



Appendix B

E-UTRA Band CA_5B



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1. Effective (Isotropic) Radiated Power Output Data

1.1. Max Power Test Result for LTE Band CA_5B

Band	Test Mode PCC/SCC	Channel PCC/SCC	RB Configuration		Modulation PCC&SCC	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
			PCC	SCC					
CA_5B	15RB+25RB	20416+20455	1RB#0	0RB#0	QPSK	23.47	24.32	38.45	PASS
CA_5B	15RB+25RB	20416+20455	8RB#0	0RB#0	QPSK	23.45	24.3	38.45	PASS
CA_5B	15RB+25RB	20501+20540	1RB#0	0RB#0	QPSK	23.69	24.54	38.45	PASS
CA_5B	15RB+25RB	20501+20540	8RB#0	0RB#0	QPSK	23.31	24.16	38.45	PASS
CA_5B	15RB+25RB	20528+20600	1RB#0	0RB#0	QPSK	23.50	24.35	38.45	PASS
CA_5B	15RB+25RB	20528+20600	8RB#0	0RB#0	QPSK	23.47	24.32	38.45	PASS
CA_5B	25RB+15RB	20425+20464	1RB#0	0RB#0	QPSK	23.72	24.57	38.45	PASS
CA_5B	25RB+15RB	20425+20464	8RB#0	0RB#0	QPSK	23.56	24.41	38.45	PASS
CA_5B	25RB+15RB	20510+20549	1RB#0	0RB#0	QPSK	23.58	24.43	38.45	PASS
CA_5B	25RB+15RB	20510+20549	8RB#0	0RB#0	QPSK	23.44	24.29	38.45	PASS
CA_5B	25RB+15RB	20595+20634	1RB#0	0RB#0	QPSK	23.29	24.14	38.45	PASS
CA_5B	25RB+15RB	20595+20634	8RB#0	0RB#0	QPSK	23.39	24.24	38.45	PASS
CA_5B	50RB+50RB	20450+20549	1RB#0	0RB#0	QPSK	23.54	24.39	38.45	PASS
CA_5B	50RB+50RB	20476+20575	1RB#0	0RB#0	QPSK	23.56	24.41	38.45	PASS
CA_5B	50RB+50RB	20501+20600	1RB#0	0RB#0	QPSK	23.38	24.23	38.45	PASS
CA_5B	25RB+50RB	20428+20500	1RB#0	0RB#0	QPSK	23.44	24.29	38.45	PASS
CA_5B	25RB+50RB	20428+20500	8RB#0	0RB#0	QPSK	23.58	24.43	38.45	PASS
CA_5B	25RB+50RB	20478+20550	1RB#0	0RB#0	QPSK	23.68	24.53	38.45	PASS
CA_5B	25RB+50RB	20478+20550	8RB#0	0RB#0	QPSK	23.38	24.23	38.45	PASS
CA_5B	25RB+50RB	20528+20600	1RB#0	0RB#0	QPSK	23.56	24.41	38.45	PASS
CA_5B	25RB+50RB	20528+20600	8RB#0	0RB#0	QPSK	23.38	24.23	38.45	PASS
CA_5B	50RB+25RB	20450+20522	1RB#0	0RB#0	QPSK	23.83	24.68	38.45	PASS
CA_5B	50RB+25RB	20450+20522	8RB#0	0RB#0	QPSK	23.58	24.43	38.45	PASS
CA_5B	50RB+25RB	20500+20572	1RB#0	0RB#0	QPSK	23.70	24.55	38.45	PASS
CA_5B	50RB+25RB	20500+20572	8RB#0	0RB#0	QPSK	23.48	24.33	38.45	PASS
CA_5B	50RB+25RB	20550+20622	1RB#0	0RB#0	QPSK	23.33	24.18	38.45	PASS
CA_5B	50RB+25RB	20550+20622	8RB#0	0RB#0	QPSK	23.29	24.14	38.45	PASS
CA_5B	15RB+25RB	20416+20455	1RB#0	0RB#0	16QAM	22.77	23.62	38.45	PASS
CA_5B	15RB+25RB	20416+20455	8RB#0	0RB#0	16QAM	22.81	23.66	38.45	PASS
CA_5B	15RB+25RB	20501+20540	1RB#0	0RB#0	16QAM	22.29	23.14	38.45	PASS
CA_5B	15RB+25RB	20501+20540	8RB#0	0RB#0	16QAM	22.42	23.27	38.45	PASS
CA_5B	15RB+25RB	20528+20600	1RB#0	0RB#0	16QAM	22.63	23.48	38.45	PASS
CA_5B	15RB+25RB	20528+20600	8RB#0	0RB#0	16QAM	22.81	23.66	38.45	PASS
CA_5B	25RB+15RB	20425+20464	1RB#0	0RB#0	16QAM	22.94	23.79	38.45	PASS
CA_5B	25RB+15RB	20425+20464	8RB#0	0RB#0	16QAM	23.08	23.93	38.45	PASS
CA_5B	25RB+15RB	20510+20549	1RB#0	0RB#0	16QAM	22.81	23.66	38.45	PASS
CA_5B	25RB+15RB	20510+20549	8RB#0	0RB#0	16QAM	23.24	24.09	38.45	PASS
CA_5B	25RB+15RB	20595+20634	1RB#0	0RB#0	16QAM	23.08	23.93	38.45	PASS
CA_5B	25RB+15RB	20595+20634	8RB#0	0RB#0	16QAM	22.96	23.81	38.45	PASS



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CA_5B	25RB+50RB	20428+20500	1RB#0	0RB#0	16QAM	22.80	23.65	38.45	PASS
CA_5B	25RB+50RB	20428+20500	8RB#0	0RB#0	16QAM	22.92	23.77	38.45	PASS
CA_5B	25RB+50RB	20478+20550	1RB#0	0RB#0	16QAM	22.26	23.11	38.45	PASS
CA_5B	25RB+50RB	20478+20550	8RB#0	0RB#0	16QAM	22.49	23.34	38.45	PASS
CA_5B	25RB+50RB	20528+20600	1RB#0	0RB#0	16QAM	22.54	23.39	38.45	PASS
CA_5B	25RB+50RB	20528+20600	8RB#0	0RB#0	16QAM	22.71	23.56	38.45	PASS
CA_5B	50RB+25RB	20450+20522	1RB#0	0RB#0	16QAM	22.84	23.69	38.45	PASS
CA_5B	50RB+25RB	20450+20522	8RB#0	0RB#0	16QAM	22.95	23.8	38.45	PASS
CA_5B	50RB+25RB	20500+20572	1RB#0	0RB#0	16QAM	22.71	23.56	38.45	PASS
CA_5B	50RB+25RB	20500+20572	8RB#0	0RB#0	16QAM	23.29	24.14	38.45	PASS
CA_5B	50RB+25RB	20550+20622	1RB#0	0RB#0	16QAM	23.07	23.92	38.45	PASS
CA_5B	50RB+25RB	20550+20622	8RB#0	0RB#0	16QAM	22.88	23.73	38.45	PASS
CA_5B	50RB+50RB	20450+20549	1RB#0	0RB#0	16QAM	22.96	23.81	38.45	PASS
CA_5B	50RB+50RB	20476+20575	1RB#0	0RB#0	16QAM	22.67	23.52	38.45	PASS
CA_5B	50RB+50RB	20501+20600	1RB#0	0RB#0	16QAM	22.98	23.83	38.45	PASS
CA_5B	15RB+25RB	20416+20455	1RB#0	0RB#0	64QAM	22.24	23.09	38.45	PASS
CA_5B	15RB+25RB	20416+20455	8RB#0	0RB#0	64QAM	22.06	22.91	38.45	PASS
CA_5B	15RB+25RB	20501+20540	1RB#0	0RB#0	64QAM	22.26	23.11	38.45	PASS
CA_5B	15RB+25RB	20501+20540	8RB#0	0RB#0	64QAM	22.16	23.01	38.45	PASS
CA_5B	15RB+25RB	20528+20600	1RB#0	0RB#0	64QAM	22.03	22.88	38.45	PASS
CA_5B	15RB+25RB	20528+20600	8RB#0	0RB#0	64QAM	22.28	23.13	38.45	PASS
CA_5B	25RB+15RB	20425+20464	1RB#0	0RB#0	64QAM	21.93	22.78	38.45	PASS
CA_5B	25RB+15RB	20425+20464	8RB#0	0RB#0	64QAM	22.18	23.03	38.45	PASS
CA_5B	25RB+15RB	20510+20549	1RB#0	0RB#0	64QAM	21.86	22.71	38.45	PASS
CA_5B	25RB+15RB	20510+20549	8RB#0	0RB#0	64QAM	22.03	22.88	38.45	PASS
CA_5B	25RB+15RB	20595+20634	1RB#0	0RB#0	64QAM	22.13	22.98	38.45	PASS
CA_5B	25RB+15RB	20595+20634	8RB#0	0RB#0	64QAM	21.95	22.8	38.45	PASS
CA_5B	25RB+50RB	20428+20500	1RB#0	0RB#0	64QAM	22.15	23	38.45	PASS
CA_5B	25RB+50RB	20428+20500	8RB#0	0RB#0	64QAM	21.96	22.81	38.45	PASS
CA_5B	25RB+50RB	20478+20550	1RB#0	0RB#0	64QAM	22.30	23.15	38.45	PASS
CA_5B	25RB+50RB	20478+20550	8RB#0	0RB#0	64QAM	22.20	23.05	38.45	PASS
CA_5B	25RB+50RB	20528+20600	1RB#0	0RB#0	64QAM	21.93	22.78	38.45	PASS
CA_5B	25RB+50RB	20528+20600	8RB#0	0RB#0	64QAM	22.29	23.14	38.45	PASS
CA_5B	50RB+25RB	20450+20522	1RB#0	0RB#0	64QAM	21.99	22.84	38.45	PASS
CA_5B	50RB+25RB	20450+20522	8RB#0	0RB#0	64QAM	22.07	22.92	38.45	PASS
CA_5B	50RB+25RB	20500+20572	1RB#0	0RB#0	64QAM	21.88	22.73	38.45	PASS
CA_5B	50RB+25RB	20500+20572	8RB#0	0RB#0	64QAM	22.12	22.97	38.45	PASS
CA_5B	50RB+25RB	20550+20622	1RB#0	0RB#0	64QAM	22.13	22.98	38.45	PASS
CA_5B	50RB+25RB	20550+20622	8RB#0	0RB#0	64QAM	21.84	22.69	38.45	PASS
CA_5B	50RB+50RB	20450+20549	1RB#0	0RB#0	64QAM	22.04	22.89	38.45	PASS
CA_5B	50RB+50RB	20476+20575	1RB#0	0RB#0	64QAM	21.83	22.68	38.45	PASS
CA_5B	50RB+50RB	20501+20600	1RB#0	0RB#0	64QAM	22.46	23.31	38.45	PASS

Remark:

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



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

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_5B	QPSK	50RB+50RB	20450+20549	50RB#0	50RB#0	6.06	13.00	PASS
CA_5B	QPSK	50RB+50RB	20476+20575	50RB#0	50RB#0	6.14	13.00	PASS
CA_5B	QPSK	50RB+50RB	20501+20600	50RB#0	50RB#0	6.12	13.00	PASS
CA_5B	16QAM	50RB+50RB	20450+20549	50RB#0	50RB#0	6.64	13.00	PASS
CA_5B	16QAM	50RB+50RB	20476+20575	50RB#0	50RB#0	6.90	13.00	PASS
CA_5B	16QAM	50RB+50RB	20501+20600	50RB#0	50RB#0	7.01	13.00	PASS
CA_5B	64QAM	50RB+50RB	20450+20549	50RB#0	50RB#0	7.10	13.00	PASS
CA_5B	64QAM	50RB+50RB	20476+20575	50RB#0	50RB#0	7.19	13.00	PASS
CA_5B	64QAM	50RB+50RB	20501+20600	50RB#0	50RB#0	7.42	13.00	PASS



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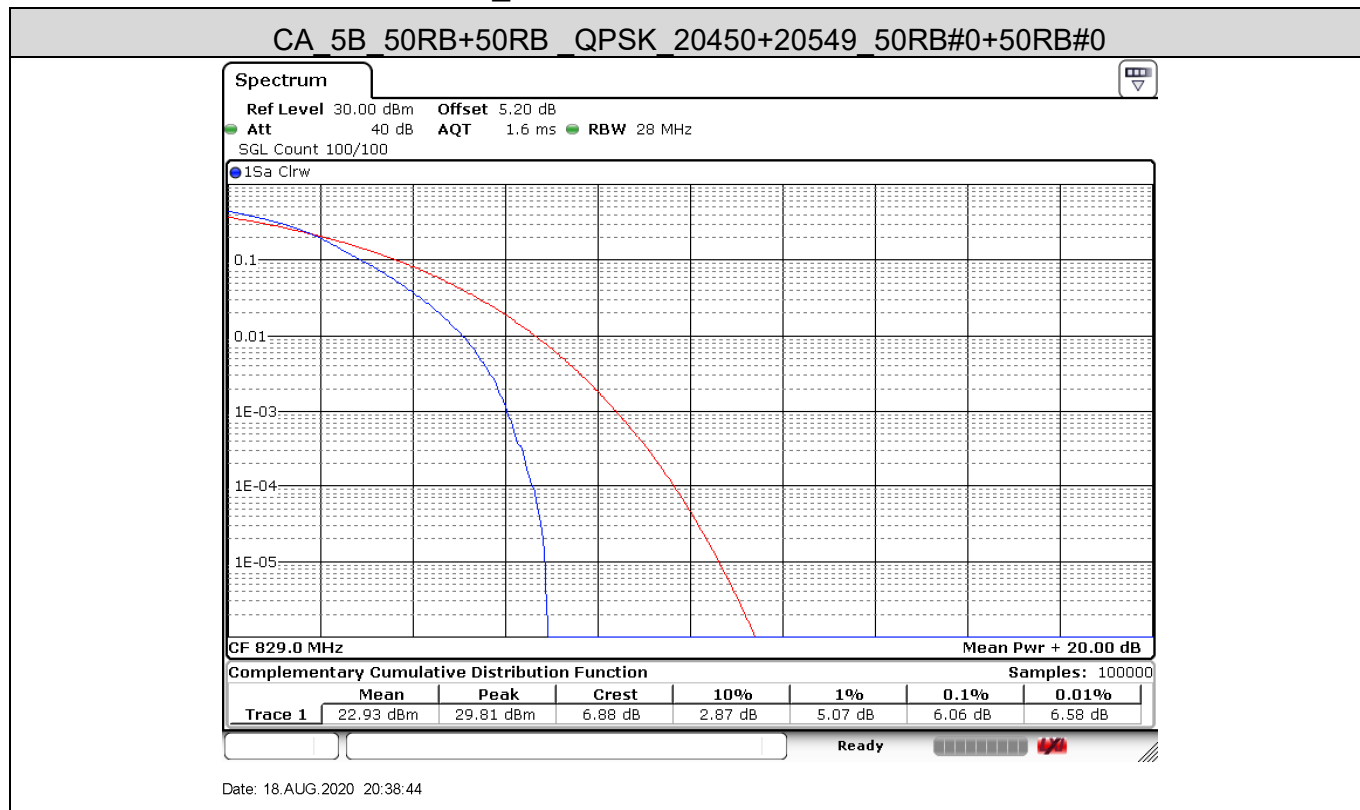
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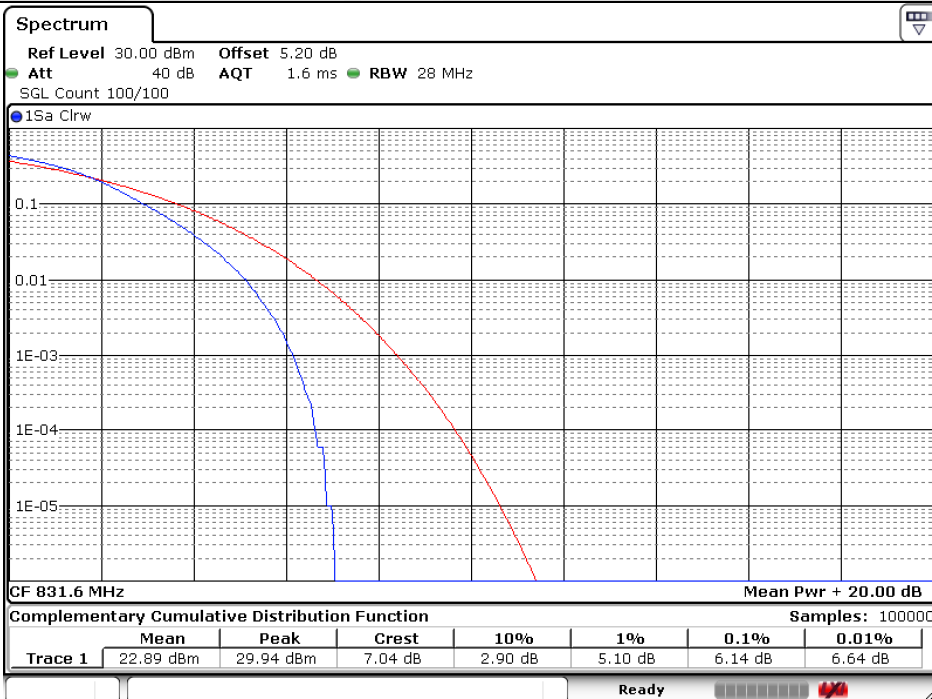


2.1. For LTE

1.1.1 Test Band = LTE Band CA_5B

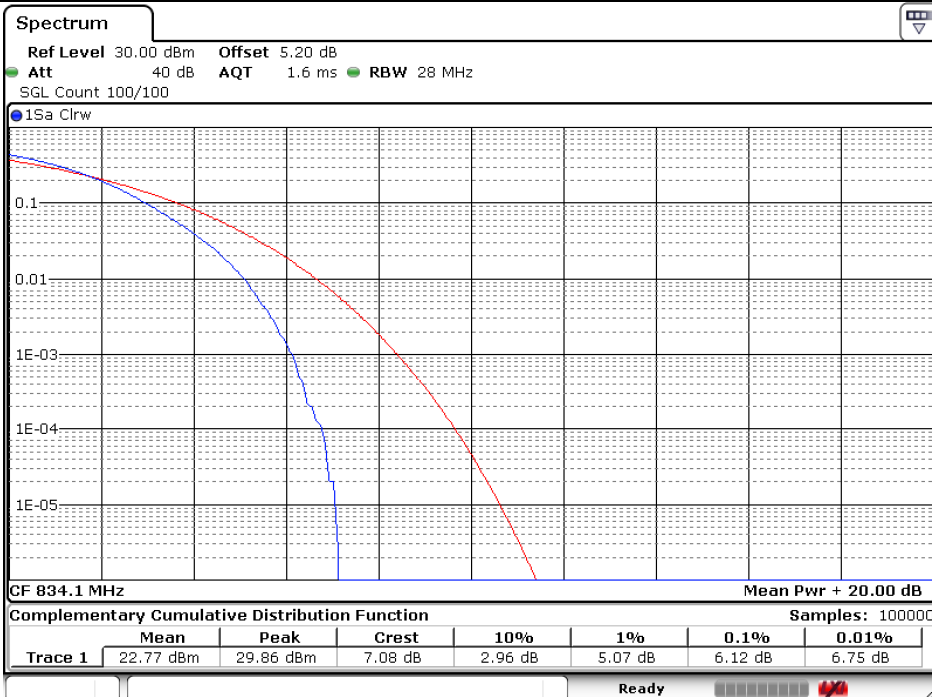


CA_5B_50RB+50RB_QPSK_20476+20575_50RB#0+50RB#0



Date: 18.AUG.2020 20:41:30

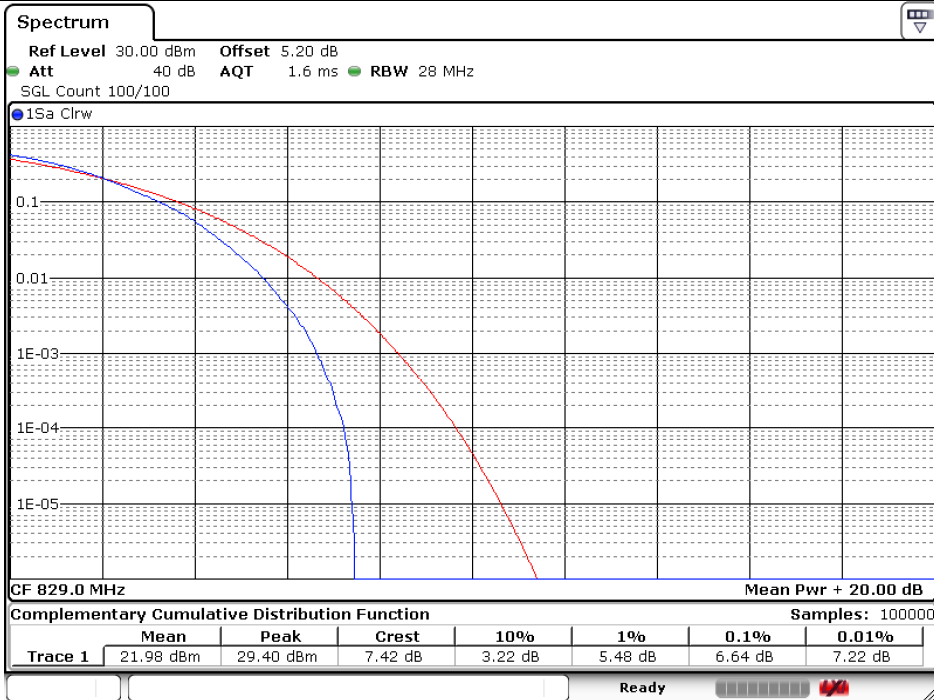
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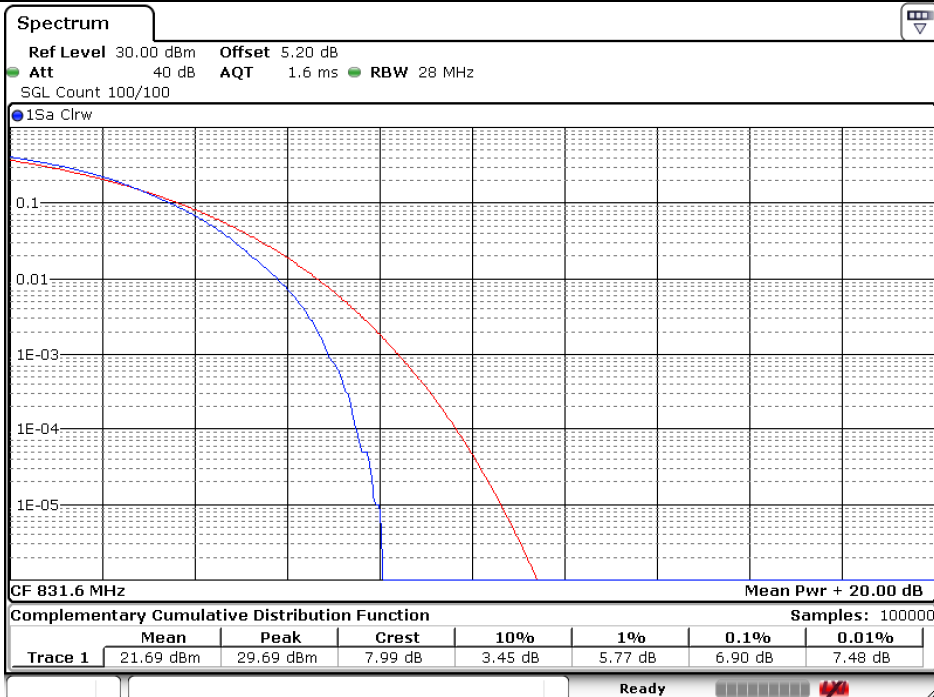


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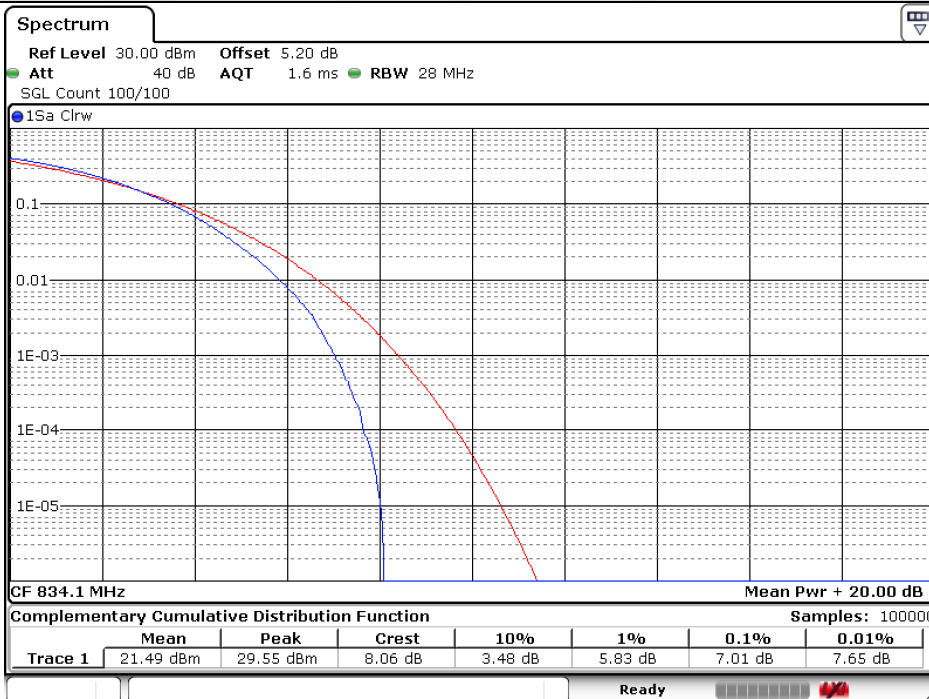
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Date: 18.AUG.2020 20:41:15

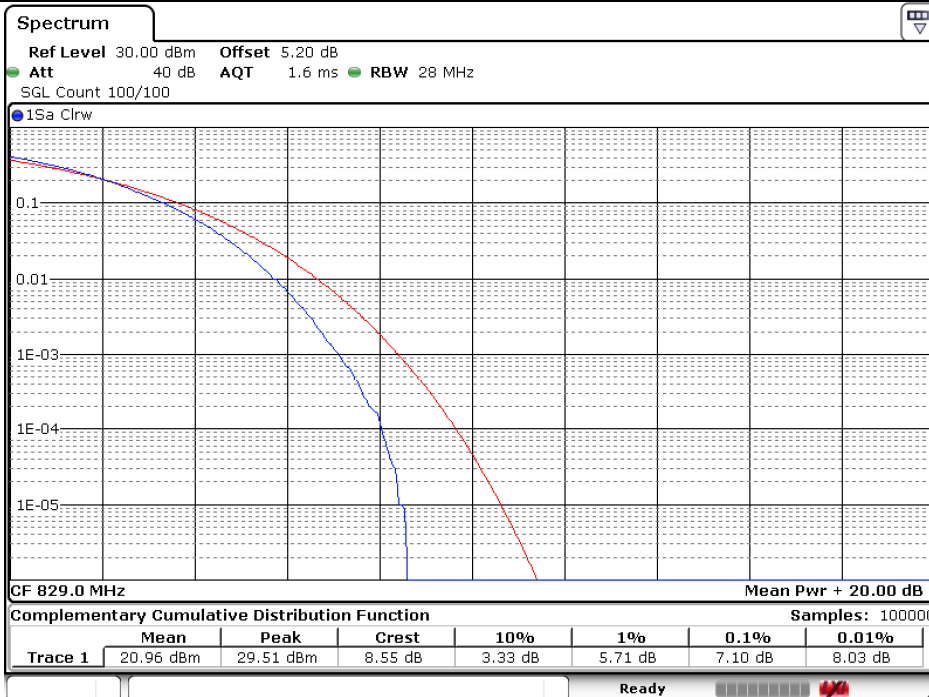


CA_5B_50RB+50RB_16QAM_20501+20600_50RB#0+50RB#0



Date: 18.AUG.2020 20:43:04

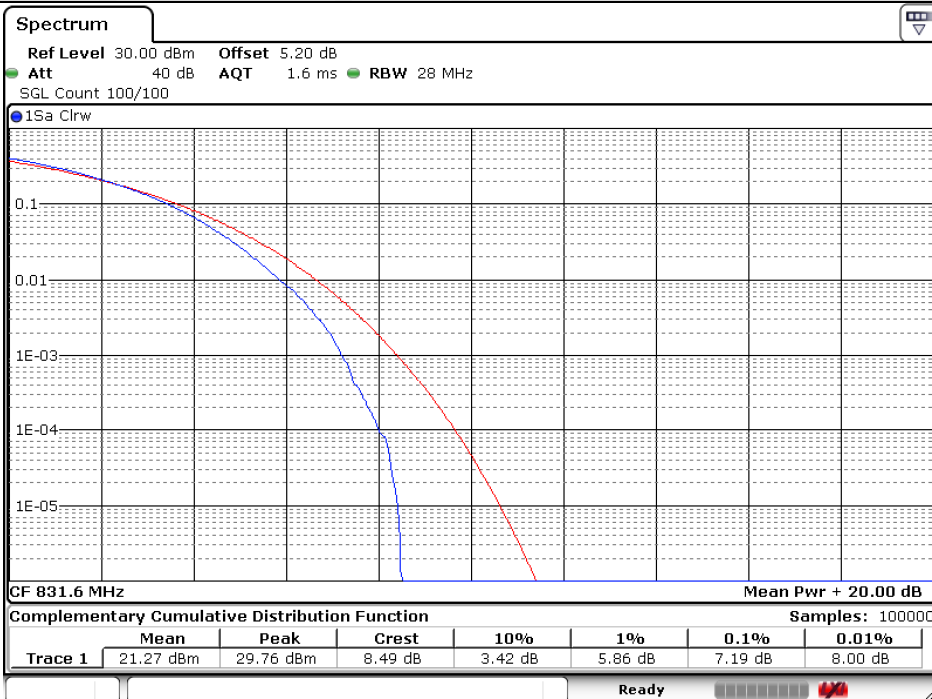
CA_5B_50RB+50RB_64QAM_20450+20549_50RB#0+50RB#0



Date: 18.AUG.2020 20:39:33



CA_5B_50RB+50RB_64QAM_20476+20575_50RB#0+50RB#0



Date: 18.AUG.2020 20:40:56

CA_5B_50RB+50RB_64QAM_20501+20600_50RB#0+50RB#0



Date: 18.AUG.2020 20:43:19



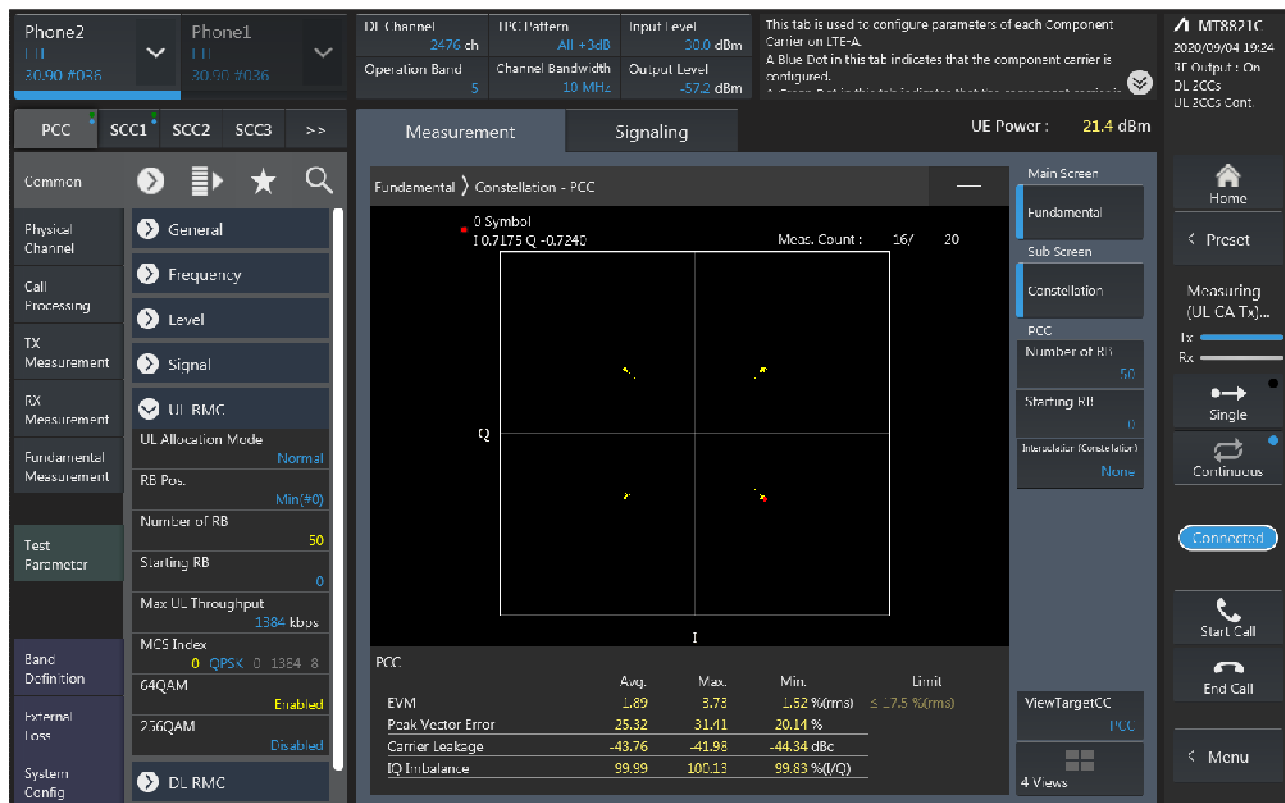
3. Modulation Characteristics

3.1. For LTE

1.1.2 Test Band = LTE Band CA_5B

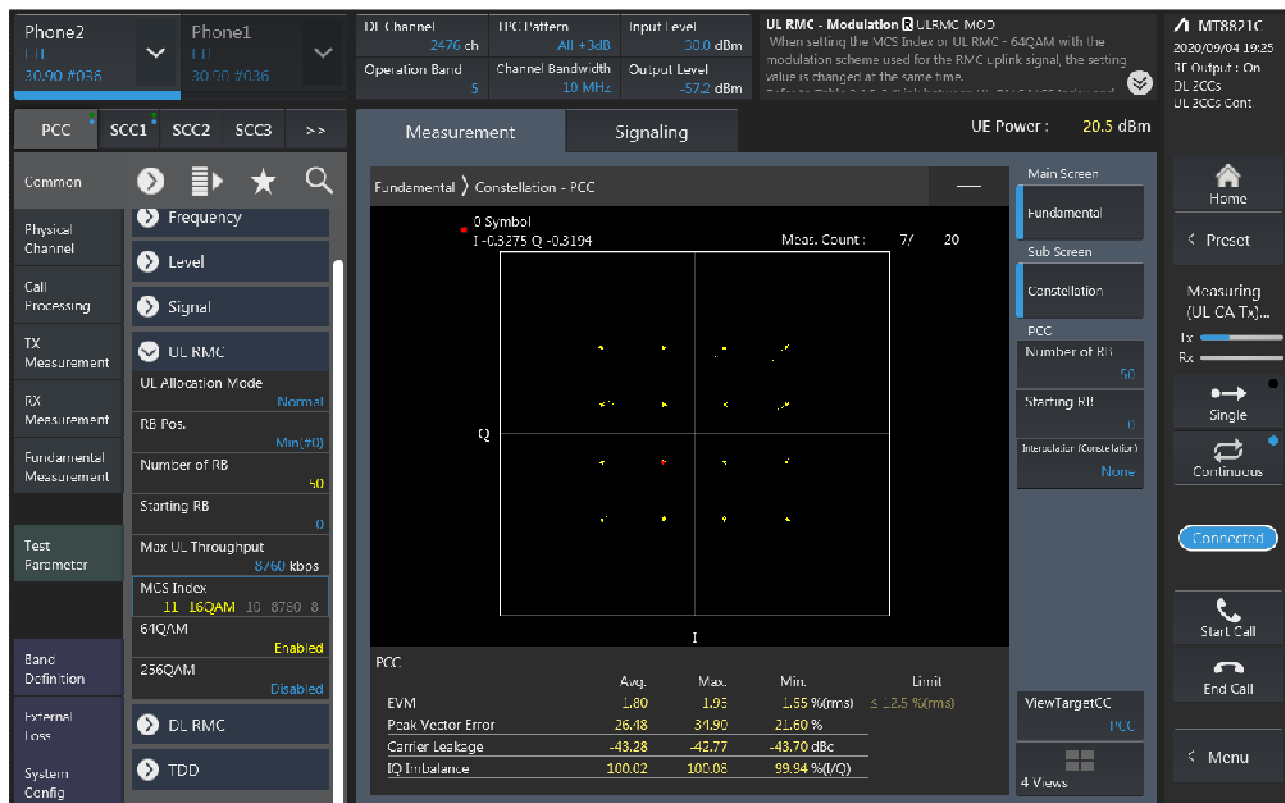
1.1.2.1 Test Mode = LTE /QPSK 50RB+50RB

1.1.2.1.1 Test Channel = 20476+20575





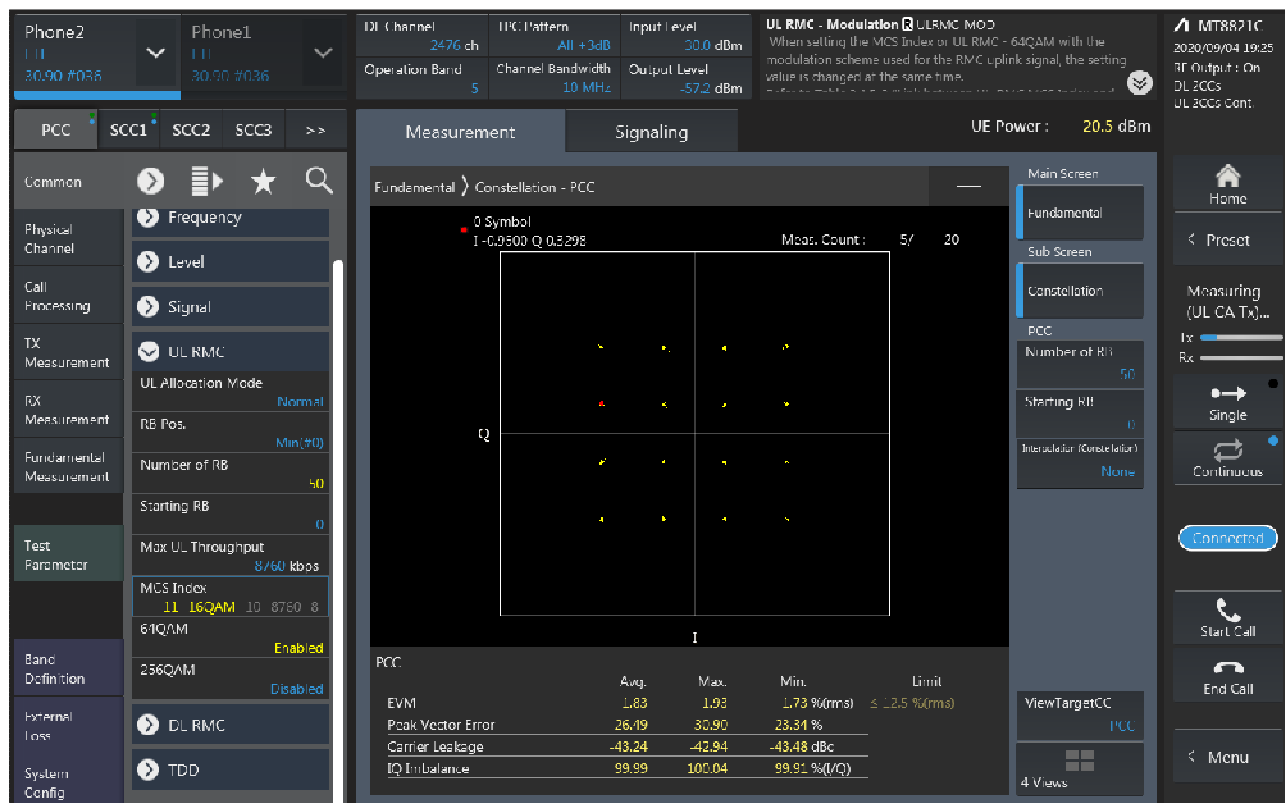
1.1.2.2 Test Mode = LTE /16QAM 50RB+50RB
1.1.2.2.1 Test Channel =20476+20575





1.1.2.3 Test Mode = LTE /64QAM 50RB+50RB

1.1.2.3.1 Test Channel = 20476+20575



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_5B	15RB+25RB	QPSK	20416+20455	15RB#0+25RB#0	7.44	7.75	PASS
CA_5B	15RB+25RB	16QAM	20416+20455	15RB#0+25RB#0	7.42	7.75	PASS
CA_5B	15RB+25RB	64QAM	20416+20455	15RB#0+25RB#0	7.43	7.73	PASS
CA_5B	15RB+25RB	QPSK	20501+20540	15RB#0+25RB#0	7.45	7.75	PASS
CA_5B	15RB+25RB	16QAM	20501+20540	15RB#0+25RB#0	7.45	7.76	PASS
CA_5B	15RB+25RB	64QAM	20501+20540	15RB#0+25RB#0	7.44	7.71	PASS
CA_5B	15RB+25RB	QPSK	20586+20625	15RB#0+25RB#0	7.43	7.74	PASS
CA_5B	15RB+25RB	16QAM	20586+20625	15RB#0+25RB#0	7.42	7.75	PASS
CA_5B	15RB+25RB	64QAM	20586+20625	15RB#0+25RB#0	7.41	7.73	PASS
CA_5B	25RB+15RB	QPSK	20425+20464	25RB#0+15RB#0	7.45	7.79	PASS
CA_5B	25RB+15RB	16QAM	20425+20464	25RB#0+15RB#0	7.45	7.78	PASS
CA_5B	25RB+15RB	64QAM	20425+20464	25RB#0+15RB#0	7.45	7.78	PASS
CA_5B	25RB+15RB	QPSK	20510+20549	25RB#0+15RB#0	7.46	7.81	PASS
CA_5B	25RB+15RB	16QAM	20510+20549	25RB#0+15RB#0	7.46	7.79	PASS
CA_5B	25RB+15RB	64QAM	20510+20549	25RB#0+15RB#0	7.46	7.80	PASS
CA_5B	25RB+15RB	QPSK	20595+20634	25RB#0+15RB#0	7.45	7.79	PASS
CA_5B	25RB+15RB	16QAM	20595+20634	25RB#0+15RB#0	7.44	7.76	PASS
CA_5B	25RB+15RB	64QAM	20595+20634	25RB#0+15RB#0	7.44	7.78	PASS
CA_5B	25RB+50RB	QPSK	20428+20500	25RB#0+50RB#0	13.84	14.54	PASS
CA_5B	25RB+50RB	16QAM	20428+20500	25RB#0+50RB#0	13.85	14.54	PASS
CA_5B	25RB+50RB	64QAM	20428+20500	25RB#0+50RB#0	13.84	14.58	PASS
CA_5B	25RB+50RB	QPSK	20478+20550	25RB#0+50RB#0	13.88	14.61	PASS
CA_5B	25RB+50RB	16QAM	20478+20550	25RB#0+50RB#0	13.89	14.57	PASS
CA_5B	25RB+50RB	64QAM	20478+20550	25RB#0+50RB#0	13.87	14.53	PASS
CA_5B	25RB+50RB	QPSK	20528+20600	25RB#0+50RB#0	13.82	14.58	PASS
CA_5B	25RB+50RB	16QAM	20528+20600	25RB#0+50RB#0	13.82	14.62	PASS
CA_5B	25RB+50RB	64QAM	20528+20600	25RB#0+50RB#0	13.80	14.57	PASS
CA_5B	50RB+25RB	QPSK	20450+20522	50RB#0+25RB#0	13.93	14.62	PASS
CA_5B	50RB+25RB	16QAM	20450+20522	50RB#0+25RB#0	13.90	14.66	PASS
CA_5B	50RB+25RB	64QAM	20450+20522	50RB#0+25RB#0	13.90	14.68	PASS
CA_5B	50RB+25RB	QPSK	20500+20572	50RB#0+25RB#0	13.93	14.67	PASS
CA_5B	50RB+25RB	16QAM	20500+20572	50RB#0+25RB#0	13.93	14.66	PASS
CA_5B	50RB+25RB	64QAM	20500+20572	50RB#0+25RB#0	13.93	14.74	PASS
CA_5B	50RB+25RB	QPSK	20550+20622	50RB#0+25RB#0	13.86	14.64	PASS

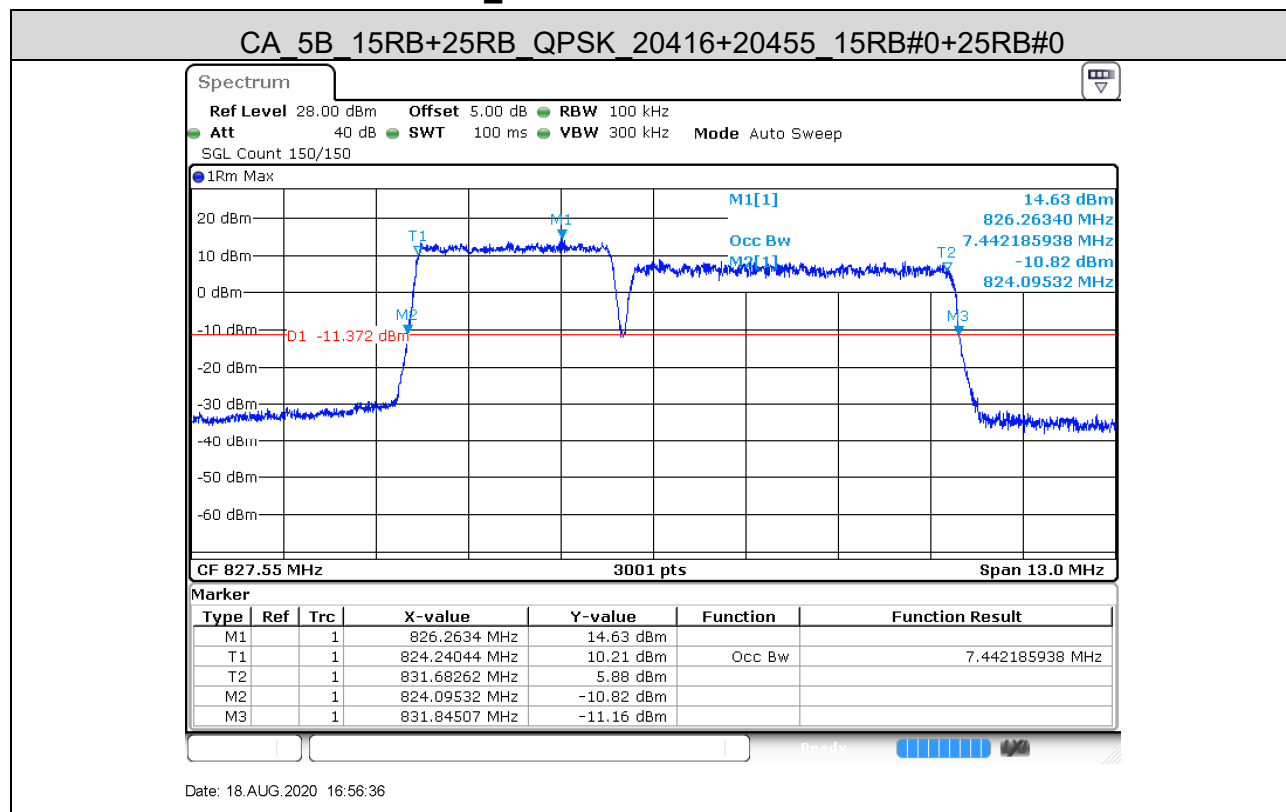




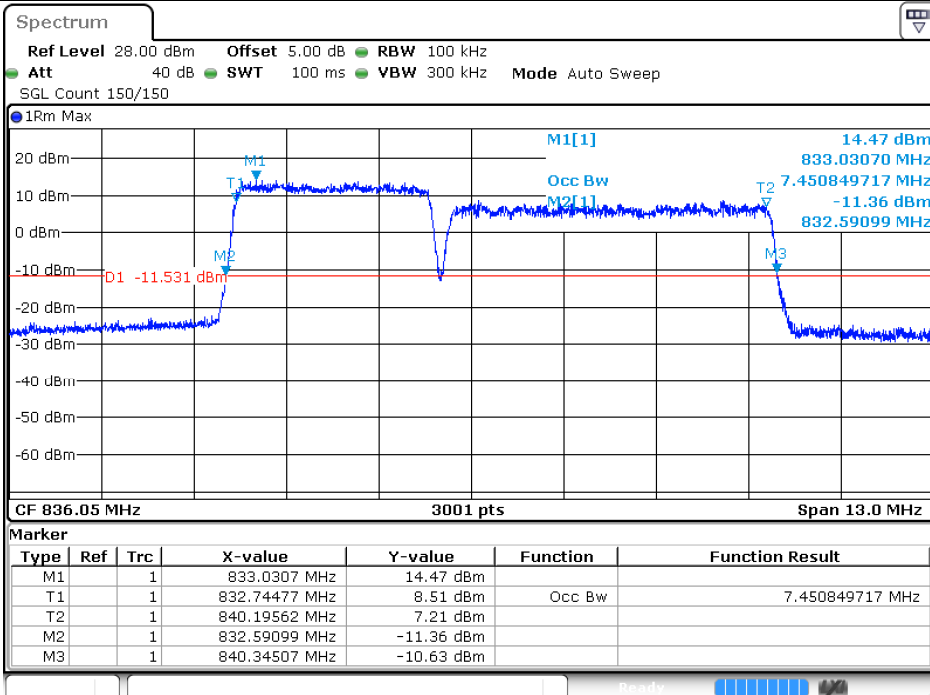
CA_5B	50RB+25RB	16QAM	20550+20622	50RB#0+25RB#0	13.86	14.63	PASS
CA_5B	50RB+25RB	64QAM	20550+20622	50RB#0+25RB#0	13.87	14.66	PASS
CA_5B	50RB+50RB	QPSK	20450+20549	50RB#0+50RB#0	18.91	19.99	PASS
CA_5B	50RB+50RB	16QAM	20450+20549	50RB#0+50RB#0	18.93	20.03	PASS
CA_5B	50RB+50RB	64QAM	20450+20549	50RB#0+50RB#0	18.93	20.07	PASS
CA_5B	50RB+50RB	QPSK	20476+20575	50RB#0+50RB#0	18.93	20.06	PASS
CA_5B	50RB+50RB	16QAM	20476+20575	50RB#0+50RB#0	18.88	19.98	PASS
CA_5B	50RB+50RB	64QAM	20476+20575	50RB#0+50RB#0	18.93	20.06	PASS
CA_5B	50RB+50RB	QPSK	20501+20600	50RB#0+50RB#0	18.89	19.88	PASS
CA_5B	50RB+50RB	16QAM	20501+20600	50RB#0+50RB#0	18.87	20.04	PASS
CA_5B	50RB+50RB	64QAM	20501+20600	50RB#0+50RB#0	18.87	20.07	PASS

4.1. For LTE

1.1.3 Test Band = LTE Band CA_5B

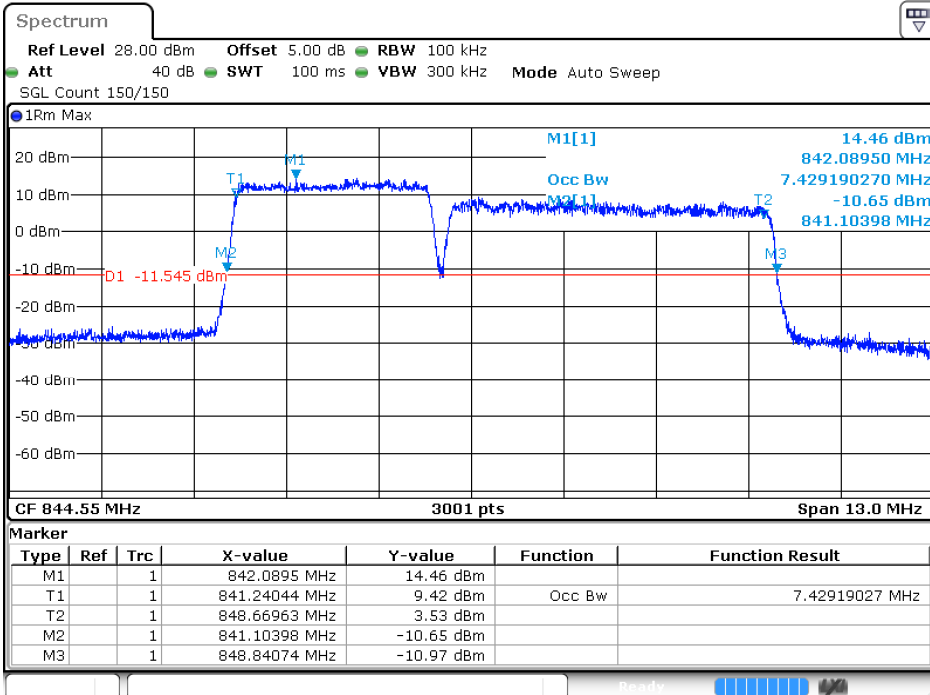


CA 5B 15RB+25RB QPSK 20501+20540 15RB#0+25RB#0



Date: 18.AUG.2020 16:57:52

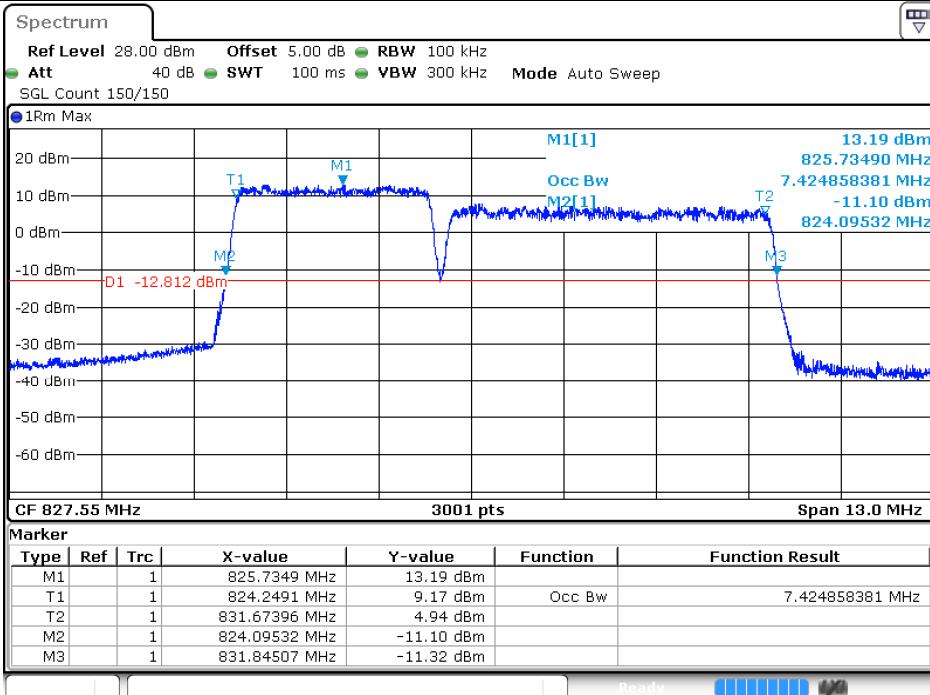
CA 5B 15RB+25RB QPSK 20586+20625 15RB#0+25RB#0



Date: 18.AUG.2020 16:59:40

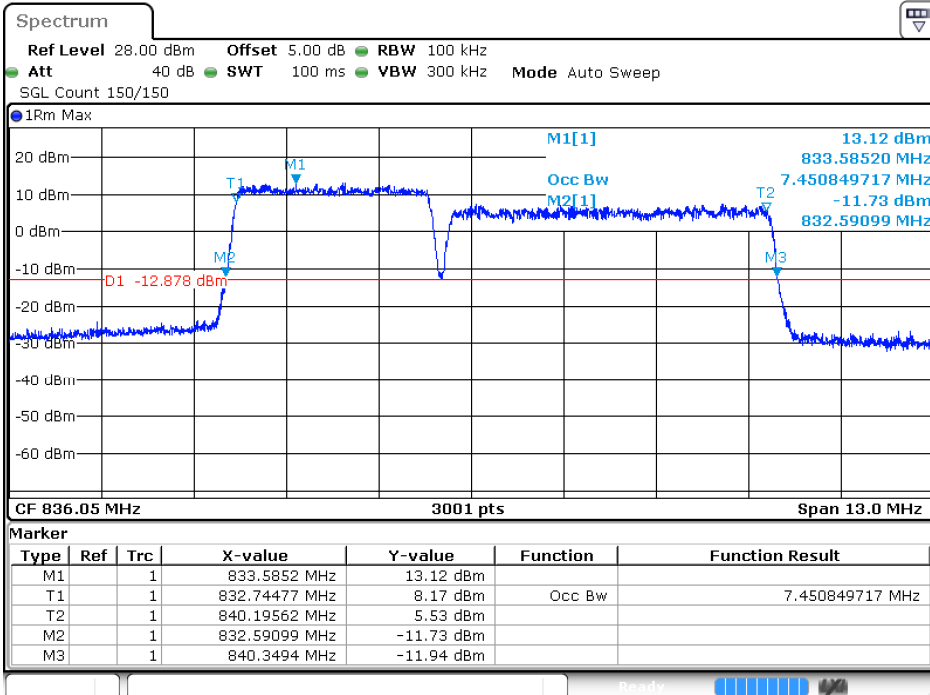


CA 5B 15RB+25RB 16QAM 20416+20455 15RB#0+25RB#0



Date: 18.AUG.2020 16:57:00

CA 5B 15RB+25RB 16QAM 20501+20540 15RB#0+25RB#0



Date: 18.AUG.2020 16:58:36



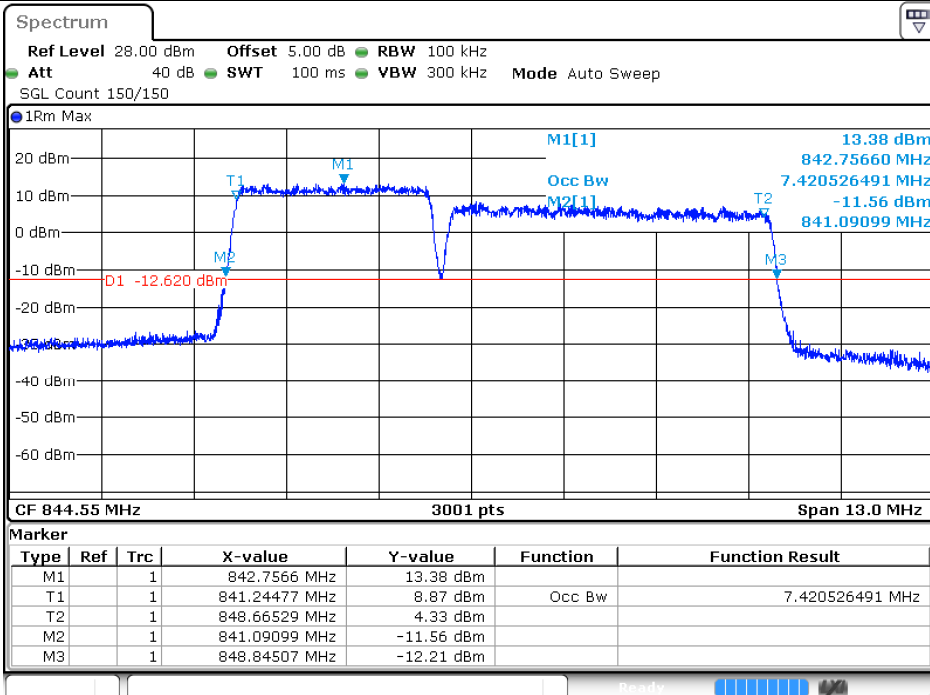
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 Shenzhen Branch and Testing Laboratory

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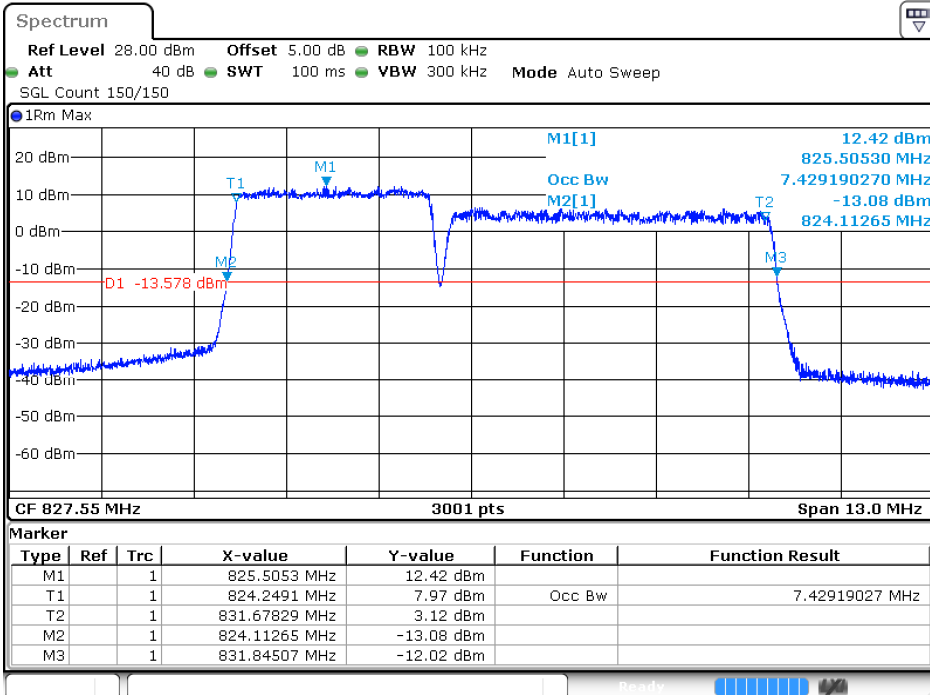
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 中国·深圳·科技园中区M-10栋一号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

CA 5B 15RB+25RB 16QAM 20586+20625 15RB#0+25RB#0



Date: 18.AUG.2020 17:00:03

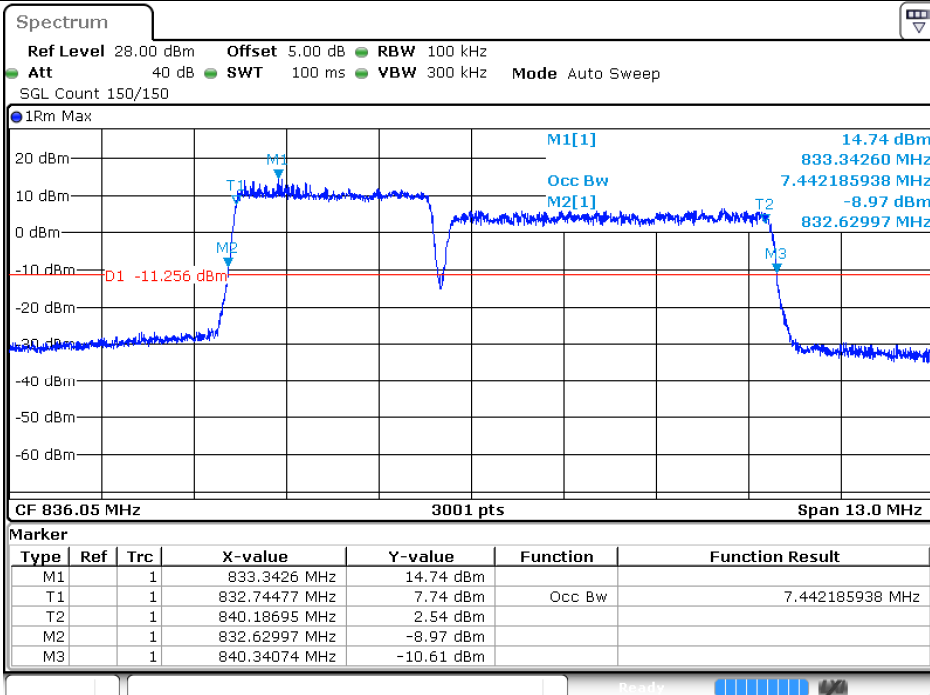
CA 5B 15RB+25RB 64QAM 20416+20455 15RB#0+25RB#0



Date: 18.AUG.2020 16:57:25

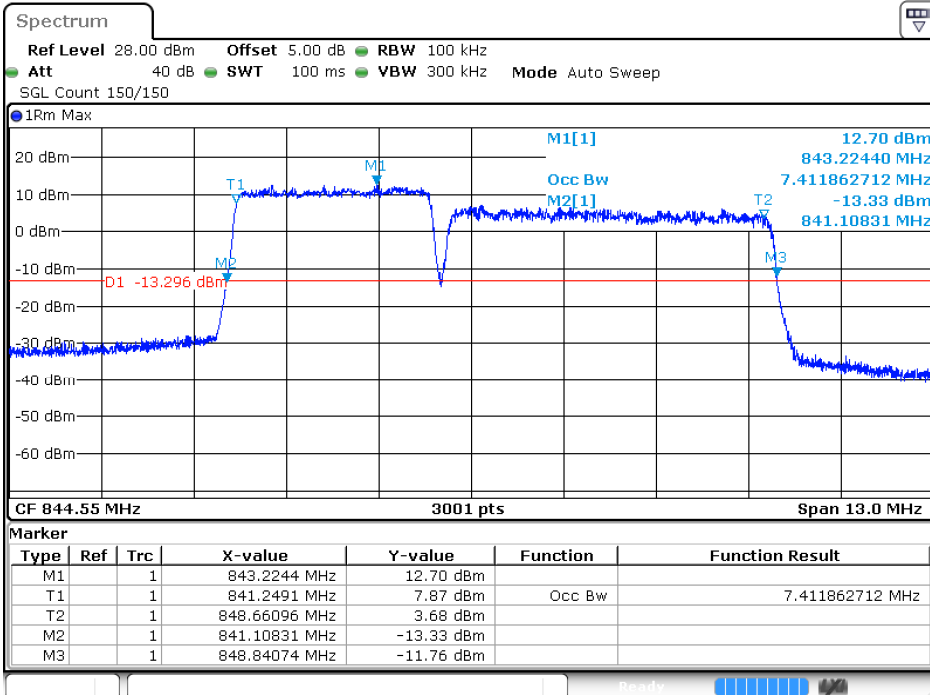


CA 5B 15RB+25RB 64QAM 20501+20540 15RB#0+25RB#0



Date: 18.AUG.2020 16:58:59

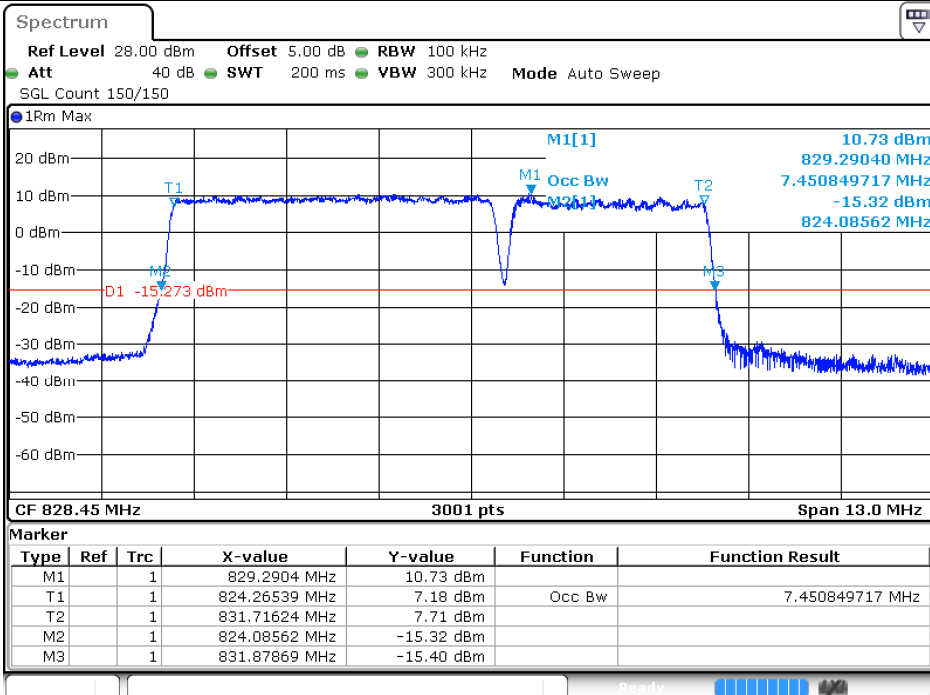
CA 5B 15RB+25RB 64QAM 20586+20625 15RB#0+25RB#0



Date: 18.AUG.2020 17:00:26

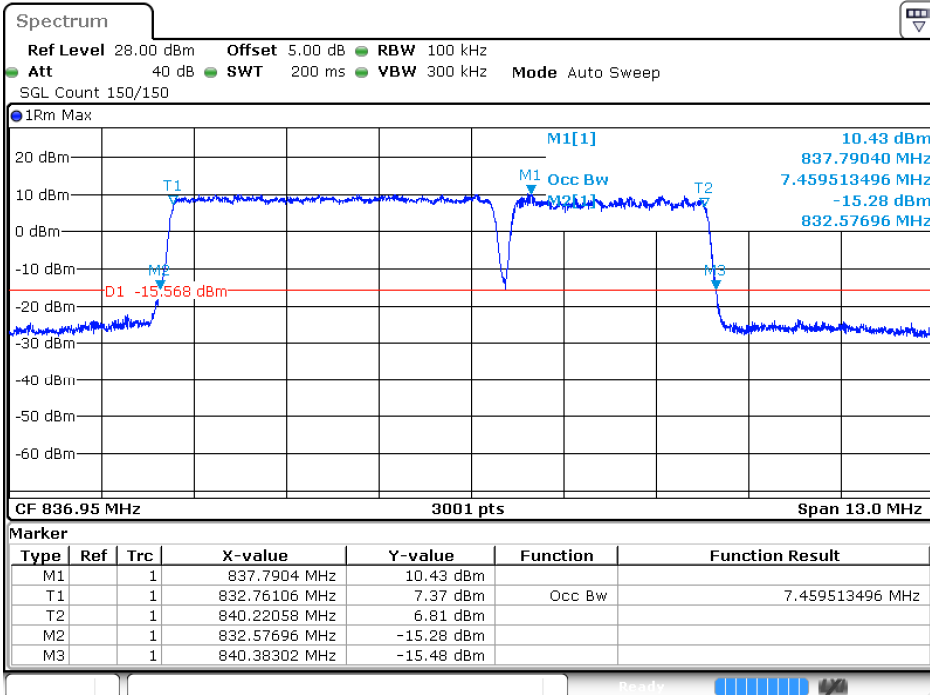


CA 5B 25RB+15RB QPSK 20425+20464 25RB#0+15RB#0



Date: 18.AUG.2020 17:01:25

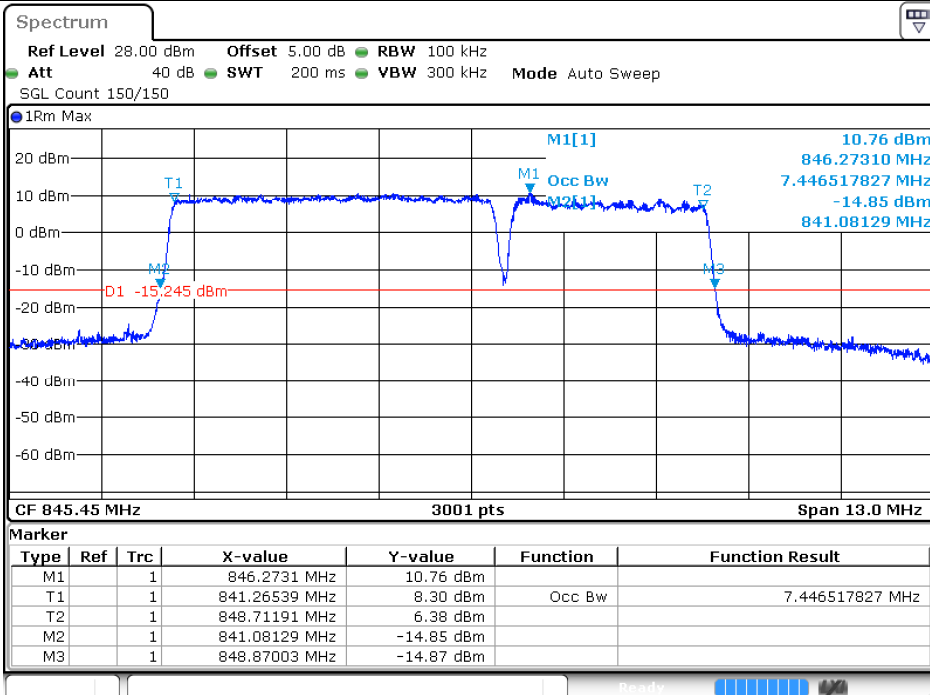
CA 5B 25RB+15RB QPSK 20510+20549 25RB#0+15RB#0



Date: 18.AUG.2020 17:03:40

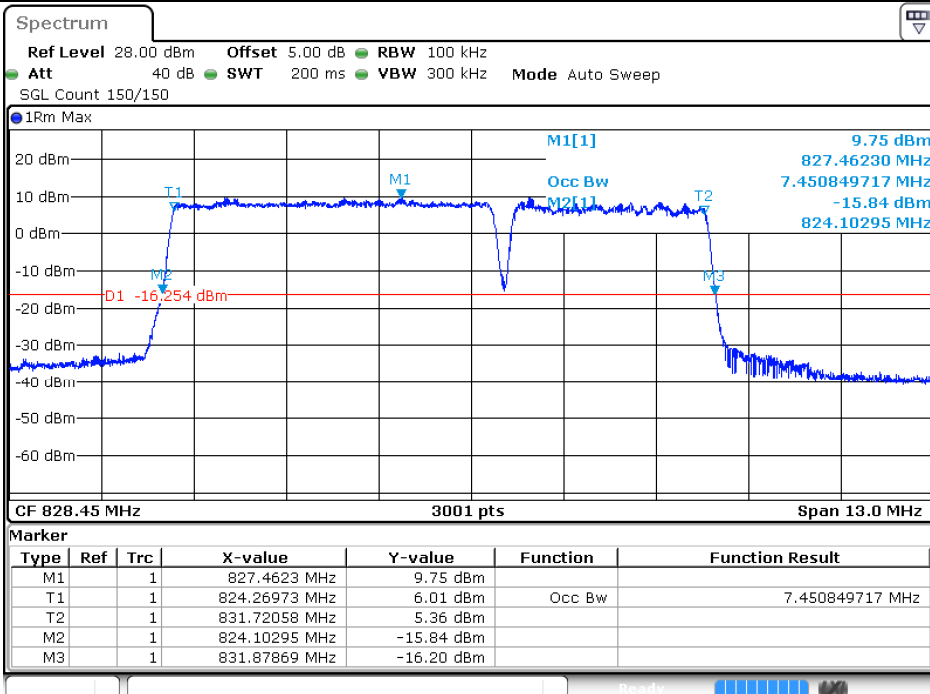


CA 5B 25RB+15RB QPSK 20595+20634 25RB#0+15RB#0



Date: 18.AUG.2020 17:05:52

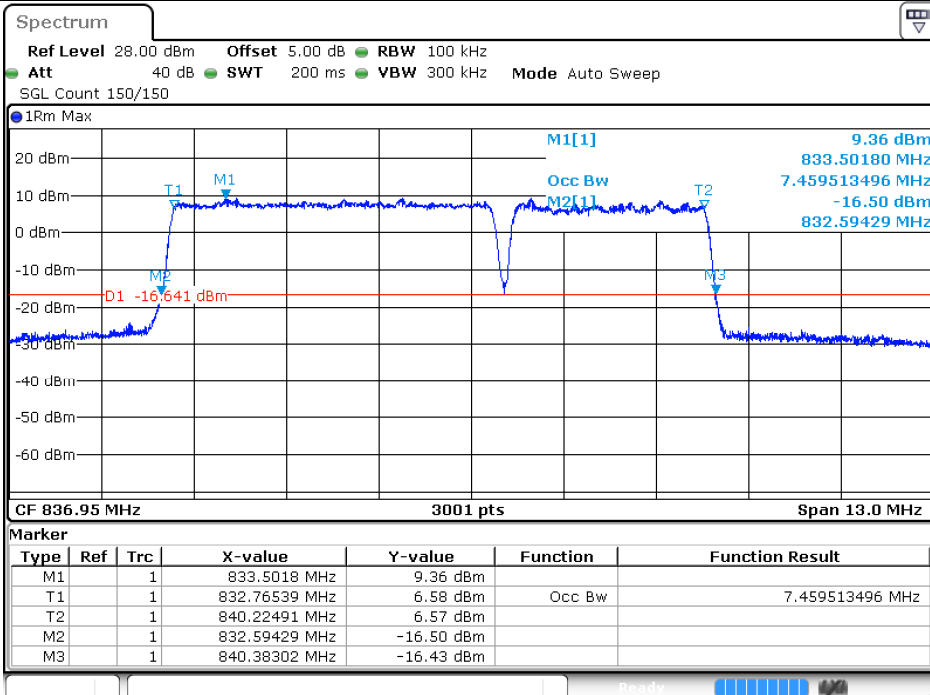
CA 5B 25RB+15RB 16QAM 20425+20464 25RB#0+15RB#0



Date: 18.AUG.2020 17:02:04

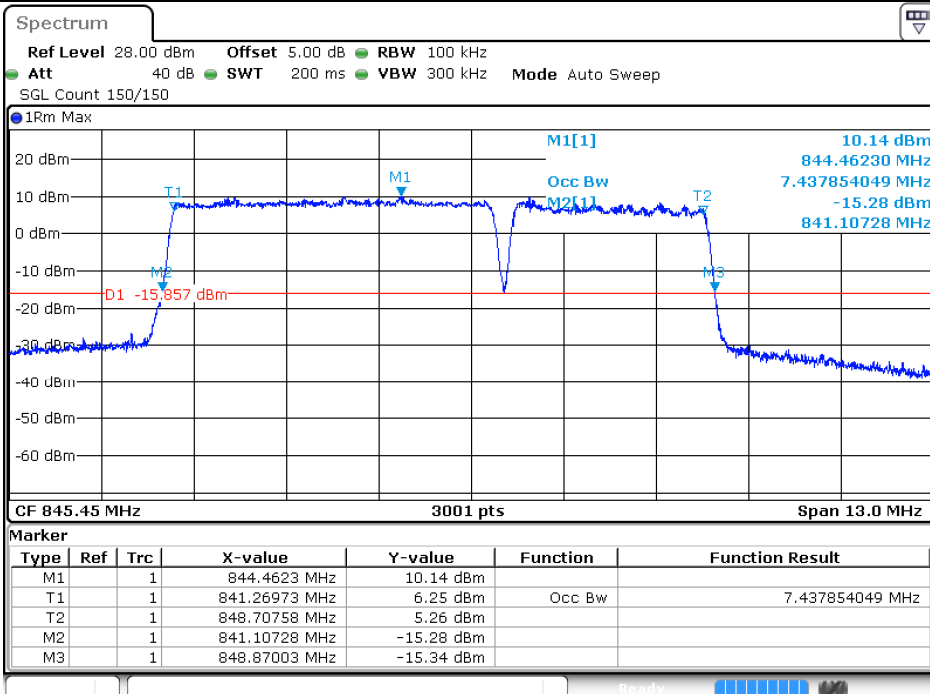


CA 5B 25RB+15RB 16QAM 20510+20549 25RB#0+15RB#0



Date: 18.AUG.2020 17:04:18

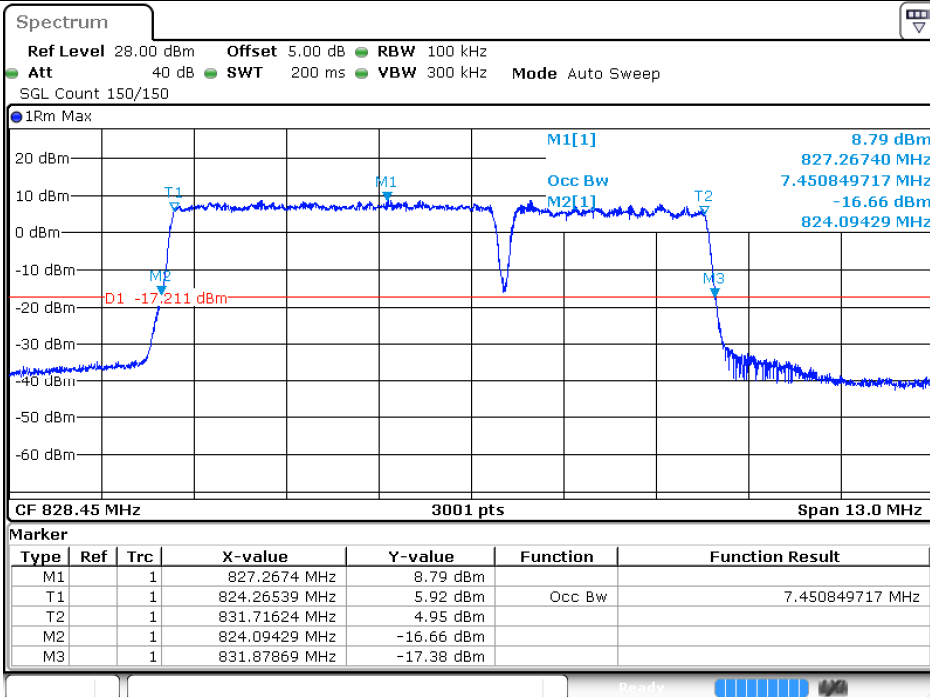
CA 5B 25RB+15RB 16QAM 20595+20634 25RB#0+15RB#0



Date: 18.AUG.2020 17:06:31

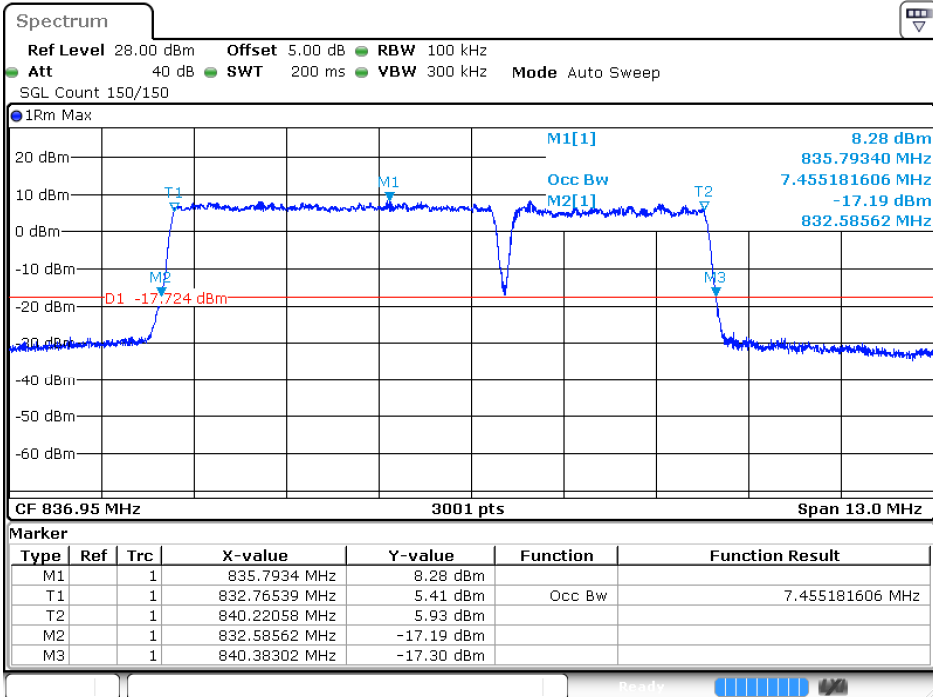


CA 5B 25RB+15RB 64QAM 20425+20464 25RB#0+15RB#0



Date: 18.AUG.2020 17:02:43

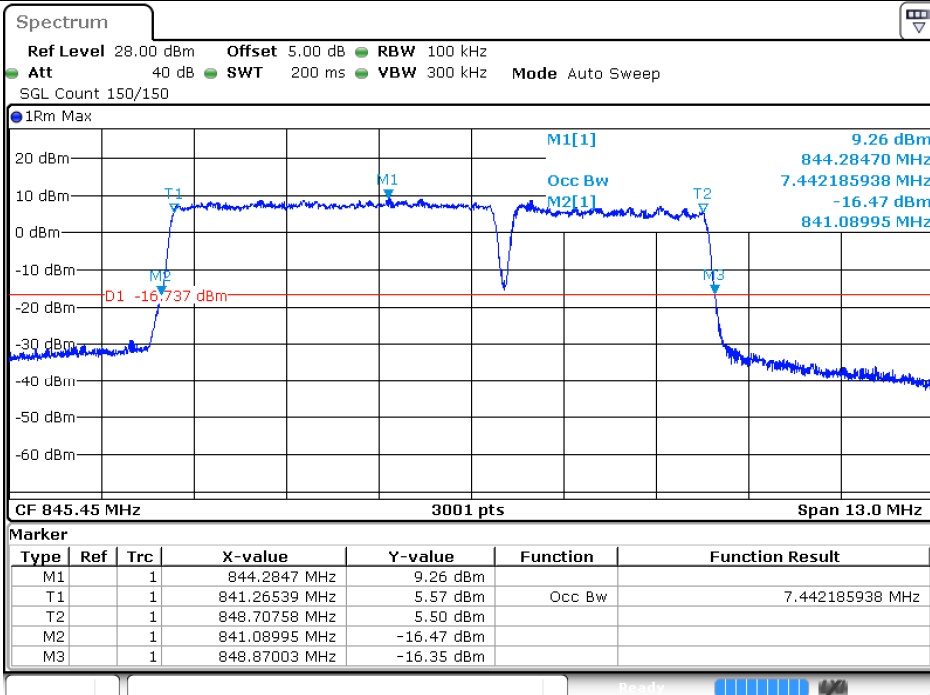
CA 5B 25RB+15RB 64QAM 20510+20549 25RB#0+15RB#0



Date: 18.AUG.2020 17:04:56

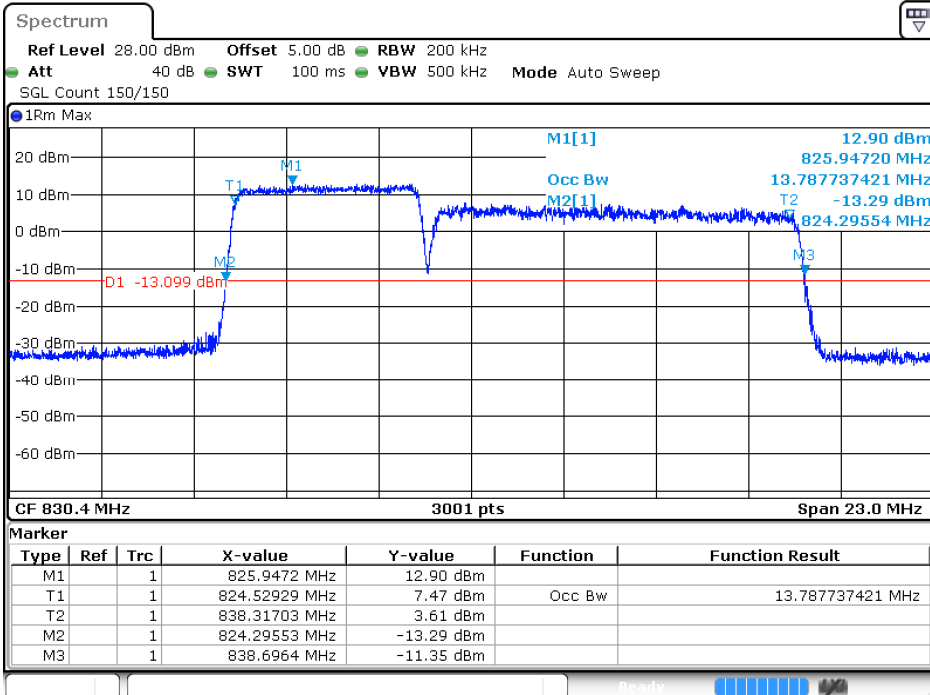


CA 5B 25RB+15RB 64QAM 20595+20634 25RB#0+15RB#0



Date: 18.AUG.2020 17:07:09

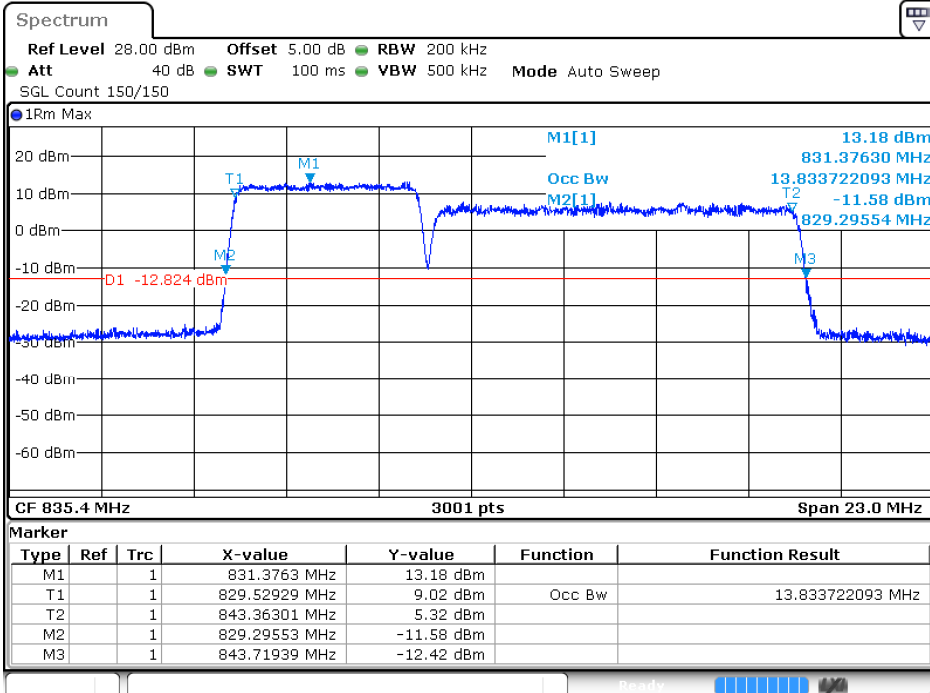
CA 5B 25RB+50RB QPSK 20428+20500 25RB#0+50RB#0



Date: 18.AUG.2020 18:51:40

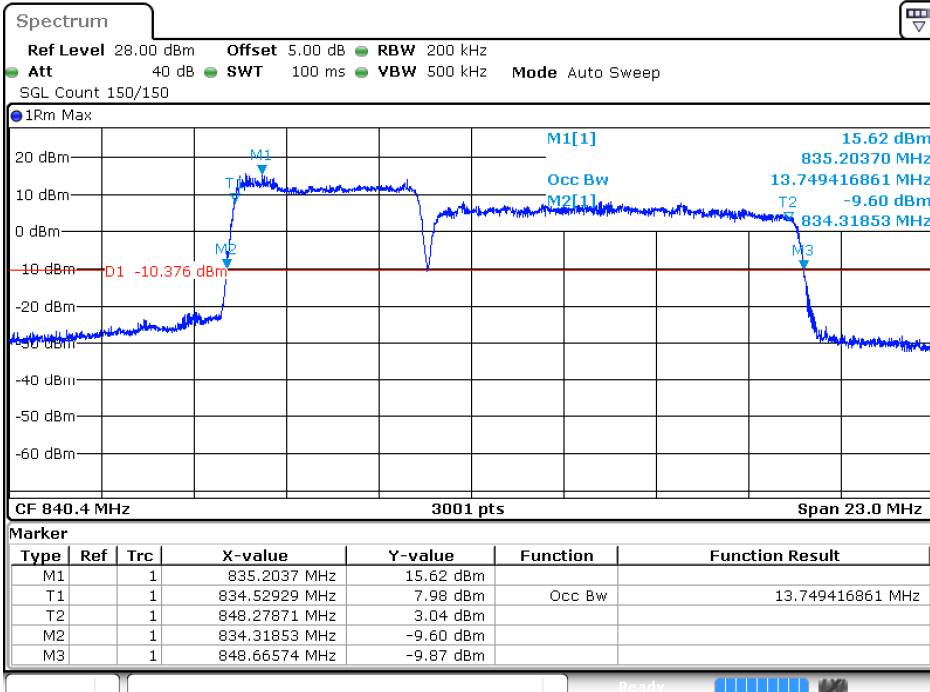


CA 5B 25RB+50RB QPSK 20478+20550 25RB#0+50RB#0



Date: 18.AUG.2020 18:53:10

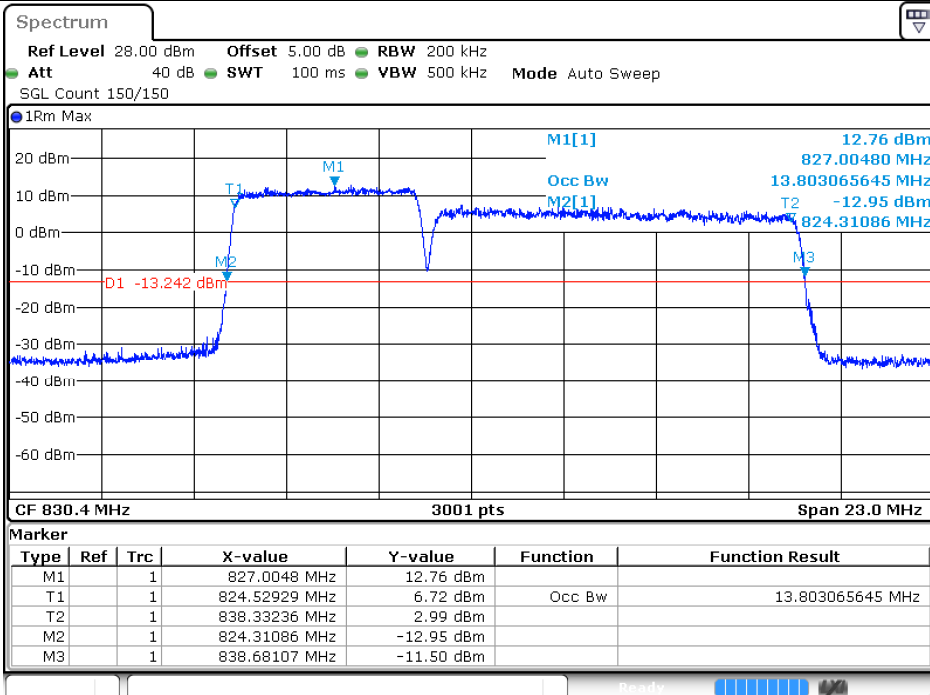
CA 5B 25RB+50RB QPSK 20528+20600 25RB#0+50RB#0



Date: 18.AUG.2020 18:54:32

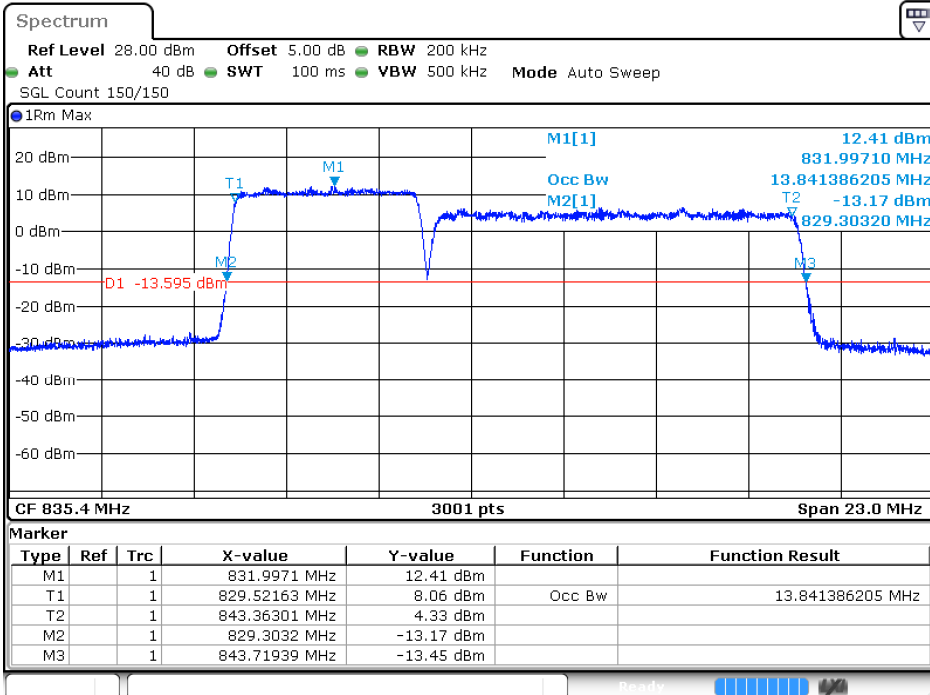


CA 5B 25RB+50RB 16QAM 20428+20500 25RB#0+50RB#0



Date: 18.AUG.2020 18:52:04

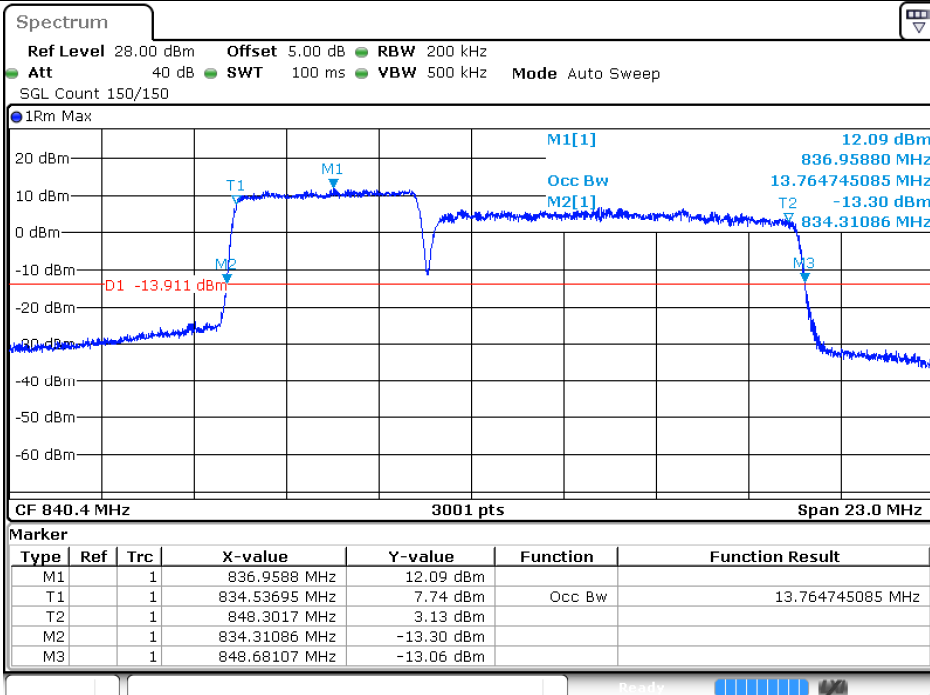
CA 5B 25RB+50RB 16QAM 20478+20550 25RB#0+50RB#0



Date: 18.AUG.2020 18:53:33

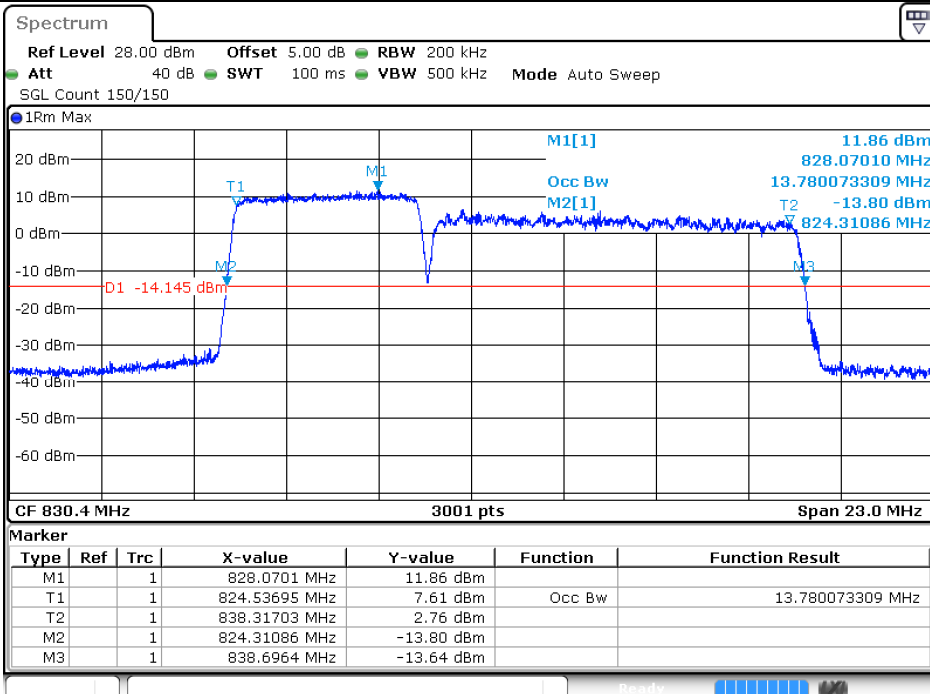


CA 5B 25RB+50RB 16QAM 20528+20600 25RB#0+50RB#0



Date: 18.AUG.2020 18:54:55

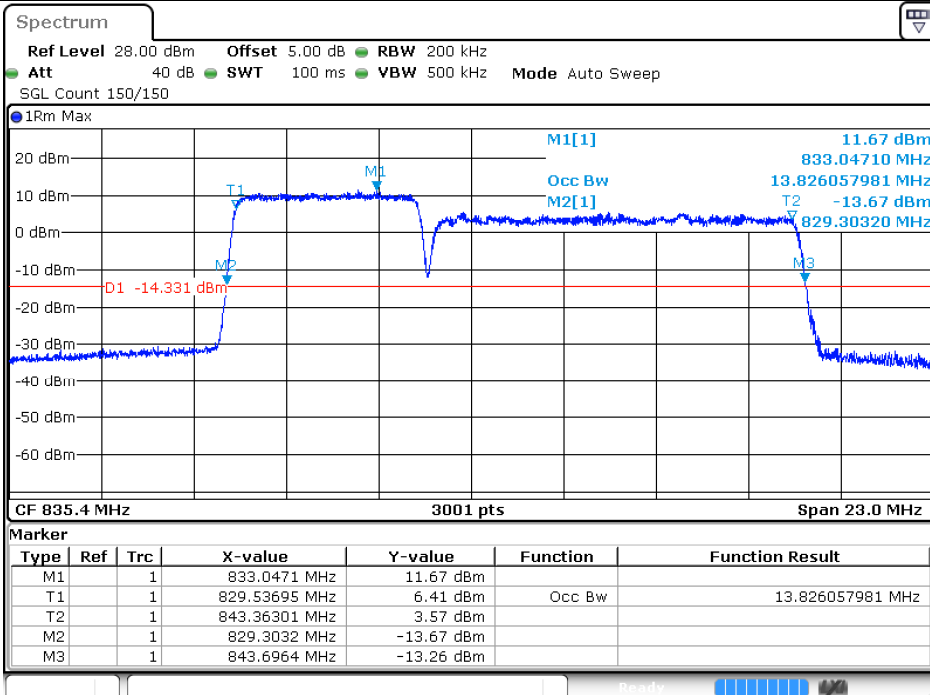
CA 5B 25RB+50RB 64QAM 20428+20500 25RB#0+50RB#0



Date: 18.AUG.2020 18:52:29

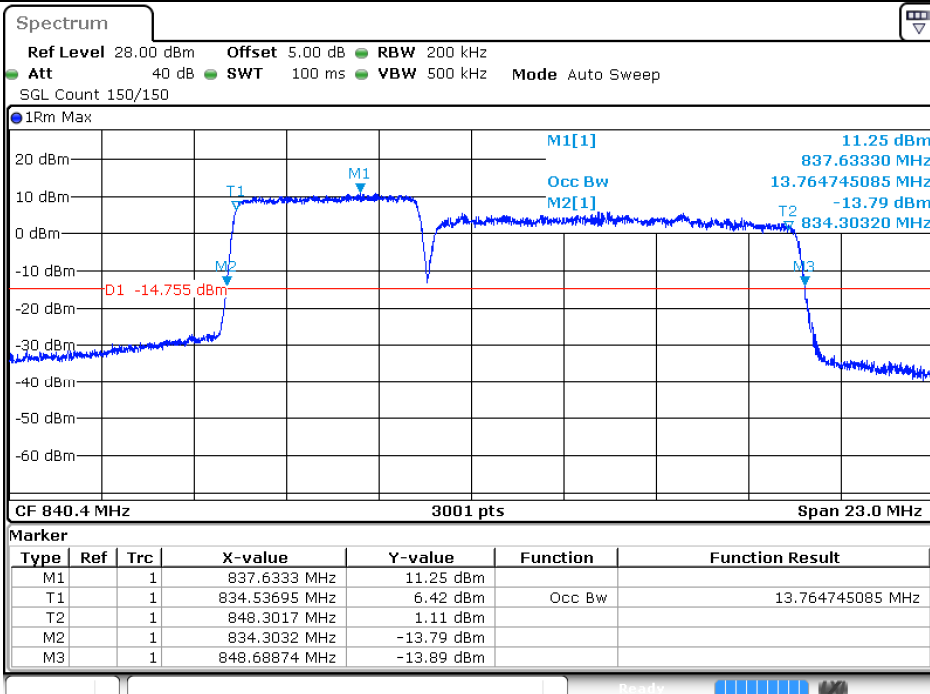


CA 5B 25RB+50RB 64QAM 20478+20550 25RB#0+50RB#0



Date: 18.AUG.2020 18:53:56

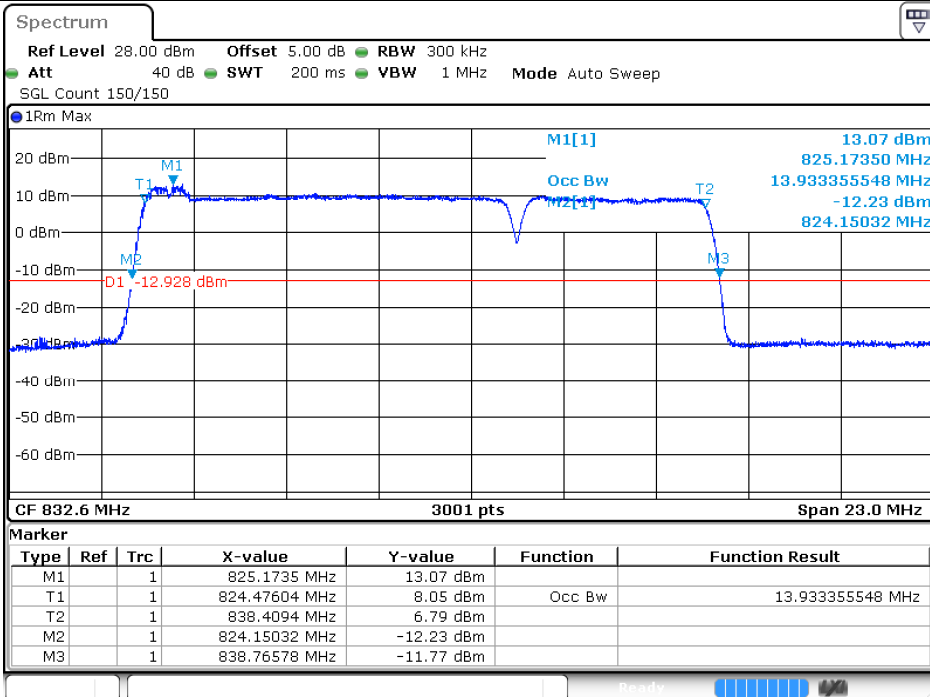
CA 5B 25RB+50RB 64QAM 20528+20600 25RB#0+50RB#0



Date: 18.AUG.2020 18:55:18

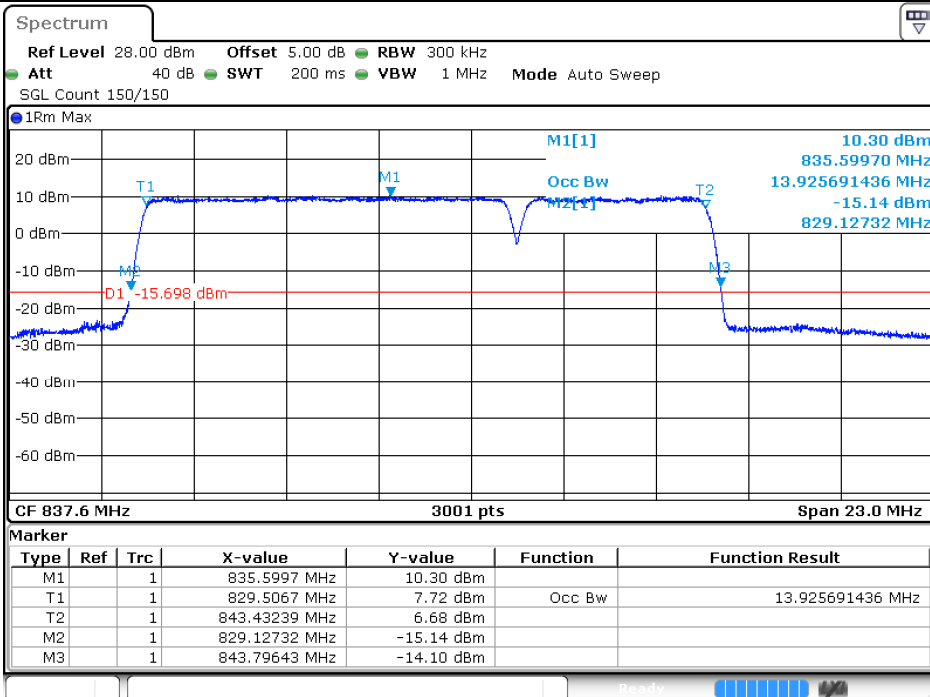


CA 5B 50RB+25RB QPSK 20450+20522 50RB#0+25RB#0



Date: 18.AUG.2020 17:20:43

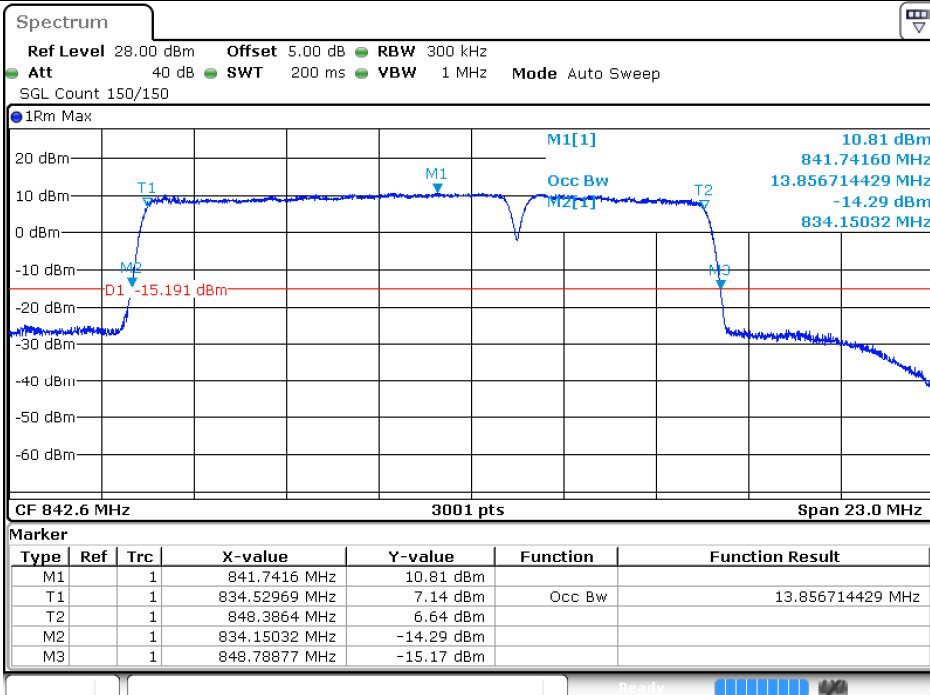
CA 5B 50RB+25RB QPSK 20500+20572 50RB#0+25RB#0



Date: 18.AUG.2020 17:22:53

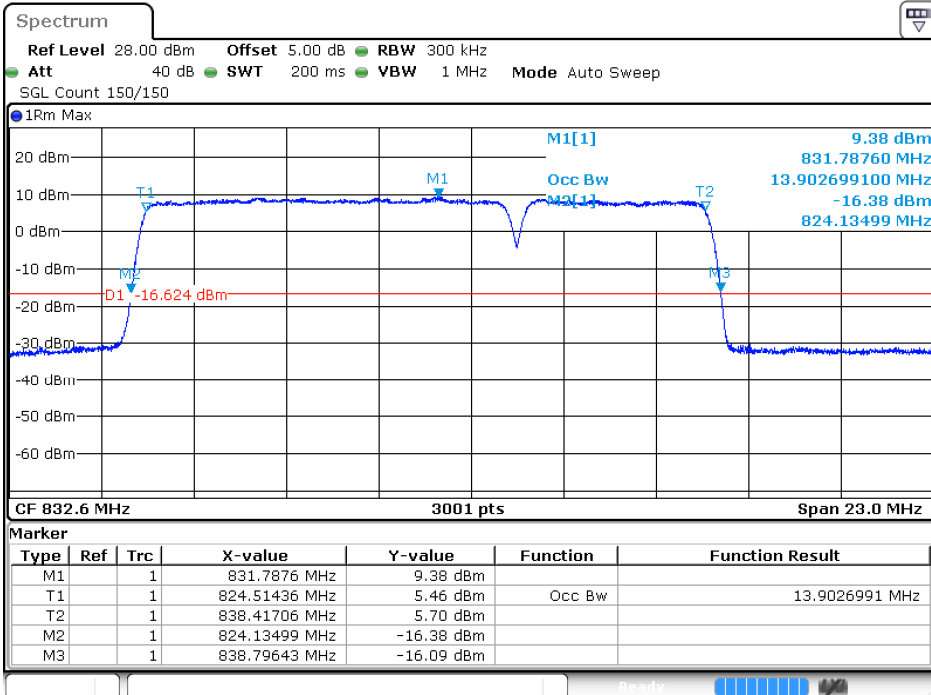


CA 5B 50RB+25RB QPSK 20550+20622 50RB#0+25RB#0



Date: 18.AUG.2020 17:25:01

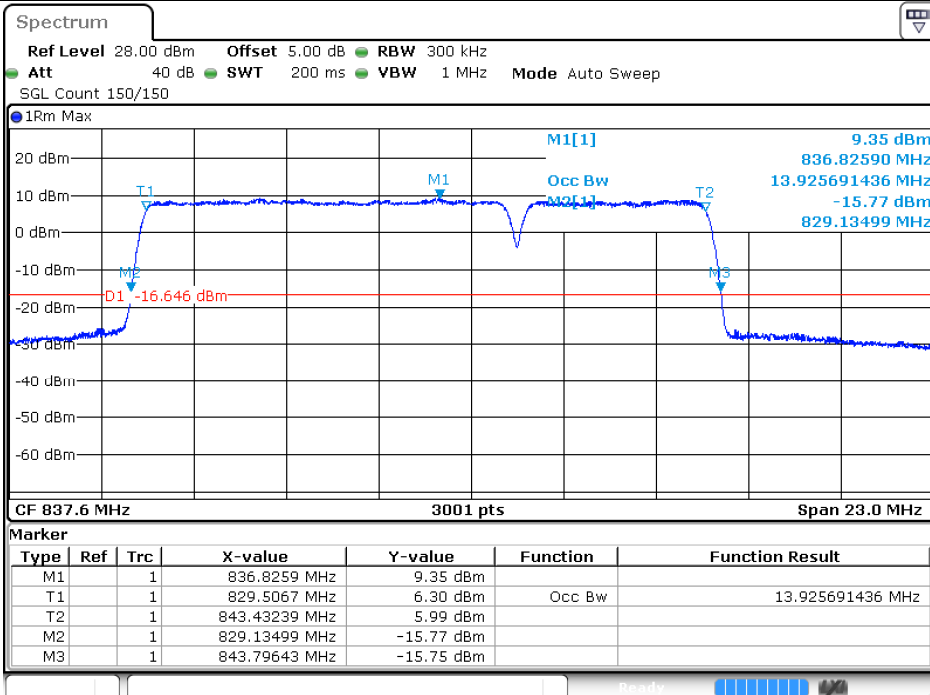
CA 5B 50RB+25RB 16QAM 20450+20522 50RB#0+25RB#0



Date: 18.AUG.2020 17:21:21

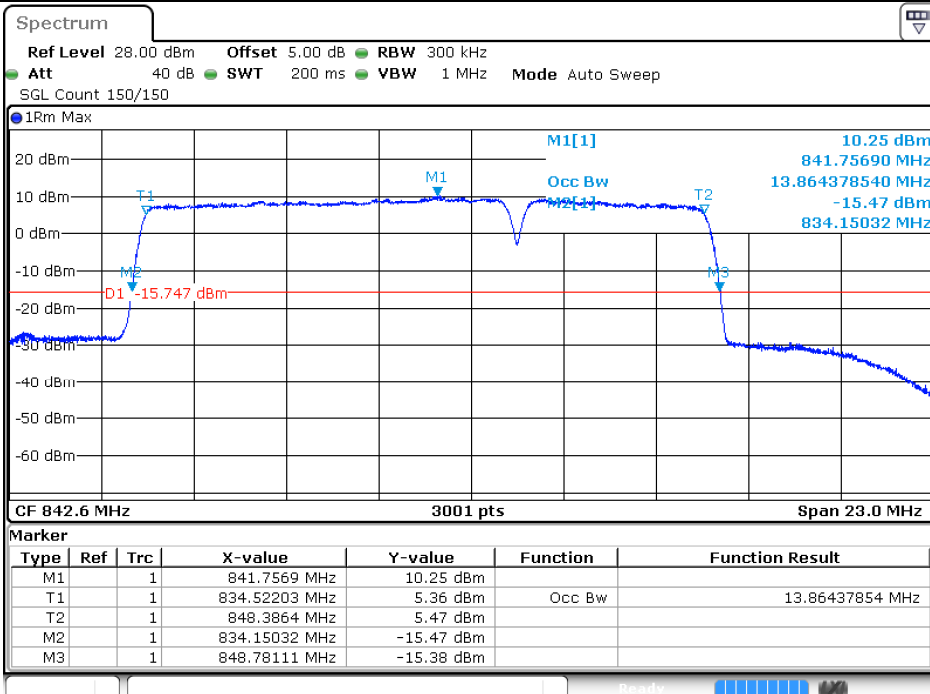


CA 5B 50RB+25RB 16QAM 20500+20572 50RB#0+25RB#0



Date: 18.AUG.2020 17:23:30

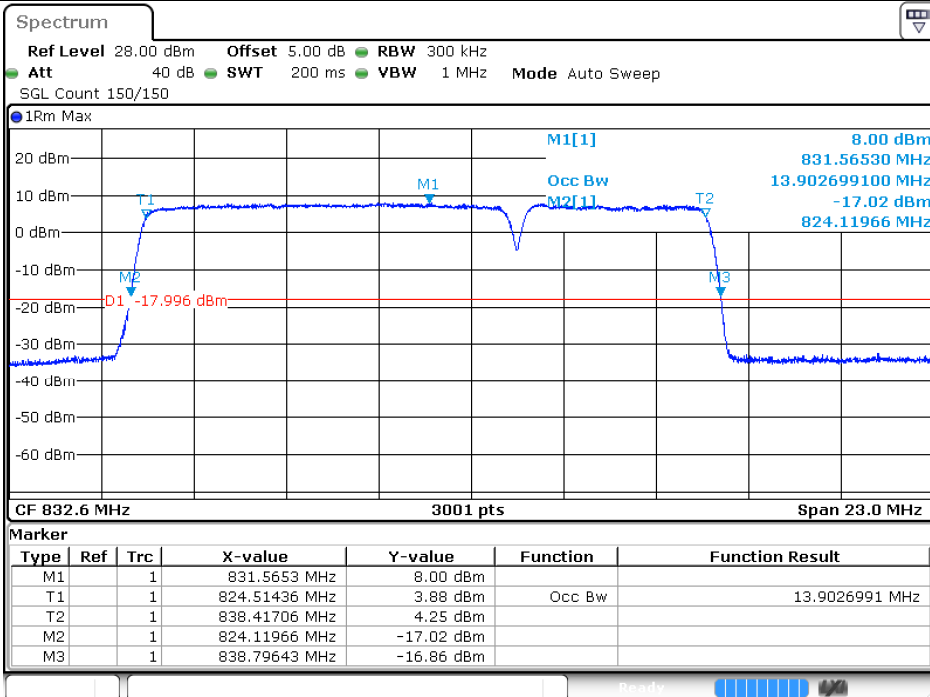
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Date: 18.AUG.2020 17:25:39

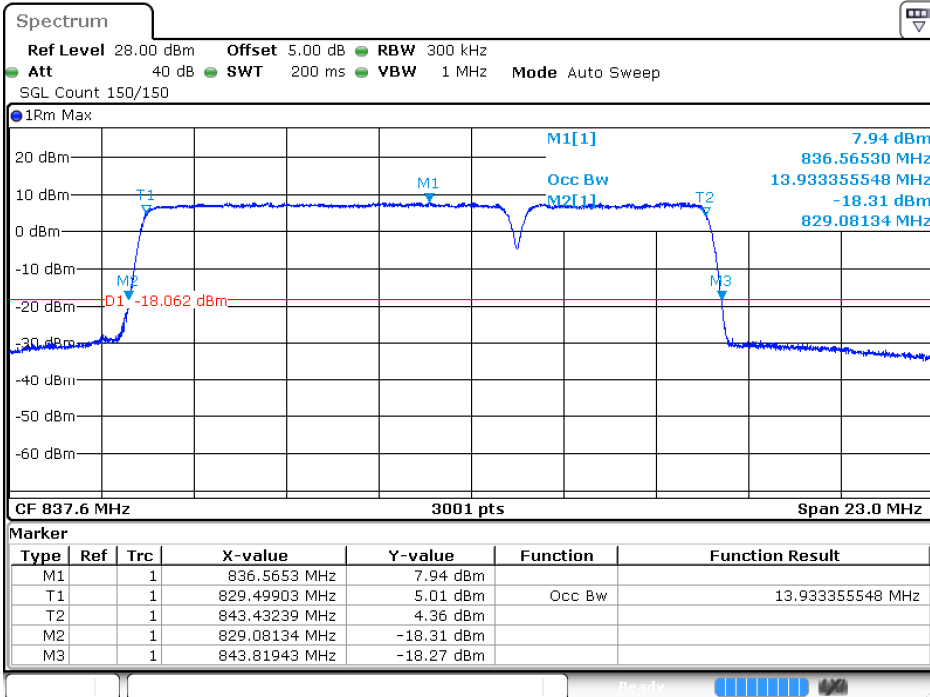


CA 5B 50RB+25RB 64QAM 20450+20522 50RB#0+25RB#0



Date: 18.AUG.2020 17:21:58

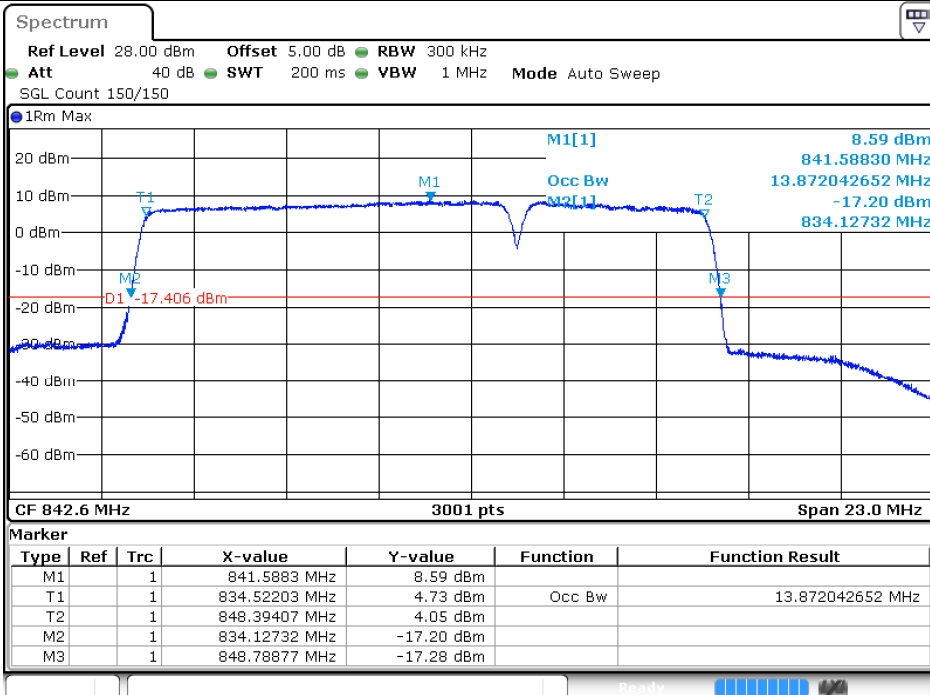
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Date: 18.AUG.2020 17:24:08

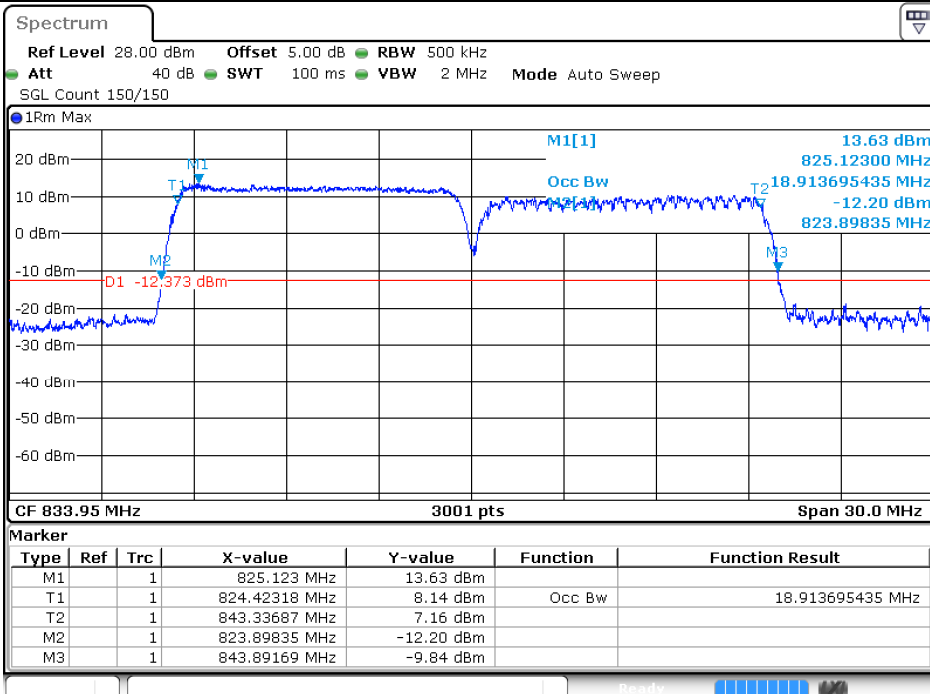


CA 5B 50RB+25RB 64QAM 20550+20622 50RB#0+25RB#0



Date: 18.AUG.2020 17:26:16

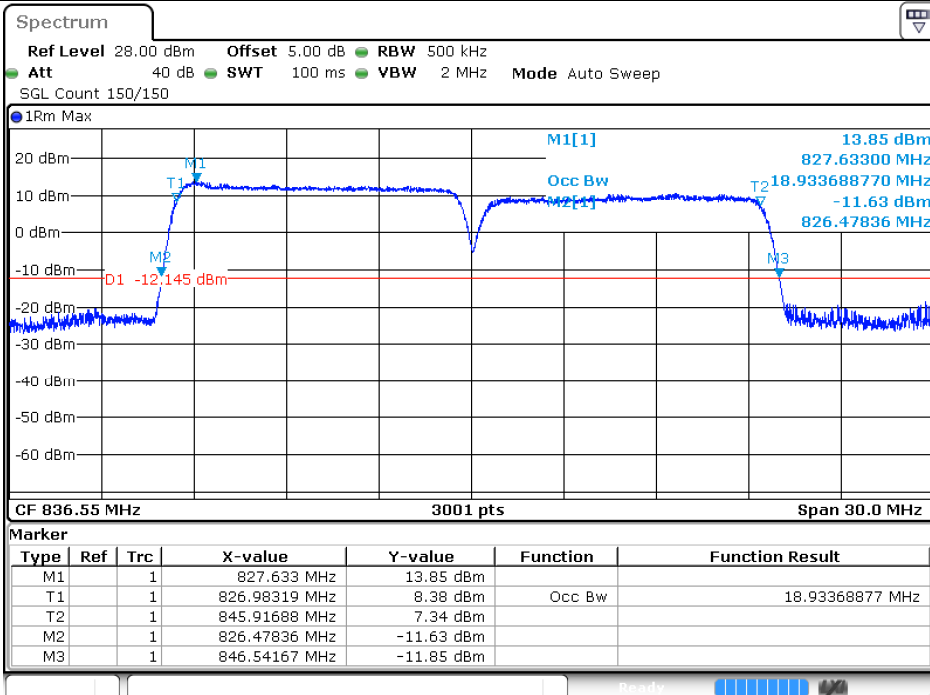
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Date: 18.AUG.2020 15:54:49

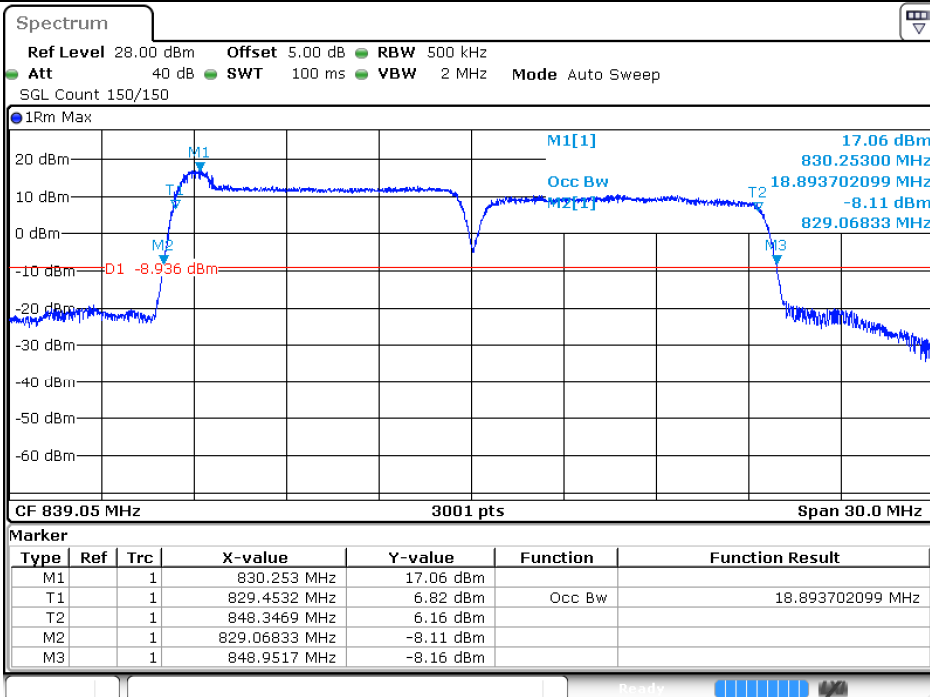


CA 5B 50RB+50RB QPSK 20476+20575 50RB#0+50RB#0



Date: 18.AUG.2020 15:56:00

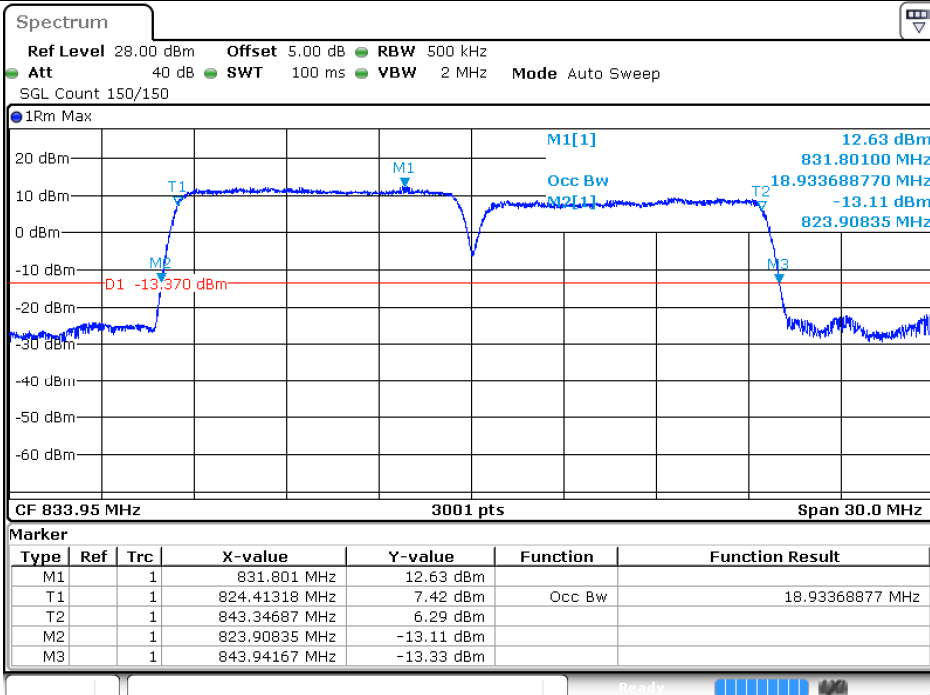
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Date: 18.AUG.2020 15:57:21

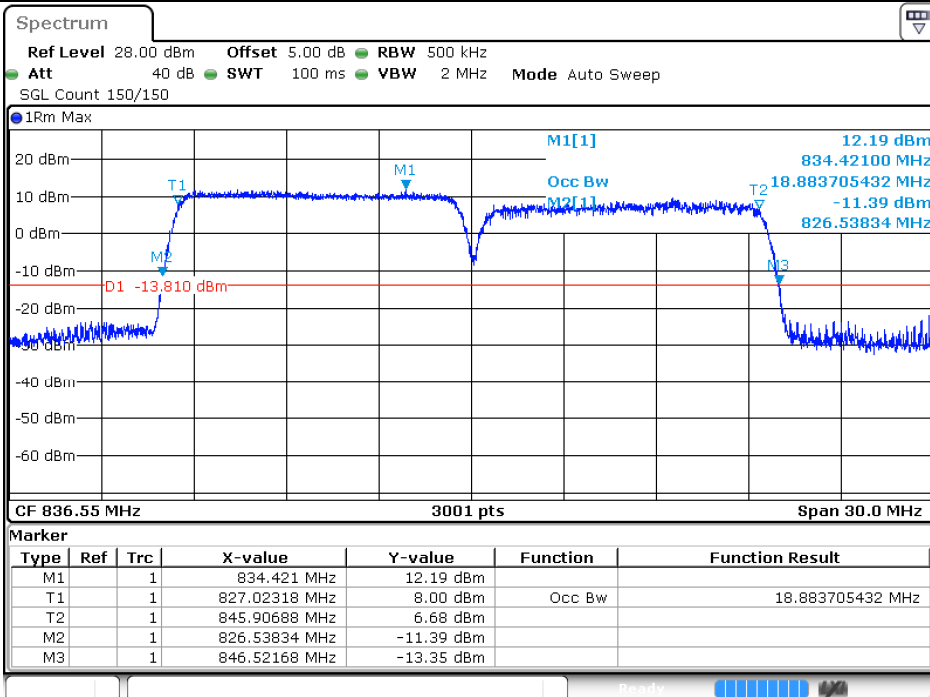


CA 5B 50RB+50RB 16QAM 20450+20549 50RB#0+50RB#0



Date: 18.AUG.2020 15:55:11

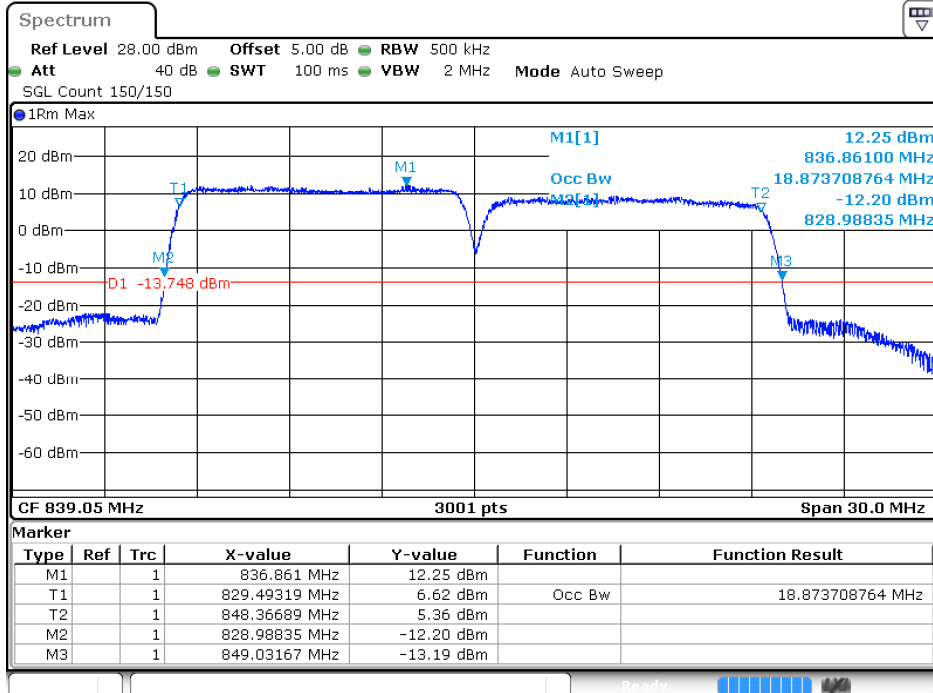
CA 5B 50RB+50RB 16QAM 20476+20575 50RB#0+50RB#0



Date: 18.AUG.2020 15:56:22

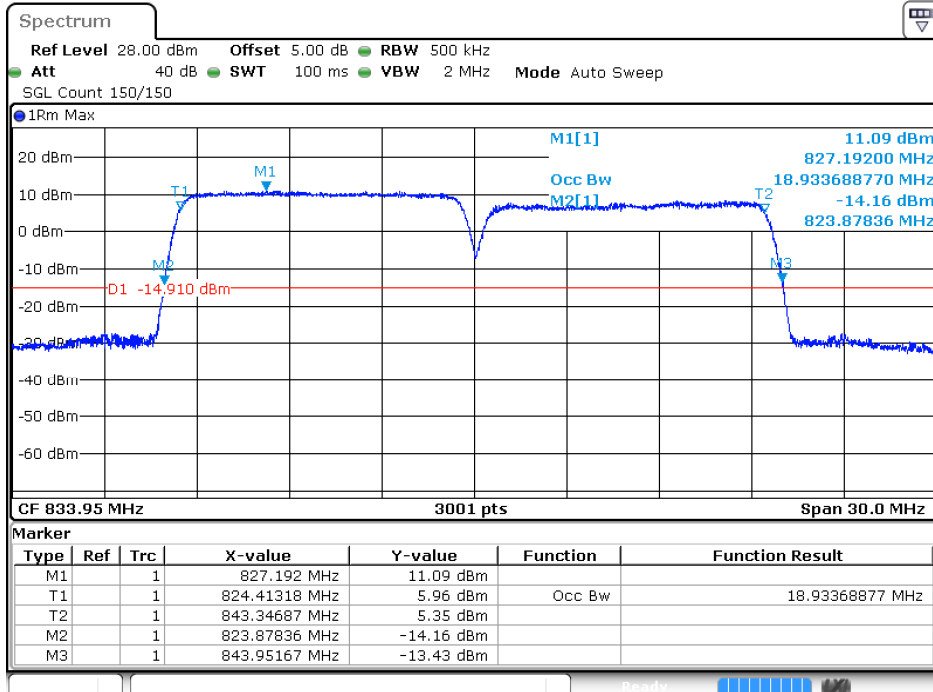


CA 5B 50RB+50RB 16QAM 20501+20600 50RB#0+50RB#0



Date: 18.AUG.2020 15:57:43

CA 5B 50RB+50RB 64QAM 20450+20549 50RB#0+50RB#0



Date: 18.AUG.2020 15:55:34



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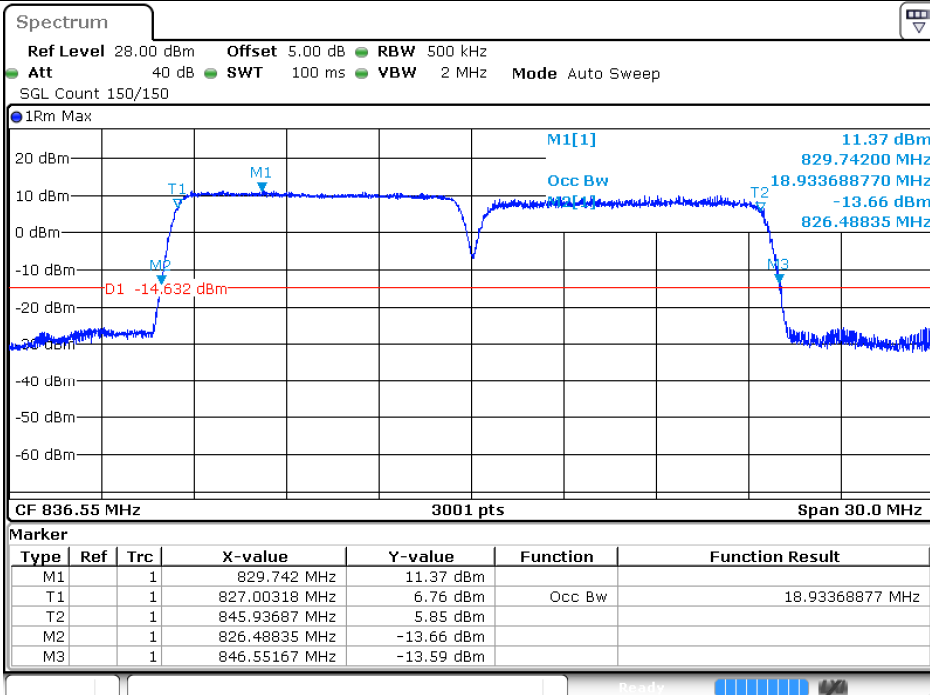
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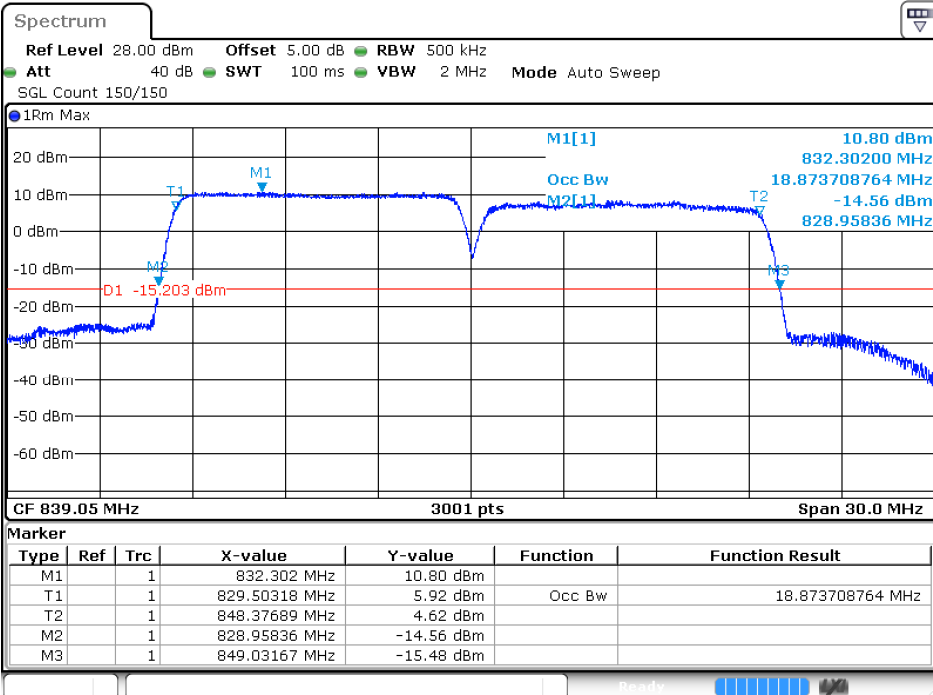
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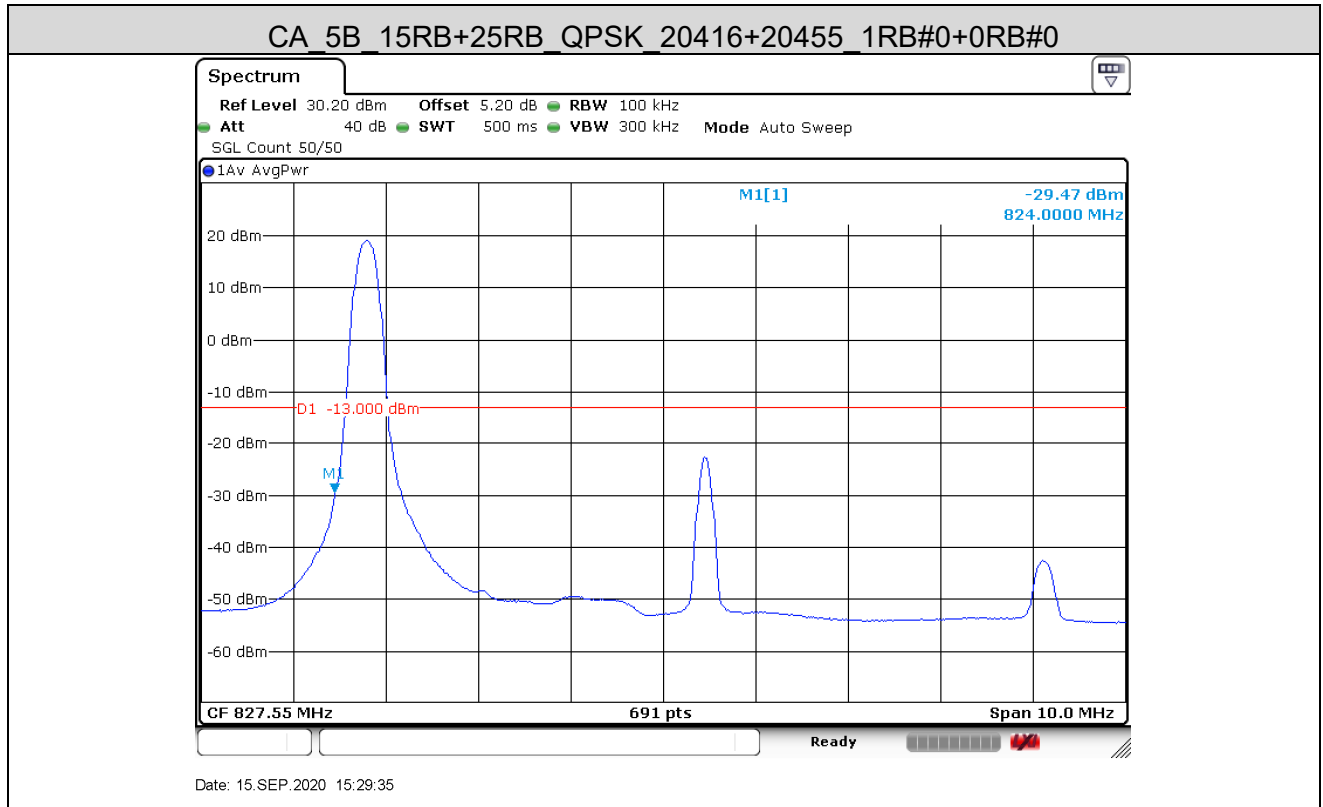
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5. Band Edges Compliance

5.1. For LTE

1.1.4 Test Band = LTE Band CA_5B



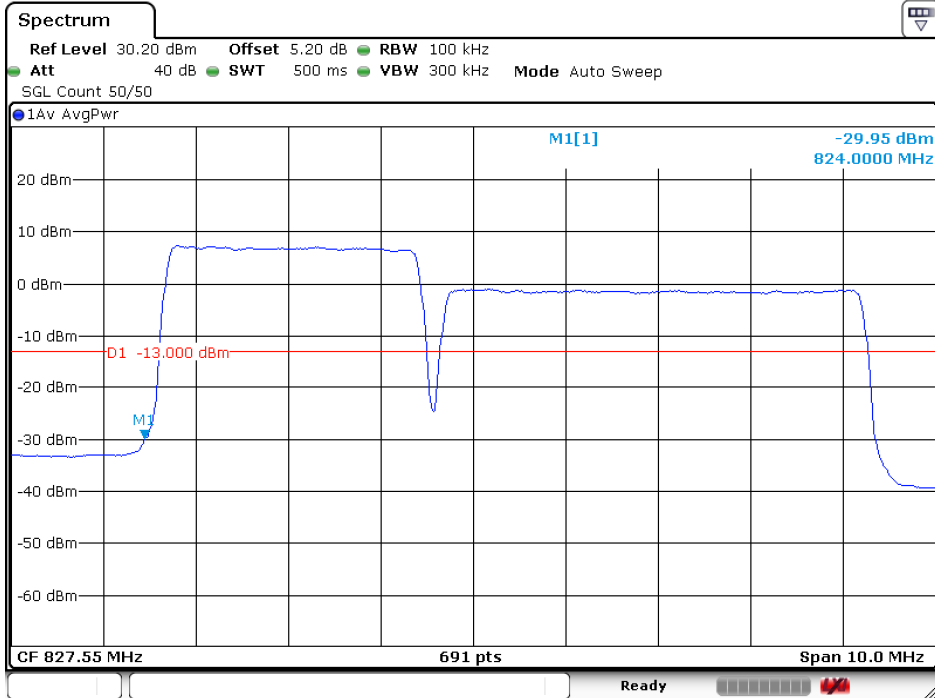
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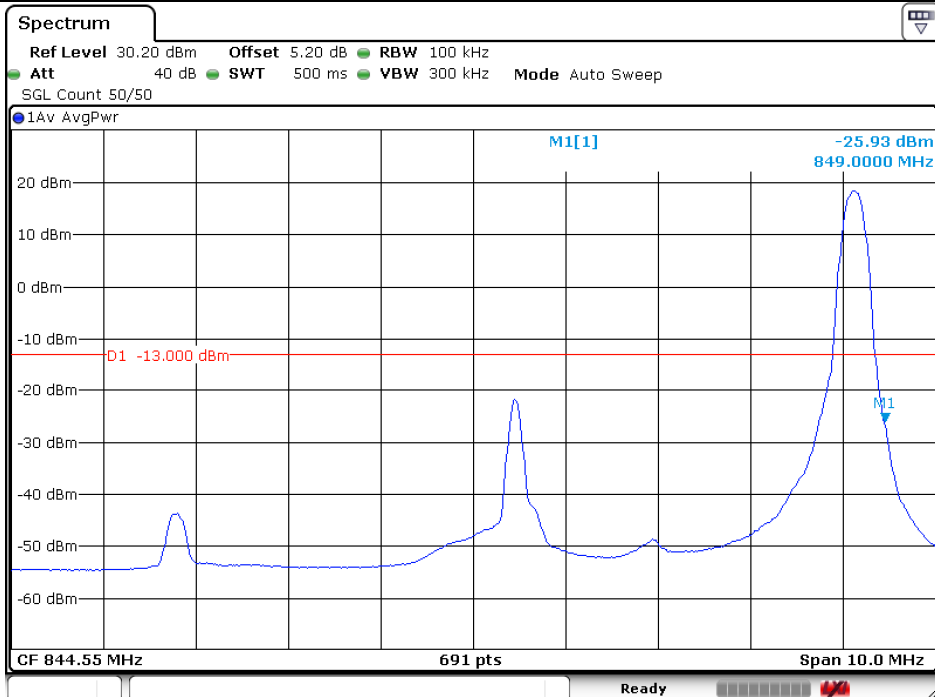
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CA 5B 15RB+25RB QPSK 20416+20455 15RB#0+25RB#0



Date: 15.SEP.2020 15:24:19

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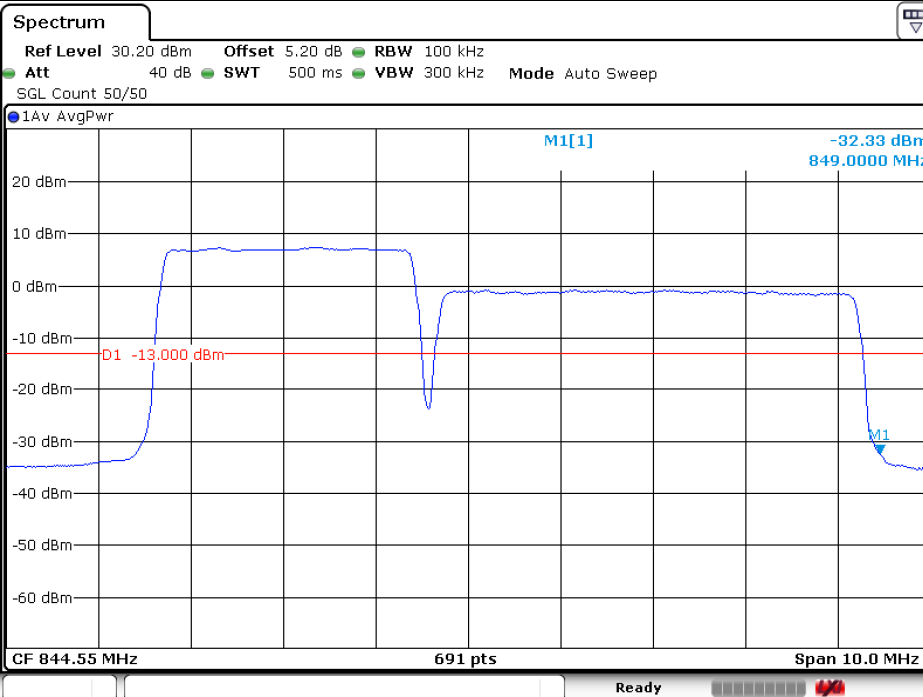


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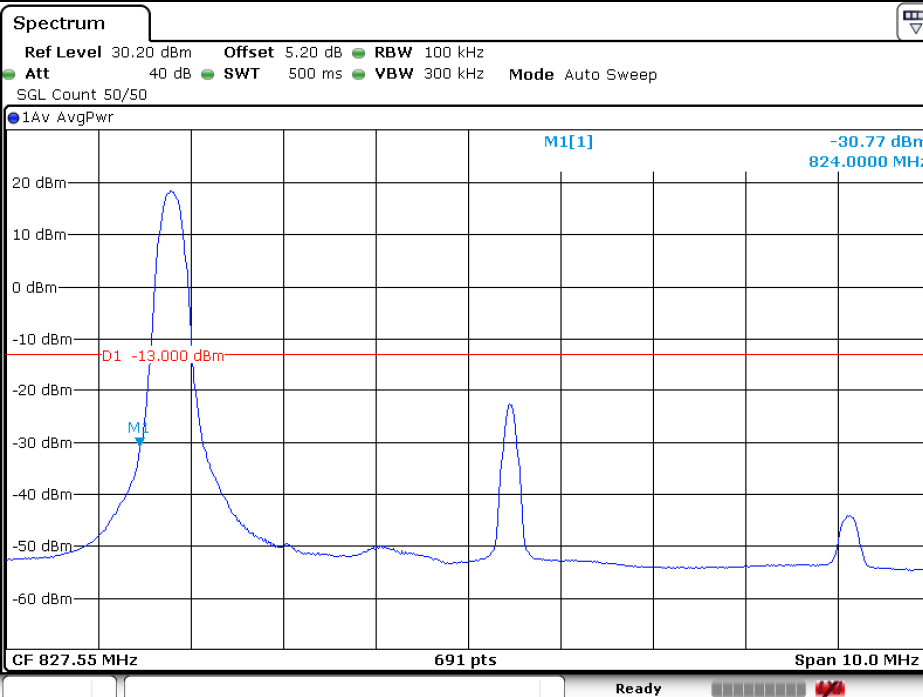
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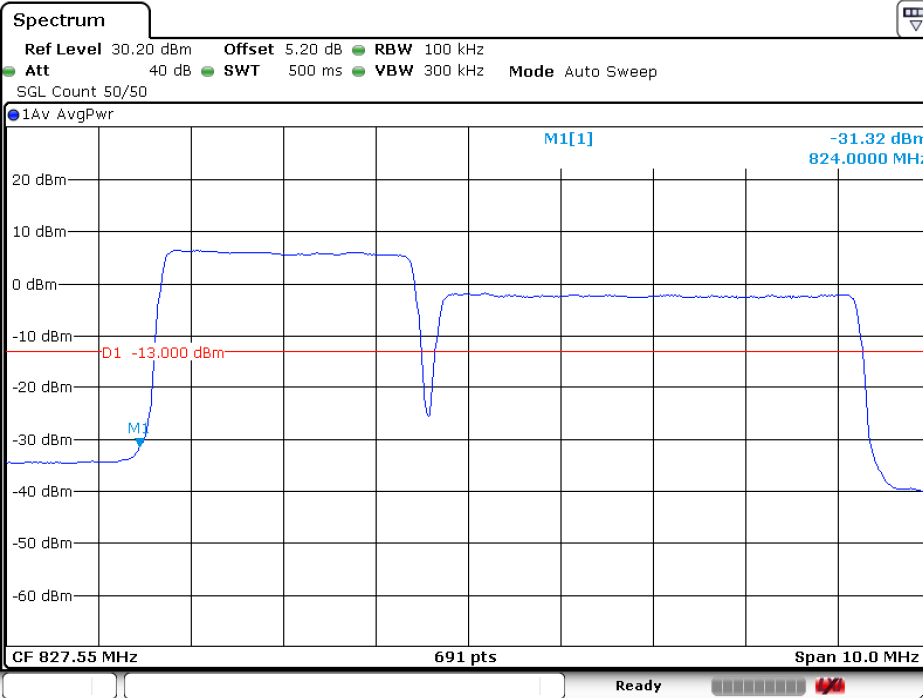
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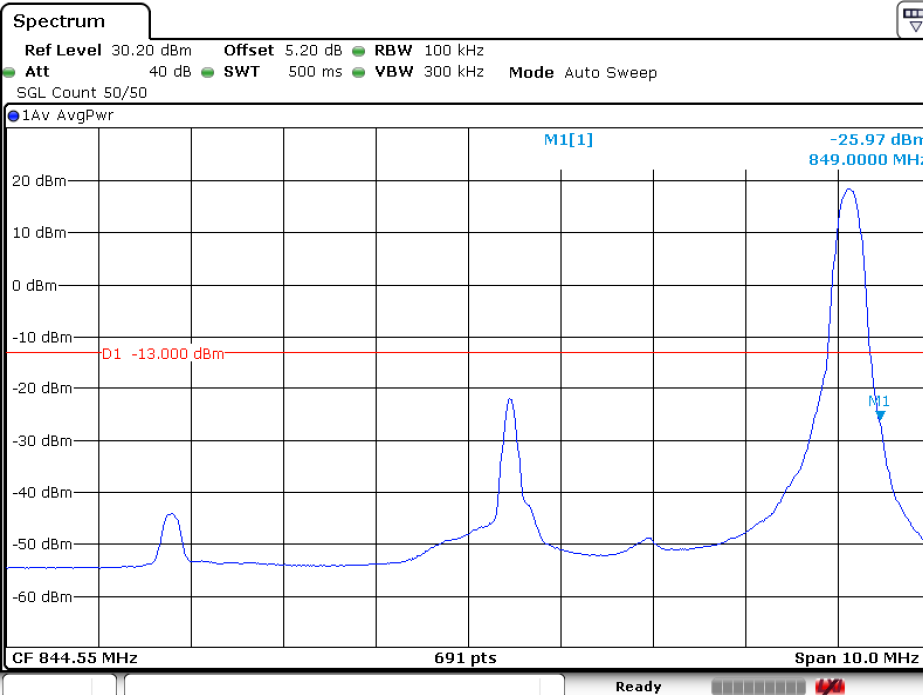


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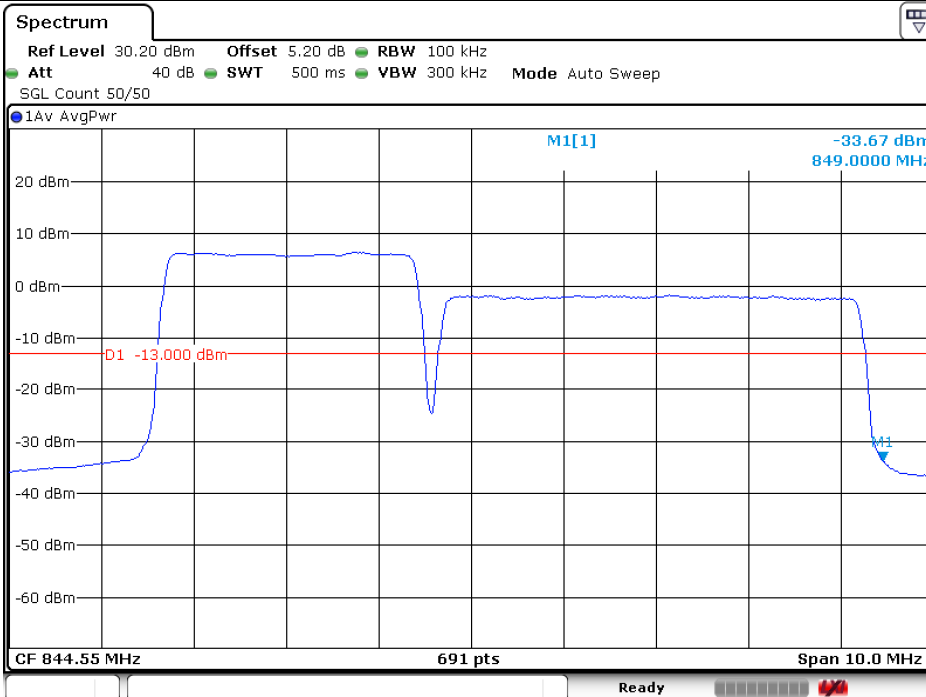
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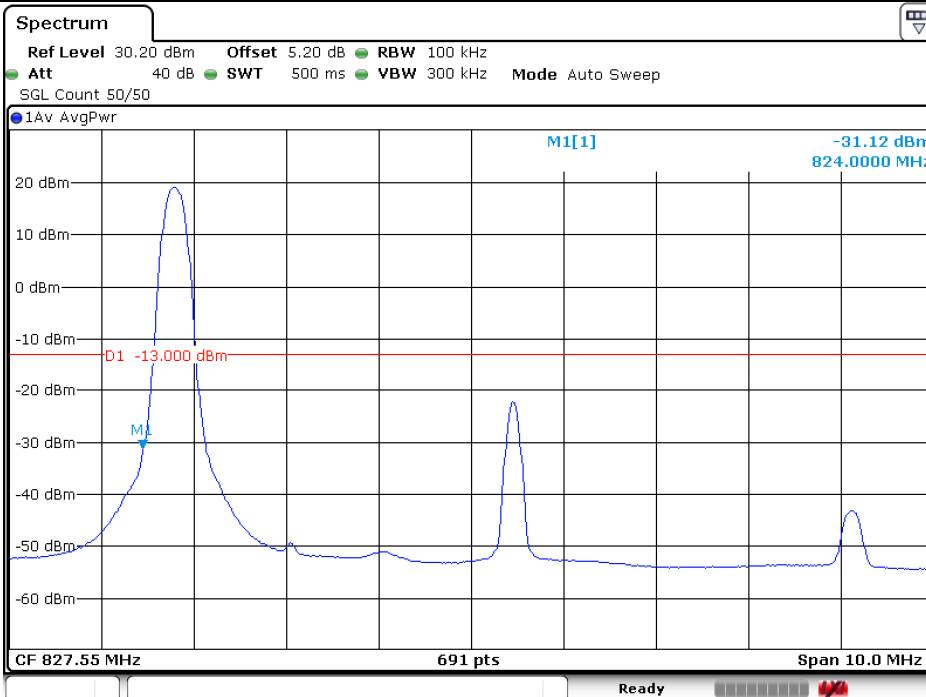


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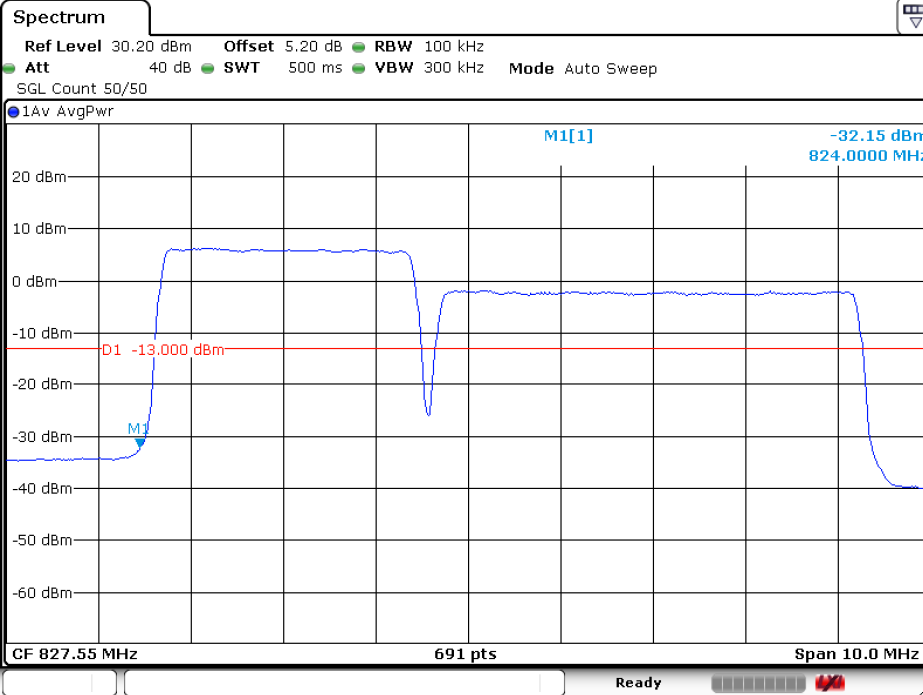
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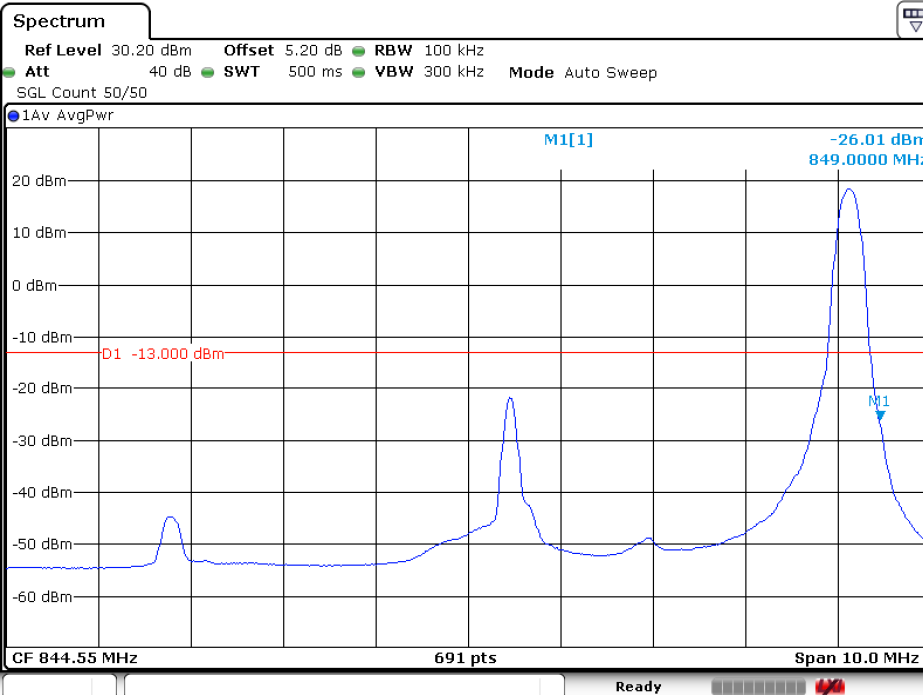


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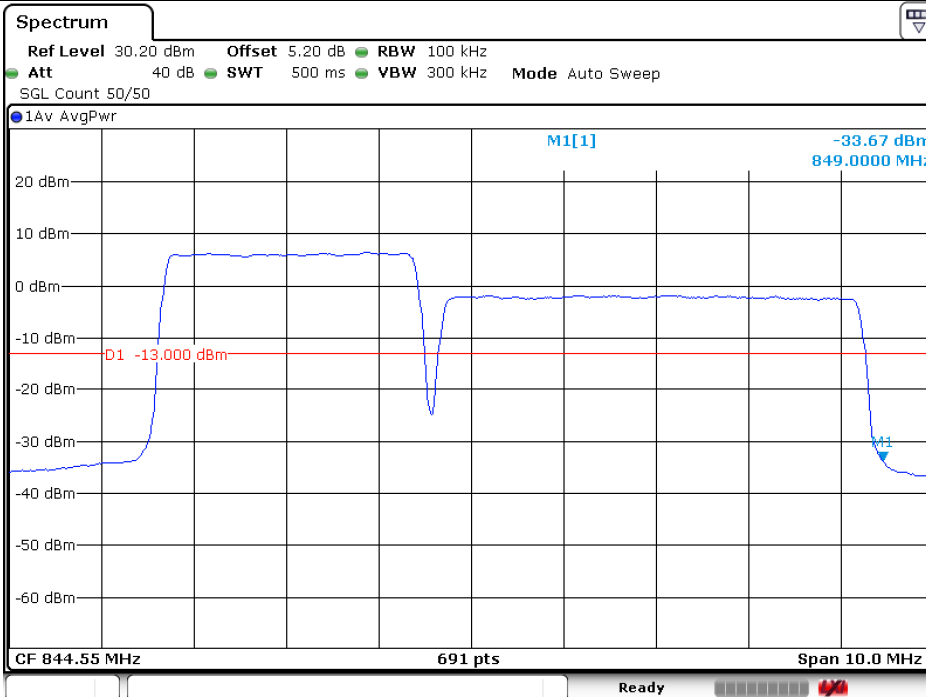
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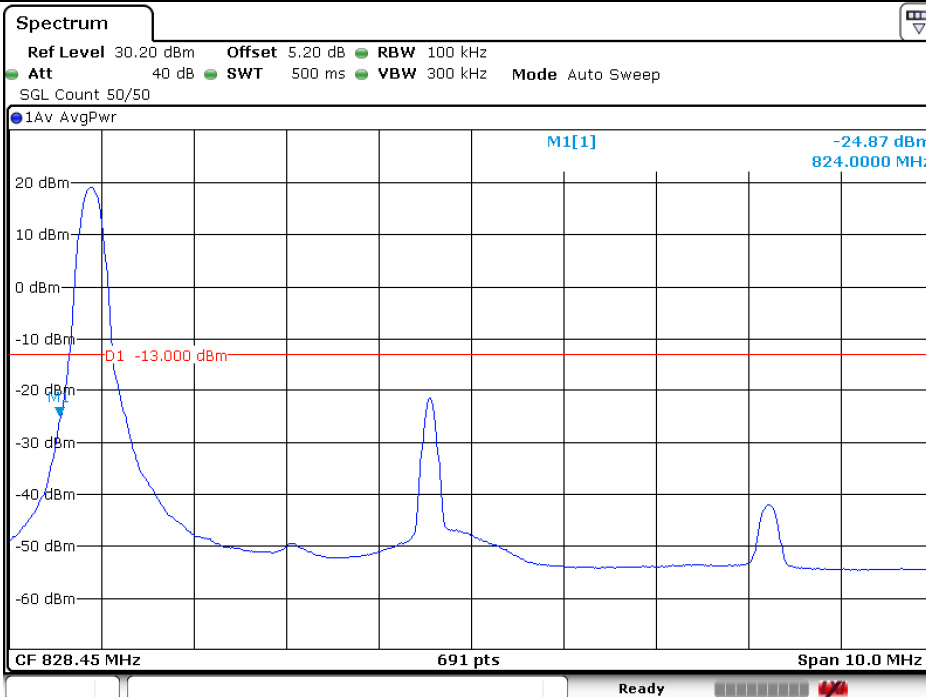


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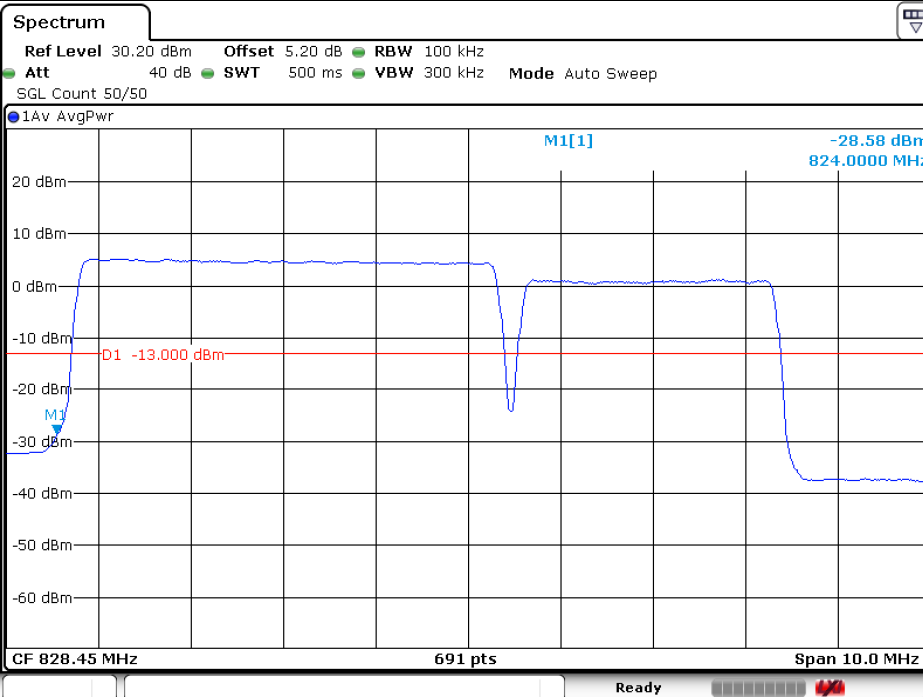
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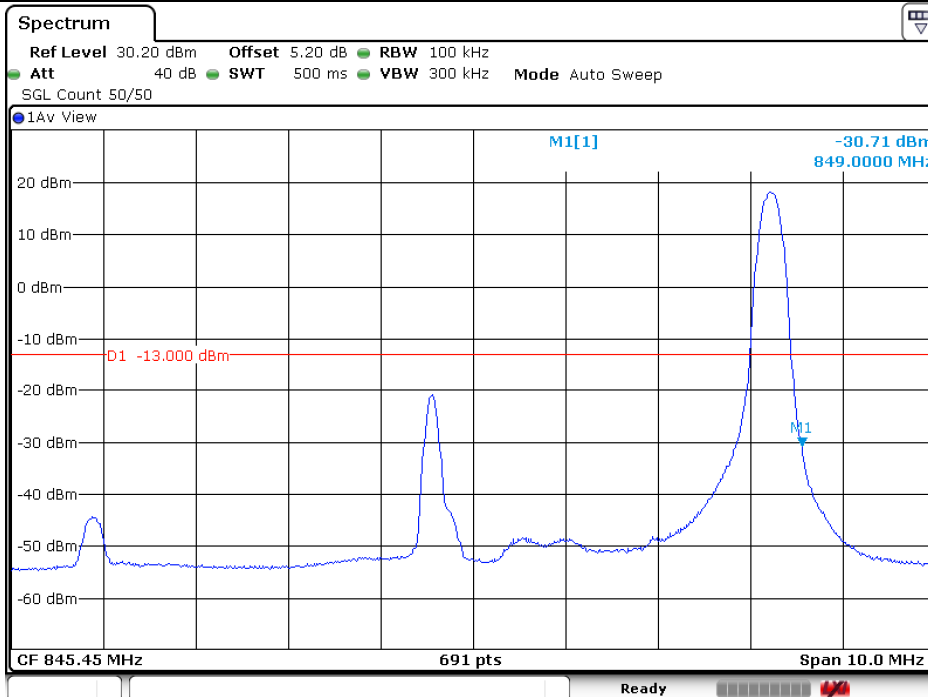


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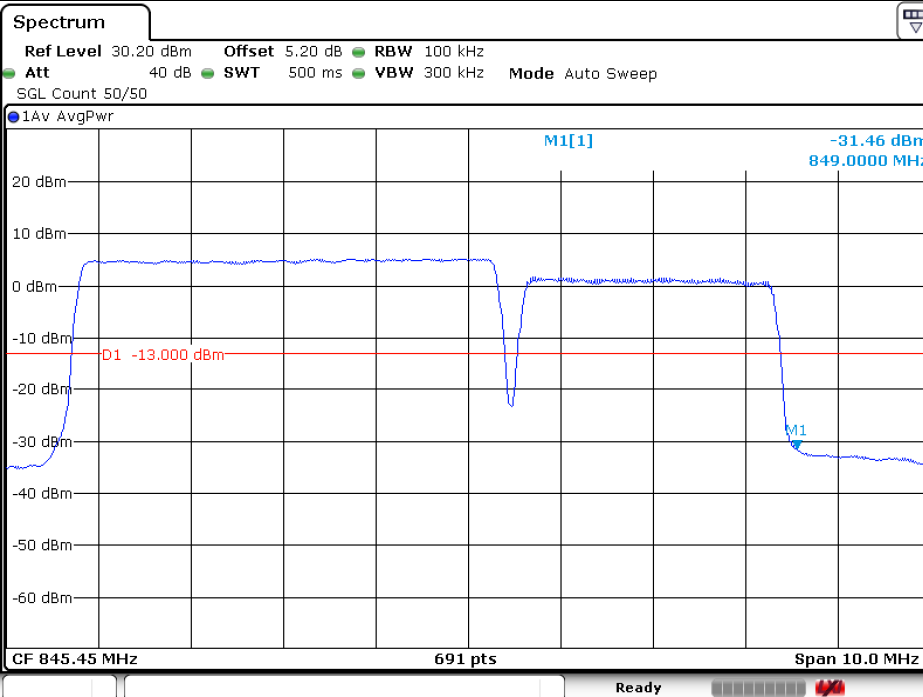
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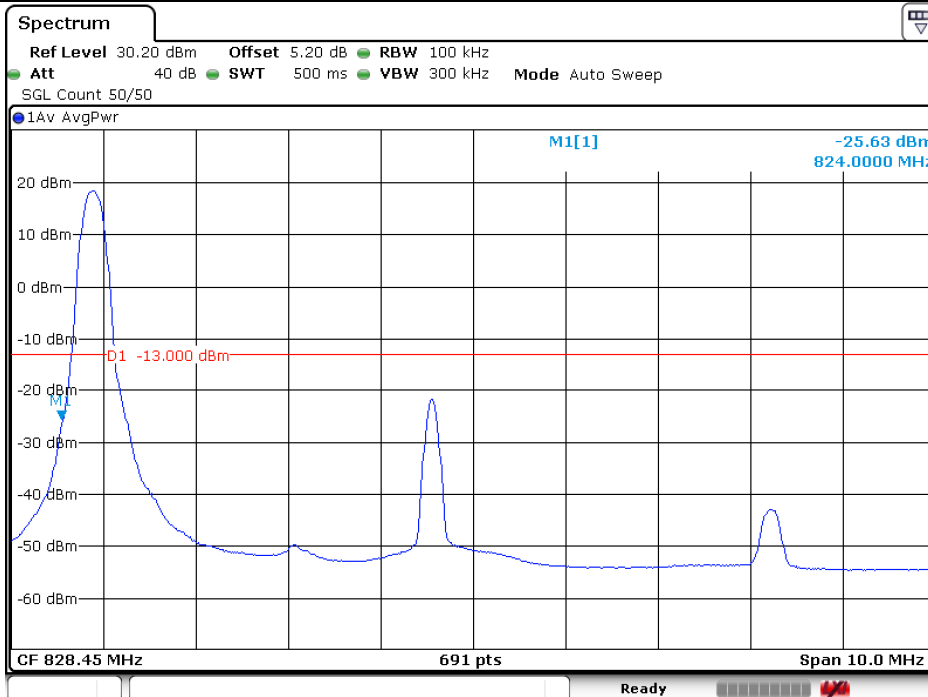


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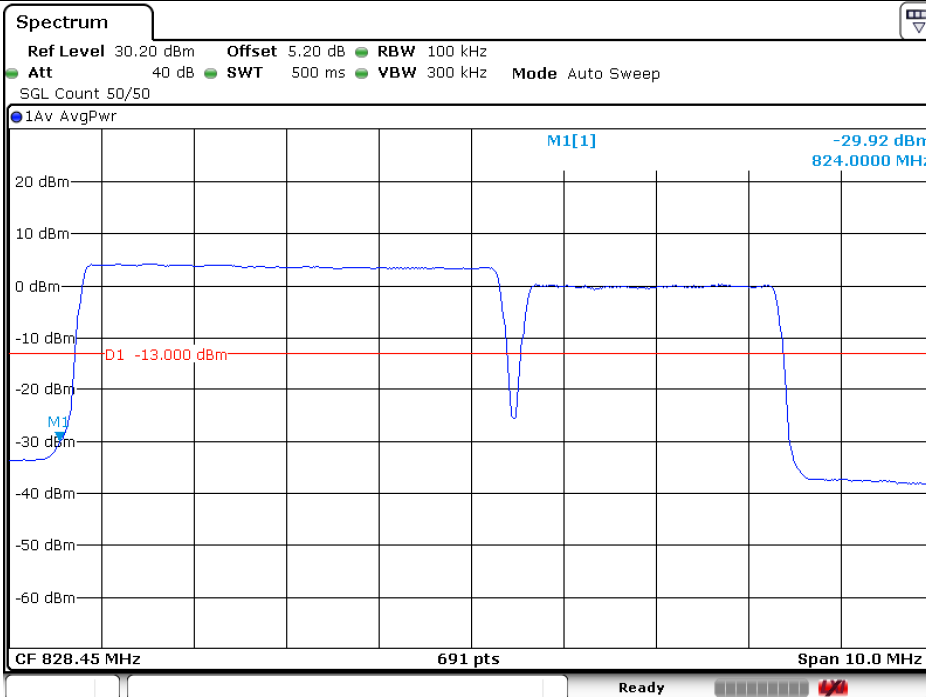
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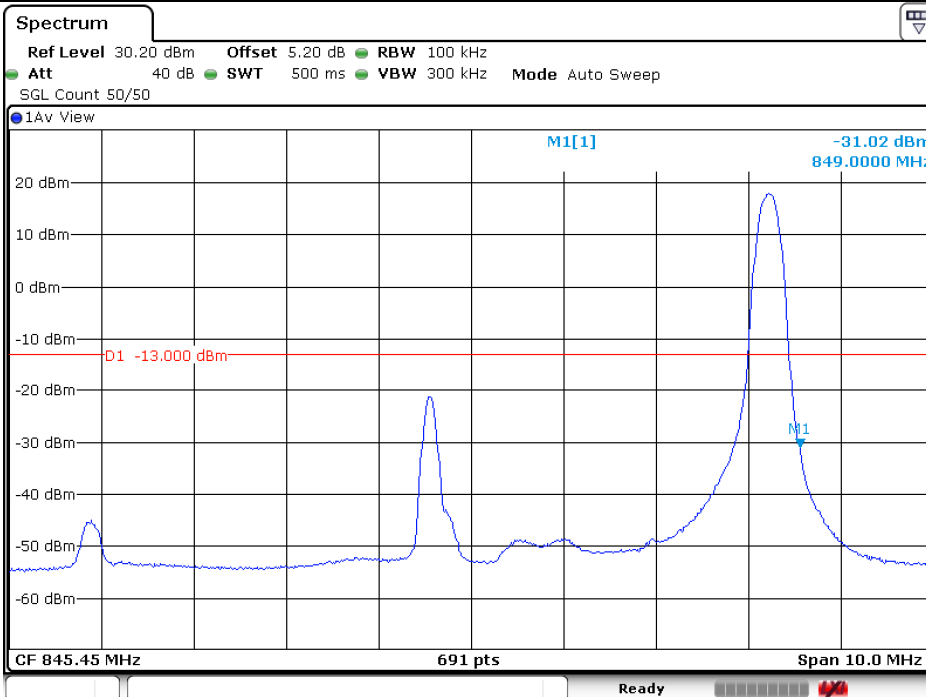


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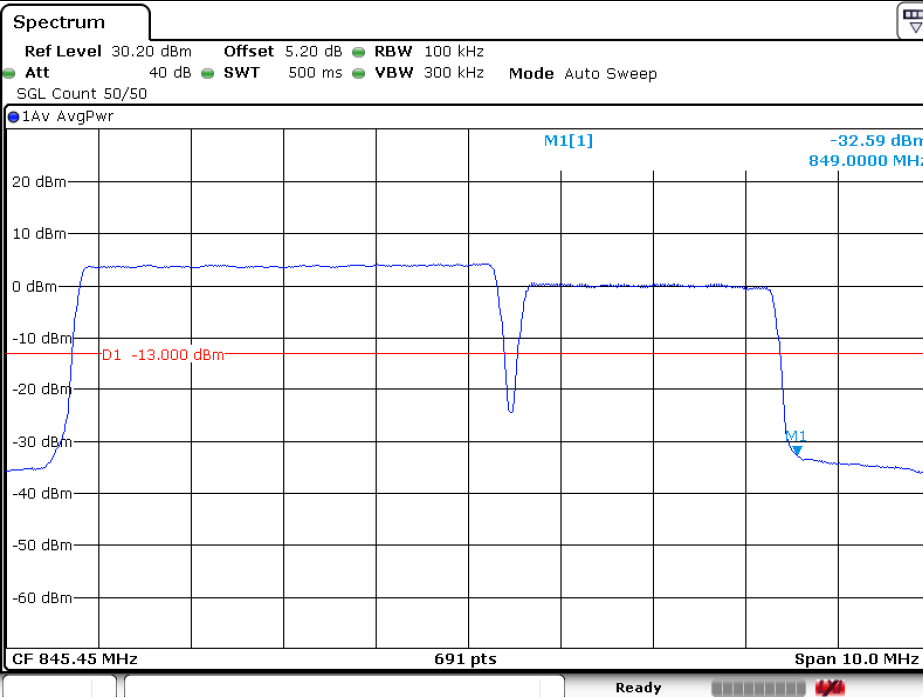
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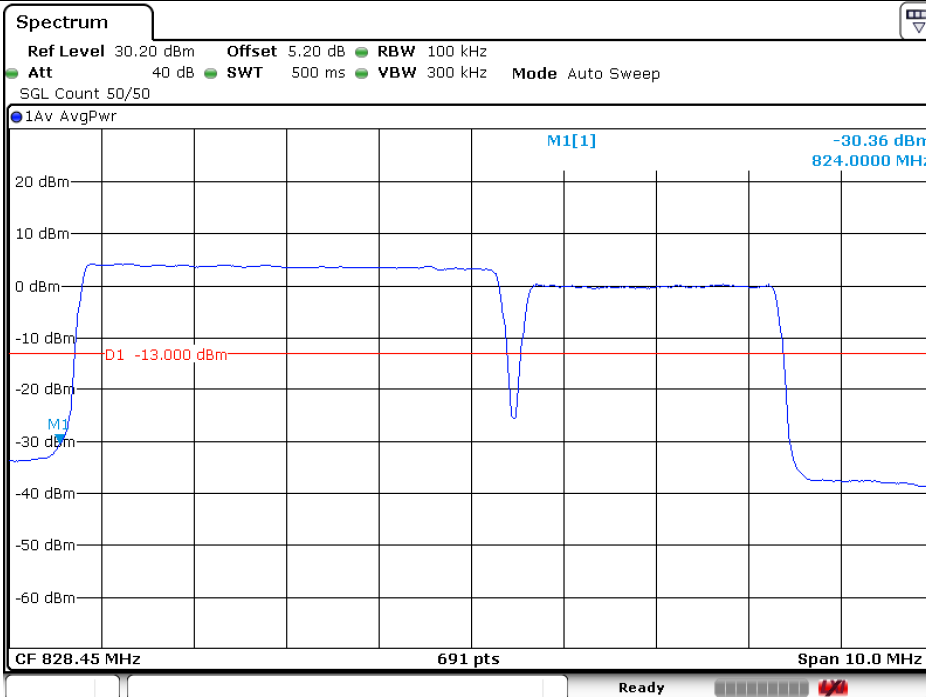
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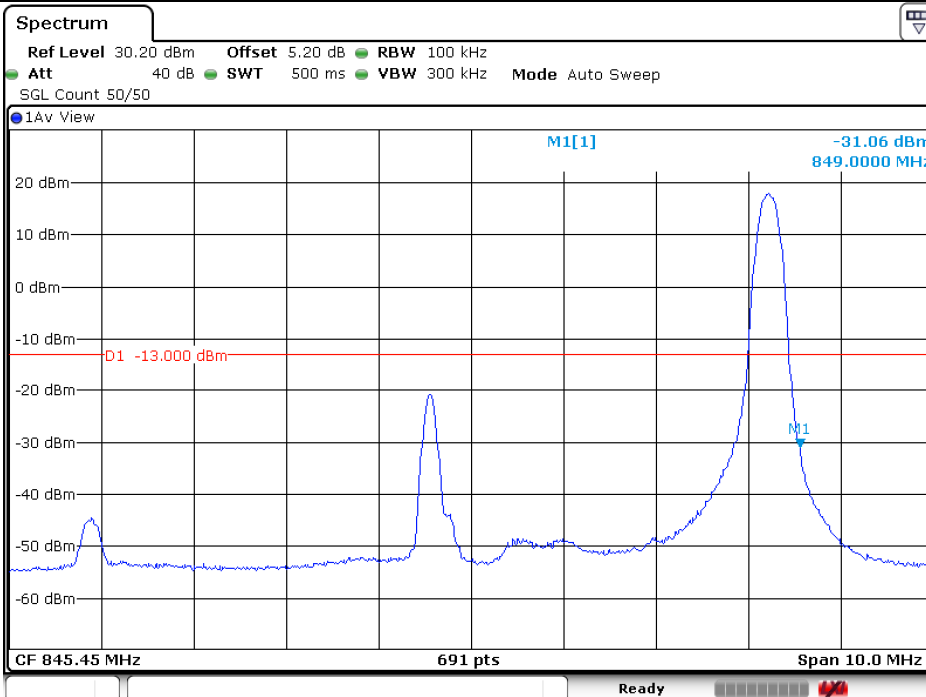


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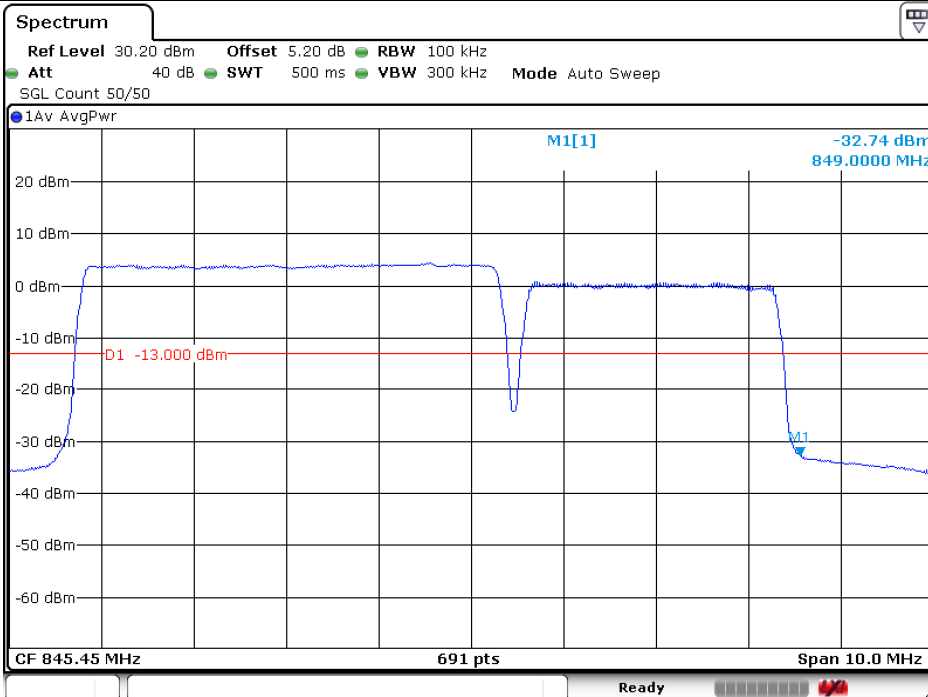
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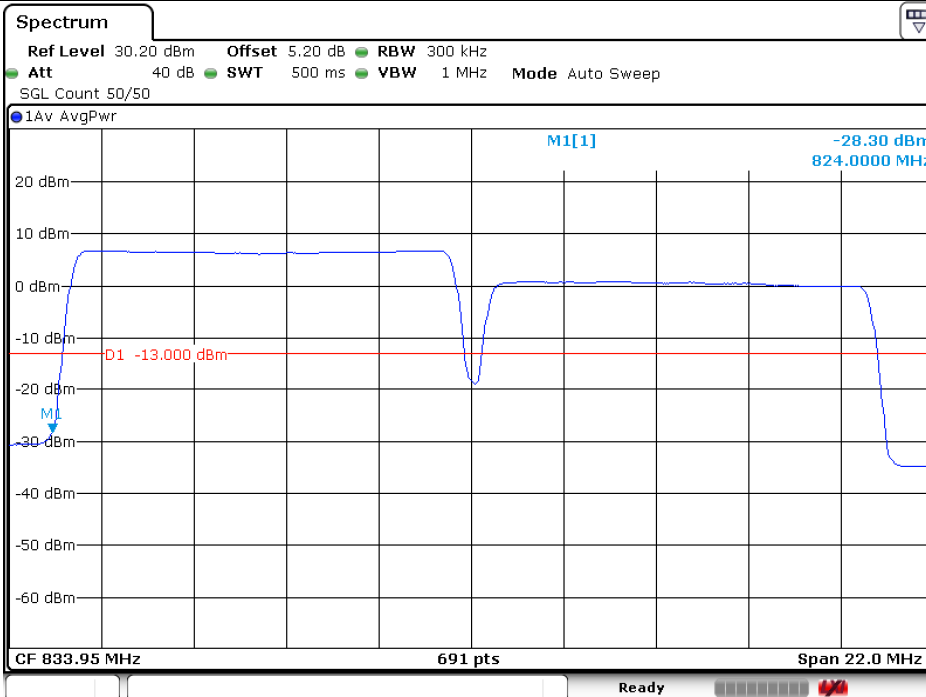
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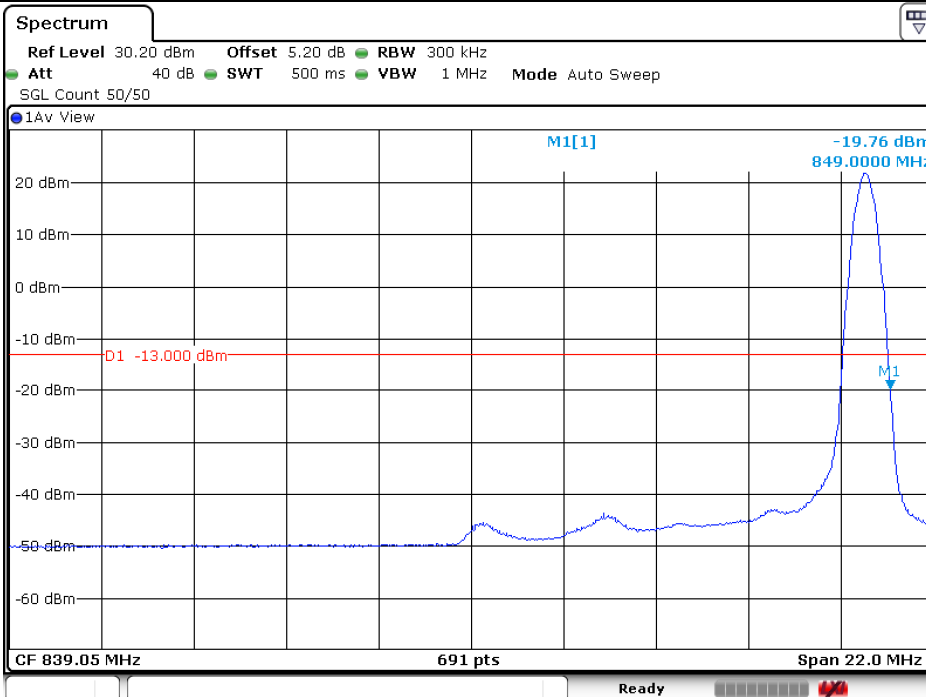


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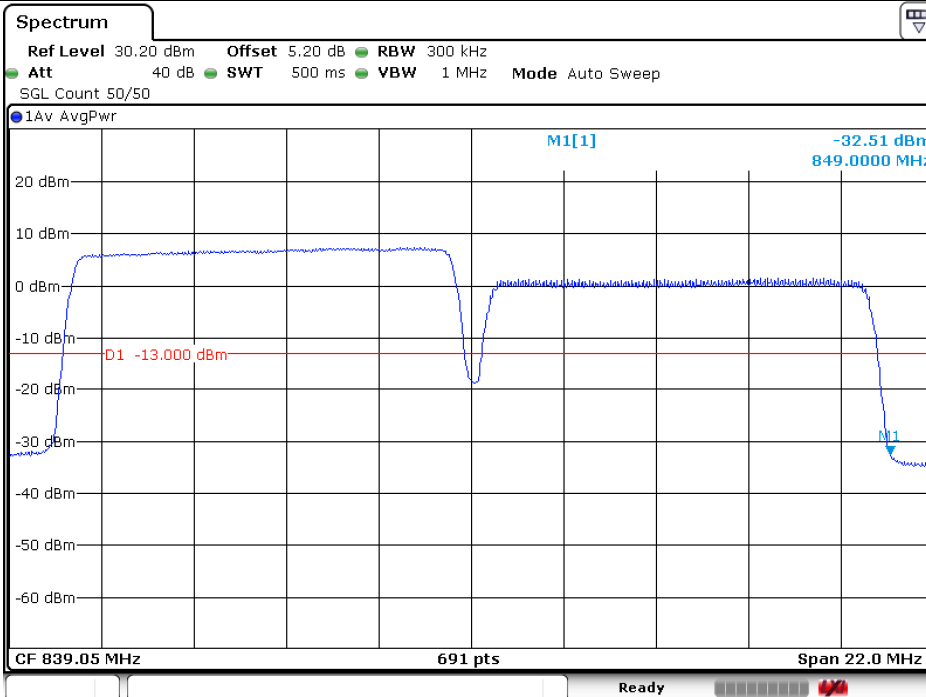
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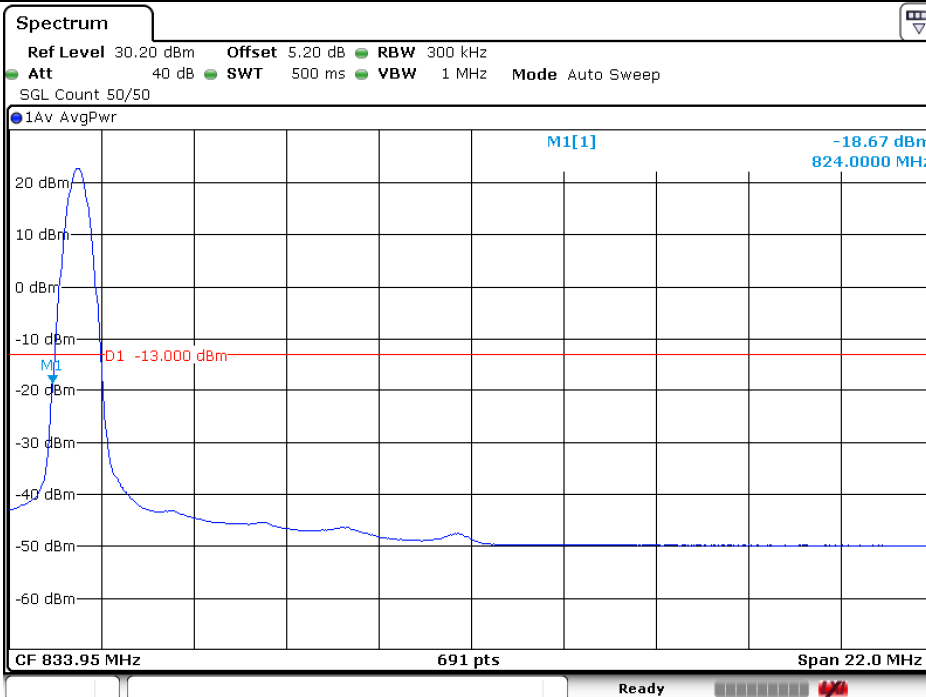
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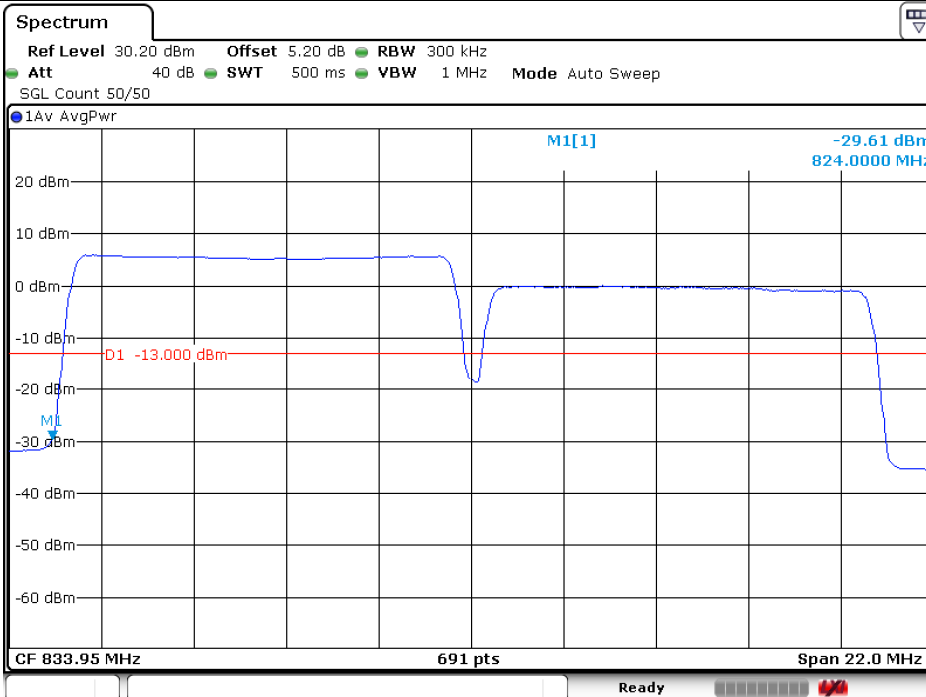
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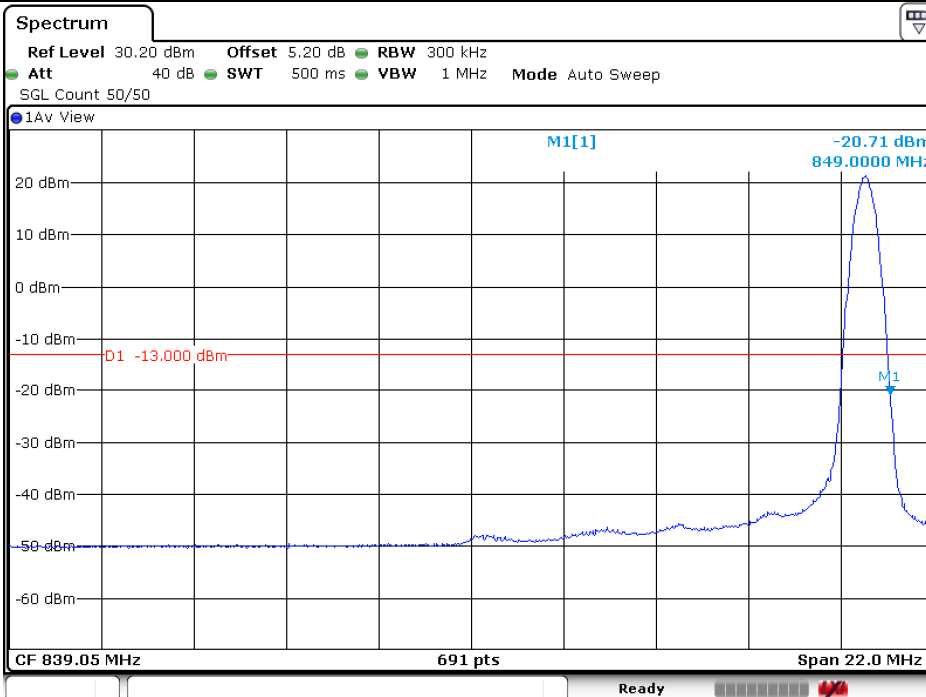


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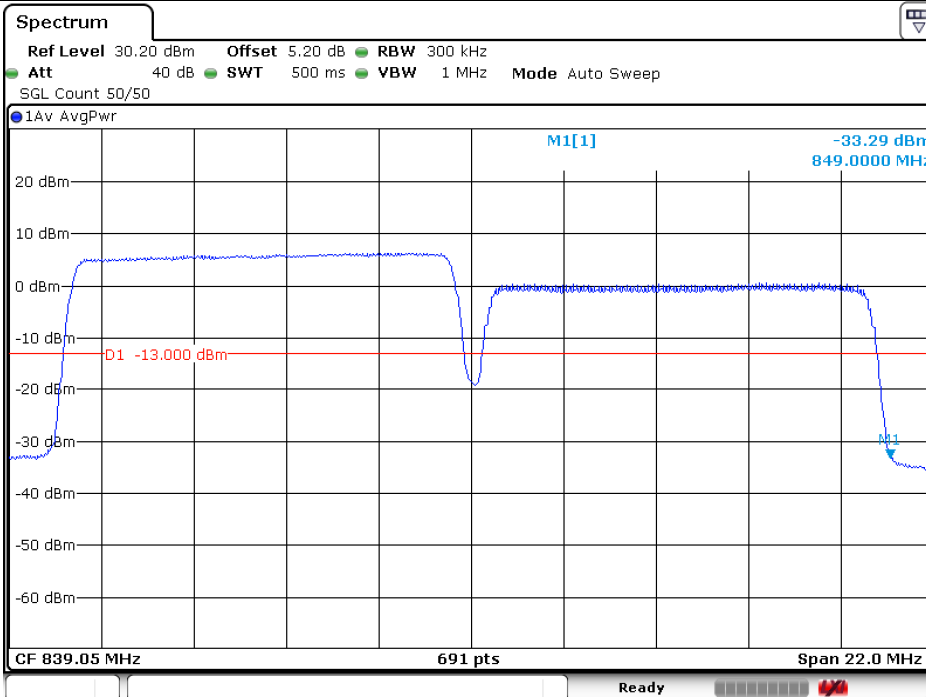
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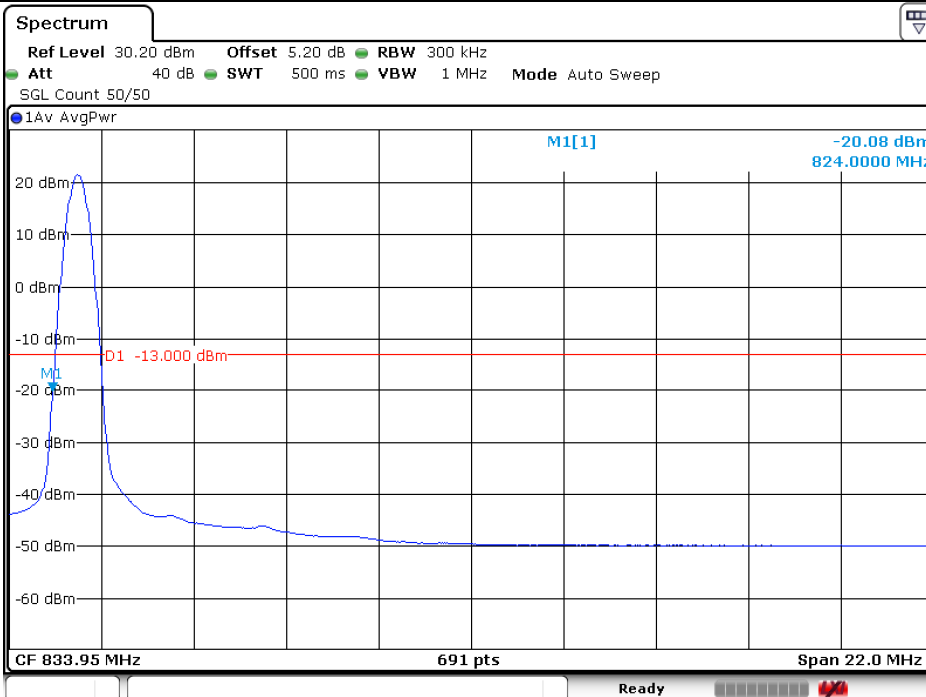


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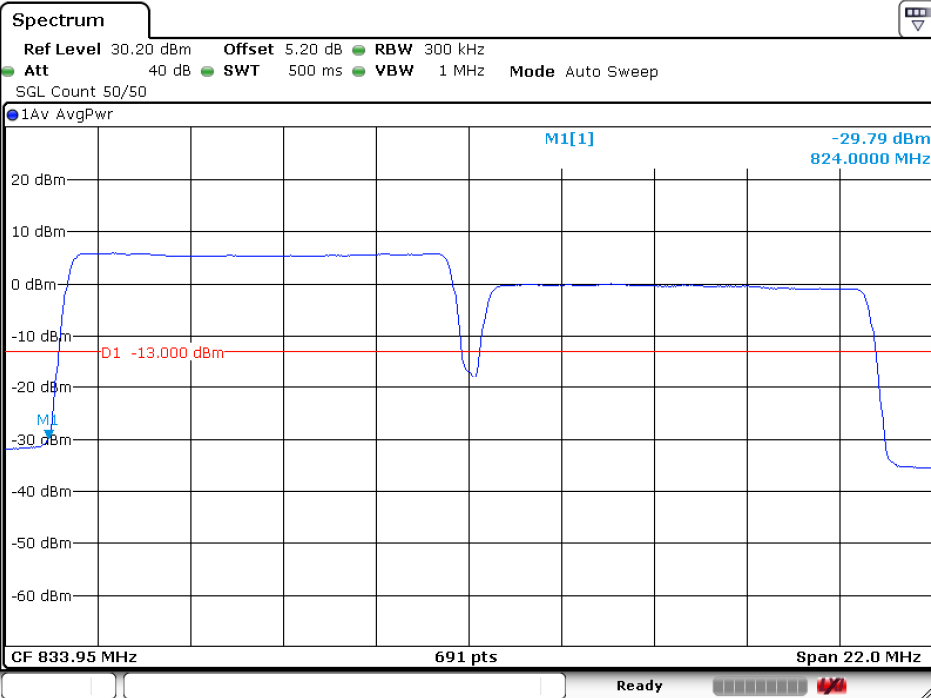
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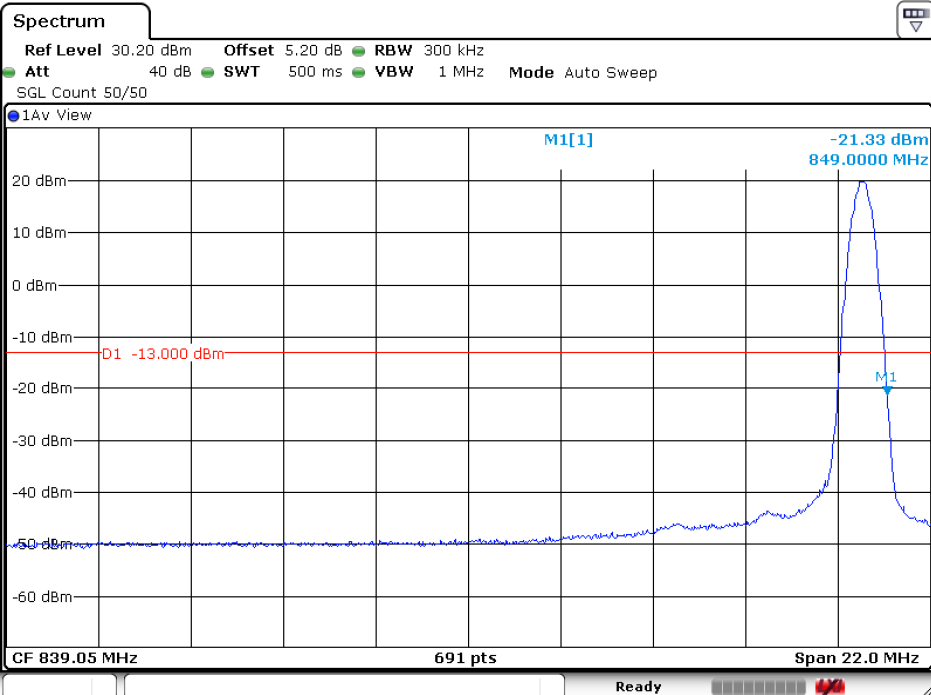


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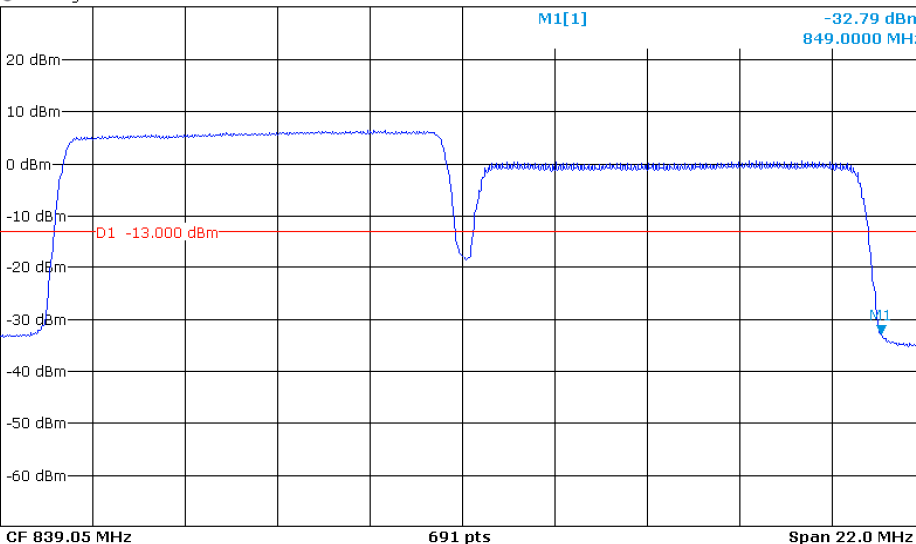


CA 5B 50RB+50RB 64QAM 20501+20600 50RB#0+50RB#0

Spectrum

Ref Level 30.20 dBm Offset 5.20 dB RBW 300 kHz
Att 40 dB SWT 500 ms VBW 1 MHz Mode Auto Sweep
SGL Count 50/50

1Av AvgPwr



CF 839.05 MHz 691 pts Span 22.0 MHz Ready

Date: 15.SEP.2020 16:24:23



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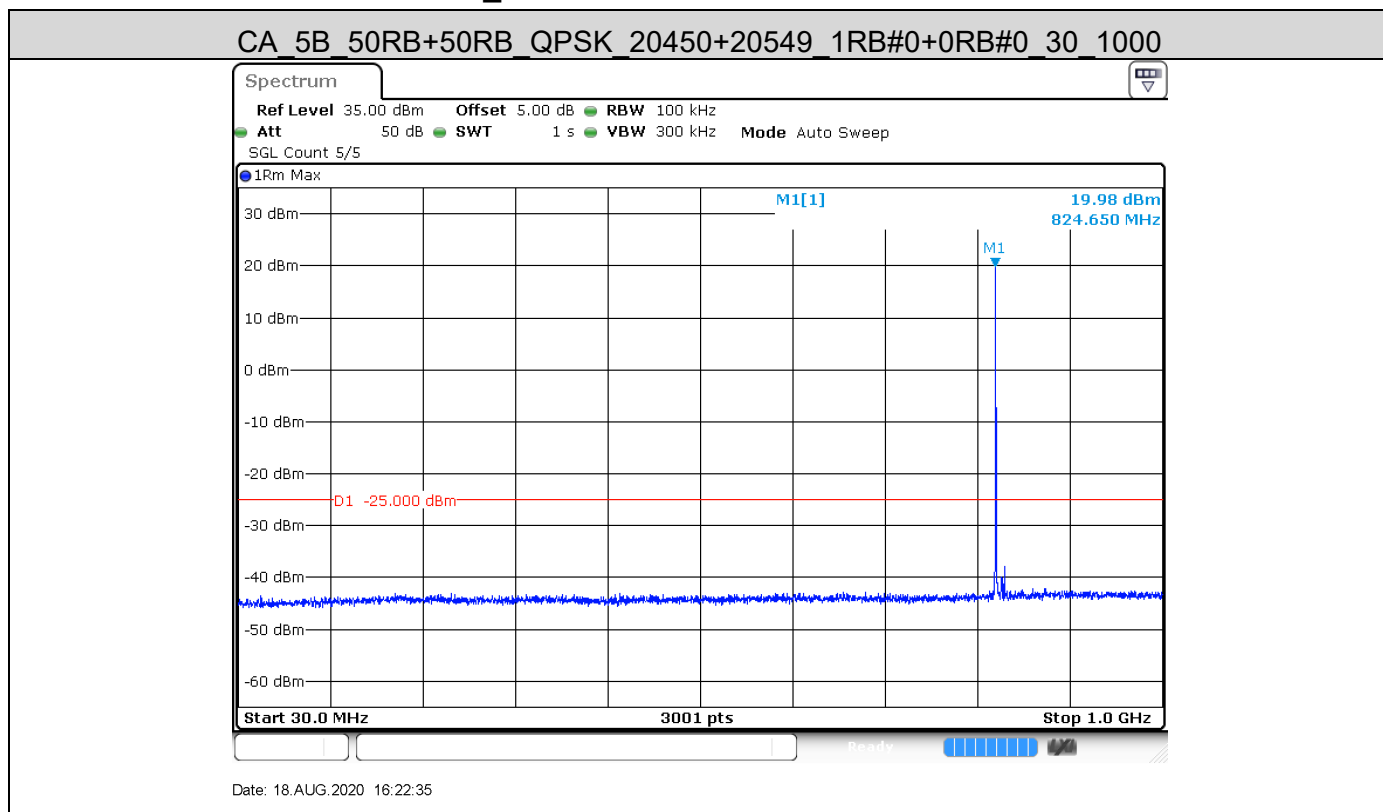
6. Spurious Emission at Antenna Terminal

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.

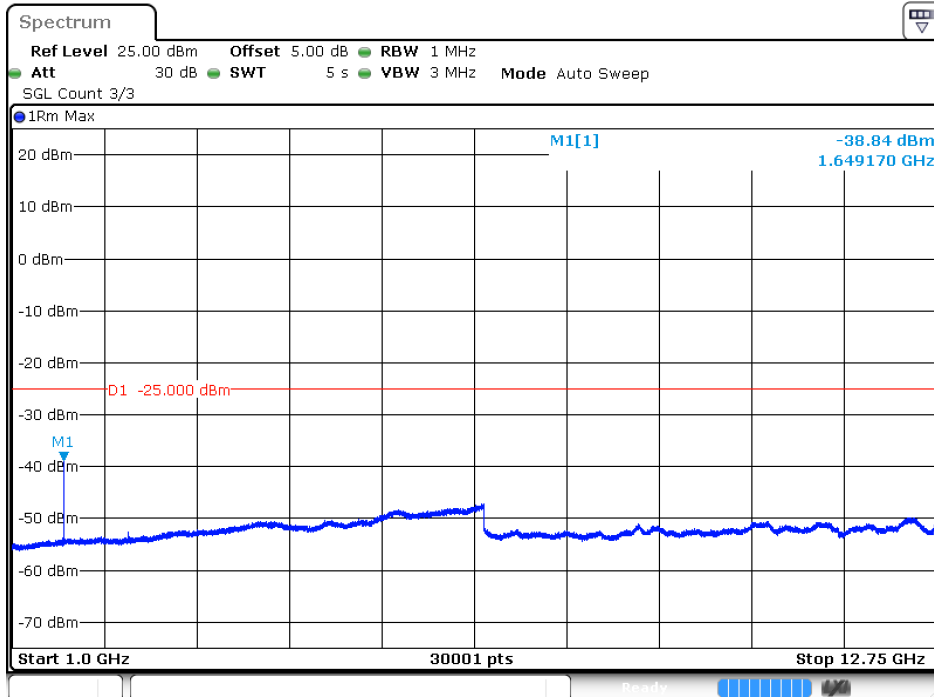
Part I - Test Plots

6.1. For LTE

1.1.5 Test Band = LTE Band CA_5B

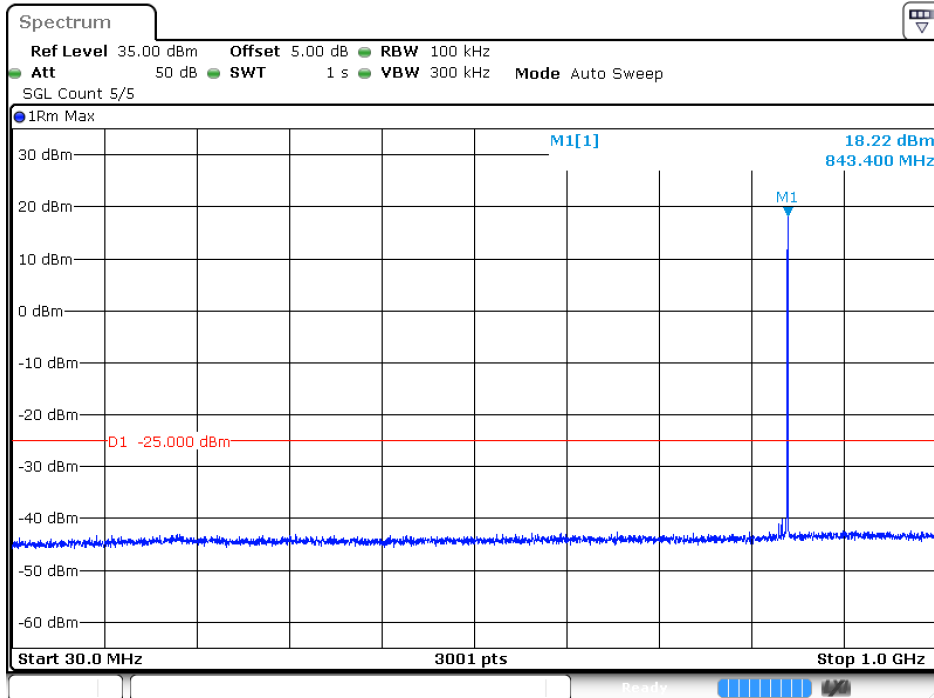


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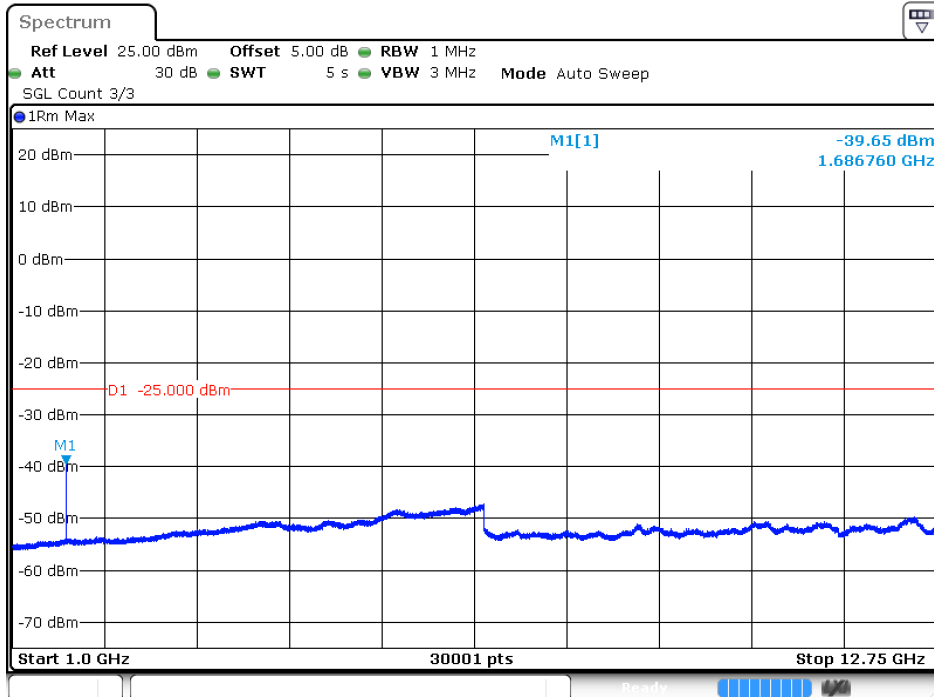
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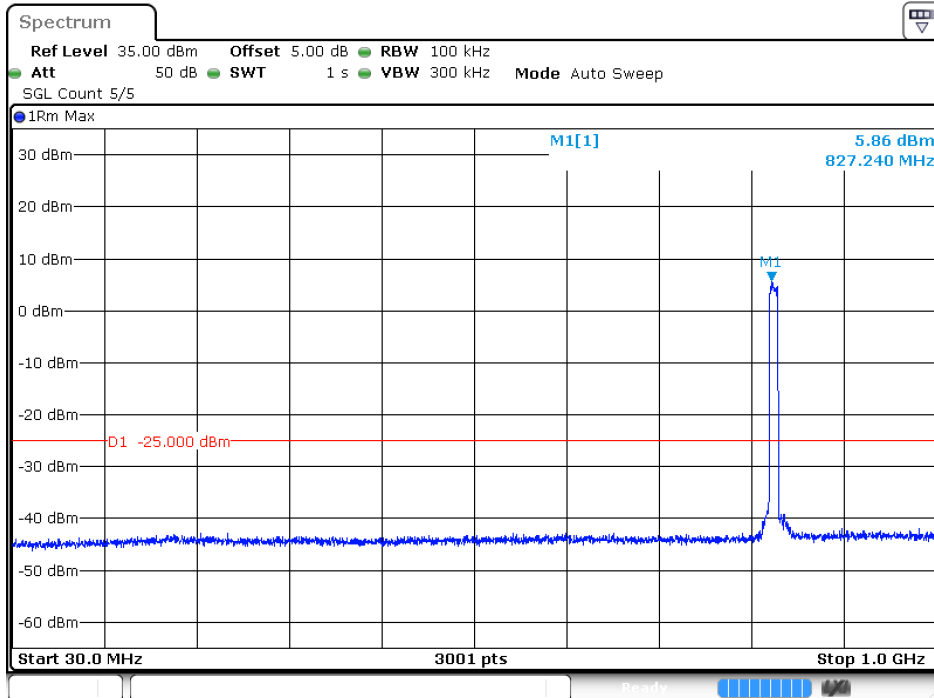


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Date: 18.AUG.2020 16:08:17

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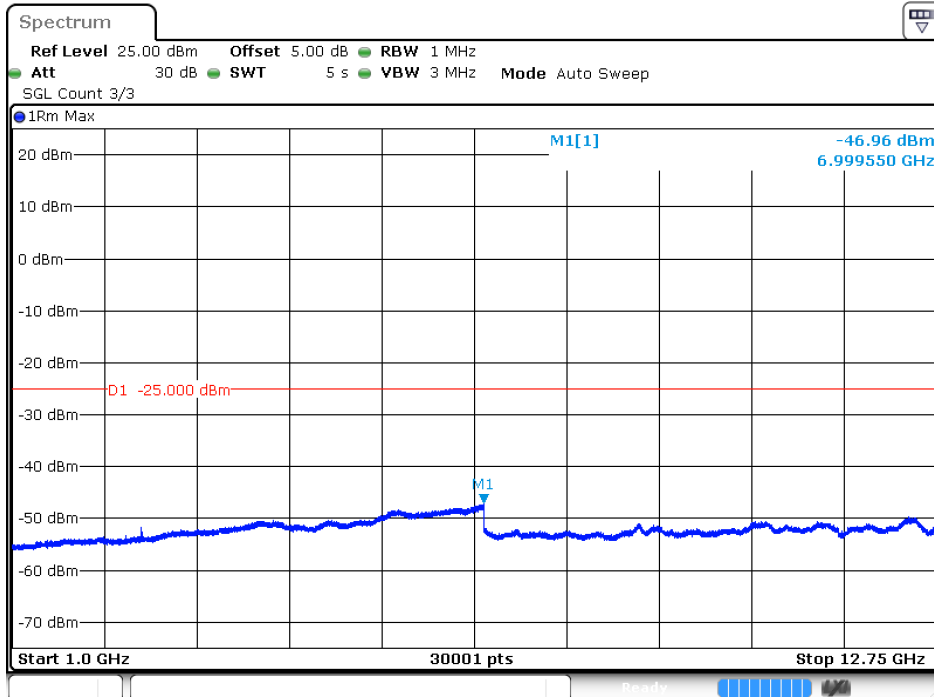
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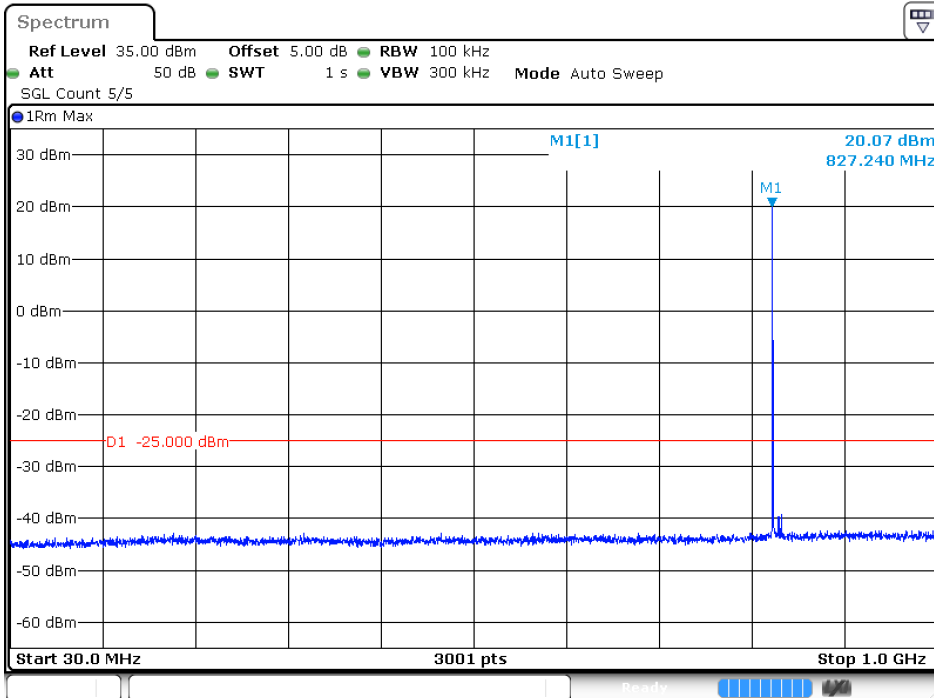
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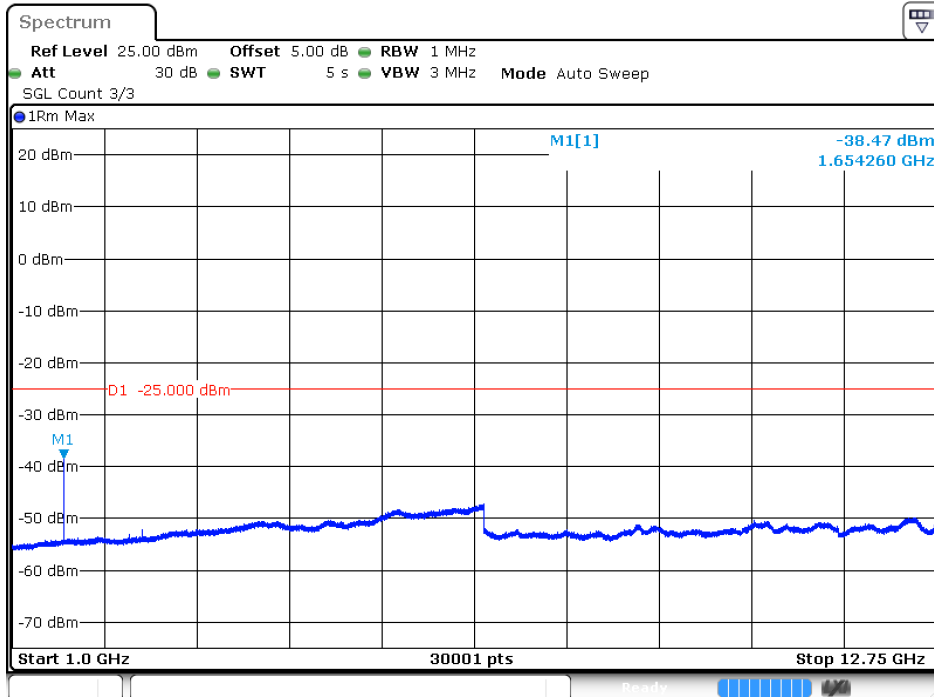
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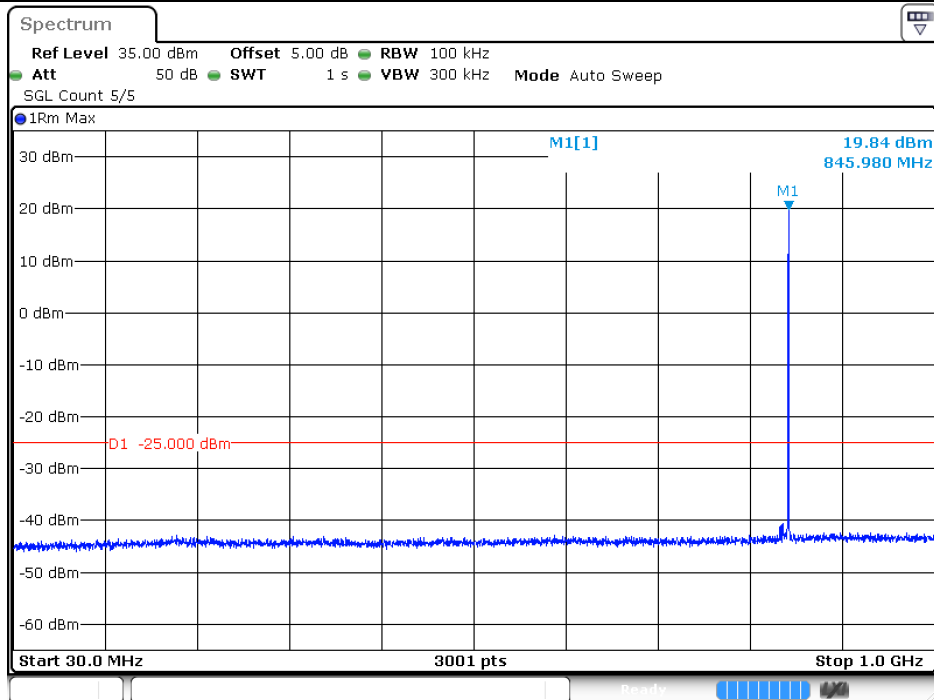


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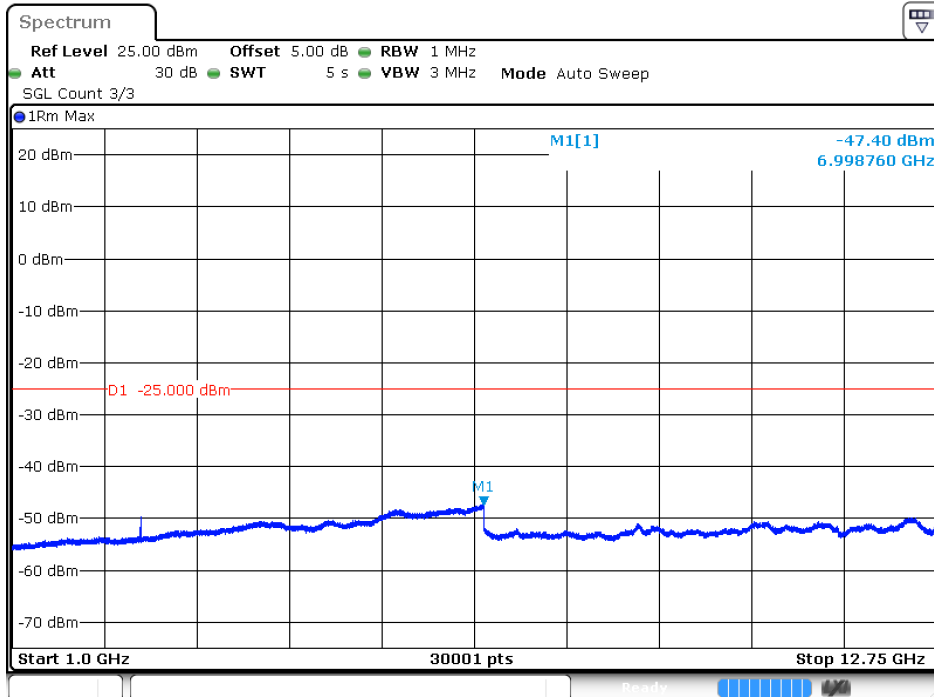
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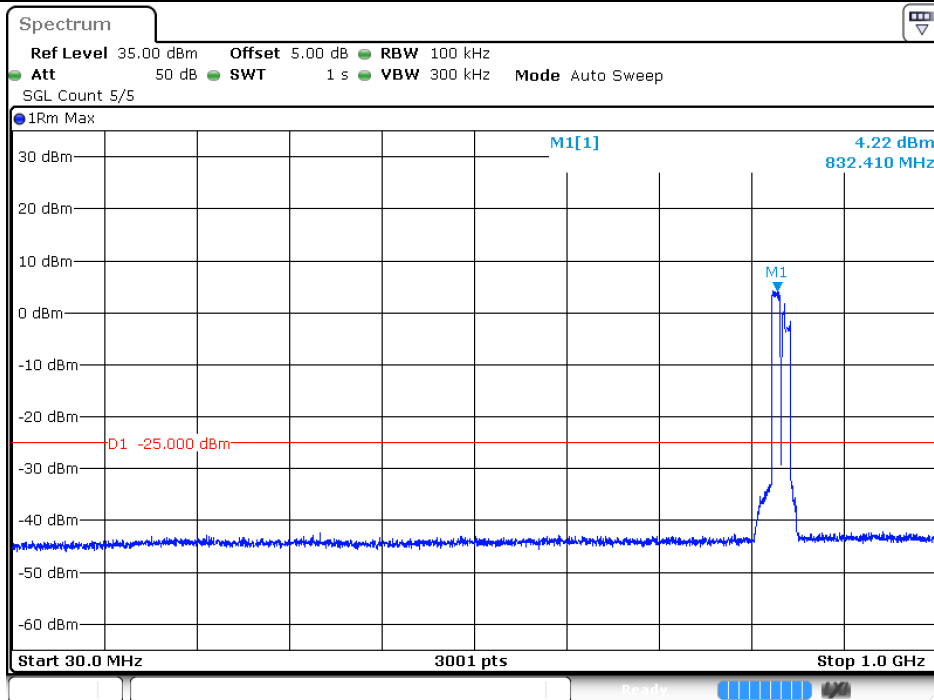
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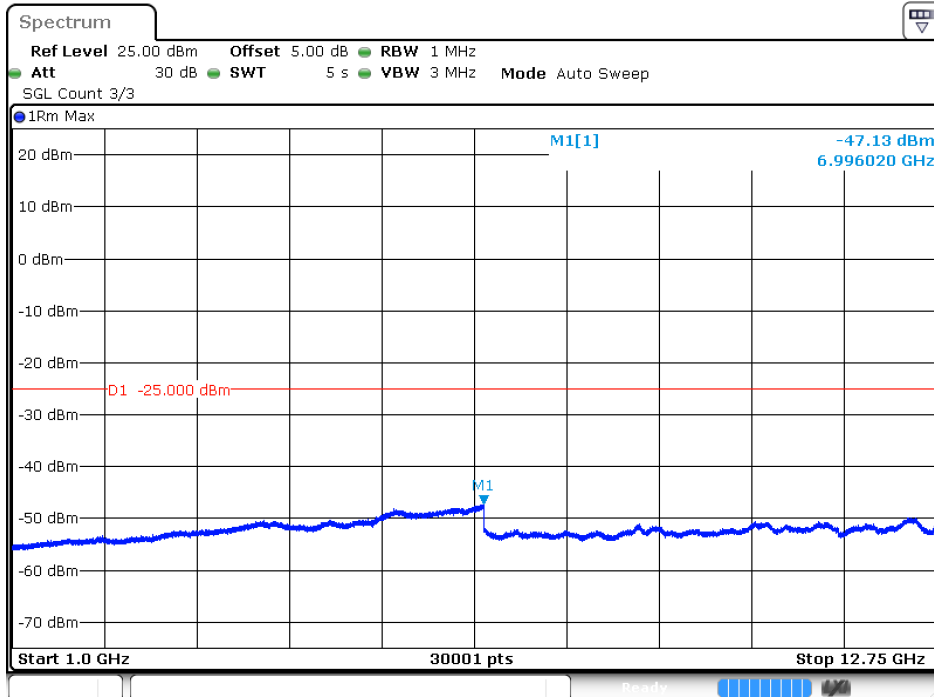
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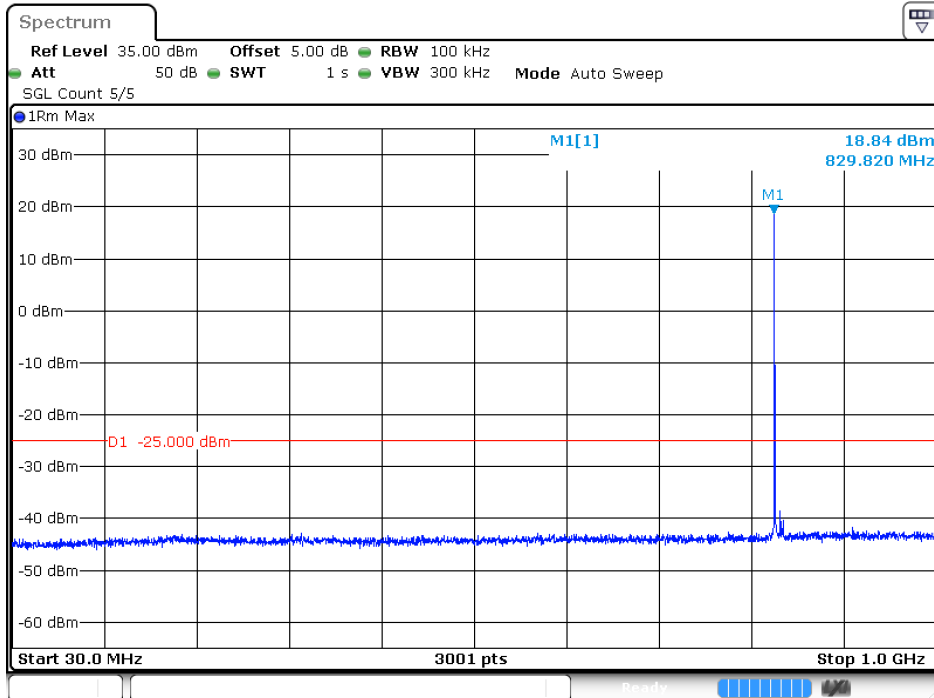
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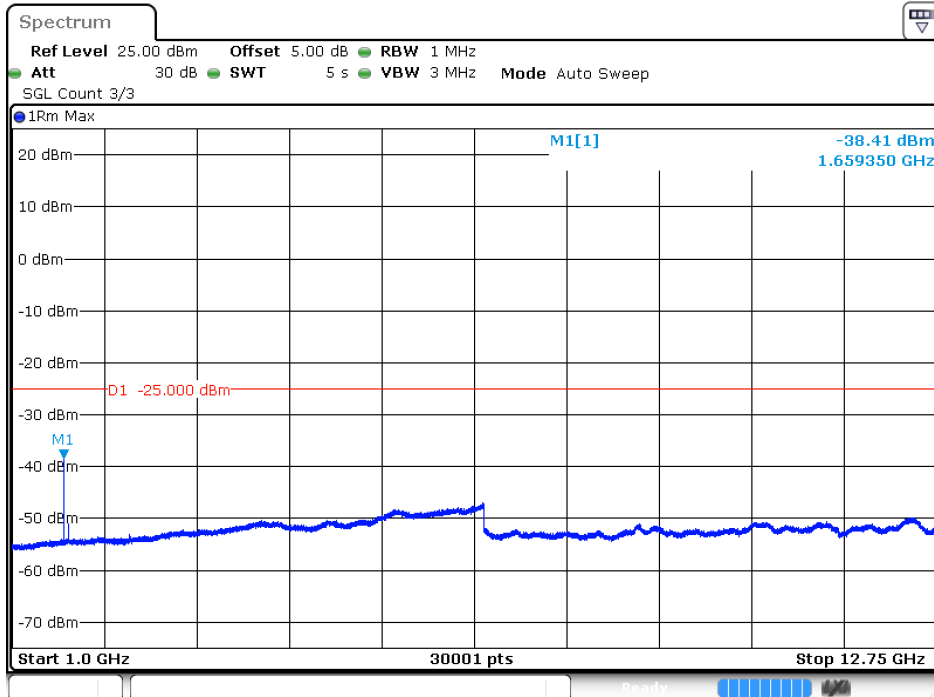
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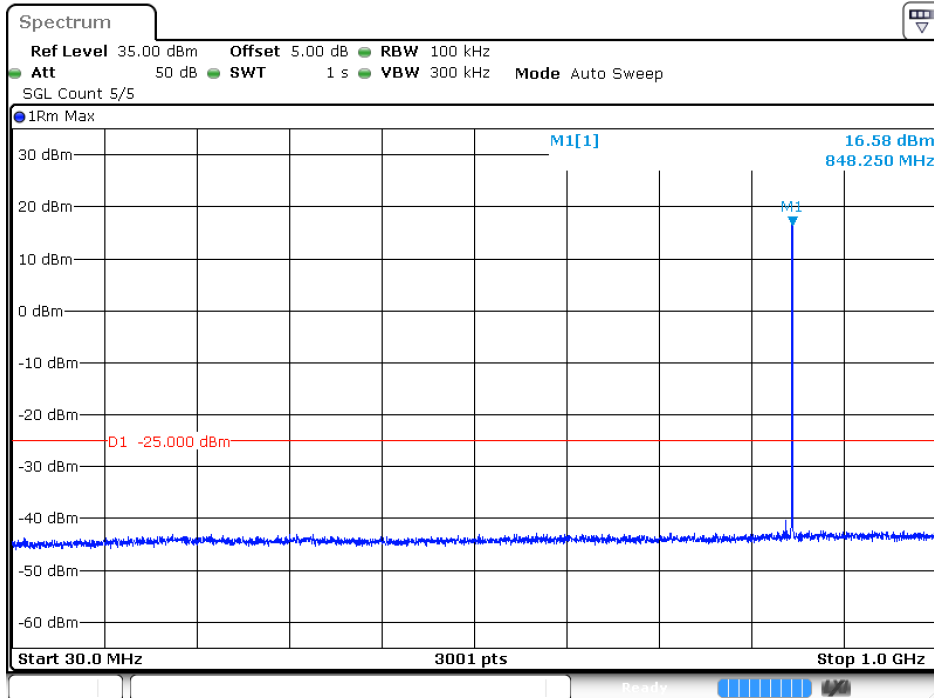


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Date: 18.AUG.2020 16:12:11

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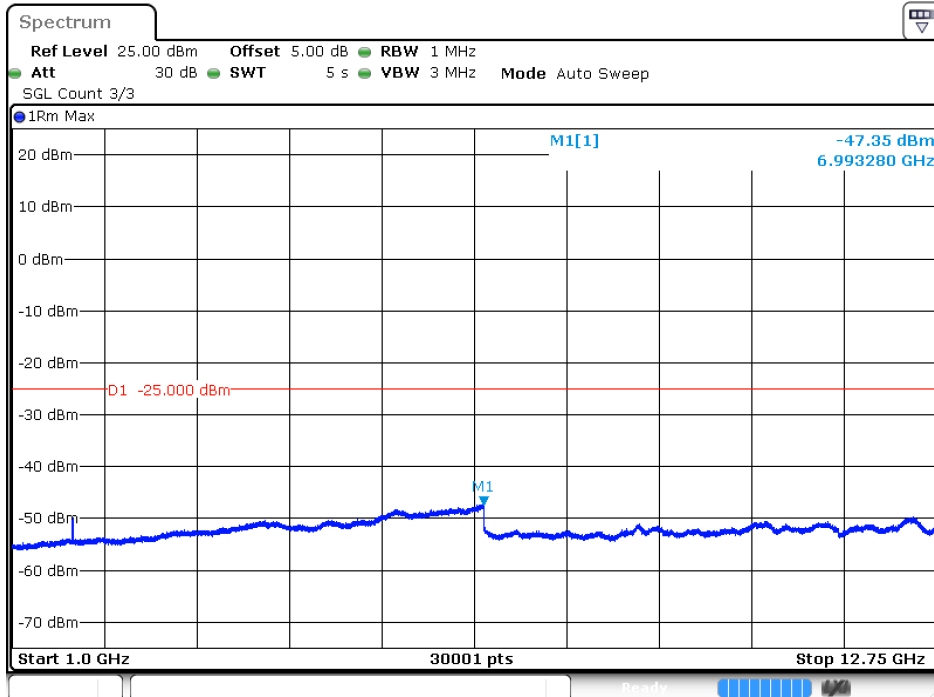
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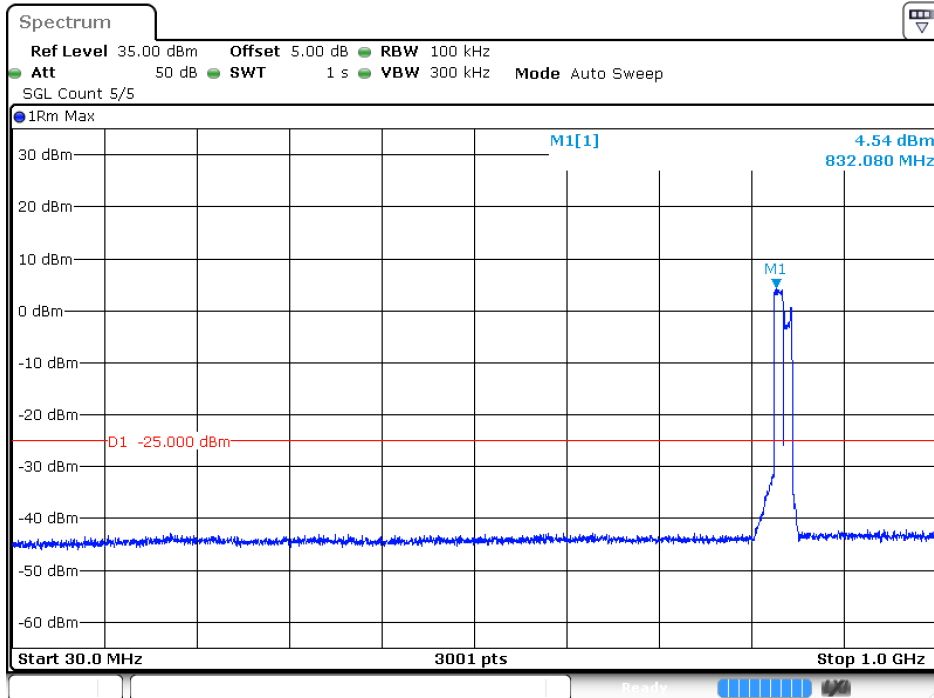
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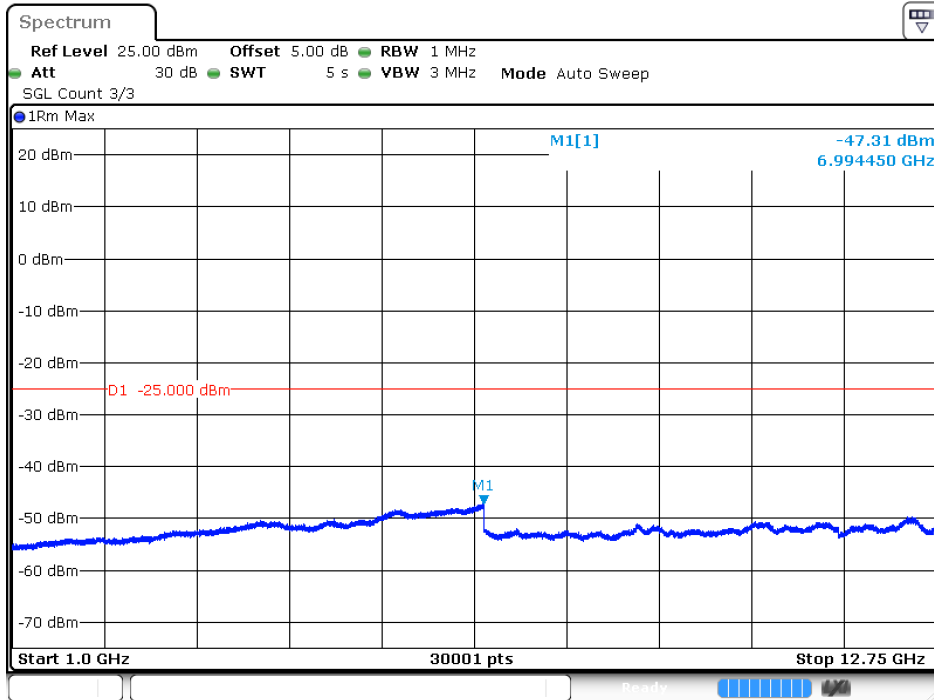
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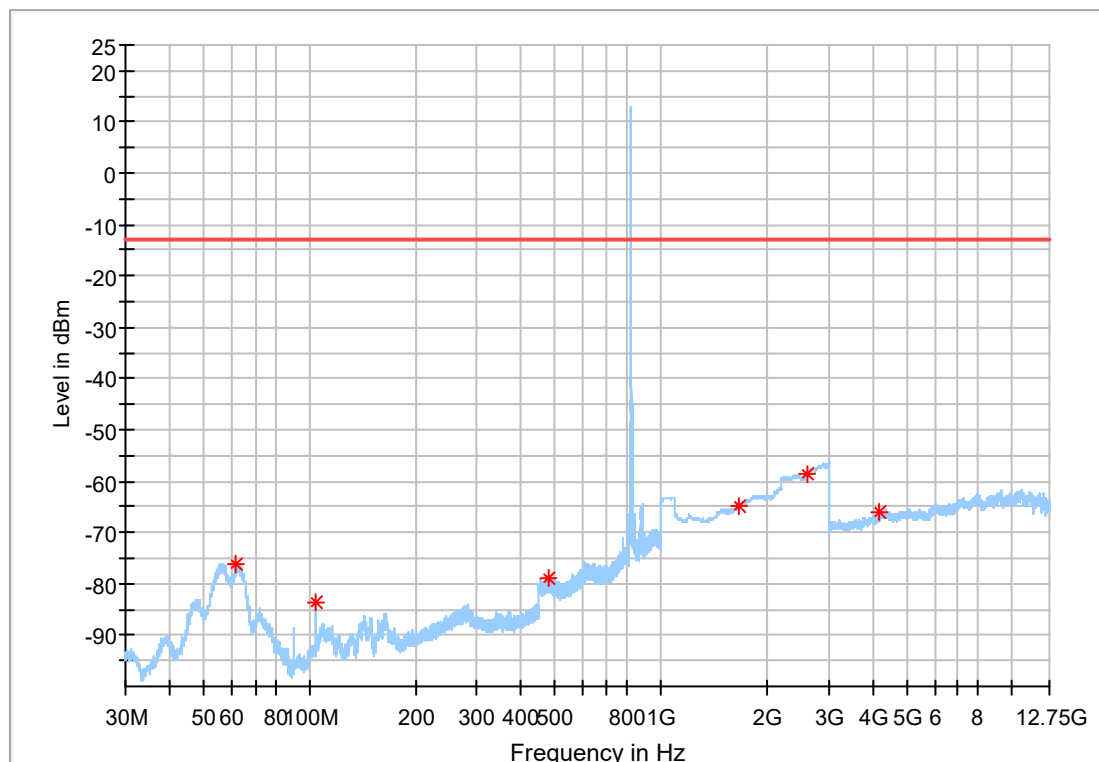
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7. Field Strength of Spurious Radiation

7.1. Test Mode =LTE/TM1 10 MHz_Ant Down

7.1.1. Test Channel = LCH_Horizontal

Full Spectrum



Critical_Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
61.920000	-75.98	-13.00	62.98	---	---	200.0	H	84.0	-95.0
104.293333	-83.43	-13.00	70.43	---	---	200.0	H	168.0	-109.6
480.433333	-78.77	-13.00	65.77	---	---	200.0	H	22.0	-100.6
1657.000000	-64.75	-13.00	51.75	---	---	200.0	H	129.0	-87.4
2604.000000	-58.48	-13.00	45.48	---	---	200.0	H	335.0	-80.2
4196.325000	-66.08	-13.00	53.08	---	---	200.0	H	57.0	-103.2



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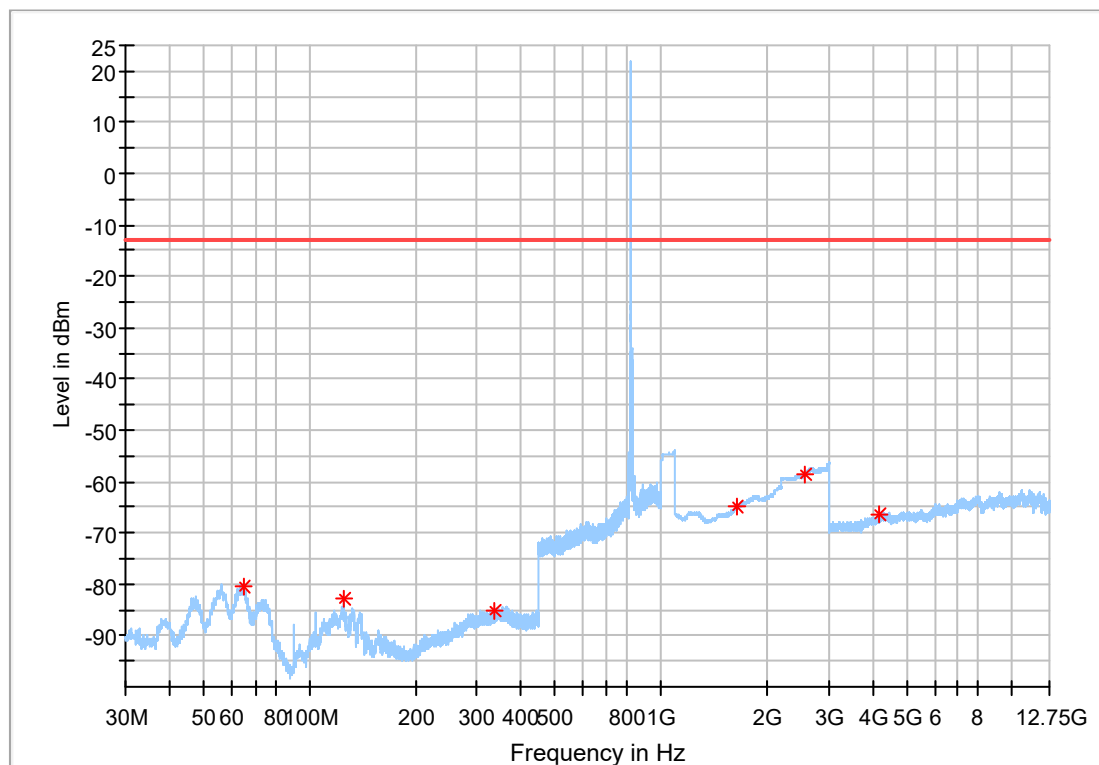
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7.1.2. Test Channel = LCH_Vertical

Full Spectrum



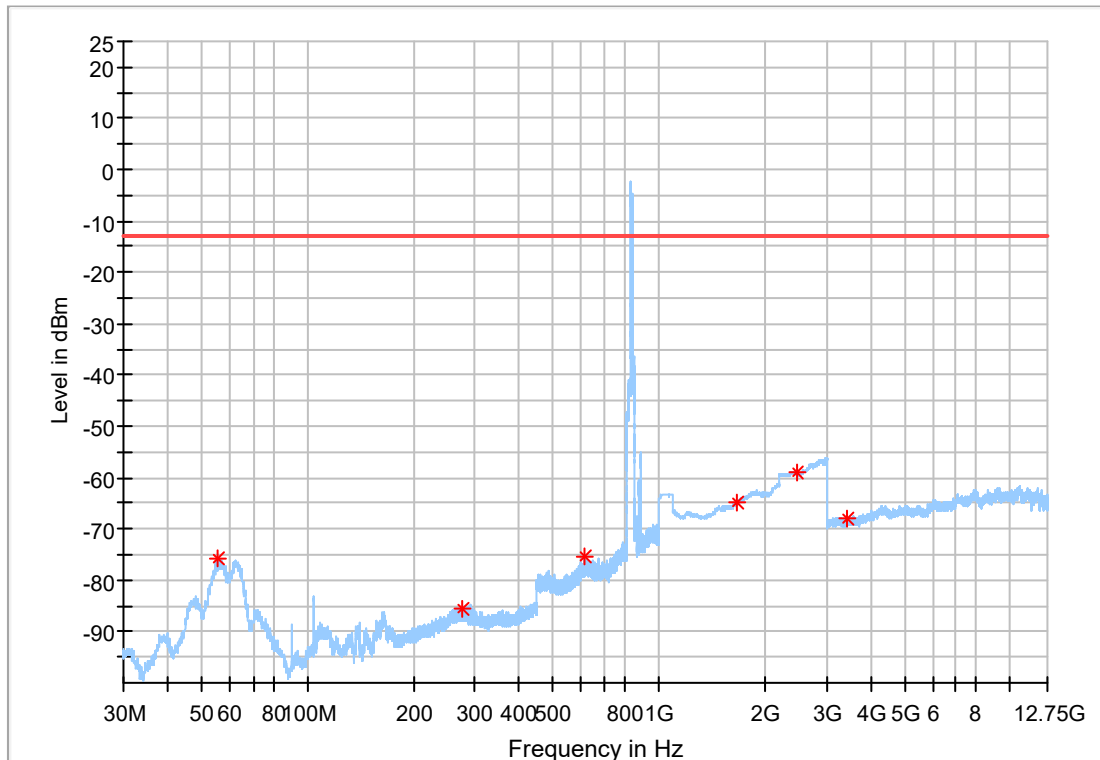
Critical_Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
65.046667	-80.43	-13.00	67.43	---	---	200.0	V	0.0	-99.8
125.013333	-82.85	-13.00	69.85	---	---	200.0	V	149.0	-103.8
337.906667	-85.06	-13.00	72.06	---	---	200.0	V	293.0	-101.9
1649.000000	-64.65	-13.00	51.65	---	---	200.0	V	105.0	-87.3
2579.000000	-58.43	-13.00	45.43	---	---	200.0	V	5.0	-80.1
4201.687500	-66.27	-13.00	53.27	---	---	200.0	V	110.0	-103.2



7.1.3. Test Channel = MCH_Horizontal

Full Spectrum



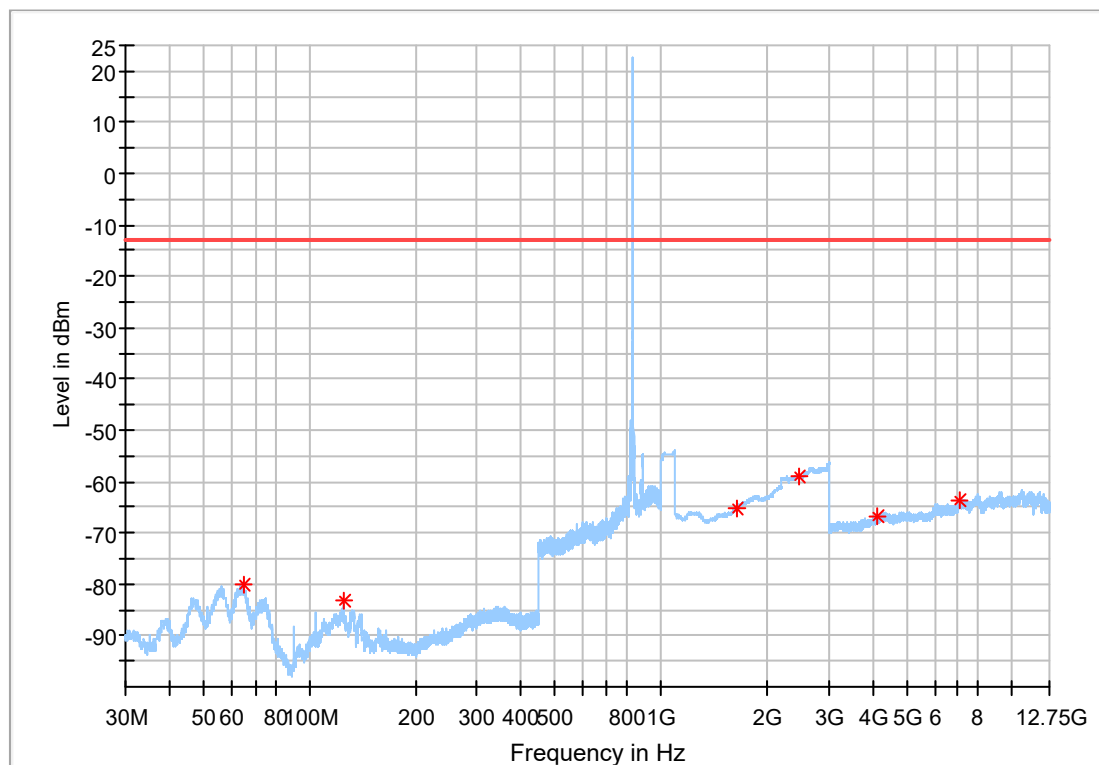
Critical_Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
55.900000	-75.71	-13.00	62.71	---	---	200.0	H	180.0	-97.1
274.533333	-85.38	-13.00	72.38	---	---	200.0	H	37.0	-102.5
618.070833	-75.41	-13.00	62.41	---	---	200.0	H	289.0	-97.8
1657.000000	-64.76	-13.00	51.76	---	---	200.0	H	10.0	-87.4
2465.500000	-58.87	-13.00	45.87	---	---	200.0	H	94.0	-80.8
3449.475000	-68.03	-13.00	55.03	---	---	200.0	H	109.0	-105.5



7.1.4. Test Channel = MCH_Vertical

Full Spectrum



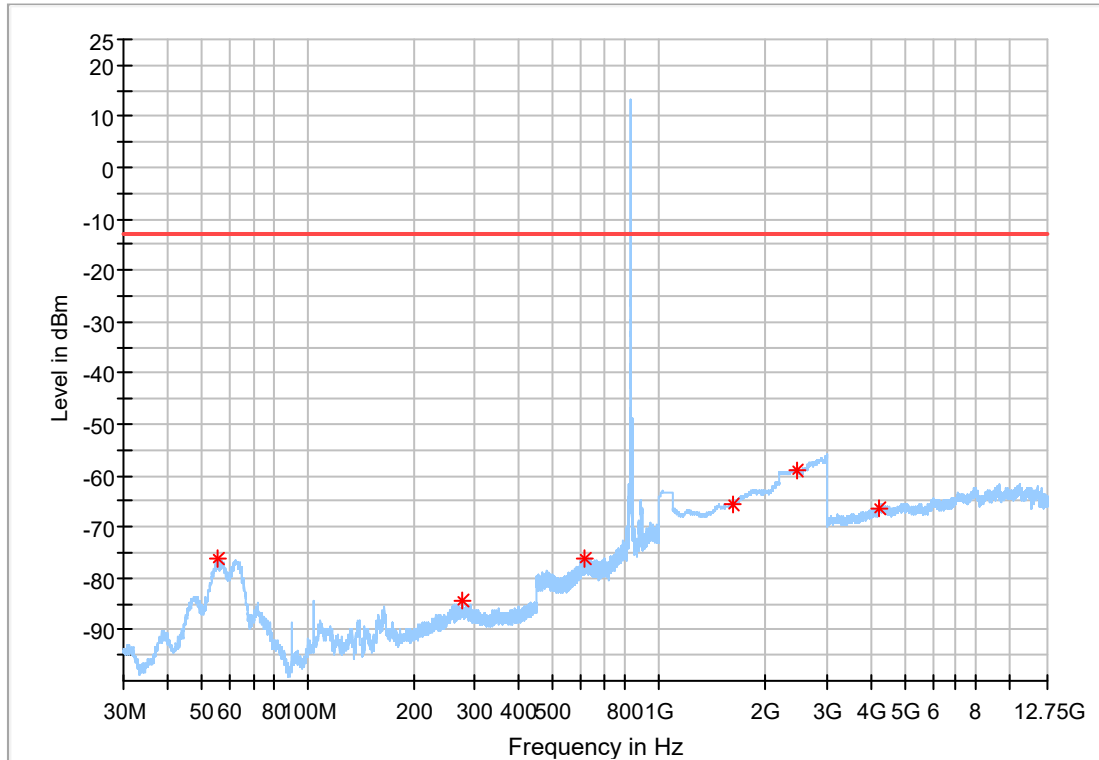
Critical_Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
64.720000	-79.91	-13.00	66.91	---	---	200.0	V	348.0	-99.8
125.013333	-83.30	-13.00	70.30	---	---	200.0	V	180.0	-103.8
1635.000000	-65.15	-13.00	52.15	---	---	200.0	V	180.0	-87.5
2464.500000	-58.85	-13.00	45.85	---	---	200.0	V	180.0	-80.8
4108.575000	-66.93	-13.00	53.93	---	---	200.0	V	109.0	-103.1
7044.787500	-63.56	-13.00	50.56	---	---	200.0	V	173.0	-98.9



7.1.5. Test Channel = HCH_Horizontal

Full Spectrum



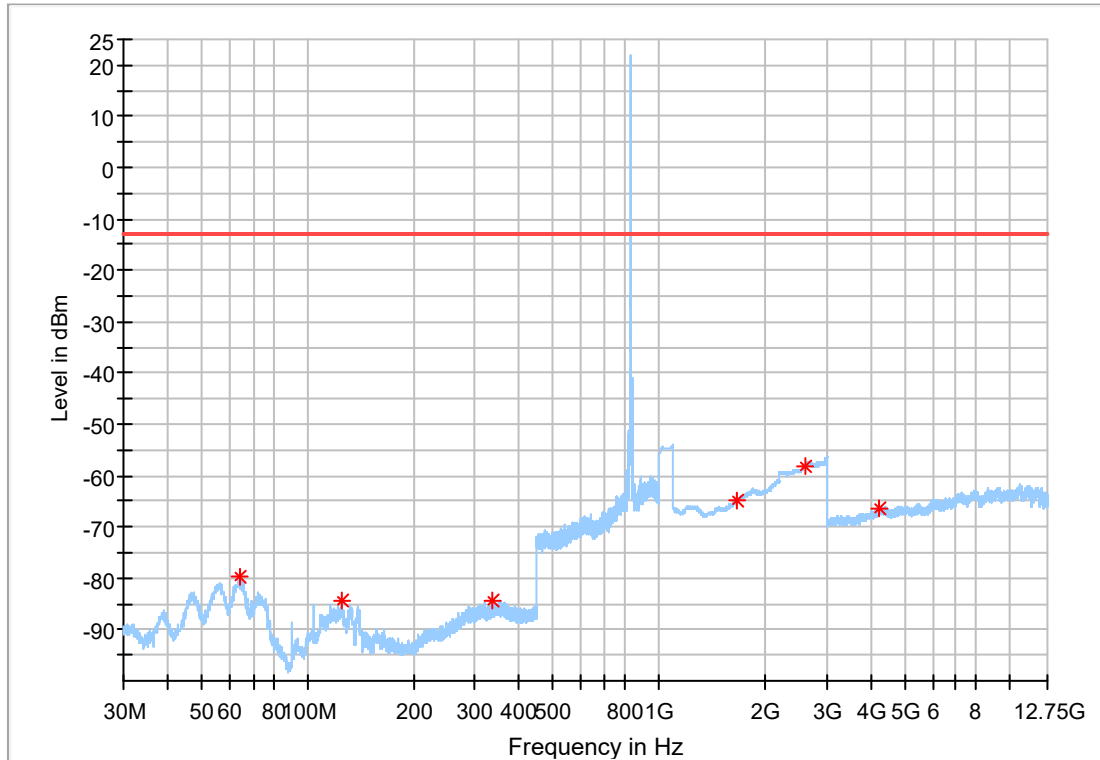
Critical_Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
55.853333	-76.10	-13.00	63.10	---	---	200.0	H	122.0	-97.1
276.166667	-84.24	-13.00	71.24	---	---	200.0	H	180.0	-102.6
614.495833	-76.04	-13.00	63.04	---	---	200.0	H	117.0	-98.0
1620.500000	-65.48	-13.00	52.48	---	---	200.0	H	146.0	-87.7
2457.000000	-58.88	-13.00	45.88	---	---	200.0	H	144.0	-80.9
4218.750000	-66.22	-13.00	53.22	---	---	200.0	H	233.0	-103.1



7.1.6. Test Channel = HCH_Vertical

Full Spectrum



Critical_Freqs

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
64.626667	-79.78	-13.00	66.78	---	---	200.0	V	151.0	-99.9
124.966667	-84.53	-13.00	71.53	---	---	200.0	V	58.0	-103.7
336.413333	-84.25	-13.00	71.25	---	---	200.0	V	104.0	-101.9
1659.000000	-64.78	-13.00	51.78	---	---	200.0	V	287.0	-87.3
2593.000000	-58.12	-13.00	45.12	---	---	200.0	V	179.0	-79.8
4209.487500	-66.49	-13.00	53.49	---	---	200.0	V	149.0	-103.2

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 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.
- 3 All modulation and all Bandwidth had been tested, but only the worst case data displayed in this report.



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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_5B	QPSK	20450+20549	50RB#0/50RB#0	TN	LV	-3.38	-0.00408	PASS
CA_5B	QPSK	20450+20549	50RB#0/50RB#0	TN	NV	-0.96	-0.00116	PASS
CA_5B	QPSK	20450+20549	50RB#0/50RB#0	TN	HV	2.32	0.00280	PASS
CA_5B	QPSK	20476+20575	50RB#0/50RB#0	TN	LV	-3.82	-0.00459	PASS
CA_5B	QPSK	20476+20575	50RB#0/50RB#0	TN	NV	1.34	0.00161	PASS
CA_5B	QPSK	20476+20575	50RB#0/50RB#0	TN	HV	-2.45	-0.00295	PASS
CA_5B	QPSK	20501+20600	50RB#0/50RB#0	TN	LV	1.78	0.00213	PASS
CA_5B	QPSK	20501+20600	50RB#0/50RB#0	TN	NV	-4.61	-0.00553	PASS
CA_5B	QPSK	20501+20600	50RB#0/50RB#0	TN	HV	2.8	0.00336	PASS
CA_5B	16QAM	20450+20549	50RB#0/50RB#0	TN	LV	-4.63	-0.00559	PASS
CA_5B	16QAM	20450+20549	50RB#0/50RB#0	TN	NV	-5.35	-0.00645	PASS
CA_5B	16QAM	20450+20549	50RB#0/50RB#0	TN	HV	-2.09	-0.00252	PASS
CA_5B	16QAM	20476+20575	50RB#0/50RB#0	TN	LV	-4.38	-0.00527	PASS
CA_5B	16QAM	20476+20575	50RB#0/50RB#0	TN	NV	-1.69	-0.00203	PASS
CA_5B	16QAM	20476+20575	50RB#0/50RB#0	TN	HV	-5.72	-0.00688	PASS
CA_5B	16QAM	20501+20600	50RB#0/50RB#0	TN	LV	2.31	0.00277	PASS
CA_5B	16QAM	20501+20600	50RB#0/50RB#0	TN	NV	-3.18	-0.00381	PASS
CA_5B	16QAM	20501+20600	50RB#0/50RB#0	TN	HV	-4.23	-0.00507	PASS
CA_5B	64QAM	20450+20549	50RB#0/50RB#0	TN	LV	-2.38	-0.00287	PASS
CA_5B	64QAM	20450+20549	50RB#0/50RB#0	TN	NV	-0.55	-0.00066	PASS
CA_5B	64QAM	20450+20549	50RB#0/50RB#0	TN	HV	-5.4	-0.00651	PASS
CA_5B	64QAM	20476+20575	50RB#0/50RB#0	TN	LV	-2.48	-0.00298	PASS
CA_5B	64QAM	20476+20575	50RB#0/50RB#0	TN	NV	-1.63	-0.00196	PASS
CA_5B	64QAM	20476+20575	50RB#0/50RB#0	TN	HV	-3.68	-0.00443	PASS
CA_5B	64QAM	20501+20600	50RB#0/50RB#0	TN	LV	-6.83	-0.00819	PASS
CA_5B	64QAM	20501+20600	50RB#0/50RB#0	TN	NV	-3.12	-0.00374	PASS
CA_5B	64QAM	20501+20600	50RB#0/50RB#0	TN	HV	2.1	0.00252	PASS



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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_5B	QPSK	20450+20549	50RB#0/50RB#0	NV	-30	-10.20	-0.01230	PASS
CA_5B	QPSK	20450+20549	50RB#0/50RB#0	NV	-20	-2.38	-0.00287	PASS
CA_5B	QPSK	20450+20549	50RB#0/50RB#0	NV	-10	9.40	0.01134	PASS
CA_5B	QPSK	20450+20549	50RB#0/50RB#0	NV	0	5.52	0.00666	PASS
CA_5B	QPSK	20450+20549	50RB#0/50RB#0	NV	10	9.70	0.01170	PASS
CA_5B	QPSK	20450+20549	50RB#0/50RB#0	NV	20	-11.97	-0.01443	PASS
CA_5B	QPSK	20450+20549	50RB#0/50RB#0	NV	30	7.28	0.00878	PASS
CA_5B	QPSK	20450+20549	50RB#0/50RB#0	NV	40	12.32	0.01486	PASS
CA_5B	QPSK	20450+20549	50RB#0/50RB#0	NV	50	-0.49	-0.00059	PASS
CA_5B	QPSK	20476+20575	50RB#0/50RB#0	NV	-30	-7.15	-0.00860	PASS
CA_5B	QPSK	20476+20575	50RB#0/50RB#0	NV	-20	1.90	0.00228	PASS
CA_5B	QPSK	20476+20575	50RB#0/50RB#0	NV	-10	11.06	0.01330	PASS
CA_5B	QPSK	20476+20575	50RB#0/50RB#0	NV	0	-10.06	-0.01210	PASS
CA_5B	QPSK	20476+20575	50RB#0/50RB#0	NV	10	10.68	0.01285	PASS
CA_5B	QPSK	20476+20575	50RB#0/50RB#0	NV	20	-8.90	-0.01070	PASS
CA_5B	QPSK	20476+20575	50RB#0/50RB#0	NV	30	-4.99	-0.00600	PASS
CA_5B	QPSK	20476+20575	50RB#0/50RB#0	NV	40	10.90	0.01310	PASS
CA_5B	QPSK	20476+20575	50RB#0/50RB#0	NV	50	12.62	0.01518	PASS
CA_5B	QPSK	20501+20600	50RB#0/50RB#0	NV	-30	-10.33	-0.01238	PASS
CA_5B	QPSK	20501+20600	50RB#0/50RB#0	NV	-20	11.16	0.01337	PASS
CA_5B	QPSK	20501+20600	50RB#0/50RB#0	NV	-10	2.85	0.00342	PASS
CA_5B	QPSK	20501+20600	50RB#0/50RB#0	NV	0	-8.17	-0.00980	PASS
CA_5B	QPSK	20501+20600	50RB#0/50RB#0	NV	10	7.60	0.00912	PASS
CA_5B	QPSK	20501+20600	50RB#0/50RB#0	NV	20	0.02	0.00002	PASS
CA_5B	QPSK	20501+20600	50RB#0/50RB#0	NV	30	3.91	0.00469	PASS
CA_5B	QPSK	20501+20600	50RB#0/50RB#0	NV	40	-6.86	-0.00823	PASS
CA_5B	QPSK	20501+20600	50RB#0/50RB#0	NV	50	-6.27	-0.00752	PASS
CA_5B	16QAM	20450+20549	50RB#0/50RB#0	NV	-30	13.77	0.01661	PASS
CA_5B	16QAM	20450+20549	50RB#0/50RB#0	NV	-20	14.19	0.01711	PASS
CA_5B	16QAM	20450+20549	50RB#0/50RB#0	NV	-10	-13.04	-0.01573	PASS
CA_5B	16QAM	20450+20549	50RB#0/50RB#0	NV	0	-10.26	-0.01238	PASS
CA_5B	16QAM	20450+20549	50RB#0/50RB#0	NV	10	-12.06	-0.01454	PASS
CA_5B	16QAM	20450+20549	50RB#0/50RB#0	NV	20	-1.25	-0.00151	PASS
CA_5B	16QAM	20450+20549	50RB#0/50RB#0	NV	30	7.29	0.00880	PASS
CA_5B	16QAM	20450+20549	50RB#0/50RB#0	NV	40	12.41	0.01497	PASS
CA_5B	16QAM	20450+20549	50RB#0/50RB#0	NV	50	14.89	0.01796	PASS
CA_5B	16QAM	20476+20575	50RB#0/50RB#0	NV	-30	11.94	0.01435	PASS
CA_5B	16QAM	20476+20575	50RB#0/50RB#0	NV	-20	-2.85	-0.00343	PASS
CA_5B	16QAM	20476+20575	50RB#0/50RB#0	NV	-10	-1.07	-0.00129	PASS
CA_5B	16QAM	20476+20575	50RB#0/50RB#0	NV	0	12.75	0.01533	PASS





CA_5B	16QAM	20476+20575	50RB#0/50RB#0	NV	10	4.31	0.00519	PASS
CA_5B	16QAM	20476+20575	50RB#0/50RB#0	NV	20	-11.38	-0.01368	PASS
CA_5B	16QAM	20476+20575	50RB#0/50RB#0	NV	30	-5.58	-0.00671	PASS
CA_5B	16QAM	20476+20575	50RB#0/50RB#0	NV	40	-1.96	-0.00235	PASS
CA_5B	16QAM	20476+20575	50RB#0/50RB#0	NV	50	0.59	0.00071	PASS
CA_5B	16QAM	20501+20600	50RB#0/50RB#0	NV	-30	0.18	0.00021	PASS
CA_5B	16QAM	20501+20600	50RB#0/50RB#0	NV	-20	-11.77	-0.01412	PASS
CA_5B	16QAM	20501+20600	50RB#0/50RB#0	NV	-10	11.35	0.01361	PASS
CA_5B	16QAM	20501+20600	50RB#0/50RB#0	NV	0	1.89	0.00226	PASS
CA_5B	16QAM	20501+20600	50RB#0/50RB#0	NV	10	-13.62	-0.01633	PASS
CA_5B	16QAM	20501+20600	50RB#0/50RB#0	NV	20	1.11	0.00134	PASS
CA_5B	16QAM	20501+20600	50RB#0/50RB#0	NV	30	-8.78	-0.01053	PASS
CA_5B	16QAM	20501+20600	50RB#0/50RB#0	NV	40	-0.53	-0.00064	PASS
CA_5B	16QAM	20501+20600	50RB#0/50RB#0	NV	50	9.64	0.01156	PASS
CA_5B	64QAM	20450+20549	50RB#0/50RB#0	NV	-30	-7.69	-0.00928	PASS
CA_5B	64QAM	20450+20549	50RB#0/50RB#0	NV	-20	4.56	0.00550	PASS
CA_5B	64QAM	20450+20549	50RB#0/50RB#0	NV	-10	-8.59	-0.01037	PASS
CA_5B	64QAM	20450+20549	50RB#0/50RB#0	NV	0	-11.75	-0.01418	PASS
CA_5B	64QAM	20450+20549	50RB#0/50RB#0	NV	10	1.14	0.00138	PASS
CA_5B	64QAM	20450+20549	50RB#0/50RB#0	NV	20	2.66	0.00321	PASS
CA_5B	64QAM	20450+20549	50RB#0/50RB#0	NV	30	-7.84	-0.00946	PASS
CA_5B	64QAM	20450+20549	50RB#0/50RB#0	NV	40	-11.55	-0.01393	PASS
CA_5B	64QAM	20450+20549	50RB#0/50RB#0	NV	50	-7.77	-0.00937	PASS
CA_5B	64QAM	20476+20575	50RB#0/50RB#0	NV	-30	-2.36	-0.00284	PASS
CA_5B	64QAM	20476+20575	50RB#0/50RB#0	NV	-20	-5.33	-0.00641	PASS
CA_5B	64QAM	20476+20575	50RB#0/50RB#0	NV	-10	-10.68	-0.01285	PASS
CA_5B	64QAM	20476+20575	50RB#0/50RB#0	NV	0	6.03	0.00725	PASS
CA_5B	64QAM	20476+20575	50RB#0/50RB#0	NV	10	7.13	0.00857	PASS
CA_5B	64QAM	20476+20575	50RB#0/50RB#0	NV	20	-2.06	-0.00248	PASS
CA_5B	64QAM	20476+20575	50RB#0/50RB#0	NV	30	5.36	0.00644	PASS
CA_5B	64QAM	20476+20575	50RB#0/50RB#0	NV	40	-5.57	-0.00669	PASS
CA_5B	64QAM	20476+20575	50RB#0/50RB#0	NV	50	11.76	0.01414	PASS
CA_5B	64QAM	20501+20600	50RB#0/50RB#0	NV	-30	-5.39	-0.00646	PASS
CA_5B	64QAM	20501+20600	50RB#0/50RB#0	NV	-20	13.66	0.01637	PASS
CA_5B	64QAM	20501+20600	50RB#0/50RB#0	NV	-10	-6.27	-0.00752	PASS
CA_5B	64QAM	20501+20600	50RB#0/50RB#0	NV	0	6.58	0.00789	PASS
CA_5B	64QAM	20501+20600	50RB#0/50RB#0	NV	10	-3.50	-0.00420	PASS
CA_5B	64QAM	20501+20600	50RB#0/50RB#0	NV	20	3.03	0.00364	PASS
CA_5B	64QAM	20501+20600	50RB#0/50RB#0	NV	30	-5.58	-0.00669	PASS
CA_5B	64QAM	20501+20600	50RB#0/50RB#0	NV	40	-13.23	-0.01586	PASS
CA_5B	64QAM	20501+20600	50RB#0/50RB#0	NV	50	-9.27	-0.01111	PASS

The End



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