

Appendix B

E-UTRA Band 12



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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
Band12	1.4MHz	QPSK	23017	1RB#0	23.25	18.30	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.42	18.47	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.40	18.45	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.42	18.47	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.52	18.57	34.77	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.57	18.62	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.48	17.53	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.24	18.29	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.60	18.65	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.49	18.54	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.48	18.53	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	23.68	18.73	34.77	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.67	18.72	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.56	17.61	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.06	18.11	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.43	18.48	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.44	18.49	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	23.57	18.62	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	23.65	18.70	34.77	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	23.40	18.45	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.63	17.68	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.28	17.33	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	21.96	17.01	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	21.92	16.97	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	22.54	17.59	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	22.67	17.72	34.77	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	22.61	17.66	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.51	16.56	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.19	17.24	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.26	17.31	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.11	17.16	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#3	22.43	17.48	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	22.84	17.89	34.77	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	22.84	17.89	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.73	16.78	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.26	17.31	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.03	17.08	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	21.95	17.00	34.77	PASS



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Band12	1.4MHz	16QAM	23173	3RB#3	22.42	17.47	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	22.77	17.82	34.77	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	22.61	17.66	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.62	16.67	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.53	18.58	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.61	18.66	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.55	18.60	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#0	22.44	17.49	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.65	17.70	34.77	PASS
Band12	3MHz	QPSK	23025	8RB#7	22.57	17.62	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.51	17.56	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.37	18.42	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.18	18.23	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.58	18.63	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#7	22.49	17.54	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#0	22.64	17.69	34.77	PASS
Band12	3MHz	QPSK	23095	8RB#4	22.52	17.57	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.71	17.76	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.16	18.21	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.40	18.45	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.53	18.58	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#0	22.55	17.60	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#7	22.53	17.58	34.77	PASS
Band12	3MHz	QPSK	23165	8RB#4	22.60	17.65	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.62	17.67	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	21.97	17.02	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	21.82	16.87	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	21.95	17.00	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#4	21.38	16.43	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#0	21.40	16.45	34.77	PASS
Band12	3MHz	16QAM	23025	8RB#7	21.30	16.35	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.62	16.67	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	22.14	17.19	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.10	17.15	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.08	17.13	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#0	21.38	16.43	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#4	21.35	16.40	34.77	PASS
Band12	3MHz	16QAM	23095	8RB#7	21.35	16.40	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.57	16.62	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.26	17.31	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.34	17.39	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.09	17.14	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#7	21.38	16.43	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#4	21.24	16.29	34.77	PASS
Band12	3MHz	16QAM	23165	8RB#0	21.24	16.29	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.70	16.75	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.35	18.40	34.77	PASS



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Band12	5MHz	QPSK	23035	1RB#12	23.62	18.67	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.60	18.65	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#13	22.67	17.72	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#6	22.75	17.80	34.77	PASS
Band12	5MHz	QPSK	23035	12RB#0	22.52	17.57	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.59	17.64	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.28	18.33	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	23.17	18.22	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.66	18.71	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#13	22.41	17.46	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#6	22.58	17.63	34.77	PASS
Band12	5MHz	QPSK	23095	12RB#0	22.64	17.69	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.57	17.62	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.48	18.53	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.13	18.18	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.45	18.50	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#13	22.39	17.44	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#6	22.56	17.61	34.77	PASS
Band12	5MHz	QPSK	23155	12RB#0	22.49	17.54	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.39	17.44	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	21.94	16.99	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.69	17.74	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	21.88	16.93	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#13	21.56	16.61	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#6	21.45	16.50	34.77	PASS
Band12	5MHz	16QAM	23035	12RB#0	21.41	16.46	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.73	16.78	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	21.90	16.95	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.47	17.52	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.01	17.06	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#13	21.42	16.47	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#6	21.37	16.42	34.77	PASS
Band12	5MHz	16QAM	23095	12RB#0	21.38	16.43	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.55	16.60	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.19	17.24	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	21.86	16.91	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	22.49	17.54	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#0	21.33	16.38	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#6	21.27	16.32	34.77	PASS
Band12	5MHz	16QAM	23155	12RB#13	21.32	16.37	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.35	16.40	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.59	18.64	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	22.70	17.75	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.27	18.32	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#0	22.82	17.87	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#12	22.61	17.66	34.77	PASS
Band12	10MHz	QPSK	23060	25RB#25	22.26	17.31	34.77	PASS



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Band12	10MHz	QPSK	23060	50RB#0	22.63	17.68	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.68	18.73	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.23	18.28	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.36	18.41	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#25	22.30	17.35	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#0	22.78	17.83	34.77	PASS
Band12	10MHz	QPSK	23095	25RB#12	22.40	17.45	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.66	17.71	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.37	18.42	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.69	18.74	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.31	18.36	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#0	22.68	17.73	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#25	22.54	17.59	34.77	PASS
Band12	10MHz	QPSK	23130	25RB#12	22.61	17.66	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.52	17.57	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.10	17.15	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.07	17.12	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.19	17.24	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#25	21.62	16.67	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#12	21.68	16.73	34.77	PASS
Band12	10MHz	16QAM	23060	25RB#0	21.57	16.62	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.57	16.62	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	21.77	16.82	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	21.89	16.94	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.14	17.19	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#25	21.41	16.46	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#0	21.51	16.56	34.77	PASS
Band12	10MHz	16QAM	23095	25RB#12	21.46	16.51	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.54	16.59	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.49	17.54	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.07	17.12	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	21.83	16.88	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#0	21.62	16.67	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#12	21.56	16.61	34.77	PASS
Band12	10MHz	16QAM	23130	25RB#25	21.40	16.45	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.51	16.56	34.77	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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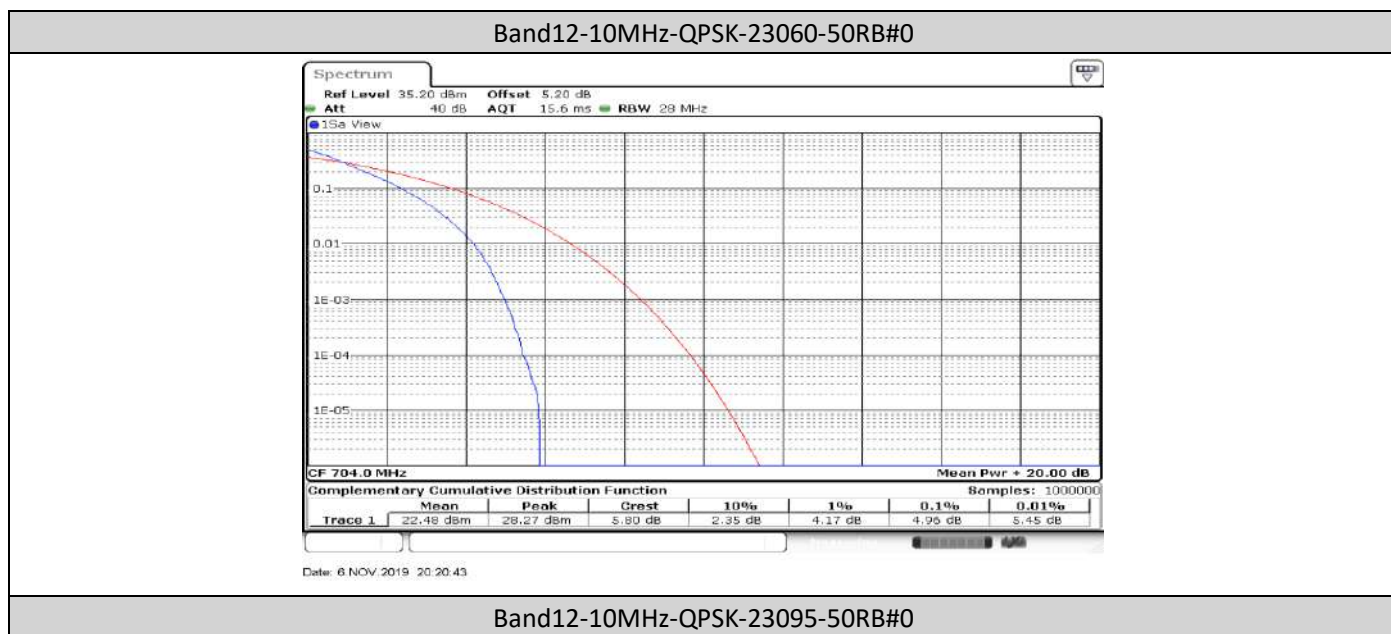


2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	4.96	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.22	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.10	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	5.88	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.06	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.00	13	PASS

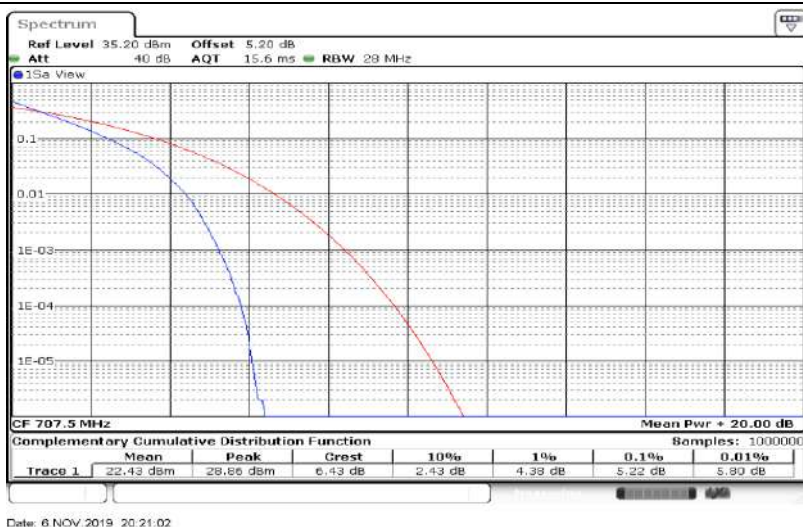
2.2. Test Plots



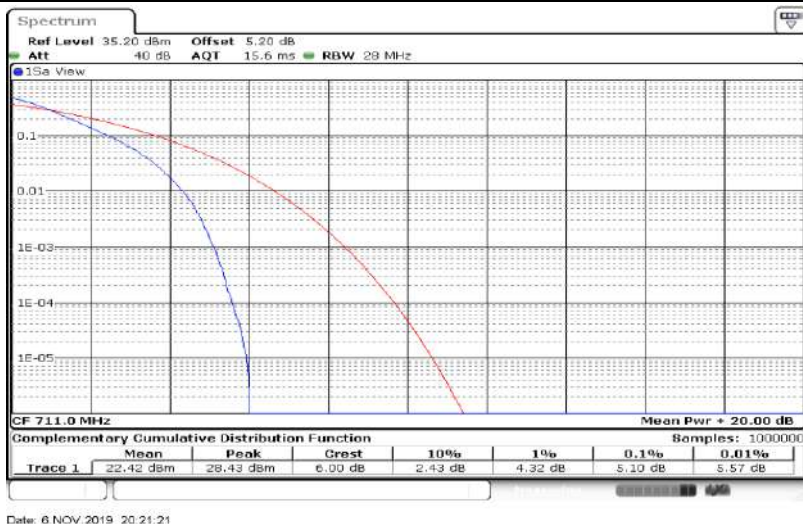
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Band12-10MHz-QPSK-23130-50RB#0

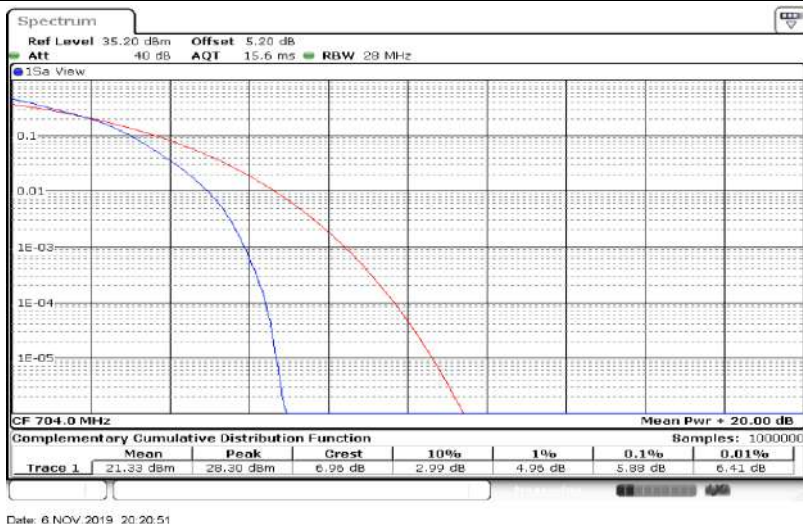


Band12-10MHz-16QAM-23060-50RB#0

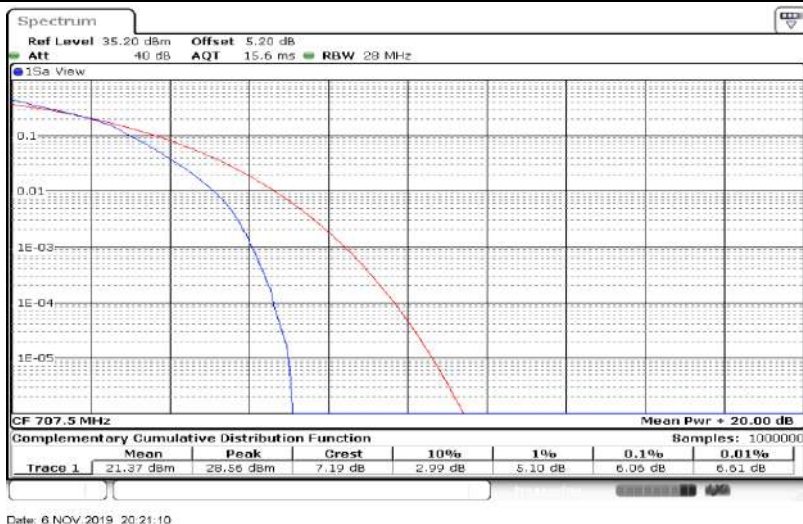


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Band12-10MHz-16QAM-23095-50RB#0



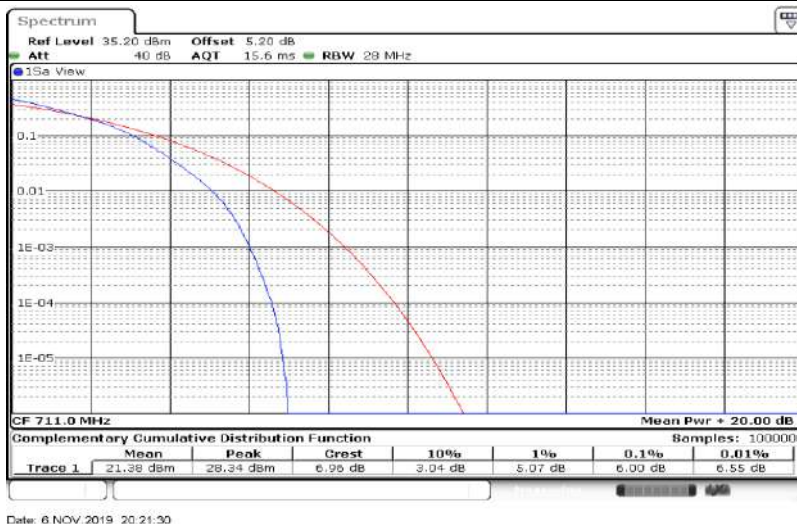
Band12-10MHz-16QAM-23130-50RB#0



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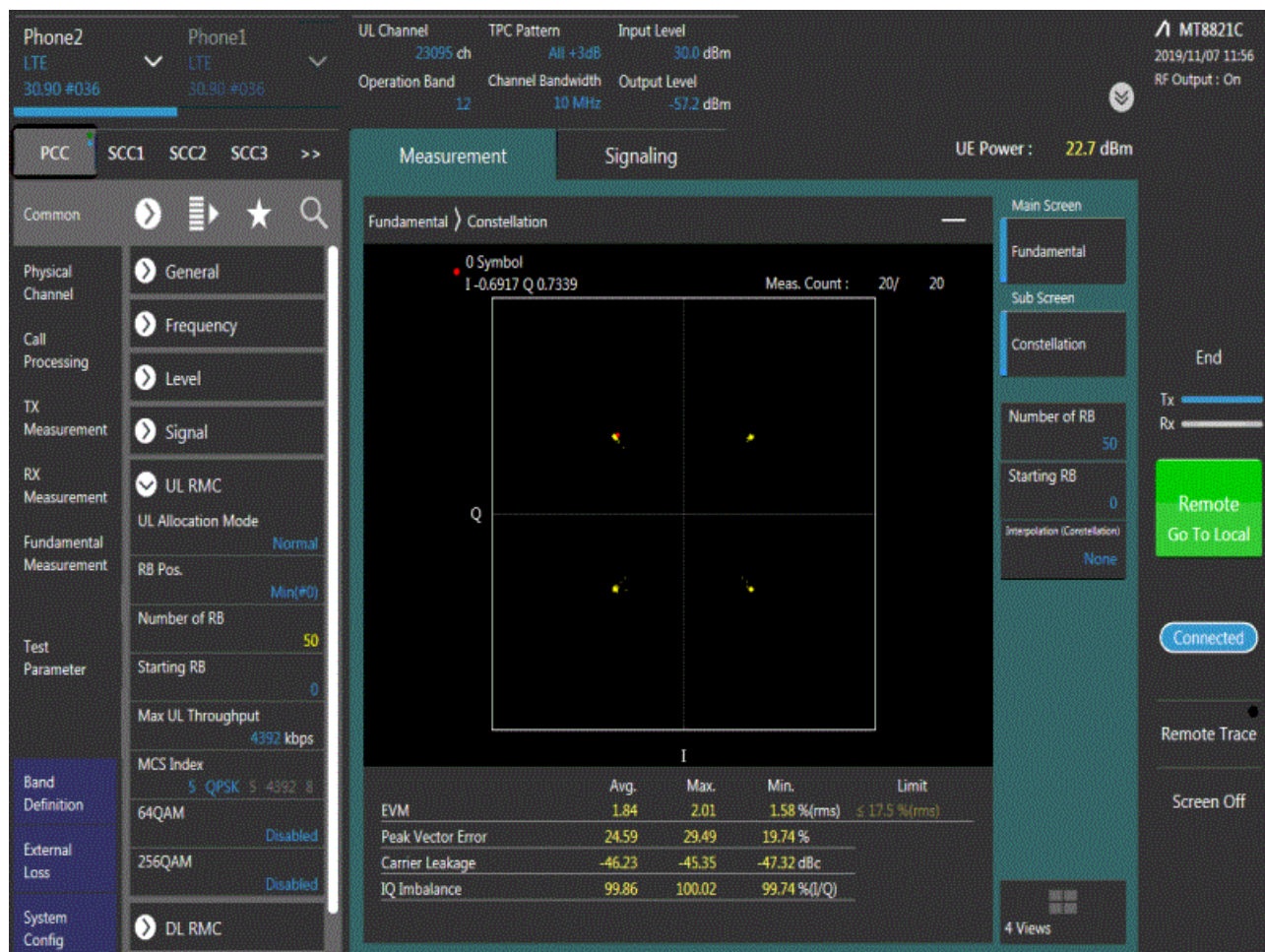
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3. Modulation Characteristics

3.1. Test Mode = LTE /TM1 10MHz

3.1.1. Test Channel = MCH



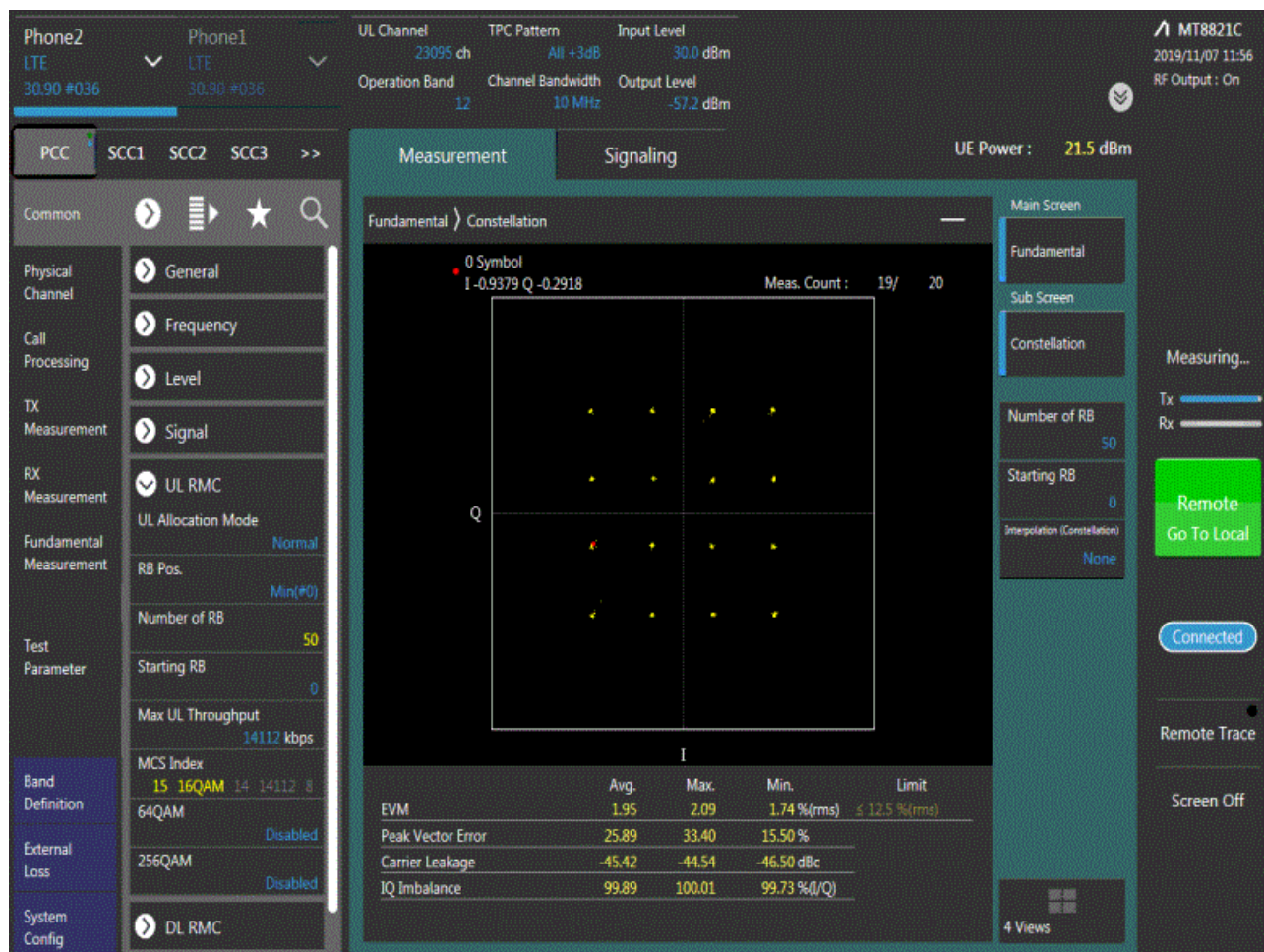
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3.2. Test Mode = LTE /TM2 10MHz

3.2.1. Test Channel = MCH



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4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.097	1.281	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.100	1.296	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.100	1.299	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.097	1.296	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.091	1.275	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.097	1.299	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.697	2.994	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.703	2.970	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.697	2.976	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.691	2.982	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.691	2.994	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.697	2.988	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.486	4.920	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.476	4.940	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.476	4.900	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.466	4.880	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.486	4.990	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.476	4.920	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.911	9.720	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.931	9.780	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.911	9.640	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.911	9.660	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.931	9.740	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.911	9.660	PASS

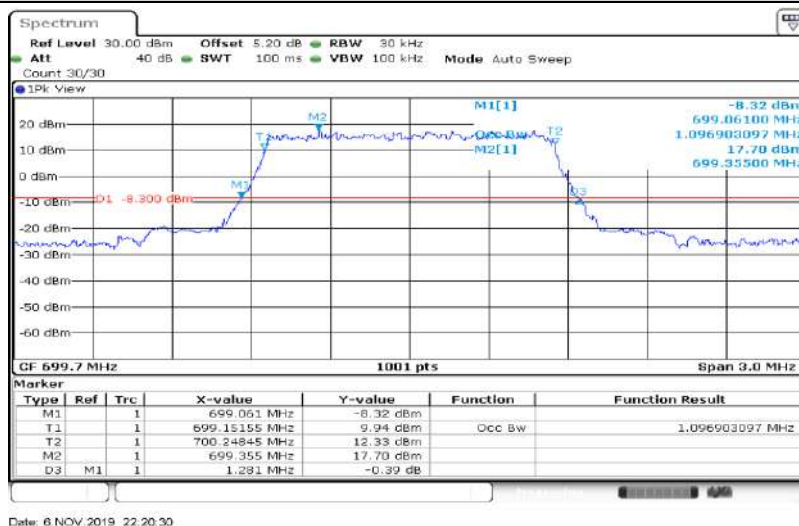


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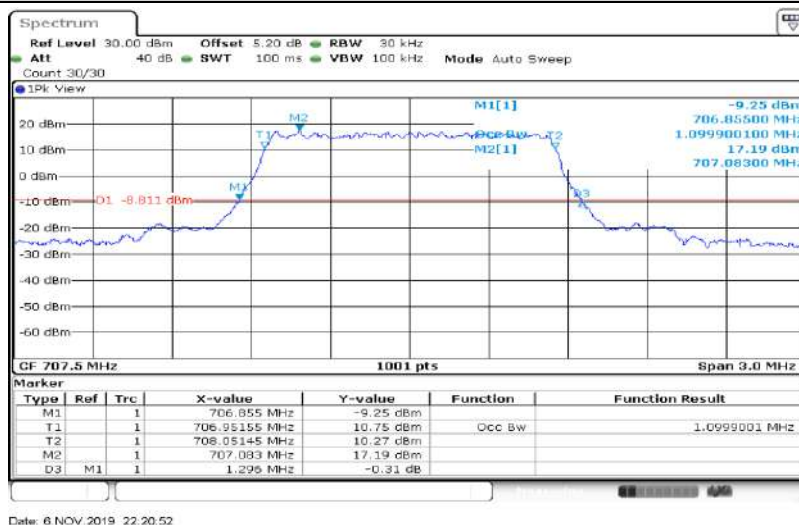
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4.2. Test Plots

Band12-1.4MHz-QPSK-23017-6RB#0-1.097

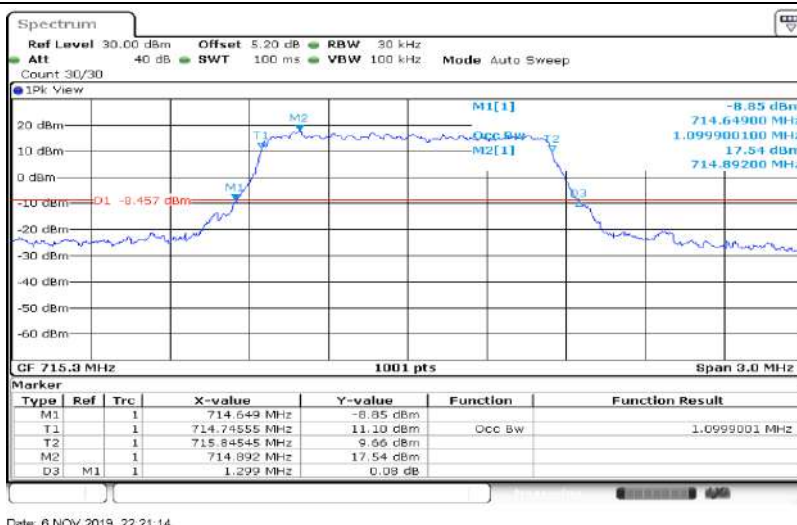


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Band12-1.4MHz-QPSK-23173-6RB#0-1.1



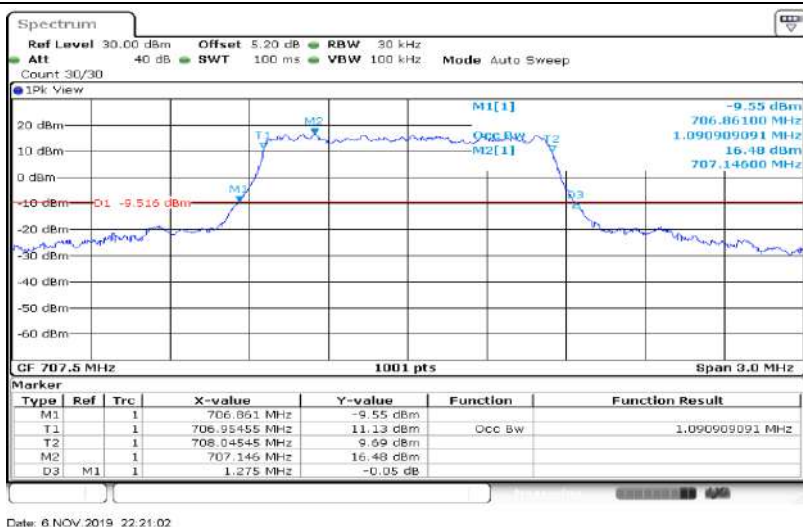


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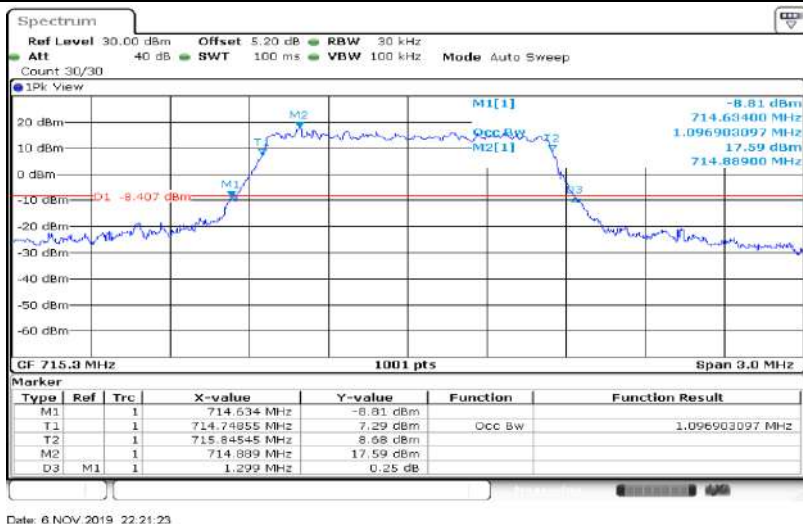


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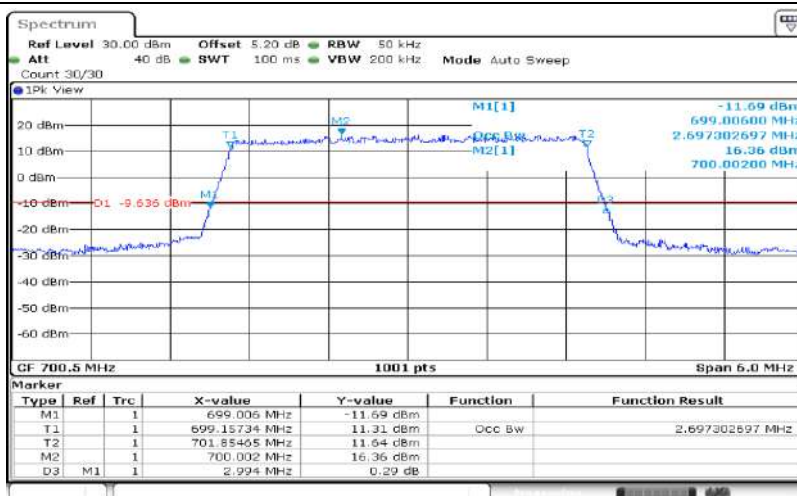


Band12-1.4MHz-16QAM-23173-6RB#0-1.097



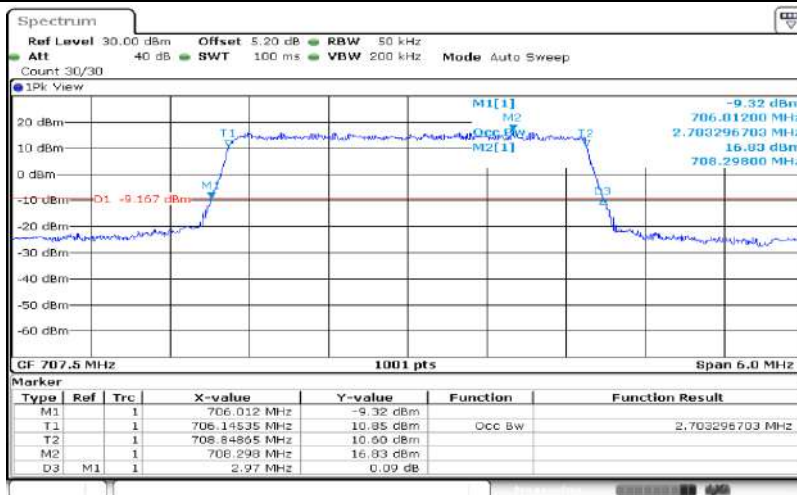
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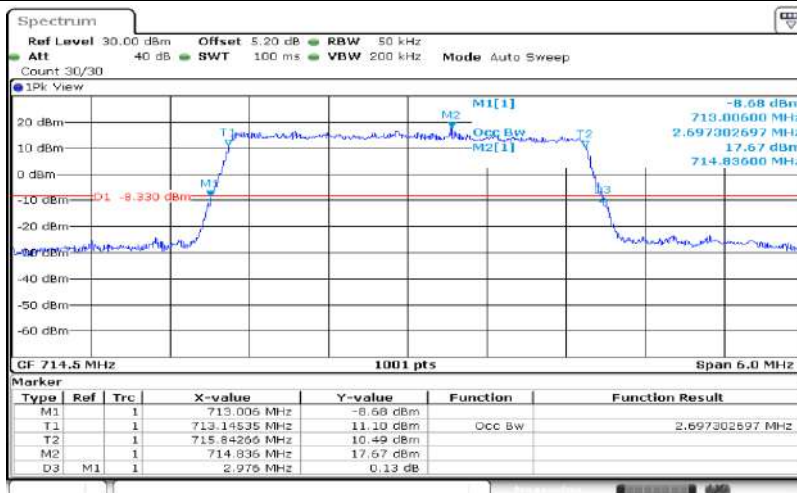
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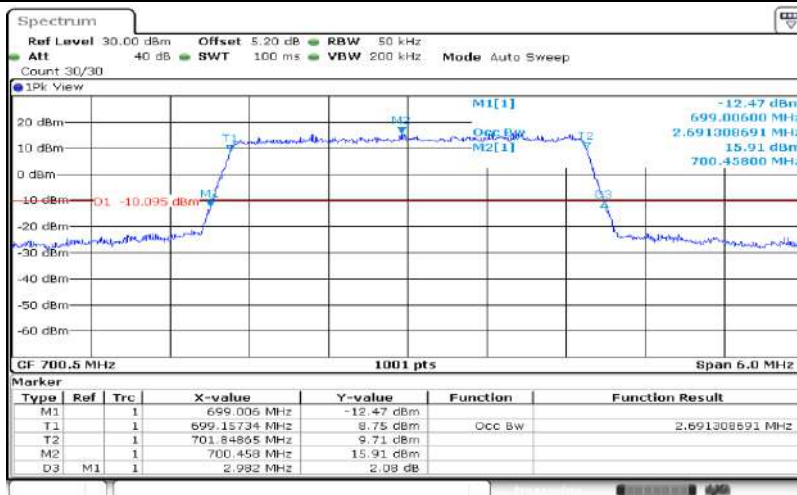
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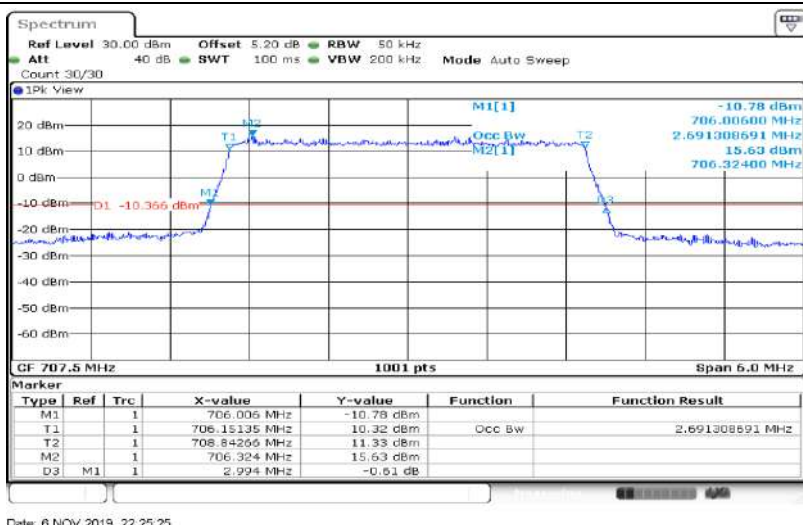
Band12-3MHz-16QAM-23025-15RB#0-2.691



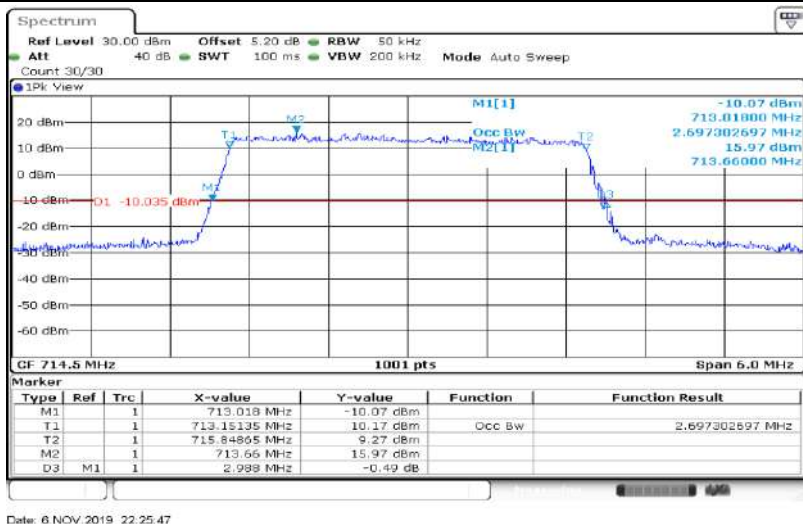
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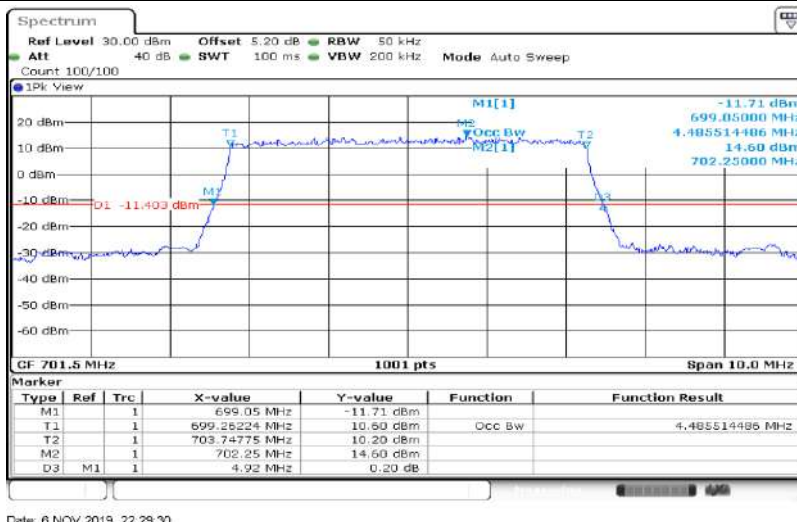


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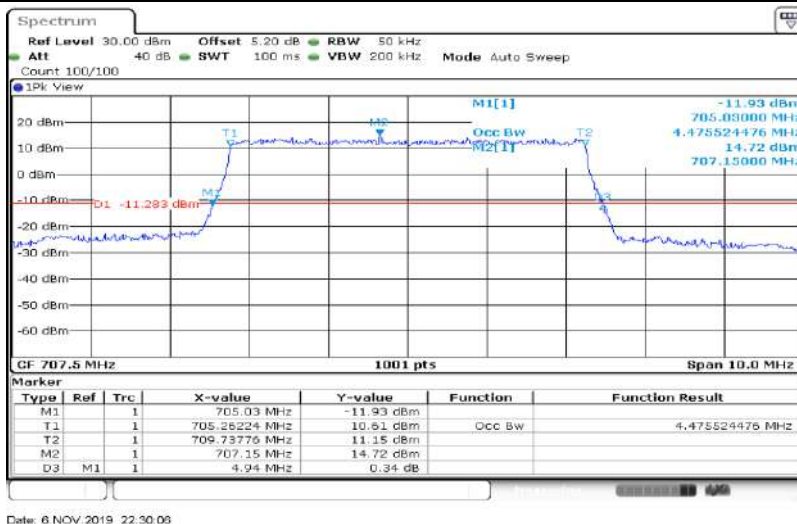


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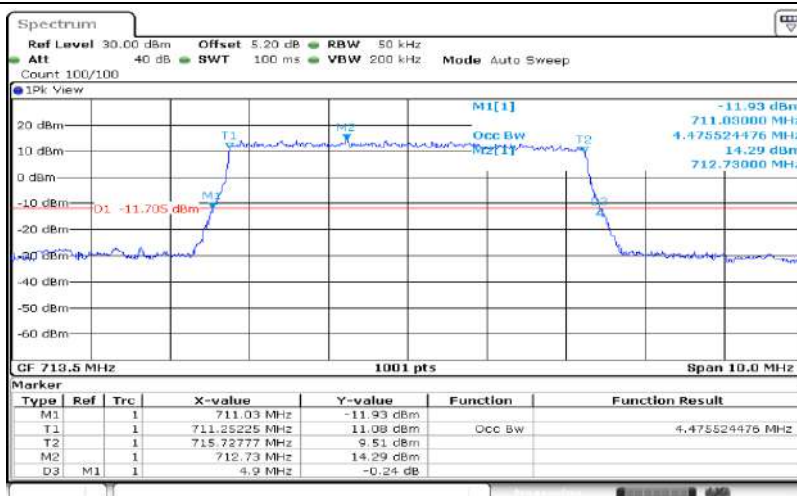


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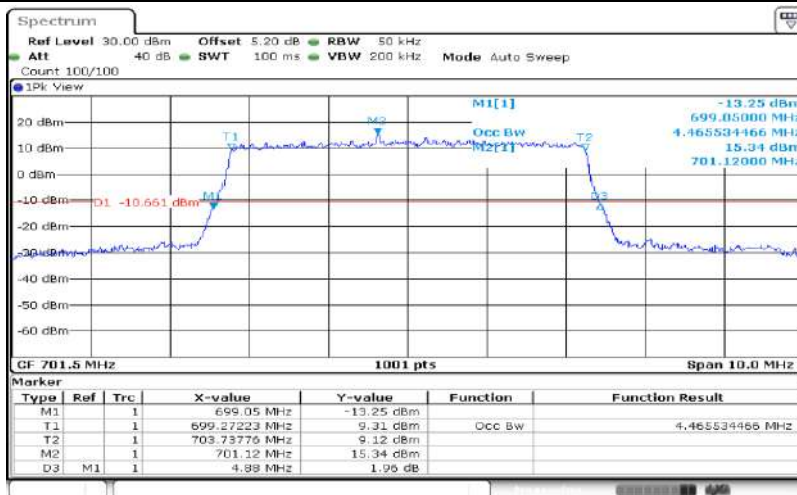


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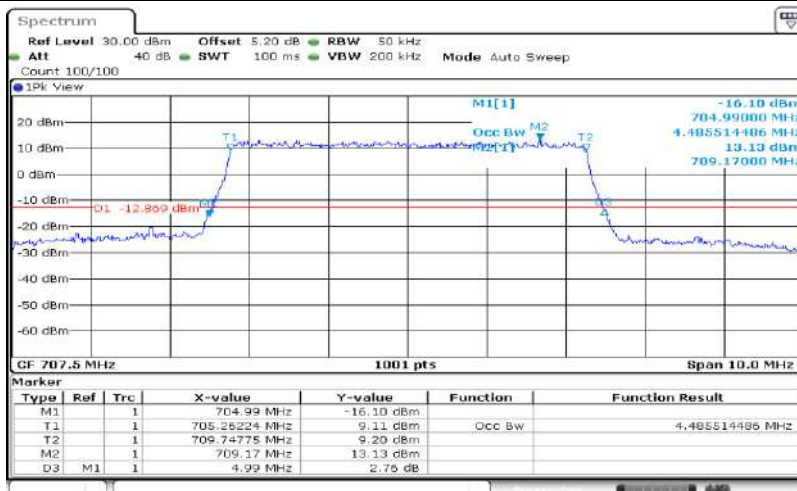


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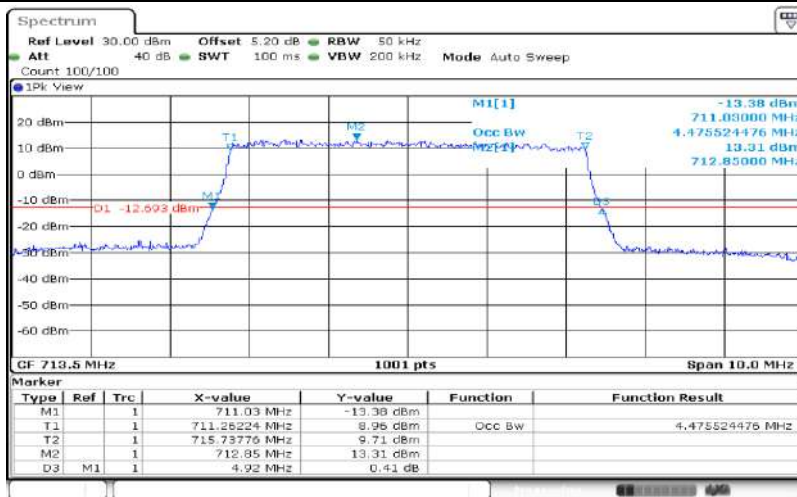
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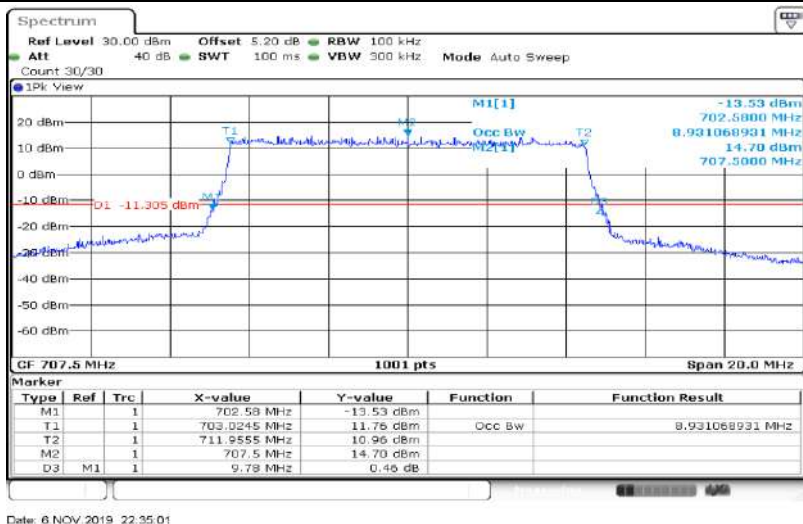
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Band12-10MHz-QPSK-23060-50RB#0-8.911



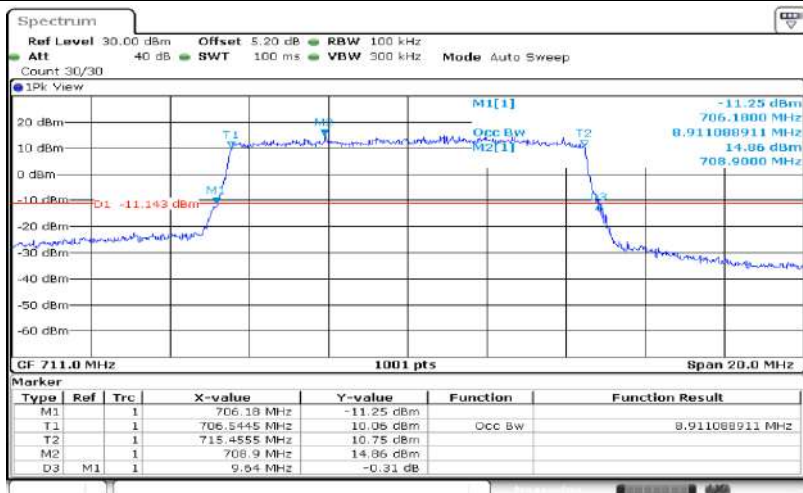


Band12-10MHz-QPSK-23095-50RB#0-8.931

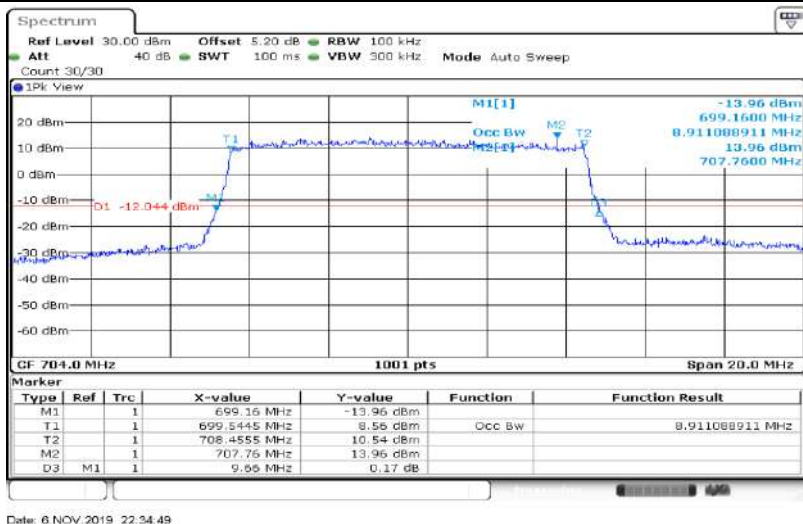


Band12-10MHz-QPSK-23130-50RB#0-8.911



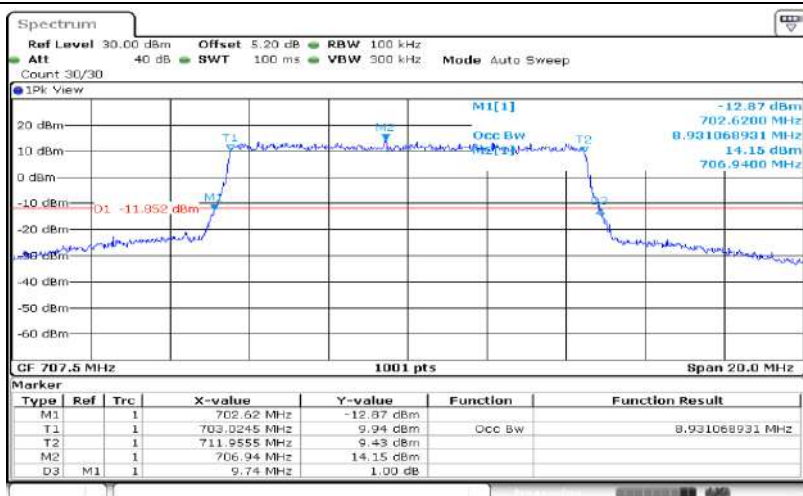


Band12-10MHz-16QAM-23060-50RB#0-8.911



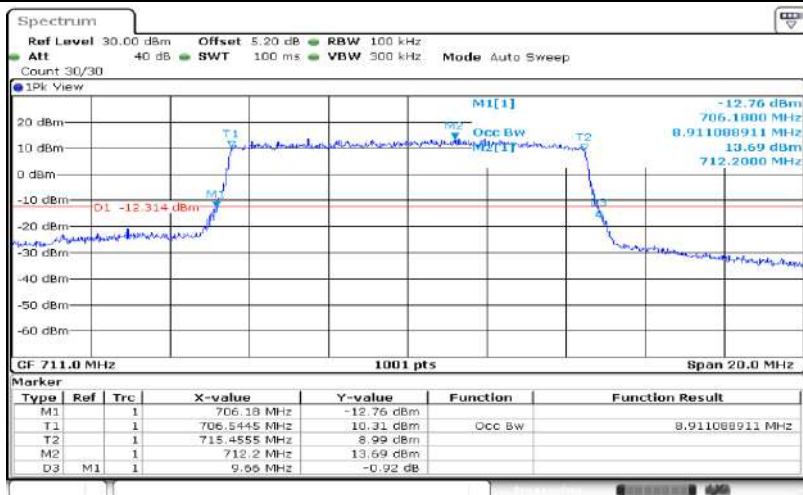
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Date: 6 NOV 2019 22:35:11

Band12-10MHz-16QAM-23130-50RB#0-8.911



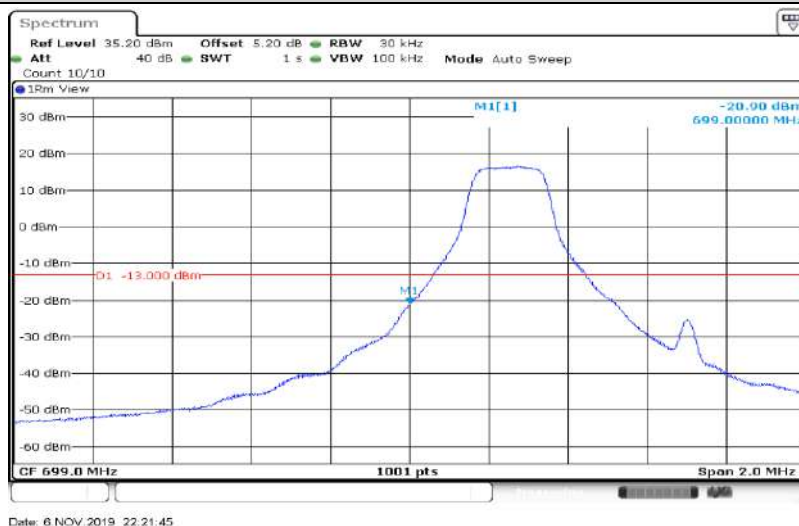
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5. Band Edge Compliance

5.1. Test Plots

Band12-1.4MHz-QPSK-23017-1RB#0



Band12-1.4MHz-QPSK-23017-6RB#0



Band12-1.4MHz-QPSK-23173-1RB#5



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Band12-1.4MHz-QPSK-23173-6RB#0



Band12-1.4MHz-16QAM-23017-1RB#0



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Band12-1.4MHz-16QAM-23017-6RB#0



Band12-1.4MHz-16QAM-23173-1RB#5





Band12-1.4MHz-16QAM-23173-6RB#0



Band12-3MHz-QPSK-23025-1RB#0





Band12-3MHz-QPSK-23025-15RB#0



Band12-3MHz-QPSK-23165-1RB#14





Band12-3MHz-QPSK-23165-15RB#0



Band12-3MHz-16QAM-23025-1RB#0



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Band12-3MHz-16QAM-23025-15RB#0



Band12-3MHz-16QAM-23165-1RB#14





Band12-3MHz-16QAM-23165-15RB#0



Band12-5MHz-QPSK-23035-1RB#0



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Band12-5MHz-QPSK-23035-25RB#0



Band12-5MHz-QPSK-23155-1RB#24

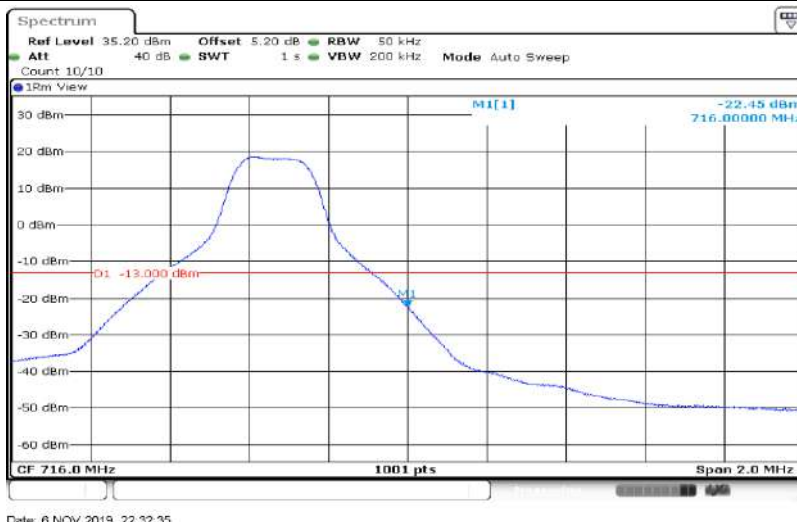


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Band12-5MHz-QPSK-23155-25RB#0

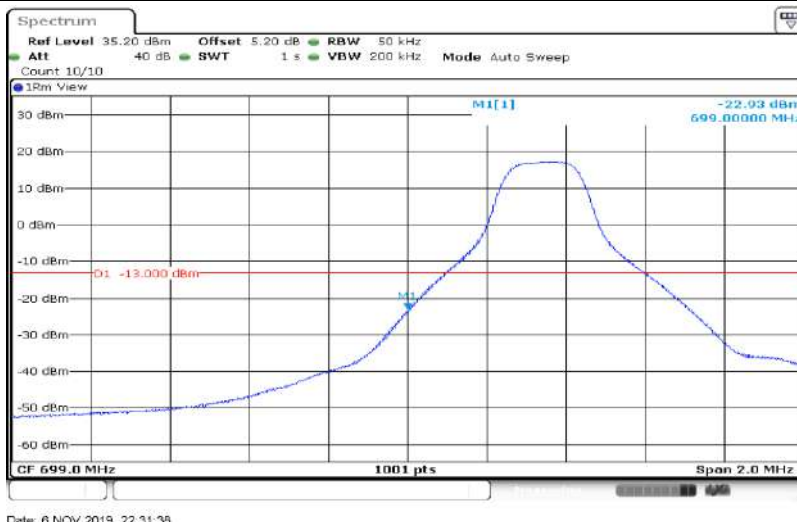


Band12-5MHz-16QAM-23035-1RB#0



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Band12-5MHz-16QAM-23035-25RB#0



Band12-5MHz-16QAM-23155-1RB#24



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Band12-5MHz-16QAM-23155-25RB#0



Band12-10MHz-QPSK-23060-1RB#0



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Band12-10MHz-QPSK-23060-50RB#0



Band12-10MHz-QPSK-23130-1RB#49



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Band12-10MHz-QPSK-23130-50RB#0



Band12-10MHz-16QAM-23060-1RB#0



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Band12-10MHz-16QAM-23060-50RB#0



Band12-10MHz-16QAM-23130-1RB#49





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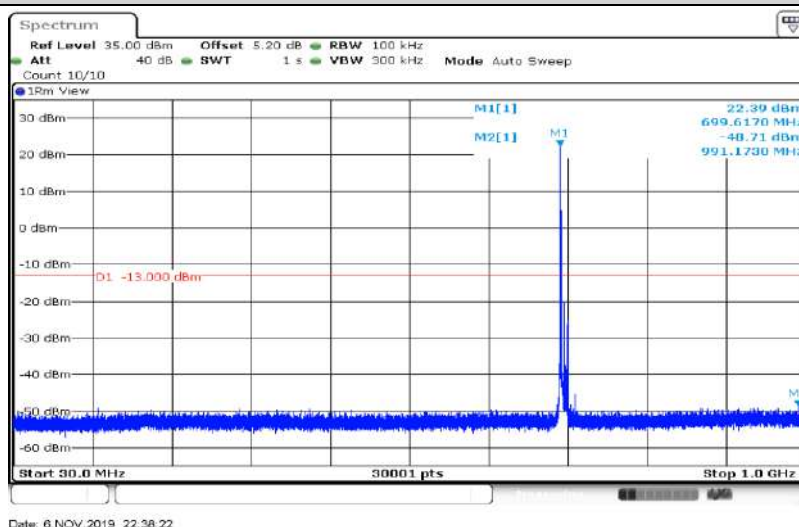
6. Spurious Emission at Antenna Terminal

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.

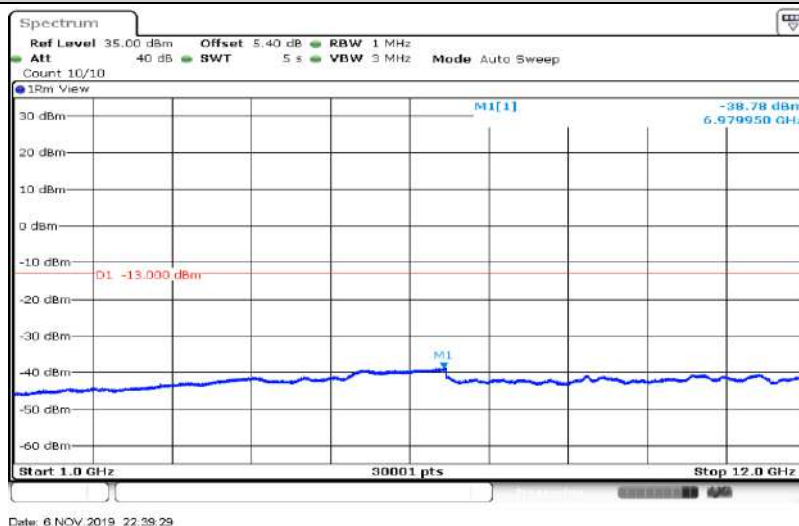
Remark2: only the worst case data displayed in this report.

6.1. Test Plots

Band12-10MHz-QPSK-23060-1RB#0-Range1:30~1000MHz

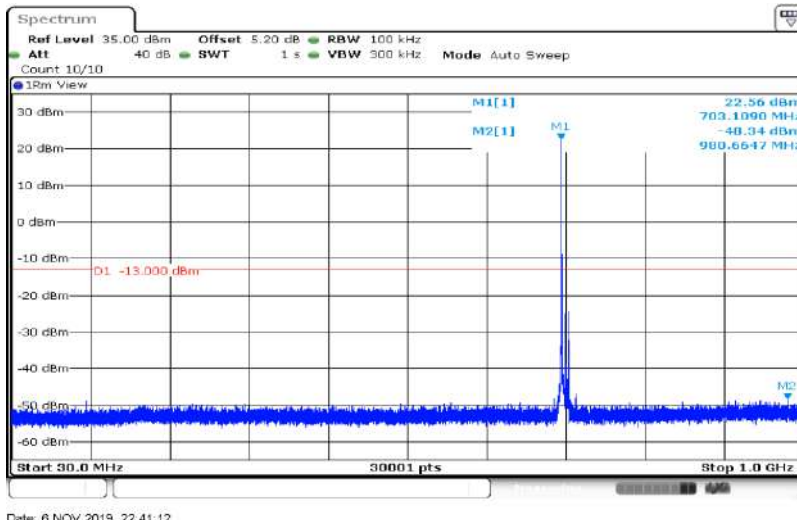


Band12-10MHz-QPSK-23060-1RB#0-Range2:1000~12000MHz

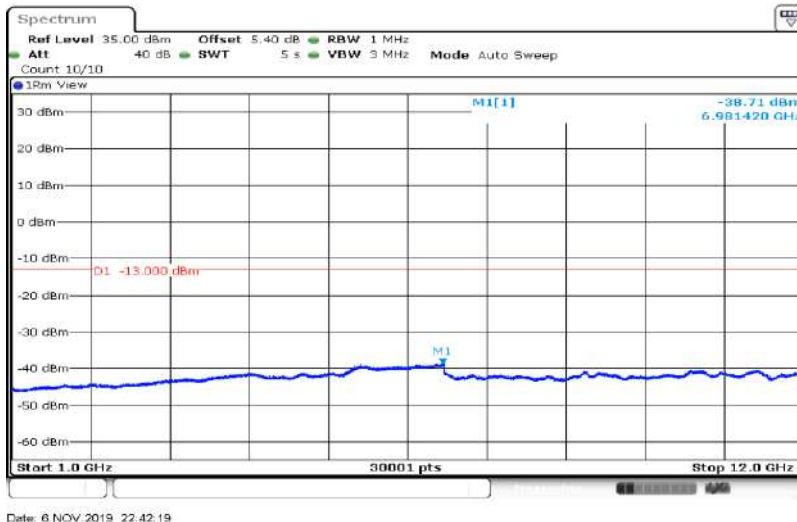


Band12-10MHz-QPSK-23095-1RB#0-Range1:30~1000MHz





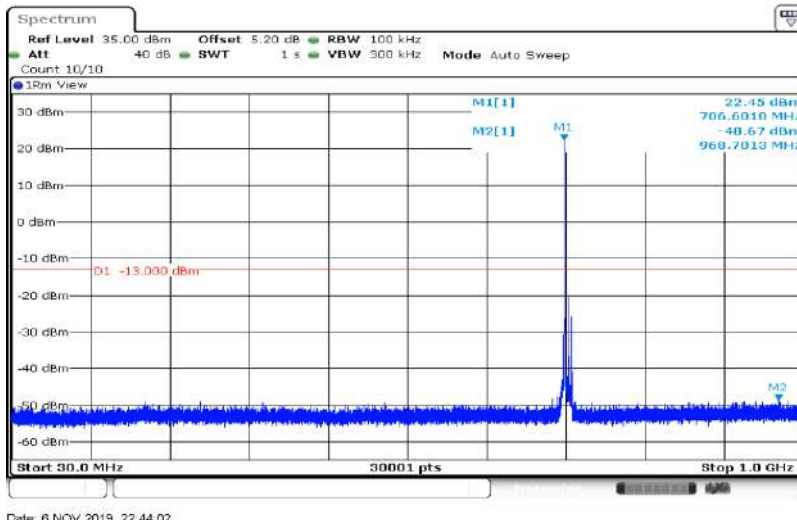
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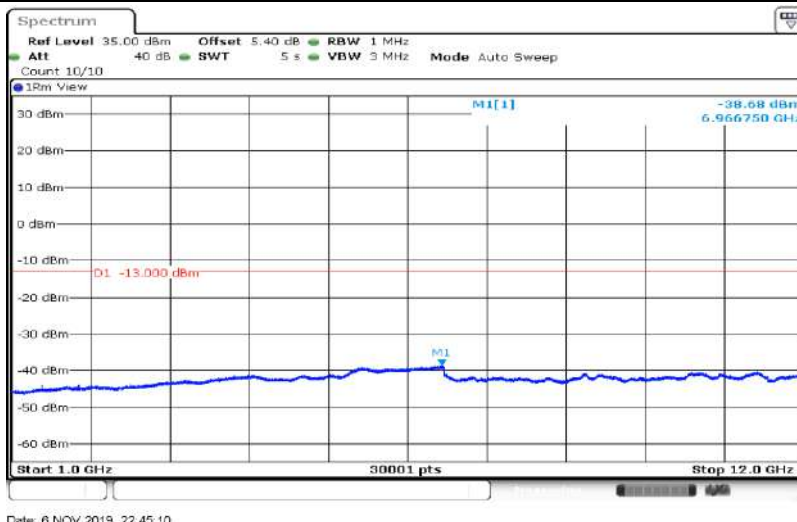
Band12-10MHz-QPSK-23130-1RB#0-Range1:30~1000MHz



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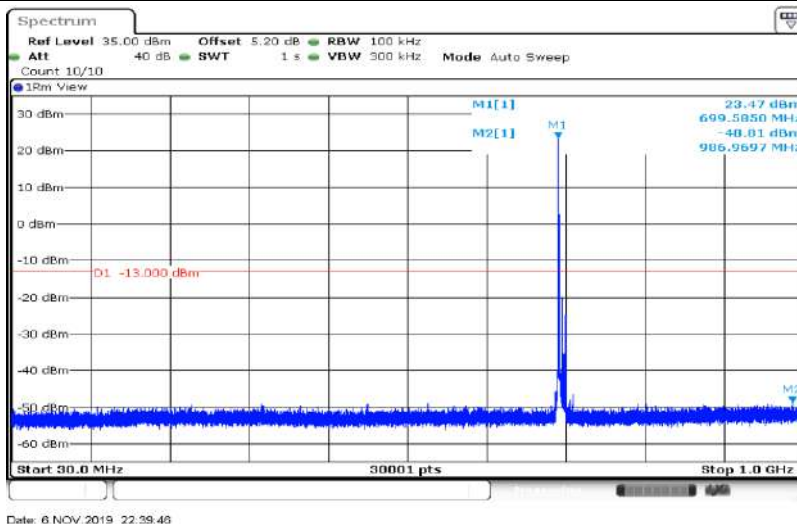
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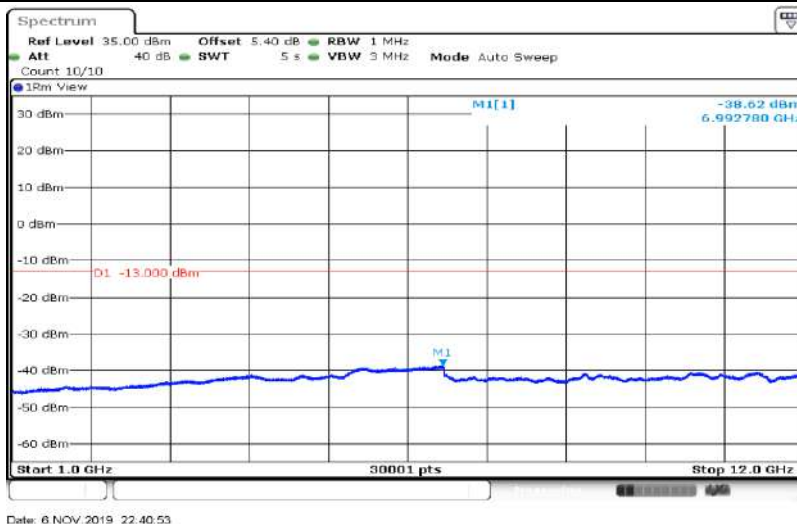
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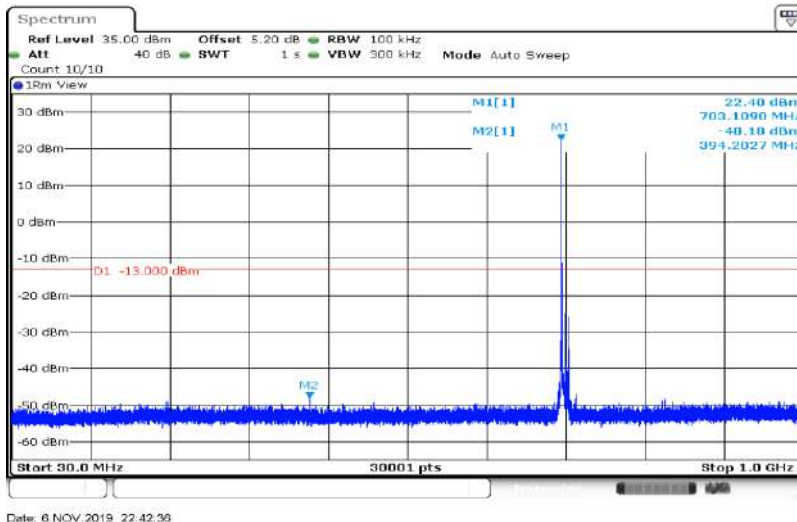
Band12-10MHz-16QAM-23060-1RB#0-Range2:1000~12000MHz



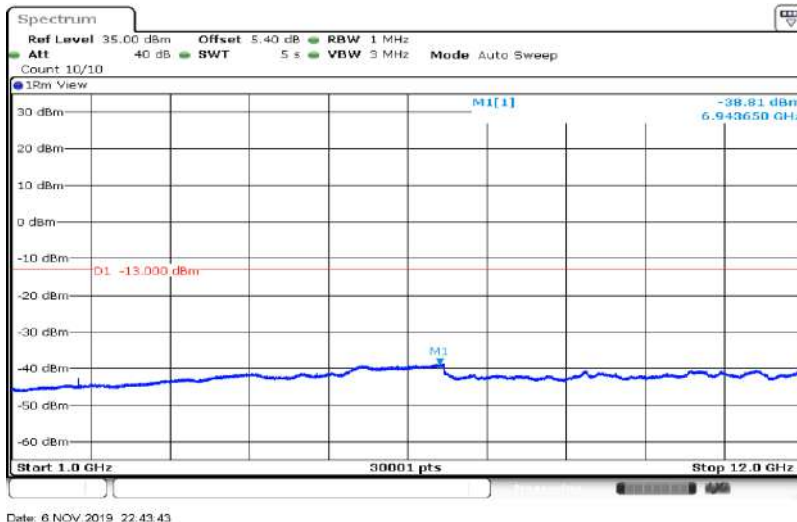
Band12-10MHz-16QAM-23095-1RB#0-Range1:30~1000MHz



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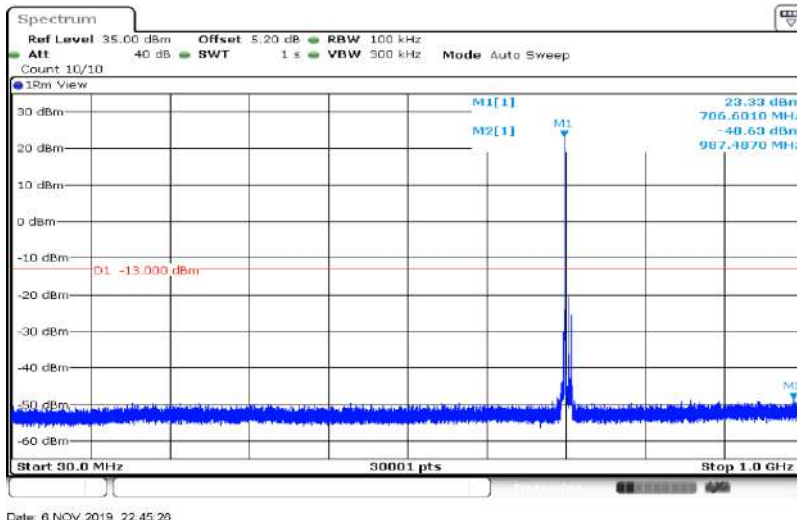
Band12-10MHz-16QAM-23095-1RB#0-Range2:1000~12000MHz



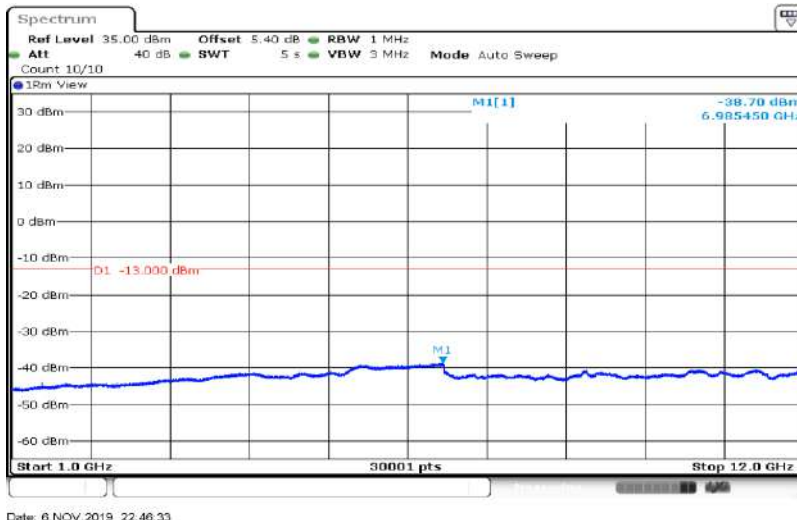
Band12-10MHz-16QAM-23130-1RB#0-Range1:30~1000MHz



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7. Field Strength of Spurious Radiation

7.1. Test Mode =LTE/TM1 10MHz

7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
108.0889	-64.79	-13.00	51.79	118	339	Vertical
906.6328	-55.06	-13.00	42.06	152	36	Vertical
1399.2799	-58.13	-13.00	45.13	296	212	Vertical
2098.6197	-54.19	-13.00	41.19	264	184	Vertical
10707.9083	-44.95	-13.00	31.95	211	13	Vertical
17992.7997	-33.26	-13.00	20.26	285	184	Vertical
47.2669	-64.59	-13.00	51.59	132	178	Horizontal
237.1054	-67.94	-13.00	54.94	154	359	Horizontal
907.3604	-50.00	-13.00	37.00	198	59	Horizontal
1399.2799	-54.60	-13.00	41.60	123	158	Horizontal
2098.6197	-46.57	-13.00	33.57	287	347	Horizontal
16400.3360	-36.99	-13.00	23.99	294	199	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
106.7793	-64.36	-13.00	51.36	121	115	Vertical
739.2995	-51.97	-13.00	38.97	220	166	Vertical
1406.0812	-59.15	-13.00	46.15	263	208	Vertical
1759.3519	-63.56	-13.00	50.56	132	49	Vertical
2109.0218	-46.89	-13.00	33.89	157	190	Vertical
17991.5997	-32.87	-13.00	19.87	305	254	Vertical
44.8902	-64.61	-13.00	51.61	145	165	Horizontal
235.4078	-68.29	-13.00	55.29	112	44	Horizontal
998.6904	-56.66	-13.00	43.66	163	255	Horizontal
1406.0812	-54.54	-13.00	41.54	254	230	Horizontal
2109.4219	-40.66	-13.00	27.66	221	0	Horizontal
16394.9358	-36.83	-13.00	23.83	183	21	Horizontal



7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Height (cm)	Angle (°)	Polarization
112.0661	-65.04	-13.00	52.04	288	338	Vertical
468.5104	-67.10	-13.00	54.10	229	11	Vertical
1412.8826	-60.80	-13.00	47.80	256	250	Vertical
2119.8240	-50.97	-13.00	37.97	195	174	Vertical
10686.3075	-45.55	-13.00	32.55	125	198	Vertical
17989.7996	-32.96	-13.00	19.96	178	198	Vertical
44.5507	-64.07	-13.00	51.07	253	245	Horizontal
232.9826	-68.63	-13.00	55.63	211	339	Horizontal
898.8724	-55.76	-13.00	42.76	296	339	Horizontal
1412.8826	-55.45	-13.00	42.45	172	157	Horizontal
2119.8240	-44.43	-13.00	31.43	133	12	Horizontal
16390.1356	-37.54	-13.00	24.54	172	148	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
Band12	10MHz	QPSK	23060	50RB#0	VL	NT	-1.30	-0.001847	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VN	NT	-1.90	-0.002699	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VH	NT	-0.30	-0.000426	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VL	NT	-0.60	-0.000848	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VN	NT	0.10	0.000141	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VH	NT	-1.50	-0.002120	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VL	NT	-1.70	-0.002391	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VN	NT	-2.80	-0.003938	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VH	NT	-1.30	-0.001828	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VL	NT	0.80	0.001136	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VN	NT	0.40	0.000568	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VH	NT	0.00	0.000000	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VL	NT	0.60	0.000848	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VN	NT	-0.80	-0.001131	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VH	NT	-0.60	-0.000848	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VL	NT	-1.70	-0.002391	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VN	NT	-0.60	-0.000844	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VH	NT	-0.50	-0.000703	±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
Band12	10MHz	QPSK	23060	50RB#0	NV	-30	-1.00	-0.001420	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-20	-0.70	-0.000994	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	0	-0.30	-0.000426	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	10	-2.10	-0.002983	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	20	-0.90	-0.001278	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	30	-0.60	-0.000852	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	40	-1.00	-0.001420	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	50	-0.20	-0.000284	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-30	-1.80	-0.002544	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-20	-1.50	-0.002120	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	0	-0.60	-0.000848	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	10	-1.20	-0.001696	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	20	-0.40	-0.000565	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	30	-1.20	-0.001696	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	40	0.70	0.000989	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	50	1.10	0.001555	±2.5	PASS



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Band12	10MHz	QPSK	23130	50RB#0	NV	-30	-2.40	-0.003376	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-20	-1.90	-0.002672	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	0	-0.90	-0.001266	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	10	-3.00	-0.004219	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	20	-1.90	-0.002672	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	30	-1.10	-0.001547	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	40	-1.10	-0.001547	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	50	-0.80	-0.001125	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-30	0.50	0.000710	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-20	-0.90	-0.001278	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	0	-1.00	-0.001420	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	10	1.60	0.002273	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	20	-0.30	-0.000426	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	30	-0.60	-0.000852	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	40	0.40	0.000568	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	50	0.10	0.000142	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-30	0.10	0.000141	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-20	0.60	0.000848	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	0	-1.10	-0.001555	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	10	0.20	0.000283	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	20	-0.10	-0.000141	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	30	1.30	0.001837	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	40	-0.70	-0.000989	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	50	-0.50	-0.000707	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-30	-1.00	-0.001406	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-20	-1.80	-0.002532	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	0	-1.80	-0.002532	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	10	-1.20	-0.001688	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	20	-1.40	-0.001969	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	30	-0.70	-0.000985	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	40	-0.40	-0.000563	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	50	0.60	0.000844	±2.5	PASS



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