



Appendix I: Test Data for E-UTRA Band 13

Product Name: Personal Mobile Alarm System
Test Model: PAL 4

Environmental Conditions

Temperature:	23.9° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu
Supervised by:	Li huan





I.1 Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	22.73	PASS
Band13	5MHz	QPSK	23205	1RB#12	22.69	PASS
Band13	5MHz	QPSK	23205	1RB#24	22.53	PASS
Band13	5MHz	QPSK	23205	12RB#0	21.75	PASS
Band13	5MHz	QPSK	23205	12RB#6	21.71	PASS
Band13	5MHz	QPSK	23205	12RB#13	21.69	PASS
Band13	5MHz	QPSK	23205	25RB#0	21.69	PASS
Band13	5MHz	QPSK	23230	1RB#0	22.63	PASS
Band13	5MHz	QPSK	23230	1RB#12	22.88	PASS
Band13	5MHz	QPSK	23230	1RB#24	22.80	PASS
Band13	5MHz	QPSK	23230	12RB#0	21.86	PASS
Band13	5MHz	QPSK	23230	12RB#6	21.91	PASS
Band13	5MHz	QPSK	23230	12RB#13	22.01	PASS
Band13	5MHz	QPSK	23230	25RB#0	21.96	PASS
Band13	5MHz	QPSK	23255	1RB#0	22.86	PASS
Band13	5MHz	QPSK	23255	1RB#12	23.13	PASS
Band13	5MHz	QPSK	23255	1RB#24	23.14	PASS
Band13	5MHz	QPSK	23255	12RB#0	22.02	PASS
Band13	5MHz	QPSK	23255	12RB#6	22.09	PASS
Band13	5MHz	QPSK	23255	12RB#13	22.08	PASS
Band13	5MHz	QPSK	23255	25RB#0	22.11	PASS
Band13	5MHz	16QAM	23205	1RB#0	21.57	PASS
Band13	5MHz	16QAM	23205	1RB#12	21.69	PASS
Band13	5MHz	16QAM	23205	1RB#24	21.29	PASS
Band13	5MHz	16QAM	23205	12RB#0	20.68	PASS
Band13	5MHz	16QAM	23205	12RB#6	20.65	PASS
Band13	5MHz	16QAM	23205	12RB#13	20.65	PASS
Band13	5MHz	16QAM	23205	25RB#0	20.75	PASS
Band13	5MHz	16QAM	23230	1RB#0	21.75	PASS
Band13	5MHz	16QAM	23230	1RB#12	21.93	PASS





Band13	5MHz	16QAM	23230	1RB#24	21.69	PASS
Band13	5MHz	16QAM	23230	12RB#0	20.83	PASS
Band13	5MHz	16QAM	23230	12RB#6	20.88	PASS
Band13	5MHz	16QAM	23230	12RB#13	21.07	PASS
Band13	5MHz	16QAM	23230	25RB#0	20.85	PASS
Band13	5MHz	16QAM	23255	1RB#0	21.83	PASS
Band13	5MHz	16QAM	23255	1RB#12	21.97	PASS
Band13	5MHz	16QAM	23255	1RB#24	22.02	PASS
Band13	5MHz	16QAM	23255	12RB#0	21.06	PASS
Band13	5MHz	16QAM	23255	12RB#6	21.00	PASS
Band13	5MHz	16QAM	23255	12RB#13	20.99	PASS
Band13	5MHz	16QAM	23255	25RB#0	20.96	PASS
Band13	10MHz	QPSK	23230	1RB#0	22.98	PASS
Band13	10MHz	QPSK	23230	1RB#24	23.09	PASS
Band13	10MHz	QPSK	23230	1RB#49	23.29	PASS
Band13	10MHz	QPSK	23230	25RB#0	22.26	PASS
Band13	10MHz	QPSK	23230	25RB#12	22.27	PASS
Band13	10MHz	QPSK	23230	25RB#25	22.31	PASS
Band13	10MHz	QPSK	23230	50RB#0	22.43	PASS
Band13	10MHz	16QAM	23230	1RB#0	22.32	PASS
Band13	10MHz	16QAM	23230	1RB#24	22.30	PASS
Band13	10MHz	16QAM	23230	1RB#49	22.43	PASS
Band13	10MHz	16QAM	23230	25RB#0	21.27	PASS
Band13	10MHz	16QAM	23230	25RB#12	21.16	PASS
Band13	10MHz	16QAM	23230	25RB#25	21.27	PASS
Band13	10MHz	16QAM	23230	50RB#0	21.32	PASS





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

Test Result

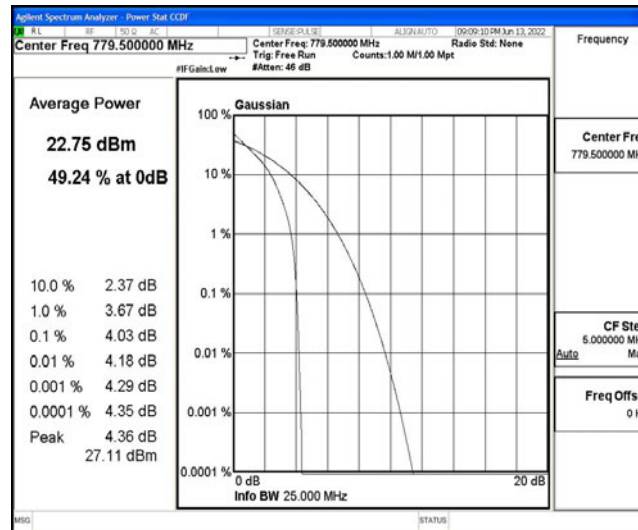
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.03	13	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.14	13	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.54	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	5.02	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	5.19	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	5.28	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	4.54	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	5.45	13	PASS



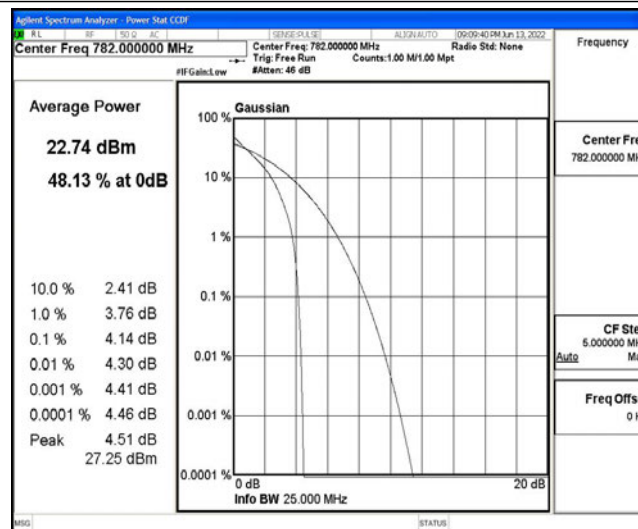


Test Graphs

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

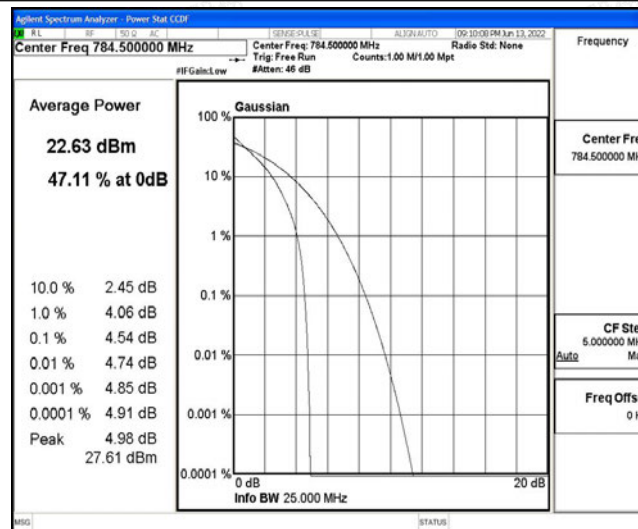


Band13-5MHz-QPSK-23230-25RB#0

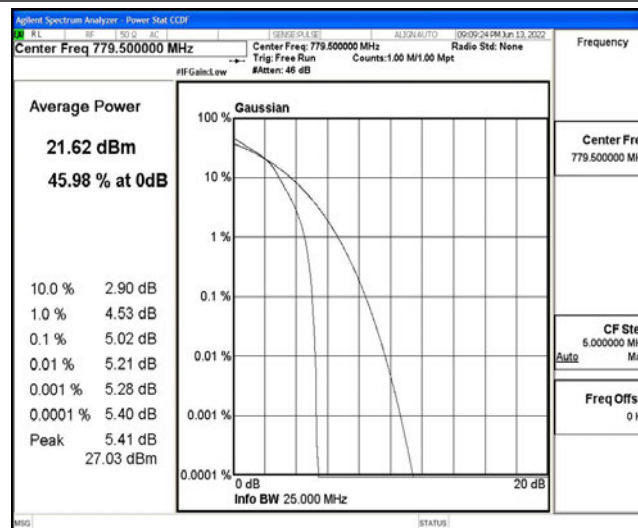


Band13-5MHz-QPSK-23255-25RB#0

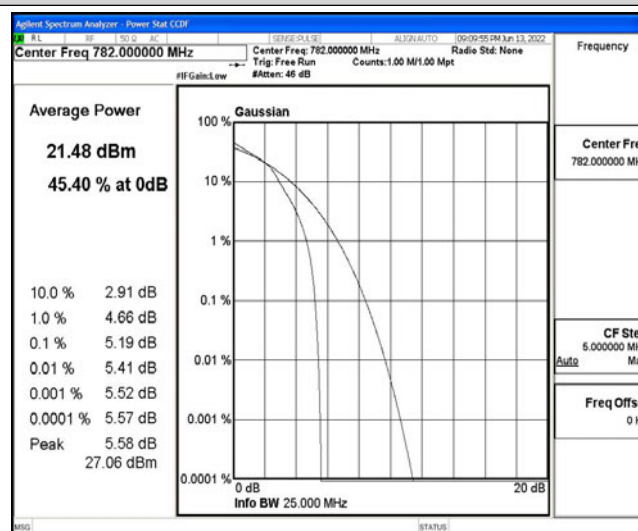




Band13-5MHz-16QAM-23205-25RB#0



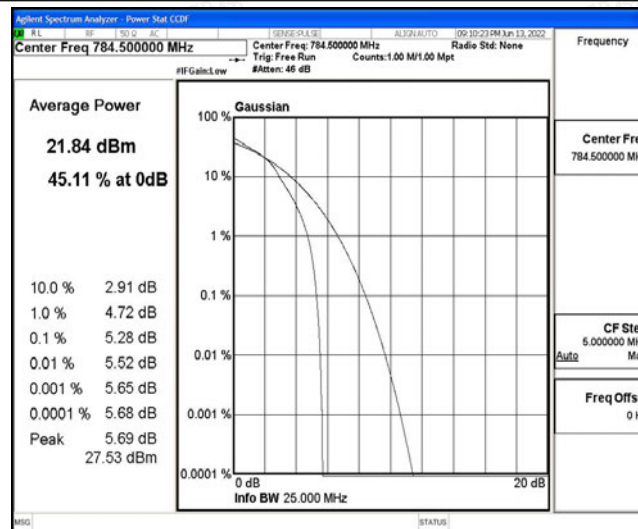
Band13-5MHz-16QAM-23230-25RB#0



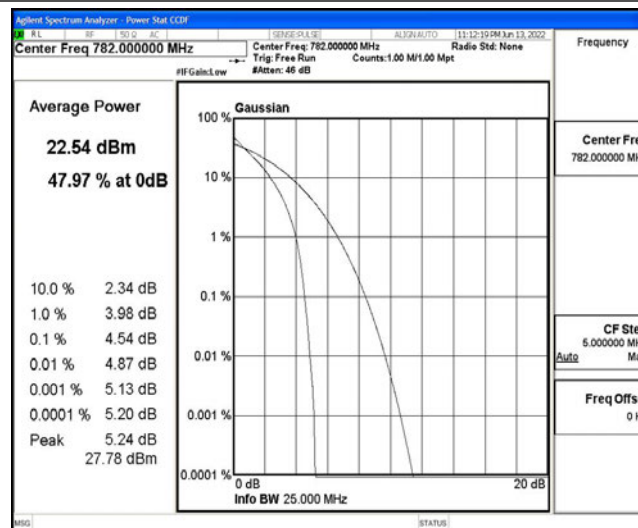
Band13-5MHz-16QAM-23255-25RB#0



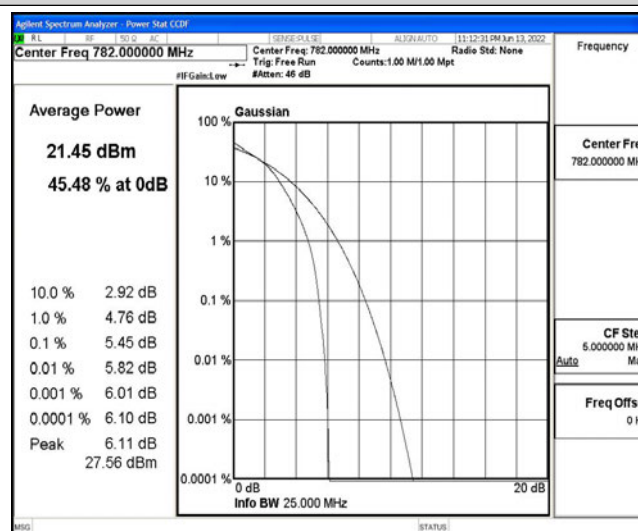
Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity



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



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





I.3 26dB Bandwidth and Occupied Bandwidth

Test Result

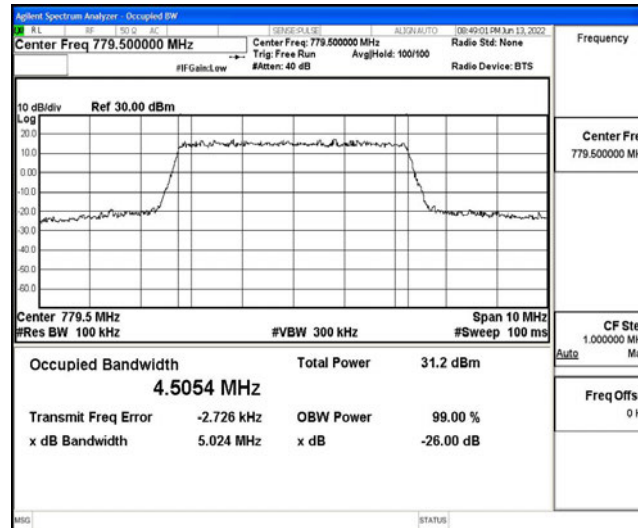
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5054	5.024	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.5099	5.025	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5194	5.024	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5033	4.989	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.5074	4.990	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.5041	5.012	PASS
Band13	10MHz	QPSK	23230	50RB#0	8.9566	9.791	PASS
Band13	10MHz	16QAM	23230	50RB#0	8.9611	9.879	PASS



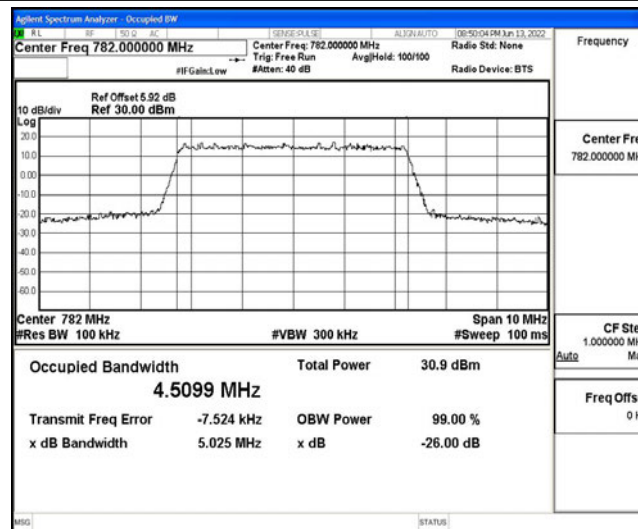


Test Graphs

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

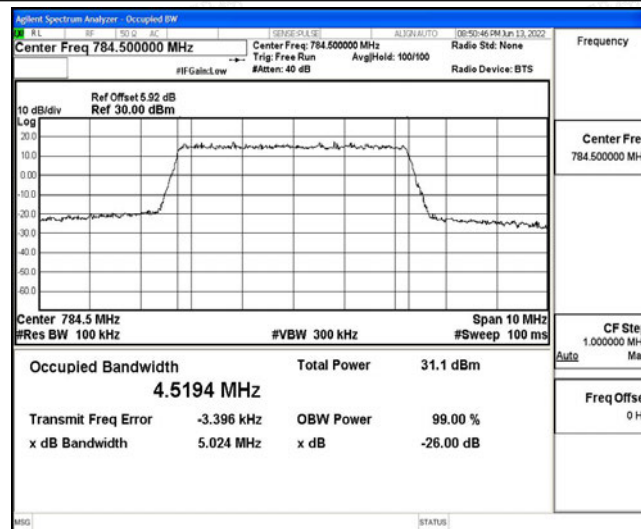


Band13-5MHz-QPSK-23230-25RB#0

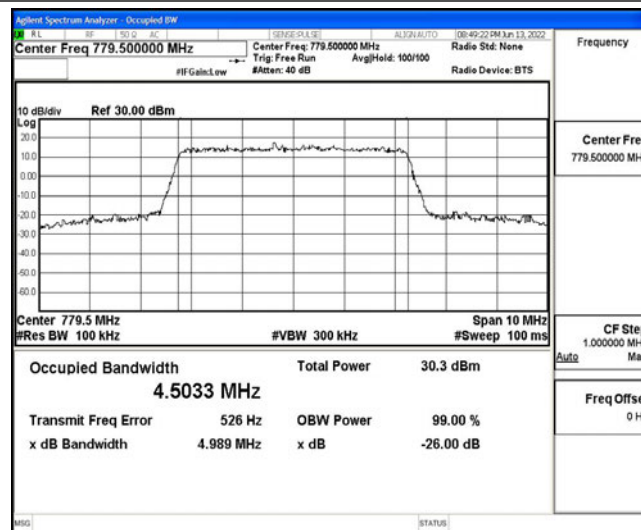


Band13-5MHz-QPSK-23255-25RB#0

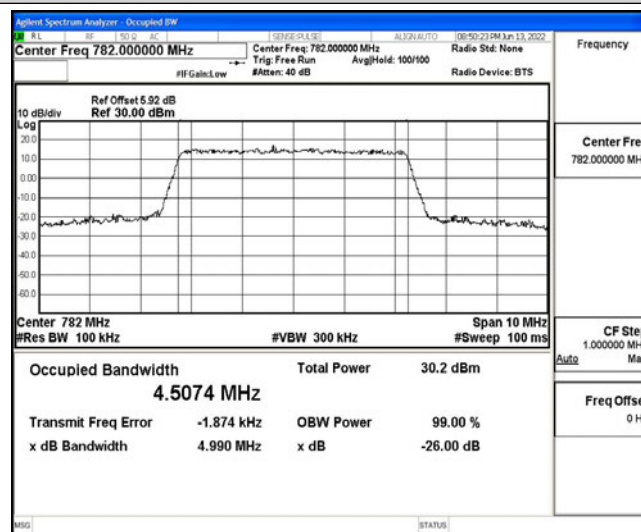




Band13-5MHz-16QAM-23205-25RB#0

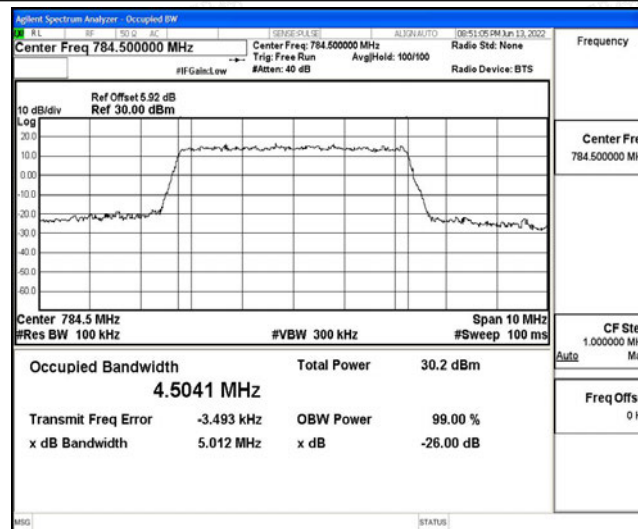


Band13-5MHz-16QAM-23230-25RB#0

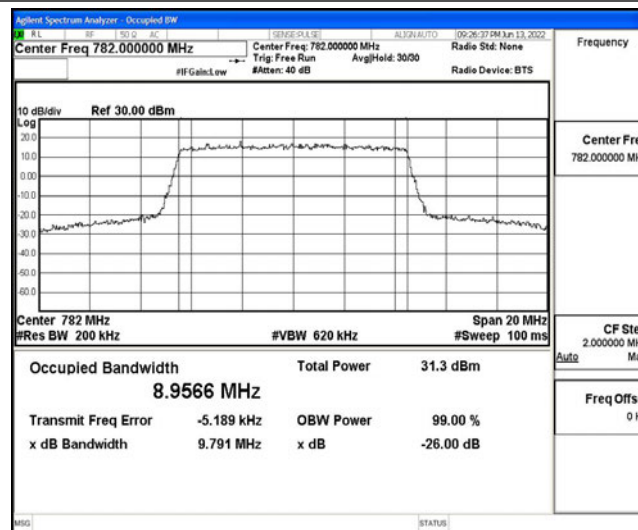


Band13-5MHz-16QAM-23255-25RB#0

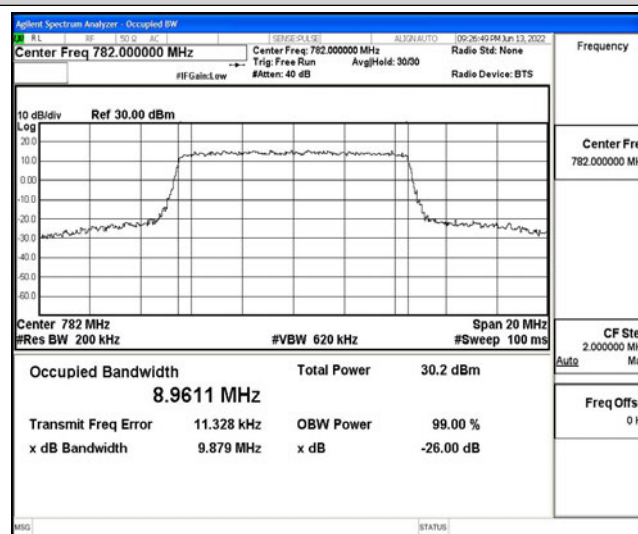




Band13-10MHz-QPSK-23230-50RB#0



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





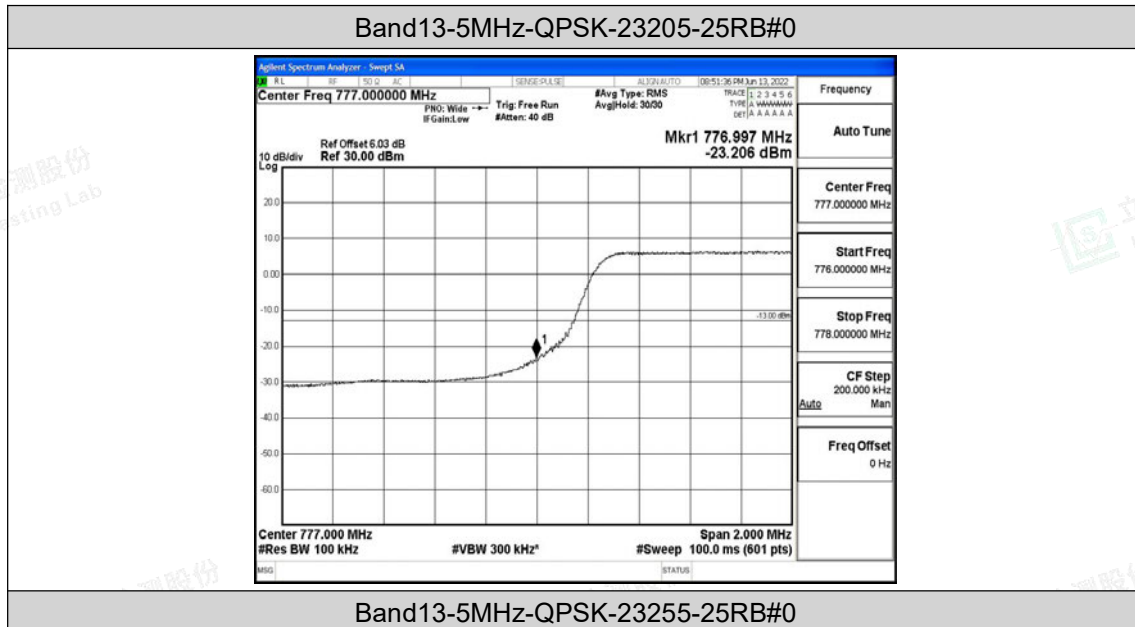


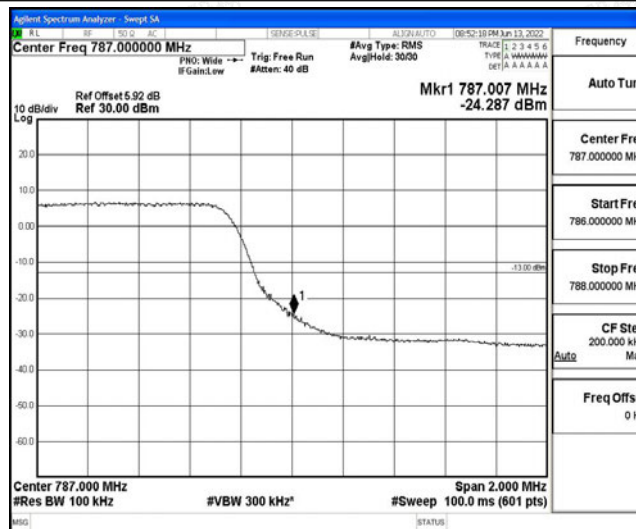
I.4 Band Edge

Test Result

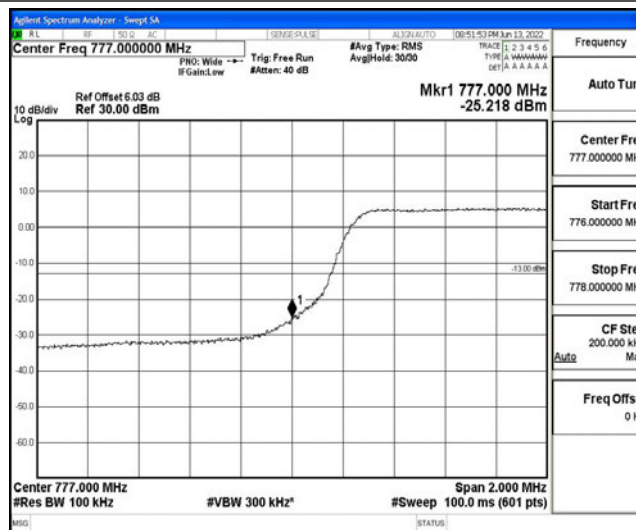
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	-23.21	PASS
Band13	5MHz	QPSK	23255	25RB#0	-24.29	PASS
Band13	5MHz	16QAM	23205	25RB#0	-25.22	PASS
Band13	5MHz	16QAM	23255	25RB#0	-26.01	PASS
Band13	10MHz	QPSK	23230	50RB#0	-25.95,-26.94	PASS
Band13	10MHz	16QAM	23230	50RB#0	-28.36,-28.74	PASS

Test Graphs

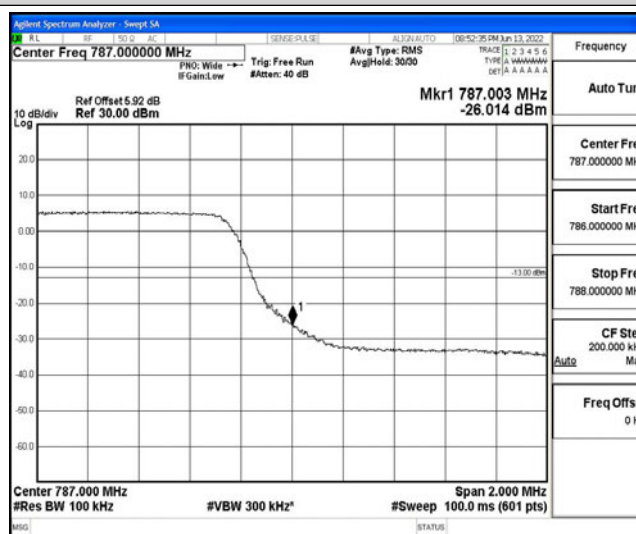




Band13-5MHz-16QAM-23205-25RB#0

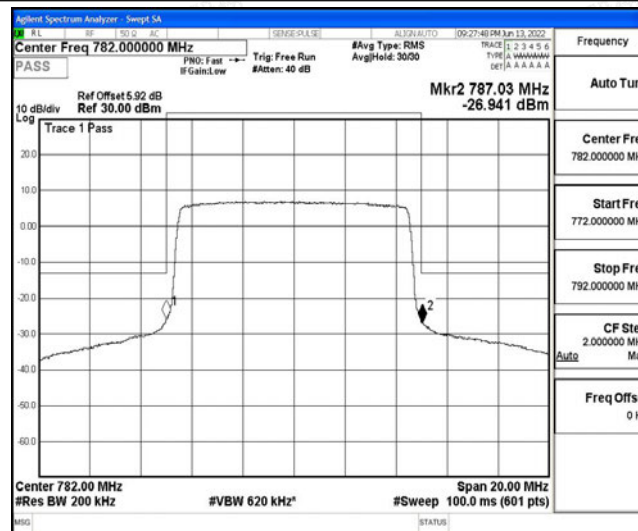


Band13-5MHz-16QAM-23255-25RB#0

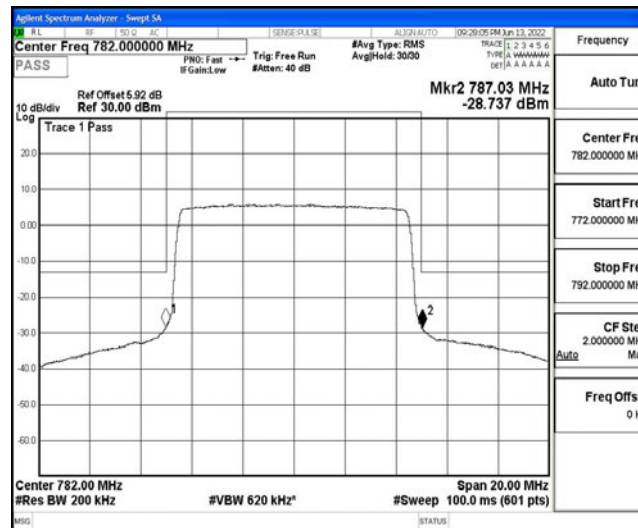


Band13-10MHz-QPSK-23230-50RB#0





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





I.5 Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	Range1:0.009~0.15MHz	-55.05	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range2:0.15~30MHz	-52.17	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range3:30~1000MHz	-41.1	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range5:763~775MHz	-54.14	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range6:793~805MHz	-58.49	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range4:1000~10000MHz	-44.92	PASS
Band13	5MHz	QPSK	23205	1RB#0	Range7:1559~1610MHz	-62.42	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range1:0.009~0.15MHz	-55.66	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range2:0.15~30MHz	-52.14	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range3:30~1000MHz	-41.26	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range5:763~775MHz	-60.39	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range6:793~805MHz	-59.9	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range4:1000~10000MHz	-44.87	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range7:1559~1610MHz	-64.25	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range1:0.009~0.15MHz	-55.18	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range2:0.15~30MHz	-52.93	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range3:30~1000MHz	-40.58	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range5:763~775MHz	-57.27	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range6:793~805MHz	-60.48	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range4:1000~10000MHz	-45.22	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range7:1559~1610MHz	-64.08	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range1:0.009~0.15MHz	-53.06	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range2:0.15~30MHz	-51.89	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range3:30~1000MHz	-41.02	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range5:763~775MHz	-54.21	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range6:793~805MHz	-59.45	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range4:1000~10000MHz	-44.96	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range7:1559~1610MHz	-62.55	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range1:0.009~0.15MHz	-55.02	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range2:0.15~30MHz	-50.57	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range3:30~1000MHz	-41.19	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range5:763~775MHz	-59.45	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range6:793~805MHz	-60.36	PASS



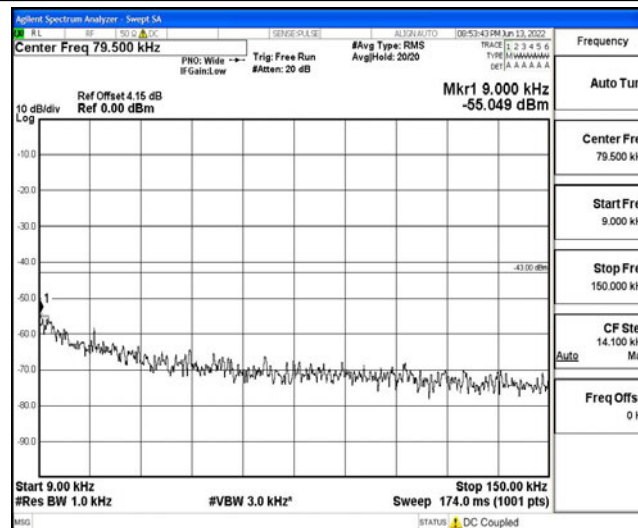
Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity



Band13	5MHz	16QAM	23230	1RB#0	Range4:1000~10000MHz	-45.27	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range7:1559~1610MHz	-64.18	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range1:0.009~0.15MHz	-55.8	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range2:0.15~30MHz	-52.55	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range3:30~1000MHz	-40.86	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range5:763~775MHz	-58.88	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range6:793~805MHz	-60.88	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range4:1000~10000MHz	-45.3	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range7:1559~1610MHz	-64.47	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range1:0.009~0.15MHz	-54.83	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range2:0.15~30MHz	-52.45	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range3:30~1000MHz	-40.27	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range5:763~775MHz	-54.32	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range6:793~805MHz	-56.94	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range4:1000~10000MHz	-45.03	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range7:1559~1610MHz	-62.41	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range1:0.009~0.15MHz	-54.26	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range2:0.15~30MHz	-51.85	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range3:30~1000MHz	-40.63	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range5:763~775MHz	-54.97	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range6:793~805MHz	-55.79	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range4:1000~10000MHz	-44.93	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range7:1559~1610MHz	-62.52	PASS

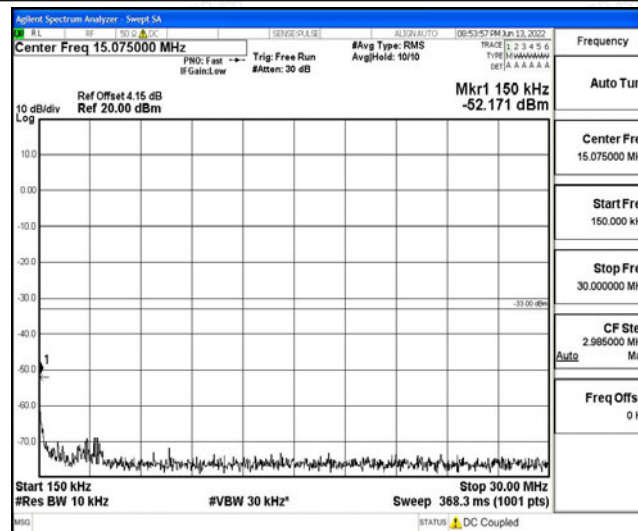
Test Graphs

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

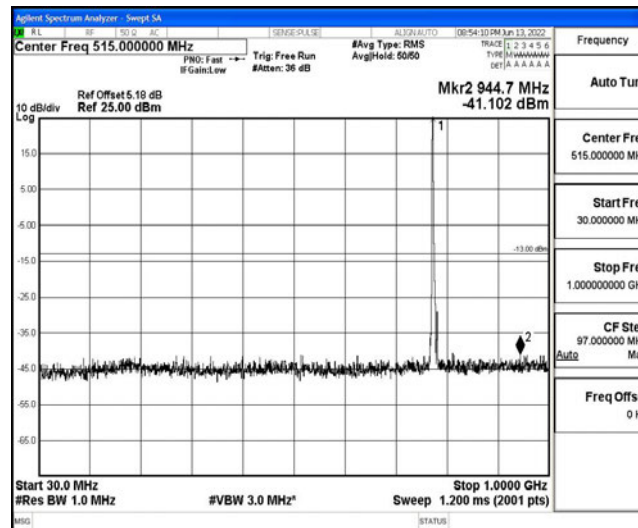


Band13-5MHz-QPSK-23205-1RB#0-Range2:0.15~30MHz

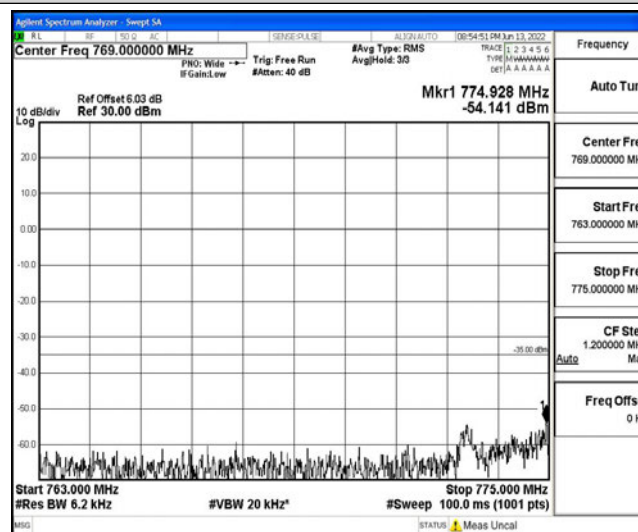




Band13-5MHz-QPSK-23205-1RB#0-Range3:30~1000MHz

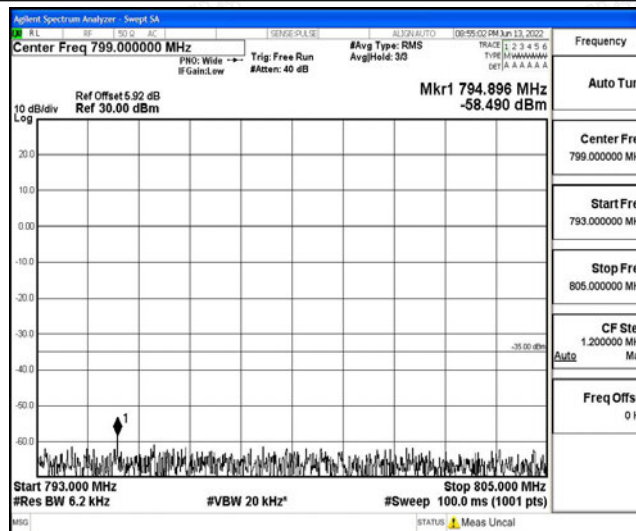


Band13-5MHz-QPSK-23205-1RB#0-Range5:763~775MHz

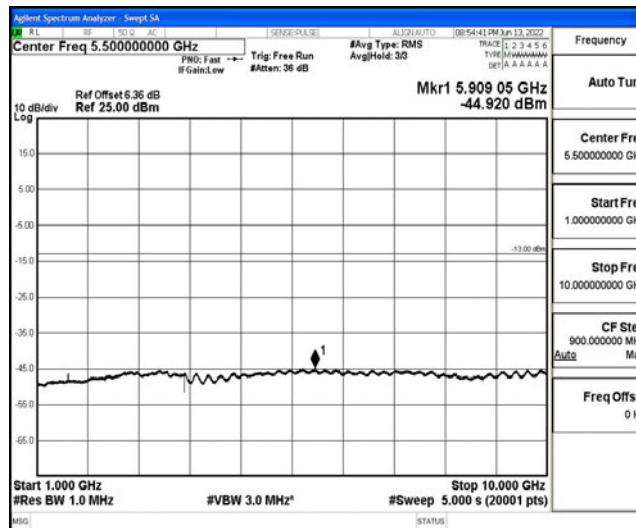


Band13-5MHz-QPSK-23205-1RB#0-Range6:793~805MHz

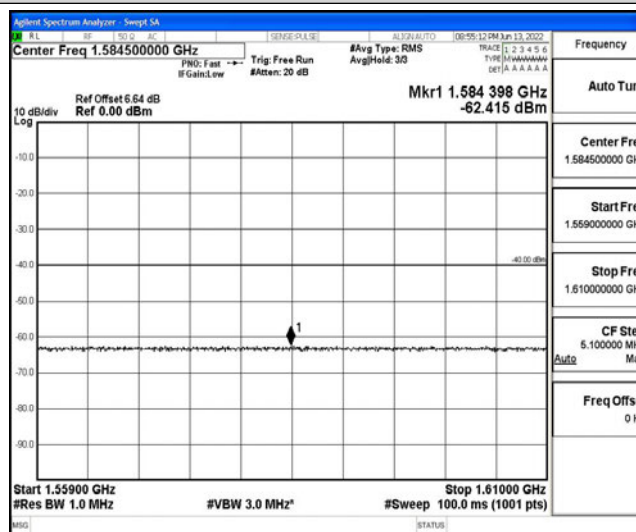




Band13-5MHz-QPSK-23205-1RB#0-Range4:1000~10000MHz

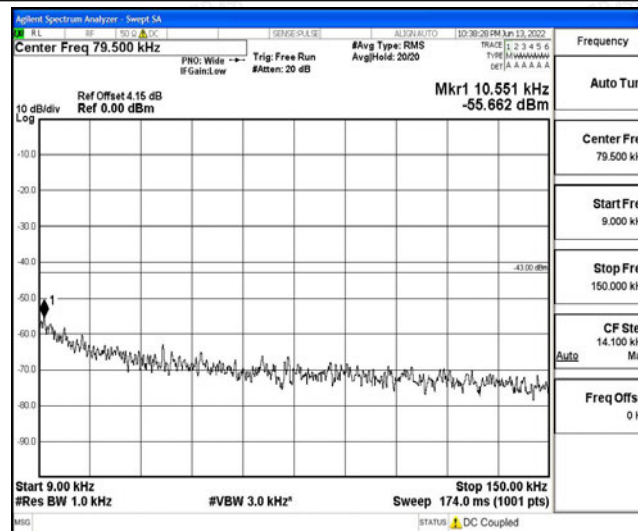


Band13-5MHz-QPSK-23205-1RB#0-Range7:1559~1610MHz

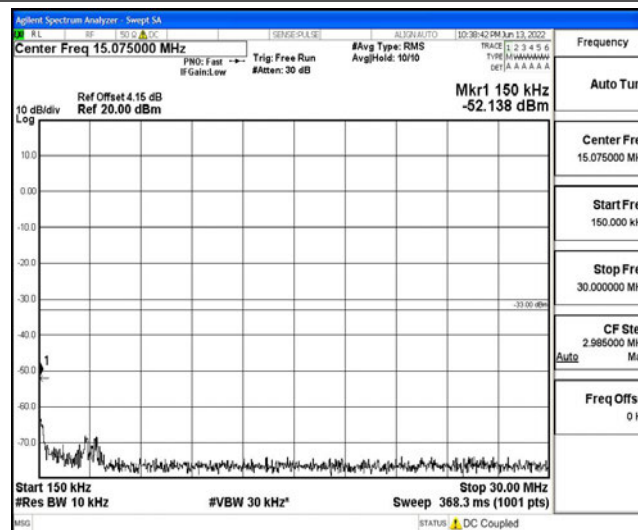


Band13-5MHz-QPSK-23230-1RB#0-Range1:0.009~0.15MHz

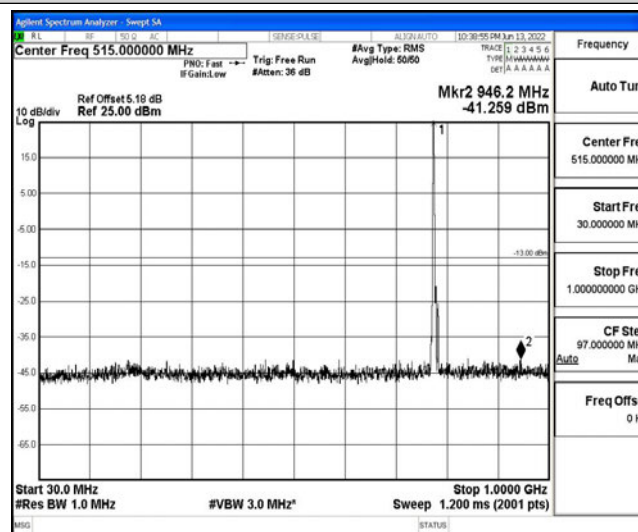




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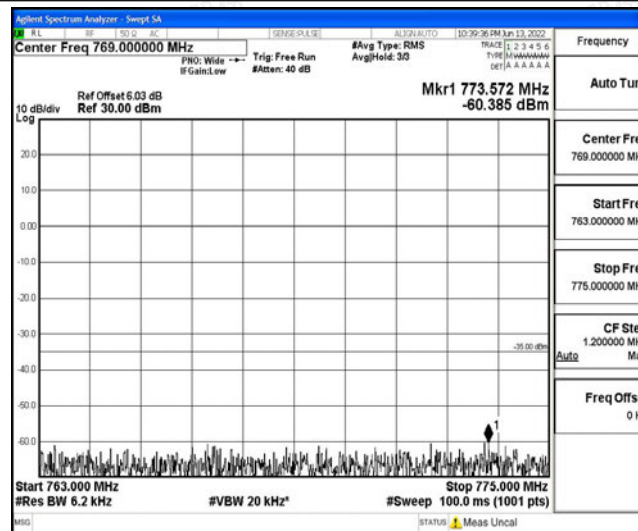
Band13-5MHz-QPSK-23230-1RB#0-Range3:30~1000MHz



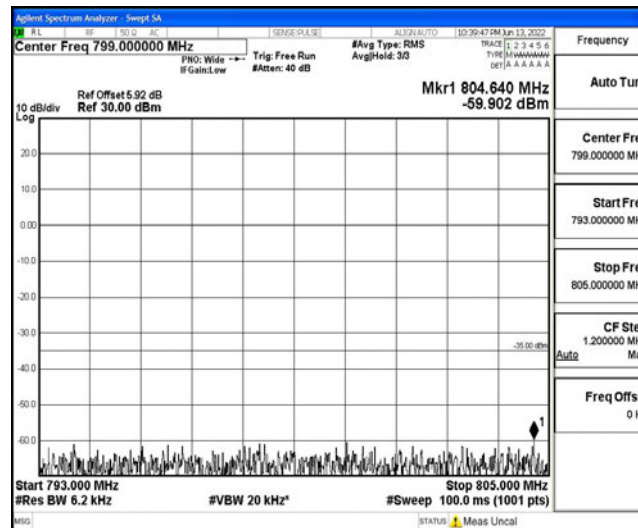
Band13-5MHz-QPSK-23230-1RB#0-Range5:763~775MHz



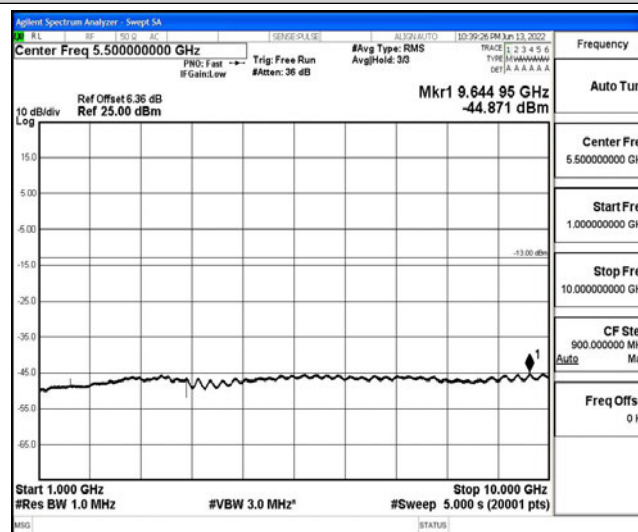
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Band13-5MHz-QPSK-23230-1RB#0-Range6:793~805MHz

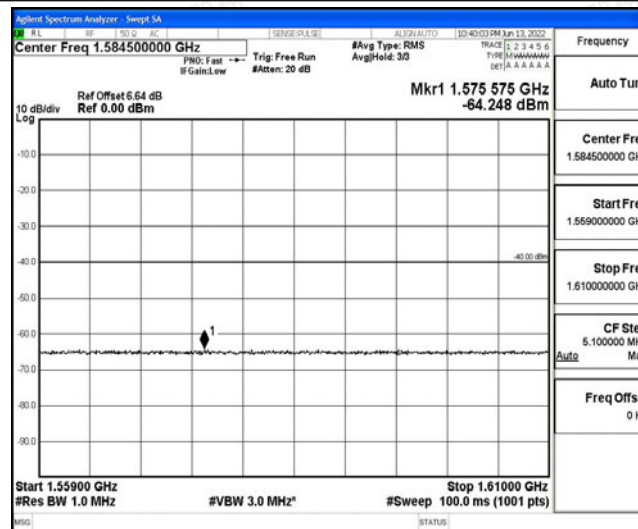


Band13-5MHz-QPSK-23230-1RB#0-Range4:1000~10000MHz

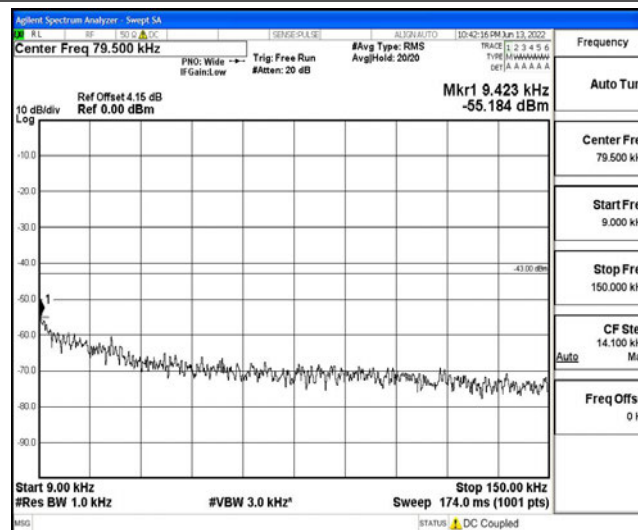


Band13-5MHz-QPSK-23230-1RB#0-Range7:1559~1610MHz

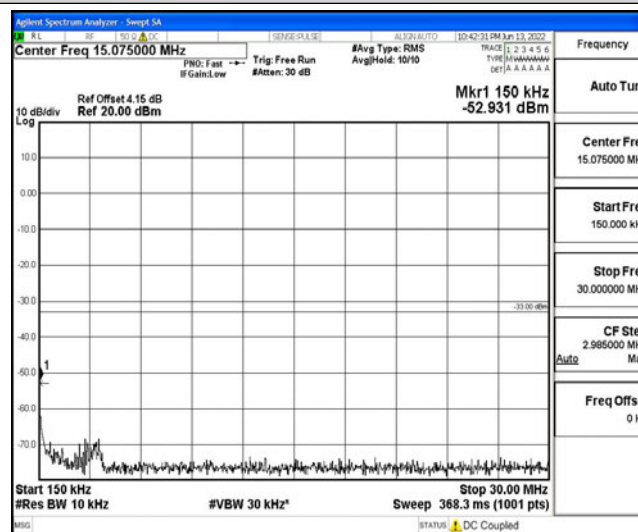




Band13-5MHz-QPSK-23255-1RB#0-Range1:0.009~0.15MHz

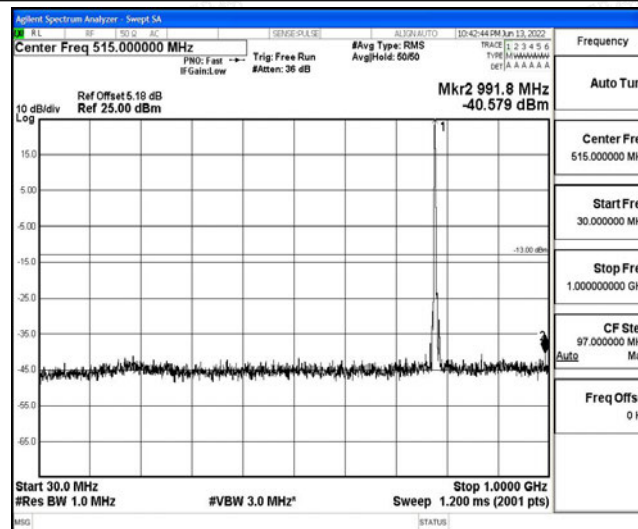


Band13-5MHz-QPSK-23255-1RB#0-Range2:0.15~30MHz

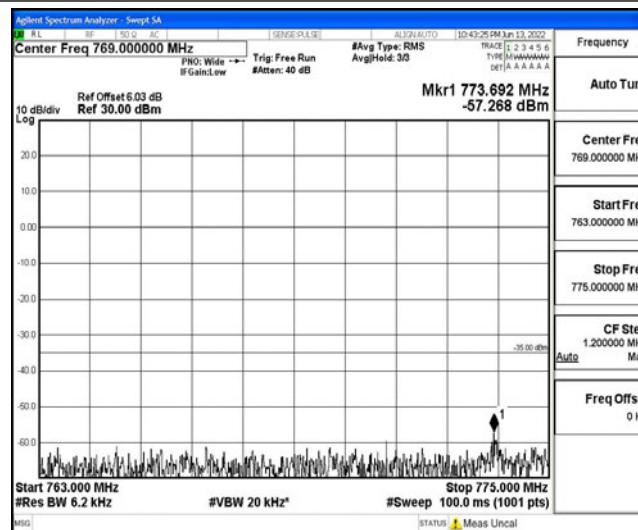


Band13-5MHz-QPSK-23255-1RB#0-Range3:30~1000MHz

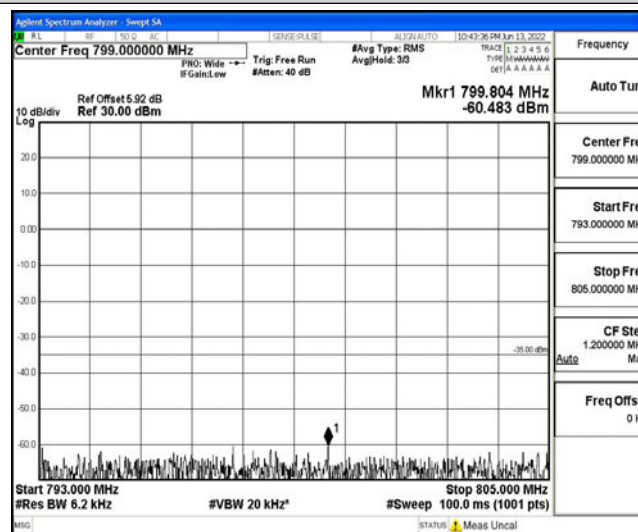




Band13-5MHz-QPSK-23255-1RB#0-Range5:763~775MHz



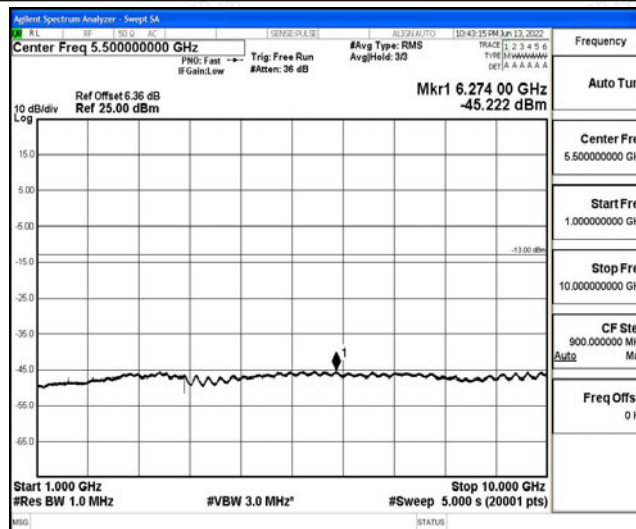
Band13-5MHz-QPSK-23255-1RB#0-Range6:793~805MHz



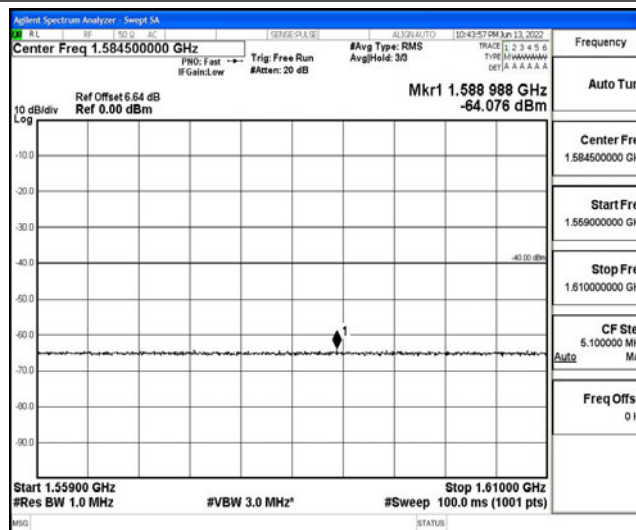
Band13-5MHz-QPSK-23255-1RB#0-Range4:1000~10000MHz



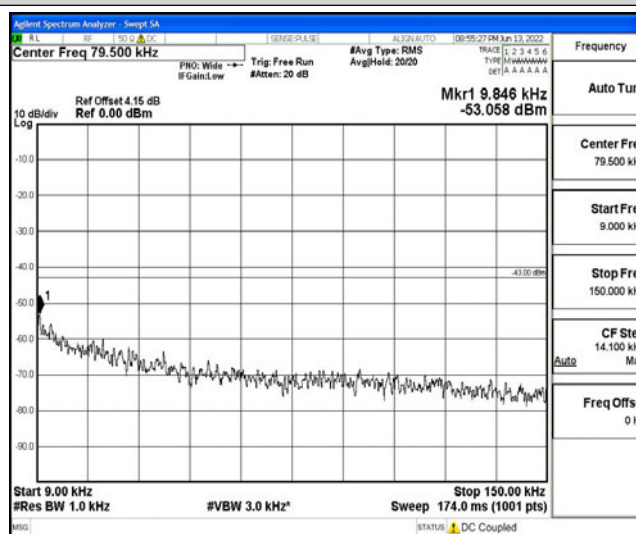
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Band13-5MHz-QPSK-23255-1RB#0-Range7:1559~1610MHz



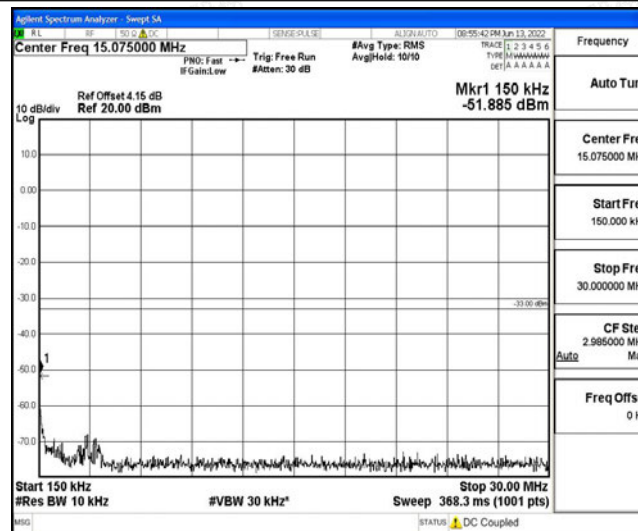
Band13-5MHz-16QAM-23205-1RB#0-Range1:0.009~0.15MHz



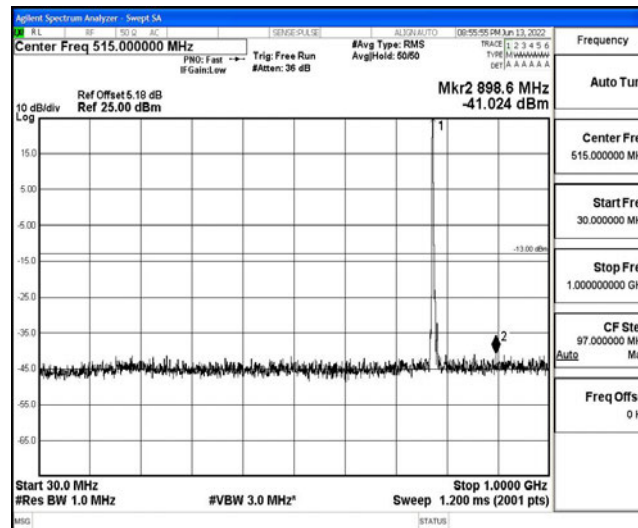
Band13-5MHz-16QAM-23205-1RB#0-Range2:0.15~30MHz



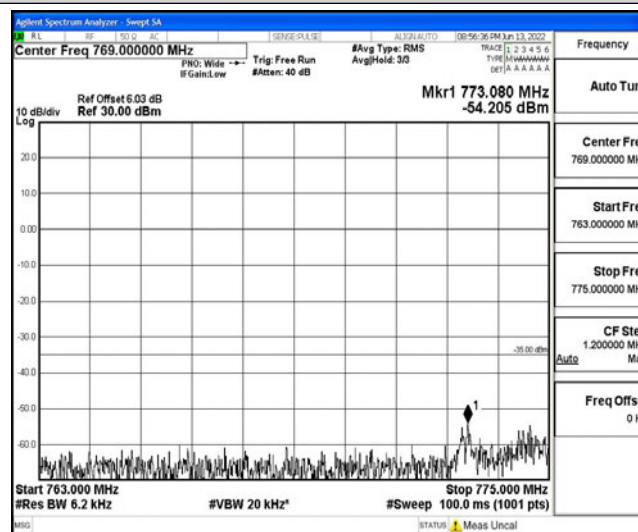
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Band13-5MHz-16QAM-23205-1RB#0-Range3:30~1000MHz

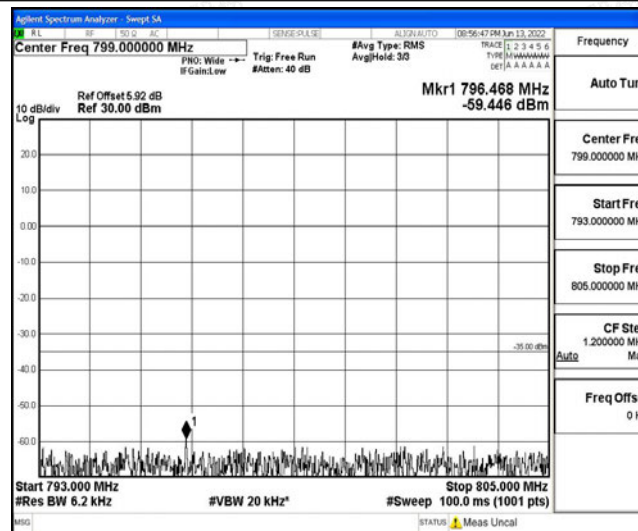


Band13-5MHz-16QAM-23205-1RB#0-Range5:763~775MHz

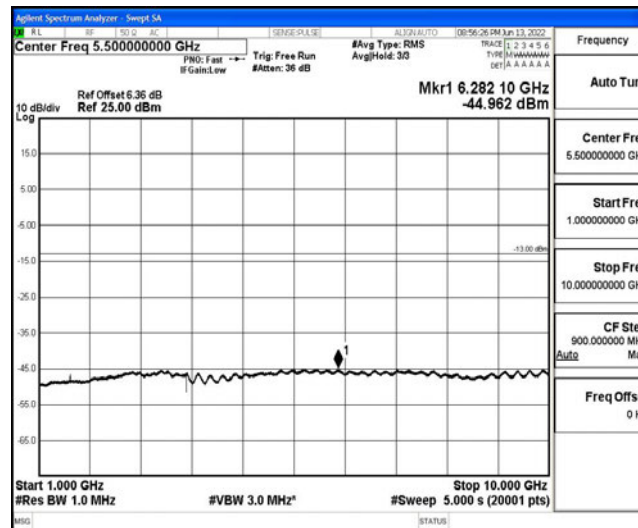


Band13-5MHz-16QAM-23205-1RB#0-Range6:793~805MHz

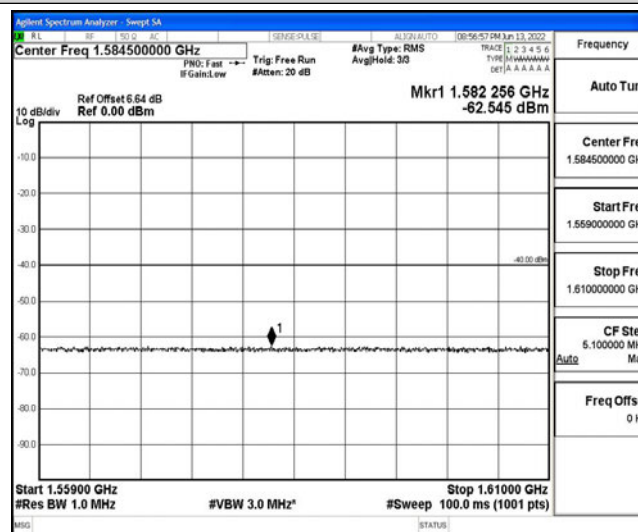




Band13-5MHz-16QAM-23205-1RB#0-Range4:1000~10000MHz

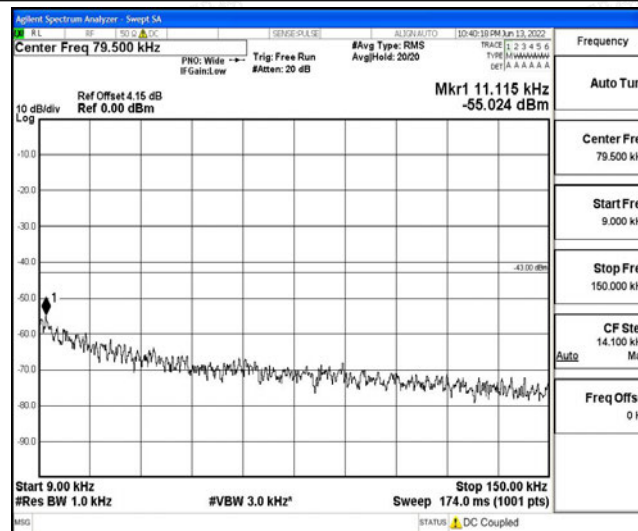


Band13-5MHz-16QAM-23205-1RB#0-Range7:1559~1610MHz

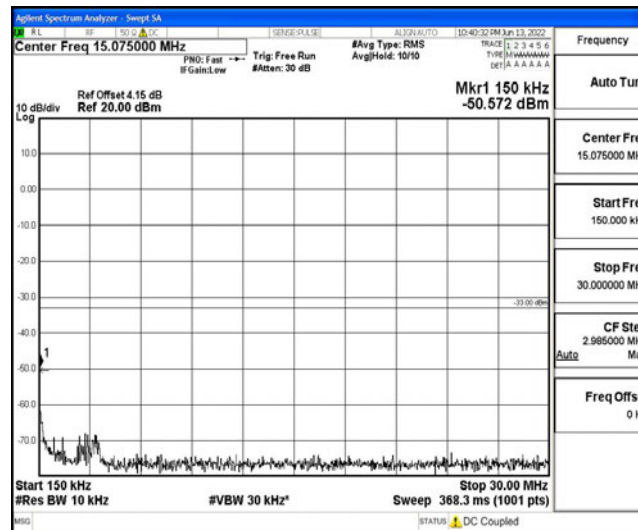


Band13-5MHz-16QAM-23230-1RB#0-Range1:0.009~0.15MHz

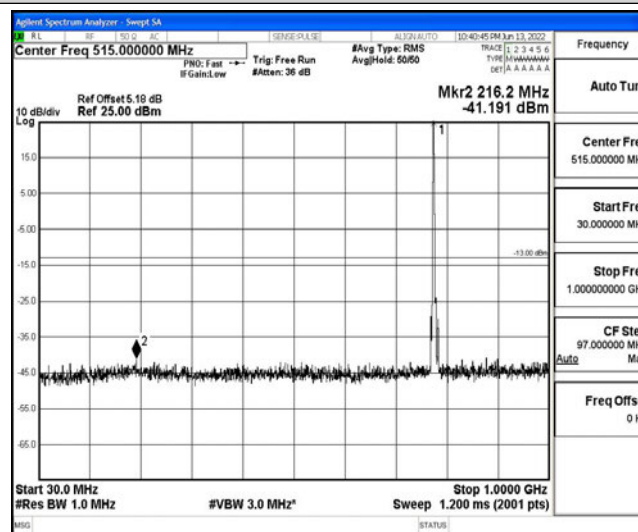




Band13-5MHz-16QAM-23230-1RB#0-Range2:0.15~30MHz

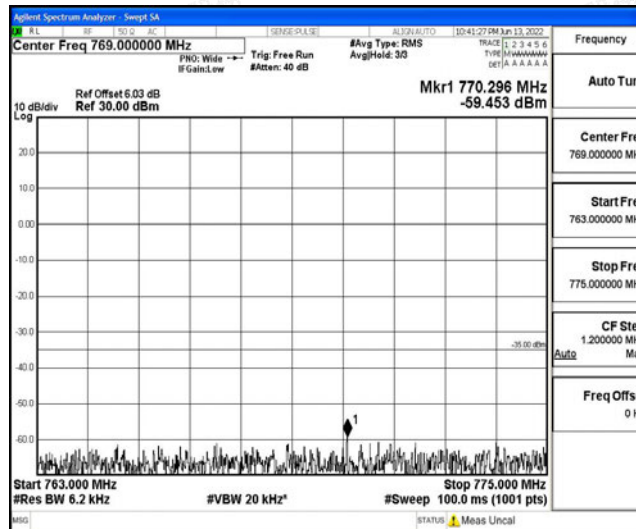


Band13-5MHz-16QAM-23230-1RB#0-Range3:30~1000MHz

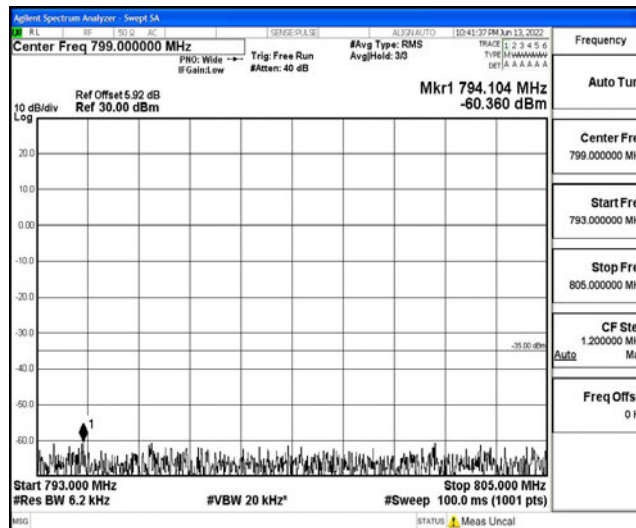


Band13-5MHz-16QAM-23230-1RB#0-Range5:763~775MHz

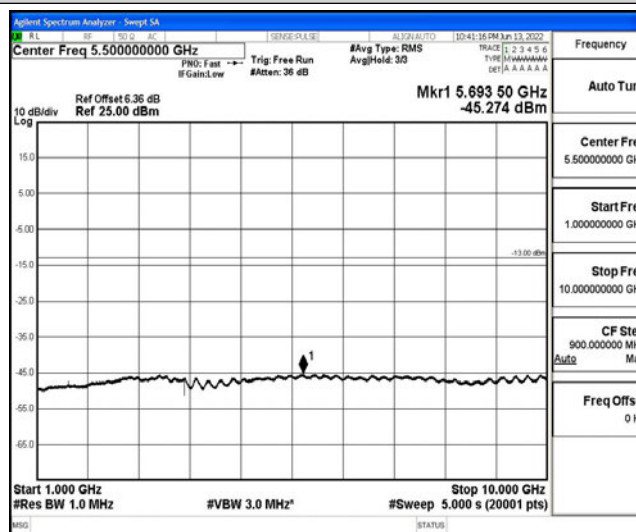




Band13-5MHz-16QAM-23230-1RB#0-Range6:793~805MHz



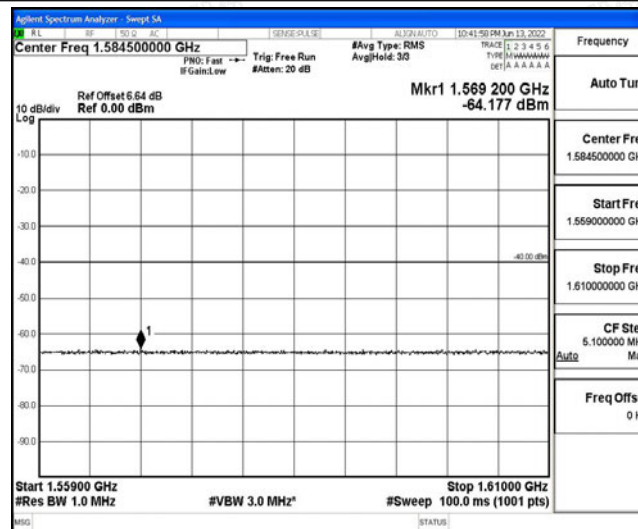
Band13-5MHz-16QAM-23230-1RB#0-Range4:1000~10000MHz



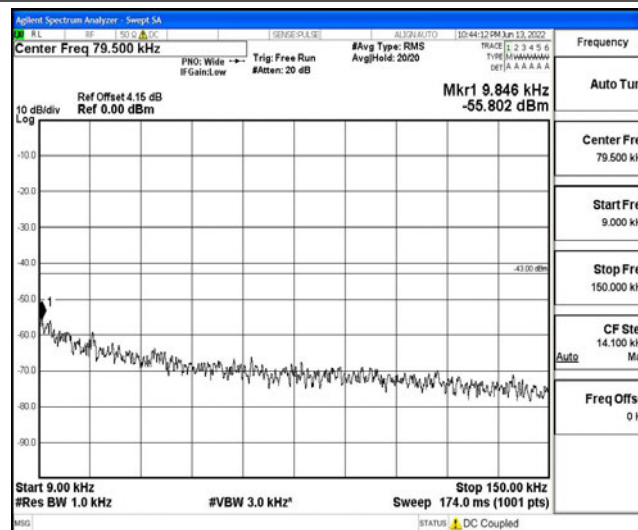
Band13-5MHz-16QAM-23230-1RB#0-Range7:1559~1610MHz



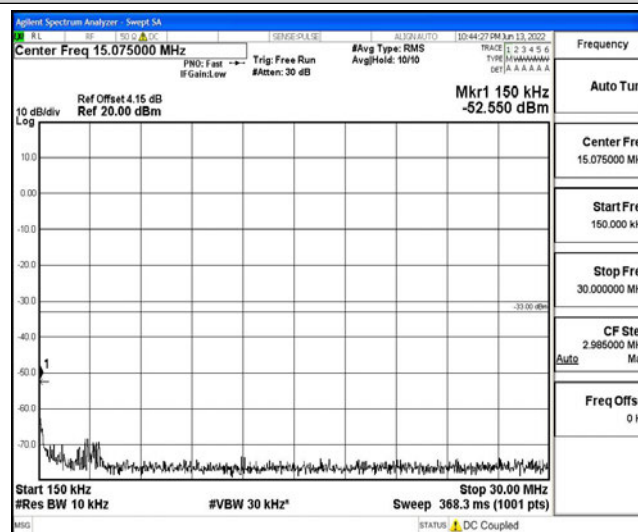
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Band13-5MHz-16QAM-23255-1RB#0-Range1:0.009~0.15MHz

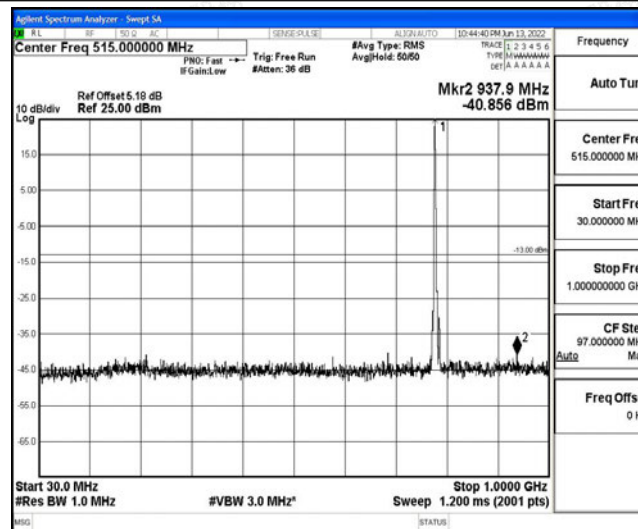


Band13-5MHz-16QAM-23255-1RB#0-Range2:0.15~30MHz

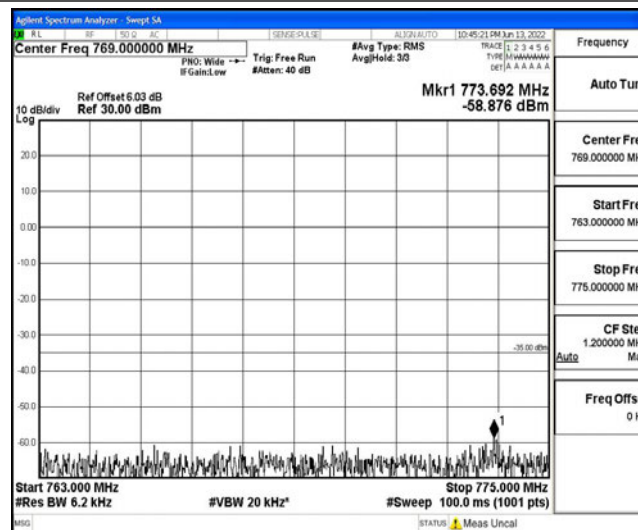


Band13-5MHz-16QAM-23255-1RB#0-Range3:30~1000MHz

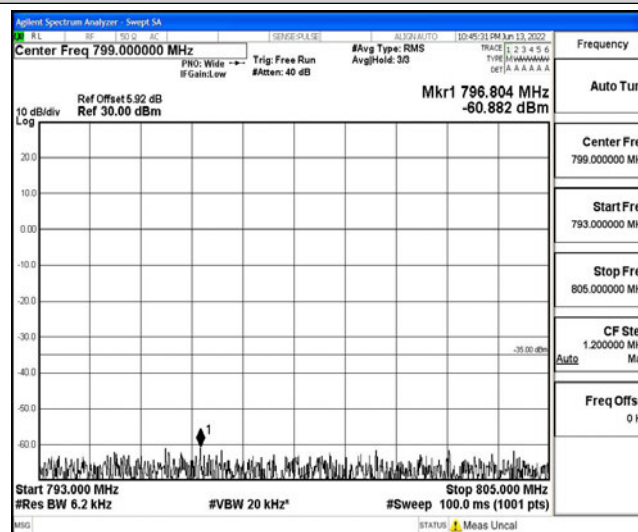




Band13-5MHz-16QAM-23255-1RB#0-Range5:763~775MHz



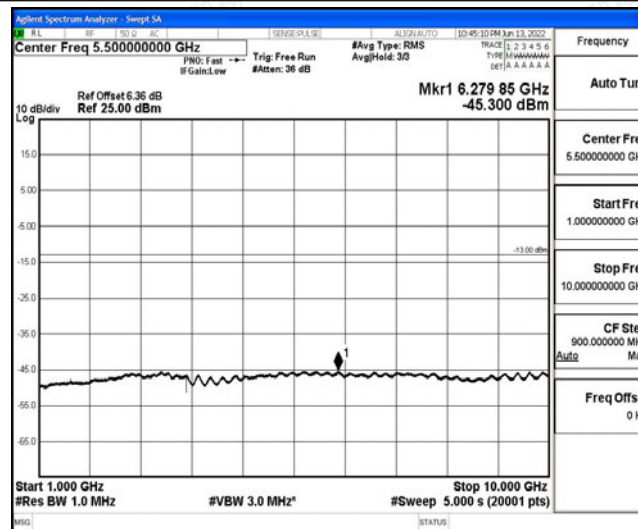
Band13-5MHz-16QAM-23255-1RB#0-Range6:793~805MHz



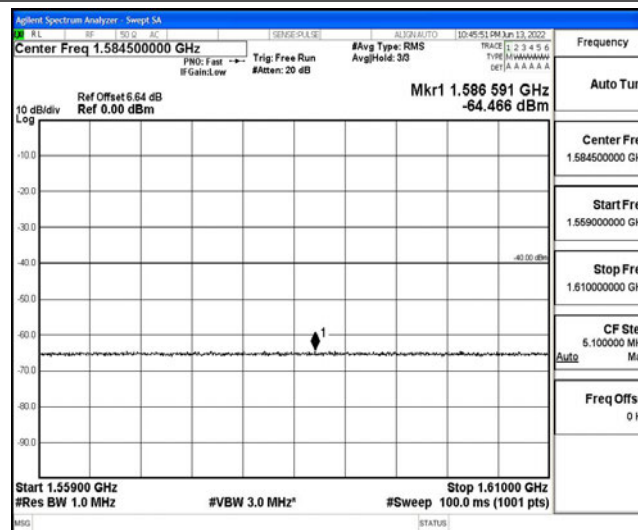
Band13-5MHz-16QAM-23255-1RB#0-Range4:1000~10000MHz



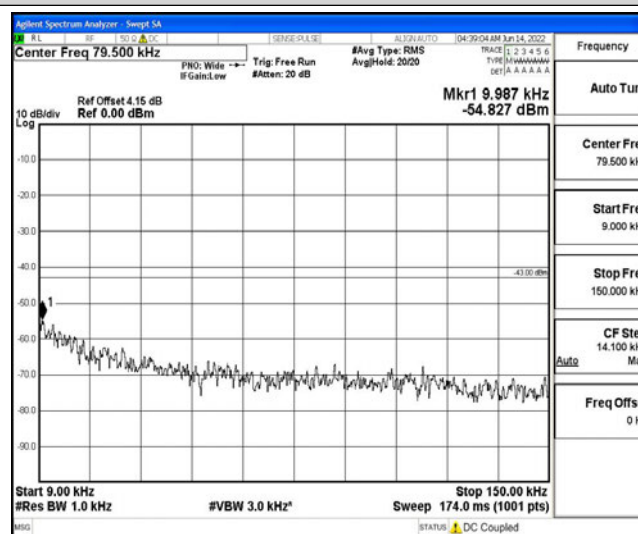
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Band13-5MHz-16QAM-23255-1RB#0-Range7:1559~1610MHz

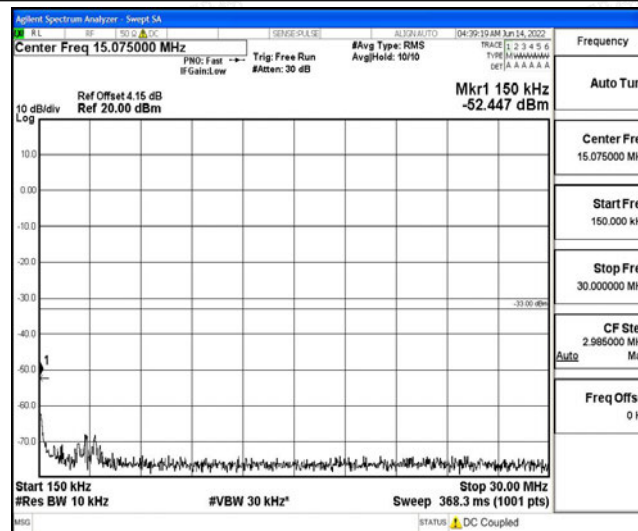


Band13-10MHz-QPSK-23230-1RB#0-Range1:0.009~0.15MHz

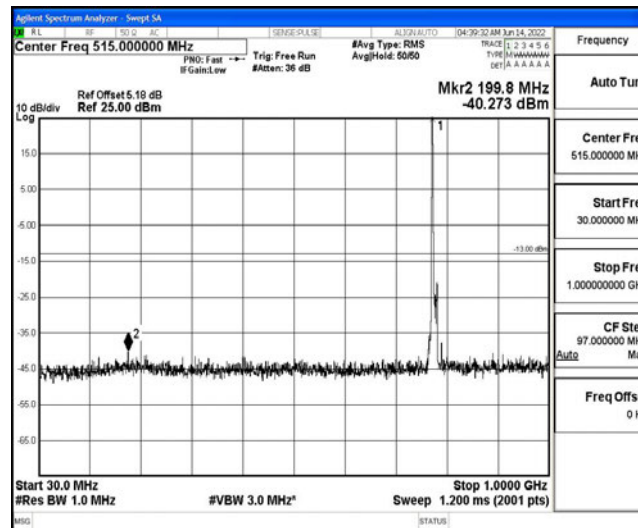


Band13-10MHz-QPSK-23230-1RB#0-Range2:0.15~30MHz

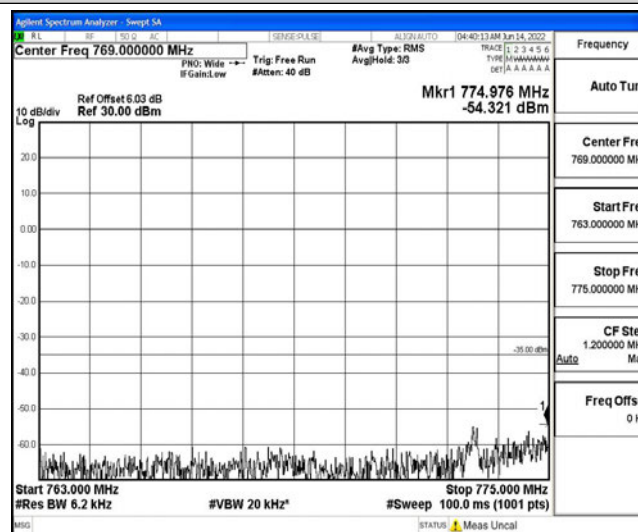




Band13-10MHz-QPSK-23230-1RB#0-Range3:30~1000MHz

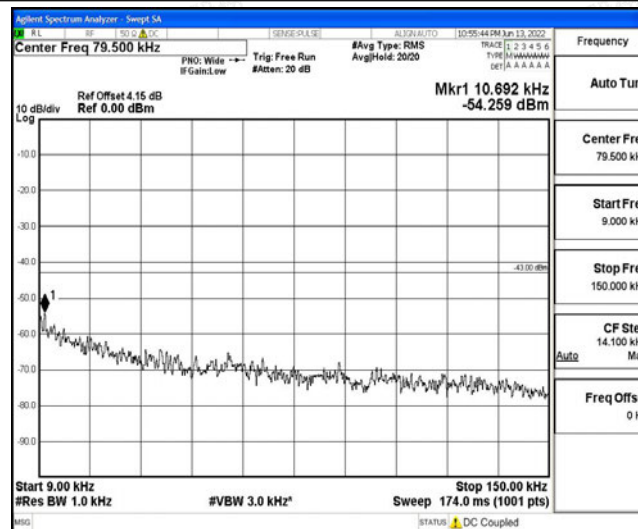


Band13-10MHz-QPSK-23230-1RB#0-Range5:763~775MHz

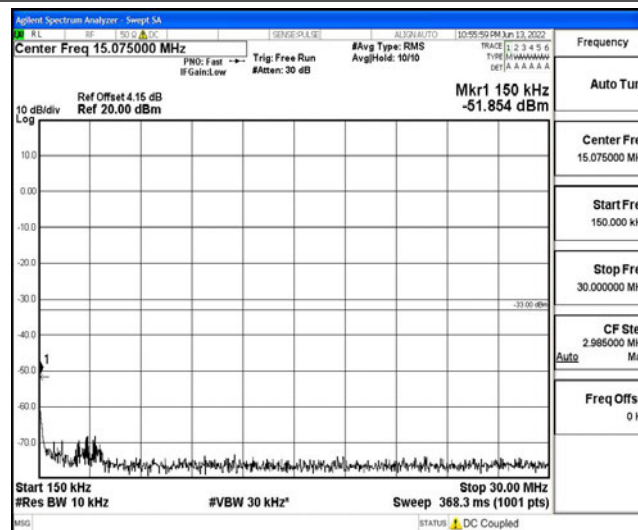


Band13-10MHz-QPSK-23230-1RB#0-Range6:793~805MHz

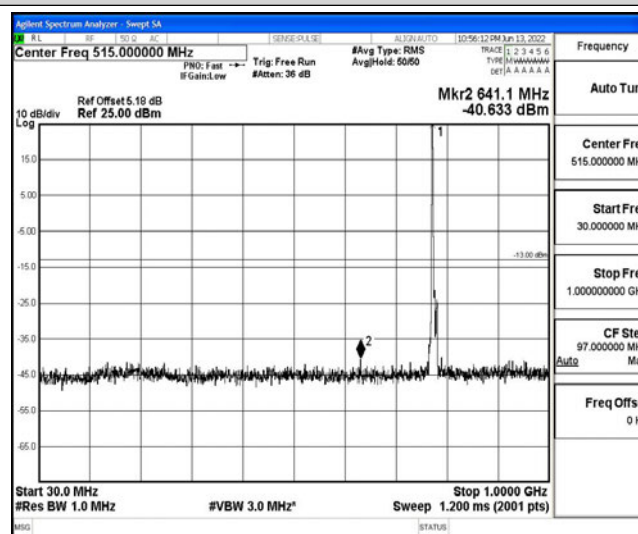




Band13-10MHz-16QAM-23230-1RB#0-Range2:0.15~30MHz

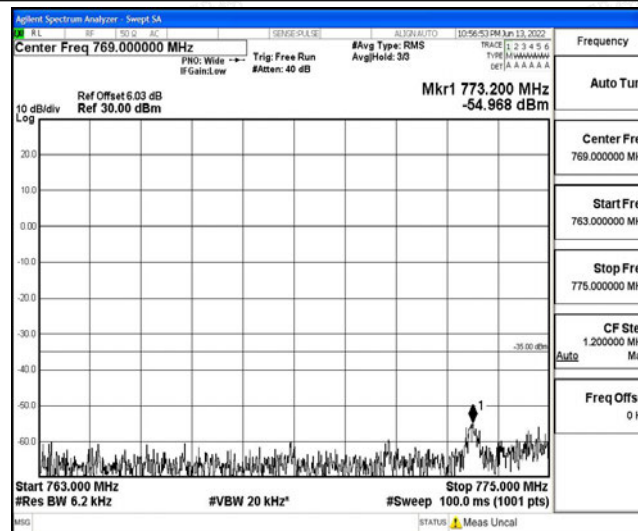


Band13-10MHz-16QAM-23230-1RB#0-Range3:30~1000MHz

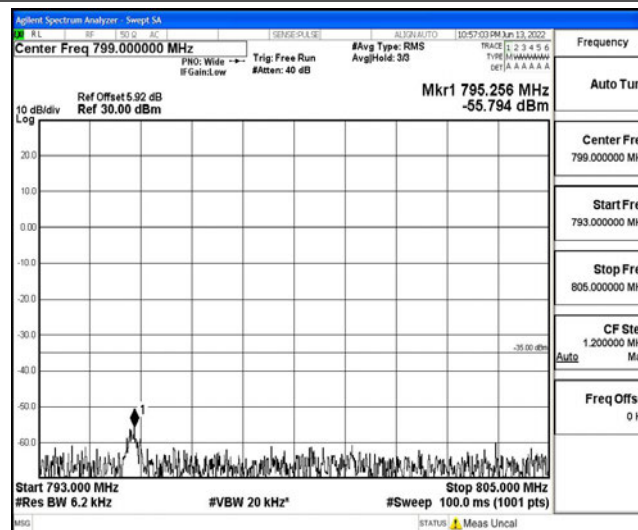


Band13-10MHz-16QAM-23230-1RB#0-Range5:763~775MHz

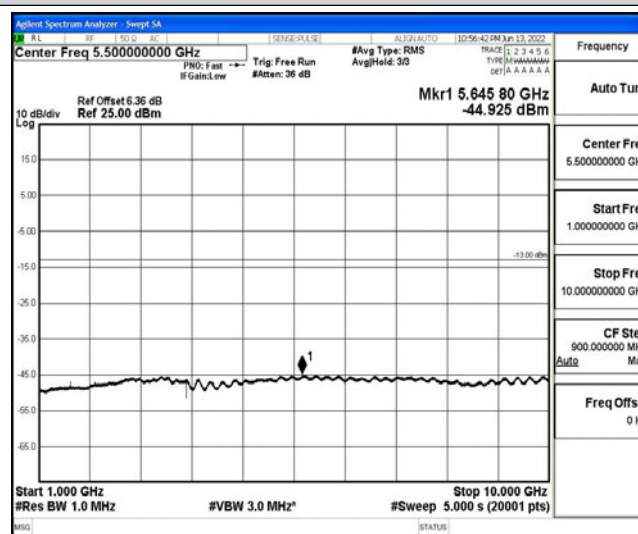




Band13-10MHz-16QAM-23230-1RB#0-Range6:793~805MHz



Band13-10MHz-16QAM-23230-1RB#0-Range4:1000~10000MHz



Band13-10MHz-16QAM-23230-1RB#0-Range7:1559~1610MHz



