



Appendix B

E-UTRA Band CA_7C



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1 Effective (Isotropic) Radiated Power Output Data

1.1 Test Result for LTE Band CA 7C for Down Ant

BAND	Test Mode PCC/SCC	Channel PCC/SCC	RB Configuration		Modulation PCC&SCC	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
			PCC	SCC					
CA_7C	50RB+100RB	20805+20949	1RB#0	0RB#0	QPSK	22.79	20.54	33.00	PASS
CA_7C	50RB+100RB	21006+21150	1RB#0	0RB#0	QPSK	22.77	20.52	33.00	PASS
CA_7C	50RB+100RB	21206+21350	1RB#0	0RB#0	QPSK	22.90	20.65	33.00	PASS
CA_7C	75RB+50RB	20825+20945	1RB#0	0RB#0	QPSK	22.81	20.56	33.00	PASS
CA_7C	75RB+50RB	21051+21171	1RB#0	0RB#0	QPSK	22.71	20.46	33.00	PASS
CA_7C	75RB+50RB	21277+21397	1RB#0	0RB#0	QPSK	22.70	20.45	33.00	PASS
CA_7C	75RB+75RB	20825+20975	1RB#0	0RB#0	QPSK	22.88	20.63	33.00	PASS
CA_7C	75RB+75RB	20825+20975	16RB#0	0RB#0	QPSK	22.70	20.45	33.00	PASS
CA_7C	75RB+75RB	21025+21175	1RB#0	0RB#0	QPSK	22.86	20.61	33.00	PASS
CA_7C	75RB+75RB	21025+21175	16RB#0	0RB#0	QPSK	22.86	20.61	33.00	PASS
CA_7C	75RB+75RB	21225+21375	1RB#0	0RB#0	QPSK	22.82	20.57	33.00	PASS
CA_7C	75RB+75RB	21225+21375	16RB#0	0RB#0	QPSK	22.87	20.62	33.00	PASS
CA_7C	75RB+100RB	20828+20999	1RB#0	0RB#0	QPSK	22.74	20.49	33.00	PASS
CA_7C	75RB+100RB	21003+21174	1RB#0	0RB#0	QPSK	22.74	20.49	33.00	PASS
CA_7C	75RB+100RB	21179+21350	1RB#0	0RB#0	QPSK	22.81	20.56	33.00	PASS
CA_7C	100RB+50RB	20850+20994	1RB#0	0RB#0	QPSK	22.79	20.54	33.00	PASS
CA_7C	100RB+50RB	20850+20994	12RB#0	0RB#0	QPSK	22.74	20.49	33.00	PASS
CA_7C	100RB+50RB	21051+21195	1RB#0	0RB#0	QPSK	22.83	20.58	33.00	PASS
CA_7C	100RB+50RB	21051+21195	12RB#0	0RB#0	QPSK	22.71	20.46	33.00	PASS
CA_7C	100RB+50RB	21251+21395	1RB#0	0RB#0	QPSK	22.83	20.58	33.00	PASS
CA_7C	100RB+50RB	21251+21395	12RB#0	0RB#0	QPSK	22.71	20.46	33.00	PASS
CA_7C	100RB+75RB	20850+21021	1RB#0	0RB#0	QPSK	22.73	20.48	33.00	PASS
CA_7C	100RB+75RB	20850+21021	16RB#0	0RB#0	QPSK	22.87	20.62	33.00	PASS
CA_7C	100RB+75RB	21026+21197	1RB#0	0RB#0	QPSK	22.72	20.47	33.00	PASS
CA_7C	100RB+75RB	21026+21197	16RB#0	0RB#0	QPSK	22.76	20.51	33.00	PASS
CA_7C	100RB+75RB	21201+21372	1RB#0	0RB#0	QPSK	22.80	20.55	33.00	PASS
CA_7C	100RB+75RB	21201+21372	16RB#0	0RB#0	QPSK	22.86	20.61	33.00	PASS
CA_7C	100RB+100RB	20850+21048	1RB#0	0RB#0	QPSK	22.81	20.56	33.00	PASS
CA_7C	100RB+100RB	20850+21048	18RB#0	0RB#0	QPSK	22.80	20.55	33.00	PASS
CA_7C	100RB+100RB	21001+21199	1RB#0	0RB#0	QPSK	22.89	20.64	33.00	PASS
CA_7C	100RB+100RB	21001+21199	18RB#0	0RB#0	QPSK	22.85	20.60	33.00	PASS
CA_7C	100RB+100RB	21152+21350	1RB#0	0RB#0	QPSK	22.74	20.49	33.00	PASS
CA_7C	100RB+100RB	21152+21350	18RB#0	0RB#0	QPSK	22.87	20.62	33.00	PASS
CA_7C	50RB+100RB	20805+20949	1RB#0	0RB#0	16QAM	21.81	19.56	33.00	PASS



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CA_7C	50RB+100RB	21006+21150	1RB#0	0RB#0	16QAM	21.86	19.61	33.00	PASS
CA_7C	50RB+100RB	21206+21350	1RB#0	0RB#0	16QAM	21.87	19.62	33.00	PASS
CA_7C	75RB+50RB	20825+20945	1RB#0	0RB#0	16QAM	21.80	19.55	33.00	PASS
CA_7C	75RB+50RB	21051+21171	1RB#0	0RB#0	16QAM	21.78	19.53	33.00	PASS
CA_7C	75RB+50RB	21277+21397	1RB#0	0RB#0	16QAM	21.73	19.48	33.00	PASS
CA_7C	75RB+75RB	20825+20975	1RB#0	0RB#0	16QAM	21.84	19.59	33.00	PASS
CA_7C	75RB+75RB	20825+20975	16RB#0	0RB#0	16QAM	21.82	19.57	33.00	PASS
CA_7C	75RB+75RB	21025+21175	1RB#0	0RB#0	16QAM	21.70	19.45	33.00	PASS
CA_7C	75RB+75RB	21025+21175	16RB#0	0RB#0	16QAM	21.77	19.52	33.00	PASS
CA_7C	75RB+75RB	21225+21375	1RB#0	0RB#0	16QAM	21.89	19.64	33.00	PASS
CA_7C	75RB+75RB	21225+21375	16RB#0	0RB#0	16QAM	21.82	19.57	33.00	PASS
CA_7C	75RB+100RB	20828+20999	1RB#0	0RB#0	16QAM	21.78	19.53	33.00	PASS
CA_7C	75RB+100RB	21003+21174	1RB#0	0RB#0	16QAM	21.76	19.51	33.00	PASS
CA_7C	75RB+100RB	21179+21350	1RB#0	0RB#0	16QAM	21.83	19.58	33.00	PASS
CA_7C	100RB+50RB	20850+20994	1RB#0	0RB#0	16QAM	21.77	19.52	33.00	PASS
CA_7C	100RB+50RB	20850+20994	12RB#0	0RB#0	16QAM	21.84	19.59	33.00	PASS
CA_7C	100RB+50RB	21051+21195	1RB#0	0RB#0	16QAM	21.75	19.50	33.00	PASS
CA_7C	100RB+50RB	21051+21195	12RB#0	0RB#0	16QAM	21.81	19.56	33.00	PASS
CA_7C	100RB+50RB	21251+21395	1RB#0	0RB#0	16QAM	21.78	19.53	33.00	PASS
CA_7C	100RB+50RB	21251+21395	12RB#0	0RB#0	16QAM	21.77	19.52	33.00	PASS
CA_7C	100RB+75RB	20850+21021	1RB#0	0RB#0	16QAM	21.86	19.61	33.00	PASS
CA_7C	100RB+75RB	20850+21021	16RB#0	0RB#0	16QAM	21.86	19.61	33.00	PASS
CA_7C	100RB+75RB	21026+21197	1RB#0	0RB#0	16QAM	21.73	19.48	33.00	PASS
CA_7C	100RB+75RB	21026+21197	16RB#0	0RB#0	16QAM	21.81	19.56	33.00	PASS
CA_7C	100RB+75RB	21201+21372	1RB#0	0RB#0	16QAM	21.81	19.56	33.00	PASS
CA_7C	100RB+75RB	21201+21372	16RB#0	0RB#0	16QAM	21.80	19.55	33.00	PASS
CA_7C	100RB+100RB	20850+21048	1RB#0	0RB#0	16QAM	21.74	19.49	33.00	PASS
CA_7C	100RB+100RB	20850+21048	18RB#0	0RB#0	16QAM	21.71	19.46	33.00	PASS
CA_7C	100RB+100RB	21001+21199	1RB#0	0RB#0	16QAM	21.79	19.54	33.00	PASS
CA_7C	100RB+100RB	21001+21199	18RB#0	0RB#0	16QAM	21.88	19.63	33.00	PASS
CA_7C	100RB+100RB	21152+21350	1RB#0	0RB#0	16QAM	21.75	19.50	33.00	PASS
CA_7C	100RB+100RB	21152+21350	18RB#0	0RB#0	16QAM	21.74	19.49	33.00	PASS
CA_7C	50RB+100RB	20805+20949	1RB#0	0RB#0	64QAM	20.85	18.60	33.00	PASS
CA_7C	50RB+100RB	21006+21150	1RB#0	0RB#0	64QAM	20.87	18.62	33.00	PASS
CA_7C	50RB+100RB	21206+21350	1RB#0	0RB#0	64QAM	20.76	18.51	33.00	PASS
CA_7C	75RB+50RB	20825+20945	1RB#0	0RB#0	64QAM	20.83	18.58	33.00	PASS
CA_7C	75RB+50RB	21051+21171	1RB#0	0RB#0	64QAM	20.88	18.63	33.00	PASS
CA_7C	75RB+50RB	21277+21397	1RB#0	0RB#0	64QAM	20.87	18.62	33.00	PASS



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CA_7C	75RB+75RB	20825+20975	1RB#0	0RB#0	64QAM	20.77	18.52	33.00	PASS
CA_7C	75RB+75RB	20825+20975	16RB#0	0RB#0	64QAM	20.70	18.45	33.00	PASS
CA_7C	75RB+75RB	21025+21175	1RB#0	0RB#0	64QAM	20.88	18.63	33.00	PASS
CA_7C	75RB+75RB	21025+21175	16RB#0	0RB#0	64QAM	20.83	18.58	33.00	PASS
CA_7C	75RB+75RB	21225+21375	1RB#0	0RB#0	64QAM	20.72	18.47	33.00	PASS
CA_7C	75RB+75RB	21225+21375	16RB#0	0RB#0	64QAM	20.85	18.60	33.00	PASS
CA_7C	75RB+100RB	20828+20999	1RB#0	0RB#0	64QAM	20.86	18.61	33.00	PASS
CA_7C	75RB+100RB	21003+21174	1RB#0	0RB#0	64QAM	20.71	18.46	33.00	PASS
CA_7C	75RB+100RB	21179+21350	1RB#0	0RB#0	64QAM	20.75	18.50	33.00	PASS
CA_7C	100RB+50RB	20850+20994	1RB#0	0RB#0	64QAM	20.83	18.58	33.00	PASS
CA_7C	100RB+50RB	20850+20994	12RB#0	0RB#0	64QAM	20.81	18.56	33.00	PASS
CA_7C	100RB+50RB	21051+21195	1RB#0	0RB#0	64QAM	20.77	18.52	33.00	PASS
CA_7C	100RB+50RB	21051+21195	12RB#0	0RB#0	64QAM	20.90	18.65	33.00	PASS
CA_7C	100RB+50RB	21251+21395	1RB#0	0RB#0	64QAM	20.72	18.47	33.00	PASS
CA_7C	100RB+50RB	21251+21395	12RB#0	0RB#0	64QAM	20.77	18.52	33.00	PASS
CA_7C	100RB+75RB	20850+21021	1RB#0	0RB#0	64QAM	20.83	18.58	33.00	PASS
CA_7C	100RB+75RB	20850+21021	16RB#0	0RB#0	64QAM	20.85	18.60	33.00	PASS
CA_7C	100RB+75RB	21026+21197	1RB#0	0RB#0	64QAM	20.82	18.57	33.00	PASS
CA_7C	100RB+75RB	21026+21197	16RB#0	0RB#0	64QAM	20.81	18.56	33.00	PASS
CA_7C	100RB+75RB	21201+21372	1RB#0	0RB#0	64QAM	20.70	18.45	33.00	PASS
CA_7C	100RB+75RB	21201+21372	16RB#0	0RB#0	64QAM	20.83	18.58	33.00	PASS
CA_7C	100RB+100RB	20850+21048	1RB#0	0RB#0	64QAM	20.83	18.58	33.00	PASS
CA_7C	100RB+100RB	20850+21048	18RB#0	0RB#0	64QAM	20.79	18.54	33.00	PASS
CA_7C	100RB+100RB	21001+21199	1RB#0	0RB#0	64QAM	20.72	18.47	33.00	PASS
CA_7C	100RB+100RB	21001+21199	18RB#0	0RB#0	64QAM	20.85	18.60	33.00	PASS
CA_7C	100RB+100RB	21152+21350	1RB#0	0RB#0	64QAM	20.80	18.55	33.00	PASS
CA_7C	100RB+100RB	21152+21350	18RB#0	0RB#0	64QAM	20.78	18.53	33.00	PASS

Remark:

a: For getting the EIRP (Efficient Isotropic Radiated Power), the following formula should be taken to calculate it,

ERP [dBm] = Conducted Power [dBm] + Gain [dBi]

EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]



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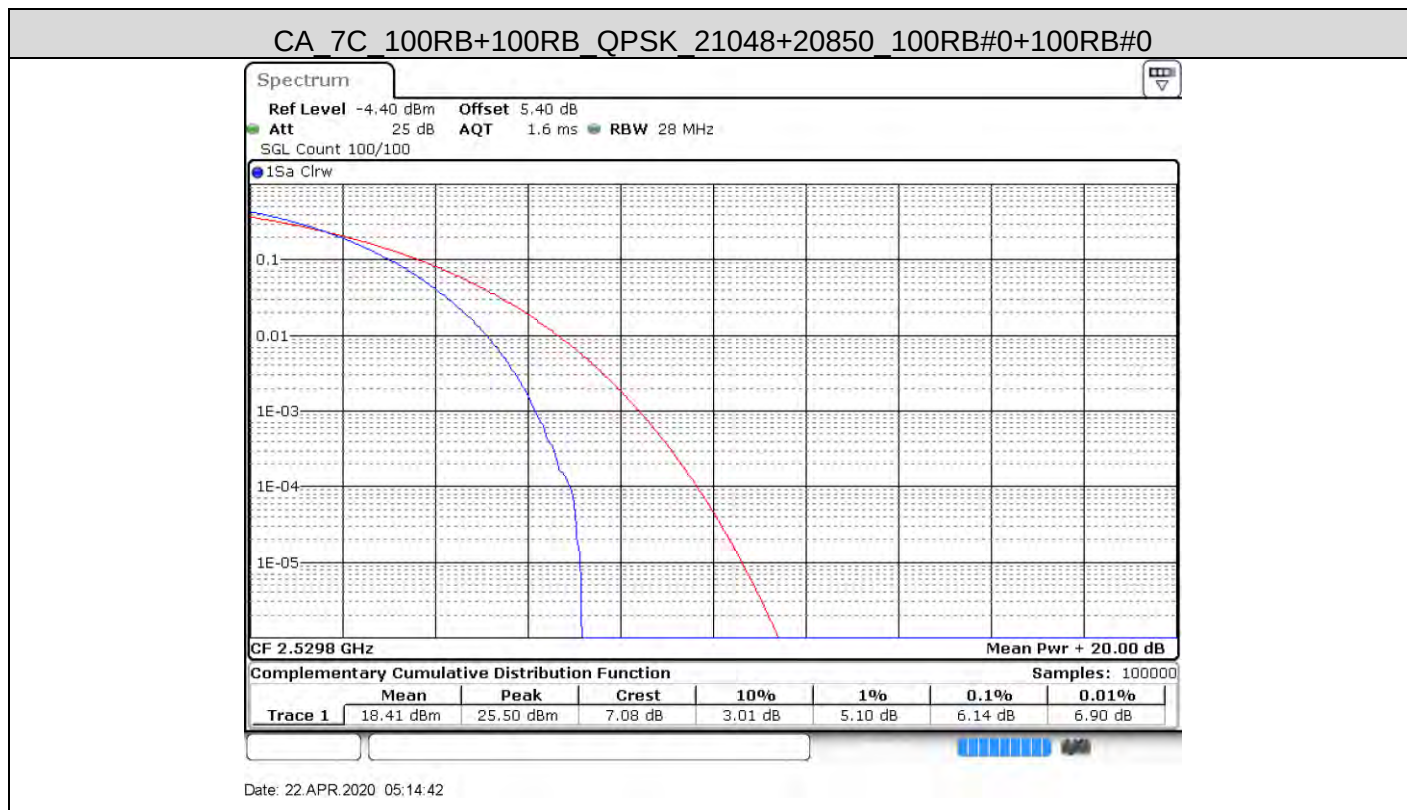
2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Modulation	Test Mode	Test Channel	PCC RB Config	SCC RB Config	Measured [dB]	Limit [dB]	Verdict
CA_7C	QPSK	100RB+100RB	21048+20850	100RB#0	100RB#0	6.14	13.00	PASS
CA_7C	QPSK	100RB+100RB	21199+21001	100RB#0	100RB#0	6.06	13.00	PASS
CA_7C	QPSK	100RB+100RB	21350+21152	100RB#0	100RB#0	6.20	13.00	PASS
CA_7C	16QAM	100RB+100RB	21048+20850	100RB#0	100RB#0	6.58	13.00	PASS
CA_7C	16QAM	100RB+100RB	21199+21001	100RB#0	100RB#0	6.72	13.00	PASS
CA_7C	16QAM	100RB+100RB	21350+21152	100RB#0	100RB#0	6.58	13.00	PASS
CA_7C	64QAM	100RB+100RB	21048+20850	100RB#0	100RB#0	6.49	13.00	PASS
CA_7C	64QAM	100RB+100RB	21199+21001	100RB#0	100RB#0	6.70	13.00	PASS
CA_7C	64QAM	100RB+100RB	21350+21152	100RB#0	100RB#0	6.61	13.00	PASS

2.1 For LTE

2.1.1 Test Band = LTE Band CA_7C

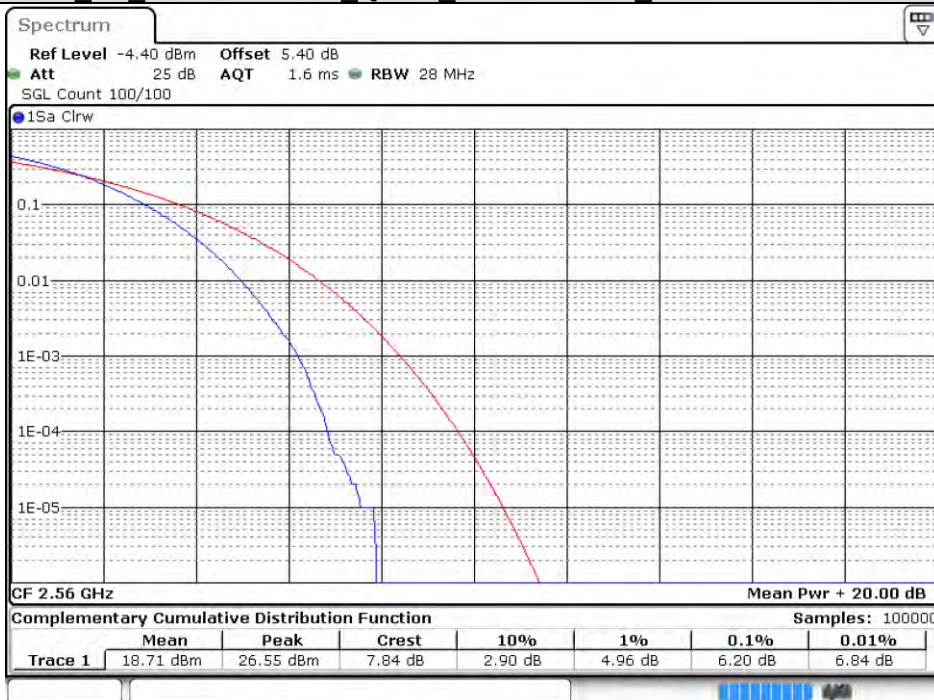


CA 7C 100RB+100RB QPSK 21199+21001 100RB#0+100RB#0



Date: 22.APR.2020 05:15:05

CA 7C 100RB+100RB QPSK 21350+21152 100RB#0+100RB#0



Date: 22.APR.2020 05:15:21



CA 7C 100RB+100RB 16QAM 21048+20850 100RB#0+100RB#0



Date: 22.APR.2020 05:14:50

CA 7C 100RB+100RB 16QAM 21199+21001 100RB#0+100RB#0



Date: 22.APR.2020 05:15:09



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CA 7C 100RB+100RB 16QAM 21350+21152 100RB#0+100RB#0



Date: 22.APR.2020 05:15:28

CA 7C 100RB+100RB 64QAM 21048+20850 100RB#0+100RB#0



Date: 22.APR.2020 05:14:57

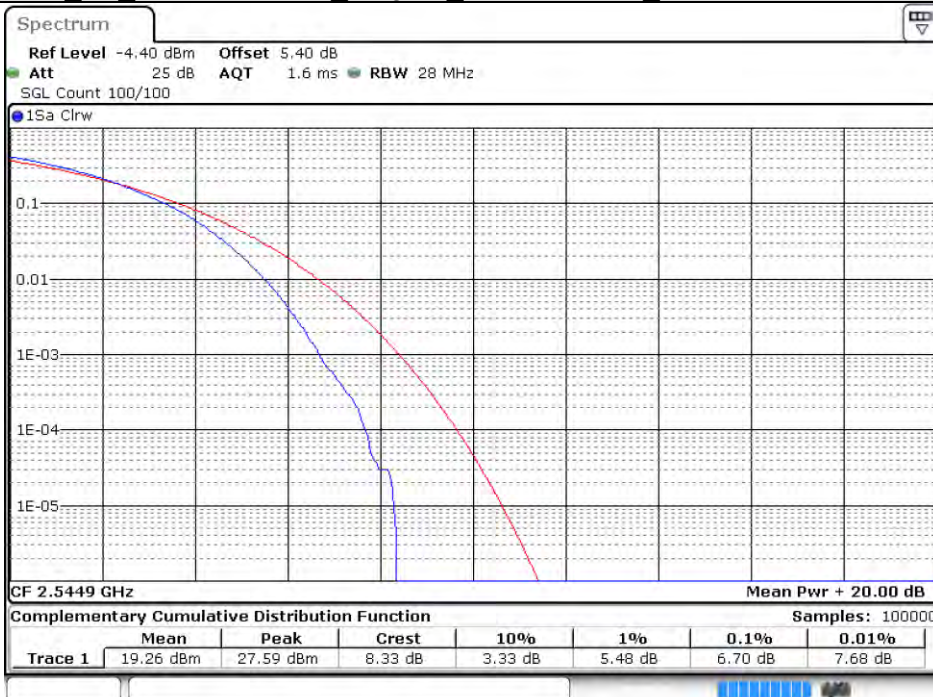


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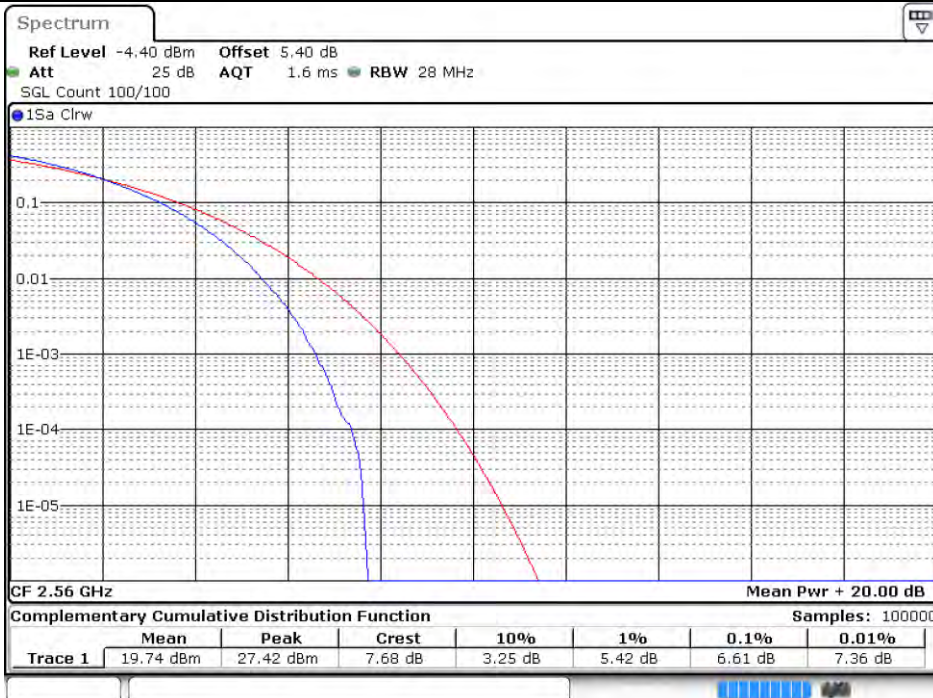
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CA 7C 100RB+100RB 64QAM 21199+21001 100RB#0+100RB#0



Date: 22.APR.2020 05:15:13

CA 7C 100RB+100RB 64QAM 21350+21152 100RB#0+100RB#0



Date: 22.APR.2020 05:15:32





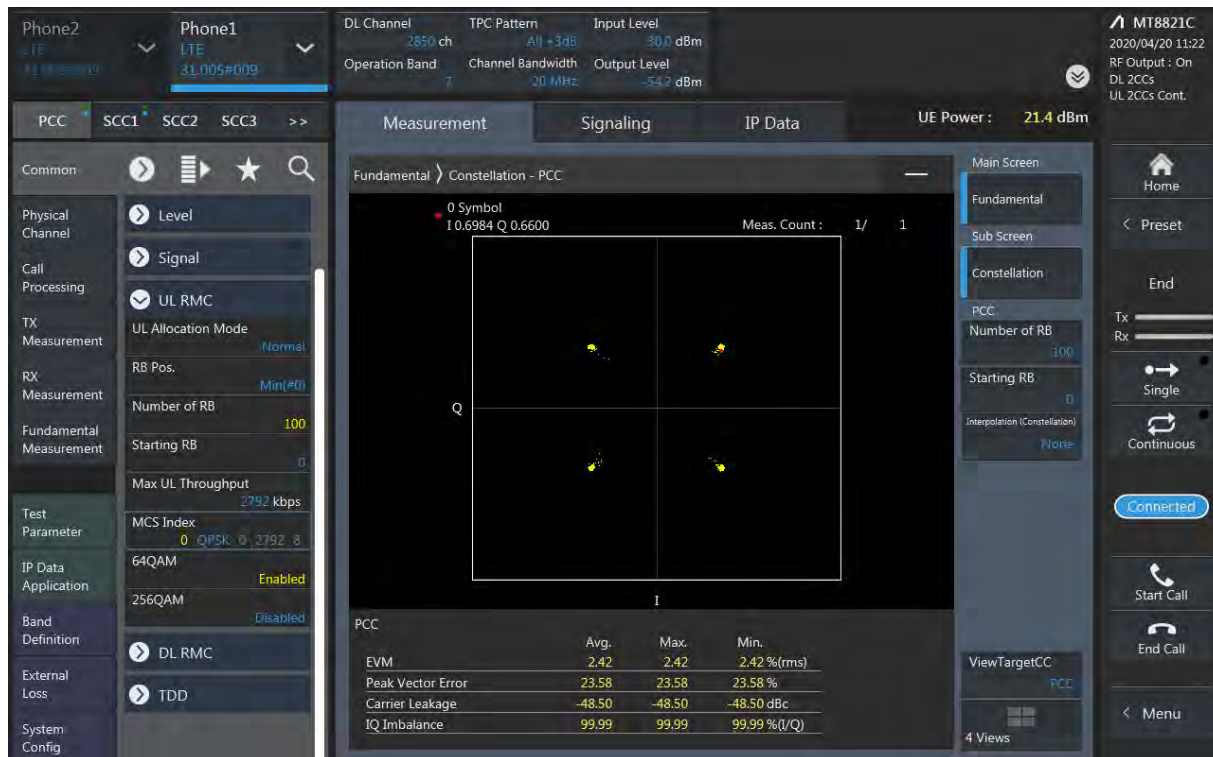
3 Modulation Characteristics

3.1 For LTE

3.1.1 Test Band = LTE Band CA_7C

3.1.1.1 Test Mode = LTE /QPSK 100RB+100RB

3.1.1.1.1 Test Channel = 20850+20994



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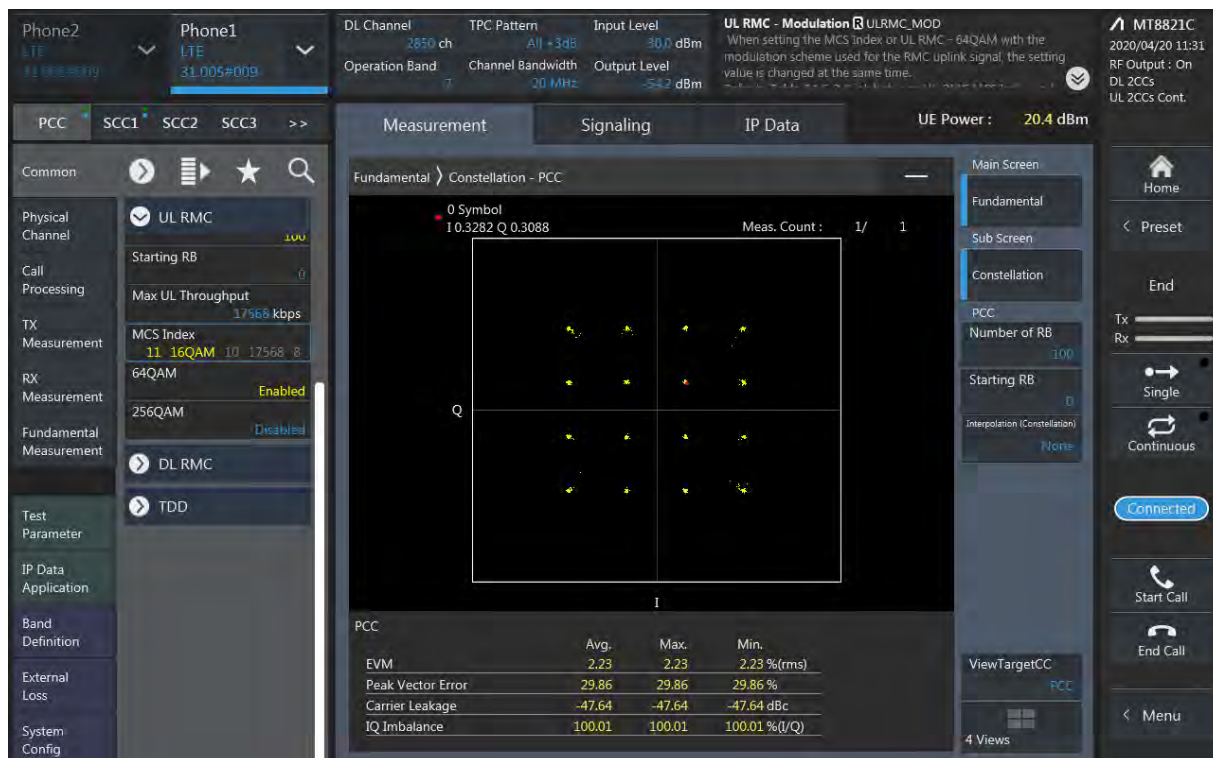
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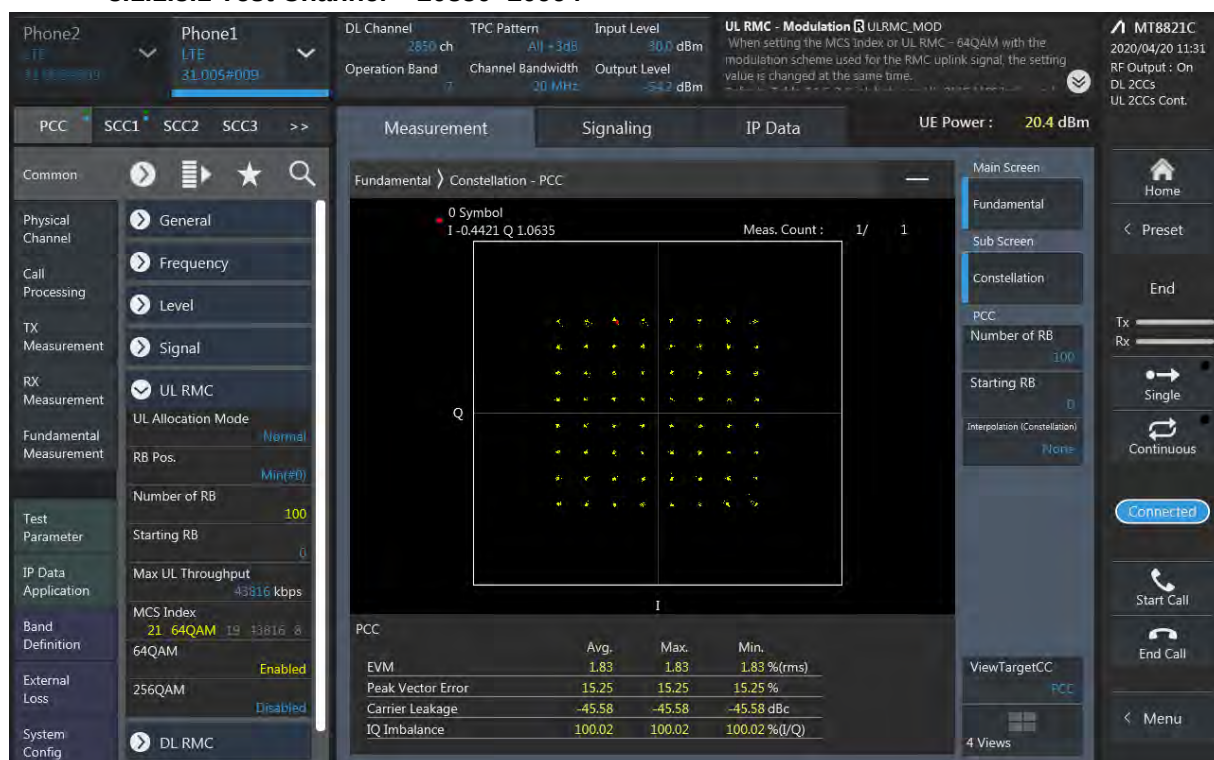
3.1.1.2 Test Mode = LTE /16QAM 100RB+100RB

3.1.1.2.1 Test Channel =20850+20994



3.1.1.3 Test Mode = LTE /64QAM 100RB+100RB

3.1.1.3.1 Test Channel = 20850+20994



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4 26dB Bandwidth and Occupied Bandwidth

Test Band	Test Mode PCC/SCC	Modulation PCC&SCC	Test Channel PCC/SCC	RB Config	OBW [MHz]	EBW [MHz]	Verdict
CA_7C	50RB+100RB	QPSK	20805+20949	50RB#0+100RB#0	27.76	28.52	PASS
CA_7C	50RB+100RB	16QAM	20805+20949	50RB#0+100RB#0	27.74	28.52	PASS
CA_7C	50RB+100RB	64QAM	20805+20949	50RB#0+100RB#0	27.74	28.51	PASS
CA_7C	50RB+100RB	QPSK	21006+21150	50RB#0+100RB#0	27.56	28.48	PASS
CA_7C	50RB+100RB	16QAM	21006+21150	50RB#0+100RB#0	27.53	28.45	PASS
CA_7C	50RB+100RB	64QAM	21006+21150	50RB#0+100RB#0	27.55	28.48	PASS
CA_7C	50RB+100RB	QPSK	21206+21350	50RB#0+100RB#0	27.58	28.46	PASS
CA_7C	50RB+100RB	16QAM	21206+21350	50RB#0+100RB#0	27.54	28.48	PASS
CA_7C	50RB+100RB	64QAM	21206+21350	50RB#0+100RB#0	27.56	28.43	PASS
CA_7C	75RB+50RB	QPSK	20825+20945	75RB#0+50RB#0	23.38	24.23	PASS
CA_7C	75RB+50RB	16QAM	20825+20945	75RB#0+50RB#0	23.37	24.26	PASS
CA_7C	75RB+50RB	64QAM	20825+20945	75RB#0+50RB#0	23.33	24.07	PASS
CA_7C	75RB+50RB	QPSK	21051+21171	75RB#0+50RB#0	23.25	24.21	PASS
CA_7C	75RB+50RB	16QAM	21051+21171	75RB#0+50RB#0	23.30	24.21	PASS
CA_7C	75RB+50RB	64QAM	21051+21171	75RB#0+50RB#0	23.31	24.20	PASS
CA_7C	75RB+50RB	QPSK	21277+21397	75RB#0+50RB#0	23.35	24.32	PASS
CA_7C	75RB+50RB	16QAM	21277+21397	75RB#0+50RB#0	23.31	24.23	PASS
CA_7C	75RB+50RB	64QAM	21277+21397	75RB#0+50RB#0	23.33	24.26	PASS
CA_7C	75RB+75RB	QPSK	20825+20975	75RB#0+75RB#0	28.43	29.13	PASS
CA_7C	75RB+75RB	16QAM	20825+20975	75RB#0+75RB#0	28.43	29.12	PASS
CA_7C	75RB+75RB	64QAM	20825+20975	75RB#0+75RB#0	28.42	29.09	PASS
CA_7C	75RB+75RB	QPSK	21025+21175	75RB#0+75RB#0	28.30	29.11	PASS
CA_7C	75RB+75RB	16QAM	21025+21175	75RB#0+75RB#0	28.30	29.09	PASS
CA_7C	75RB+75RB	64QAM	21025+21175	75RB#0+75RB#0	28.30	29.12	PASS
CA_7C	75RB+75RB	QPSK	21225+21375	75RB#0+75RB#0	28.30	29.10	PASS
CA_7C	75RB+75RB	16QAM	21225+21375	75RB#0+75RB#0	28.28	29.09	PASS
CA_7C	75RB+75RB	64QAM	21225+21375	75RB#0+75RB#0	28.31	29.09	PASS
CA_7C	75RB+100RB	QPSK	20828+20999	75RB#0+100RB#0	32.75	33.97	PASS
CA_7C	75RB+100RB	16QAM	20828+20999	75RB#0+100RB#0	32.83	33.83	PASS
CA_7C	75RB+100RB	64QAM	20828+20999	75RB#0+100RB#0	32.83	33.85	PASS
CA_7C	75RB+100RB	QPSK	21003+21174	75RB#0+100RB#0	32.69	33.79	PASS
CA_7C	75RB+100RB	16QAM	21003+21174	75RB#0+100RB#0	31.61	33.61	PASS
CA_7C	75RB+100RB	64QAM	21003+21174	75RB#0+100RB#0	32.33	33.81	PASS



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CA_7C	75RB+100RB	QPSK	21179+21350	75RB#0+100RB#0	32.69	33.77	PASS
CA_7C	75RB+100RB	16QAM	21179+21350	75RB#0+100RB#0	32.53	33.69	PASS
CA_7C	75RB+100RB	64QAM	21179+21350	75RB#0+100RB#0	32.67	33.61	PASS
CA_7C	100RB+50RB	QPSK	20850+20994	100RB#0+50RB#0	28.01	28.95	PASS
CA_7C	100RB+50RB	16QAM	20850+20994	100RB#0+50RB#0	28.00	28.93	PASS
CA_7C	100RB+50RB	64QAM	20850+20994	100RB#0+50RB#0	28.01	28.94	PASS
CA_7C	100RB+50RB	QPSK	21051+21195	100RB#0+50RB#0	27.79	29.13	PASS
CA_7C	100RB+50RB	16QAM	21051+21195	100RB#0+50RB#0	27.88	28.92	PASS
CA_7C	100RB+50RB	64QAM	21051+21195	100RB#0+50RB#0	28.00	28.91	PASS
CA_7C	100RB+50RB	QPSK	21251+21395	100RB#0+50RB#0	27.97	28.97	PASS
CA_7C	100RB+50RB	16QAM	21251+21395	100RB#0+50RB#0	27.98	28.76	PASS
CA_7C	100RB+50RB	64QAM	21251+21395	100RB#0+50RB#0	28.00	28.95	PASS
CA_7C	100RB+75RB	QPSK	20850+21021	100RB#0+75RB#0	32.89	33.85	PASS
CA_7C	100RB+75RB	16QAM	20850+21021	100RB#0+75RB#0	32.91	33.81	PASS
CA_7C	100RB+75RB	64QAM	20850+21021	100RB#0+75RB#0	32.89	33.83	PASS
CA_7C	100RB+75RB	QPSK	21026+21197	100RB#0+75RB#0	32.83	33.81	PASS
CA_7C	100RB+75RB	16QAM	21026+21197	100RB#0+75RB#0	32.81	33.81	PASS
CA_7C	100RB+75RB	64QAM	21026+21197	100RB#0+75RB#0	32.81	33.81	PASS
CA_7C	100RB+75RB	QPSK	21201+21372	100RB#0+75RB#0	32.83	33.81	PASS
CA_7C	100RB+75RB	16QAM	21201+21372	100RB#0+75RB#0	32.81	33.81	PASS
CA_7C	100RB+75RB	64QAM	21201+21372	100RB#0+75RB#0	32.81	33.81	PASS
CA_7C	100RB+100RB	QPSK	20850+21048	100RB#0+100RB#0	37.79	38.85	PASS
CA_7C	100RB+100RB	16QAM	20850+21048	100RB#0+100RB#0	37.75	38.75	PASS
CA_7C	100RB+100RB	64QAM	20850+21048	100RB#0+100RB#0	37.75	38.79	PASS
CA_7C	100RB+100RB	QPSK	21001+21199	100RB#0+100RB#0	37.63	38.73	PASS
CA_7C	100RB+100RB	16QAM	21001+21199	100RB#0+100RB#0	37.47	38.79	PASS
CA_7C	100RB+100RB	64QAM	21001+21199	100RB#0+100RB#0	37.67	38.71	PASS
CA_7C	100RB+100RB	QPSK	21152+21350	100RB#0+100RB#0	37.49	38.99	PASS
CA_7C	100RB+100RB	16QAM	21152+21350	100RB#0+100RB#0	37.61	38.49	PASS
CA_7C	100RB+100RB	64QAM	21152+21350	100RB#0+100RB#0	36.63	38.73	PASS



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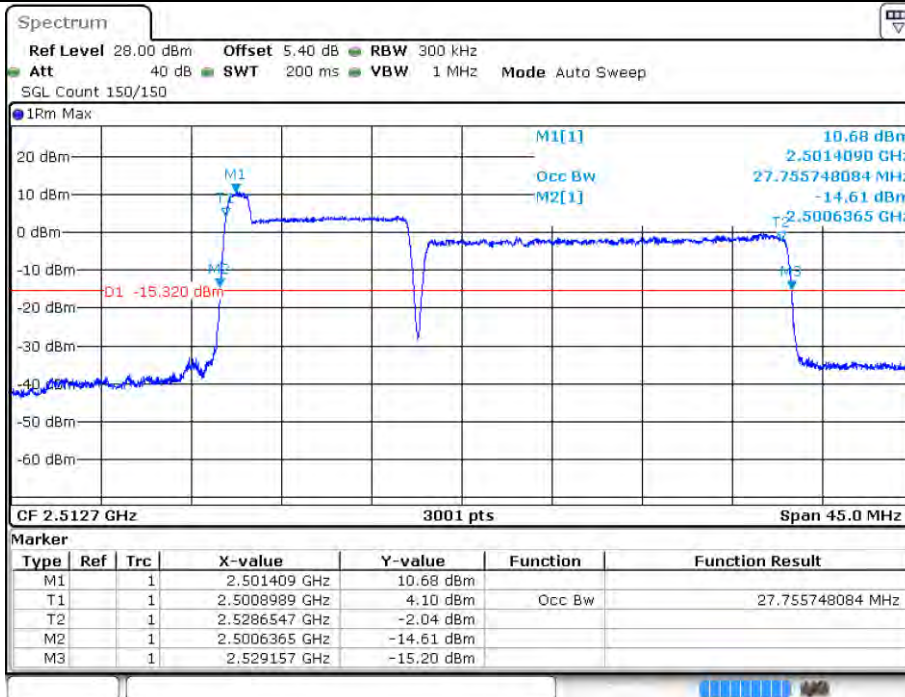
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4.1 For LTE

4.1.1 Test Band = LTE Band CA_7C

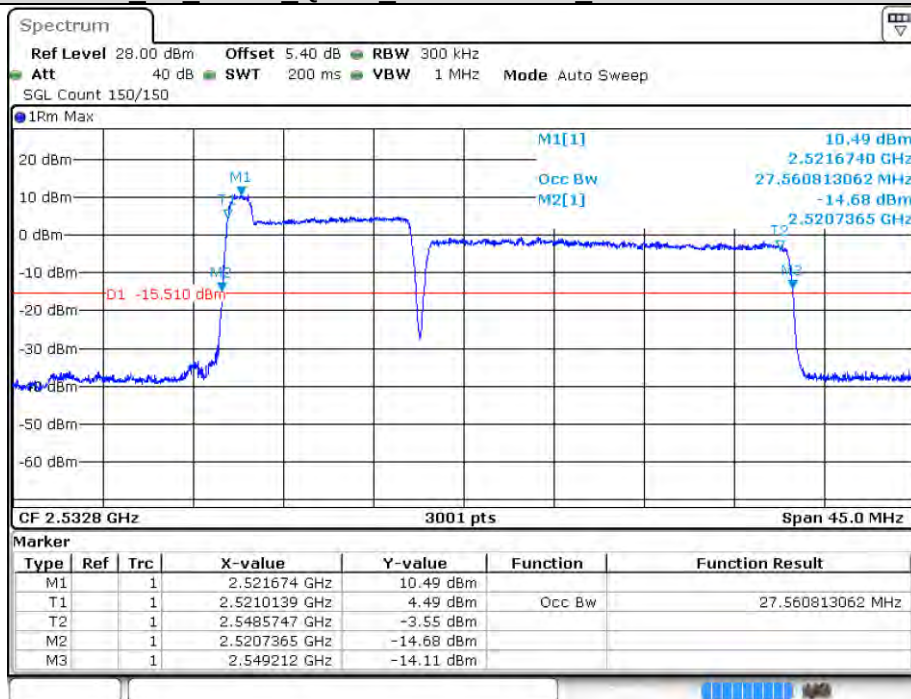
CA 7C 10+20 QPSK 20805+20949 50RB#0+100RB#0



Date: 6 MAY 2020 04:58:24

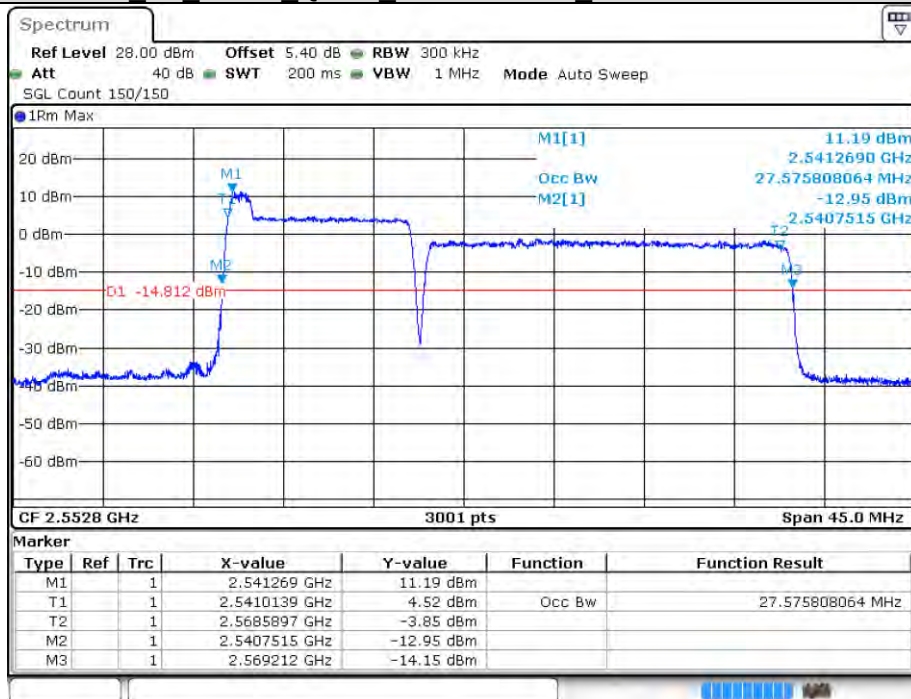


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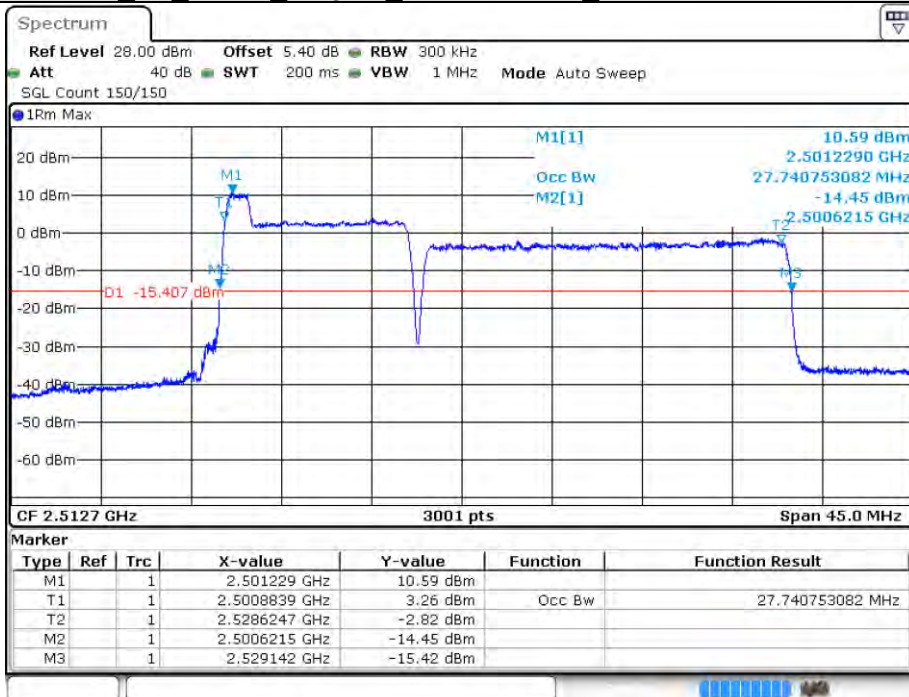
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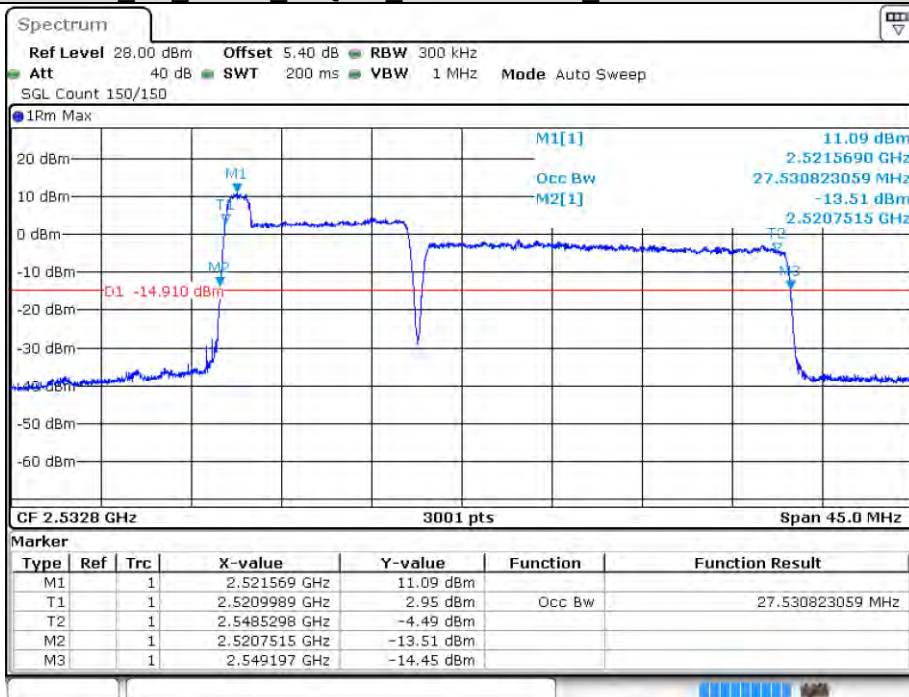


CA 7C 10+20 16QAM 20805+20949 50RB#0+100RB#0



Date: 6.MAY.2020 04:59:01

CA 7C 10+20 16QAM 21006+21150 50RB#0+100RB#0



Date: 6.MAY.2020 05:00:57

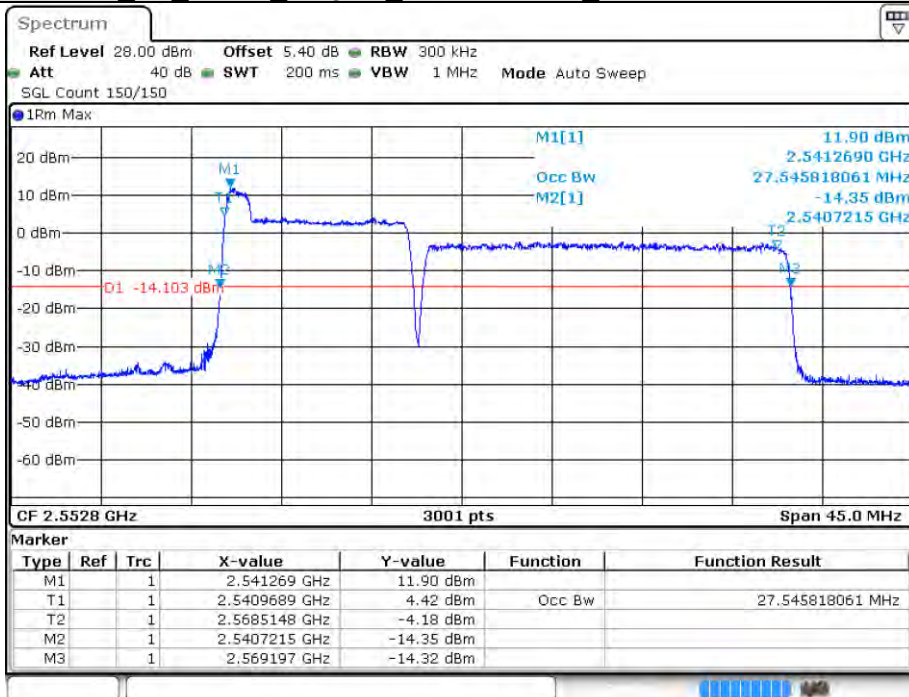


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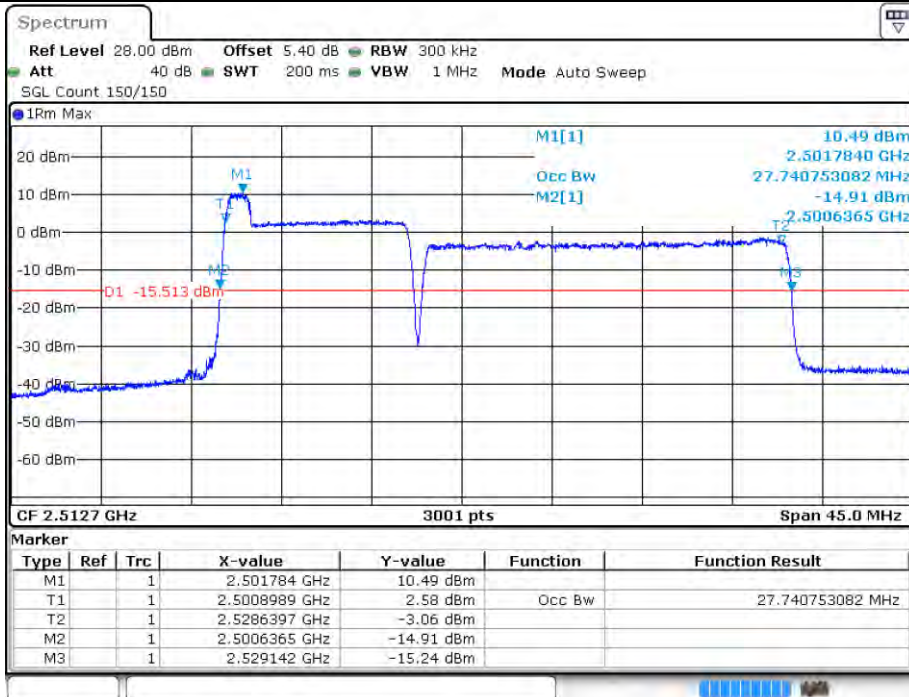
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CA 7C 10+20 16QAM 21206+21350 50RB#0+100RB#0



Date: 6.MAY.2020 05:02:52

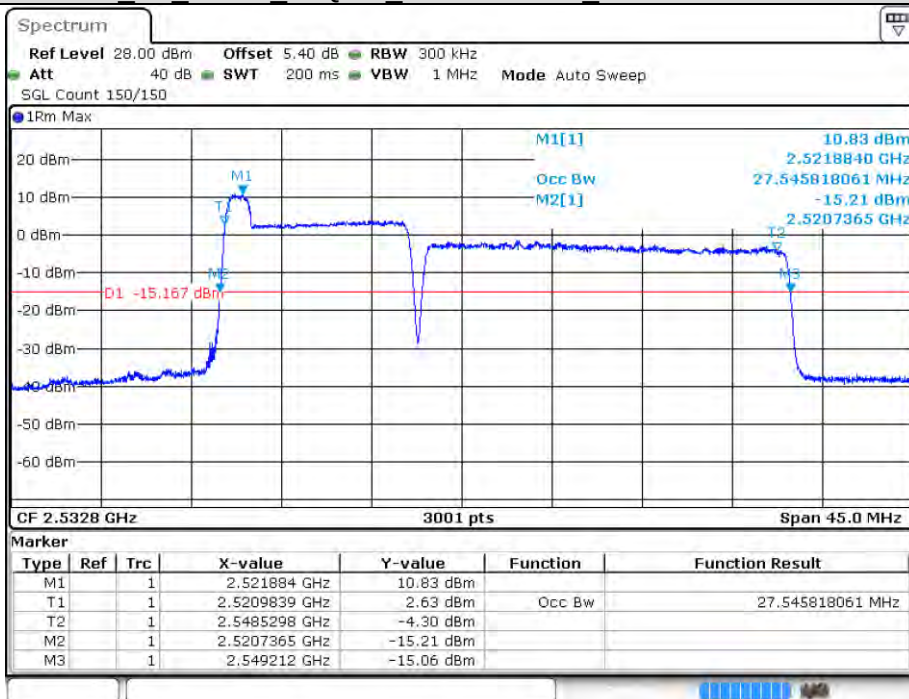
CA 7C 10+20 64QAM 20805+20949 50RB#0+100RB#0



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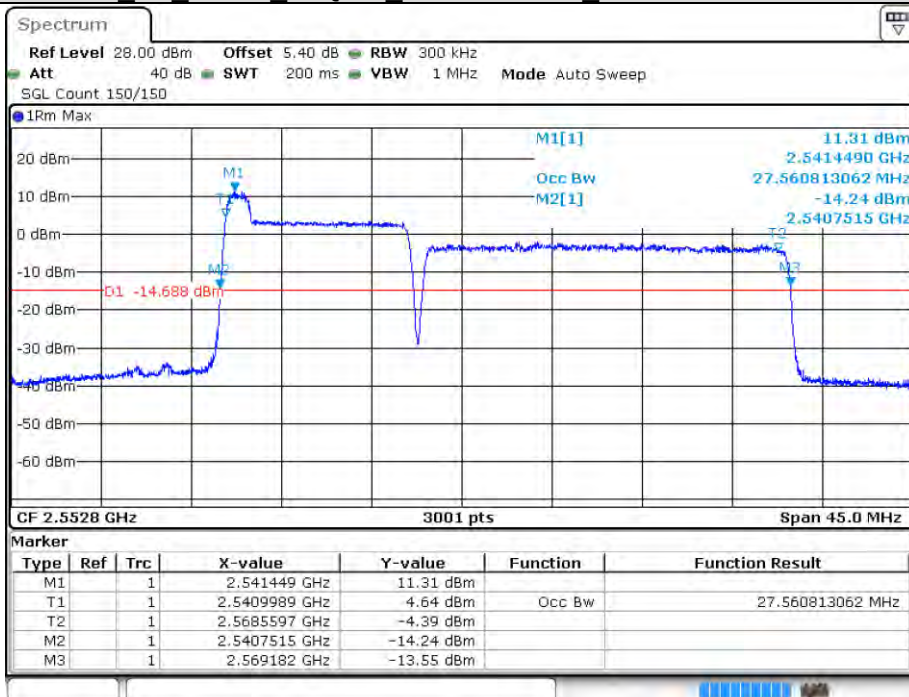


CA 7C 10+20 64QAM 21006+21150 50RB#0+100RB#0



Date: 6.MAY.2020 05:01:35

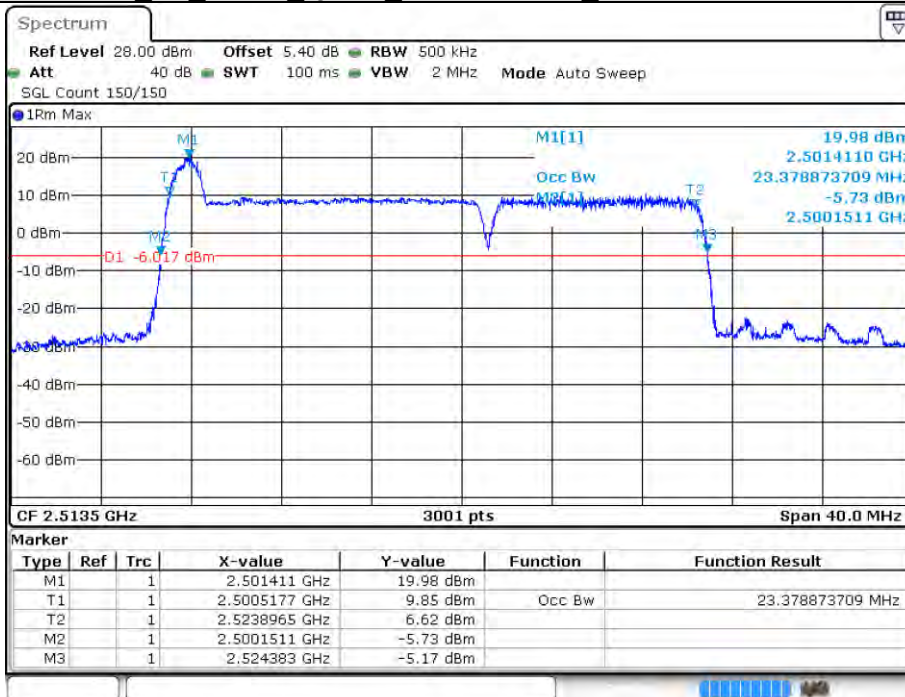
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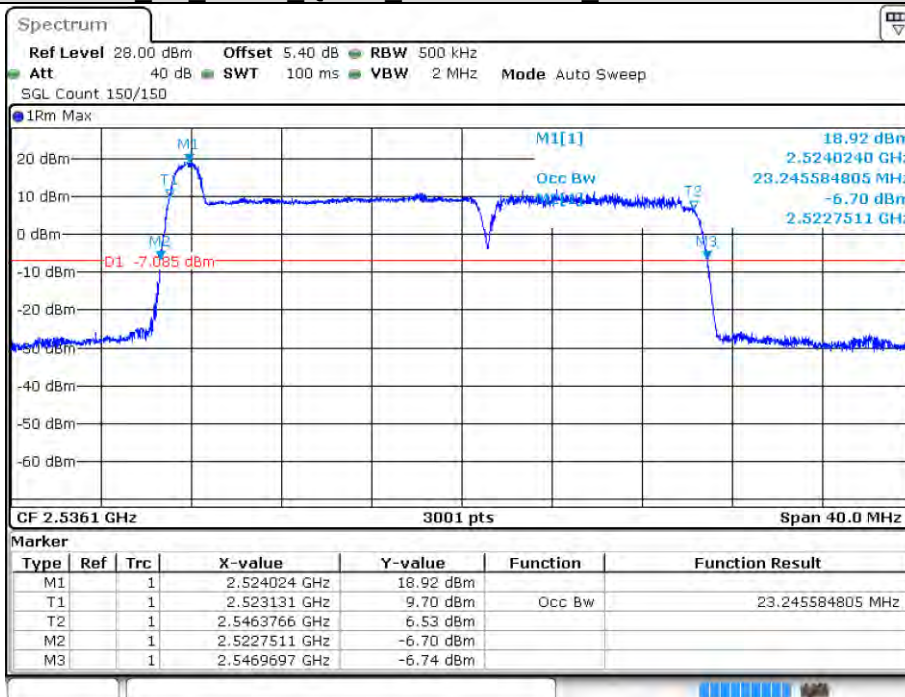


CA 7C 15+10 QPSK 20825+20945 75RB#0+50RB#0



Date: 6.MAY.2020 05:04:41

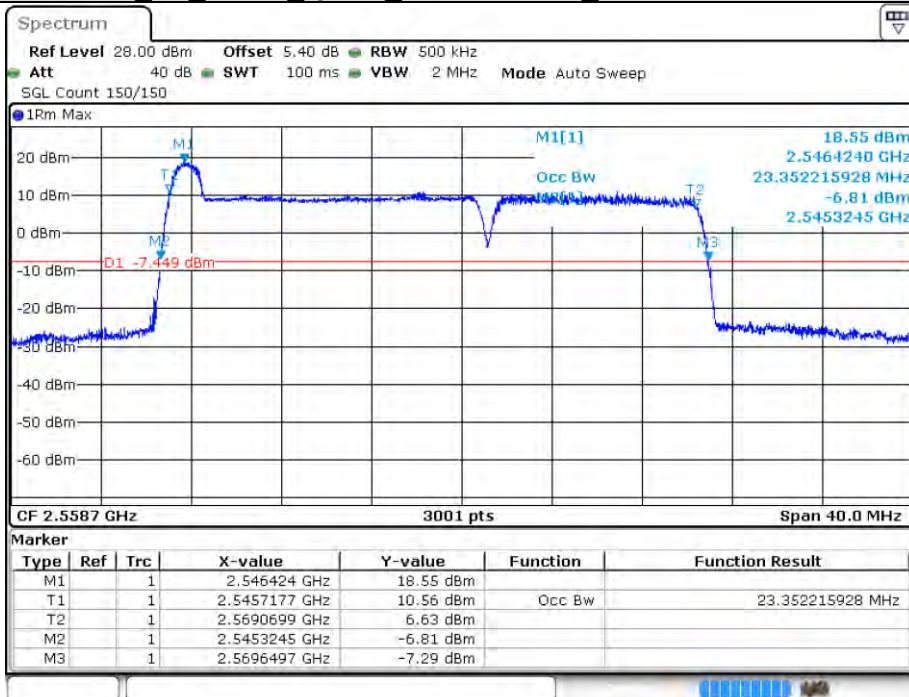
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Date: 6.MAY.2020 05:05:49

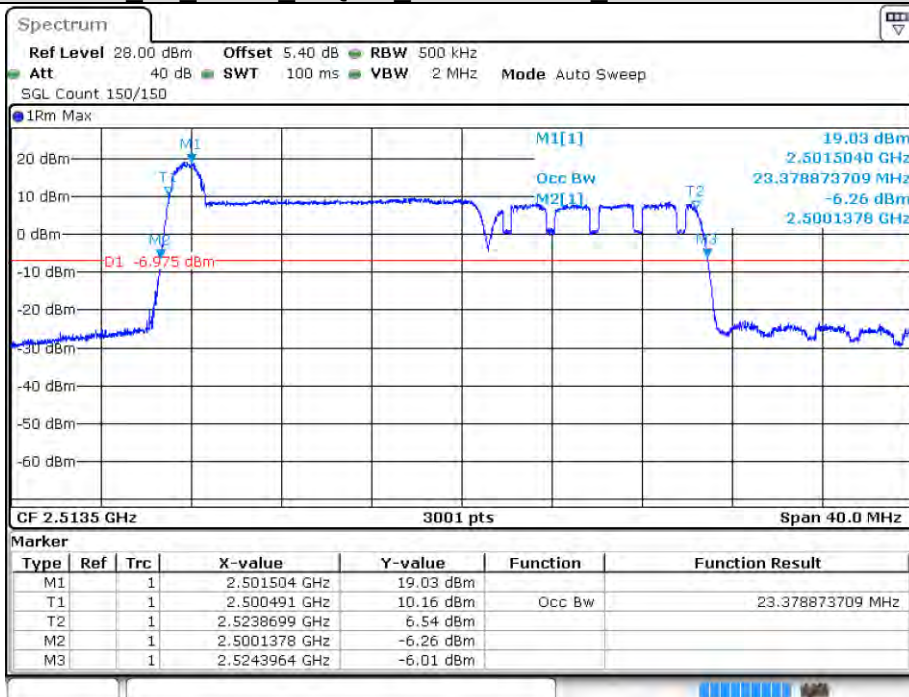


CA 7C 15+10 QPSK 21277+21397 75RB#0+50RB#0



Date: 6.MAY.2020 05:06:58

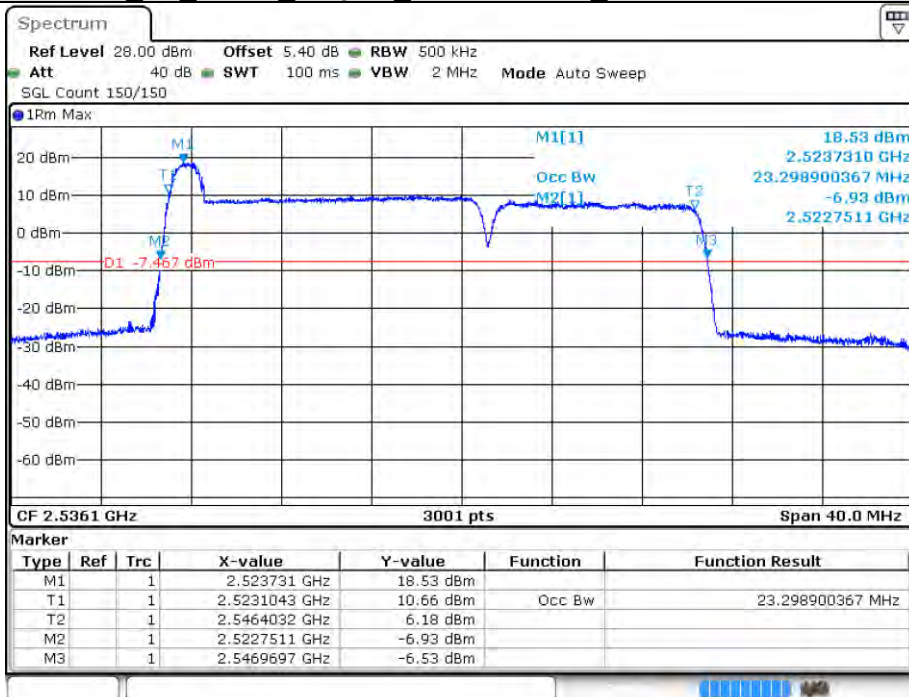
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Date: 6.MAY.2020 05:05:03

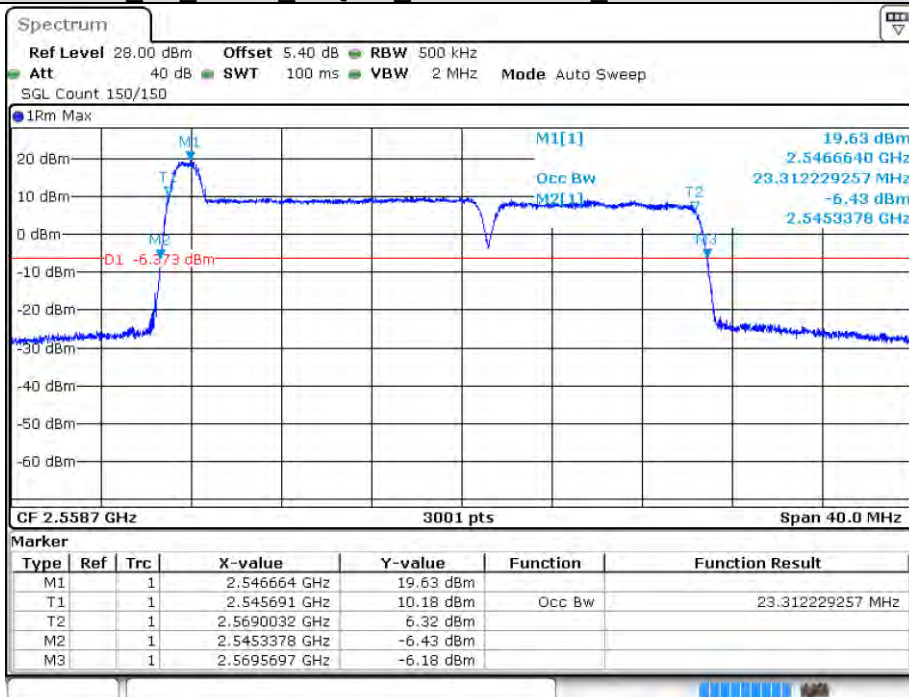


CA 7C 15+10 16QAM 21051+21171 75RB#0+50RB#0



Date: 6.MAY.2020 05:06:12

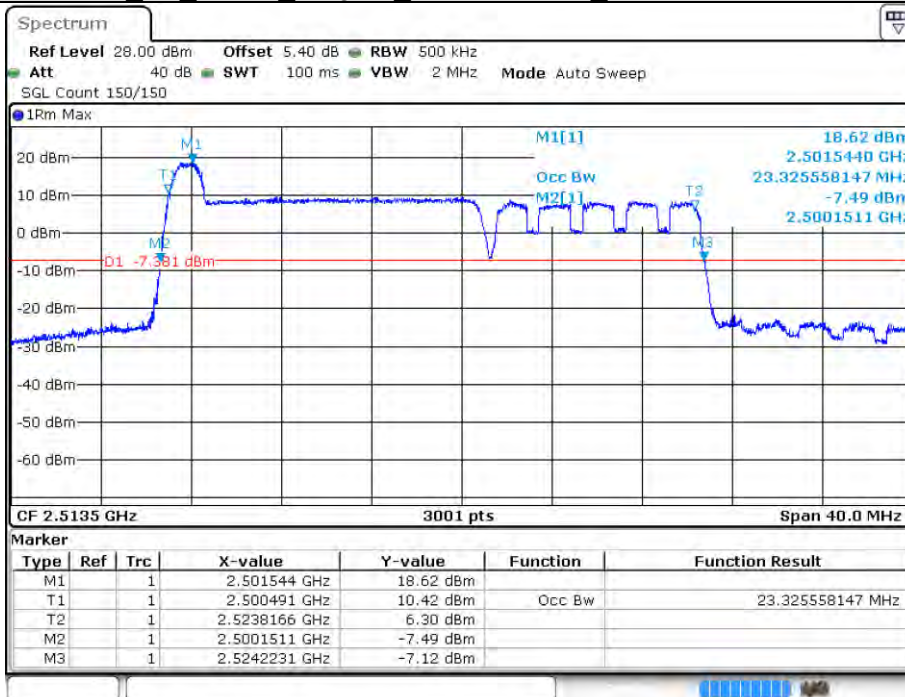
CA 7C 15+10 16QAM 21277+21397 75RB#0+50RB#0



Date: 6.MAY.2020 05:07:20

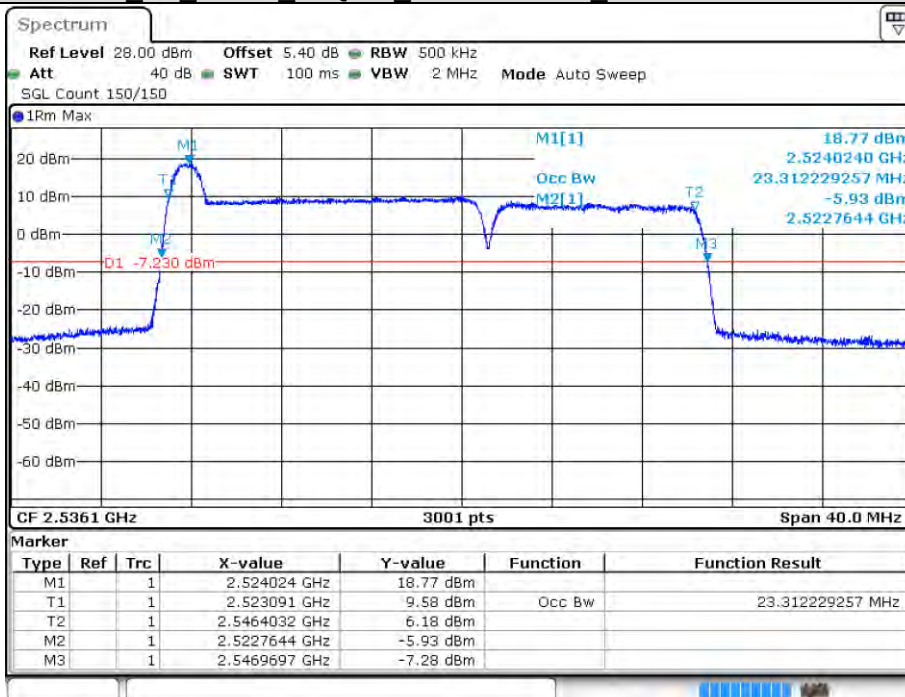


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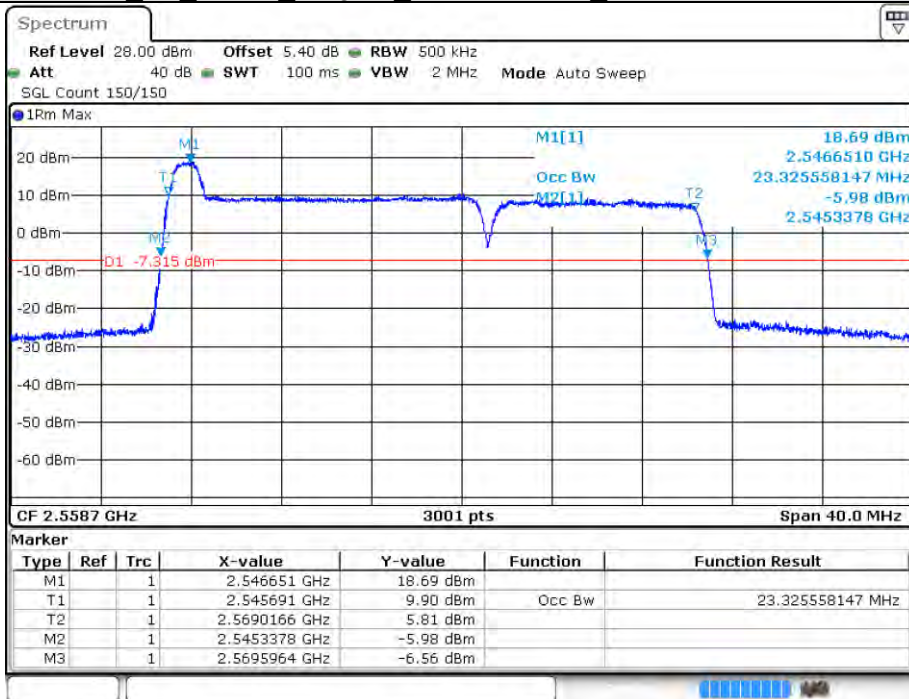
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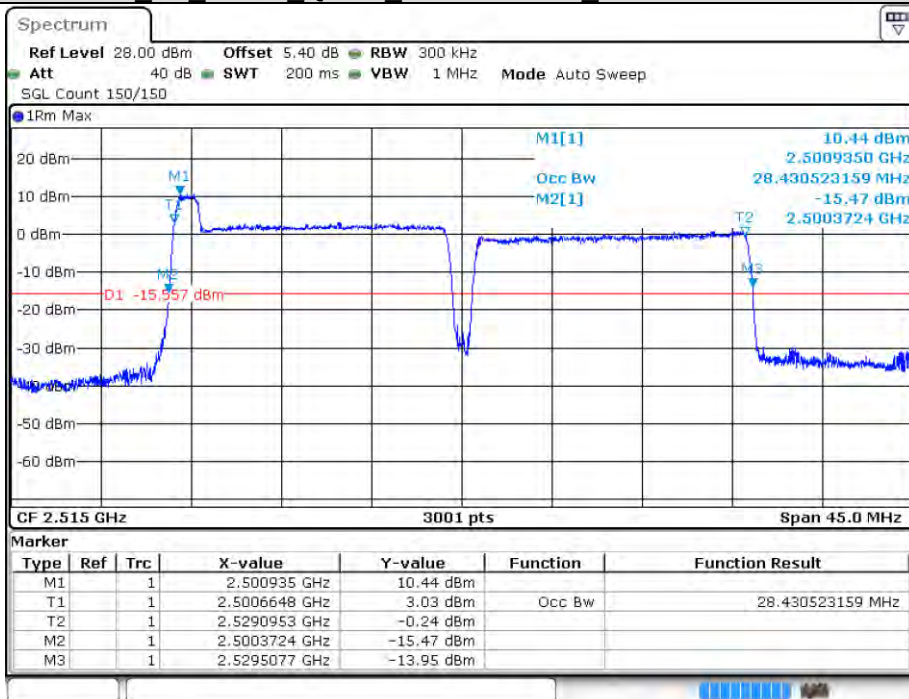


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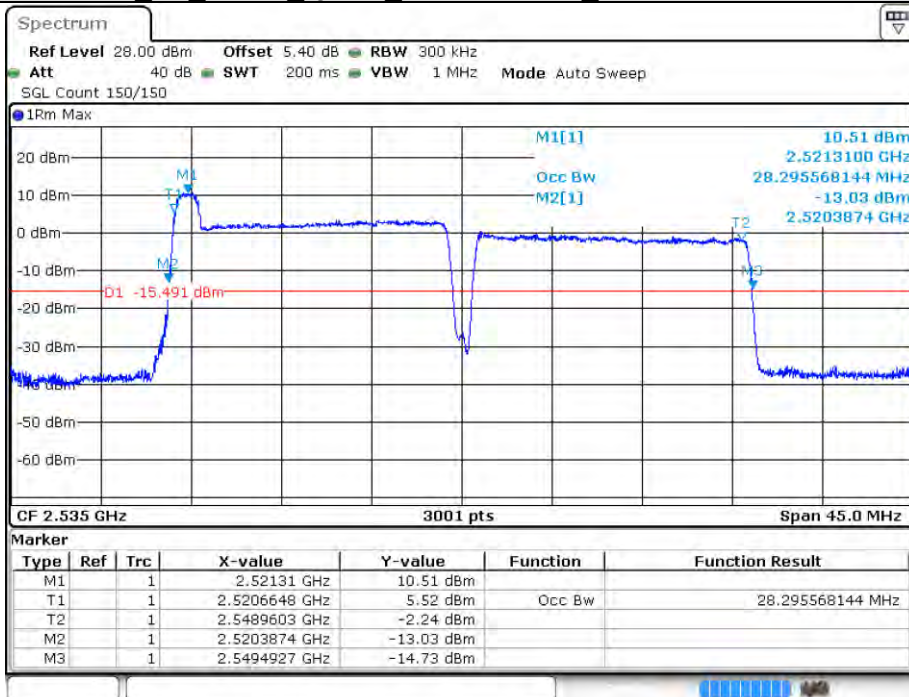
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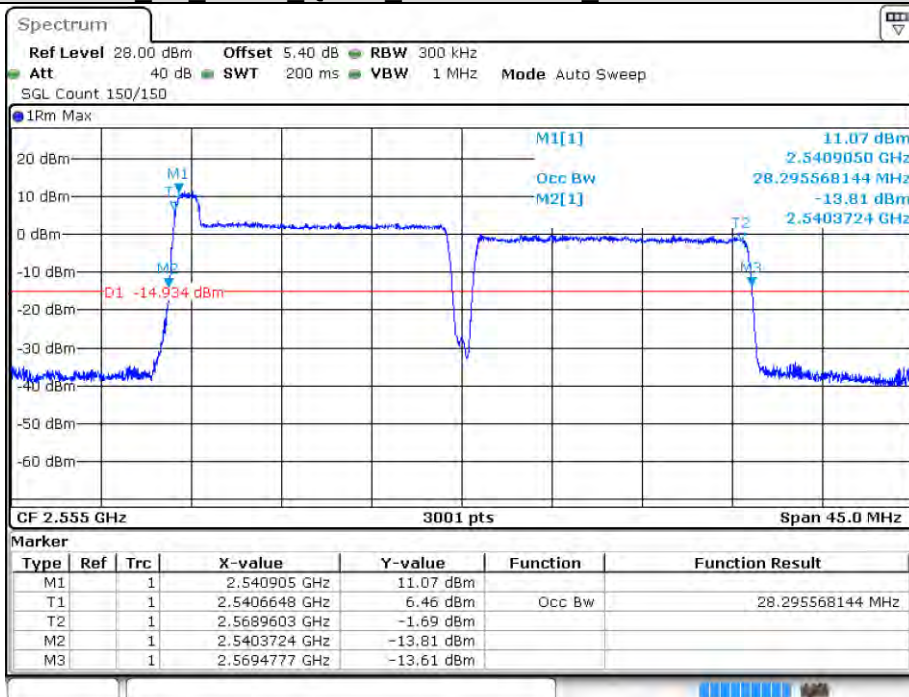


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Date: 6.MAY.2020 05:11:02

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Date: 6.MAY.2020 05:12:56

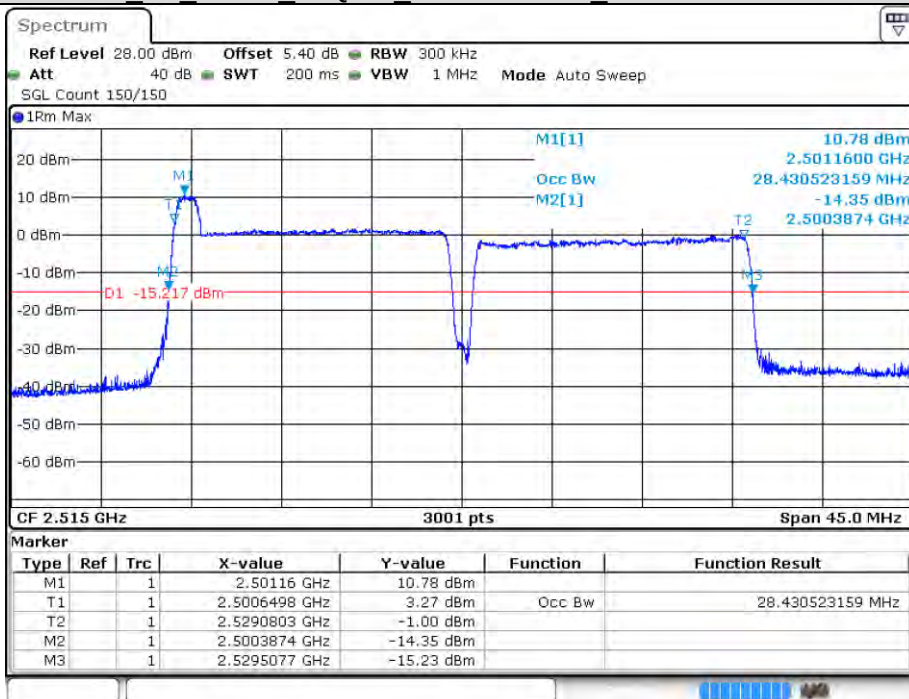


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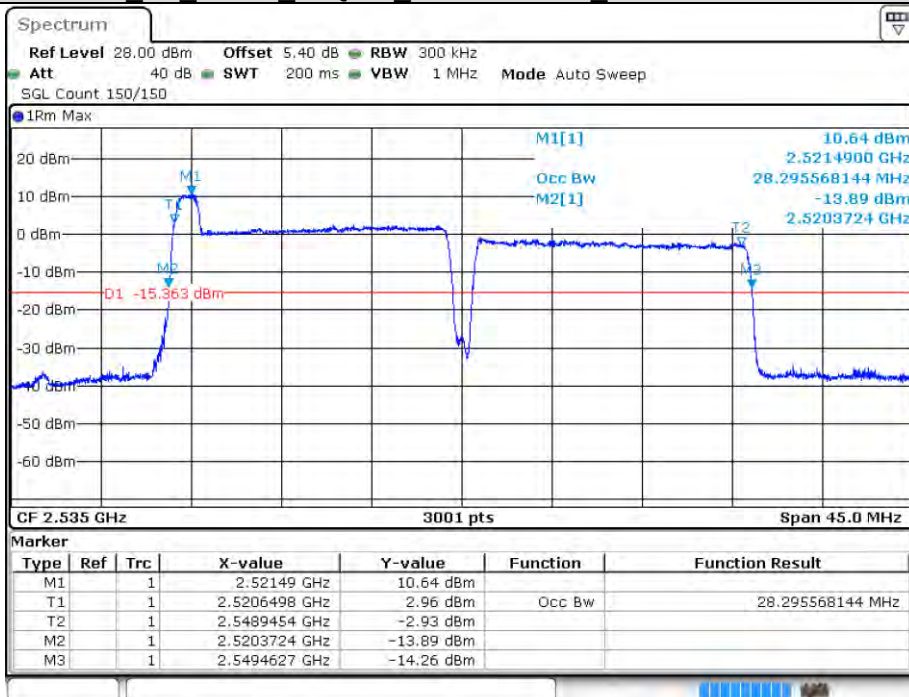
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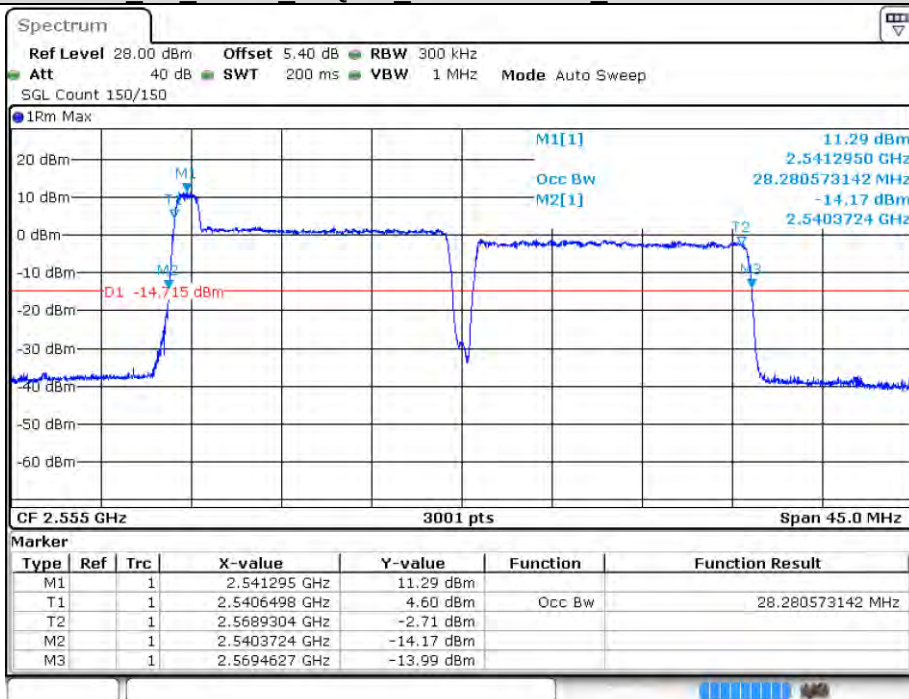
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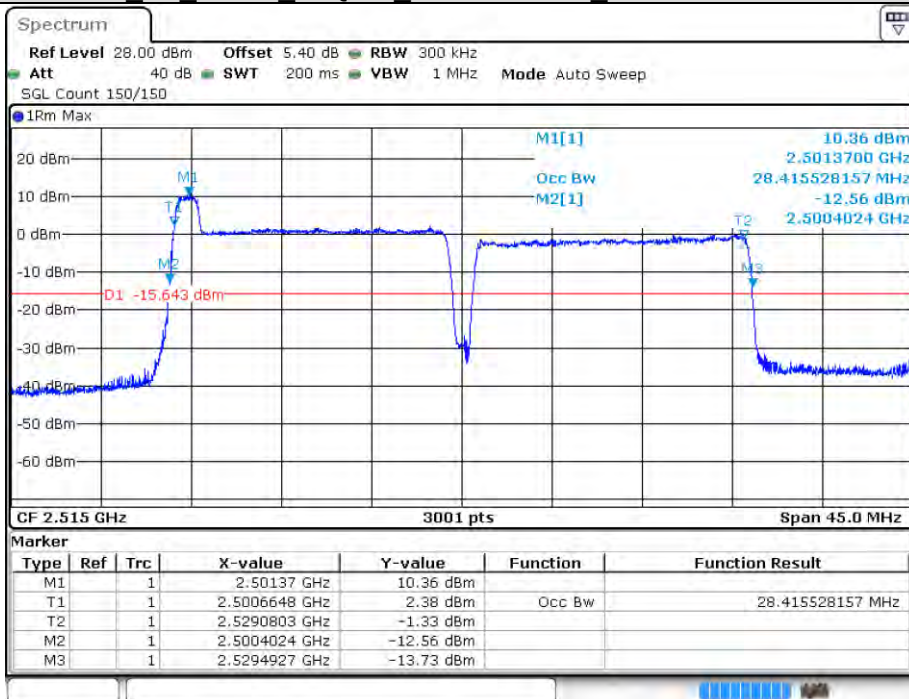


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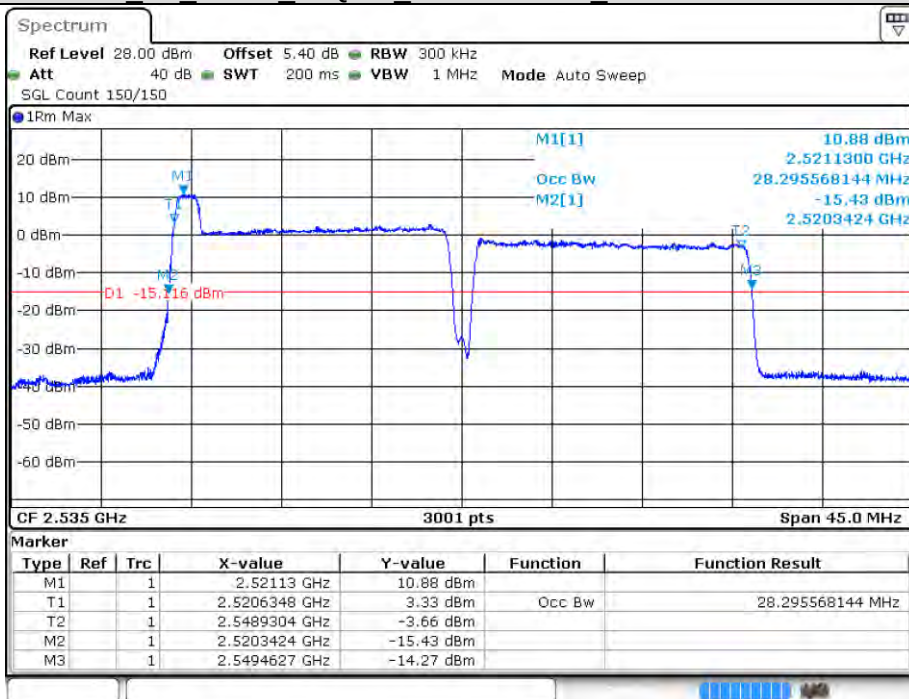
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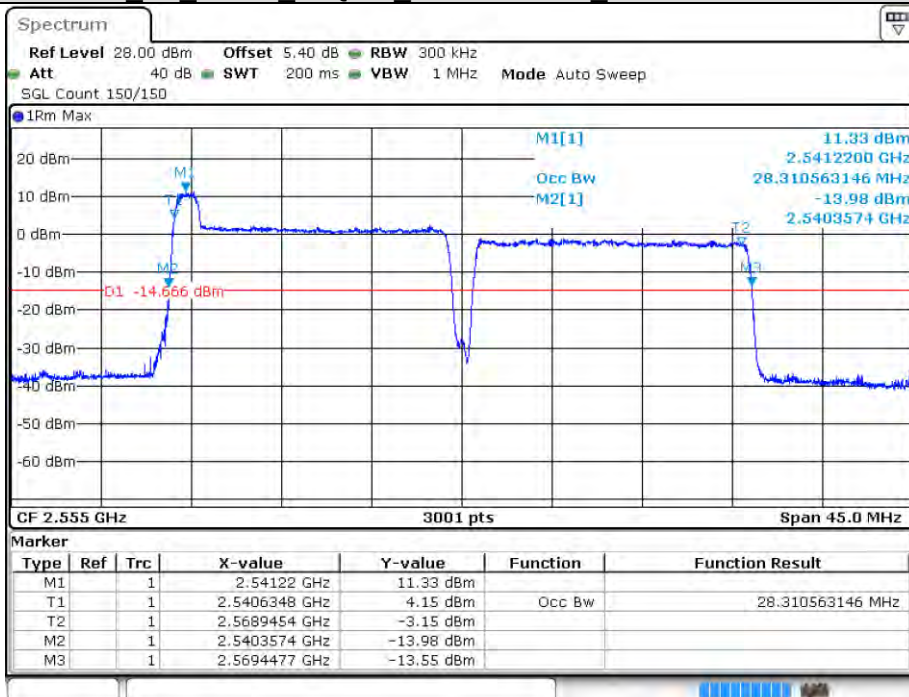


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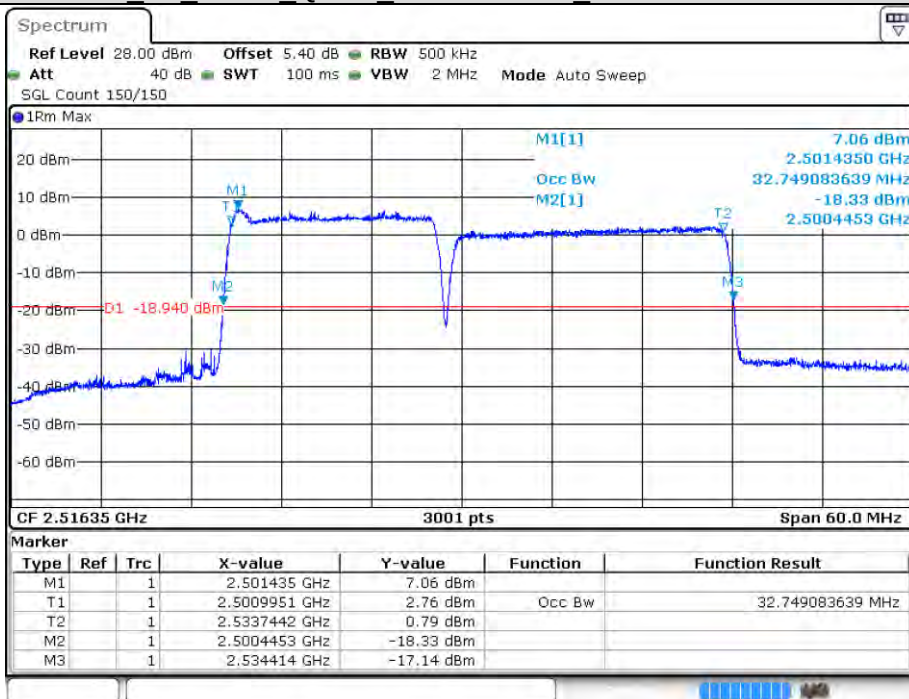
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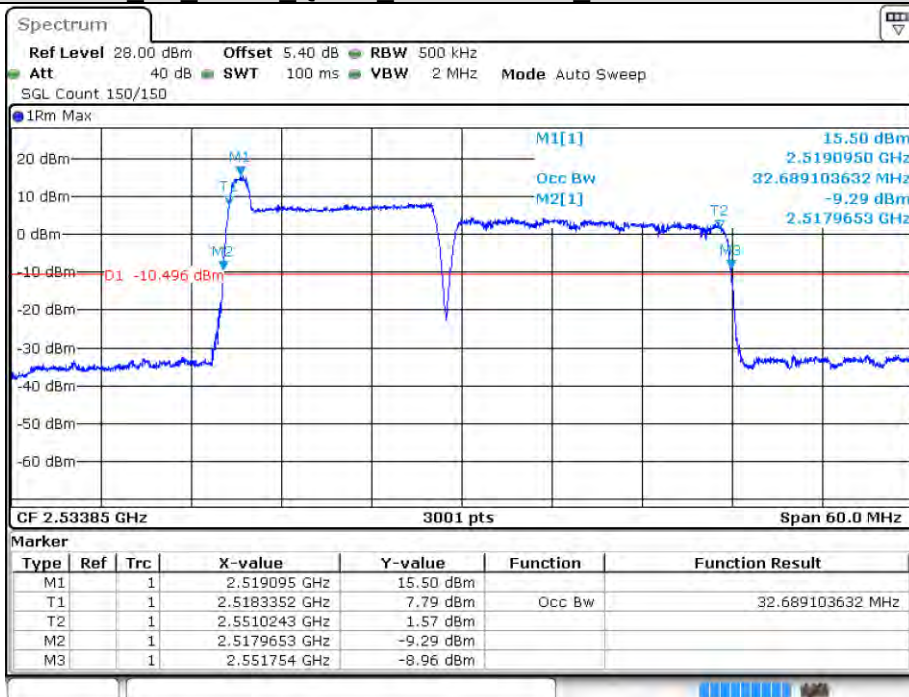


CA 7C 15+20 QPSK 20828+20999 75RB#0+100RB#0



Date: 6.MAY.2020 05:16:02

CA 7C 15+20 QPSK 21003+21174 75RB#0+100RB#0



Date: 6.MAY.2020 05:17:12

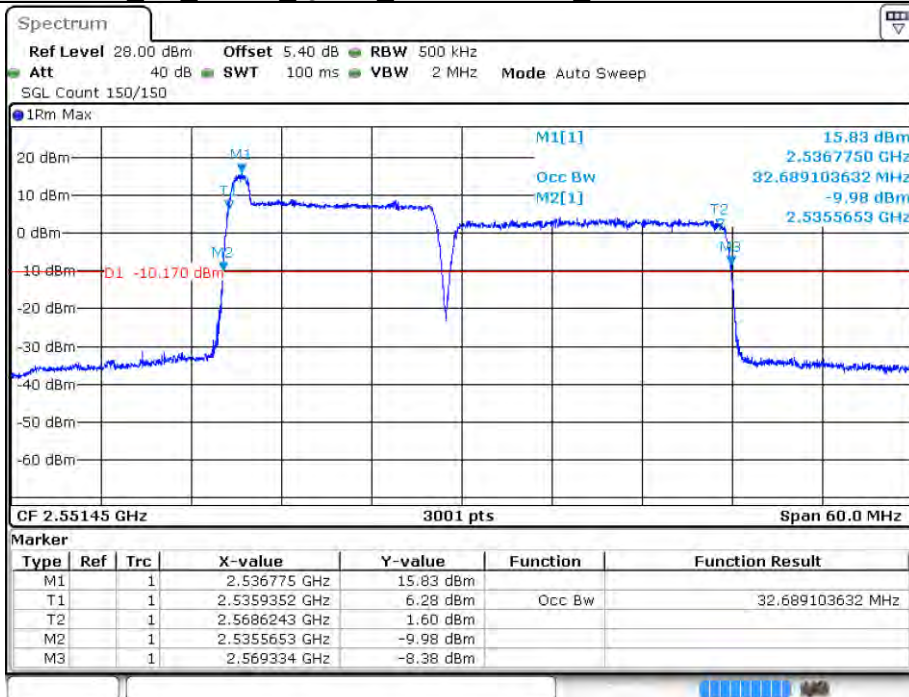


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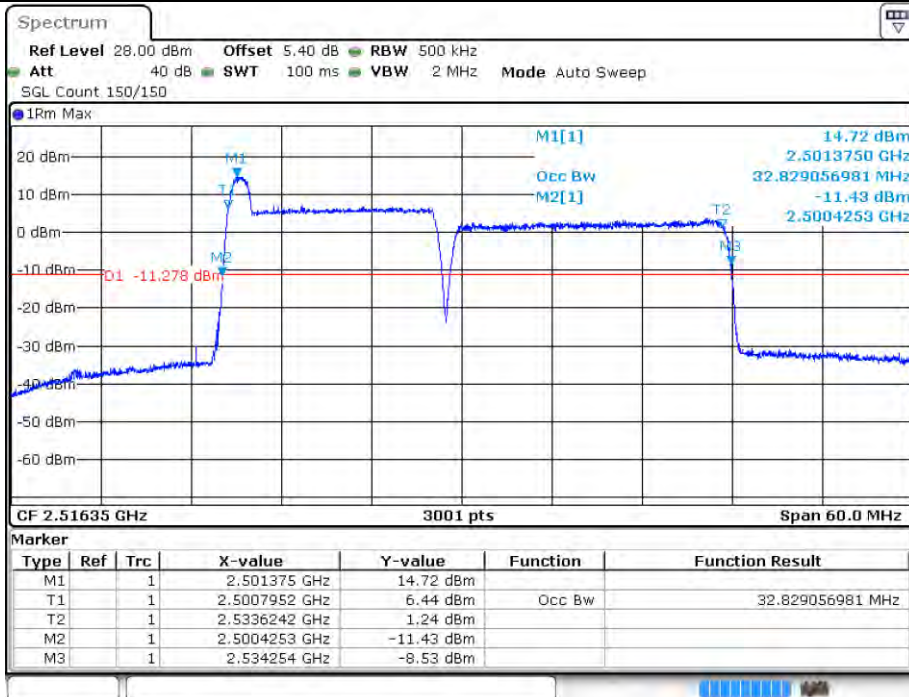
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CA 7C 15+20 QPSK 21179+21350 75RB#0+100RB#0



Date: 6.MAY.2020 05:18:22

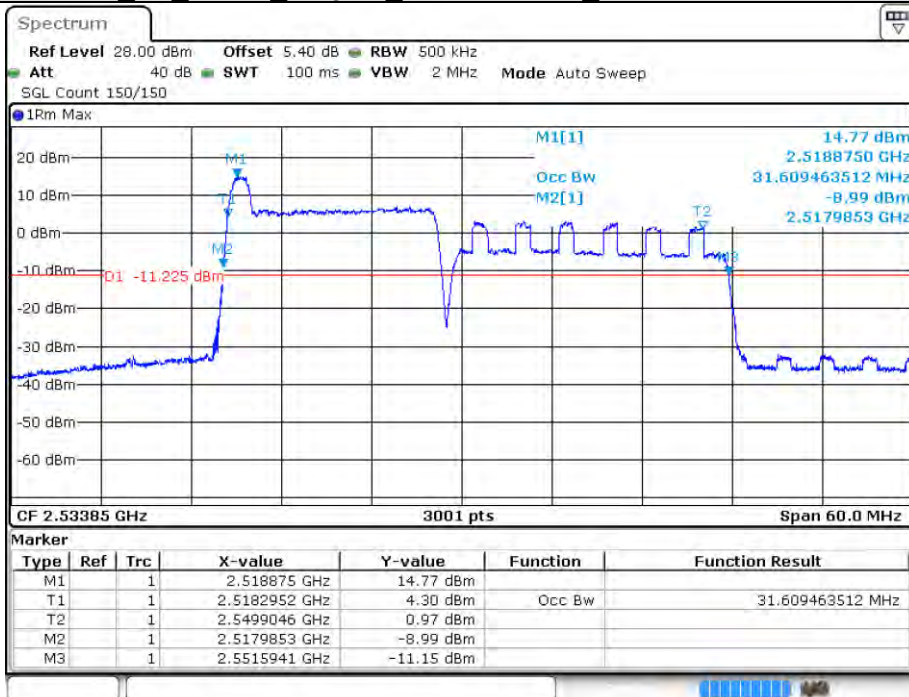
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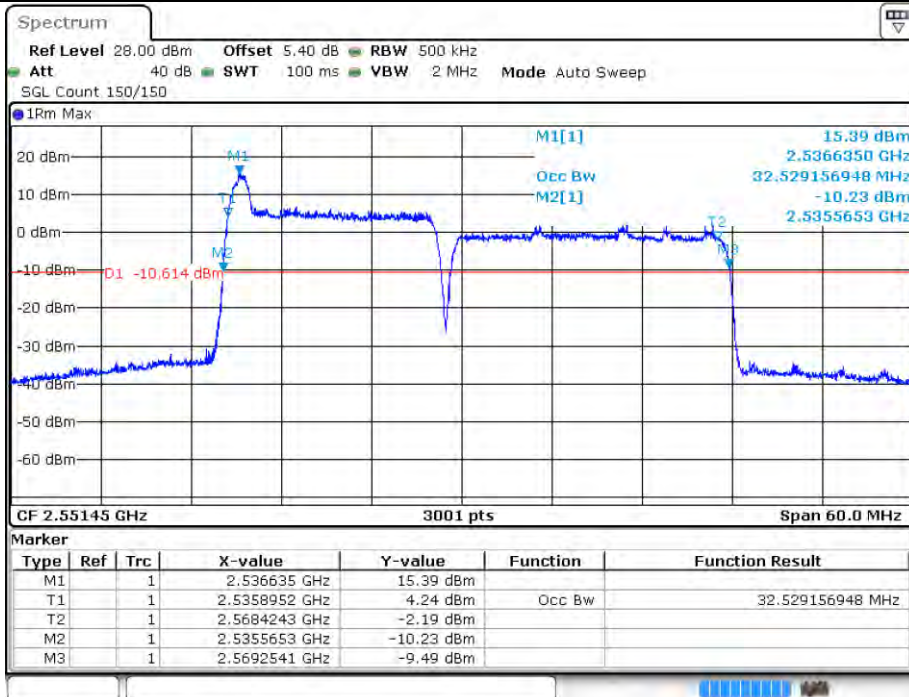


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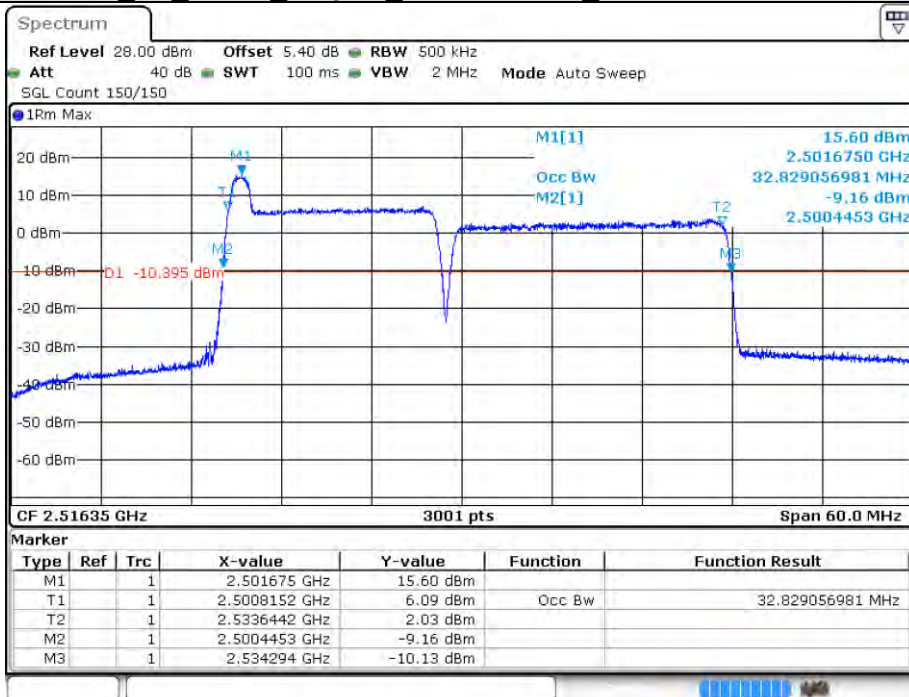
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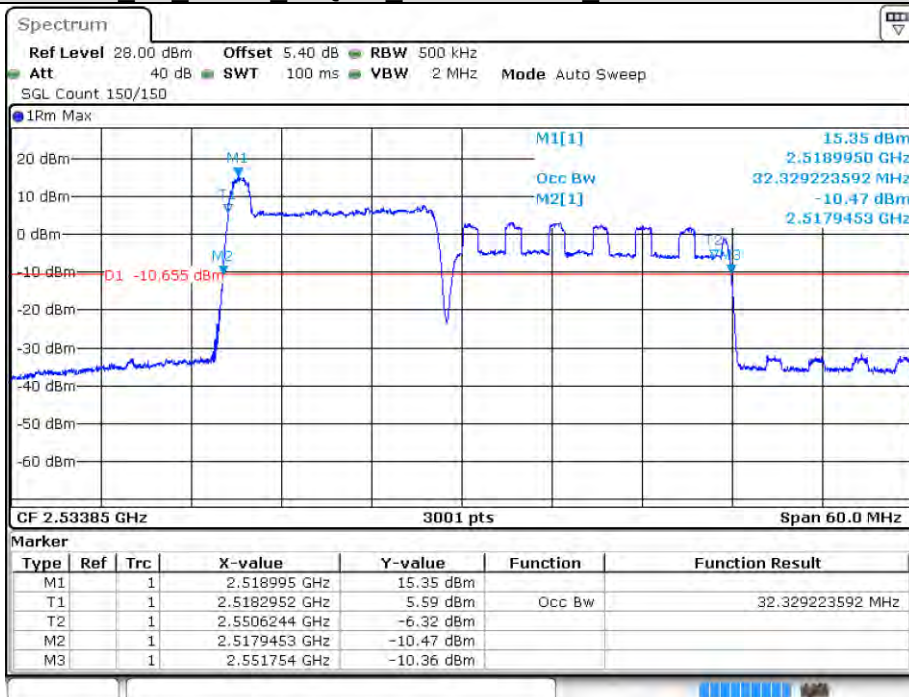
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CA 7C 15+20 64QAM 20828+20999 75RB#0+100RB#0



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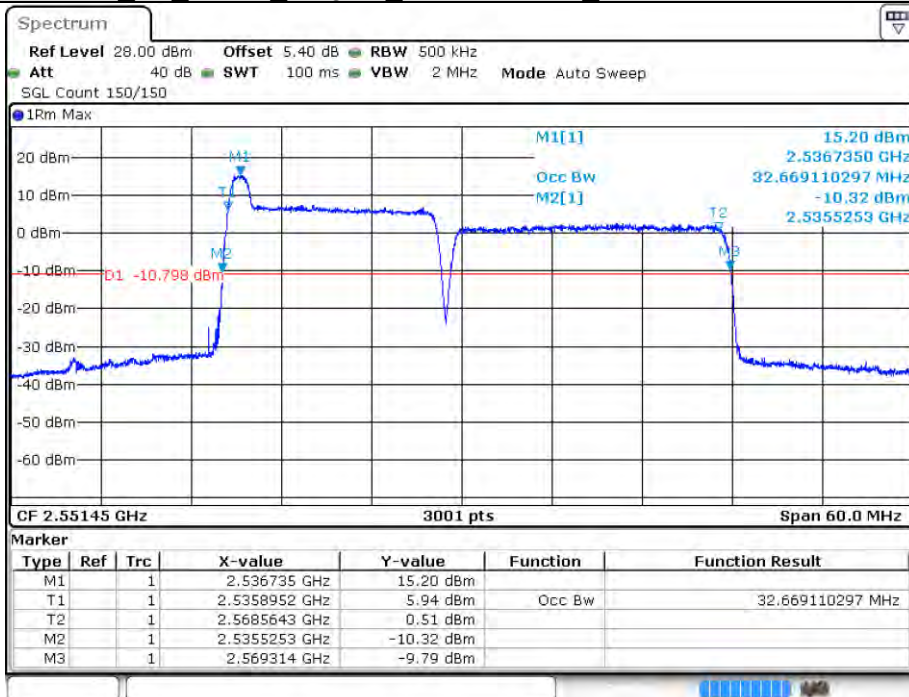
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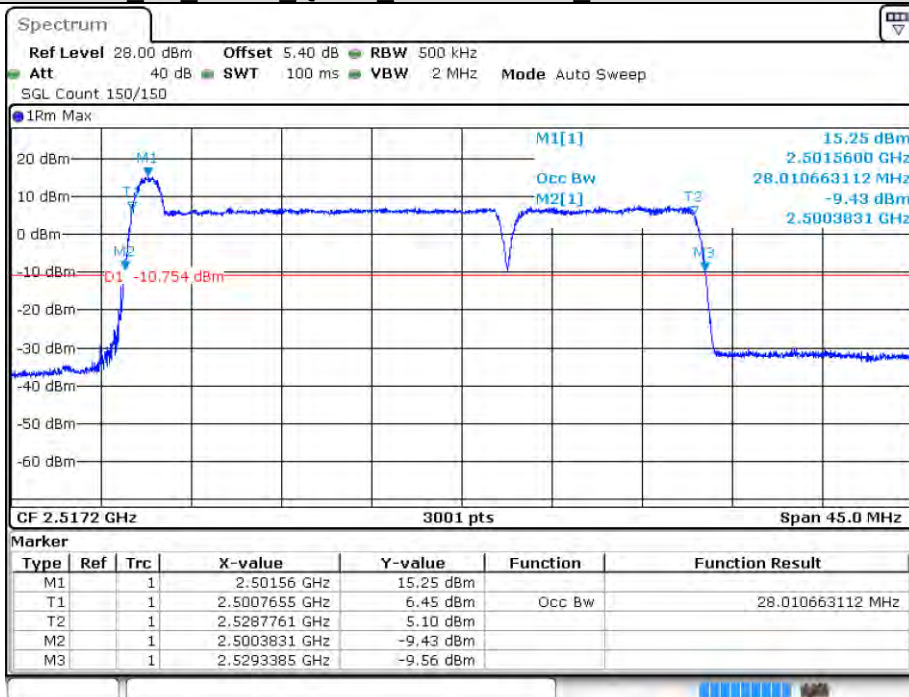


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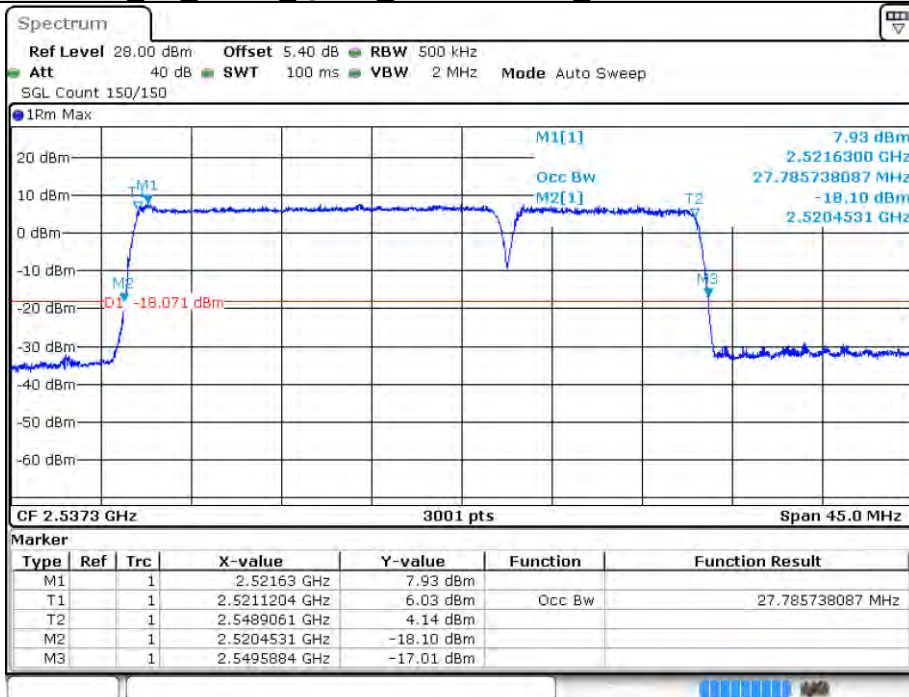
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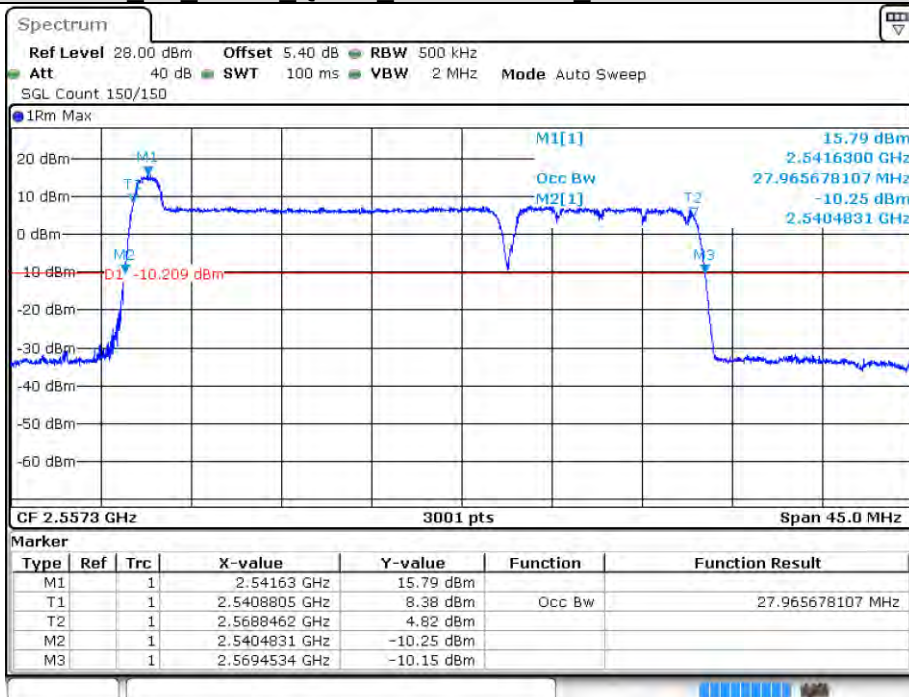


CA 7C 20+10 QPSK 21051+21195 100RB#0+50RB#0



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Date: 7.MAY.2020 02:12:41



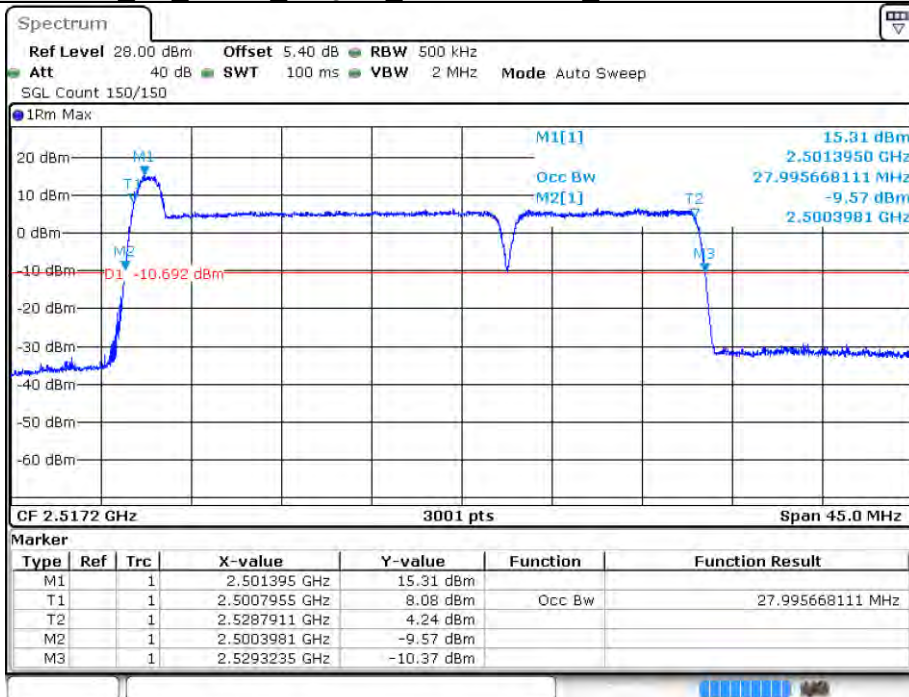
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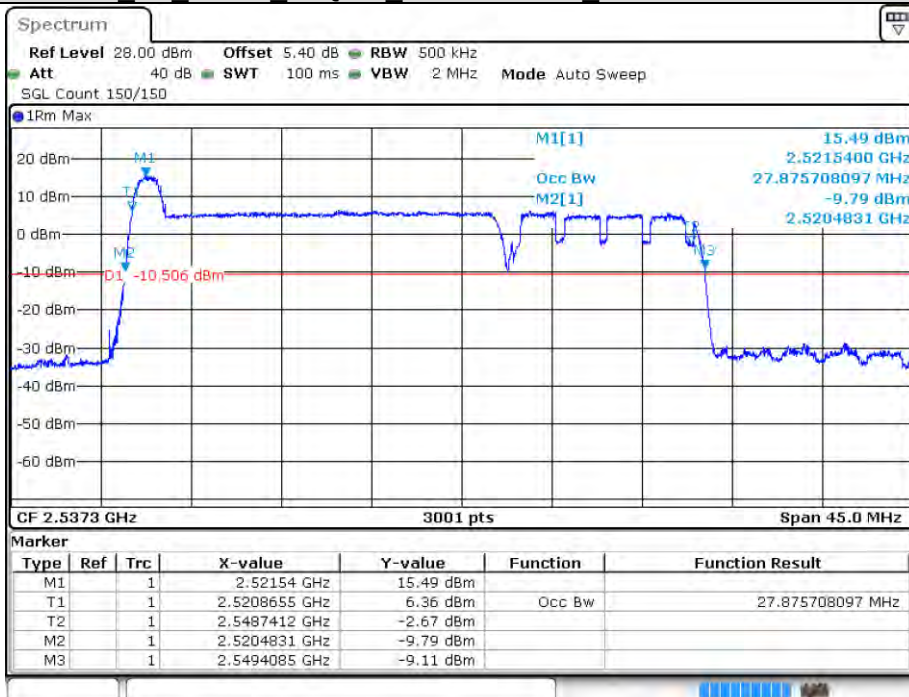
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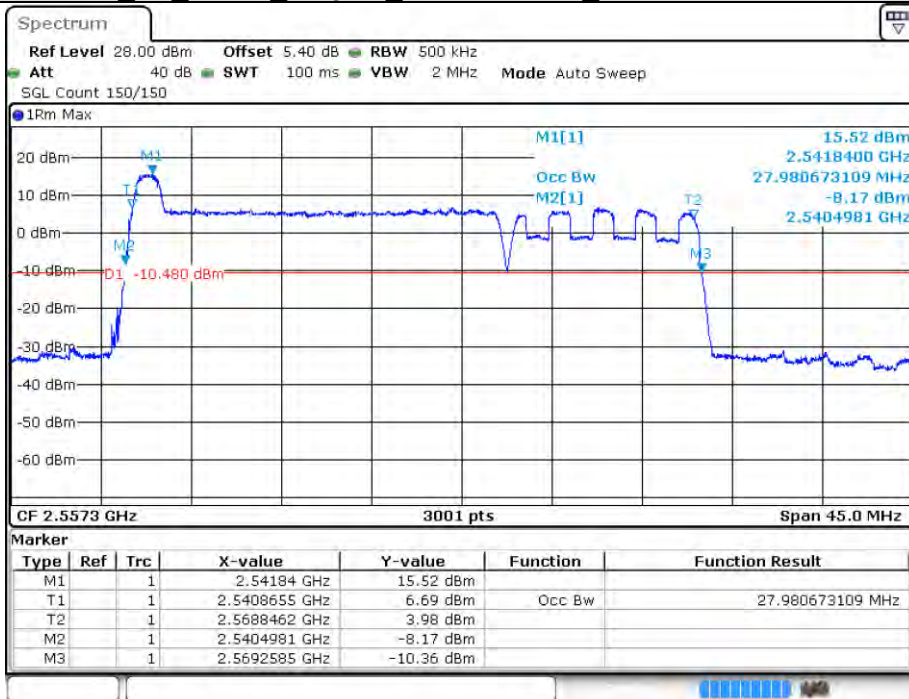
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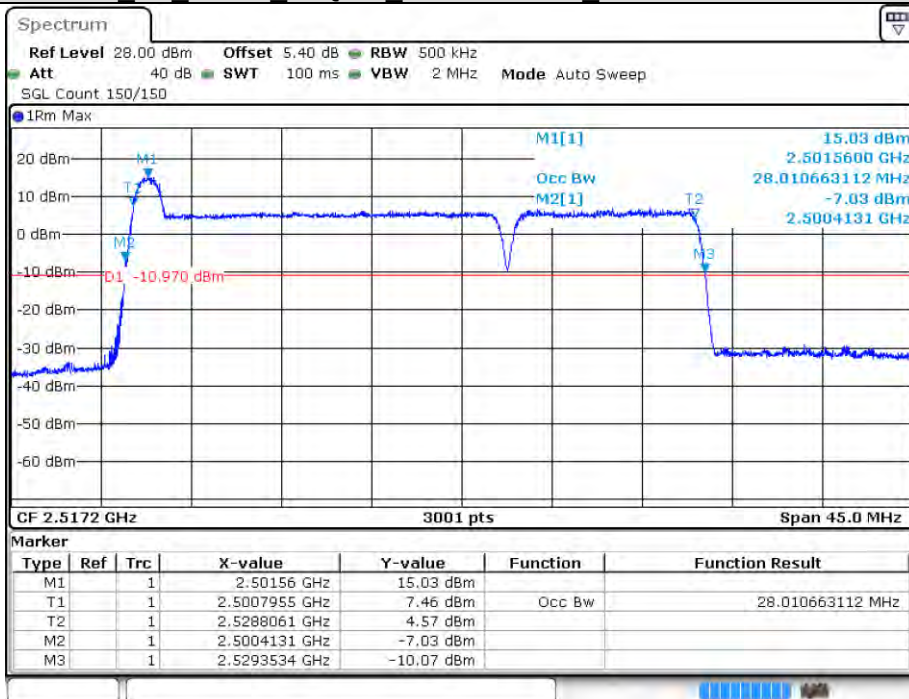


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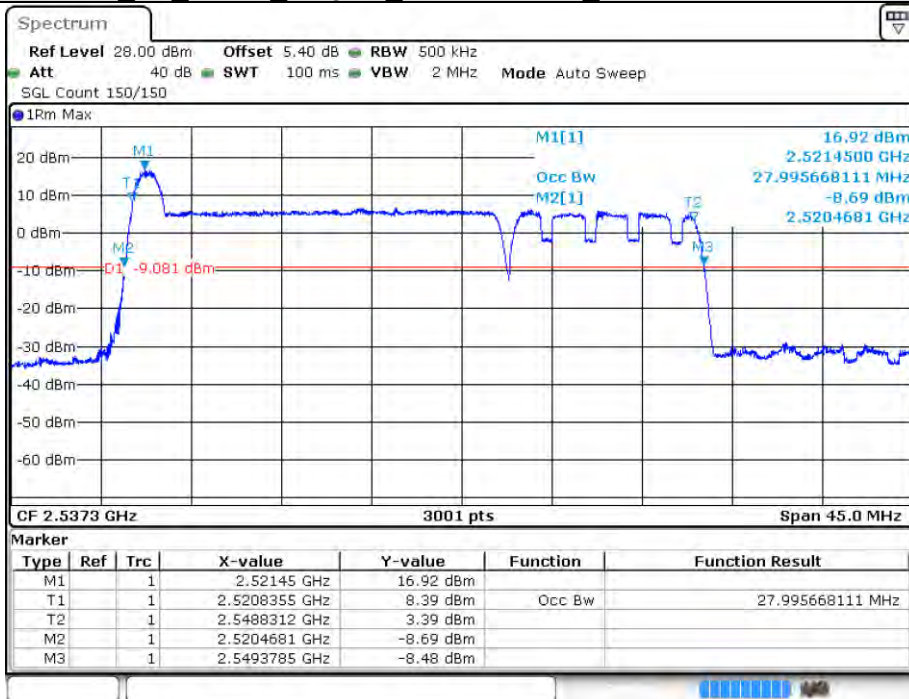
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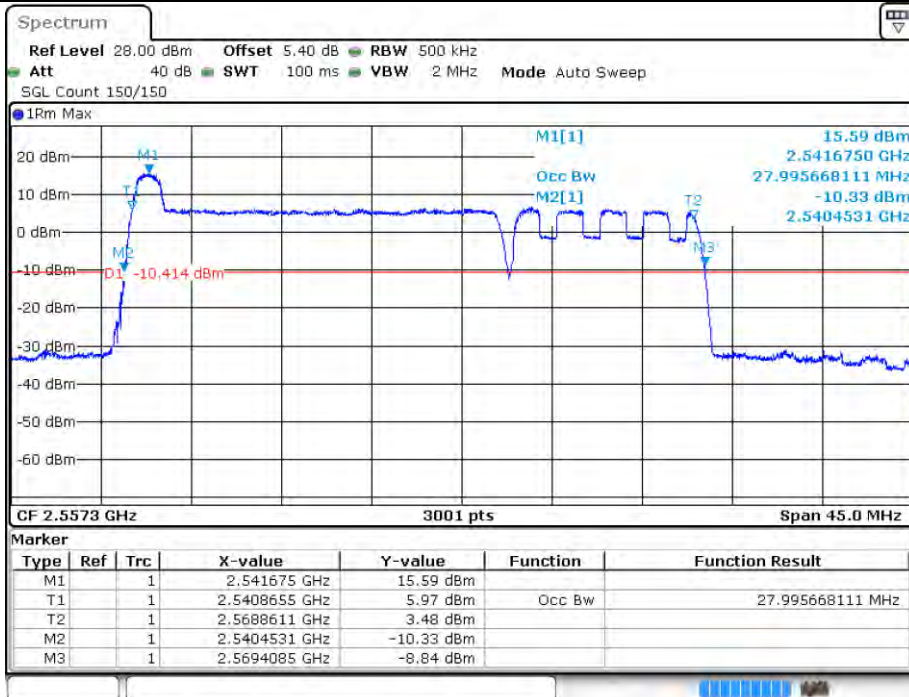


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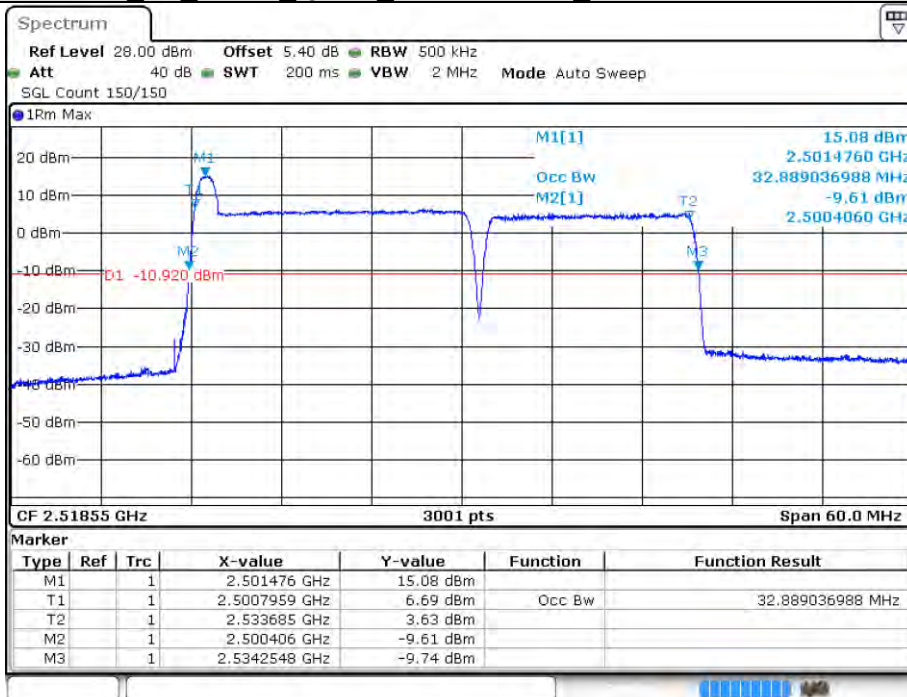
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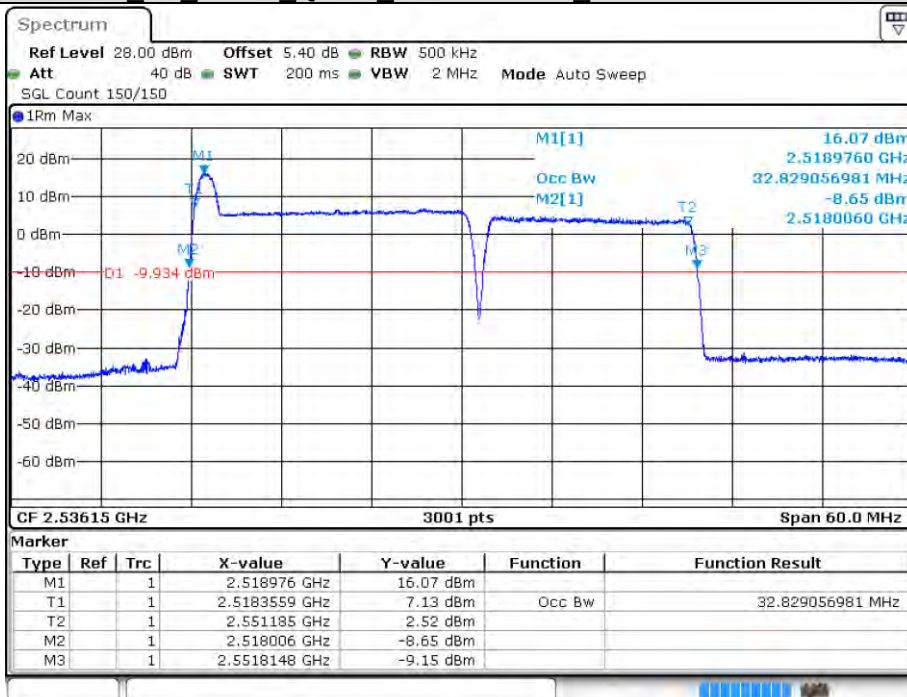
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CA 7C 20+15_QPSK 20850+21021 100RB#0+75RB#0



Date: 7.MAY.2020 02:16:56

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Date: 7.MAY.2020 02:18:53



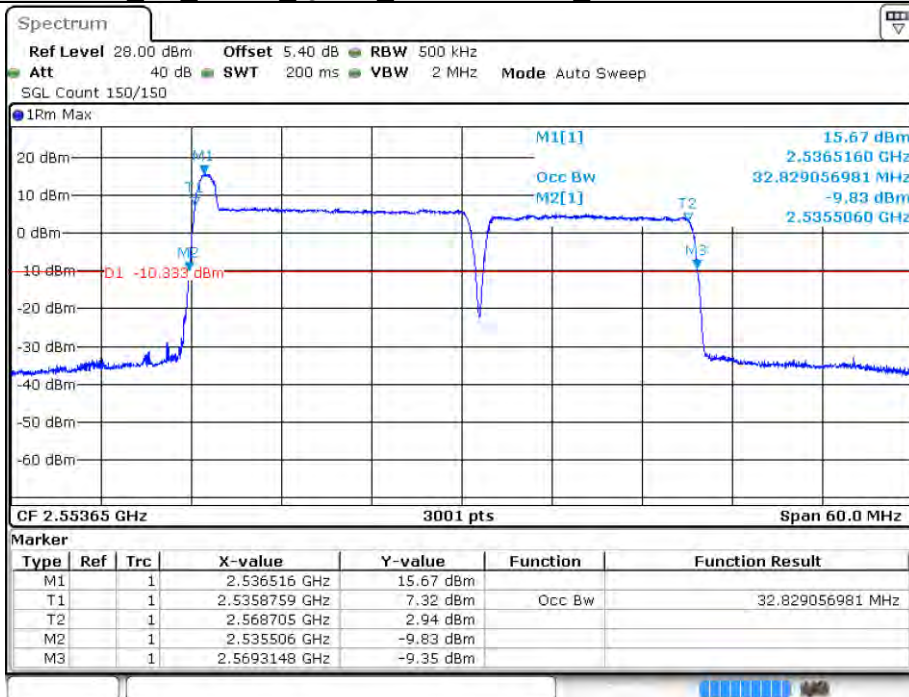
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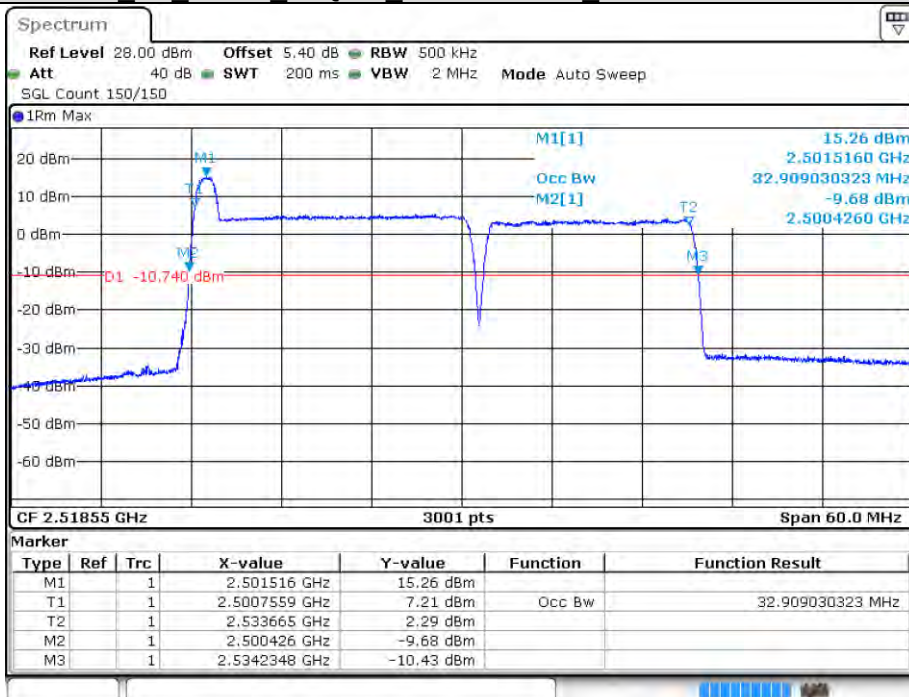
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CA 7C 20+15 QPSK 21201+21372 100RB#0+75RB#0



Date: 7.MAY.2020 02:20:50

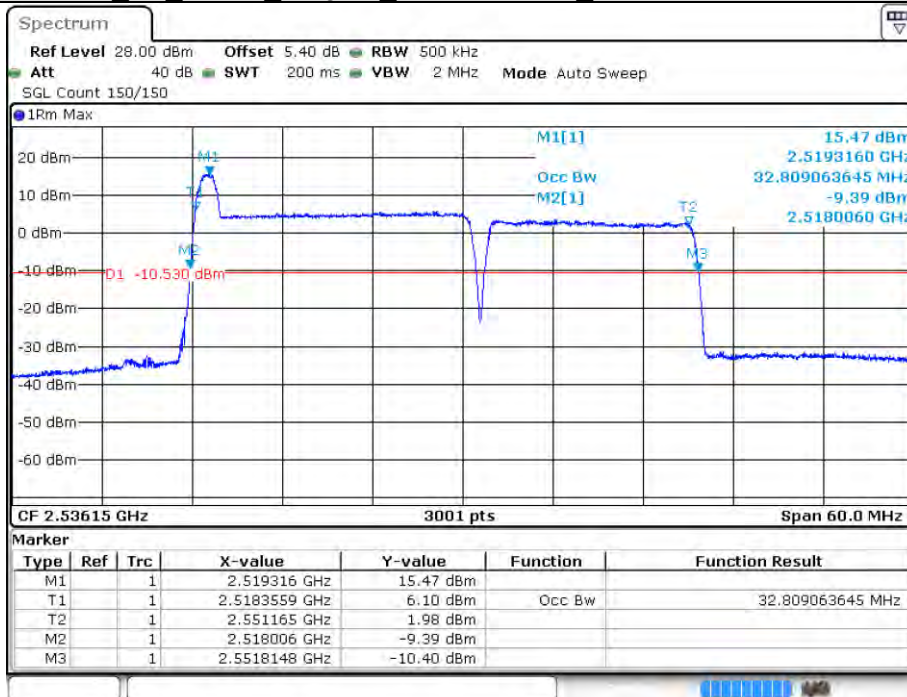
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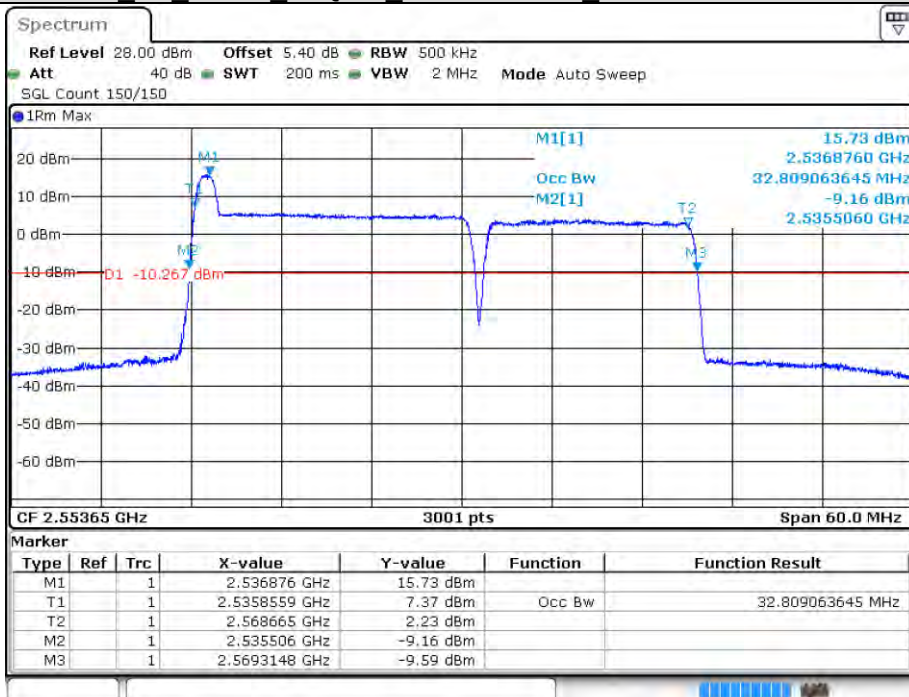


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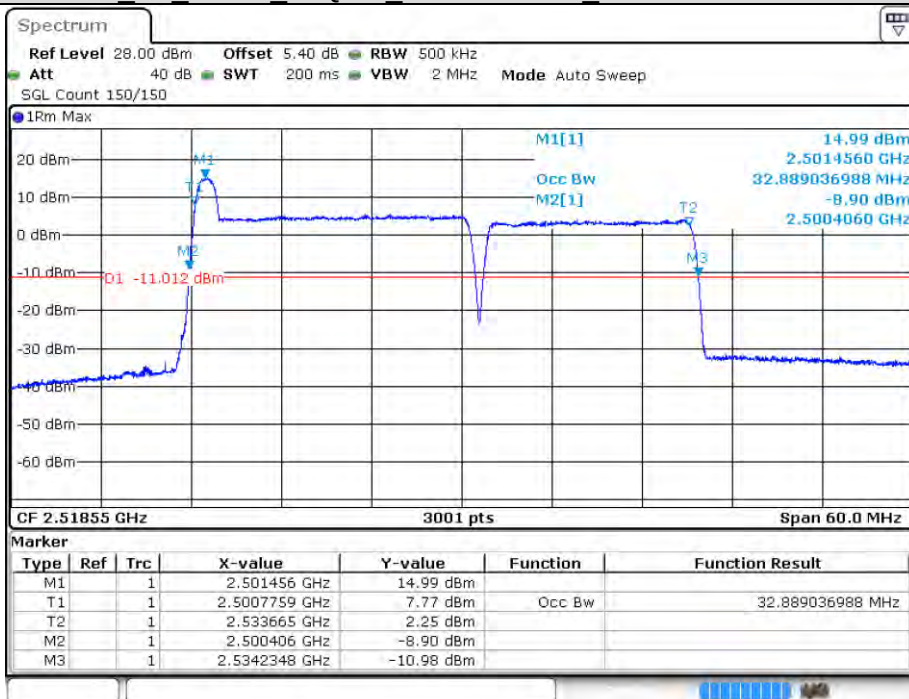


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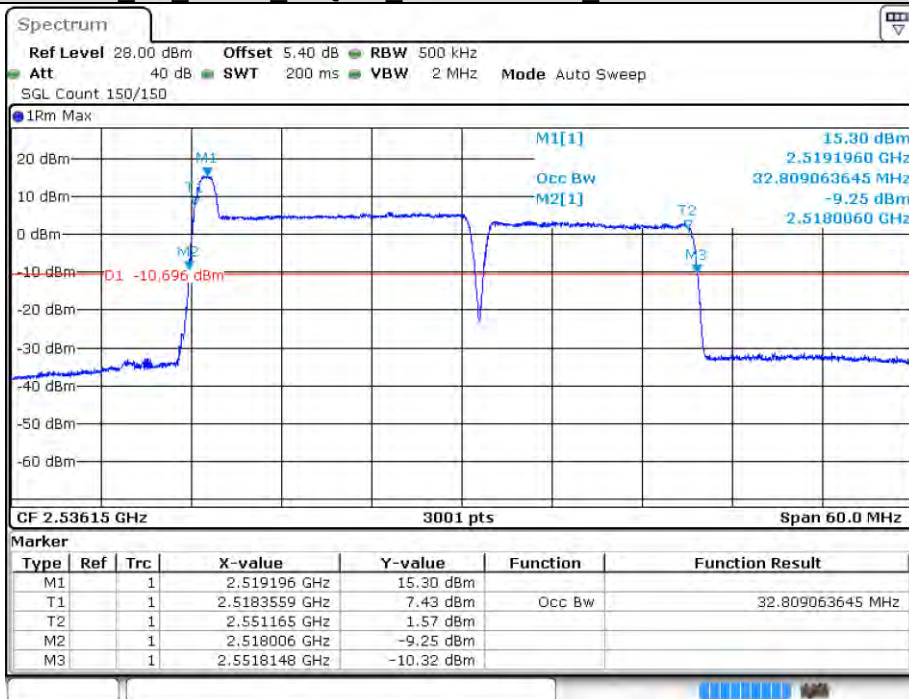
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CA 7C 20+15 64QAM 20850+21021 100RB#0+75RB#0



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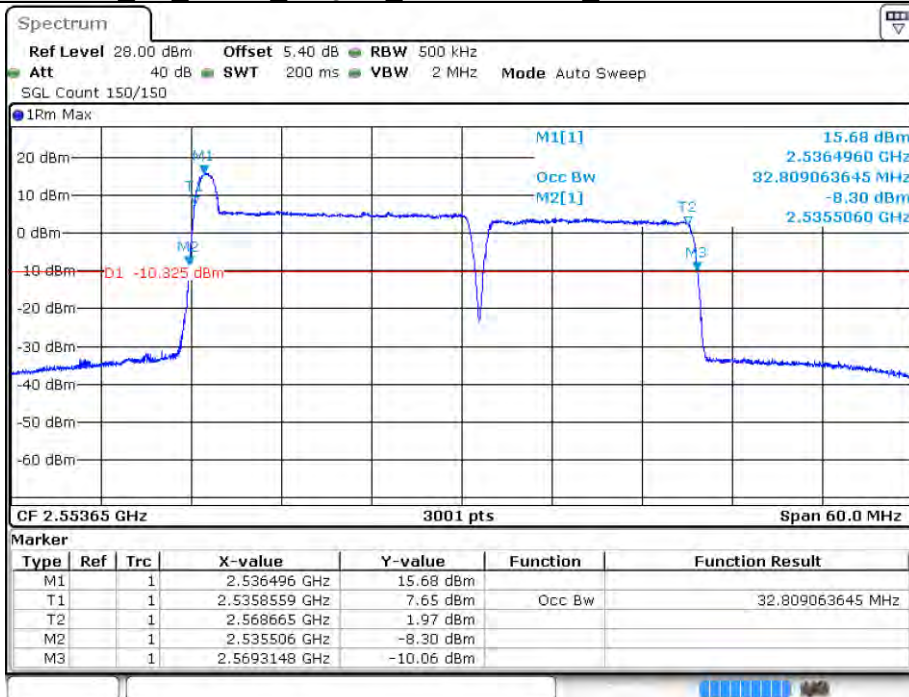
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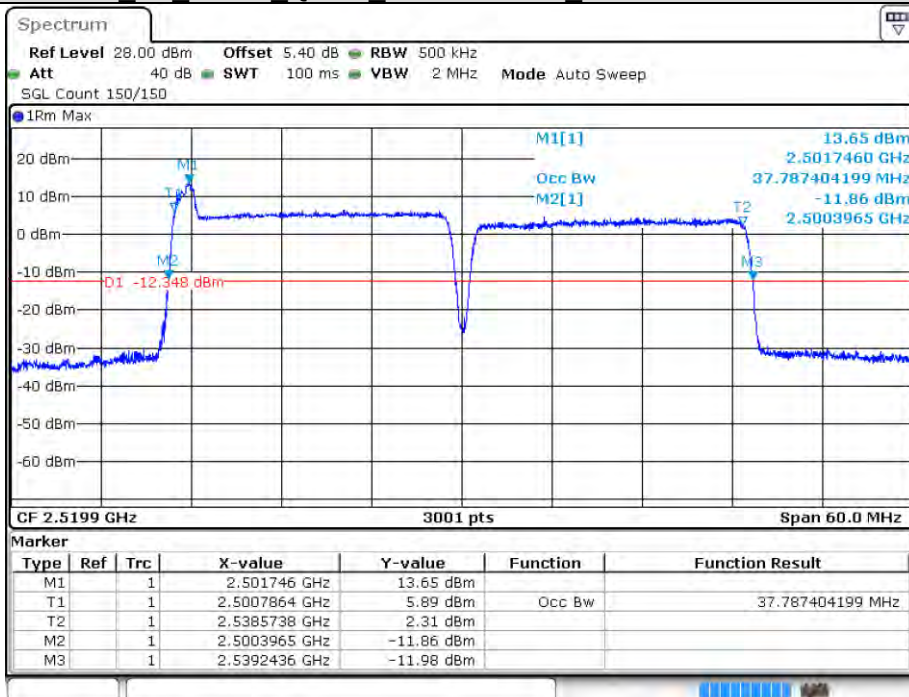


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Date: 7.MAY.2020 02:22:07

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Date: 6.MAY.2020 05:20:22

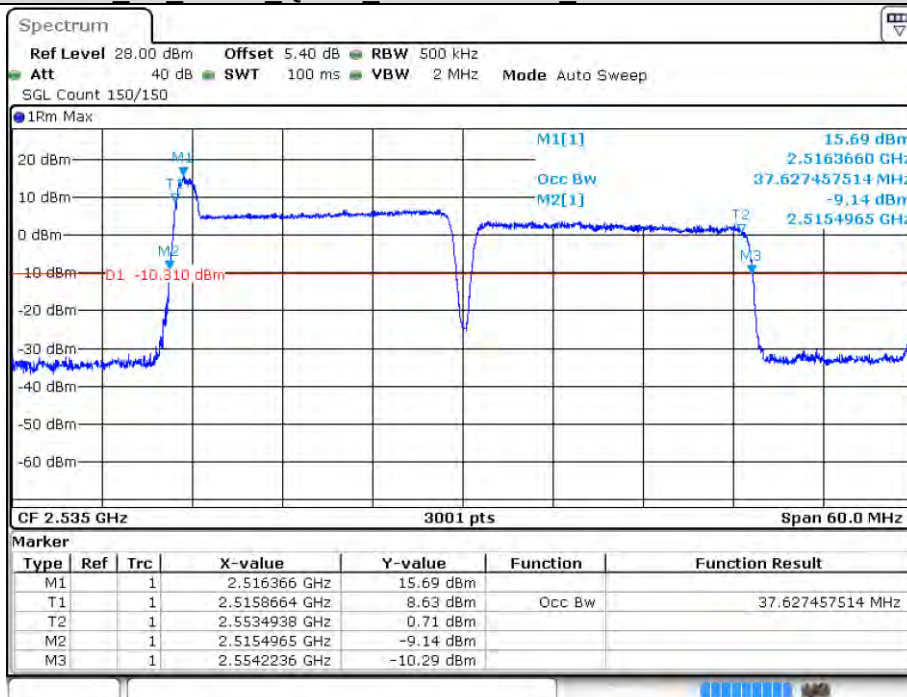


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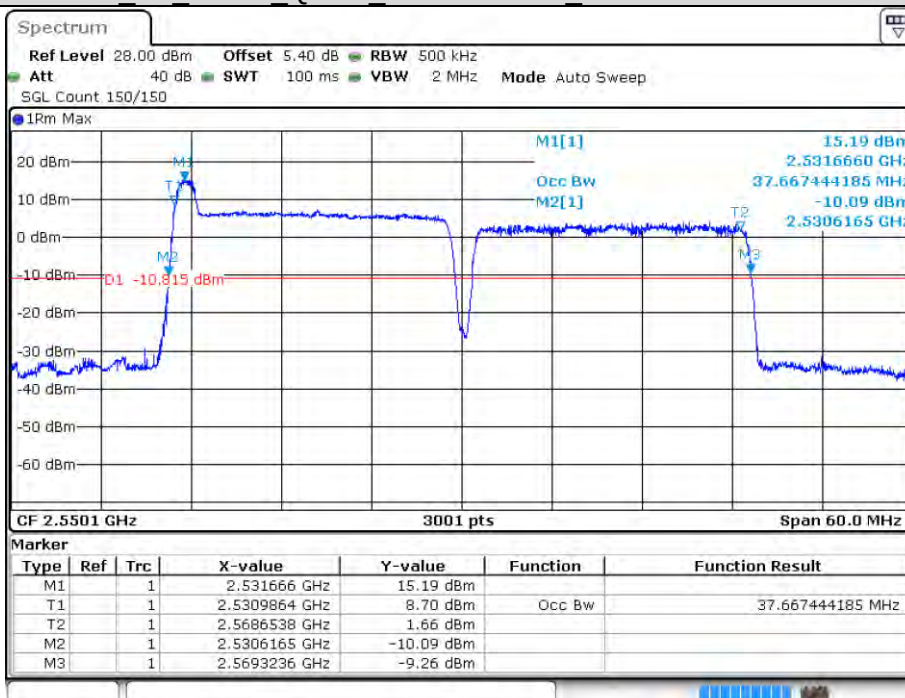
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CA 7C 20+20 QPSK 21001+21199 100RB#0+100RB#0



Date: 6.MAY.2020 05:21:29

CA 7C 20+20 QPSK 21152+21350 100RB#0+100RB#0



Date: 6.MAY.2020 05:22:36



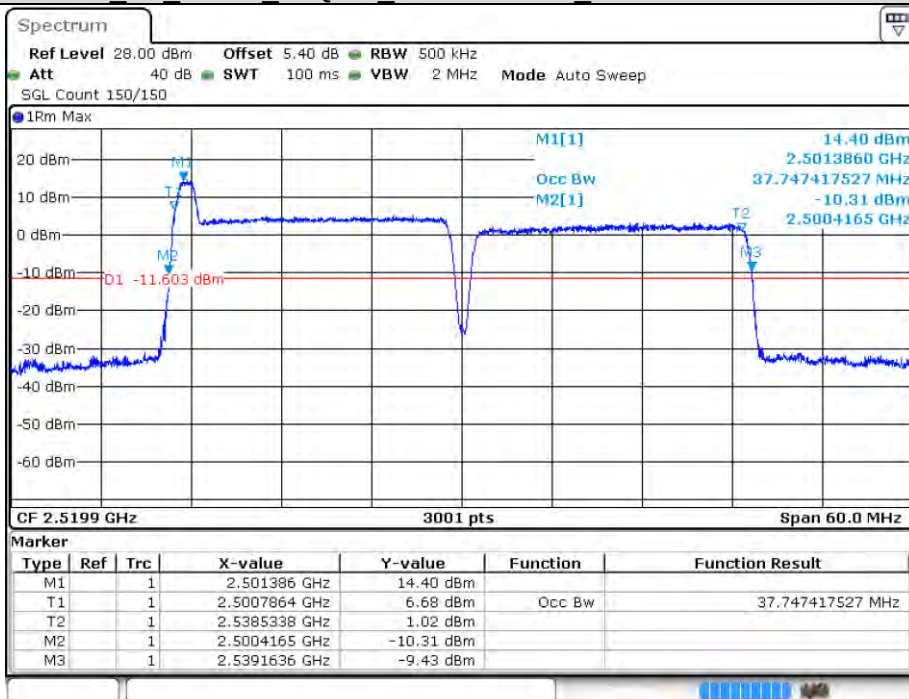
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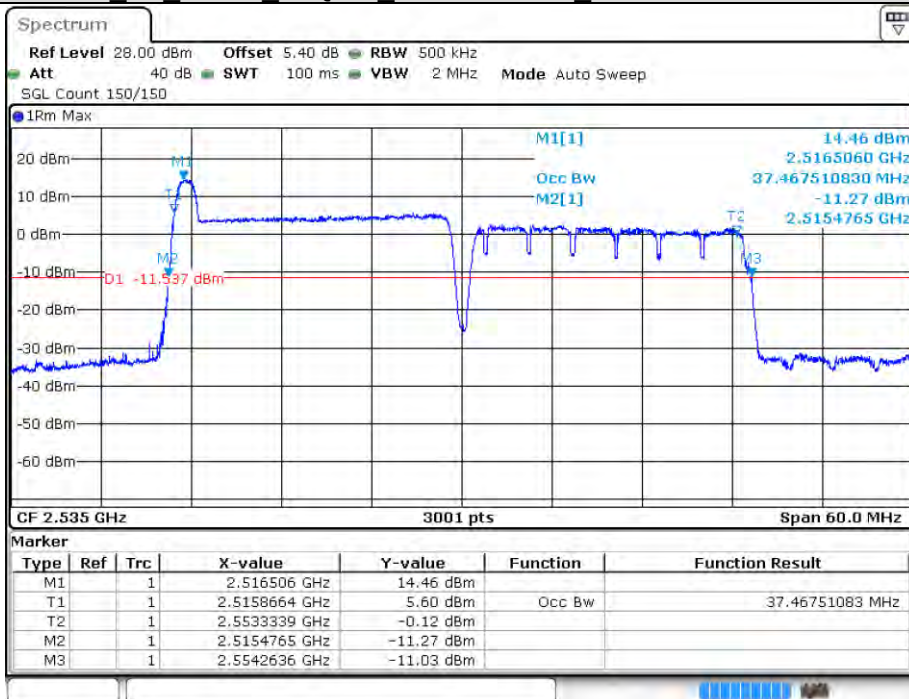
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CA 7C 20+20 16QAM 20850+21048 100RB#0+100RB#0



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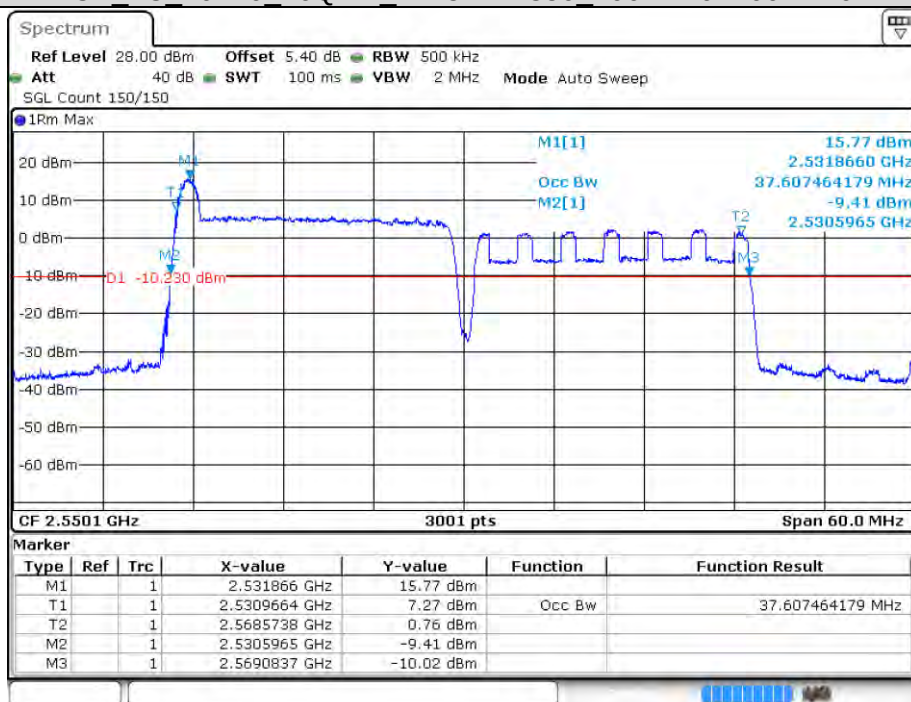
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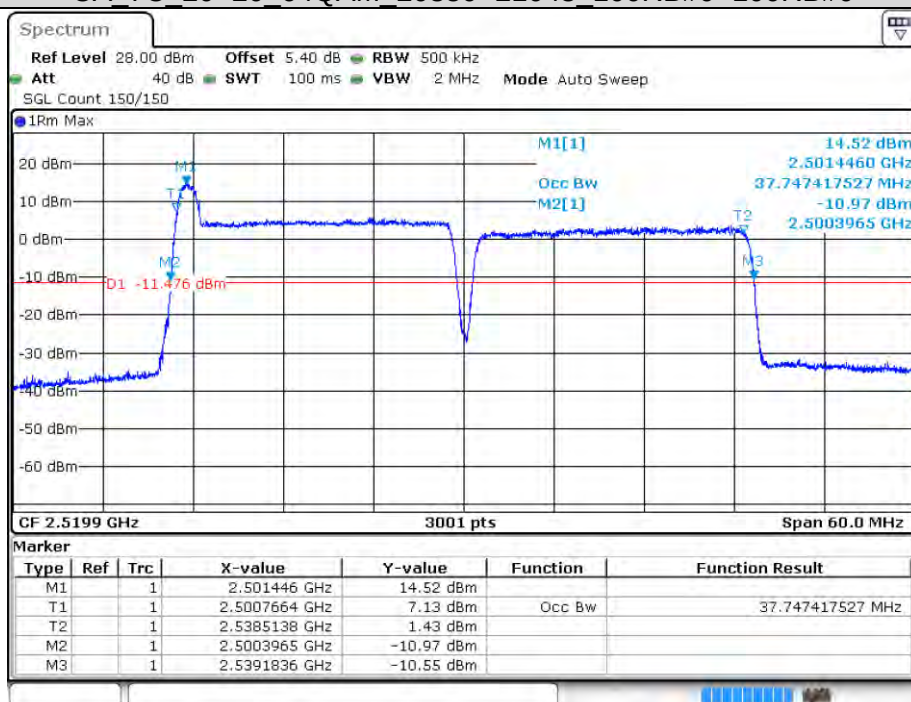


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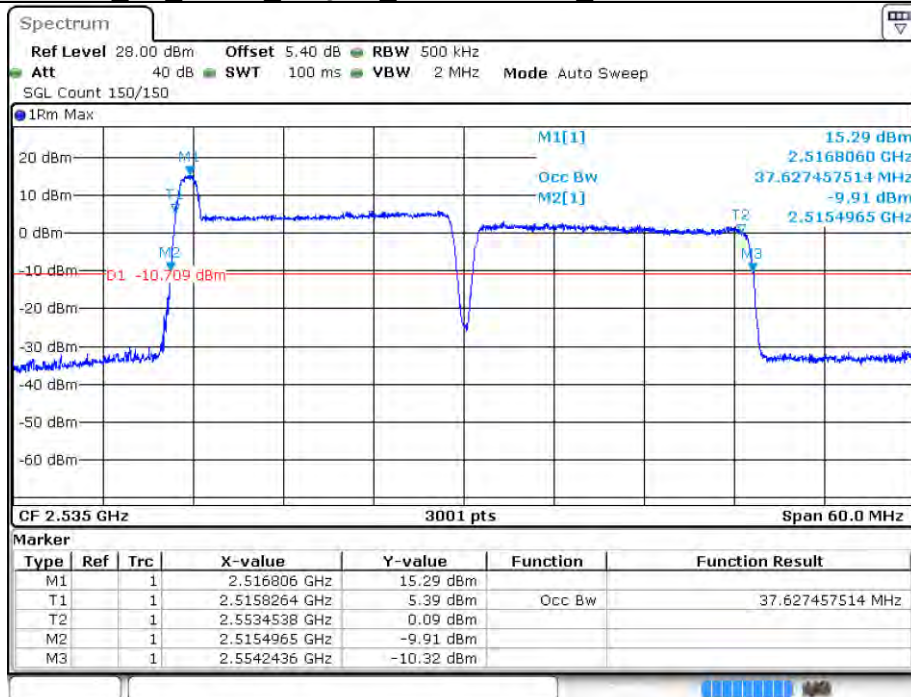


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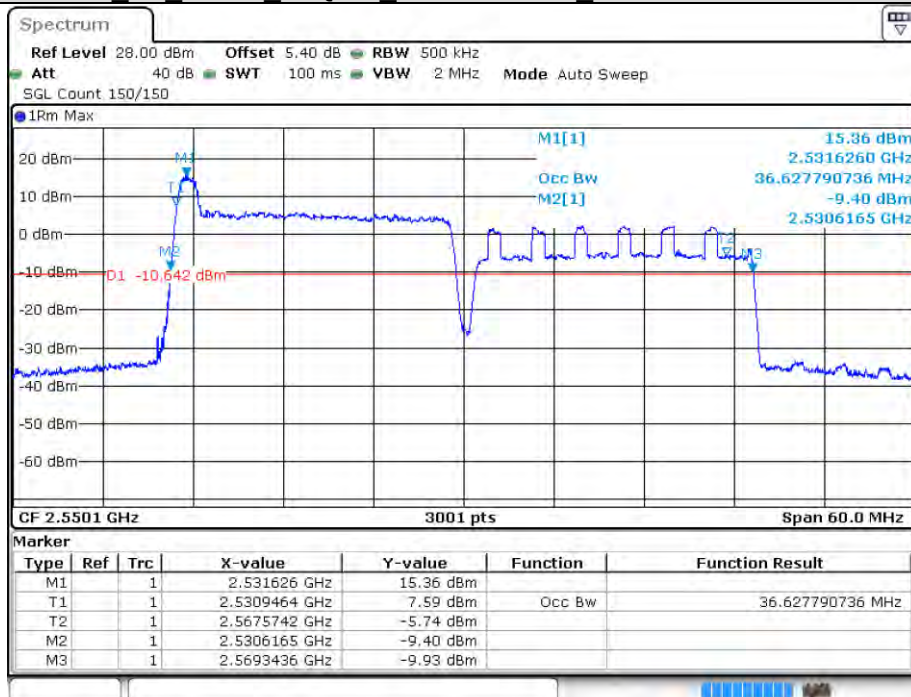
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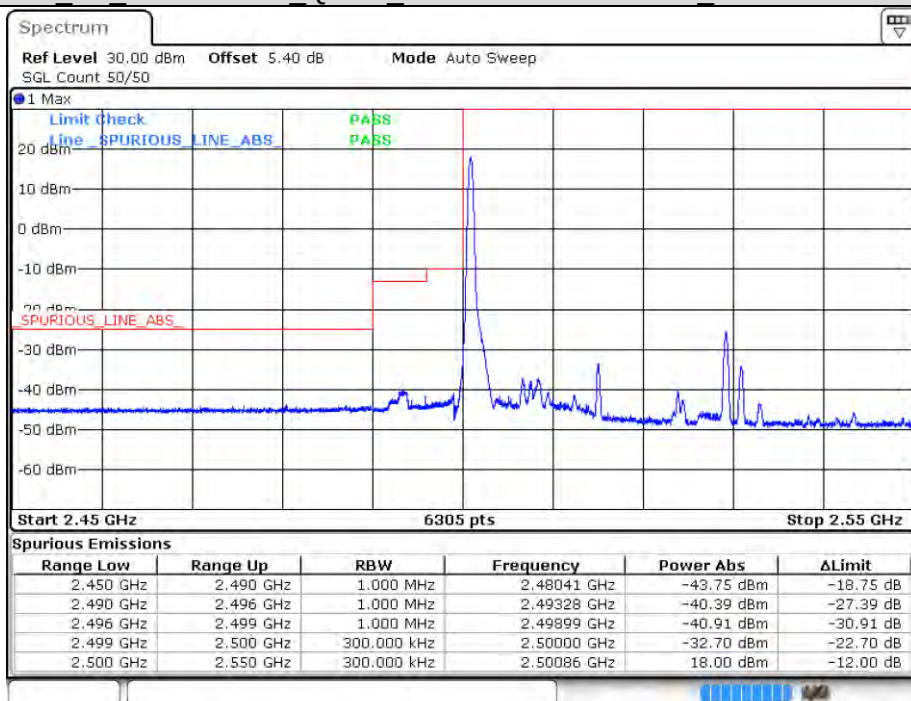


5 Band Edges Compliance

5.1 For LTE

5.1.1 Test Band = LTE Band CA_7C

CA_7C_75RB+75RB_QPSK_208225RB+100RB975_1RB#0+0RB#0



Date: 5 MAY 2020 11:24:41



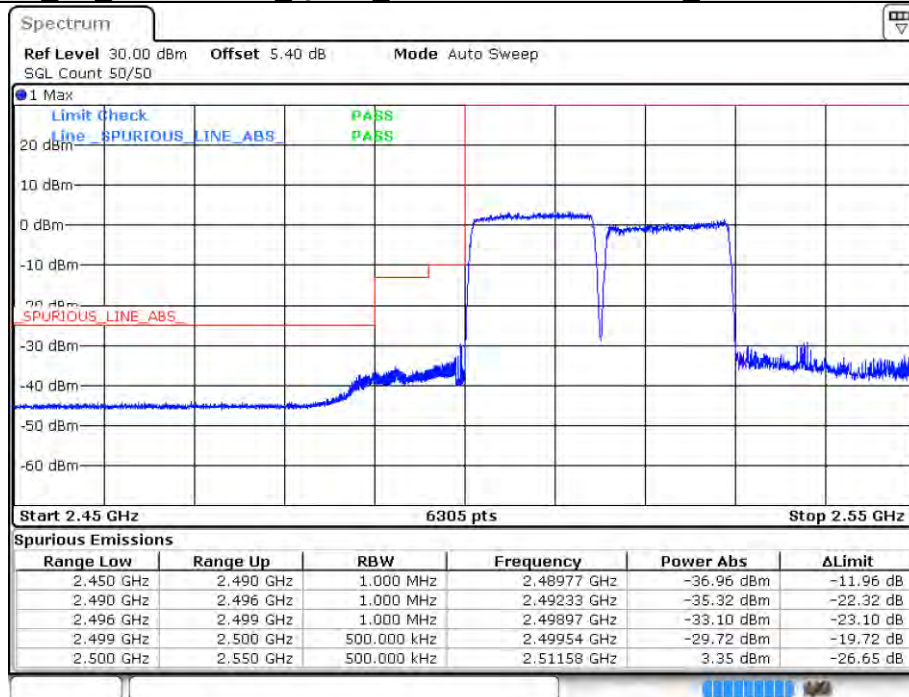
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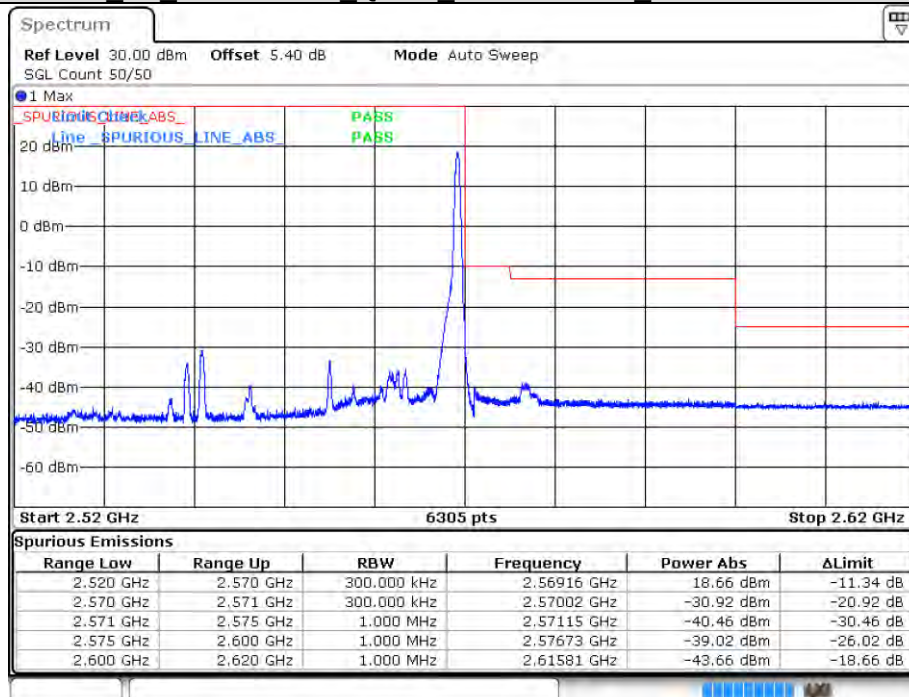
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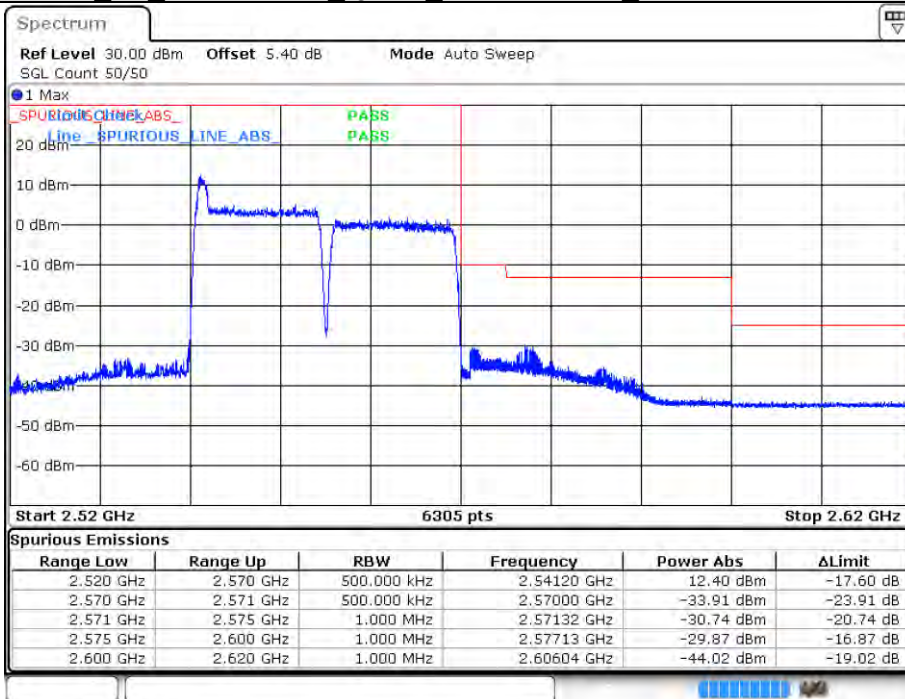
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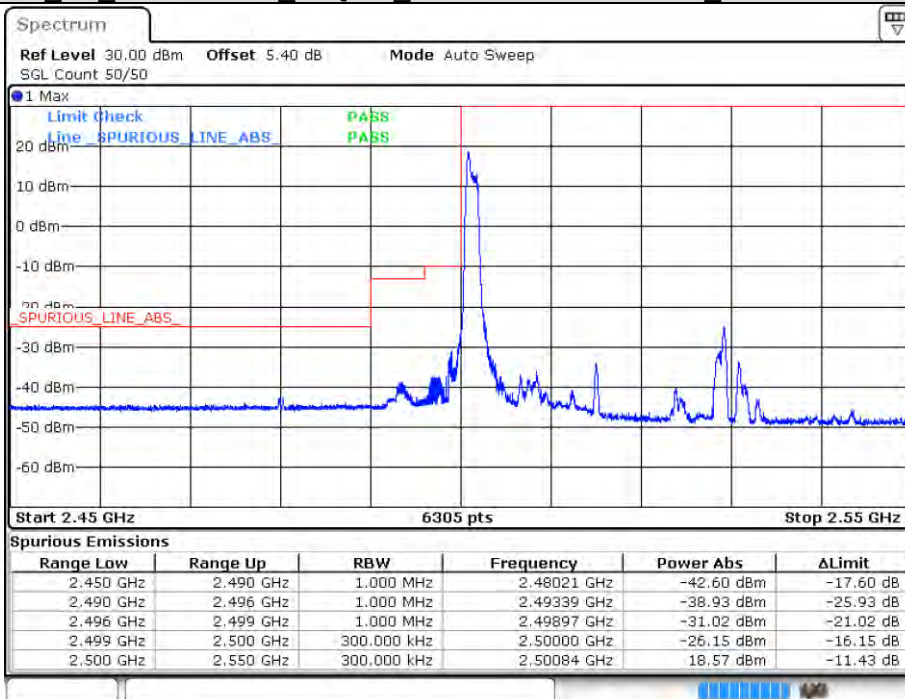


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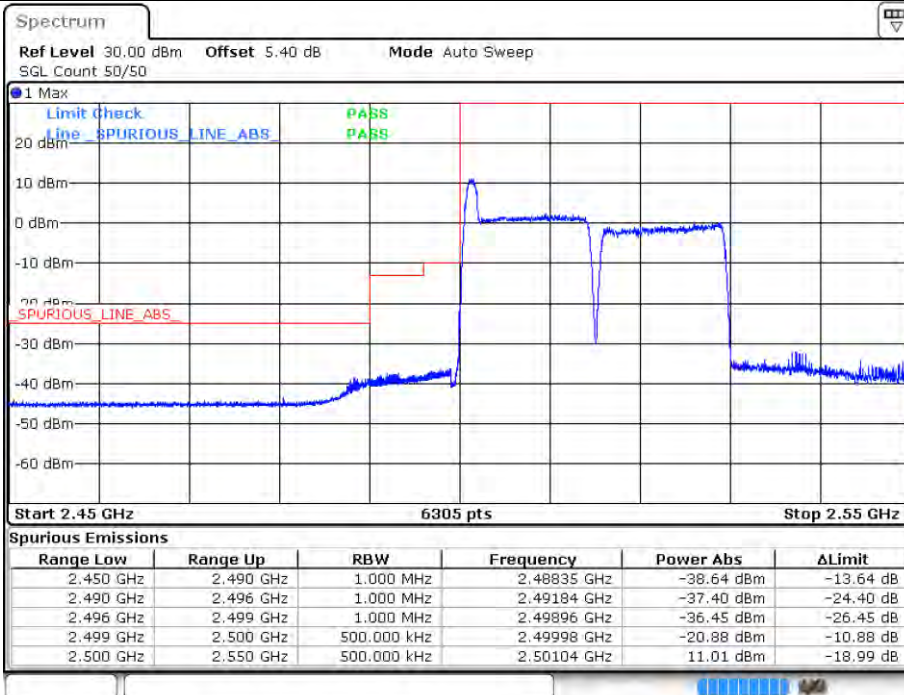
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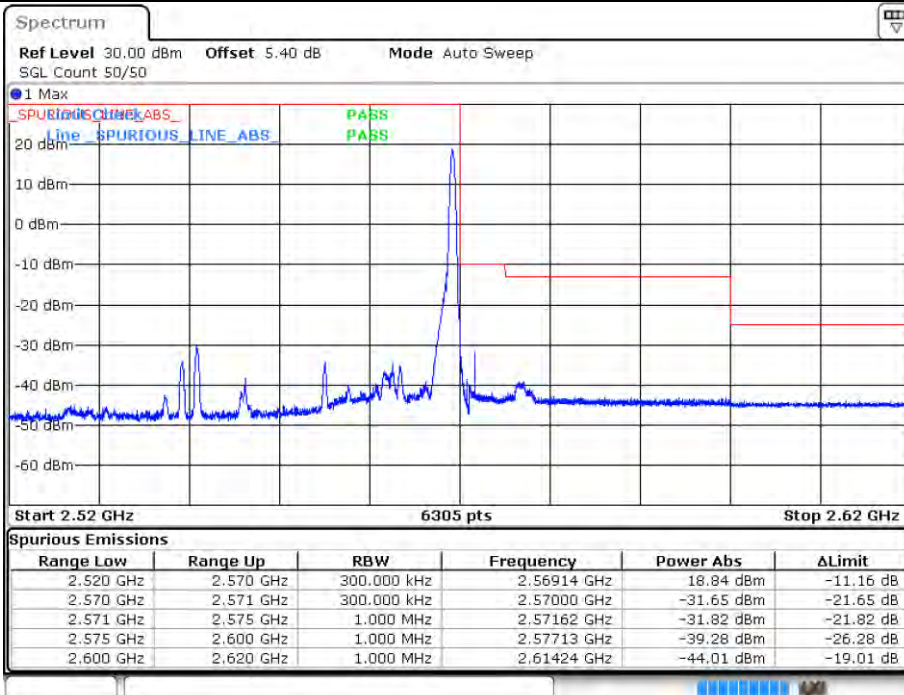


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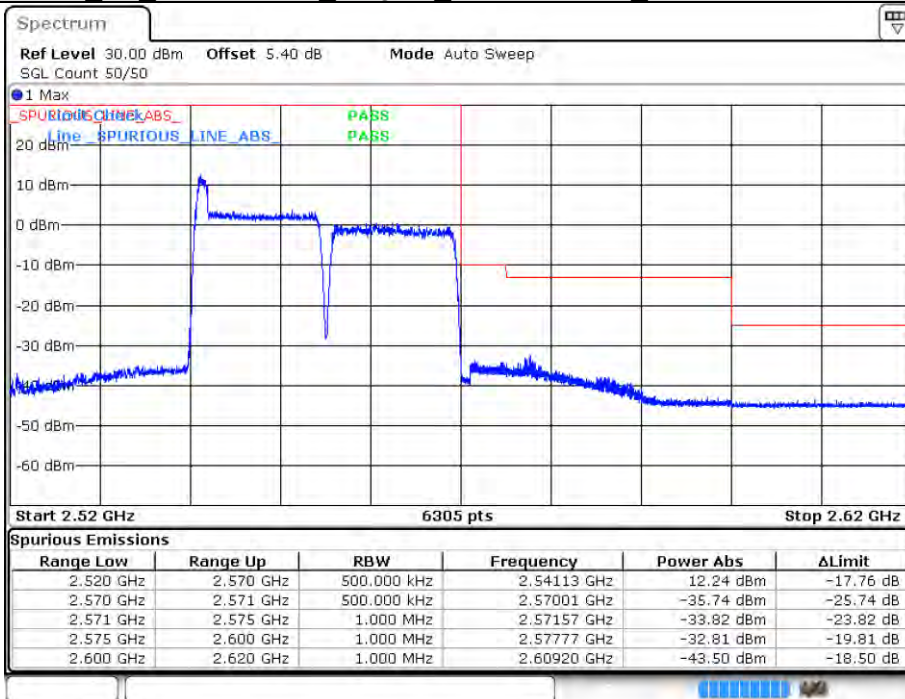
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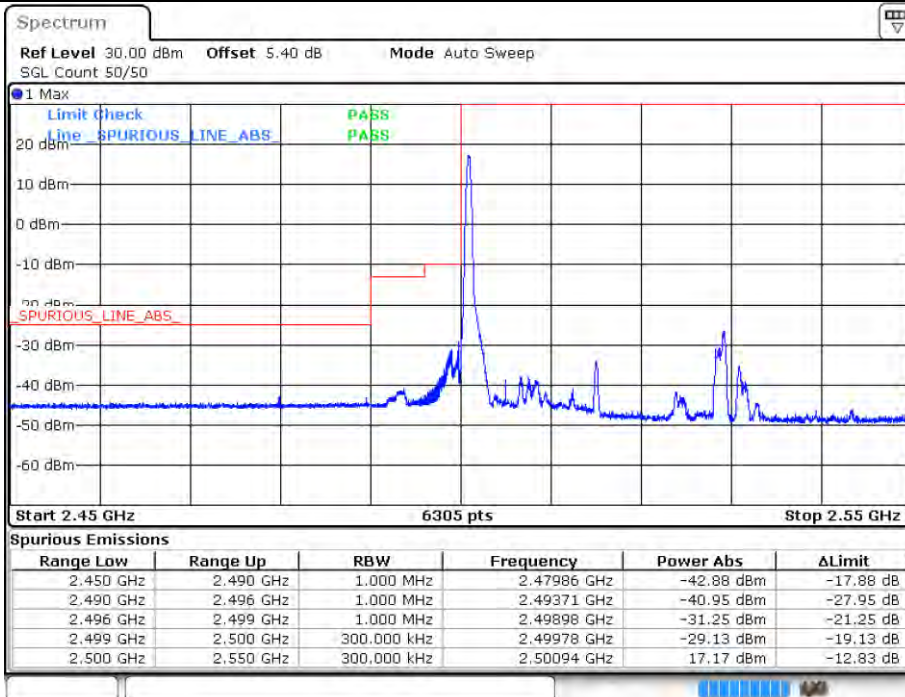
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CA 7C 75RB+75RB 16QAM 21225+21375 75RB#0+75RB#0



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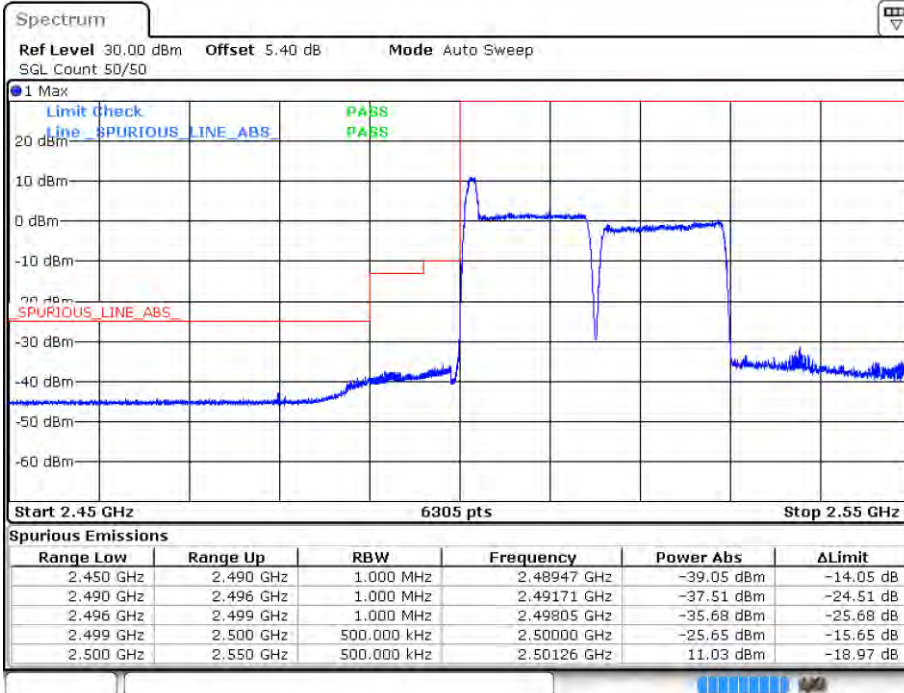
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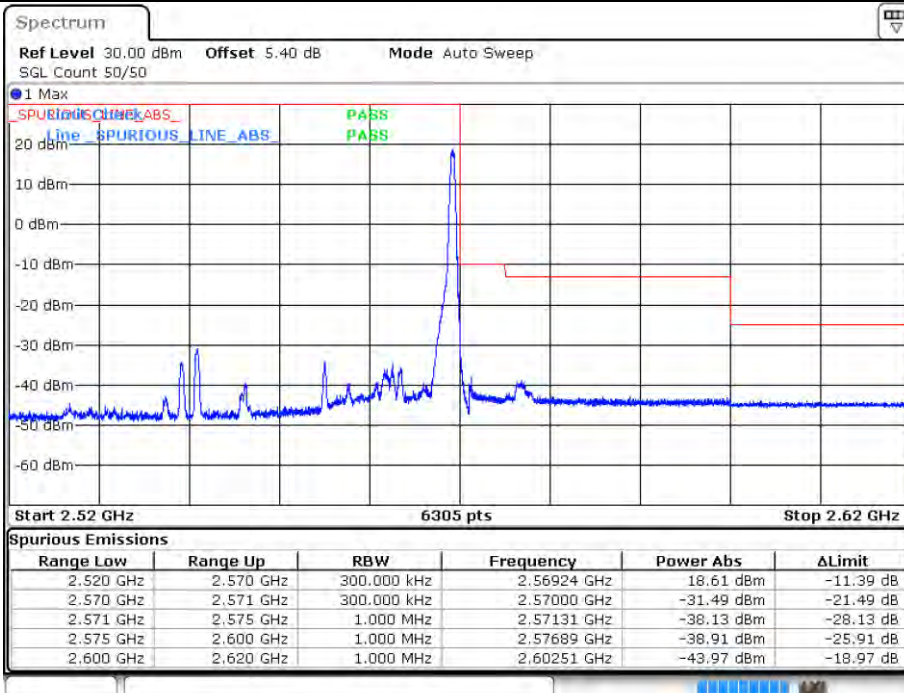


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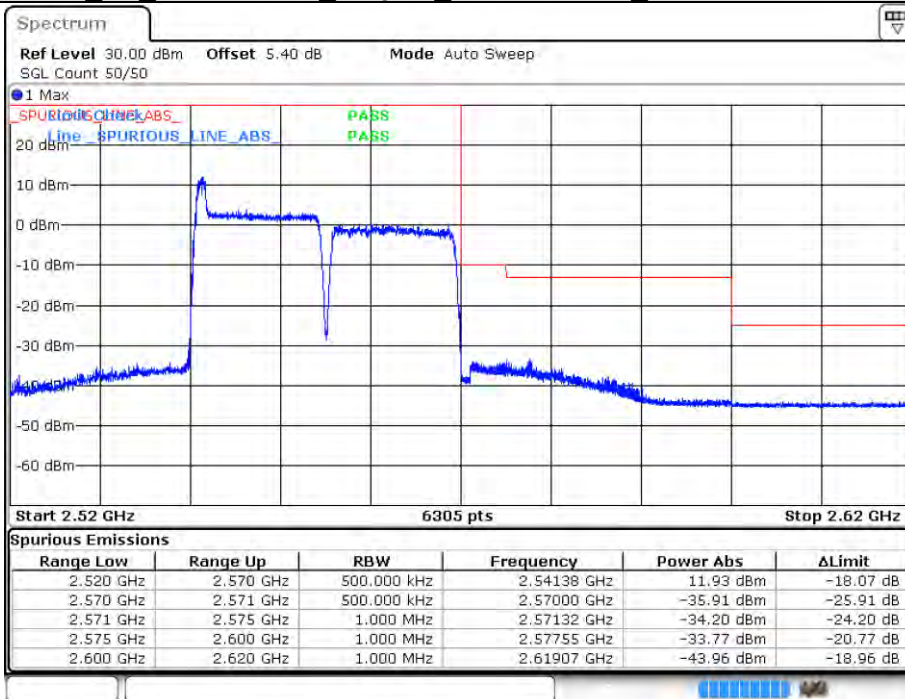
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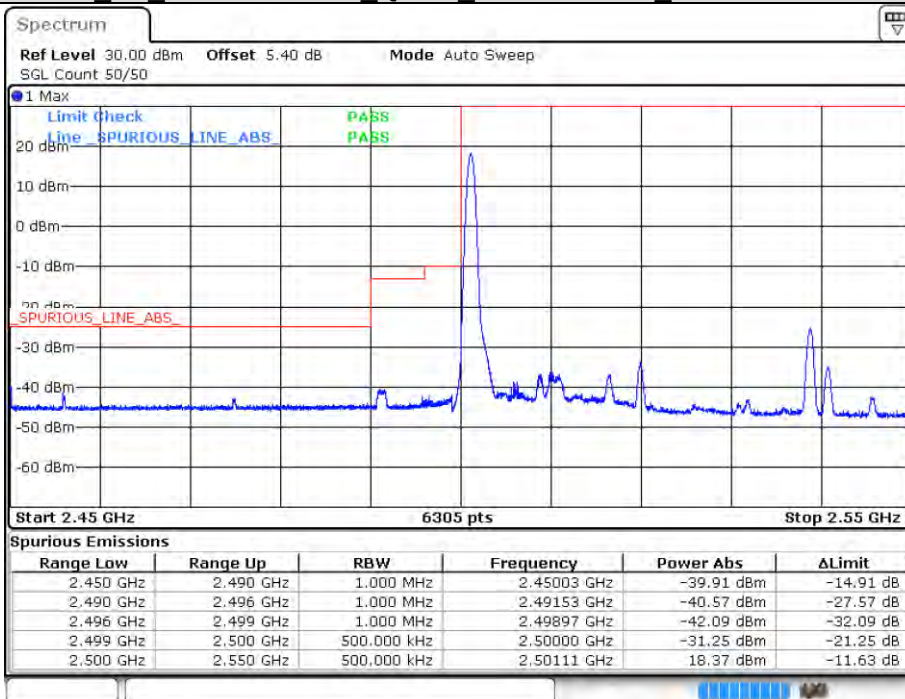


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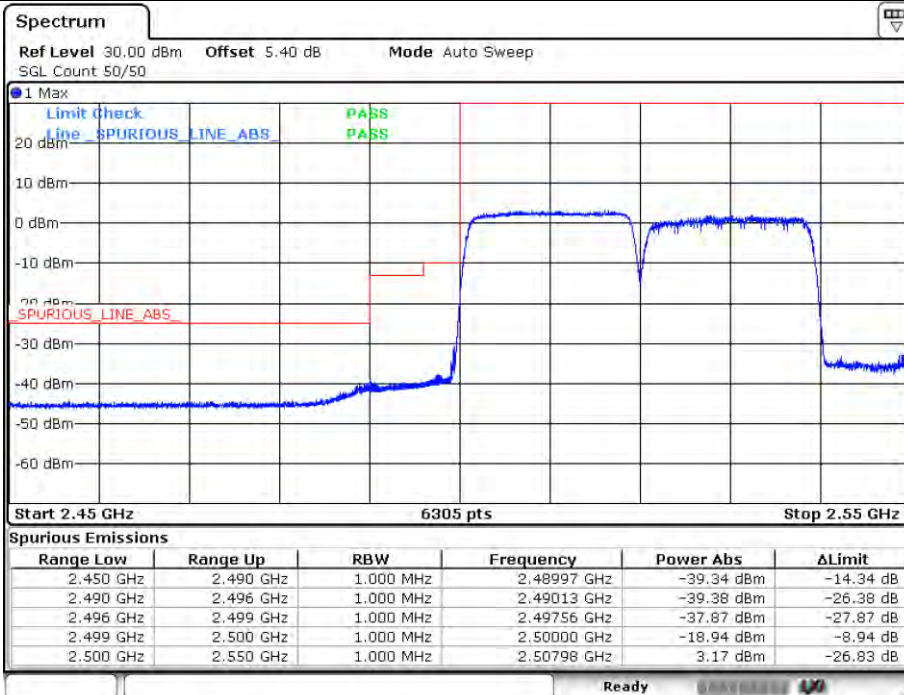
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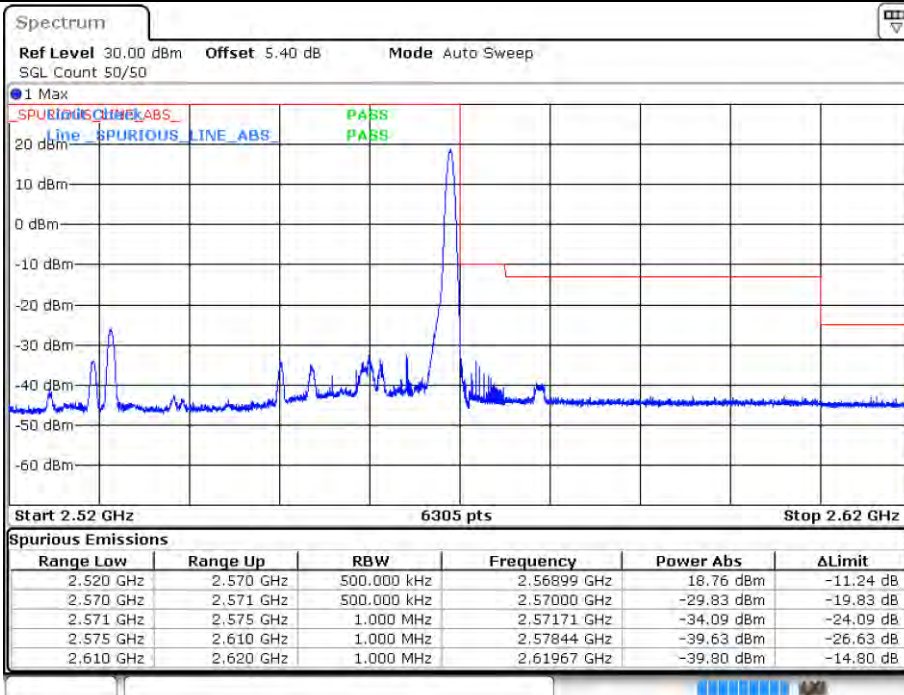


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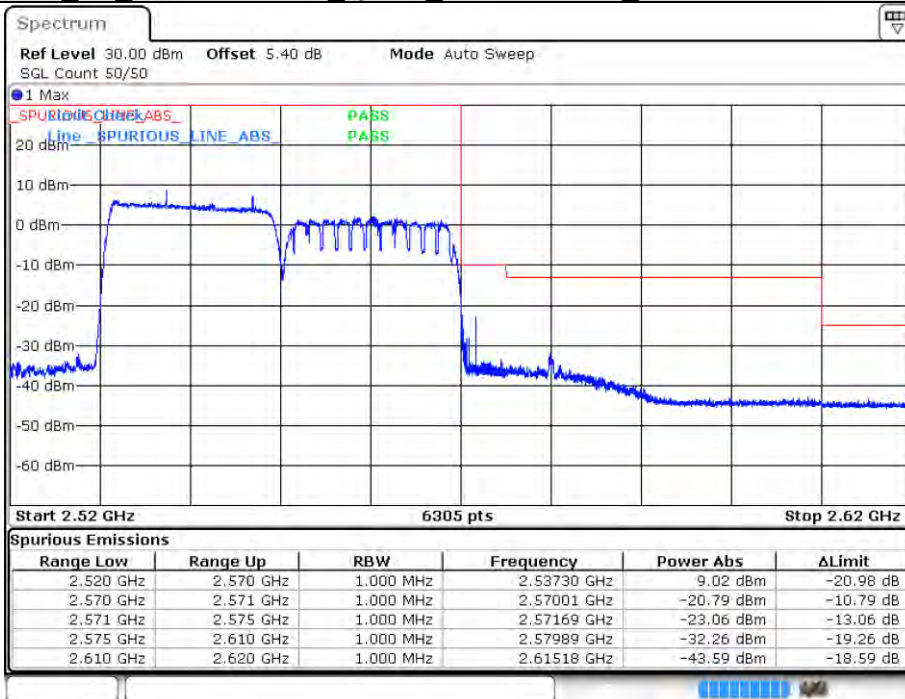
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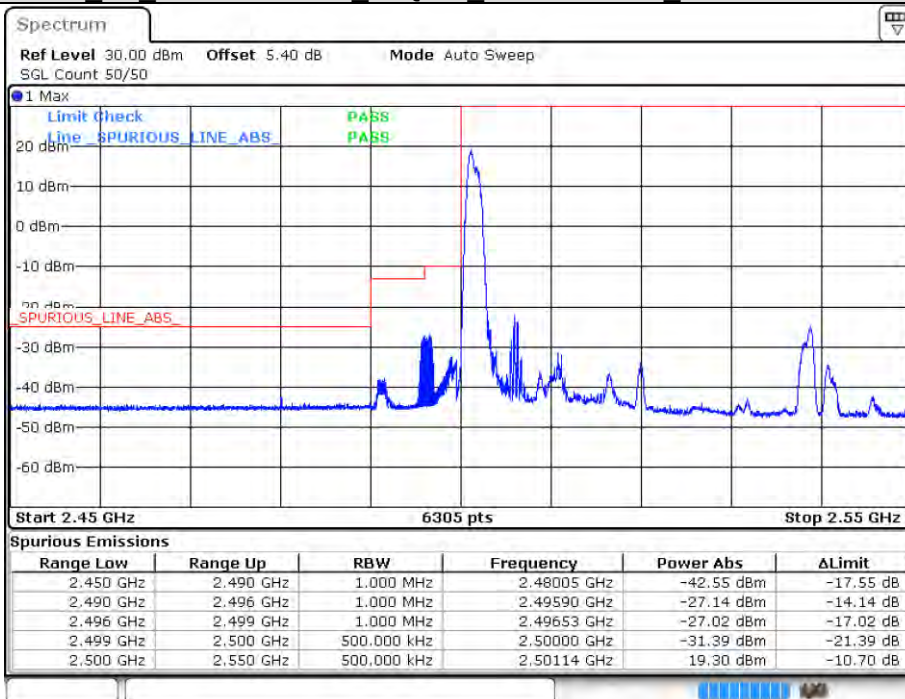


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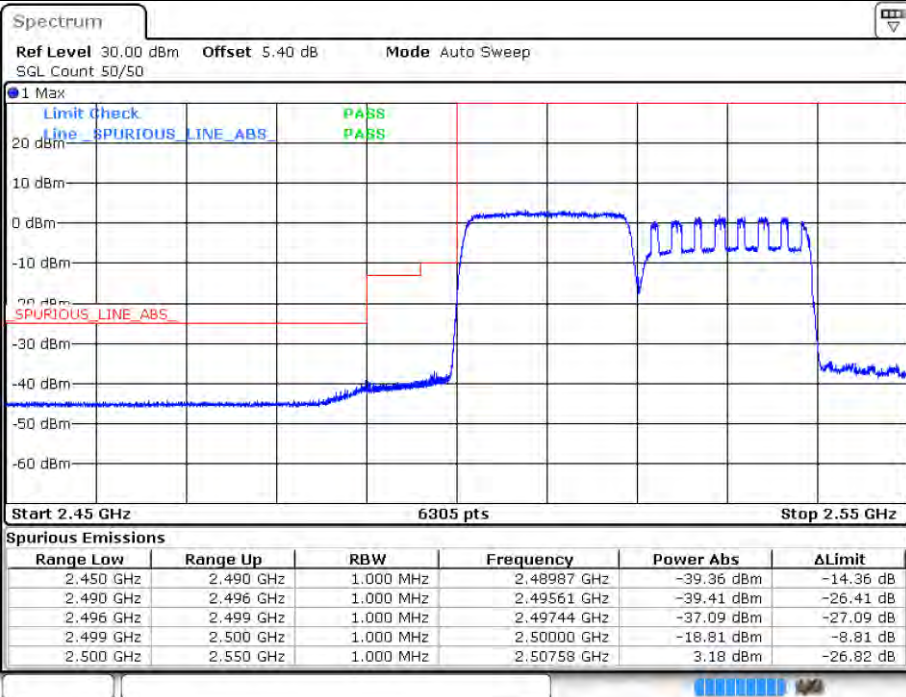
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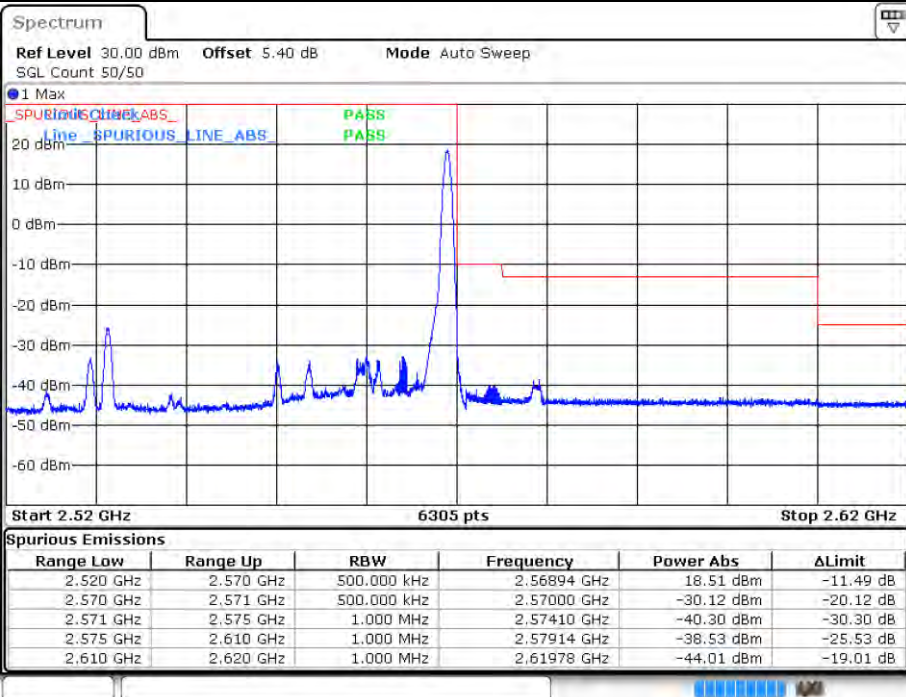


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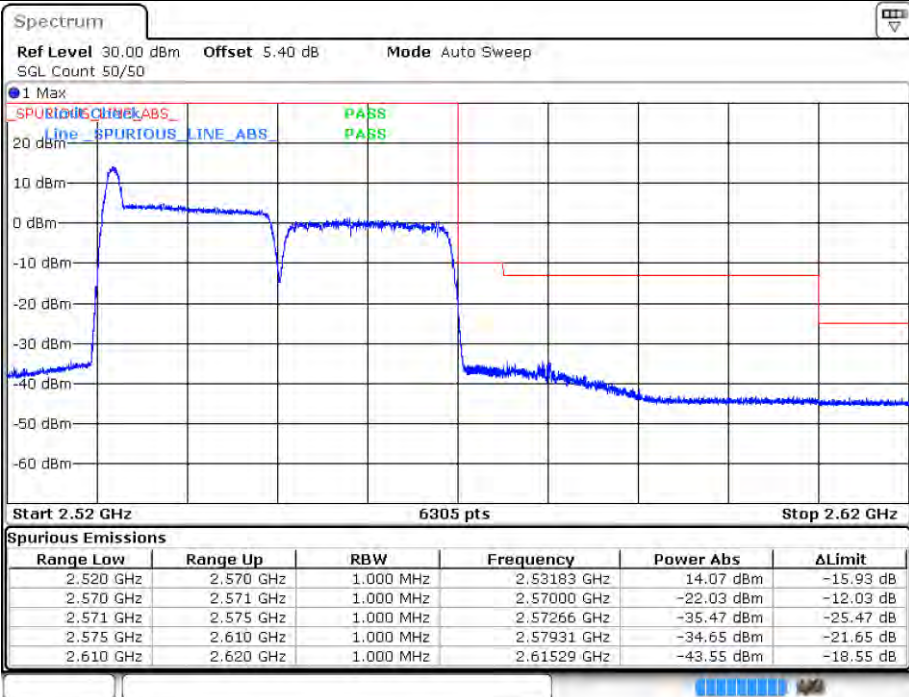
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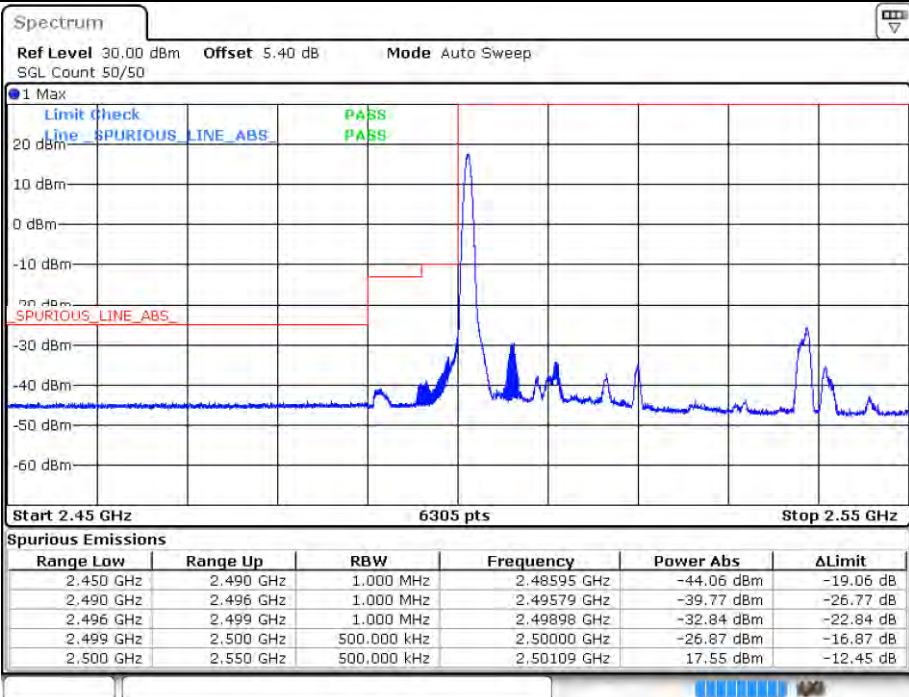


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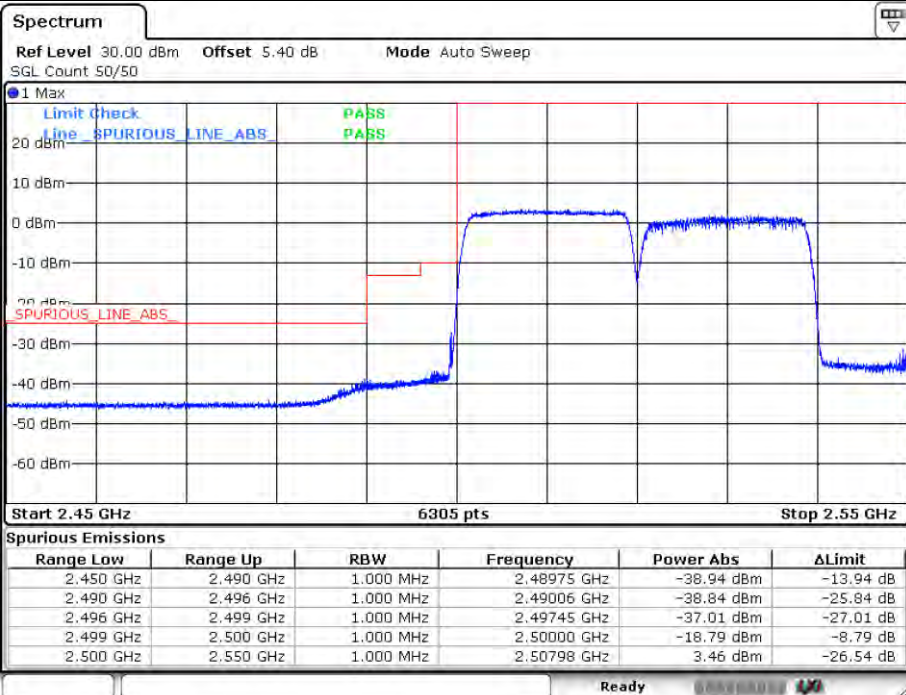
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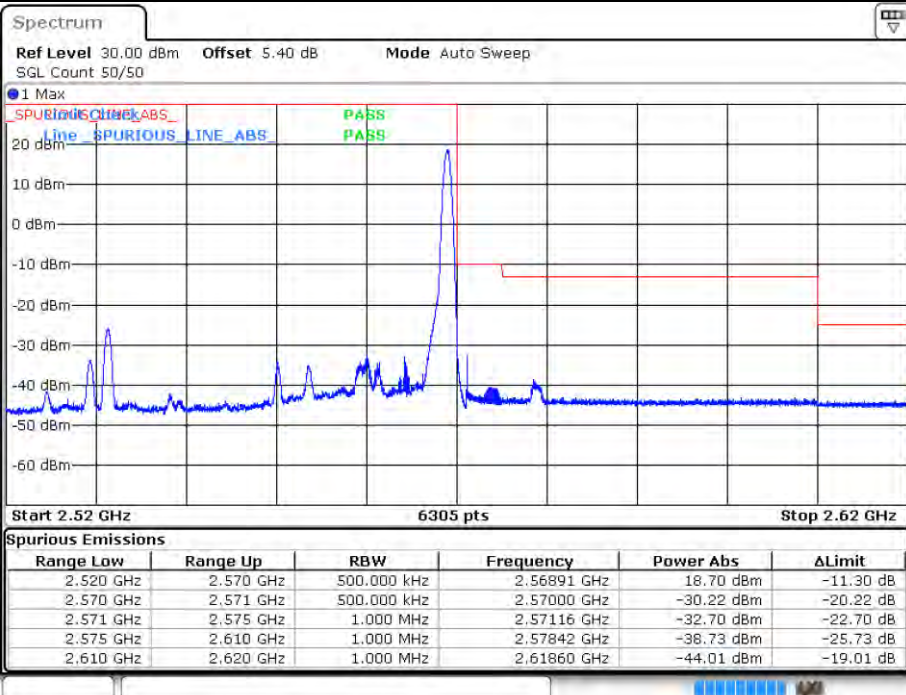


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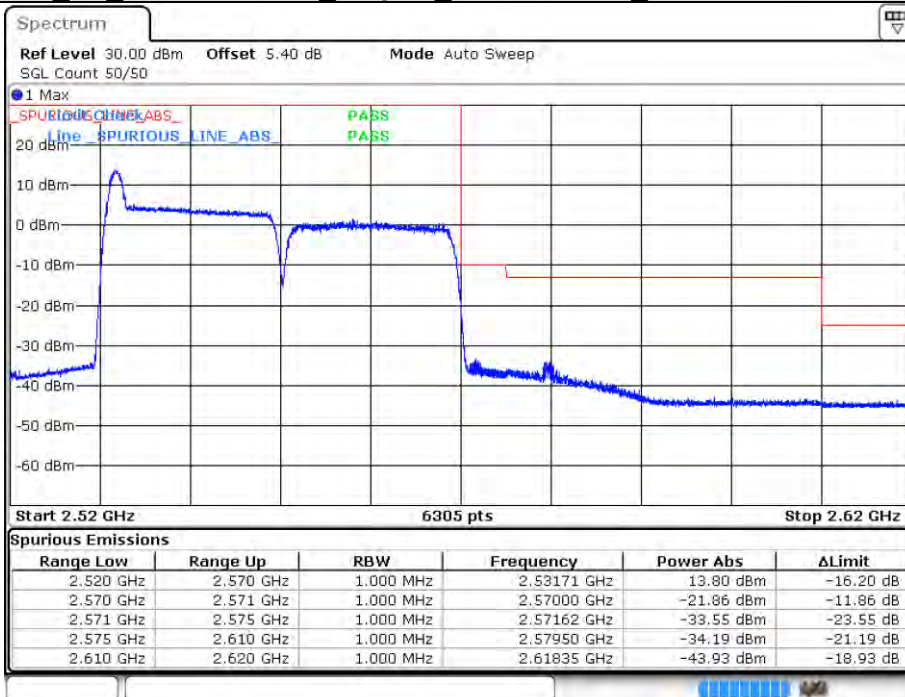
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Date: 5.MAY.2020 11:39:58



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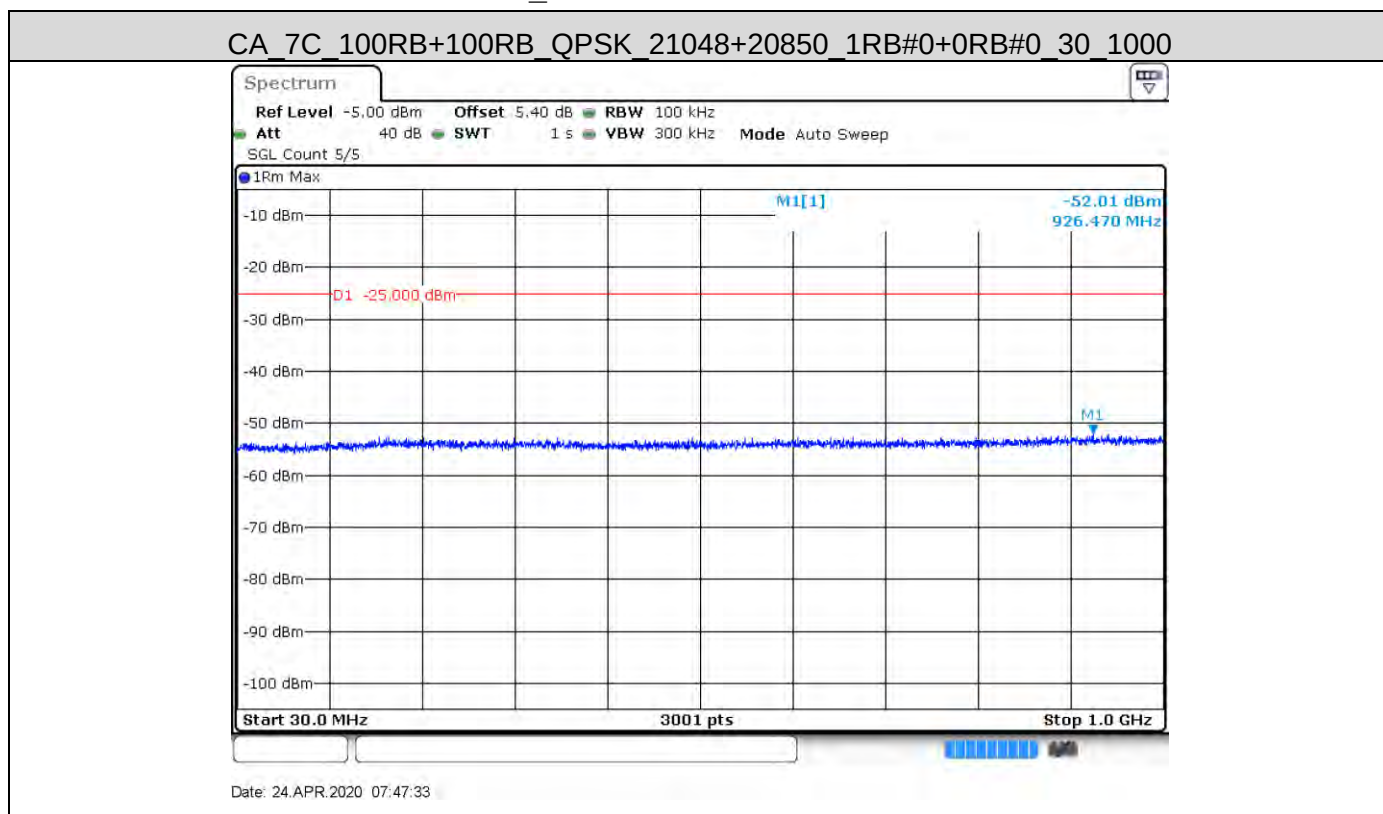
6 Spurious Emission at Antenna Terminal

NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (Span / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Part I - Test Plots

6.1 For LTE

6.1.1 Test Band = LTE Band CA_7C



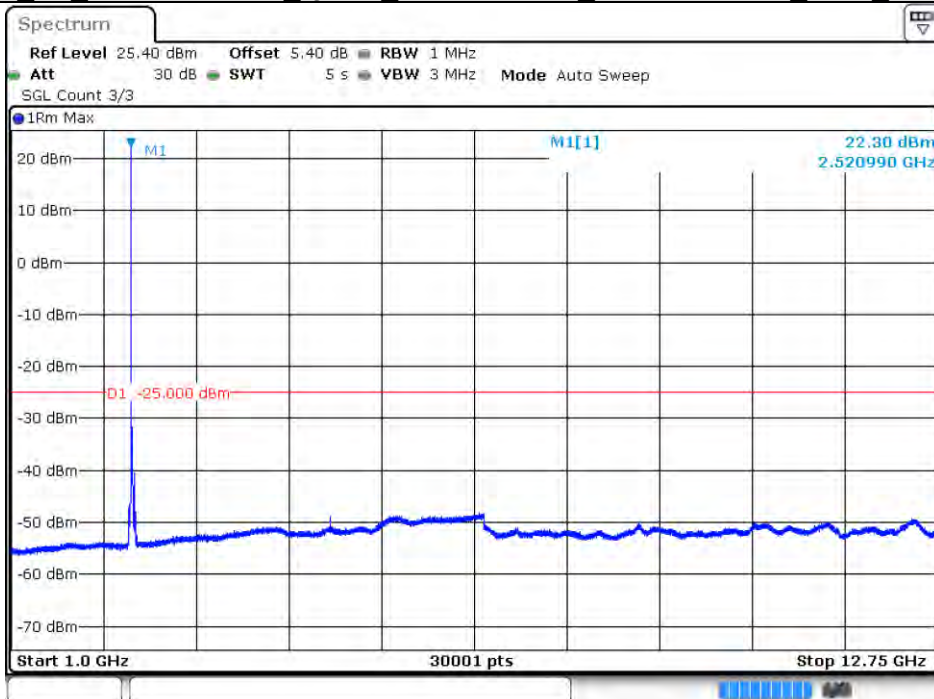
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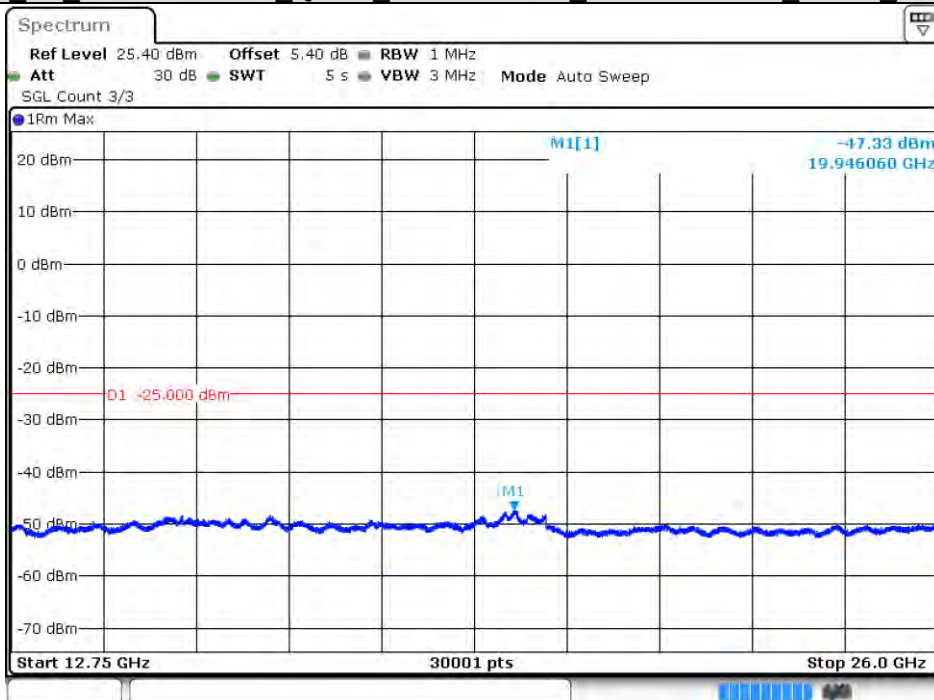
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CA 7C 100RB+100RB QPSK 21048+20850 1RB#0+0RB#0 1000 12750



Date: 24.APR.2020 07:50:10

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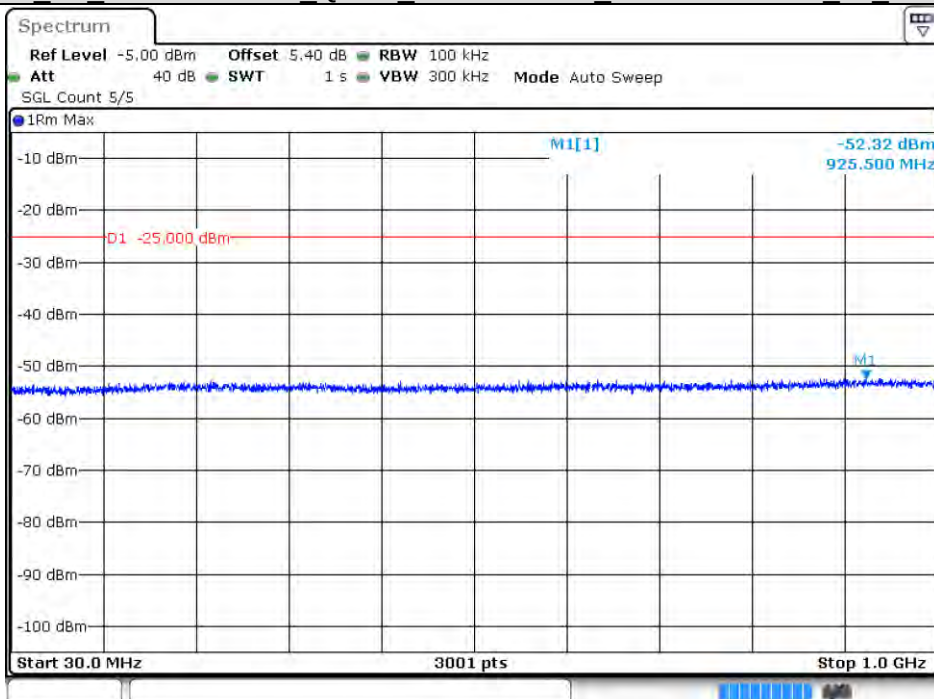


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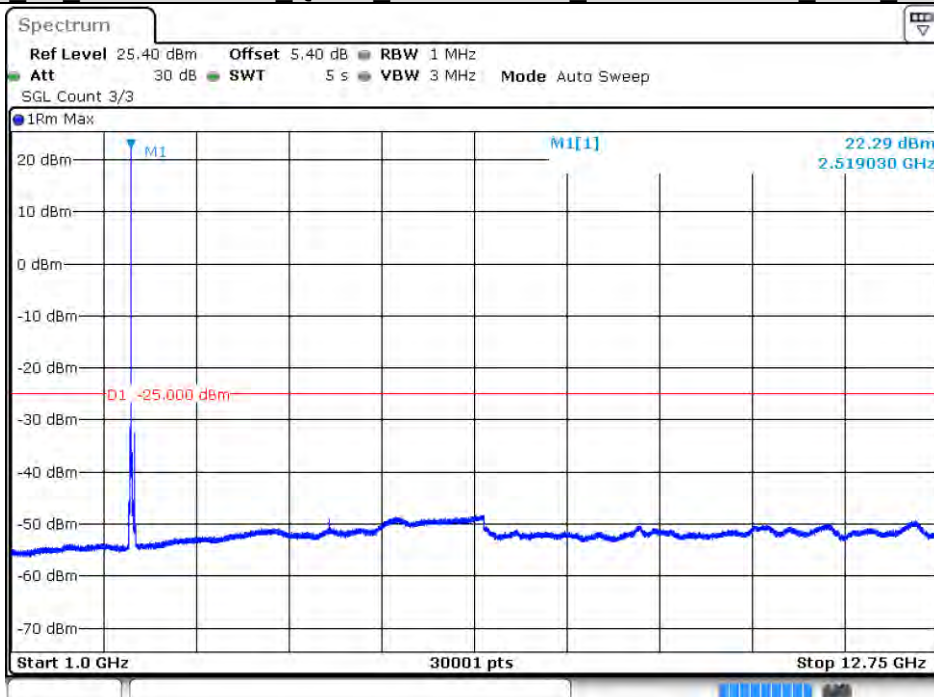
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Date: 24.APR.2020 07:47:39

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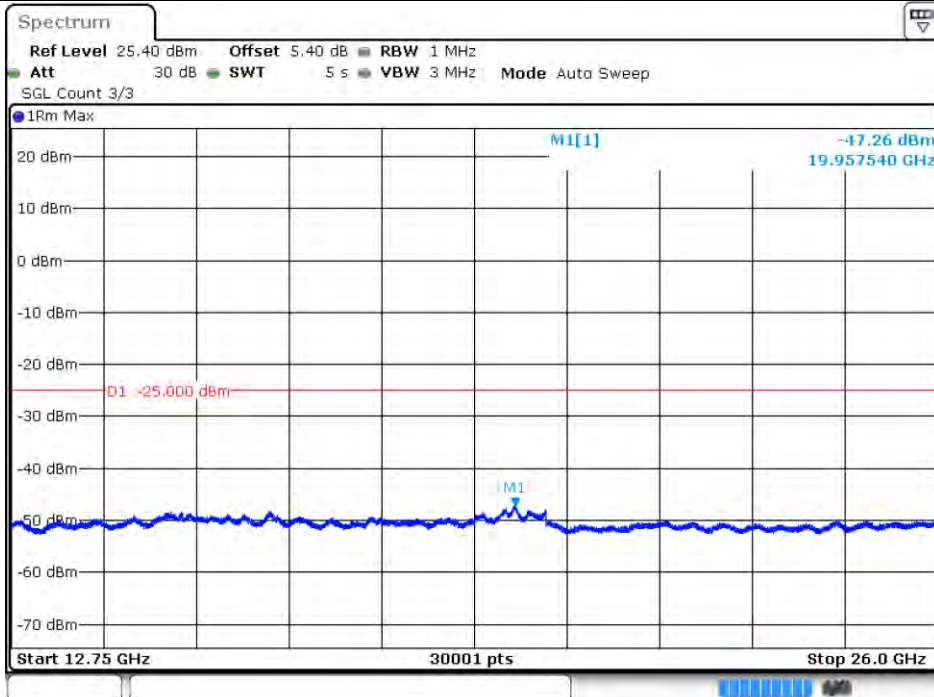
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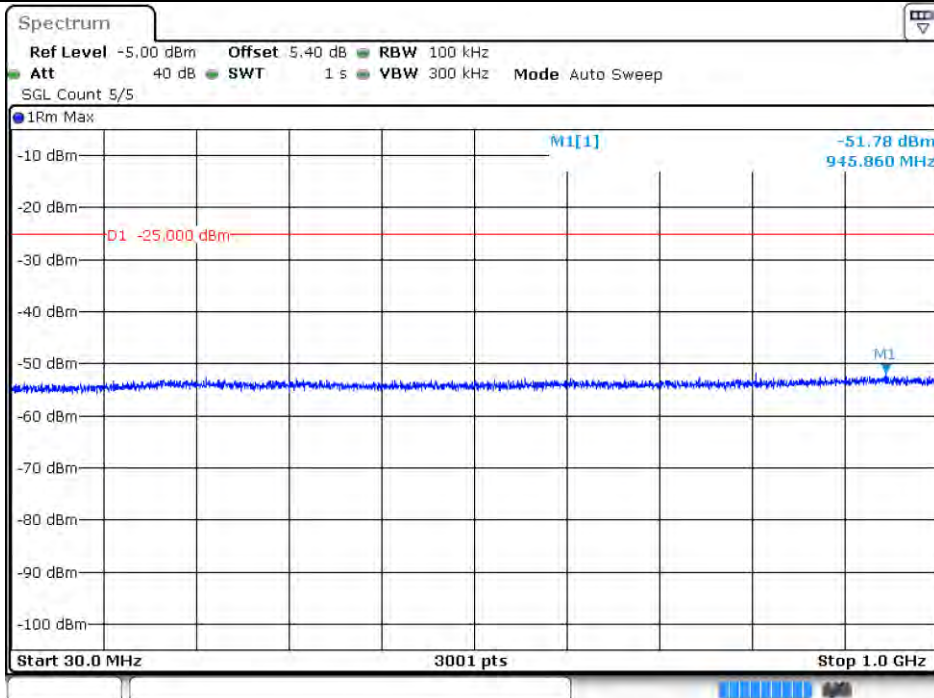
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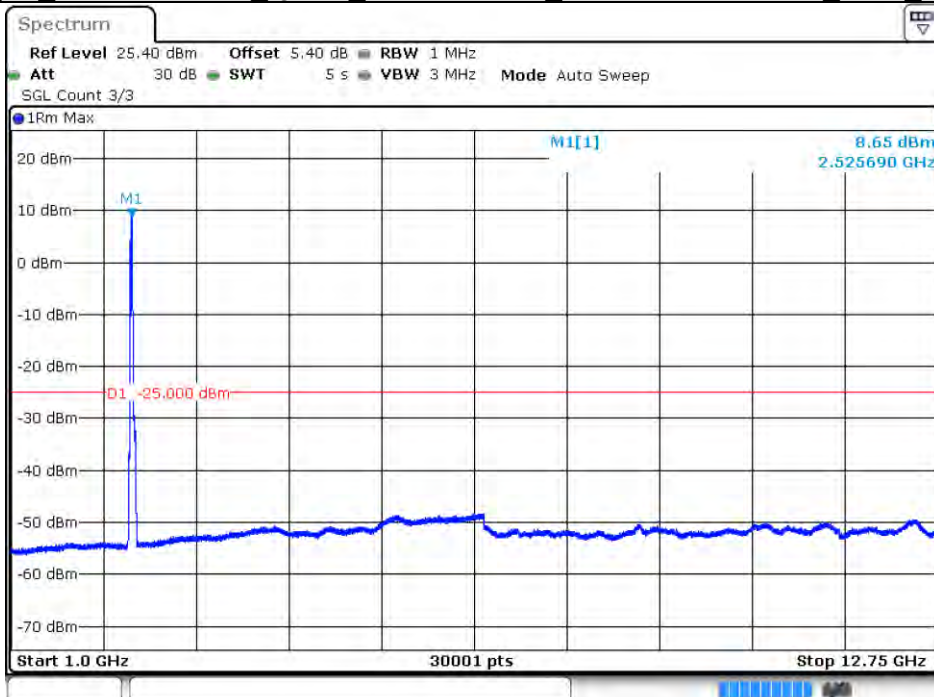
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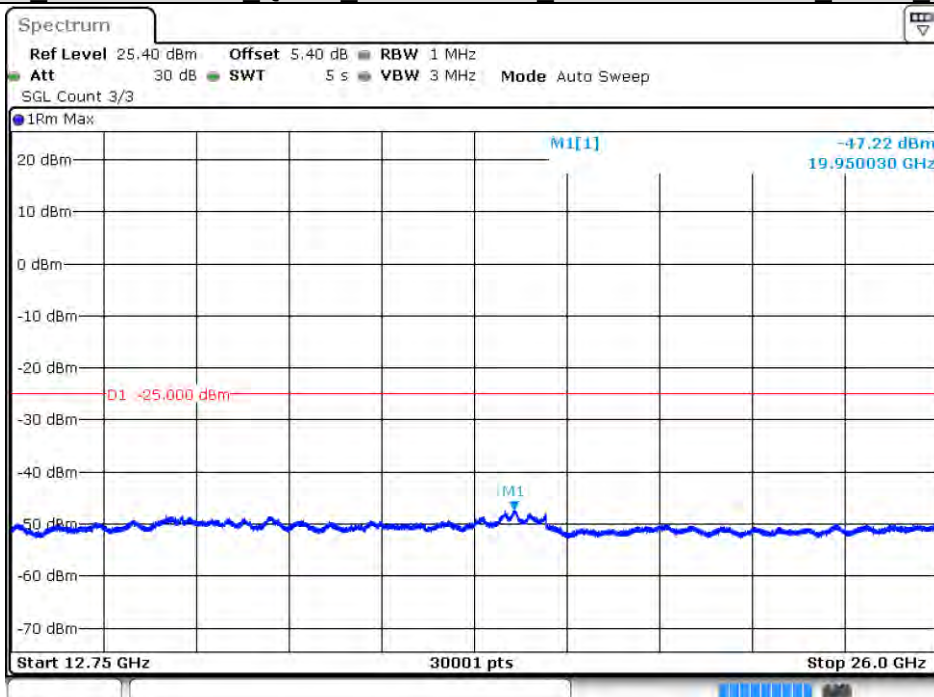
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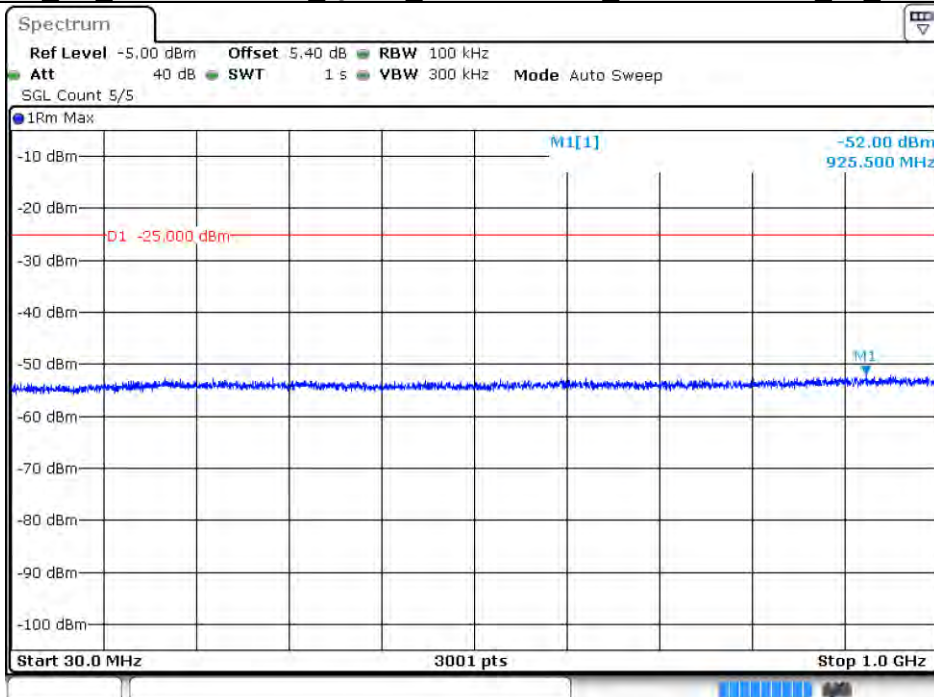


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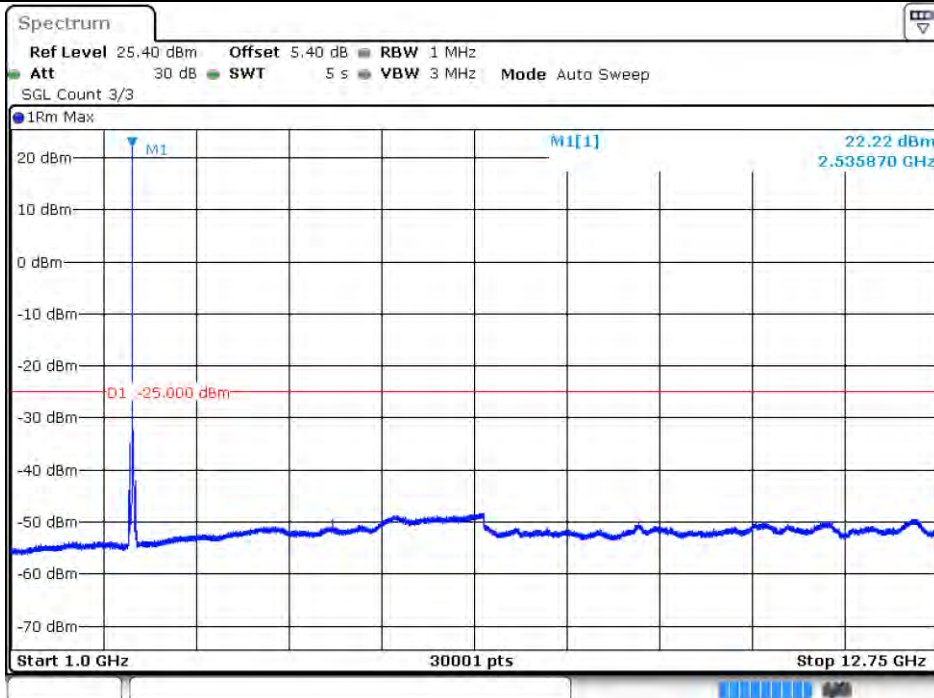
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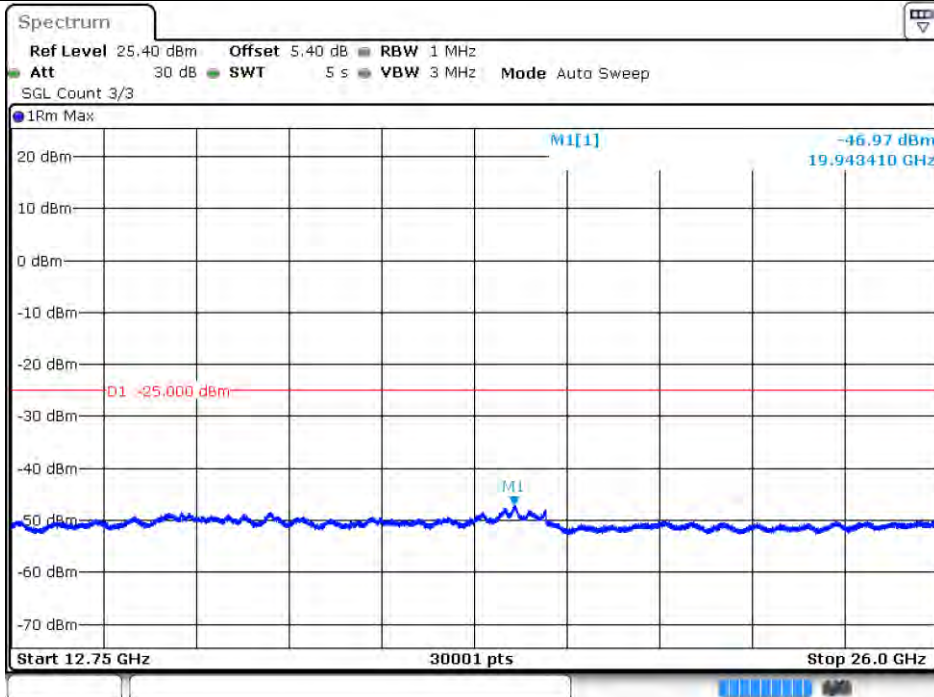
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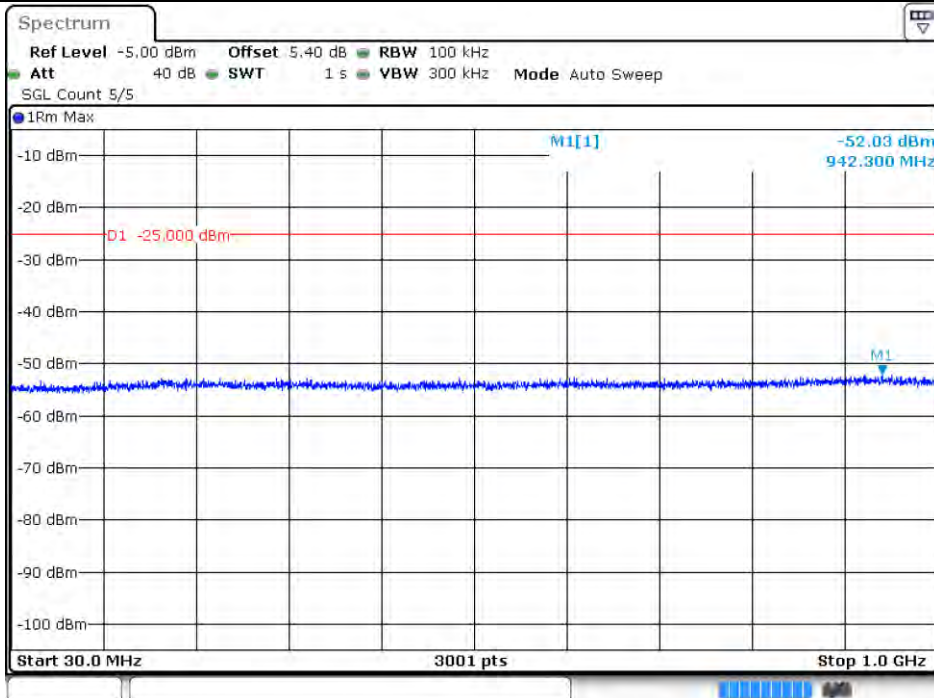


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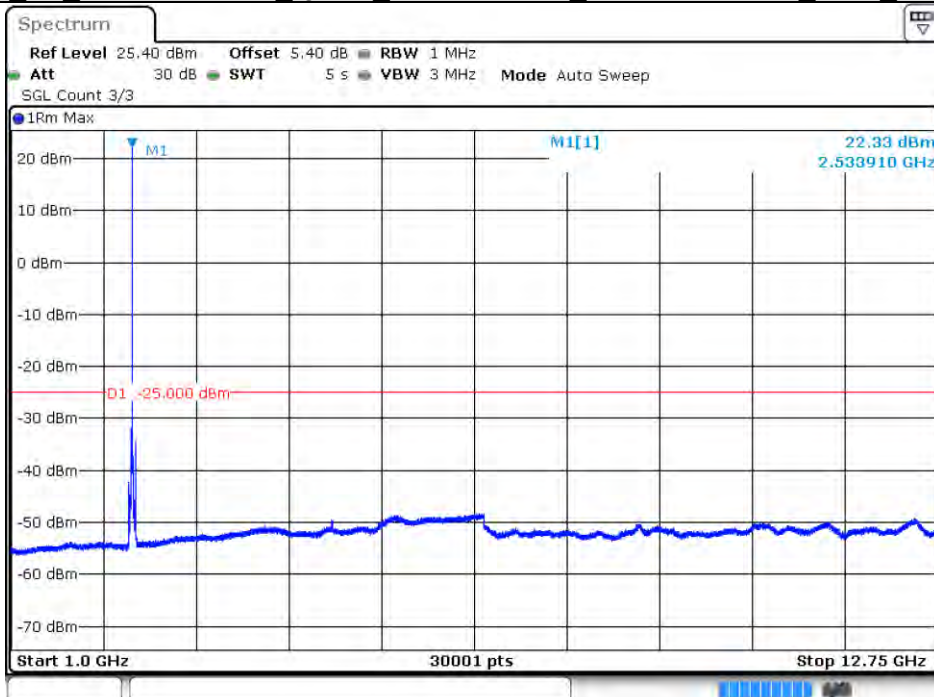
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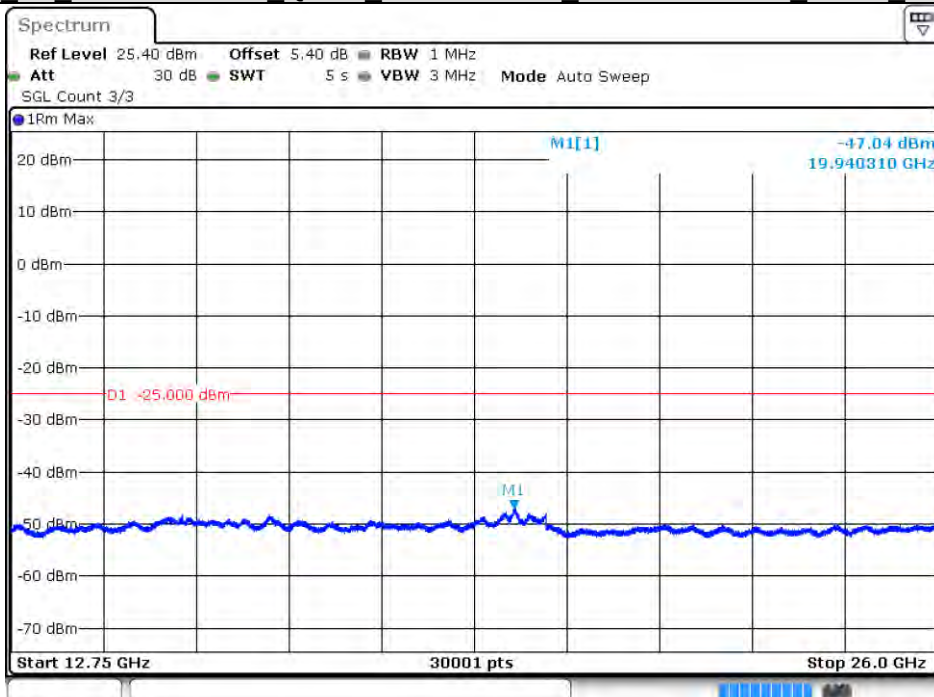
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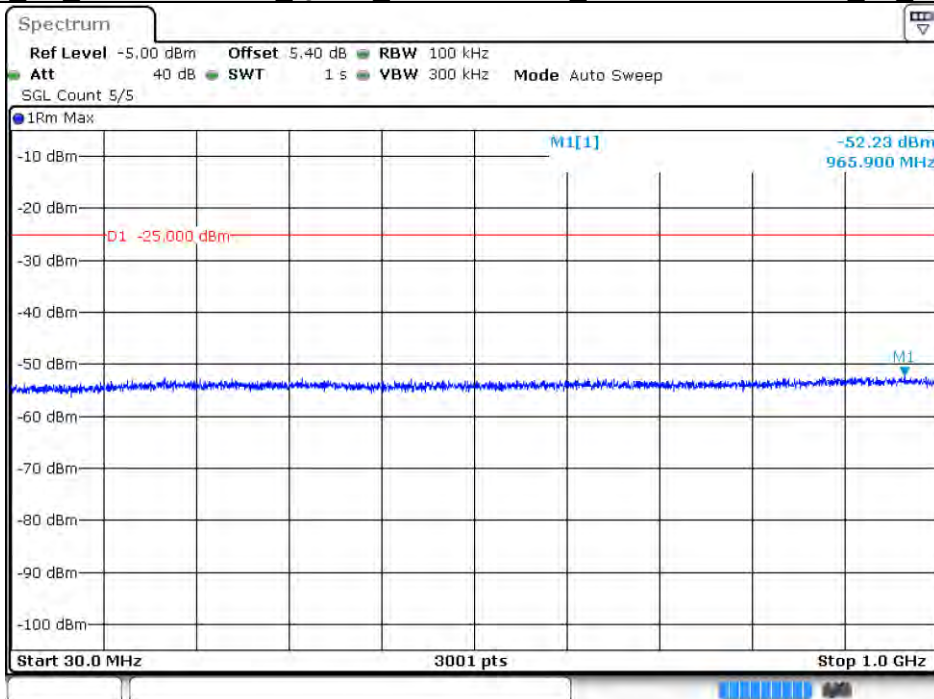
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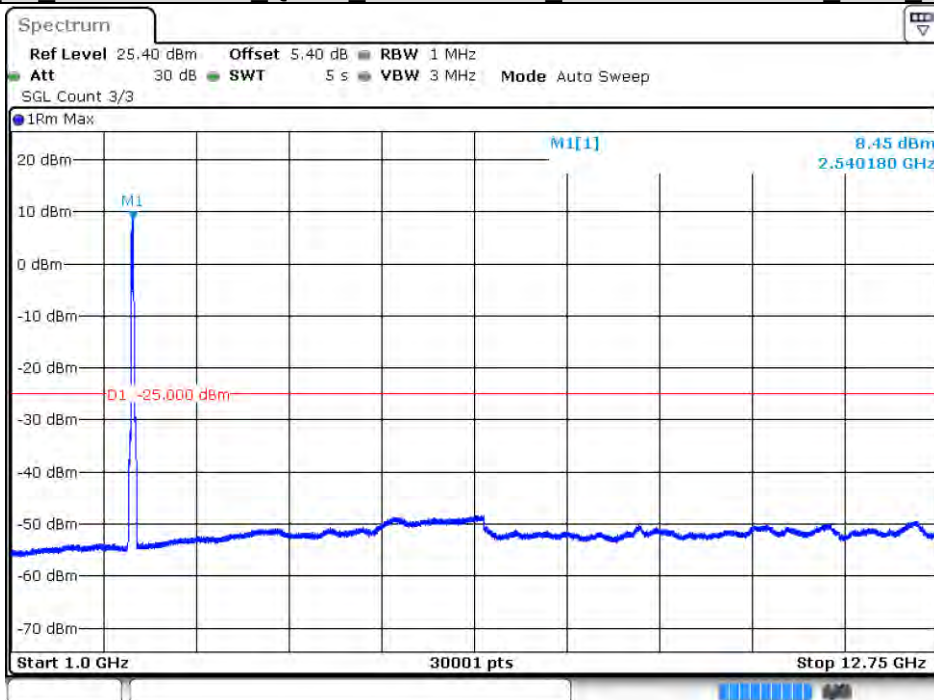


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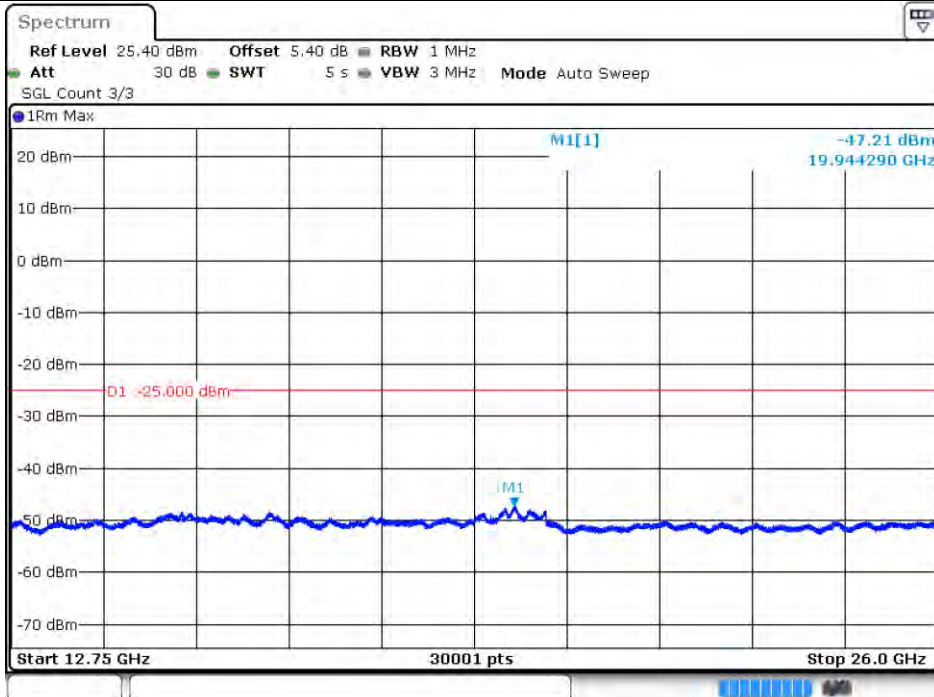
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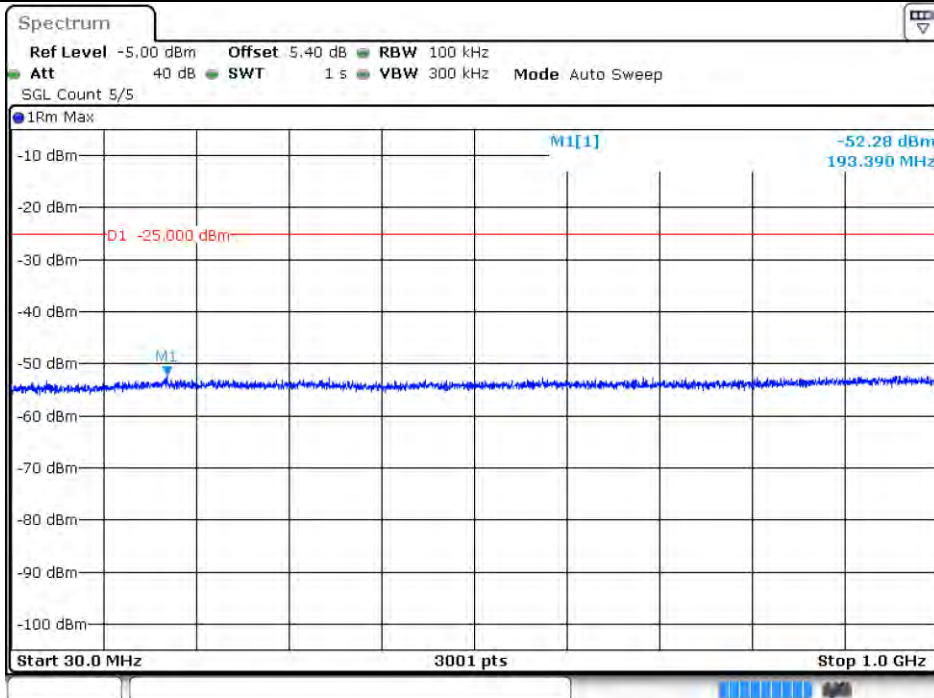


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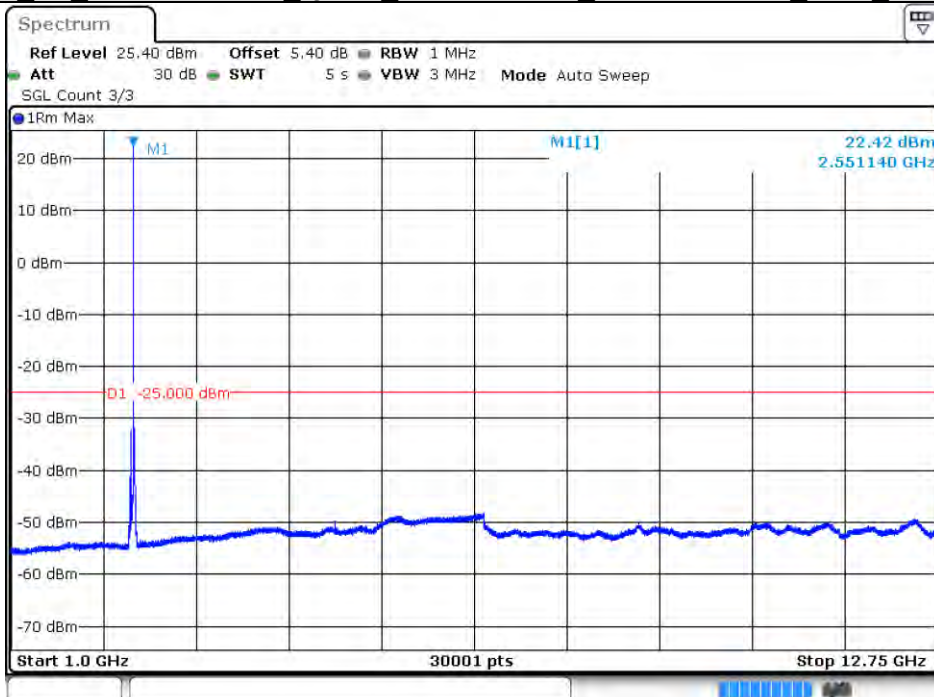
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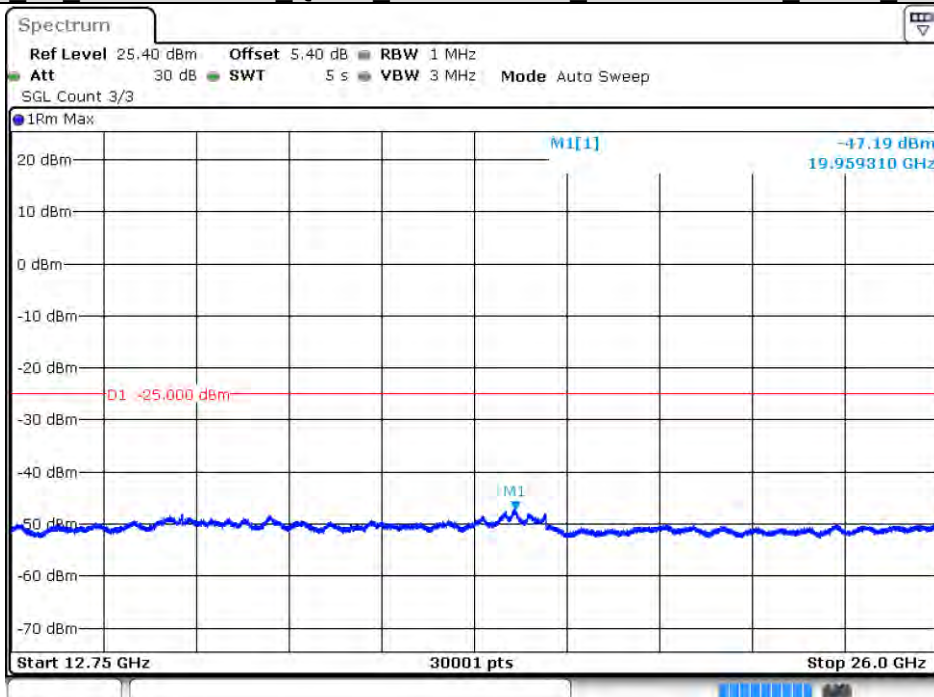
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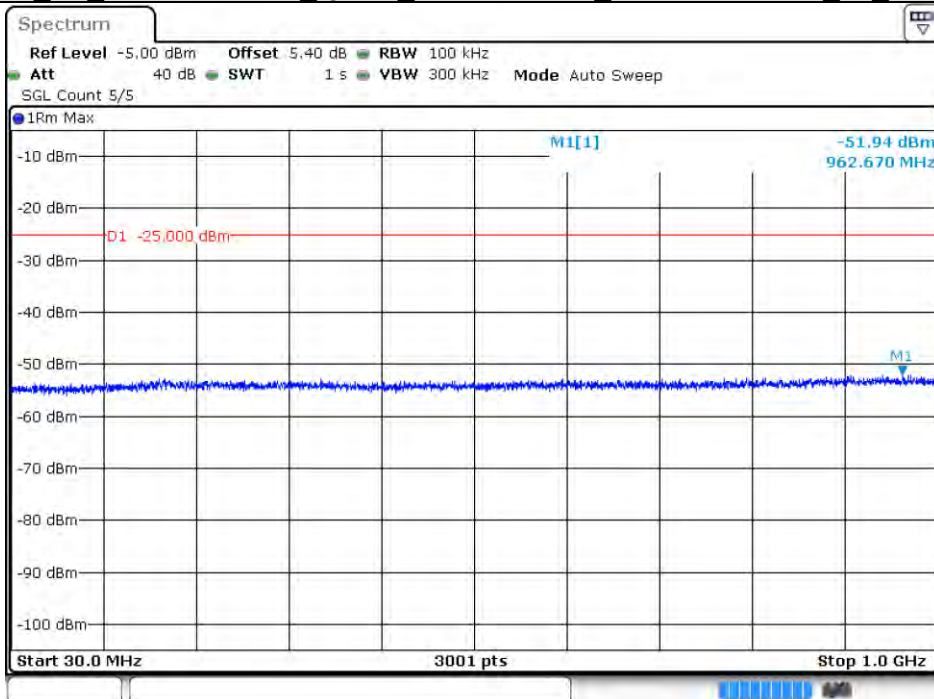


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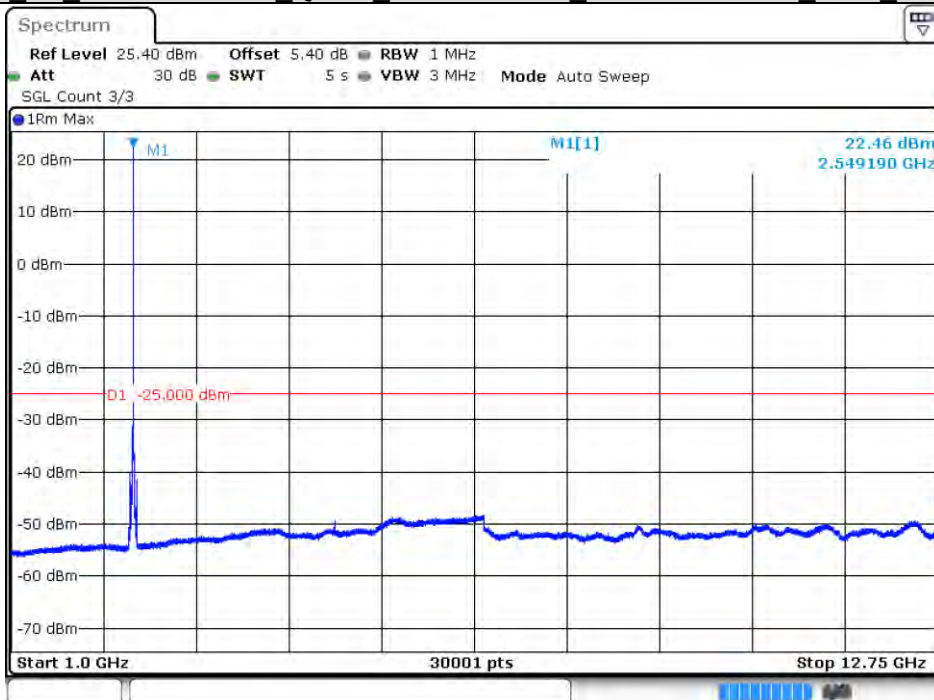
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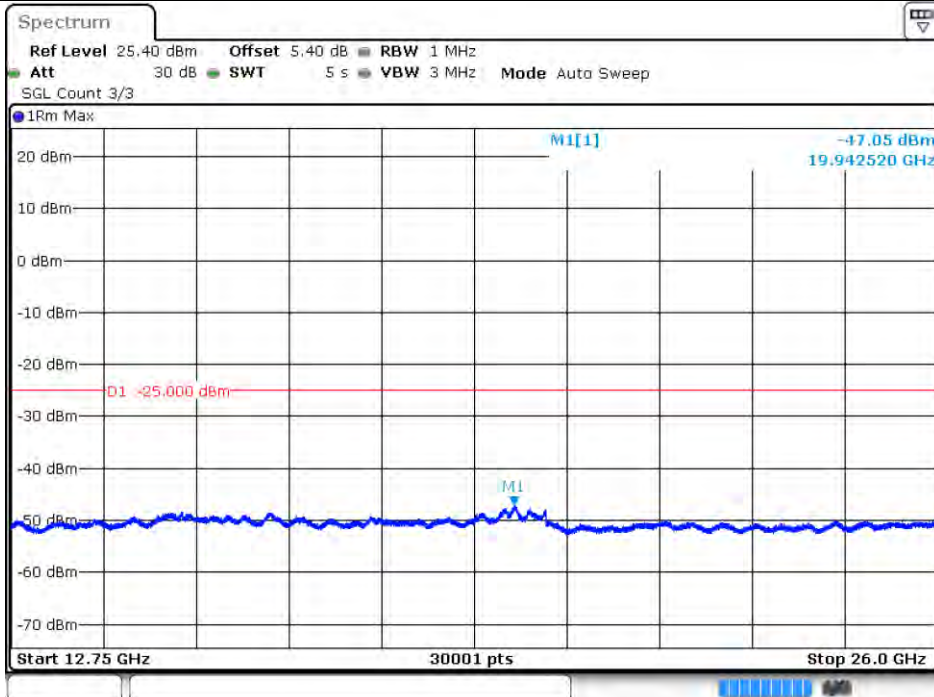
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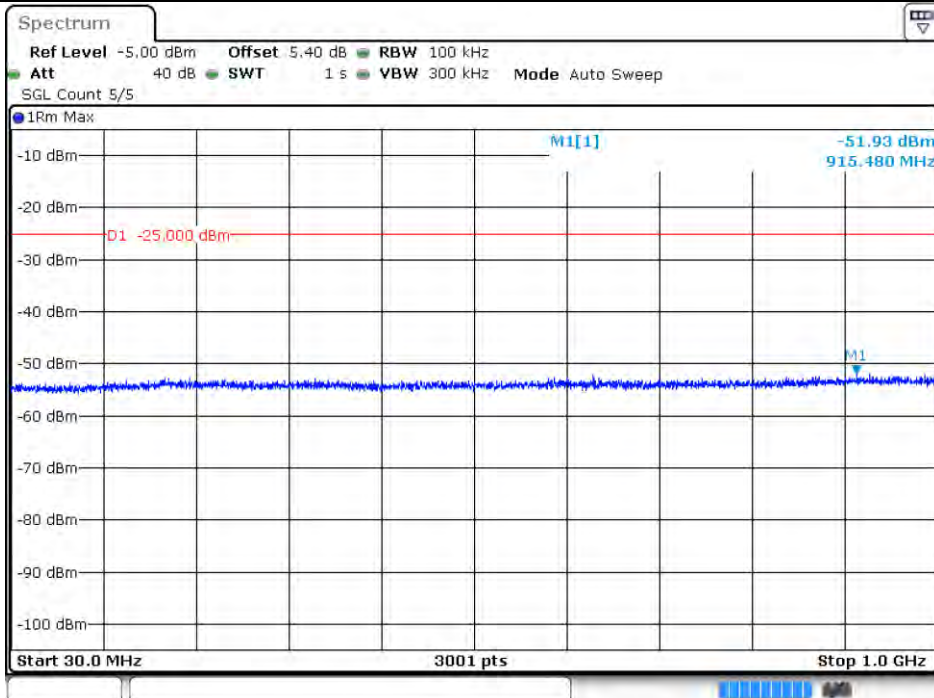
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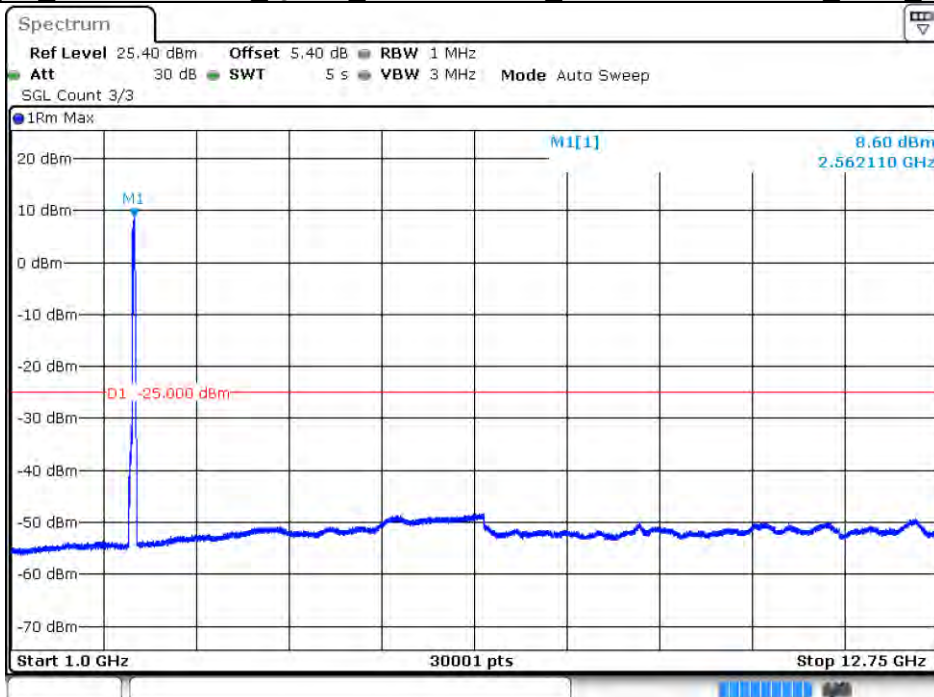
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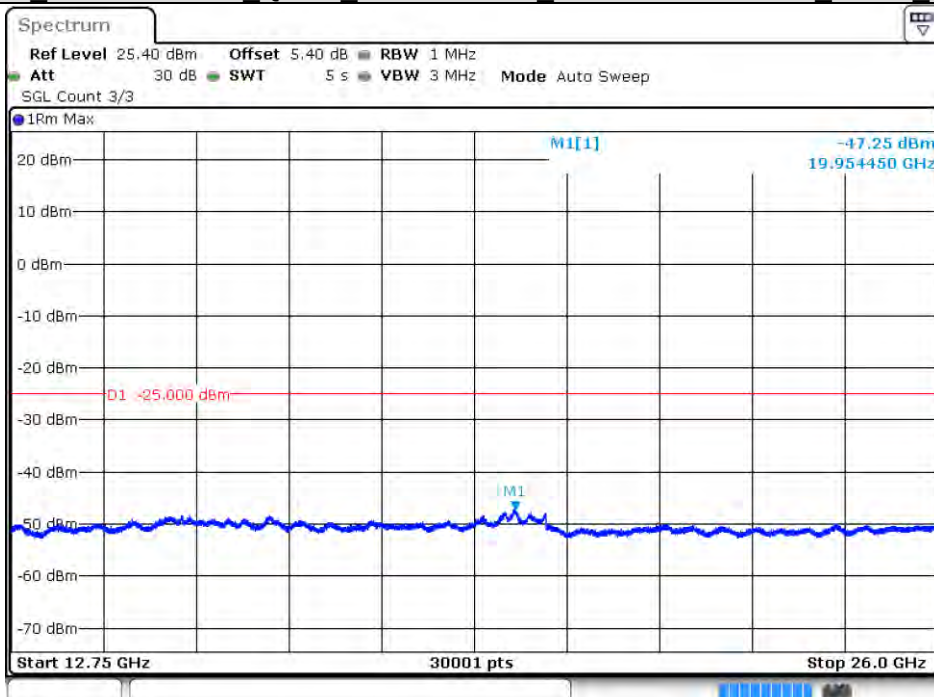
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7 Field Strength of Spurious Radiation

7.1 For LTE UL CA

7.1.1 Test Band = LTE Band CA_7C (Down Ant)

7.1.1.1 Test Mode =LTE/QPSK

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
56.550000	-76.00	-25.00	51.00	Vertical
335.200000	-82.63	-25.00	57.63	Vertical
949.216667	-75.45	-25.00	50.45	Vertical
5056.275000	-65.47	-25.00	40.47	Vertical
7548.050000	-63.56	-25.00	38.56	Vertical
10003.425000	-62.39	-25.00	37.39	Vertical
56.550000	-74.05	-25.00	49.05	Horizontal
478.141667	-82.94	-25.00	57.94	Horizontal
961.270833	-74.82	-25.00	49.82	Horizontal
5089.425000	-65.53	-25.00	40.53	Horizontal
7503.200000	-63.58	-25.00	38.58	Horizontal
10007.650000	-62.29	-25.00	37.29	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
56.200000	-73.96	-25.00	48.96	Vertical
330.450000	-81.68	-25.00	56.68	Vertical
949.583333	-73.89	-25.00	48.89	Vertical
5065.700000	-65.11	-25.00	40.11	Vertical
7505.475000	-63.16	-25.00	38.16	Vertical
10641.725000	-60.72	-25.00	35.72	Vertical
56.600000	-73.43	-25.00	48.43	Horizontal
484.833333	-81.61	-25.00	56.61	Horizontal
937.941667	-75.38	-25.00	50.38	Horizontal
5097.550000	-65.46	-25.00	40.46	Horizontal
7548.700000	-63.64	-25.00	38.64	Horizontal
10085.975000	-62.36	-25.00	37.36	Horizontal



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7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
57.350000	-76.36	-25.00	51.36	Vertical
335.250000	-81.84	-25.00	56.84	Vertical
950.775000	-75.50	-25.00	50.50	Vertical
5061.800000	-65.05	-25.00	40.05	Vertical
7671.550000	-63.01	-25.00	38.01	Vertical
10258.875000	-62.16	-25.00	37.16	Vertical
56.700000	-74.35	-25.00	49.35	Horizontal
450.275000	-81.95	-25.00	56.95	Horizontal
952.700000	-75.10	-25.00	50.10	Horizontal
5093.650000	-65.52	-25.00	40.52	Horizontal
7504.500000	-63.09	-25.00	38.09	Horizontal
10013.175000	-62.42	-25.00	37.42	Horizontal

Remark:

- 1 According to 971168 D01 Power Meas License Digital Systems, The amplitudes of unwanted emissions that are attenuated more than 20 dB below the applicable limit are not required to be reported.
- 2 The disturbance below 30MHz and above 12.75GHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data displayed in this report.





8 Frequency Stability

8.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	RB Config	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
CA_7C	QPSK	20850+21048	100RB#0/100RB#0	TN	LV	1.67	0.000664	PASS
CA_7C	QPSK	20850+21048	100RB#0/100RB#0	TN	NV	-0.46	-0.000182	PASS
CA_7C	QPSK	20850+21048	100RB#0/100RB#0	TN	HV	-9.69	-0.003859	PASS
CA_7C	QPSK	21001+21199	100RB#0/100RB#0	TN	LV	9.33	0.003697	PASS
CA_7C	QPSK	21001+21199	100RB#0/100RB#0	TN	NV	-4.25	-0.001683	PASS
CA_7C	QPSK	21001+21199	100RB#0/100RB#0	TN	HV	-1.75	-0.000695	PASS
CA_7C	QPSK	21152+21350	100RB#0/100RB#0	TN	LV	5.30	0.002087	PASS
CA_7C	QPSK	21152+21350	100RB#0/100RB#0	TN	NV	-1.16	-0.000456	PASS
CA_7C	QPSK	21152+21350	100RB#0/100RB#0	TN	HV	1.04	0.000409	PASS
CA_7C	16QAM	20850+21048	100RB#0/100RB#0	TN	LV	-8.65	-0.003445	PASS
CA_7C	16QAM	20850+21048	100RB#0/100RB#0	TN	NV	-3.30	-0.001313	PASS
CA_7C	16QAM	20850+21048	100RB#0/100RB#0	TN	HV	4.61	0.001835	PASS
CA_7C	16QAM	21001+21199	100RB#0/100RB#0	TN	LV	3.57	0.001412	PASS
CA_7C	16QAM	21001+21199	100RB#0/100RB#0	TN	NV	-8.67	-0.003435	PASS
CA_7C	16QAM	21001+21199	100RB#0/100RB#0	TN	HV	5.46	0.002163	PASS
CA_7C	16QAM	21152+21350	100RB#0/100RB#0	TN	LV	2.82	0.001111	PASS
CA_7C	16QAM	21152+21350	100RB#0/100RB#0	TN	NV	0.54	0.000211	PASS
CA_7C	16QAM	21152+21350	100RB#0/100RB#0	TN	HV	-12.10	-0.004764	PASS
CA_7C	64QAM	20850+21048	100RB#0/100RB#0	TN	LV	-2.85	-0.001137	PASS
CA_7C	64QAM	20850+21048	100RB#0/100RB#0	TN	NV	-0.24	-0.000094	PASS
CA_7C	64QAM	20850+21048	100RB#0/100RB#0	TN	HV	12.61	0.005026	PASS
CA_7C	64QAM	21001+21199	100RB#0/100RB#0	TN	LV	5.22	0.002067	PASS
CA_7C	64QAM	21001+21199	100RB#0/100RB#0	TN	NV	3.25	0.001289	PASS
CA_7C	64QAM	21001+21199	100RB#0/100RB#0	TN	HV	-1.43	-0.000568	PASS
CA_7C	64QAM	21152+21350	100RB#0/100RB#0	TN	LV	-0.99	-0.000388	PASS
CA_7C	64QAM	21152+21350	100RB#0/100RB#0	TN	NV	-0.35	-0.000138	PASS
CA_7C	64QAM	21152+21350	100RB#0/100RB#0	TN	HV	-3.96	-0.001560	PASS

8.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	RB Config	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
CA_7C	QPSK	20850+21048	100RB#0/100RB#0	NV	-30	-0.09	-0.000036	PASS
CA_7C	QPSK	20850+21048	100RB#0/100RB#0	NV	-20	0.96	0.000383	PASS
CA_7C	QPSK	20850+21048	100RB#0/100RB#0	NV	-10	-1.32	-0.000525	PASS
CA_7C	QPSK	20850+21048	100RB#0/100RB#0	NV	0	-5.87	-0.002337	PASS
CA_7C	QPSK	20850+21048	100RB#0/100RB#0	NV	10	-7.50	-0.002987	PASS
CA_7C	QPSK	20850+21048	100RB#0/100RB#0	NV	20	3.73	0.001488	PASS
CA_7C	QPSK	20850+21048	100RB#0/100RB#0	NV	30	5.12	0.002038	PASS



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CA_7C	QPSK	20850+21048	100RB#0/100RB#0	NV	40	3.43	0.001368	PASS
CA_7C	QPSK	20850+21048	100RB#0/100RB#0	NV	50	0.10	0.000039	PASS
CA_7C	QPSK	21001+21199	100RB#0/100RB#0	NV	-30	-4.27	-0.001693	PASS
CA_7C	QPSK	21001+21199	100RB#0/100RB#0	NV	-20	-7.84	-0.003103	PASS
CA_7C	QPSK	21001+21199	100RB#0/100RB#0	NV	-10	-5.34	-0.002115	PASS
CA_7C	QPSK	21001+21199	100RB#0/100RB#0	NV	0	0.04	0.000014	PASS
CA_7C	QPSK	21001+21199	100RB#0/100RB#0	NV	10	7.61	0.003016	PASS
CA_7C	QPSK	21001+21199	100RB#0/100RB#0	NV	20	-5.06	-0.002005	PASS
CA_7C	QPSK	21001+21199	100RB#0/100RB#0	NV	30	9.00	0.003565	PASS
CA_7C	QPSK	21001+21199	100RB#0/100RB#0	NV	40	11.76	0.004656	PASS
CA_7C	QPSK	21001+21199	100RB#0/100RB#0	NV	50	-2.88	-0.001143	PASS
CA_7C	QPSK	21152+21350	100RB#0/100RB#0	NV	-30	-6.18	-0.002433	PASS
CA_7C	QPSK	21152+21350	100RB#0/100RB#0	NV	-20	-2.02	-0.000796	PASS
CA_7C	QPSK	21152+21350	100RB#0/100RB#0	NV	-10	6.89	0.002712	PASS
CA_7C	QPSK	21152+21350	100RB#0/100RB#0	NV	0	-9.58	-0.003771	PASS
CA_7C	QPSK	21152+21350	100RB#0/100RB#0	NV	10	0.58	0.000229	PASS
CA_7C	QPSK	21152+21350	100RB#0/100RB#0	NV	20	3.08	0.001212	PASS
CA_7C	QPSK	21152+21350	100RB#0/100RB#0	NV	30	6.89	0.002711	PASS
CA_7C	QPSK	21152+21350	100RB#0/100RB#0	NV	40	3.95	0.001557	PASS
CA_7C	QPSK	21152+21350	100RB#0/100RB#0	NV	50	-3.84	-0.001510	PASS
CA_7C	16QAM	20850+21048	100RB#0/100RB#0	NV	-30	-10.61	-0.004227	PASS
CA_7C	16QAM	20850+21048	100RB#0/100RB#0	NV	-20	-7.70	-0.003066	PASS
CA_7C	16QAM	20850+21048	100RB#0/100RB#0	NV	-10	5.78	0.002301	PASS
CA_7C	16QAM	20850+21048	100RB#0/100RB#0	NV	0	-1.06	-0.000423	PASS
CA_7C	16QAM	20850+21048	100RB#0/100RB#0	NV	10	-6.17	-0.002459	PASS
CA_7C	16QAM	20850+21048	100RB#0/100RB#0	NV	20	-1.16	-0.000462	PASS
CA_7C	16QAM	20850+21048	100RB#0/100RB#0	NV	30	-9.28	-0.003696	PASS
CA_7C	16QAM	20850+21048	100RB#0/100RB#0	NV	40	-3.29	-0.001309	PASS
CA_7C	16QAM	20850+21048	100RB#0/100RB#0	NV	50	-5.78	-0.002303	PASS
CA_7C	16QAM	21001+21199	100RB#0/100RB#0	NV	-30	1.44	0.000568	PASS
CA_7C	16QAM	21001+21199	100RB#0/100RB#0	NV	-20	-3.56	-0.001408	PASS
CA_7C	16QAM	21001+21199	100RB#0/100RB#0	NV	-10	3.67	0.001452	PASS
CA_7C	16QAM	21001+21199	100RB#0/100RB#0	NV	0	-1.76	-0.000698	PASS
CA_7C	16QAM	21001+21199	100RB#0/100RB#0	NV	10	-0.60	-0.000238	PASS
CA_7C	16QAM	21001+21199	100RB#0/100RB#0	NV	20	0.86	0.000342	PASS
CA_7C	16QAM	21001+21199	100RB#0/100RB#0	NV	30	-1.91	-0.000755	PASS
CA_7C	16QAM	21001+21199	100RB#0/100RB#0	NV	40	-9.09	-0.003599	PASS
CA_7C	16QAM	21001+21199	100RB#0/100RB#0	NV	50	5.84	0.002314	PASS
CA_7C	16QAM	21152+21350	100RB#0/100RB#0	NV	-30	-9.66	-0.003802	PASS
CA_7C	16QAM	21152+21350	100RB#0/100RB#0	NV	-20	5.89	0.002319	PASS
CA_7C	16QAM	21152+21350	100RB#0/100RB#0	NV	-10	-4.53	-0.001784	PASS
CA_7C	16QAM	21152+21350	100RB#0/100RB#0	NV	0	6.19	0.002435	PASS
CA_7C	16QAM	21152+21350	100RB#0/100RB#0	NV	10	-5.62	-0.002214	PASS
CA_7C	16QAM	21152+21350	100RB#0/100RB#0	NV	20	1.21	0.000475	PASS





CA_7C	16QAM	21152+21350	100RB#0/100RB#0	NV	30	-8.36	-0.003292	PASS
CA_7C	16QAM	21152+21350	100RB#0/100RB#0	NV	40	3.59	0.001412	PASS
CA_7C	16QAM	21152+21350	100RB#0/100RB#0	NV	50	8.64	0.003400	PASS
CA_7C	64QAM	20850+21048	100RB#0/100RB#0	NV	-30	1.59	0.000635	PASS
CA_7C	64QAM	20850+21048	100RB#0/100RB#0	NV	-20	-4.57	-0.001822	PASS
CA_7C	64QAM	20850+21048	100RB#0/100RB#0	NV	-10	3.12	0.001243	PASS
CA_7C	64QAM	20850+21048	100RB#0/100RB#0	NV	0	-4.24	-0.001690	PASS
CA_7C	64QAM	20850+21048	100RB#0/100RB#0	NV	10	3.80	0.001515	PASS
CA_7C	64QAM	20850+21048	100RB#0/100RB#0	NV	20	6.58	0.002621	PASS
CA_7C	64QAM	20850+21048	100RB#0/100RB#0	NV	30	8.84	0.003522	PASS
CA_7C	64QAM	20850+21048	100RB#0/100RB#0	NV	40	-6.56	-0.002614	PASS
CA_7C	64QAM	20850+21048	100RB#0/100RB#0	NV	50	-1.22	-0.000484	PASS
CA_7C	64QAM	21001+21199	100RB#0/100RB#0	NV	-30	1.12	0.000445	PASS
CA_7C	64QAM	21001+21199	100RB#0/100RB#0	NV	-20	-2.51	-0.000993	PASS
CA_7C	64QAM	21001+21199	100RB#0/100RB#0	NV	-10	1.46	0.000579	PASS
CA_7C	64QAM	21001+21199	100RB#0/100RB#0	NV	0	2.11	0.000837	PASS
CA_7C	64QAM	21001+21199	100RB#0/100RB#0	NV	10	-3.07	-0.001215	PASS
CA_7C	64QAM	21001+21199	100RB#0/100RB#0	NV	20	-0.76	-0.000301	PASS
CA_7C	64QAM	21001+21199	100RB#0/100RB#0	NV	30	-8.61	-0.003409	PASS
CA_7C	64QAM	21001+21199	100RB#0/100RB#0	NV	40	-2.35	-0.000932	PASS
CA_7C	64QAM	21001+21199	100RB#0/100RB#0	NV	50	-11.35	-0.004495	PASS
CA_7C	64QAM	21152+21350	100RB#0/100RB#0	NV	-30	-3.39	-0.001334	PASS
CA_7C	64QAM	21152+21350	100RB#0/100RB#0	NV	-20	-2.52	-0.000993	PASS
CA_7C	64QAM	21152+21350	100RB#0/100RB#0	NV	-10	-1.08	-0.000427	PASS
CA_7C	64QAM	21152+21350	100RB#0/100RB#0	NV	0	0.23	0.000089	PASS
CA_7C	64QAM	21152+21350	100RB#0/100RB#0	NV	10	2.52	0.000991	PASS
CA_7C	64QAM	21152+21350	100RB#0/100RB#0	NV	20	5.30	0.002088	PASS
CA_7C	64QAM	21152+21350	100RB#0/100RB#0	NV	30	12.33	0.004854	PASS
CA_7C	64QAM	21152+21350	100RB#0/100RB#0	NV	40	-5.43	-0.002136	PASS
CA_7C	64QAM	21152+21350	100RB#0/100RB#0	NV	50	2.98	0.001174	PASS

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