13-5MHz-QPSK-23205-1RB#0-Range6:793~805MHz



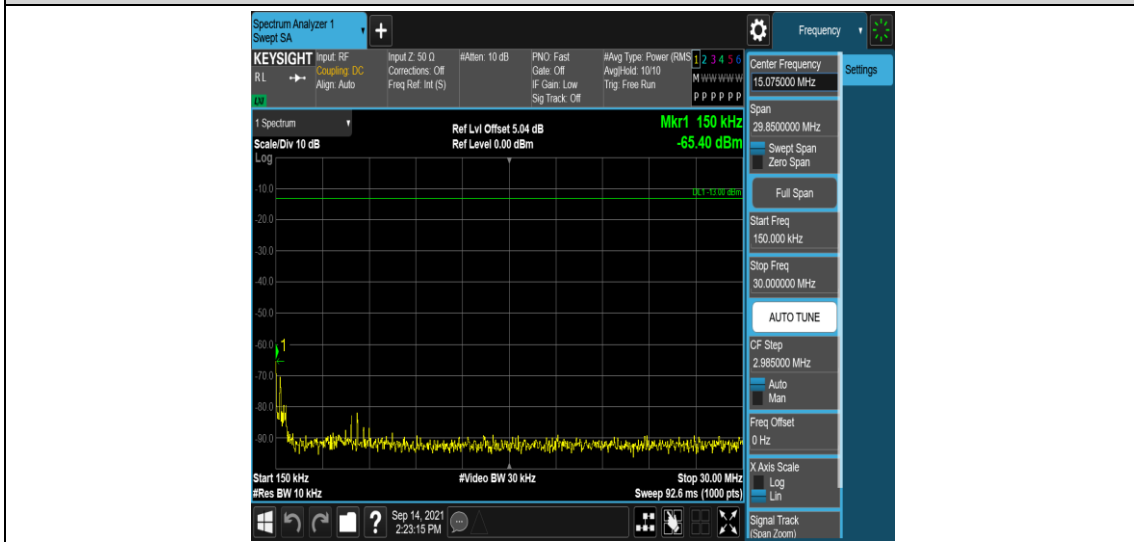
Band13-5MHz-QPSK-23205-1RB#0-Range4:1000~10000MHz



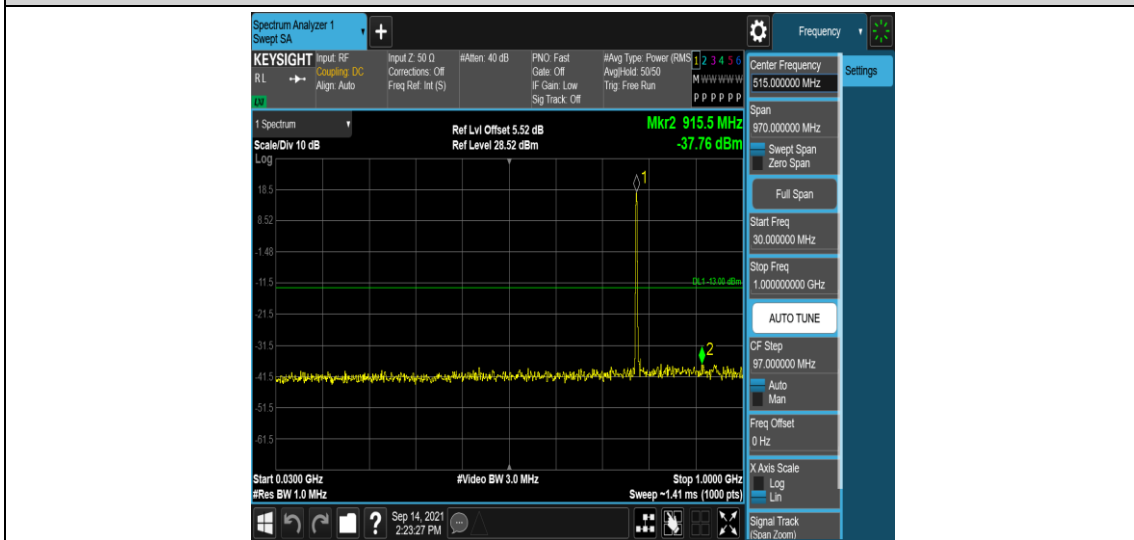
Band13-5MHz-QPSK-23205-1RB#0-Range7:1559~1610MHz



Band13-5MHz-QPSK-23230-1RB#0-Range1:0.009~0.15MHz



Band13-5MHz-QPSK-23230-1RB#0-Range2:0.15~30MHz

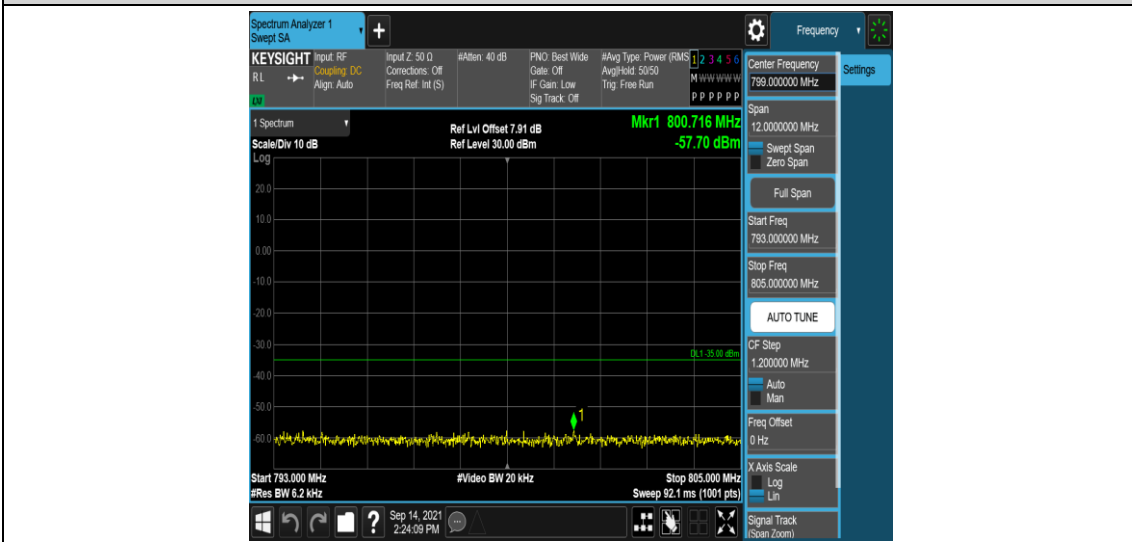


Band13-5MHz-QPSK-23230-1RB#0-Range3:30~1000MHz

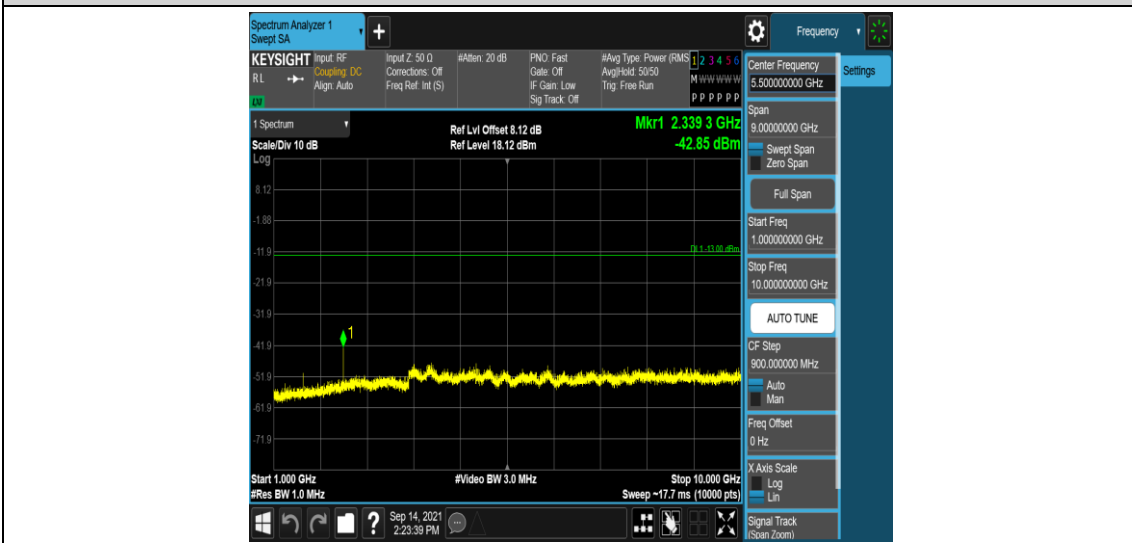




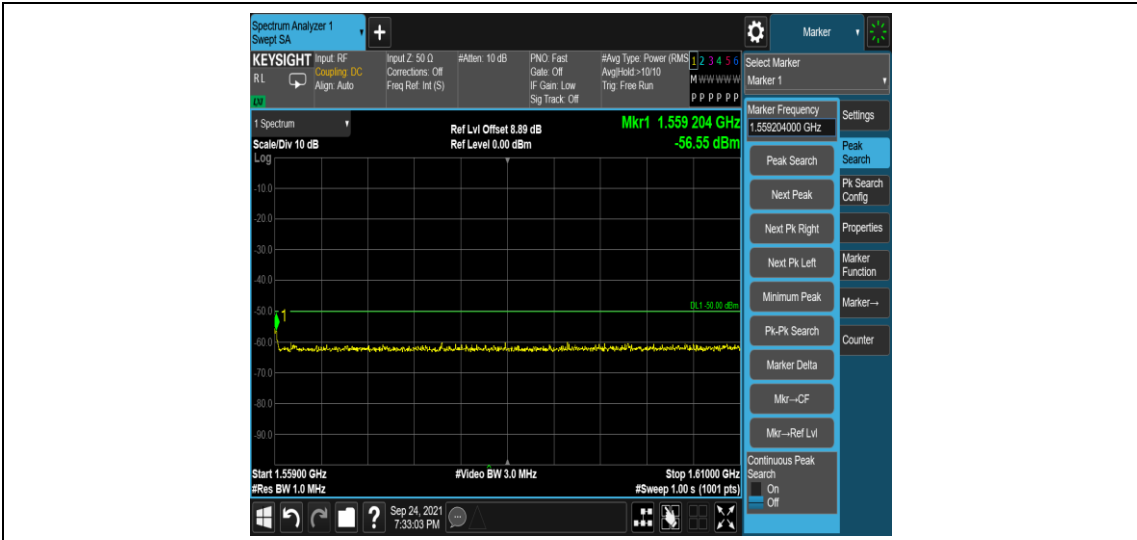
Band13-5MHz-QPSK-23230-1RB#0-Range5:763~775MHz



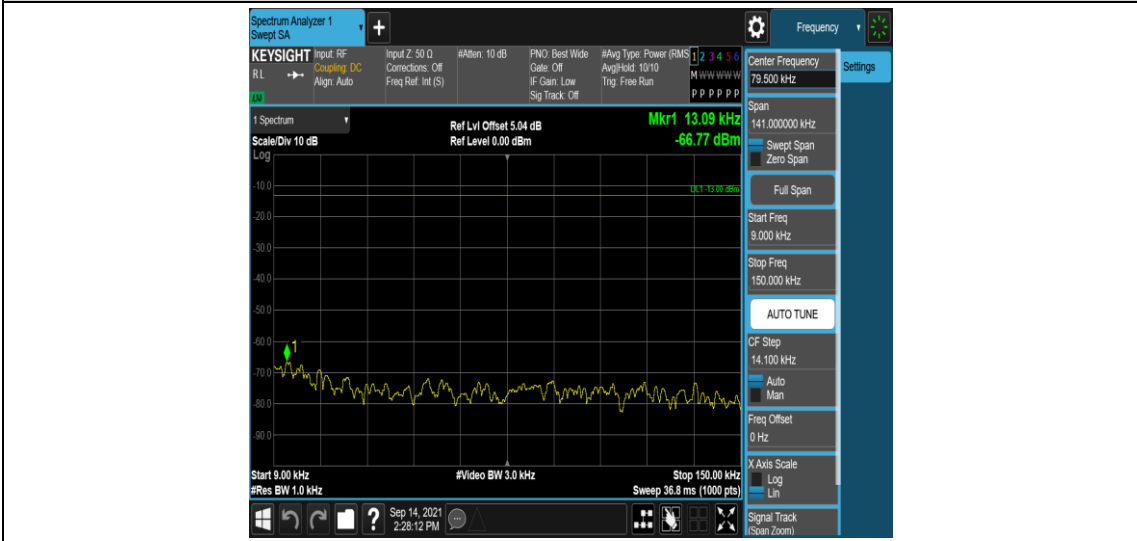
Band13-5MHz-QPSK-23230-1RB#0-Range6:793~805MHz



Band13-5MHz-QPSK-23230-1RB#0-Range4:1000~10000MHz



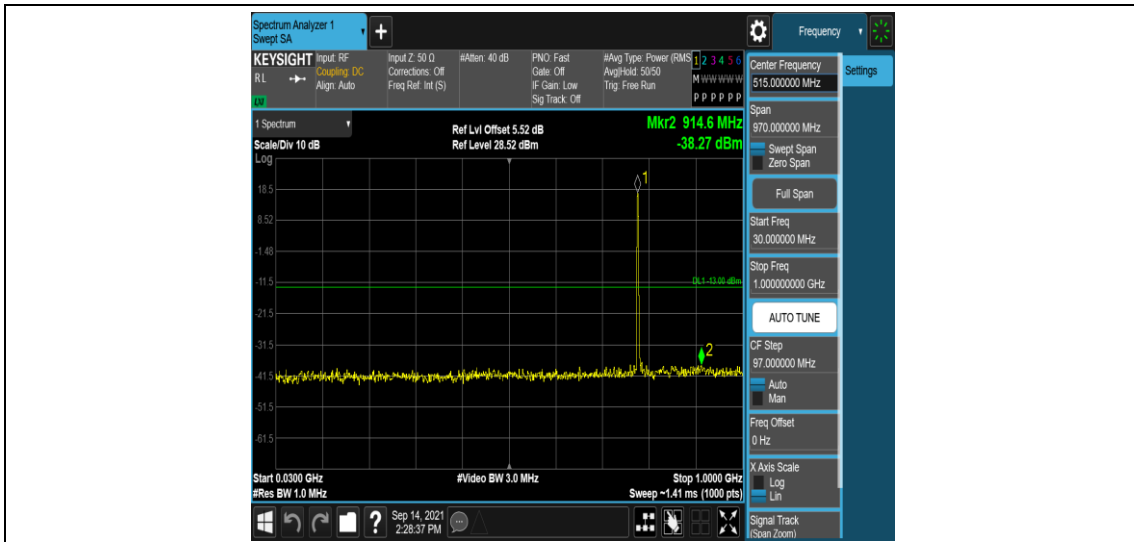
Band13-5MHz-QPSK-23230-1RB#0-Range7:1559~1610MHz



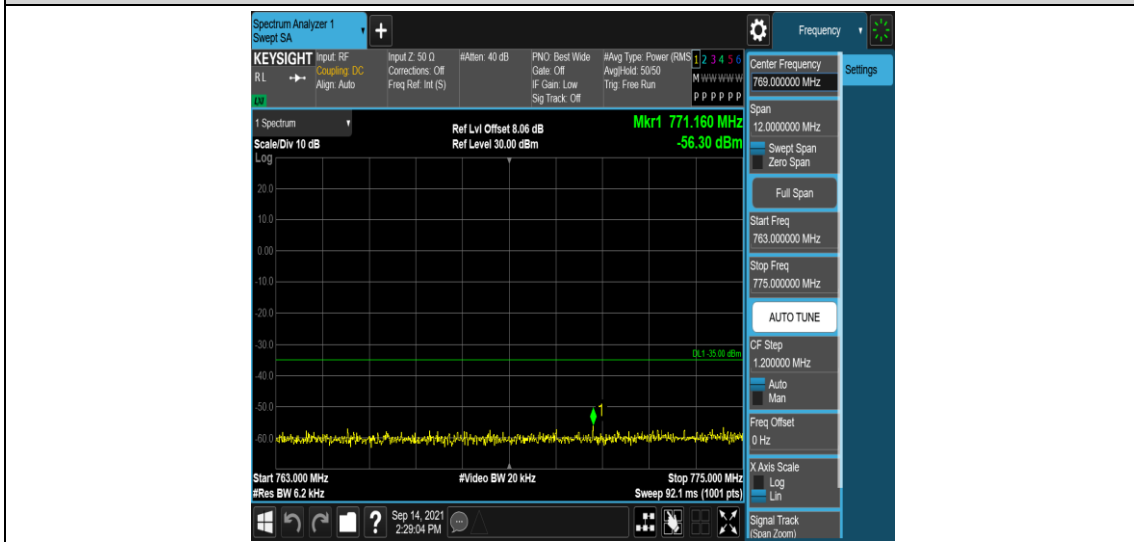
Band13-5MHz-QPSK-23255-1RB#0-Range1:0.009~0.15MHz



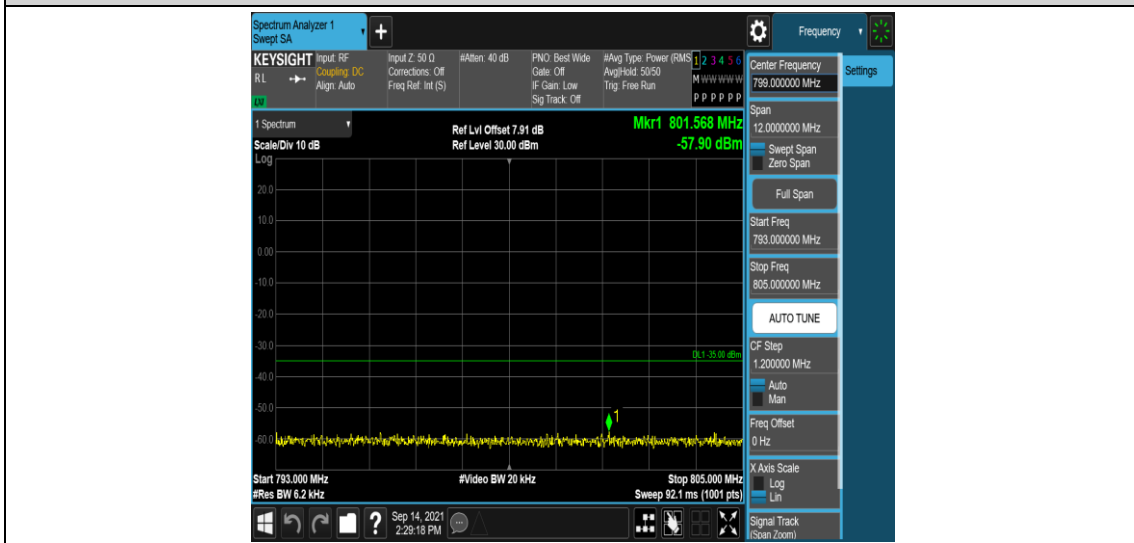
Band13-5MHz-QPSK-23255-1RB#0-Range2:0.15~30MHz



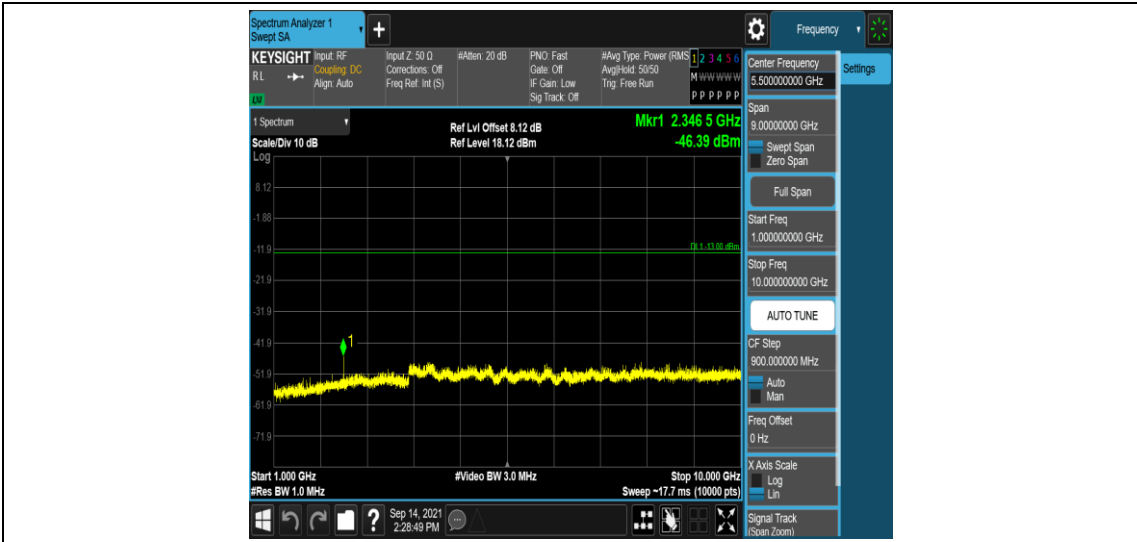
Band13-5MHz-QPSK-23255-1RB#0-Range3:30~1000MHz



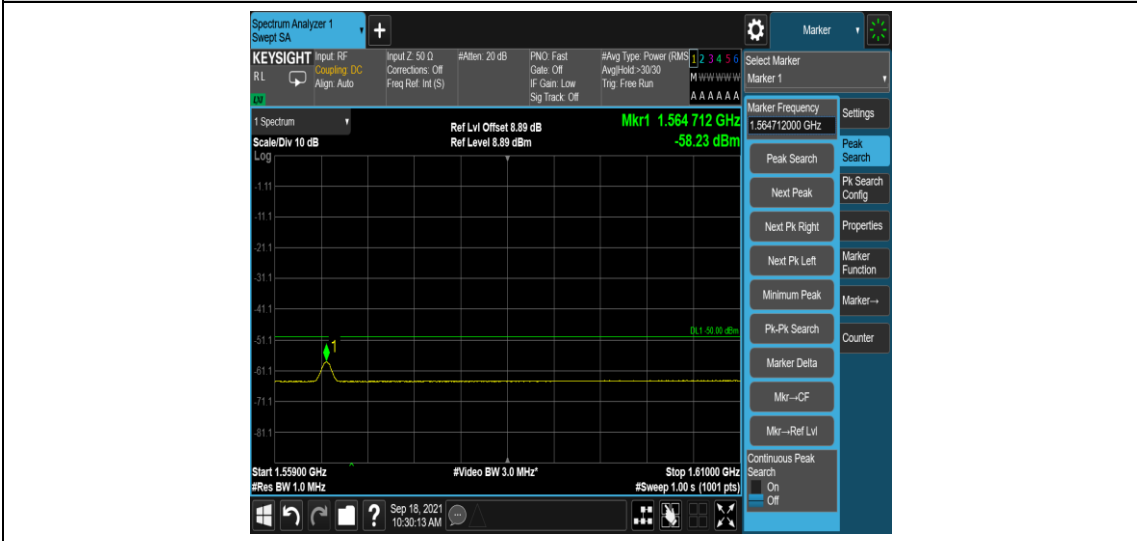
Band13-5MHz-QPSK-23255-1RB#0-Range5:763~775MHz



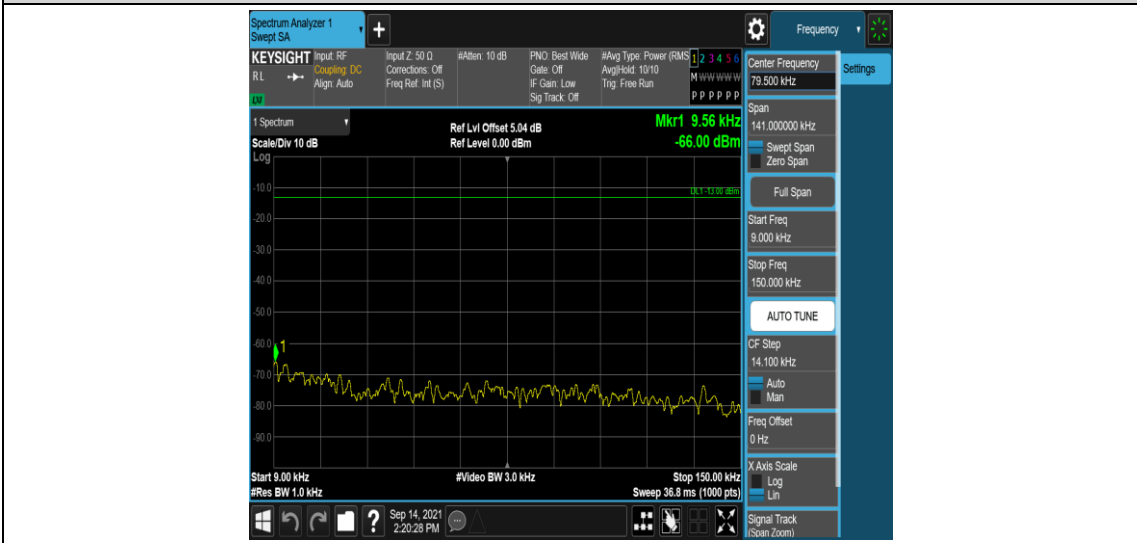
Band13-5MHz-QPSK-23255-1RB#0-Range6:793~805MHz



Band13-5MHz-QPSK-23255-1RB#0-Range4:1000~10000MHz



Band13-5MHz-QPSK-23255-1RB#0-Range7:1559~1610MHz



Band13-5MHz-16QAM-23205-1RB#0-Range1:0.009~0.15MHz