

Appendix B

E-UTRA BAND 2

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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
Band2	1.4MHz	QPSK	18607	1RB#0	23.00	14.20	33.00	PASS
Band2	1.4MHz	QPSK	18607	1RB#2	23.13	14.33	33.00	PASS
Band2	1.4MHz	QPSK	18607	1RB#5	23.12	14.32	33.00	PASS
Band2	1.4MHz	QPSK	18607	3RB#0	23.18	14.38	33.00	PASS
Band2	1.4MHz	QPSK	18607	3RB#1	23.44	14.64	33.00	PASS
Band2	1.4MHz	QPSK	18607	3RB#3	23.27	14.47	33.00	PASS
Band2	1.4MHz	QPSK	18607	6RB#0	22.20	13.40	33.00	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	23.11	14.31	33.00	PASS
Band2	1.4MHz	QPSK	18900	1RB#2	23.15	14.35	33.00	PASS
Band2	1.4MHz	QPSK	18900	1RB#5	22.66	13.86	33.00	PASS
Band2	1.4MHz	QPSK	18900	3RB#0	22.96	14.16	33.00	PASS
Band2	1.4MHz	QPSK	18900	3RB#1	23.11	14.31	33.00	PASS
Band2	1.4MHz	QPSK	18900	3RB#3	23.17	14.37	33.00	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	22.00	13.20	33.00	PASS
Band2	1.4MHz	QPSK	19193	1RB#0	23.20	14.40	33.00	PASS
Band2	1.4MHz	QPSK	19193	1RB#2	23.17	14.37	33.00	PASS
Band2	1.4MHz	QPSK	19193	1RB#5	22.84	14.04	33.00	PASS
Band2	1.4MHz	QPSK	19193	3RB#0	23.11	14.31	33.00	PASS
Band2	1.4MHz	QPSK	19193	3RB#1	23.31	14.51	33.00	PASS
Band2	1.4MHz	QPSK	19193	3RB#3	23.47	14.67	33.00	PASS
Band2	1.4MHz	QPSK	19193	6RB#0	22.31	13.51	33.00	PASS
Band2	1.4MHz	16QAM	18607	1RB#0	21.56	12.76	33.00	PASS
Band2	1.4MHz	16QAM	18607	1RB#2	21.77	12.97	33.00	PASS
Band2	1.4MHz	16QAM	18607	1RB#5	21.66	12.86	33.00	PASS
Band2	1.4MHz	16QAM	18607	3RB#0	22.35	13.55	33.00	PASS
Band2	1.4MHz	16QAM	18607	3RB#1	22.32	13.52	33.00	PASS
Band2	1.4MHz	16QAM	18607	3RB#3	22.15	13.35	33.00	PASS
Band2	1.4MHz	16QAM	18607	6RB#0	21.29	12.49	33.00	PASS
Band2	1.4MHz	16QAM	18900	1RB#0	21.61	12.81	33.00	PASS
Band2	1.4MHz	16QAM	18900	1RB#2	21.74	12.94	33.00	PASS
Band2	1.4MHz	16QAM	18900	1RB#5	21.76	12.96	33.00	PASS
Band2	1.4MHz	16QAM	18900	3RB#0	22.13	13.33	33.00	PASS
Band2	1.4MHz	16QAM	18900	3RB#1	22.18	13.38	33.00	PASS
Band2	1.4MHz	16QAM	18900	3RB#3	22.32	13.52	33.00	PASS
Band2	1.4MHz	16QAM	18900	6RB#0	20.92	12.12	33.00	PASS



Band2	1.4MHz	16QAM	19193	1RB#0	21.70	12.90	33.00	PASS
Band2	1.4MHz	16QAM	19193	1RB#2	21.89	13.09	33.00	PASS
Band2	1.4MHz	16QAM	19193	1RB#5	21.72	12.92	33.00	PASS
Band2	1.4MHz	16QAM	19193	3RB#0	22.32	13.52	33.00	PASS
Band2	1.4MHz	16QAM	19193	3RB#1	22.38	13.58	33.00	PASS
Band2	1.4MHz	16QAM	19193	3RB#3	22.20	13.40	33.00	PASS
Band2	1.4MHz	16QAM	19193	6RB#0	21.30	12.50	33.00	PASS
Band2	3MHz	QPSK	18615	1RB#0	23.23	14.43	33.00	PASS
Band2	3MHz	QPSK	18615	1RB#8	23.21	14.41	33.00	PASS
Band2	3MHz	QPSK	18615	1RB#14	23.27	14.47	33.00	PASS
Band2	3MHz	QPSK	18615	8RB#0	22.33	13.53	33.00	PASS
Band2	3MHz	QPSK	18615	8RB#4	22.29	13.49	33.00	PASS
Band2	3MHz	QPSK	18615	8RB#7	22.27	13.47	33.00	PASS
Band2	3MHz	QPSK	18615	15RB#0	22.36	13.56	33.00	PASS
Band2	3MHz	QPSK	18900	1RB#0	23.27	14.47	33.00	PASS
Band2	3MHz	QPSK	18900	1RB#8	23.53	14.73	33.00	PASS
Band2	3MHz	QPSK	18900	1RB#14	23.17	14.37	33.00	PASS
Band2	3MHz	QPSK	18900	8RB#0	22.26	13.46	33.00	PASS
Band2	3MHz	QPSK	18900	8RB#4	22.44	13.64	33.00	PASS
Band2	3MHz	QPSK	18900	8RB#7	22.38	13.58	33.00	PASS
Band2	3MHz	QPSK	18900	15RB#0	22.39	13.59	33.00	PASS
Band2	3MHz	QPSK	19185	1RB#0	23.57	14.77	33.00	PASS
Band2	3MHz	QPSK	19185	1RB#8	23.20	14.40	33.00	PASS
Band2	3MHz	QPSK	19185	1RB#14	23.06	14.26	33.00	PASS
Band2	3MHz	QPSK	19185	8RB#0	22.63	13.83	33.00	PASS
Band2	3MHz	QPSK	19185	8RB#4	22.37	13.57	33.00	PASS
Band2	3MHz	QPSK	19185	8RB#7	22.29	13.49	33.00	PASS
Band2	3MHz	QPSK	19185	15RB#0	22.57	13.77	33.00	PASS
Band2	3MHz	16QAM	18615	1RB#0	21.61	12.81	33.00	PASS
Band2	3MHz	16QAM	18615	1RB#8	21.66	12.86	33.00	PASS
Band2	3MHz	16QAM	18615	1RB#14	21.61	12.81	33.00	PASS
Band2	3MHz	16QAM	18615	8RB#0	21.45	12.65	33.00	PASS
Band2	3MHz	16QAM	18615	8RB#4	21.40	12.60	33.00	PASS
Band2	3MHz	16QAM	18615	8RB#7	21.48	12.68	33.00	PASS
Band2	3MHz	16QAM	18615	15RB#0	21.32	12.52	33.00	PASS
Band2	3MHz	16QAM	18900	1RB#0	21.69	12.89	33.00	PASS
Band2	3MHz	16QAM	18900	1RB#8	21.80	13.00	33.00	PASS
Band2	3MHz	16QAM	18900	1RB#14	21.76	12.96	33.00	PASS
Band2	3MHz	16QAM	18900	8RB#0	21.00	12.20	33.00	PASS
Band2	3MHz	16QAM	18900	8RB#4	21.24	12.44	33.00	PASS
Band2	3MHz	16QAM	18900	8RB#7	21.21	12.41	33.00	PASS
Band2	3MHz	16QAM	18900	15RB#0	21.46	12.66	33.00	PASS



Band2	3MHz	16QAM	19185	1RB#0	22.28	13.48	33.00	PASS
Band2	3MHz	16QAM	19185	1RB#8	21.82	13.02	33.00	PASS
Band2	3MHz	16QAM	19185	1RB#14	22.45	13.65	33.00	PASS
Band2	3MHz	16QAM	19185	8RB#0	21.37	12.57	33.00	PASS
Band2	3MHz	16QAM	19185	8RB#4	21.42	12.62	33.00	PASS
Band2	3MHz	16QAM	19185	8RB#7	21.42	12.62	33.00	PASS
Band2	3MHz	16QAM	19185	15RB#0	21.51	12.71	33.00	PASS
Band2	5MHz	QPSK	18625	1RB#0	23.30	14.50	33.00	PASS
Band2	5MHz	QPSK	18625	1RB#12	23.36	14.56	33.00	PASS
Band2	5MHz	QPSK	18625	1RB#24	23.12	14.32	33.00	PASS
Band2	5MHz	QPSK	18625	12RB#0	22.47	13.67	33.00	PASS
Band2	5MHz	QPSK	18625	12RB#6	22.38	13.58	33.00	PASS
Band2	5MHz	QPSK	18625	12RB#13	22.24	13.44	33.00	PASS
Band2	5MHz	QPSK	18625	25RB#0	22.42	13.62	33.00	PASS
Band2	5MHz	QPSK	18900	1RB#0	22.98	14.18	33.00	PASS
Band2	5MHz	QPSK	18900	1RB#12	23.44	14.64	33.00	PASS
Band2	5MHz	QPSK	18900	1RB#24	22.93	14.13	33.00	PASS
Band2	5MHz	QPSK	18900	12RB#0	22.15	13.35	33.00	PASS
Band2	5MHz	QPSK	18900	12RB#6	22.36	13.56	33.00	PASS
Band2	5MHz	QPSK	18900	12RB#13	22.29	13.49	33.00	PASS
Band2	5MHz	QPSK	18900	25RB#0	22.28	13.48	33.00	PASS
Band2	5MHz	QPSK	19175	1RB#0	23.13	14.33	33.00	PASS
Band2	5MHz	QPSK	19175	1RB#12	23.16	14.36	33.00	PASS
Band2	5MHz	QPSK	19175	1RB#24	22.86	14.06	33.00	PASS
Band2	5MHz	QPSK	19175	12RB#0	22.73	13.93	33.00	PASS
Band2	5MHz	QPSK	19175	12RB#6	22.40	13.60	33.00	PASS
Band2	5MHz	QPSK	19175	12RB#13	22.15	13.35	33.00	PASS
Band2	5MHz	QPSK	19175	25RB#0	22.65	13.85	33.00	PASS
Band2	5MHz	16QAM	18625	1RB#0	22.22	13.42	33.00	PASS
Band2	5MHz	16QAM	18625	1RB#12	21.94	13.14	33.00	PASS
Band2	5MHz	16QAM	18625	1RB#24	21.63	12.83	33.00	PASS
Band2	5MHz	16QAM	18625	12RB#0	21.30	12.50	33.00	PASS
Band2	5MHz	16QAM	18625	12RB#6	21.38	12.58	33.00	PASS
Band2	5MHz	16QAM	18625	12RB#13	21.13	12.33	33.00	PASS
Band2	5MHz	16QAM	18625	25RB#0	21.11	12.31	33.00	PASS
Band2	5MHz	16QAM	18900	1RB#0	21.96	13.16	33.00	PASS
Band2	5MHz	16QAM	18900	1RB#12	22.01	13.21	33.00	PASS
Band2	5MHz	16QAM	18900	1RB#24	21.96	13.16	33.00	PASS
Band2	5MHz	16QAM	18900	12RB#0	21.05	12.25	33.00	PASS
Band2	5MHz	16QAM	18900	12RB#6	21.17	12.37	33.00	PASS
Band2	5MHz	16QAM	18900	12RB#13	21.21	12.41	33.00	PASS
Band2	5MHz	16QAM	18900	25RB#0	21.25	12.45	33.00	PASS



Band2	5MHz	16QAM	19175	1RB#0	22.28	13.48	33.00	PASS
Band2	5MHz	16QAM	19175	1RB#12	22.57	13.77	33.00	PASS
Band2	5MHz	16QAM	19175	1RB#24	22.36	13.56	33.00	PASS
Band2	5MHz	16QAM	19175	12RB#0	21.40	12.60	33.00	PASS
Band2	5MHz	16QAM	19175	12RB#6	21.40	12.60	33.00	PASS
Band2	5MHz	16QAM	19175	12RB#13	21.41	12.61	33.00	PASS
Band2	5MHz	16QAM	19175	25RB#0	21.44	12.64	33.00	PASS
Band2	10MHz	QPSK	18650	1RB#0	23.18	14.38	33.00	PASS
Band2	10MHz	QPSK	18650	1RB#24	23.76	14.96	33.00	PASS
Band2	10MHz	QPSK	18650	1RB#49	22.59	13.79	33.00	PASS
Band2	10MHz	QPSK	18650	25RB#0	22.75	13.95	33.00	PASS
Band2	10MHz	QPSK	18650	25RB#12	22.47	13.67	33.00	PASS
Band2	10MHz	QPSK	18650	25RB#25	22.22	13.42	33.00	PASS
Band2	10MHz	QPSK	18650	50RB#0	22.39	13.59	33.00	PASS
Band2	10MHz	QPSK	18900	1RB#0	23.09	14.29	33.00	PASS
Band2	10MHz	QPSK	18900	1RB#24	23.79	14.99	33.00	PASS
Band2	10MHz	QPSK	18900	1RB#49	22.91	14.11	33.00	PASS
Band2	10MHz	QPSK	18900	25RB#0	22.67	13.87	33.00	PASS
Band2	10MHz	QPSK	18900	25RB#12	22.72	13.92	33.00	PASS
Band2	10MHz	QPSK	18900	25RB#25	22.29	13.49	33.00	PASS
Band2	10MHz	QPSK	18900	50RB#0	22.39	13.59	33.00	PASS
Band2	10MHz	QPSK	19150	1RB#0	23.38	14.58	33.00	PASS
Band2	10MHz	QPSK	19150	1RB#24	24.18	15.38	33.00	PASS
Band2	10MHz	QPSK	19150	1RB#49	22.54	13.74	33.00	PASS
Band2	10MHz	QPSK	19150	25RB#0	22.98	14.18	33.00	PASS
Band2	10MHz	QPSK	19150	25RB#12	22.58	13.78	33.00	PASS
Band2	10MHz	QPSK	19150	25RB#25	22.17	13.37	33.00	PASS
Band2	10MHz	QPSK	19150	50RB#0	22.51	13.71	33.00	PASS
Band2	10MHz	16QAM	18650	1RB#0	22.15	13.35	33.00	PASS
Band2	10MHz	16QAM	18650	1RB#24	22.01	13.21	33.00	PASS
Band2	10MHz	16QAM	18650	1RB#49	21.93	13.13	33.00	PASS
Band2	10MHz	16QAM	18650	27RB#0	21.21	12.41	33.00	PASS
Band2	10MHz	16QAM	18900	1RB#0	21.95	13.15	33.00	PASS
Band2	10MHz	16QAM	18900	1RB#24	22.43	13.63	33.00	PASS
Band2	10MHz	16QAM	18900	1RB#49	21.98	13.18	33.00	PASS
Band2	10MHz	16QAM	18900	27RB#0	21.16	12.36	33.00	PASS
Band2	10MHz	16QAM	19150	1RB#0	21.99	13.19	33.00	PASS
Band2	10MHz	16QAM	19150	1RB#24	22.26	13.46	33.00	PASS
Band2	10MHz	16QAM	19150	1RB#49	21.91	13.11	33.00	PASS
Band2	10MHz	16QAM	19150	27RB#0	21.09	12.29	33.00	PASS
Band2	15MHz	QPSK	18675	1RB#0	23.20	14.40	33.00	PASS
Band2	15MHz	QPSK	18675	1RB#38	23.74	14.94	33.00	PASS



Band2	15MHz	QPSK	18675	1RB#74	22.82	14.02	33.00	PASS
Band2	15MHz	QPSK	18675	36RB#0	22.79	13.99	33.00	PASS
Band2	15MHz	QPSK	18675	36RB#18	22.62	13.82	33.00	PASS
Band2	15MHz	QPSK	18675	36RB#39	22.27	13.47	33.00	PASS
Band2	15MHz	QPSK	18675	75RB#0	22.22	13.42	33.00	PASS
Band2	15MHz	QPSK	18900	1RB#0	22.67	13.87	33.00	PASS
Band2	15MHz	QPSK	18900	1RB#38	24.31	15.51	33.00	PASS
Band2	15MHz	QPSK	18900	1RB#74	22.96	14.16	33.00	PASS
Band2	15MHz	QPSK	18900	36RB#0	22.60	13.80	33.00	PASS
Band2	15MHz	QPSK	18900	36RB#18	22.79	13.99	33.00	PASS
Band2	15MHz	QPSK	18900	36RB#39	22.40	13.60	33.00	PASS
Band2	15MHz	QPSK	18900	75RB#0	22.34	13.54	33.00	PASS
Band2	15MHz	QPSK	19125	1RB#0	22.59	13.79	33.00	PASS
Band2	15MHz	QPSK	19125	1RB#38	23.82	15.02	33.00	PASS
Band2	15MHz	QPSK	19125	1RB#74	22.59	13.79	33.00	PASS
Band2	15MHz	QPSK	19125	36RB#0	22.87	14.07	33.00	PASS
Band2	15MHz	QPSK	19125	36RB#18	22.68	13.88	33.00	PASS
Band2	15MHz	QPSK	19125	36RB#39	22.27	13.47	33.00	PASS
Band2	15MHz	QPSK	19125	75RB#0	22.23	13.43	33.00	PASS
Band2	15MHz	16QAM	18675	1RB#0	21.72	12.92	33.00	PASS
Band2	15MHz	16QAM	18675	1RB#38	22.33	13.53	33.00	PASS
Band2	15MHz	16QAM	18675	1RB#74	22.11	13.31	33.00	PASS
Band2	15MHz	16QAM	18675	27RB#0	21.16	12.36	33.00	PASS
Band2	15MHz	16QAM	18900	1RB#0	21.88	13.08	33.00	PASS
Band2	15MHz	16QAM	18900	1RB#38	22.34	13.54	33.00	PASS
Band2	15MHz	16QAM	18900	1RB#74	22.35	13.55	33.00	PASS
Band2	15MHz	16QAM	18900	27RB#0	21.34	12.54	33.00	PASS
Band2	15MHz	16QAM	19125	1RB#0	21.79	12.99	33.00	PASS
Band2	15MHz	16QAM	19125	1RB#38	21.87	13.07	33.00	PASS
Band2	15MHz	16QAM	19125	1RB#74	21.63	12.83	33.00	PASS
Band2	15MHz	16QAM	19125	27RB#0	21.11	12.31	33.00	PASS
Band2	20MHz	QPSK	18700	1RB#0	23.27	14.47	33.00	PASS
Band2	20MHz	QPSK	18700	1RB#49	24.05	15.25	33.00	PASS
Band2	20MHz	QPSK	18700	1RB#99	22.93	14.13	33.00	PASS
Band2	20MHz	QPSK	18700	50RB#0	22.97	14.17	33.00	PASS
Band2	20MHz	QPSK	18700	50RB#25	22.67	13.87	33.00	PASS
Band2	20MHz	QPSK	18700	50RB#50	22.43	13.63	33.00	PASS
Band2	20MHz	QPSK	18700	100RB#0	22.21	13.41	33.00	PASS
Band2	20MHz	QPSK	18900	1RB#0	22.64	13.84	33.00	PASS
Band2	20MHz	QPSK	18900	1RB#49	24.46	15.66	33.00	PASS
Band2	20MHz	QPSK	18900	1RB#99	22.80	14.00	33.00	PASS
Band2	20MHz	QPSK	18900	50RB#0	22.73	13.93	33.00	PASS



Band2	20MHz	QPSK	18900	50RB#25	22.90	14.10	33.00	PASS
Band2	20MHz	QPSK	18900	50RB#50	22.46	13.66	33.00	PASS
Band2	20MHz	QPSK	18900	100RB#0	22.16	13.36	33.00	PASS
Band2	20MHz	QPSK	19100	1RB#0	22.88	14.08	33.00	PASS
Band2	20MHz	QPSK	19100	1RB#49	23.15	14.35	33.00	PASS
Band2	20MHz	QPSK	19100	1RB#99	22.61	13.81	33.00	PASS
Band2	20MHz	QPSK	19100	50RB#0	22.98	14.18	33.00	PASS
Band2	20MHz	QPSK	19100	50RB#25	22.61	13.81	33.00	PASS
Band2	20MHz	QPSK	19100	50RB#50	22.25	13.45	33.00	PASS
Band2	20MHz	QPSK	19100	100RB#0	22.22	13.42	33.00	PASS
Band2	20MHz	16QAM	18700	1RB#0	21.51	12.71	33.00	PASS
Band2	20MHz	16QAM	18700	1RB#49	21.67	12.87	33.00	PASS
Band2	20MHz	16QAM	18700	1RB#99	21.73	12.93	33.00	PASS
Band2	20MHz	16QAM	18700	27RB#0	21.14	12.34	33.00	PASS
Band2	20MHz	16QAM	18900	1RB#0	21.86	13.06	33.00	PASS
Band2	20MHz	16QAM	18900	1RB#49	21.93	13.13	33.00	PASS
Band2	20MHz	16QAM	18900	1RB#99	21.63	12.83	33.00	PASS
Band2	20MHz	16QAM	18900	27RB#0	21.11	12.31	33.00	PASS
Band2	20MHz	16QAM	19100	1RB#0	21.57	12.77	33.00	PASS
Band2	20MHz	16QAM	19100	1RB#49	22.05	13.25	33.00	PASS
Band2	20MHz	16QAM	19100	1RB#99	21.57	12.77	33.00	PASS
Band2	20MHz	16QAM	19100	27RB#0	21.12	12.32	33.00	PASS

Remark:

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

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

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

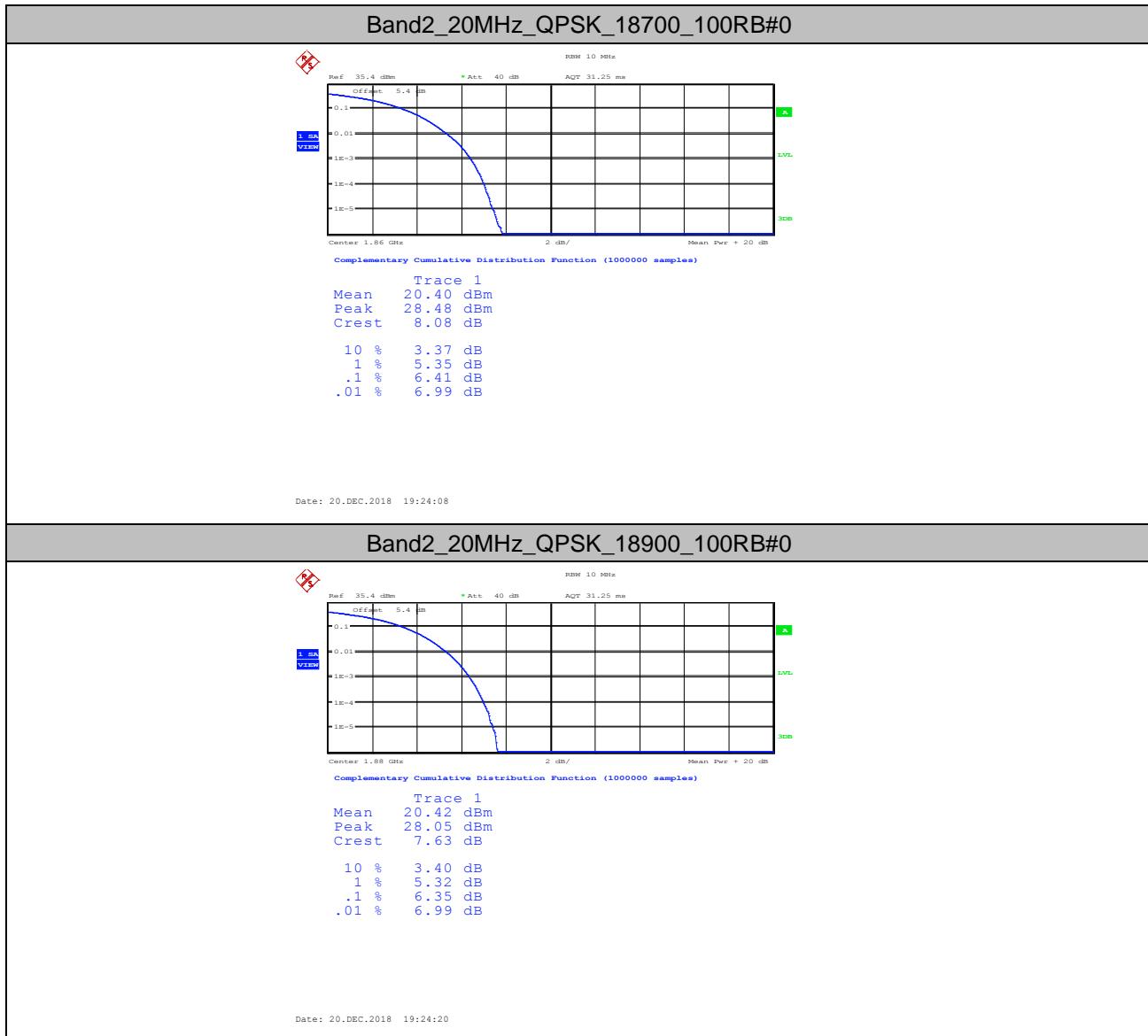
b: SGP=Signal Generator Level

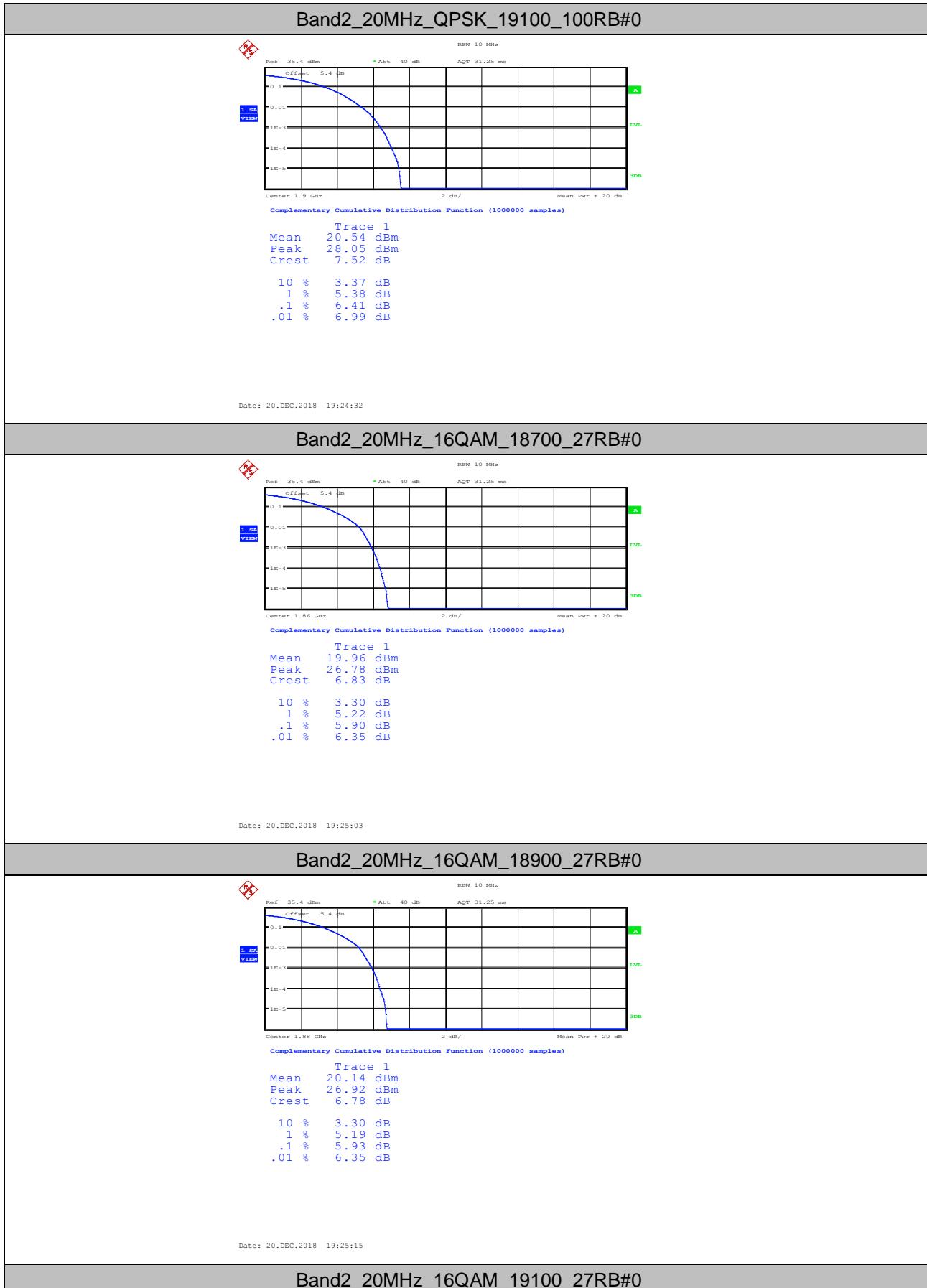
2. Peak-to-Average Ratio(CCDF)

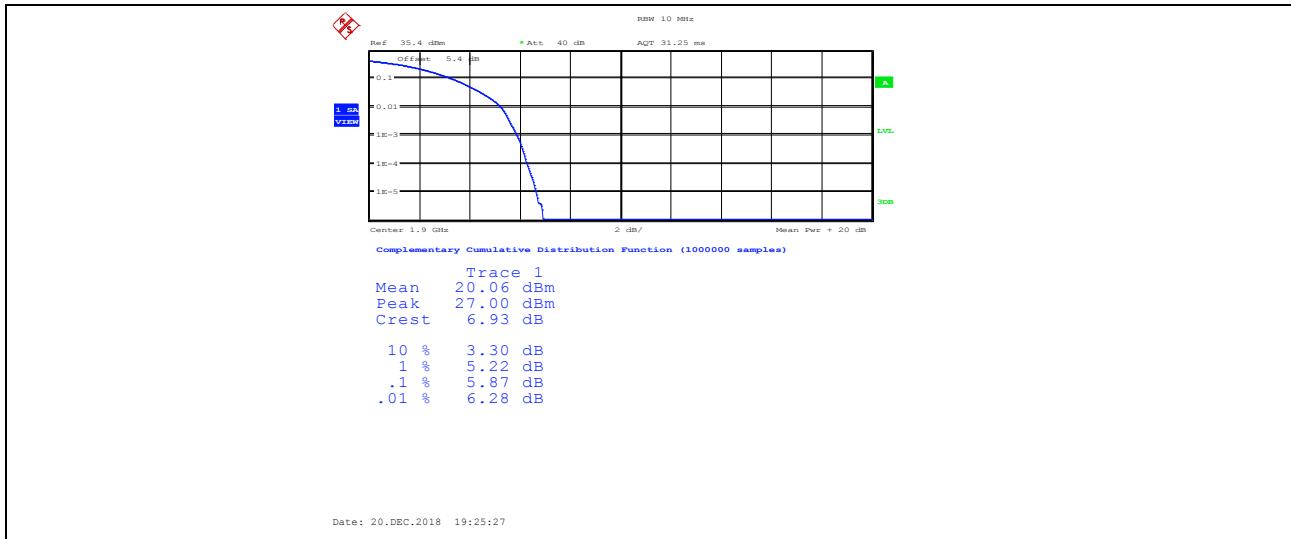
2.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band2	20MHz	QPSK	18700	100RB#0	6.41	13	PASS
Band2	20MHz	QPSK	18900	100RB#0	6.35	13	PASS
Band2	20MHz	QPSK	19100	100RB#0	6.41	13	PASS
Band2	20MHz	16QAM	18700	27RB#0	5.90	13	PASS
Band2	20MHz	16QAM	18900	27RB#0	5.93	13	PASS
Band2	20MHz	16QAM	19100	27RB#0	5.87	13	PASS

2.2. Test Plots





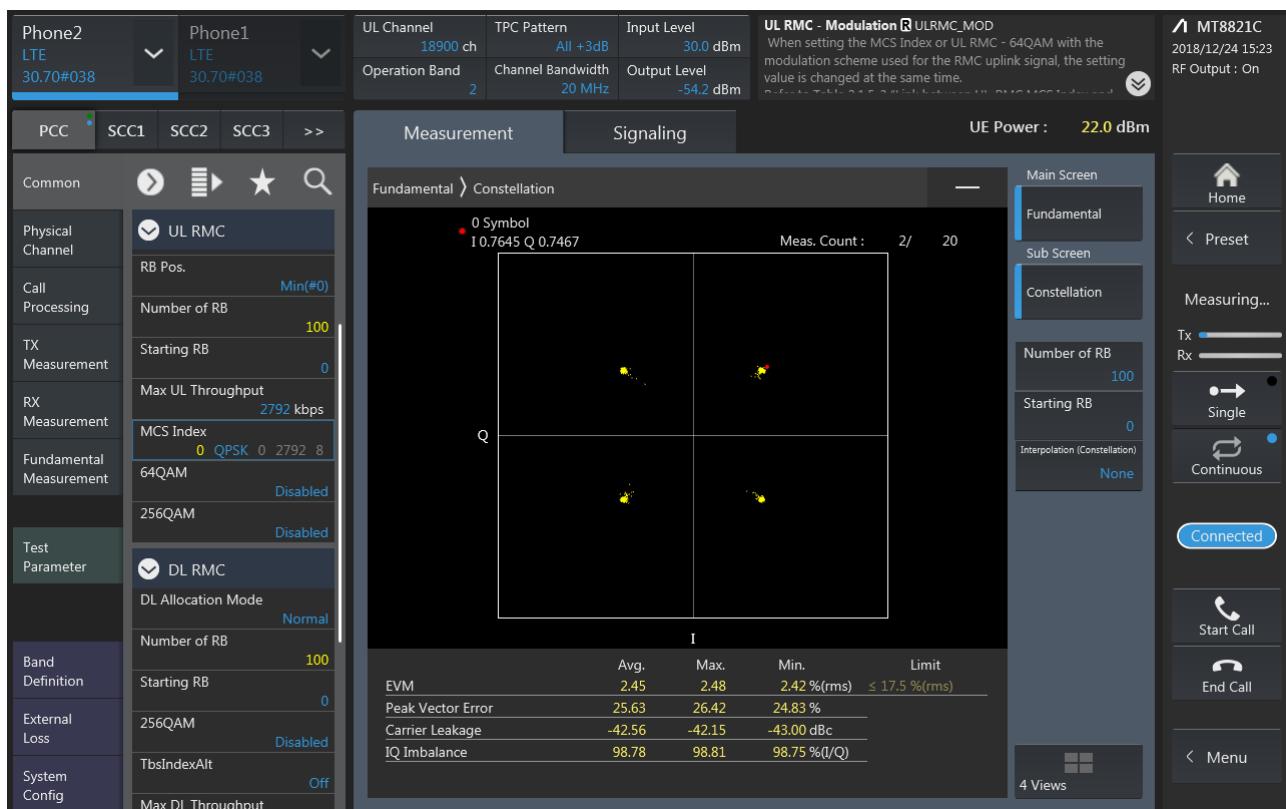


3. Modulation Characteristics

3.1. Test BAND = LTE BAND2

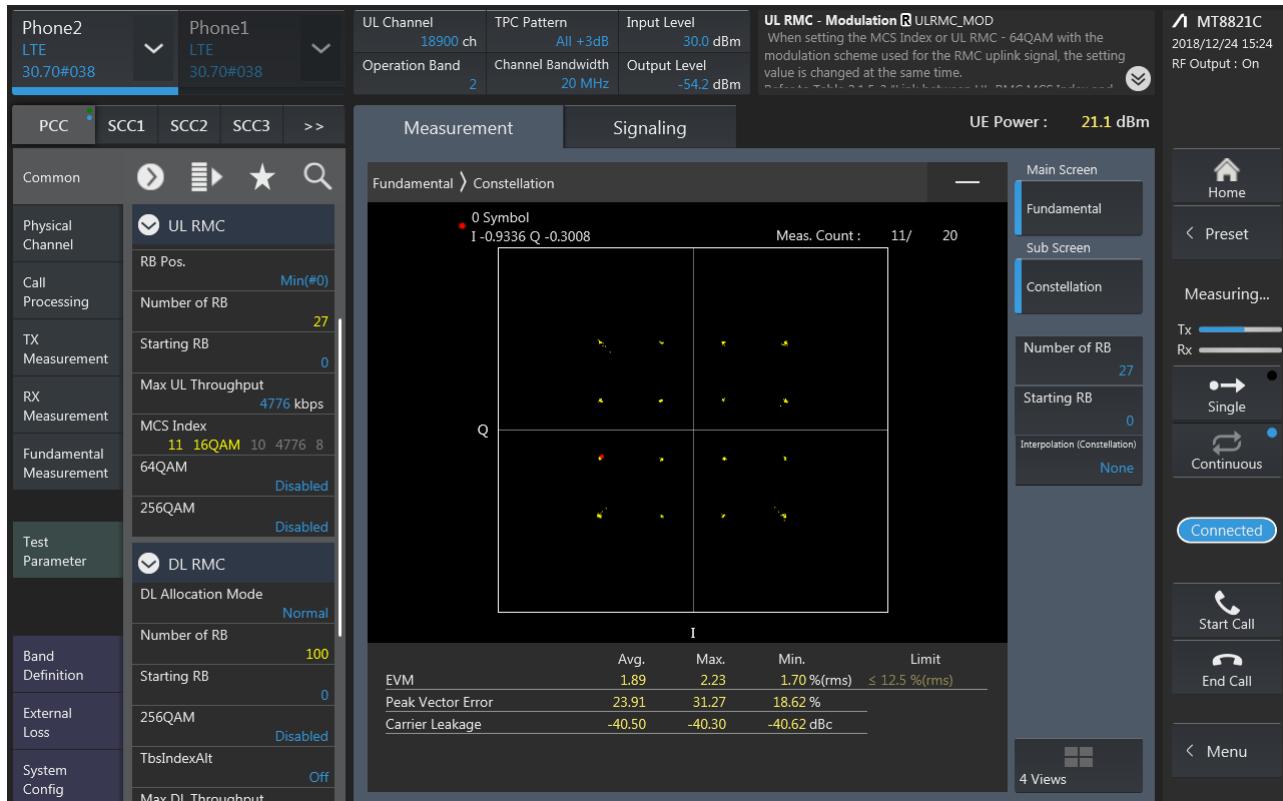
3.1.1. Test Mode = LTE /TM1 20MHz

3.1.1.1. Test Channel = MCH



3.1.2. Test Mode = LTE /TM2 20MHz

3.1.2.1. Test Channel = MCH



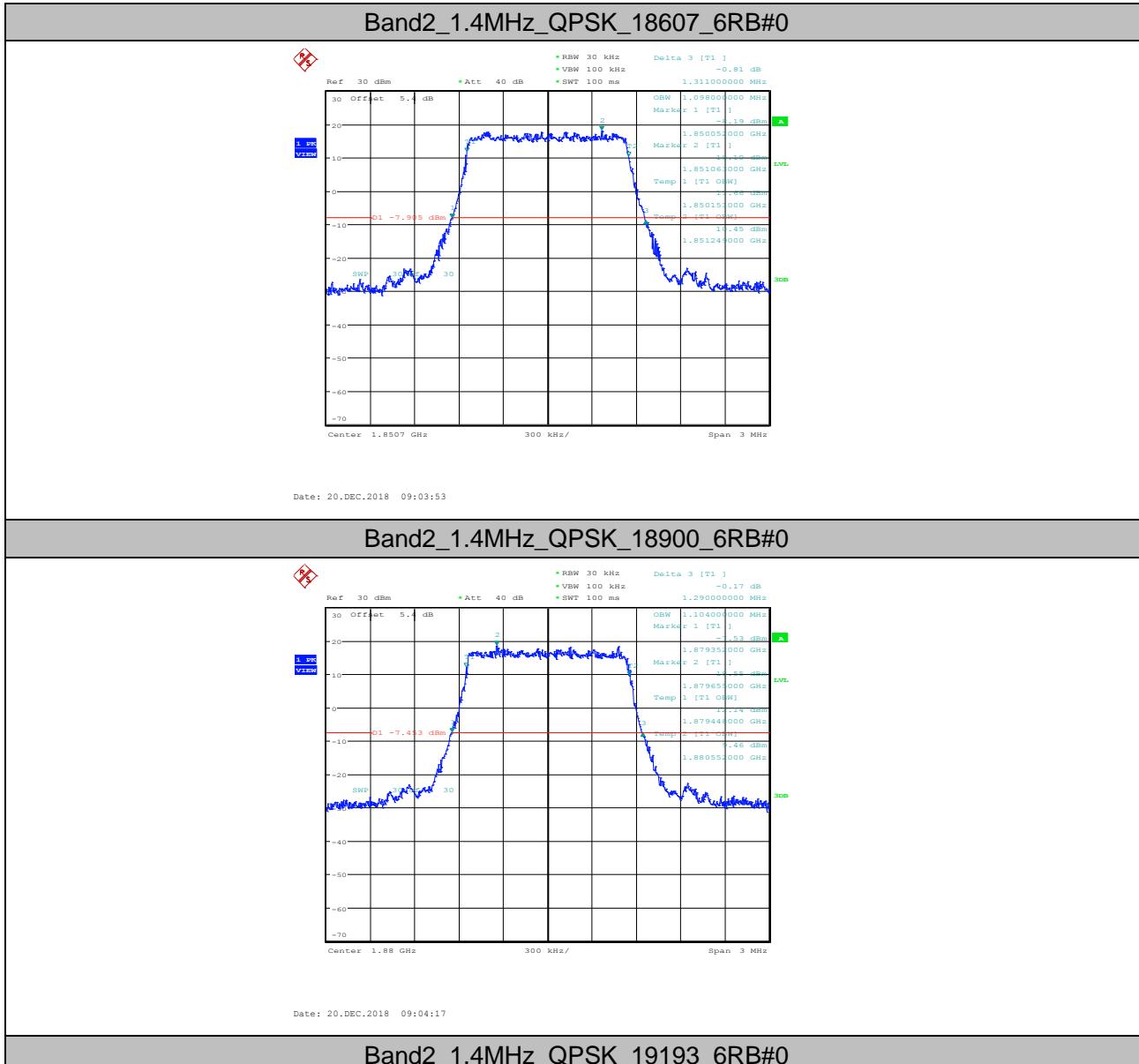
4. 26dB Bandwidth and Occupied Bandwidth

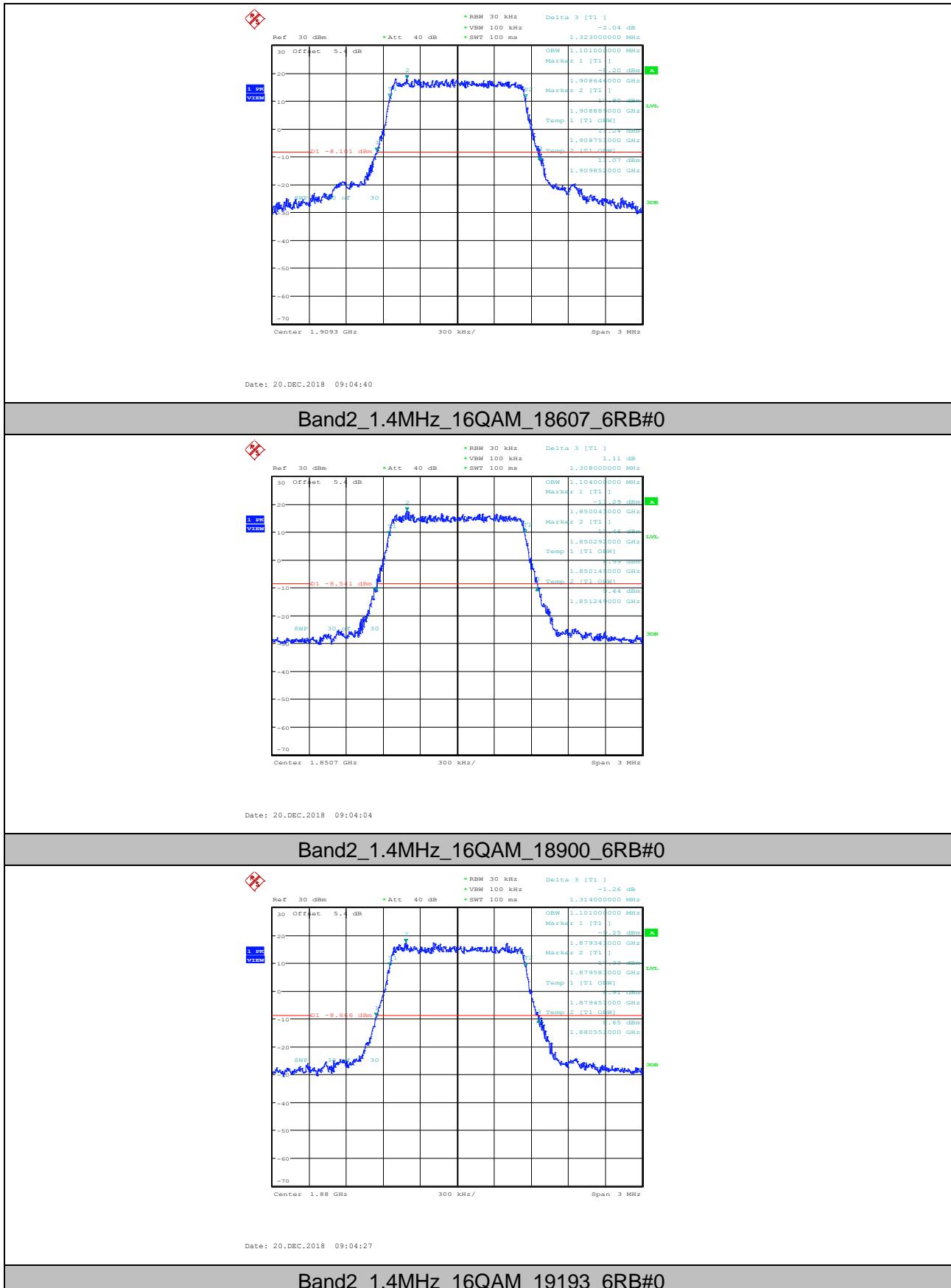
4.1. Test Result

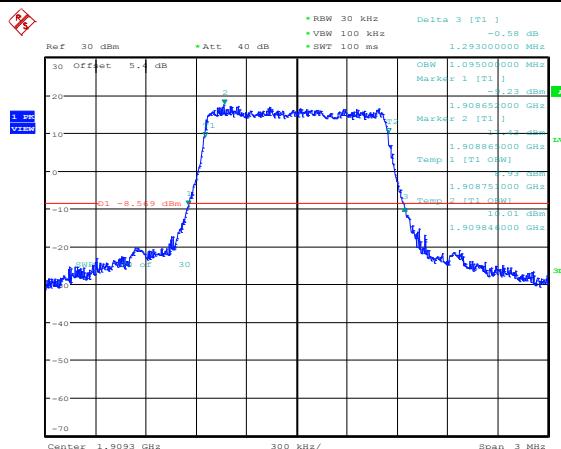
BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band2	1.4MHz	QPSK	18607	6RB#0	1.098	1.311	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	1.104	1.290	PASS
Band2	1.4MHz	QPSK	19193	6RB#0	1.101	1.323	PASS
Band2	1.4MHz	16QAM	18607	6RB#0	1.104	1.308	PASS
Band2	1.4MHz	16QAM	18900	6RB#0	1.101	1.314	PASS
Band2	1.4MHz	16QAM	19193	6RB#0	1.095	1.293	PASS
Band2	3MHz	QPSK	18615	15RB#0	2.706	2.976	PASS
Band2	3MHz	QPSK	18900	15RB#0	2.700	2.982	PASS
Band2	3MHz	QPSK	19185	15RB#0	2.706	2.994	PASS
Band2	3MHz	16QAM	18615	15RB#0	2.706	3.006	PASS
Band2	3MHz	16QAM	18900	15RB#0	2.700	2.994	PASS
Band2	3MHz	16QAM	19185	15RB#0	2.700	2.994	PASS
Band2	5MHz	QPSK	18625	25RB#0	4.490	4.960	PASS
Band2	5MHz	QPSK	18900	25RB#0	4.480	4.920	PASS
Band2	5MHz	QPSK	19175	25RB#0	4.480	4.940	PASS
Band2	5MHz	16QAM	18625	25RB#0	4.480	4.870	PASS
Band2	5MHz	16QAM	18900	25RB#0	4.480	4.970	PASS
Band2	5MHz	16QAM	19175	25RB#0	4.480	4.910	PASS
Band2	10MHz	QPSK	18650	50RB#0	8.940	9.780	PASS
Band2	10MHz	QPSK	18900	50RB#0	8.920	9.740	PASS
Band2	10MHz	QPSK	19150	50RB#0	8.920	9.620	PASS
Band2	10MHz	16QAM	18650	27RB#0	4.880	5.620	PASS
Band2	10MHz	16QAM	18900	27RB#0	4.880	5.640	PASS
Band2	10MHz	16QAM	19150	27RB#0	4.880	5.600	PASS
Band2	15MHz	QPSK	18675	75RB#0	13.500	14.940	PASS
Band2	15MHz	QPSK	18900	75RB#0	13.470	14.910	PASS
Band2	15MHz	QPSK	19125	75RB#0	13.350	14.820	PASS
Band2	15MHz	16QAM	18675	27RB#0	5.190	6.270	PASS
Band2	15MHz	16QAM	18900	27RB#0	5.130	6.300	PASS
Band2	15MHz	16QAM	19125	27RB#0	5.160	6.360	PASS
Band2	20MHz	QPSK	18700	100RB#0	17.880	19.360	PASS
Band2	20MHz	QPSK	18900	100RB#0	17.880	19.480	PASS
Band2	20MHz	QPSK	19100	100RB#0	17.800	19.240	PASS
Band2	20MHz	16QAM	18700	27RB#0	5.240	6.858	PASS

Band2	20MHz	16QAM	18900	27RB#0	5.160	6.474	PASS
Band2	20MHz	16QAM	19100	27RB#0	5.240	6.682	PASS

4.2. Test Plots

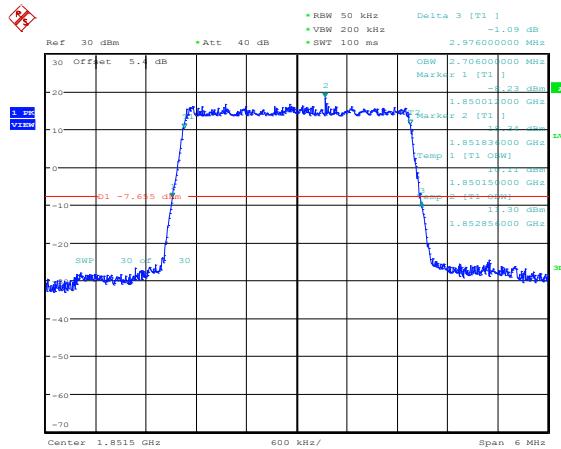






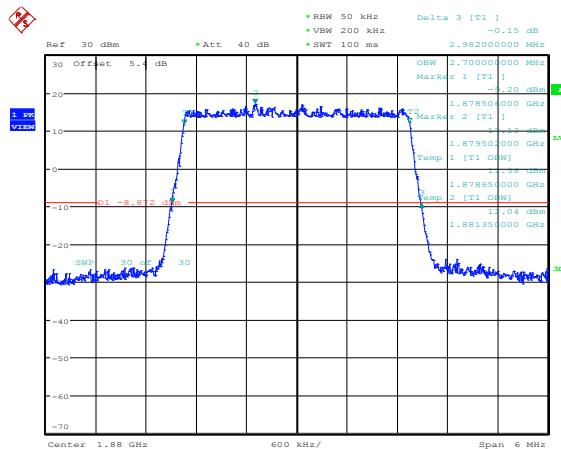
Date: 20.DEC.2018 09:04:51

Band2_3MHz_QPSK_18615_15RB#0



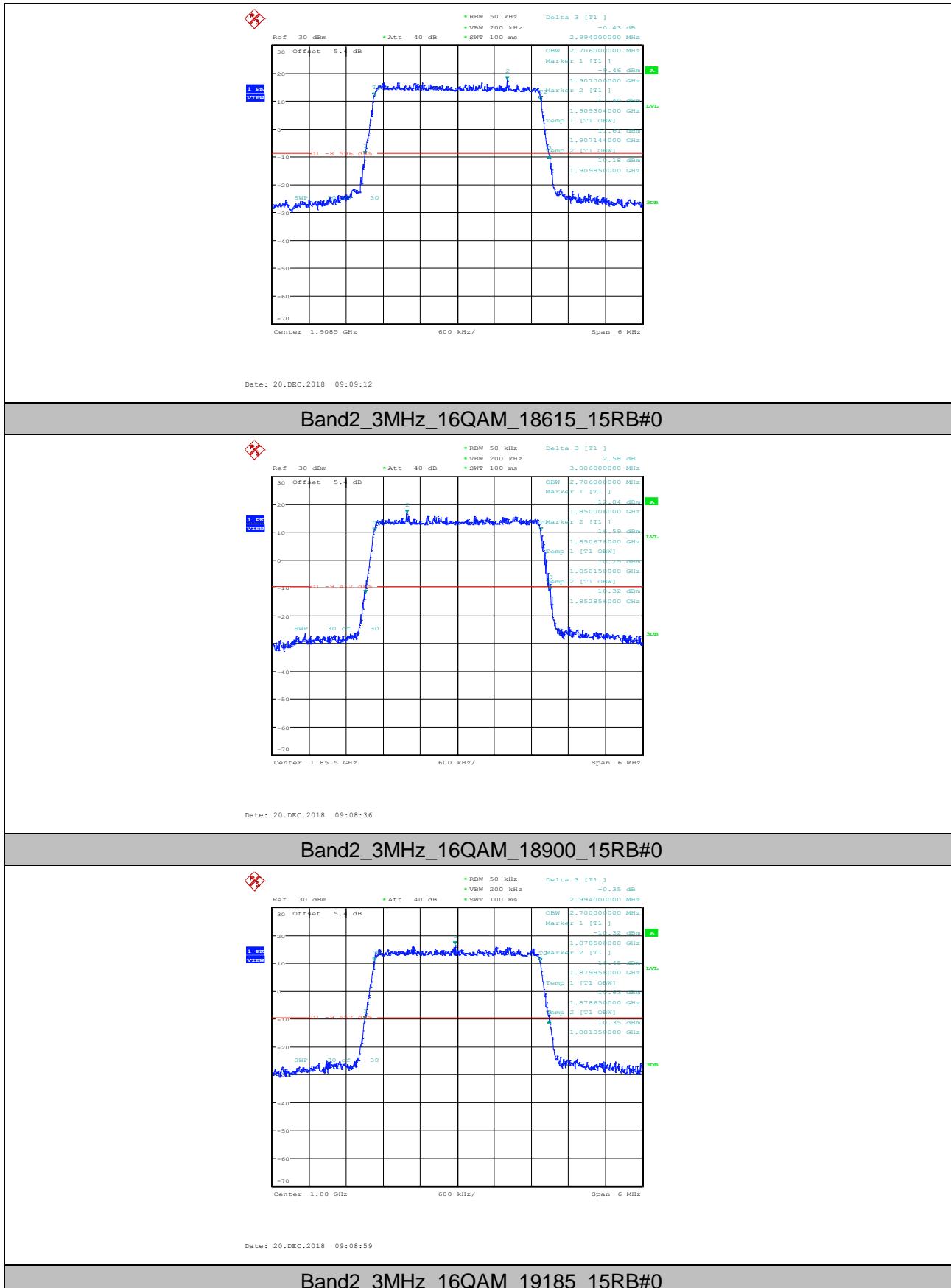
Date: 20.DEC.2018 09:08:26

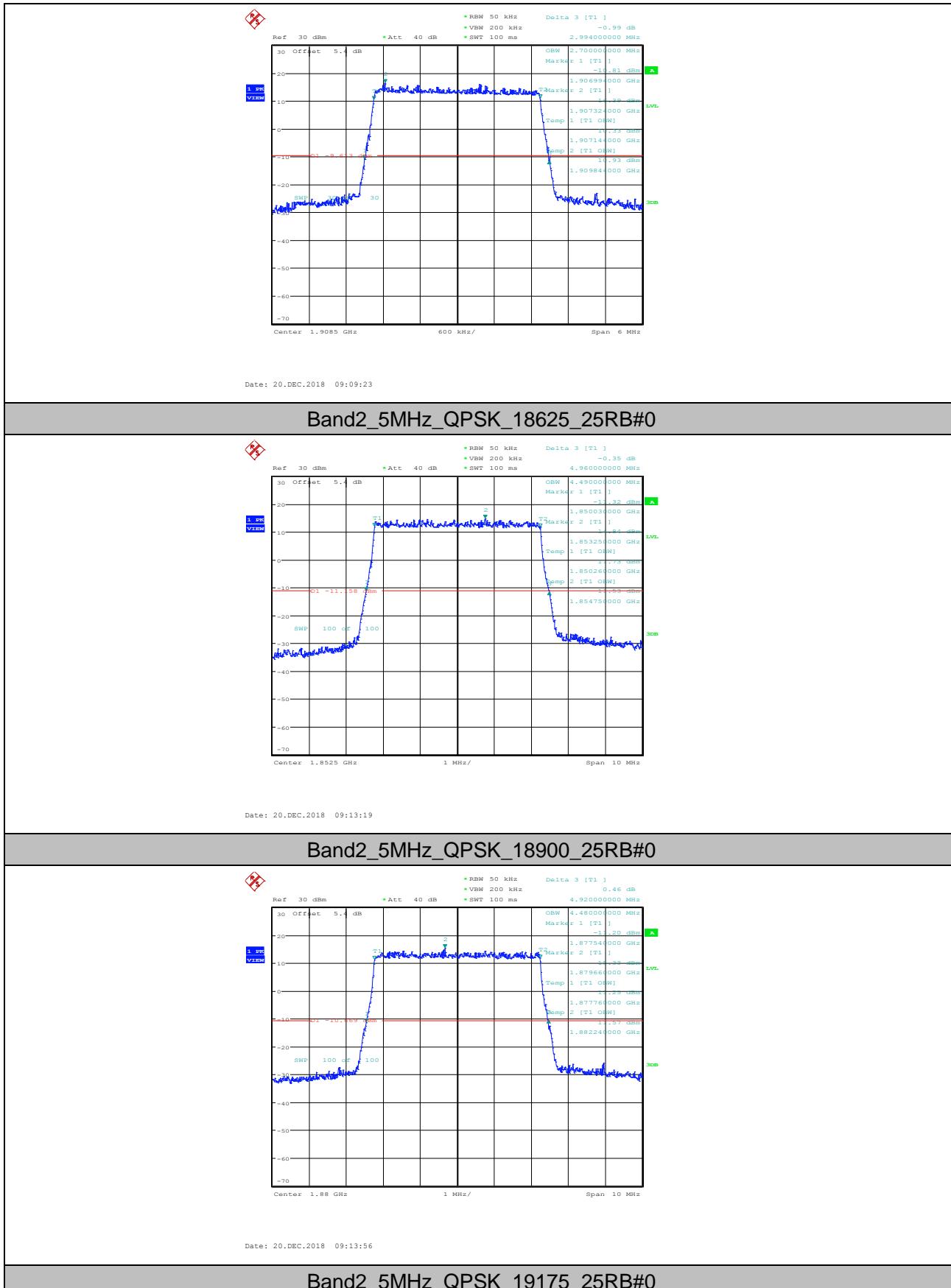
Band2_3MHz_QPSK_18900_15RB#0

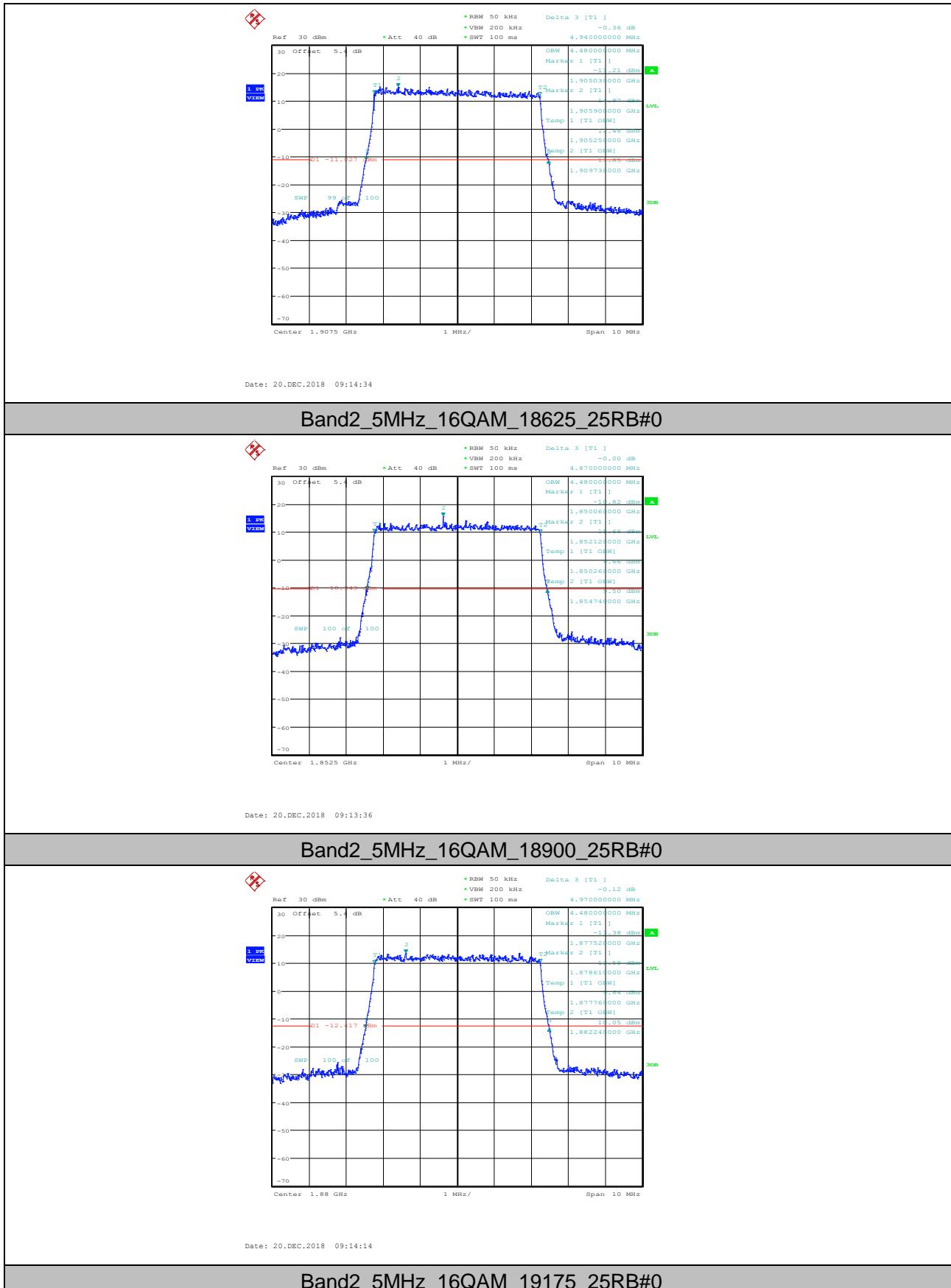


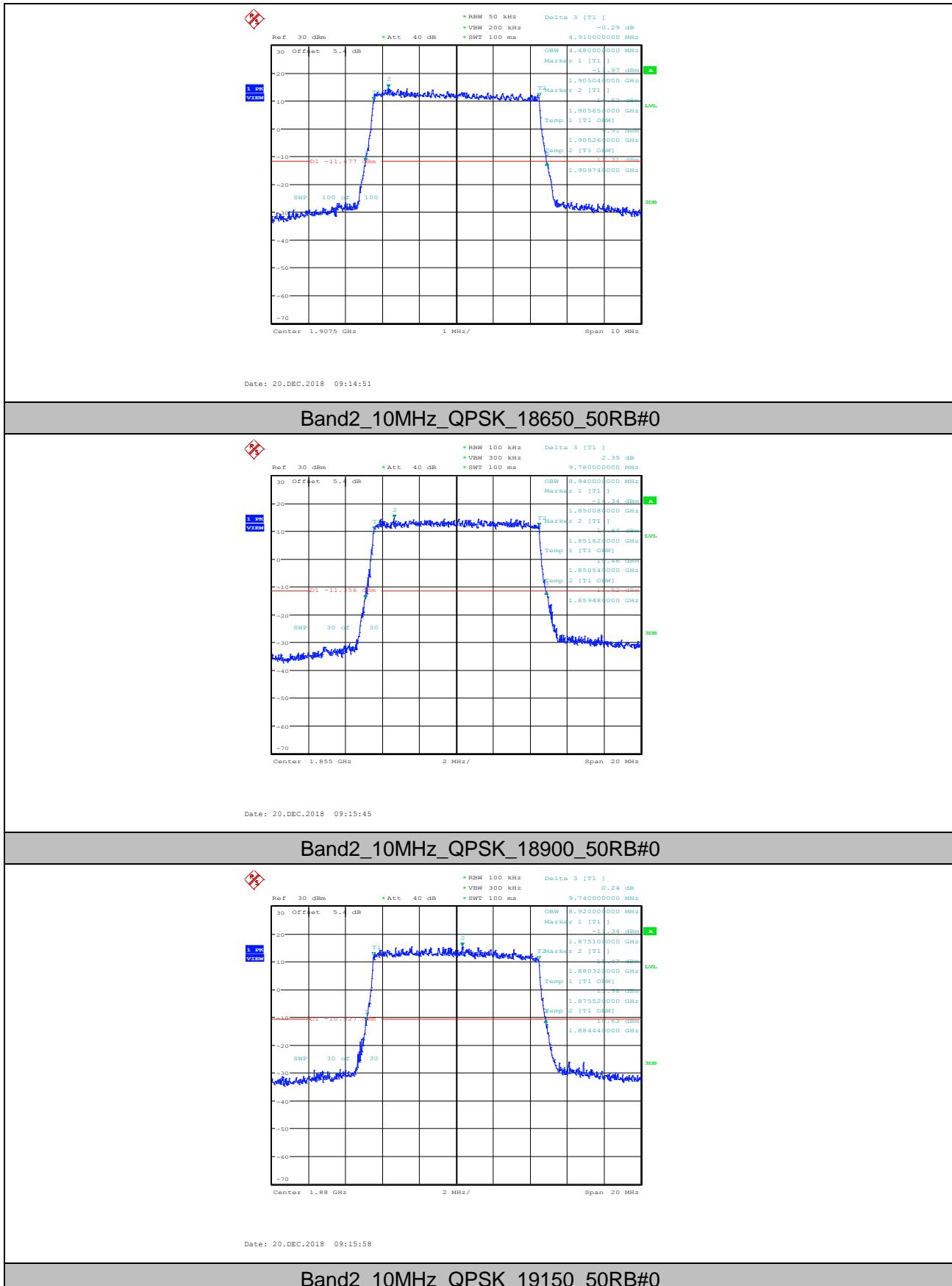
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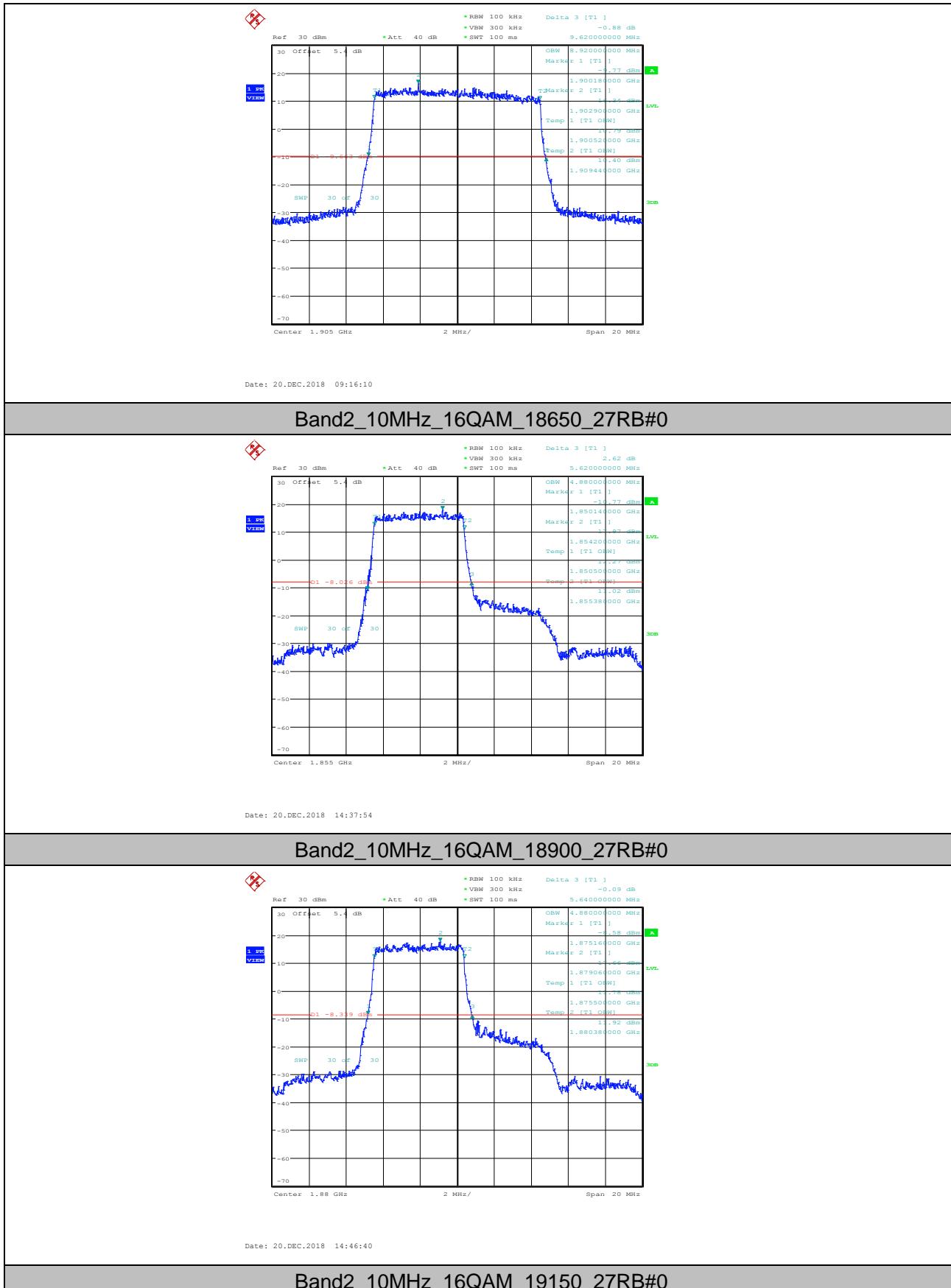
Band2_3MHz_QPSK_19185_15RB#0

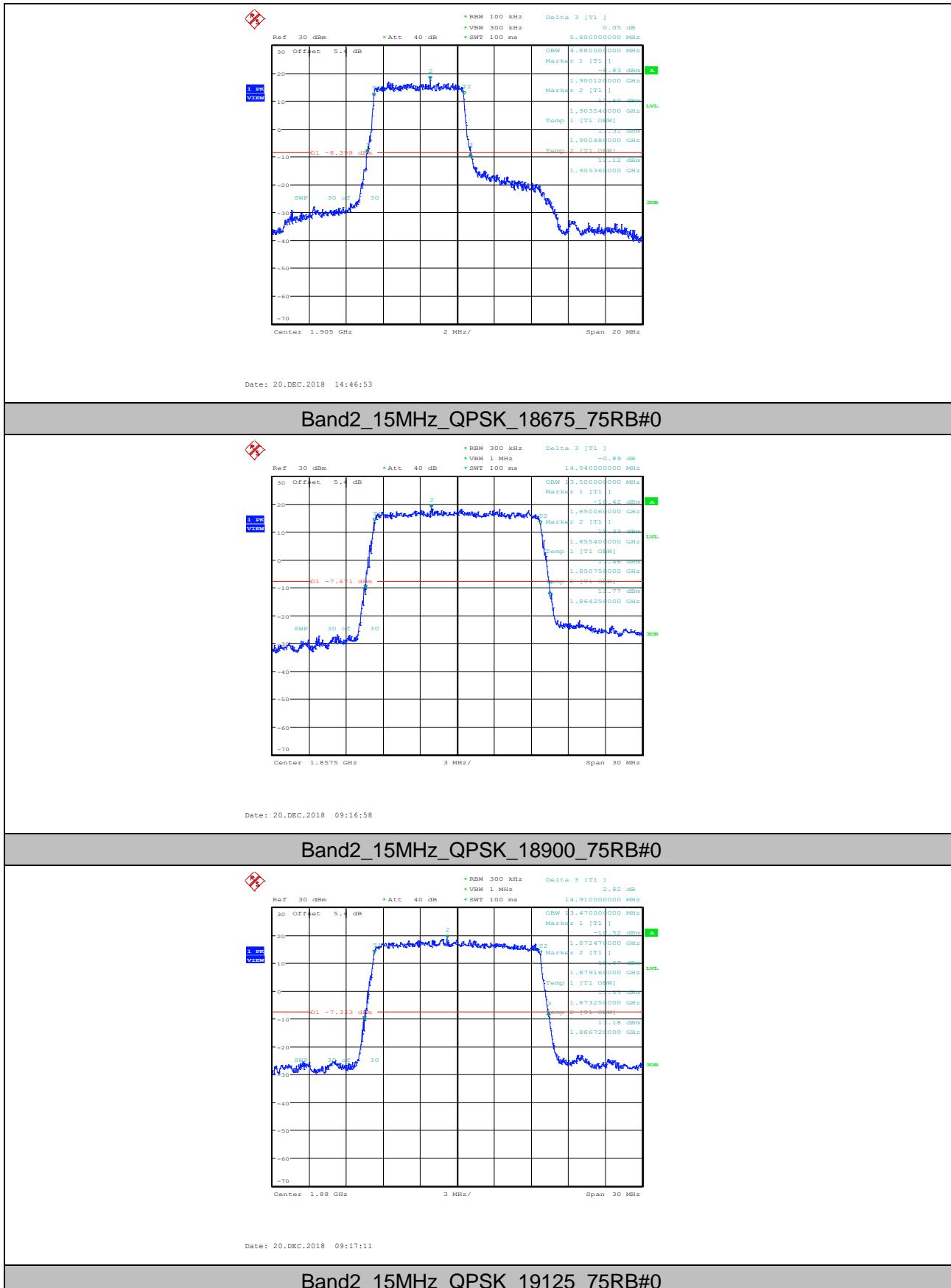


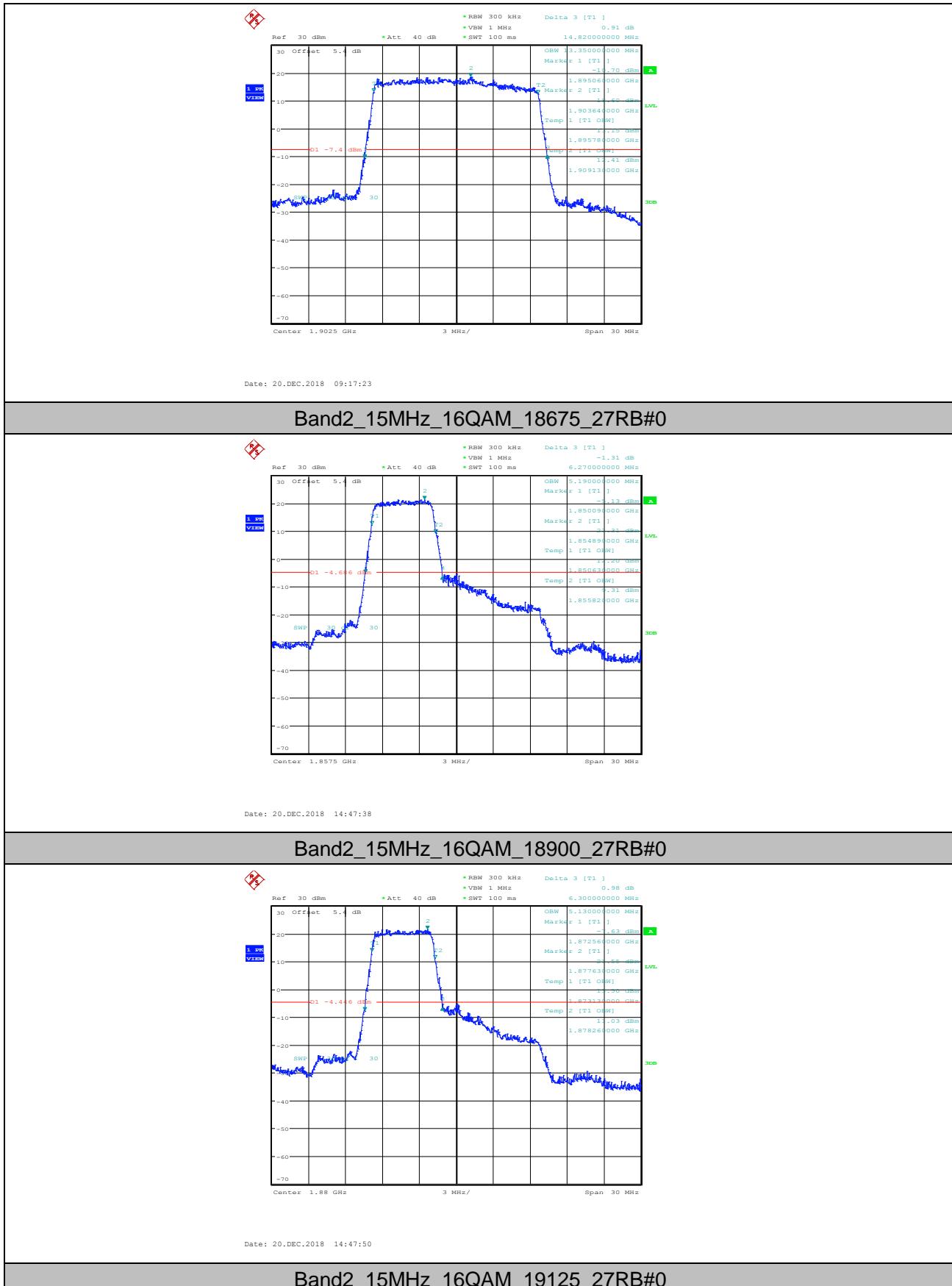


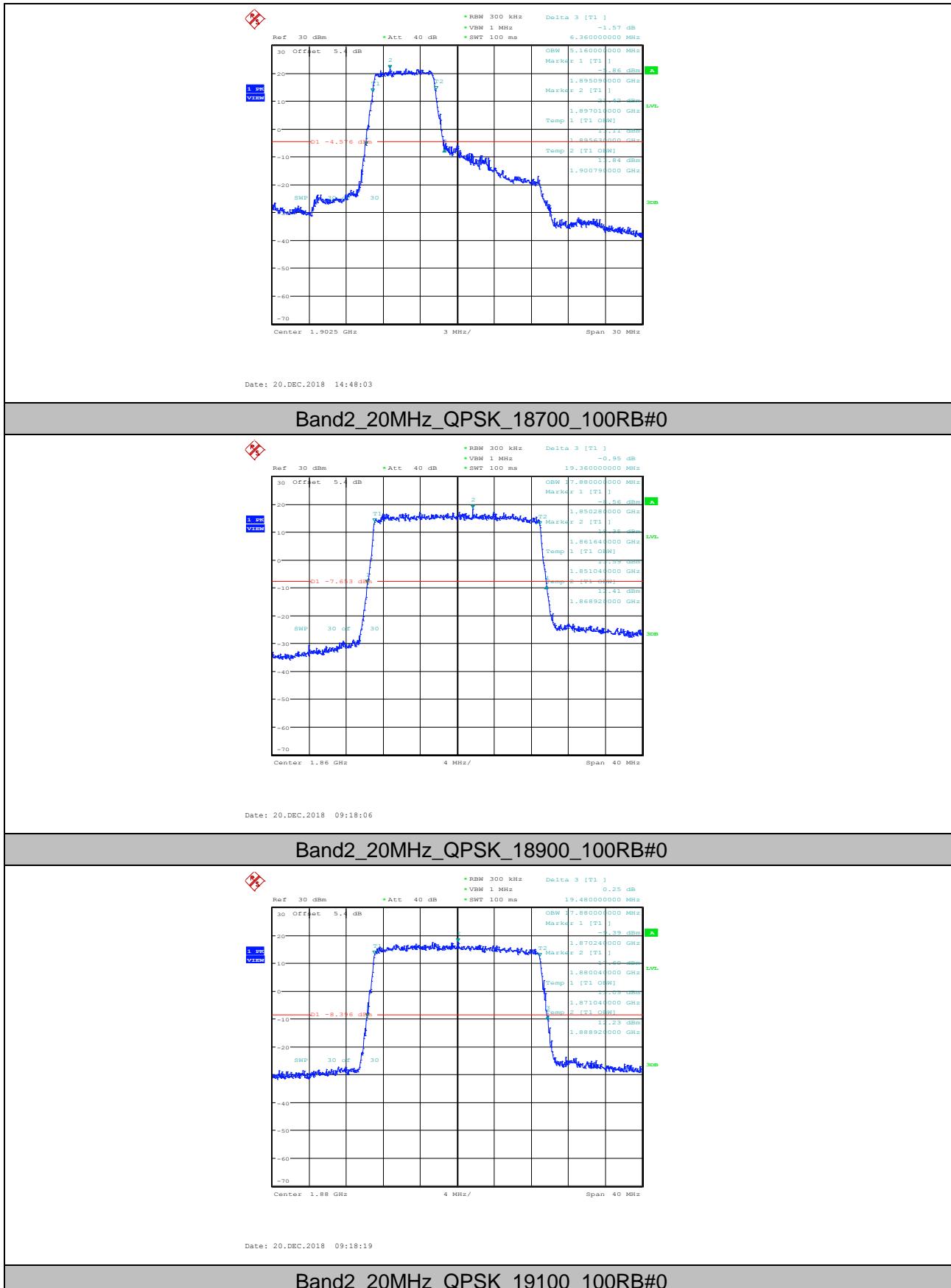


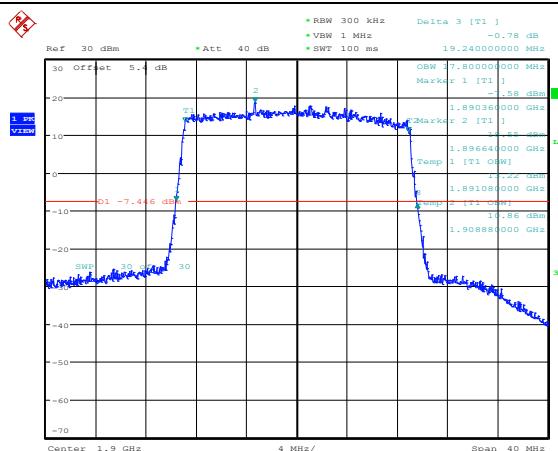






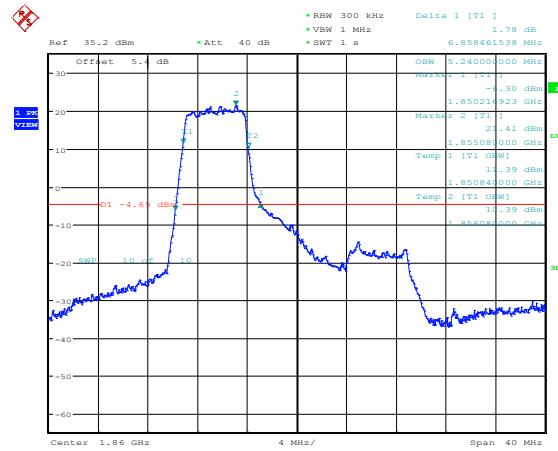






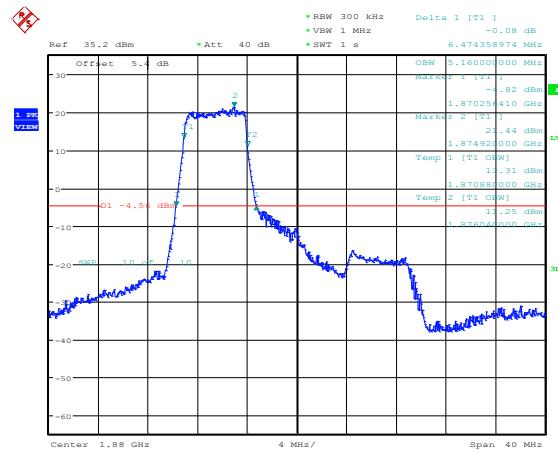
Date: 20.DEC.2018 09:18:31

Band2 20MHz 16QAM 18700 27RB#0



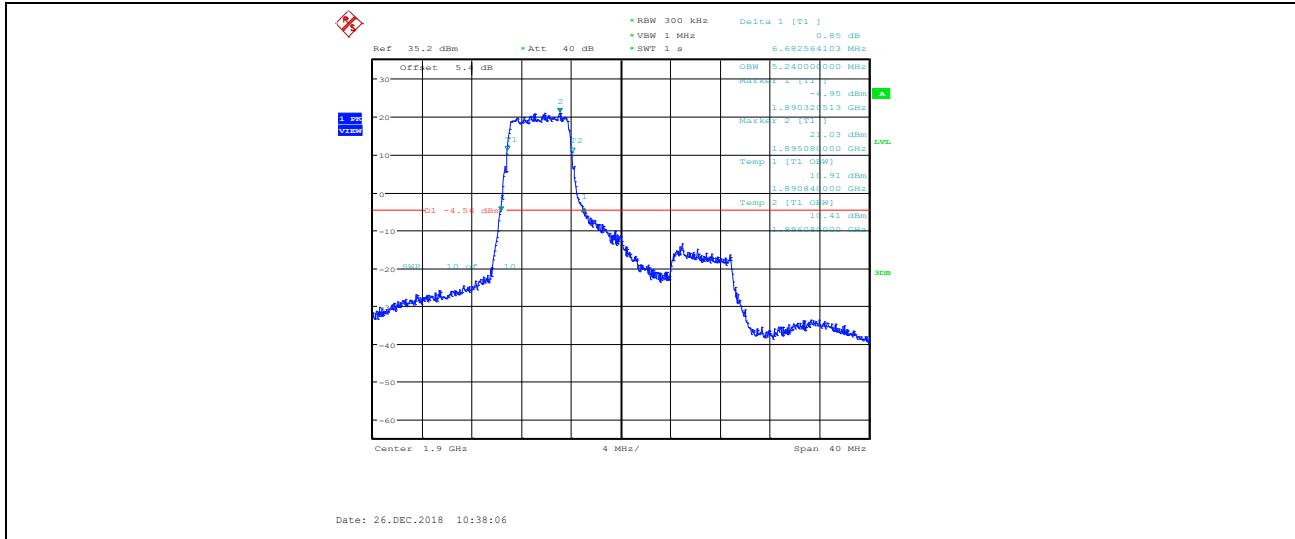
Date: 26.DEC.2018 10:35:16

Band2 20MHz 16QAM 18900 27RB#0



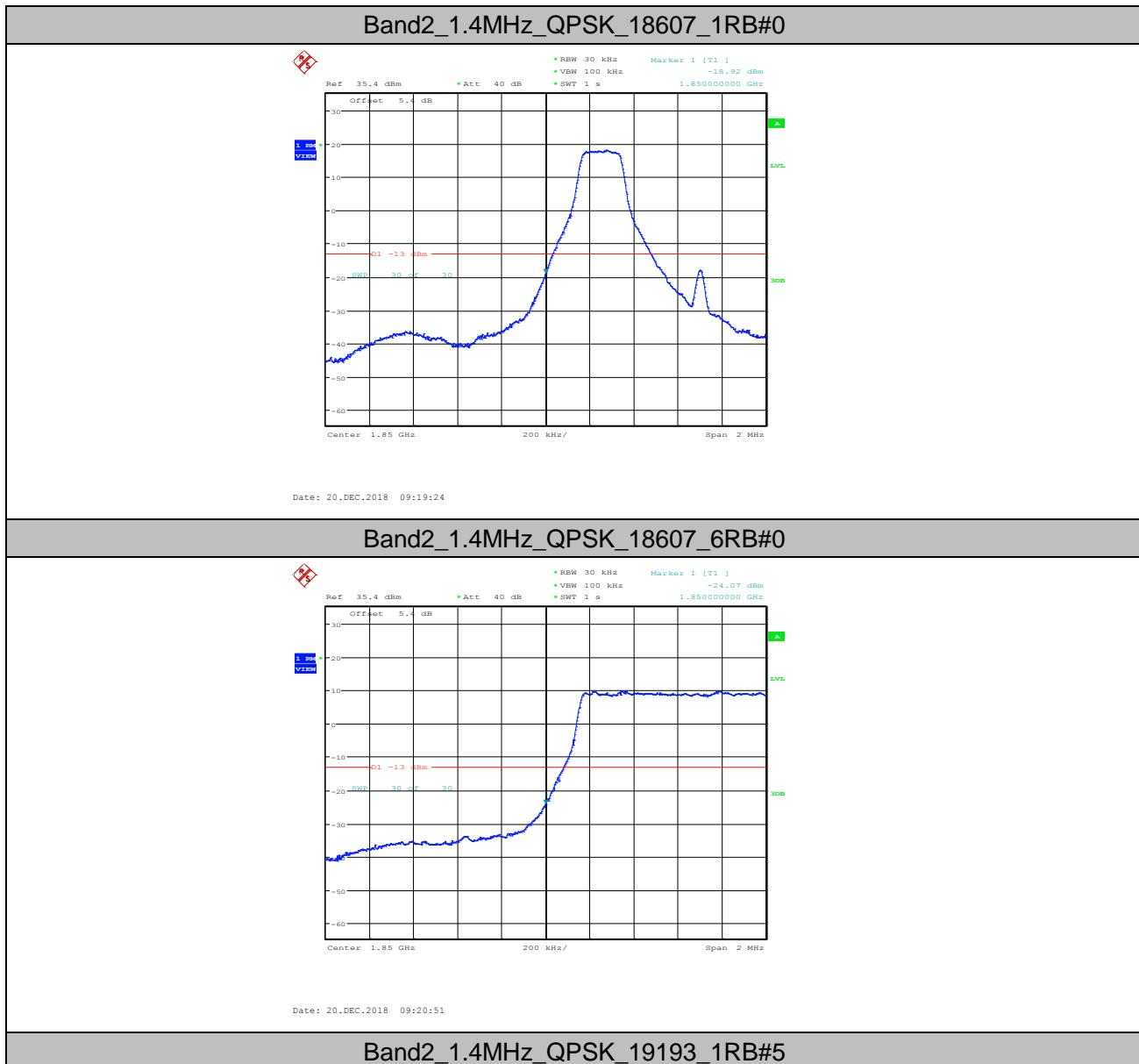
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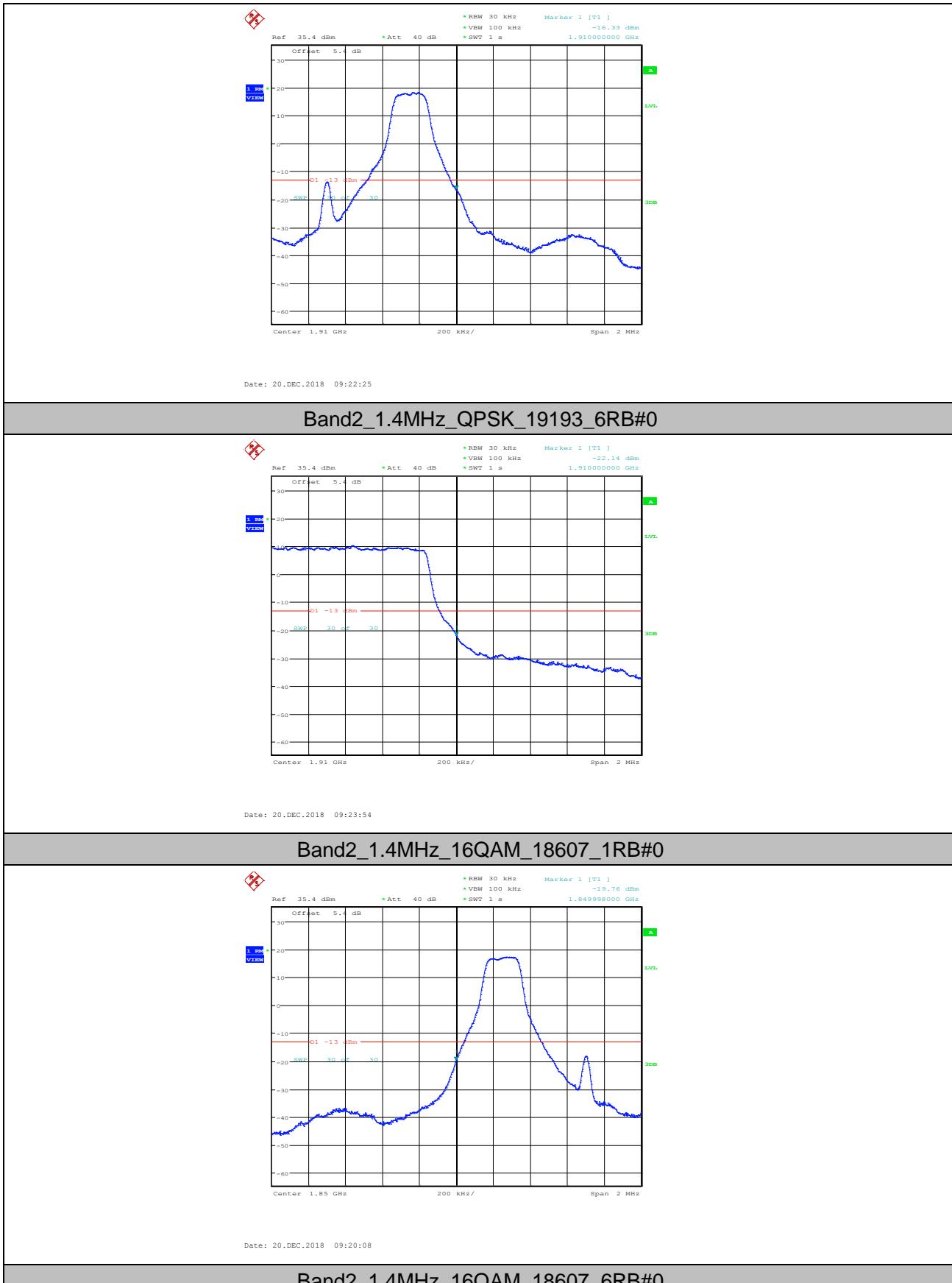
Band2 20MHz 16QAM 19100 27RB#0

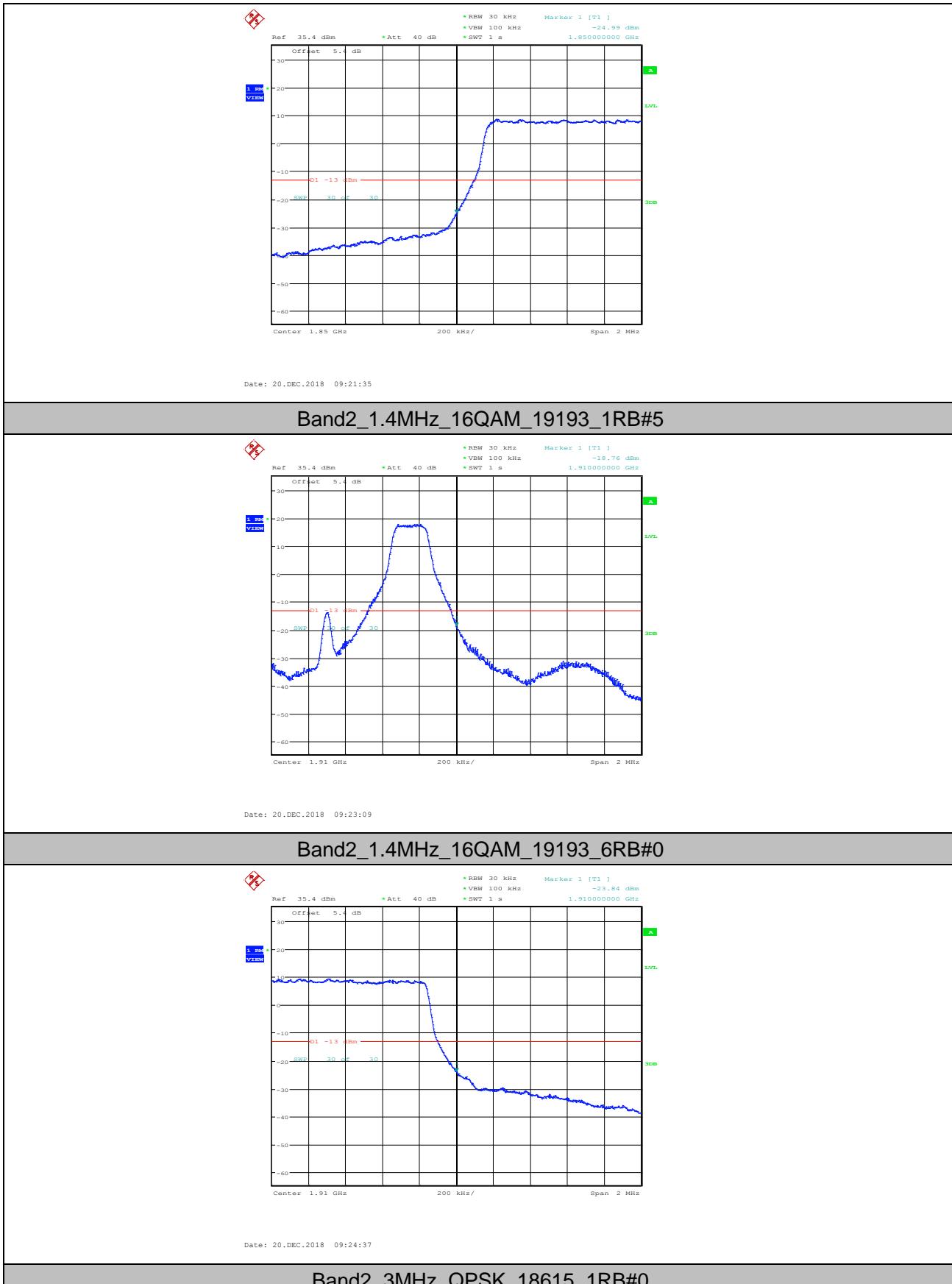


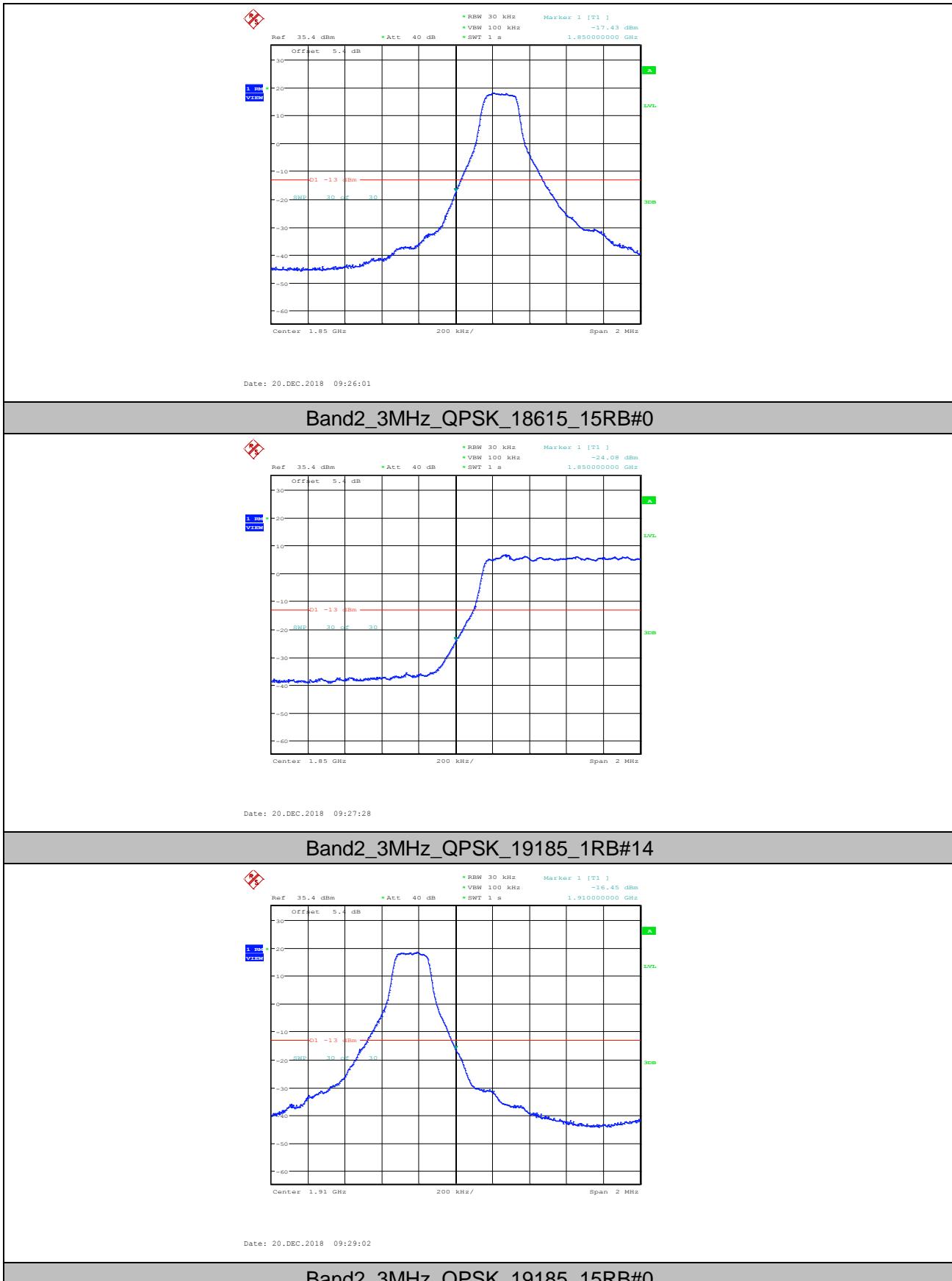
5. Band Edge Compliance

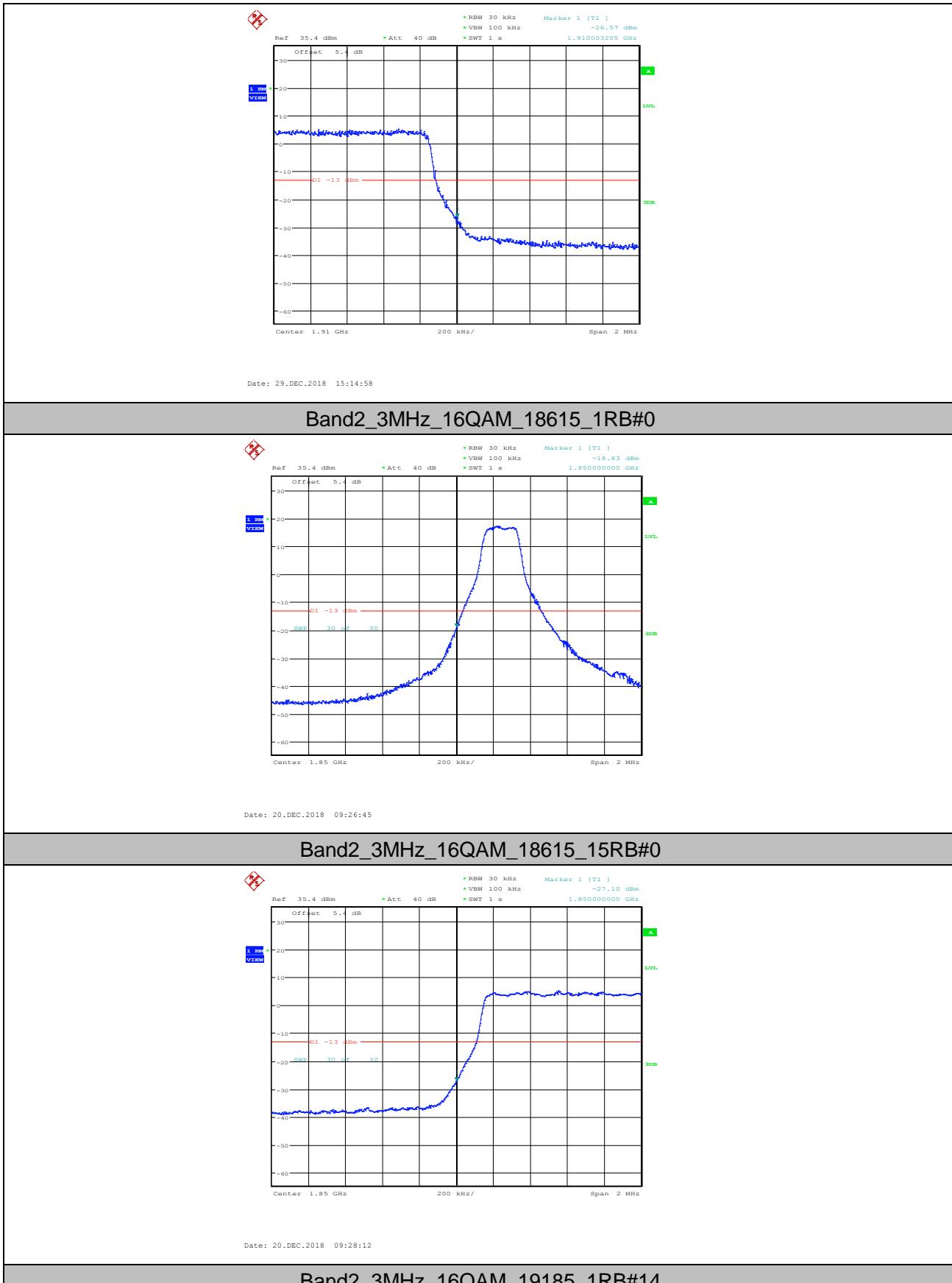
5.1. Test Plots

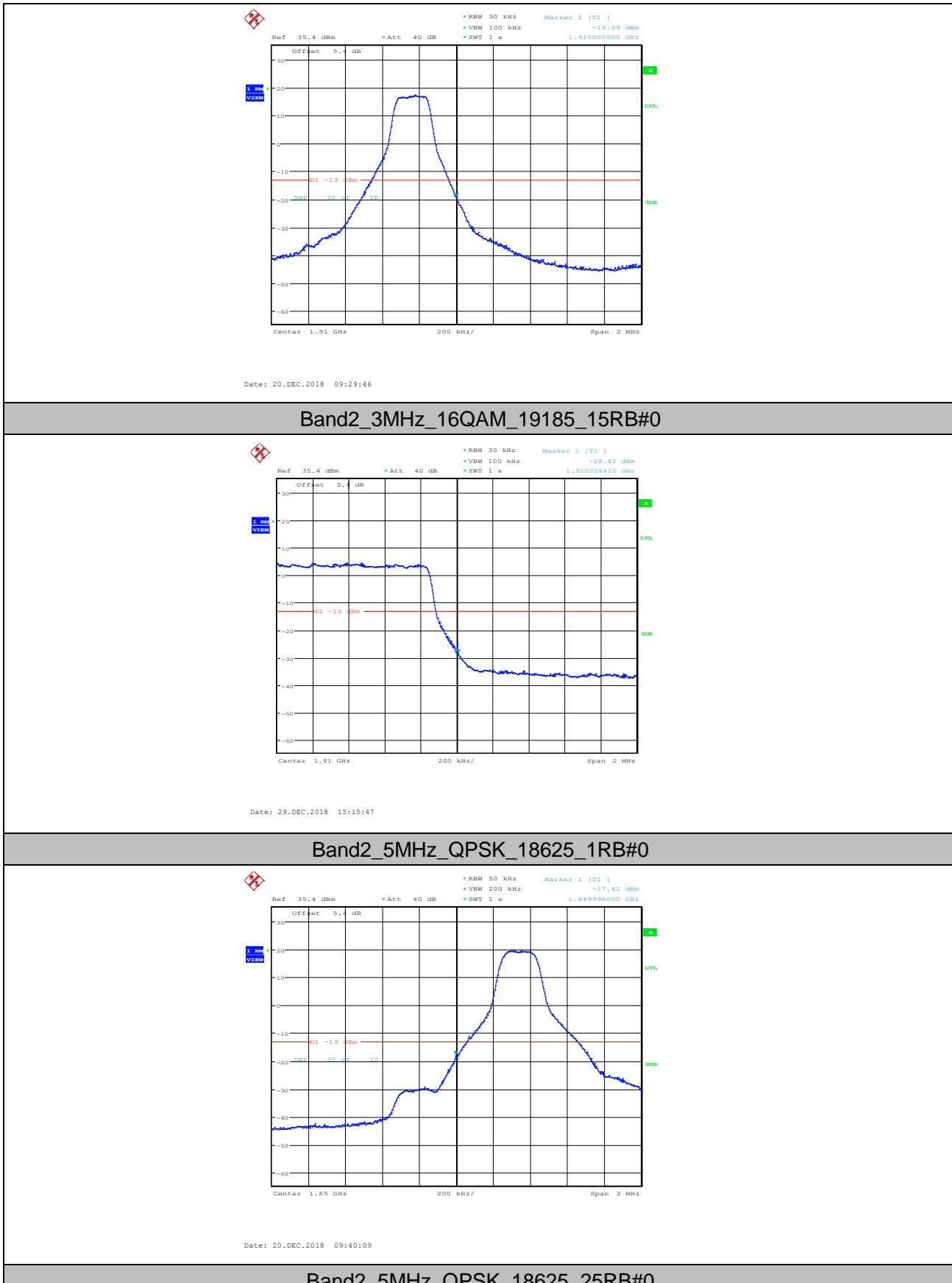


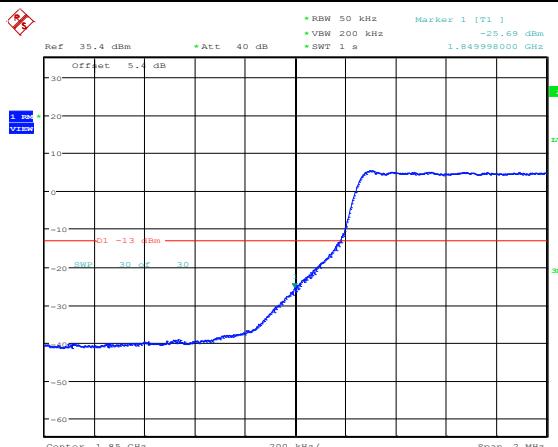






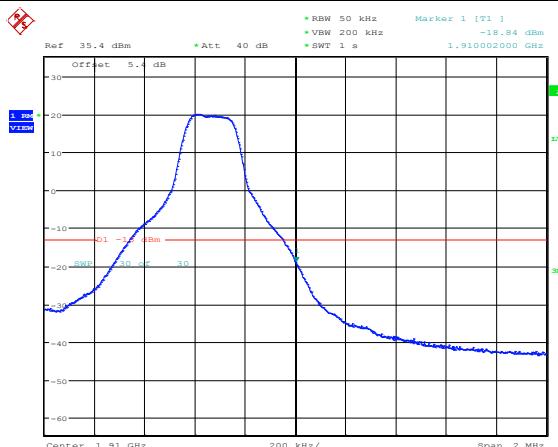






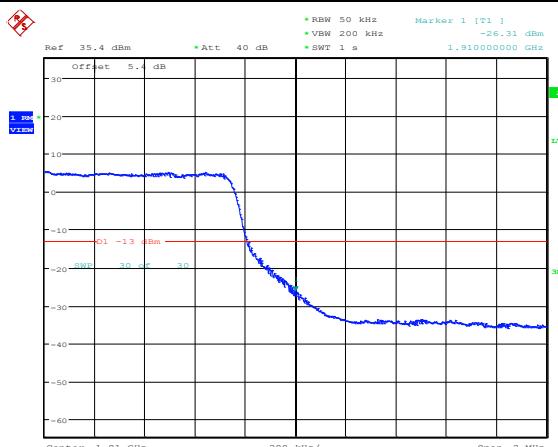
Date: 20.DEC.2018 09:41:36

Band2 5MHz QPSK 19175 1RB#24



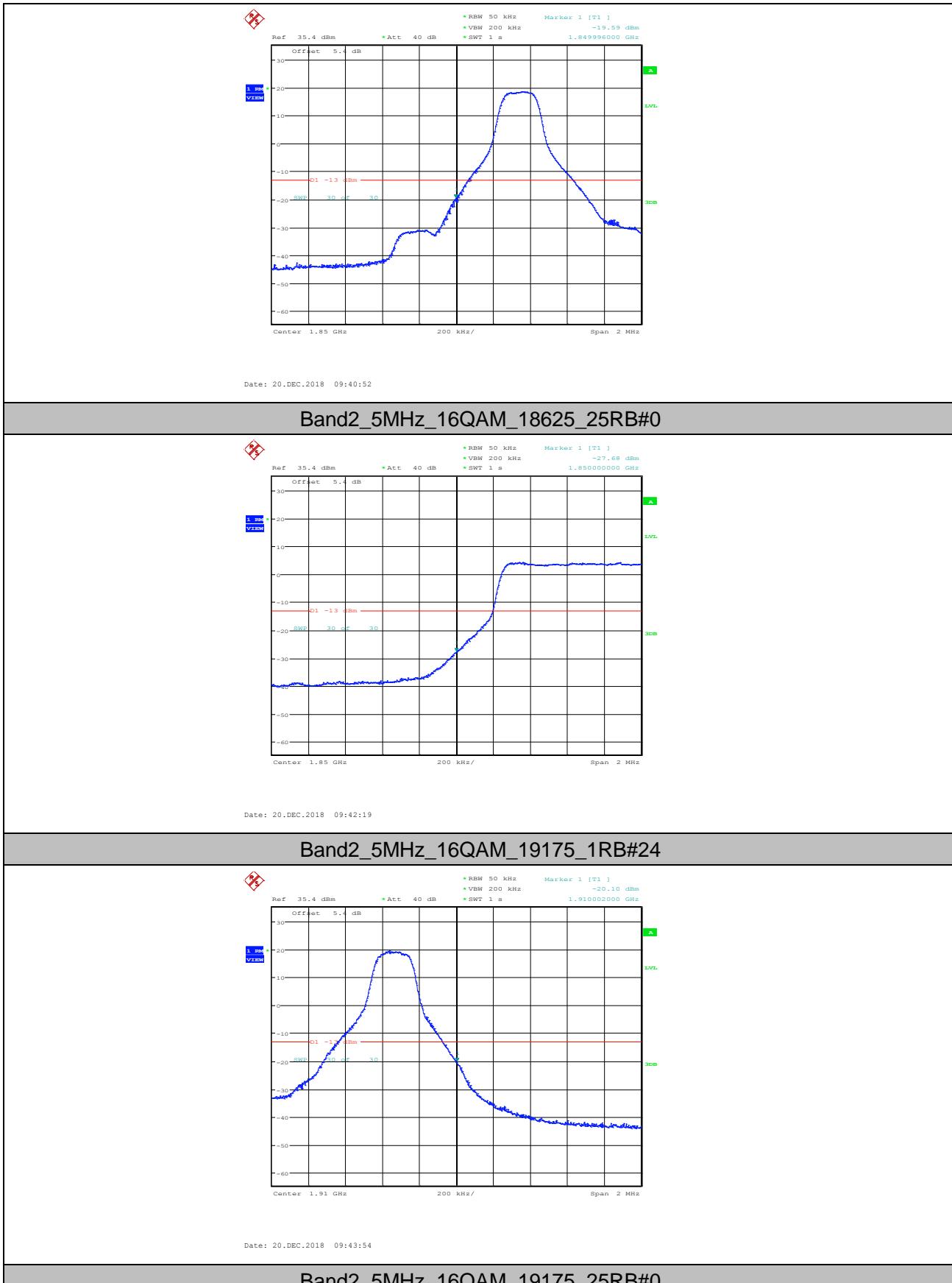
Date: 20-DEC-2018 09:43:10

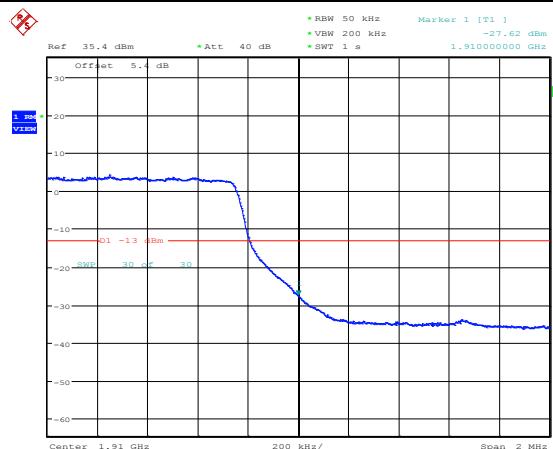
Band2 5MHz QPSK 19175 25RB#0



Date: 20.DEC.2018 09:44:37

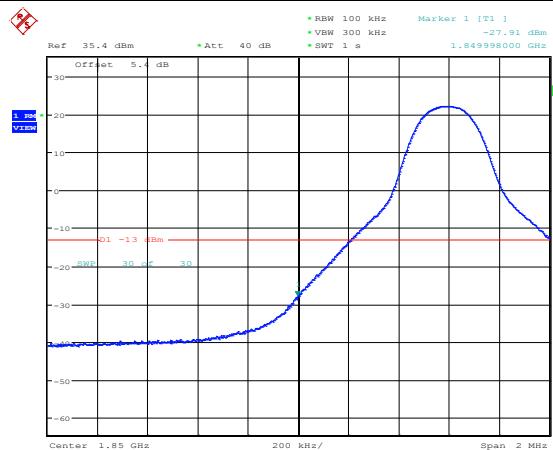
Band2 5MHz 16QAM 18625 1RB#0





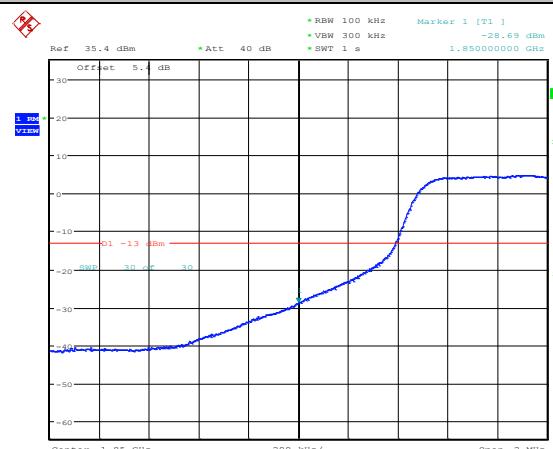
Date: 20.DEC.2018 09:45:21

Band2 10MHz QPSK 18650 1RB#0



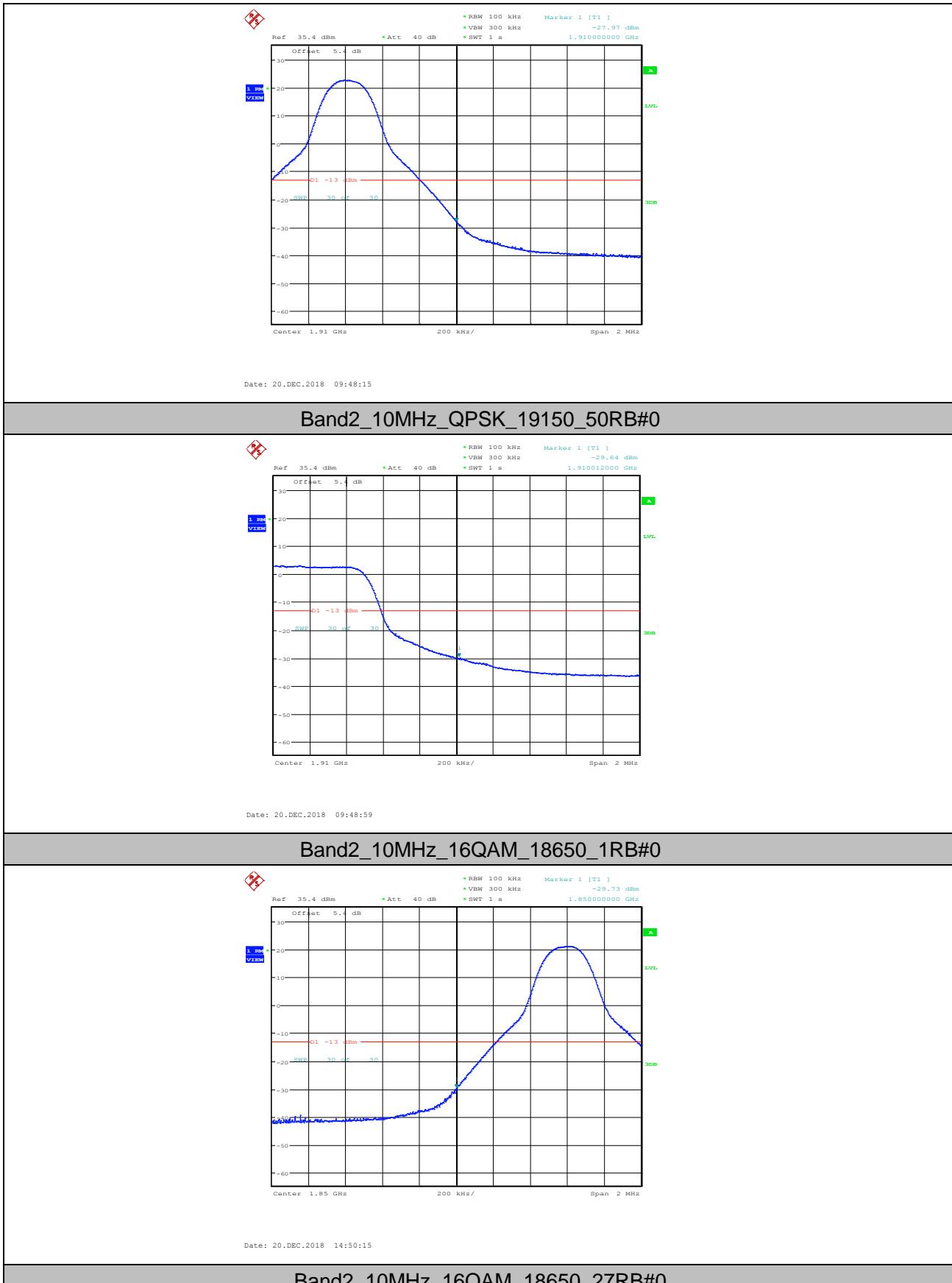
Date: 20 DEC 2018 09:46:41

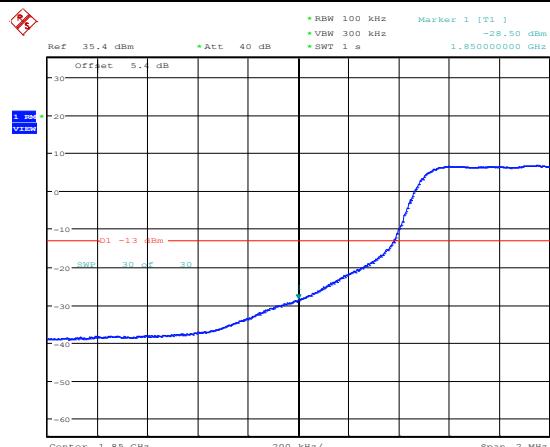
Band2 10MHz QPSK 18650 50RB#0



Date: 30 DEC 2018 09:47:35

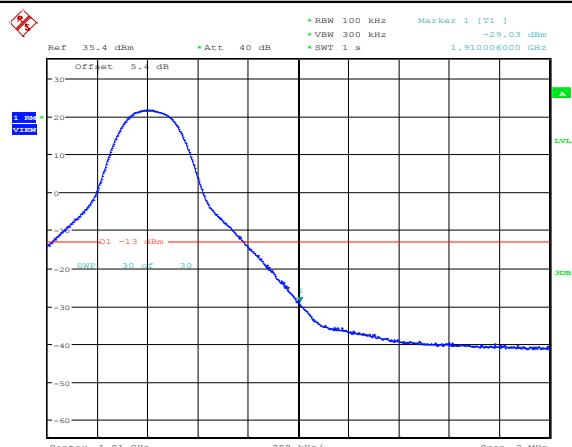
Band2 10MHz QPSK 19150 1RB#49





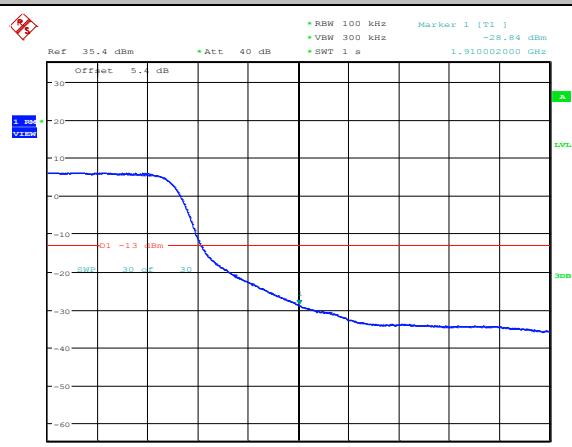
Date: 20.DEC.2018 14:51:02

Band2 10MHz 16QAM 19150 1RB#49



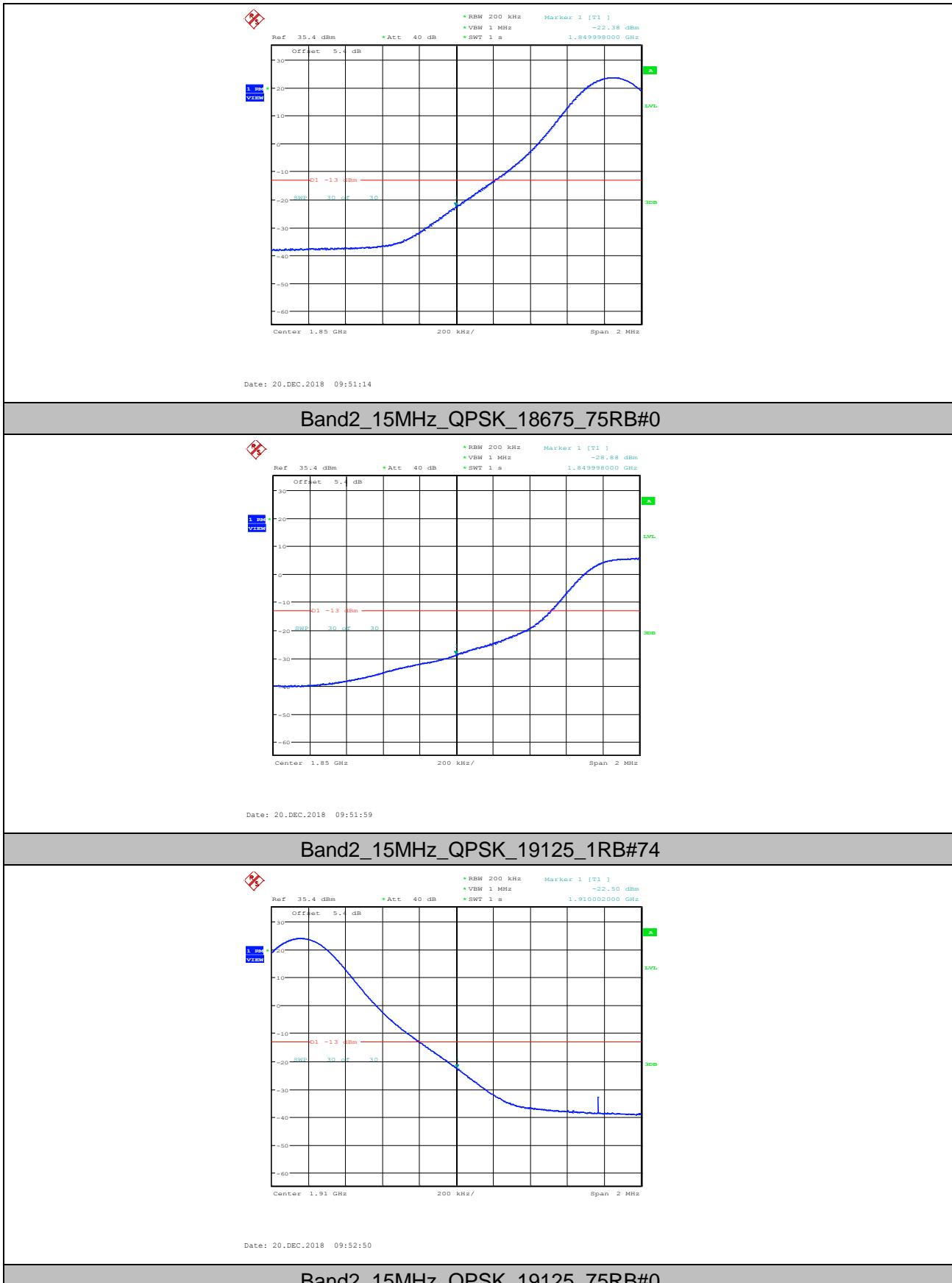
Date: 20 DEC 2018 14:51:53

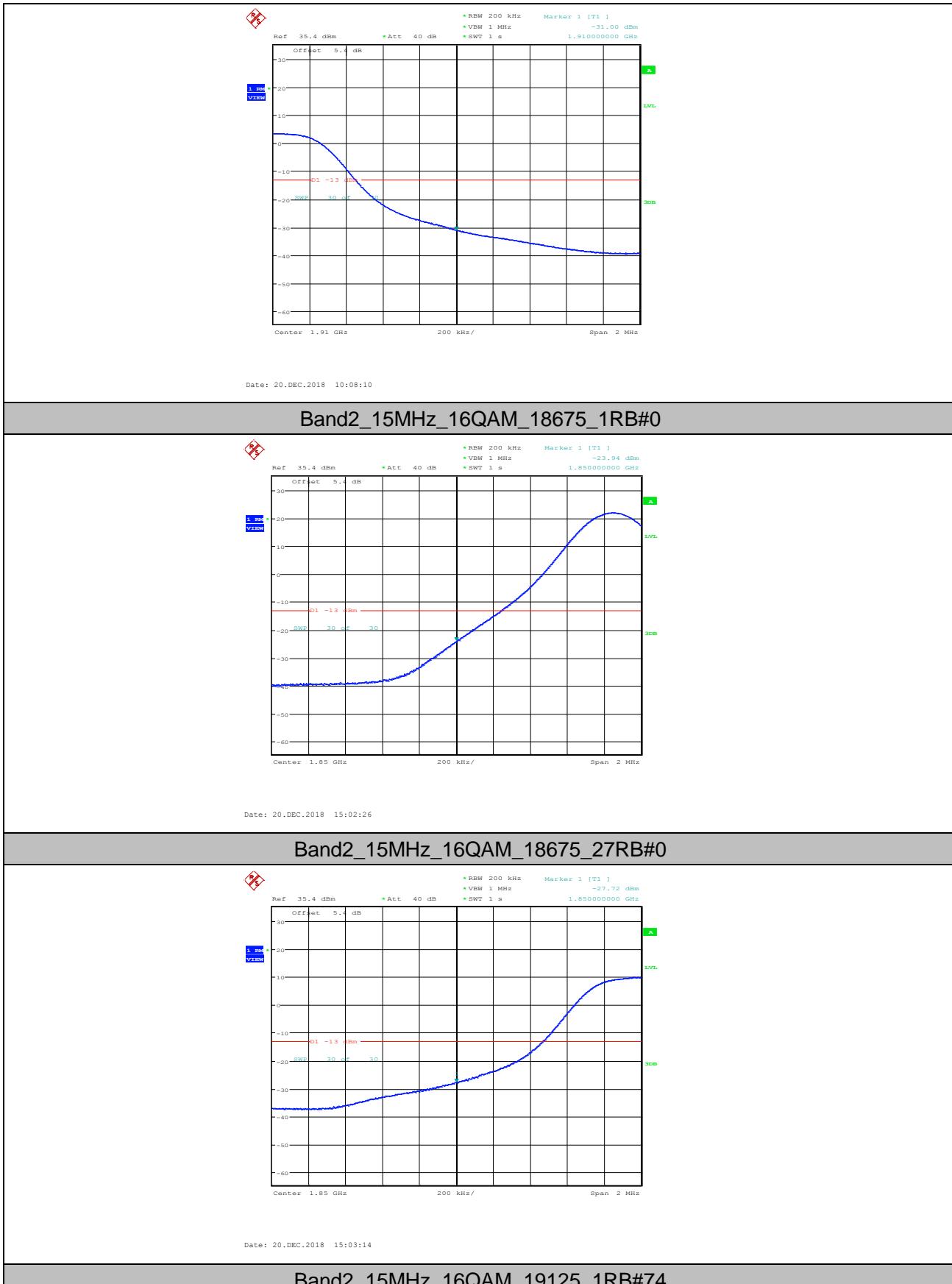
Band2 10MHz 16QAM 19150 27RB#23

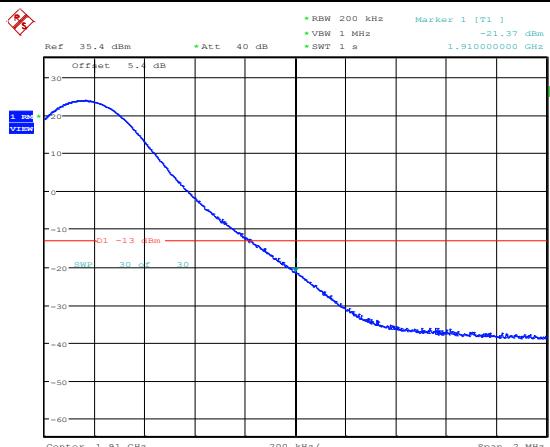


Patent 20 PEG 2010 14:52:41

Band2 15MHz QPSK 18675 1RB#0

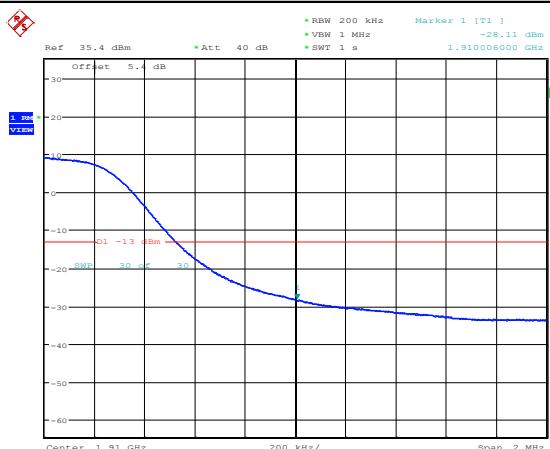






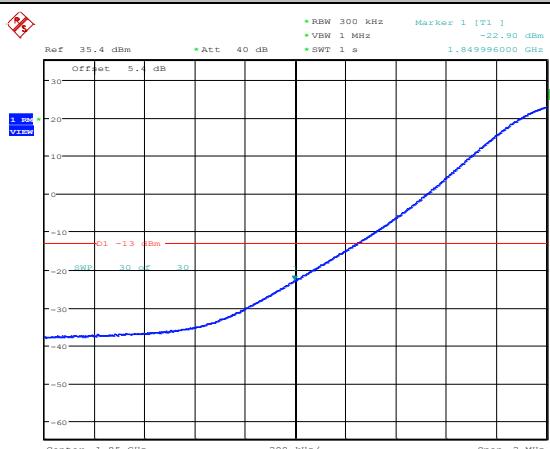
Date: 20.DEC.2018 15:04:05

Band2 15MHz 16QAM 19125 27RB#48



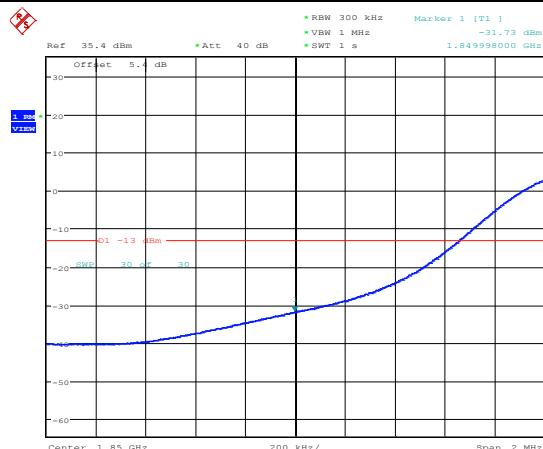
Date: 20-DEC-2018 15:04:53

Band2 20MHz QPSK 18700 1RB#0



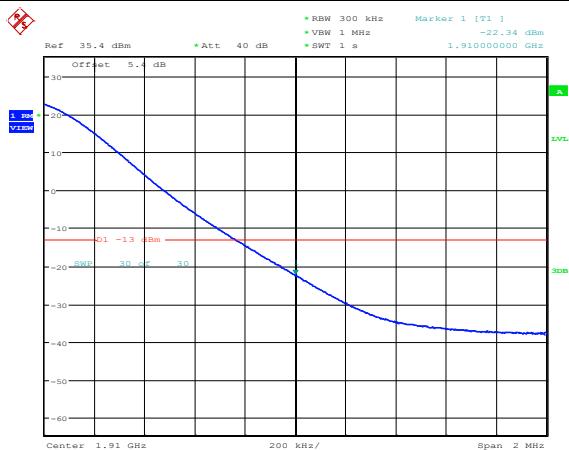
Date: 20.DEC.2018 10:09:24

Band2 20MHz QPSK 18700 100RB#0



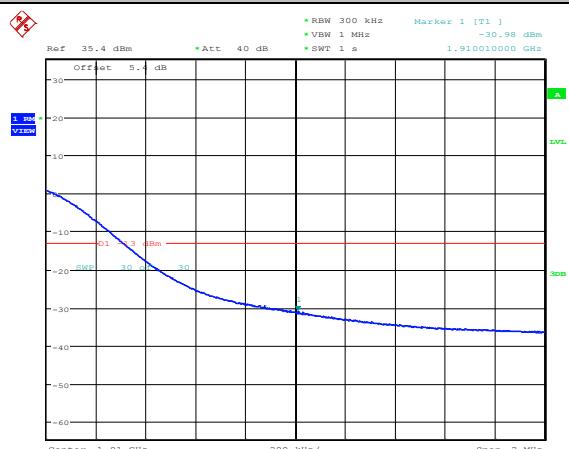
Date: 20.DEC.2018 10:28:43

Band2 20MHz QPSK 19100 1RB#99



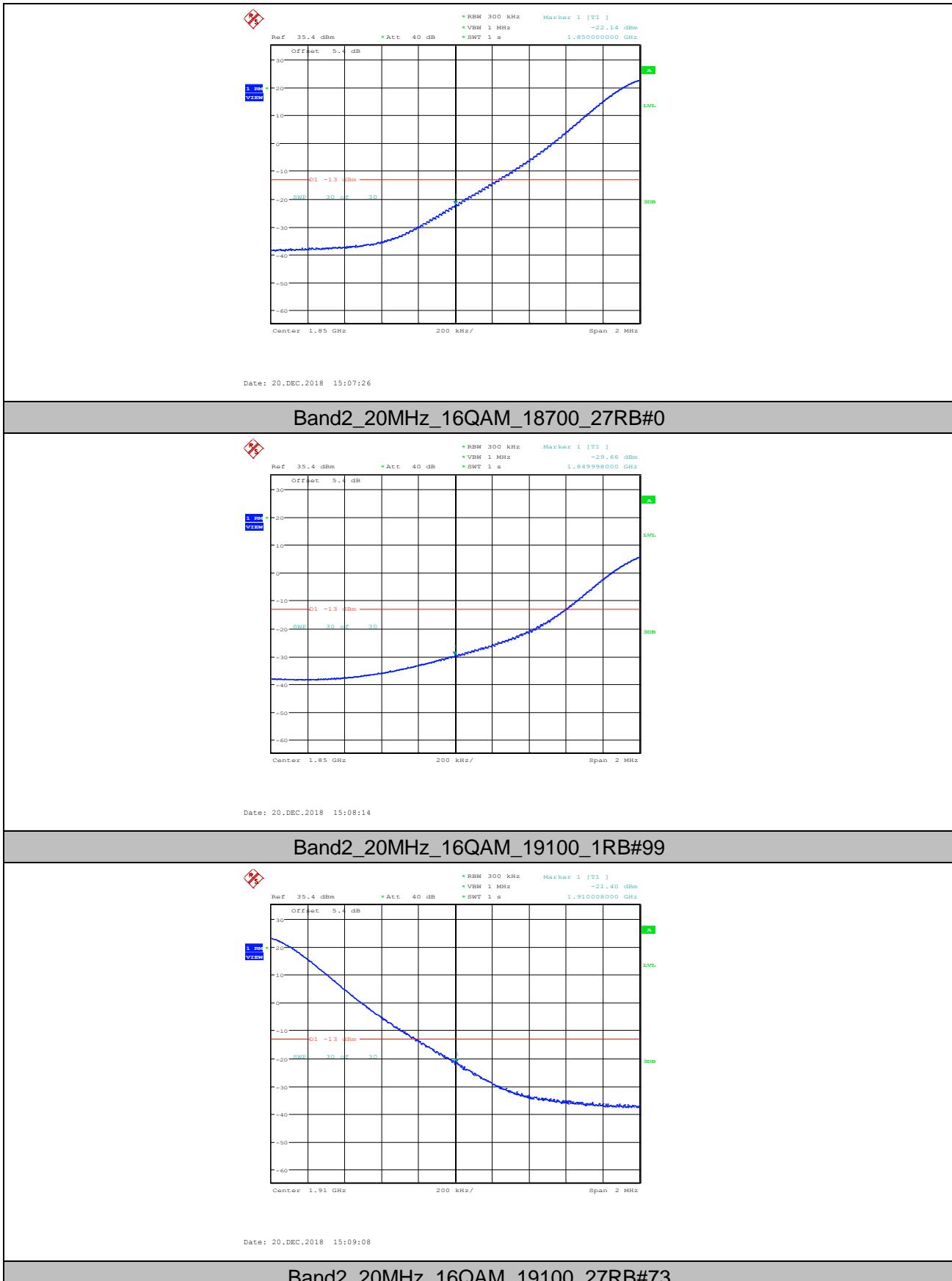
Date: 20-DEC-2018 10:29:35

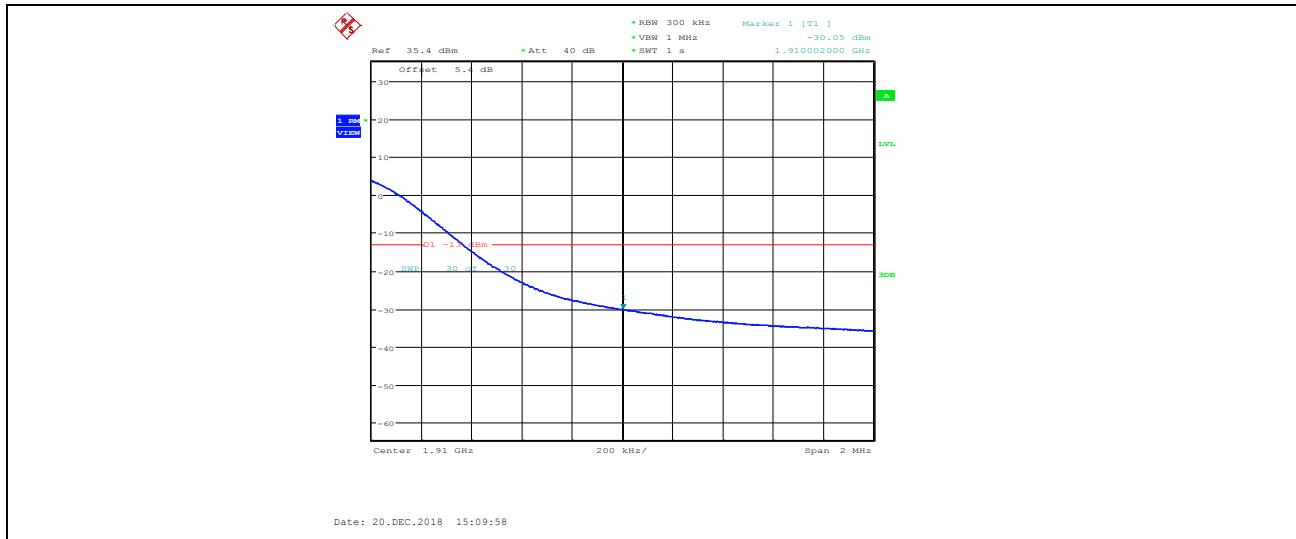
Band2 20MHz QPSK 19100 100RB#0



Date: 30 DEC 2018 10:30:19

Band2 20MHz 16QAM 18700 1RB#0



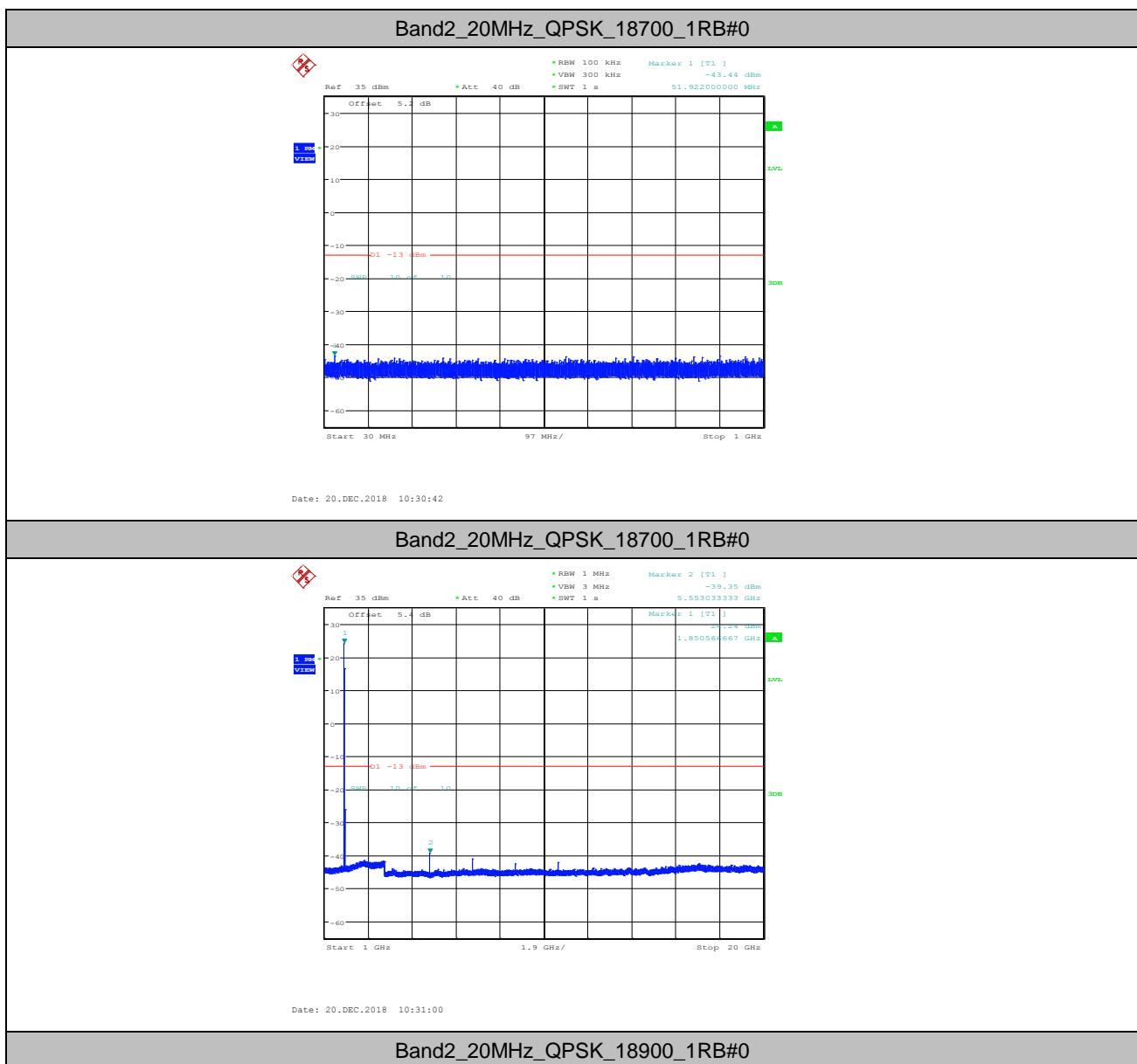


6. Spurious Emission at Antenna Terminal

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 $< \text{RBW}/2$ 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.

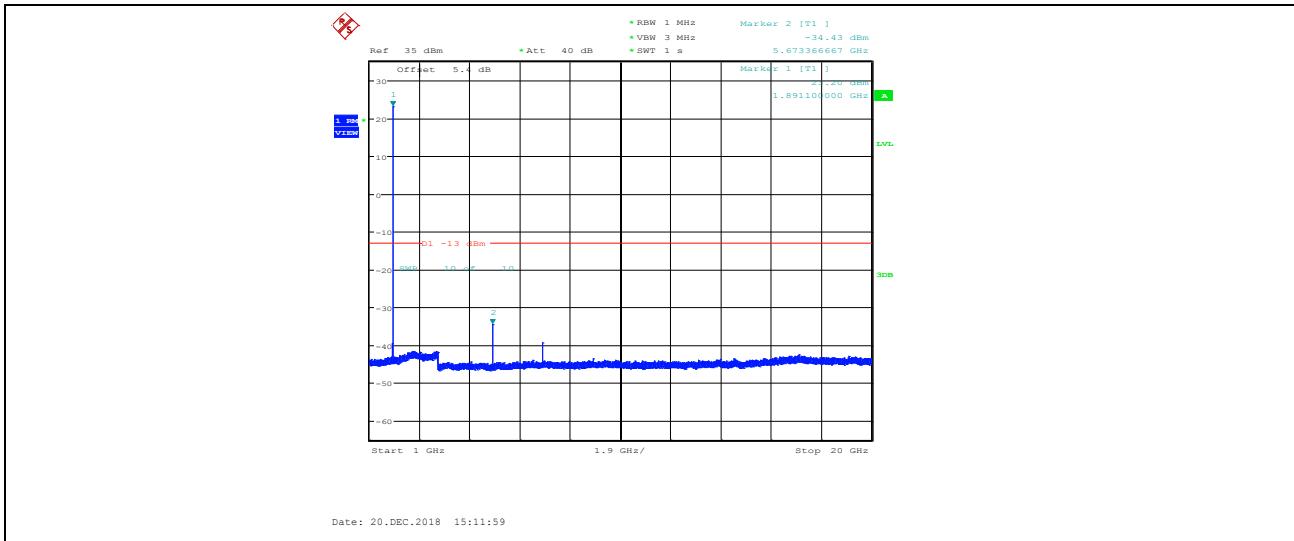
6.1. Test Plots











7. Field Strength of Spurious Radiation

7.1. Test BAND = LTE BAND 2

7.1.1. Test Mode =LTE/TM1 20MHz

7.1.1.1. Test Channel = LCH 1RB#0

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
112.300000	-80.35	-13.00	67.35	Vertical
3702.000000	-64.71	-13.00	51.71	Vertical
5553.200000	-53.37	-13.00	40.37	Vertical
7404.400000	-49.24	-13.00	36.24	Vertical
9255.600000	-55.08	-13.00	42.08	Vertical
11106.475000	-60.16	-13.00	47.16	Vertical
62.500000	-77.11	-13.00	64.11	Horizontal
104.250000	-79.02	-13.00	66.02	Horizontal
3702.000000	-63.44	-13.00	50.44	Horizontal
5553.200000	-57.16	-13.00	44.16	Horizontal
7404.400000	-55.28	-13.00	42.28	Horizontal
9255.275000	-58.16	-13.00	45.16	Horizontal

7.1.1.2. Test Channel = MCH 1RB#0

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
110.000000	-79.87	-13.00	66.87	Vertical
3741.975000	-63.89	-13.00	50.89	Vertical
5613.325000	-56.47	-13.00	43.47	Vertical
7484.350000	-50.05	-13.00	37.05	Vertical
9355.375000	-61.67	-13.00	48.67	Vertical
11226.725000	-59.01	-13.00	46.01	Vertical
62.250000	-77.55	-13.00	64.55	Horizontal
3741.975000	-64.72	-13.00	51.72	Horizontal
5613.325000	-59.24	-13.00	46.24	Horizontal
7484.350000	-54.29	-13.00	41.29	Horizontal
9355.375000	-60.02	-13.00	47.02	Horizontal
11226.400000	-61.87	-13.00	48.87	Horizontal

7.1.1.3. Test Channel = HCH 1RB#0

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
104.250000	-64.18	-13.00	51.18	Vertical
3781.950000	-63.74	-13.00	50.74	Vertical
5673.125000	-59.35	-13.00	46.35	Vertical
7564.300000	-51.63	-13.00	38.63	Vertical
9455.475000	-53.67	-13.00	40.67	Vertical
11346.325000	-58.00	-13.00	45.00	Vertical
62.550000	-77.17	-13.00	64.17	Horizontal
104.300000	-74.44	-13.00	61.44	Horizontal
3781.950000	-59.17	-13.00	46.17	Horizontal
5673.125000	-54.23	-13.00	41.23	Horizontal
7564.300000	-54.84	-13.00	41.84	Horizontal
9455.150000	-57.36	-13.00	44.36	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

Voltage										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	20MHz	QPSK	18700	100RB#0	VL	NT	1.40	0.000753	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	VN	NT	-2.60	-0.001398	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	VH	NT	-0.10	-0.000054	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	VL	NT	-1.40	-0.000745	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	VN	NT	-2.30	-0.001223	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	VH	NT	-1.40	-0.000745	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	VL	NT	-1.80	-0.000947	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	VN	NT	-2.20	-0.001158	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	VH	NT	-1.00	-0.000526	±2.5	PASS
Band2	20MHz	16QAM	18700	27RB#0	VL	NT	0.30	0.000161	±2.5	PASS
Band2	20MHz	16QAM	18700	27RB#0	VN	NT	0.70	0.000376	±2.5	PASS
Band2	20MHz	16QAM	18700	27RB#0	VH	NT	-0.70	-0.000376	±2.5	PASS
Band2	20MHz	16QAM	18900	27RB#0	VL	NT	-3.60	-0.001915	±2.5	PASS
Band2	20MHz	16QAM	18900	27RB#0	VN	NT	-2.70	-0.001436	±2.5	PASS
Band2	20MHz	16QAM	18900	27RB#0	VH	NT	-2.80	-0.001489	±2.5	PASS
Band2	20MHz	16QAM	19100	27RB#0	VL	NT	-2.60	-0.001368	±2.5	PASS
Band2	20MHz	16QAM	19100	27RB#0	VN	NT	-1.60	-0.000842	±2.5	PASS
Band2	20MHz	16QAM	19100	27RB#0	VH	NT	-1.00	-0.000526	±2.5	PASS

8.2. Frequency Vs Temperature

Temperature										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	20MHz	QPSK	18700	100RB#0	NV	-30	0.30	0.000161	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	-20	0.00	0.000000	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	0	0.60	0.000323	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	10	0.20	0.000108	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	20	0.60	0.000323	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	30	1.10	0.000591	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	40	0.60	0.000323	±2.5	PASS
Band2	20MHz	QPSK	18700	100RB#0	NV	50	0.60	0.000323	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	-30	-1.60	-0.000851	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	-20	-3.60	-0.001915	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	0	-3.60	-0.001915	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	10	-2.80	-0.001489	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	20	-2.80	-0.001489	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	30	-3.10	-0.001649	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	40	-4.10	-0.002181	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	50	-1.30	-0.000691	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	-30	-2.80	-0.001474	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	-20	-1.20	-0.000632	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	0	-2.00	-0.001053	±2.5	PASS



Band2	20MHz	QPSK	19100	100RB#0	NV	10	-3.00	-0.001579	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	20	-2.10	-0.001105	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	30	-2.30	-0.001211	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	40	-2.70	-0.001421	±2.5	PASS
Band2	20MHz	QPSK	19100	100RB#0	NV	50	-0.70	-0.000368	±2.5	PASS
Band2	20MHz	16QAM	18700	27RB#0	NV	-30	0.00	0.000000	±2.5	PASS
Band2	20MHz	16QAM	18700	27RB#0	NV	-20	0.10	0.000054	±2.5	PASS
Band2	20MHz	16QAM	18700	27RB#0	NV	0	0.80	0.000430	±2.5	PASS
Band2	20MHz	16QAM	18700	27RB#0	NV	10	0.10	0.000054	±2.5	PASS
Band2	20MHz	16QAM	18700	27RB#0	NV	20	0.50	0.000269	±2.5	PASS
Band2	20MHz	16QAM	18700	27RB#0	NV	30	-0.20	-0.000108	±2.5	PASS
Band2	20MHz	16QAM	18700	27RB#0	NV	40	-0.20	-0.000108	±2.5	PASS
Band2	20MHz	16QAM	18700	27RB#0	NV	50	-0.60	-0.000323	±2.5	PASS
Band2	20MHz	16QAM	18900	27RB#0	NV	-30	-4.50	-0.002394	±2.5	PASS
Band2	20MHz	16QAM	18900	27RB#0	NV	-20	-2.90	-0.001543	±2.5	PASS
Band2	20MHz	16QAM	18900	27RB#0	NV	0	-3.00	-0.001596	±2.5	PASS
Band2	20MHz	16QAM	18900	27RB#0	NV	10	-1.40	-0.000745	±2.5	PASS
Band2	20MHz	16QAM	18900	27RB#0	NV	20	-4.10	-0.002181	±2.5	PASS
Band2	20MHz	16QAM	18900	27RB#0	NV	30	-3.10	-0.001649	±2.5	PASS
Band2	20MHz	16QAM	18900	27RB#0	NV	40	-2.00	-0.001064	±2.5	PASS
Band2	20MHz	16QAM	18900	27RB#0	NV	50	-3.10	-0.001649	±2.5	PASS
Band2	20MHz	16QAM	19100	27RB#0	NV	-30	-2.20	-0.001158	±2.5	PASS
Band2	20MHz	16QAM	19100	27RB#0	NV	-20	-2.90	-0.001526	±2.5	PASS
Band2	20MHz	16QAM	19100	27RB#0	NV	0	-2.10	-0.001105	±2.5	PASS
Band2	20MHz	16QAM	19100	27RB#0	NV	10	-2.30	-0.001211	±2.5	PASS
Band2	20MHz	16QAM	19100	27RB#0	NV	20	-2.90	-0.001526	±2.5	PASS
Band2	20MHz	16QAM	19100	27RB#0	NV	30	-2.40	-0.001263	±2.5	PASS
Band2	20MHz	16QAM	19100	27RB#0	NV	40	-0.70	-0.000368	±2.5	PASS
Band2	20MHz	16QAM	19100	27RB#0	NV	50	-1.10	-0.000579	±2.5	PASS

The End