



Appendix F: Test Data for CatM1 Band 13

Product Name: Gulliver

Test Model: Gulliver

Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Can Kun
Supervised by:	Nick Peng



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F.1 Conducted Output Power Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dBm)	Verdict
Band13	5MHz	23205	QPSK	1	0	Low	22.44	PASS
Band13	5MHz	23205	QPSK	1	5	Low	22.92	PASS
Band13	5MHz	23205	QPSK	6	0	Low	22.61	PASS
Band13	5MHz	23230	QPSK	1	0	Low	22.91	PASS
Band13	5MHz	23230	QPSK	1	5	Low	22.74	PASS
Band13	5MHz	23230	QPSK	6	0	Low	22.51	PASS
Band13	5MHz	23255	QPSK	1	0	High	22.55	PASS
Band13	5MHz	23255	QPSK	1	5	High	22.37	PASS
Band13	5MHz	23255	QPSK	6	0	High	22.50	PASS
Band13	5MHz	23205	16QAM	1	0	Low	22.88	PASS
Band13	5MHz	23205	16QAM	1	5	Low	22.63	PASS
Band13	5MHz	23205	16QAM	6	0	Low	22.60	PASS
Band13	5MHz	23230	16QAM	1	0	Low	22.43	PASS
Band13	5MHz	23230	16QAM	1	5	Low	22.80	PASS
Band13	5MHz	23230	16QAM	6	0	Low	22.42	PASS
Band13	5MHz	23255	16QAM	1	0	High	22.66	PASS
Band13	5MHz	23255	16QAM	1	5	High	22.40	PASS
Band13	5MHz	23255	16QAM	6	0	High	22.50	PASS
Band13	10MHz	23230	QPSK	1	0	Low	22.56	PASS
Band13	10MHz	23230	QPSK	1	5	Low	22.82	PASS
Band13	10MHz	23230	QPSK	6	0	Low	22.76	PASS
Band13	10MHz	23230	16QAM	1	0	Low	21.96	PASS
Band13	10MHz	23230	16QAM	1	5	Low	22.21	PASS
Band13	10MHz	23230	16QAM	6	0	Low	22.32	PASS



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F.2 Peak-to-Average Ratio(CCDF) for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	23205	QPSK	1	0	Low	8.59	<=13	PASS
Band13	5MHz	23205	QPSK	6	0	Low	10.87	<=13	PASS
Band13	5MHz	23230	QPSK	1	0	Low	9.39	<=13	PASS
Band13	5MHz	23230	QPSK	6	0	Low	8.73	<=13	PASS
Band13	5MHz	23255	QPSK	1	0	High	9.40	<=13	PASS
Band13	5MHz	23255	QPSK	6	0	High	9.74	<=13	PASS
Band13	5MHz	23205	16QAM	1	0	Low	7.48	<=13	PASS
Band13	5MHz	23205	16QAM	6	0	Low	8.54	<=13	PASS
Band13	5MHz	23230	16QAM	1	0	Low	8.40	<=13	PASS
Band13	5MHz	23230	16QAM	6	0	Low	9.93	<=13	PASS
Band13	5MHz	23255	16QAM	1	0	High	9.21	<=13	PASS
Band13	5MHz	23255	16QAM	6	0	High	9.23	<=13	PASS
Band13	10MHz	23230	QPSK	1	0	Low	10.42	<=13	PASS
Band13	10MHz	23230	QPSK	6	0	Low	6.86	<=13	PASS
Band13	10MHz	23230	16QAM	1	0	Low	8.96	<=13	PASS
Band13	10MHz	23230	16QAM	6	0	Low	9.51	<=13	PASS



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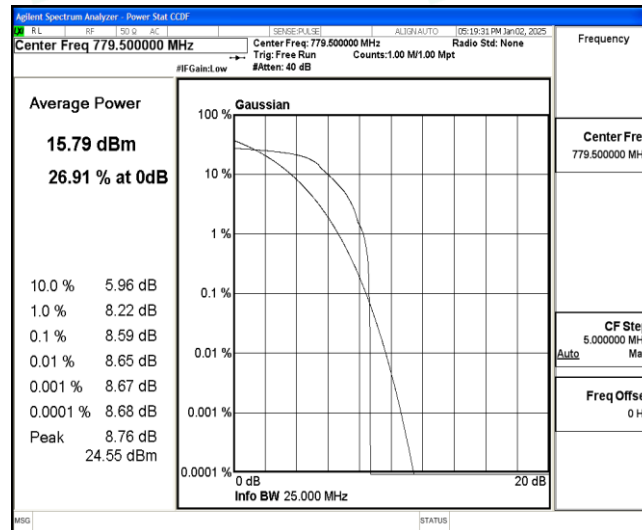
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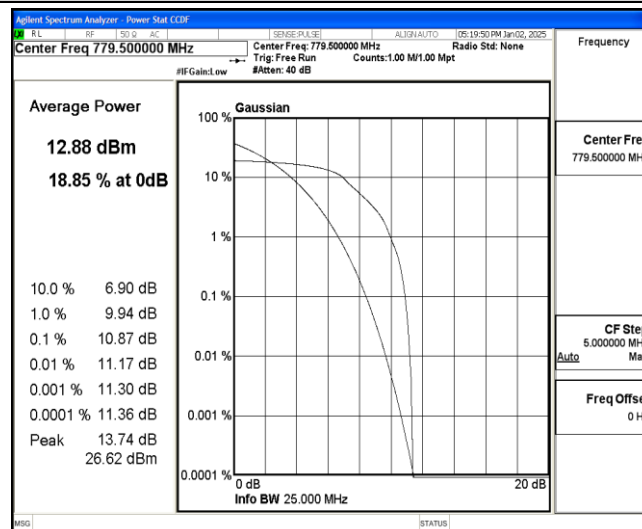
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Test Graphs



Band13-5MHz-QPSK-23205-1-0-Low-8.59-<=13-PASS



Band13-5MHz-QPSK-23205-6-0-Low-10.87-<=13-PASS

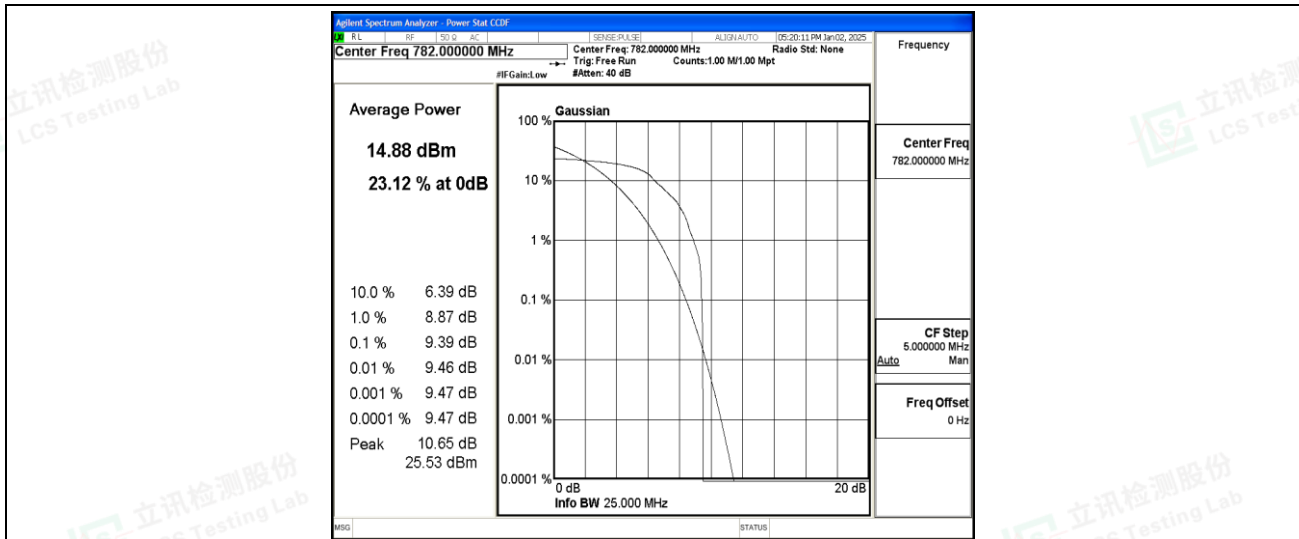


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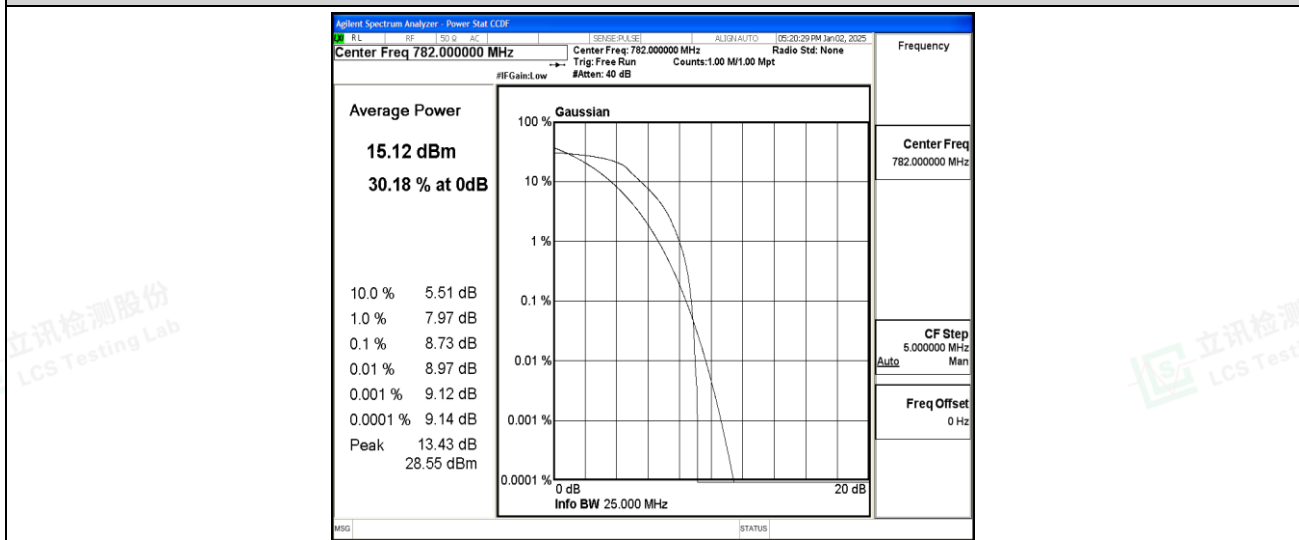
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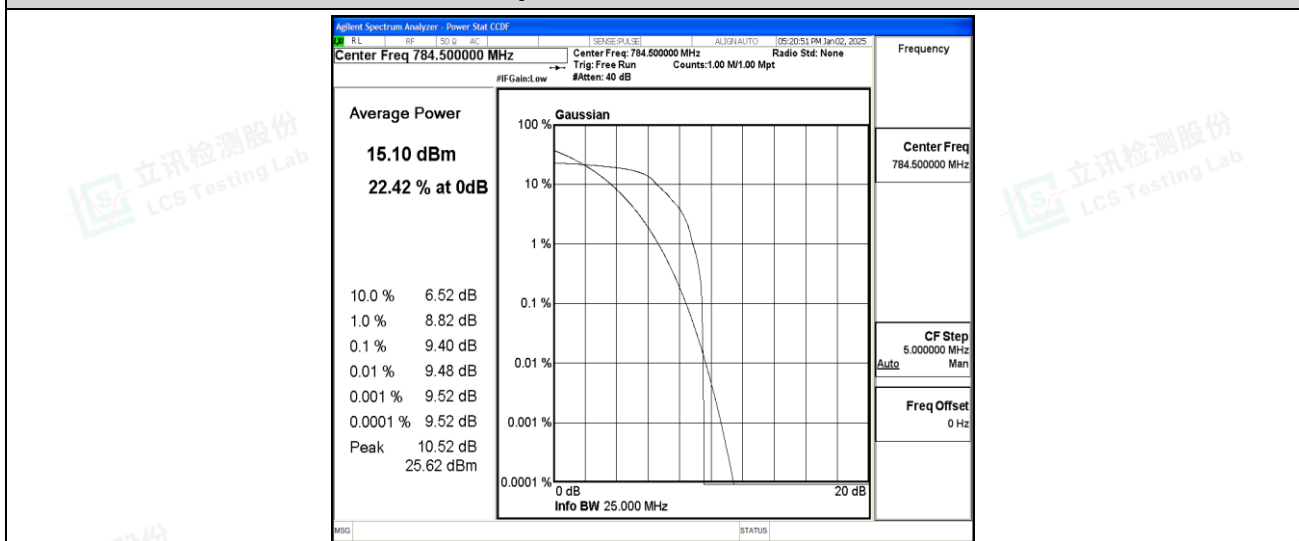
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Band13-5MHz-QPSK-23230-1-0-Low-9.39-<=13-PASS



Band13-5MHz-QPSK-23230-6-0-Low-8.73-<=13-PASS



Band13-5MHz-QPSK-23255-1-0-High-9.40-<=13-PASS

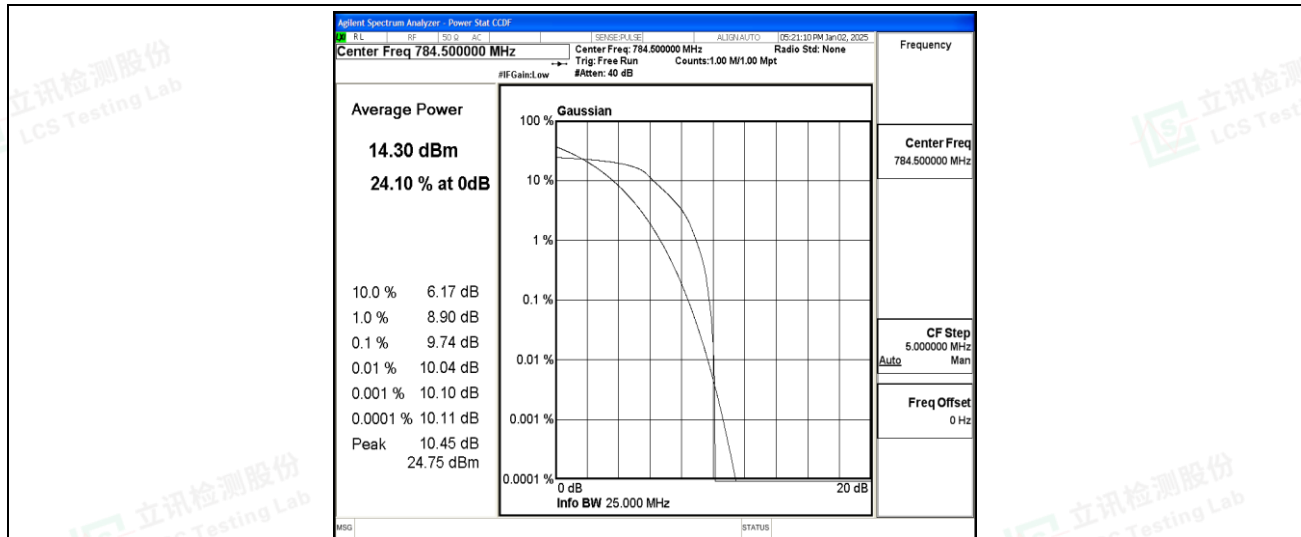


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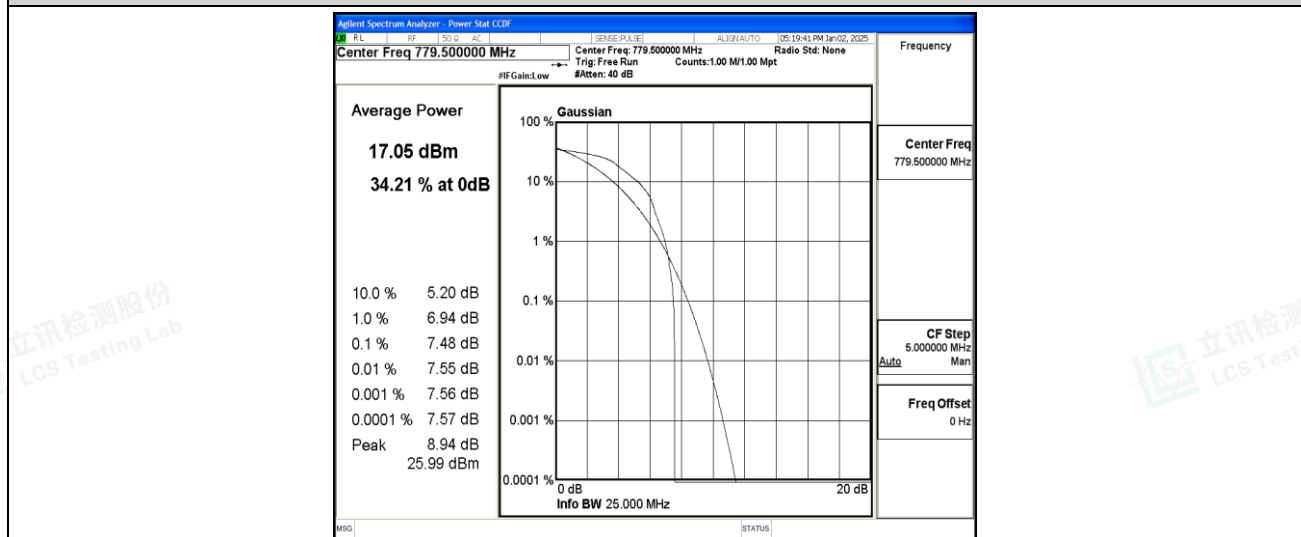
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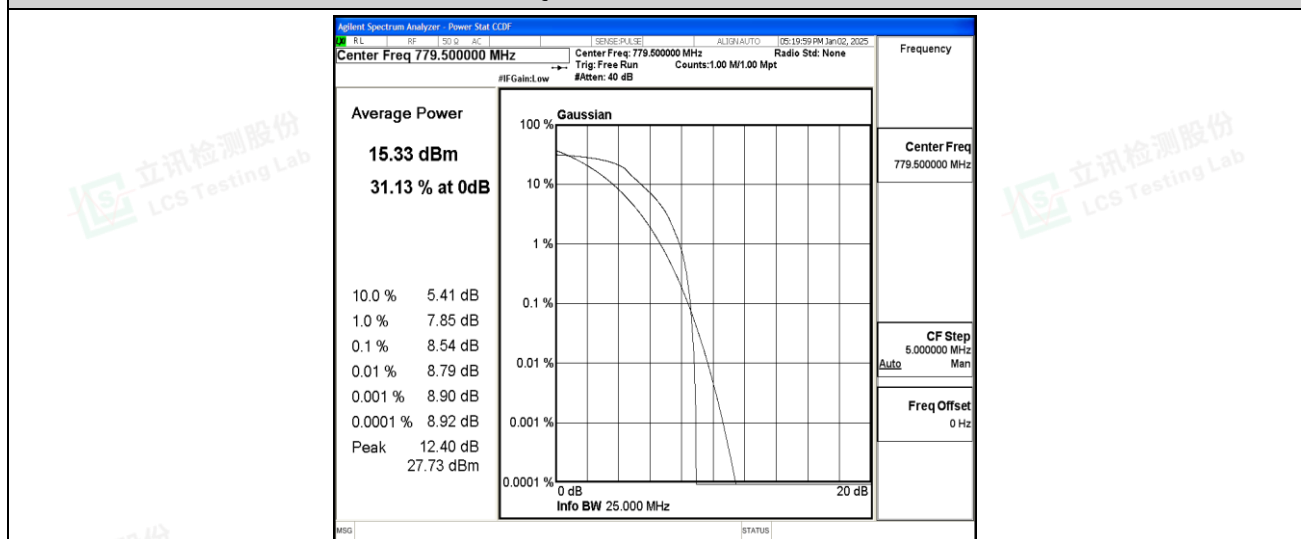
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Band13-5MHz-QPSK-23255-6-0-High-9.74-<=13-PASS



Band13-5MHz-16QAM-23205-1-0-Low-7.48-<=13-PASS



Band13-5MHz-16QAM-23205-6-0-Low-8.54-<=13-PASS

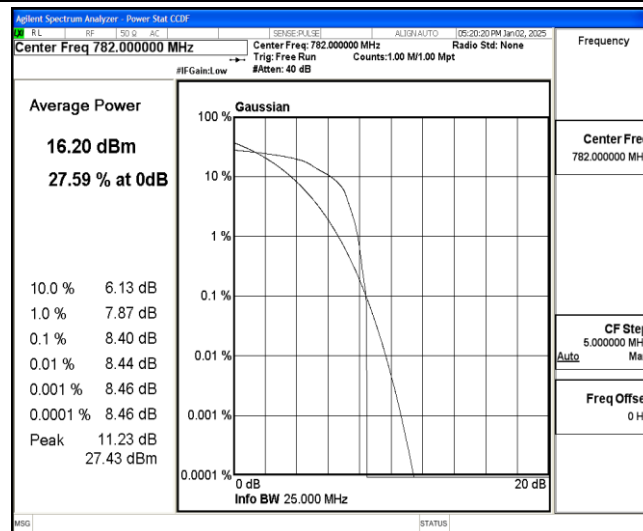


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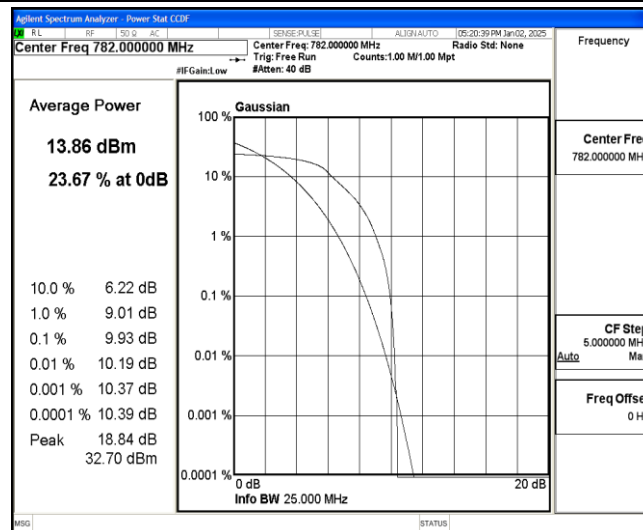
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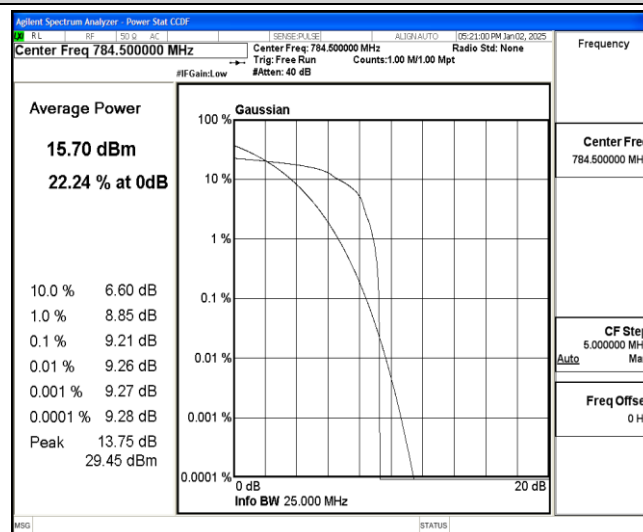
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Band13-5MHz-16QAM-23230-1-0-Low-8.40-<=13-PASS



Band13-5MHz-16QAM-23230-6-0-Low-9.93-<=13-PASS



Band13-5MHz-16QAM-23255-1-0-High-9.21-<=13-PASS

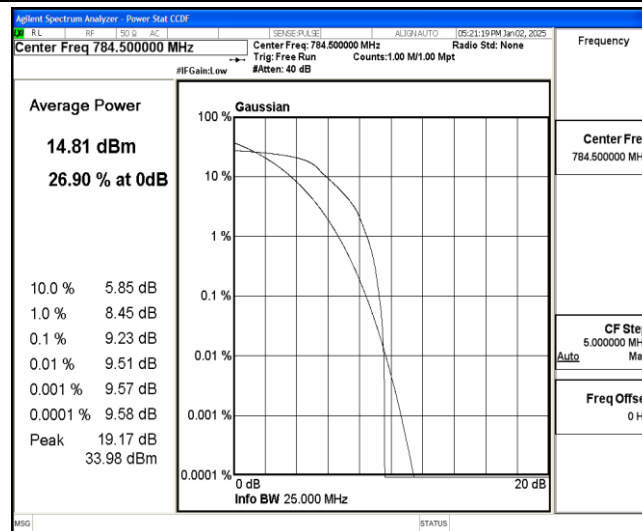


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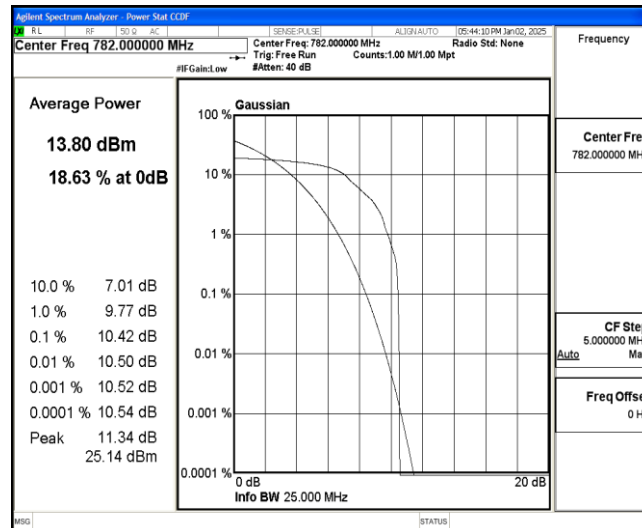
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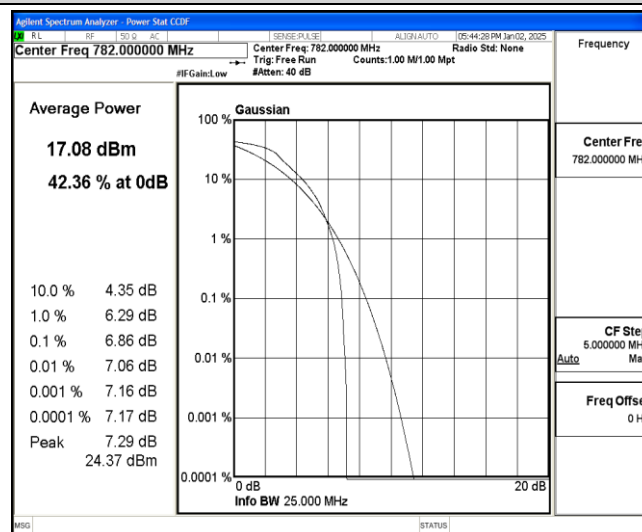
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Band13-5MHz-16QAM-23255-6-0-High-9.23-<=13-PASS



Band13-10MHz-QPSK-23230-1-0-Low-10.42-<=13-PASS



Band13-10MHz-QPSK-23230-6-0-Low-6.86-<=13-PASS

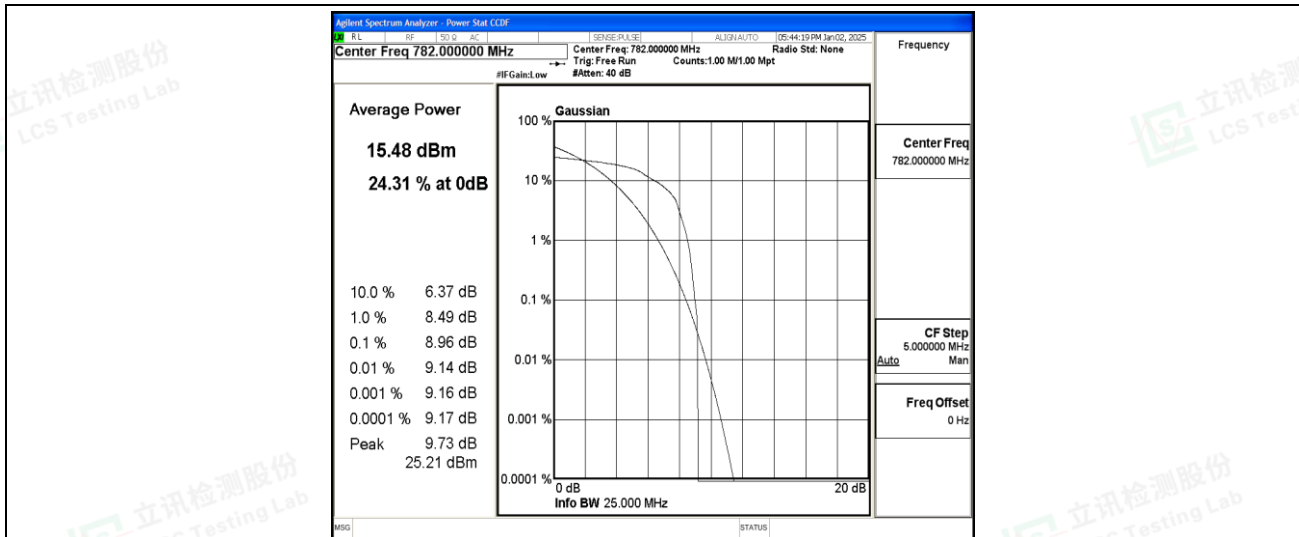


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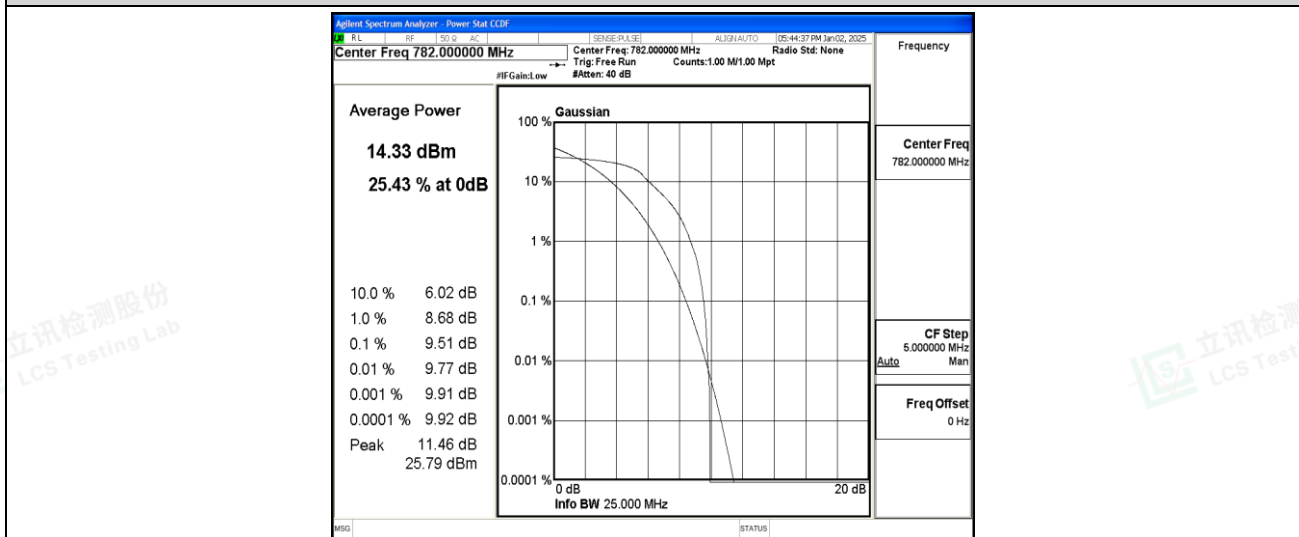
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Band13-10MHz-16QAM-23230-1-0-Low-8.96-<=13-PASS



Band13-10MHz-16QAM-23230-6-0-Low-9.51-<=13-PASS





F.3 26dB Bandwidth and Occupied Bandwidth for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	23205	QPSK	6	0	Low	1.1909	1.433	PASS
Band13	5MHz	23230	QPSK	6	0	Low	1.1876	1.397	PASS
Band13	5MHz	23255	QPSK	6	0	High	1.1852	1.598	PASS
Band13	5MHz	23205	16QAM	6	0	Low	1.1855	1.512	PASS
Band13	5MHz	23230	16QAM	6	0	Low	1.1649	1.401	PASS
Band13	5MHz	23255	16QAM	6	0	High	1.1753	1.495	PASS
Band13	10MHz	23230	QPSK	6	0	Low	1.3462	1.847	PASS
Band13	10MHz	23230	16QAM	6	0	Low	1.3348	2.046	PASS



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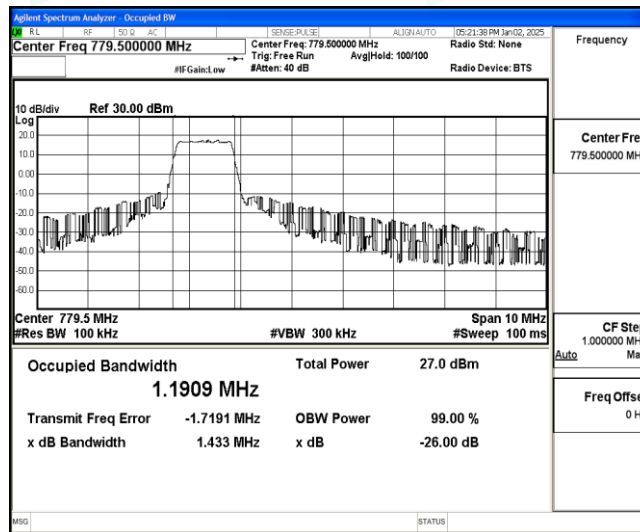
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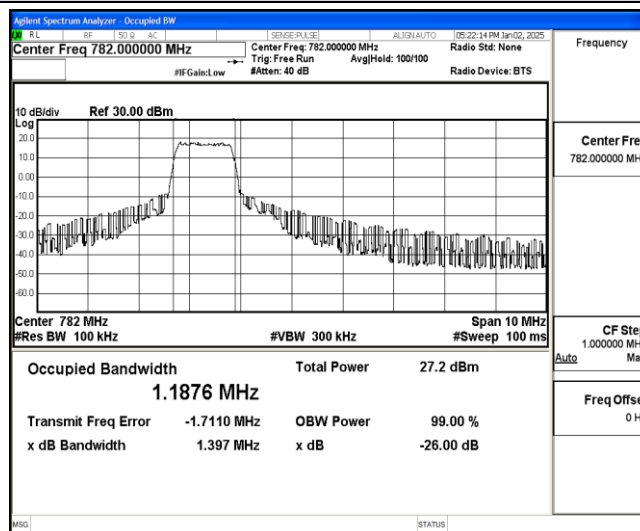
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Test Graphs



Band13-5MHz-QPSK-23205-6-0-Low-1.1909-1.433-PASS



Band13-5MHz-QPSK-23230-6-0-Low-1.1876-1.397-PASS

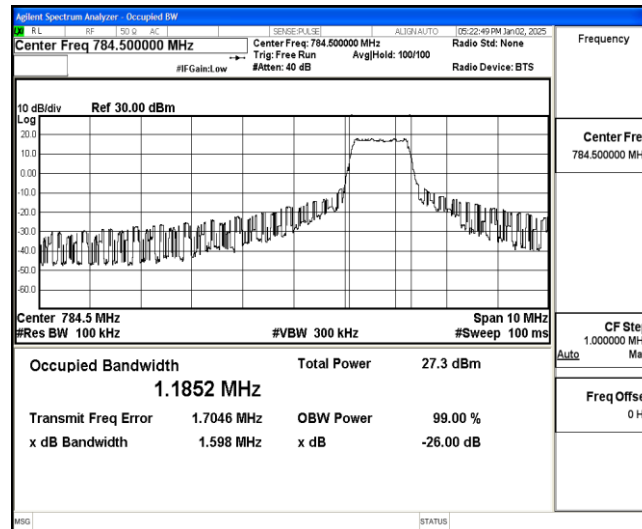


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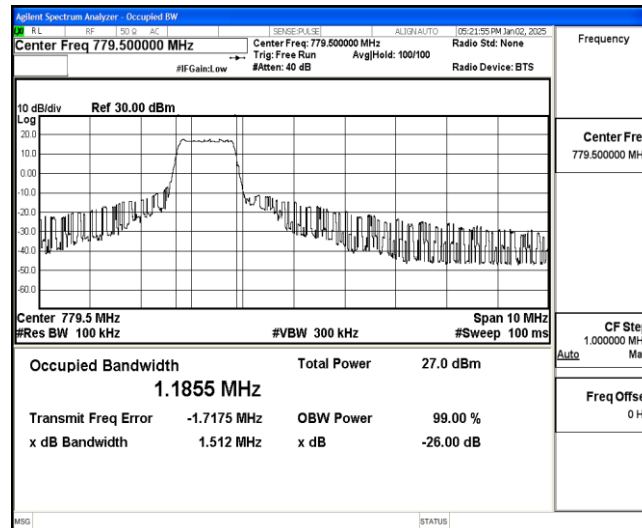
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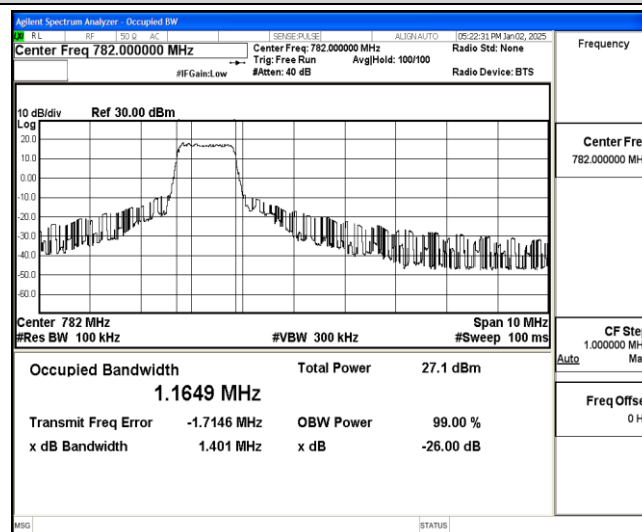
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Band13-5MHz-QPSK-23255-6-0-High-1.1852-1.598-PASS



Band13-5MHz-16QAM-23205-6-0-Low-1.1855-1.512-PASS



Band13-5MHz-16QAM-23230-6-0-Low-1.1649-1.401-PASS

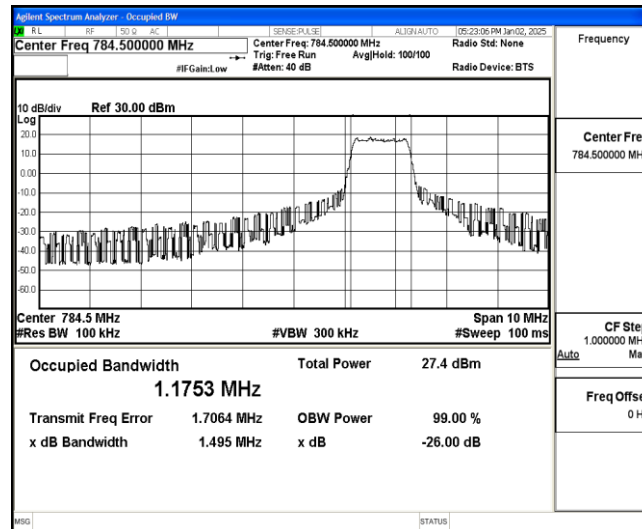


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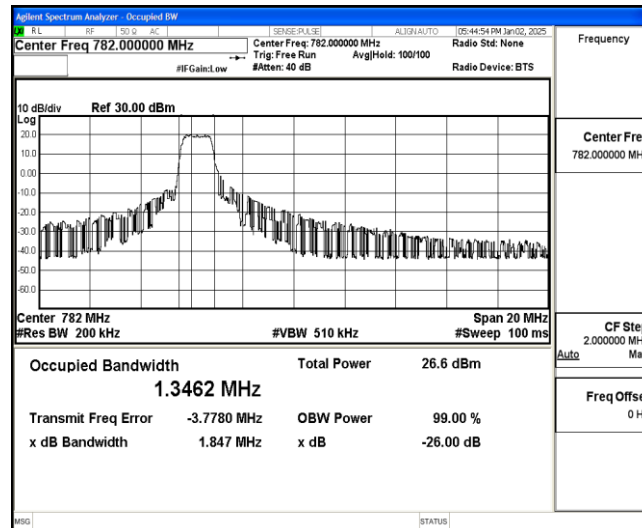
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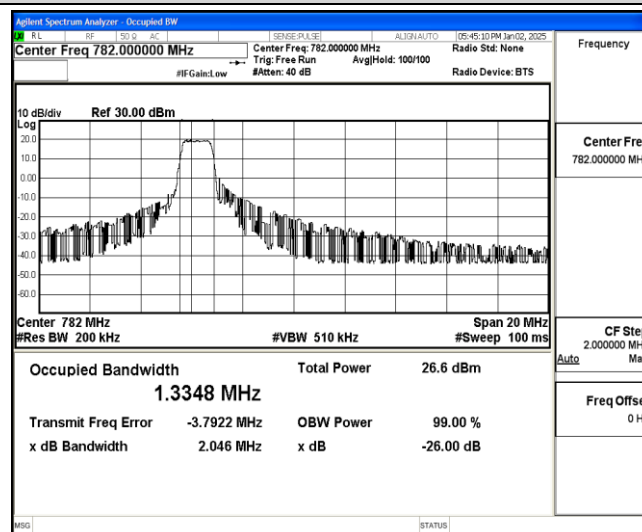
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Band13-5MHz-16QAM-23255-6-0-High-1.1753-1.495-PASS



Band13-10MHz-QPSK-23230-6-0-Low-1.3462-1.847-PASS



Band13-10MHz-16QAM-23230-6-0-Low-1.3348-2.046-PASS



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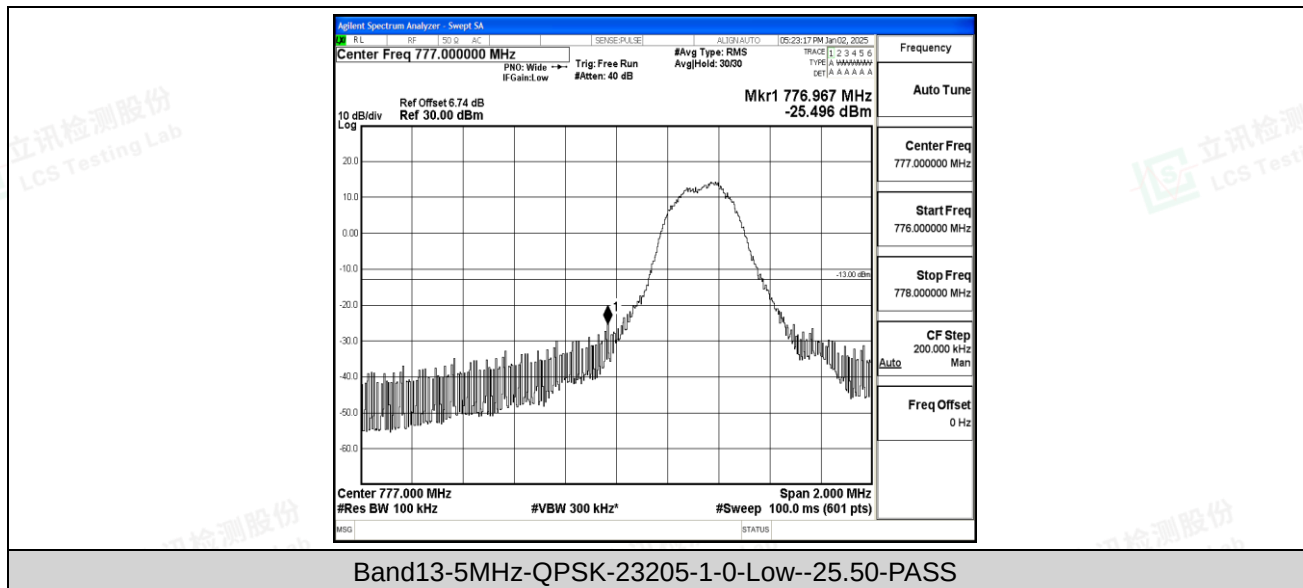


F.4 Band Edge for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Result(dBm)	Verdict
Band13	5MHz	23205	QPSK	1	0	Low	-25.50	PASS
Band13	5MHz	23205	QPSK	6	0	Low	-31.10	PASS
Band13	5MHz	23255	QPSK	1	0	High	-41.96	PASS
Band13	5MHz	23255	QPSK	6	0	High	-28.16	PASS
Band13	5MHz	23205	16QAM	1	0	Low	-28.55	PASS
Band13	5MHz	23205	16QAM	6	0	Low	-30.29	PASS
Band13	5MHz	23255	16QAM	1	0	High	-41.72	PASS
Band13	5MHz	23255	16QAM	6	0	High	-27.96	PASS

Test Graphs

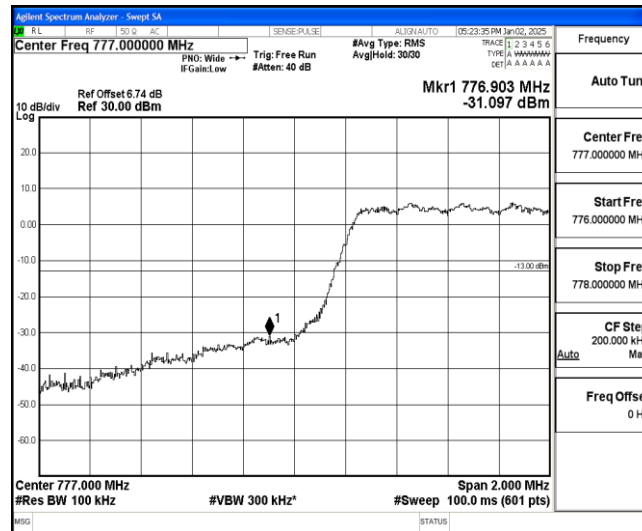


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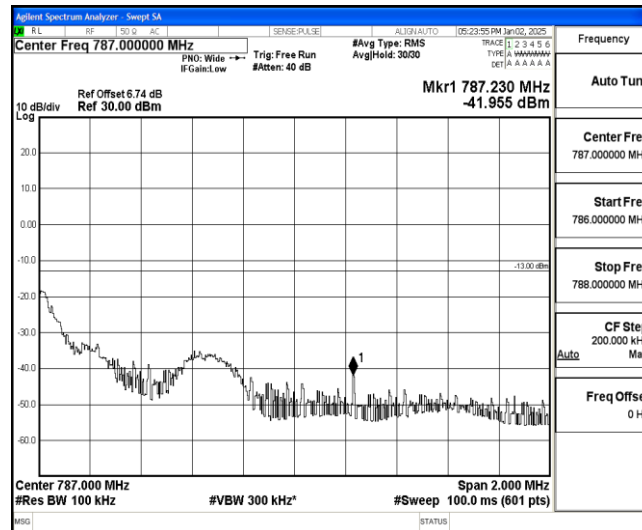
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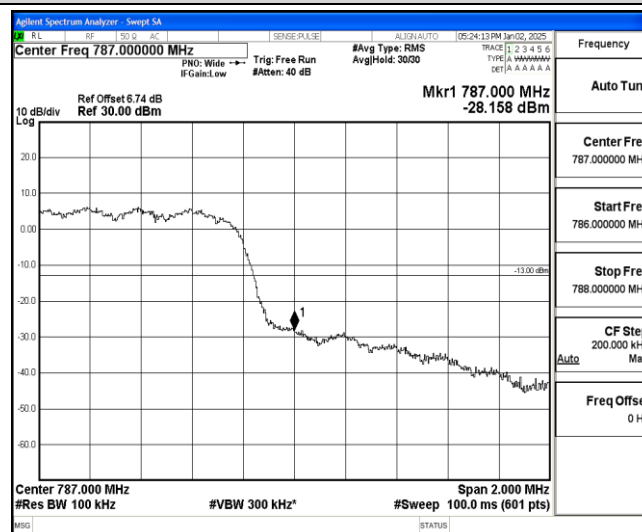
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Band13-5MHz-QPSK-23205-6-0-Low--31.10-PASS



Band13-5MHz-QPSK-23255-1-0-High--41.96-PASS



Band13-5MHz-QPSK-23255-6-0-High--28.16-PASS

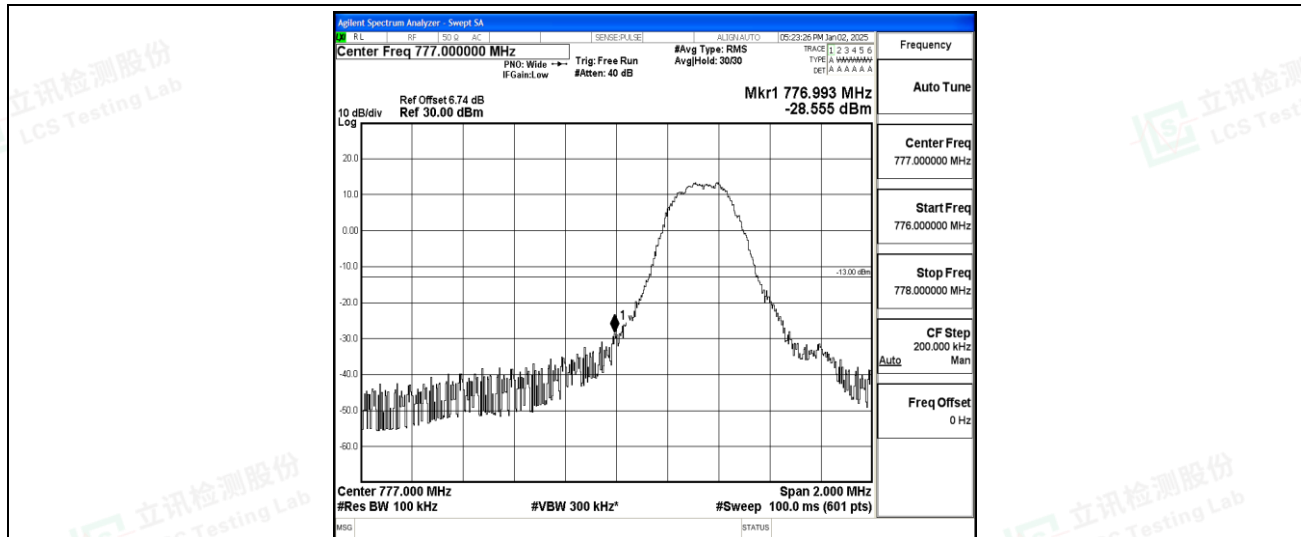


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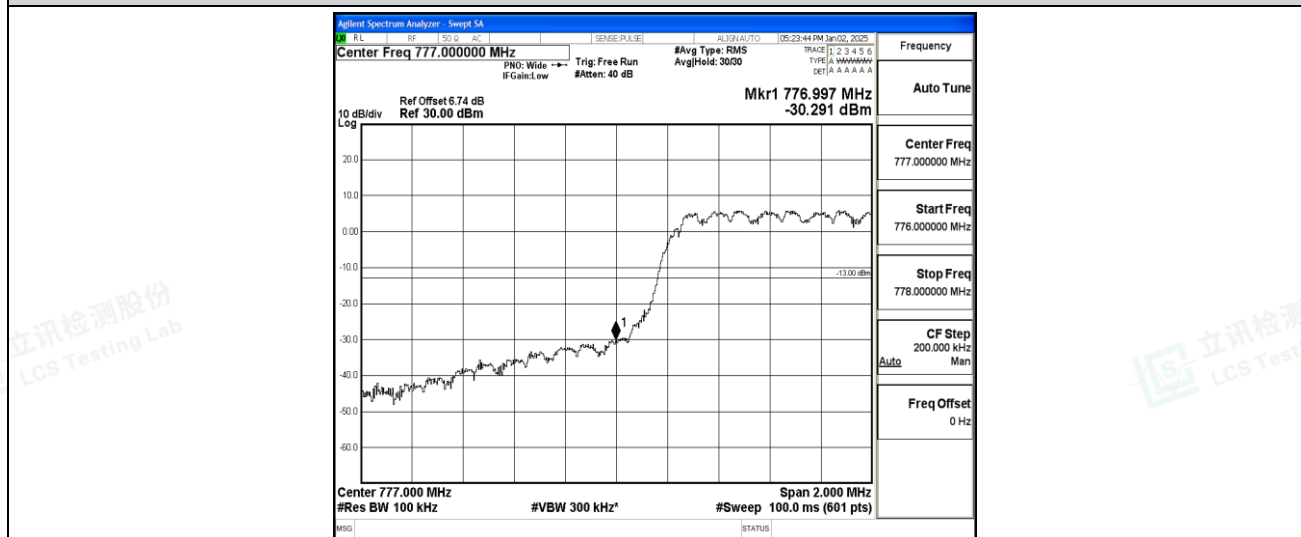
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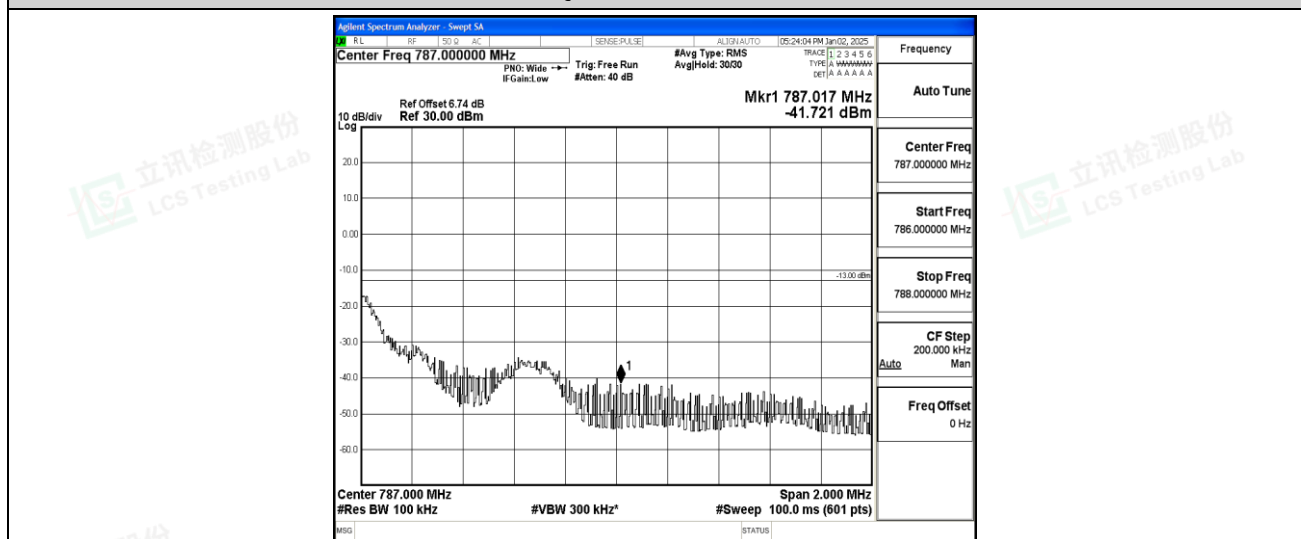
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Band13-5MHz-16QAM-23205-1-0-Low--28.55-PASS

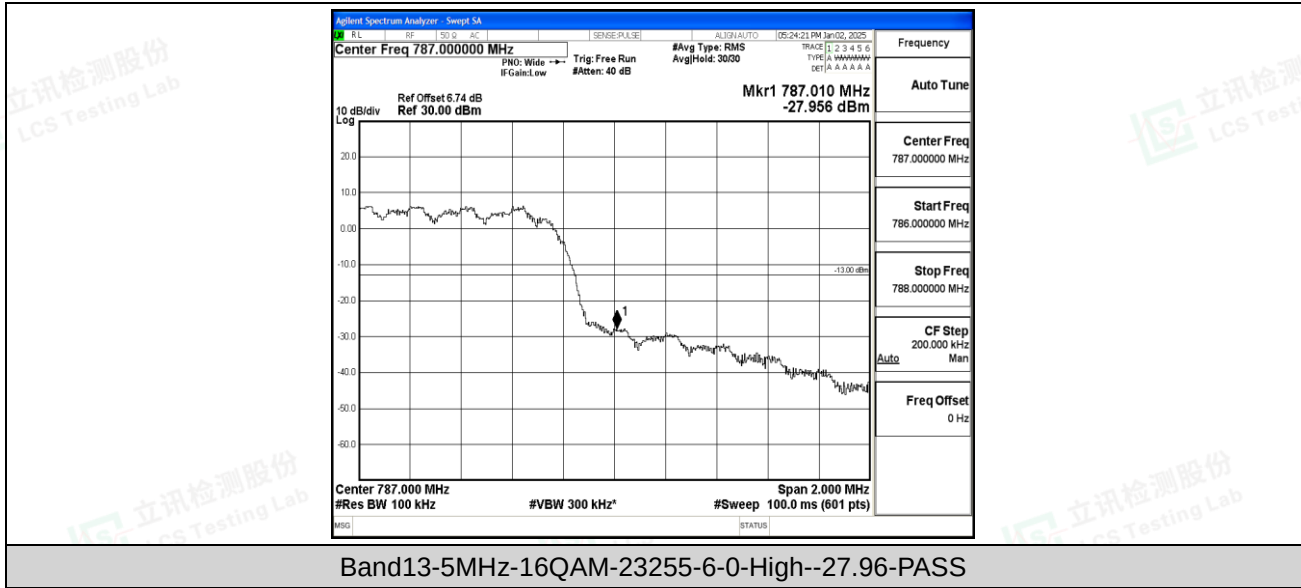


Band13-5MHz-16QAM-23205-6-0-Low--30.29-PASS



Band13-5MHz-16QAM-23255-1-0-High--41.72-PASS





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F.5 Conducted Spurious Emission for M1

Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Start Freq	Stop Freq	Result (dBm)	Verdict
Band13	5MHz	23205	QPSK	1	0	Low	30	1000	-38.14	PASS
Band13	5MHz	23205	QPSK	1	0	Low	1000	5000	-43.7	PASS
Band13	5MHz	23205	QPSK	1	0	Low	5000	12000	-59.46	PASS
Band13	5MHz	23205	QPSK	1	0	Low	12000	26500	-44.43	PASS
Band13	5MHz	23230	QPSK	1	0	Low	30	1000	-38.01	PASS
Band13	5MHz	23230	QPSK	1	0	Low	1000	5000	-43.64	PASS
Band13	5MHz	23230	QPSK	1	0	Low	5000	12000	-59.2	PASS
Band13	5MHz	23230	QPSK	1	0	Low	12000	26500	-44.51	PASS
Band13	5MHz	23255	QPSK	1	0	High	30	1000	-37.54	PASS
Band13	5MHz	23255	QPSK	1	0	High	1000	5000	-43.77	PASS
Band13	5MHz	23255	QPSK	1	0	High	5000	12000	-59.55	PASS
Band13	5MHz	23255	QPSK	1	0	High	12000	26500	-44.49	PASS
Band13	5MHz	23205	16QAM	1	0	Low	30	1000	-38.36	PASS
Band13	5MHz	23205	16QAM	1	0	Low	1000	5000	-43.58	PASS
Band13	5MHz	23205	16QAM	1	0	Low	5000	12000	-59.36	PASS
Band13	5MHz	23205	16QAM	1	0	Low	12000	26500	-44.41	PASS
Band13	5MHz	23230	16QAM	1	0	Low	30	1000	-37.41	PASS
Band13	5MHz	23230	16QAM	1	0	Low	1000	5000	-43.62	PASS
Band13	5MHz	23230	16QAM	1	0	Low	5000	12000	-59.56	PASS
Band13	5MHz	23230	16QAM	1	0	Low	12000	26500	-44.39	PASS
Band13	5MHz	23255	16QAM	1	0	High	30	1000	-37.7	PASS
Band13	5MHz	23255	16QAM	1	0	High	1000	5000	-43.73	PASS
Band13	5MHz	23255	16QAM	1	0	High	5000	12000	-59.59	PASS
Band13	5MHz	23255	16QAM	1	0	High	12000	26500	-44.35	PASS



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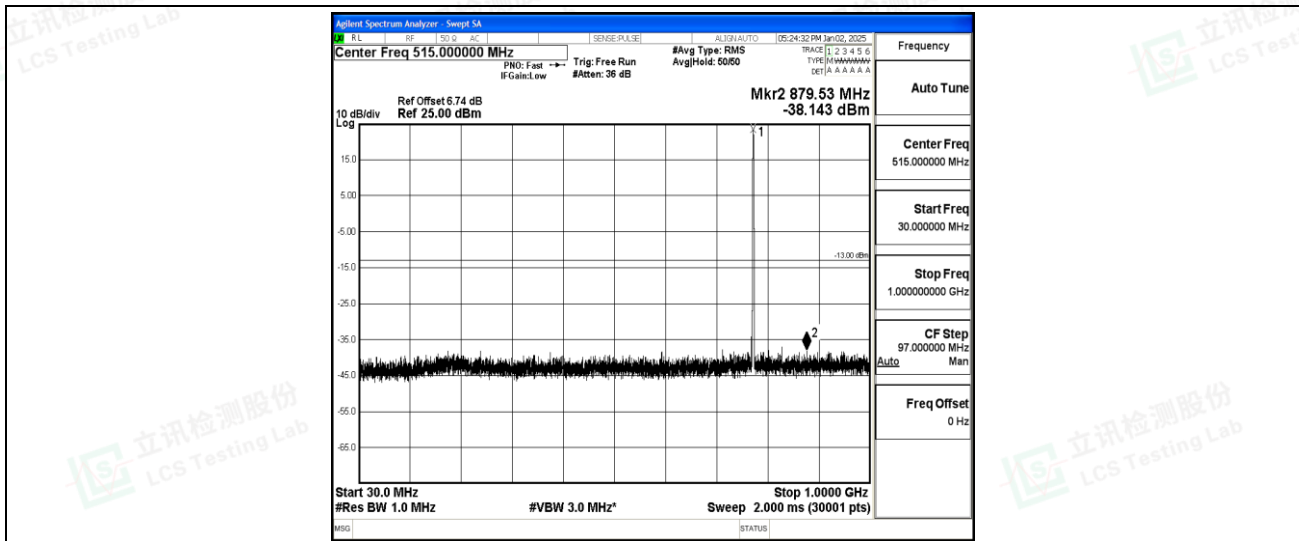
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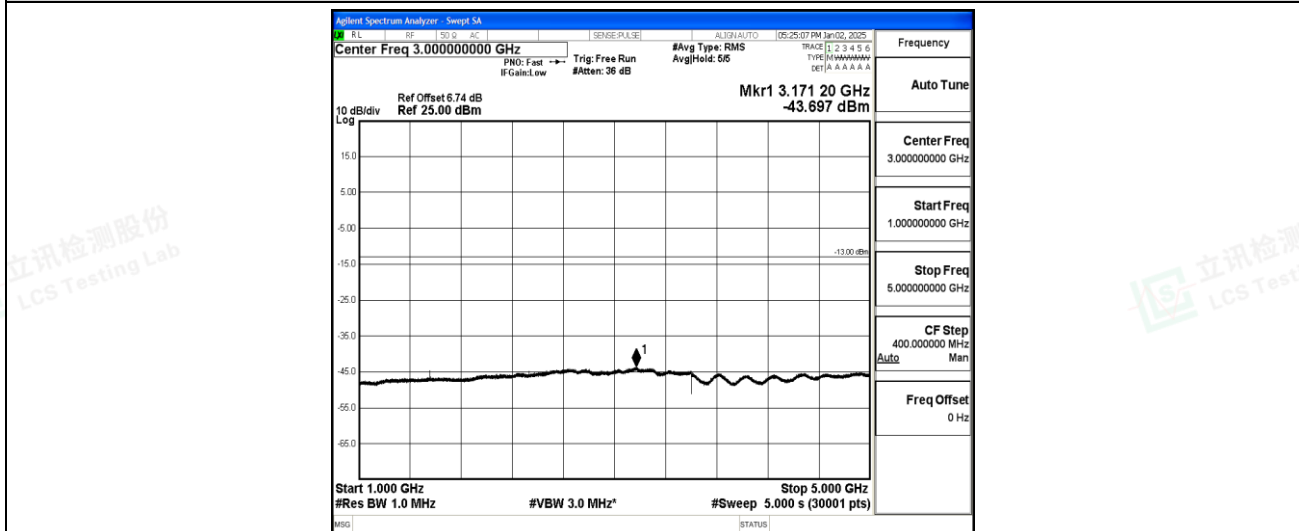
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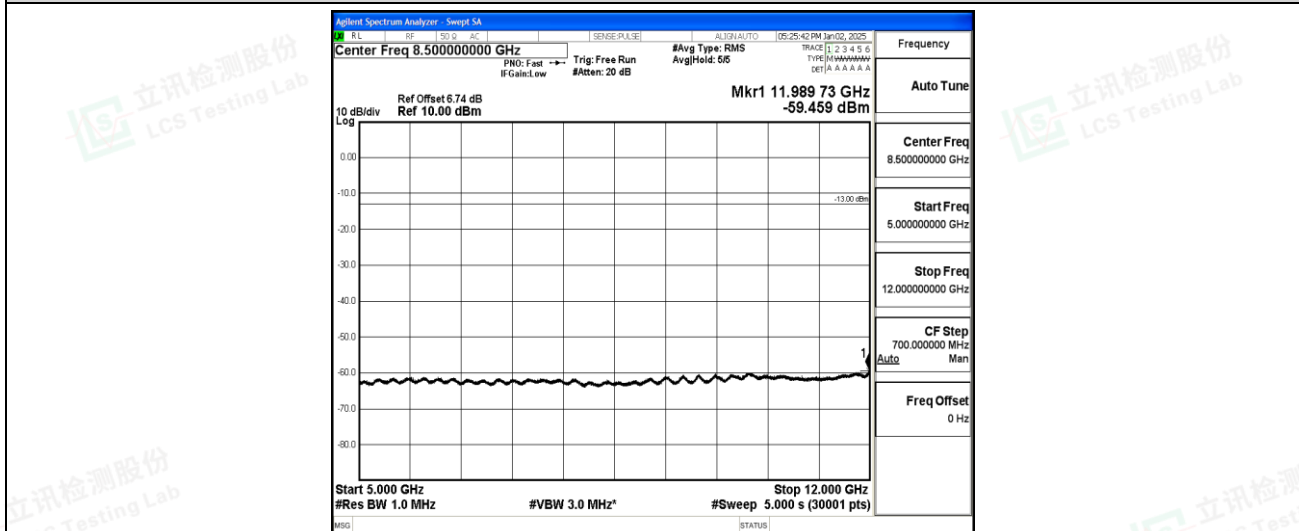
Test Graphs



Band13-5MHz-QPSK-23205-1-0-Low-30-1000--38.14-PASS



Band13-5MHz-QPSK-23205-1-0-Low-1000-5000--43.7-PASS



Band13-5MHz-QPSK-23205-1-0-Low-5000-12000--59.46-PASS

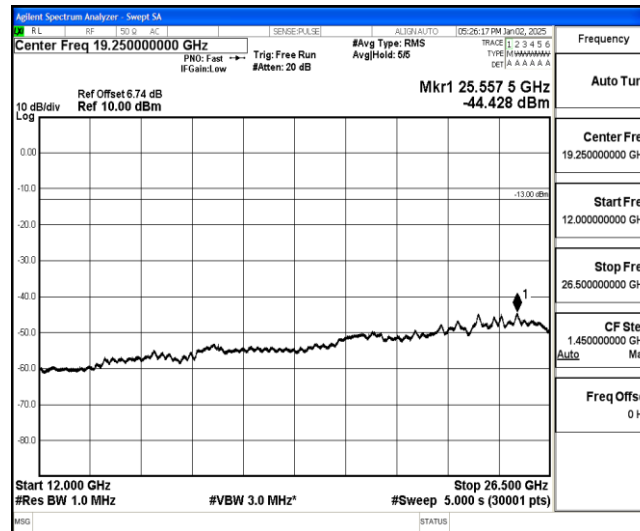


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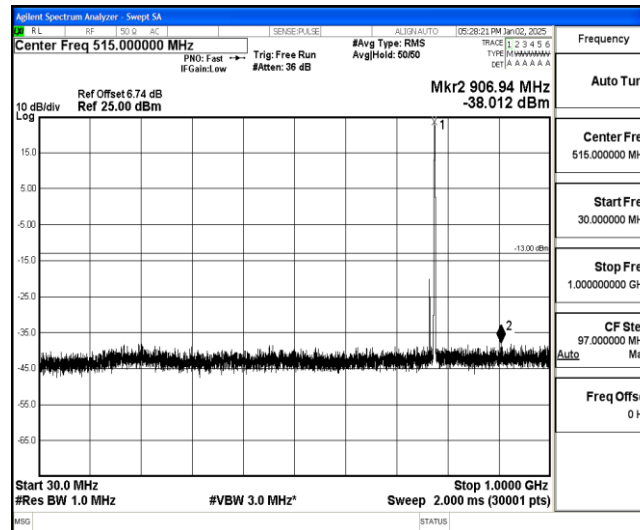
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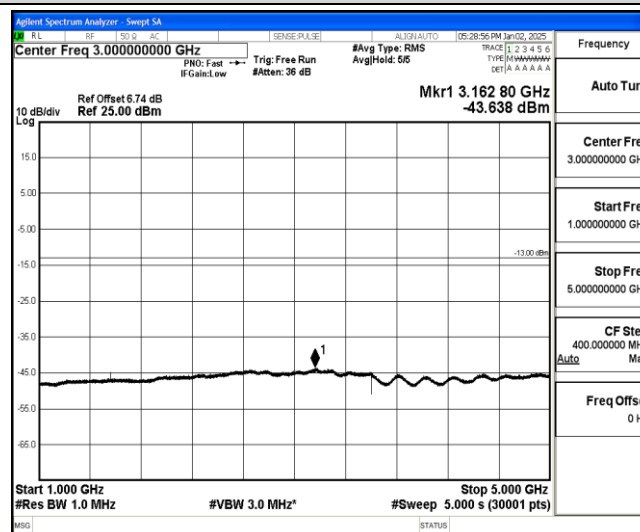
Scan code to check authenticity



Band13-5MHz-QPSK-23205-1-0-Low-12000-26500--44.43-PASS

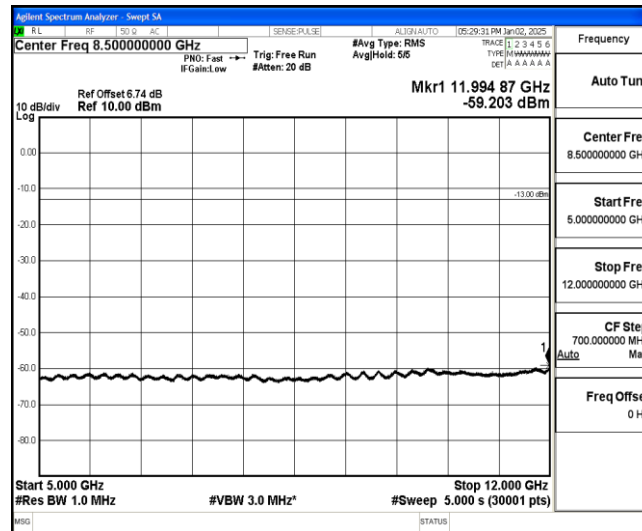


Band13-5MHz-QPSK-23230-1-0-Low-30-1000--38.01-PASS

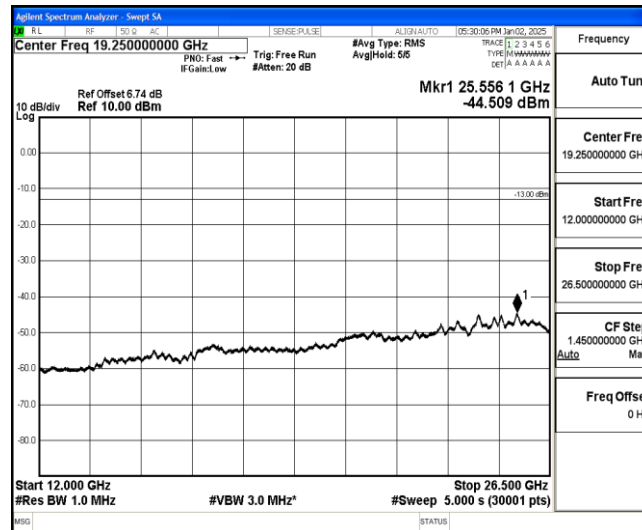


Band13-5MHz-QPSK-23230-1-0-Low-1000-5000--43.64-PASS

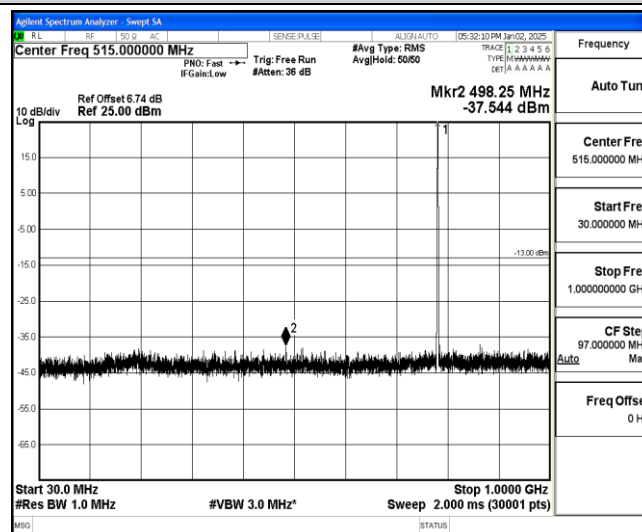




Band13-5MHz-QPSK-23230-1-0-Low-5000-12000--59.2-PASS

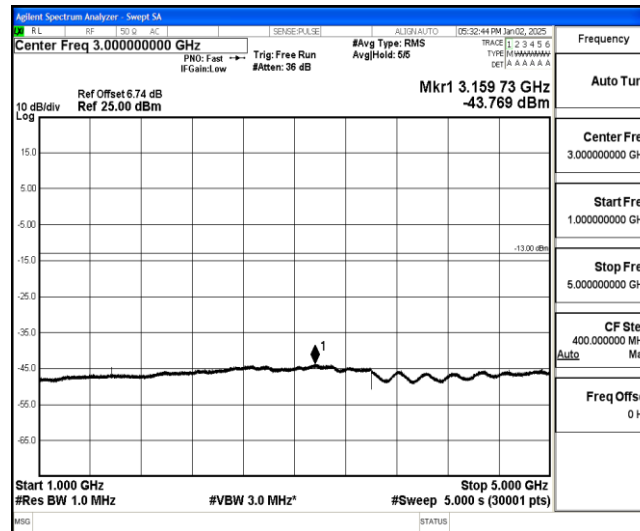


Band13-5MHz-QPSK-23230-1-0-Low-12000-26500--44.51-PASS

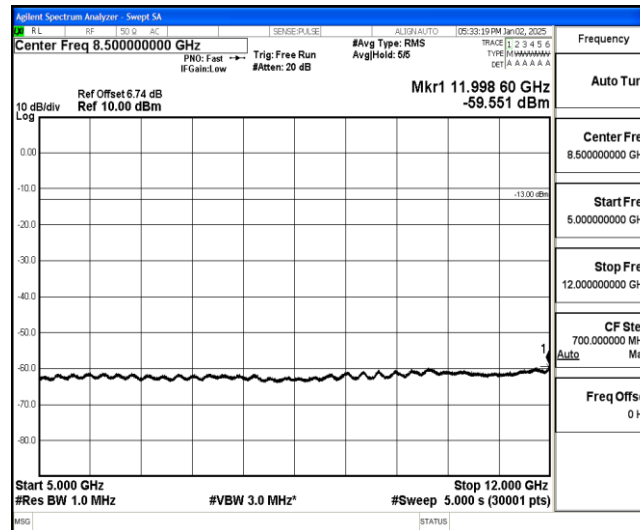


Band13-5MHz-QPSK-23255-1-0-High-30-1000--37.54-PASS

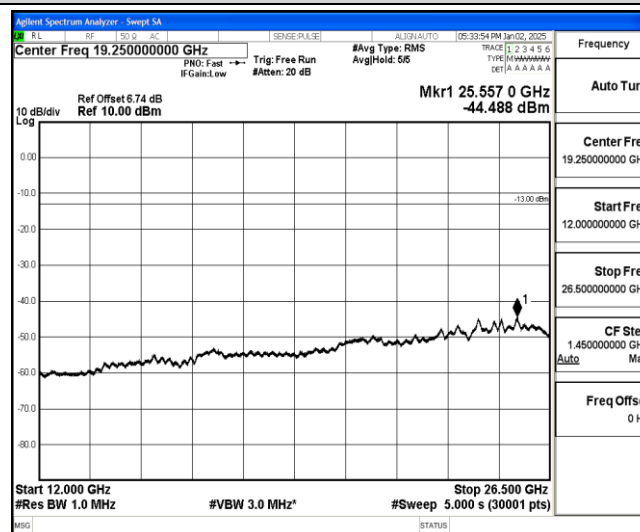




Band13-5MHz-QPSK-23255-1-0-High-1000-5000--43.77-PASS



Band13-5MHz-QPSK-23255-1-0-High-5000-12000--59.55-PASS



Band13-5MHz-QPSK-23255-1-0-High-12000-26500--44.49-PASS

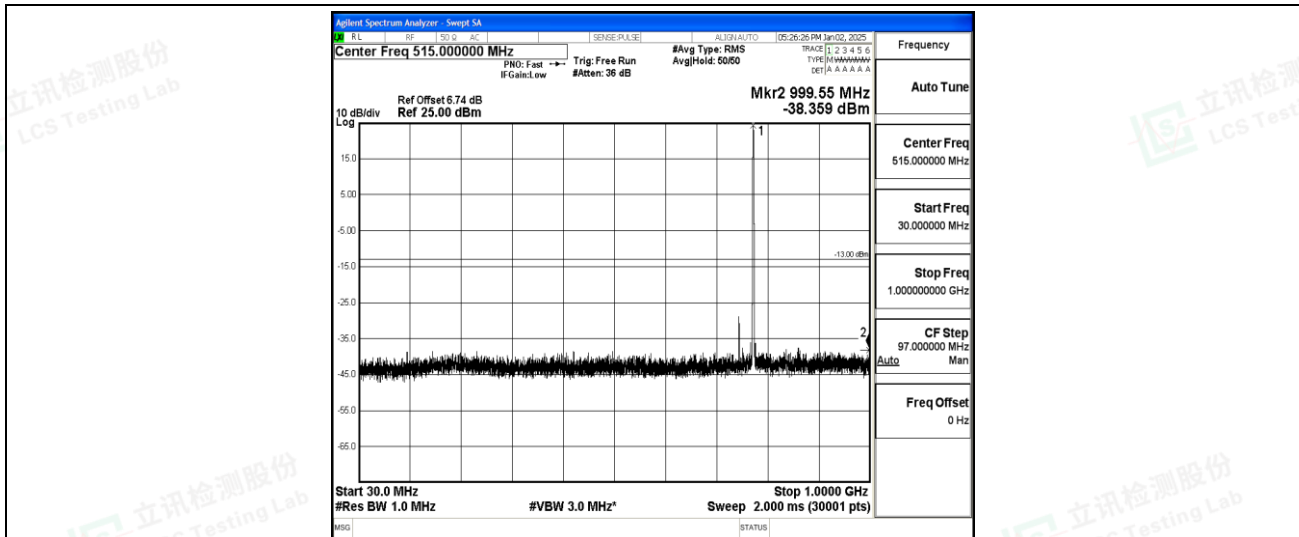


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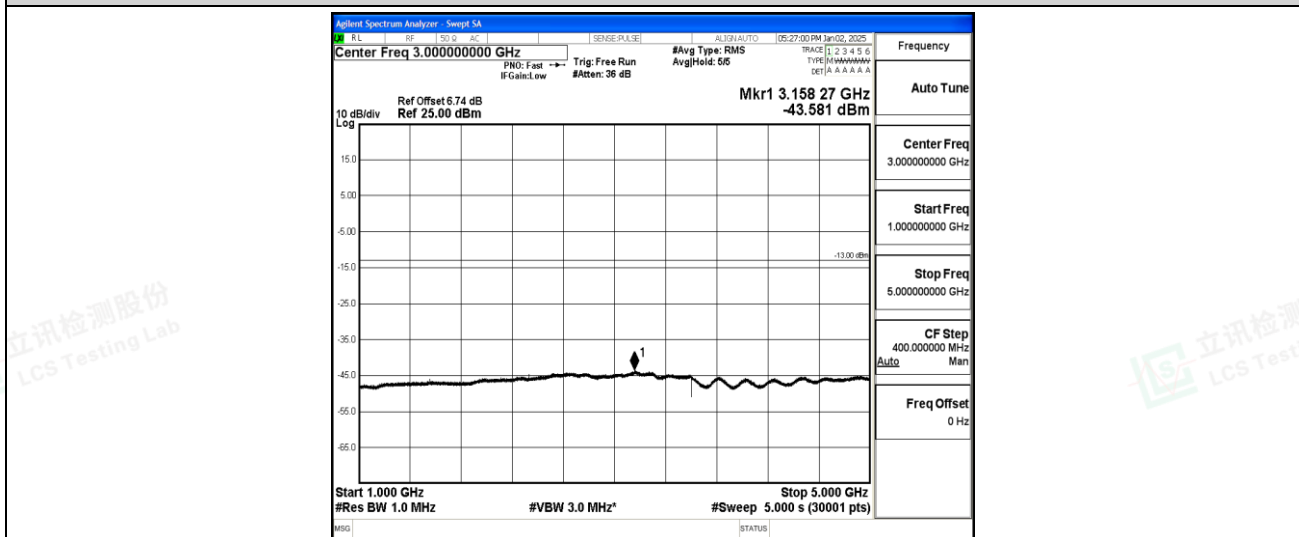
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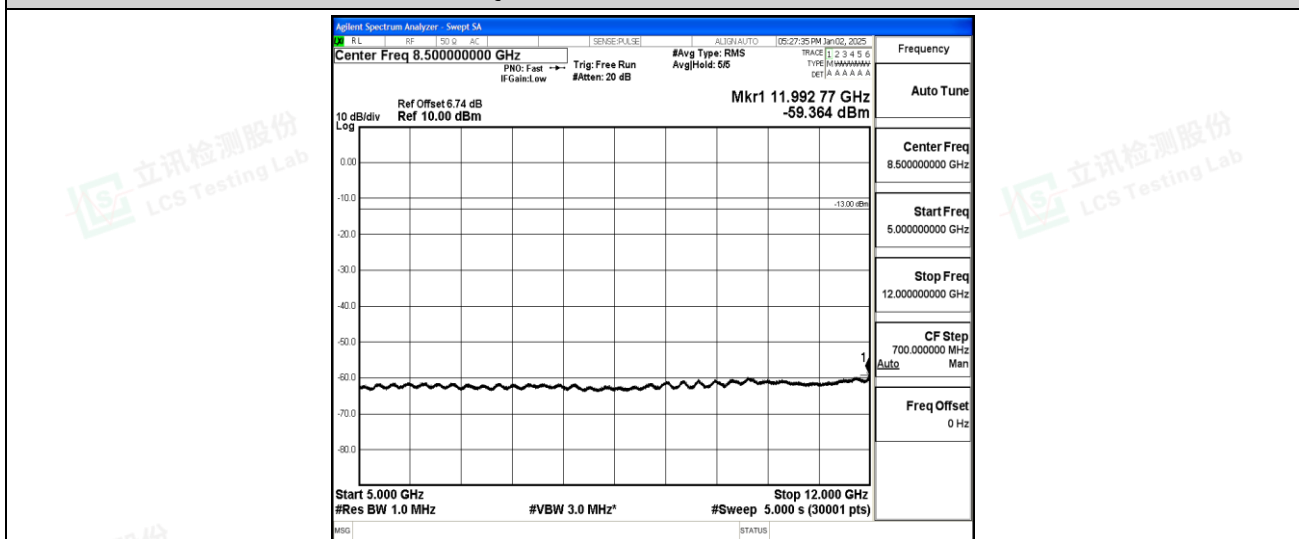
Scan code to check authenticity



Band13-5MHz-16QAM-23205-1-0-Low-30-1000--38.36-PASS

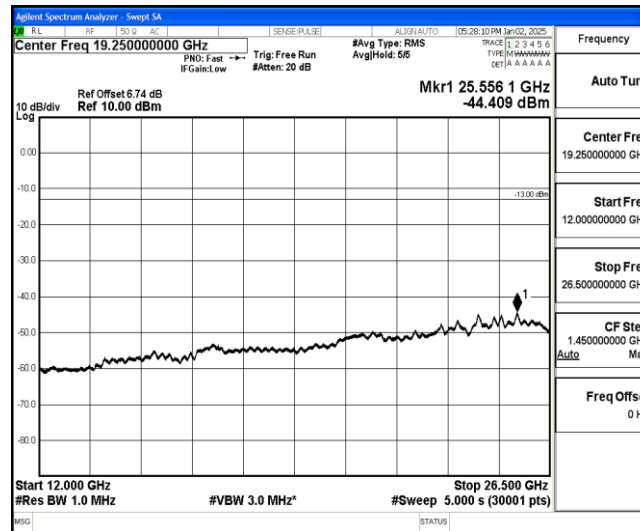


Band13-5MHz-16QAM-23205-1-0-Low-1000-5000--43.58-PASS

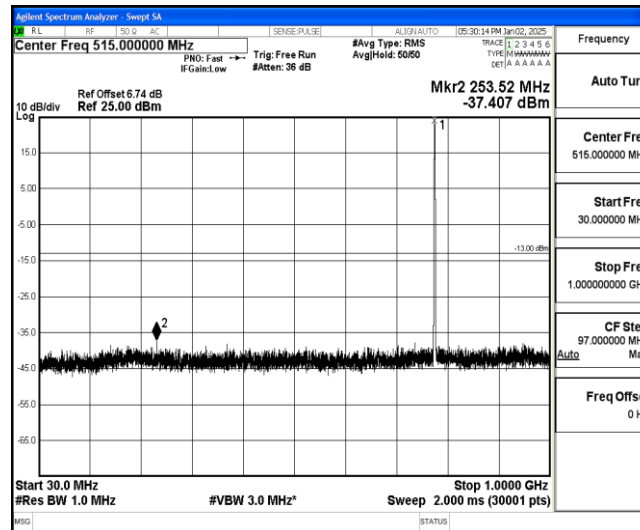


Band13-5MHz-16QAM-23205-1-0-Low-5000-12000--59.36-PASS

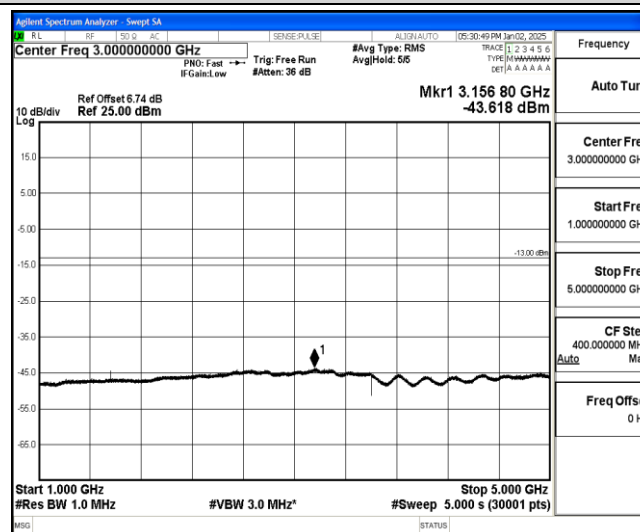




Band13-5MHz-16QAM-23205-1-0-Low-12000-26500--44.41-PASS

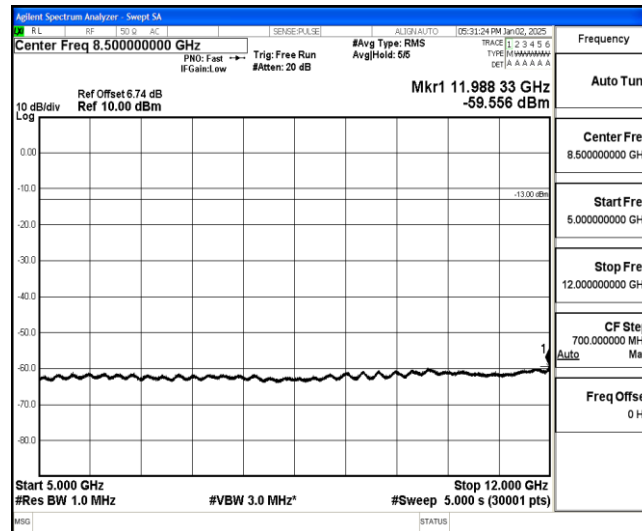


Band13-5MHz-16QAM-23230-1-0-Low-30-1000--37.41-PASS

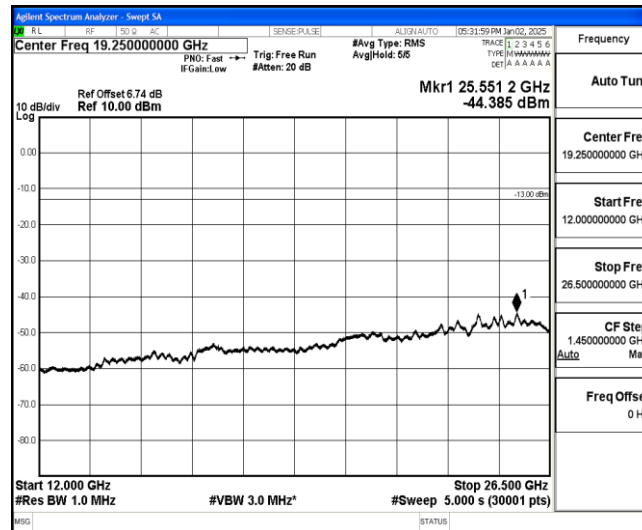


Band13-5MHz-16QAM-23230-1-0-Low-1000-5000--43.62-PASS

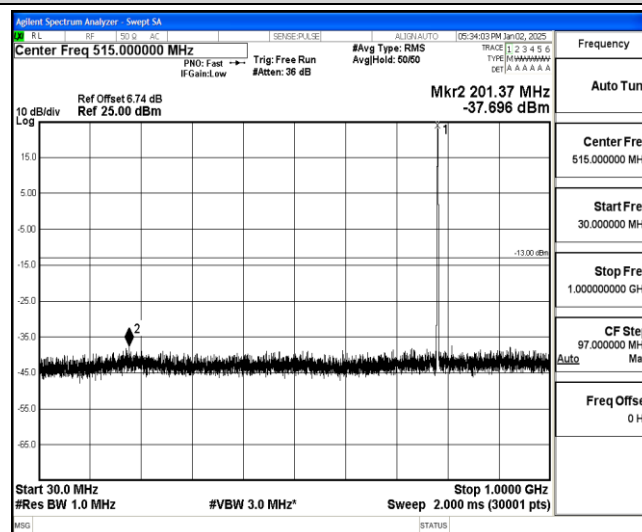




Band13-5MHz-16QAM-23230-1-0-Low-5000-12000--59.56-PASS



Band13-5MHz-16QAM-23230-1-0-Low-12000-26500--44.39-PASS



Band13-5MHz-16QAM-23255-1-0-High-30-1000--37.7-PASS

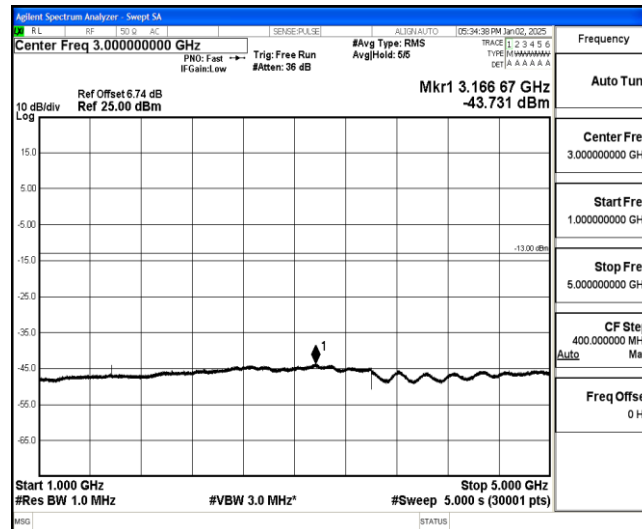


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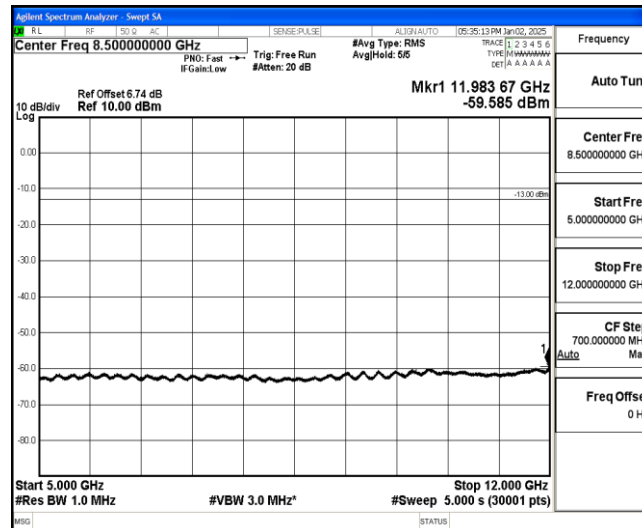
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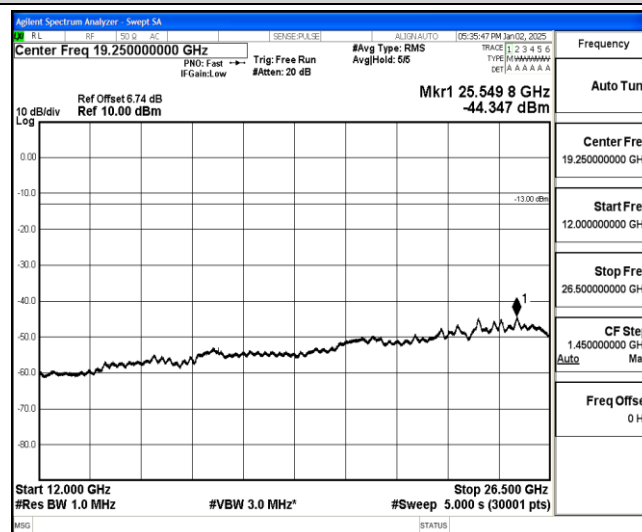
Scan code to check authenticity



Band13-5MHz-16QAM-23255-1-0-High-1000-5000--43.73-PASS



Band13-5MHz-16QAM-23255-1-0-High-5000-12000--59.59-PASS



Band13-5MHz-16QAM-23255-1-0-High-12000-26500--44.35-PASS

