Appendix B

E-UTRA Band 5

CONTENT

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	22.22	18.53	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	22.34	18.65	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	22.09	18.40	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	22.30	18.61	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	22.30	18.61	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	22.10	18.41	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	21.05	17.36	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	22.44	18.75	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	22.17	18.48	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	22.65	18.96	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	22.99	19.30	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	22.07	18.38	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	22.89	19.20	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	21.68	17.99	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	22.61	18.92	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	22.94	19.25	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	22.40	18.71	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	22.62	18.93	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	22.94	19.25	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	22.72	19.03	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	21.20	17.51	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	21.22	17.53	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	21.07	17.38	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	21.48	17.79	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	21.19	17.50	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	21.61	17.92	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	21.10	17.41	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	20.62	16.93	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	21.52	17.83	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	21.92	18.23	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	21.12	17.43	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	21.71	18.02	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	21.81	18.12	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	21.26	17.57	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	20.37	16.68	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	21.82	18.13	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	21.61	17.92	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	21.92	18.23	38.45	PASS

Band5	1.4MHz	16QAM	20643	3RB#0	21.43	17.74	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	21.29	17.60	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	21.95	18.26	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	20.77	17.08	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	22.67	18.98	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	22.26	18.57	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	22.57	18.88	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#0	21.56	17.87	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#4	21.95	18.26	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#7	21.70	18.01	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	21.91	18.22	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	22.64	18.95	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	22.18	18.49	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	22.70	19.01	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#7	21.53	17.84	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#0	21.17	17.48	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#4	21.03	17.34	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	21.41	17.72	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	22.72	19.03	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	22.04	18.35	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	22.59	18.90	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#0	21.10	17.41	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#7	21.86	18.17	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#4	21.58	17.89	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	21.56	17.87	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	21.89	18.20	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	21.51	17.82	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	21.32	17.63	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#7	20.15	16.46	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#4	20.86	17.17	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#0	20.18	16.49	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	20.84	17.15	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	21.02	17.33	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	21.63	17.94	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	21.02	17.33	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#7	20.73	17.04	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#0	20.74	17.05	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#4	20.50	16.81	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.00	17.31	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	21.53	17.84	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	21.39	17.70	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	21.97	18.28	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#0	20.10	16.41	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#4	20.30	16.61	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#7	20.88	17.19	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	20.01	16.32	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	22.65	18.96	38.45	PASS

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Band5	5MHz	QPSK	20425	1RB#12	22.63	18.94	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	22.42	18.73	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#0	21.16	17.47	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#6	21.23	17.54	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#13	21.88	18.19	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	21.87	18.18	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	22.47	18.78	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	22.09	18.40	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	22.61	18.92	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#0	21.75	18.06	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#6	21.14	17.45	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#13	21.70	18.01	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	21.33	17.64	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	22.85	19.16	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	22.25	18.56	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	22.13	18.44	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#0	21.11	17.42	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#6	21.50	17.81	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#13	21.86	18.17	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	21.13	17.44	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	21.27	17.58	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	21.99	18.30	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	21.13	17.44	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#6	20.99	17.30	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#0	20.91	17.22	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#13	20.76	17.07	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	20.45	16.76	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	21.13	17.44	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	21.50	17.81	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	21.10	17.41	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#13	20.46	16.77	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#0	20.72	17.03	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#6	20.57	16.88	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	20.38	16.69	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	21.45	17.76	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	21.22	17.53	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	21.21	17.52	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#0	20.68	16.99	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#6	20.15	16.46	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#13	20.45	16.76	38.45	PASS
Band5	5MHz	16QAM	20625	25RB#0	20.72	17.03	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	22.88	19.19	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	22.30	18.61	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	22.38	18.69	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#0	21.88	18.19	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#12	21.32	17.63	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#25	21.58	17.89	38.45	PASS

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Band5	10MHz	QPSK	20450	50RB#0	21.92	18.23	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	22.99	19.30	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	22.80	19.11	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	22.36	18.67	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#25	21.55	17.86	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#0	21.66	17.97	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#12	21.88	18.19	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.00	18.31	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	22.17	18.48	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	22.22	18.53	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	22.15	18.46	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#0	21.86	18.17	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#25	21.31	17.62	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#12	21.88	18.19	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	21.98	18.29	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	21.00	17.31	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	21.76	18.07	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	21.27	17.58	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#25	20.52	16.83	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#12	20.96	17.27	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#0	20.10	16.41	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	20.89	17.20	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	21.19	17.50	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	21.97	18.28	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	21.54	17.85	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#25	20.79	17.10	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#0	20.91	17.22	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#12	20.17	16.48	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	20.91	17.22	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	21.26	17.57	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	21.31	17.62	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	21.73	18.04	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#0	21.00	17.31	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#12	20.19	16.50	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#25	20.95	17.26	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	20.37	16.68	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]

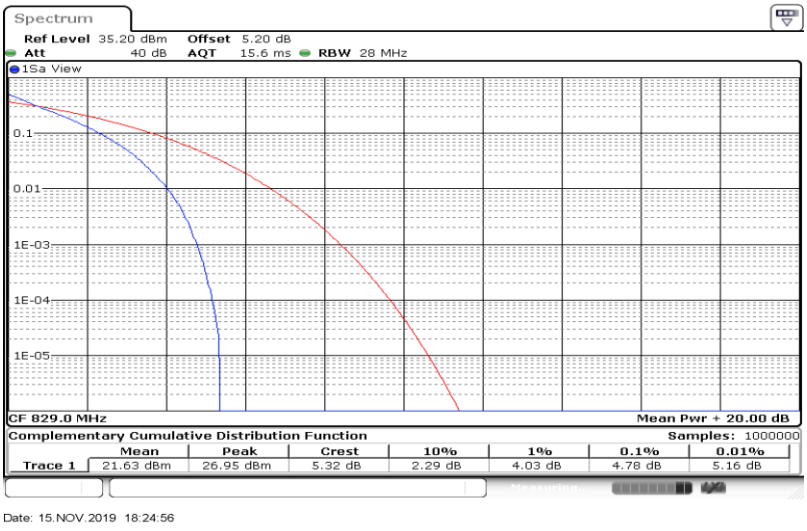
2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

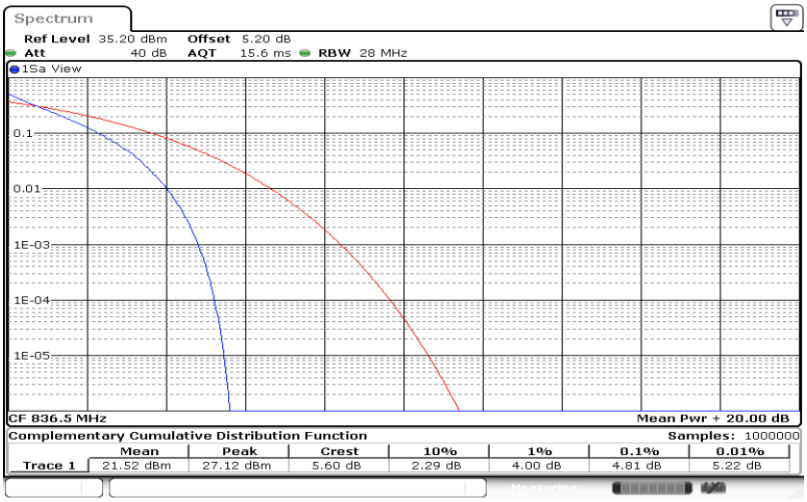
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	4.78	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	4.81	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	4.55	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	5.65	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	5.68	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.45	13	PASS

2.2. Test Plots

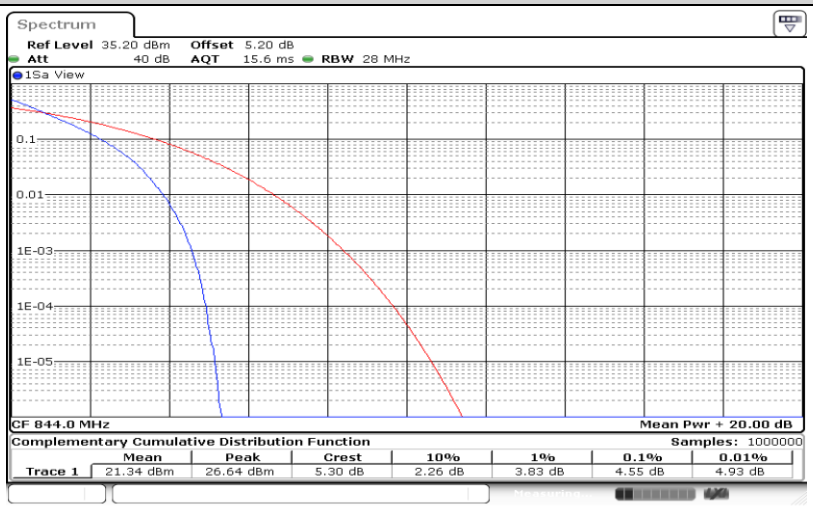
Band5-10MHz-QPSK-20450-50RB#0



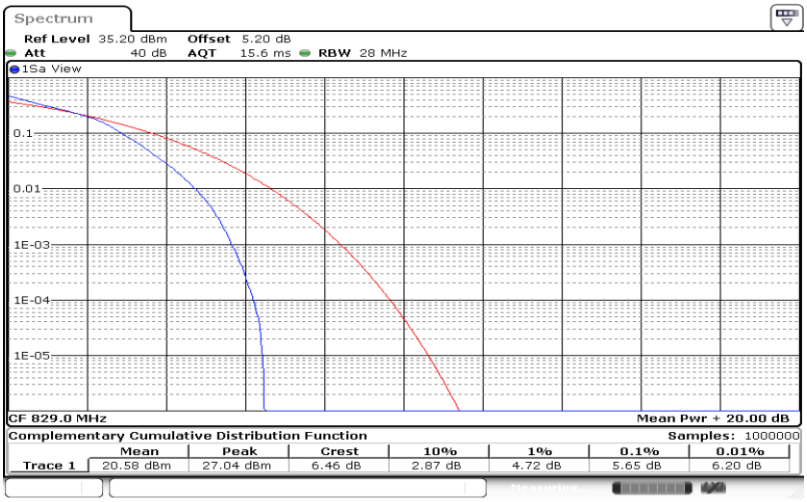
Band5-10MHz-QPSK-20525-50RB#0



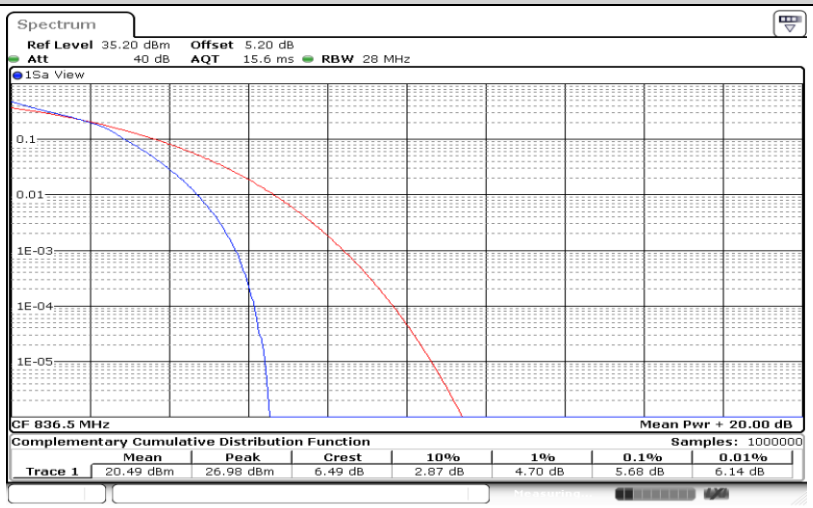
Band5-10MHz-QPSK-20600-50RB#0



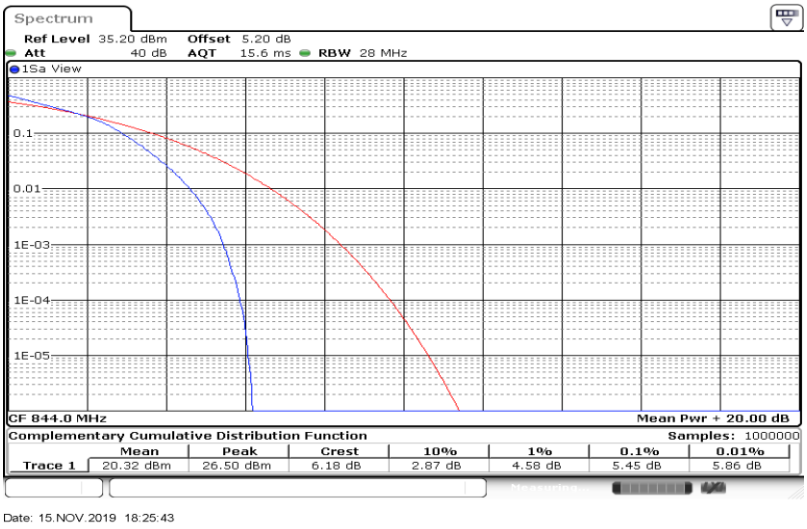
Band5-10MHz-16QAM-20450-50RB#0



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



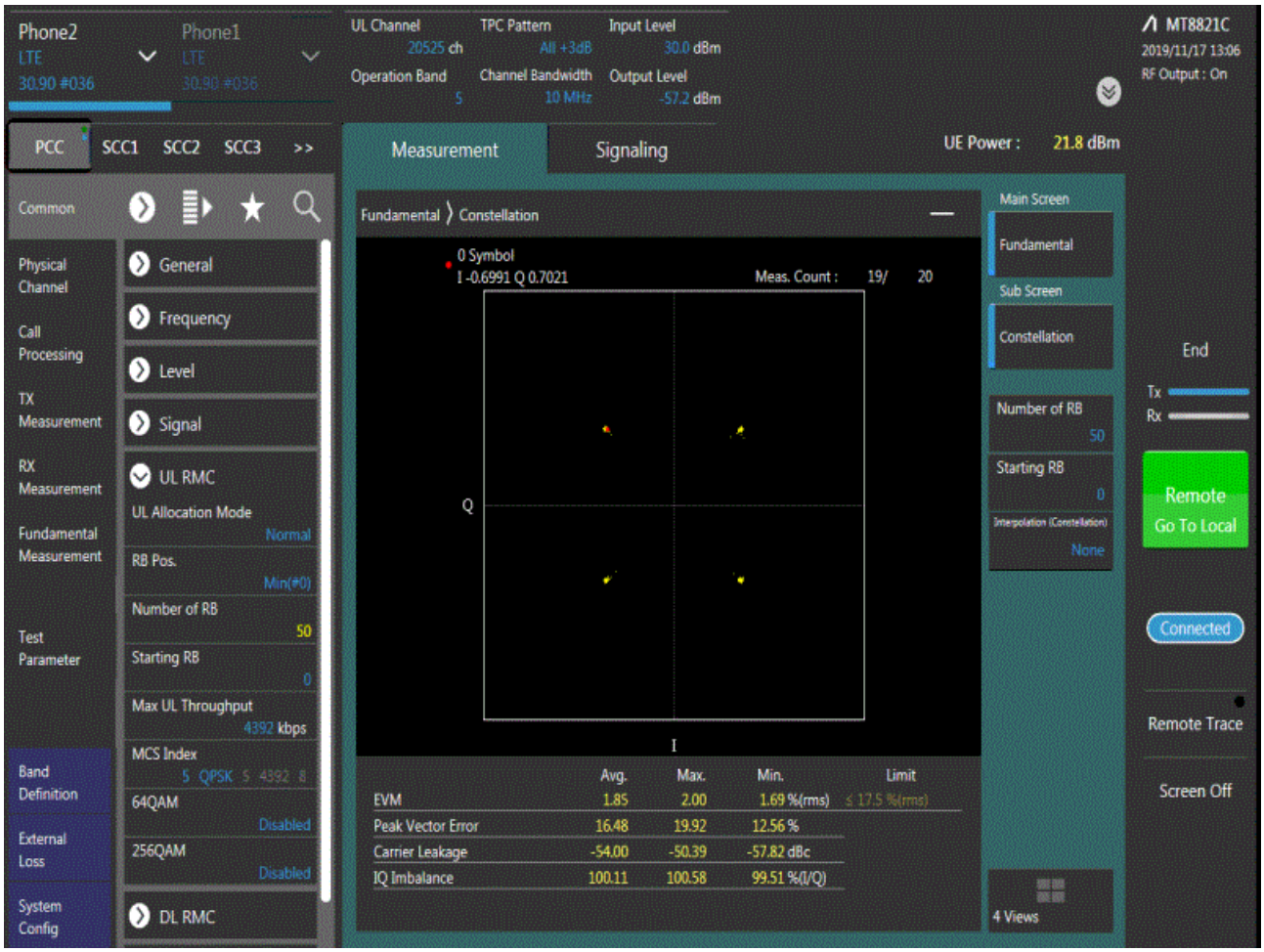
Band5-10MHz-16QAM-20600-50RB#0



3. Modulation Characteristics

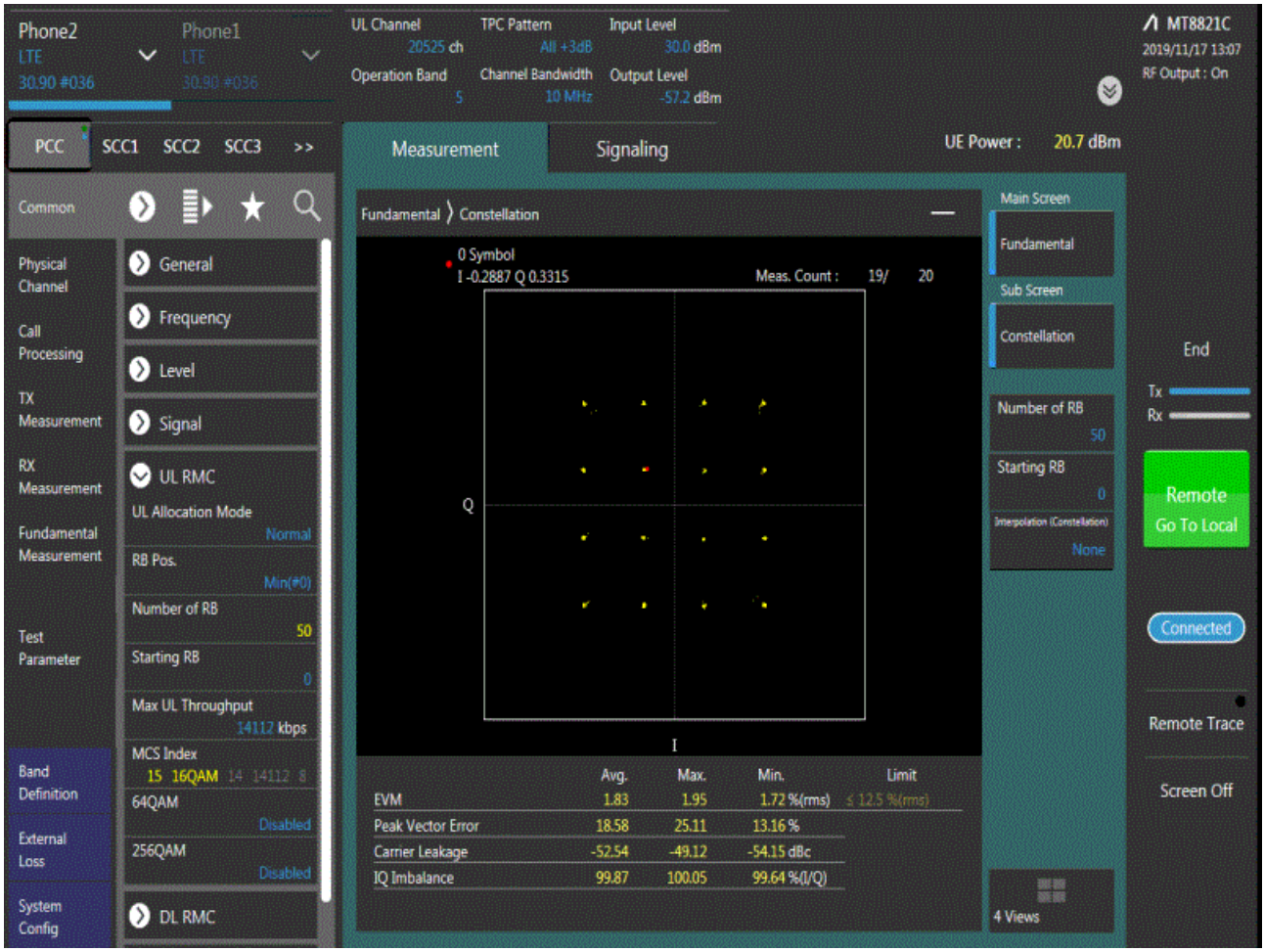
3.1. Test Mode = LTE /TM1 10MHz

3.1.1.Test Channel = MCH



3.2. Test Mode = LTE /TM2 10MHz

3.2.1.Test Channel = MCH



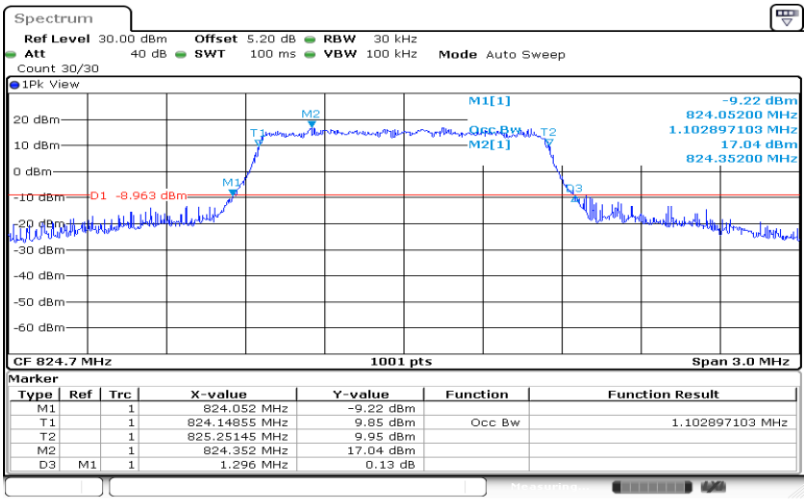
4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.103	1.296	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.097	1.299	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.094	1.299	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.097	1.281	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.088	1.287	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.100	1.314	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.685	2.916	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.691	2.904	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.685	2.904	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.685	2.916	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.685	3.012	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.685	2.928	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.466	4.840	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.476	4.860	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.486	4.850	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.476	4.880	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.476	4.850	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.466	4.800	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.931	9.600	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.931	9.580	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.931	9.660	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.931	9.600	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.931	9.640	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.931	9.580	PASS

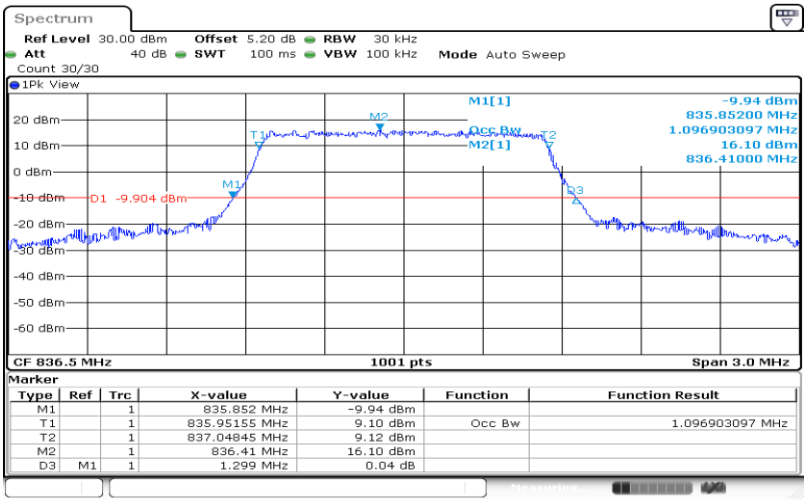
4.2. Test Plots

Band5-1.4MHz-QPSK-20407-6RB#0-1.103



Date: 15.NOV.2019 03:17:33

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



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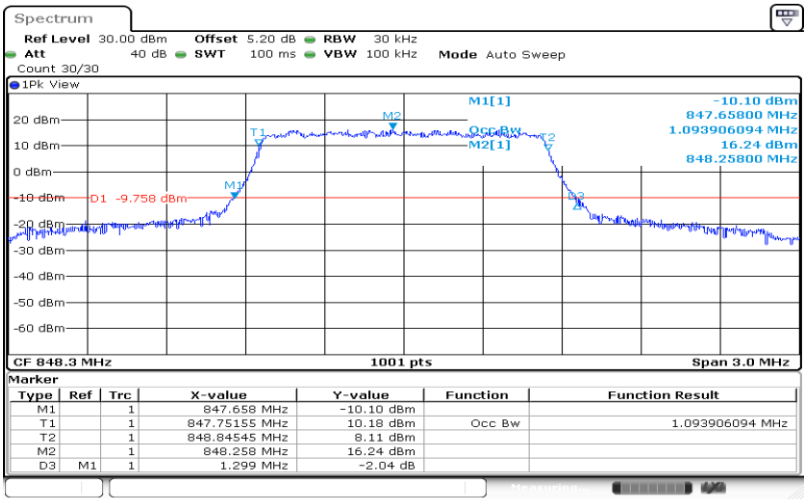
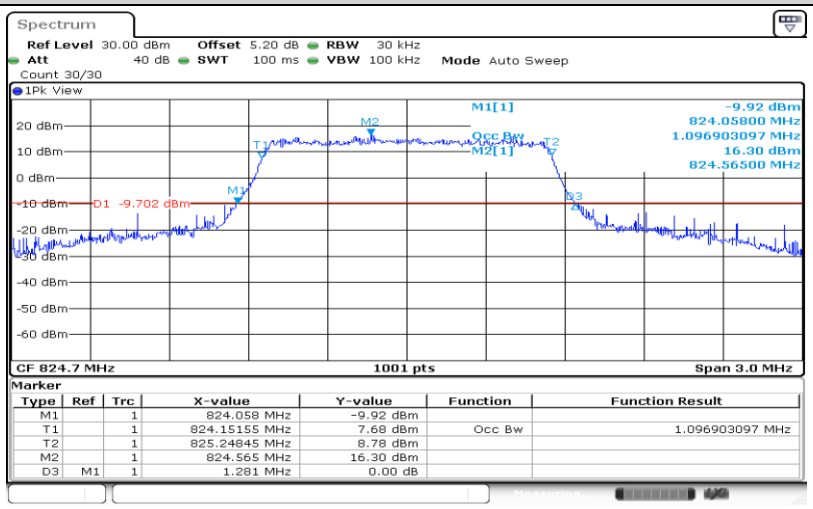
Band5-1.4MHz-QPSK-20643-6RB#0-1.094



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



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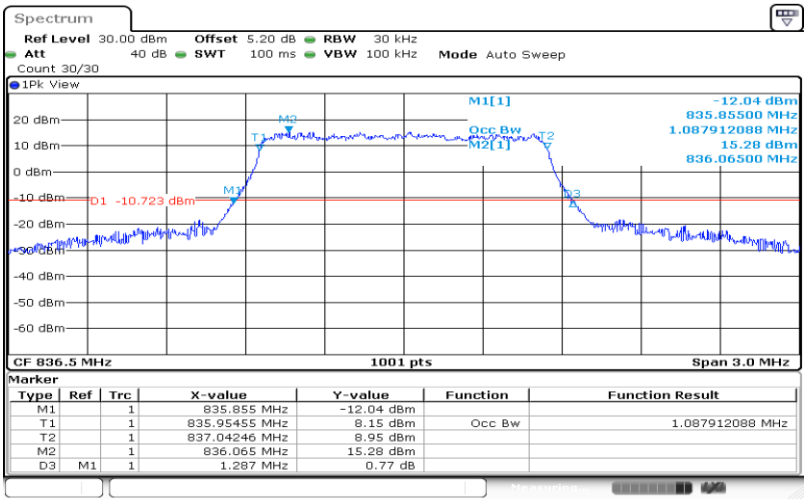

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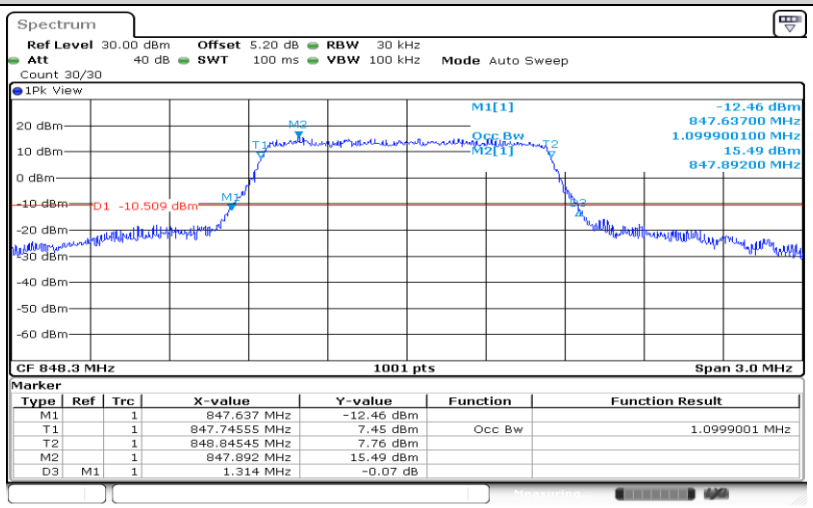

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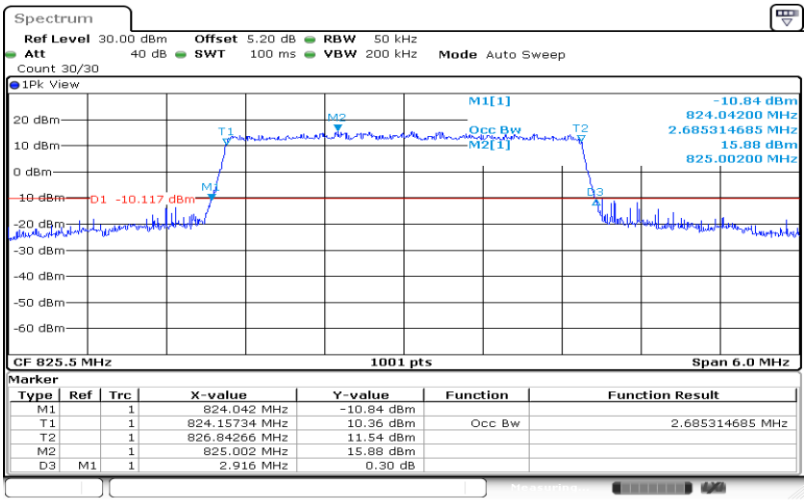

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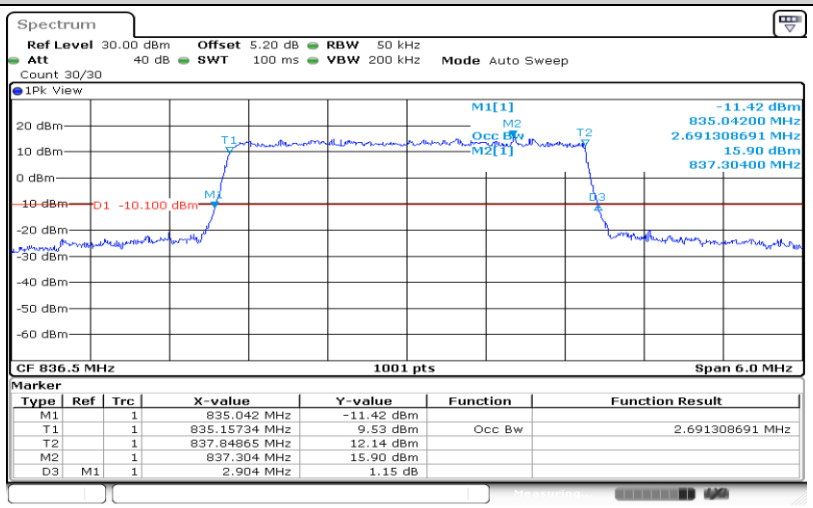
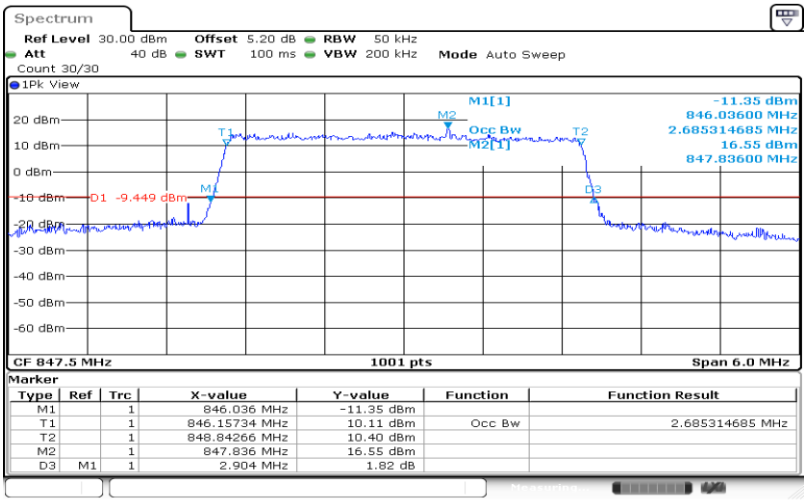


Band5-3MHz-QPSK-20635-15RB#0-2.685



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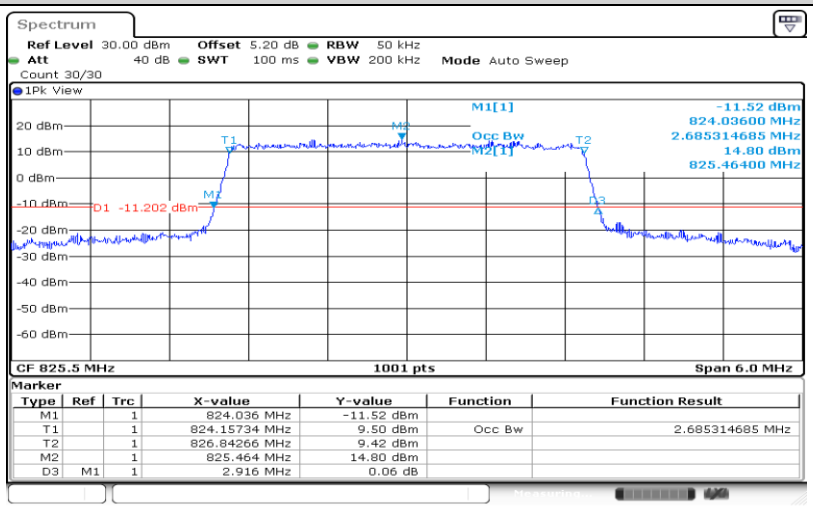

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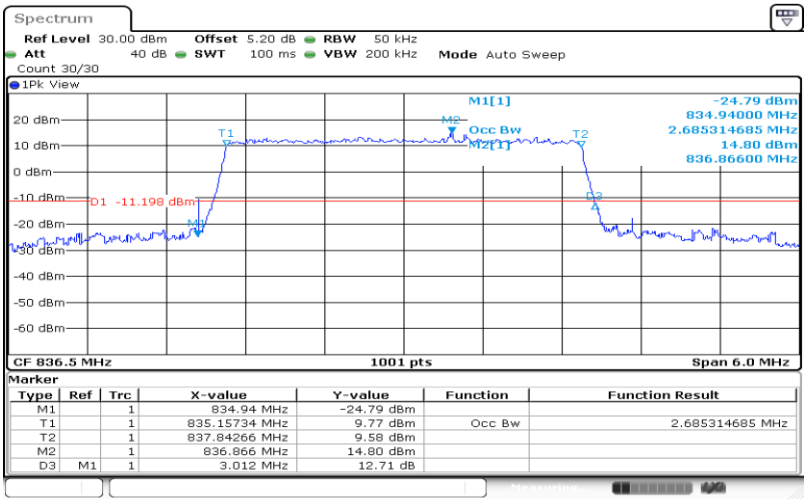
Band5-3MHz-16QAM-20525-15RB#0-2.685



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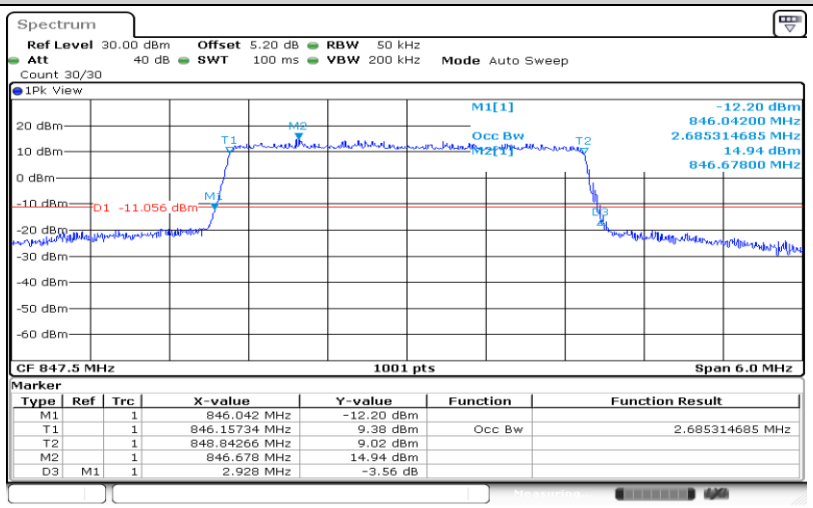

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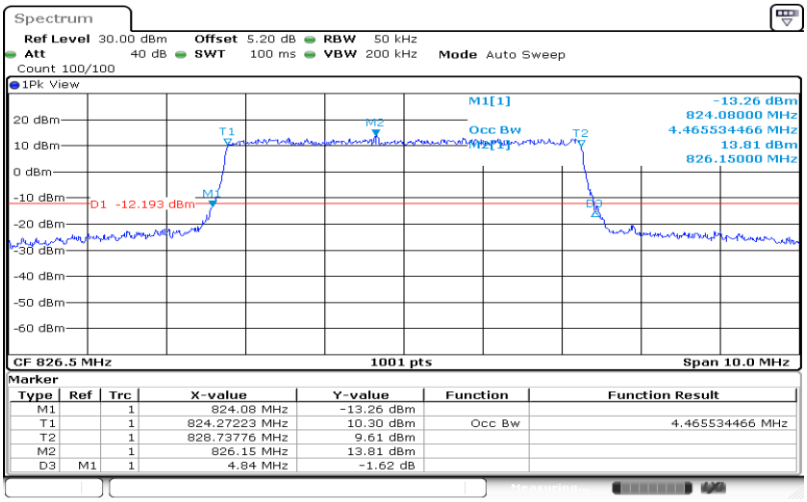
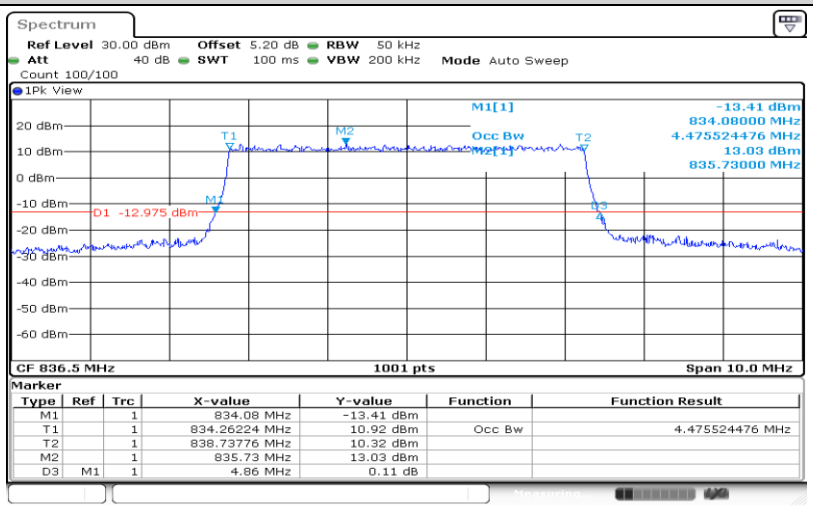


Band5-5MHz-QPSK-20525-25RB#0-4.476



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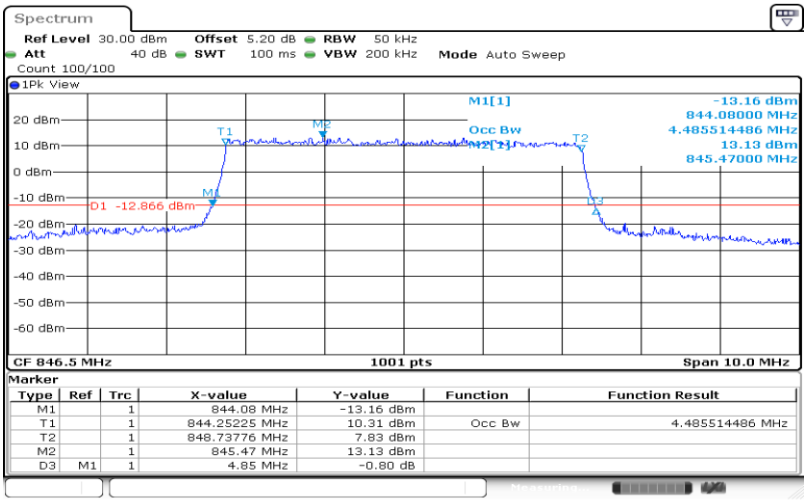

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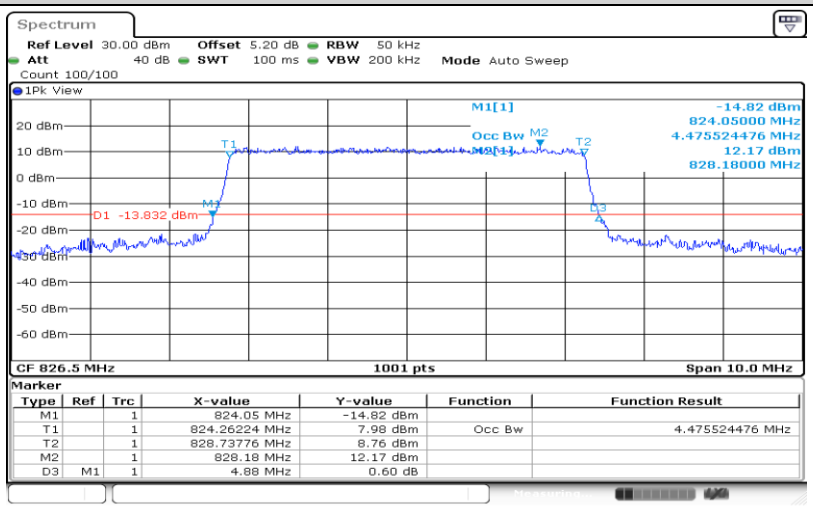

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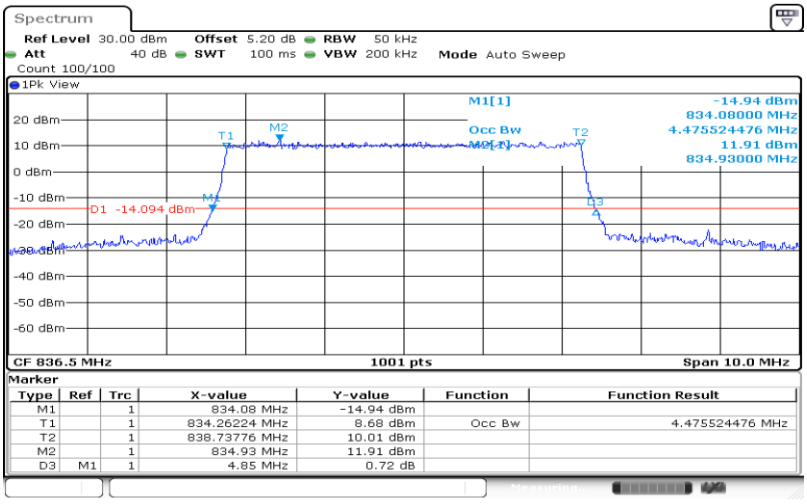

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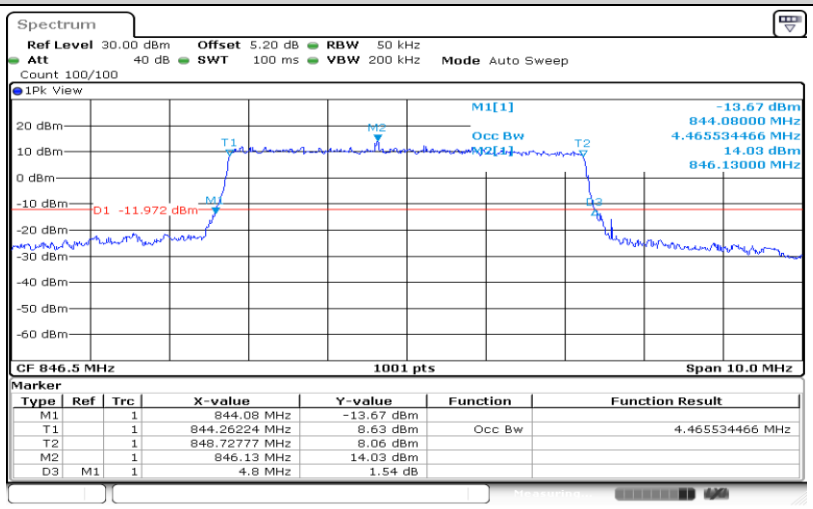

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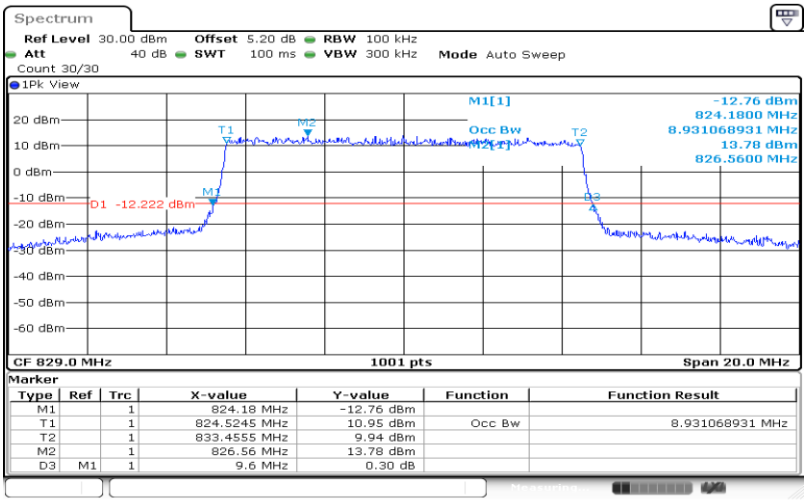
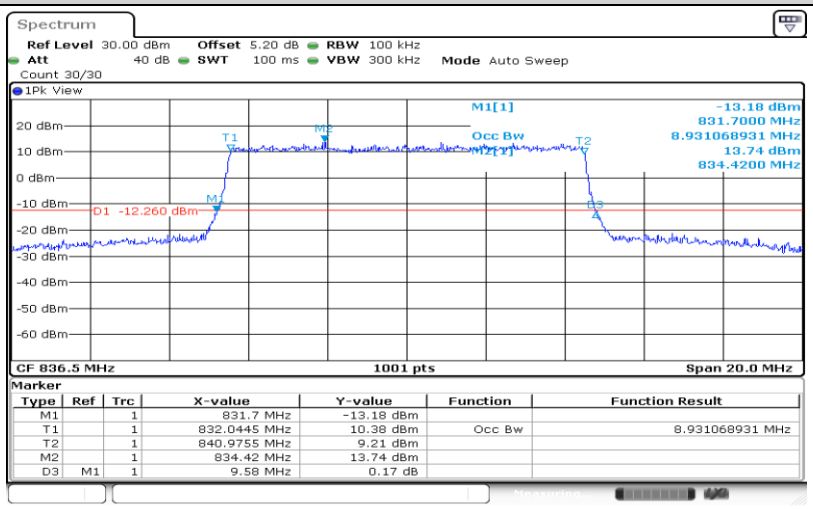
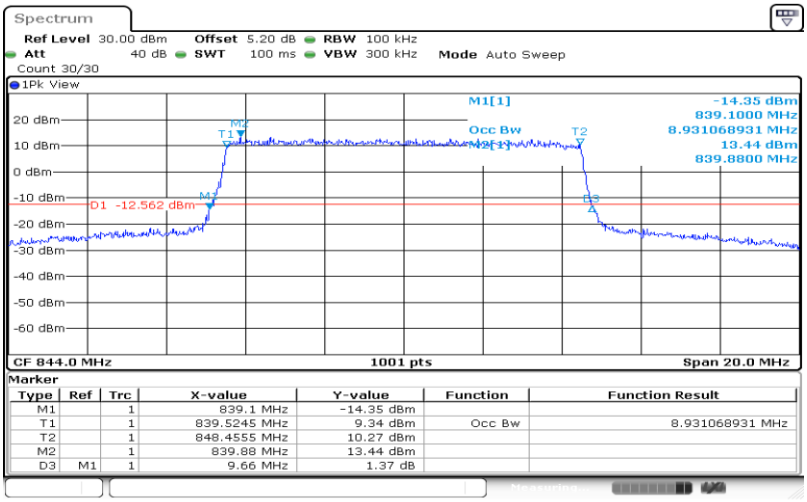
Band5-10MHz-QPSK-20450-50RB#0-8.931



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



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



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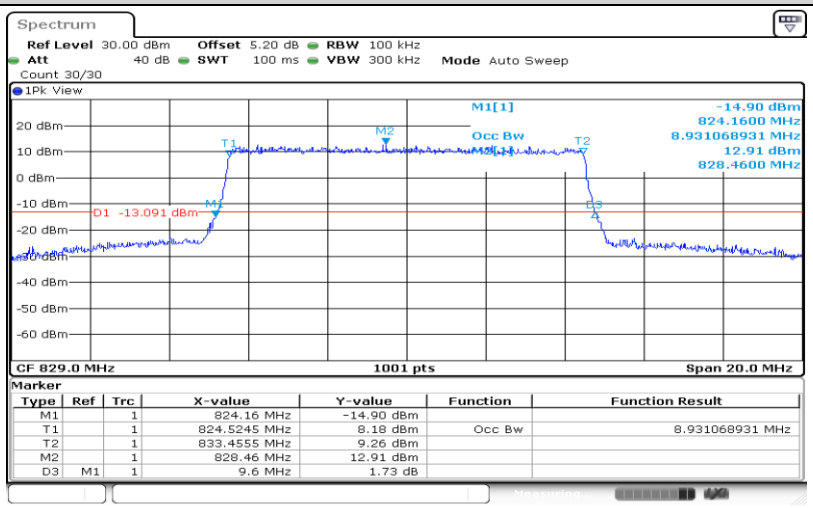

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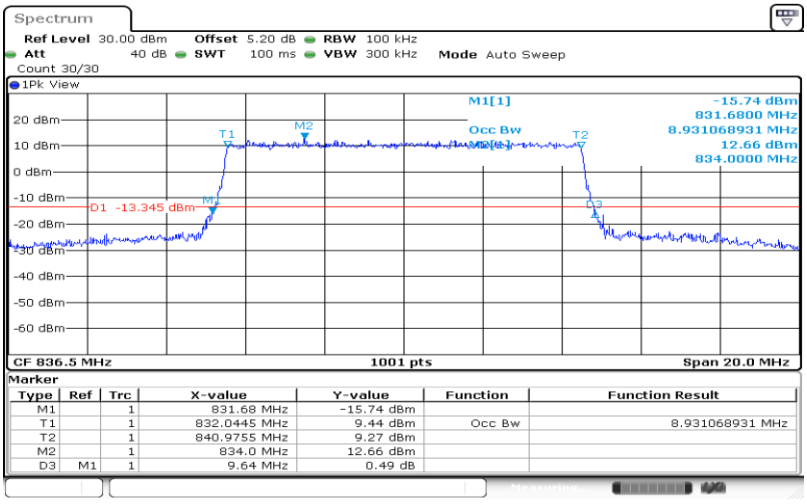

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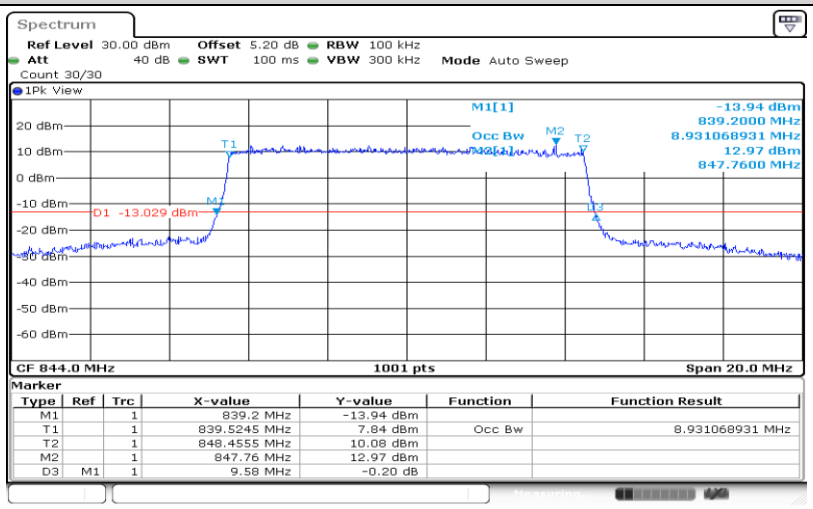
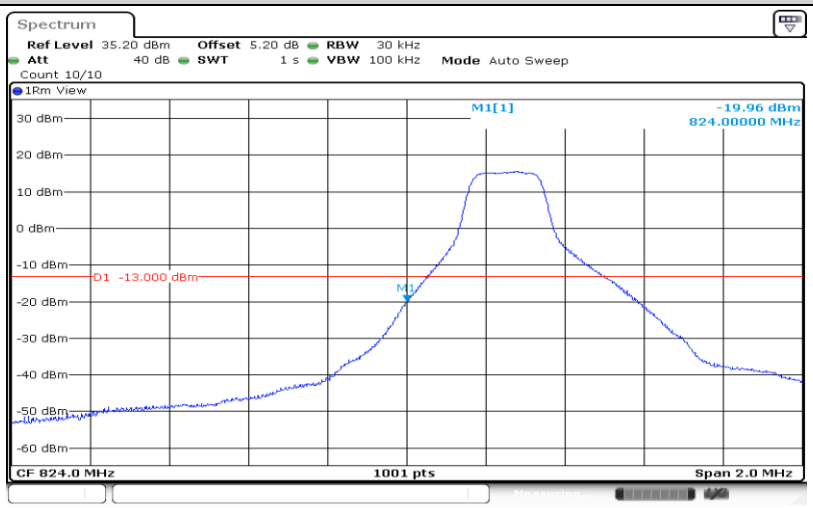


Date: 15.NOV.2019 03:26:10

5. Band Edge Compliance

5.1. Test Plots

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



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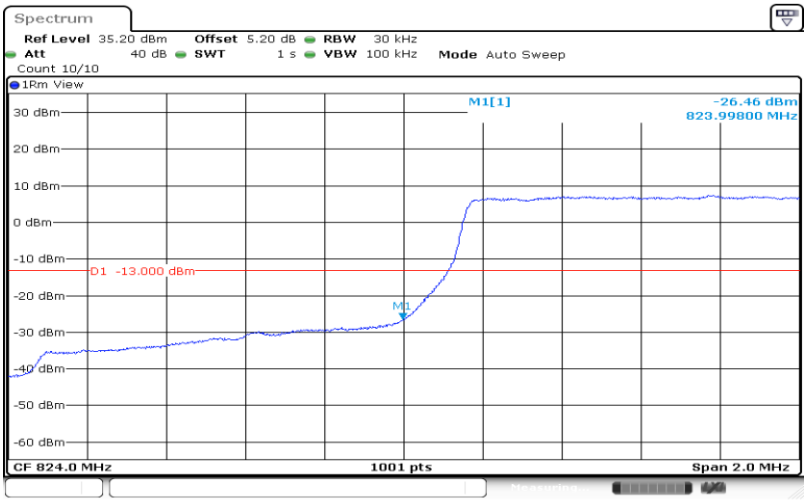

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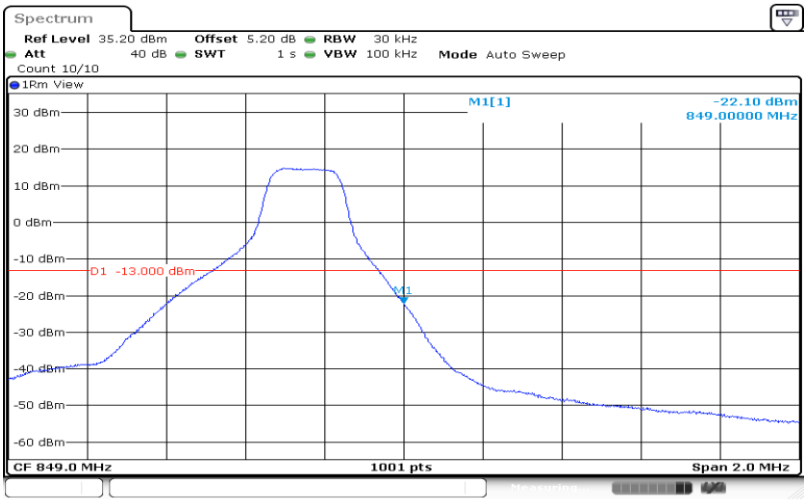

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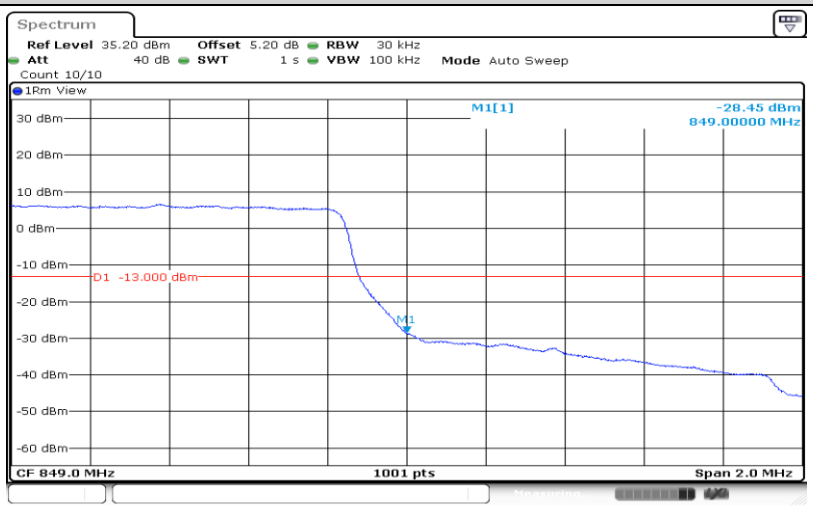

Band5-1.4MHz-16QAM-20407-1RB#0

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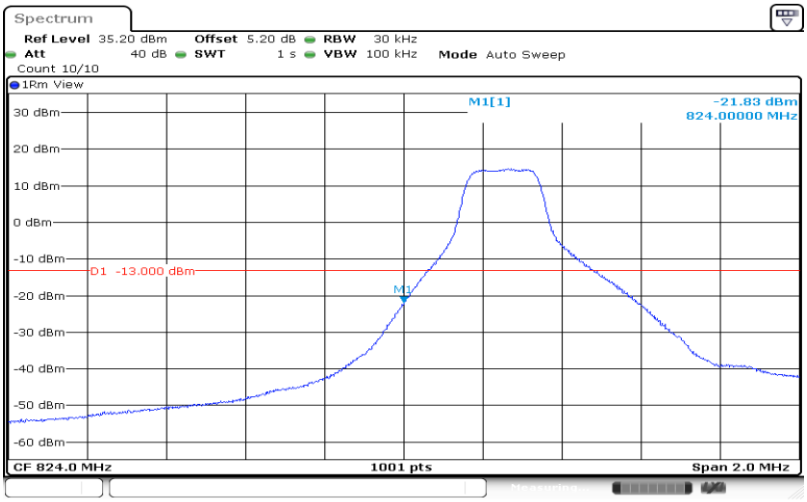

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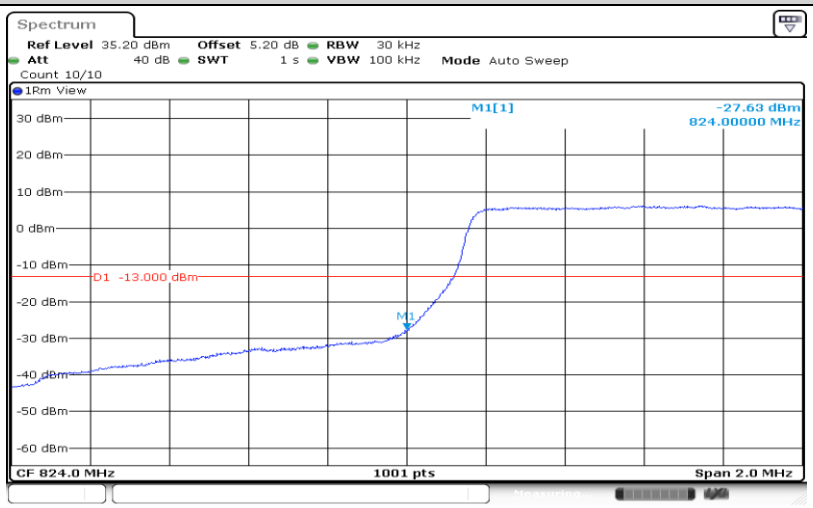
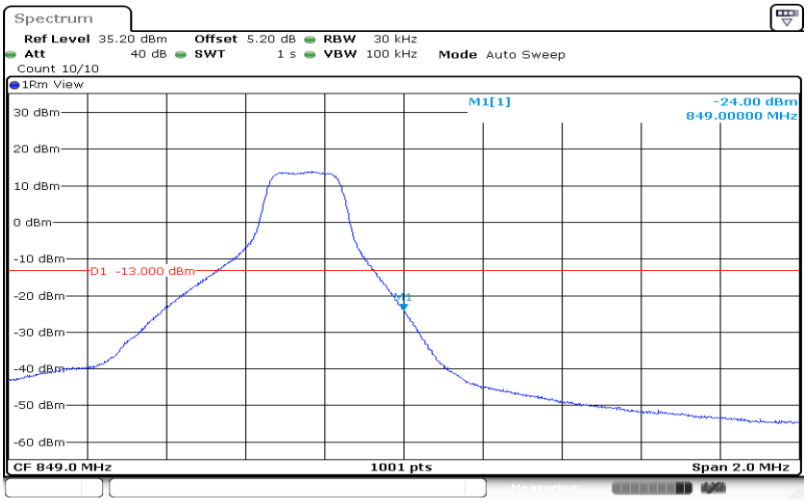
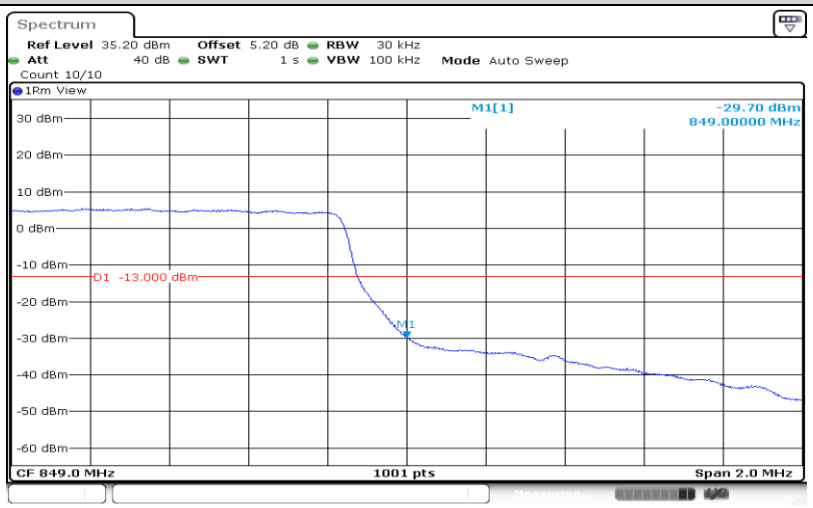


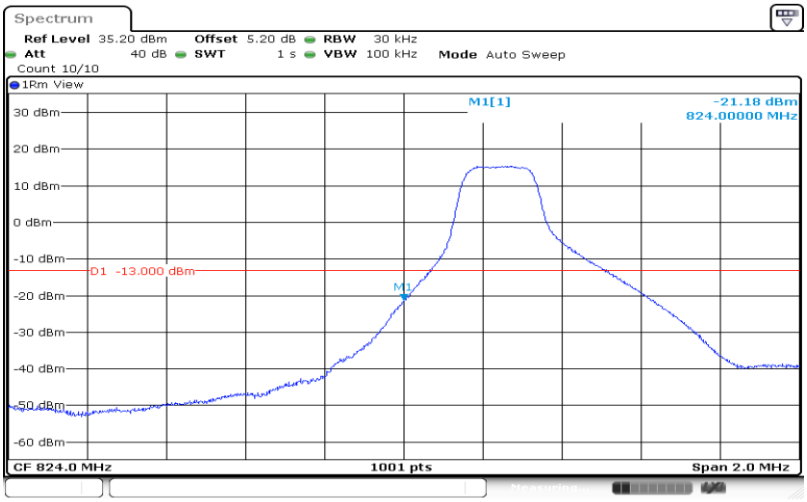
Band5-1.4MHz-16QAM-20643-1RB#5



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



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



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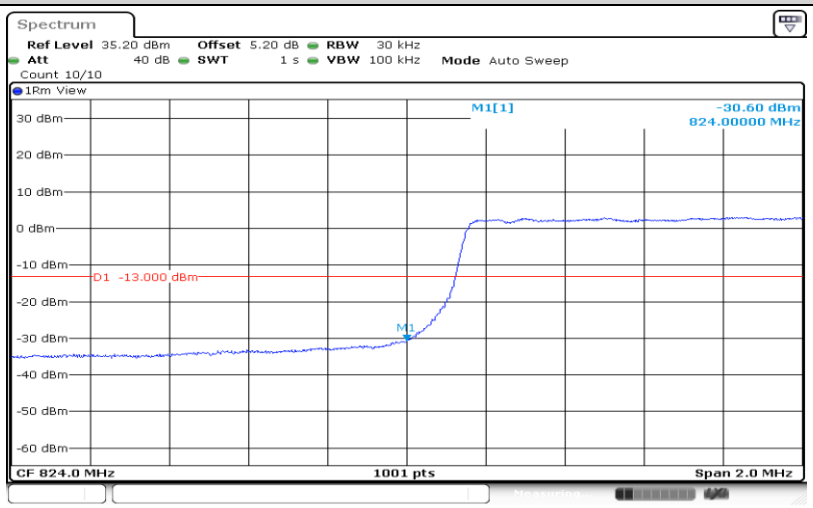

Band5-3MHz-QPSK-20635-1RB#14

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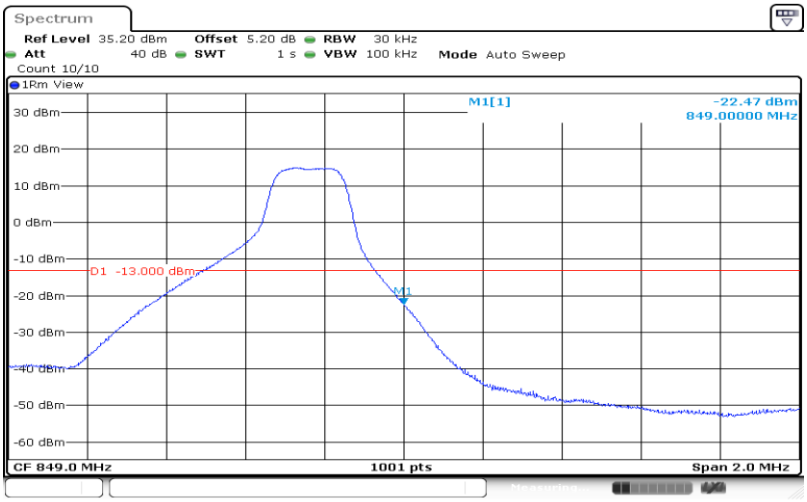

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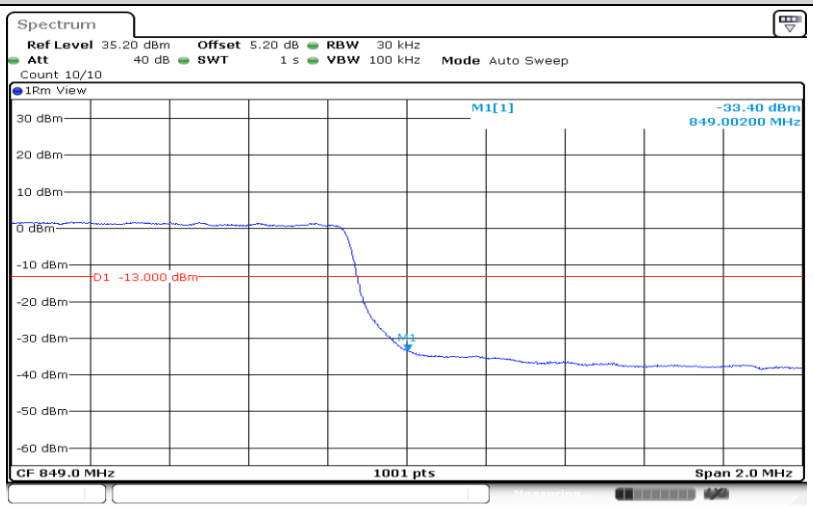

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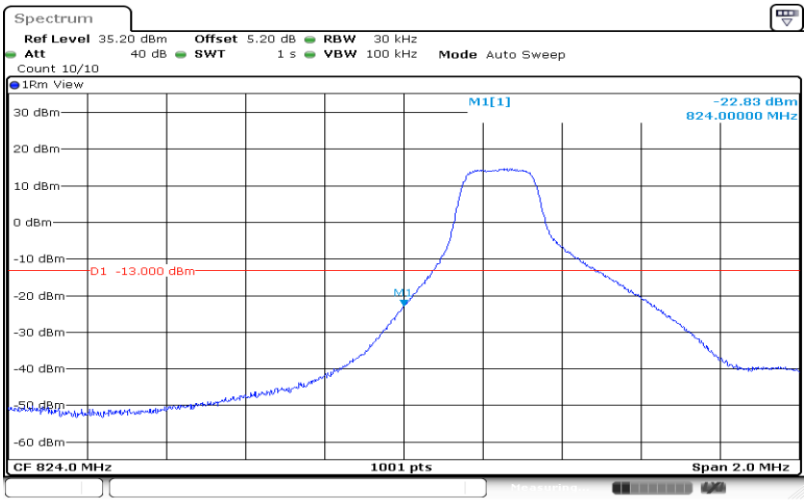

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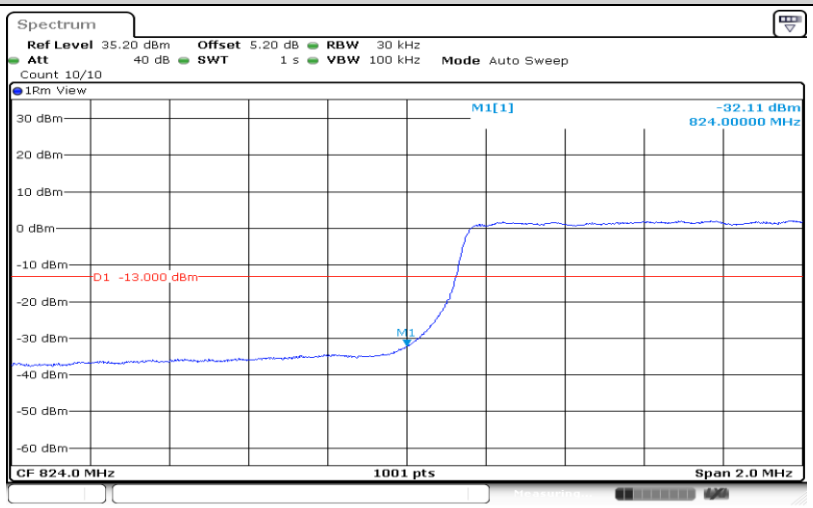

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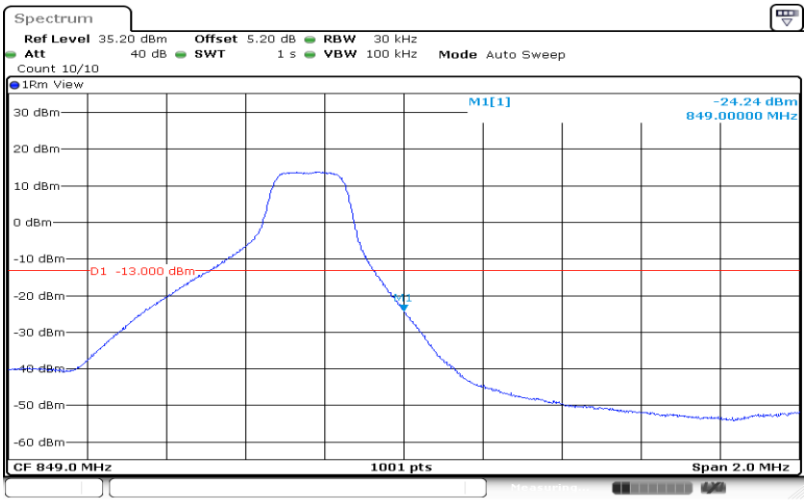

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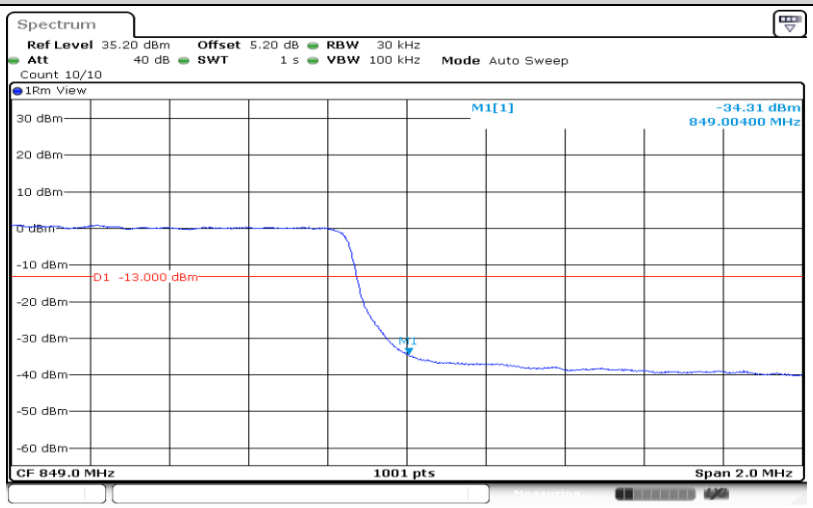
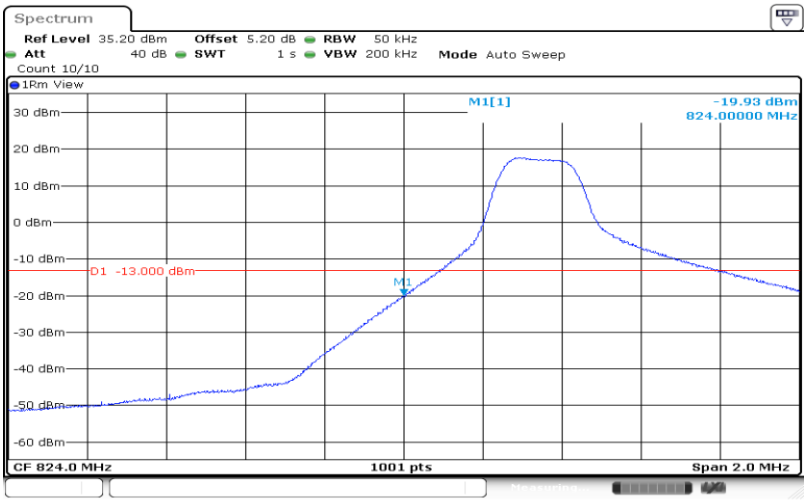


Band5-5MHz-QPSK-20425-1RB#0



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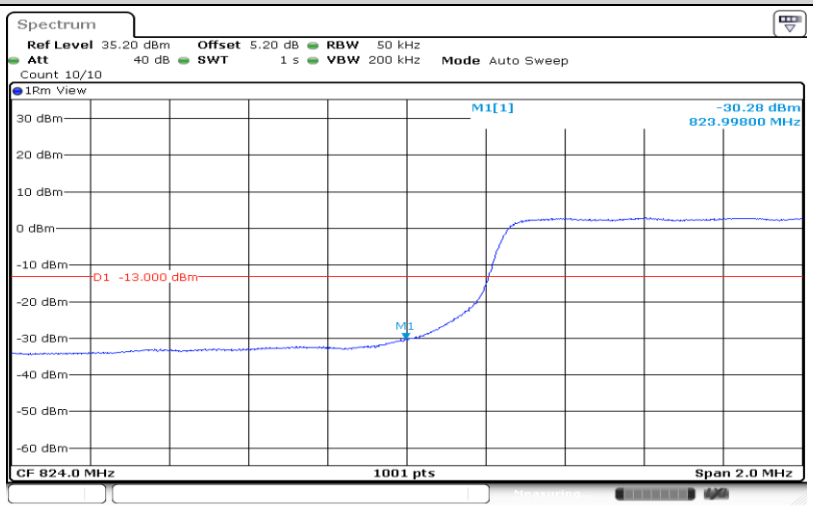
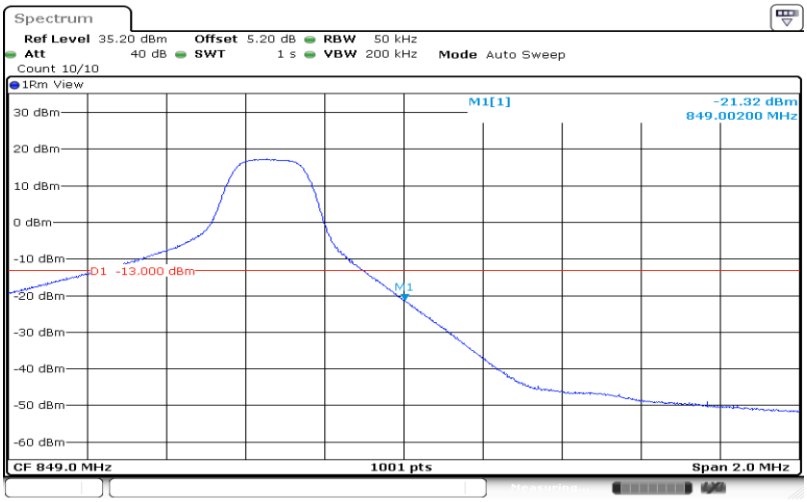


Band5-5MHz-QPSK-20625-1RB#24



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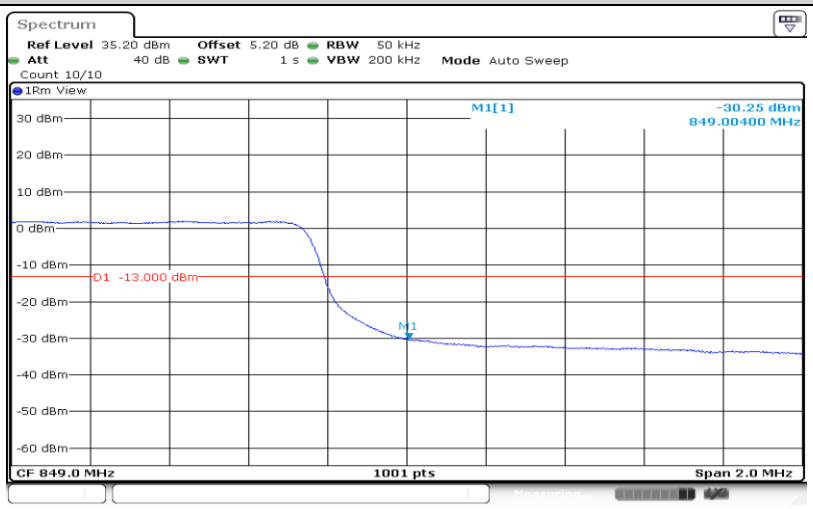

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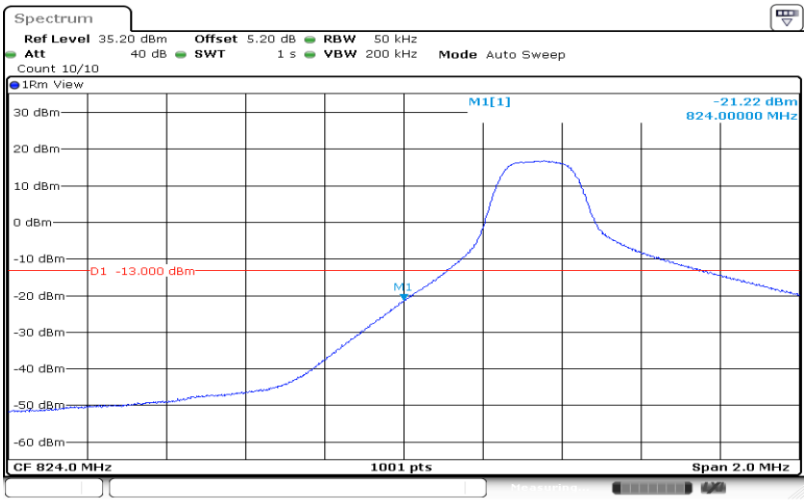

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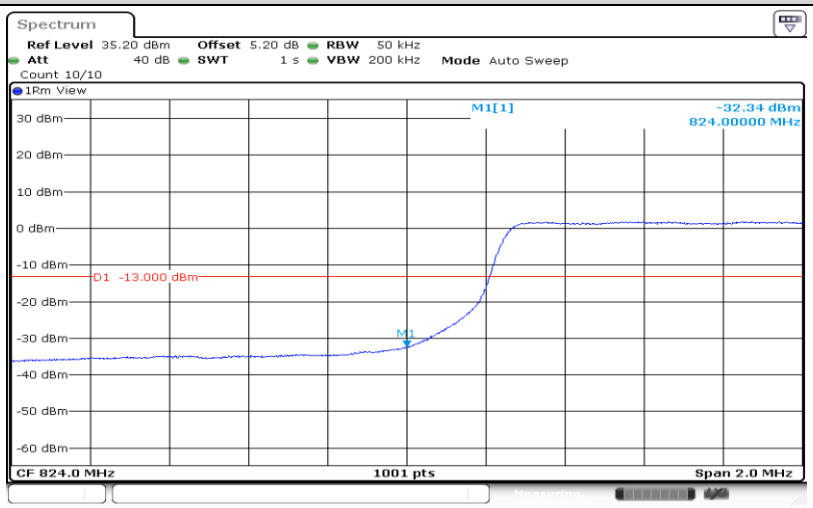

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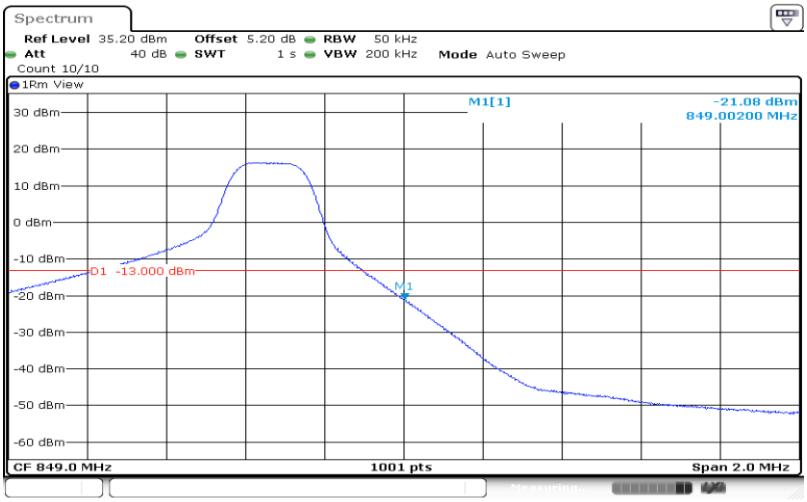

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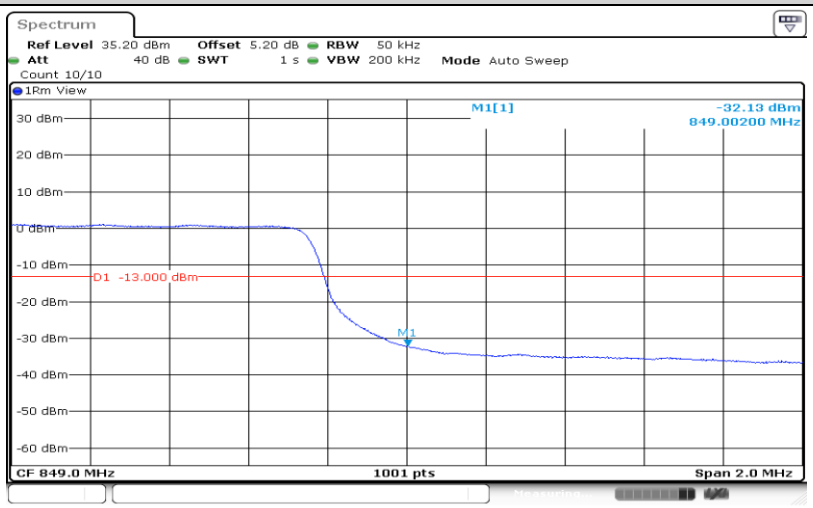

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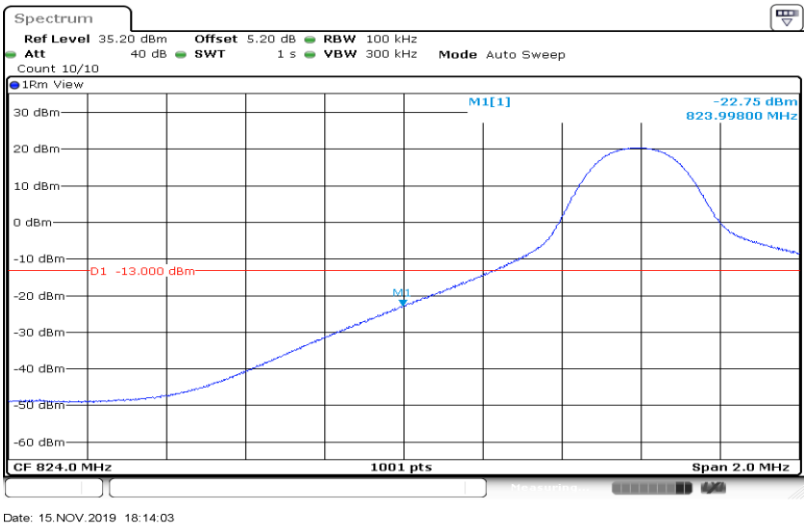

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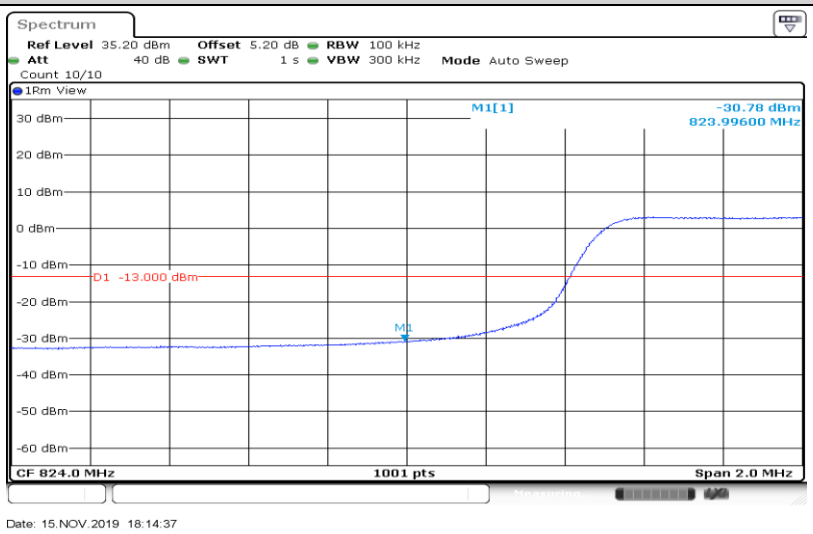
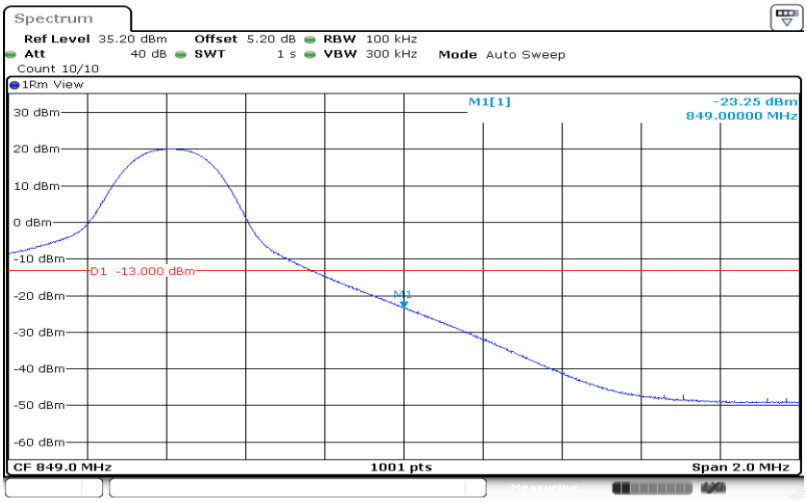
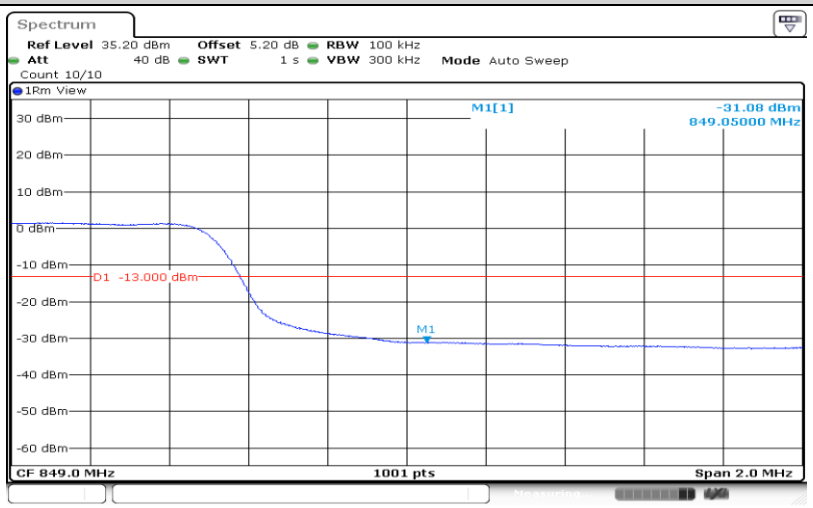


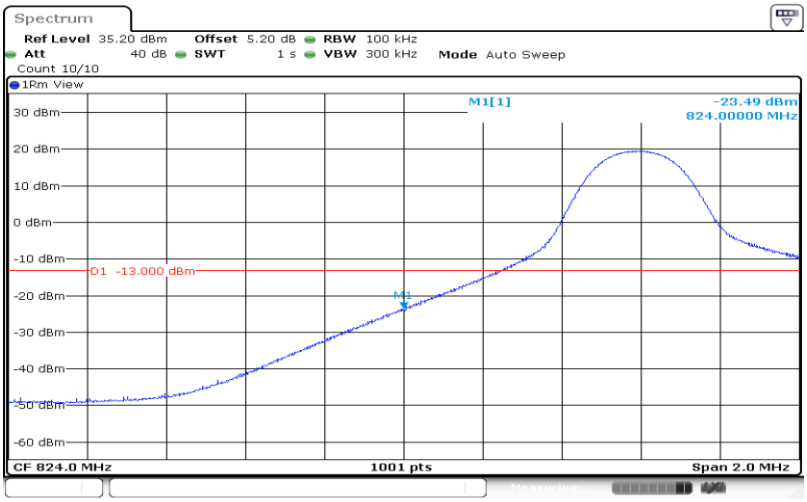
Band5-10MHz-QPSK-20600-1RB#49



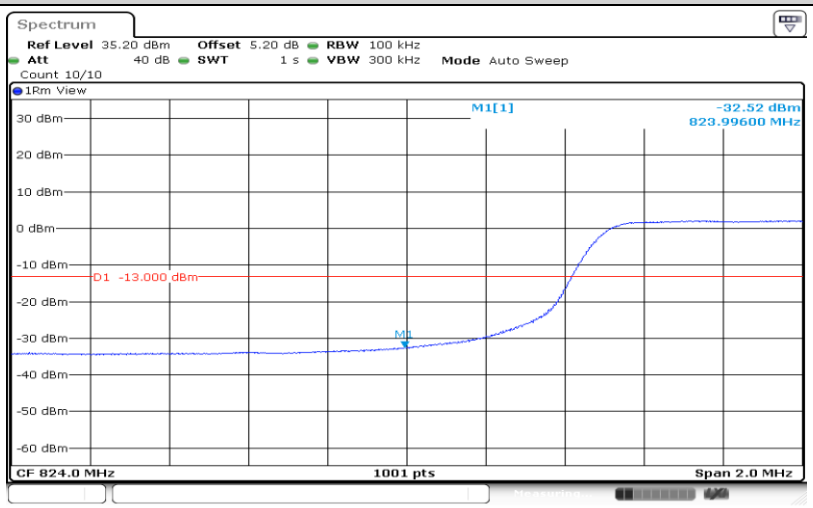
Band5-10MHz-QPSK-20600-50RB#0



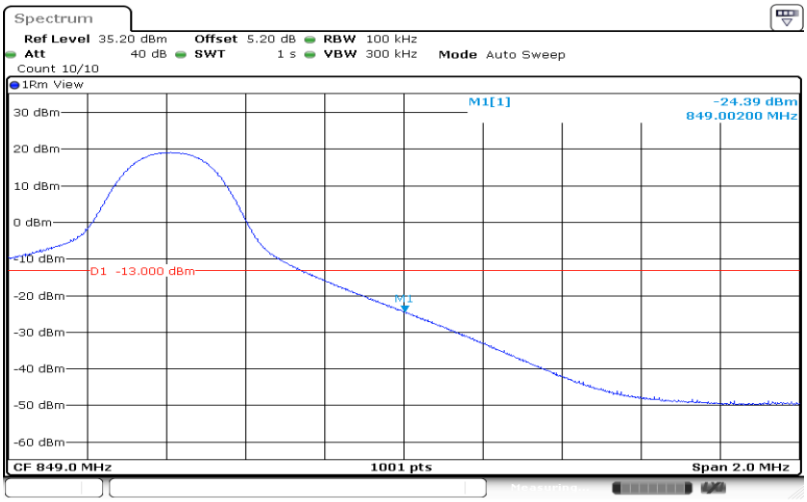
Band5-10MHz-16QAM-20450-1RB#0



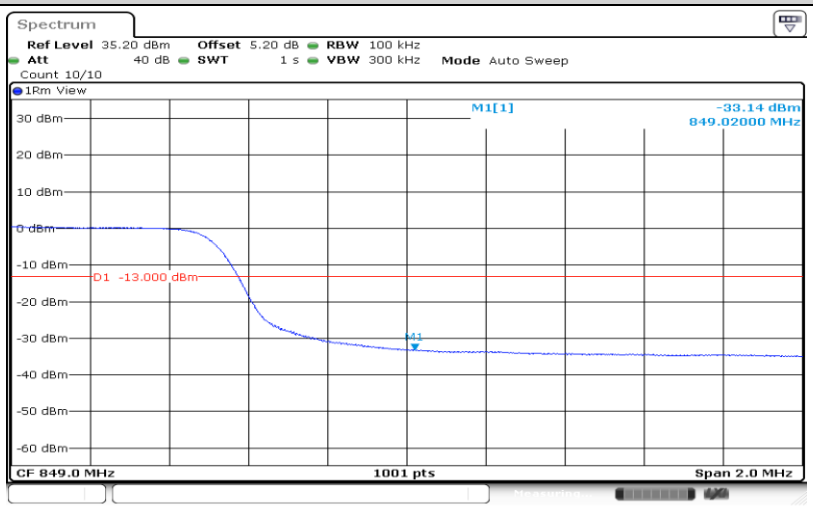
Band5-10MHz-16QAM-20450-50RB#0



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



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



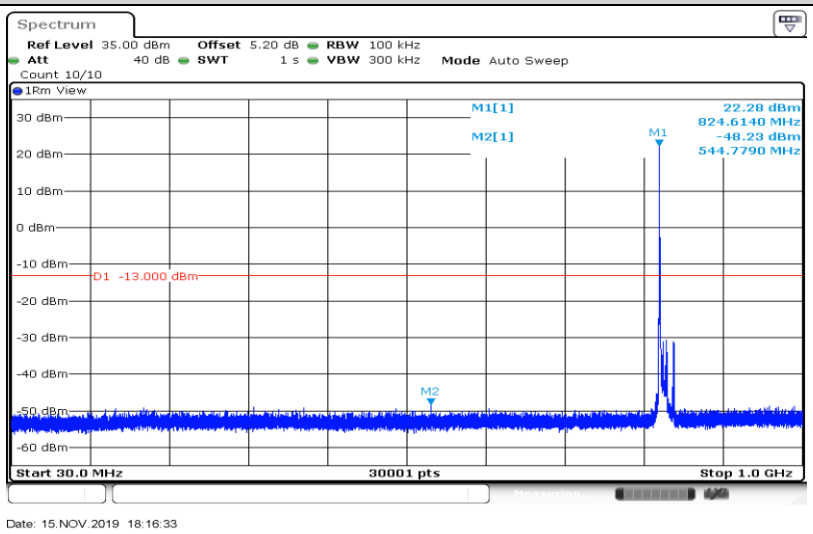
6. Spurious Emission at Antenna Terminal

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 * (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.

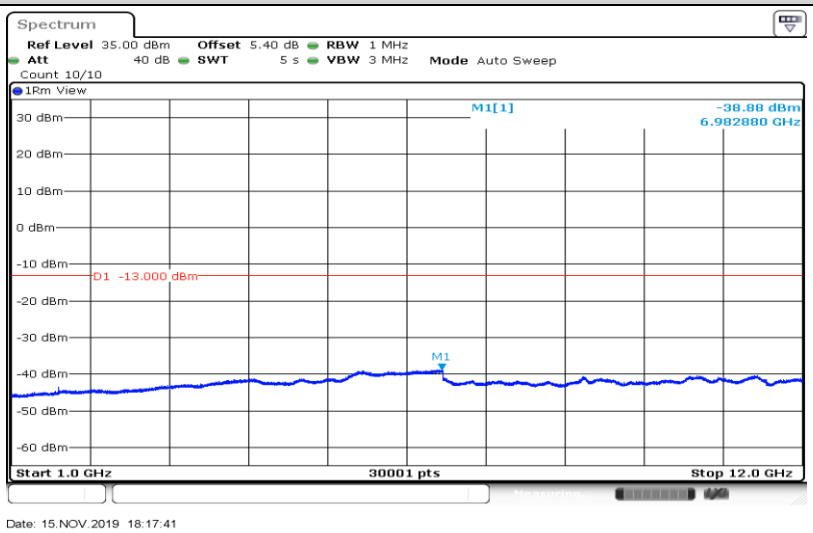
6.1. Test Plots

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



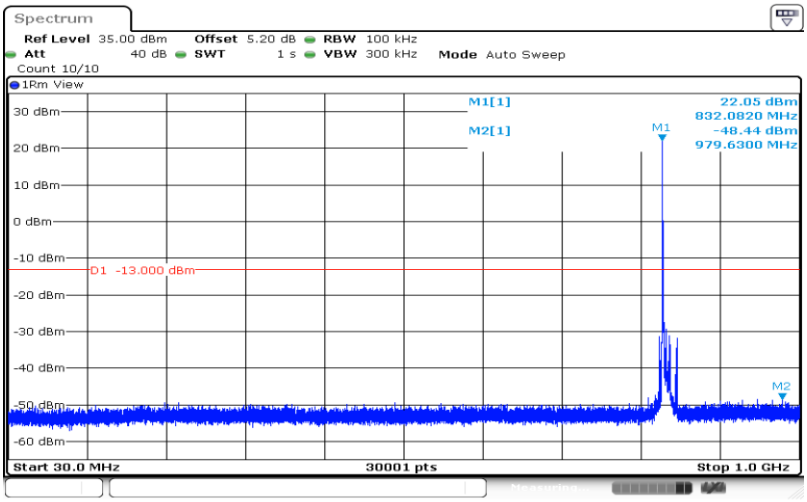
Date: 15.NOV.2019 18:16:33

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

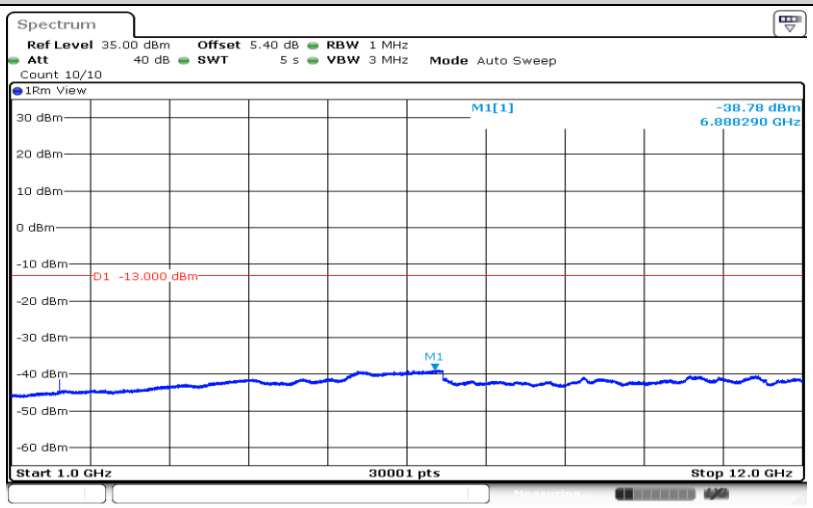


Date: 15.NOV.2019 18:17:41

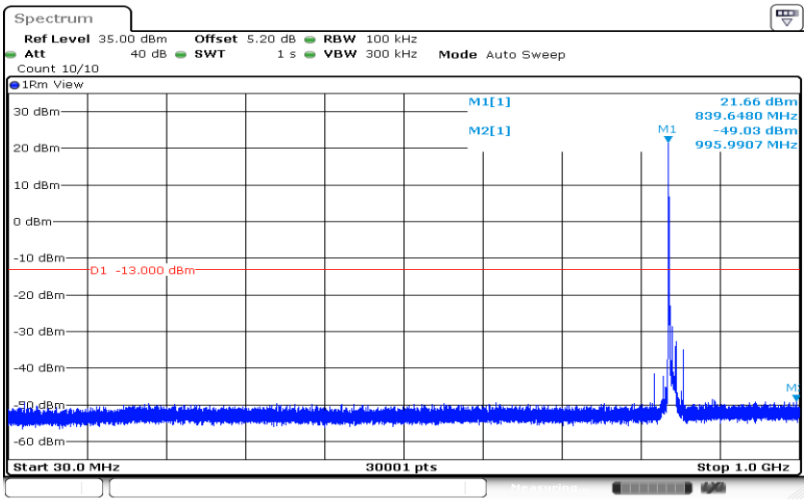
Band5-10MHz-QPSK-20525-1RB#0-Range1:30~1000MHz



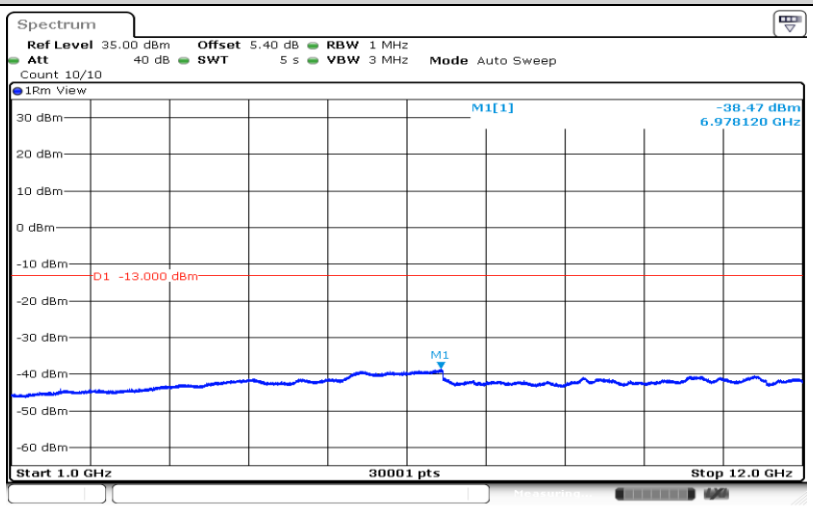
Band5-10MHz-QPSK-20525-1RB#0-Range2:1000~12000MHz



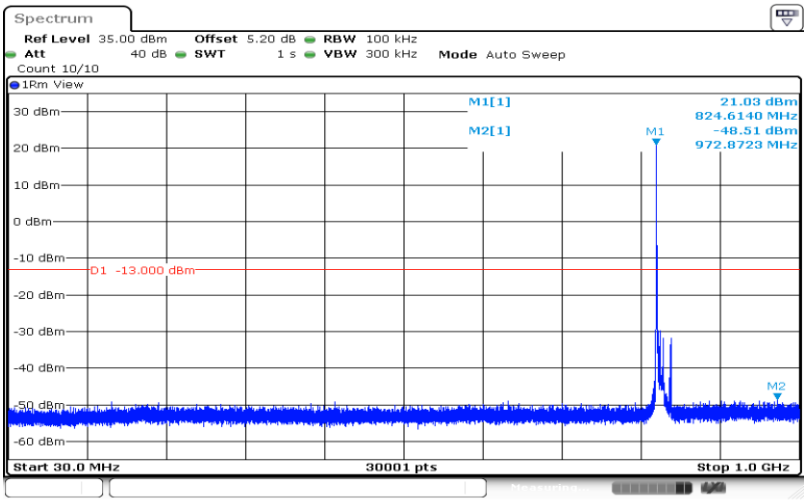
Band5-10MHz-QPSK-20600-1RB#0-Range1:30~1000MHz



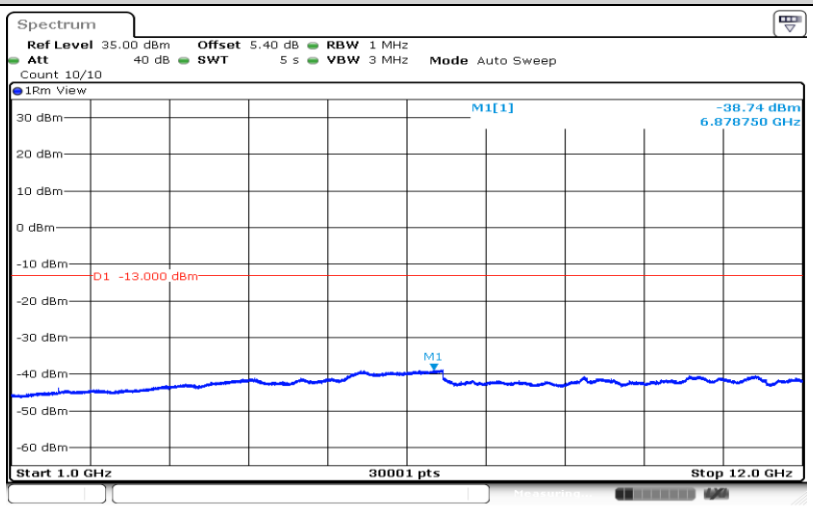
Band5-10MHz-QPSK-20600-1RB#0-Range2:1000~12000MHz



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

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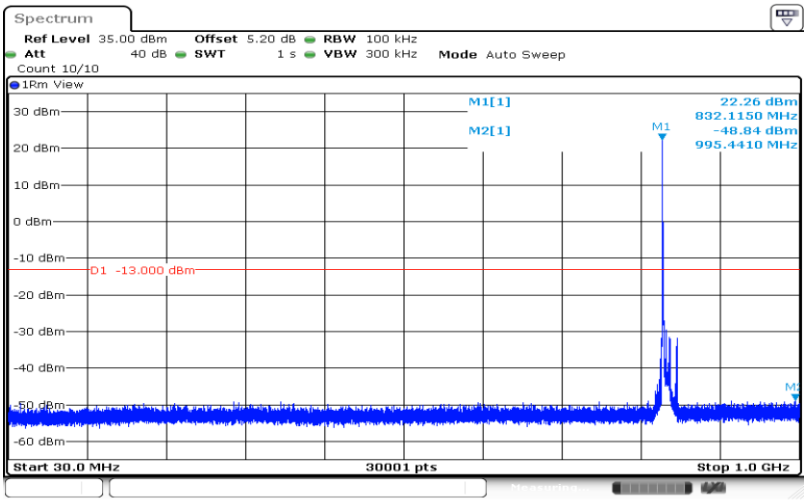
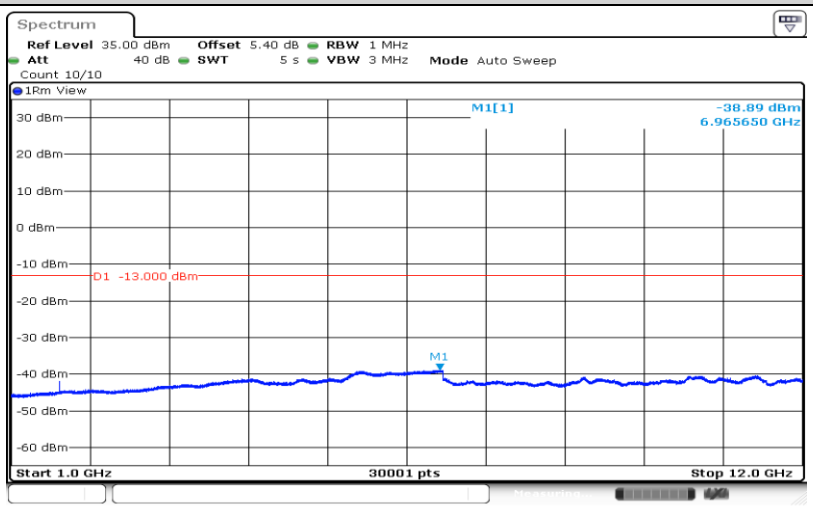
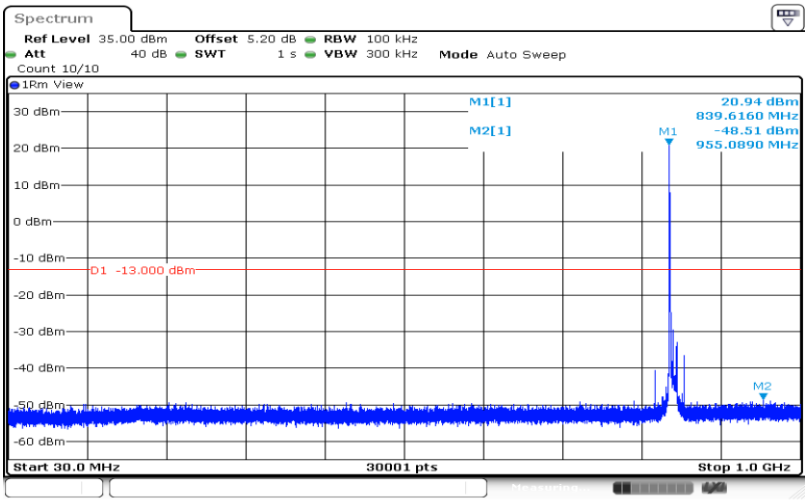


Band5-10MHz-16QAM-20525-1RB#0-Range2:1000~12000MHz



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



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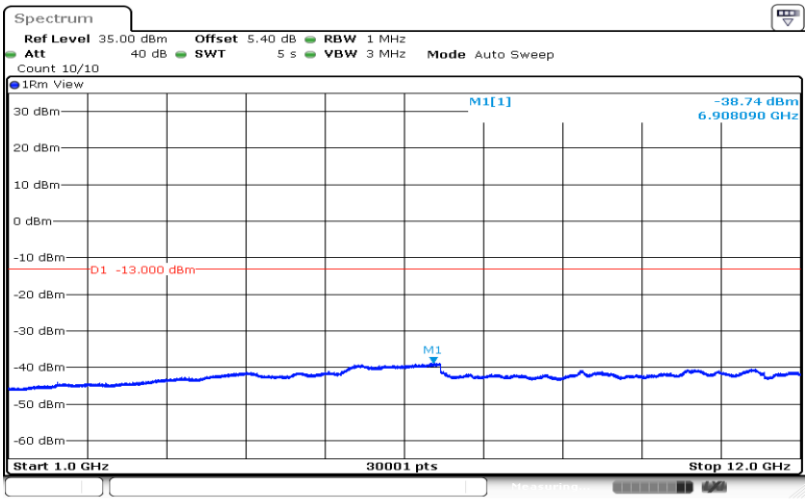
Band5-10MHz-16QAM-20600-1RB#0-Range2:1000~12000MHz



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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
49.6435	-69.95	-13.00	56.95	174	7	Vertical
116.3343	-62.12	-13.00	49.12	185	70	Vertical
1663.7327	-48.28	-13.00	35.28	196	162	Vertical
3328.4109	-52.49	-13.00	39.49	231	324	Vertical
4992.4664	-47.05	-13.00	34.05	262	7	Vertical
7488.9496	-47.85	-13.00	34.85	214	230	Vertical
45.4723	-61.89	-13.00	48.89	255	324	Horizontal
231.9156	-64.77	-13.00	51.77	194	7	Horizontal
506.1483	-63.93	-13.00	50.93	321	165	Horizontal
1664.1328	-47.76	-13.00	34.76	262	283	Horizontal
3328.2109	-48.64	-13.00	35.64	281	134	Horizontal
7488.9496	-50.73	-13.00	37.73	154	229	Horizontal

7.1.2.Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height [cm]	Angle [°]	Polarization
53.1842	-71.03	-13.00	58.03	258	71	Vertical
112.8906	-62.37	-13.00	49.37	174	134	Vertical
1648.9298	-45.68	-13.00	32.68	192	171	Vertical
3298.4099	-50.85	-13.00	37.85	251	229	Vertical
4947.4649	-45.81	-13.00	32.81	254	7	Vertical
7421.3474	-43.72	-13.00	30.72	184	39	Vertical
43.2897	-61.37	-13.00	48.37	285	293	Horizontal
243.1197	-65.35	-13.00	52.35	174	134	Horizontal
1648.9298	-44.33	-13.00	31.33	196	79	Horizontal
3298.4099	-48.42	-13.00	35.42	213	102	Horizontal
4947.6649	-50.70	-13.00	37.70	258	229	Horizontal
7421.3474	-47.90	-13.00	34.90	246	166	Horizontal

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7.1.3.Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height [cm]	Angle [°]	Polarization
47.6064	-69.30	-13.00	56.30	185	293	Vertical
107.1189	-62.61	-13.00	49.61	196	324	Vertical
1678.9358	-48.13	-13.00	35.13	231	169	Vertical
4198.0399	-51.20	-13.00	38.20	252	166	Vertical
5037.4679	-46.07	-13.00	33.07	261	7	Vertical
7556.3519	-46.21	-13.00	33.21	184	198	Vertical
43.8232	-62.15	-13.00	49.15	258	169	Horizontal
229.2480	-64.05	-13.00	51.05	174	157	Horizontal
1679.3359	-45.07	-13.00	32.07	196	154	Horizontal
3358.4119	-50.33	-13.00	37.33	231	23	Horizontal
5037.6679	-52.13	-13.00	39.13	262	9	Horizontal
7556.5519	-50.42	-13.00	37.42	215	222	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.

8. Frequency Stability

8.1. Frequency Vs Voltage

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	VL	NT	-10.41	-0.012557	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	-12.89	-0.015549	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	-9.90	-0.011942	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-9.68	-0.011572	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-10.16	-0.012146	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-13.10	-0.015660	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	-10.47	-0.012405	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	-11.37	-0.013472	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	-10.24	-0.012133	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VL	NT	-6.62	-0.007986	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VN	NT	-9.74	-0.011749	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VH	NT	-8.24	-0.009940	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VL	NT	-8.08	-0.009659	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VN	NT	-7.42	-0.008870	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VH	NT	-12.07	-0.014429	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VL	NT	-8.83	-0.010462	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VN	NT	-7.50	-0.008886	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VH	NT	-12.32	-0.014597	±2.5	PASS

8.2. Frequency Vs Temperature

Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	NV	-30	-9.40	-0.011339	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-20	-7.35	-0.008866	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	0	-7.98	-0.009626	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	-7.55	-0.009107	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	-6.14	-0.007407	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-12.23	-0.014753	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	-8.98	-0.010832	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	50	-10.91	-0.013160	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	-12.63	-0.015099	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	-11.60	-0.013867	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-10.13	-0.012110	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-11.40	-0.013628	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	-10.79	-0.012899	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-12.63	-0.015099	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	-13.22	-0.015804	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	-8.25	-0.009863	±2.5	PASS

Band5	10MHz	QPSK	20600	50RB#0	NV	-30	-10.76	-0.012749	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	-13.95	-0.016528	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	0	-10.37	-0.012287	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	10	-11.62	-0.013768	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	20	-11.09	-0.013140	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	30	-13.89	-0.016457	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	-15.88	-0.018815	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	50	-8.30	-0.009834	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-30	-9.17	-0.011062	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-20	-12.22	-0.014741	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	0	-12.17	-0.014680	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	10	-8.57	-0.010338	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	20	-6.41	-0.007732	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	30	-10.41	-0.012557	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	40	-10.16	-0.012256	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	50	-8.58	-0.010350	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-30	-8.70	-0.010400	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-20	-12.39	-0.014812	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	0	-13.10	-0.015660	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	10	-9.37	-0.011201	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	20	-13.03	-0.015577	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	30	-9.18	-0.010974	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	40	-11.19	-0.013377	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	50	-7.47	-0.008930	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-30	-11.84	-0.014028	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-20	-13.75	-0.016291	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	0	-10.09	-0.011955	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	10	-13.99	-0.016576	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	20	-12.53	-0.014846	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	30	-9.24	-0.010948	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	40	-12.57	-0.014893	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	50	-13.53	-0.016031	±2.5	PASS

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