



Appendix K: Test Data for E-UTRA Band 13

Product Name: In-Vehicle Display Terminal
Test Model: VT-7A

Environmental Conditions

Temperature:	23.9° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Can Kun
Supervised by:	Nick Peng





K.1 Conducted Output Power Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	23.79	PASS
Band13	5MHz	16QAM	23205	1RB#0	22.60	PASS
Band13	5MHz	QPSK	23205	1RB#12	23.79	PASS
Band13	5MHz	16QAM	23205	1RB#12	22.57	PASS
Band13	5MHz	QPSK	23205	1RB#24	23.72	PASS
Band13	5MHz	16QAM	23205	1RB#24	22.61	PASS
Band13	5MHz	QPSK	23205	12RB#0	22.96	PASS
Band13	5MHz	16QAM	23205	12RB#0	22.23	PASS
Band13	5MHz	QPSK	23205	12RB#6	22.95	PASS
Band13	5MHz	16QAM	23205	12RB#6	22.22	PASS
Band13	5MHz	QPSK	23205	12RB#13	22.88	PASS
Band13	5MHz	16QAM	23205	12RB#13	22.22	PASS
Band13	5MHz	QPSK	23205	25RB#0	22.83	PASS
Band13	5MHz	16QAM	23205	25RB#0	22.29	PASS
Band13	5MHz	QPSK	23230	1RB#0	23.53	PASS
Band13	5MHz	16QAM	23230	1RB#0	23.46	PASS
Band13	5MHz	QPSK	23230	1RB#12	23.42	PASS
Band13	5MHz	16QAM	23230	1RB#12	23.44	PASS
Band13	5MHz	QPSK	23230	1RB#24	23.74	PASS
Band13	5MHz	16QAM	23230	1RB#24	22.82	PASS
Band13	5MHz	QPSK	23230	12RB#0	22.87	PASS
Band13	5MHz	16QAM	23230	12RB#0	22.20	PASS
Band13	5MHz	QPSK	23230	12RB#6	22.87	PASS
Band13	5MHz	16QAM	23230	12RB#6	22.20	PASS
Band13	5MHz	QPSK	23230	12RB#13	22.82	PASS
Band13	5MHz	16QAM	23230	12RB#13	22.11	PASS
Band13	5MHz	QPSK	23230	25RB#0	22.81	PASS
Band13	5MHz	16QAM	23230	25RB#0	21.97	PASS
Band13	5MHz	QPSK	23255	1RB#0	23.61	PASS
Band13	5MHz	16QAM	23255	1RB#0	22.88	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.46	PASS
Band13	5MHz	16QAM	23255	1RB#12	22.76	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.26	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.44	PASS
Band13	5MHz	QPSK	23255	12RB#0	22.77	PASS



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Band13	5MHz	16QAM	23255	12RB#0	22.02	PASS
Band13	5MHz	QPSK	23255	12RB#6	22.76	PASS
Band13	5MHz	16QAM	23255	12RB#6	22.07	PASS
Band13	5MHz	QPSK	23255	12RB#13	22.60	PASS
Band13	5MHz	16QAM	23255	12RB#13	22.09	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.65	PASS
Band13	5MHz	16QAM	23255	25RB#0	22.09	PASS
Band13	10MHz	QPSK	23230	1RB#0	23.20	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.63	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.25	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.61	PASS
Band13	10MHz	QPSK	23230	1RB#49	22.71	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.22	PASS
Band13	10MHz	QPSK	23230	25RB#0	22.30	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.65	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.30	PASS
Band13	10MHz	16QAM	23230	25RB#12	21.73	PASS
Band13	10MHz	QPSK	23230	25RB#25	22.18	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.46	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.20	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.62	PASS





K.2 Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	4.43	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	5.09	13	PASS
Band13	5MHz	QPSK	23205	25RB#0	5.36	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	5.93	13	PASS
Band13	5MHz	QPSK	23230	1RB#0	4.55	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	5.07	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.36	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	6.00	13	PASS
Band13	5MHz	QPSK	23255	1RB#0	4.60	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	5.09	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	5.36	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	5.99	13	PASS
Band13	10MHz	QPSK	23230	1RB#0	4.44	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	5.00	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.36	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	5.98	13	PASS



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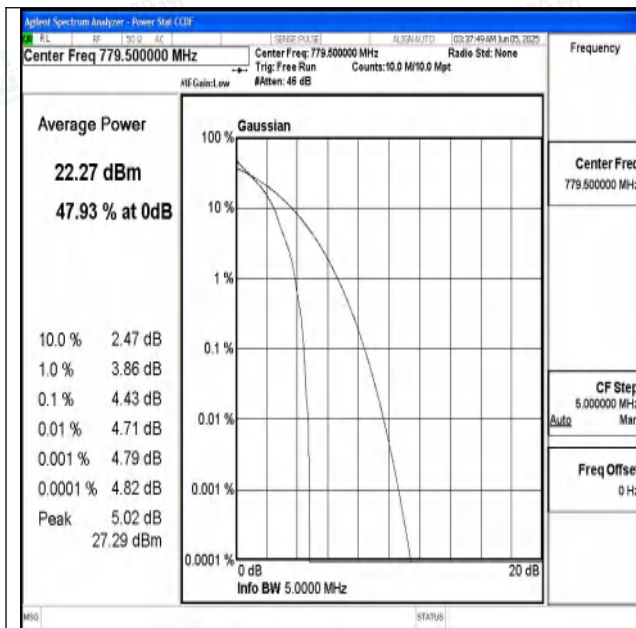
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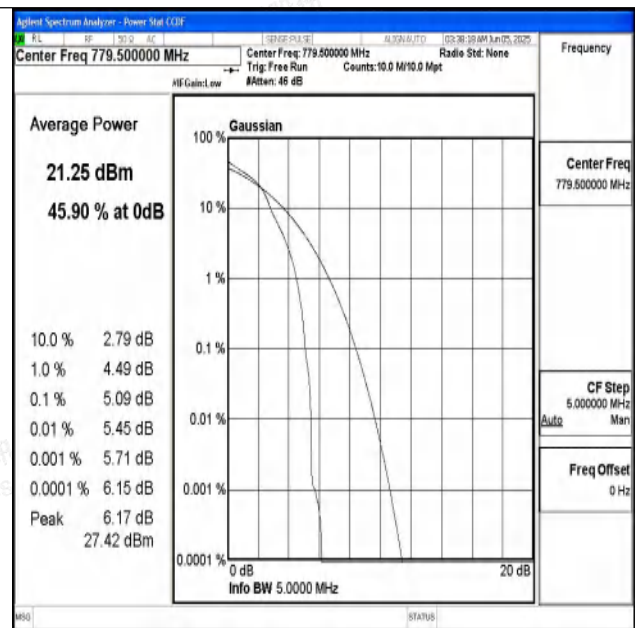
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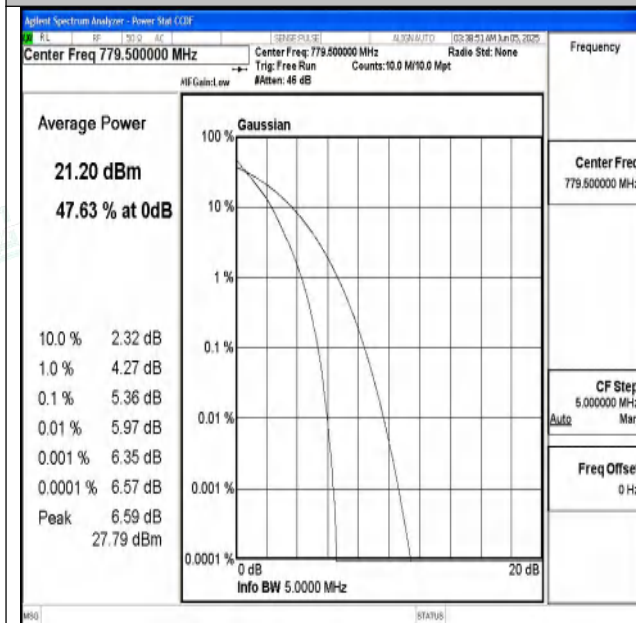
Test Graphs



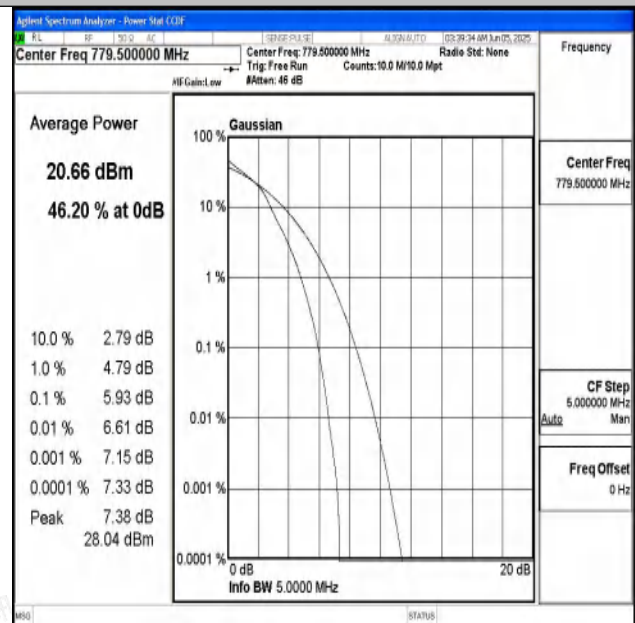
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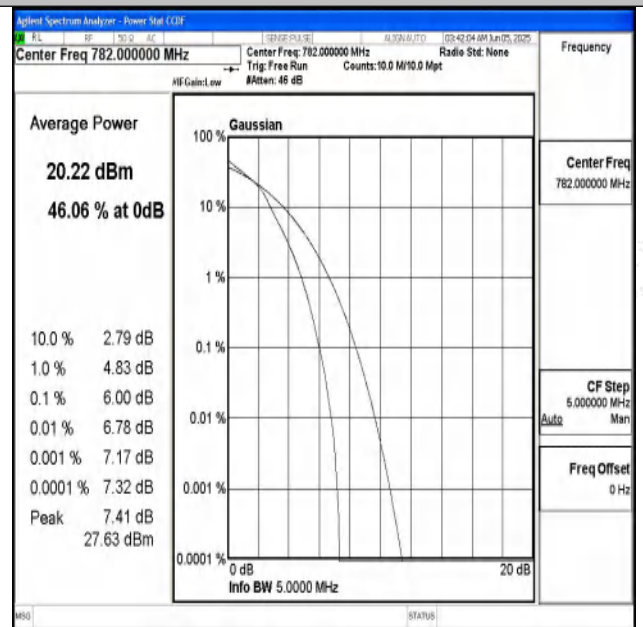
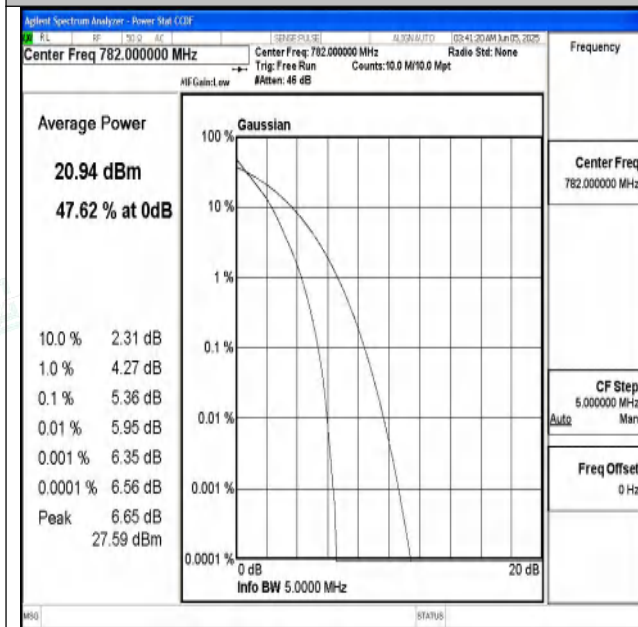
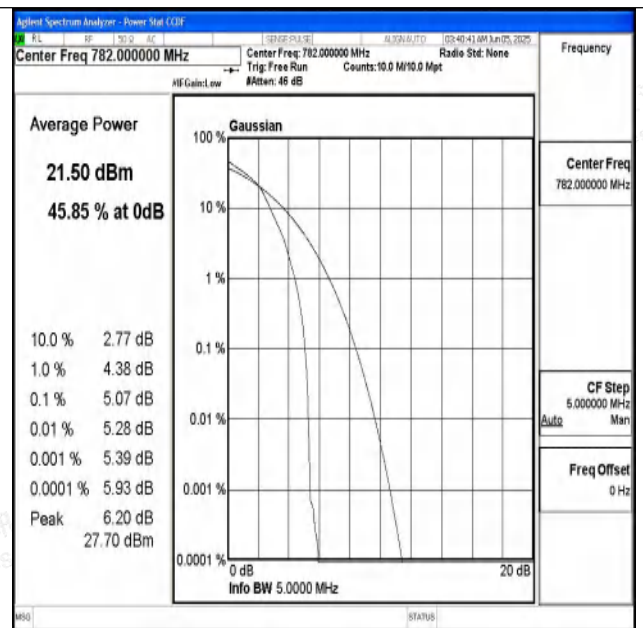
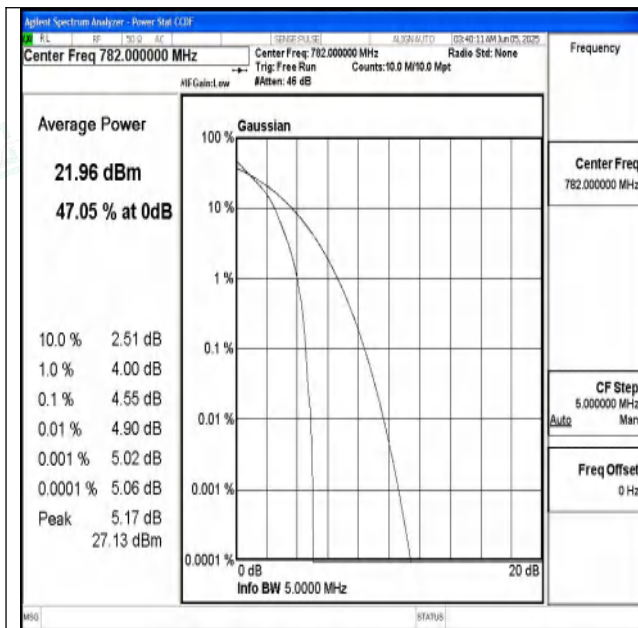


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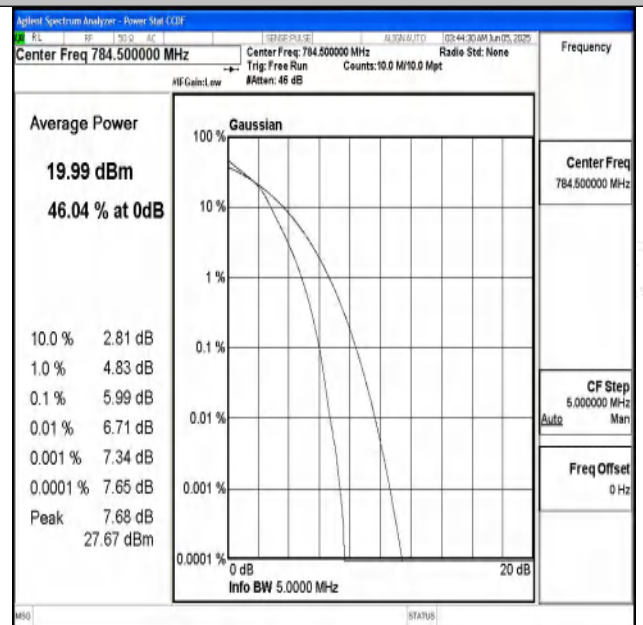
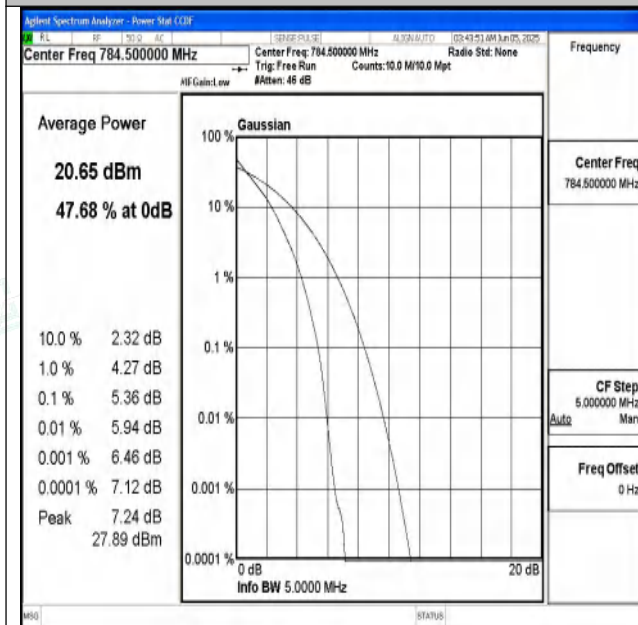
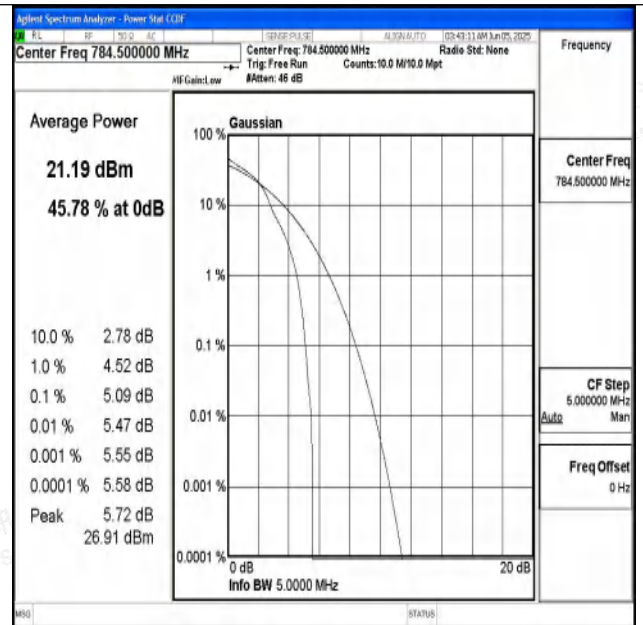
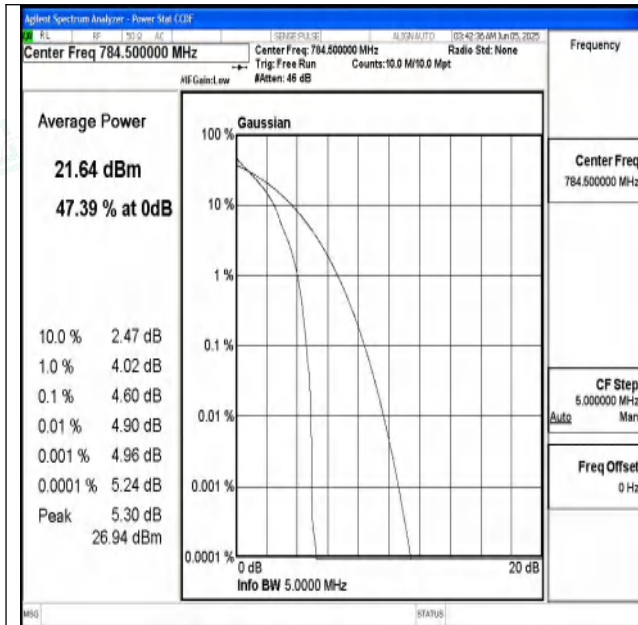


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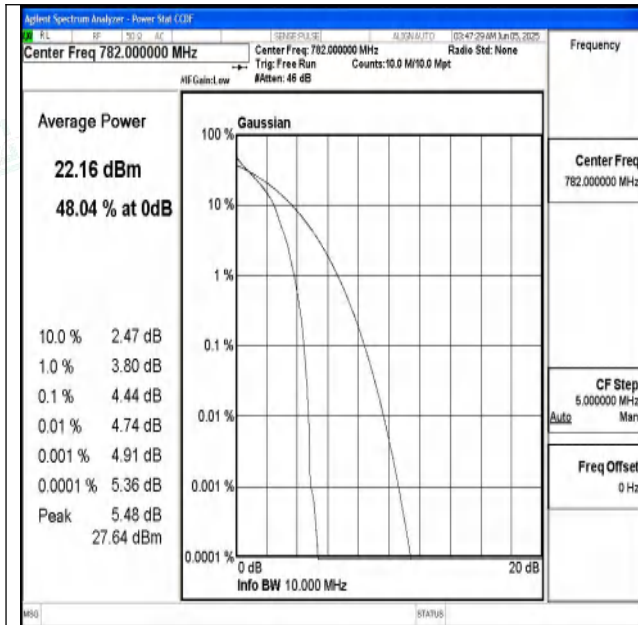


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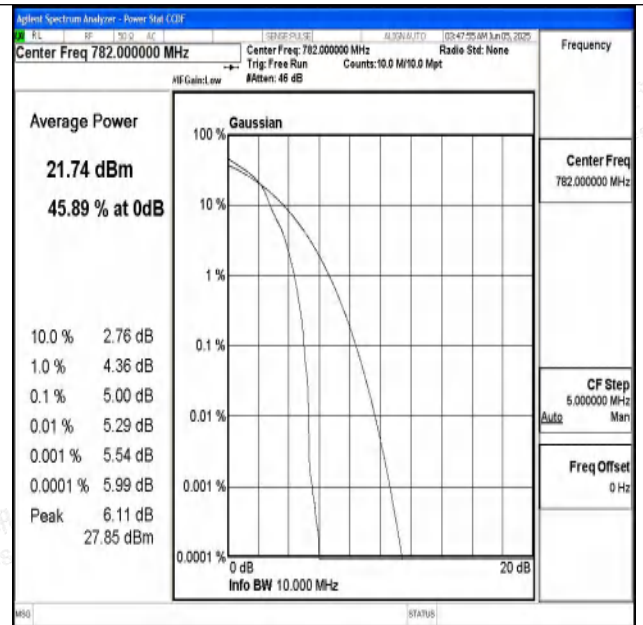
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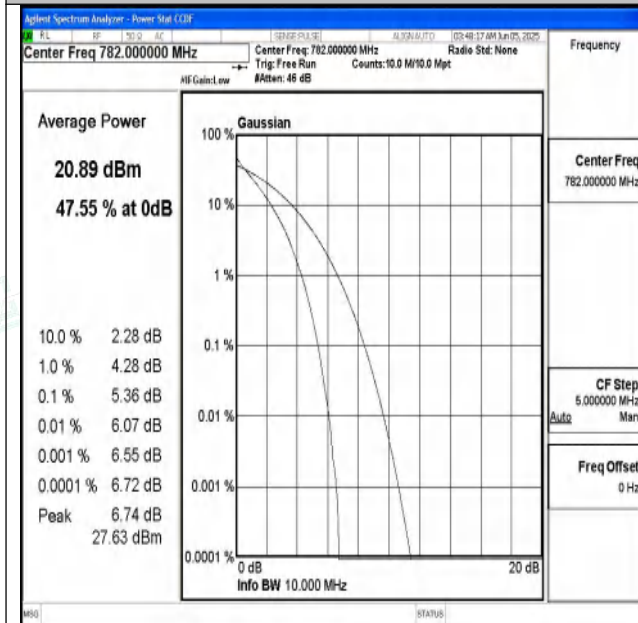
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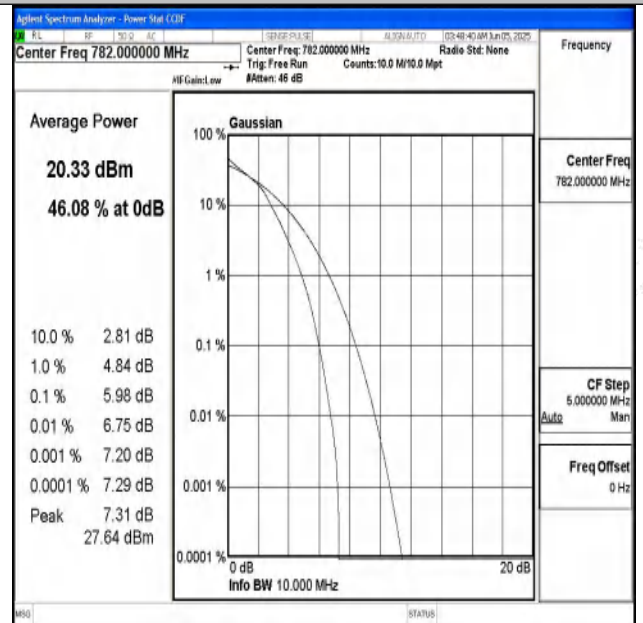
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Band13-10MHz-QPSK-23230-50RB#0-PASS



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



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K.3 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	4.5212	5.217	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5262	5.282	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5147	5.432	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5221	5.286	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5167	5.182	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5378	5.441	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9938	10.04	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9855	10.12	PASS



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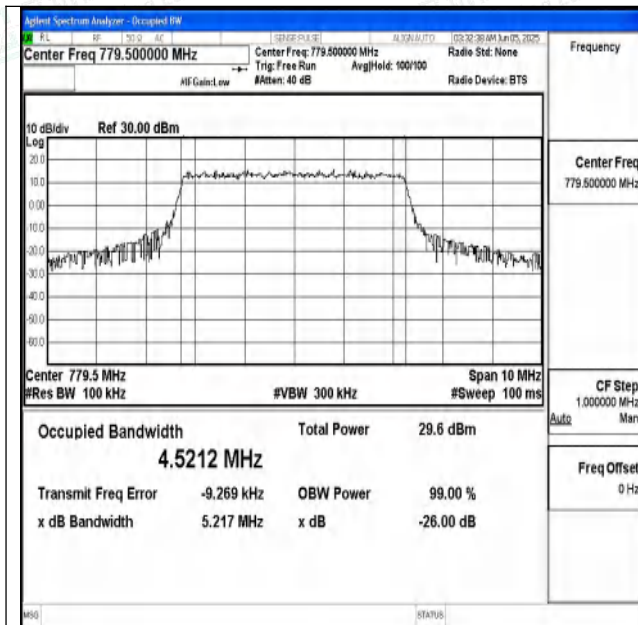
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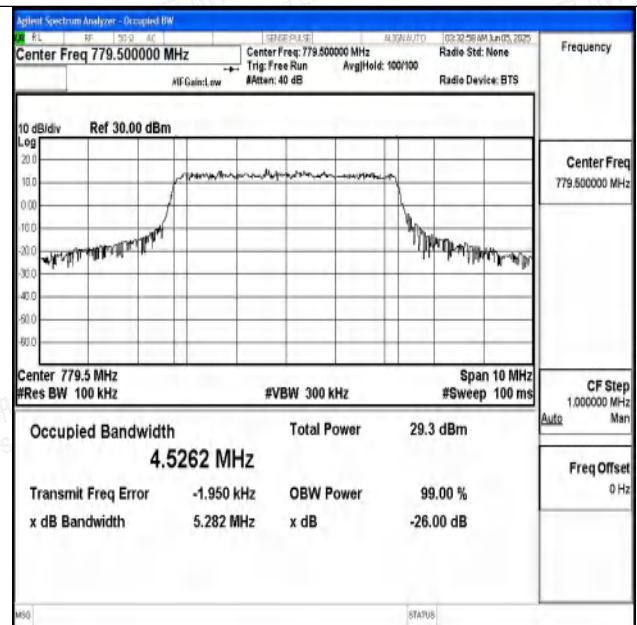
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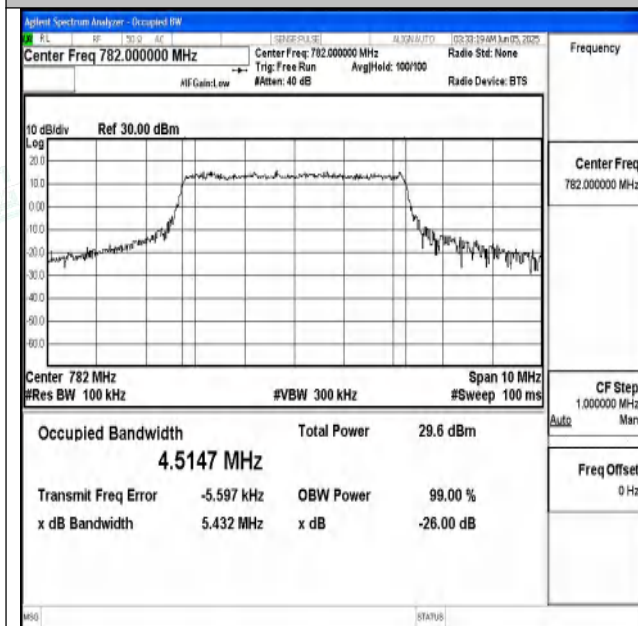
Test Graphs



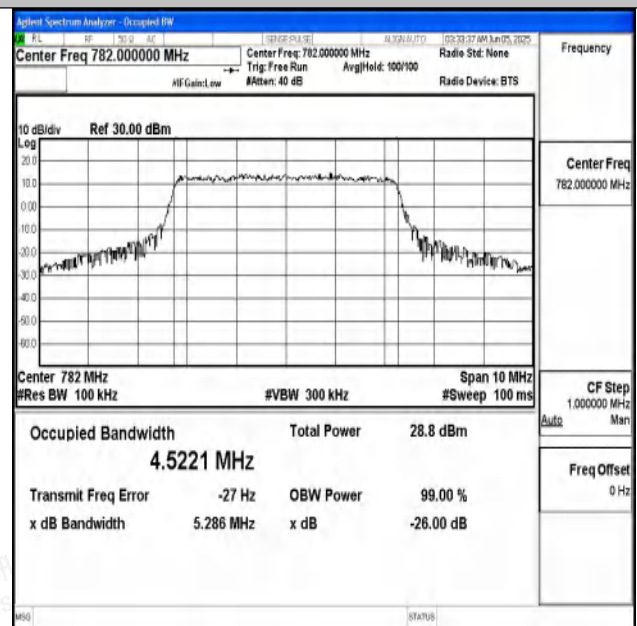
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Band13-5MHz-16QAM-23205-25RB#0-PASS

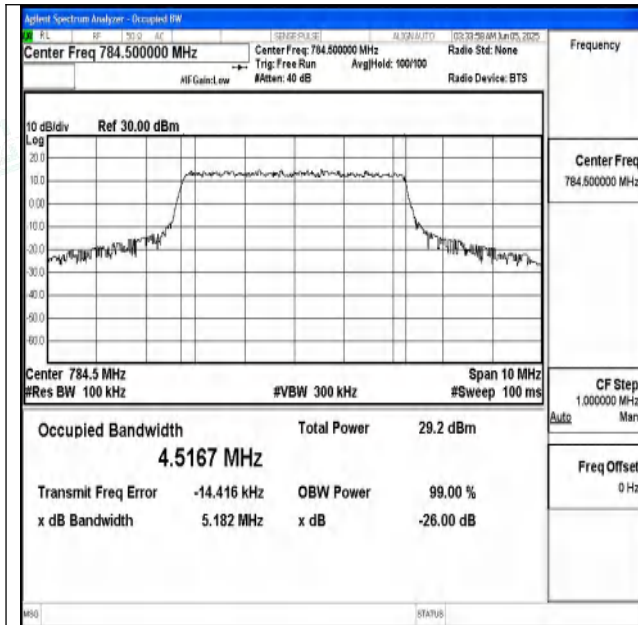


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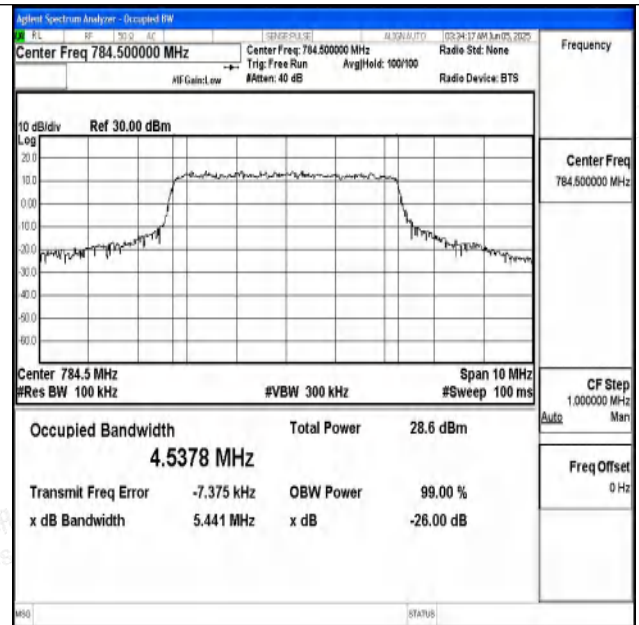


Band13-5MHz-16QAM-23230-25RB#0-PASS

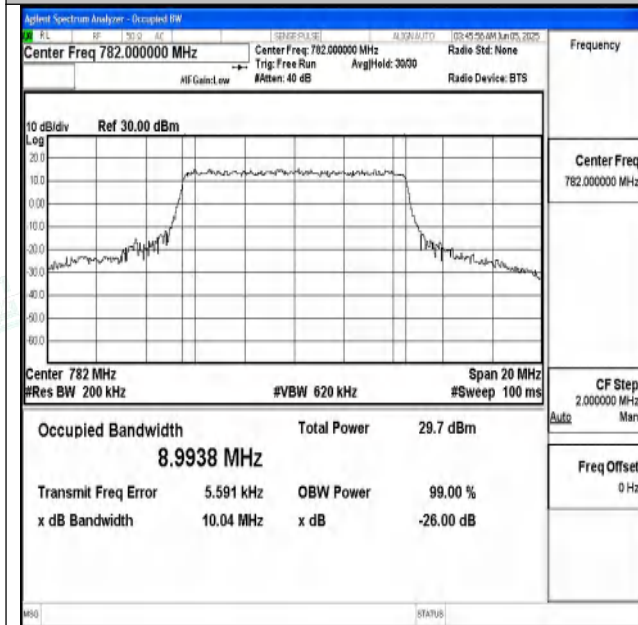




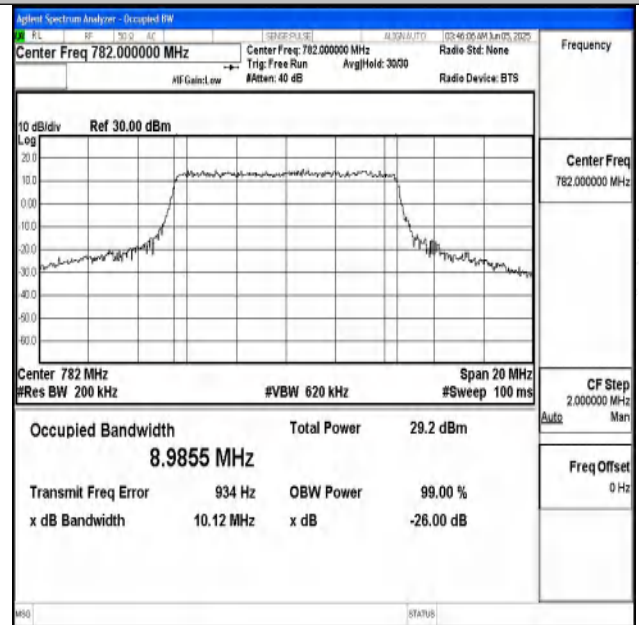
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Band13-5MHz-16QAM-23255-25RB#0-PASS



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



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



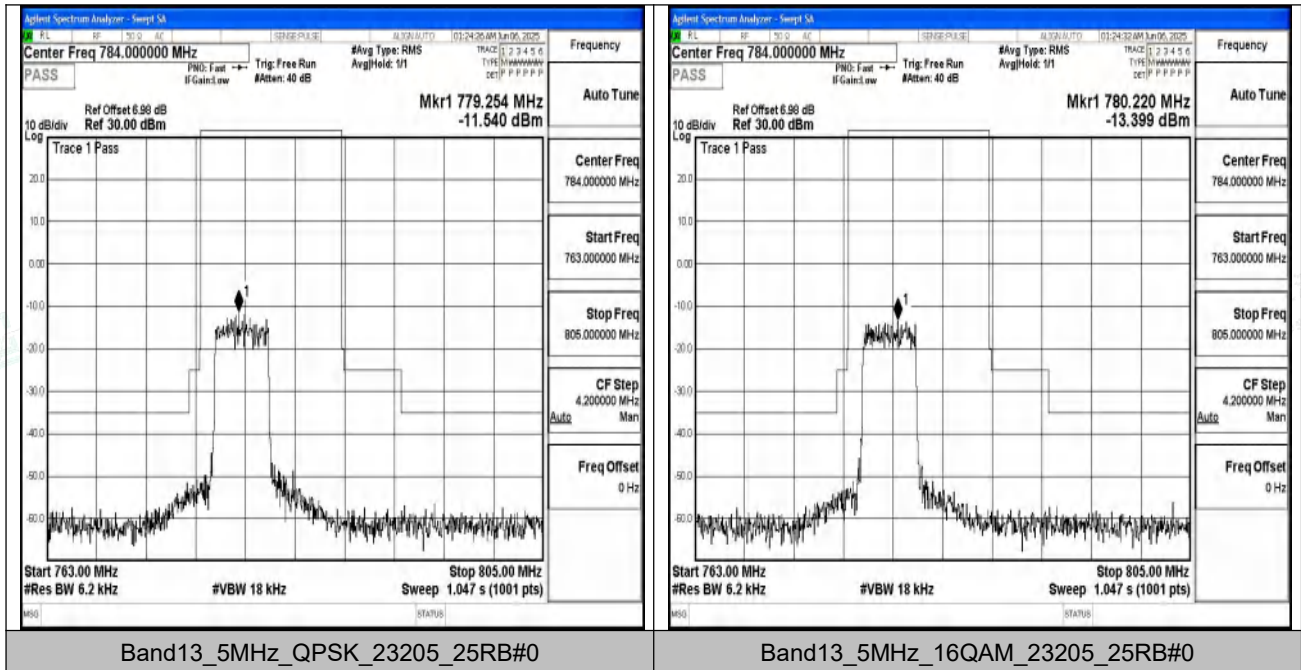


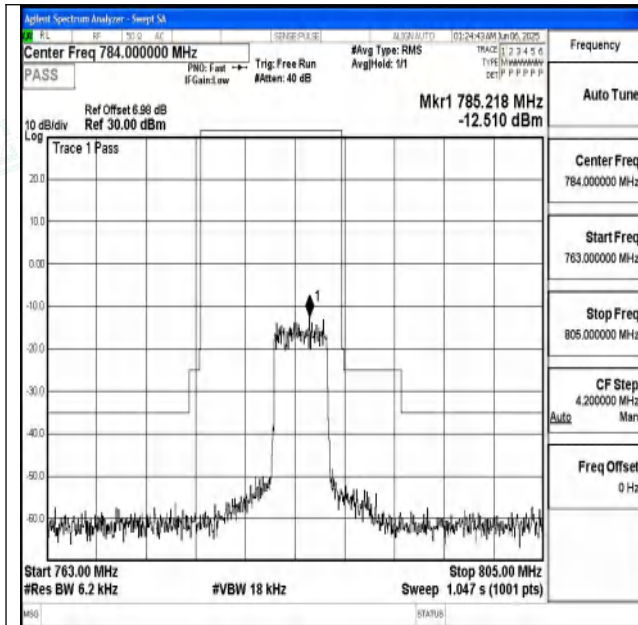
K.4 Band Edge

Test Result

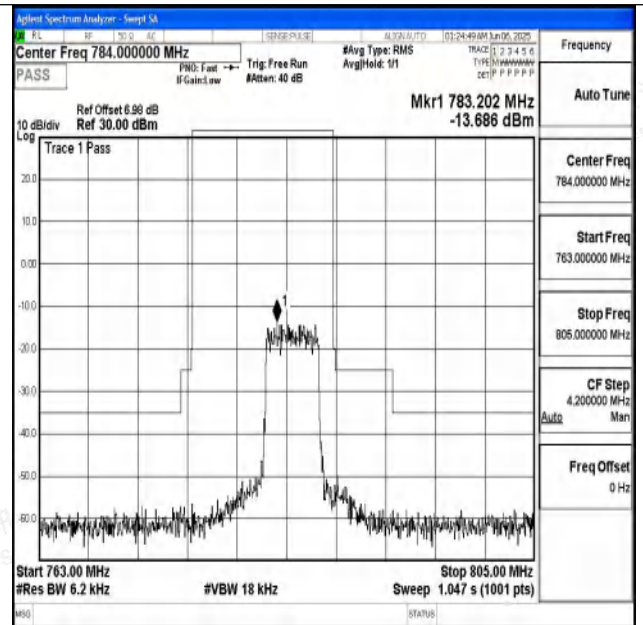
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	-51.64	PASS
Band13	5MHz	16QAM	23205	25RB#0	-54.16	PASS
Band13	5MHz	QPSK	23255	25RB#0	-56.18	PASS
Band13	5MHz	16QAM	23255	25RB#0	-57.12	PASS
Band13	10MHz	QPSK	23230	50RB#0	-52.52	PASS
Band13	10MHz	16QAM	23230	50RB#0	-54.76	PASS

Test Graphs

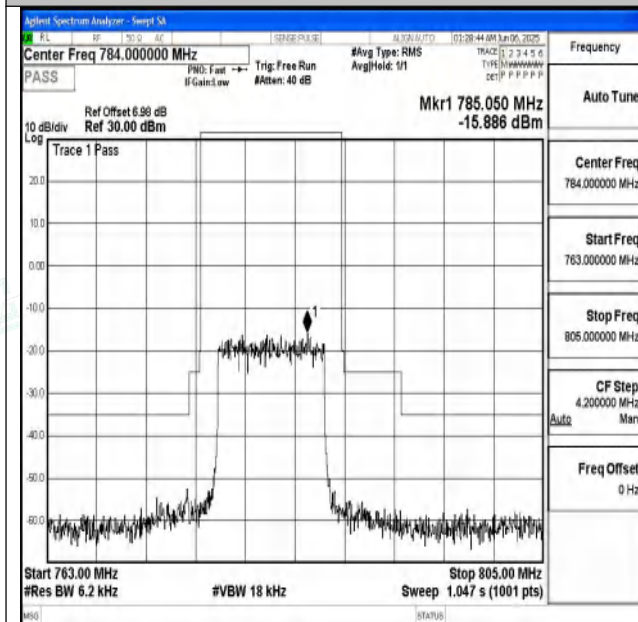




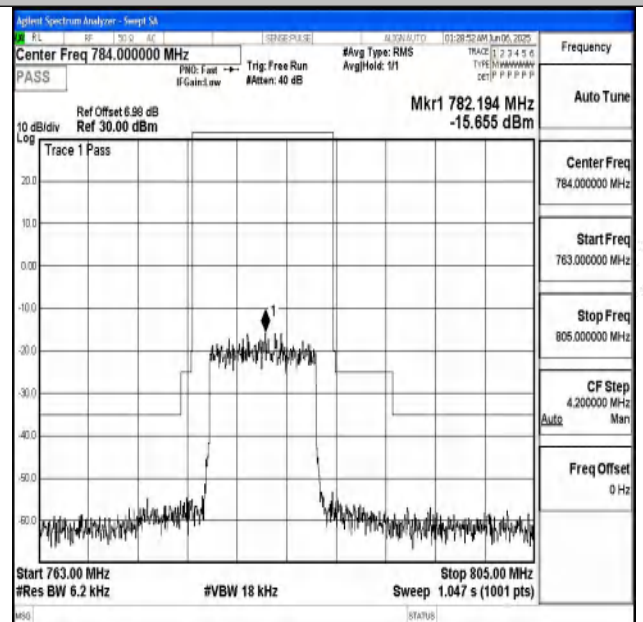
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Band13_5MHz_16QAM_23255_25RB#0



Band13_10MHz_QPSK_23230_50RB#0



Band13_10MHz_16QAM_23230_50RB#0





K.5 Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	0.009~0.15	-57.91	PASS
Band13	5MHz	QPSK	23205	1RB#0	0.15~30	-48.56	PASS
Band13	5MHz	QPSK	23205	1RB#0	30~1000	-52.42	PASS
Band13	5MHz	QPSK	23205	1RB#0	1000~3000	-39.05	PASS
Band13	5MHz	QPSK	23205	1RB#0	3000~10000	-35.37	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.009~0.15	-55.92	PASS
Band13	5MHz	16QAM	23205	1RB#0	0.15~30	-47.30	PASS
Band13	5MHz	16QAM	23205	1RB#0	30~1000	-52.63	PASS
Band13	5MHz	16QAM	23205	1RB#0	1000~3000	-38.57	PASS
Band13	5MHz	16QAM	23205	1RB#0	3000~10000	-35.34	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.009~0.15	-60.38	PASS
Band13	5MHz	QPSK	23230	1RB#0	0.15~30	-43.20	PASS
Band13	5MHz	QPSK	23230	1RB#0	30~1000	-51.54	PASS
Band13	5MHz	QPSK	23230	1RB#0	1000~3000	-38.99	PASS
Band13	5MHz	QPSK	23230	1RB#0	3000~10000	-34.11	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.009~0.15	-59.30	PASS
Band13	5MHz	16QAM	23230	1RB#0	0.15~30	-46.62	PASS
Band13	5MHz	16QAM	23230	1RB#0	30~1000	-53.09	PASS
Band13	5MHz	16QAM	23230	1RB#0	1000~3000	-38.59	PASS
Band13	5MHz	16QAM	23230	1RB#0	3000~10000	-35.21	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.009~0.15	-60.80	PASS
Band13	5MHz	QPSK	23255	1RB#0	0.15~30	-47.16	PASS
Band13	5MHz	QPSK	23255	1RB#0	30~1000	-53.18	PASS
Band13	5MHz	QPSK	23255	1RB#0	1000~3000	-38.70	PASS
Band13	5MHz	QPSK	23255	1RB#0	3000~10000	-35.34	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.009~0.15	-56.81	PASS
Band13	5MHz	16QAM	23255	1RB#0	0.15~30	-43.86	PASS
Band13	5MHz	16QAM	23255	1RB#0	30~1000	-52.81	PASS
Band13	5MHz	16QAM	23255	1RB#0	1000~3000	-38.70	PASS
Band13	5MHz	16QAM	23255	1RB#0	3000~10000	-35.04	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.009~0.15	-54.73	PASS
Band13	10MHz	QPSK	23230	1RB#0	0.15~30	-47.85	PASS
Band13	10MHz	QPSK	23230	1RB#0	30~1000	-52.98	PASS
Band13	10MHz	QPSK	23230	1RB#0	1000~3000	-38.05	PASS



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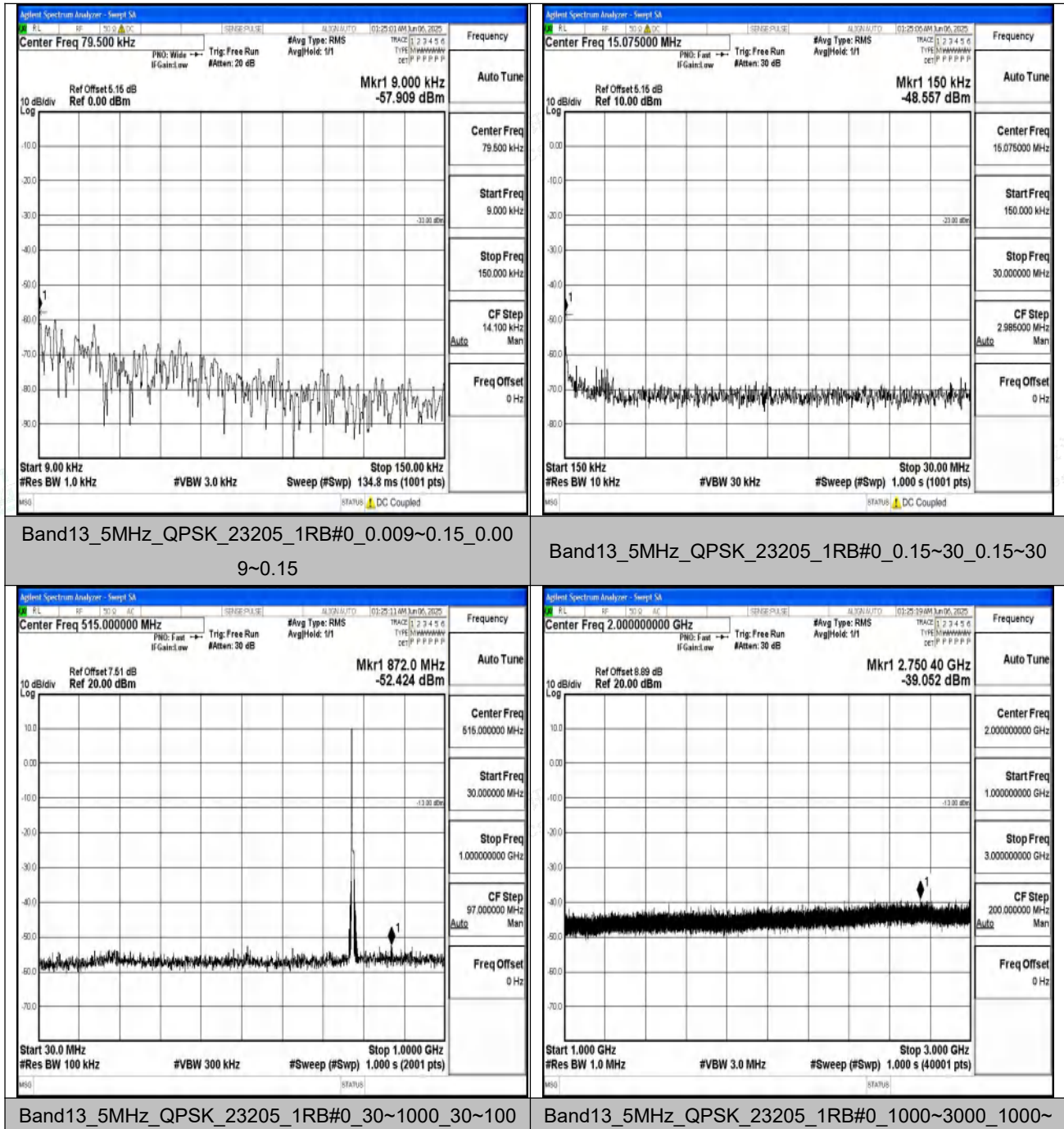
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Band13	10MHz	QPSK	23230	1RB#0	3000~10000	-35.11	PASS
Band13	10MHz	16QAM	23230	1RB#0	0.009~0.15	-54.78	PASS
Band13	10MHz	16QAM	23230	1RB#0	0.15~30	-44.45	PASS
Band13	10MHz	16QAM	23230	1RB#0	30~1000	-52.70	PASS
Band13	10MHz	16QAM	23230	1RB#0	1000~3000	-38.86	PASS
Band13	10MHz	16QAM	23230	1RB#0	3000~10000	-35.61	PASS

Test Graphs

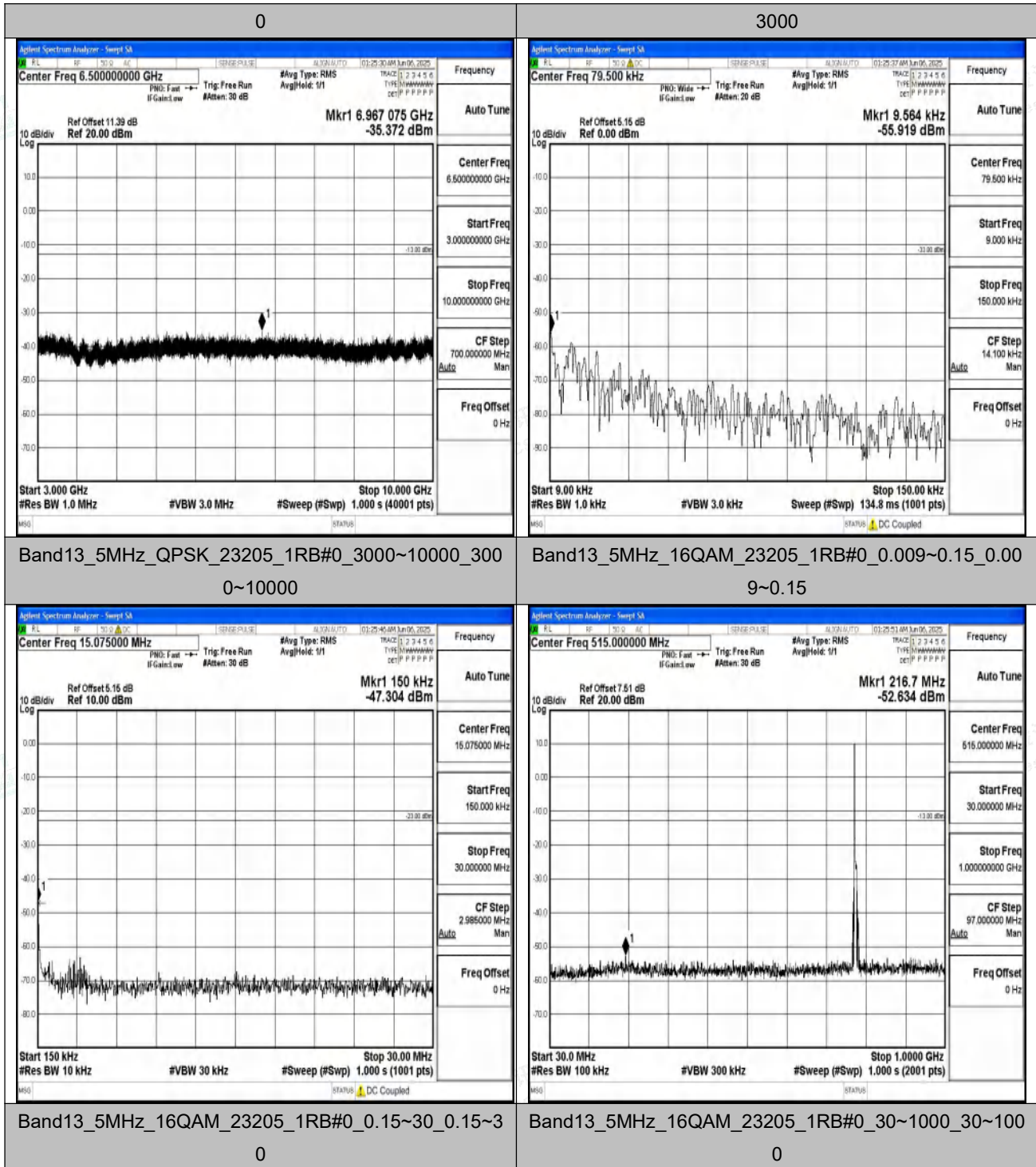


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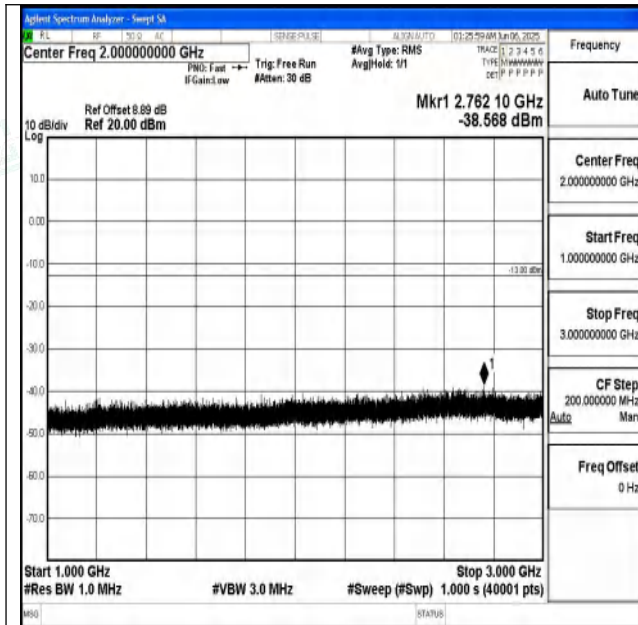


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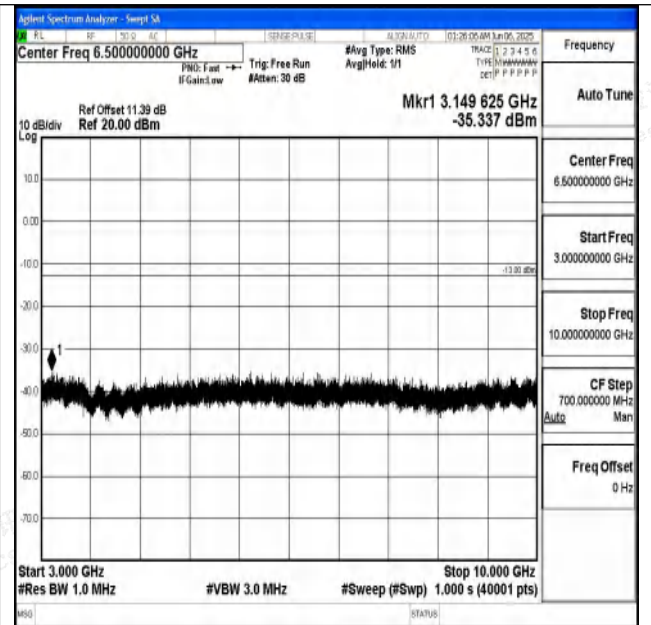
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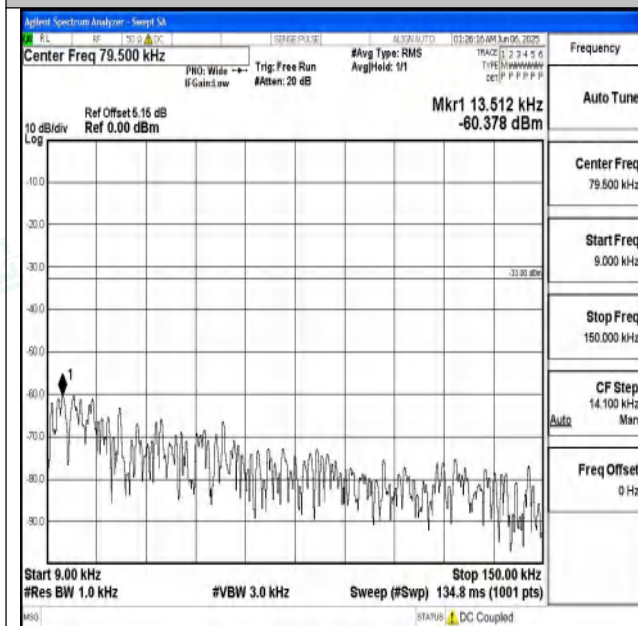
Scan code to check authenticity



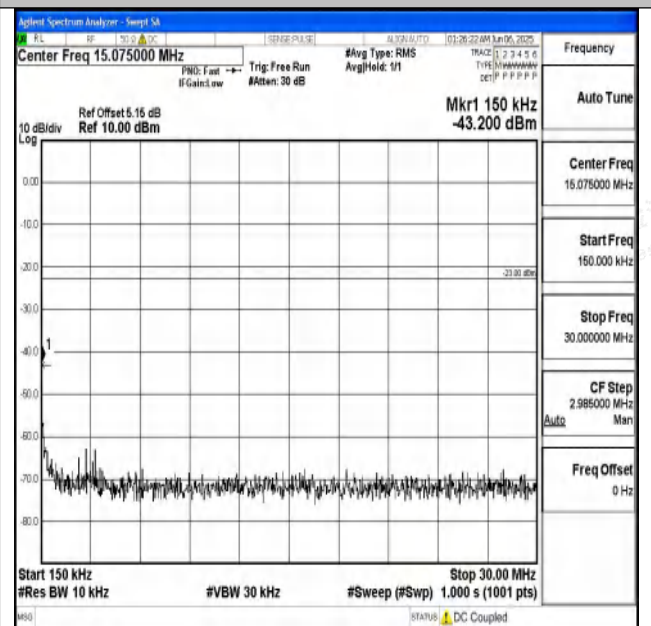
Band13_5MHz_16QAM_23205_1RB#0_1000~3000_100
0~3000



Band13_5MHz_16QAM_23205_1RB#0_3000~10000_300
0~10000

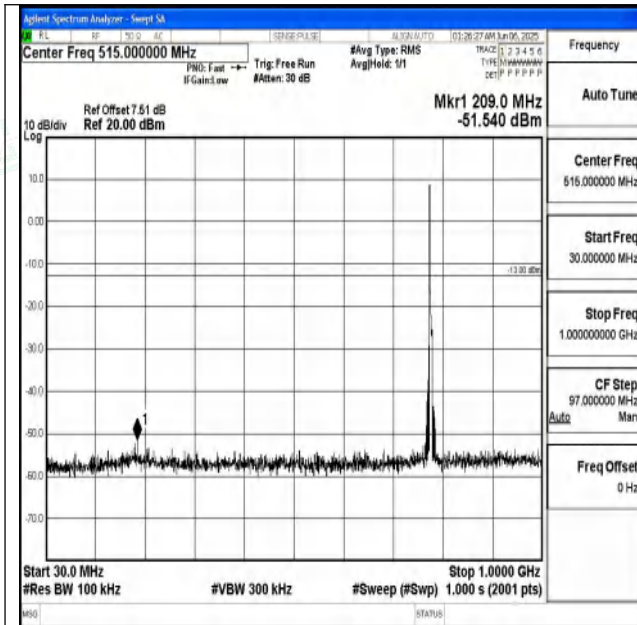


Band13_5MHz_QPSK_23230_1RB#0_0.009~0.15_0.00
9~0.15



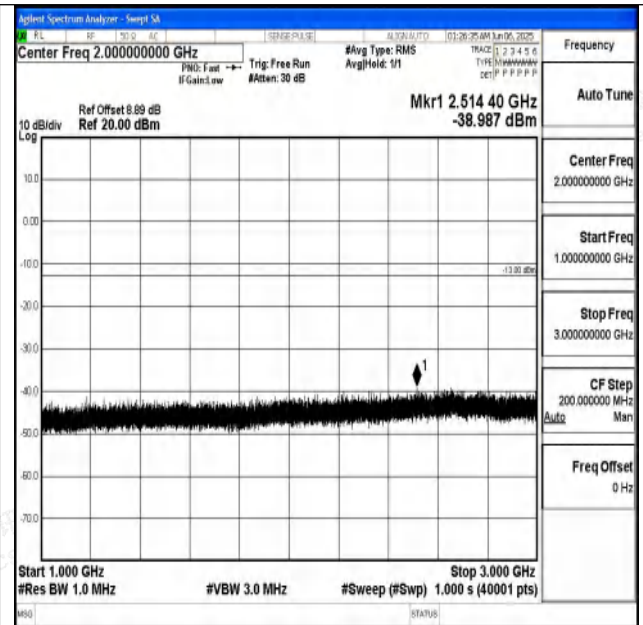
Band13_5MHz_QPSK_23230_1RB#0_0.15~30_0.15~30





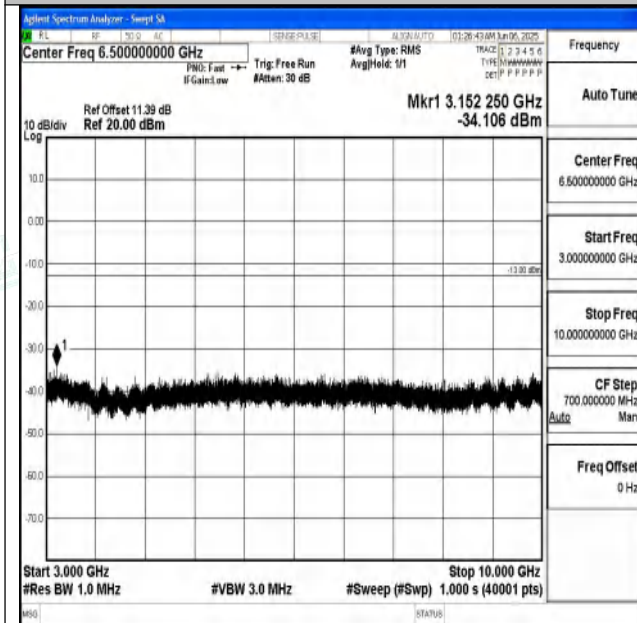
Band13_5MHz_QPSK_23230_1RB#0_30~1000_30~100

0



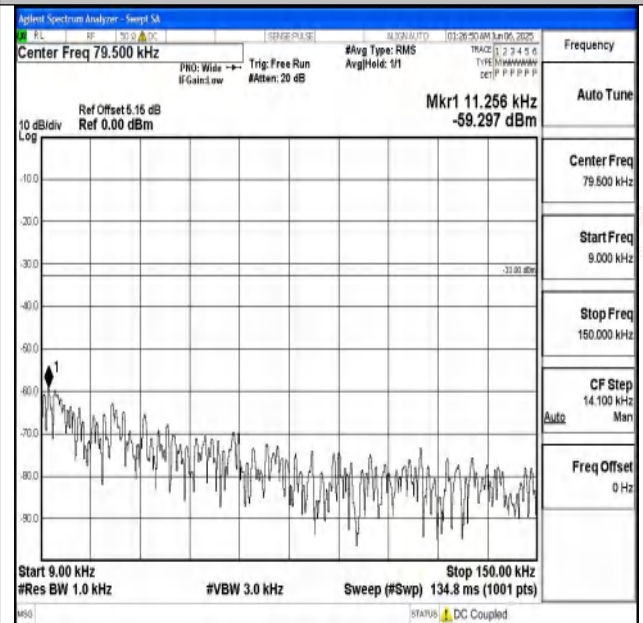
Band13_5MHz_QPSK_23230_1RB#0_1000~3000_1000~

3000



Band13_5MHz_QPSK_23230_1RB#0_3000~10000_300

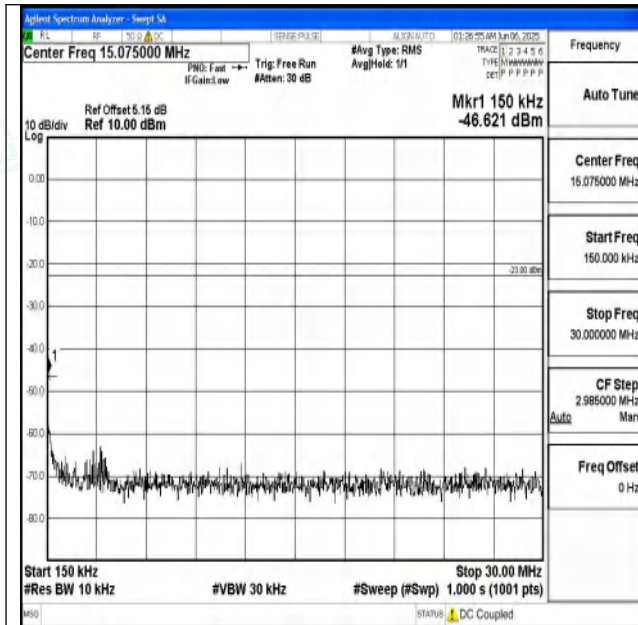
0~10000



Band13_5MHz_16QAM_23230_1RB#0_0.009~0.15_0.00

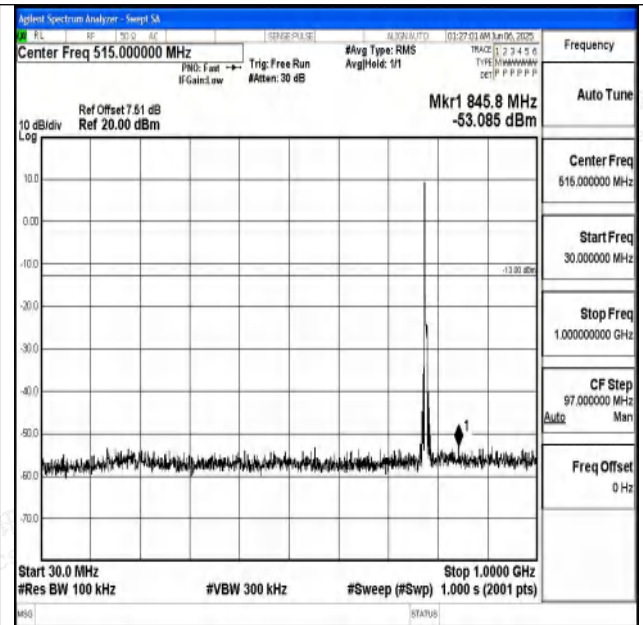
9~0.15





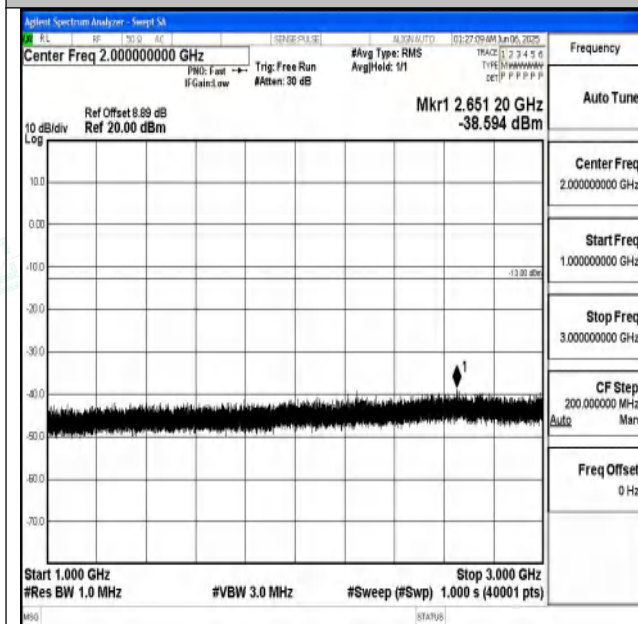
Band13_5MHz_16QAM_23230_1RB#0_0.15~30_0.15~3

0



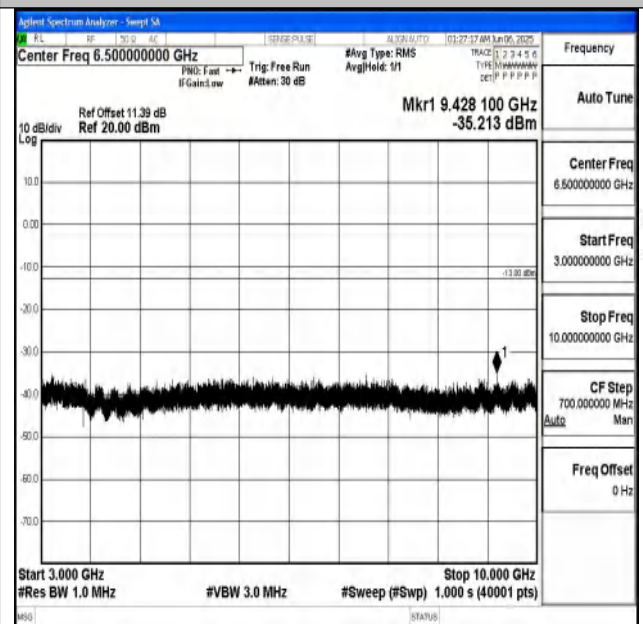
Band13_5MHz_16QAM_23230_1RB#0_30~1000_30~1000

0



Band13_5MHz_16QAM_23230_1RB#0_1000~3000_100

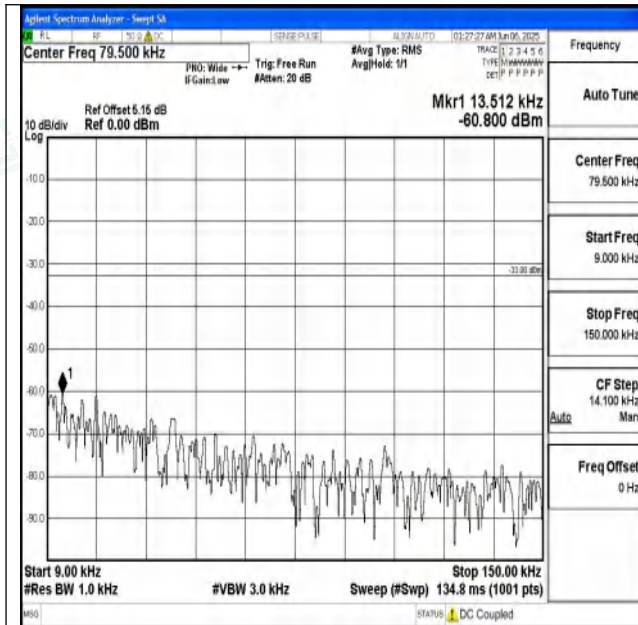
0~3000



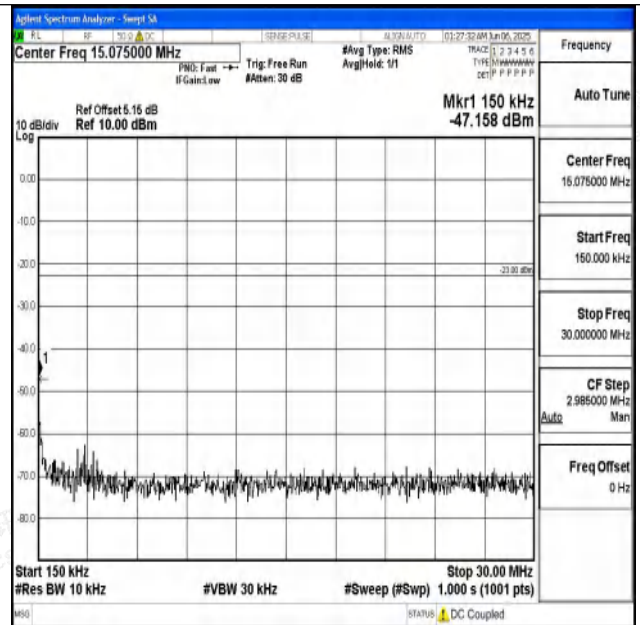
Band13_5MHz_16QAM_23230_1RB#0_3000~10000_300

0~10000

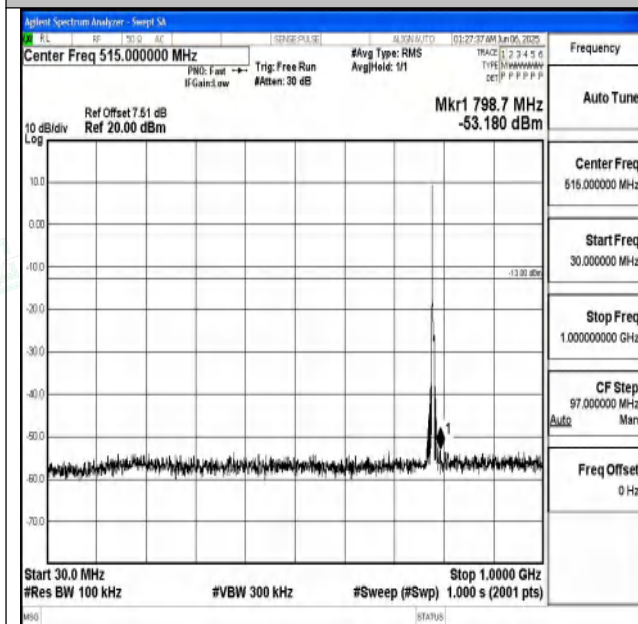




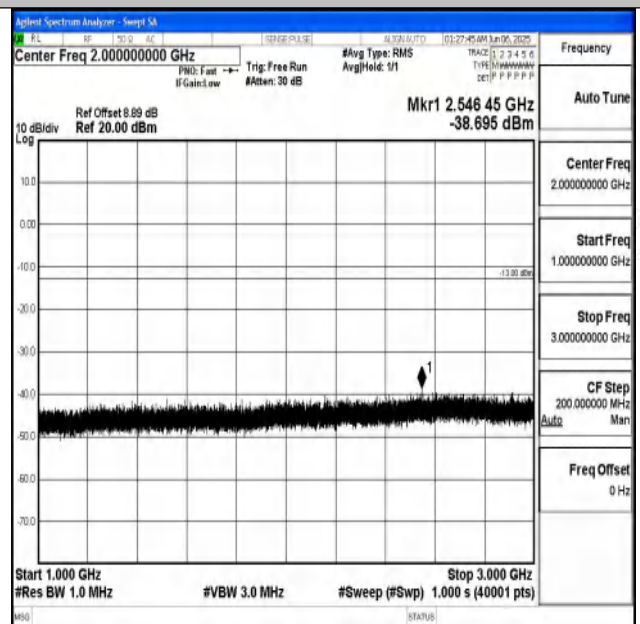
Band13_5MHz_QPSK_23255_1RB#0_0.009~0.15_0.00
9~0.15



Band13_5MHz_QPSK_23255_1RB#0_0.15~30_0.15~30



Band13_5MHz_QPSK_23255_1RB#0_30~1000_30~100
0



Band13_5MHz_QPSK_23255_1RB#0_1000~3000_1000~
3000

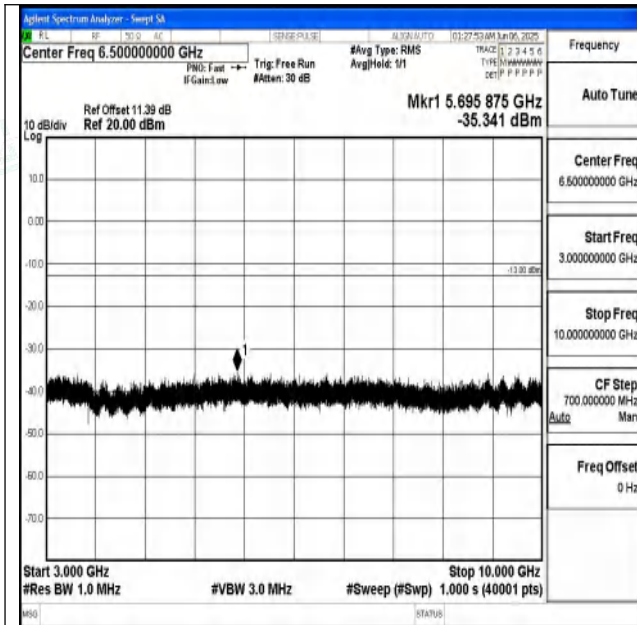


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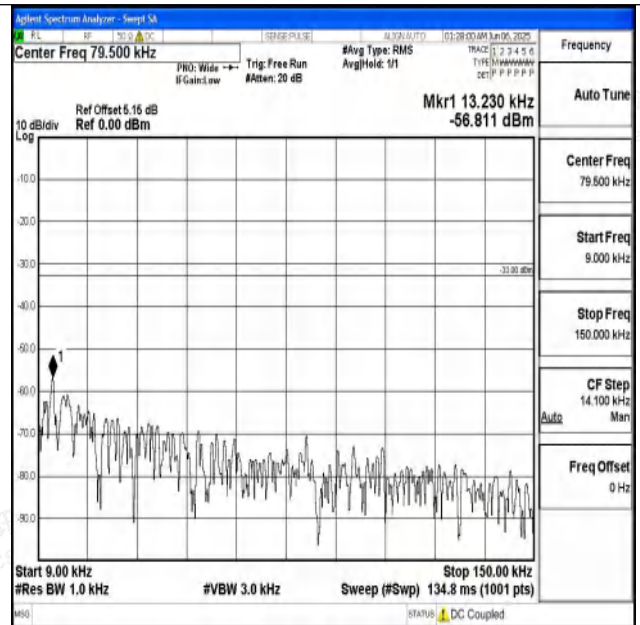
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

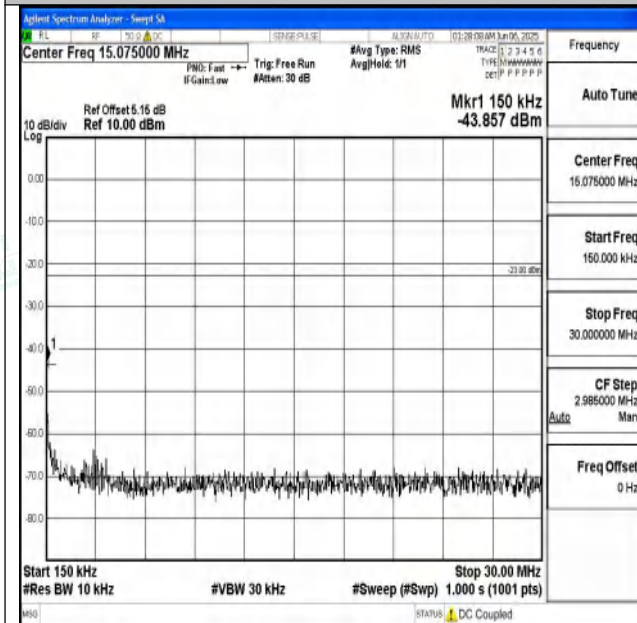
Scan code to check authenticity



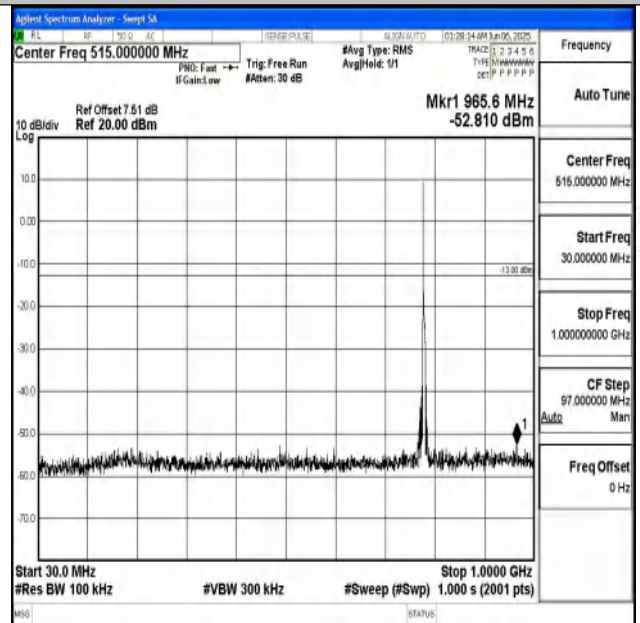
Band13_5MHz_QPSK_23255_1RB#0_3000~10000_300
0~10000



Band13_5MHz_16QAM_23255_1RB#0_0.009~0.15_0.00
9~0.15

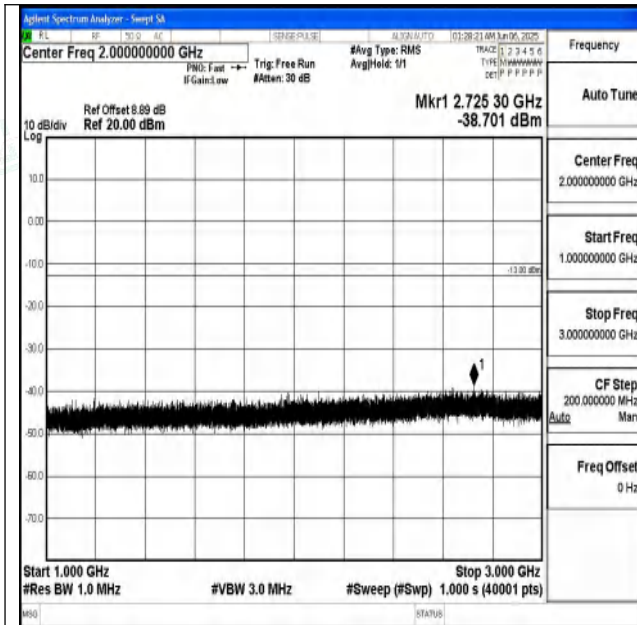


Band13_5MHz_16QAM_23255_1RB#0_0.15~30_0.15~3
0

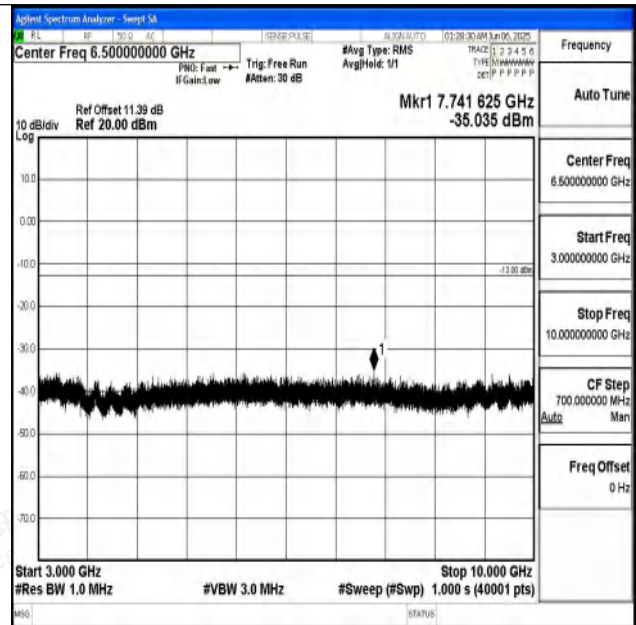


Band13_5MHz_16QAM_23255_1RB#0_30~1000_30~100
0

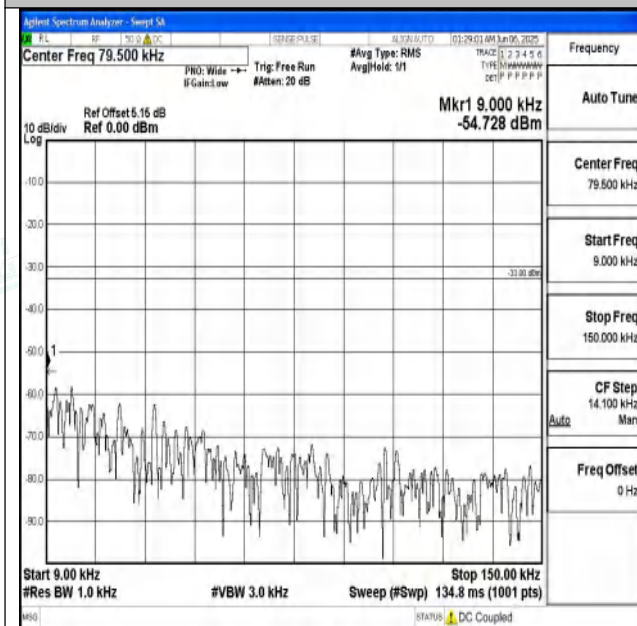




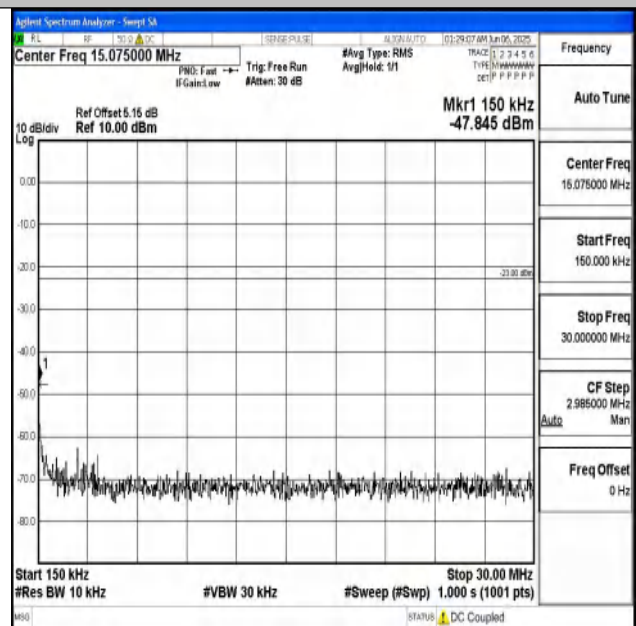
Band13_5MHz_16QAM_23255_1RB#0_1000~3000_100
0~3000



Band13_5MHz_16QAM_23255_1RB#0_3000~10000_300
0~10000

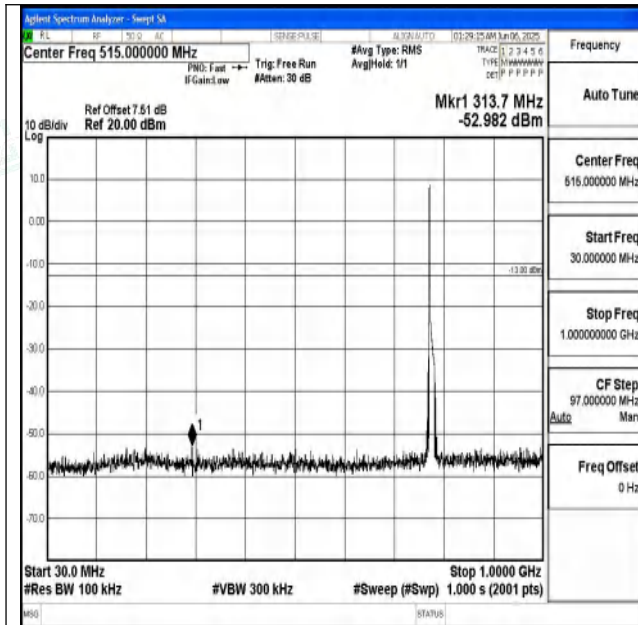


Band13_10MHz_QPSK_23230_1RB#0_0.009~0.15_0.0
09~0.15

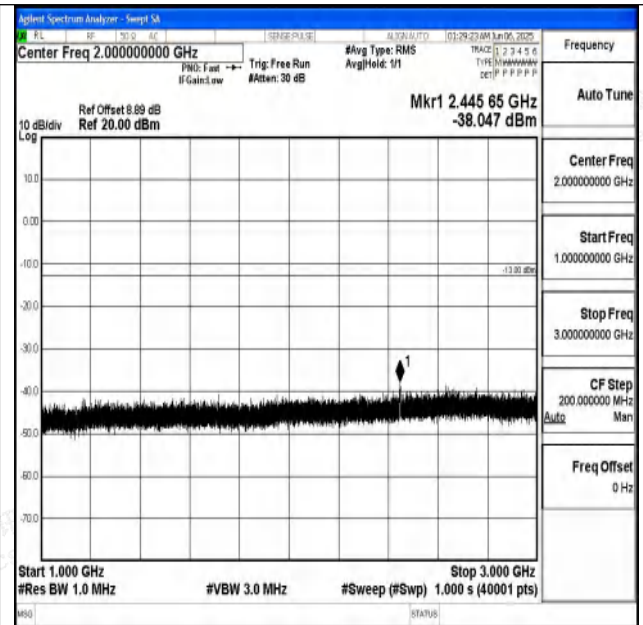


Band13_10MHz_QPSK_23230_1RB#0_0.15~30_0.15~30

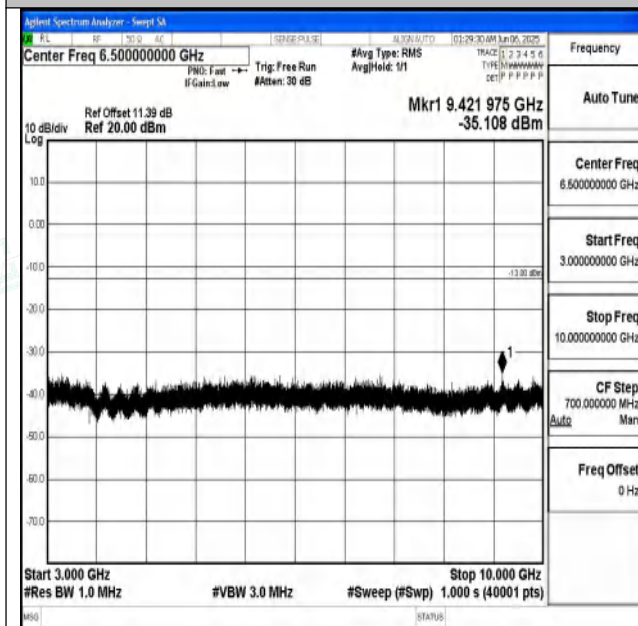




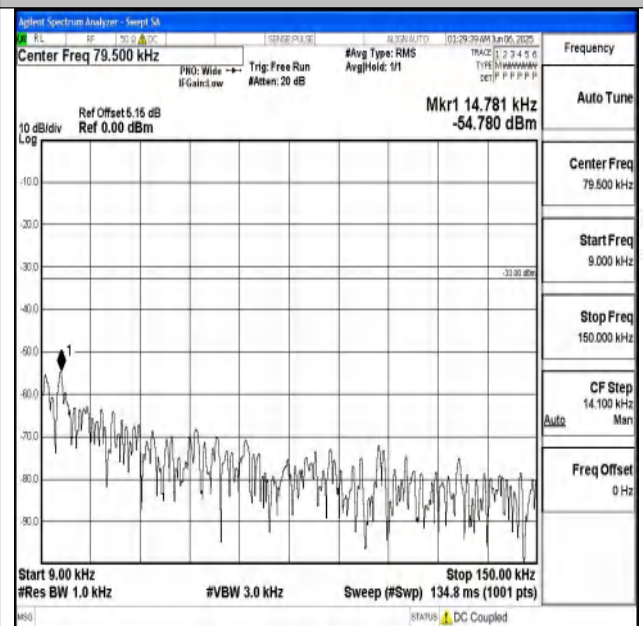
Band13_10MHz_QPSK_23230_1RB#0_30~1000_30~10
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Band13_10MHz_QPSK_23230_1RB#0_1000~3000_1000
~3000

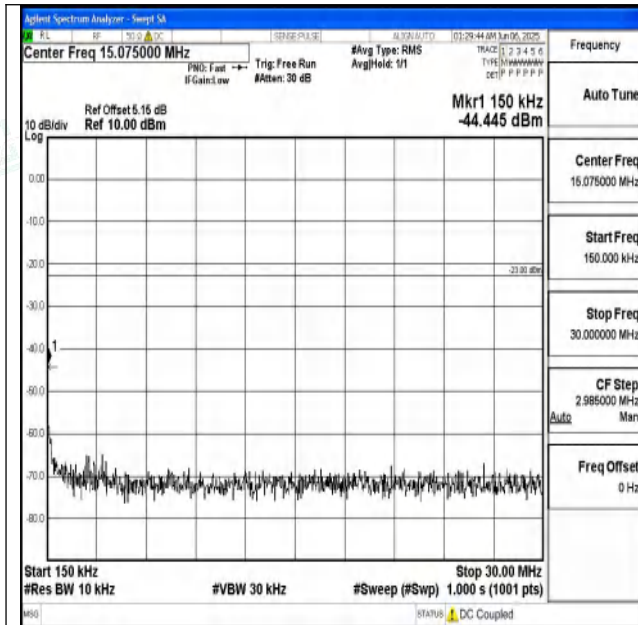


Band13_10MHz_QPSK_23230_1RB#0_3000~10000_30
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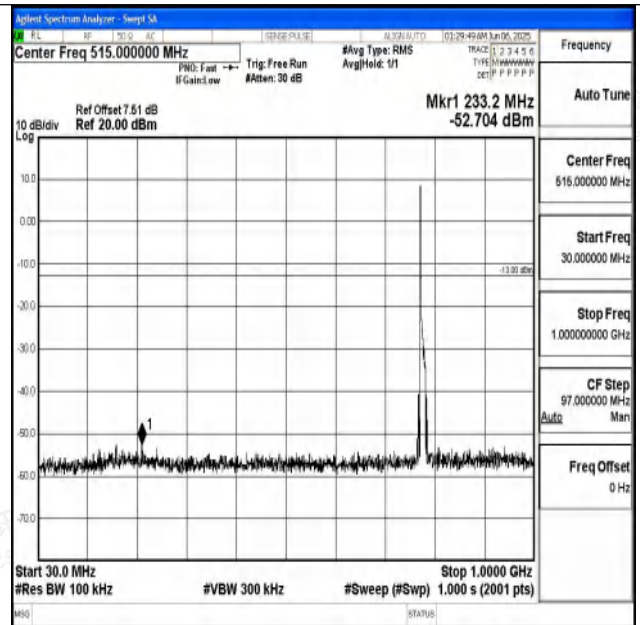
Band13_10MHz_16QAM_23230_1RB#0_0.009~0.15_0.0
09~0.15





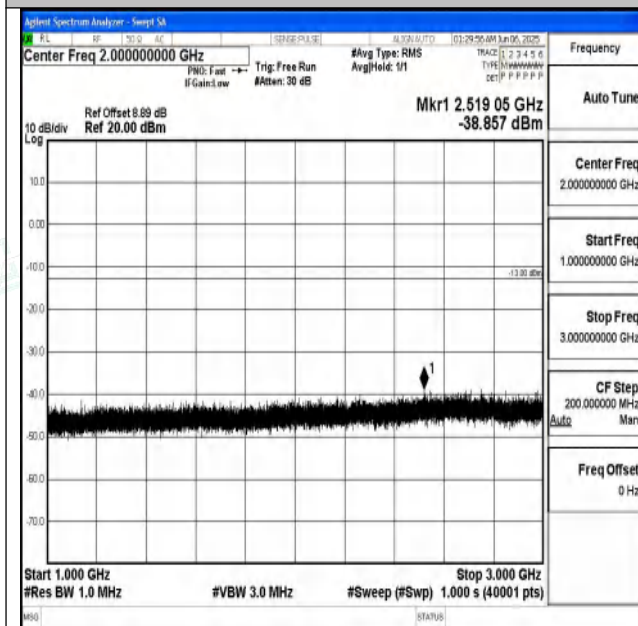
Band13_10MHz_16QAM_23230_1RB#0_0.15~30_0.15~

30



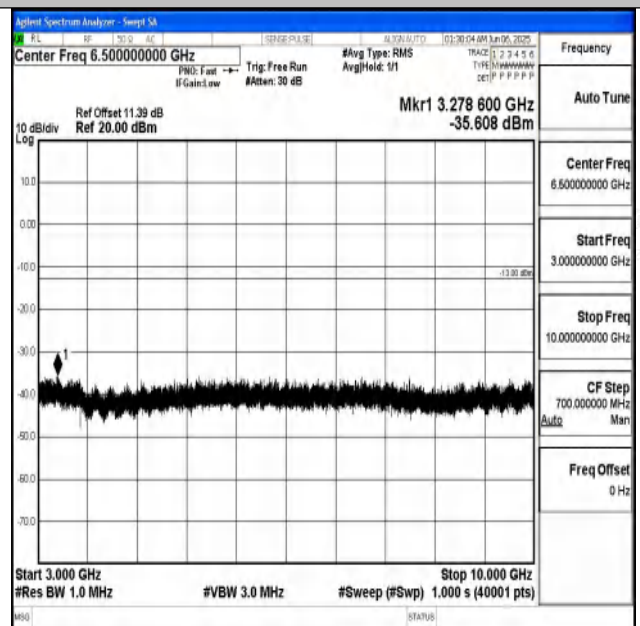
Band13_10MHz_16QAM_23230_1RB#0_30~1000_30~10

00



Band13_10MHz_16QAM_23230_1RB#0_1000~3000_10

00~3000



Band13_10MHz_16QAM_23230_1RB#0_3000~10000_30

00~10000



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