

# Appendix B

## E-UTRA BAND 4

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## 1. Effective (Isotropic) Radiated Power

### 1.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	23.05	18.35	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#2	23.24	18.54	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	23.17	18.47	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#0	23.20	18.50	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#1	23.48	18.78	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#3	23.15	18.45	30.00	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	22.30	17.60	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	23.29	18.59	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#2	23.14	18.44	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#5	23.15	18.45	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#0	23.27	18.57	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#1	23.30	18.60	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#3	23.29	18.59	30.00	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	22.16	17.46	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	22.95	18.25	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#2	23.10	18.40	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	23.03	18.33	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#0	23.32	18.62	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#1	23.10	18.40	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#3	23.21	18.51	30.00	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	22.20	17.50	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	22.31	17.61	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#2	21.66	16.96	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	21.54	16.84	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#0	22.15	17.45	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#1	22.23	17.53	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#3	22.45	17.75	30.00	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	21.17	16.47	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	21.85	17.15	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#2	21.73	17.03	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#5	21.80	17.10	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#0	22.14	17.44	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#1	22.21	17.51	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#3	22.09	17.39	30.00	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	21.50	16.80	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	22.18	17.48	30.00	PASS



Band4	1.4MHz	16QAM	20393	1RB#2	22.29	17.59	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#5	21.70	17.00	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#0	22.22	17.52	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#1	22.41	17.71	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#3	22.31	17.61	30.00	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	21.27	16.57	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#0	23.10	18.40	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#8	23.40	18.70	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#14	22.97	18.27	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#0	22.12	17.42	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#4	22.37	17.67	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#7	22.17	17.47	30.00	PASS
Band4	3MHz	QPSK	19965	15RB#0	22.18	17.48	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#0	23.23	18.53	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#8	23.15	18.45	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#14	23.07	18.37	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#0	22.32	17.62	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#4	22.28	17.58	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#7	22.27	17.57	30.00	PASS
Band4	3MHz	QPSK	20175	15RB#0	22.24	17.54	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#0	22.90	18.20	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#8	22.82	18.12	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#14	22.97	18.27	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#0	22.87	18.17	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#4	21.88	17.18	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#7	22.06	17.36	30.00	PASS
Band4	3MHz	QPSK	20385	15RB#0	22.06	17.36	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#0	21.61	16.91	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#8	21.66	16.96	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#14	21.70	17.00	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#0	21.19	16.49	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#4	21.21	16.51	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#7	21.13	16.43	30.00	PASS
Band4	3MHz	16QAM	19965	15RB#0	21.22	16.52	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#0	21.93	17.23	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#8	22.19	17.49	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#14	22.29	17.59	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#0	21.33	16.63	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#4	21.20	16.50	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#7	21.15	16.45	30.00	PASS
Band4	3MHz	16QAM	20175	15RB#0	21.38	16.68	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#0	21.69	16.99	30.00	PASS



Band4	3MHz	16QAM	20385	1RB#8	21.85	17.15	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#14	21.71	17.01	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#0	20.85	16.15	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#4	20.99	16.29	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#7	21.16	16.46	30.00	PASS
Band4	3MHz	16QAM	20385	15RB#0	21.09	16.39	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#0	23.12	18.42	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#12	23.38	18.68	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#24	22.98	18.28	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#0	22.10	17.40	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#6	22.24	17.54	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#13	22.09	17.39	30.00	PASS
Band4	5MHz	QPSK	19975	25RB#0	22.14	17.44	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#0	23.20	18.50	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#12	23.14	18.44	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#24	23.06	18.36	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#0	22.22	17.52	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#6	22.29	17.59	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#13	22.06	17.36	30.00	PASS
Band4	5MHz	QPSK	20175	25RB#0	22.27	17.57	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#0	22.89	18.19	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#12	23.35	18.65	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#24	23.01	18.31	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#0	22.18	17.48	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#6	22.00	17.30	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#13	22.13	17.43	30.00	PASS
Band4	5MHz	QPSK	20375	25RB#0	22.15	17.45	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#0	22.05	17.35	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#12	22.29	17.59	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#24	21.48	16.78	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#0	21.28	16.58	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#6	21.24	16.54	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#13	21.15	16.45	30.00	PASS
Band4	5MHz	16QAM	19975	25RB#0	21.20	16.50	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#0	21.91	17.21	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#12	22.23	17.53	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#24	22.11	17.41	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#0	21.30	16.60	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#6	21.33	16.63	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#13	21.06	16.36	30.00	PASS
Band4	5MHz	16QAM	20175	25RB#0	21.43	16.73	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#0	21.60	16.90	30.00	PASS



Band4	5MHz	16QAM	20375	1RB#12	22.31	17.61	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#24	21.71	17.01	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#0	21.15	16.45	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#6	21.25	16.55	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#13	21.12	16.42	30.00	PASS
Band4	5MHz	16QAM	20375	25RB#0	21.25	16.55	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#0	23.02	18.32	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#24	23.76	19.06	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#49	23.01	18.31	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#0	22.28	17.58	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#12	22.41	17.71	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#25	22.08	17.38	30.00	PASS
Band4	10MHz	QPSK	20000	50RB#0	22.06	17.36	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#0	22.81	18.11	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#24	23.52	18.82	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#49	22.40	17.70	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#0	22.51	17.81	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#12	22.30	17.60	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#25	21.93	17.23	30.00	PASS
Band4	10MHz	QPSK	20175	50RB#0	22.19	17.49	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#0	22.85	18.15	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#24	23.49	18.79	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#49	22.40	17.70	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#0	22.35	17.65	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#12	22.23	17.53	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#25	21.91	17.21	30.00	PASS
Band4	10MHz	QPSK	20350	50RB#0	22.10	17.40	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#0	21.84	17.14	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#24	21.62	16.92	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#49	21.60	16.90	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#0	21.27	16.57	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#12	21.17	16.47	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#25	21.09	16.39	30.00	PASS
Band4	10MHz	16QAM	20000	50RB#0	21.03	16.33	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#0	22.13	17.43	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#24	22.07	17.37	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#49	21.36	16.66	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#0	21.15	16.45	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#12	21.34	16.64	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#25	21.16	16.46	30.00	PASS
Band4	10MHz	16QAM	20175	50RB#0	21.11	16.41	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#0	21.50	16.80	30.00	PASS



Band4	10MHz	16QAM	20350	1RB#24	22.12	17.42	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#49	21.71	17.01	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#0	21.16	16.46	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#12	21.29	16.59	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#25	21.26	16.56	30.00	PASS
Band4	10MHz	16QAM	20350	50RB#0	20.99	16.29	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#0	22.97	18.27	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#38	23.93	19.23	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#74	22.46	17.76	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#0	22.14	17.44	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#18	22.51	17.81	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#39	22.25	17.55	30.00	PASS
Band4	15MHz	QPSK	20025	75RB#0	22.12	17.42	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#0	22.98	18.28	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#38	22.88	18.18	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#74	22.22	17.52	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#0	22.63	17.93	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#18	22.40	17.70	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#39	22.01	17.31	30.00	PASS
Band4	15MHz	QPSK	20175	75RB#0	22.14	17.44	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#0	23.18	18.48	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#38	23.55	18.85	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#74	22.53	17.83	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#0	22.43	17.73	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#18	22.23	17.53	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#39	21.73	17.03	30.00	PASS
Band4	15MHz	QPSK	20325	75RB#0	22.04	17.34	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#0	22.30	17.60	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#38	21.94	17.24	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#74	22.19	17.49	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#0	21.31	16.61	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#18	21.12	16.42	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#39	21.16	16.46	30.00	PASS
Band4	15MHz	16QAM	20025	75RB#0	21.12	16.42	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#0	21.59	16.89	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#38	22.85	18.15	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#74	21.72	17.02	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#0	21.34	16.64	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#18	21.32	16.62	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#39	21.06	16.36	30.00	PASS
Band4	15MHz	16QAM	20175	75RB#0	21.17	16.47	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#0	22.33	17.63	30.00	PASS



Band4	15MHz	16QAM	20325	1RB#38	21.59	16.89	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#74	21.76	17.06	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#0	21.11	16.41	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#18	21.10	16.40	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#39	21.12	16.42	30.00	PASS
Band4	15MHz	16QAM	20325	75RB#0	21.07	16.37	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#0	23.00	18.30	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#49	23.52	18.82	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#99	22.53	17.83	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#0	22.17	17.47	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#25	22.03	17.33	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#50	22.06	17.36	30.00	PASS
Band4	20MHz	QPSK	20050	100RB#0	22.16	17.46	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#0	22.92	18.22	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#49	23.97	19.27	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#99	22.26	17.56	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#0	22.74	18.04	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#25	22.32	17.62	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#50	21.91	17.21	30.00	PASS
Band4	20MHz	QPSK	20175	100RB#0	22.26	17.56	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#0	23.04	18.34	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#49	23.40	18.70	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#99	22.16	17.46	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#0	22.71	18.01	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#25	22.21	17.51	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#50	21.74	17.04	30.00	PASS
Band4	20MHz	QPSK	20300	100RB#0	22.10	17.40	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#0	21.75	17.05	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#49	21.76	17.06	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#99	21.41	16.71	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#0	21.31	16.61	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#25	21.27	16.57	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#50	21.41	16.71	30.00	PASS
Band4	20MHz	16QAM	20050	100RB#0	21.19	16.49	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#0	22.32	17.62	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#49	21.83	17.13	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#99	21.46	16.76	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#0	21.33	16.63	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#25	21.26	16.56	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#50	21.31	16.61	30.00	PASS
Band4	20MHz	16QAM	20175	100RB#0	21.18	16.48	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#0	21.46	16.76	30.00	PASS



Band4	20MHz	16QAM	20300	1RB#49	22.14	17.44	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#99	22.34	17.64	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#0	21.36	16.66	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#25	21.09	16.39	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#50	21.08	16.38	30.00	PASS
Band4	20MHz	16QAM	20300	100RB#0	21.14	16.44	30.00	PASS

Remark:

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

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

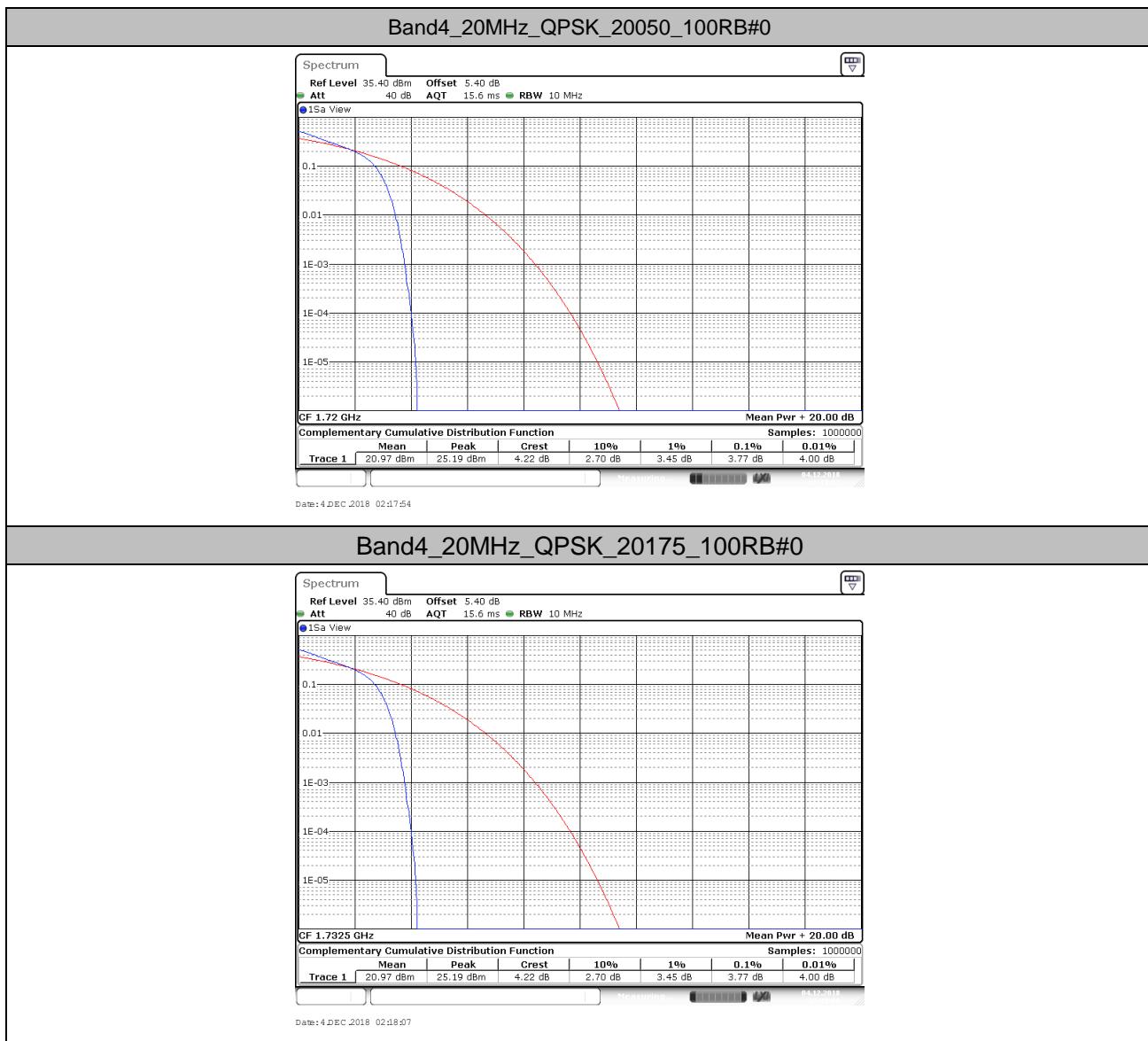
b: SGP=Signal Generator Level

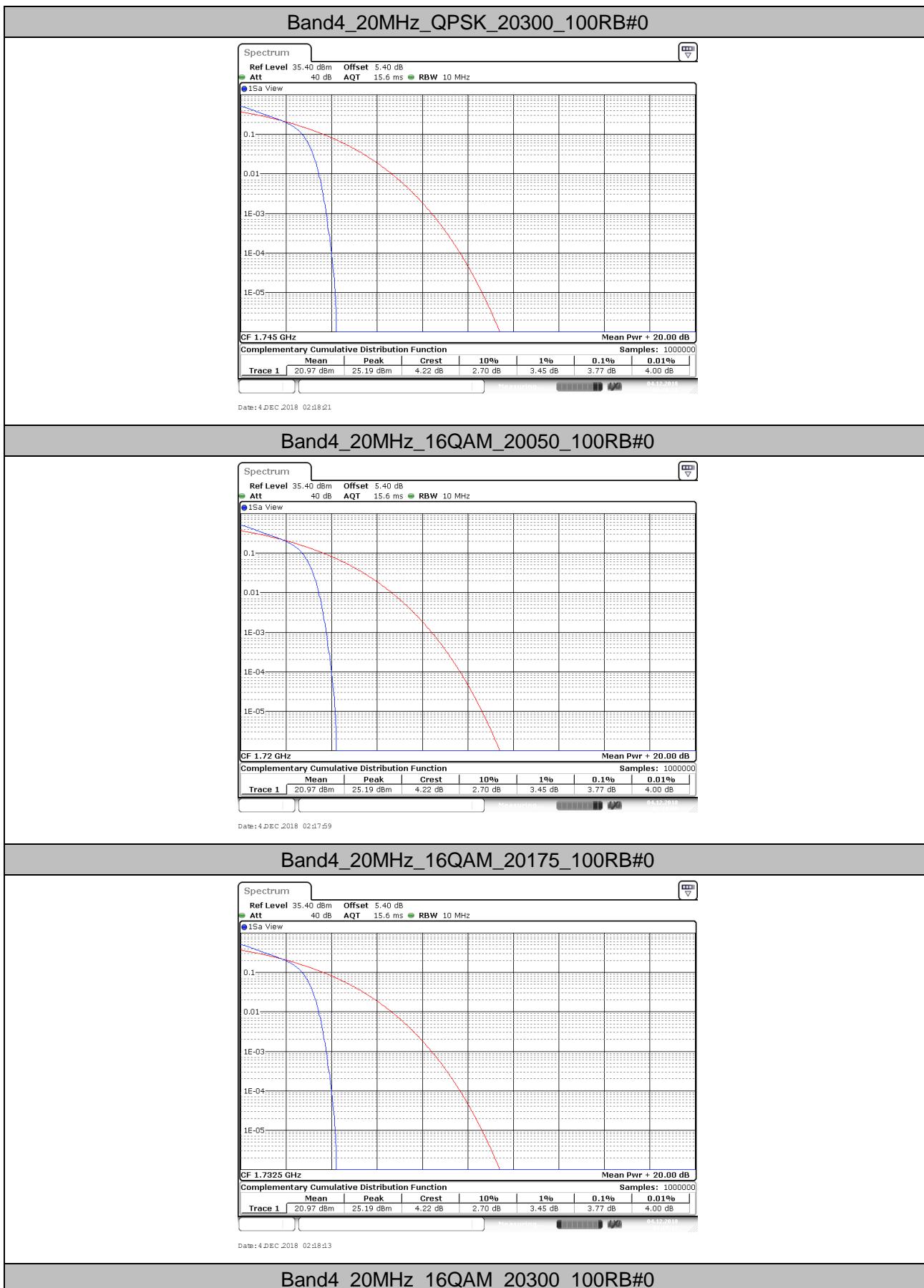
## 2. Peak-to-Average Ratio(CCDF)

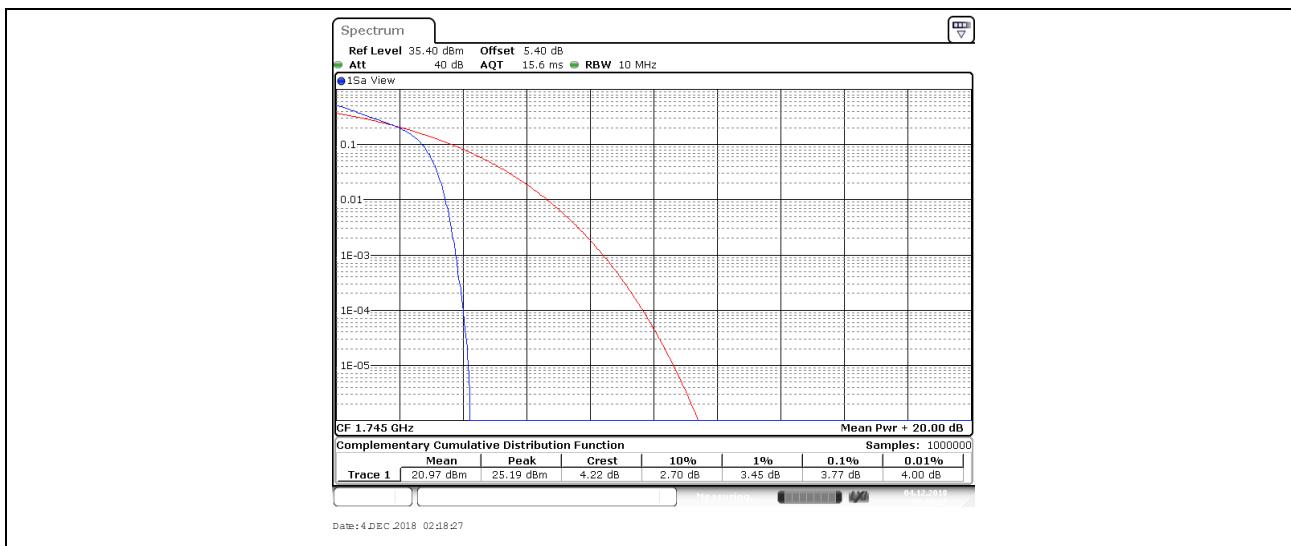
### 2.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	20MHz	QPSK	20050	100RB#0	3.77	13	PASS
Band4	20MHz	QPSK	20175	100RB#0	3.77	13	PASS
Band4	20MHz	QPSK	20300	100RB#0	3.77	13	PASS
Band4	20MHz	16QAM	20050	100RB#0	3.77	13	PASS
Band4	20MHz	16QAM	20175	100RB#0	3.77	13	PASS
Band4	20MHz	16QAM	20300	100RB#0	3.77	13	PASS

### 2.2. Test Plots





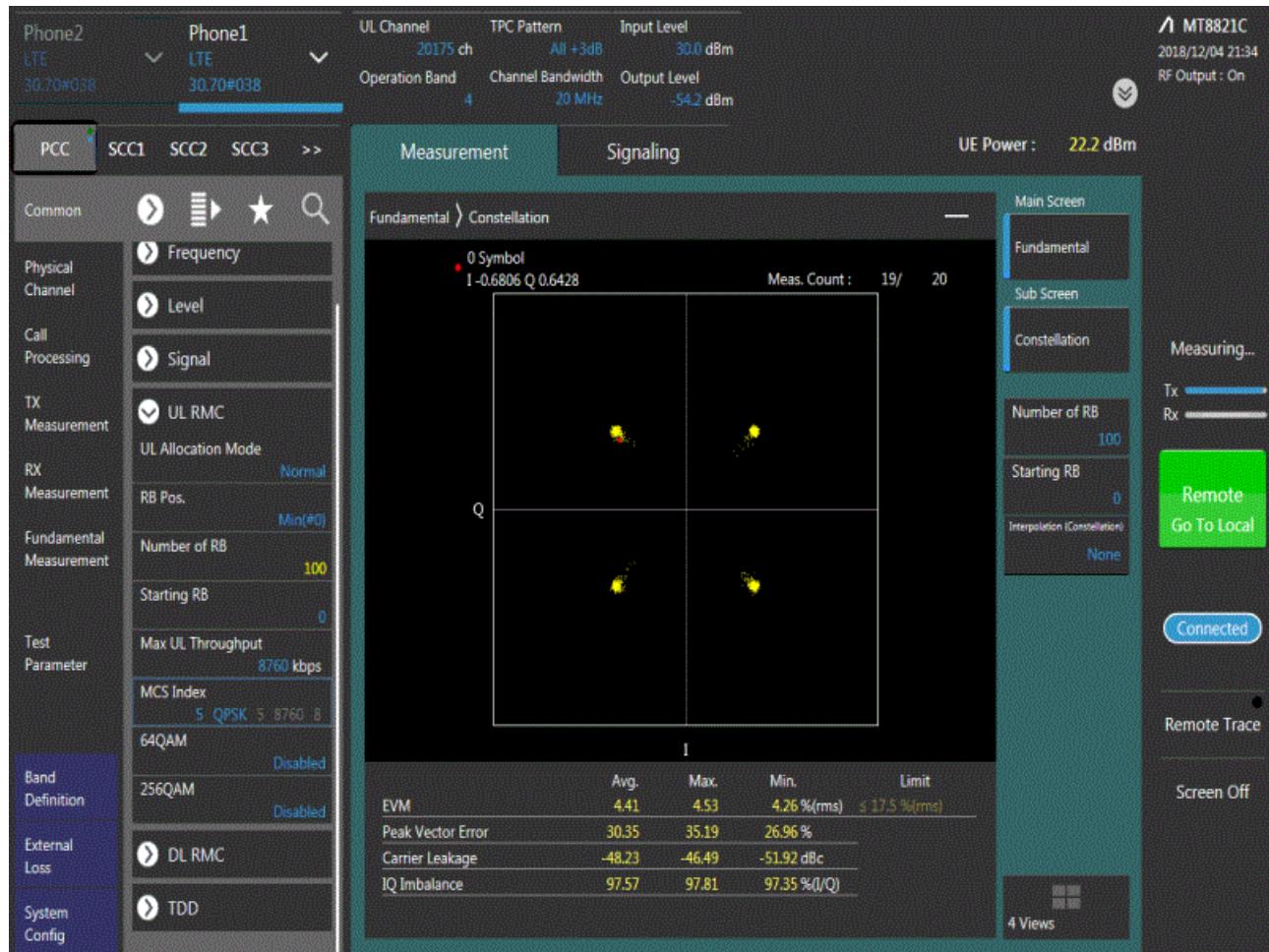


### 3. Modulation Characteristics

#### 3.1. Test BAND = LTE BAND4

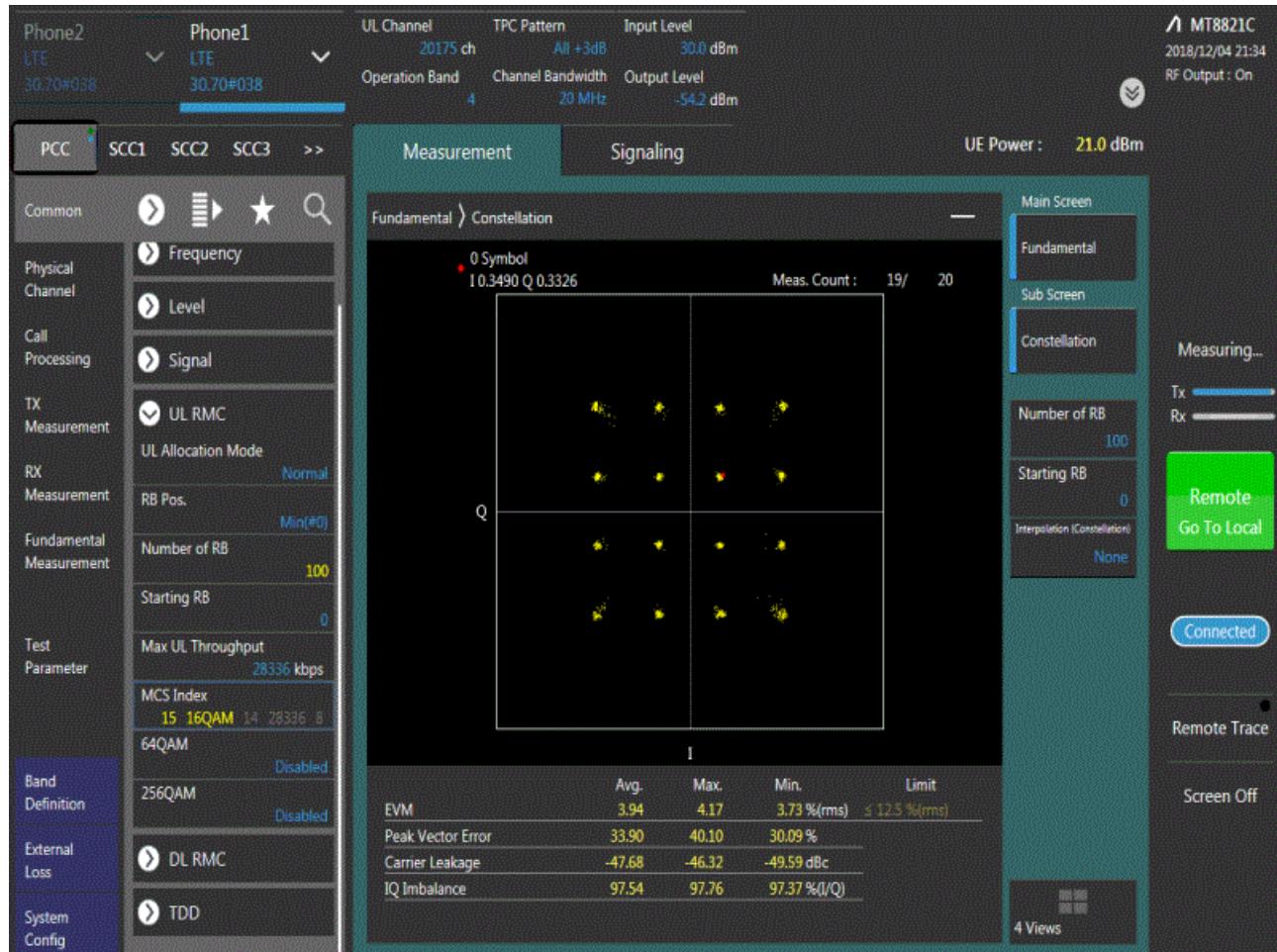
##### 3.1.1. Test Mode = LTE /TM1 20MHz

###### 3.1.1.1. Test Channel = MCH



### 3.1.2. Test Mode = LTE /TM2 20MHz

#### 3.1.2.1. Test Channel = MCH



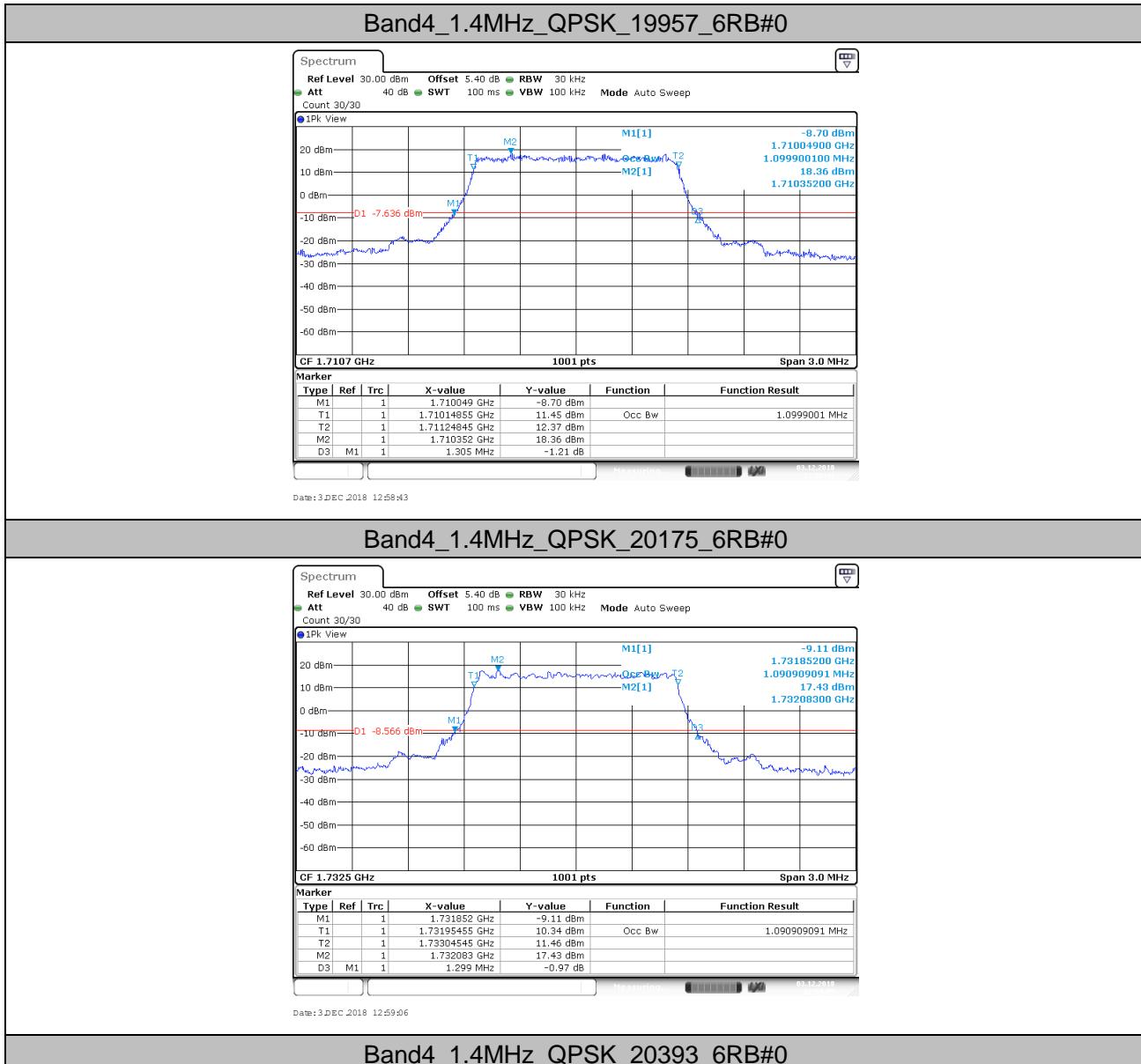
## 4. 26dB Bandwidth and Occupied Bandwidth

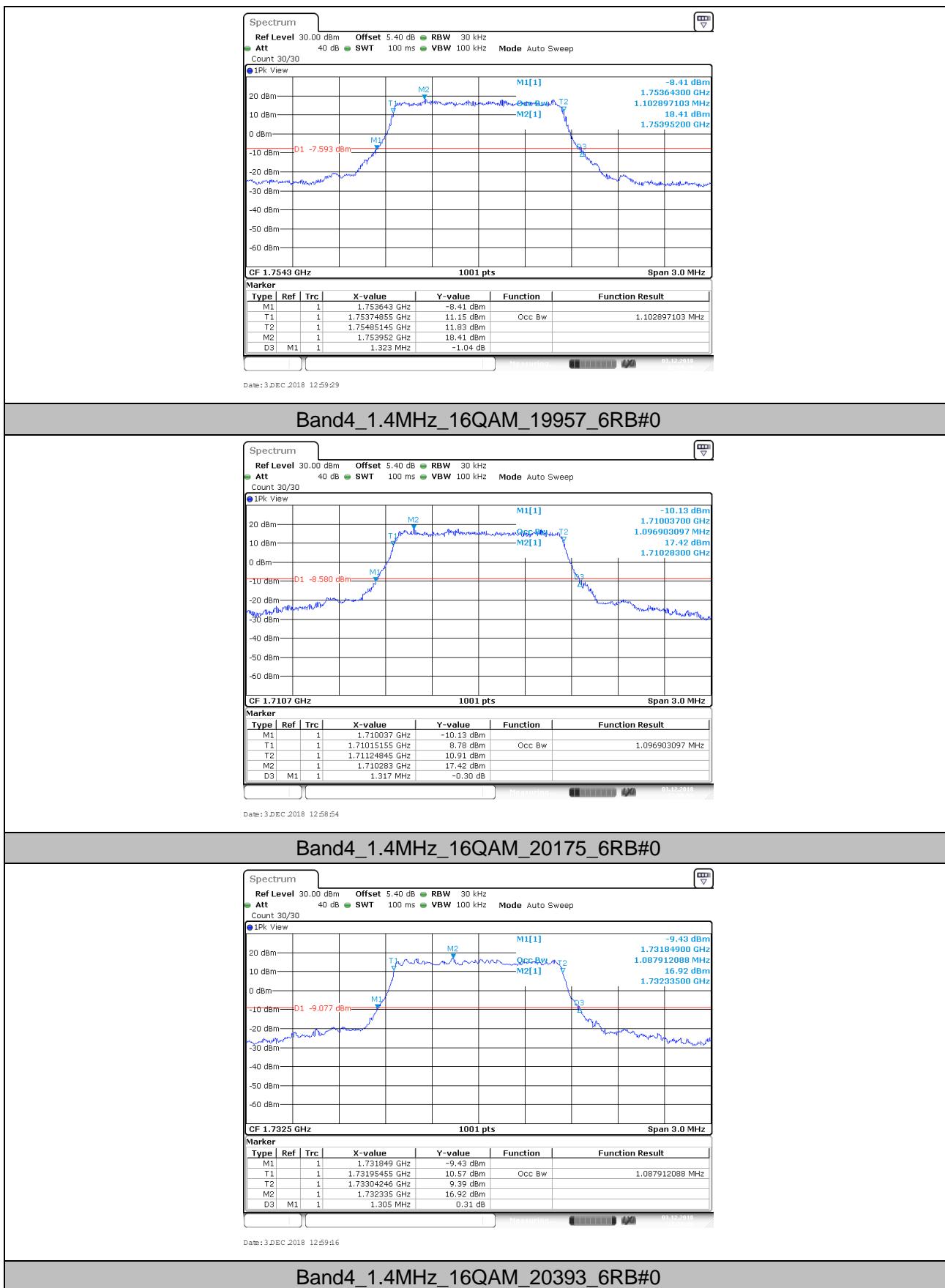
### 4.1. Test Result

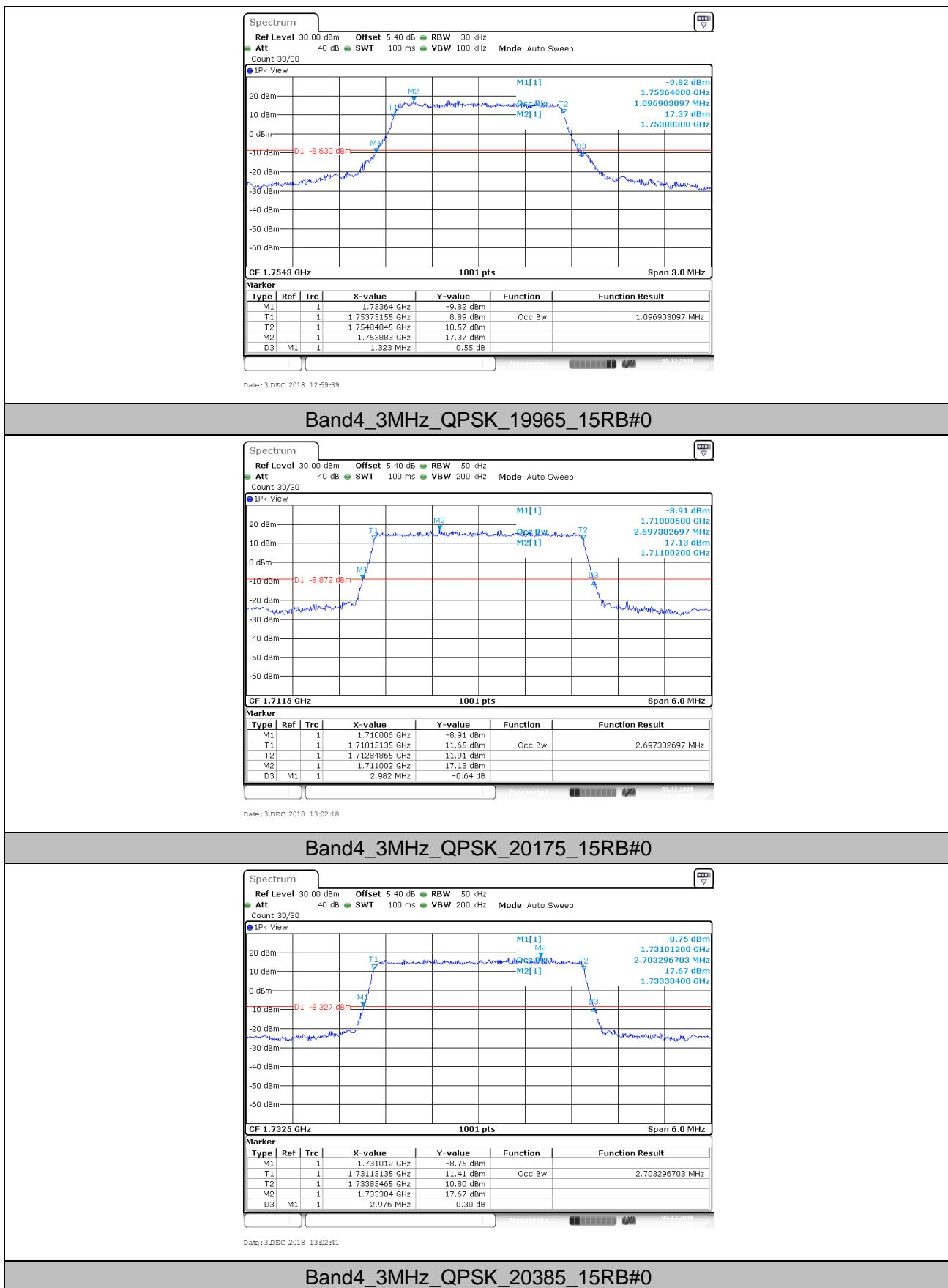
BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	1.1	1.305	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.091	1.299	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	1.103	1.323	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	1.097	1.317	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.088	1.305	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	1.097	1.323	PASS
Band4	3MHz	QPSK	19965	15RB#0	2.697	2.982	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.703	2.976	PASS
Band4	3MHz	QPSK	20385	15RB#0	2.697	2.982	PASS
Band4	3MHz	16QAM	19965	15RB#0	2.697	3.006	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.697	3.000	PASS
Band4	3MHz	16QAM	20385	15RB#0	2.697	2.994	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.466	4.950	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.476	4.970	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.496	4.960	PASS
Band4	5MHz	16QAM	19975	25RB#0	4.476	4.970	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.486	4.970	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.476	4.930	PASS
Band4	10MHz	QPSK	20000	50RB#0	8.931	9.780	PASS
Band4	10MHz	QPSK	20175	50RB#0	8.911	9.760	PASS
Band4	10MHz	QPSK	20350	50RB#0	8.911	9.880	PASS
Band4	10MHz	16QAM	20000	50RB#0	8.931	9.760	PASS
Band4	10MHz	16QAM	20175	50RB#0	8.931	9.740	PASS
Band4	10MHz	16QAM	20350	50RB#0	8.911	9.700	PASS
Band4	15MHz	QPSK	20025	75RB#0	13.487	14.820	PASS
Band4	15MHz	QPSK	20175	75RB#0	13.397	14.820	PASS
Band4	15MHz	QPSK	20325	75RB#0	13.367	14.760	PASS
Band4	15MHz	16QAM	20025	75RB#0	13.457	14.850	PASS
Band4	15MHz	16QAM	20175	75RB#0	13.457	14.760	PASS
Band4	15MHz	16QAM	20325	75RB#0	13.397	14.790	PASS
Band4	20MHz	QPSK	20050	100RB#0	17.902	19.320	PASS
Band4	20MHz	QPSK	20175	100RB#0	17.862	19.520	PASS
Band4	20MHz	QPSK	20300	100RB#0	17.822	19.280	PASS
Band4	20MHz	16QAM	20050	100RB#0	17.862	19.400	PASS
Band4	20MHz	16QAM	20175	100RB#0	17.822	19.320	PASS

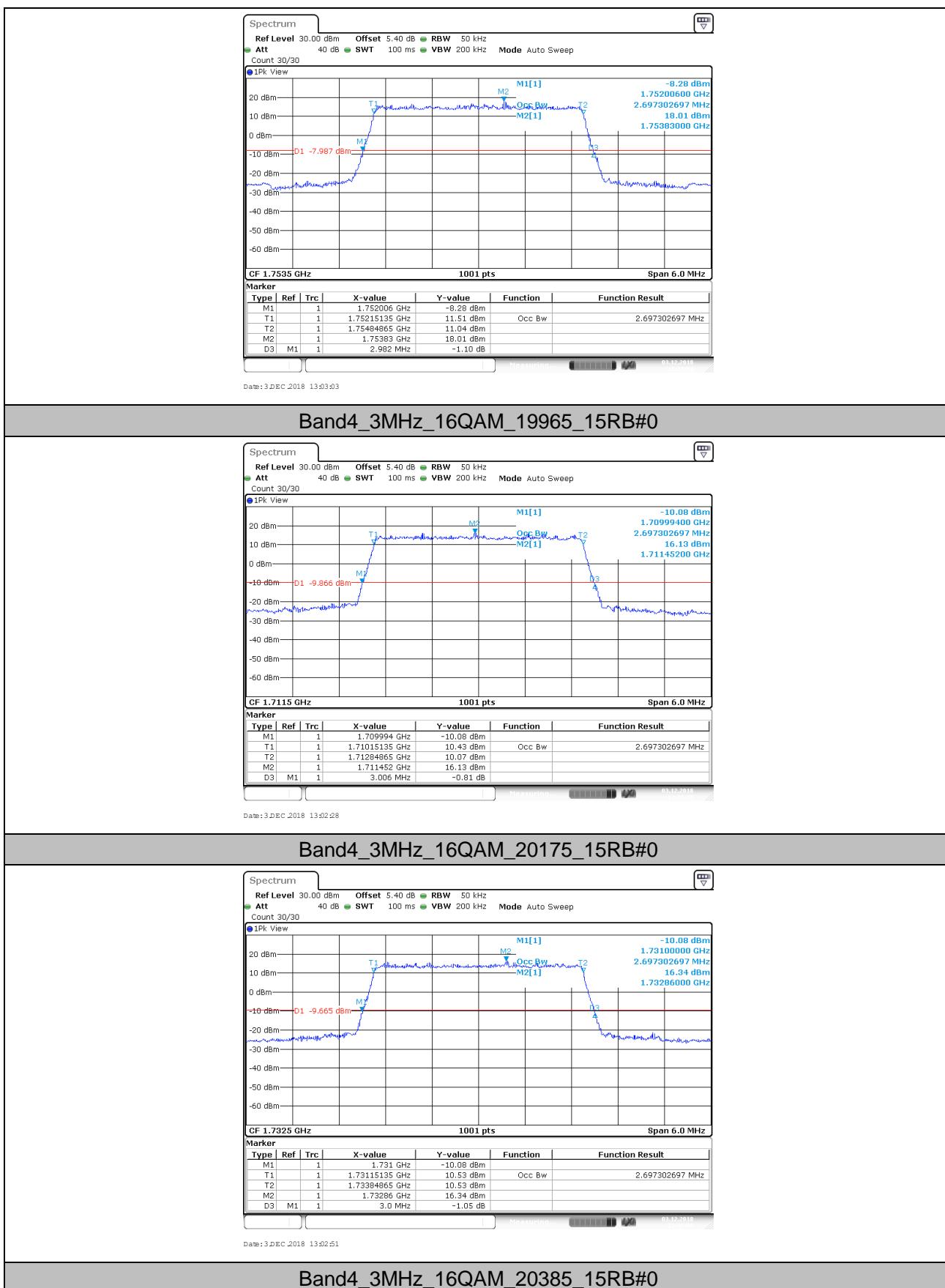
Band4	20MHz	16QAM	20300	100RB#0	17.822	19.400	PASS
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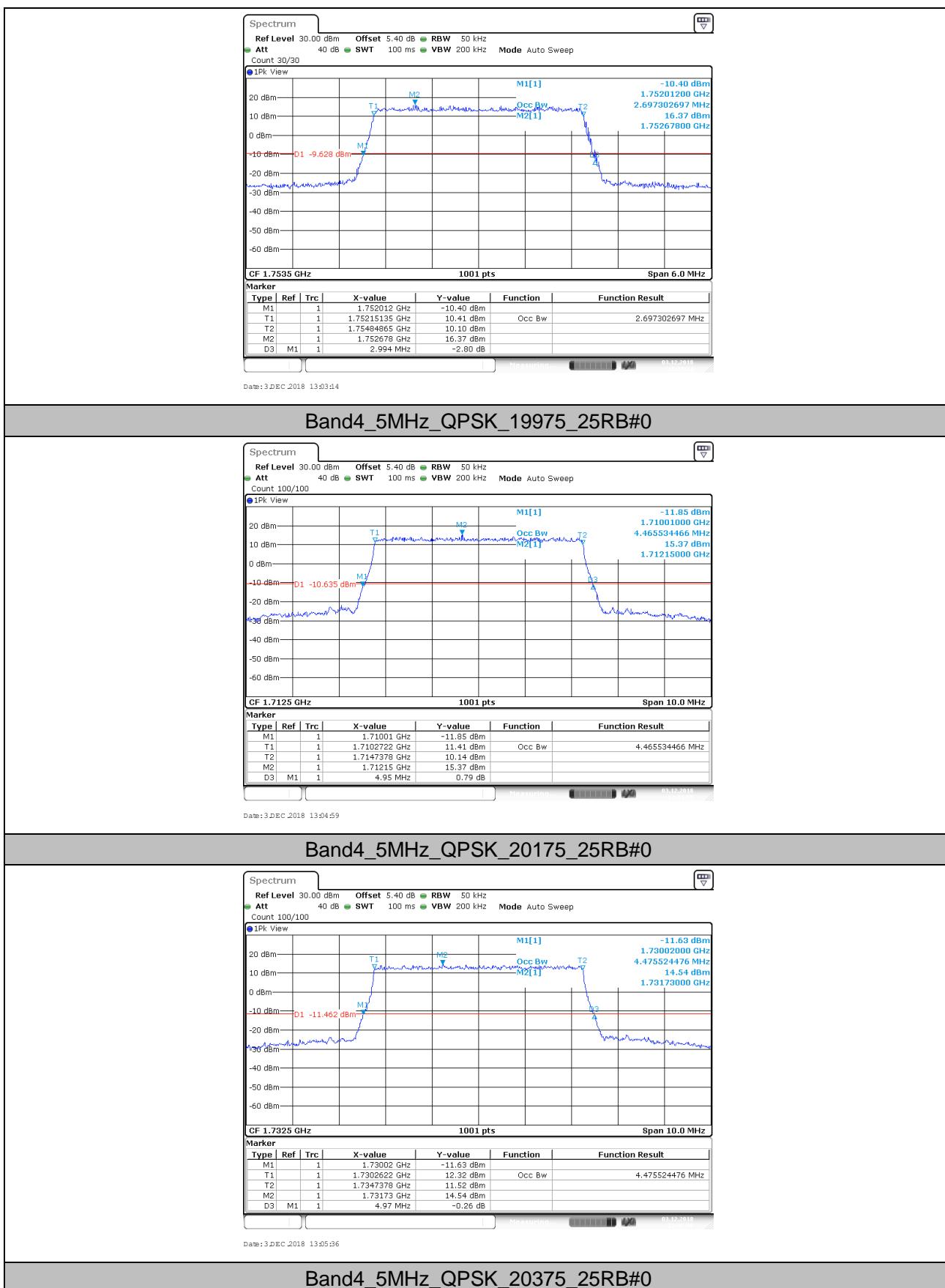
## 4.2. Test Plots

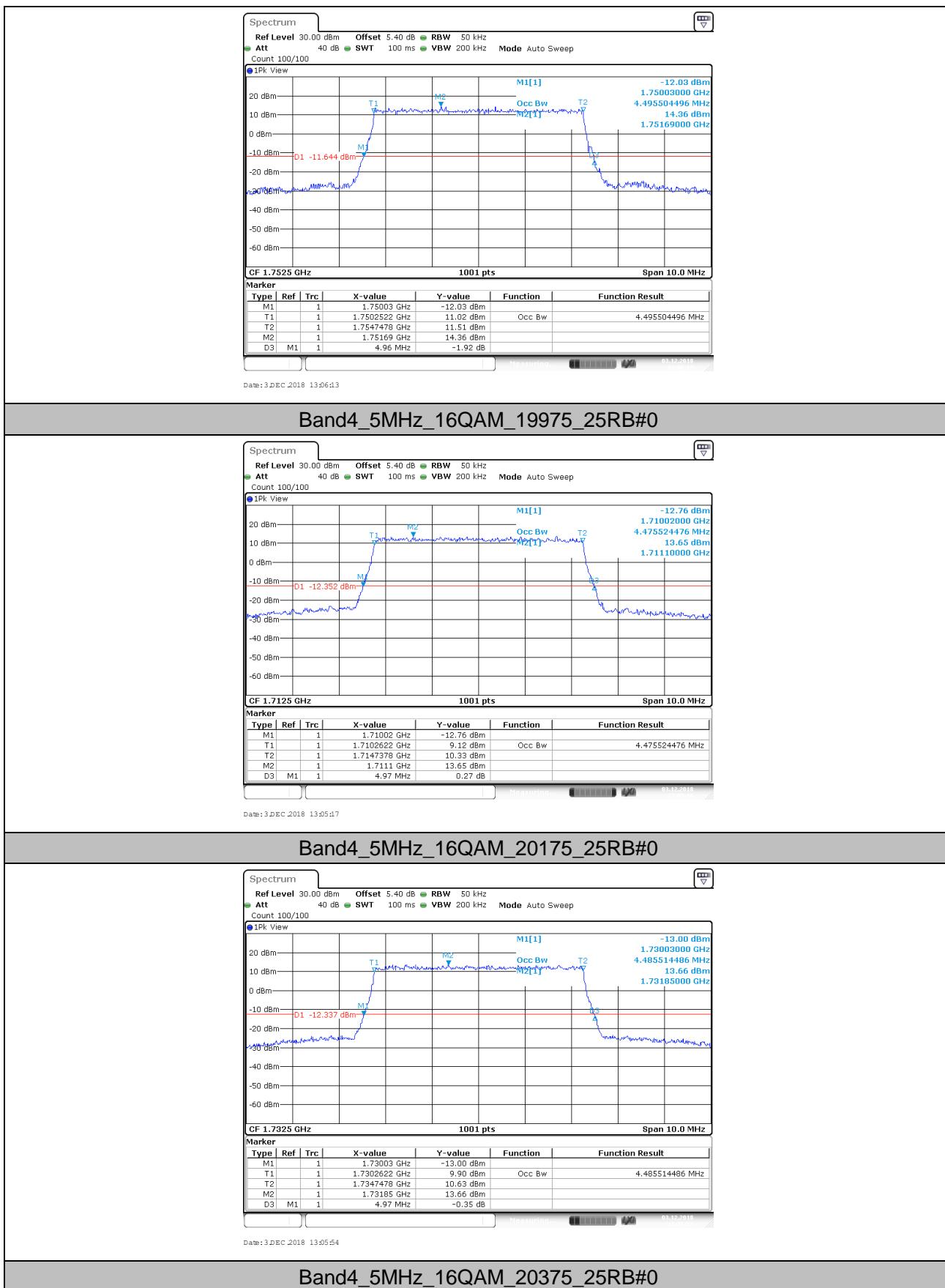


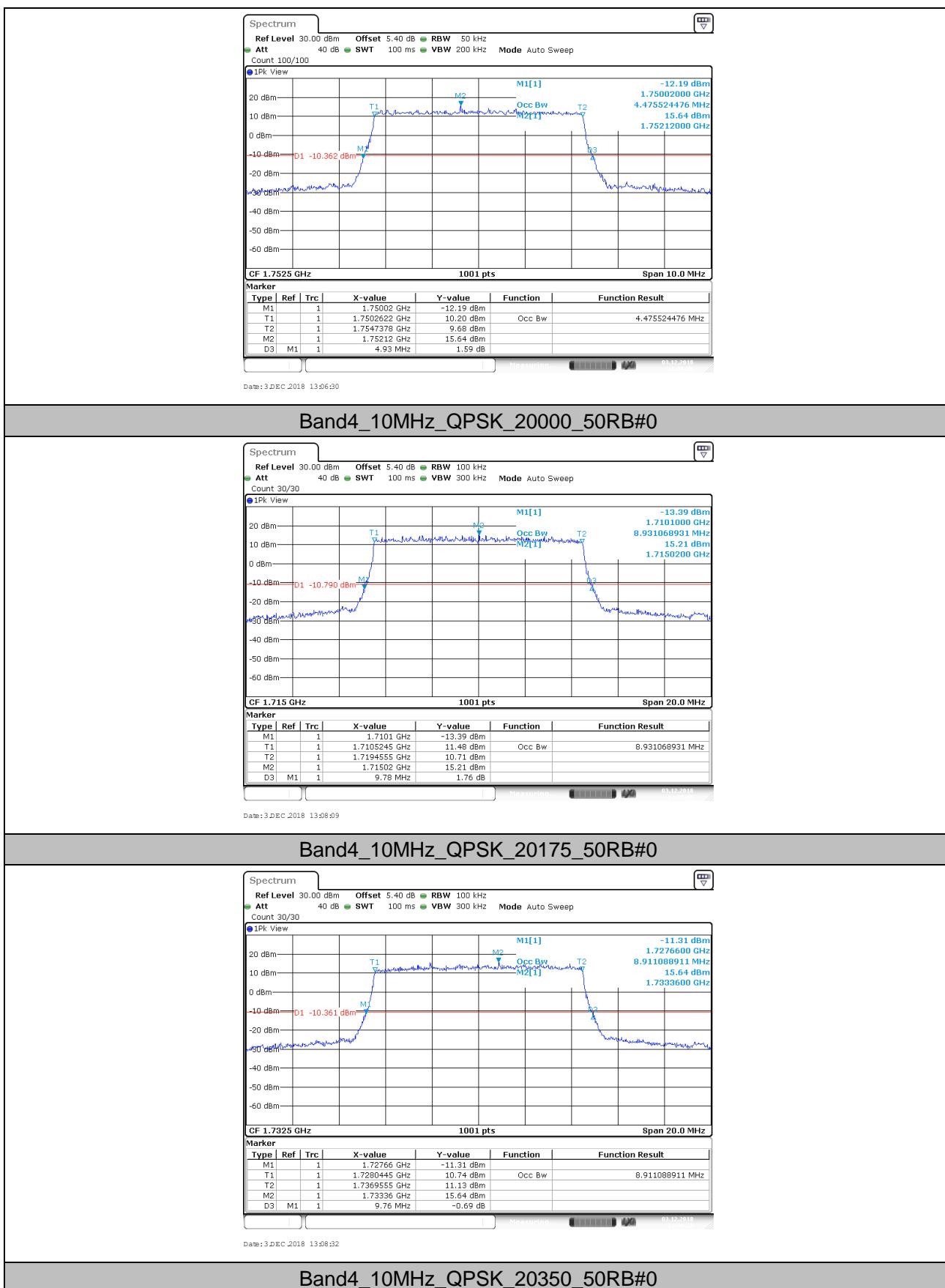


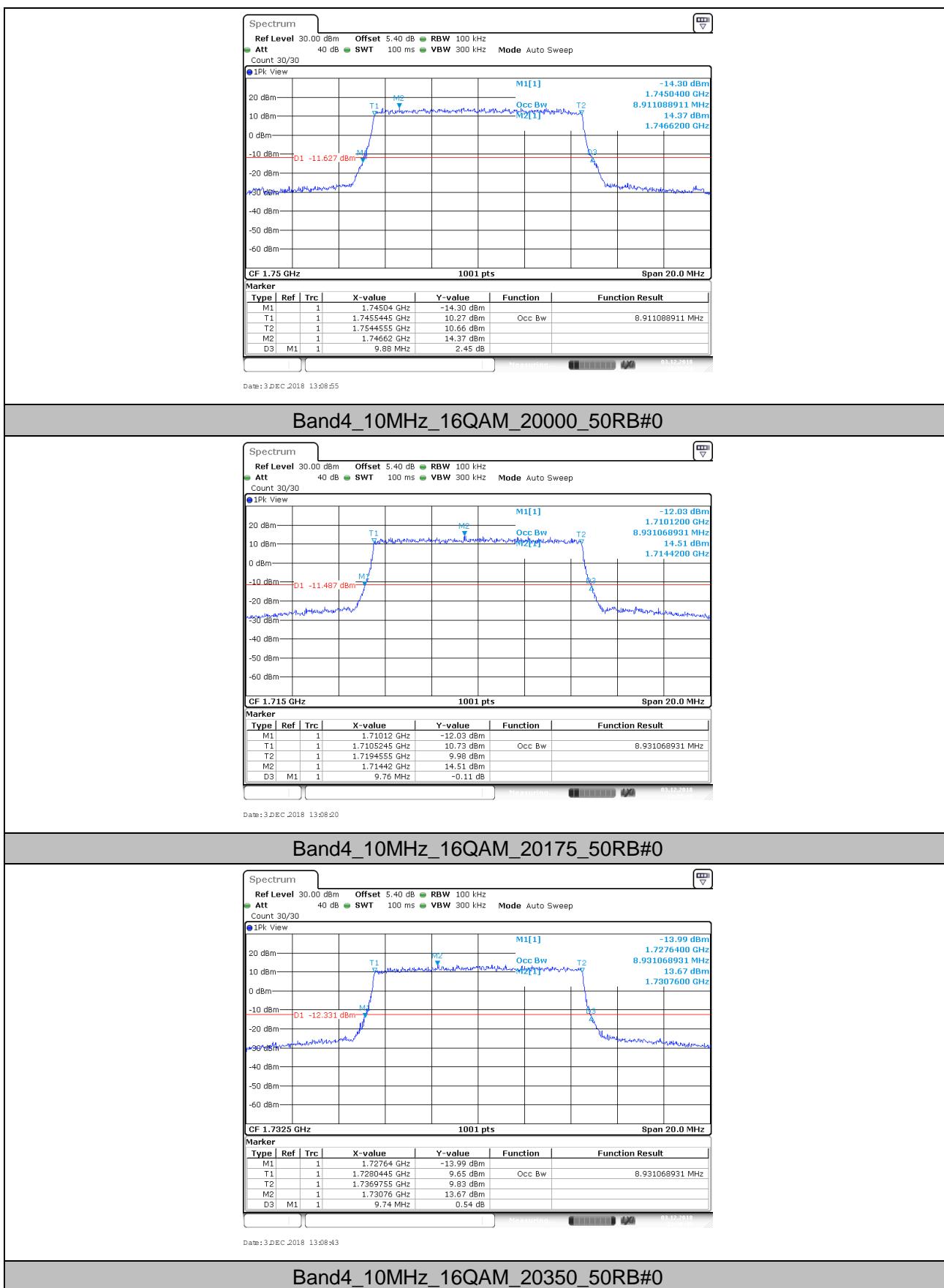




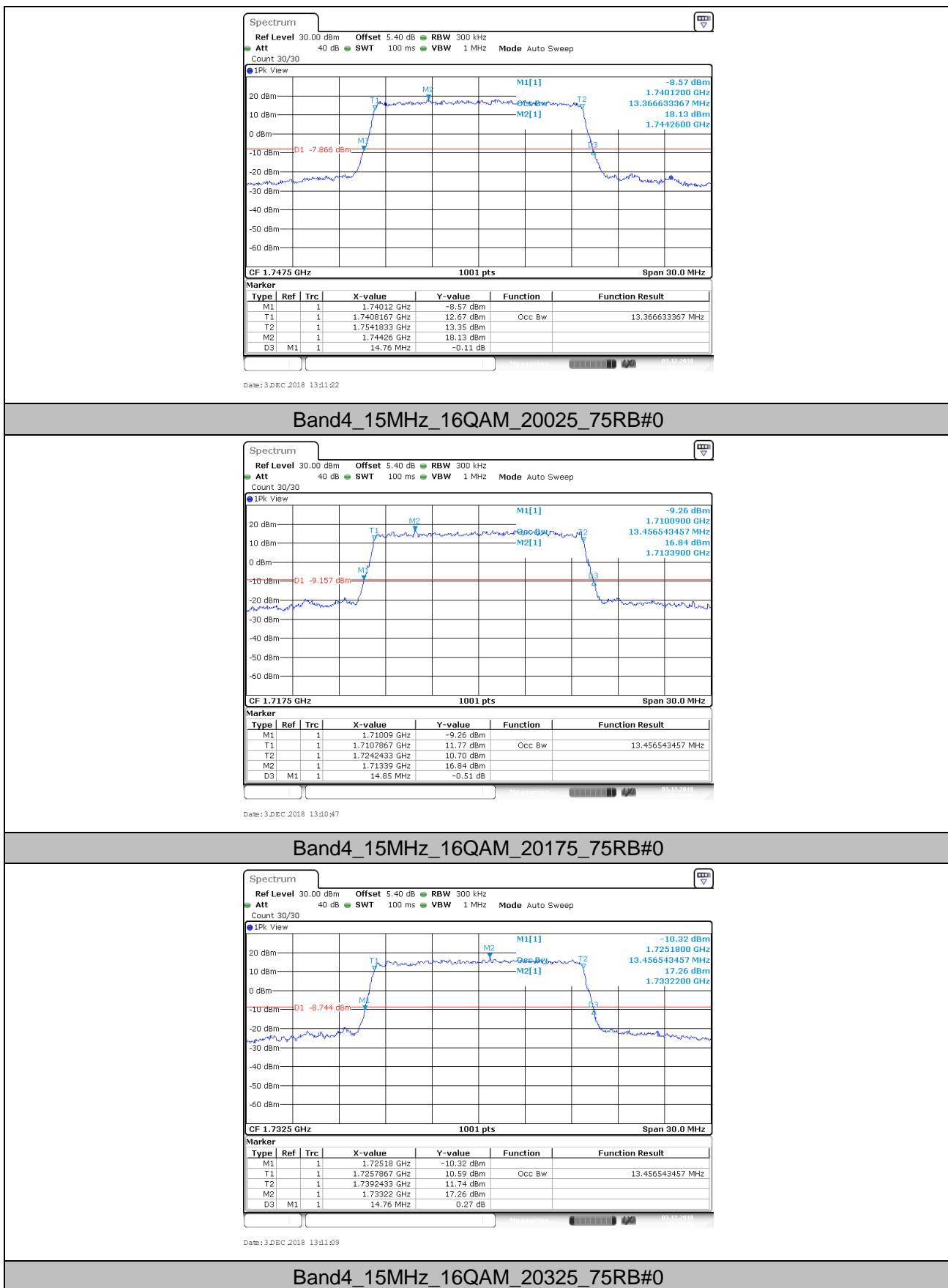


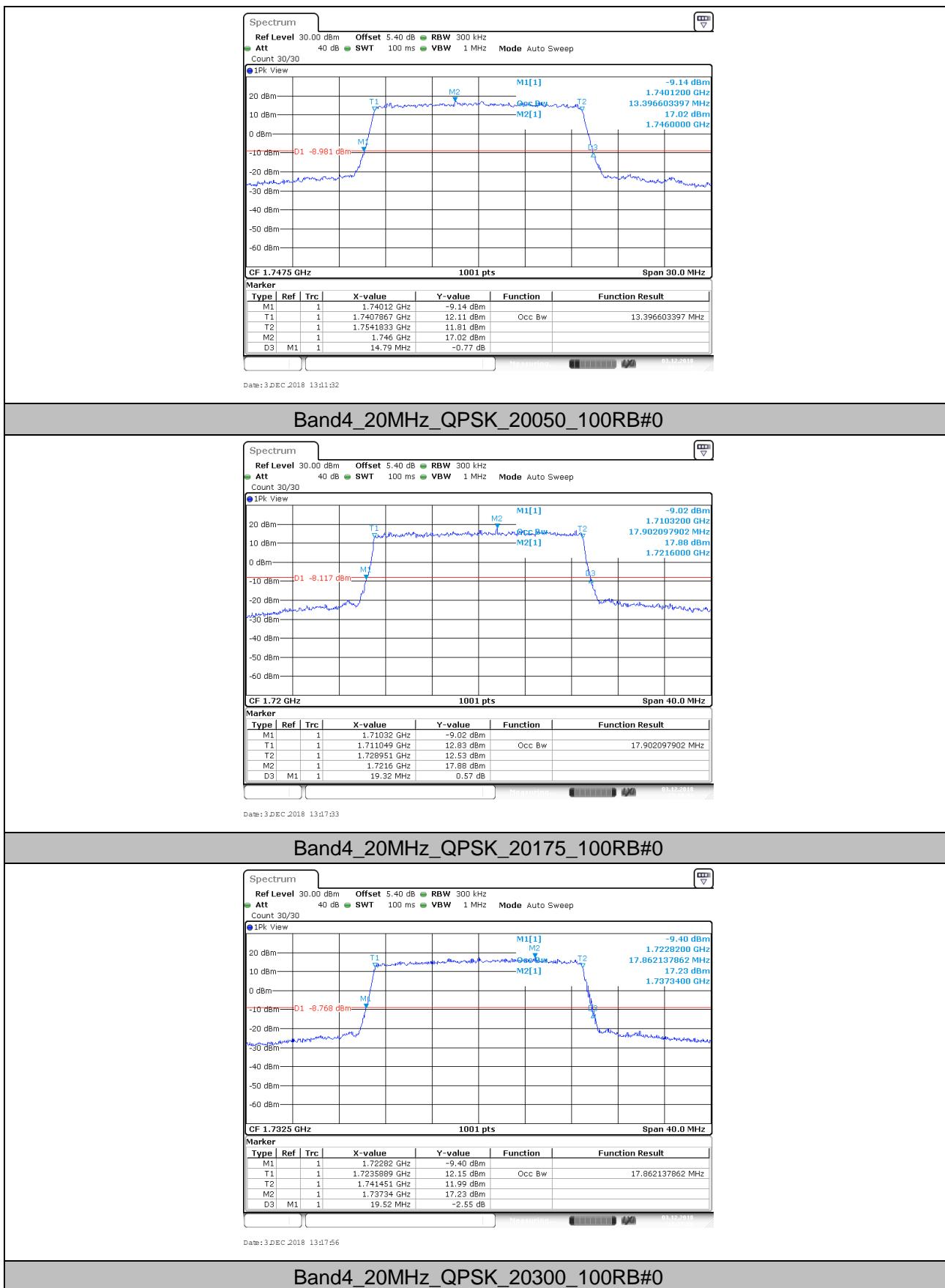


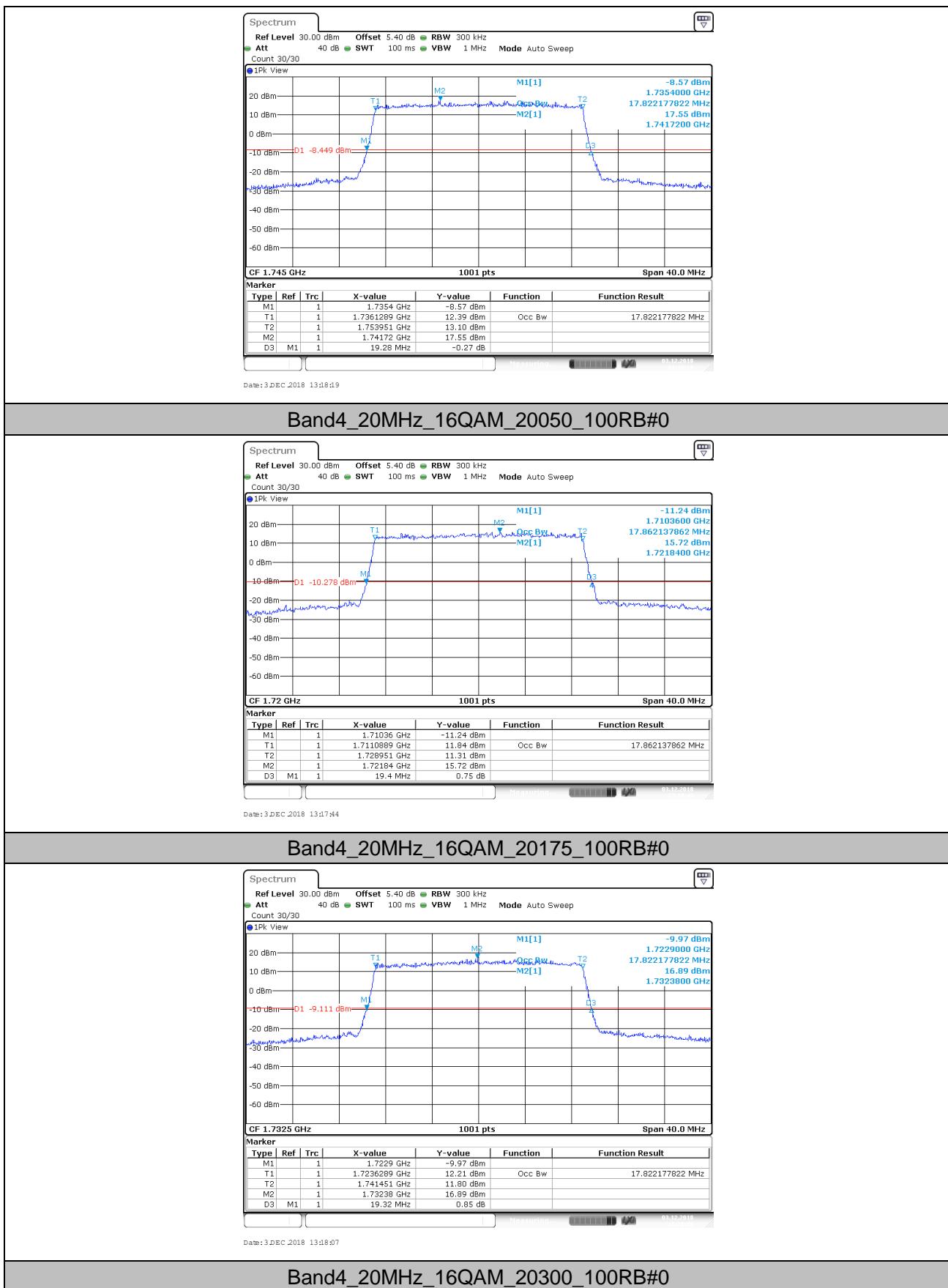


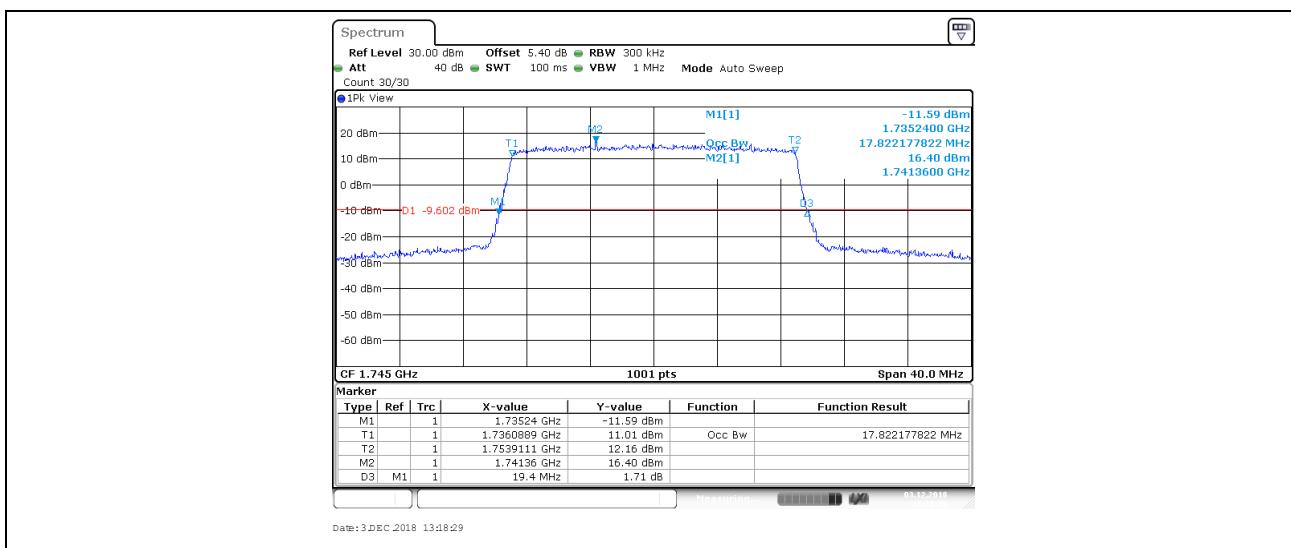






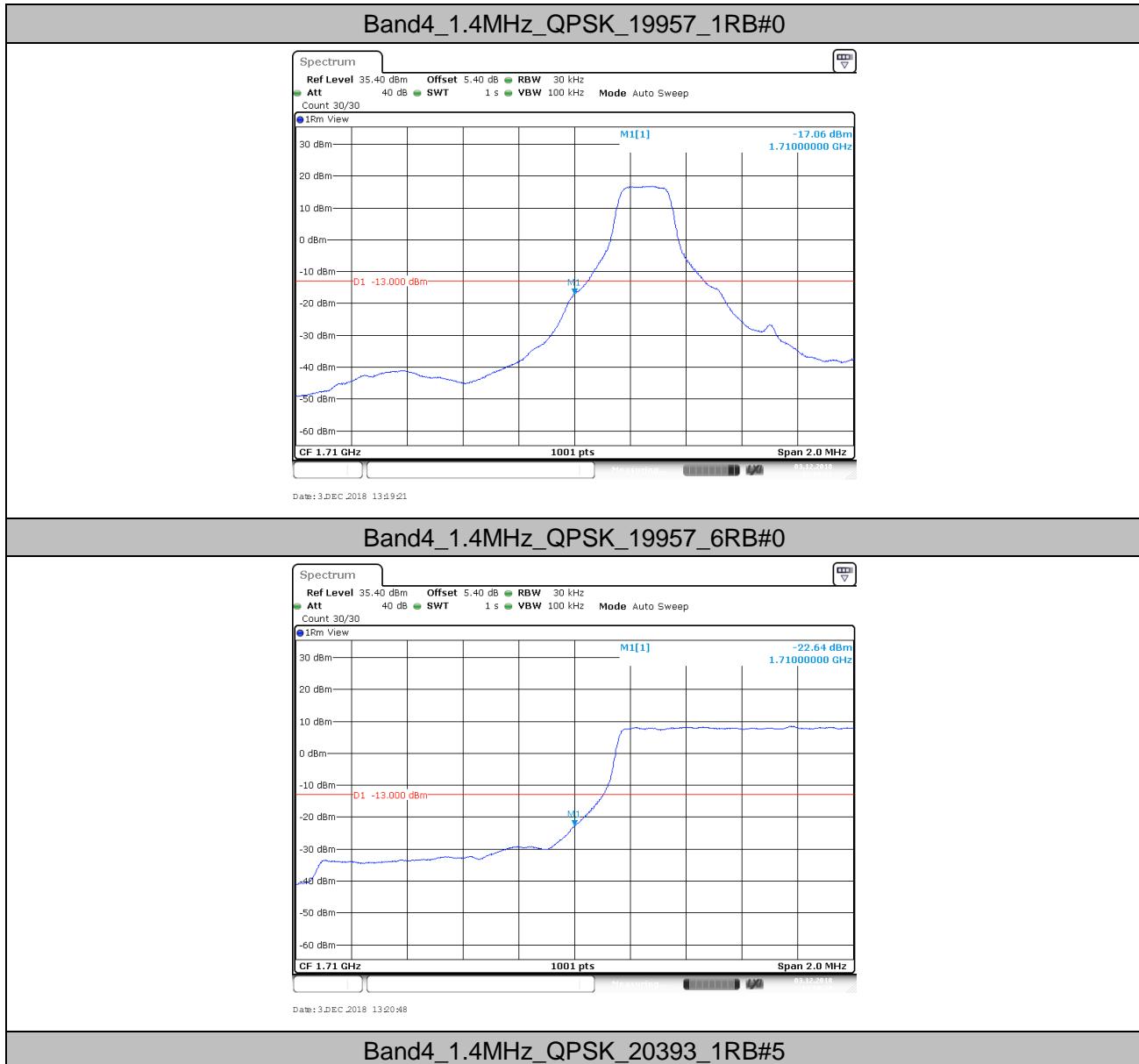


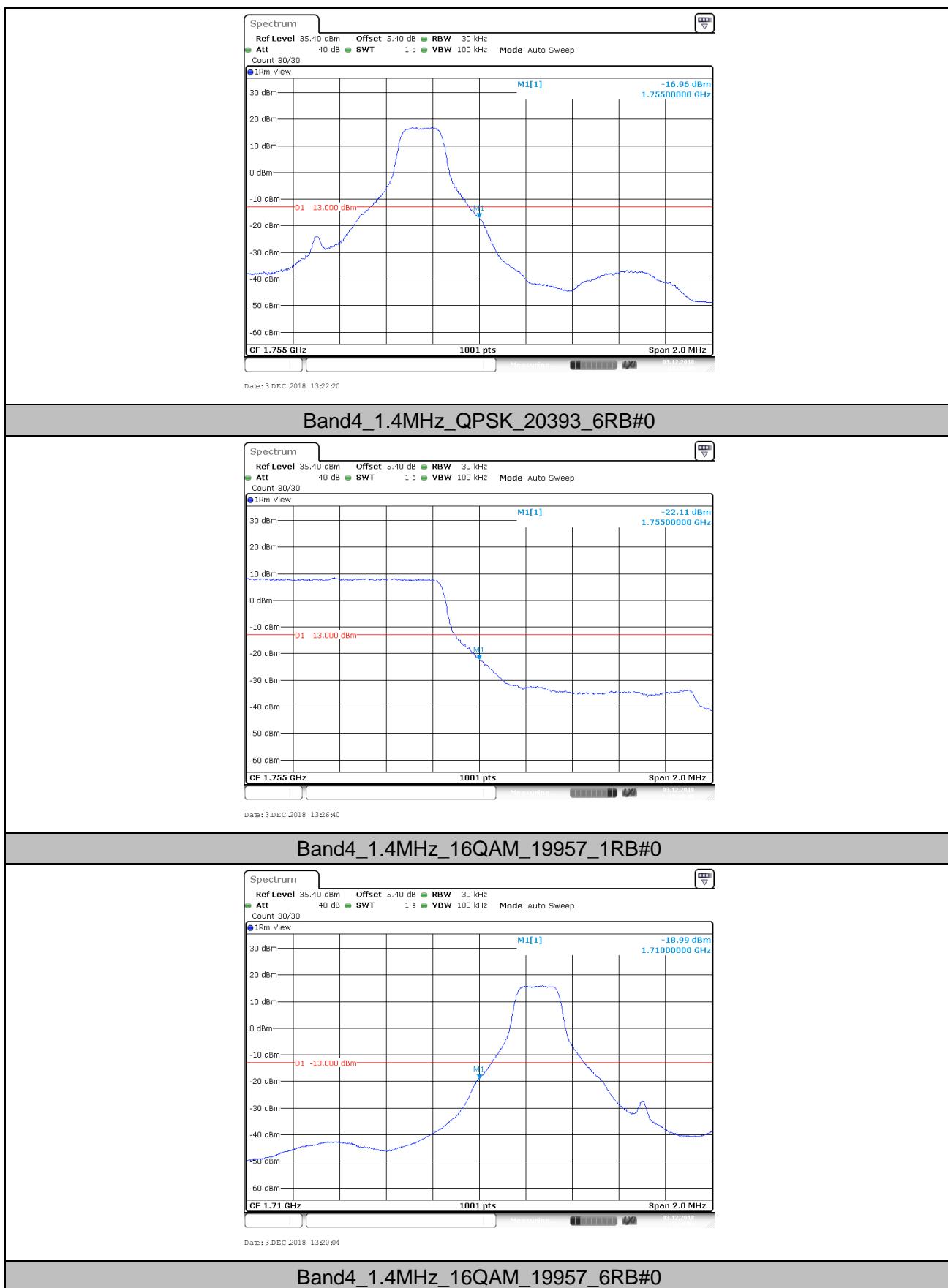


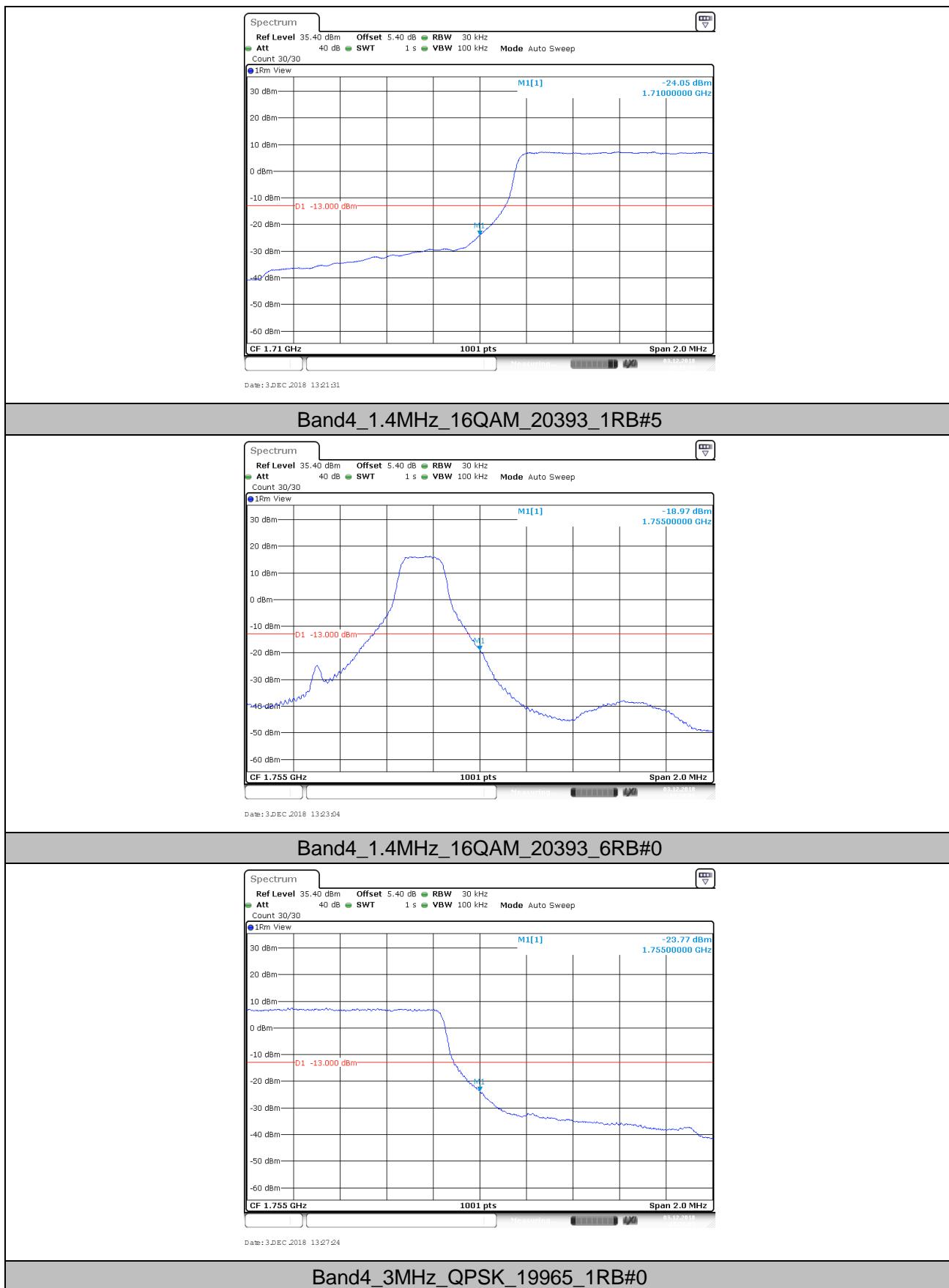


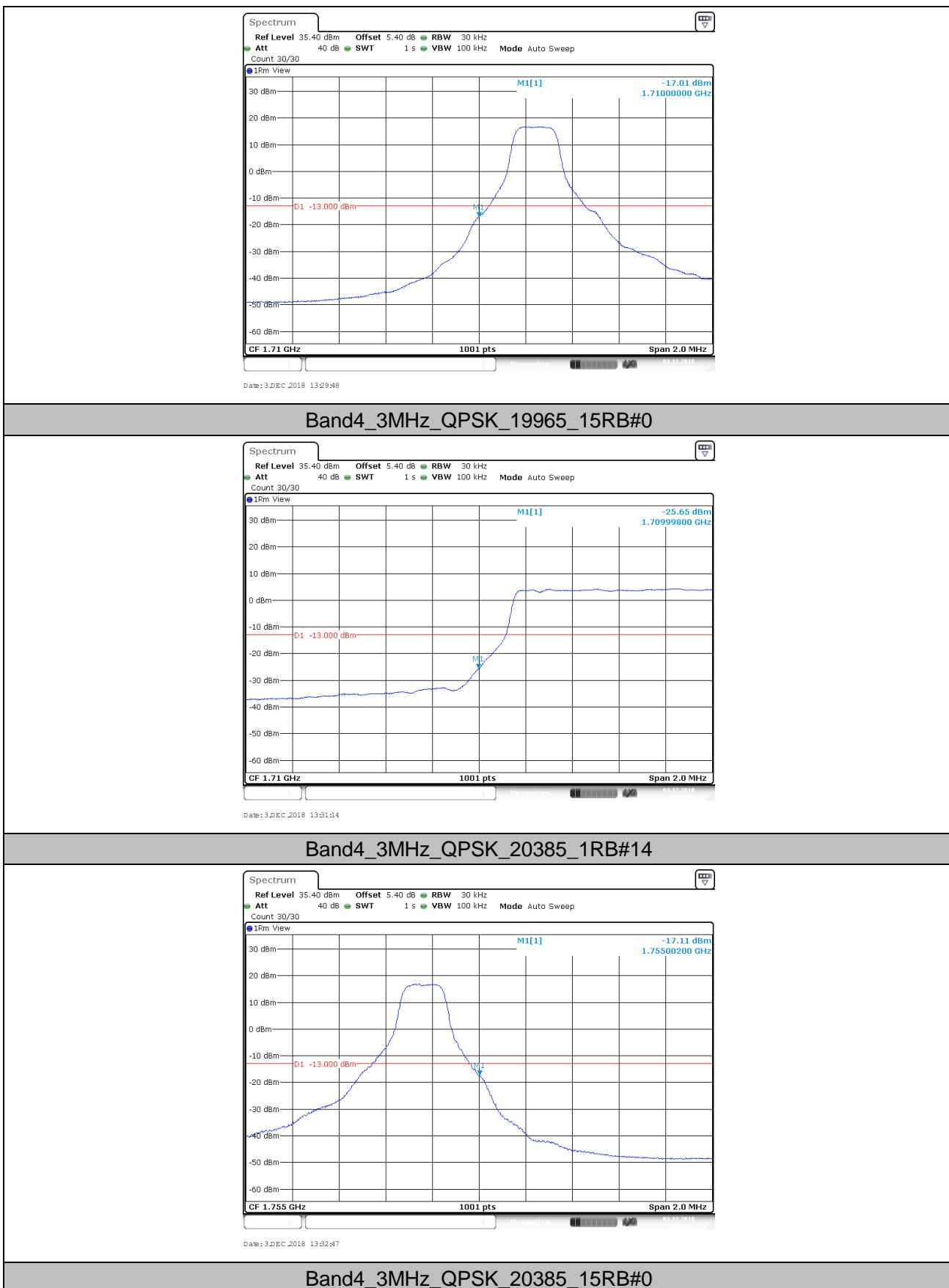
## 5. Band Edge Compliance

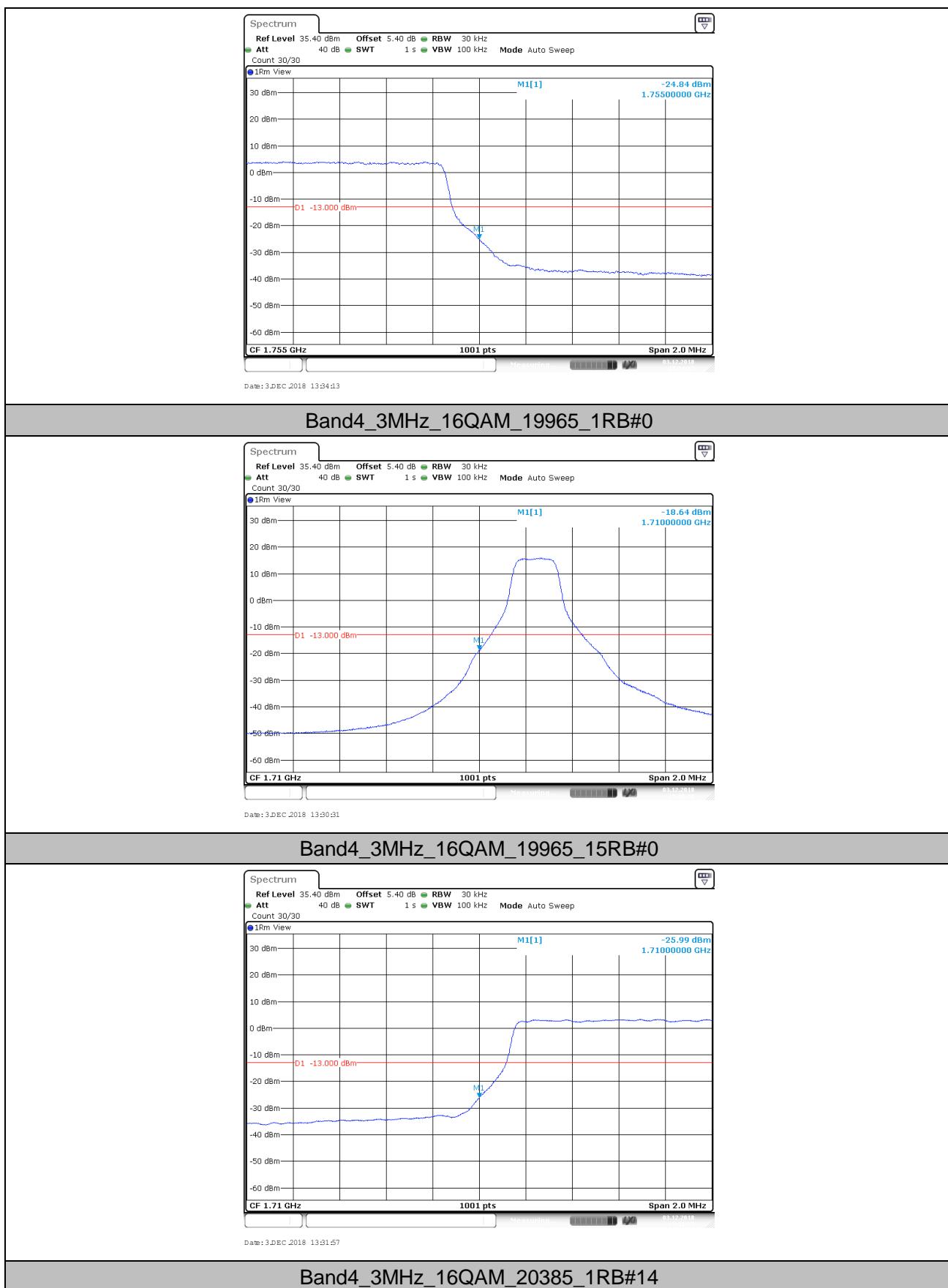
### 5.1. Test Plots

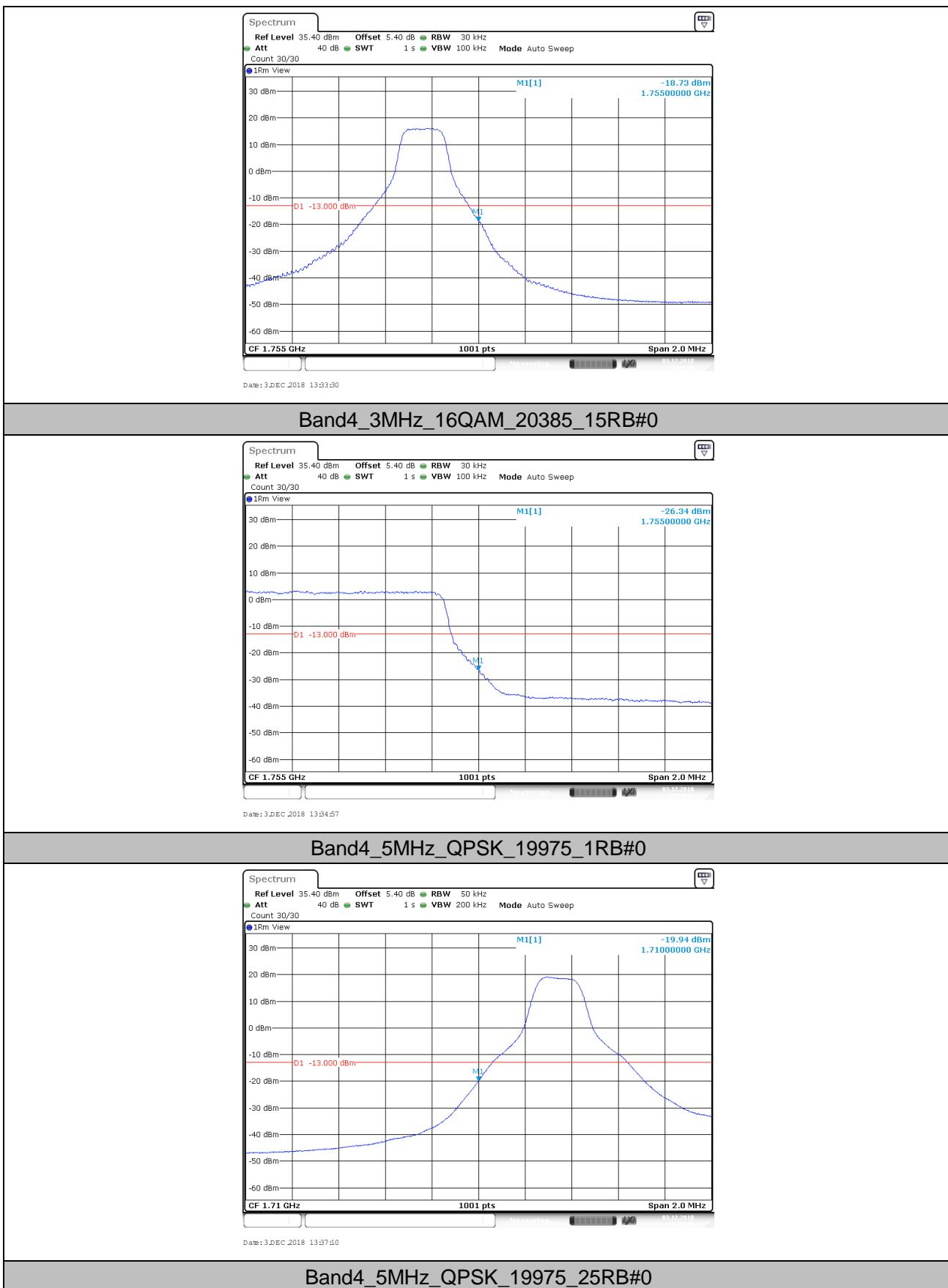


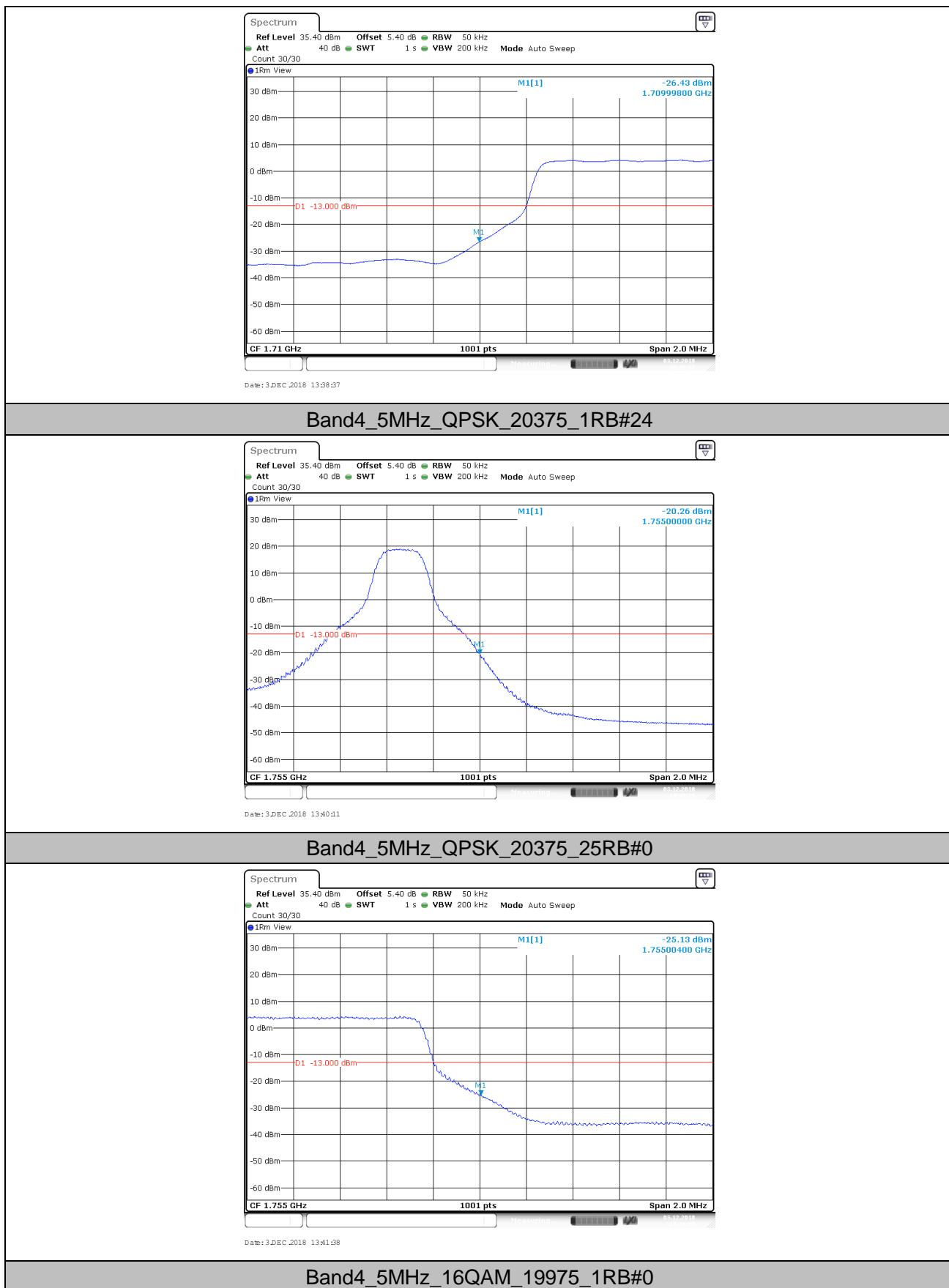


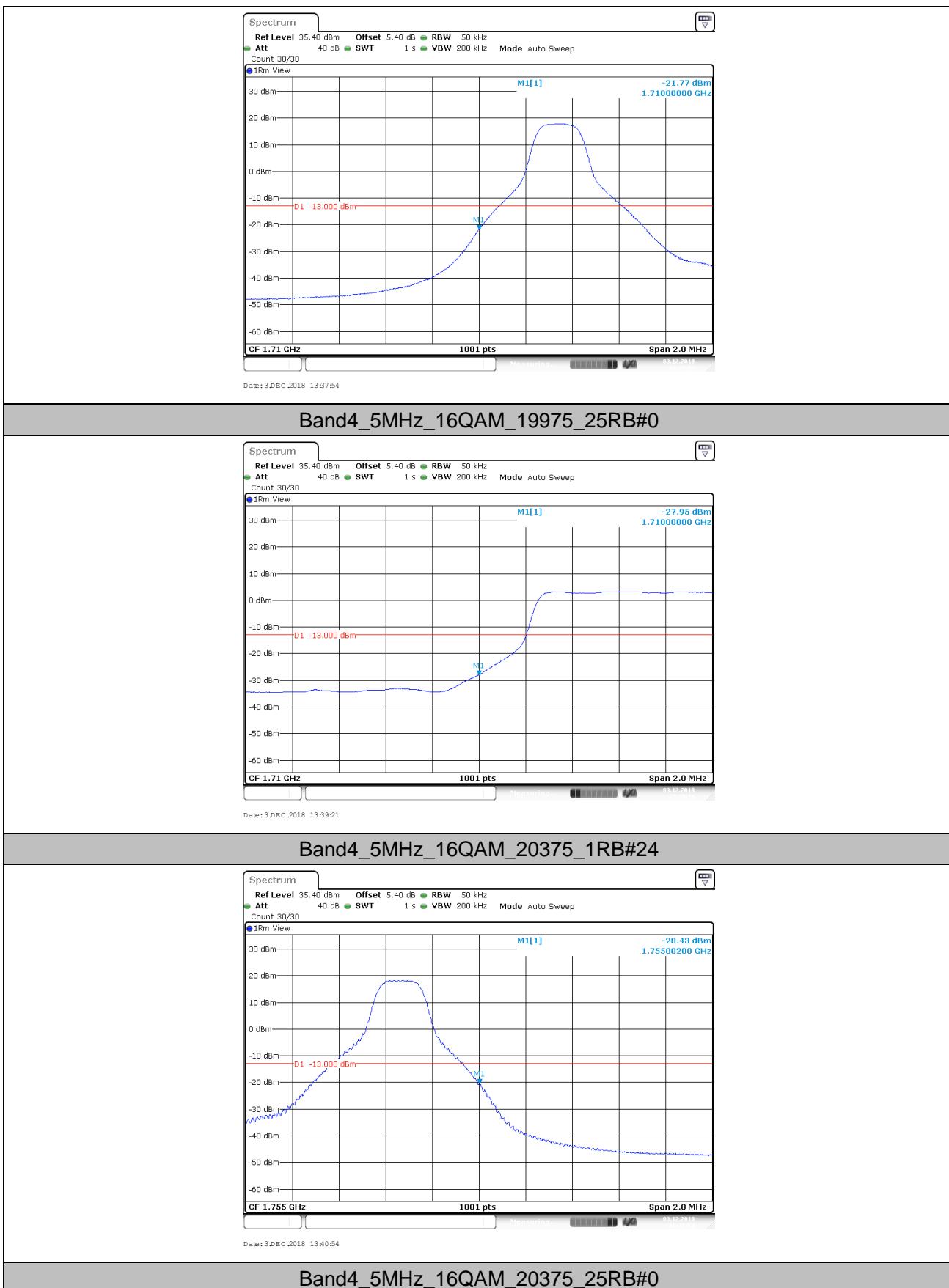


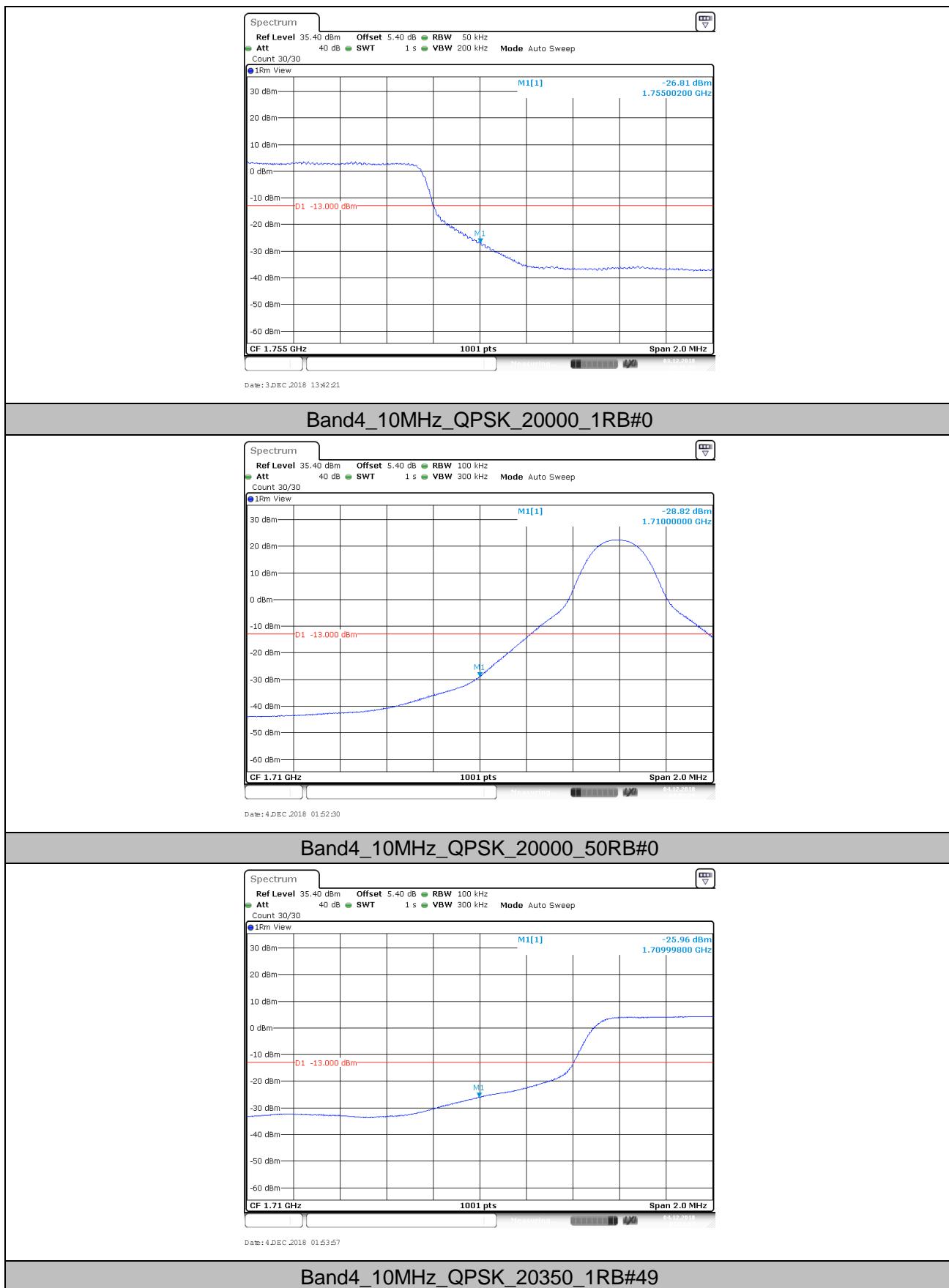


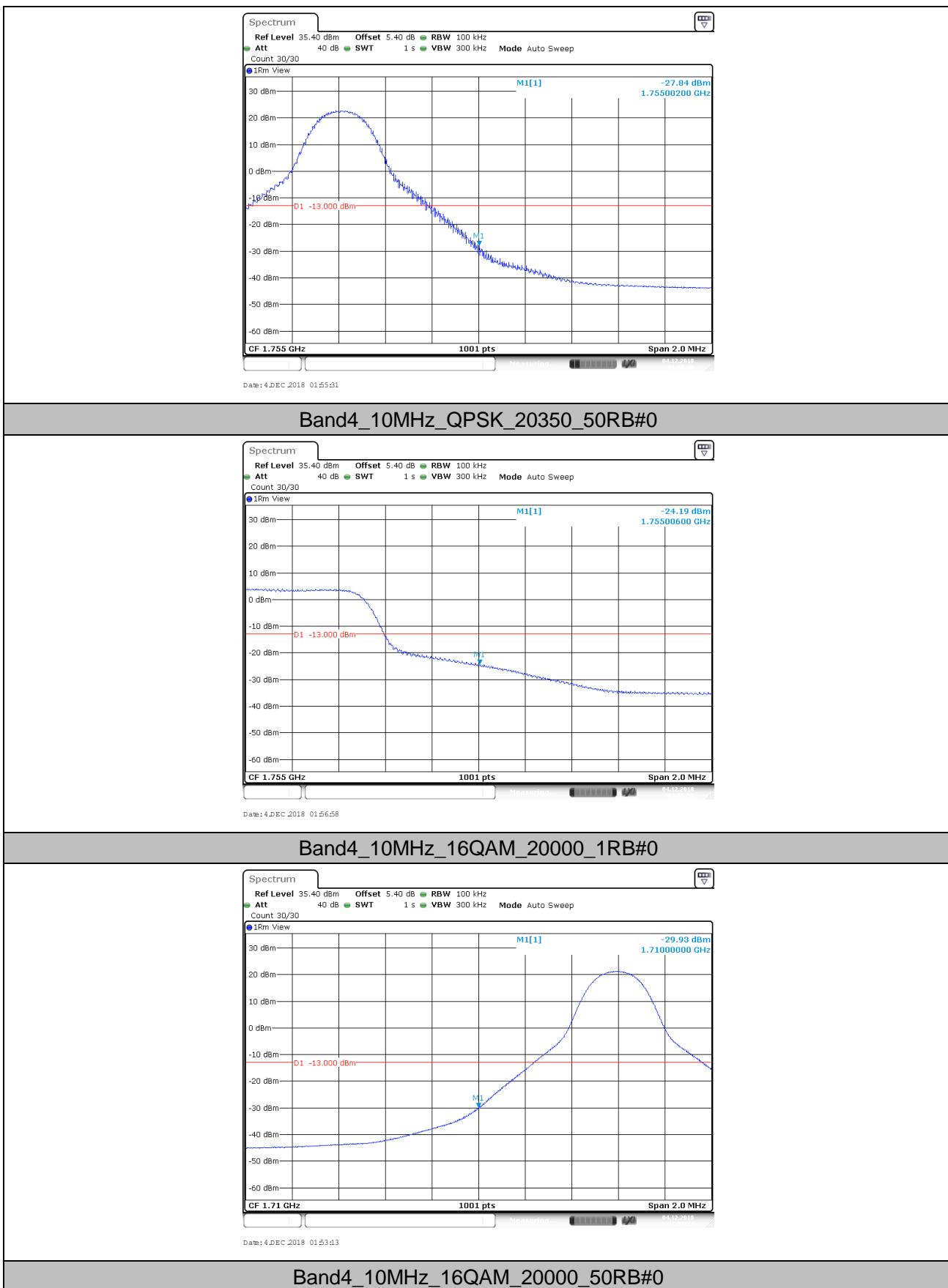


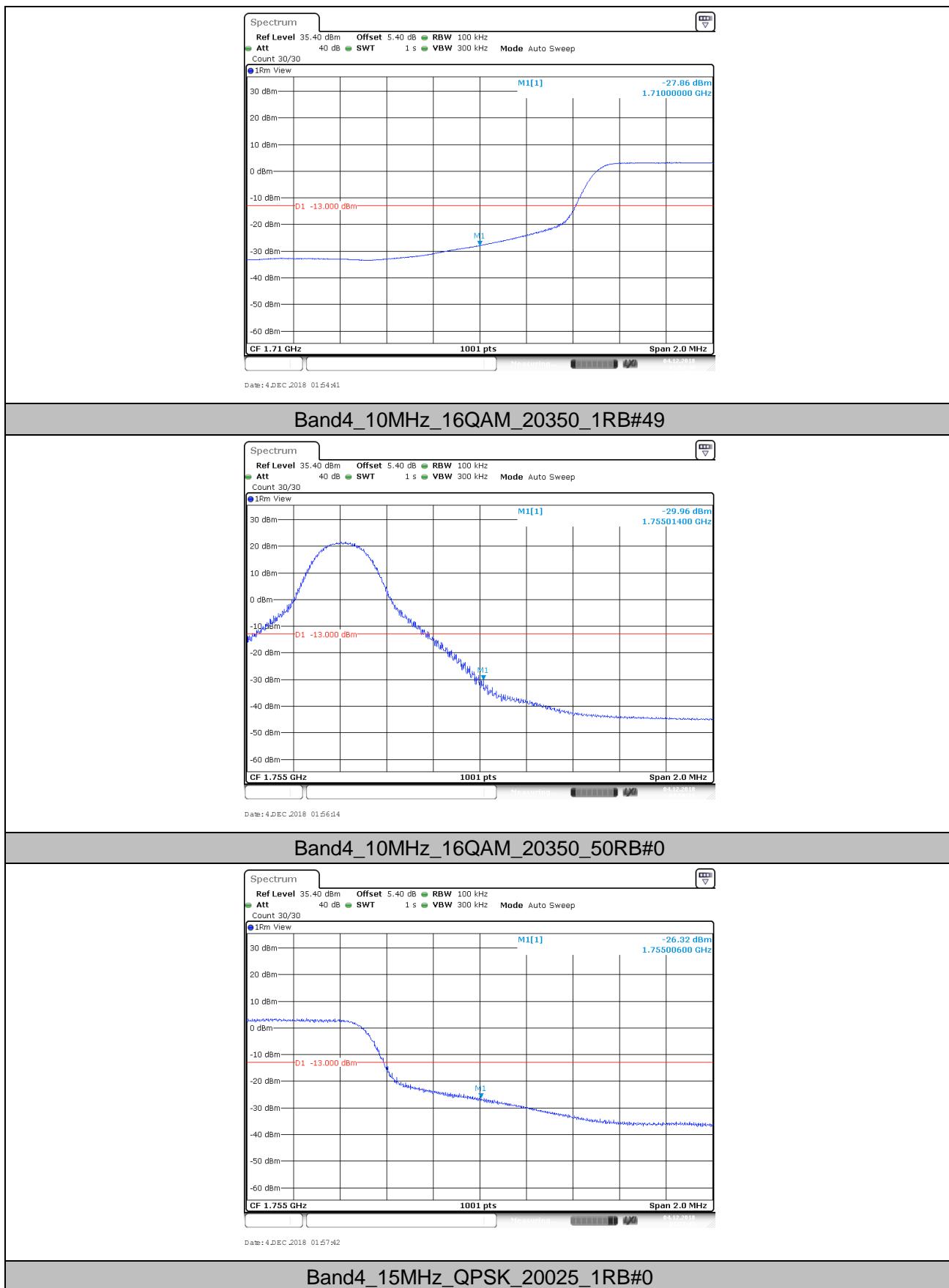


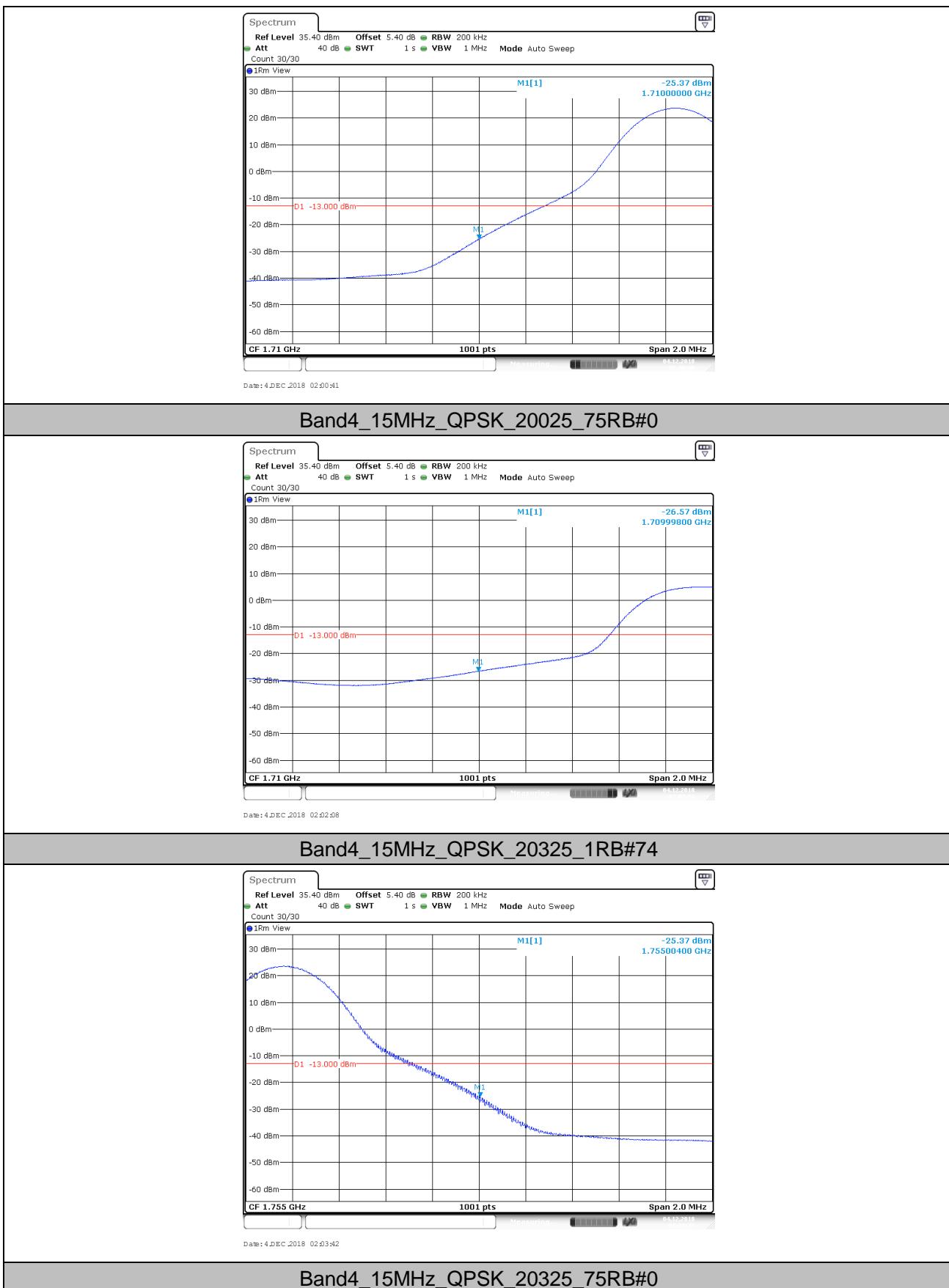


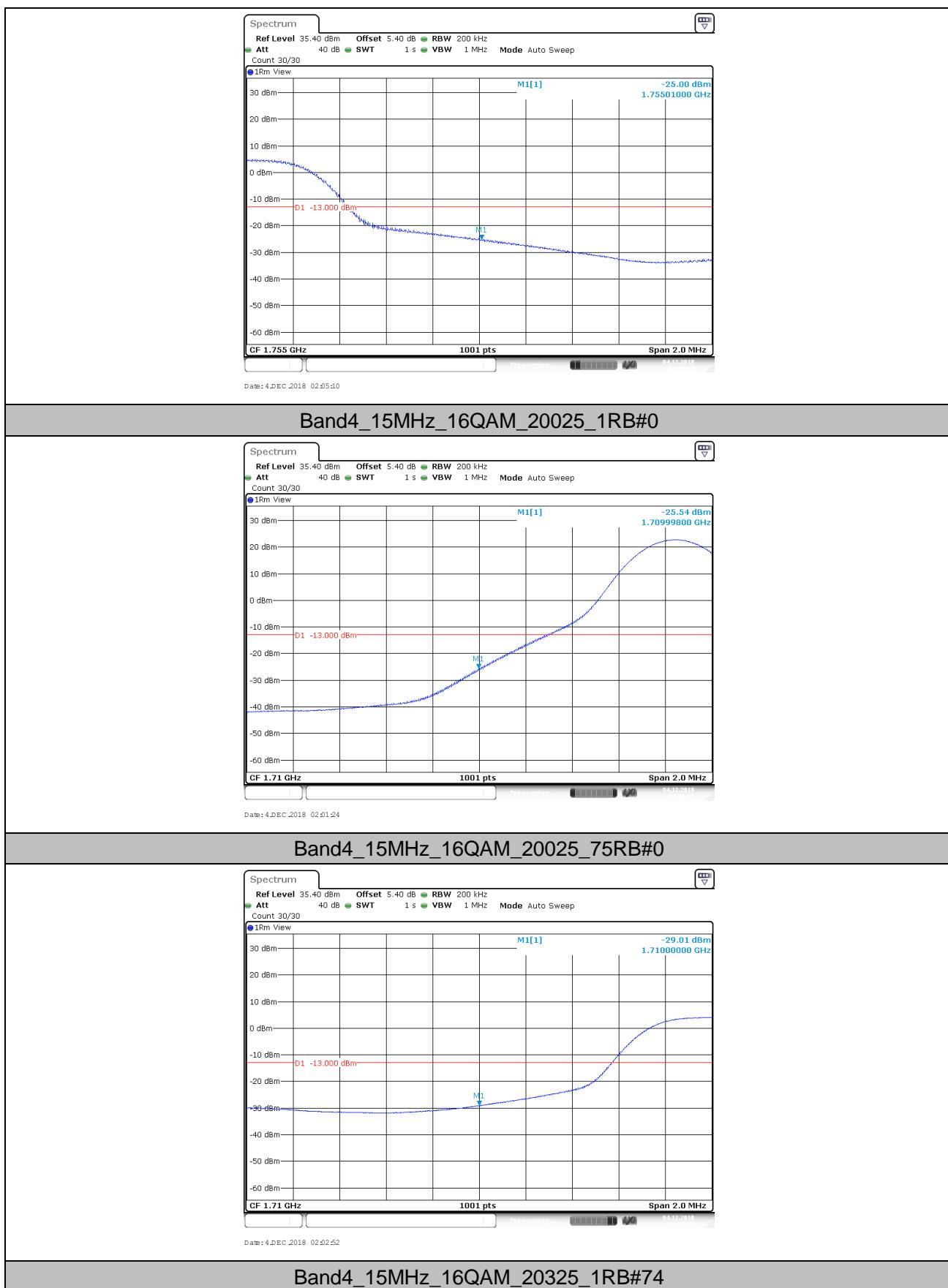


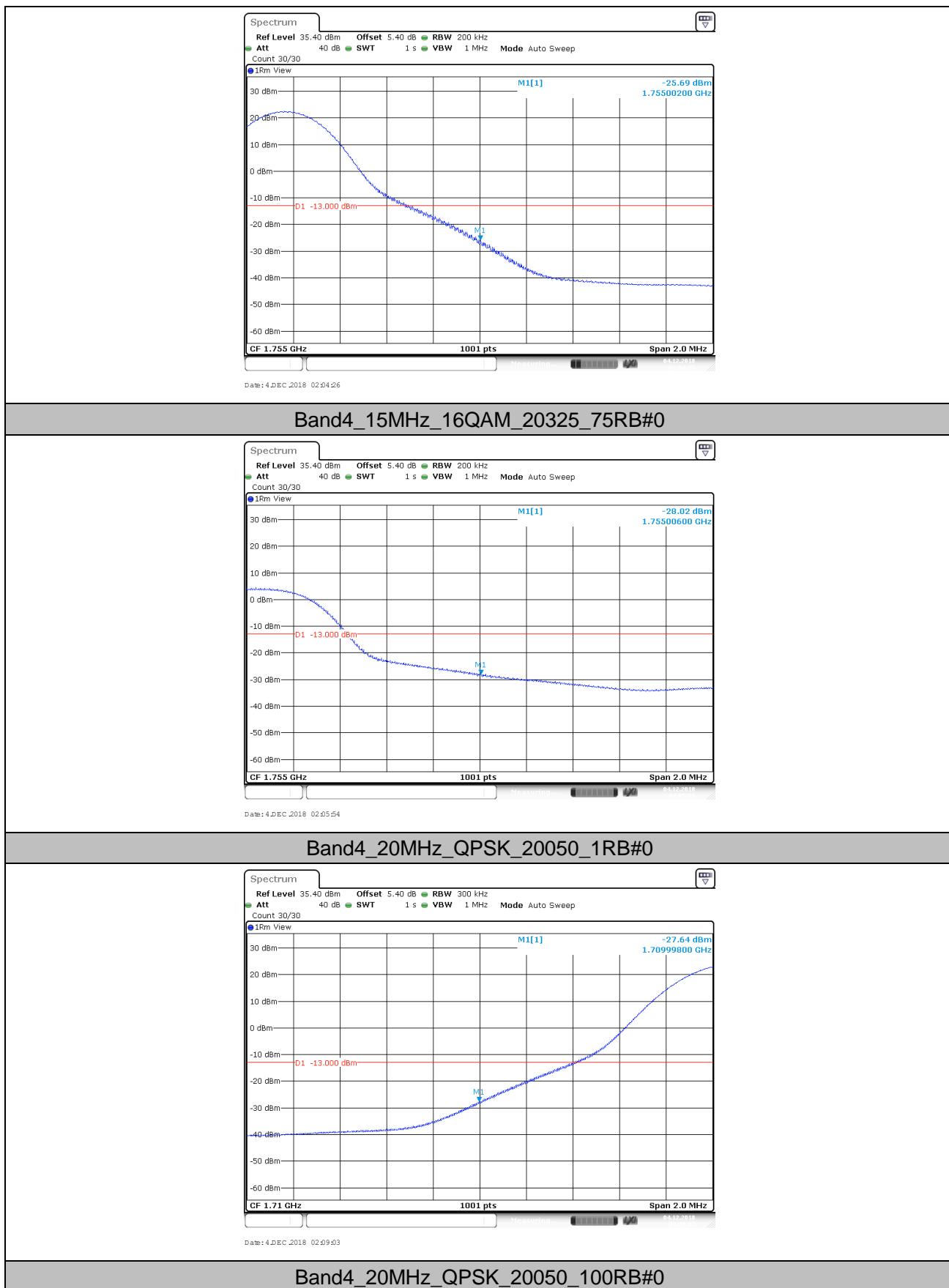


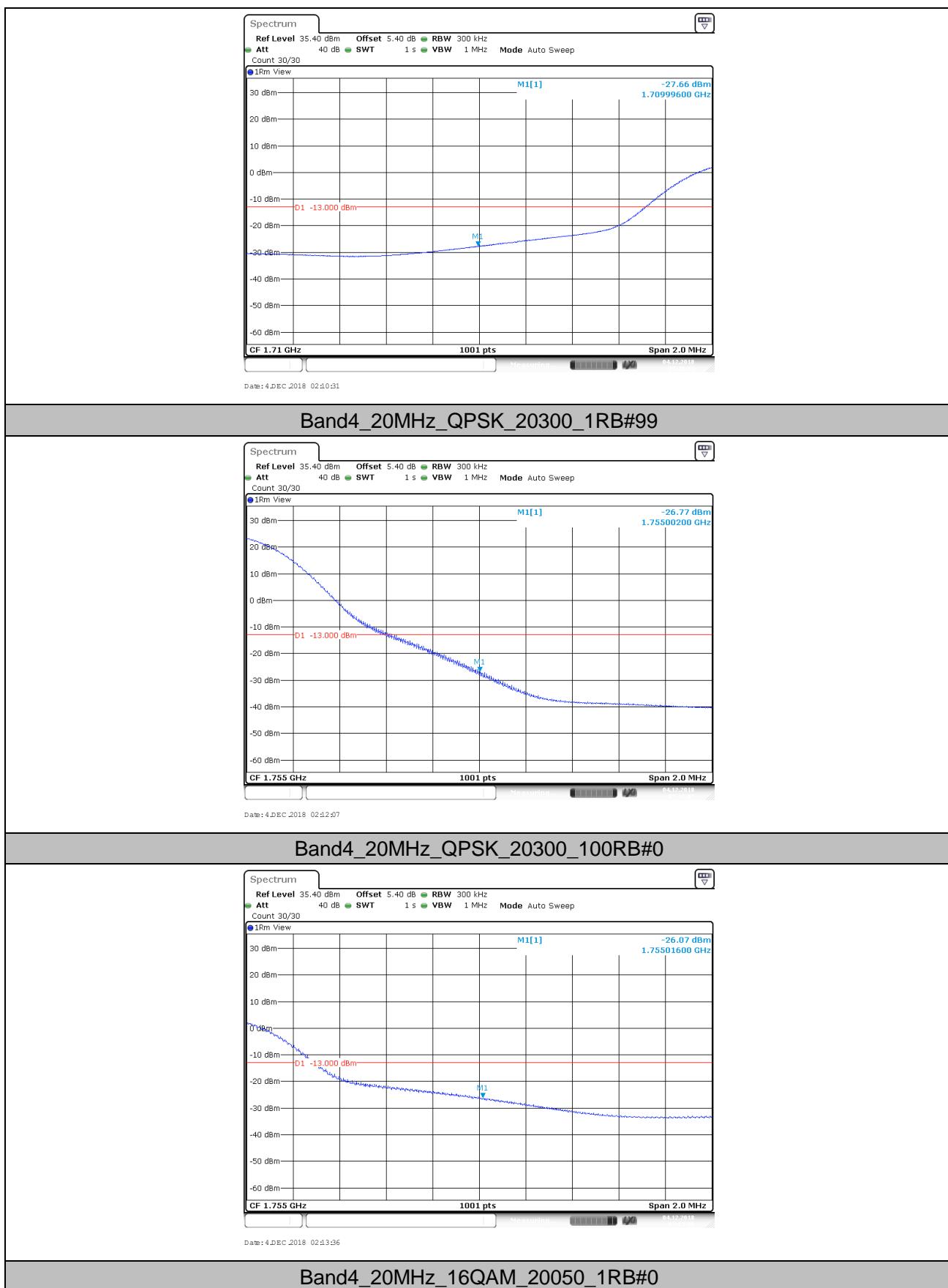


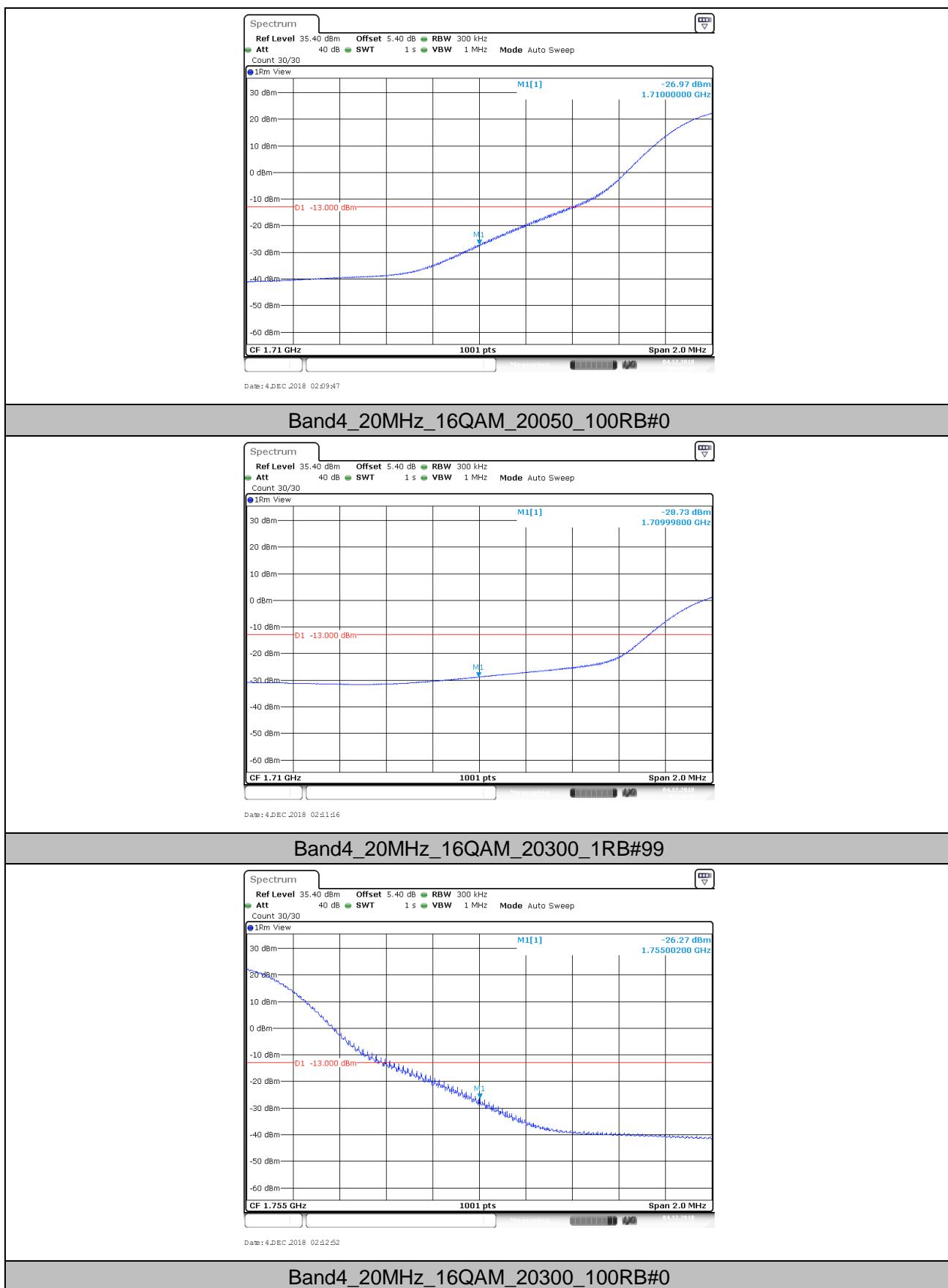


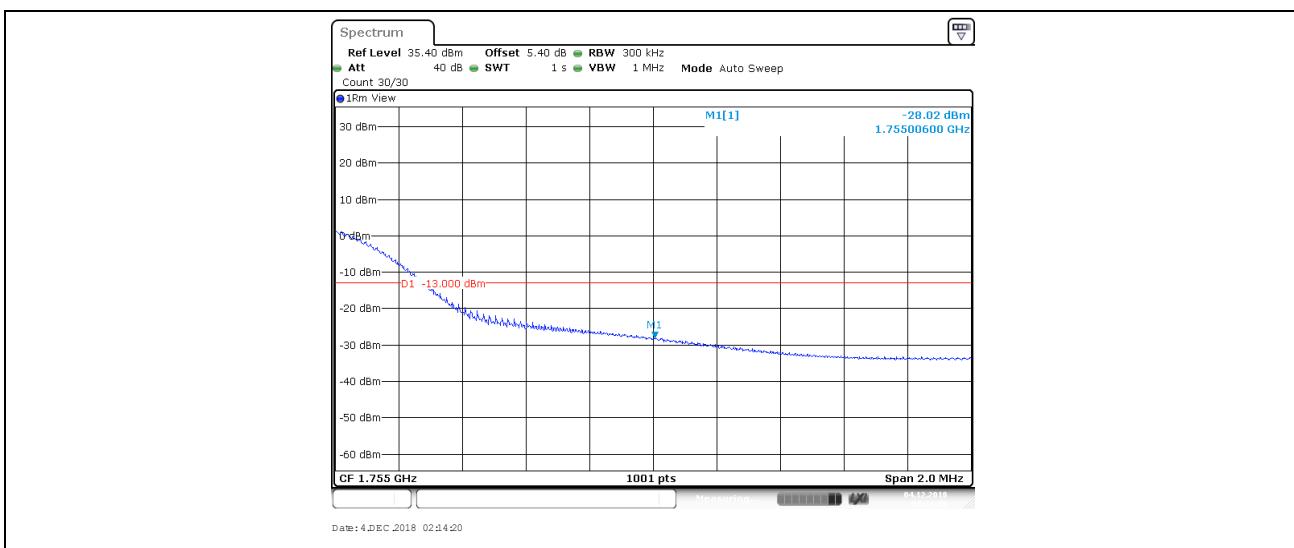










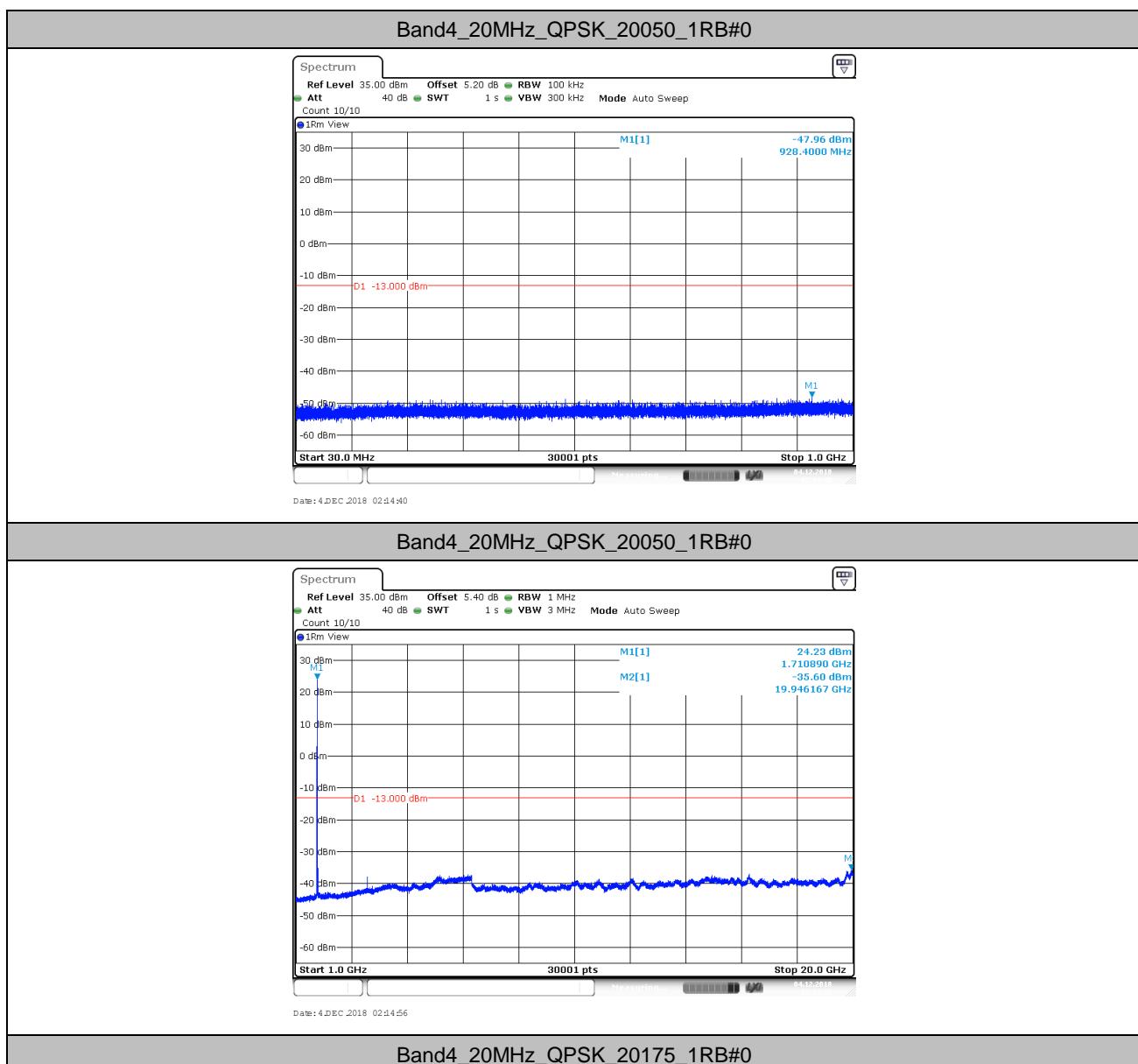


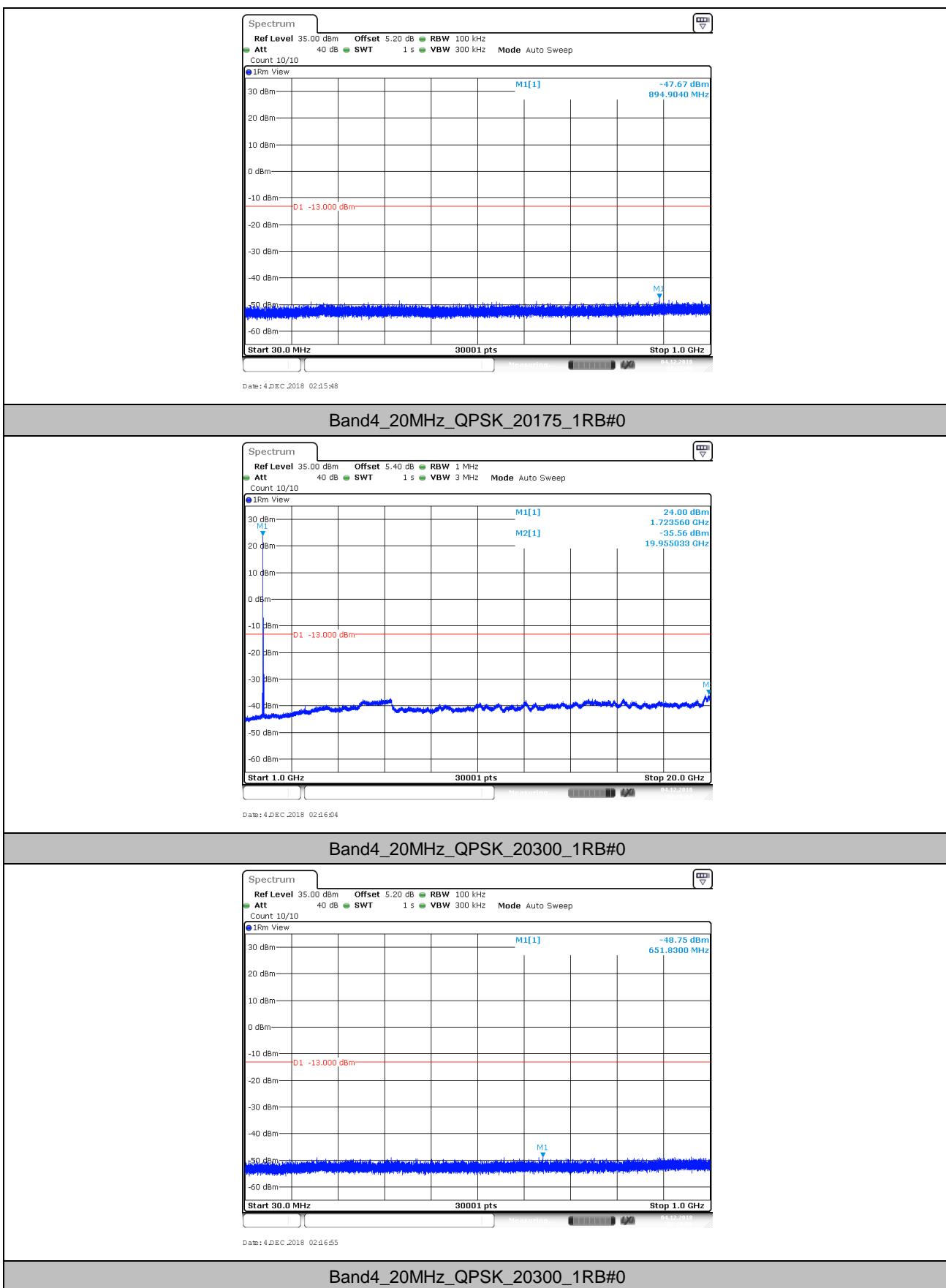
## 6. Spurious Emission at Antenna Terminal

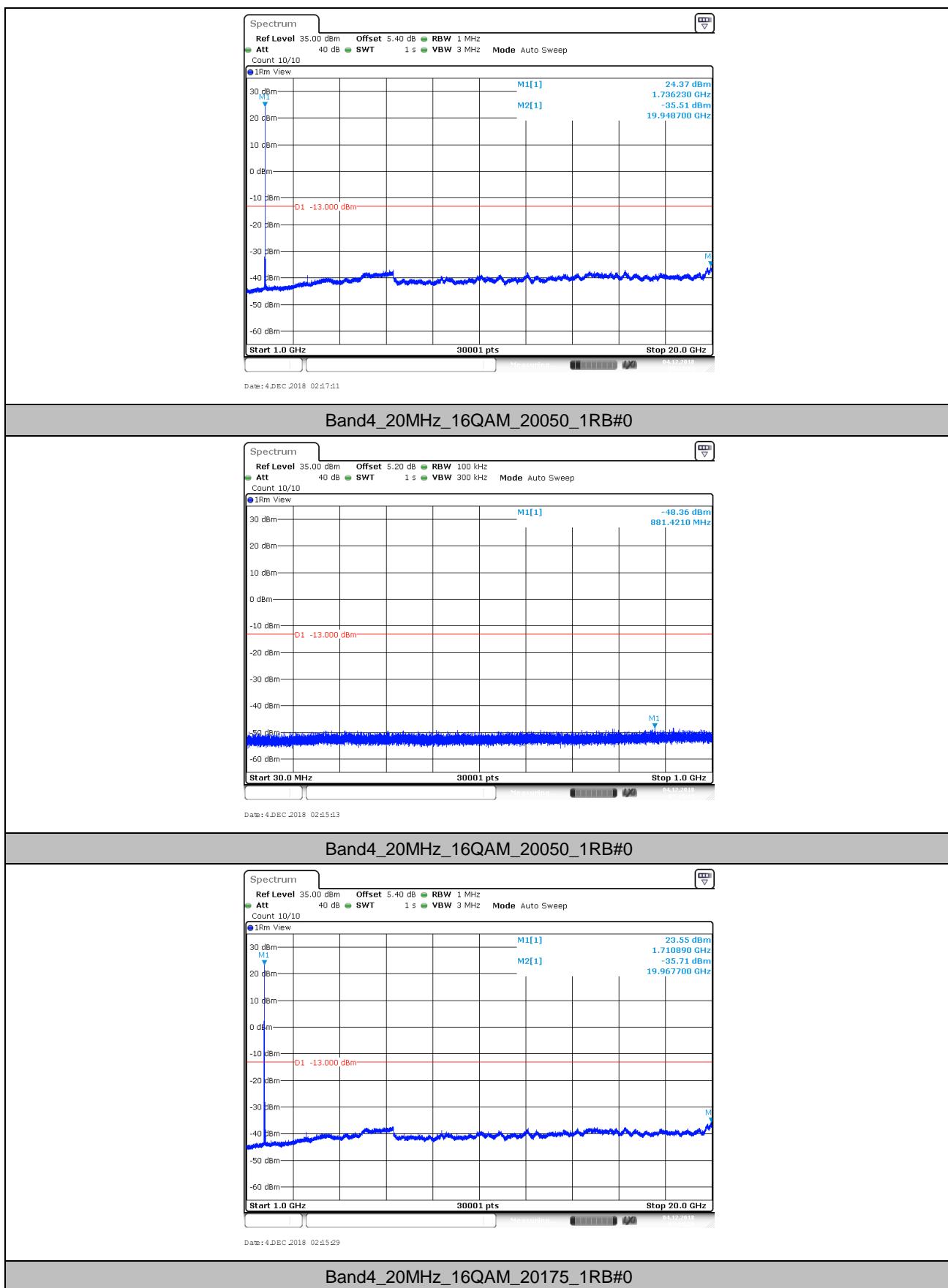
Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of  $< \text{RBW}/2$  so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =  $k * (\text{Span} / \text{RBW})$ " with  $k$  between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

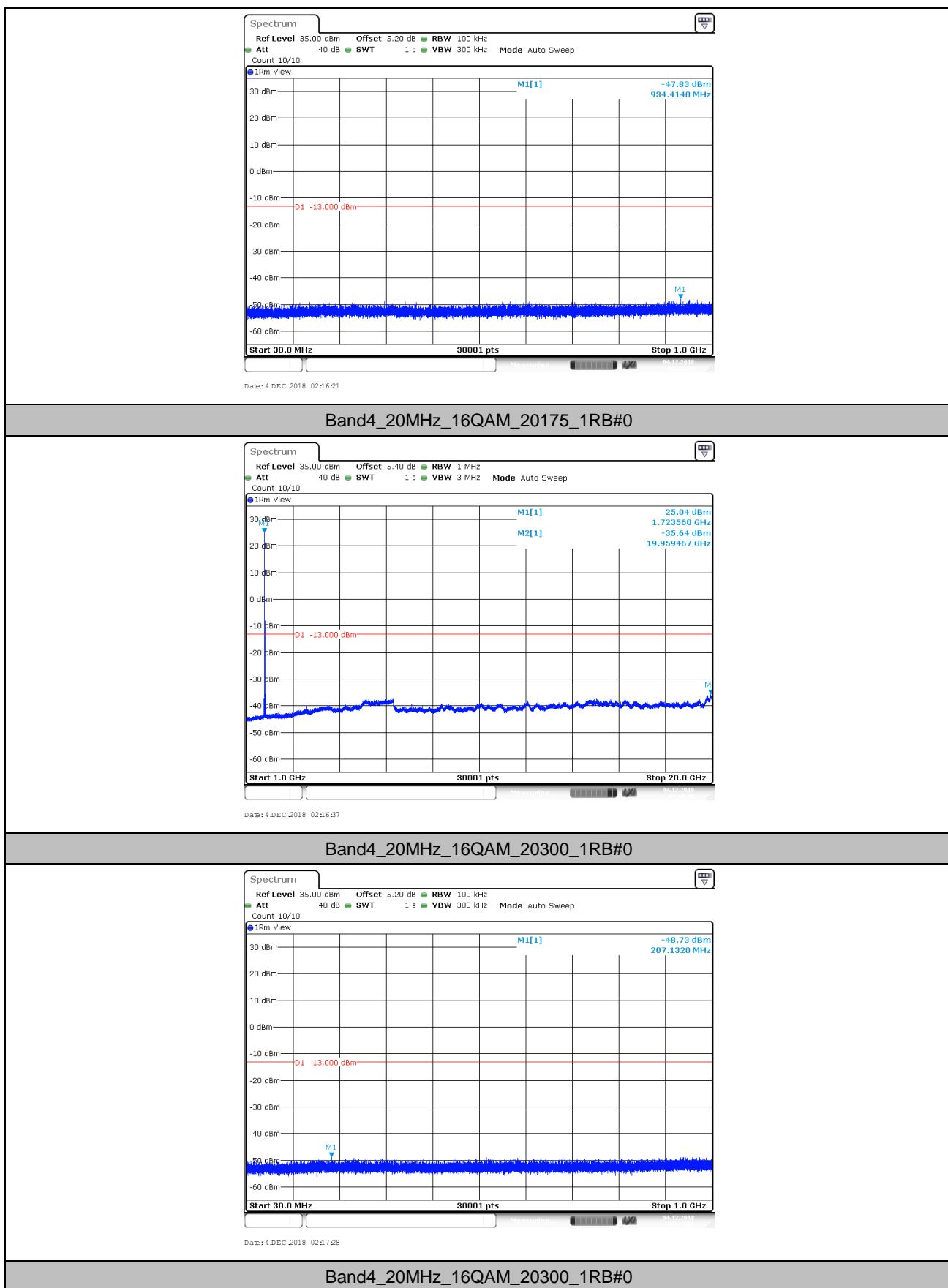
Remark2: only the worst case data displayed in this report.

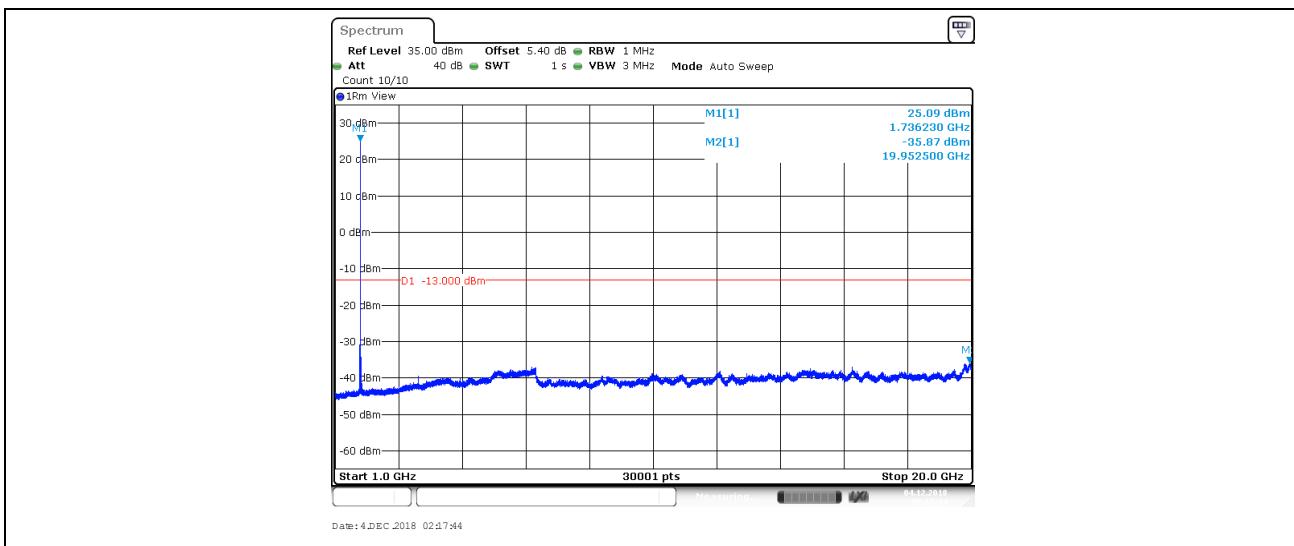
### 6.1. Test Plots











## 7. Field Strength of Spurious Radiation

### 7.1. Test BAND = LTE BAND 4

#### 7.1.1. Test Mode =LTE/TM1 20MHz

##### 7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
71.850000	-79.65	-13.00	66.65	Vertical
132.250000	-77.18	-13.00	64.18	Vertical
423.550000	-83.52	-13.00	70.52	Vertical
3421.850000	-61.28	-13.00	48.28	Vertical
5133.300000	-53.72	-13.00	40.72	Vertical
6844.425000	-62.15	-13.00	49.15	Vertical
63.450000	-77.09	-13.00	64.09	Horizontal
133.100000	-78.43	-13.00	65.43	Horizontal
211.900000	-74.60	-13.00	61.60	Horizontal
3422.175000	-59.98	-13.00	46.98	Horizontal
5132.975000	-65.48	-13.00	52.48	Horizontal
8102.175000	-64.82	-13.00	51.82	Horizontal

##### 7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
71.950000	-79.87	-13.00	66.87	Vertical
138.200000	-77.70	-13.00	64.70	Vertical
3446.875000	-65.62	-13.00	52.62	Vertical
5170.675000	-52.13	-13.00	39.13	Vertical
6894.150000	-61.42	-13.00	48.42	Vertical
8617.950000	-63.18	-13.00	50.18	Vertical
62.850000	-77.28	-13.00	64.28	Horizontal
132.000000	-78.38	-13.00	65.38	Horizontal
423.850000	-79.81	-13.00	66.81	Horizontal
3446.875000	-62.95	-13.00	49.95	Horizontal
5170.675000	-65.20	-13.00	52.20	Horizontal
7974.775000	-63.87	-13.00	50.87	Horizontal

**7.1.1.3. Test Channel = HCH**

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
72.100000	-79.23	-13.00	66.23	Vertical
133.300000	-76.81	-13.00	63.81	Vertical
318.500000	-86.55	-13.00	73.55	Vertical
3471.900000	-63.76	-13.00	50.76	Vertical
5208.050000	-51.30	-13.00	38.30	Vertical
6944.200000	-58.90	-13.00	45.90	Vertical
62.250000	-77.26	-13.00	64.26	Horizontal
212.050000	-74.82	-13.00	61.82	Horizontal
424.000000	-80.07	-13.00	67.07	Horizontal
3471.900000	-63.05	-13.00	50.05	Horizontal
5208.050000	-64.33	-13.00	51.33	Horizontal
9071.975000	-63.61	-13.00	50.61	Horizontal

## Remark:

- 1) The disturbance above 12.75GHz and 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.
- 2) We have tested all modulation and all Bandwidth , but only the worst case data presented in this report.

## 8. Frequency Stability

### 8.1. Frequency Vs Voltage

BAND	Bandwidth	Modulation	Channel	Voltage							Verdict
				RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)		
Band4	20MHz	QPSK	20050	100RB#0	VL	NT	-0.40	-0.000233	±2.5	PASS	
Band4	20MHz	QPSK	20050	100RB#0	VN	NT	0.70	0.000407	±2.5	PASS	
Band4	20MHz	QPSK	20050	100RB#0	VH	NT	0.90	0.000523	±2.5	PASS	
Band4	20MHz	QPSK	20175	100RB#0	VL	NT	-0.60	-0.000346	±2.5	PASS	
Band4	20MHz	QPSK	20175	100RB#0	VN	NT	0.20	0.000115	±2.5	PASS	
Band4	20MHz	QPSK	20175	100RB#0	VH	NT	0.40	0.000231	±2.5	PASS	
Band4	20MHz	QPSK	20300	100RB#0	VL	NT	-3.50	-0.002006	±2.5	PASS	
Band4	20MHz	QPSK	20300	100RB#0	VN	NT	-3.80	-0.002178	±2.5	PASS	
Band4	20MHz	QPSK	20300	100RB#0	VH	NT	-3.50	-0.002006	±2.5	PASS	
Band4	20MHz	16QAM	20050	100RB#0	VL	NT	2.40	0.001395	±2.5	PASS	
Band4	20MHz	16QAM	20050	100RB#0	VN	NT	1.80	0.001047	±2.5	PASS	
Band4	20MHz	16QAM	20050	100RB#0	VH	NT	0.00	0.000000	±2.5	PASS	
Band4	20MHz	16QAM	20175	100RB#0	VL	NT	-3.80	-0.002178	±2.5	PASS	
Band4	20MHz	16QAM	20175	100RB#0	VN	NT	0.40	0.000231	±2.5	PASS	
Band4	20MHz	16QAM	20175	100RB#0	VH	NT	1.80	0.001039	±2.5	PASS	
Band4	20MHz	16QAM	20300	100RB#0	VL	NT	-3.80	-0.002178	±2.5	PASS	
Band4	20MHz	16QAM	20300	100RB#0	VN	NT	-3.80	-0.002178	±2.5	PASS	
Band4	20MHz	16QAM	20300	100RB#0	VH	NT	-2.10	-0.001203	±2.5	PASS	

### 8.2. Frequency Vs Temperature

BAND	Bandwidth	Modulation	Channel	Temperature							Verdict
				RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)		
Band4	20MHz	QPSK	20050	100RB#0	NV	-30	2.60	0.001512	±2.5	PASS	
Band4	20MHz	QPSK	20050	100RB#0	NV	-20	1.60	0.000930	±2.5	PASS	
Band4	20MHz	QPSK	20050	100RB#0	NV	0	2.70	0.001570	±2.5	PASS	
Band4	20MHz	QPSK	20050	100RB#0	NV	10	2.60	0.001512	±2.5	PASS	
Band4	20MHz	QPSK	20050	100RB#0	NV	20	1.40	0.000814	±2.5	PASS	
Band4	20MHz	QPSK	20050	100RB#0	NV	30	0.60	0.000349	±2.5	PASS	
Band4	20MHz	QPSK	20050	100RB#0	NV	40	0.10	0.000058	±2.5	PASS	
Band4	20MHz	QPSK	20050	100RB#0	NV	50	2.80	0.001628	±2.5	PASS	
Band4	20MHz	QPSK	20175	100RB#0	NV	-30	0.30	0.000173	±2.5	PASS	
Band4	20MHz	QPSK	20175	100RB#0	NV	-20	0.50	0.000289	±2.5	PASS	
Band4	20MHz	QPSK	20175	100RB#0	NV	0	1.00	0.000577	±2.5	PASS	
Band4	20MHz	QPSK	20175	100RB#0	NV	10	-0.40	-0.000231	±2.5	PASS	
Band4	20MHz	QPSK	20175	100RB#0	NV	20	-0.20	-0.000115	±2.5	PASS	
Band4	20MHz	QPSK	20175	100RB#0	NV	30	2.10	0.001212	±2.5	PASS	
Band4	20MHz	QPSK	20175	100RB#0	NV	40	-0.80	-0.000462	±2.5	PASS	
Band4	20MHz	QPSK	20175	100RB#0	NV	50	-0.50	-0.000289	±2.5	PASS	
Band4	20MHz	QPSK	20300	100RB#0	NV	-30	-2.20	-0.001261	±2.5	PASS	
Band4	20MHz	QPSK	20300	100RB#0	NV	-20	-2.70	-0.001547	±2.5	PASS	
Band4	20MHz	QPSK	20300	100RB#0	NV	0	-2.40	-0.001375	±2.5	PASS	
Band4	20MHz	QPSK	20300	100RB#0	NV	10	-2.90	-0.001662	±2.5	PASS	

Band4	20MHz	QPSK	20300	100RB#0	NV	20	-0.60	-0.000344	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	30	-1.30	-0.000745	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	40	-1.60	-0.000917	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	50	-3.50	-0.002006	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	-30	1.00	0.000581	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	-20	1.10	0.000640	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	0	0.50	0.000291	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	10	0.40	0.000233	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	20	0.60	0.000349	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	30	1.00	0.000581	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	40	3.00	0.001744	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	50	2.80	0.001628	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	-30	0.70	0.000404	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	-20	0.70	0.000404	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	0	-1.40	-0.000808	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	10	-0.40	-0.000231	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	20	0.10	0.000058	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	30	0.20	0.000115	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	40	2.40	0.001385	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	50	1.20	0.000693	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	-30	-1.40	-0.000808	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	-20	-0.40	-0.000231	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	0	-2.30	-0.001318	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	10	-3.10	-0.001777	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	20	-2.70	-0.001547	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	30	-2.40	-0.001375	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	40	-2.30	-0.001318	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	50	-2.20	-0.001261	±2.5	PASS

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The End