



Appendix B

E-UTRA Band 5



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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	23.00	23.75	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	23.23	23.98	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	22.91	23.66	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#0	23.34	24.09	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	23.41	24.16	38.45	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	23.22	23.97	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	22.22	22.97	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	23.21	23.96	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.24	23.99	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	23.26	24.01	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	23.31	24.06	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	23.35	24.10	38.45	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	23.30	24.05	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.19	22.94	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	23.11	23.86	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.17	23.92	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	23.20	23.95	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	23.21	23.96	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	23.30	24.05	38.45	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	23.36	24.11	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.23	22.98	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	21.84	22.59	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	21.99	22.74	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	21.76	22.51	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	22.53	23.28	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	22.39	23.14	38.45	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	22.20	22.95	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	21.22	21.97	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	21.99	22.74	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	22.09	22.84	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	21.96	22.71	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	22.48	23.23	38.45	PASS



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Band5	1.4MHz	16QAM	20525	3RB#1	22.42	23.17	38.45	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	22.46	23.21	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	21.32	22.07	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	21.91	22.66	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	22.01	22.76	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	21.75	22.50	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	22.49	23.24	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	22.36	23.11	38.45	PASS
Band5	1.4MHz	16QAM	20643	3RB#3	22.34	23.09	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.17	21.92	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.25	24.00	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	23.03	23.78	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	23.18	23.93	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#0	22.29	23.04	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#4	22.10	22.85	38.45	PASS
Band5	3MHz	QPSK	20415	8RB#7	22.15	22.90	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.12	22.87	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.35	24.10	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	23.15	23.90	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	23.19	23.94	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#0	22.23	22.98	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#4	22.28	23.03	38.45	PASS
Band5	3MHz	QPSK	20525	8RB#7	22.26	23.01	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	22.35	23.10	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	23.27	24.02	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.15	23.90	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	23.15	23.90	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#0	22.27	23.02	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#4	22.20	22.95	38.45	PASS
Band5	3MHz	QPSK	20635	8RB#7	22.21	22.96	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	22.22	22.97	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	21.86	22.61	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	21.74	22.49	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	21.91	22.66	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#0	21.08	21.83	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#4	21.07	21.82	38.45	PASS
Band5	3MHz	16QAM	20415	8RB#7	21.09	21.84	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	21.30	22.05	38.45	PASS



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Band5	3MHz	16QAM	20525	1RB#0	21.94	22.69	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	21.94	22.69	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	21.95	22.70	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#0	21.16	21.91	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#4	21.17	21.92	38.45	PASS
Band5	3MHz	16QAM	20525	8RB#7	21.19	21.94	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.27	22.02	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	21.89	22.64	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	21.92	22.67	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	21.86	22.61	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#0	21.14	21.89	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#4	21.16	21.91	38.45	PASS
Band5	3MHz	16QAM	20635	8RB#7	21.22	21.97	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	21.24	21.99	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.06	23.81	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#12	23.46	24.21	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	22.98	23.73	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#0	22.06	22.81	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#6	22.22	22.97	38.45	PASS
Band5	5MHz	QPSK	20425	12RB#13	22.17	22.92	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	22.23	22.98	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	23.13	23.88	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	23.50	24.25	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	23.00	23.75	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#0	22.30	23.05	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#6	22.32	23.07	38.45	PASS
Band5	5MHz	QPSK	20525	12RB#13	22.24	22.99	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.29	23.04	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	23.05	23.80	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.53	24.28	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	23.02	23.77	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#0	22.19	22.94	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#6	22.19	22.94	38.45	PASS
Band5	5MHz	QPSK	20625	12RB#13	22.17	22.92	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	22.21	22.96	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	21.83	22.58	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.29	23.04	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	21.78	22.53	38.45	PASS



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Band5	5MHz	16QAM	20425	12RB#0	21.04	21.79	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#6	21.02	21.77	38.45	PASS
Band5	5MHz	16QAM	20425	12RB#13	21.17	21.92	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	21.19	21.94	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	21.88	22.63	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	22.35	23.10	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	21.86	22.61	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#0	21.19	21.94	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#6	21.28	22.03	38.45	PASS
Band5	5MHz	16QAM	20525	12RB#13	21.24	21.99	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.24	21.99	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	21.84	22.59	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.26	23.01	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	21.81	22.56	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#0	21.12	21.87	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#6	21.07	21.82	38.45	PASS
Band5	5MHz	16QAM	20625	12RB#13	21.20	21.95	38.45	PASS
Band5	5MHz	16QAM	20625	25RB#0	21.16	21.91	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	23.18	23.93	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.24	23.99	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.04	23.79	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#0	22.30	23.05	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#12	22.32	23.07	38.45	PASS
Band5	10MHz	QPSK	20450	25RB#25	22.31	23.06	38.45	PASS
Band5	10MHz	QPSK	20450	50RB#0	22.35	23.10	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	23.25	24.00	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.36	24.11	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	23.12	23.87	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#0	22.34	23.09	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#12	22.28	23.03	38.45	PASS
Band5	10MHz	QPSK	20525	25RB#25	22.21	22.96	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.29	23.04	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	23.07	23.82	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	23.48	24.23	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	23.09	23.84	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#0	22.29	23.04	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#12	22.25	23.00	38.45	PASS
Band5	10MHz	QPSK	20600	25RB#25	22.16	22.91	38.45	PASS



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Band5	10MHz	QPSK	20600	50RB#0	22.25	23.00	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	21.94	22.69	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	21.98	22.73	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	21.95	22.70	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#0	21.14	21.89	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#12	21.28	22.03	38.45	PASS
Band5	10MHz	16QAM	20450	25RB#25	21.20	21.95	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.30	22.05	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	22.06	22.81	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	22.10	22.85	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	21.96	22.71	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#0	21.17	21.92	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#12	21.33	22.08	38.45	PASS
Band5	10MHz	16QAM	20525	25RB#25	21.17	21.92	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	21.27	22.02	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	21.83	22.58	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	22.16	22.91	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	21.94	22.69	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#0	21.37	22.12	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#12	21.35	22.10	38.45	PASS
Band5	10MHz	16QAM	20600	25RB#25	21.31	22.06	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	21.29	22.04	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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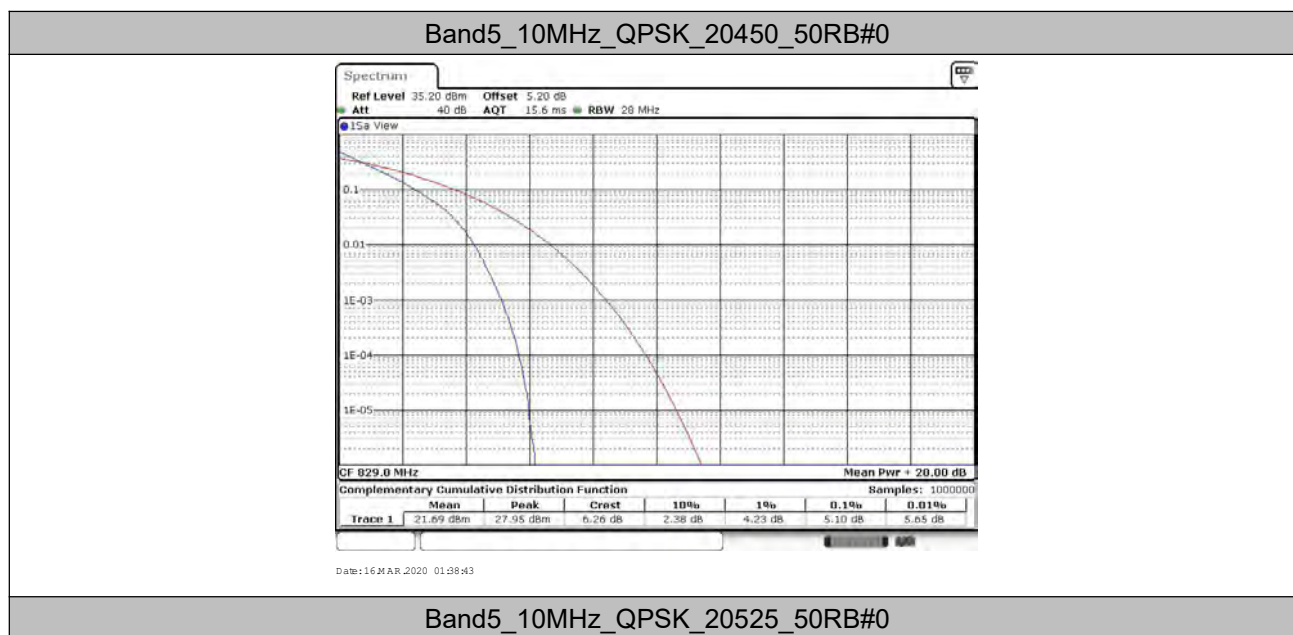


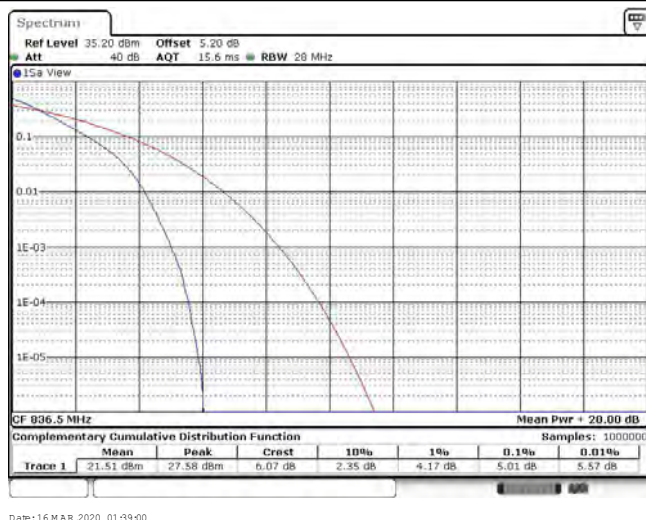
2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

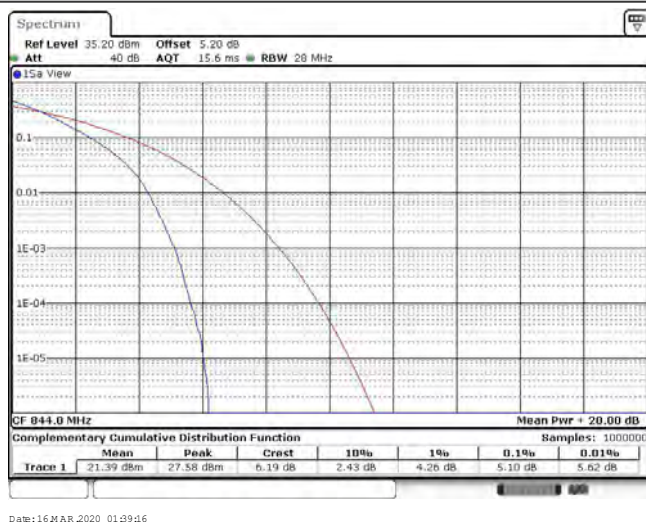
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band5	10MHz	QPSK	20450	50RB#0	5.10	13.00	PASS
Band5	10MHz	QPSK	20525	50RB#0	5.01	13.00	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.10	13.00	PASS
Band5	10MHz	16QAM	20450	50RB#0	5.91	13.00	PASS
Band5	10MHz	16QAM	20525	50RB#0	5.83	13.00	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.91	13.00	PASS

2.2. Test Plots





Band5_10MHz_QPSK_20600_50RB#0

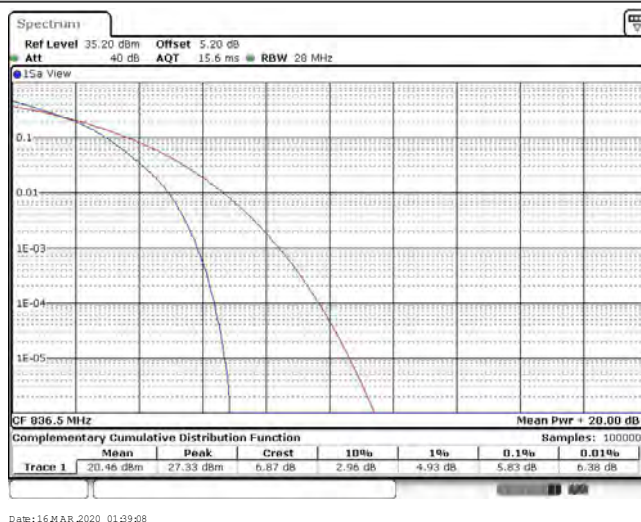


Band5_10MHz_16QAM_20450_50RB#0





Band5_10MHz_16QAM_20525_50RB#0



Band5_10MHz_16QAM_20600_50RB#0



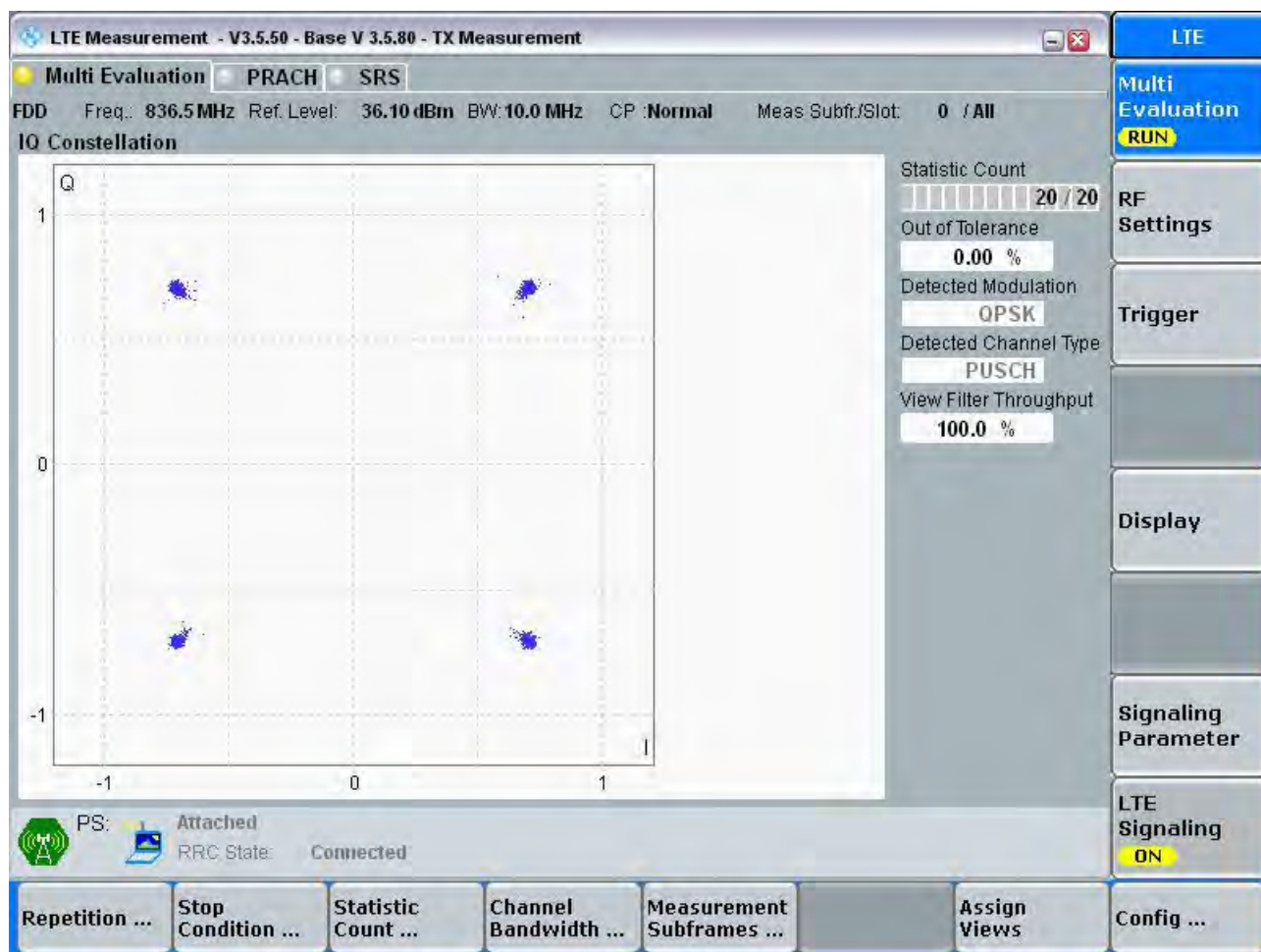


3. Modulation Characteristics

3.1. Test Band = LTE Band 5

3.2. Test Mode = LTE /TM1 10MHz

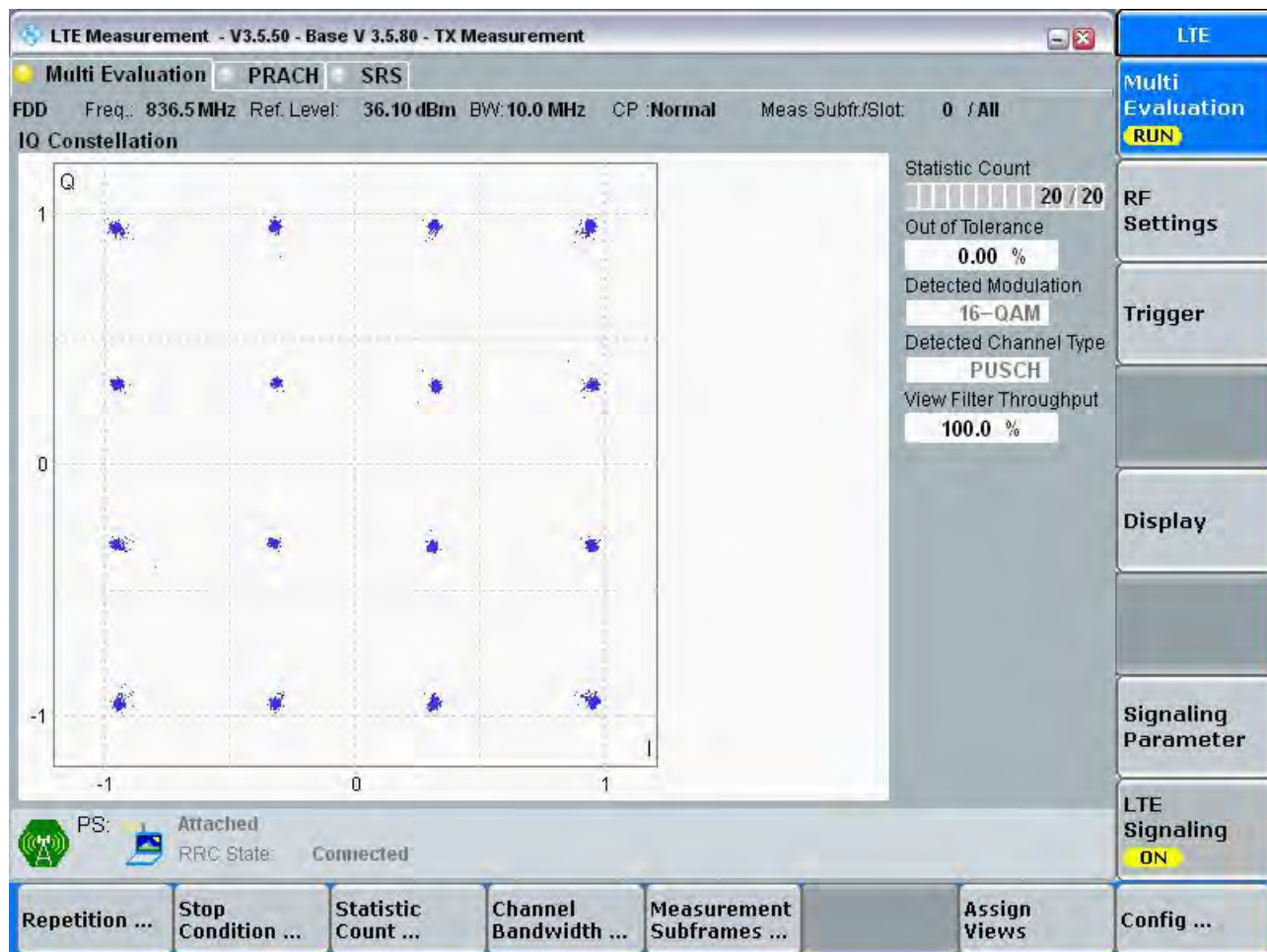
3.2.1. Test Channel = MCH





3.3. Test Mode = LTE /TM2 10MHz

3.3.1. 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	1.091	1.293	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.094	1.296	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.091	1.290	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.091	1.281	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.091	1.284	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.088	1.287	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.697	2.976	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.697	3.000	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.697	2.976	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.685	2.976	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.685	2.970	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.691	2.964	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.476	4.930	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.466	4.910	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.476	4.920	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.466	4.930	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.476	4.930	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.496	4.950	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.931	9.680	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.891	9.680	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.931	9.740	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.931	9.740	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.911	9.680	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.931	9.720	PASS



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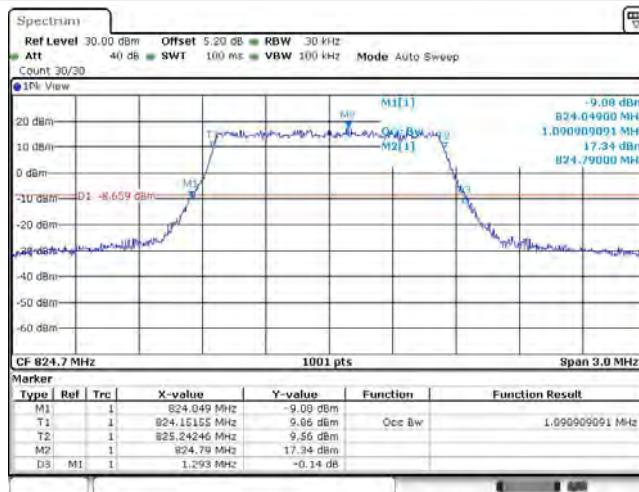
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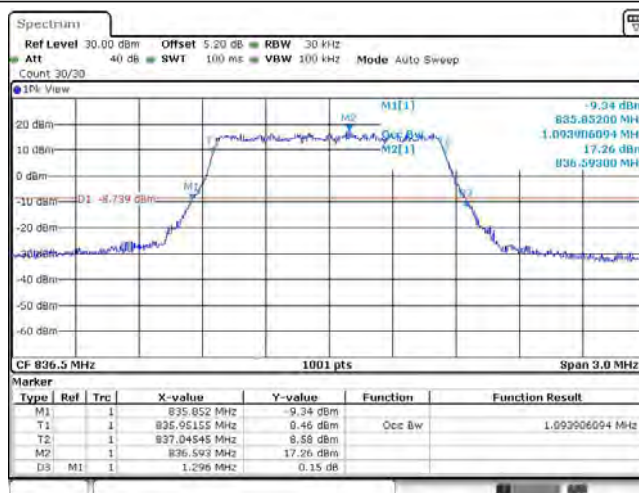
4.2. Test Plots

Band5_1.4MHz_QPSK_20407_6RB#0



Date: 12 MAR 2020 15:25:57

Band5_1.4MHz_QPSK_20525_6RB#0



Date: 12 MAR 2020 15:26:29

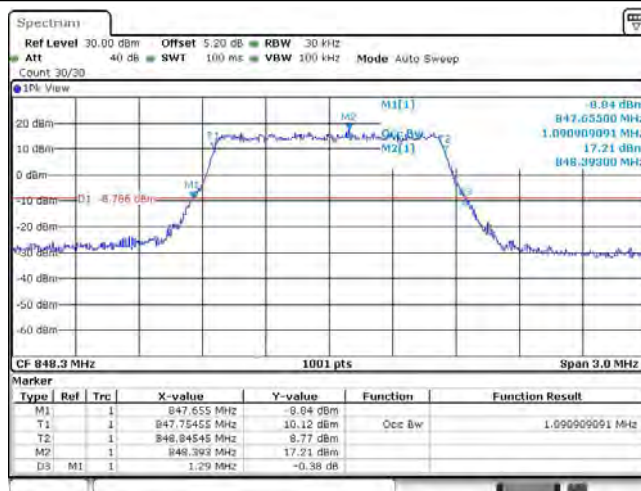
Band5_1.4MHz_QPSK_20643_6RB#0



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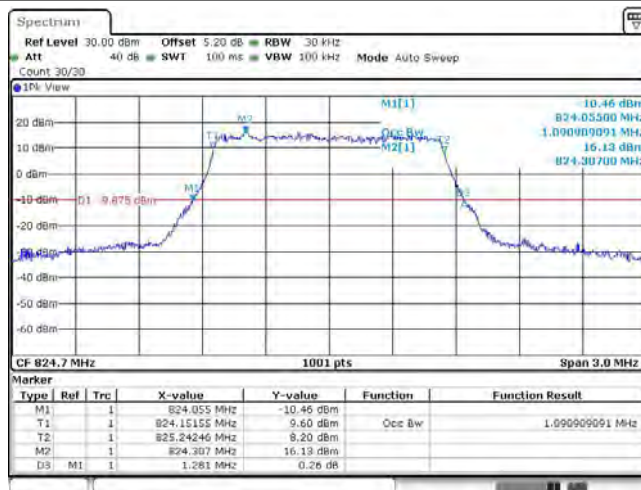
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Date: 12 MAR 2020 15:27:01

Band5_1.4MHz_16QAM_20407_6RB#0



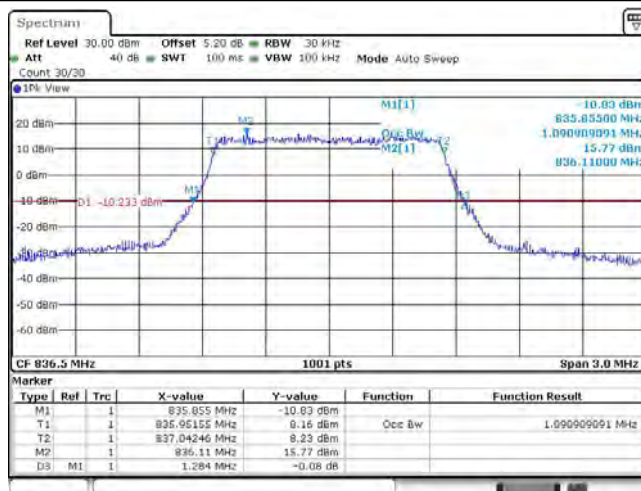
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Band5_1.4MHz_16QAM_20525_6RB#0



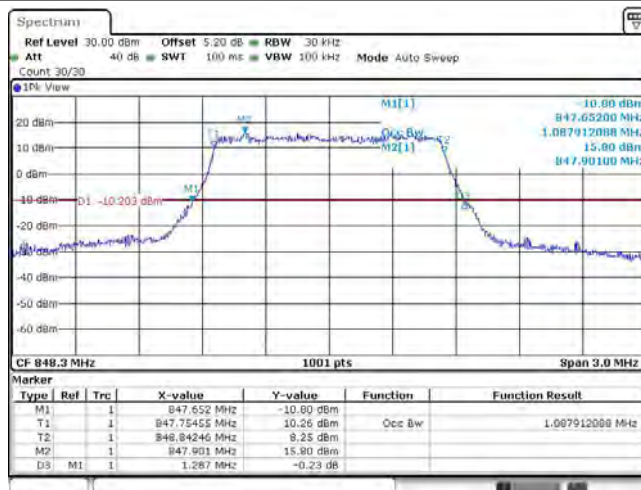
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Date: 12 MAR 2020 15:26:44

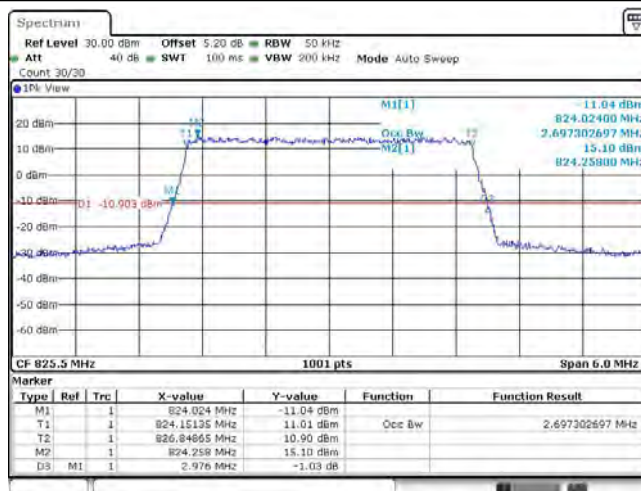
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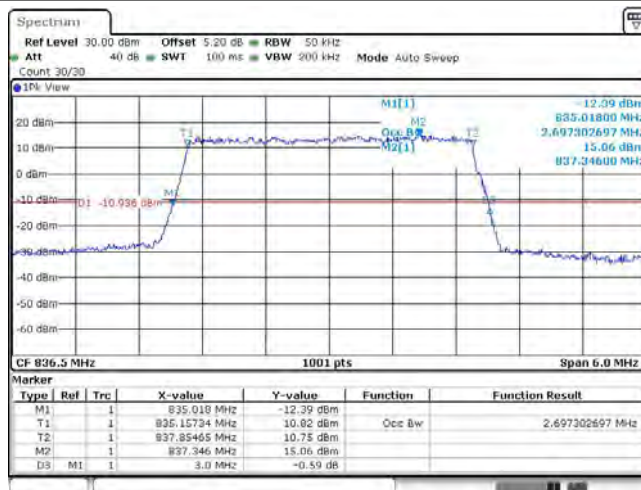
Band5_3MHz_QPSK_20415_15RB#0





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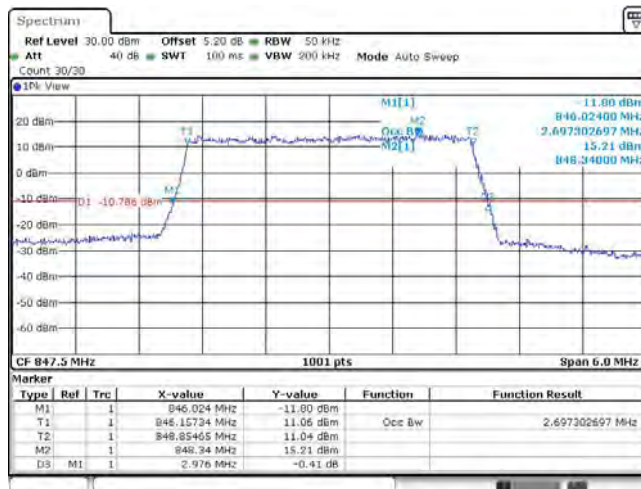
Band5_3MHz_QPSK_20525_15RB#0



Date: 12 MAR 2020 15:28:09

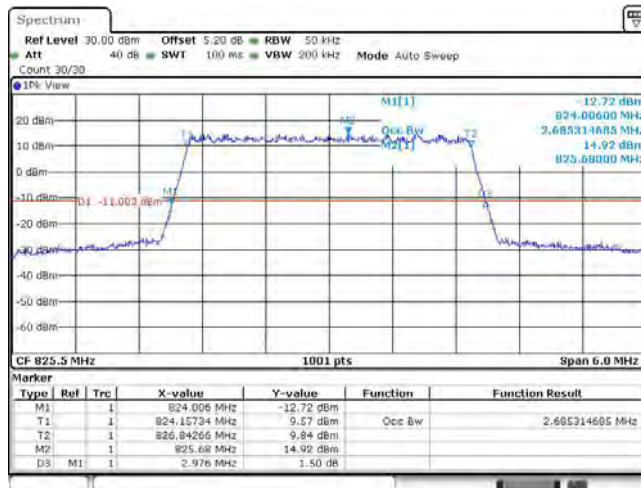
Band5_3MHz_QPSK_20635_15RB#0





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Band5_3MHz_16QAM_20415_15RB#0



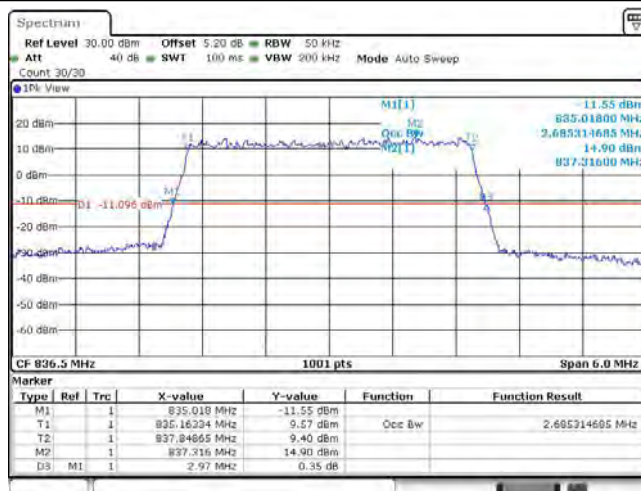
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Band5_3MHz_16QAM_20525_15RB#0



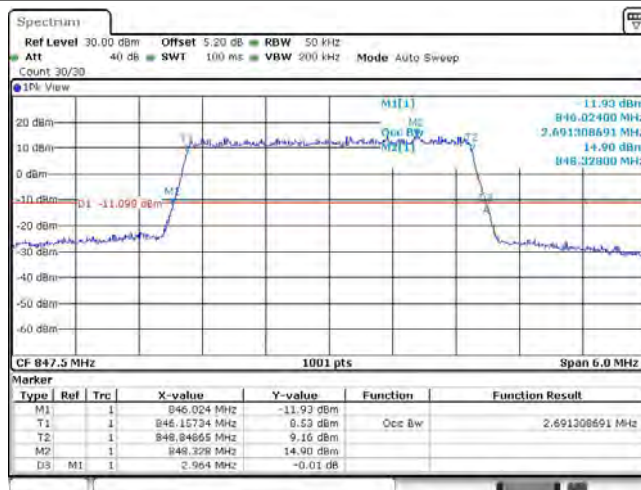
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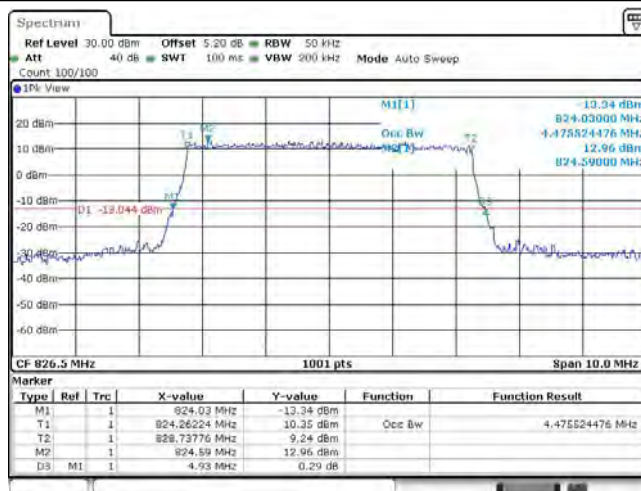
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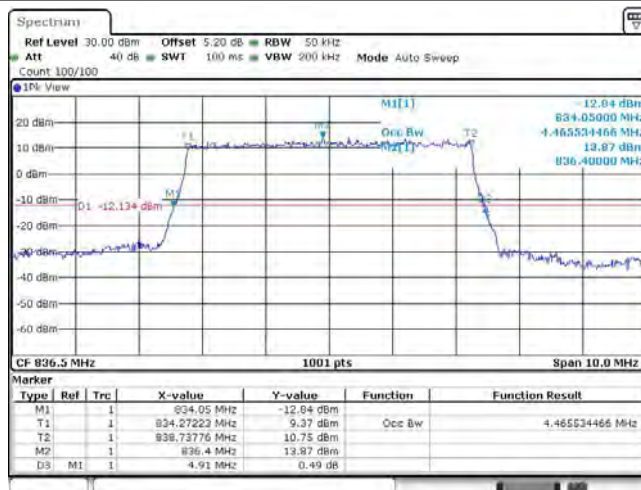
Band5_5MHz_QPSK_20425_25RB#0





Date: 12 MAR 2020 15:29:23

Band5_5MHz_QPSK_20525_25RB#0



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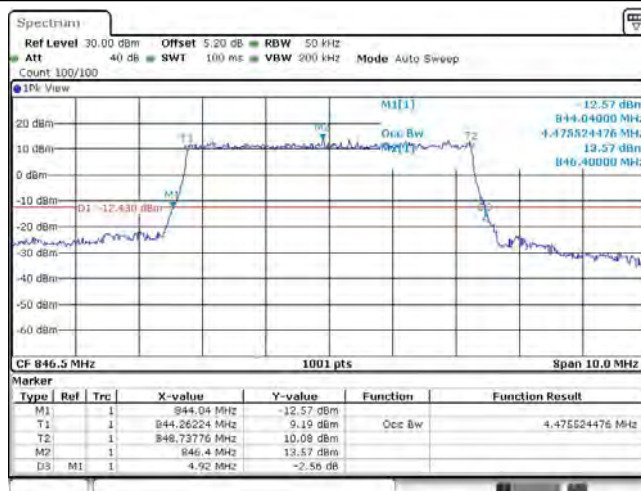
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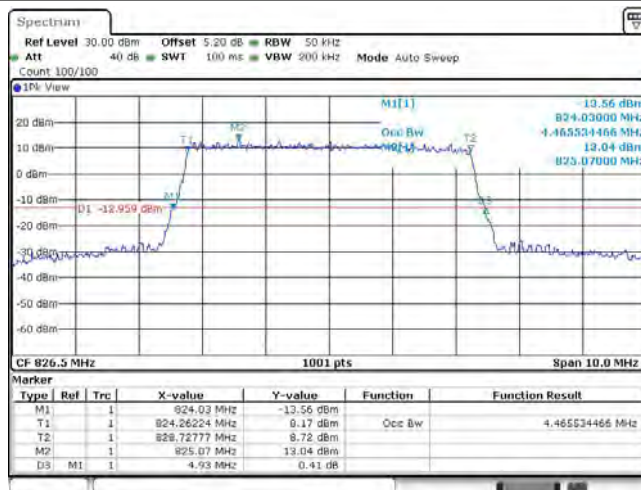
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Date: 12 MAR 2020 15:30:55

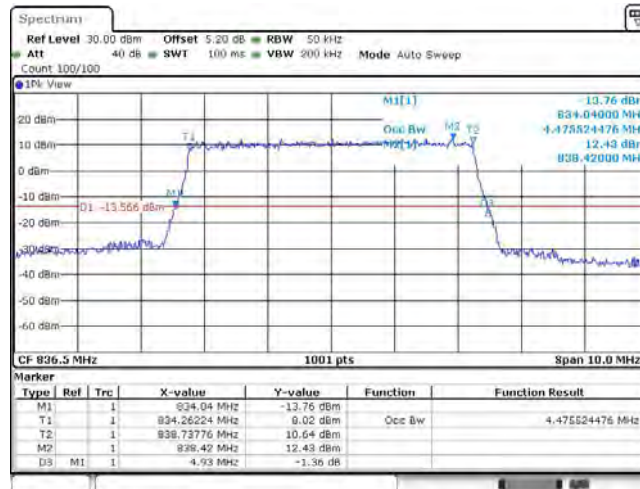
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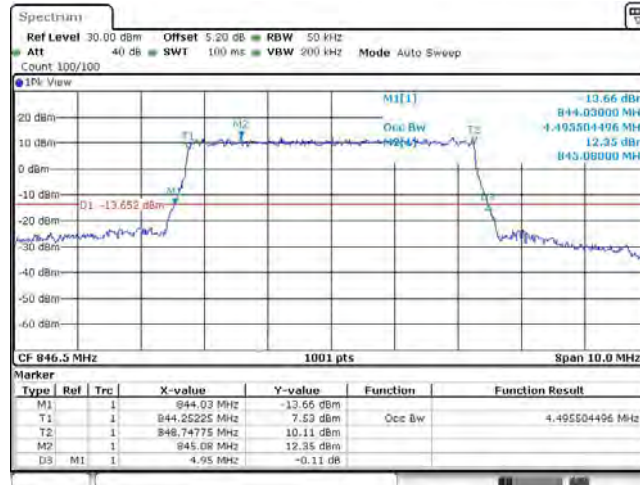
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Date: 12 MAR 2020 15:30:32

Band5_5MHz_16QAM_20625_25RB#0



Date: 12 MAR 2020 15:31:17

Band5_10MHz_QPSK_20450_50RB#0





Date: 12 MAR 2020 15:31:38

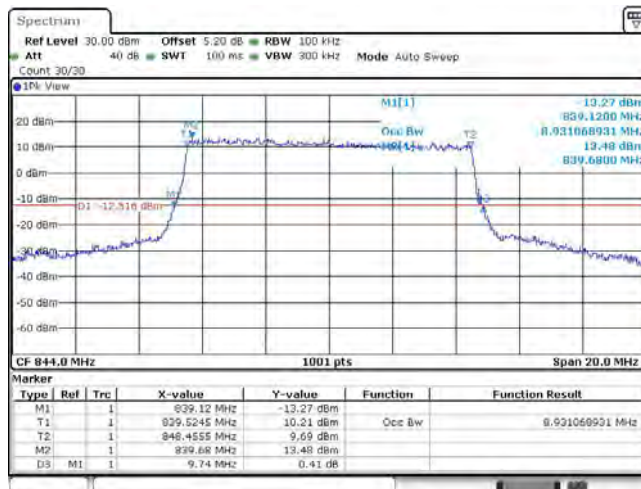
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Band5_10MHz_QPSK_20600_50RB#0





Date: 12 MAR 2020 15:32:42

Band5_10MHz_16QAM_20450_50RB#0



Date: 12 MAR 2020 15:31:54

Band5_10MHz_16QAM_20525_50RB#0



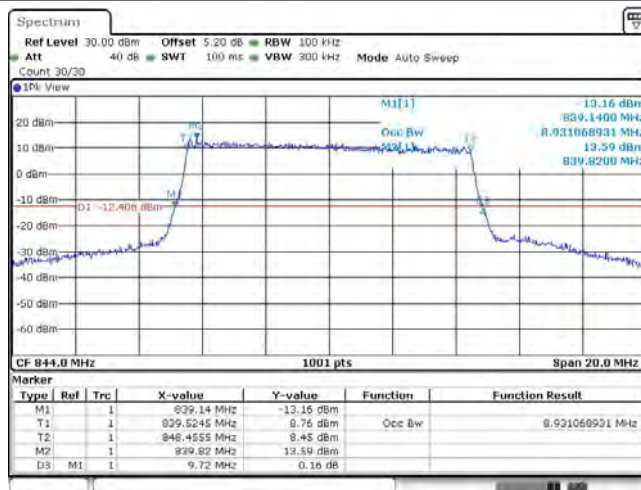
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Date: 12 MAR 2020 15:32:26

Band5_10MHz_16QAM_20600_50RB#0



Date: 12 MAR 2020 15:32:57



5. Band Edge Compliance

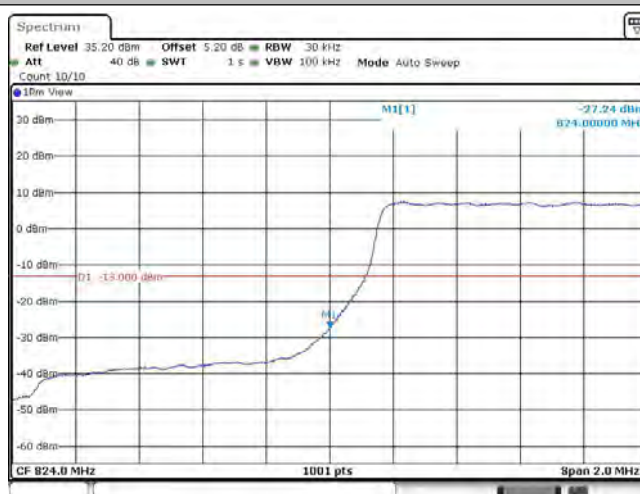
5.1. Test Plots

Band5_1.4MHz_QPSK_20407_1RB#0



Date: 12 MAR 2020 15:33:25

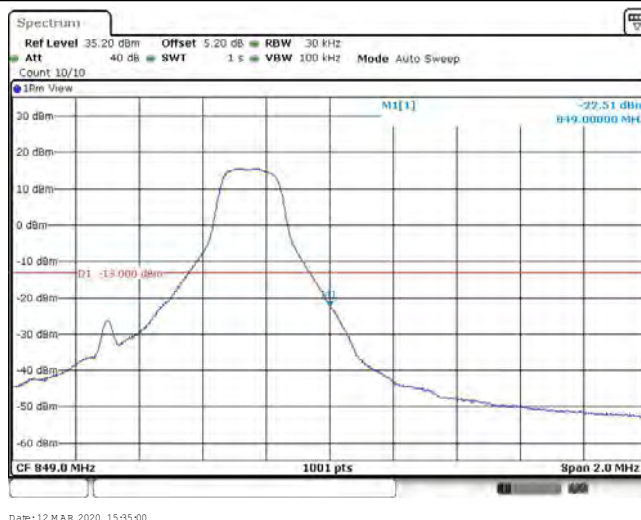
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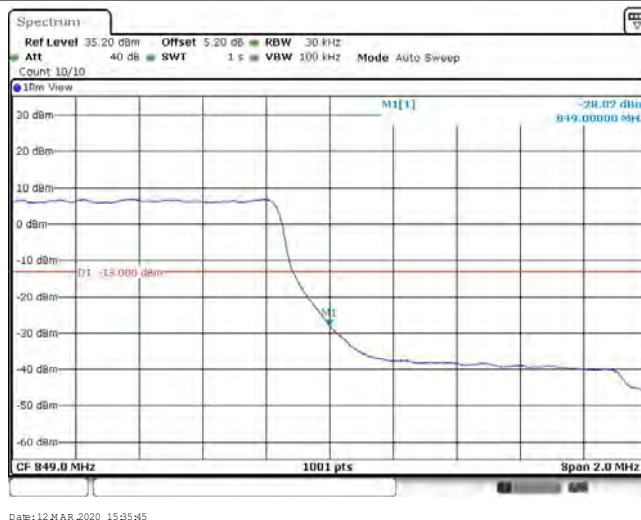
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Band5_1.4MHz_QPSK_20643_1RB#5





Band5_1.4MHz_QPSK_20643_6RB#0

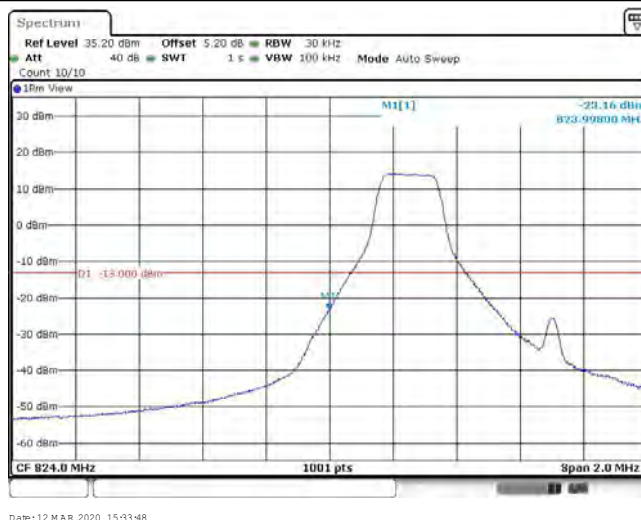


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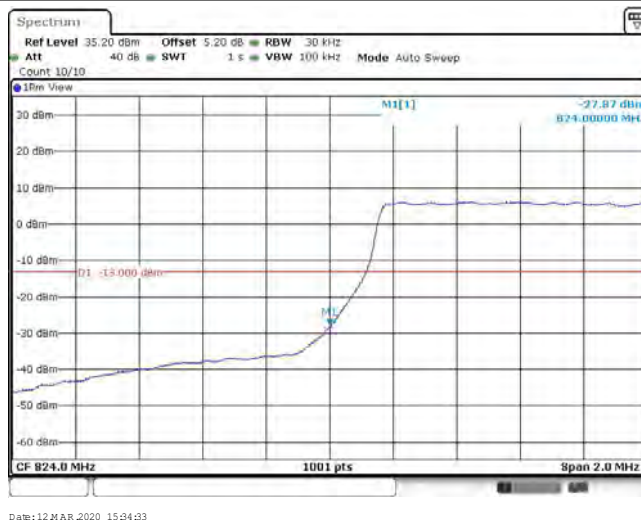


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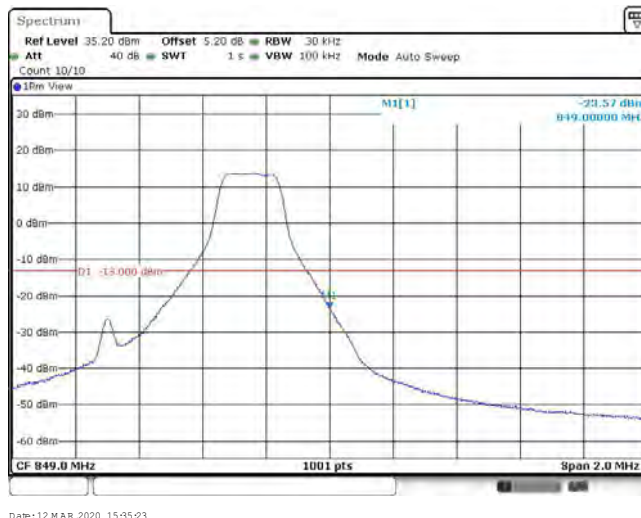


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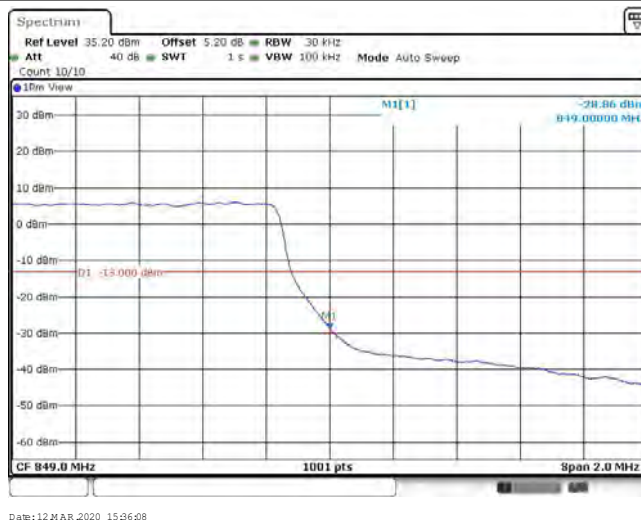


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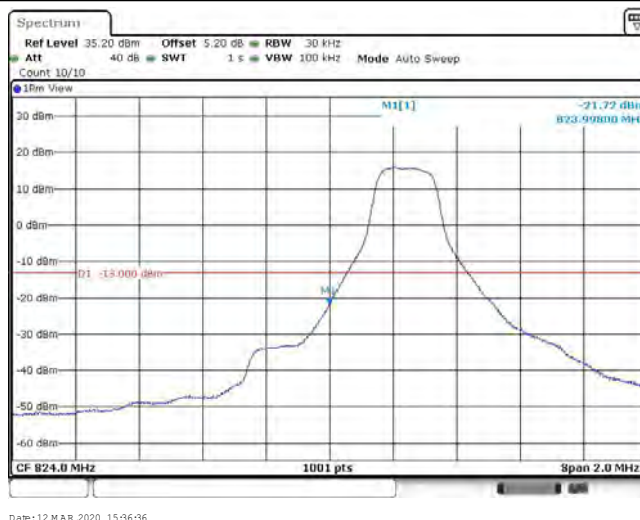


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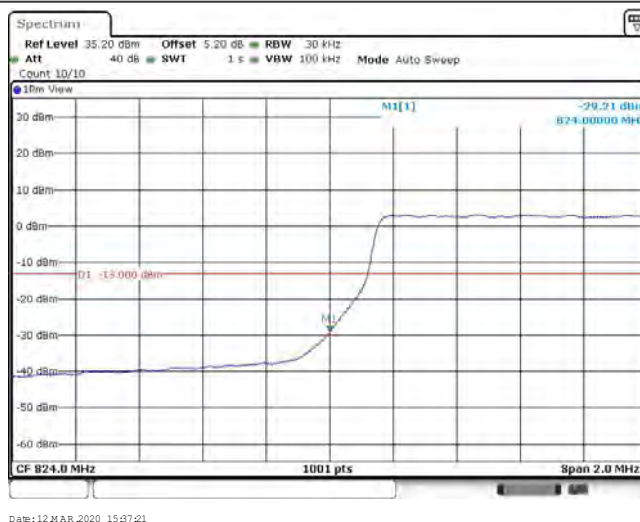


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Band5_3MHz_QPSK_20415_15RB#0



Band5_3MHz_QPSK_20635_1RB#14



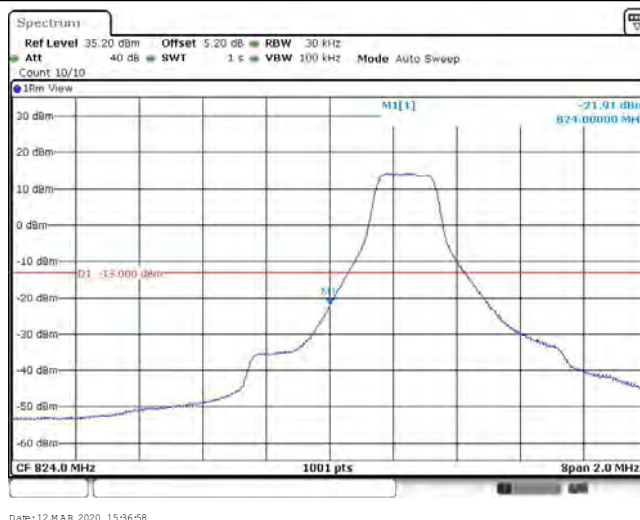


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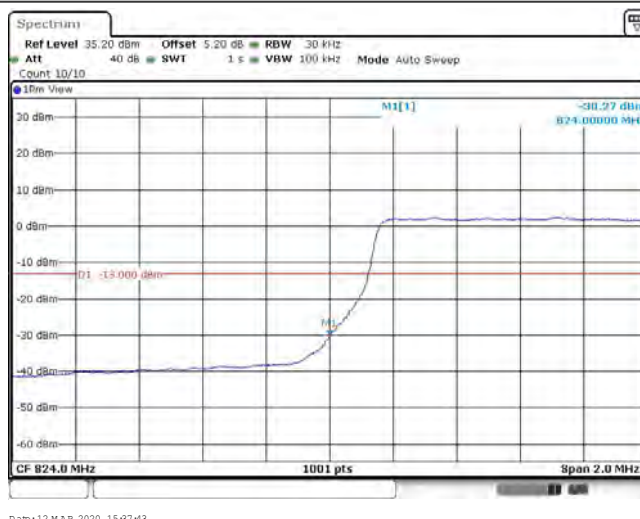


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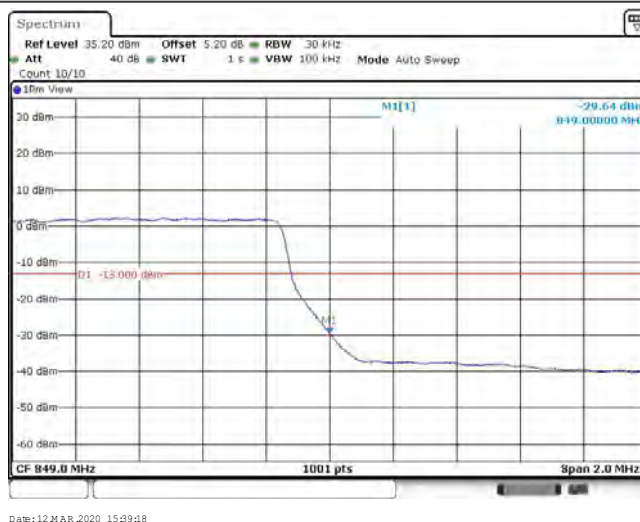


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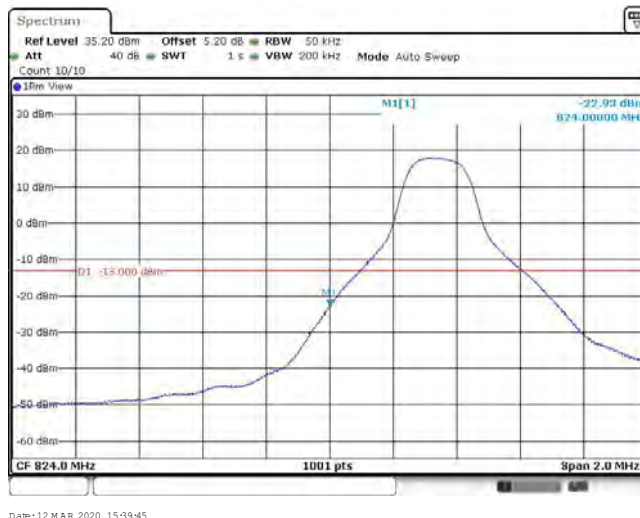


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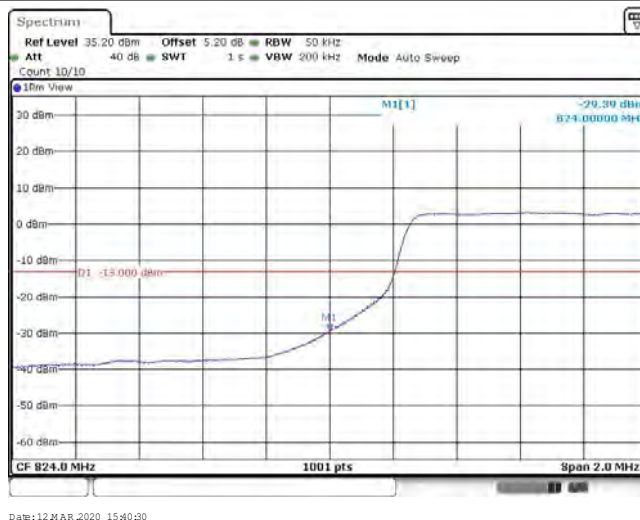


Band5_5MHz_QPSK_20425_1RB#0





Band5_5MHz_QPSK_20425_25RB#0

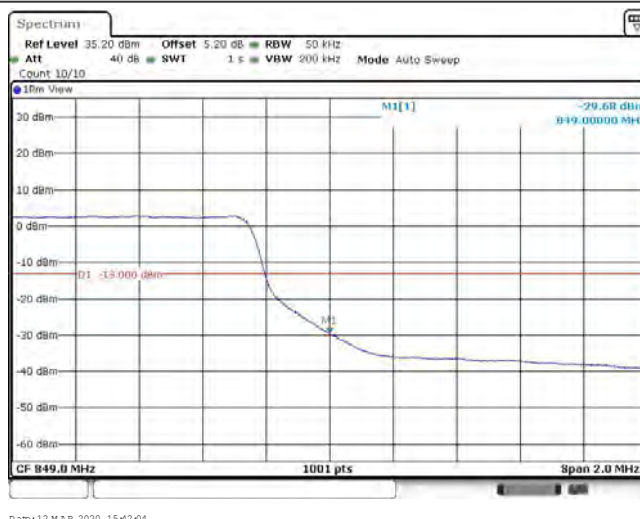


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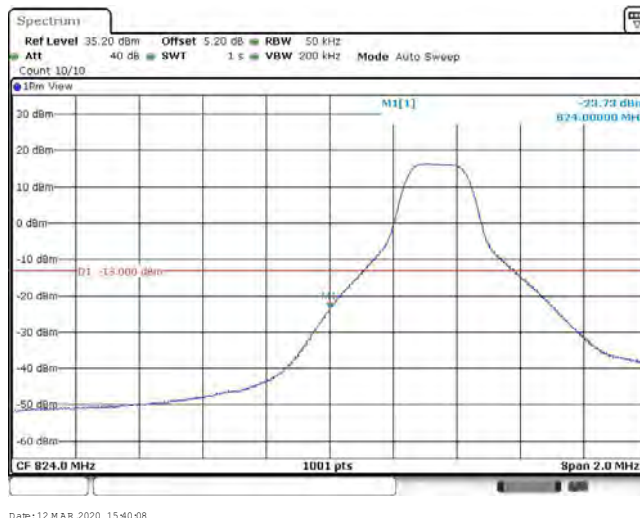


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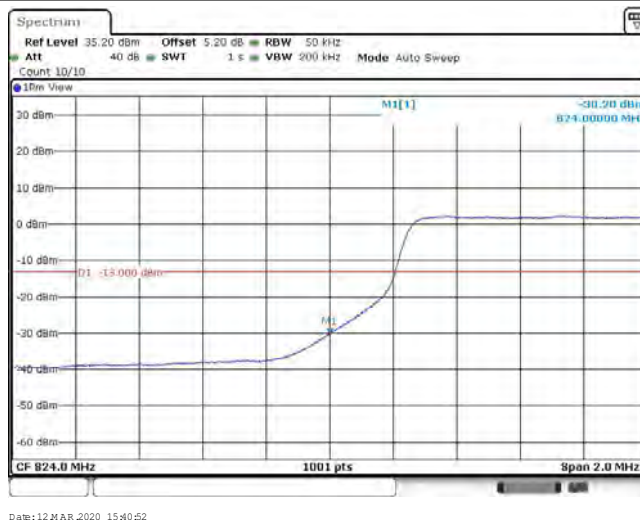


Band5_5MHz_16QAM_20425_1RB#0



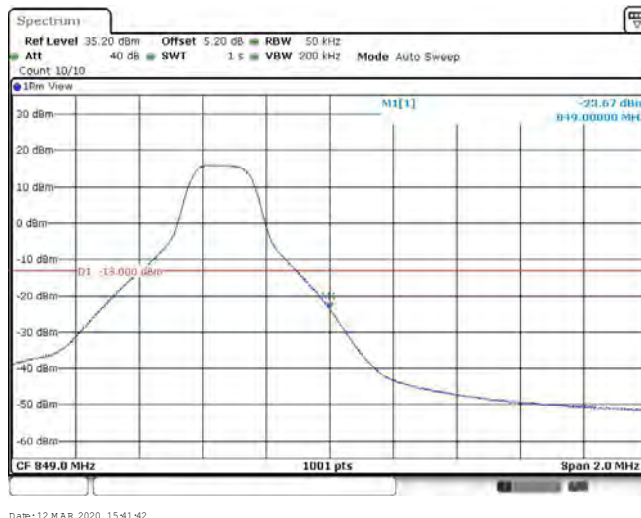


Band5_5MHz_16QAM_20425_25RB#0



Band5_5MHz_16QAM_20625_1RB#24





Date: 12 MAR 2020 15:41:42

Band5_5MHz_16QAM_20625_25RB#0



Date: 12 MAR 2020 15:42:27

Band5_10MHz_QPSK_20450_1RB#0

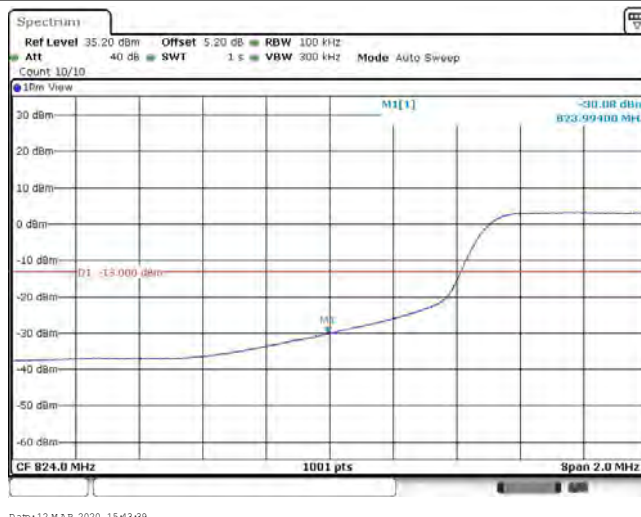


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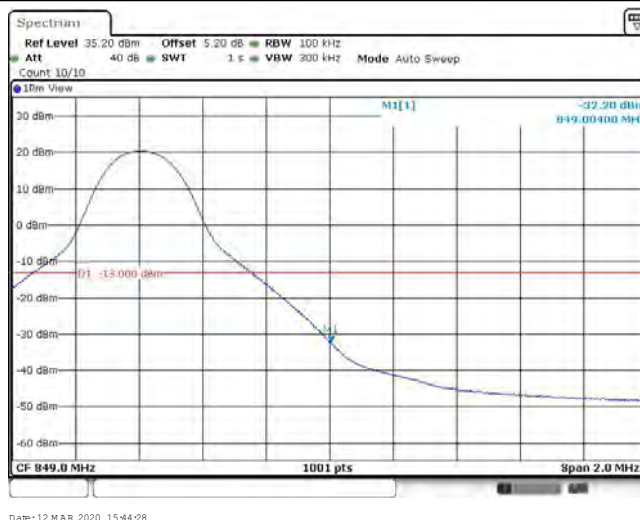


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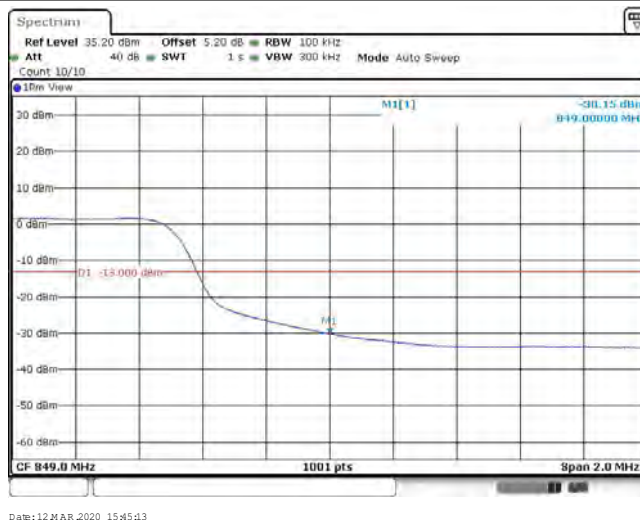
Band5_10MHz_QPSK_20600_1RB#49





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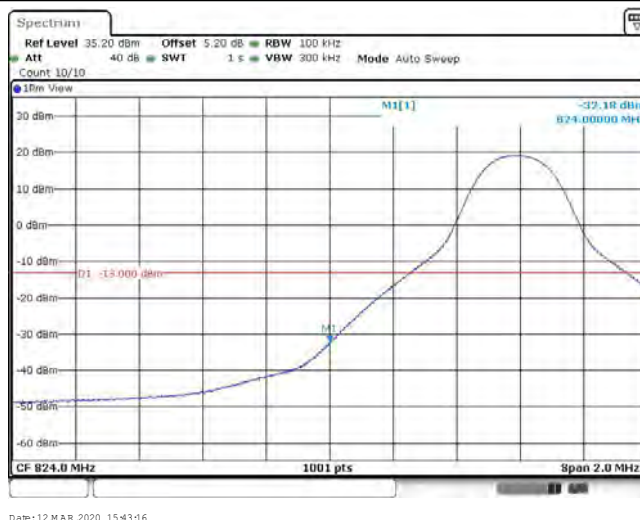
Date: 12 MAR 2020 15:45:13

Band5_10MHz_16QAM_20450_1RB#0

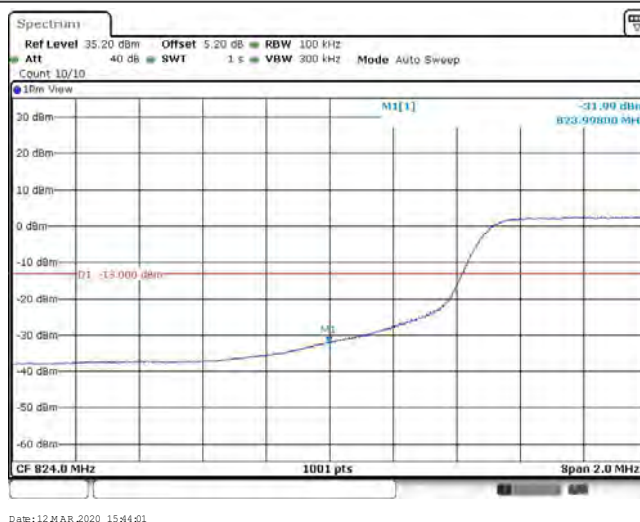


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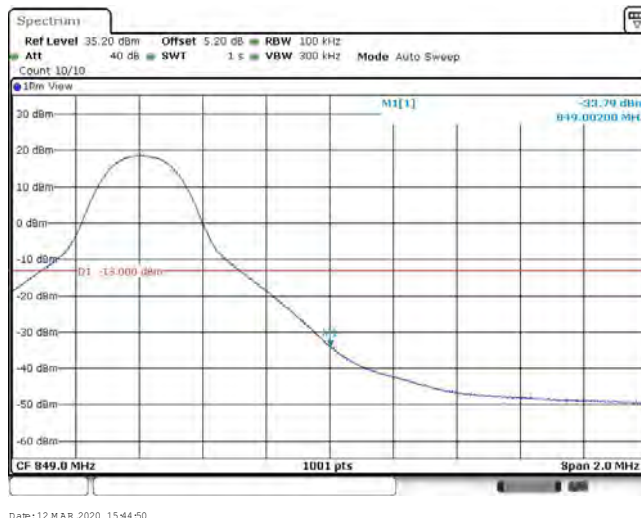


Band5_10MHz_16QAM_20450_50RB#0

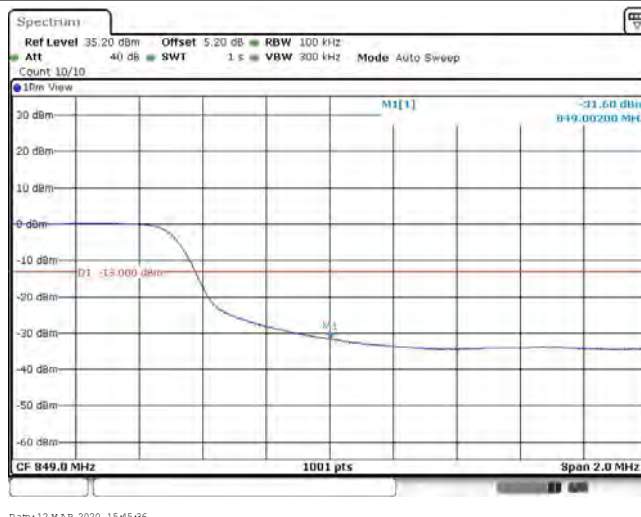


Band5_10MHz_16QAM_20600_1RB#49





Band5_10MHz_16QAM_20600_50RB#0





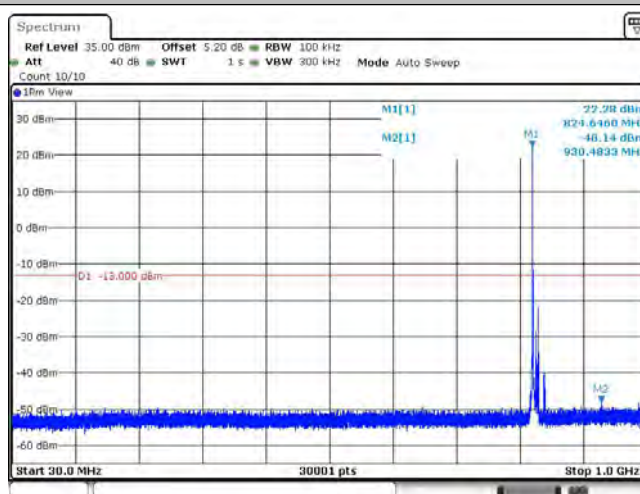
6. Spurious Emission at Antenna Terminal

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 = $k * (\text{Span} / RBW)$ " 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.

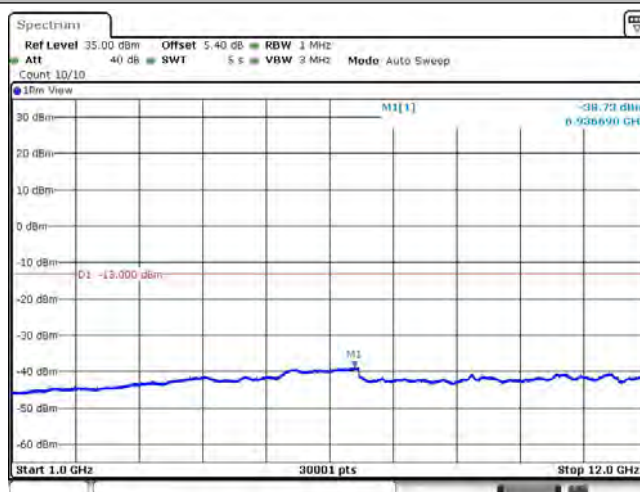
6.1. Test Plots

Band5_10MHz_QPSK_20450_1RB#0



Date: 12 MAR 2020 15:46:03

Band5_10MHz_QPSK_20450_1RB#0



Date: 12 MAR 2020 15:47:13

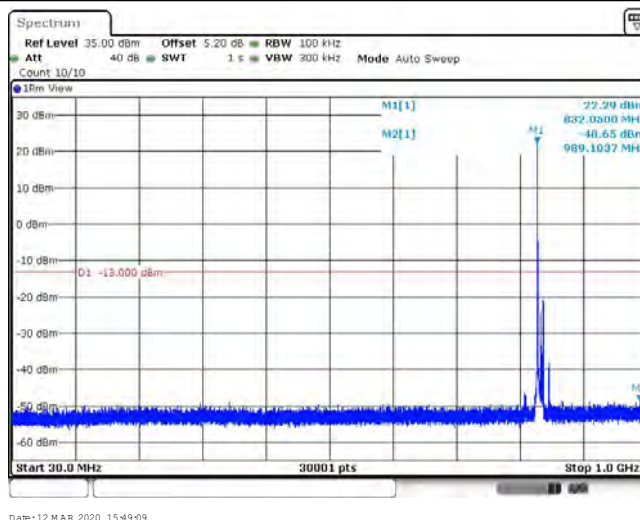
Band5_10MHz_QPSK_20525_1RB#0



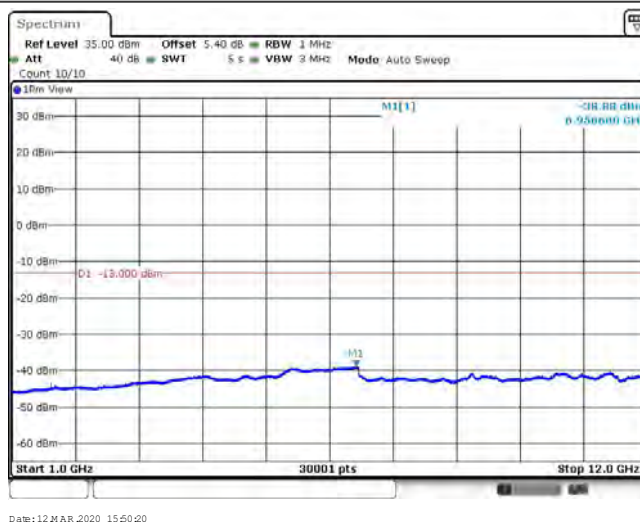
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Shenzhen Branch Inspection & Testing Services Laboratory

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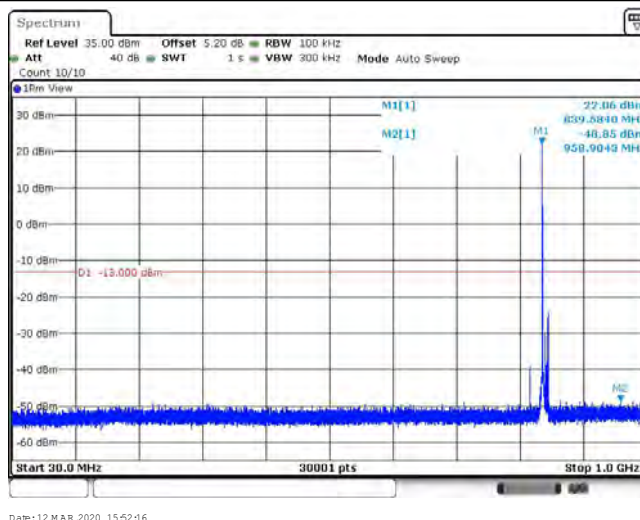


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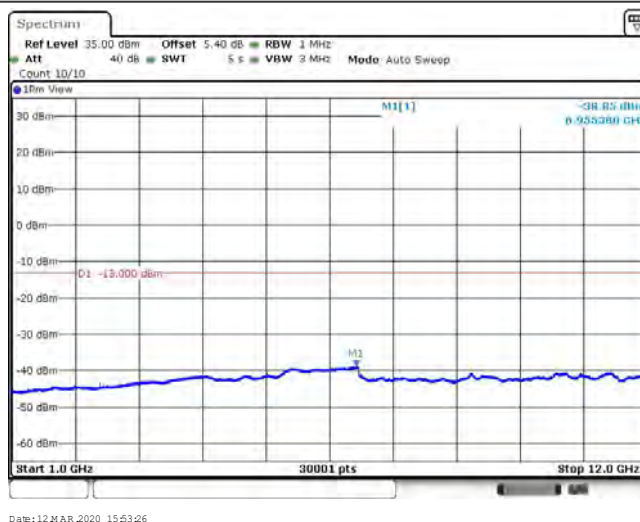


Band5_10MHz_QPSK_20600_1RB#0





Band5_10MHz_QPSK_20600_1RB#0

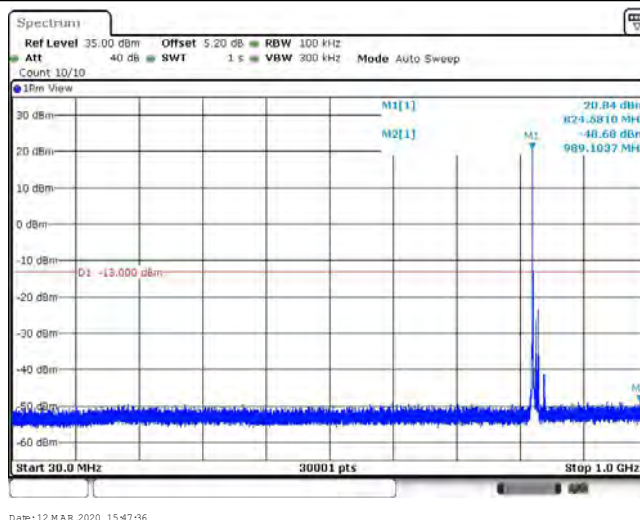


Band5_10MHz_16QAM_20450_1RB#0

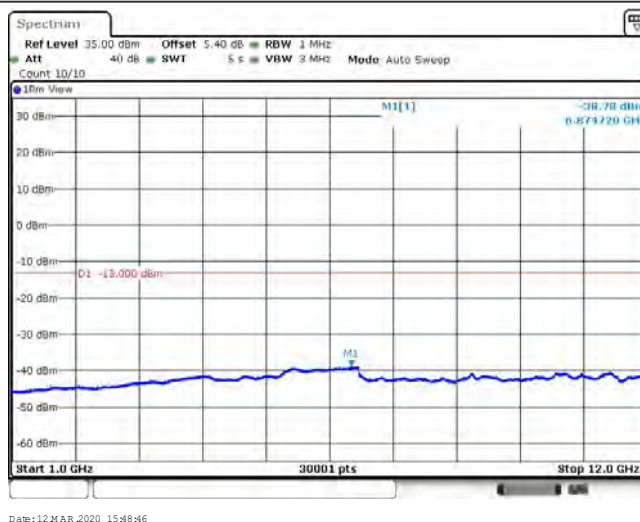


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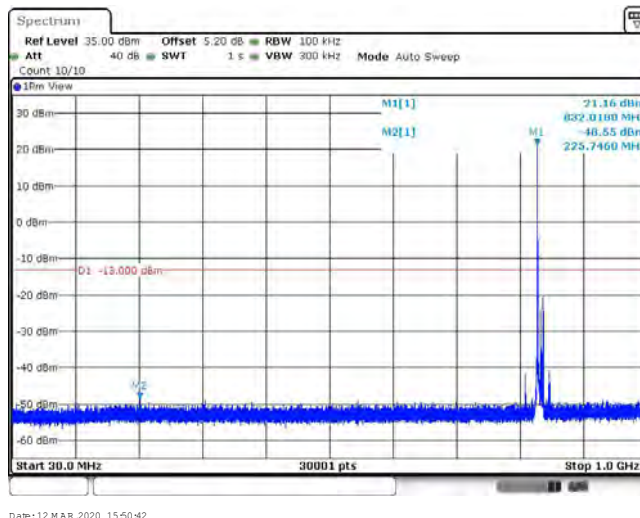


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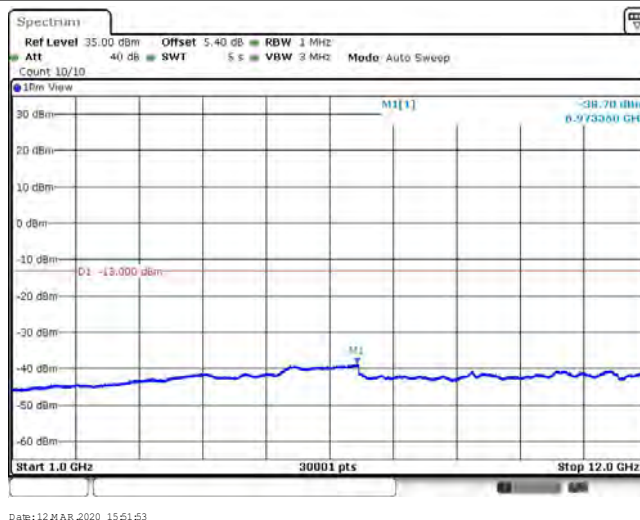


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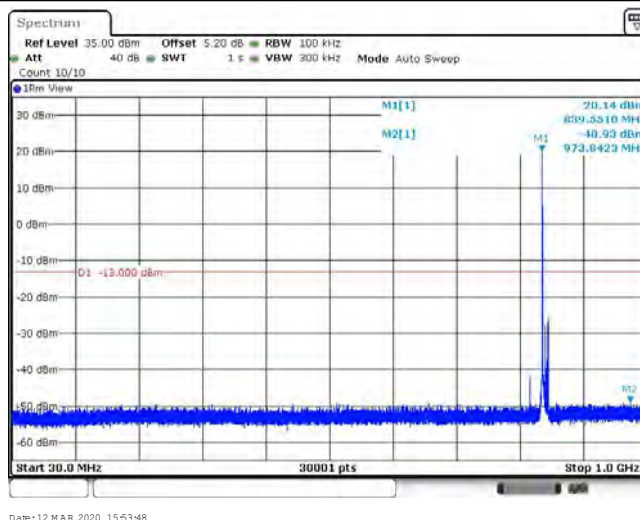


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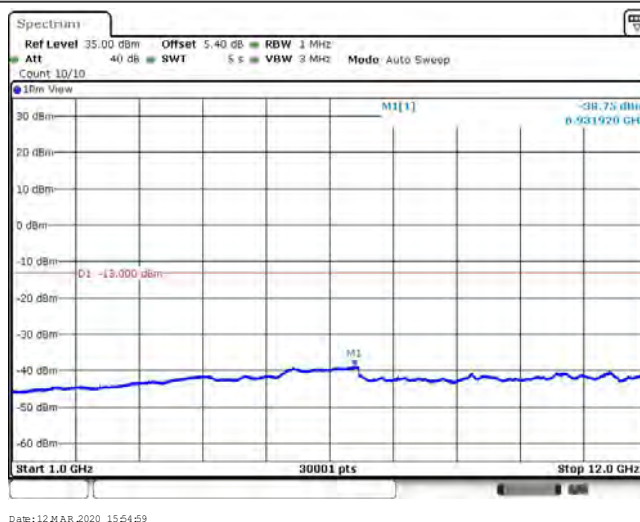


Band5_10MHz_16QAM_20600_1RB#0





Band5_10MHz_16QAM_20600_1RB#0





7. Field Strength of Spurious Radiation

7.1. Test Band = LTE Band 5

7.1.1. Test Mode = LTE/TM1

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
111.6296	-62.64	-13.00	49.64	Vertical
591.3671	-61.67	-13.00	48.67	Vertical
2304.2609	-58.28	-13.00	45.28	Vertical
3298.2099	-61.52	-13.00	48.52	Vertical
7413.7471	-55.52	-13.00	42.52	Vertical
8827.1942	-54.06	-13.00	41.06	Vertical
41.8346	-62.77	-13.00	49.77	Horizontal
238.4149	-65.52	-13.00	52.52	Horizontal
1649.3299	-58.50	-13.00	45.50	Horizontal
2473.8948	-52.16	-13.00	39.16	Horizontal
3298.4099	-57.30	-13.00	44.30	Horizontal
8709.3903	-55.70	-13.00	42.70	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
110.2715	-62.08	-13.00	49.08	Vertical
510.5135	-63.33	-13.00	50.33	Vertical
1664.1328	-60.65	-13.00	47.65	Vertical
2496.2993	-58.14	-13.00	45.14	Vertical
3328.4109	-62.62	-13.00	49.62	Vertical
8775.1925	-53.96	-13.00	40.96	Vertical
43.3867	-62.61	-13.00	49.61	Horizontal
235.1653	-65.10	-13.00	52.10	Horizontal
1664.1328	-51.42	-13.00	38.42	Horizontal
2496.2993	-51.80	-13.00	38.80	Horizontal
3328.6110	-58.70	-13.00	45.70	Horizontal
8767.5923	-54.70	-13.00	41.70	Horizontal





7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
110.2715	-62.39	-13.00	49.39	Vertical
544.8532	-62.82	-13.00	49.82	Vertical
1678.9358	-62.88	-13.00	49.88	Vertical
2519.1038	-54.77	-13.00	41.77	Vertical
3358.2119	-61.69	-13.00	48.69	Vertical
8753.3918	-54.24	-13.00	41.24	Vertical
40.8160	-62.57	-13.00	49.57	Horizontal
228.5689	-64.93	-13.00	51.93	Horizontal
1678.9358	-56.82	-13.00	43.82	Horizontal
2518.7037	-45.18	-13.00	32.18	Horizontal
3358.4119	-59.49	-13.00	46.49	Horizontal
8804.3935	-54.75	-13.00	41.75	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 had been displayed.



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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	-3.00	-0.003619	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VN	NT	-3.30	-0.003981	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	VH	NT	-3.60	-0.004343	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-5.40	-0.006455	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-5.90	-0.007053	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-4.40	-0.005260	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VL	NT	1.30	0.001540	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VN	NT	1.20	0.001422	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	VH	NT	1.60	0.001896	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VL	NT	1.70	0.002051	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VN	NT	2.70	0.003257	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	VH	NT	1.60	0.001930	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VL	NT	-5.80	-0.006934	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VN	NT	0.80	0.000956	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	VH	NT	-5.70	-0.006814	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VL	NT	-0.50	-0.000592	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VN	NT	0.30	0.000355	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	VH	NT	-0.80	-0.000948	±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	-3.10	-0.003739	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	-20	-3.50	-0.004222	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	0	-3.80	-0.004584	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	10	-3.80	-0.004584	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	20	-4.70	-0.005669	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	30	-4.90	-0.005911	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	40	-5.30	-0.006393	±2.5	PASS
Band5	10MHz	QPSK	20450	50RB#0	NV	50	-5.20	-0.006273	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	-4.50	-0.005380	±2.5	PASS



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Band5	10MHz	QPSK	20525	50RB#0	NV	-20	-4.40	-0.005260	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-4.50	-0.005380	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-4.40	-0.005260	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	-4.70	-0.005619	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-4.90	-0.005858	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	-5.20	-0.006216	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	-5.00	-0.005977	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-30	1.60	0.001896	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	-20	1.40	0.001659	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	0	0.60	0.000711	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	10	1.20	0.001422	±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	30	0.20	0.000237	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	40	0.20	0.000237	±2.5	PASS
Band5	10MHz	QPSK	20600	50RB#0	NV	50	0.10	0.000118	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-30	0.90	0.001086	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	-20	1.20	0.001448	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	0	1.20	0.001448	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	10	1.10	0.001327	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	20	1.20	0.001448	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	30	1.80	0.002171	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	40	1.60	0.001930	±2.5	PASS
Band5	10MHz	16QAM	20450	50RB#0	NV	50	1.80	0.002171	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-30	-6.50	-0.007770	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	-20	-6.70	-0.008010	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	0	-6.60	-0.007890	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	10	-1.90	-0.002271	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	20	-5.20	-0.006216	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	30	-5.00	-0.005977	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	40	-4.20	-0.005021	±2.5	PASS
Band5	10MHz	16QAM	20525	50RB#0	NV	50	-3.70	-0.004423	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-30	-1.60	-0.001896	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	-20	-1.90	-0.002251	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	0	-2.20	-0.002607	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	10	-1.40	-0.001659	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	20	-1.50	-0.001777	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	30	-2.20	-0.002607	±2.5	PASS
Band5	10MHz	16QAM	20600	50RB#0	NV	40	-1.60	-0.001896	±2.5	PASS



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Band5	10MHz	16QAM	20600	50RB#0	NV	50	-1.70	-0.002014	±2.5	PASS
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The End



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