



Appendix B

E-UTRA Band 5



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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



1 Effective (Isotropic) Radiated Power

1.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	23.29	19.74	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	23.52	19.97	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	23.30	19.75	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	23.39	19.84	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	23.67	20.12	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	23.52	19.97	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	22.41	18.86	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	23.36	19.81	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	23.38	19.83	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.38	19.83	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	23.42	19.87	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	23.66	20.11	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	23.46	19.91	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.43	18.88	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	23.09	19.54	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	23.39	19.84	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.30	19.75	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	23.54	19.99	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	23.45	19.90	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	23.43	19.88	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.52	18.97	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	21.94	18.39	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	22.46	18.91	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	21.80	18.25	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	22.66	19.11	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	22.61	19.06	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	22.60	19.05	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	21.59	18.04	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	21.93	18.38	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	21.84	18.29	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	21.75	18.20	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	22.50	18.95	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	22.49	18.94	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	22.40	18.85	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	21.44	17.89	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	22.55	19.00	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	21.95	18.40	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	21.80	18.25	38.45	PASS



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Band5	1.4MHz	16QAM	20643	3RB#0	22.47	18.92	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	22.45	18.90	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	22.53	18.98	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.50	17.95	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	23.46	19.91	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	23.50	19.95	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.37	19.82	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#0	22.40	18.85	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#4	22.54	18.99	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#7	22.44	18.89	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.51	18.96	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.60	20.05	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	23.09	19.54	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	23.44	19.89	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#7	22.48	18.93	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#0	22.35	18.80	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#4	22.36	18.81	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	22.44	18.89	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.31	19.76	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	23.61	20.06	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	23.16	19.61	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#0	22.70	19.15	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#7	22.42	18.87	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#4	22.39	18.84	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	22.48	18.93	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	22.28	18.73	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	21.92	18.37	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	22.00	18.45	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#7	21.33	17.78	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#4	21.37	17.82	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#0	21.55	18.00	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	21.47	17.92	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	21.92	18.37	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	21.98	18.43	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	21.78	18.23	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#7	21.40	17.85	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#0	21.20	17.65	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#4	21.29	17.74	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.40	17.85	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	21.92	18.37	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	22.05	18.50	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	22.43	18.88	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#0	21.58	18.03	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#4	21.21	17.66	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#7	21.60	18.05	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	21.41	17.86	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.45	19.90	38.45	PASS



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Shenzhen Branch (CSTC Laboratory)

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Band5	5MHz	QPSK	20425	1RB#12	23.50	19.95	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	23.37	19.82	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#0	22.22	18.67	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#6	22.45	18.90	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#13	22.53	18.98	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	22.36	18.81	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	23.41	19.86	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	23.40	19.85	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	23.09	19.54	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#0	22.28	18.73	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#6	22.35	18.80	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#13	22.36	18.81	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.31	18.76	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	23.29	19.74	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	23.41	19.86	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.38	19.83	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#0	22.52	18.97	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#6	22.55	19.00	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#13	22.38	18.83	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	22.33	18.78	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	21.86	18.31	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.00	18.45	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	21.83	18.28	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#6	21.44	17.89	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#0	21.38	17.83	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#13	21.34	17.79	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	21.53	17.98	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	21.76	18.21	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	22.02	18.47	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	21.71	18.16	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#13	21.30	17.75	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#0	21.30	17.75	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#6	21.18	17.63	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.37	17.82	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.49	18.94	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	21.89	18.34	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	21.84	18.29	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#0	21.21	17.66	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#6	21.47	17.92	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#13	21.35	17.80	38.45	PASS
Band5	5MHz	16QAM	20625	25RB#0	21.46	17.91	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.20	19.65	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.56	20.01	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	23.49	19.94	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#0	22.46	18.91	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#12	22.61	19.06	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#25	22.41	18.86	38.45	PASS



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Band5	10MHz	QPSK	20450	50RB#0	22.50	18.95	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	23.36	19.81	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	23.23	19.68	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.64	20.09	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#25	22.39	18.84	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#0	22.54	18.99	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#12	22.41	18.86	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.39	18.84	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	23.59	20.04	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	23.31	19.76	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	23.23	19.68	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#0	22.41	18.86	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#25	22.43	18.88	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#12	22.50	18.95	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	22.47	18.92	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	21.92	18.37	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	21.88	18.33	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	22.17	18.62	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#25	21.48	17.93	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#12	21.56	18.01	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#0	21.48	17.93	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.39	17.84	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	22.26	18.71	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	22.21	18.66	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	21.81	18.26	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#25	21.47	17.92	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#0	21.32	17.77	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#12	21.38	17.83	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	21.36	17.81	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	21.95	18.40	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	21.80	18.25	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	21.87	18.32	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#0	21.17	17.62	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#12	21.33	17.78	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#25	21.40	17.85	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	21.54	17.99	38.45	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 [dBd]

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



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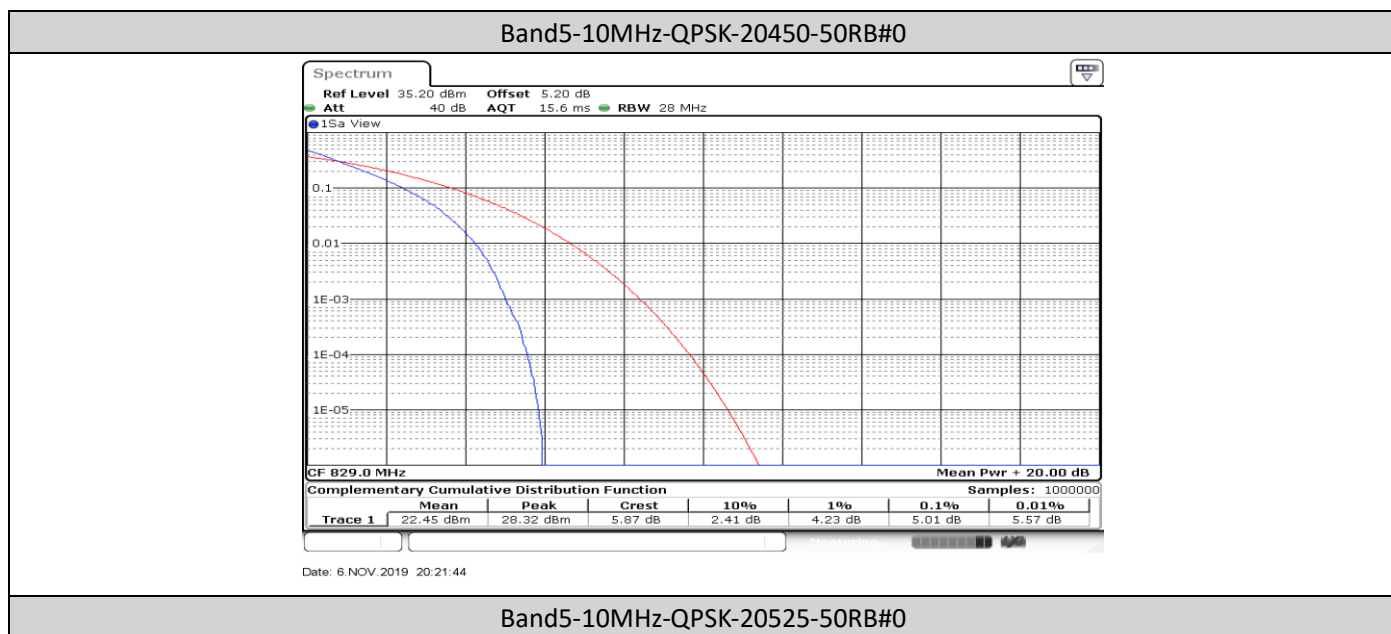


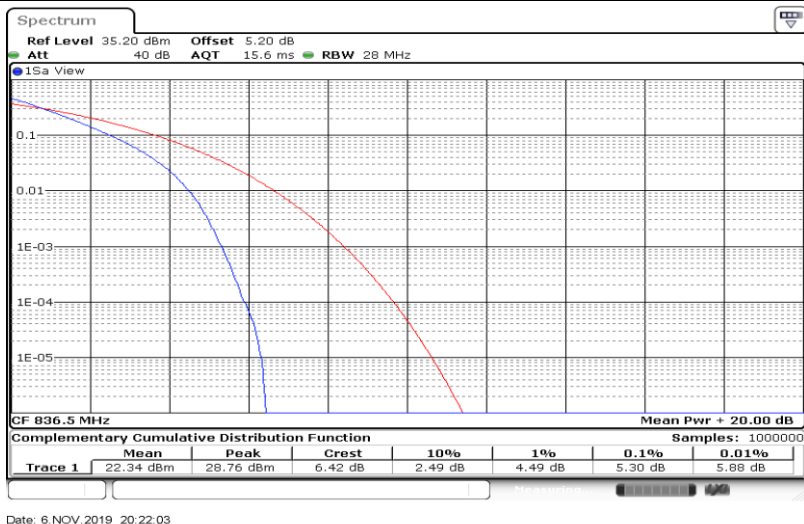
2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

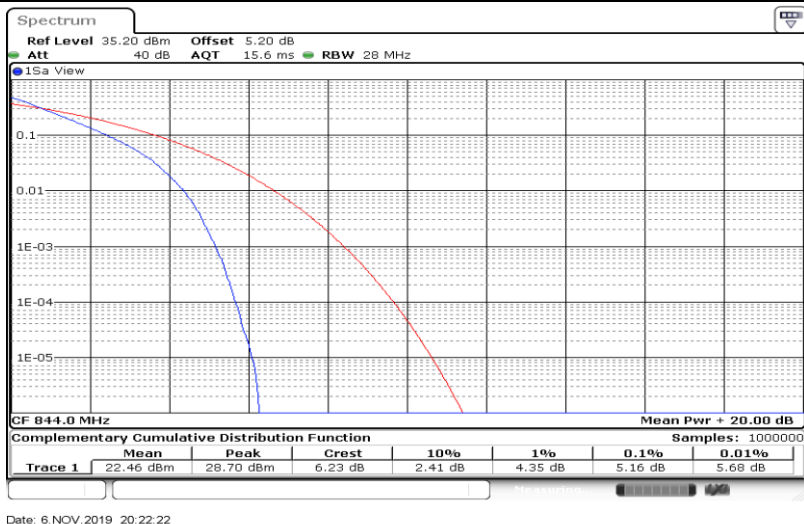
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	5.01	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	5.30	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.16	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	5.80	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	6.14	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	6.03	13	PASS

2.2. Test Plots



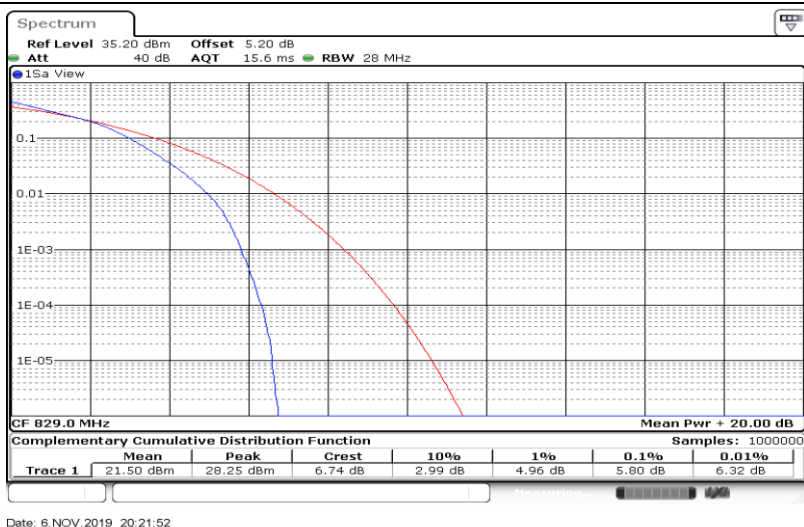


Band5-10MHz-QPSK-20600-50RB#0

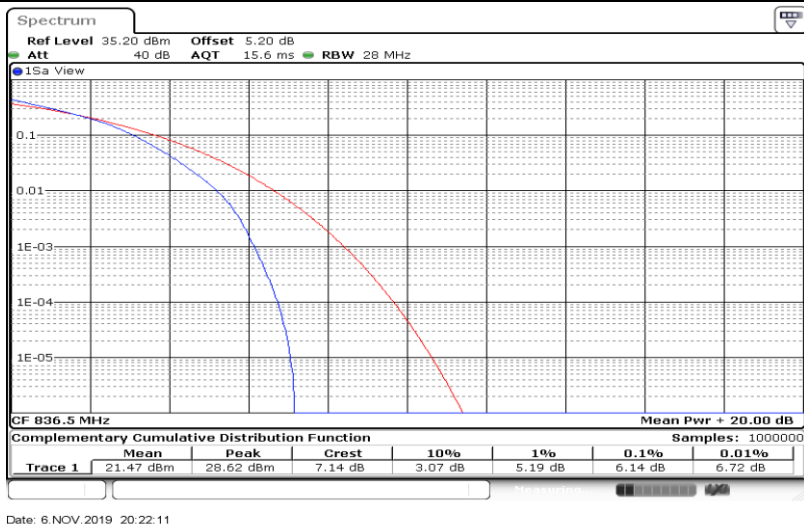


Band5-10MHz-16QAM-20450-50RB#0



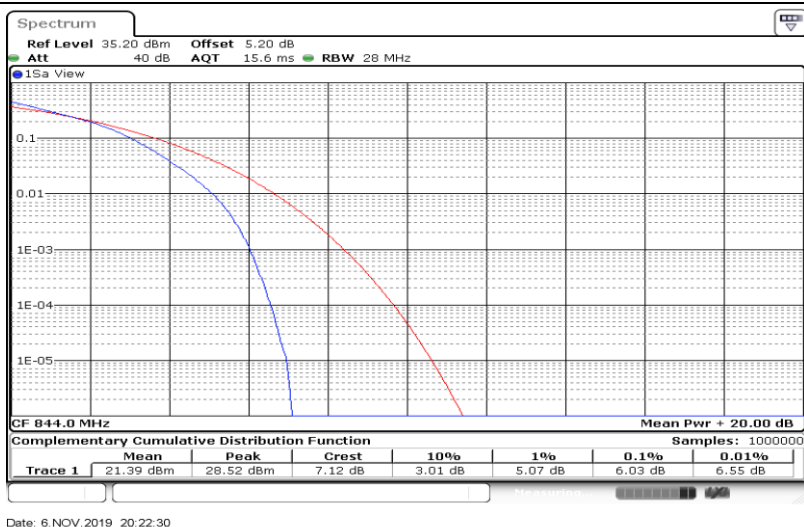


Band5-10MHz-16QAM-20525-50RB#0



Band5-10MHz-16QAM-20600-50RB#0





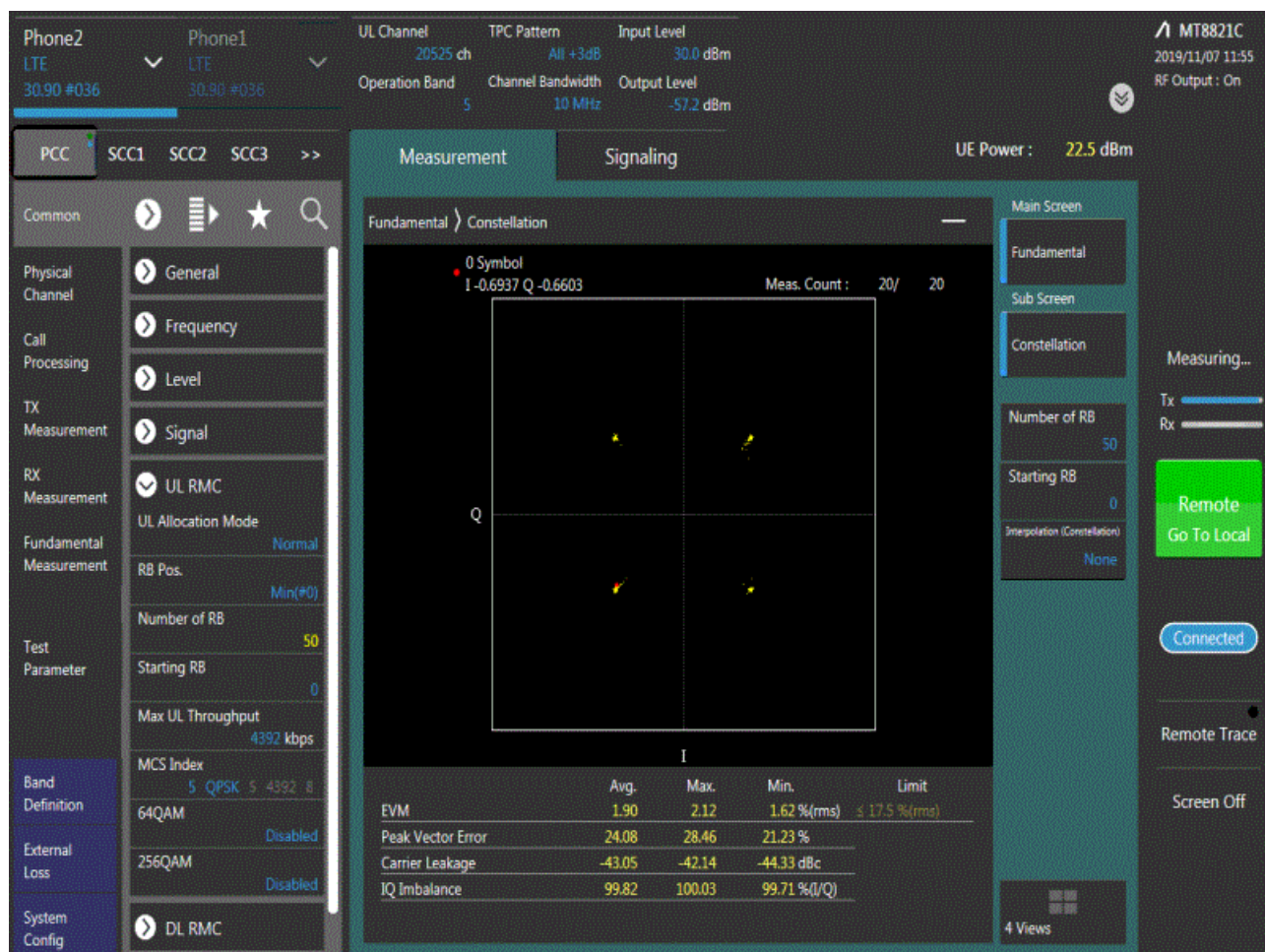
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3. Modulation Characteristics

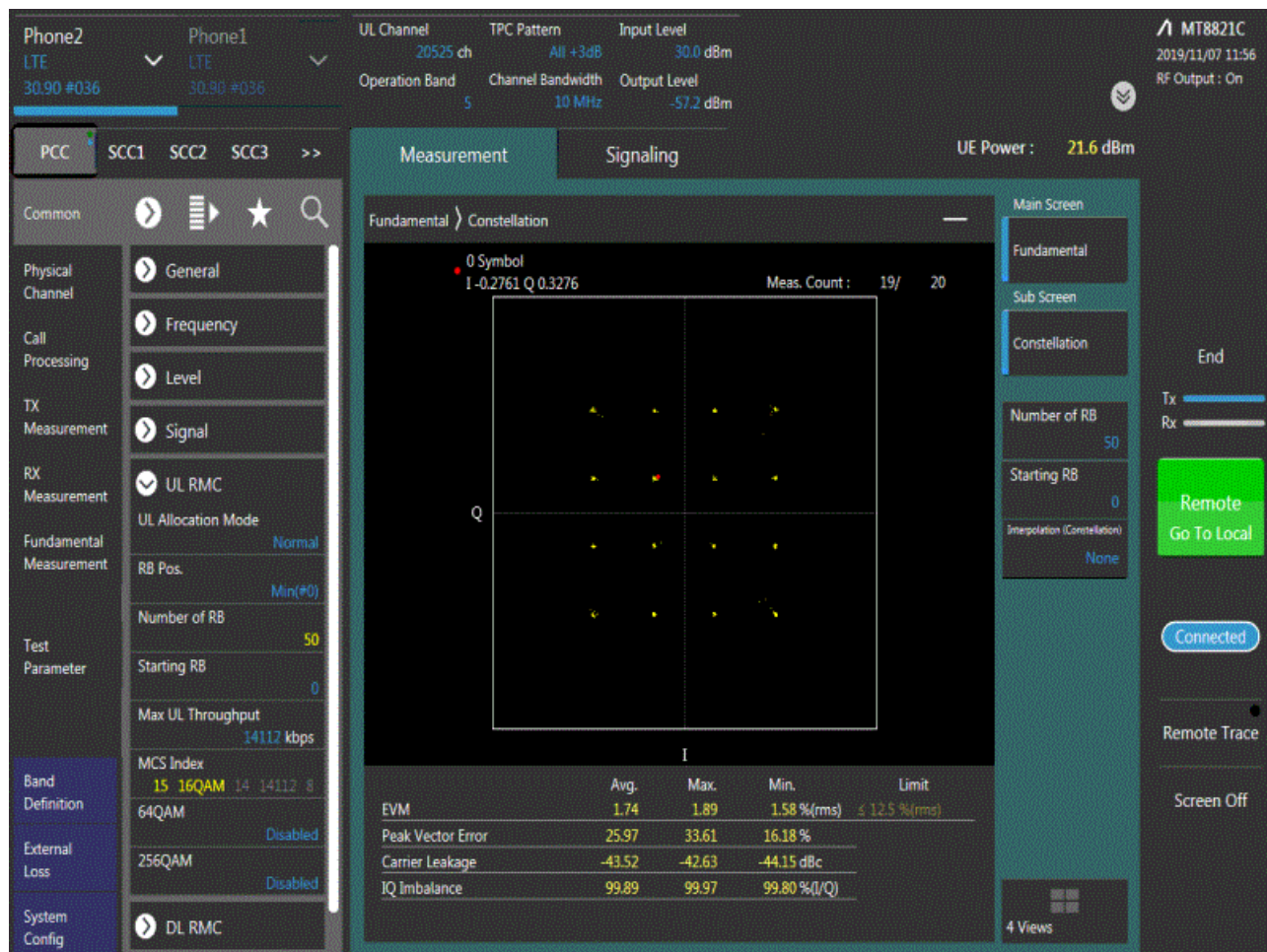
3.1. Test Mode = LTE /TM1 10MHz

3.1.1. Test Channel = MCH



3.2. Test Mode = LTE /TM2 10MHz

3.2.1. Test Channel = MCH





4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

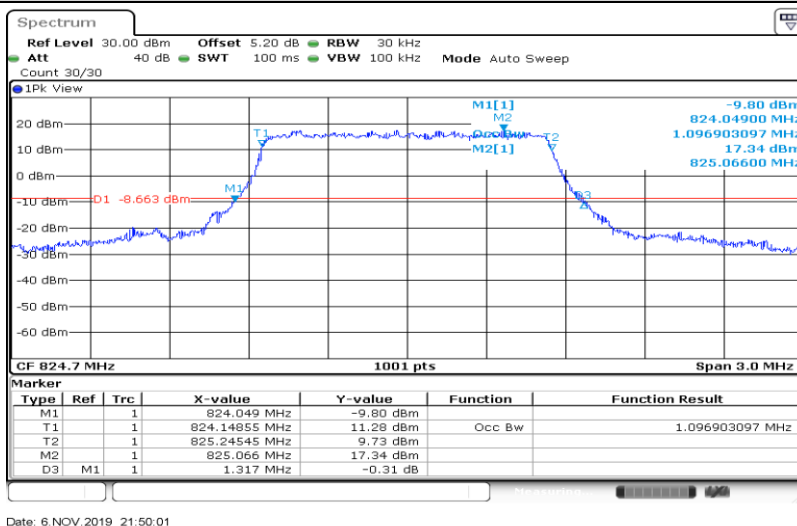
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.097	1.317	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.097	1.314	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.094	1.302	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.097	1.299	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.091	1.275	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.100	1.308	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.703	2.958	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.697	2.994	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.697	2.976	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.697	2.982	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.697	2.982	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.697	2.982	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.486	4.940	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.476	4.910	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.486	4.950	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.466	4.880	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.476	4.960	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.486	4.940	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.931	9.700	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.931	9.700	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.931	9.760	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.911	9.740	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.931	9.780	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.911	9.660	PASS



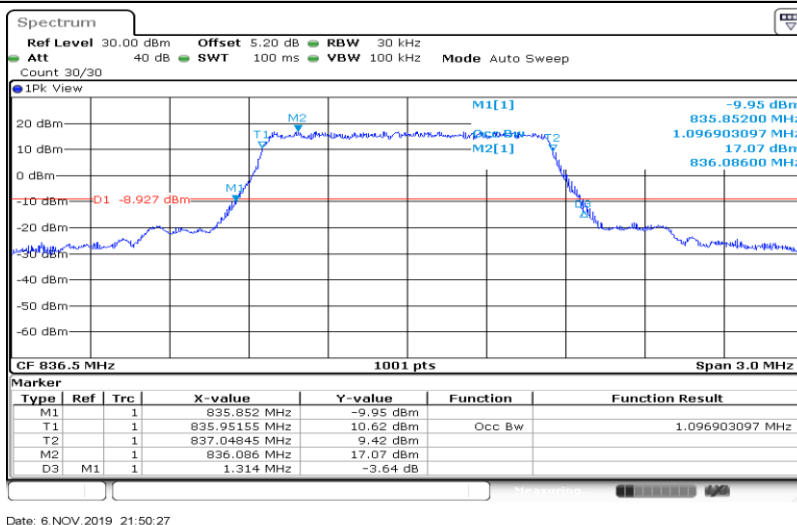


4.2. Test Plots

Band5-1.4MHz-QPSK-20407-6RB#0-1.097

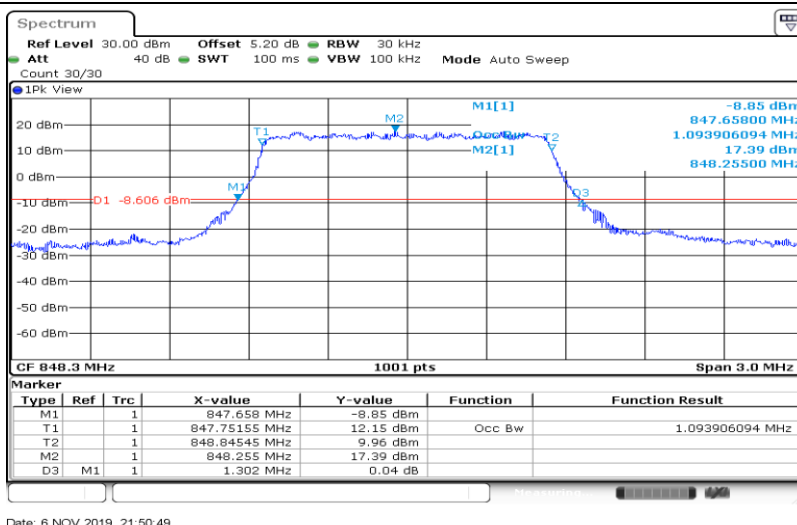


Band5-1.4MHz-QPSK-20525-6RB#0-1.097

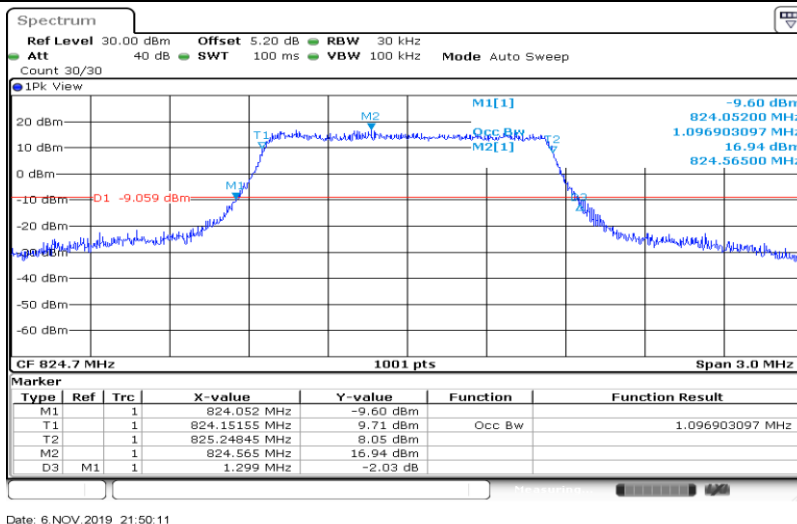


Band5-1.4MHz-QPSK-20643-6RB#0-1.094



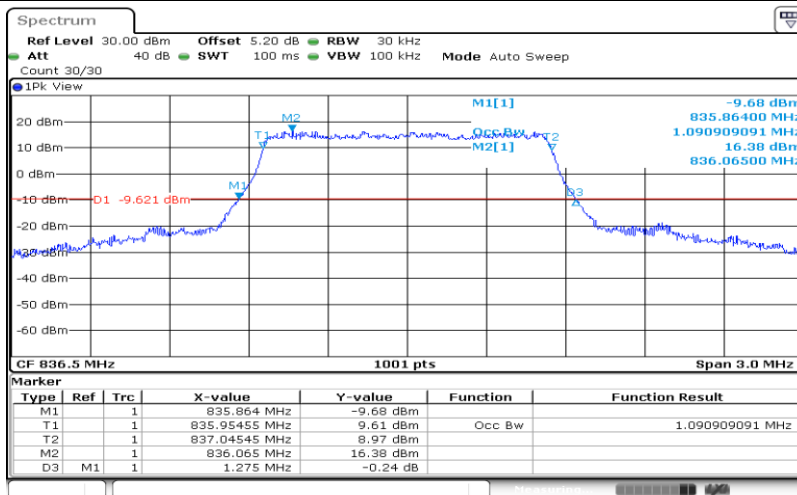


Band5-1.4MHz-16QAM-20407-6RB#0-1.097



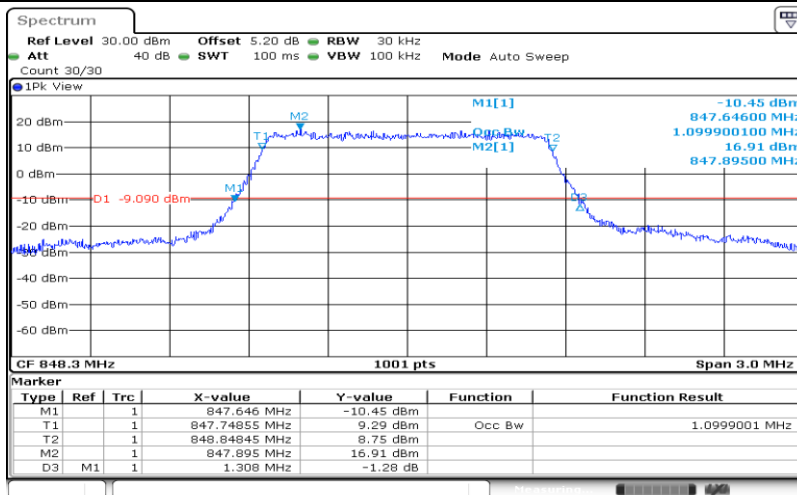
Band5-1.4MHz-16QAM-20525-6RB#0-1.091





Date: 6 NOV. 2019 21:50:37

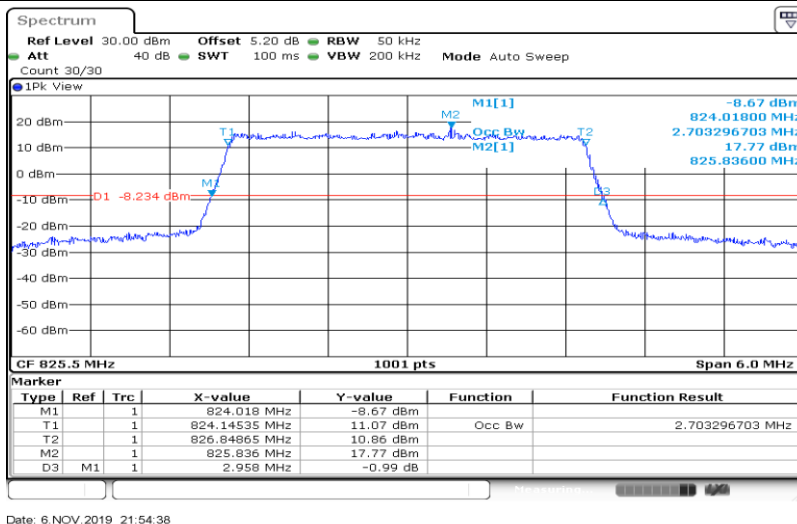
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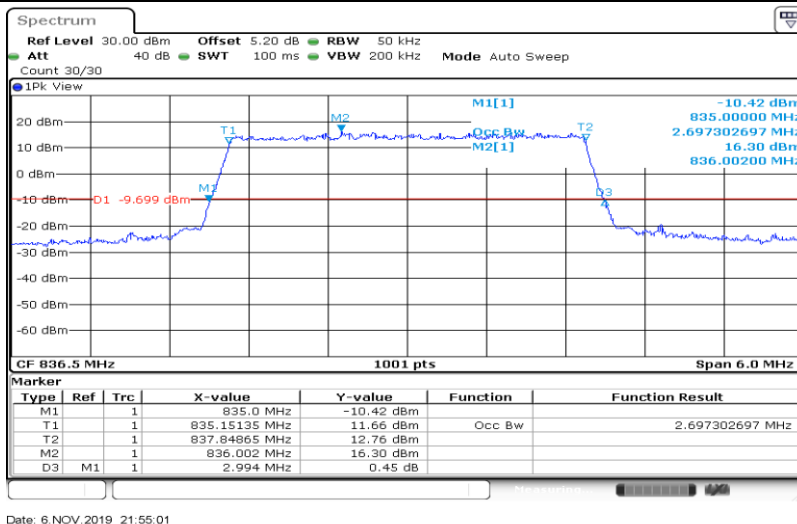
Date: 6 NOV. 2019 21:50:59

Band5-3MHz-QPSK-20415-15RB#0-2.703





Band5-3MHz-QPSK-20525-15RB#0-2.697



Band5-3MHz-QPSK-20635-15RB#0-2.697



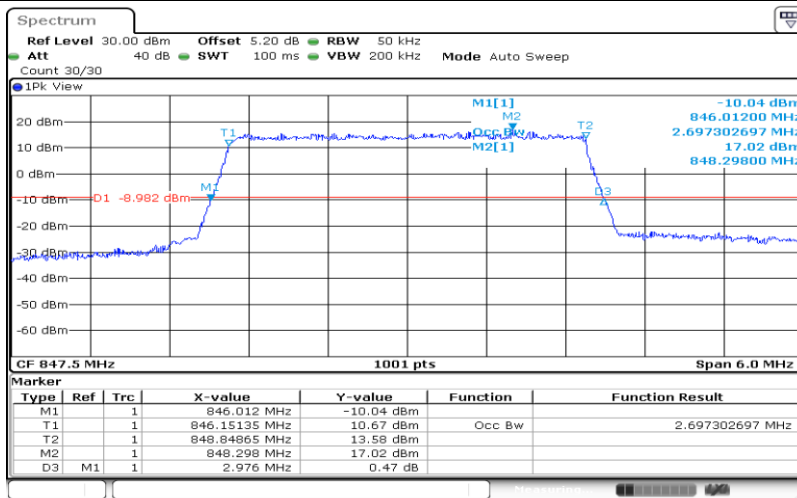
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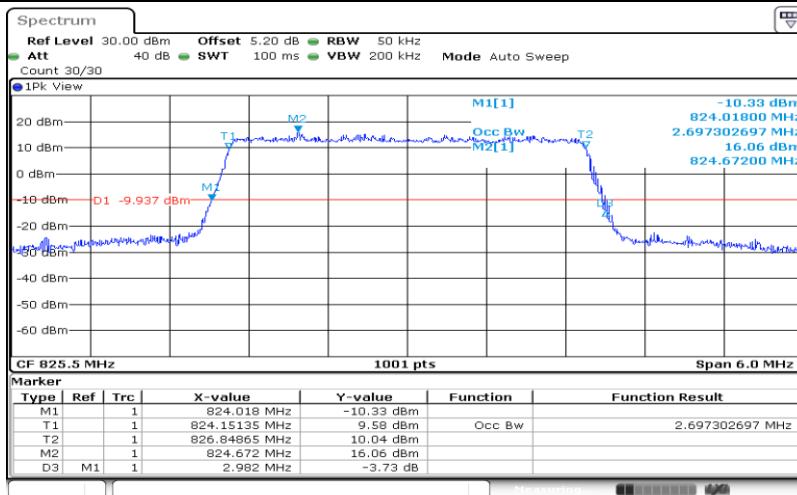
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Date: 6 NOV. 2019 21:55:23

Band5-3MHz-16QAM-20415-15RB#0-2.697



Date: 6 NOV. 2019 21:54:48

Band5-3MHz-16QAM-20525-15RB#0-2.697

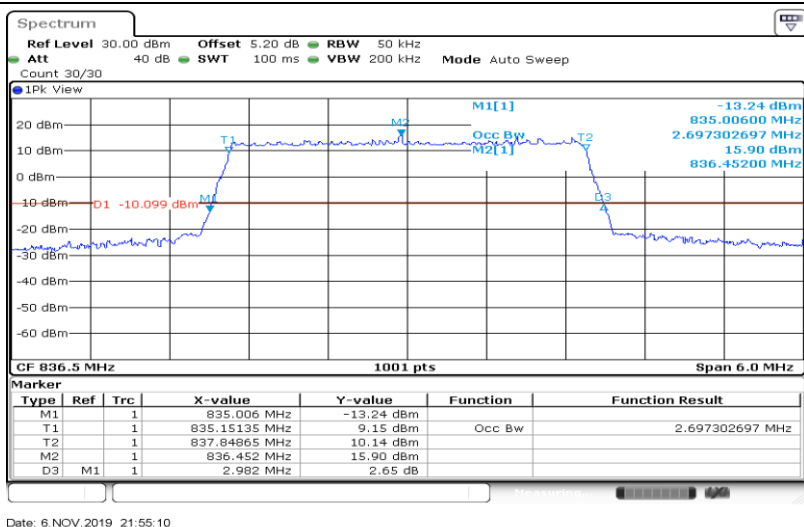


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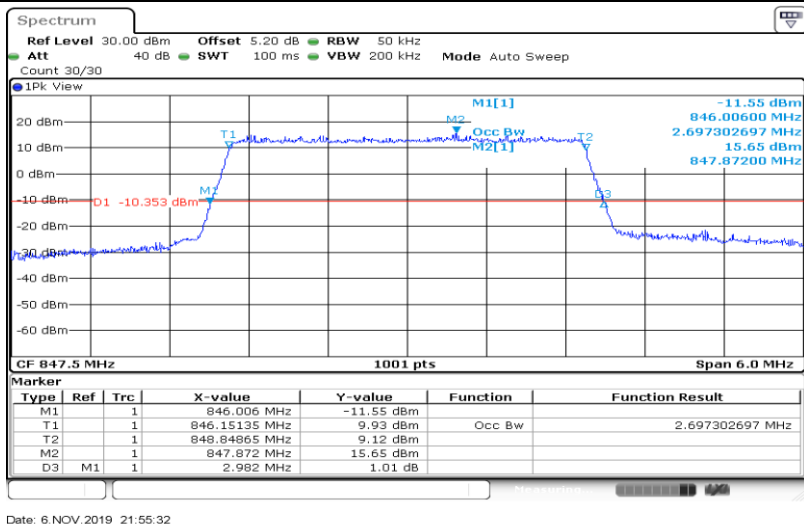
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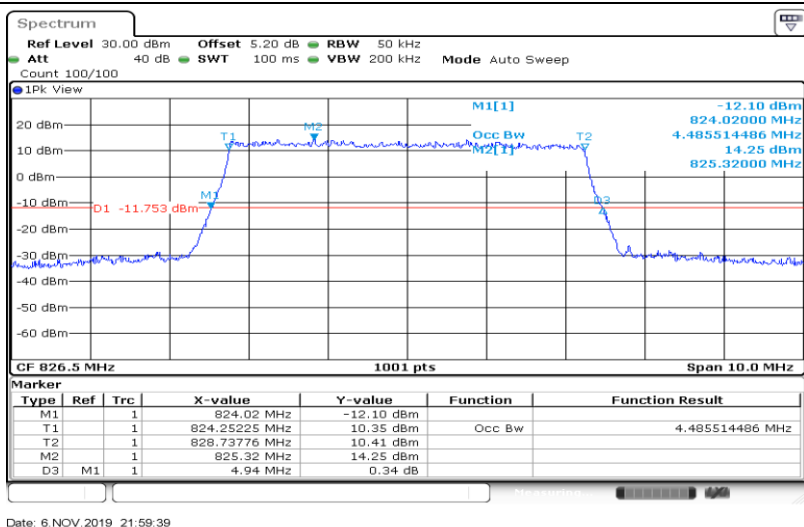


Band5-3MHz-16QAM-20635-15RB#0-2.697

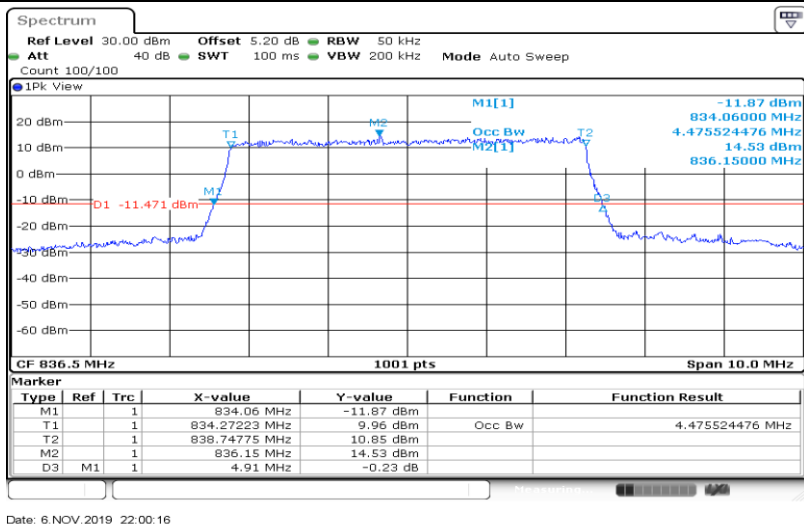


Band5-5MHz-QPSK-20425-25RB#0-4.486



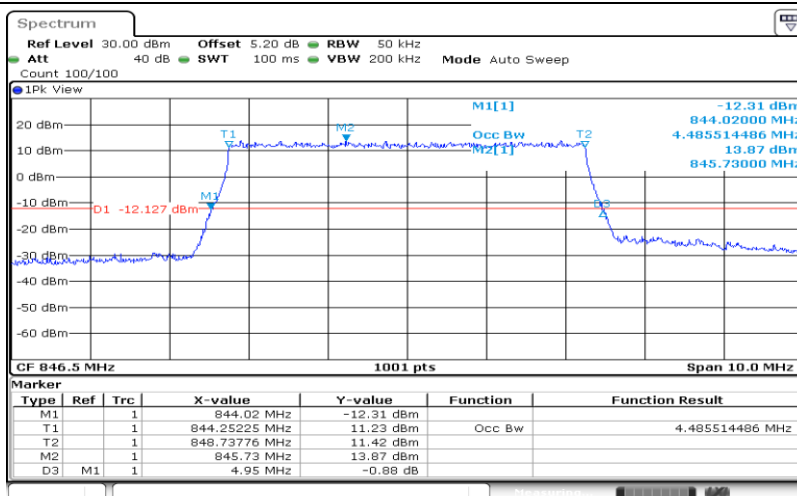


Band5-5MHz-QPSK-20525-25RB#0-4.476



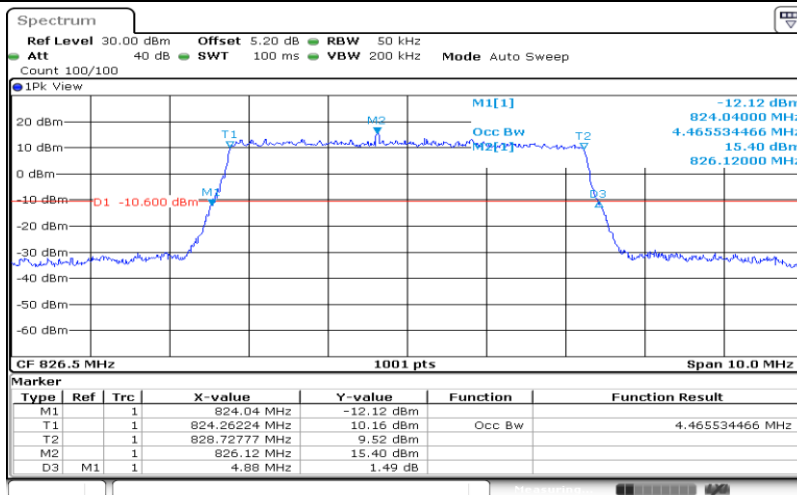
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Date: 6 NOV. 2019 22:00:52

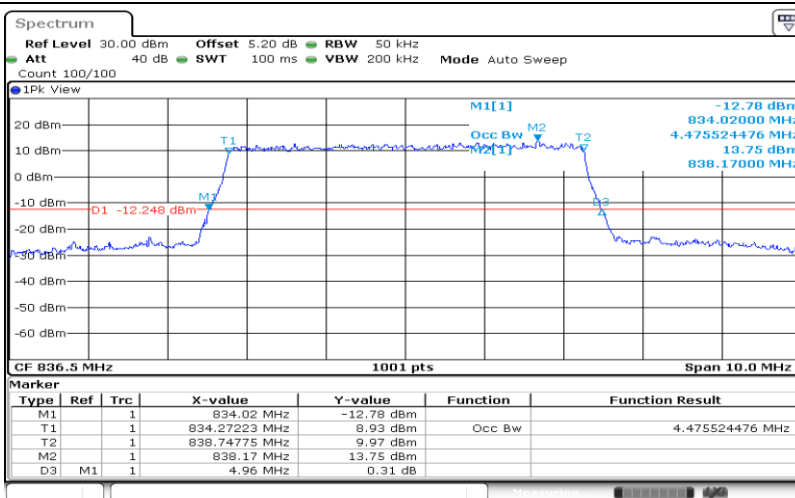
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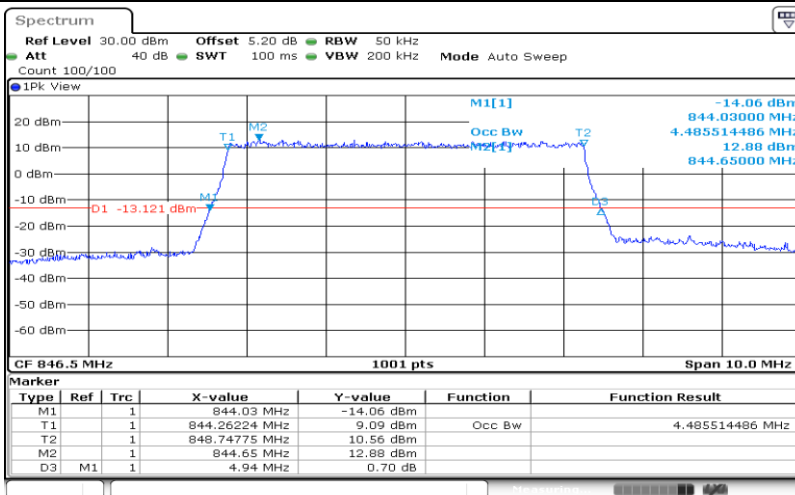
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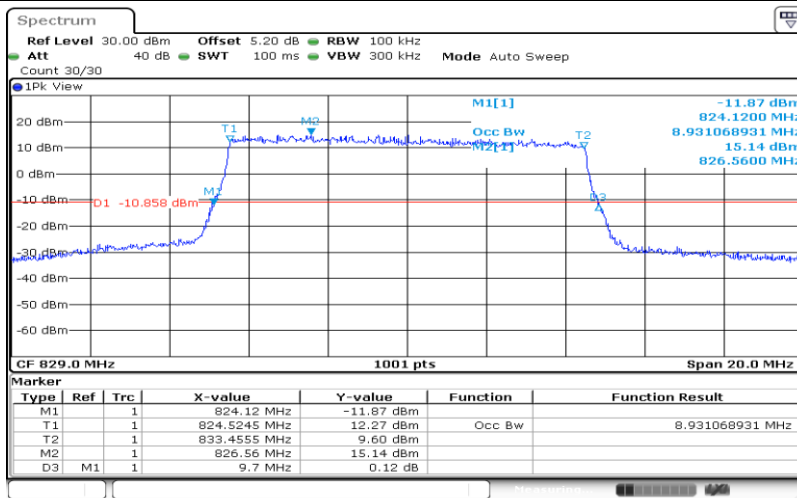
Band5-5MHz-16QAM-20625-25RB#0-4.486



Date: 6 NOV. 2019 22:01:09

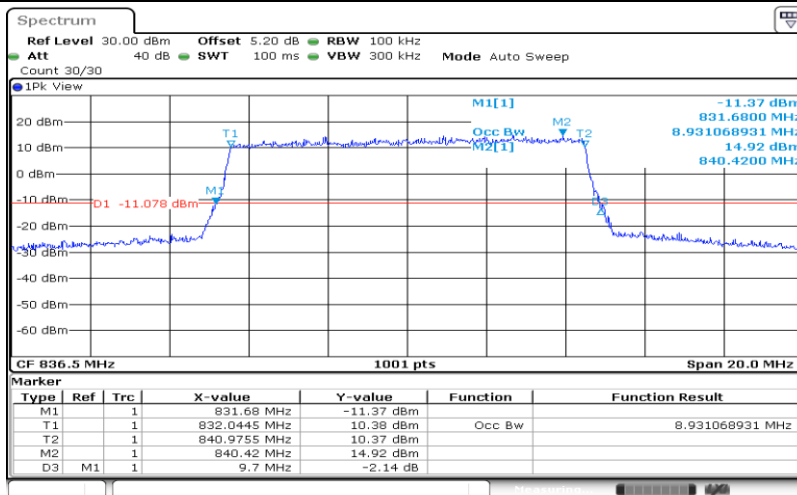
Band5-10MHz-QPSK-20450-50RB#0-8.931





Date: 6 NOV. 2019 22:08:13

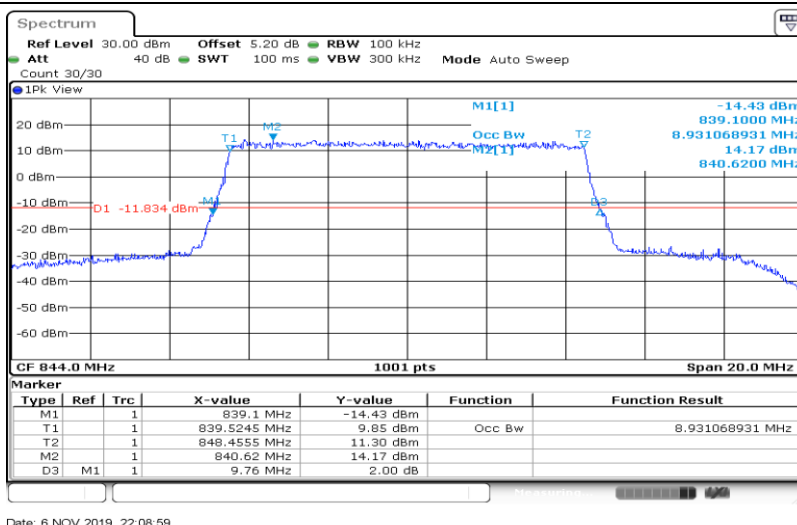
Band5-10MHz-QPSK-20525-50RB#0-8.931



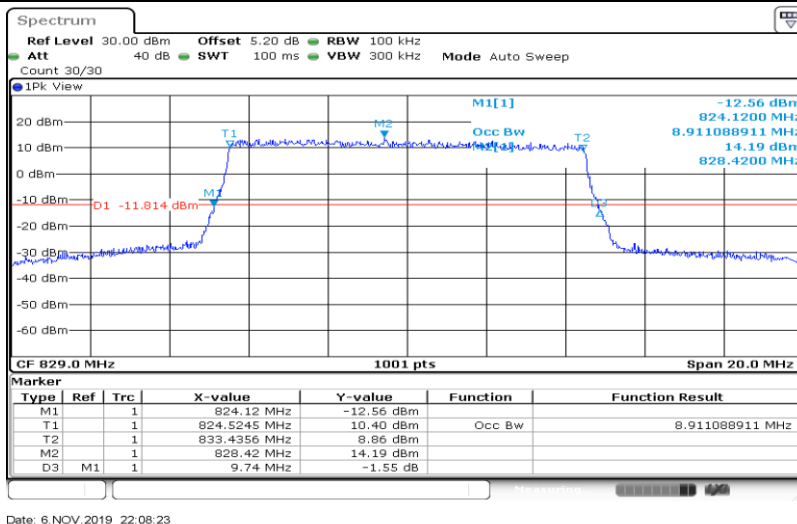
Date: 6 NOV. 2019 22:08:36

Band5-10MHz-QPSK-20600-50RB#0-8.931





Band5-10MHz-16QAM-20450-50RB#0-8.911



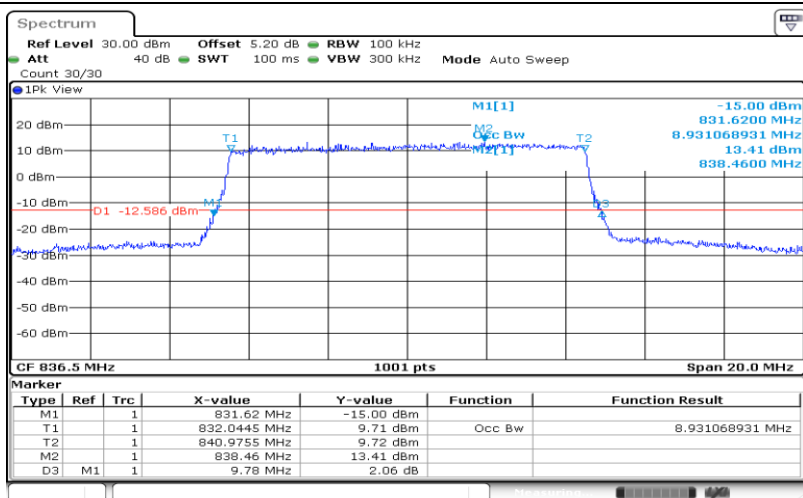
Band5-10MHz-16QAM-20525-50RB#0-8.931



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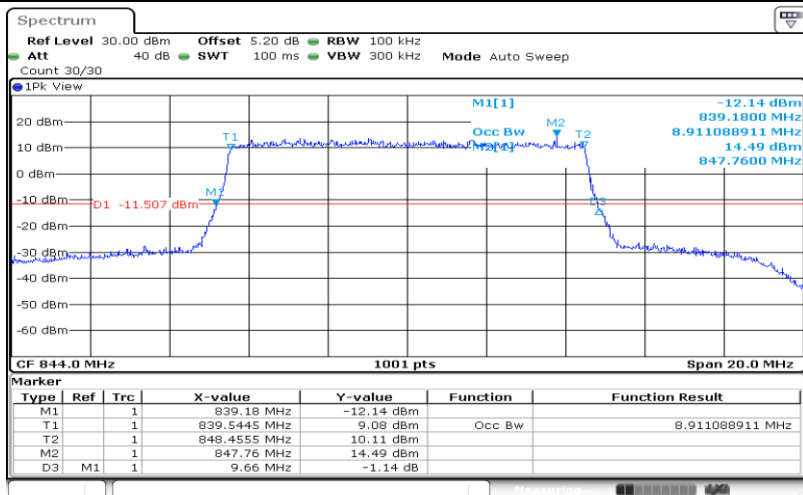
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Date: 6 NOV. 2019 22:08:46

Band5-10MHz-16QAM-20600-50RB#0-8.911



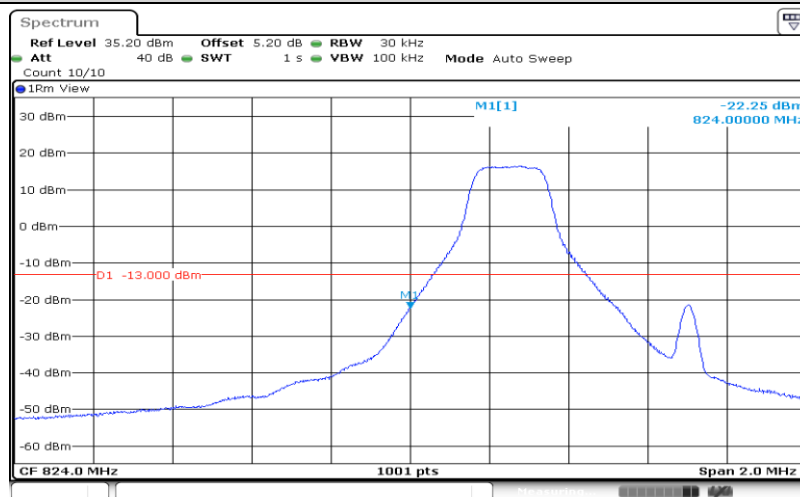
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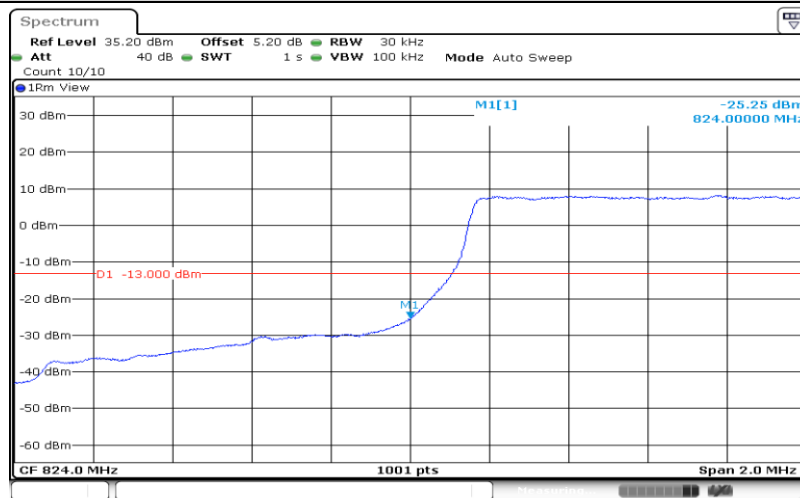
5. Band Edge Compliance

5.1. Test Plots

Band5-1.4MHz-QPSK-20407-1RB#0

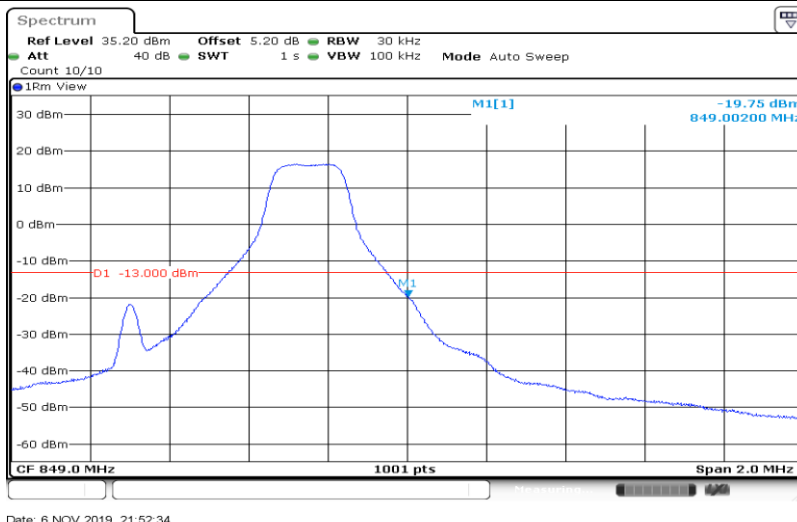


Band5-1.4MHz-QPSK-20407-6RB#0



Band5-1.4MHz-QPSK-20643-1RB#5





Band5-1.4MHz-QPSK-20643-6RB#0

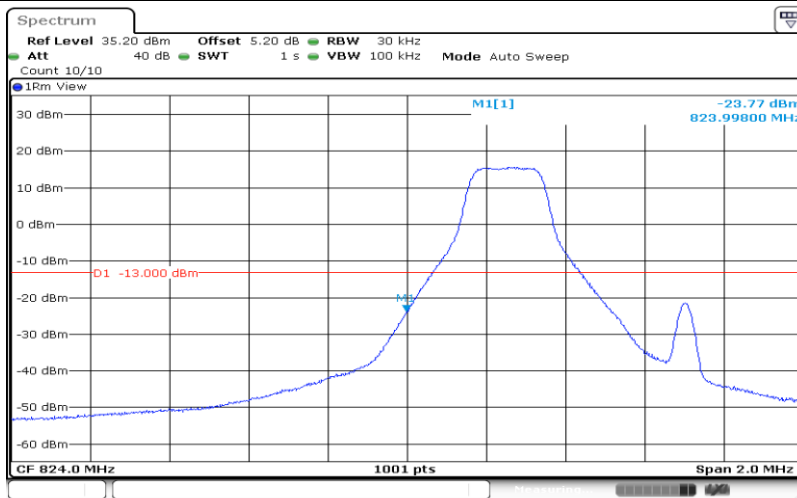


Band5-1.4MHz-16QAM-20407-1RB#0



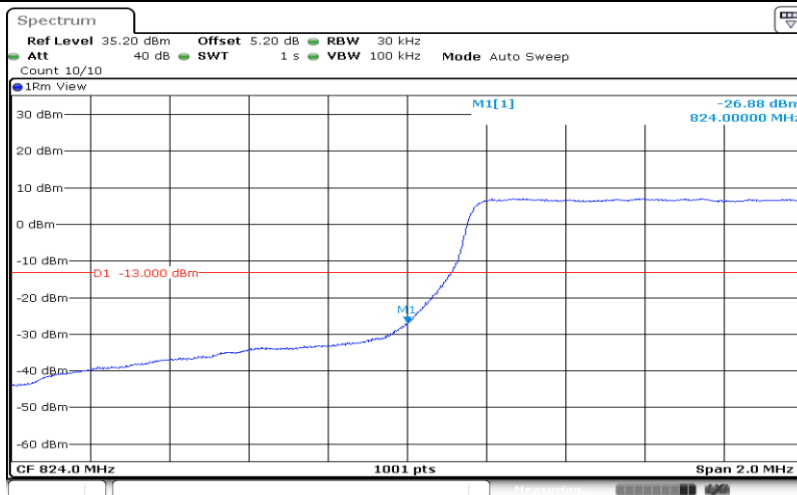
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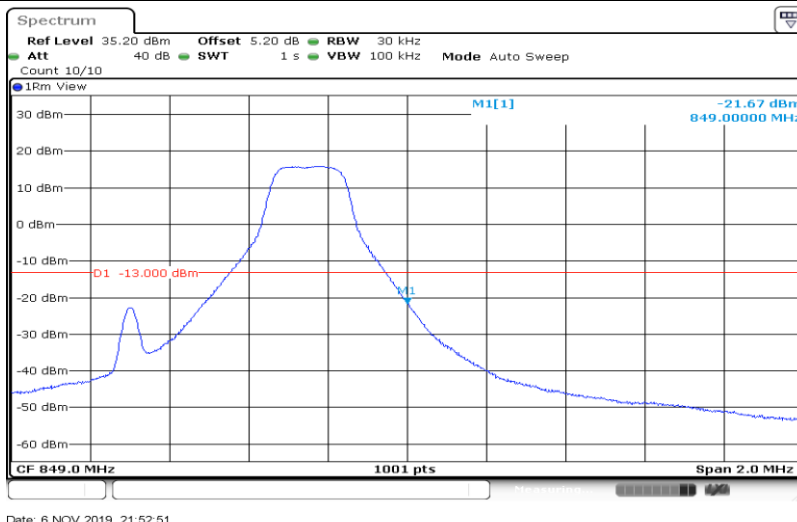
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Date: 6 NOV. 2019 21:52:11

Band5-1.4MHz-16QAM-20643-1RB#5



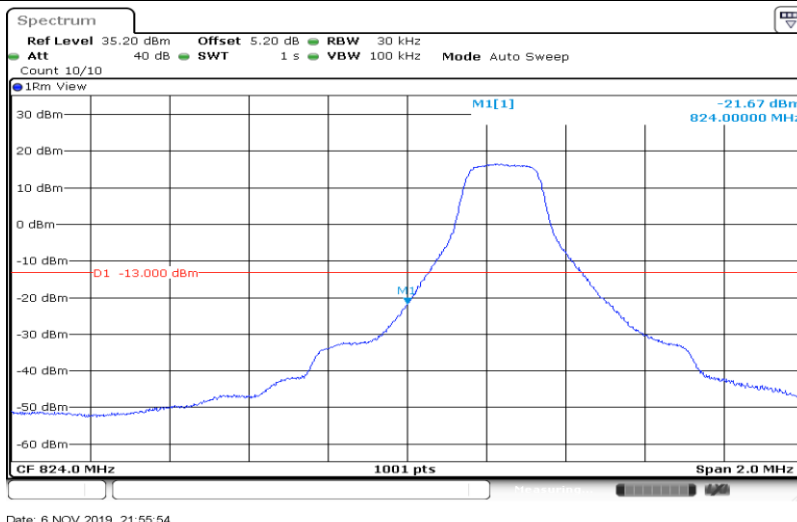


Band5-1.4MHz-16QAM-20643-6RB#0

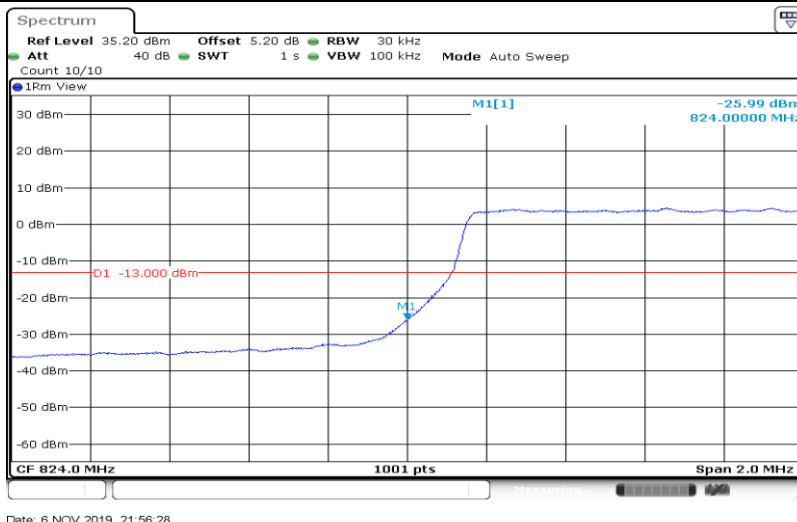


Band5-3MHz-QPSK-20415-1RB#0



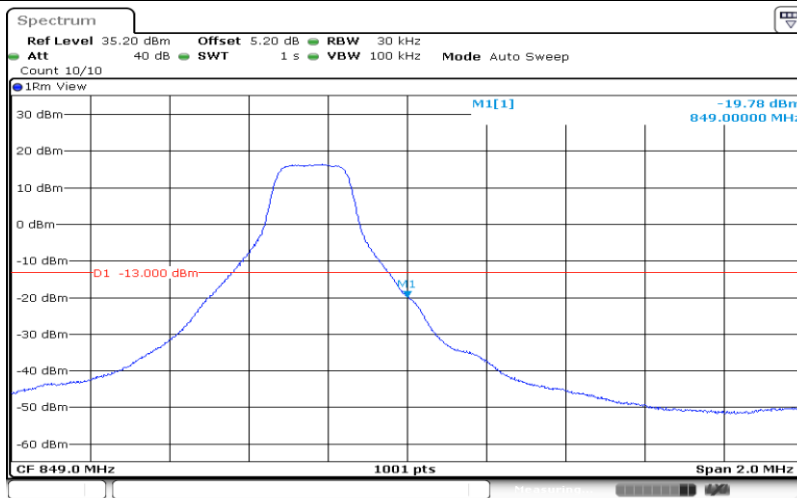


Band5-3MHz-QPSK-20415-15RB#0



Band5-3MHz-QPSK-20635-1RB#14





Date: 6 NOV. 2019 21:57:07

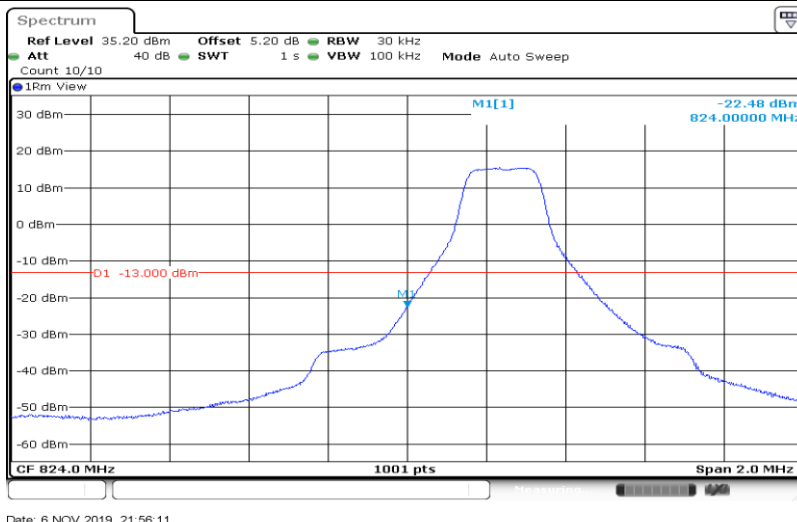
Band5-3MHz-QPSK-20635-15RB#0



Date: 6 NOV. 2019 21:57:41

Band5-3MHz-16QAM-20415-1RB#0



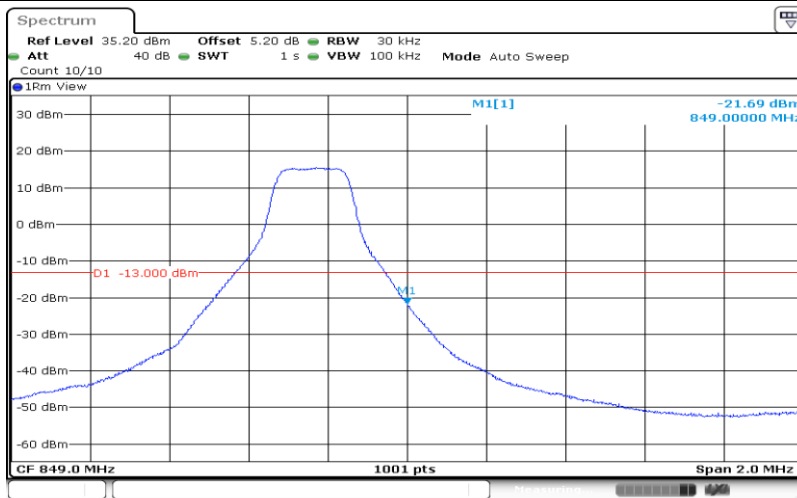


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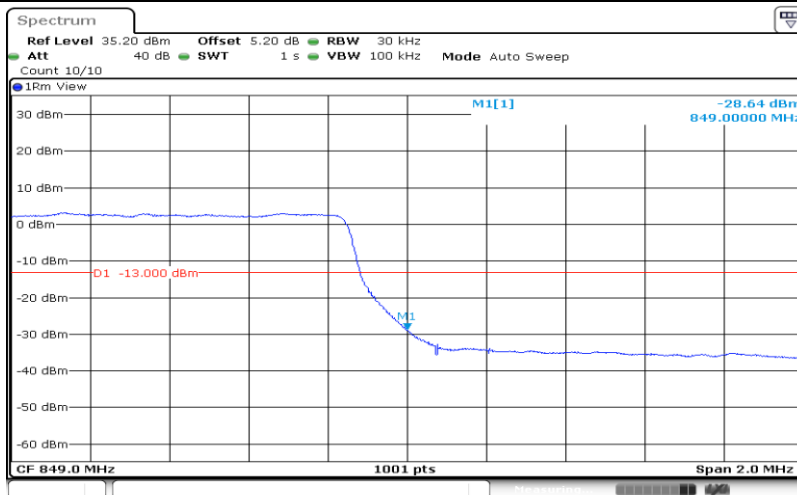
Band5-3MHz-16QAM-20635-1RB#14





Date: 6 NOV. 2019 21:57:24

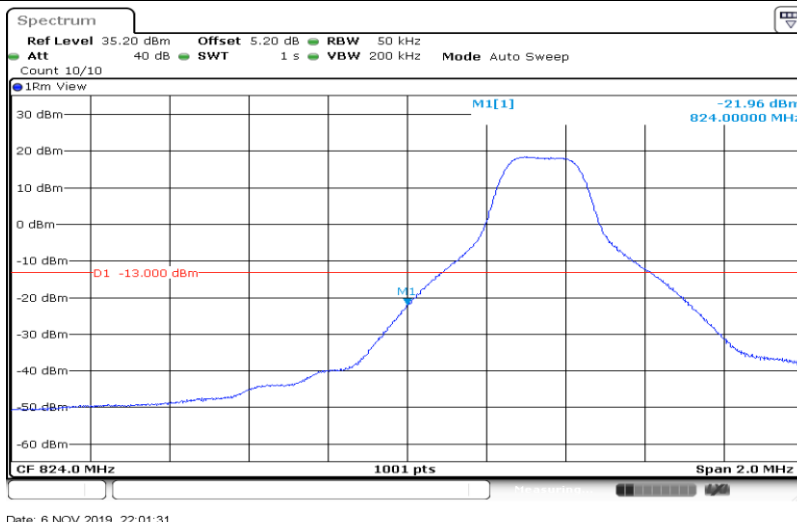
Band5-3MHz-16QAM-20635-15RB#0



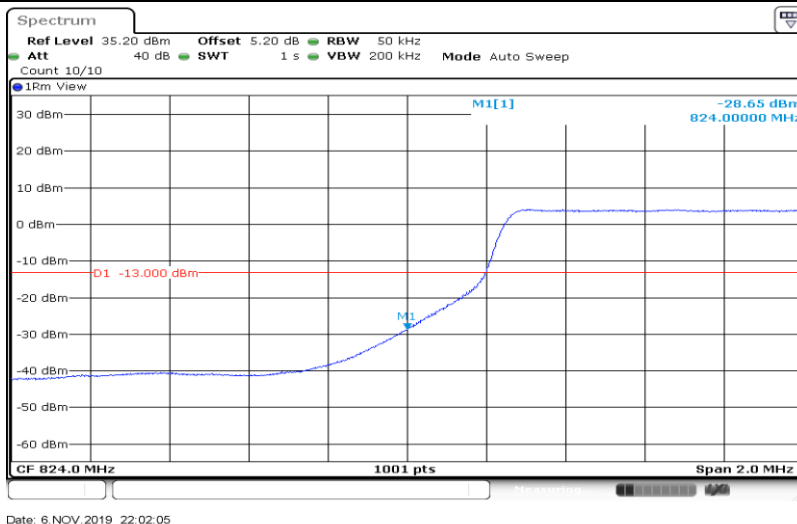
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Band5-5MHz-QPSK-20425-1RB#0





Band5-5MHz-QPSK-20425-25RB#0

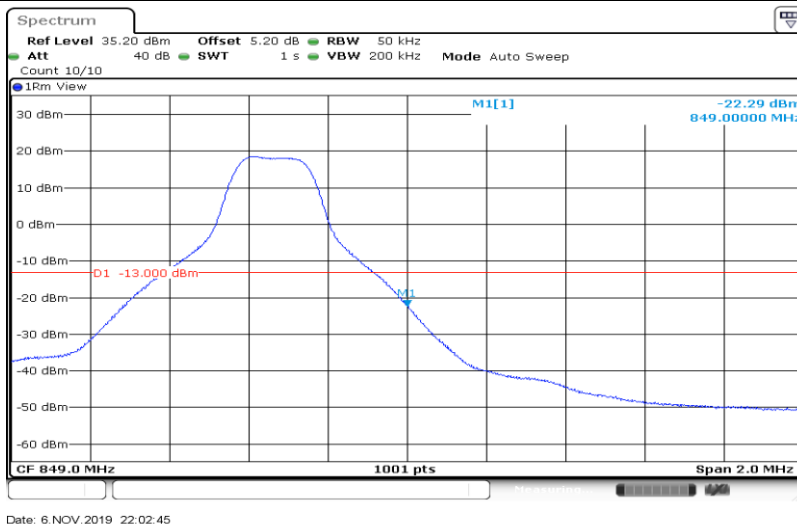


Band5-5MHz-QPSK-20625-1RB#24



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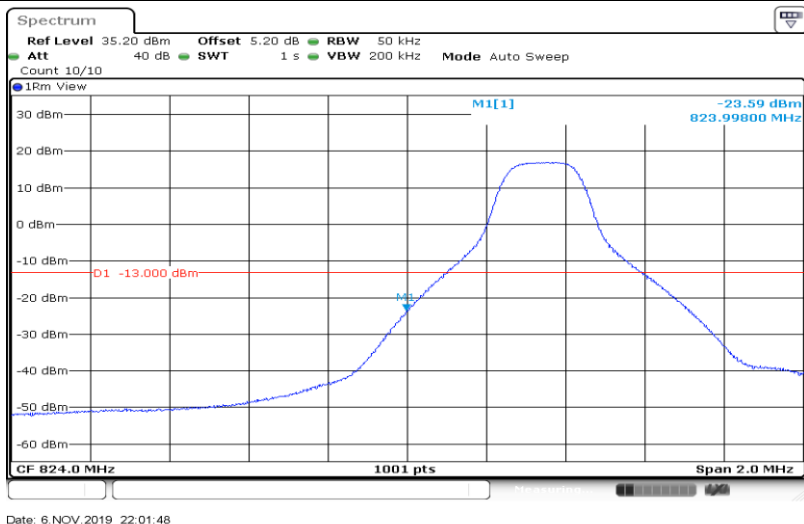


Band5-5MHz-QPSK-20625-25RB#0

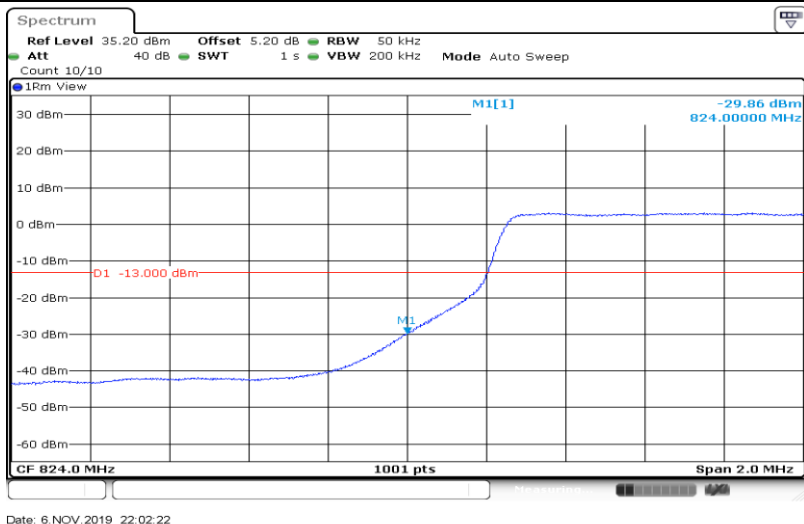


Band5-5MHz-16QAM-20425-1RB#0





Band5-5MHz-16QAM-20425-25RB#0



Band5-5MHz-16QAM-20625-1RB#24

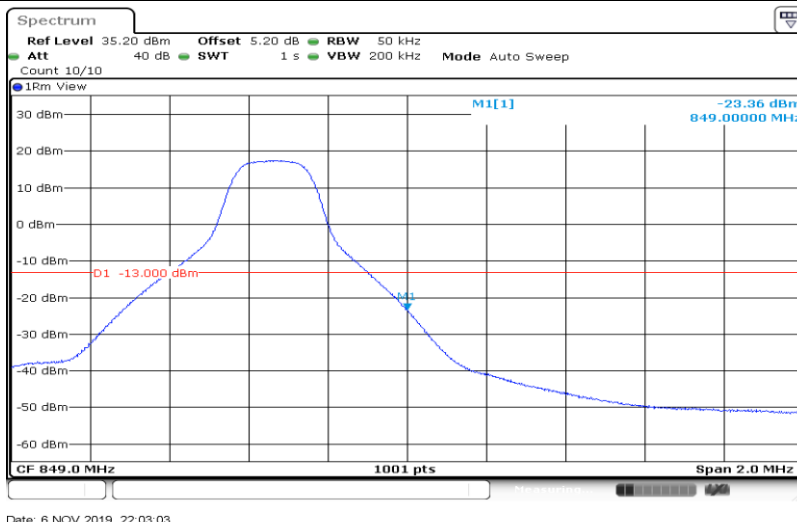


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Band5-5MHz-16QAM-20625-25RB#0

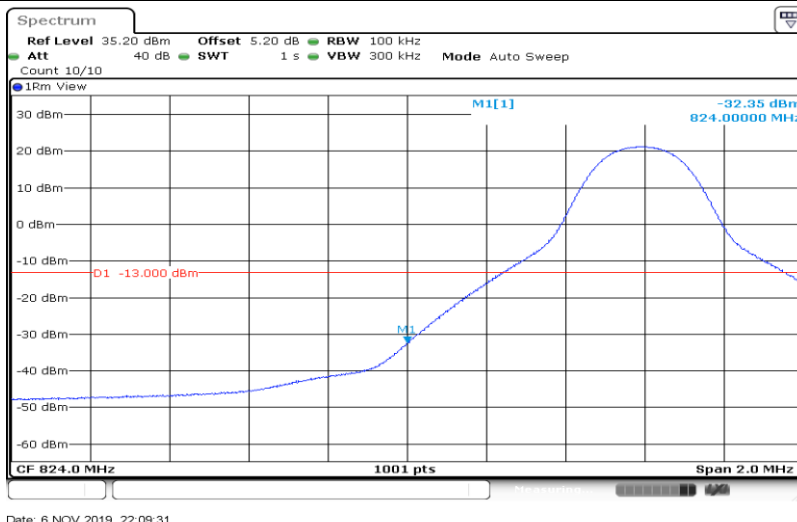


Band5-10MHz-QPSK-20450-1RB#0

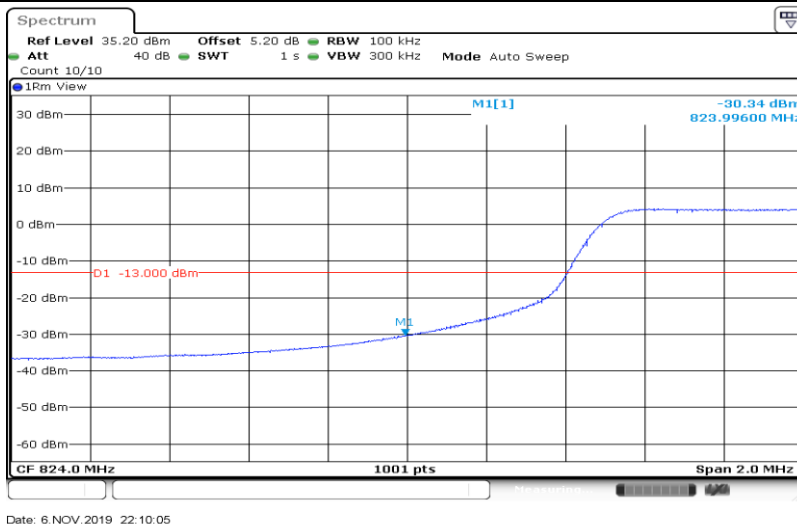


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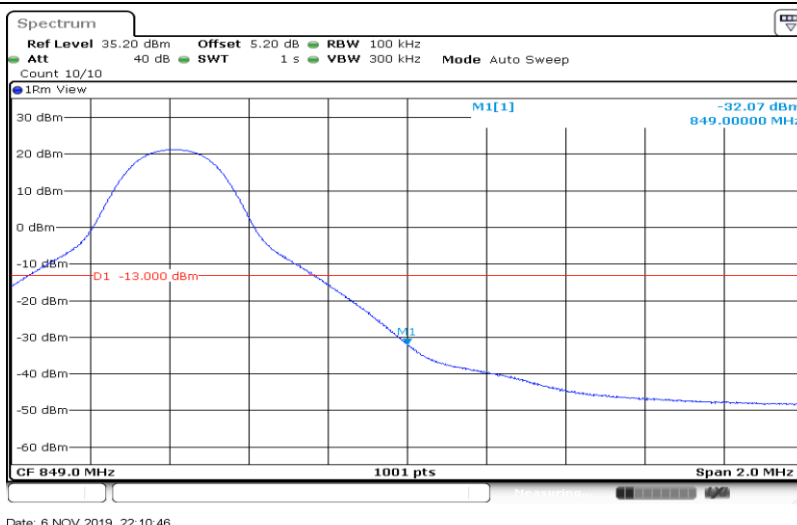
Band5-10MHz-QPSK-20450-50RB#0



Band5-10MHz-QPSK-20600-1RB#49



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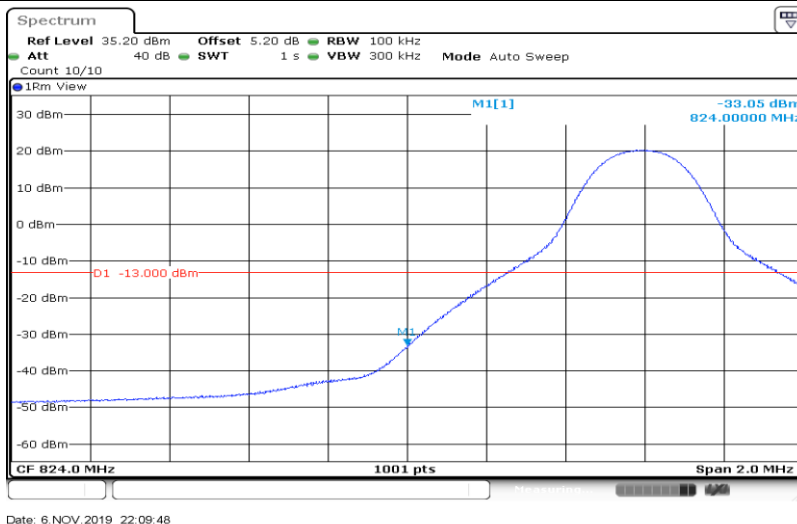


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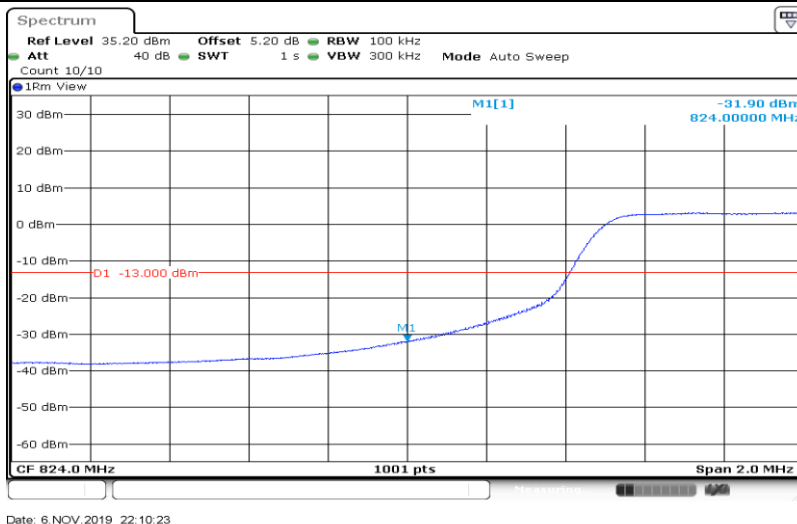


Band5-10MHz-16QAM-20450-1RB#0



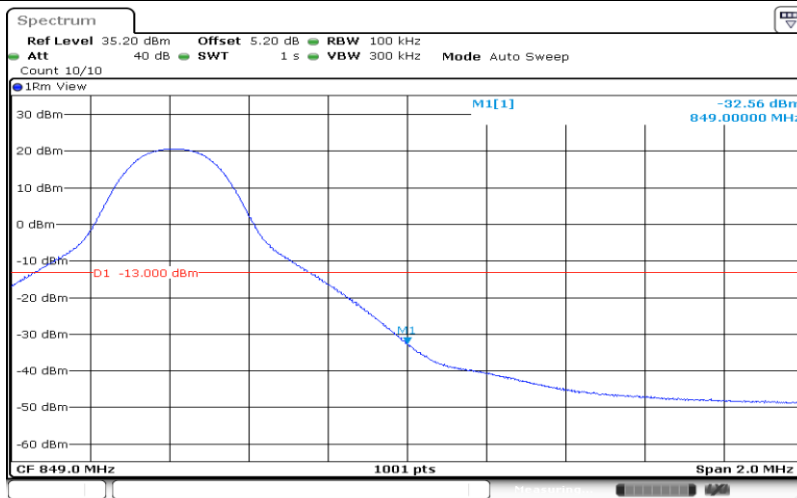


Band5-10MHz-16QAM-20450-50RB#0



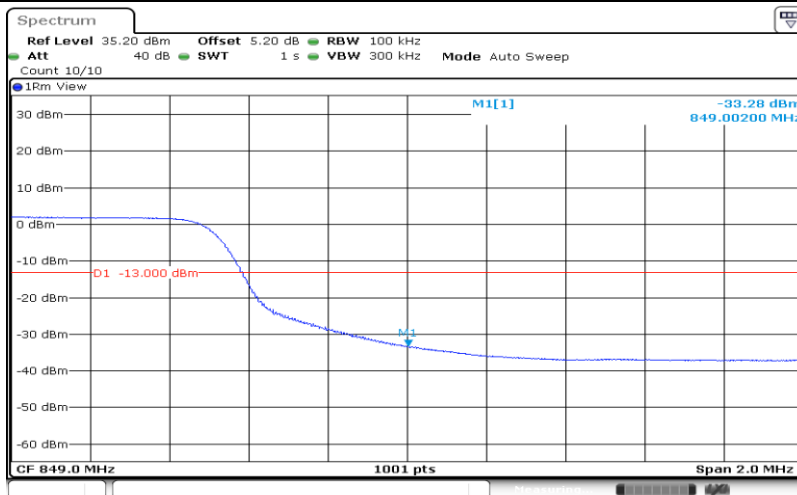
Band5-10MHz-16QAM-20600-1RB#49





Date: 6 NOV. 2019 22:11:03

Band5-10MHz-16QAM-20600-50RB#0



Date: 6 NOV. 2019 22:11:38



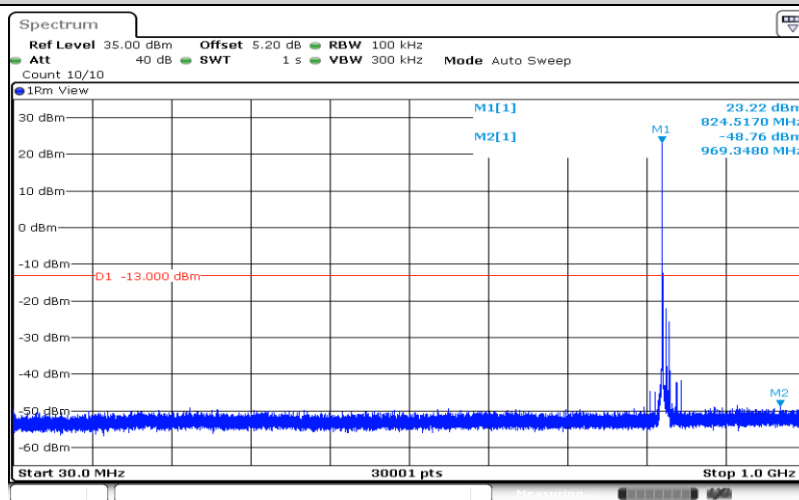
6. Spurious Emission at Antenna Terminal

Remark1: 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 = $k * (\text{Span} / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Remark2: only the worst case data displayed in this report.

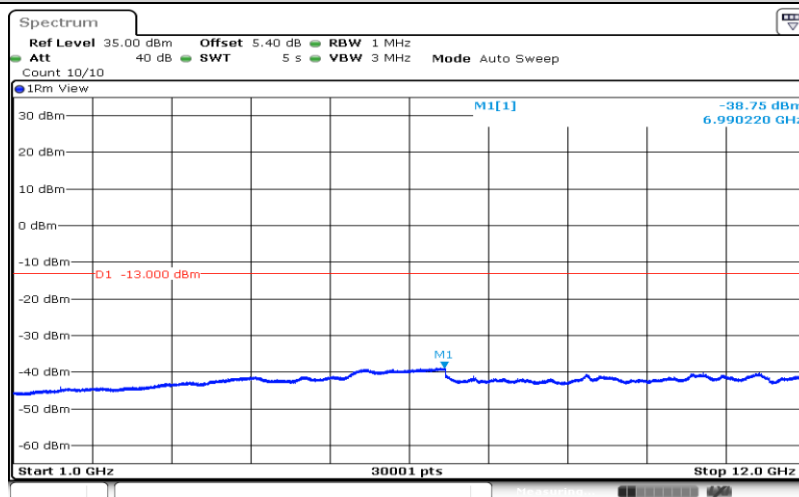
6.1. Test Plots

Band5-10MHz-QPSK-20450-1RB#0-Range1:30~1000MHz



Date: 6 NOV. 2019 22:11:57

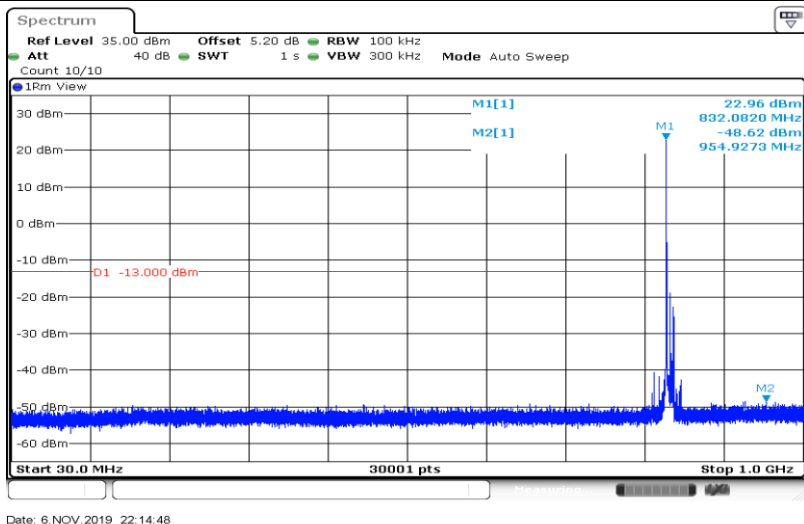
Band5-10MHz-QPSK-20450-1RB#0-Range2:1000~12000MHz



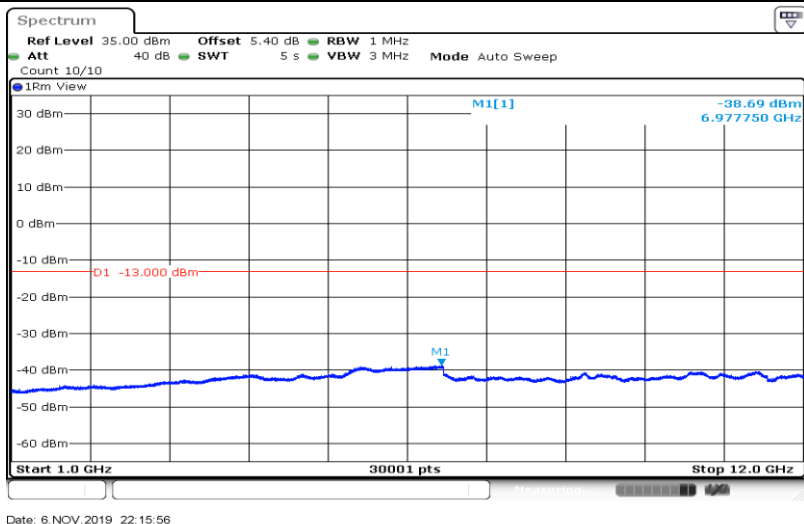
Date: 6 NOV. 2019 22:13:05

Band5-10MHz-QPSK-20525-1RB#0-Range1:30~1000MHz





Band5-10MHz-QPSK-20525-1RB#0-Range2:1000~12000MHz



Band5-10MHz-QPSK-20600-1RB#0-Range1:30~1000MHz

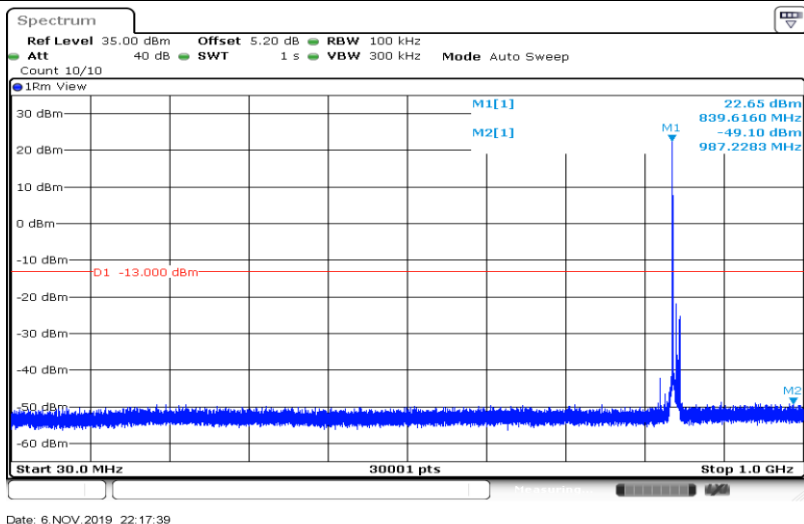


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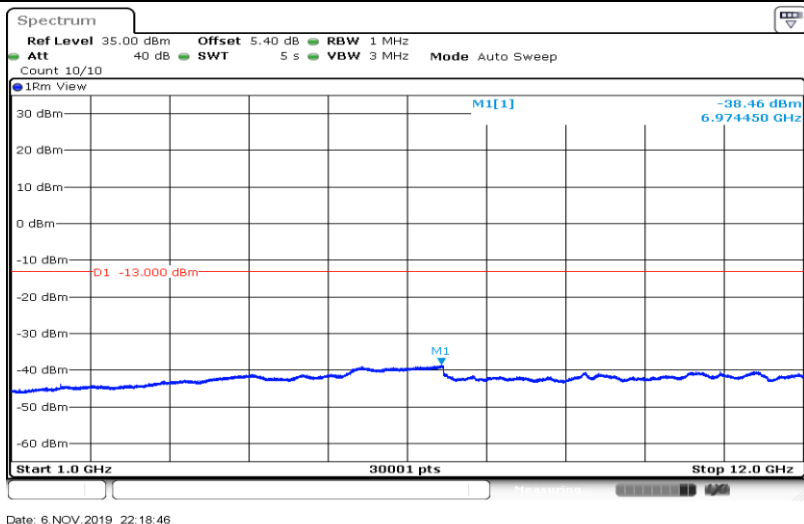
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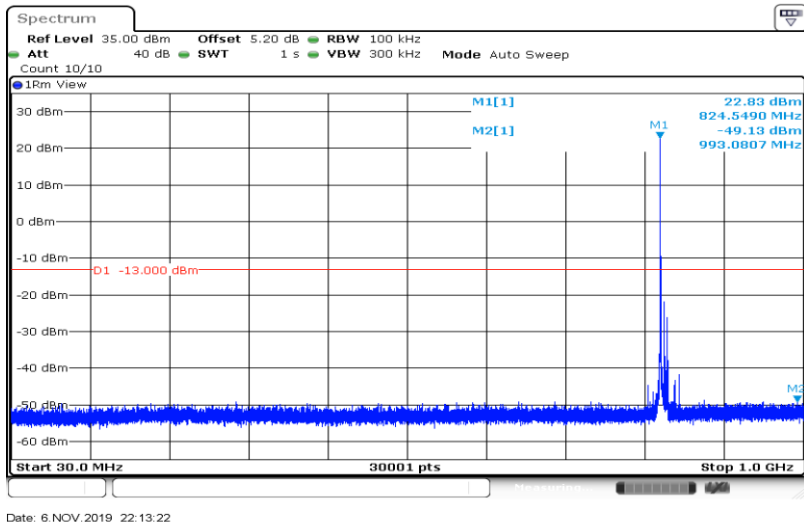


Band5-10MHz-QPSK-20600-1RB#0-Range2:1000~12000MHz

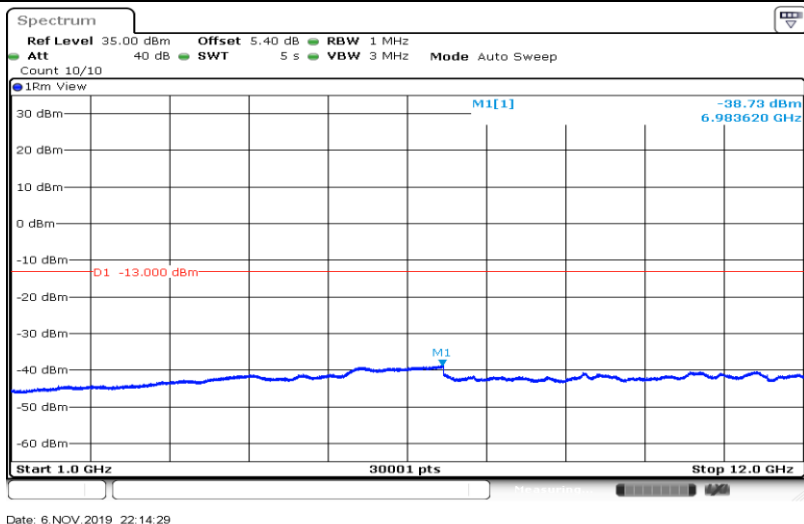


Band5-10MHz-16QAM-20450-1RB#0-Range1:30~1000MHz



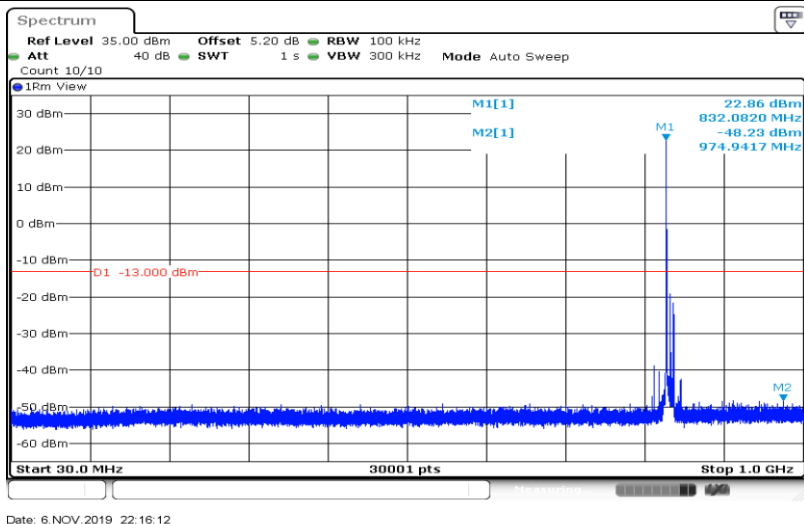


Band5-10MHz-16QAM-20450-1RB#0-Range2:1000~12000MHz

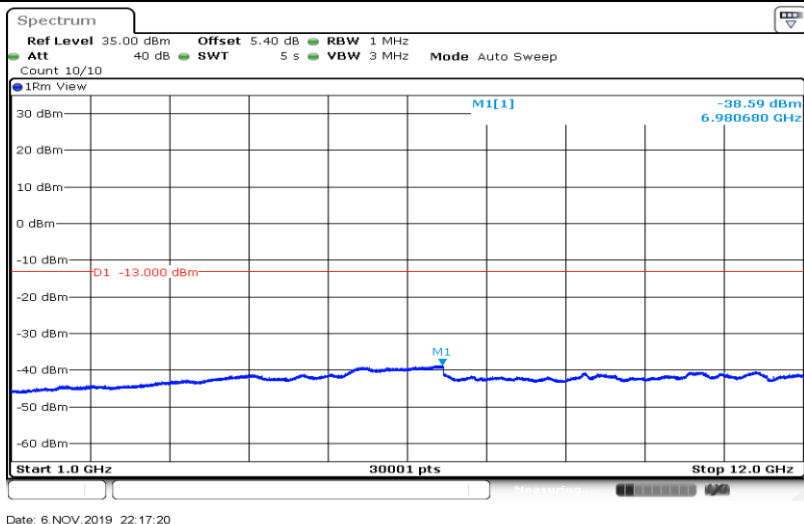


Band5-10MHz-16QAM-20525-1RB#0-Range1:30~1000MHz



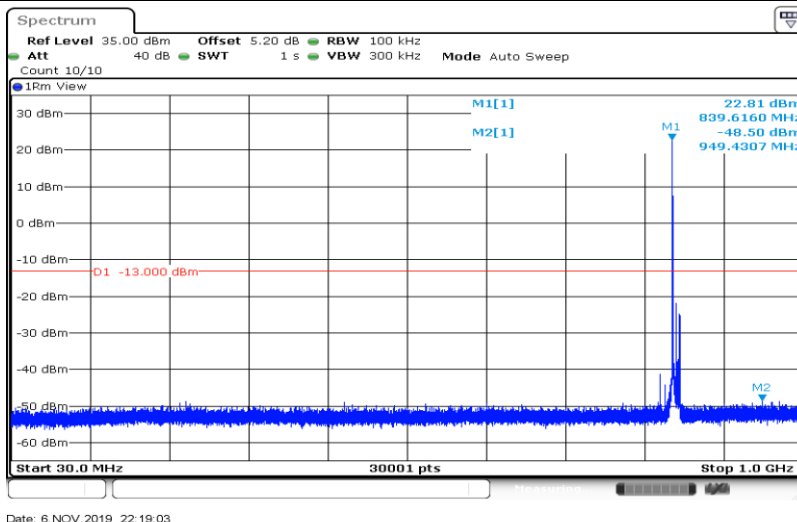


Band5-10MHz-16QAM-20525-1RB#0-Range2:1000~12000MHz

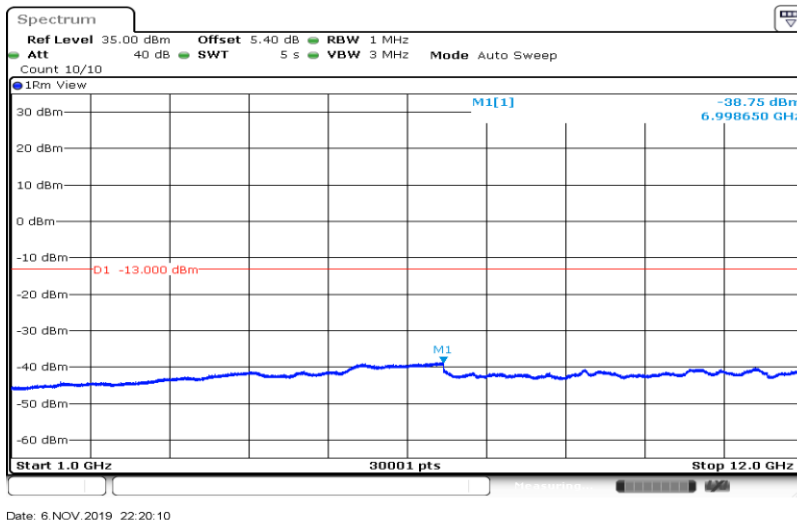


Band5-10MHz-16QAM-20600-1RB#0-Range1:30~1000MHz





Band5-10MHz-16QAM-20600-1RB#0-Range2:1000~12000MHz



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7. Field Strength of Spurious Radiation

7.1. Test Mode =LTE/TM1

7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
48.7219	-70.02	-13.00	57.02	266	71	Vertical
110.1745	-62.52	-13.00	49.52	241	293	Vertical
722.9056	-59.90	-13.00	46.90	184	261	Vertical
1764.1528	-54.36	-13.00	41.36	196	80	Vertical
2440.2881	-33.59	-13.00	20.59	132	25	Vertical
8576.5859	-50.50	-13.00	37.50	172	40	Vertical
44.3567	-62.68	-13.00	49.68	176	167	Horizontal
235.6503	-65.72	-13.00	52.72	132	40	Horizontal
712.3806	-59.39	-13.00	46.39	172	230	Horizontal
1752.5505	-56.81	-13.00	43.81	245	98	Horizontal
2440.2881	-33.68	-13.00	20.68	269	336	Horizontal
8640.3880	-50.75	-13.00	37.75	284	72	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
32.4251	-69.06	-13.00	56.06	218	65	Vertical
110.2230	-62.08	-13.00	49.08	266	65	Vertical
775.0458	-59.24	-13.00	46.24	273	3	Vertical
1763.7528	-53.12	-13.00	40.12	175	247	Vertical
2449.4899	-38.79	-13.00	25.79	111	336	Vertical
8621.7874	-50.14	-13.00	37.14	172	193	Vertical
44.1627	-61.36	-13.00	48.36	222	9	Horizontal
227.7444	-65.39	-13.00	52.39	274	135	Horizontal
757.2454	-59.39	-13.00	46.39	163	356	Horizontal
1751.3503	-50.96	-13.00	37.96	162	71	Horizontal
2454.6909	-36.36	-13.00	23.36	173	215	Horizontal
8776.1925	-50.69	-13.00	37.69	172	9	Horizontal





7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
32.5221	-69.82	-13.00	56.82	231	166	Vertical
117.0134	-62.76	-13.00	49.76	278	8	Vertical
728.3864	-59.05	-13.00	46.05	211	40	Vertical
1754.1508	-57.35	-13.00	44.35	195	206	Vertical
2479.8960	-55.47	-13.00	42.47	172	47	Vertical
8663.9888	-50.03	-13.00	37.03	132	230	Vertical
44.8902	-62.75	-13.00	49.75	169	8	Horizontal
232.7401	-65.15	-13.00	52.15	173	293	Horizontal
713.0597	-59.74	-13.00	46.74	287	135	Horizontal
1750.9502	-58.43	-13.00	45.43	121	36	Horizontal
2448.6897	-54.86	-13.00	41.86	284	166	Horizontal
8757.7919	-50.36	-13.00	37.36	233	8	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 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 Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	VL	NT	-1.10	-0.001327	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	-0.80	-0.000965	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	-1.50	-0.001809	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-1.50	-0.001793	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-2.00	-0.002391	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-0.90	-0.001076	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	-0.10	-0.000118	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	-2.10	-0.002488	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	-1.10	-0.001303	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VL	NT	-0.40	-0.000483	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VN	NT	-0.70	-0.000844	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VH	NT	0.30	0.000362	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VL	NT	0.10	0.000120	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VN	NT	-0.10	-0.000120	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VH	NT	-1.30	-0.001554	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VL	NT	-1.40	-0.001659	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VN	NT	0.10	0.000118	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VH	NT	-0.30	-0.000355	±2.5	PASS

8.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	NV	-30	-1.30	-0.001568	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-20	0.00	0.000000	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	0	-1.10	-0.001327	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	1.00	0.001206	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	0.20	0.000241	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-1.00	-0.001206	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	-1.10	-0.001327	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	50	-0.30	-0.000362	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	0.00	0.000000	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	-0.40	-0.000478	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-0.90	-0.001076	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-1.20	-0.001435	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	-0.60	-0.000717	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-1.00	-0.001195	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	-1.60	-0.001913	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	-2.10	-0.002510	±2.5	PASS



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SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (CSTC Laboratory)

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057
中国·深圳·科技园中区M-10栋一号厂房

t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com



Band5	10MHz	QPSK	20600	50RB#0	NV	-30	-1.10	-0.001303	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	-0.70	-0.000829	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	0	-0.80	-0.000948	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	10	-1.30	-0.001540	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	20	-0.60	-0.000711	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	30	-2.20	-0.002607	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	-1.20	-0.001422	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	50	-1.30	-0.001540	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-30	-1.40	-0.001689	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-20	-0.60	-0.000724	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	0	-0.30	-0.000362	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	10	-0.30	-0.000362	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	20	0.80	0.000965	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	30	-1.00	-0.001206	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	40	-1.10	-0.001327	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	50	-0.40	-0.000483	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-30	0.50	0.000598	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-20	-0.50	-0.000598	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	0	-0.60	-0.000717	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	10	-0.80	-0.000956	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	20	-0.90	-0.001076	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	30	-0.90	-0.001076	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	40	-0.60	-0.000717	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	50	-0.90	-0.001076	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-30	-0.40	-0.000474	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-20	0.30	0.000355	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	0	-0.50	-0.000592	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	10	-0.50	-0.000592	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	20	0.50	0.000592	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	30	0.40	0.000474	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	40	-0.90	-0.001066	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	50	-0.60	-0.000711	±2.5	PASS



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No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgsgroup.com.cn
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