

Appendix B

E-UTRA Band 4



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CONTENT

1. EFFECTIVE (ISOTROPIC) RADIATED POWER.....	4
1.1. TEST RESULT.....	4
2. PEAK-TO-AVERAGE RATIO (CCDF).....	12
2.1. TEST RESULT.....	12
2.2. TEST PLOTS	12
3. MODULATION CHARACTERISTICS	16
3.1. TEST MODE = LTE /TM1 20MHz	16
3.1.1. TEST CHANNEL = MCH	16
3.2. TEST MODE = LTE /TM2 20MHz	17
3.2.1. TEST CHANNEL = MCH	17
3.3. TEST MODE = LTE /TM3 20MHz	错误!未定义书签。
3.3.1. TEST CHANNEL = MCH	错误!未定义书签。
4. 26DB BANDWIDTH AND OCCUPIED BANDWIDTH	18
4.1. TEST RESULT.....	18
4.2. TEST PLOTS	19
5. BAND EDGE COMPLIANCE	38
5.1. TEST PLOTS	38
6. SPURIOUS EMISSION AT ANTENNA TERMINAL.....	63
6.1. TEST PLOTS	63
7. FIELD STRENGTH OF SPURIOUS RADIATION.....	70
7.1. Test Band = LTE_4 _TM1	70
7.1.1. Test Channel = Low Channel	70
7.2. Test Band = LTE_4 _TM1	71
7.2.1. Test Channel = Low Channel	71
7.3. Test Band = LTE_4 _TM1	72
7.3.1. Test Channel = Mid Channel	72
7.4. Test Band = LTE_4 _TM1	73
7.4.1. Test Channel = Mid Channel	73
7.5. Test Band = LTE_4 _TM1	74
7.5.1. Test Channel = High Channel	74

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7.6.	Test Band = LTE_4 _TM1	75
7.6.1.	Test Channel = High Channel	75
8.	FREQUENCY STABILITY.....	76
8.1.	FREQUENCY VS VOLTAGE	76
8.2.	FREQUENCY VS TEMPERATURE	76



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1 Effective (Isotropic) Radiated Power

1.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	23.95	27.96	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#2	24.07	28.08	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	24.00	28.01	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#1	24.16	28.17	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#0	24.11	28.12	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#3	23.98	27.99	30.00	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	23.15	27.16	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#5	24.01	28.02	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	24.00	28.01	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#2	23.88	27.89	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#0	24.06	28.07	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#1	24.01	28.02	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#3	24.09	28.10	30.00	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	23.10	27.11	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#2	24.08	28.09	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	24.26	28.27	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	24.04	28.05	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#0	24.32	28.33	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#3	24.22	28.23	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#1	24.25	28.26	30.00	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	23.27	27.28	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#2	23.12	27.13	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	23.21	27.22	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	23.31	27.32	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#0	22.89	26.90	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#1	23.10	27.11	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#3	23.00	27.01	30.00	PASS

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Band4	1.4MHz	16QAM	19957	6RB#0	22.05	26.06	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#5	22.99	27.00	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	23.20	27.21	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#2	23.04	27.05	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#3	22.96	26.97	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#1	23.07	27.08	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#0	22.97	26.98	30.00	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	22.29	26.30	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#2	23.26	27.27	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#5	23.36	27.37	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	23.18	27.19	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#3	23.25	27.26	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#1	23.22	27.23	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#0	23.22	27.23	30.00	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	22.42	26.43	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#14	23.84	27.85	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#0	23.98	27.99	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#8	23.90	27.91	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#7	22.99	27.00	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#4	22.97	26.98	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#0	22.89	26.90	30.00	PASS
Band4	3MHz	QPSK	19965	15RB#0	22.98	26.99	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#14	23.85	27.86	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#8	24.03	28.04	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#0	23.93	27.94	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#7	22.97	26.98	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#0	22.94	26.95	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#4	22.98	26.99	30.00	PASS
Band4	3MHz	QPSK	20175	15RB#0	22.94	26.95	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#14	24.06	28.07	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#8	24.27	28.28	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#0	24.04	28.05	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#4	23.07	27.08	30.00	PASS

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Band4	3MHz	QPSK	20385	8RB#0	23.19	27.20	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#7	23.15	27.16	30.00	PASS
Band4	3MHz	QPSK	20385	15RB#0	23.22	27.23	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#8	22.96	26.97	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#14	23.02	27.03	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#0	22.94	26.95	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#0	21.94	25.95	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#7	22.03	26.04	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#4	22.01	26.02	30.00	PASS
Band4	3MHz	16QAM	19965	15RB#0	21.83	25.84	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#8	23.30	27.31	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#14	23.44	27.45	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#0	23.02	27.03	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#4	21.97	25.98	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#0	22.05	26.06	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#7	21.91	25.92	30.00	PASS
Band4	3MHz	16QAM	20175	15RB#0	21.99	26.00	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#14	23.13	27.14	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#0	23.41	27.42	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#8	23.37	27.38	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#0	22.20	26.21	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#7	22.19	26.20	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#4	22.27	26.28	30.00	PASS
Band4	3MHz	16QAM	20385	15RB#0	22.24	26.25	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#24	23.90	27.91	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#12	23.93	27.94	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#0	23.84	27.85	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#6	22.96	26.97	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#0	23.04	27.05	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#13	22.95	26.96	30.00	PASS
Band4	5MHz	QPSK	19975	25RB#0	23.03	27.04	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#24	23.83	27.84	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#0	24.03	28.04	30.00	PASS

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Band4	5MHz	QPSK	20175	1RB#12	23.76	27.77	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#6	23.02	27.03	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#0	23.08	27.09	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#13	22.86	26.87	30.00	PASS
Band4	5MHz	QPSK	20175	25RB#0	23.06	27.07	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#0	23.86	27.87	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#12	24.02	28.03	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#24	24.12	28.13	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#0	23.17	27.18	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#6	23.23	27.24	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#13	23.12	27.13	30.00	PASS
Band4	5MHz	QPSK	20375	25RB#0	23.17	27.18	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#0	22.86	26.87	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#12	22.99	27.00	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#24	22.88	26.89	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#13	21.94	25.95	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#0	21.87	25.88	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#6	22.01	26.02	30.00	PASS
Band4	5MHz	16QAM	19975	25RB#0	22.03	26.04	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#0	23.10	27.11	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#12	23.14	27.15	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#24	23.07	27.08	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#0	22.00	26.01	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#13	21.87	25.88	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#6	21.92	25.93	30.00	PASS
Band4	5MHz	16QAM	20175	25RB#0	21.91	25.92	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#0	23.05	27.06	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#24	23.11	27.12	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#12	23.31	27.32	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#0	22.12	26.13	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#6	22.20	26.21	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#13	22.13	26.14	30.00	PASS
Band4	5MHz	16QAM	20375	25RB#0	22.06	26.07	30.00	PASS

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Band4	10MHz	QPSK	20000	1RB#0	23.86	27.87	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#24	24.04	28.05	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#49	23.96	27.97	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#12	22.94	26.95	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#0	22.86	26.87	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#25	23.04	27.05	30.00	PASS
Band4	10MHz	QPSK	20000	50RB#0	23.05	27.06	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#49	24.04	28.05	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#0	24.02	28.03	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#24	23.89	27.90	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#0	23.13	27.14	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#12	23.05	27.06	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#25	22.93	26.94	30.00	PASS
Band4	10MHz	QPSK	20175	50RB#0	23.07	27.08	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#24	24.07	28.08	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#49	24.05	28.06	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#0	24.07	28.08	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#0	23.24	27.25	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#25	23.12	27.13	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#12	23.28	27.29	30.00	PASS
Band4	10MHz	QPSK	20350	50RB#0	23.29	27.30	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#24	23.12	27.13	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#49	23.14	27.15	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#0	23.00	27.01	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#0	21.93	25.94	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#12	22.02	26.03	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#25	22.05	26.06	30.00	PASS
Band4	10MHz	16QAM	20000	50RB#0	22.03	26.04	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#49	23.18	27.19	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#0	23.14	27.15	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#24	23.05	27.06	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#25	22.09	26.10	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#12	22.11	26.12	30.00	PASS

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Band4	10MHz	16QAM	20175	25RB#0	21.89	25.90	30.00	PASS
Band4	10MHz	16QAM	20175	50RB#0	22.01	26.02	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#24	23.42	27.43	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#49	23.44	27.45	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#0	23.14	27.15	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#25	22.36	26.37	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#12	22.16	26.17	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#0	22.18	26.19	30.00	PASS
Band4	10MHz	16QAM	20350	50RB#0	22.14	26.15	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#74	23.90	27.91	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#0	23.92	27.93	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#38	23.88	27.89	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#39	22.93	26.94	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#18	23.03	27.04	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#0	23.09	27.10	30.00	PASS
Band4	15MHz	QPSK	20025	75RB#0	22.92	26.93	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#74	23.83	27.84	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#38	23.89	27.90	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#0	23.88	27.89	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#0	23.00	27.01	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#39	23.09	27.10	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#18	22.90	26.91	30.00	PASS
Band4	15MHz	QPSK	20175	75RB#0	23.07	27.08	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#74	24.00	28.01	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#38	24.06	28.07	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#0	23.98	27.99	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#18	23.15	27.16	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#0	23.21	27.22	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#39	23.07	27.08	30.00	PASS
Band4	15MHz	QPSK	20325	75RB#0	23.08	27.09	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#0	23.12	27.13	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#74	23.18	27.19	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#38	23.16	27.17	30.00	PASS

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Band4	15MHz	16QAM	20025	36RB#0	21.99	26.00	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#39	22.02	26.03	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#18	22.04	26.05	30.00	PASS
Band4	15MHz	16QAM	20025	75RB#0	21.98	25.99	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#38	23.24	27.25	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#74	23.30	27.31	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#0	23.19	27.20	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#18	21.96	25.97	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#0	21.93	25.94	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#39	21.95	25.96	30.00	PASS
Band4	15MHz	16QAM	20175	75RB#0	21.93	25.94	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#74	23.40	27.41	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#0	23.45	27.46	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#38	23.17	27.18	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#0	22.22	26.23	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#39	22.09	26.10	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#18	22.08	26.09	30.00	PASS
Band4	15MHz	16QAM	20325	75RB#0	22.14	26.15	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#99	23.89	27.90	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#49	23.94	27.95	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#0	23.75	27.76	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#25	22.86	26.87	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#0	23.02	27.03	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#50	23.08	27.09	30.00	PASS
Band4	20MHz	QPSK	20050	100RB#0	22.87	26.88	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#99	23.93	27.94	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#0	23.99	28.00	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#49	23.84	27.85	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#25	22.97	26.98	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#0	23.08	27.09	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#50	22.81	26.82	30.00	PASS
Band4	20MHz	QPSK	20175	100RB#0	23.04	27.05	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#0	23.99	28.00	30.00	PASS

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Band4	20MHz	QPSK	20300	1RB#49	24.11	28.12	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#99	23.86	27.87	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#0	23.39	27.40	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#25	23.33	27.34	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#50	22.97	26.98	30.00	PASS
Band4	20MHz	QPSK	20300	100RB#0	23.23	27.24	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#0	23.29	27.30	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#49	23.33	27.34	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#99	22.95	26.96	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#50	21.78	25.79	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#0	21.95	25.96	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#25	21.92	25.93	30.00	PASS
Band4	20MHz	16QAM	20050	100RB#0	21.90	25.91	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#0	23.01	27.02	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#49	23.15	27.16	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#99	23.00	27.01	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#0	22.07	26.08	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#50	21.93	25.94	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#25	21.82	25.83	30.00	PASS
Band4	20MHz	16QAM	20175	100RB#0	22.00	26.01	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#0	23.05	27.06	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#99	23.02	27.03	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#49	23.05	27.06	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#0	22.24	26.25	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#25	22.15	26.16	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#50	22.08	26.09	30.00	PASS
Band4	20MHz	16QAM	20300	100RB#0	22.15	26.16	30.00	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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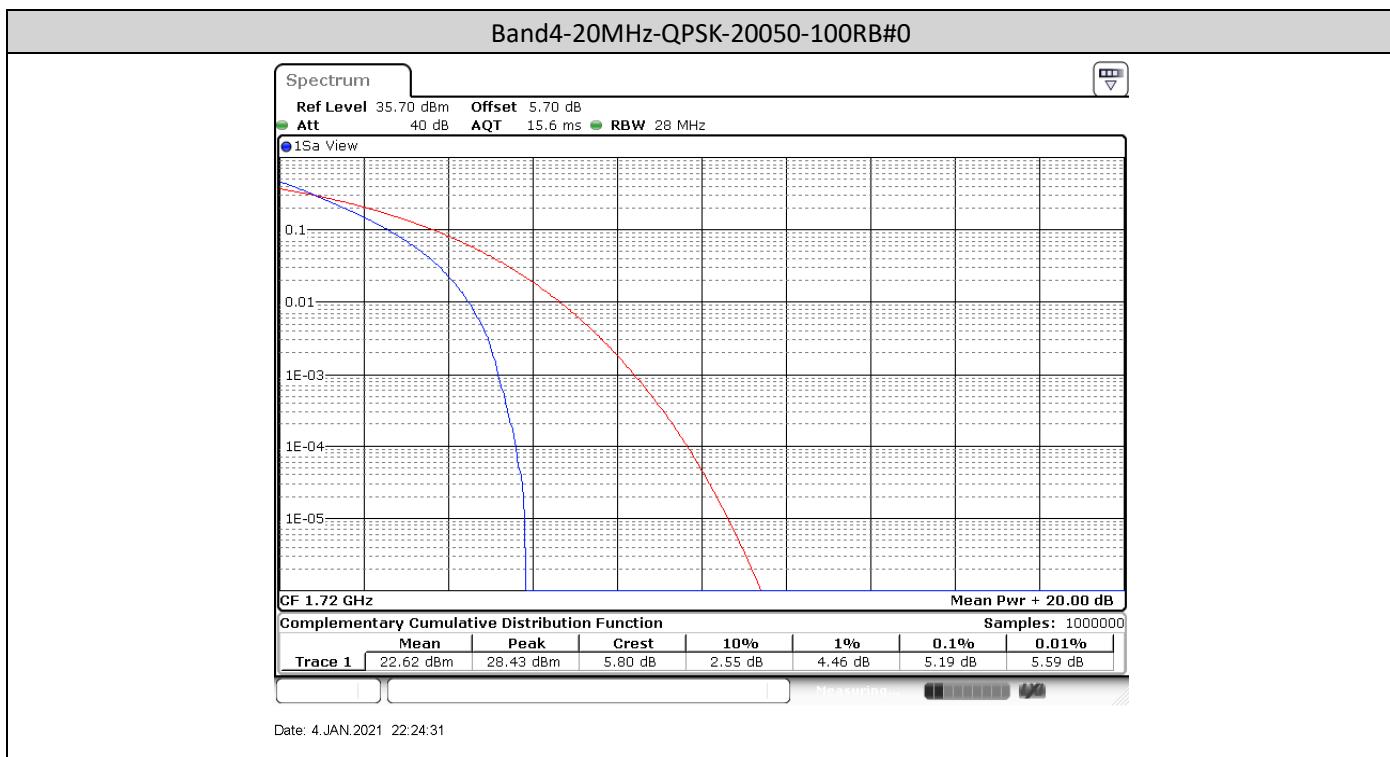
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2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	20MHz	QPSK	20050	100RB#0	5.19	13	PASS
Band4	20MHz	QPSK	20175	100RB#0	5.10	13	PASS
Band4	20MHz	QPSK	20300	100RB#0	5.16	13	PASS
Band4	20MHz	16QAM	20050	100RB#0	6.03	13	PASS
Band4	20MHz	16QAM	20175	100RB#0	6.00	13	PASS
Band4	20MHz	16QAM	20300	100RB#0	6.00	13	PASS

2.2. Test Plots



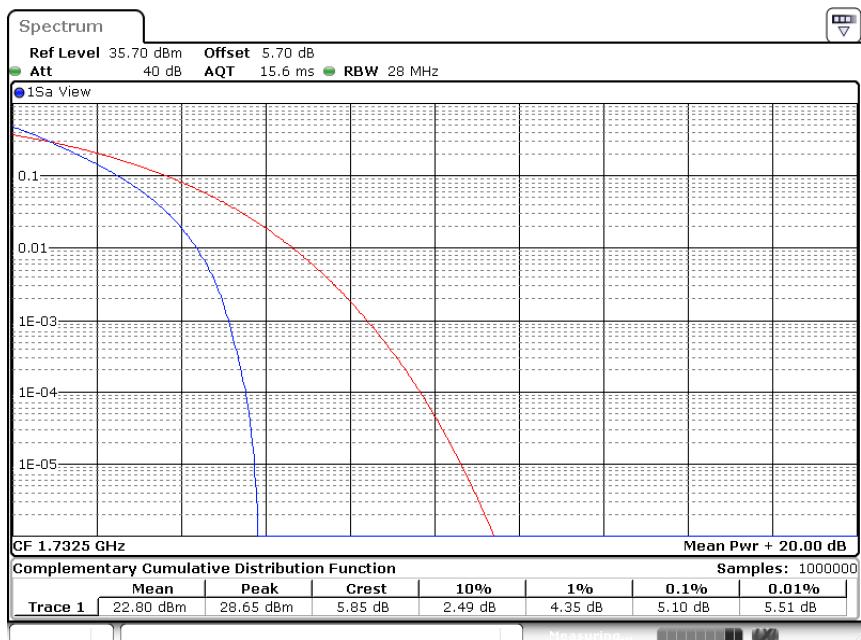
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Band4-20MHz-QPSK-20175-100RB#0



Date: 4.JAN.2021 22:24:54

Band4-20MHz-QPSK-20300-100RB#0



Date: 4.JAN.2021 22:25:17

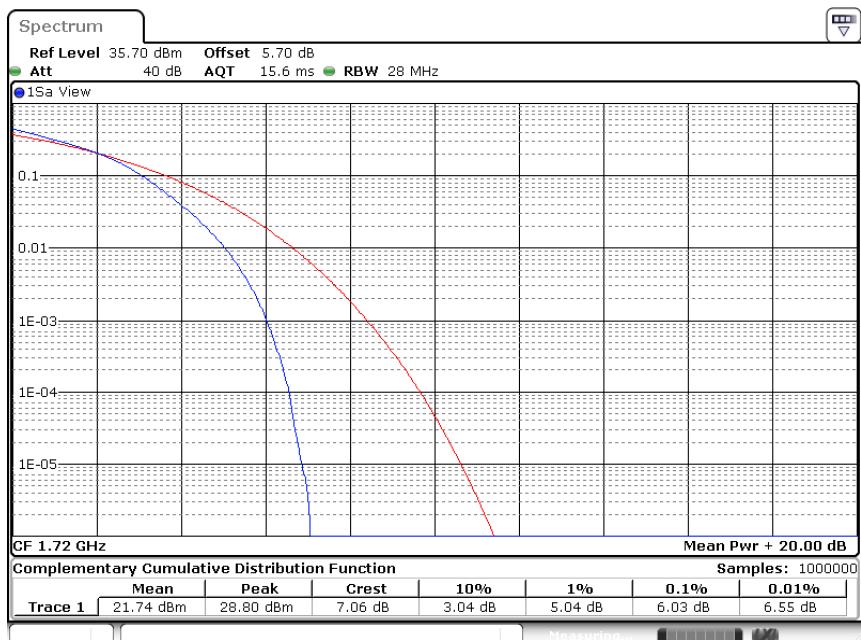
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Band4-20MHz-16QAM-20050-100RB#0



Date: 4.JAN.2021 22:24:42

Band4-20MHz-16QAM-20175-100RB#0



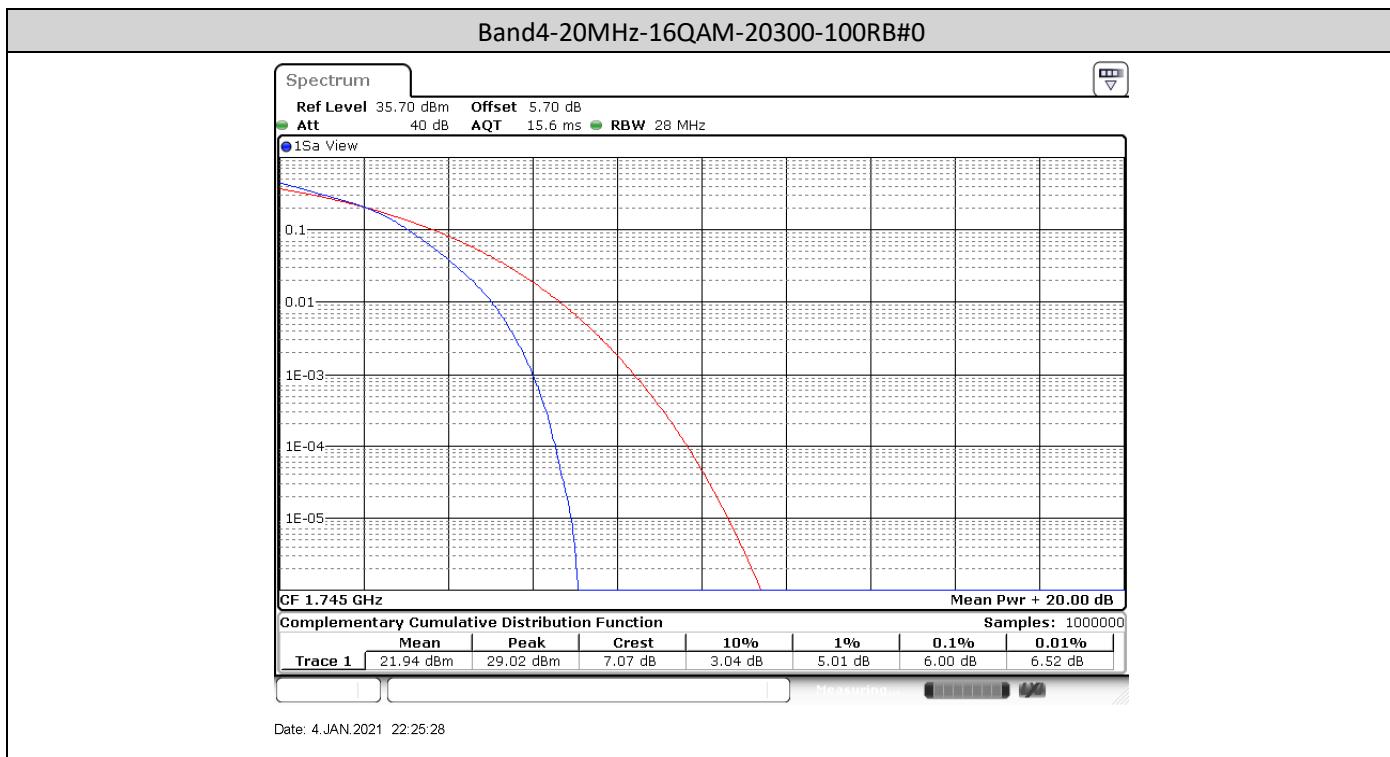
Date: 4.JAN.2021 22:25:05

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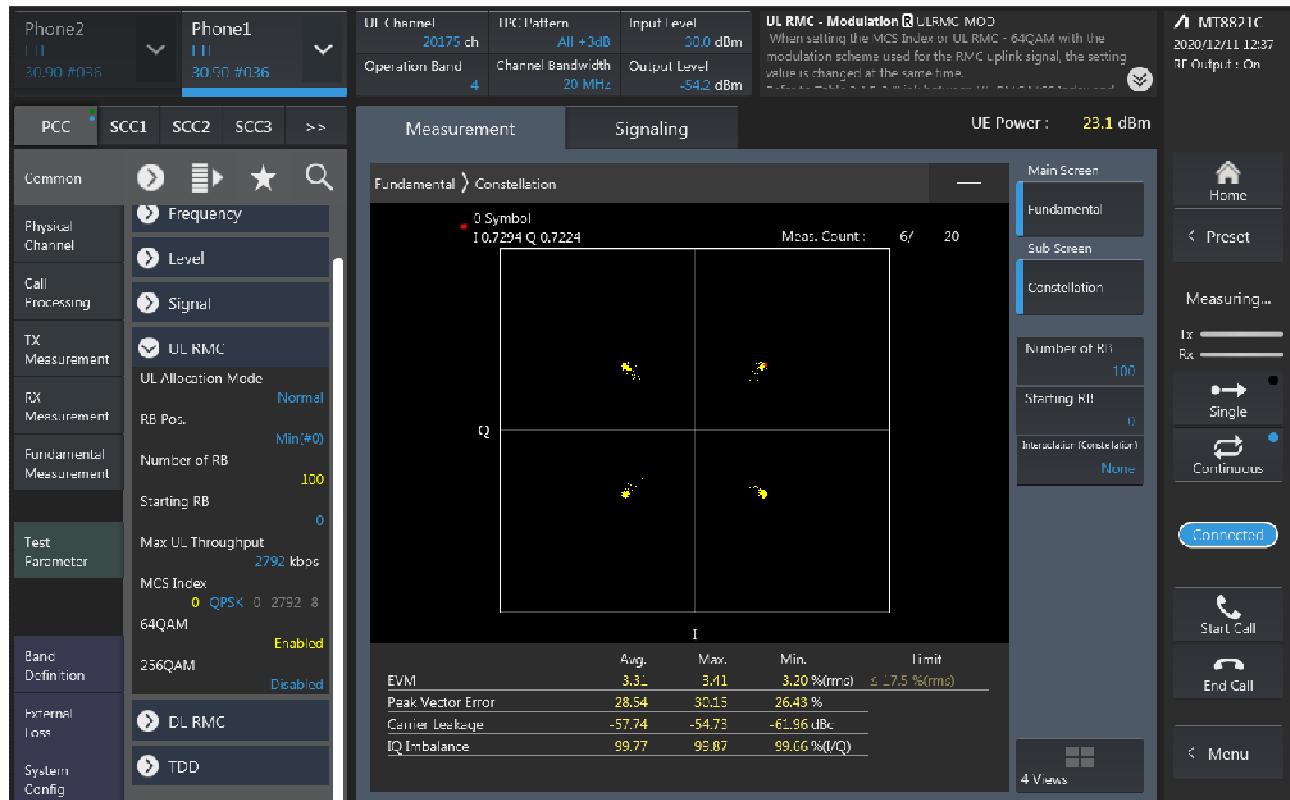


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3. Modulation Characteristics

3.1. Test Mode = LTE /TM1 20MHz

3.1.1. Test Channel = MCH



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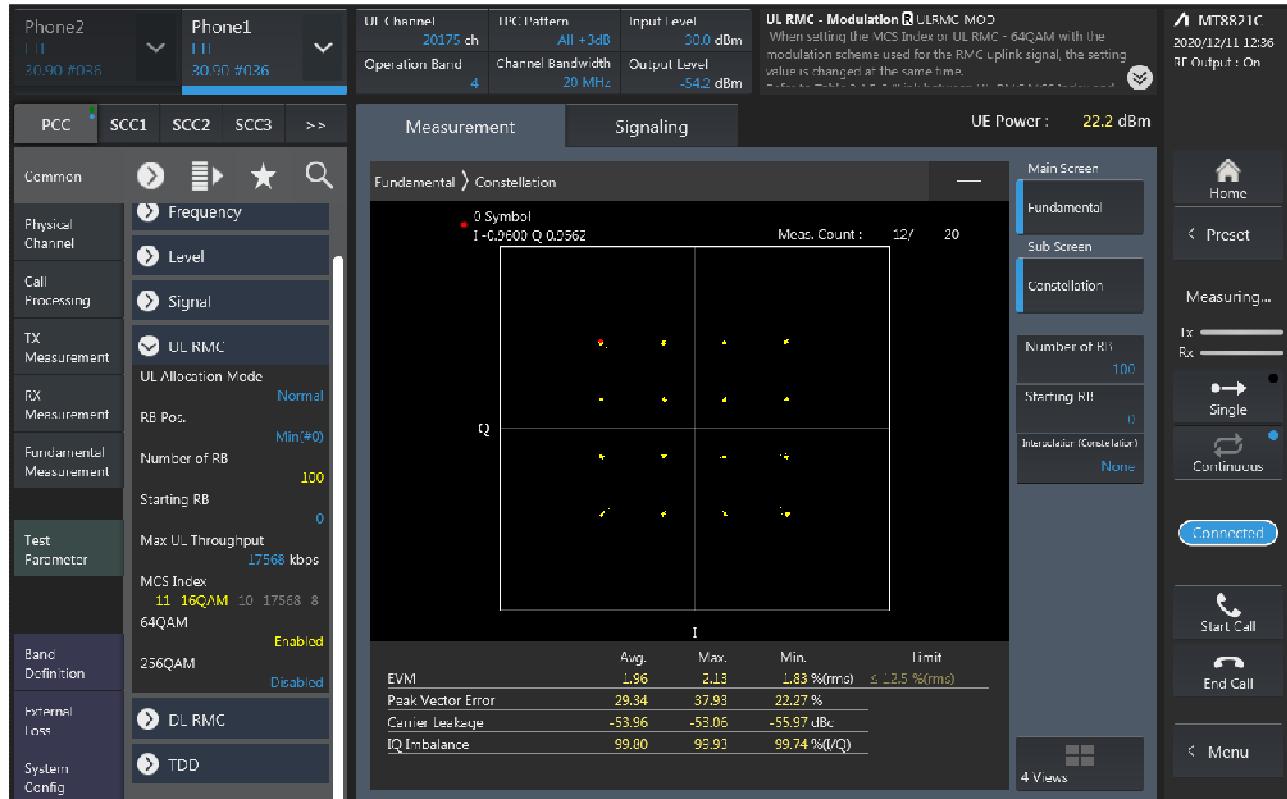
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3.2. Test Mode = LTE /TM2 20MHz

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
Band4	1.4MHz	QPSK	19957	6RB#0	1.091	1.284	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.085	1.275	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	1.091	1.281	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	1.091	1.278	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.091	1.281	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	1.088	1.281	PASS
Band4	3MHz	QPSK	19965	15RB#0	2.691	2.916	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.685	2.922	PASS
Band4	3MHz	QPSK	20385	15RB#0	2.685	2.916	PASS
Band4	3MHz	16QAM	19965	15RB#0	2.679	2.892	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.679	2.904	PASS
Band4	3MHz	16QAM	20385	15RB#0	2.673	2.898	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.466	4.830	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.476	4.850	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.476	4.830	PASS
Band4	5MHz	16QAM	19975	25RB#0	4.476	4.860	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.476	4.870	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.476	4.860	PASS
Band4	10MHz	QPSK	20000	50RB#0	8.931	9.580	PASS
Band4	10MHz	QPSK	20175	50RB#0	8.911	9.580	PASS
Band4	10MHz	QPSK	20350	50RB#0	8.951	9.600	PASS
Band4	10MHz	16QAM	20000	50RB#0	8.931	9.600	PASS
Band4	10MHz	16QAM	20175	50RB#0	8.931	9.580	PASS
Band4	10MHz	16QAM	20350	50RB#0	8.911	9.600	PASS
Band4	15MHz	QPSK	20025	75RB#0	13.457	14.760	PASS
Band4	15MHz	QPSK	20175	75RB#0	13.457	14.640	PASS
Band4	15MHz	QPSK	20325	75RB#0	13.487	14.610	PASS
Band4	15MHz	16QAM	20025	75RB#0	13.457	14.550	PASS
Band4	15MHz	16QAM	20175	75RB#0	13.457	14.490	PASS
Band4	15MHz	16QAM	20325	75RB#0	13.457	14.640	PASS
Band4	20MHz	QPSK	20050	100RB#0	17.862	19.240	PASS

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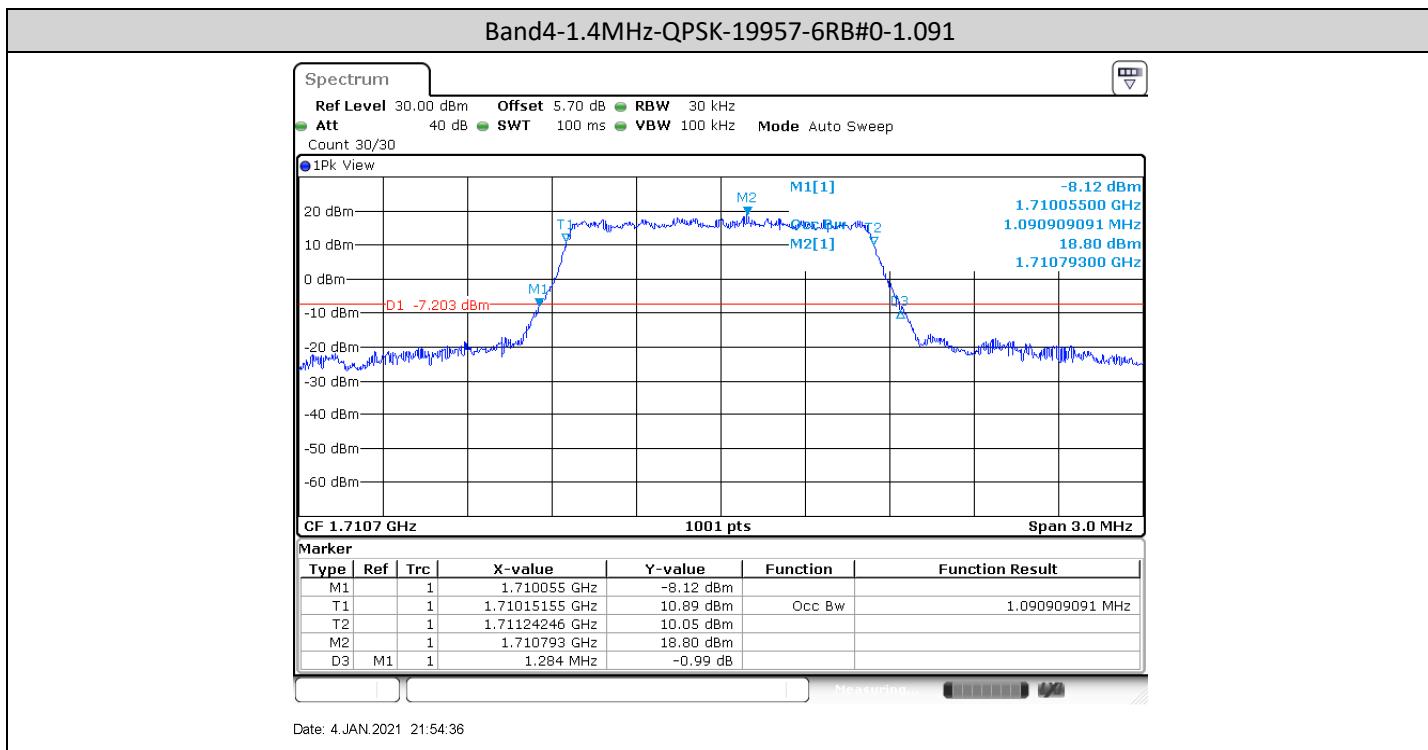
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Band4	20MHz	QPSK	20175	100RB#0	17.862	19.240	PASS
Band4	20MHz	QPSK	20300	100RB#0	17.902	19.320	PASS
Band4	20MHz	16QAM	20050	100RB#0	17.862	19.160	PASS
Band4	20MHz	16QAM	20175	100RB#0	17.862	19.200	PASS
Band4	20MHz	16QAM	20300	100RB#0	17.902	19.320	PASS

4.2. Test Plots



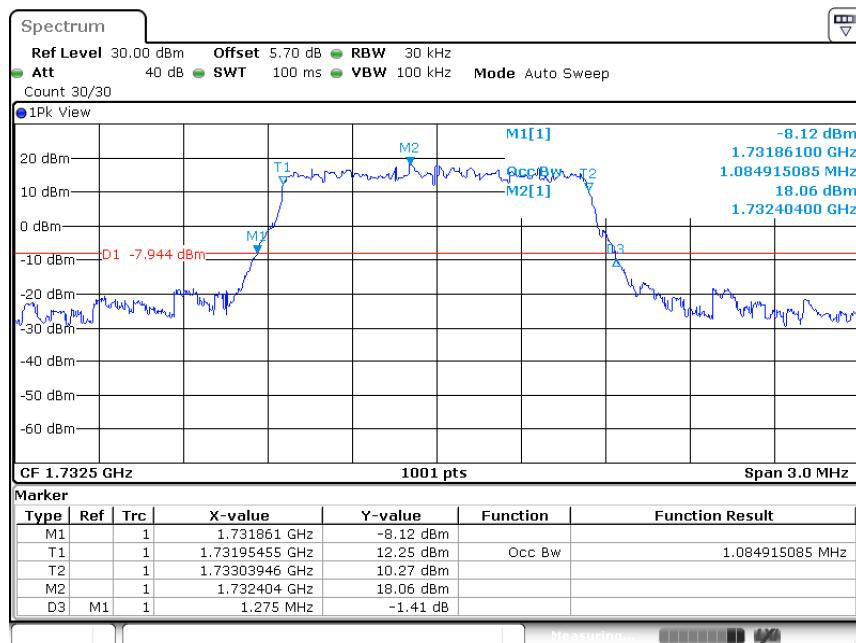
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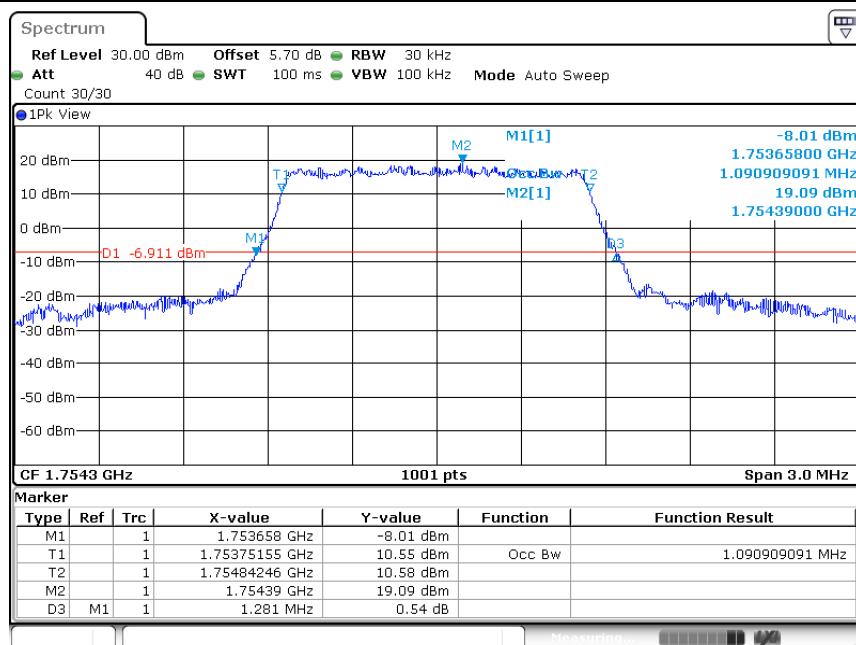
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Band4-1.4MHz-QPSK-20175-6RB#0-1.085



Date: 4.JAN.2021 21:55:02

Band4-1.4MHz-QPSK-20393-6RB#0-1.091



Date: 4.JAN.2021 21:55:28

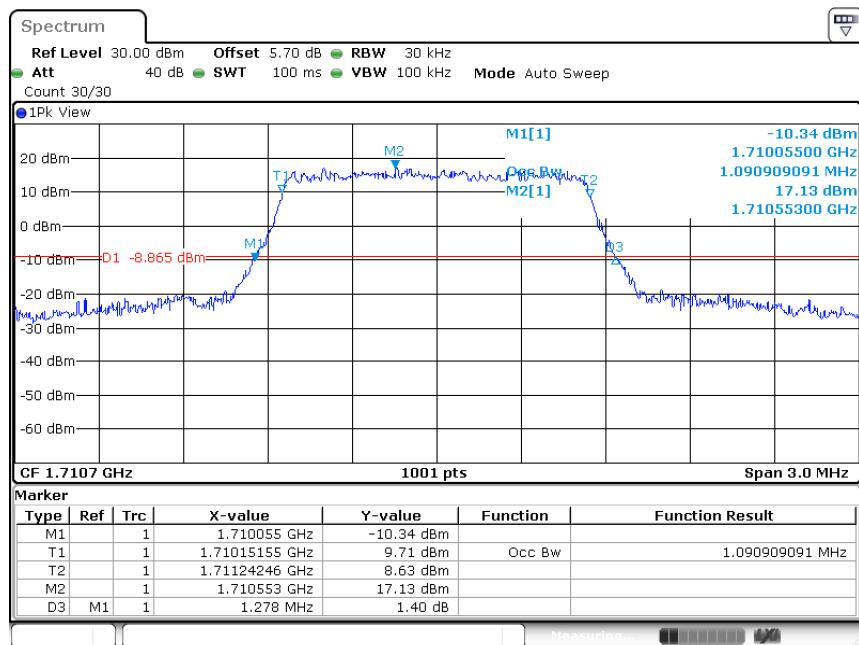
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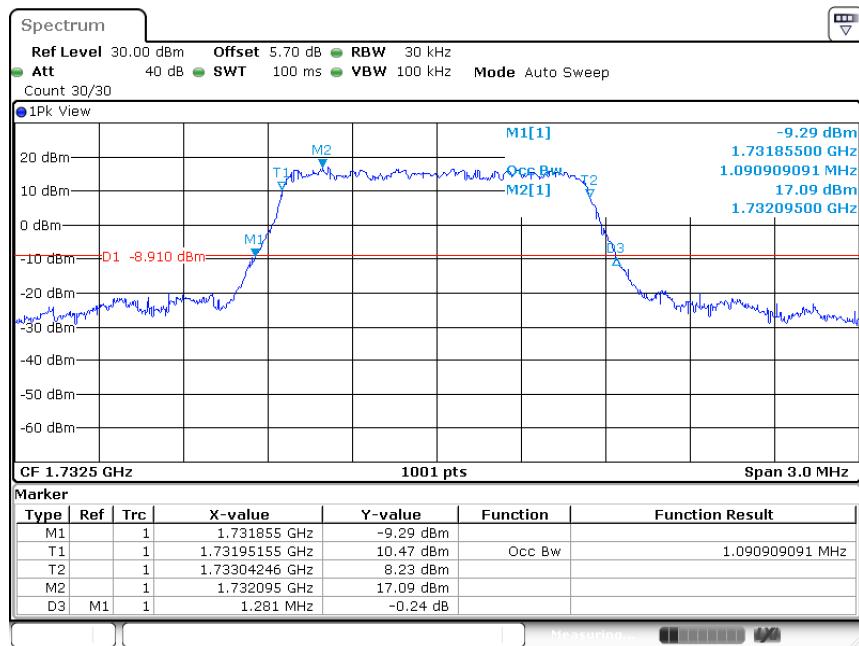
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Band4-1.4MHz-16QAM-19957-6RB#0-1.091



Date: 4.JAN.2021 21:54:49

Band4-1.4MHz-16QAM-20175-6RB#0-1.091



Date: 4.JAN.2021 21:55:15

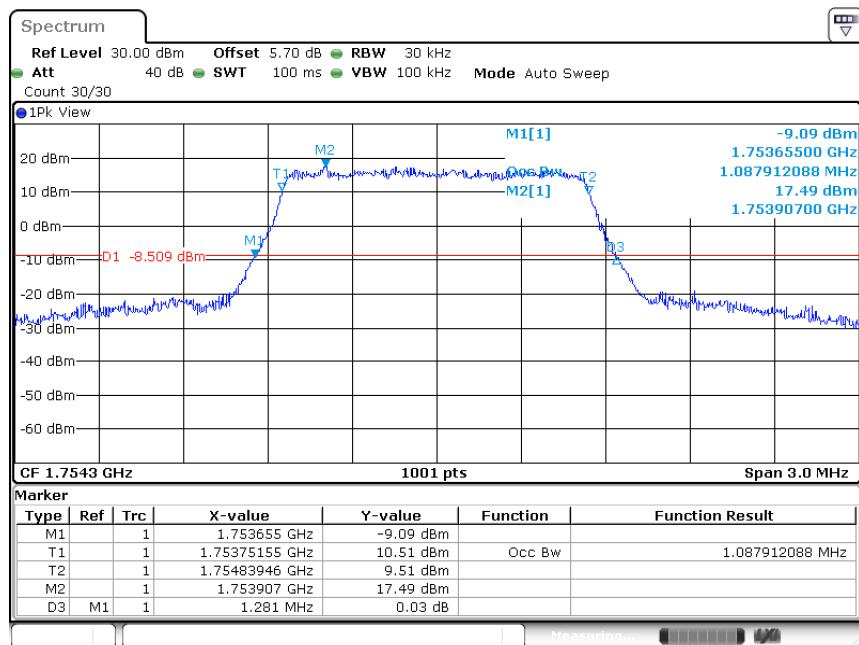
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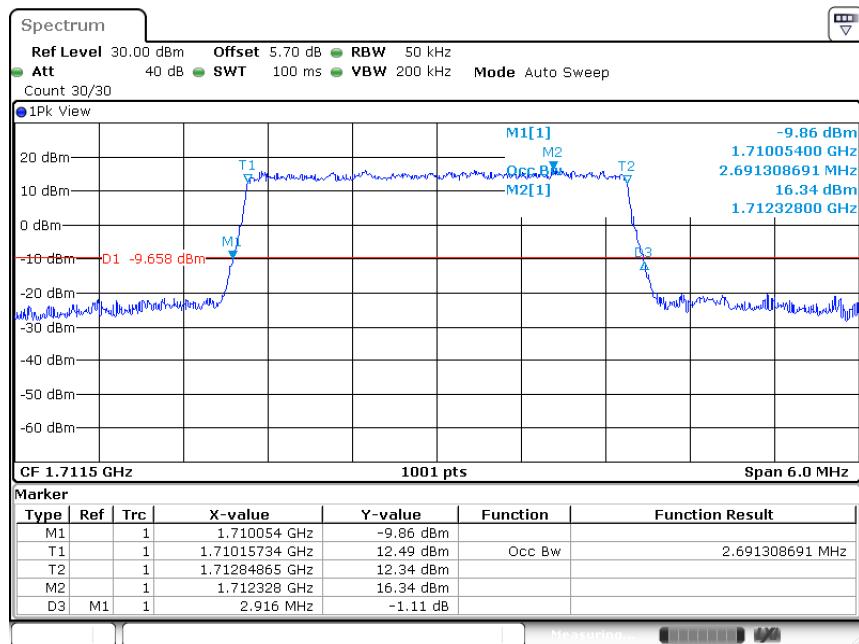
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Band4-1.4MHz-16QAM-20393-6RB#0-1.088



Date: 4.JAN.2021 21:55:40

Band4-3MHz-QPSK-19965-15RB#0-2.691



Date: 4.JAN.2021 21:55:58

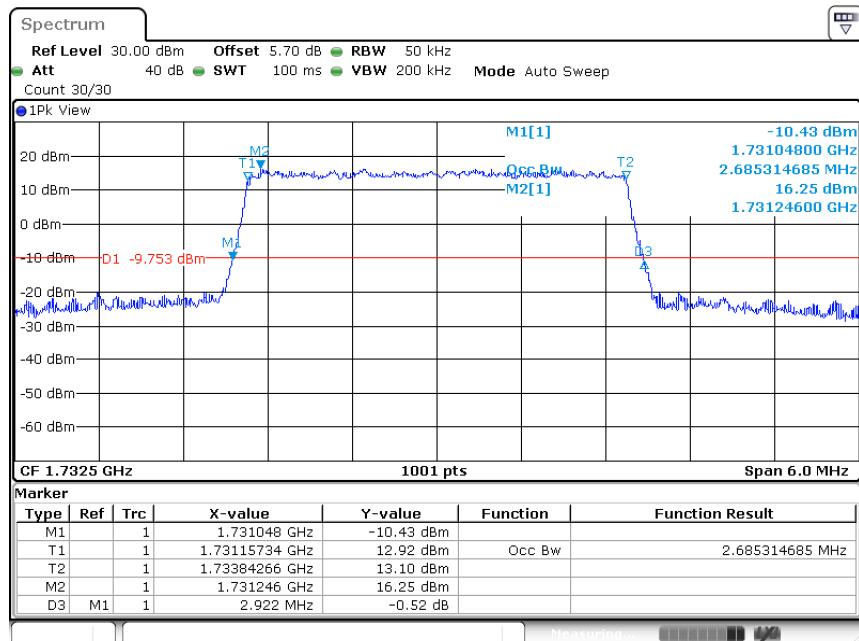
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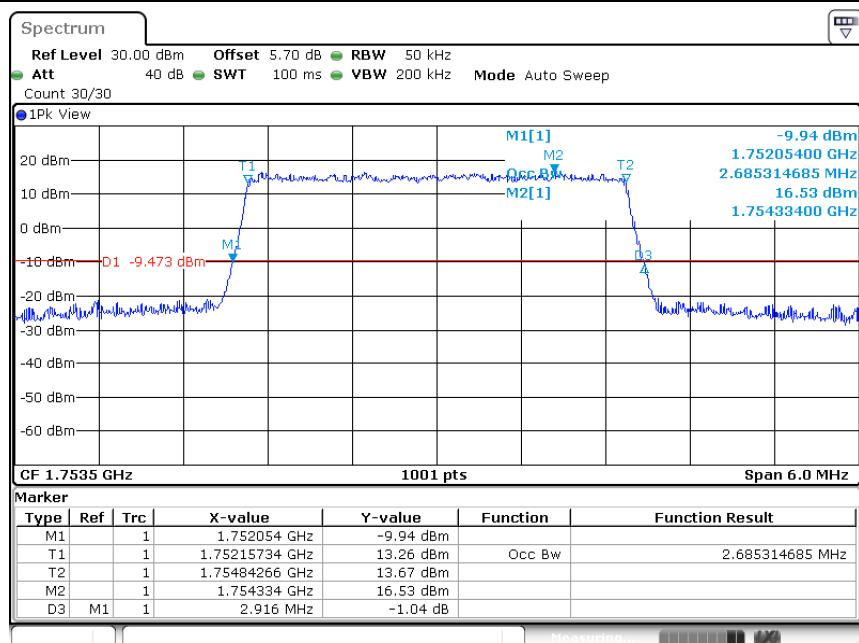
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Band4-3MHz-QPSK-20175-15RB#0-2.685



Date: 4.JAN.2021 21:56:24

Band4-3MHz-QPSK-20385-15RB#0-2.685



Date: 4.JAN.2021 21:56:50

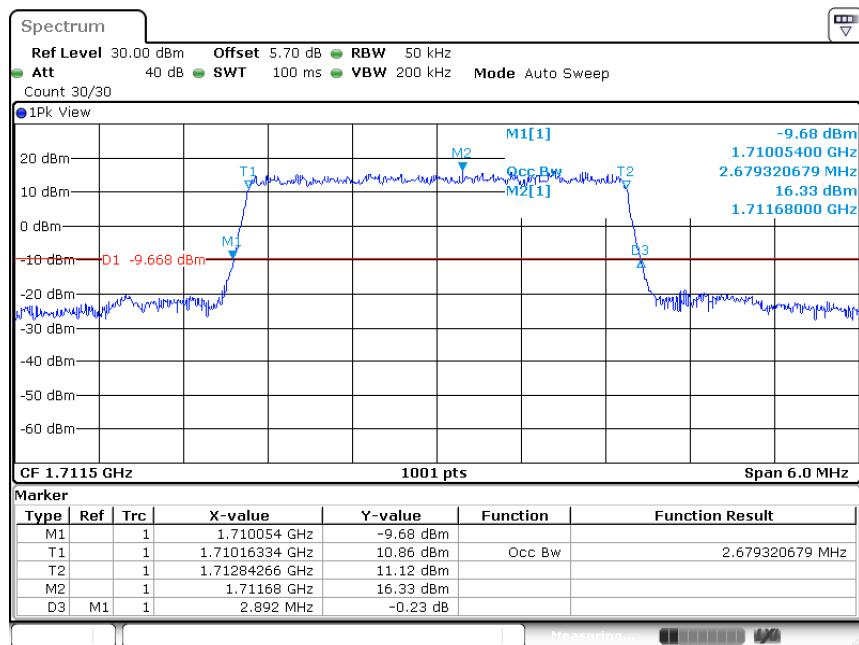
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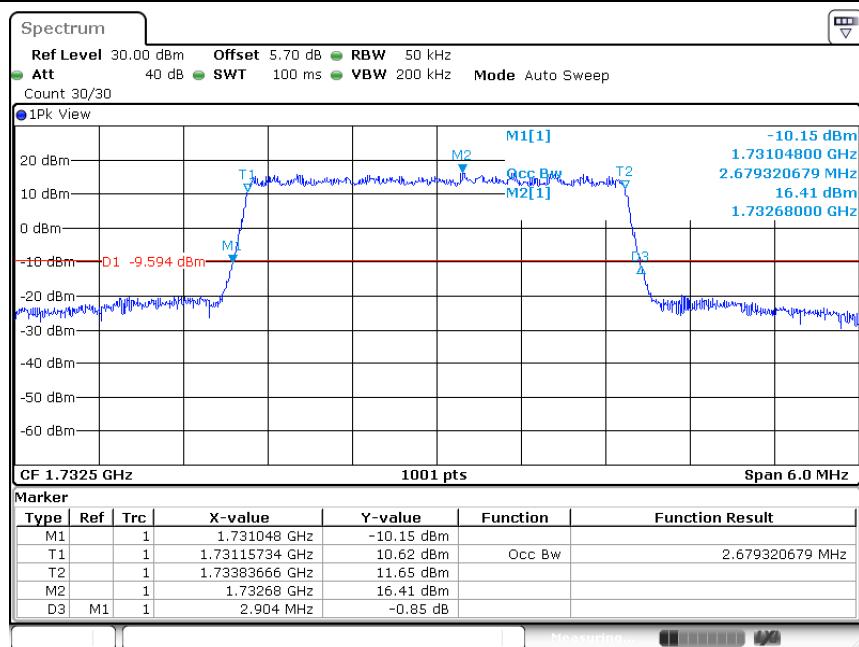
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Band4-3MHz-16QAM-19965-15RB#0-2.679



Date: 4.JAN.2021 21:56:11

Band4-3MHz-16QAM-20175-15RB#0-2.679



Date: 4.JAN.2021 21:56:37

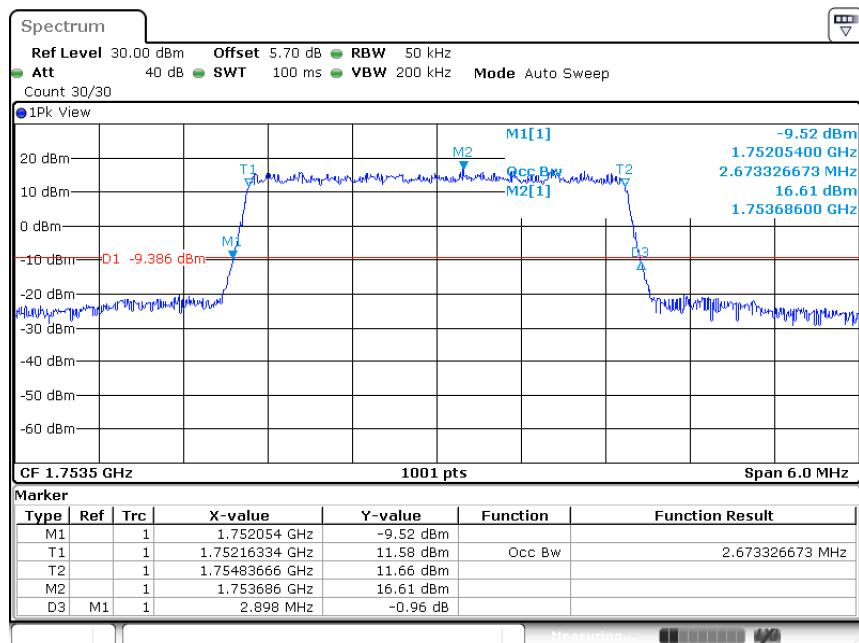
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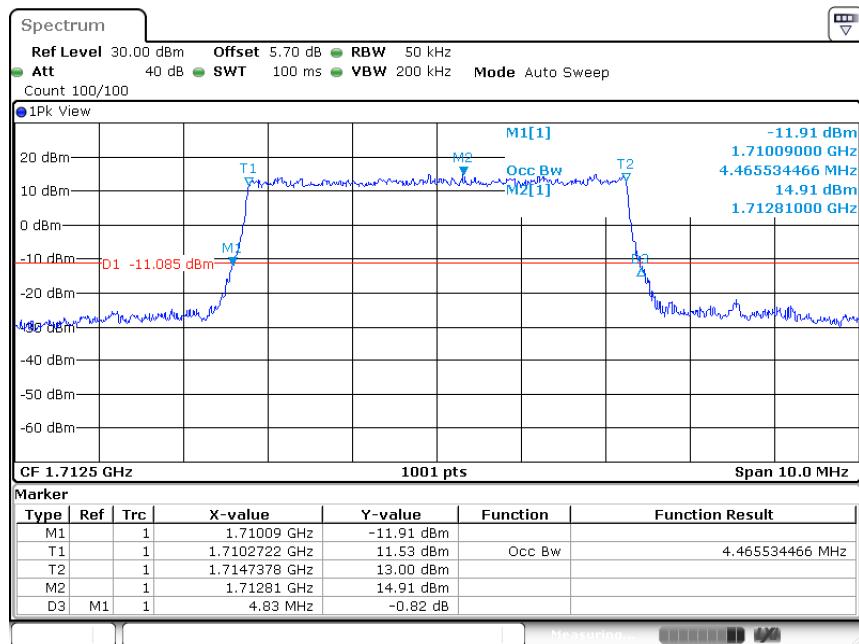
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Band4-3MHz-16QAM-20385-15RB#0-2.673



Date: 4.JAN.2021 21:57:03

Band4-5MHz-QPSK-19975-25RB#0-4.466



Date: 4.JAN.2021 21:57:28

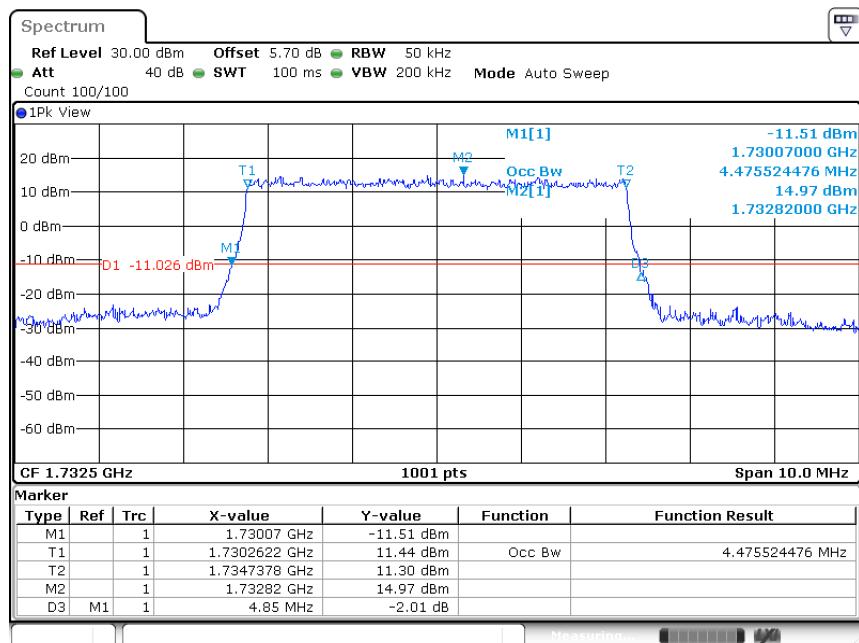
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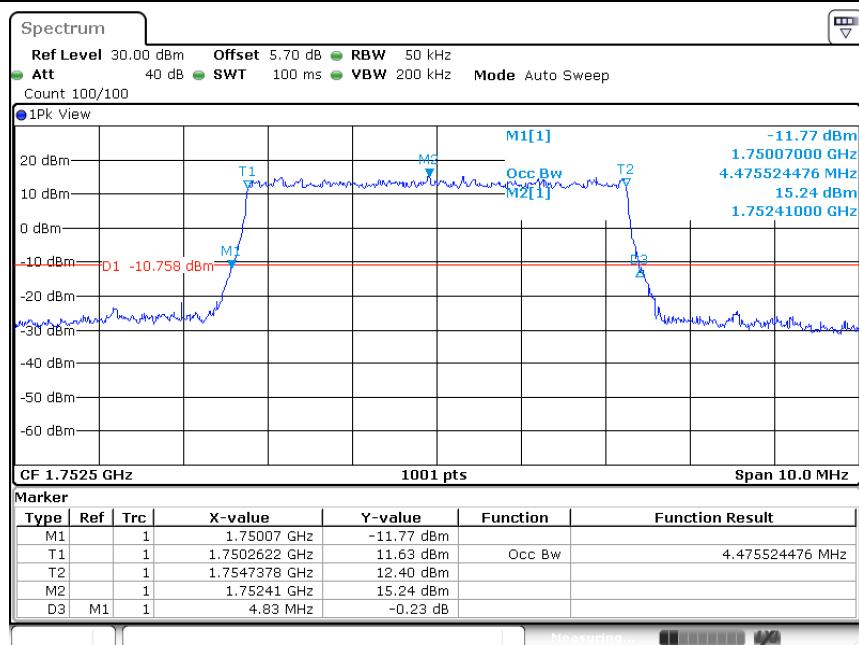
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Band4-5MHz-QPSK-20175-25RB#0-4.476



Date: 4.JAN.2021 21:58:08

Band4-5MHz-QPSK-20375-25RB#0-4.476



Date: 4.JAN.2021 21:58:47

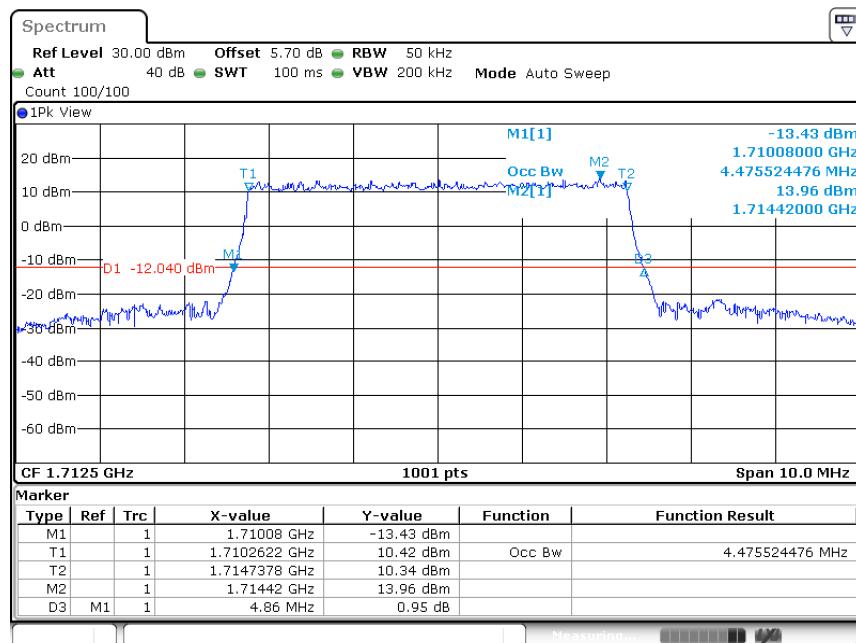
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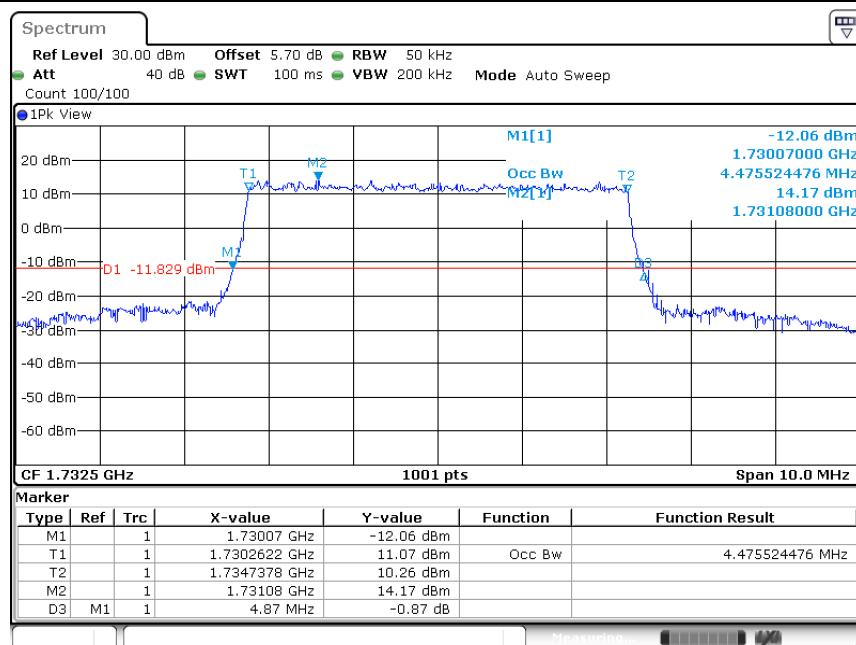
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Band4-5MHz-16QAM-19975-25RB#0-4.476



Date: 4.JAN.2021 21:57:47

Band4-5MHz-16QAM-20175-25RB#0-4.476



Date: 4.JAN.2021 21:58:27

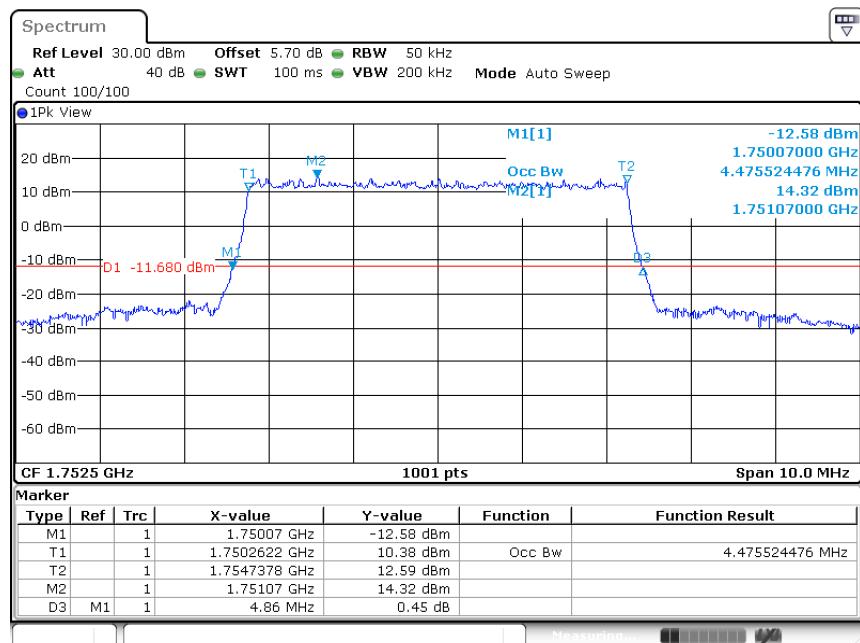
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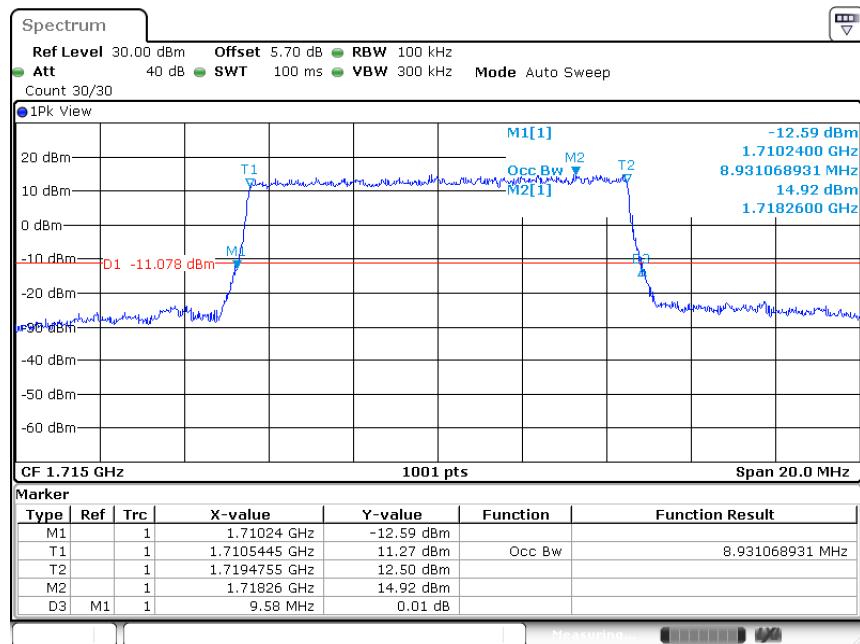
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Band4-5MHz-16QAM-20375-25RB#0-4.476



Date: 4.JAN.2021 21:59:07

Band4-10MHz-QPSK-20000-50RB#0-8.931



Date: 4.JAN.2021 21:59:25

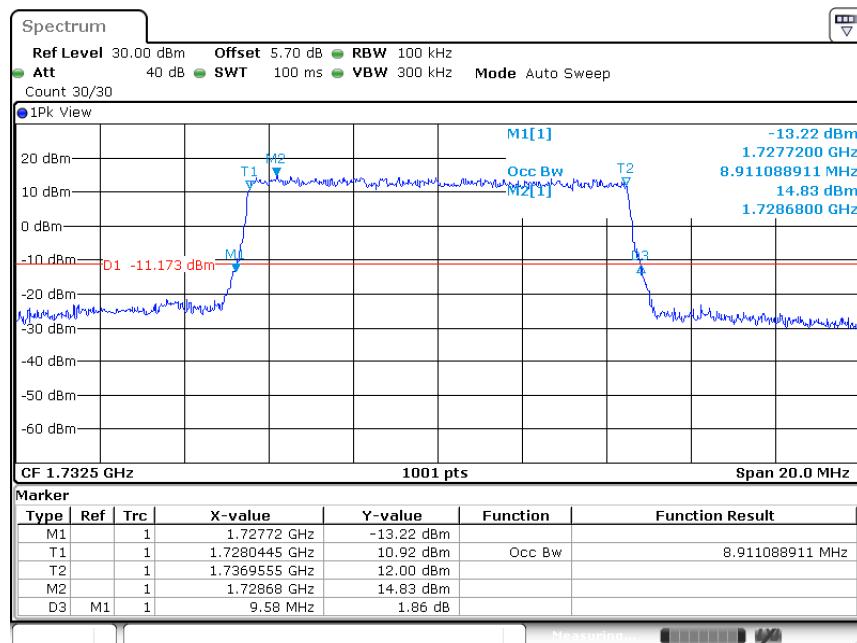
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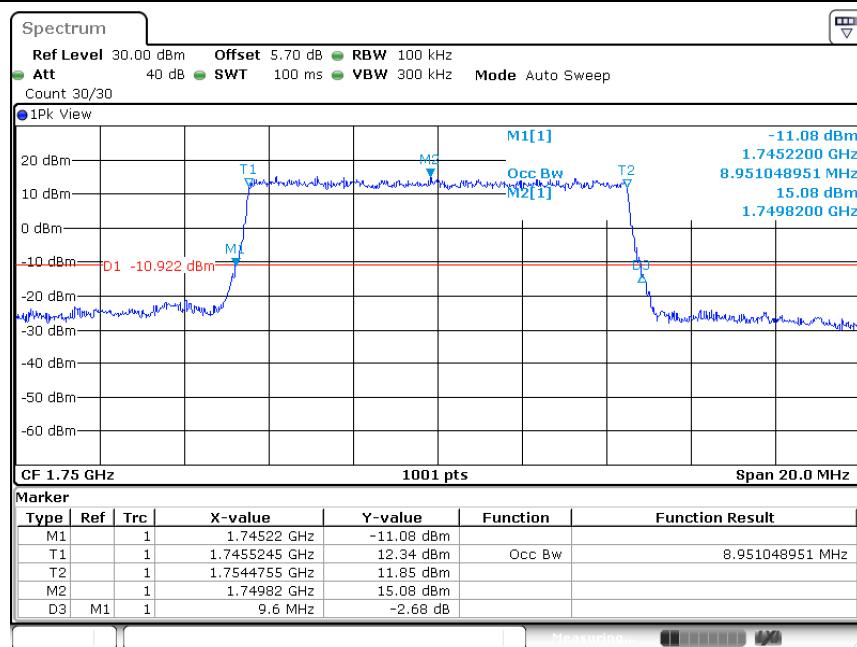
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Band4-10MHz-QPSK-20175-50RB#0-8.911



Date: 4.JAN.2021 21:59:50

Band4-10MHz-QPSK-20350-50RB#0-8.951



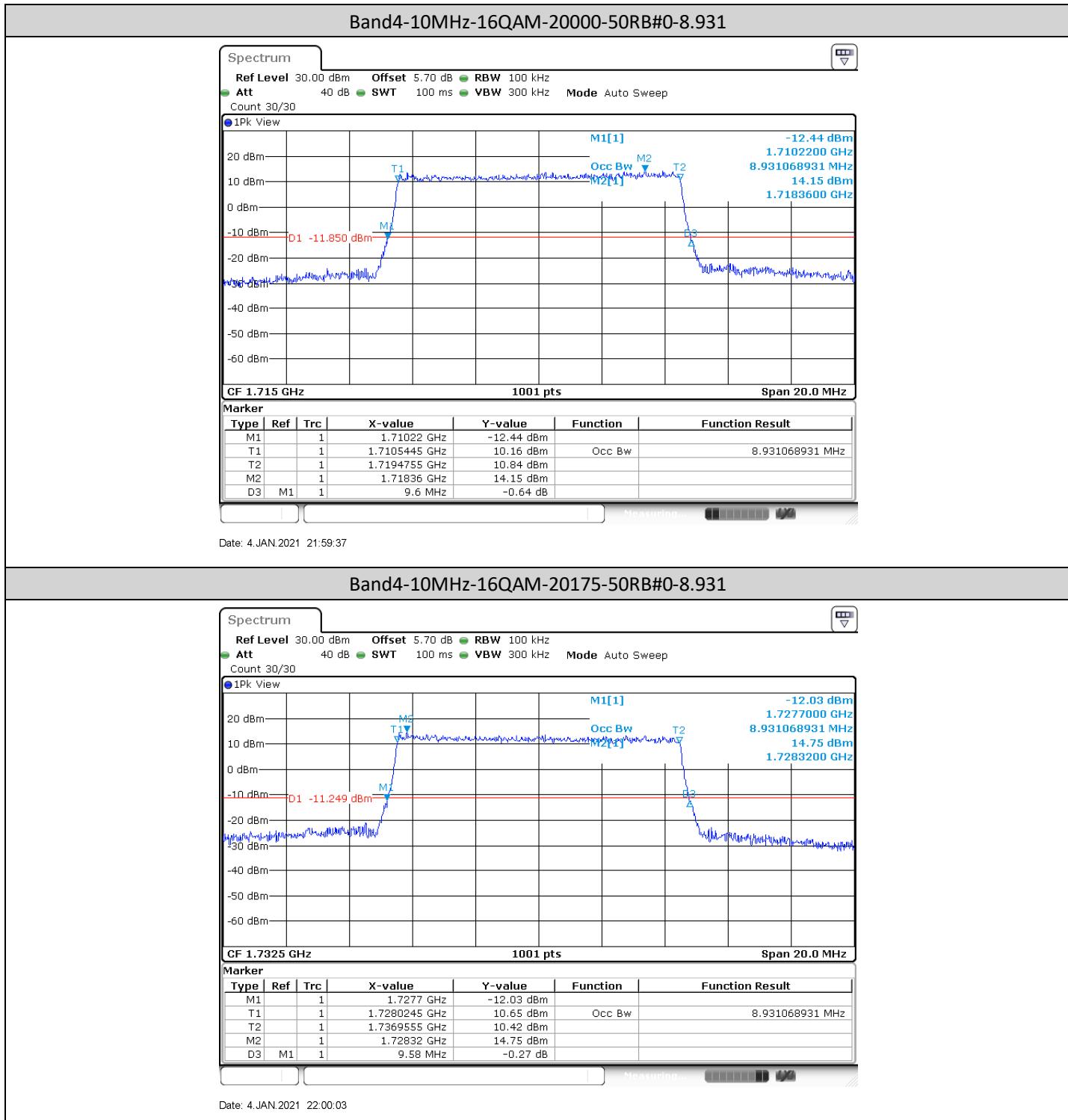
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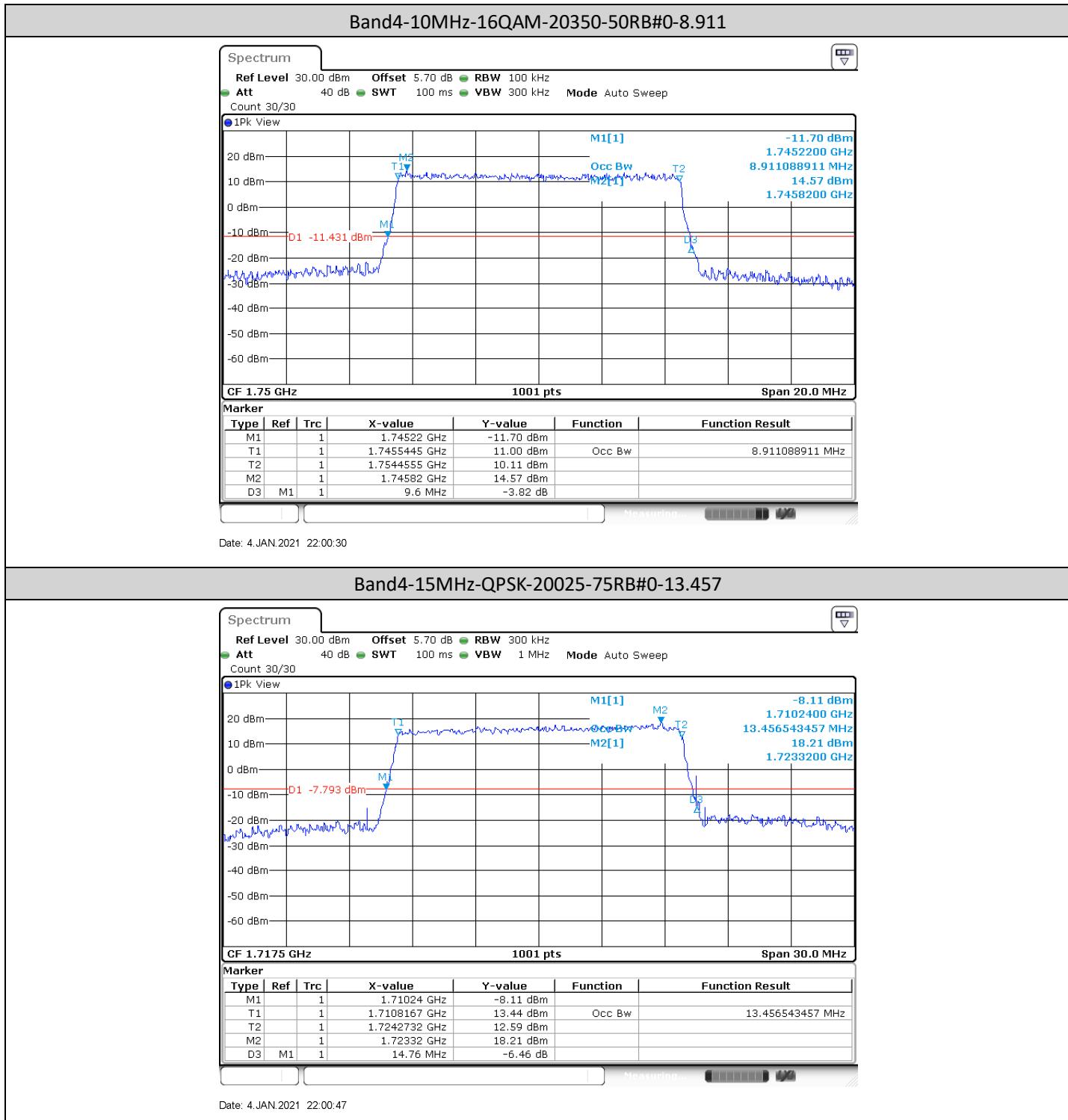


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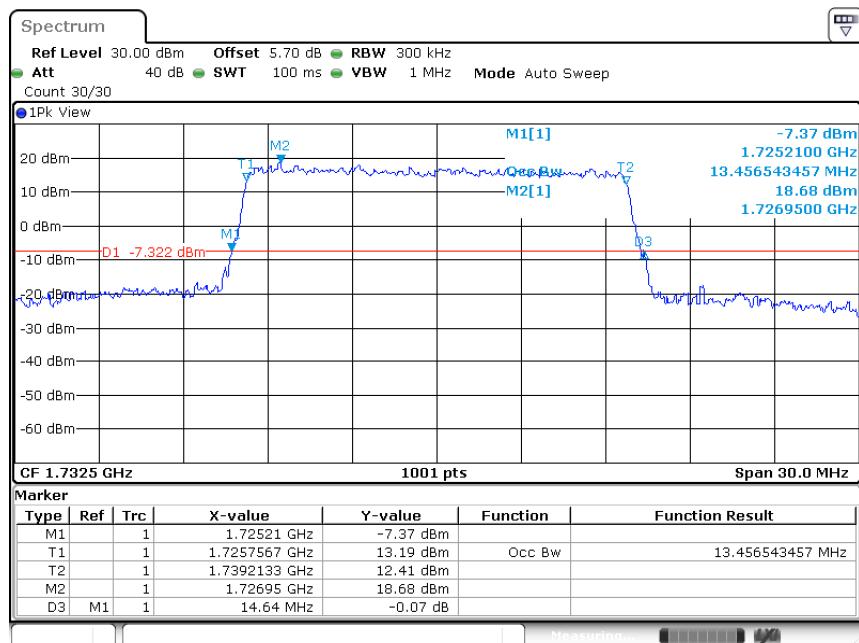


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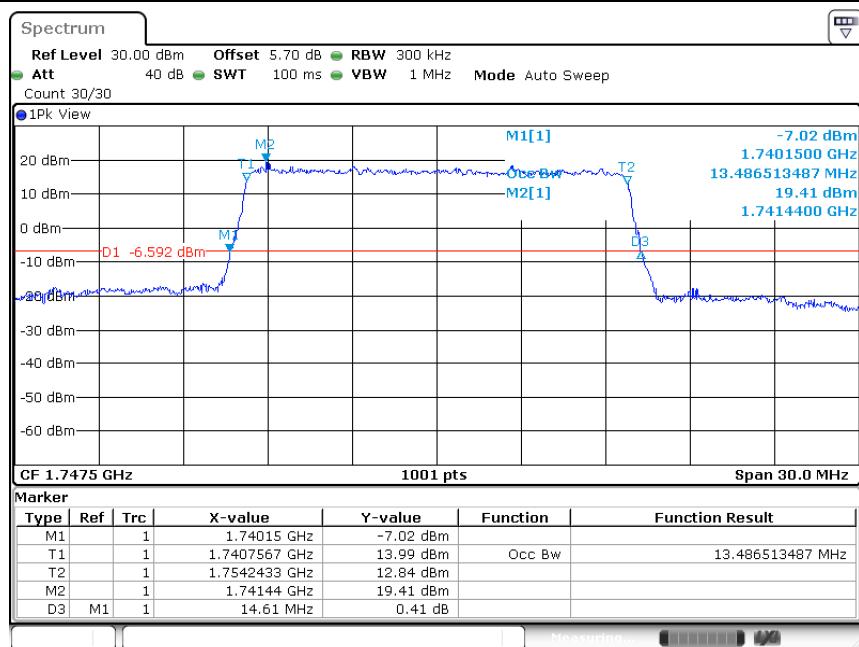


Band4-15MHz-QPSK-20175-75RB#0-13.457



Date: 4.JAN.2021 22:01:13

Band4-15MHz-QPSK-20325-75RB#0-13.487



Date: 4.JAN.2021 22:01:39

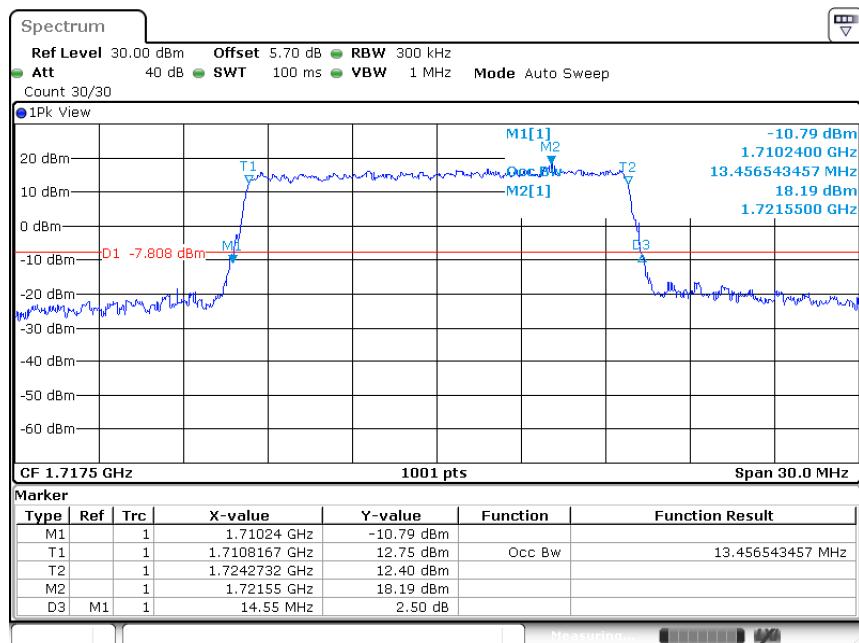
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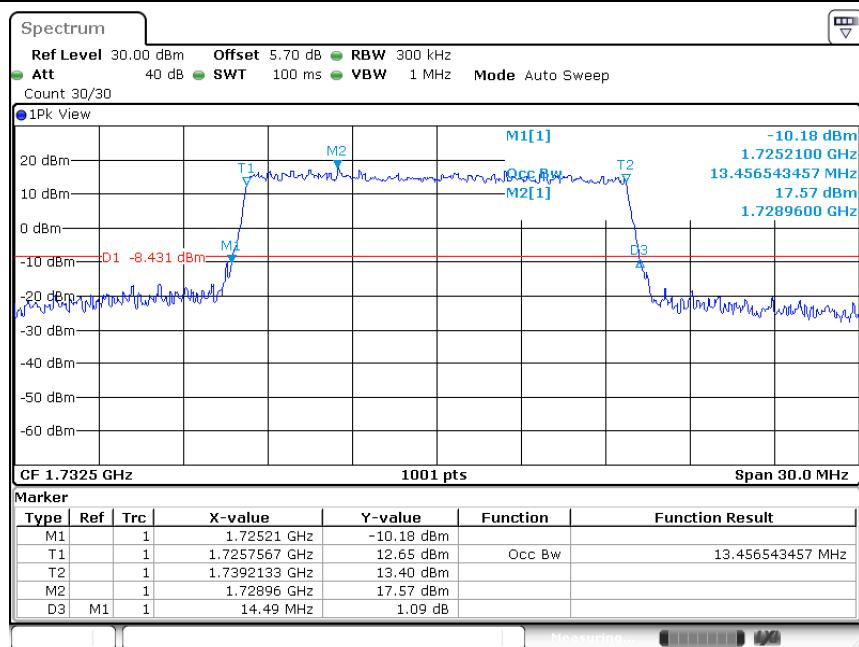
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Band4-15MHz-16QAM-20025-75RB#0-13.457



Date: 4.JAN.2021 22:01:00

Band4-15MHz-16QAM-20175-75RB#0-13.457



Date: 4.JAN.2021 22:01:26

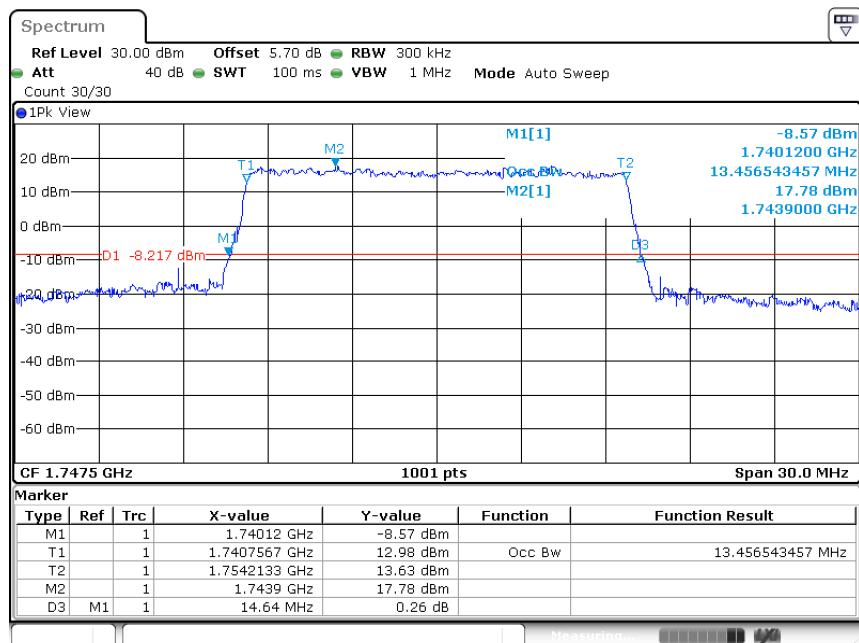
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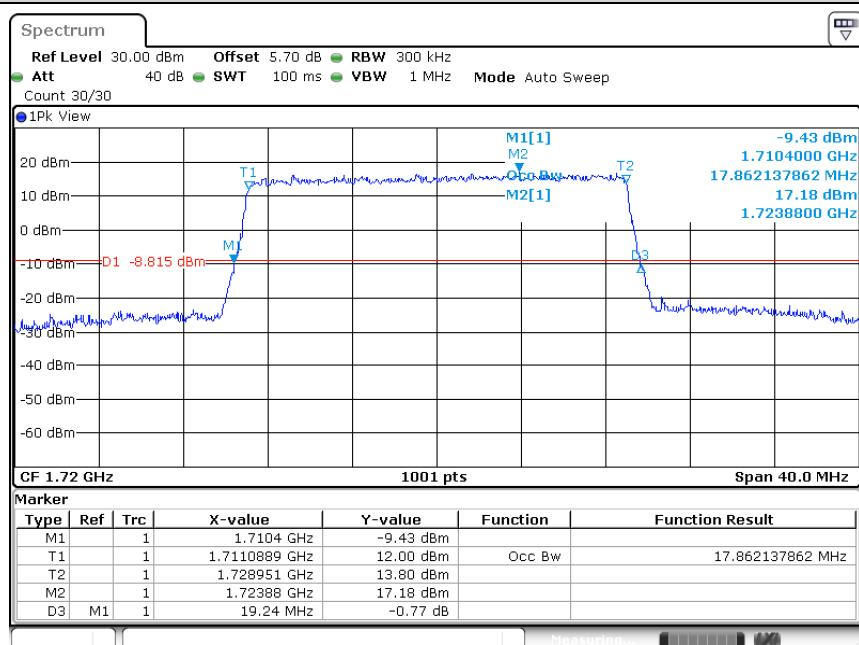
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Band4-15MHz-16QAM-20325-75RB#0-13.457



Date: 4.JAN.2021 22:01:52

Band4-20MHz-QPSK-20050-100RB#0-17.862



Date: 4.JAN.2021 22:02:10

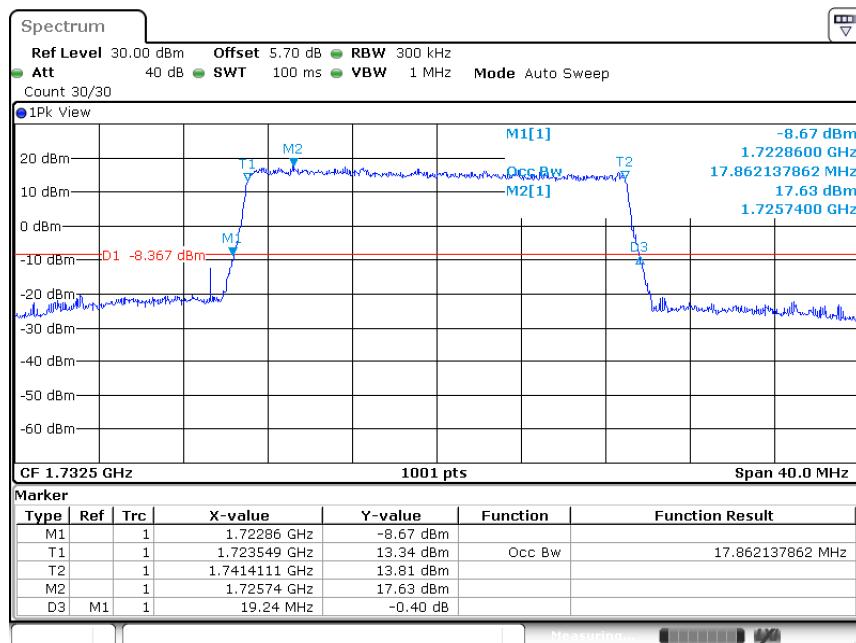
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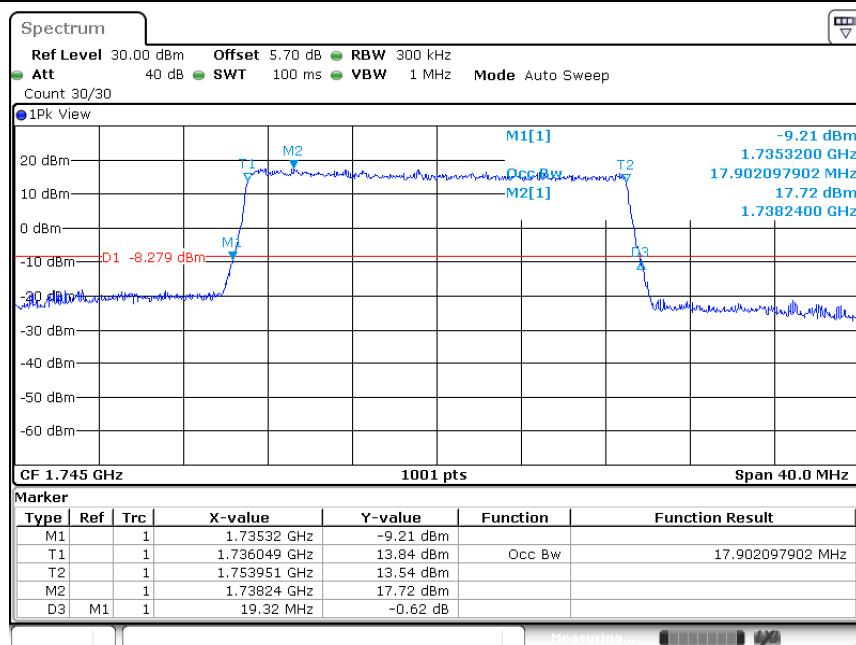
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Band4-20MHz-QPSK-20175-100RB#0-17.862



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Band4-20MHz-QPSK-20300-100RB#0-17.902



Date: 4.JAN.2021 22:03:02

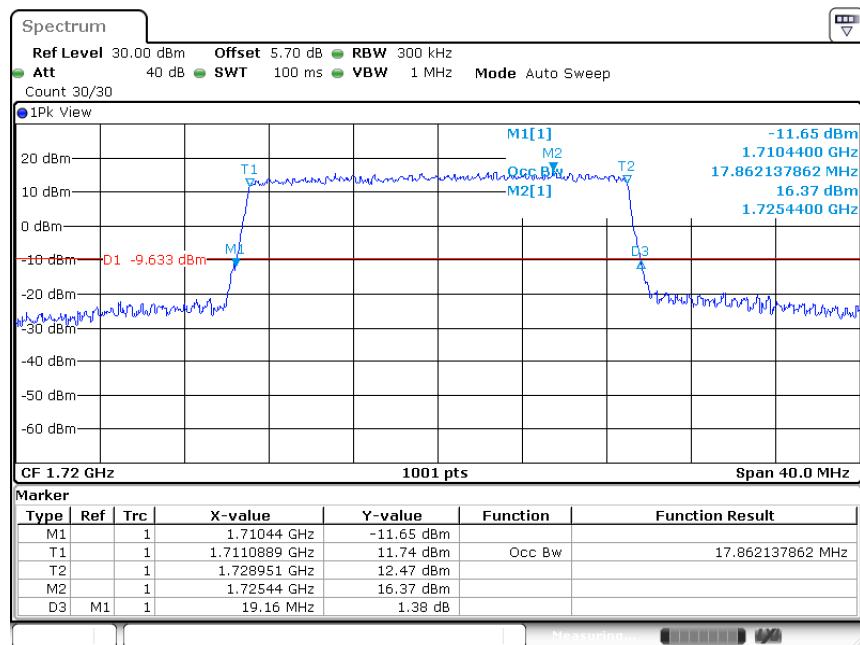
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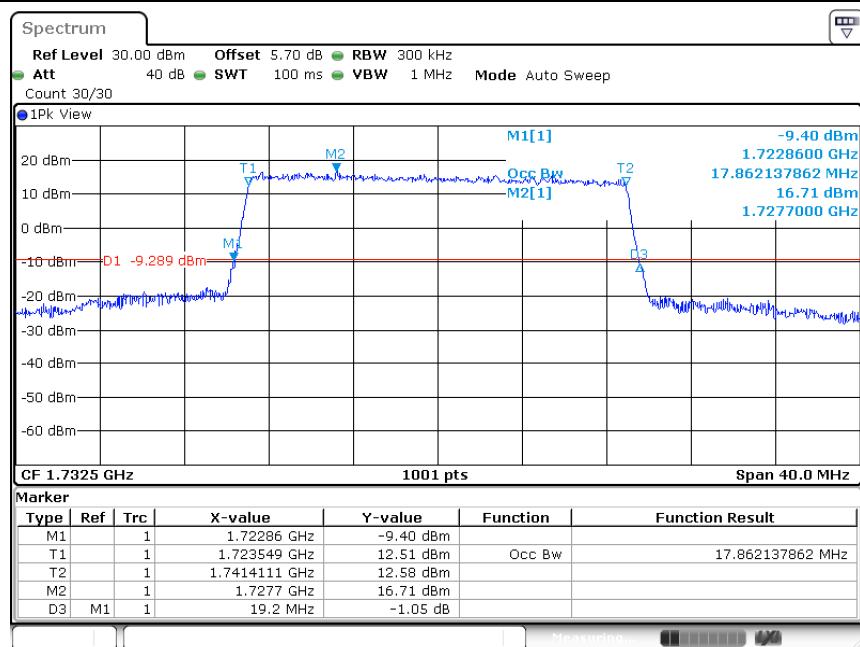
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Band4-20MHz-16QAM-20050-100RB#0-17.862



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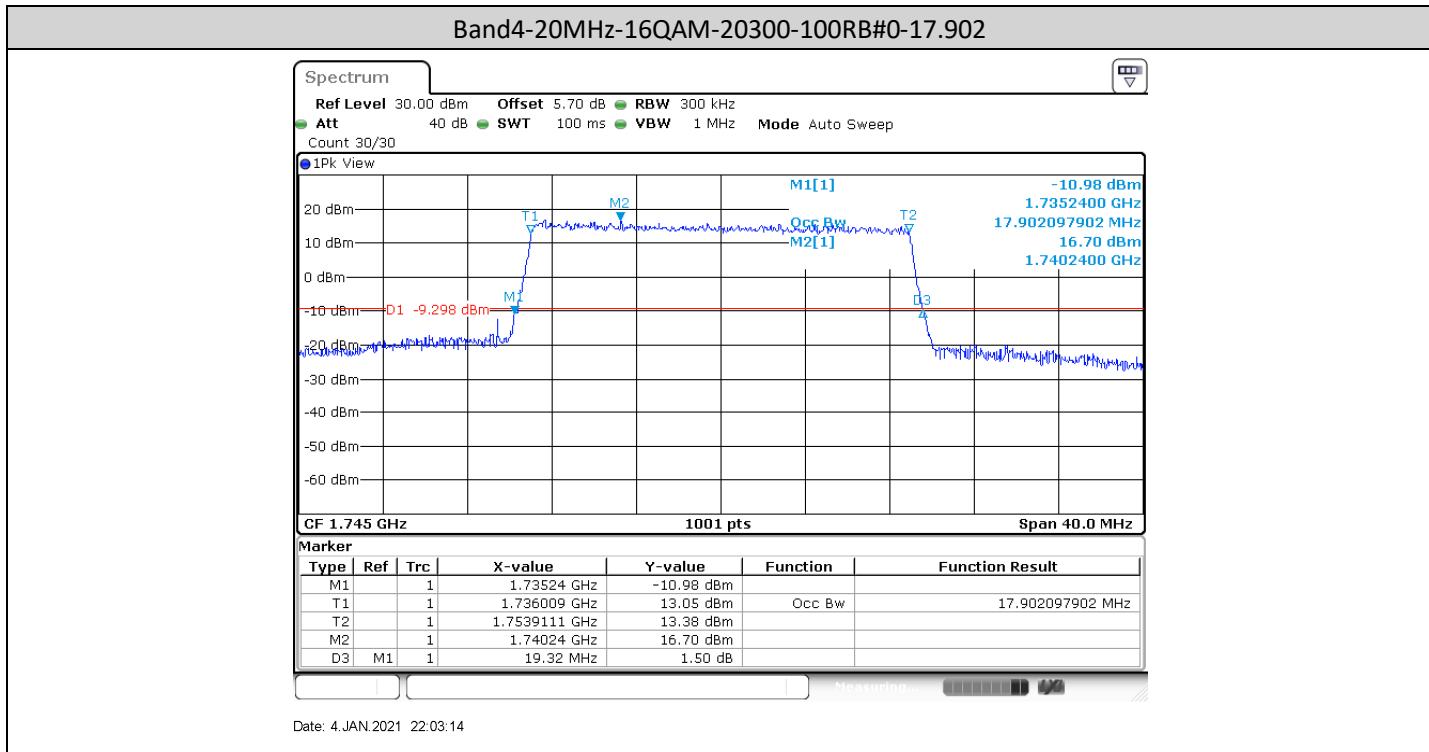
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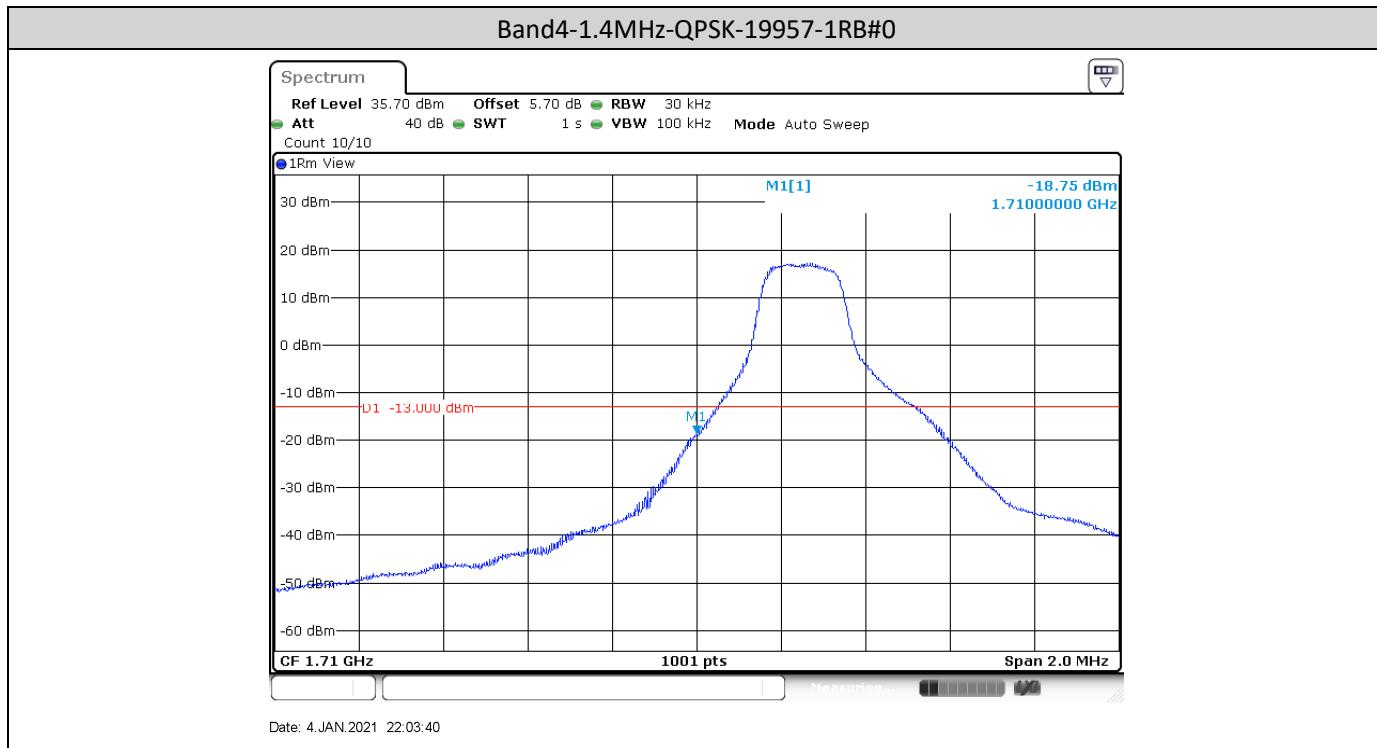
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5. Band Edge Compliance

5.1. Test Plots

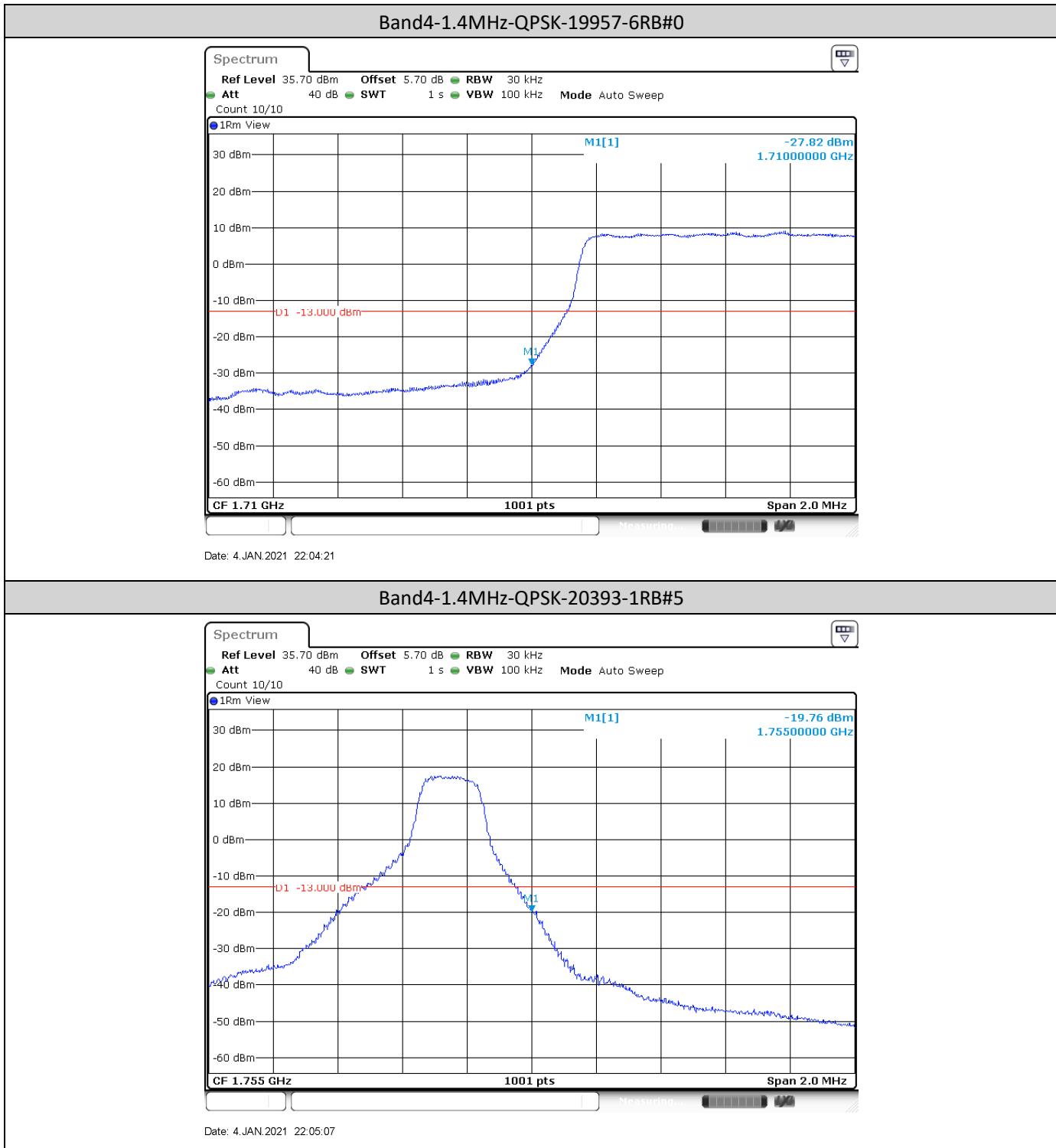


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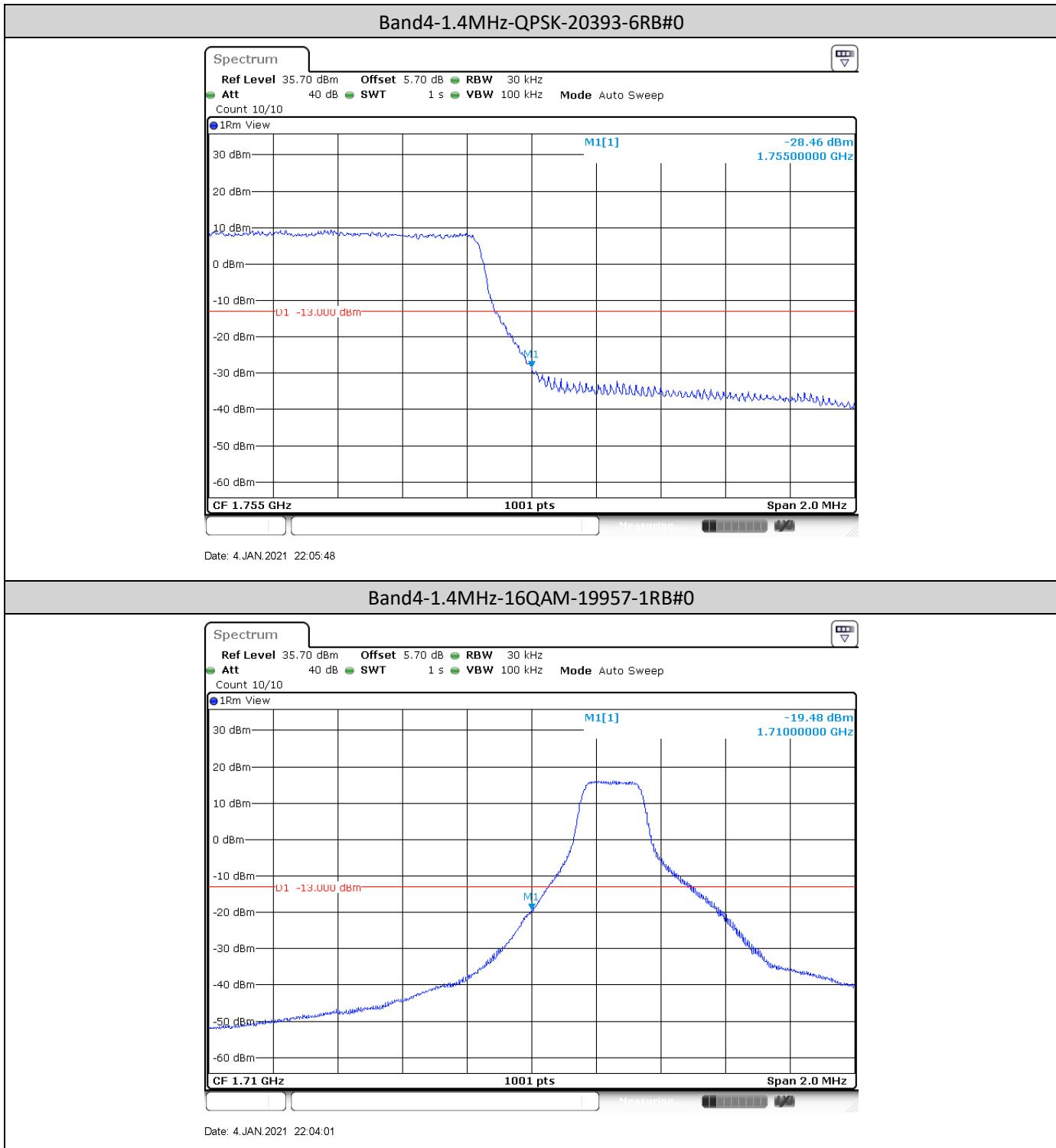


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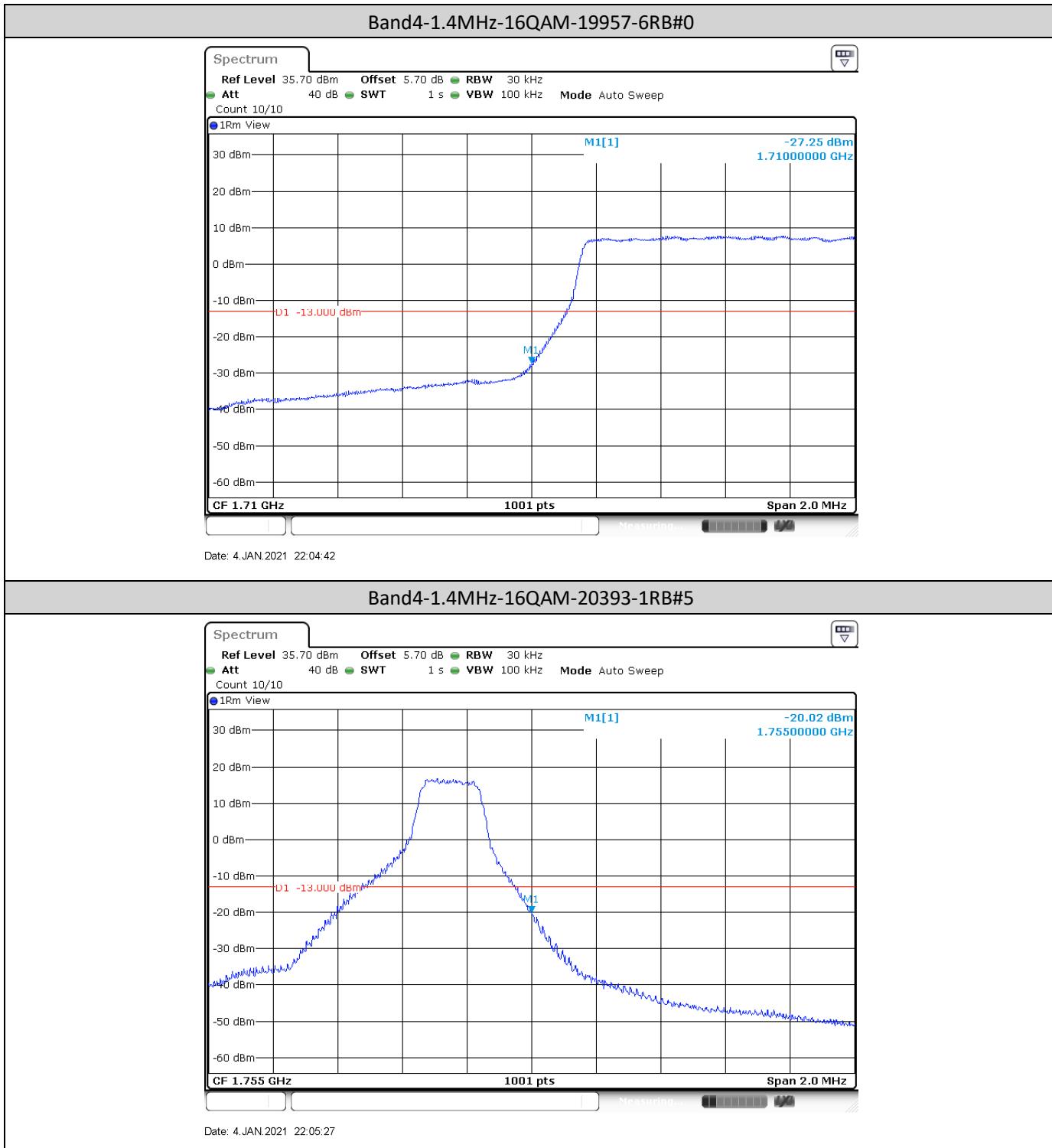


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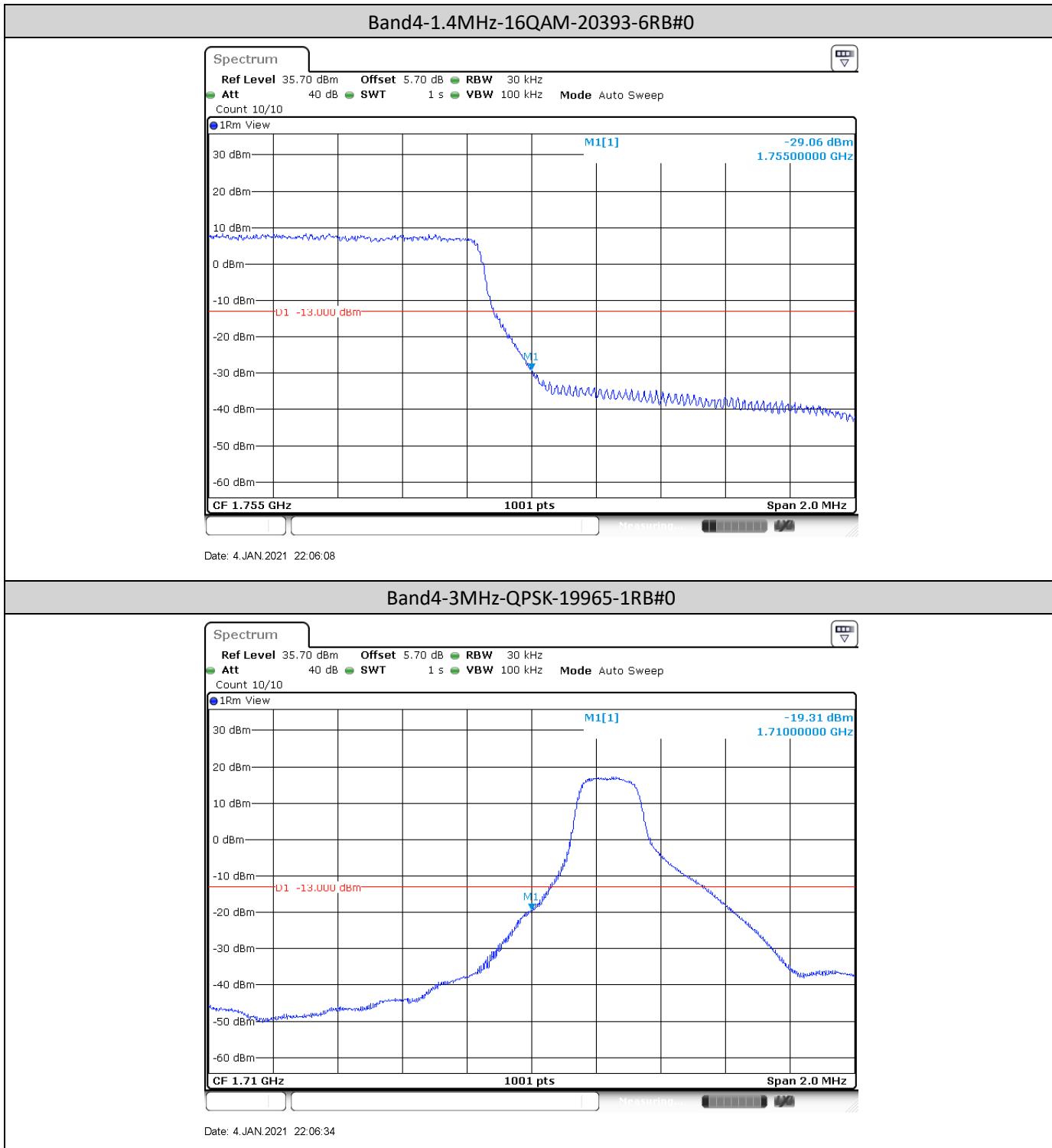


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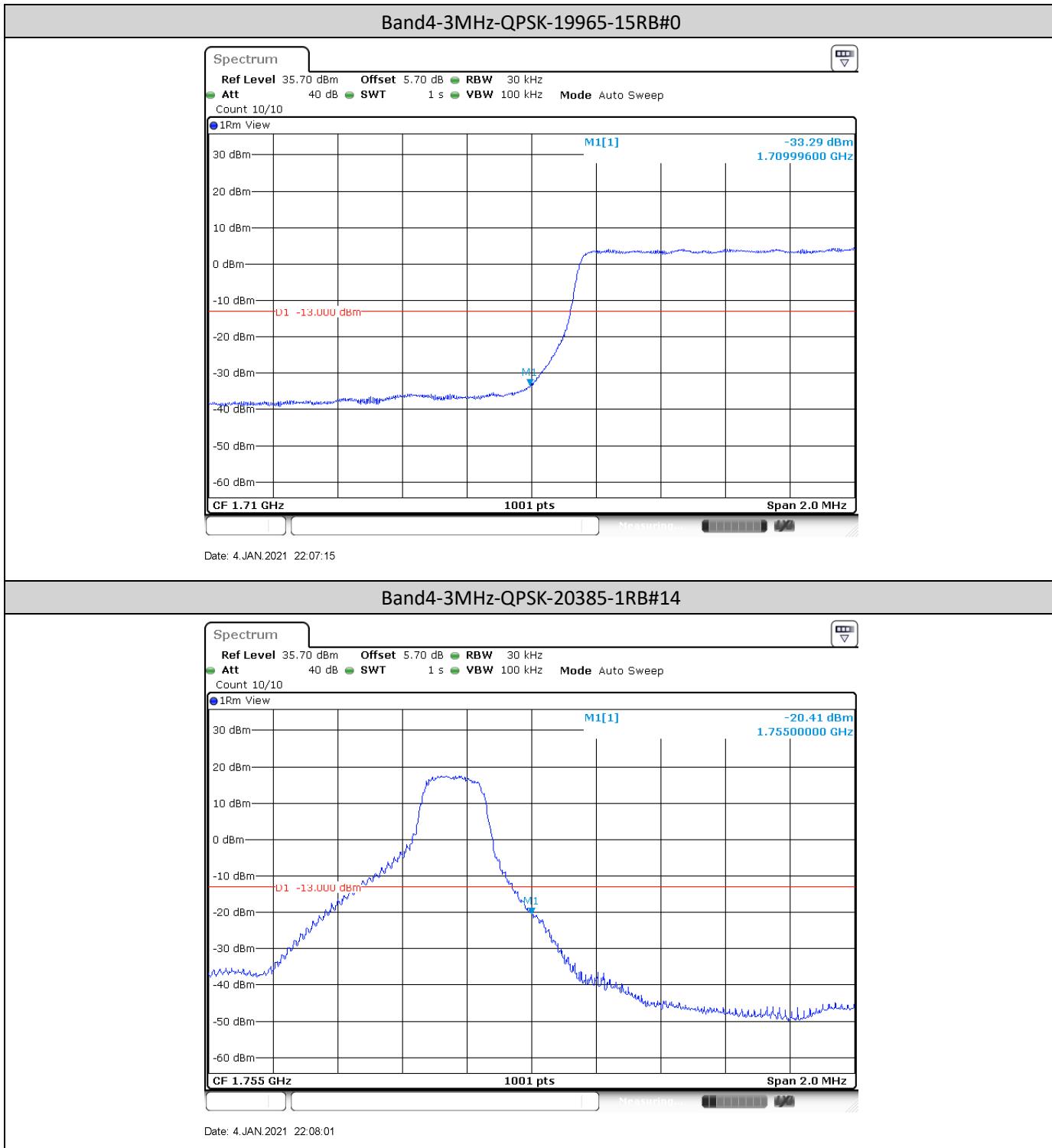


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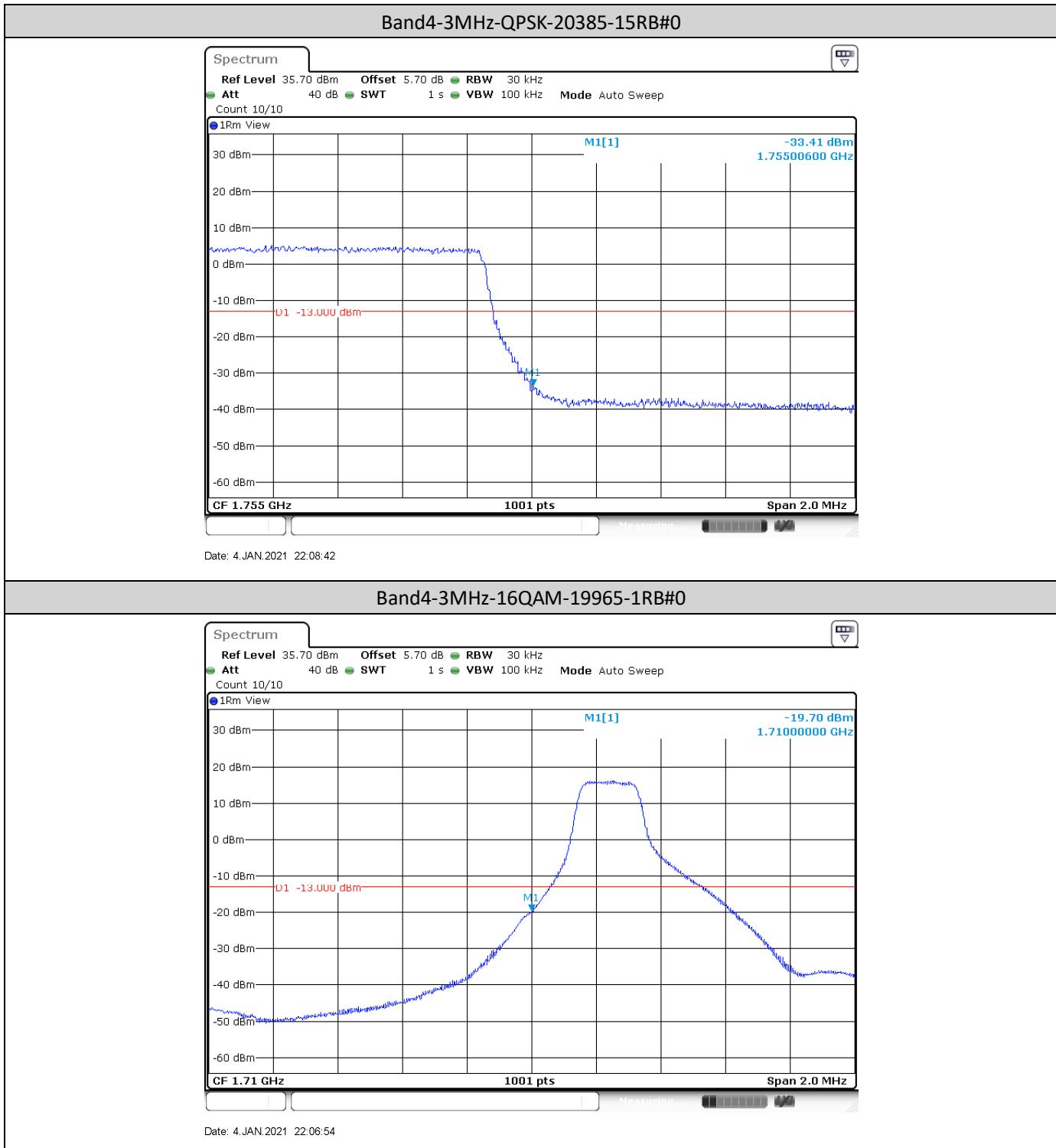


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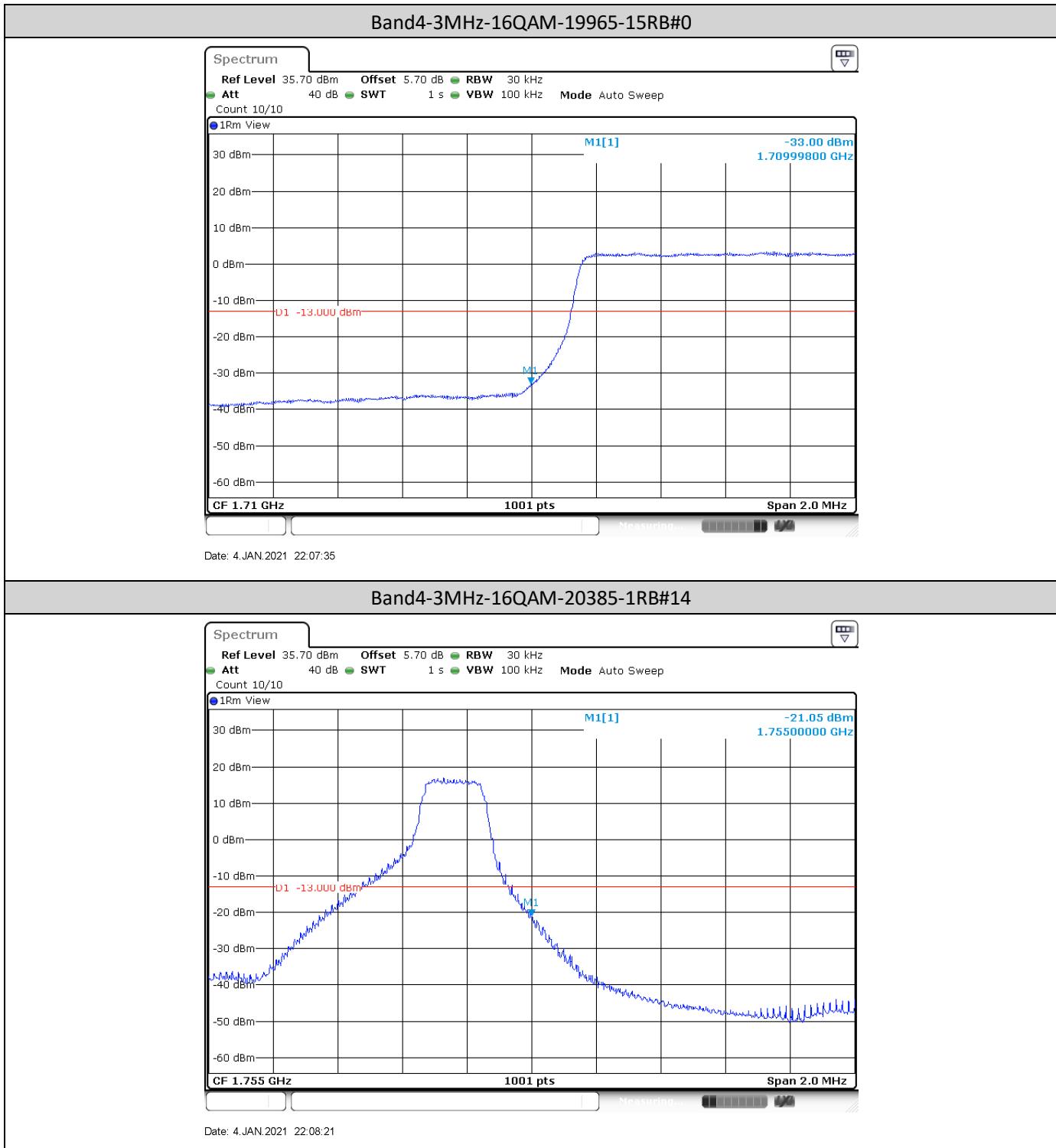


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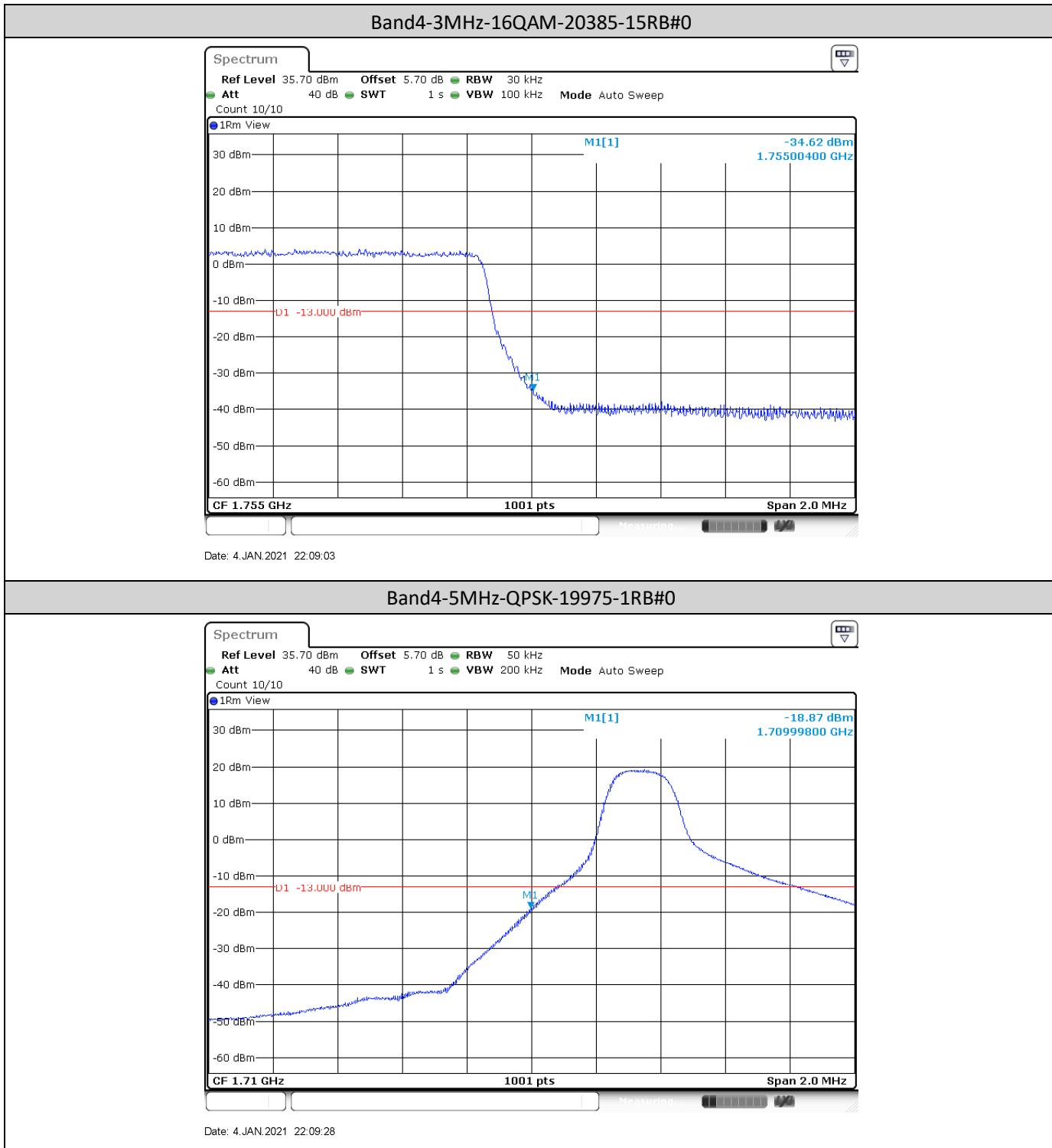


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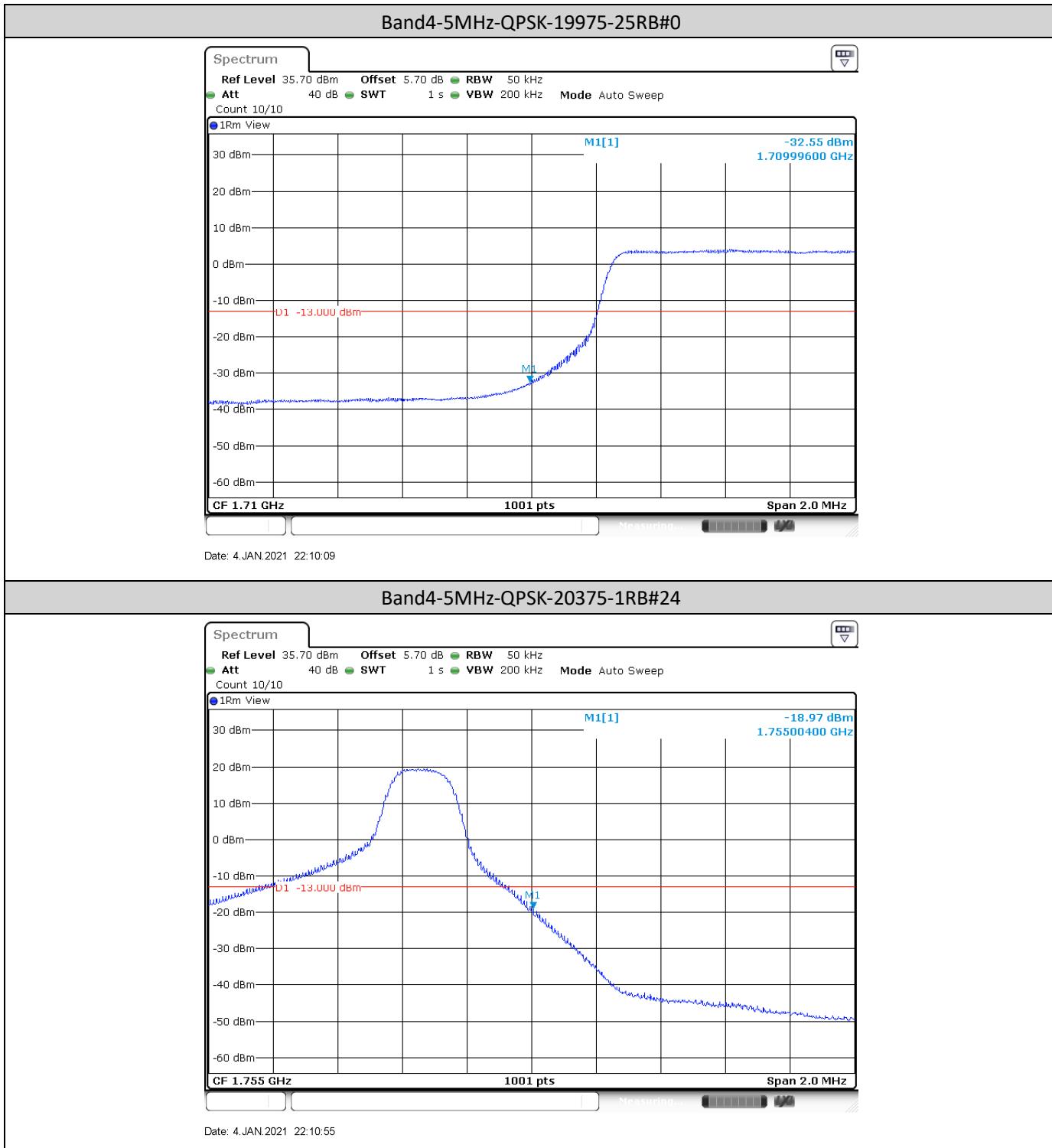


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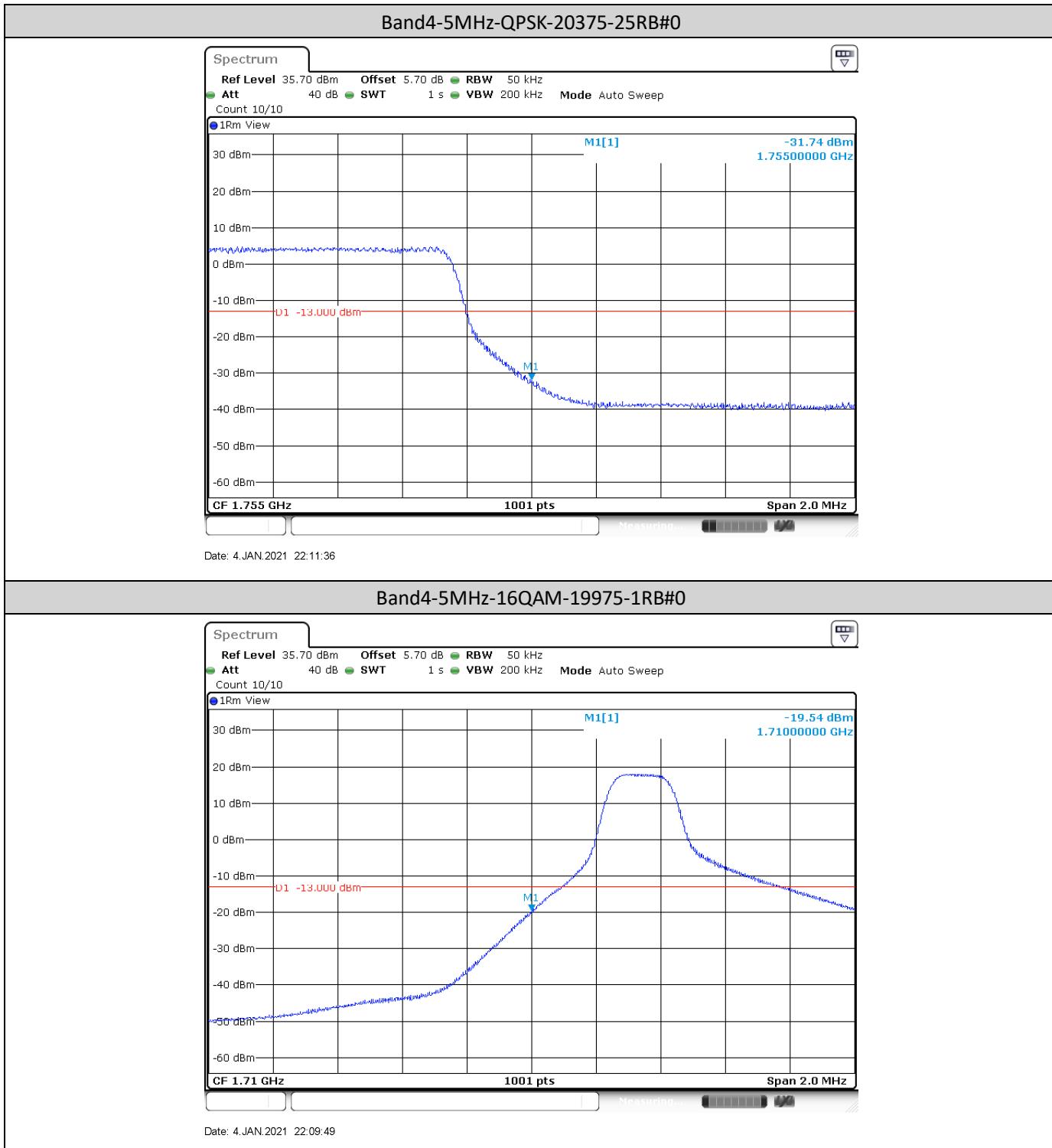


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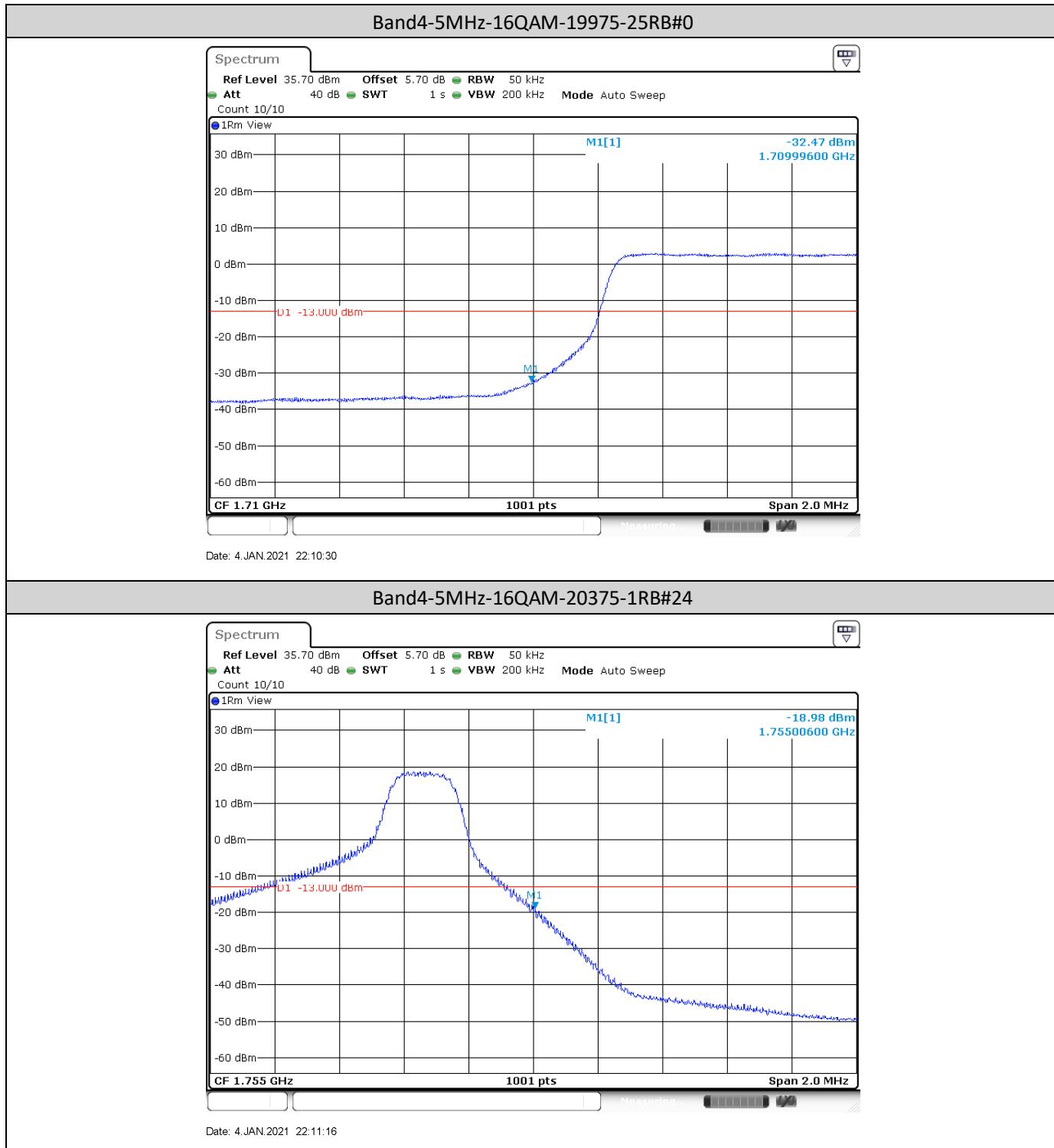


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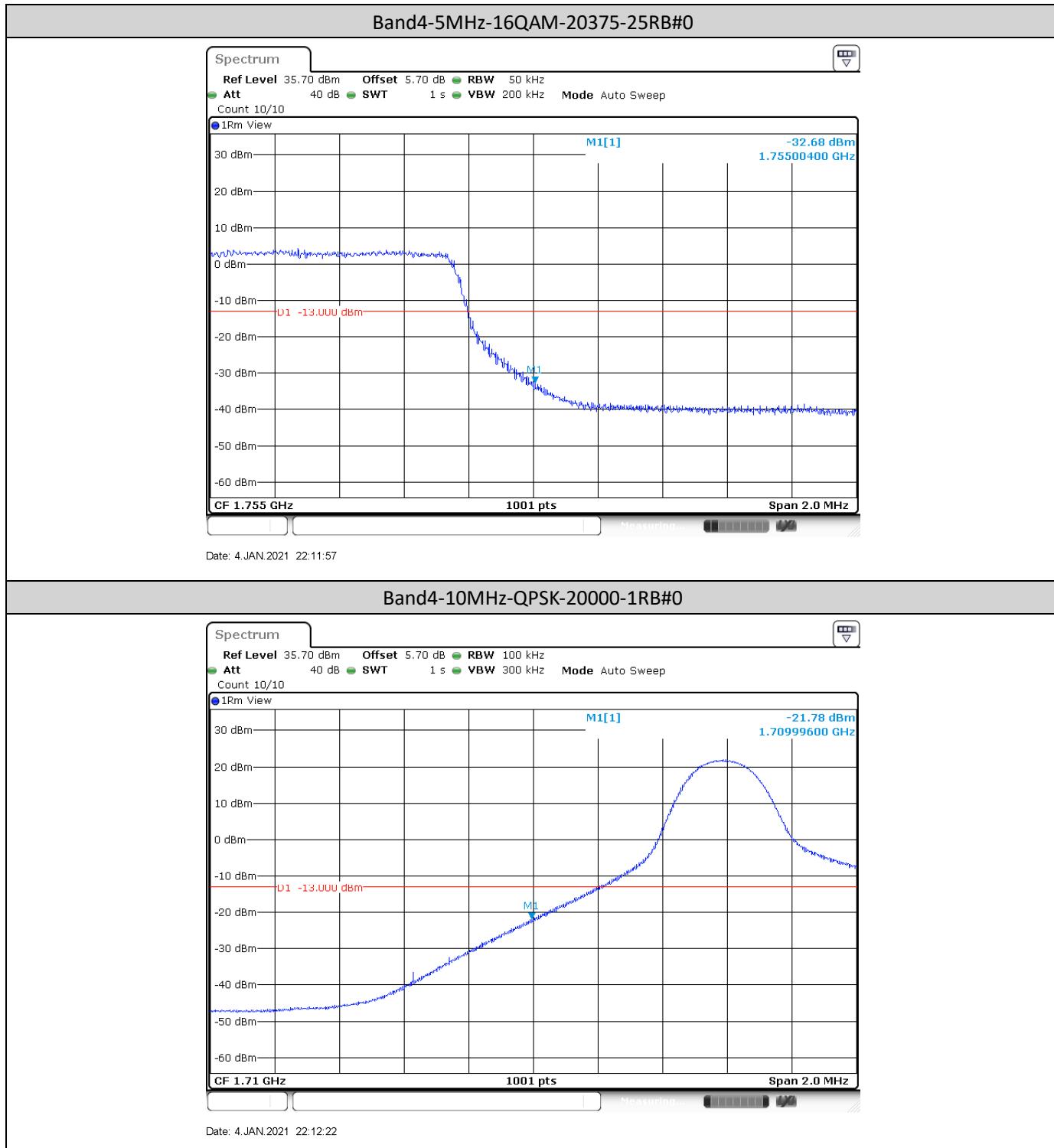


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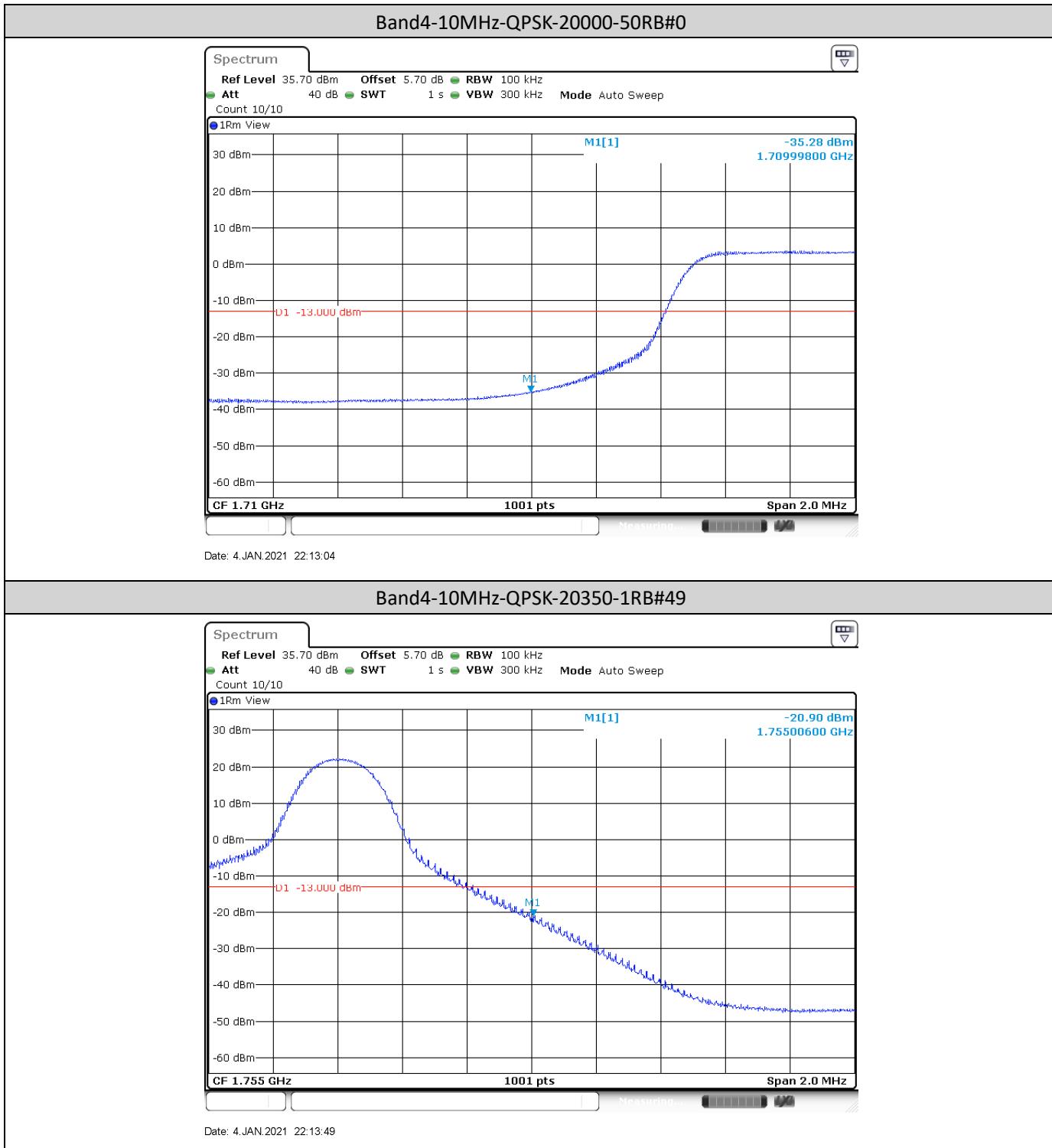


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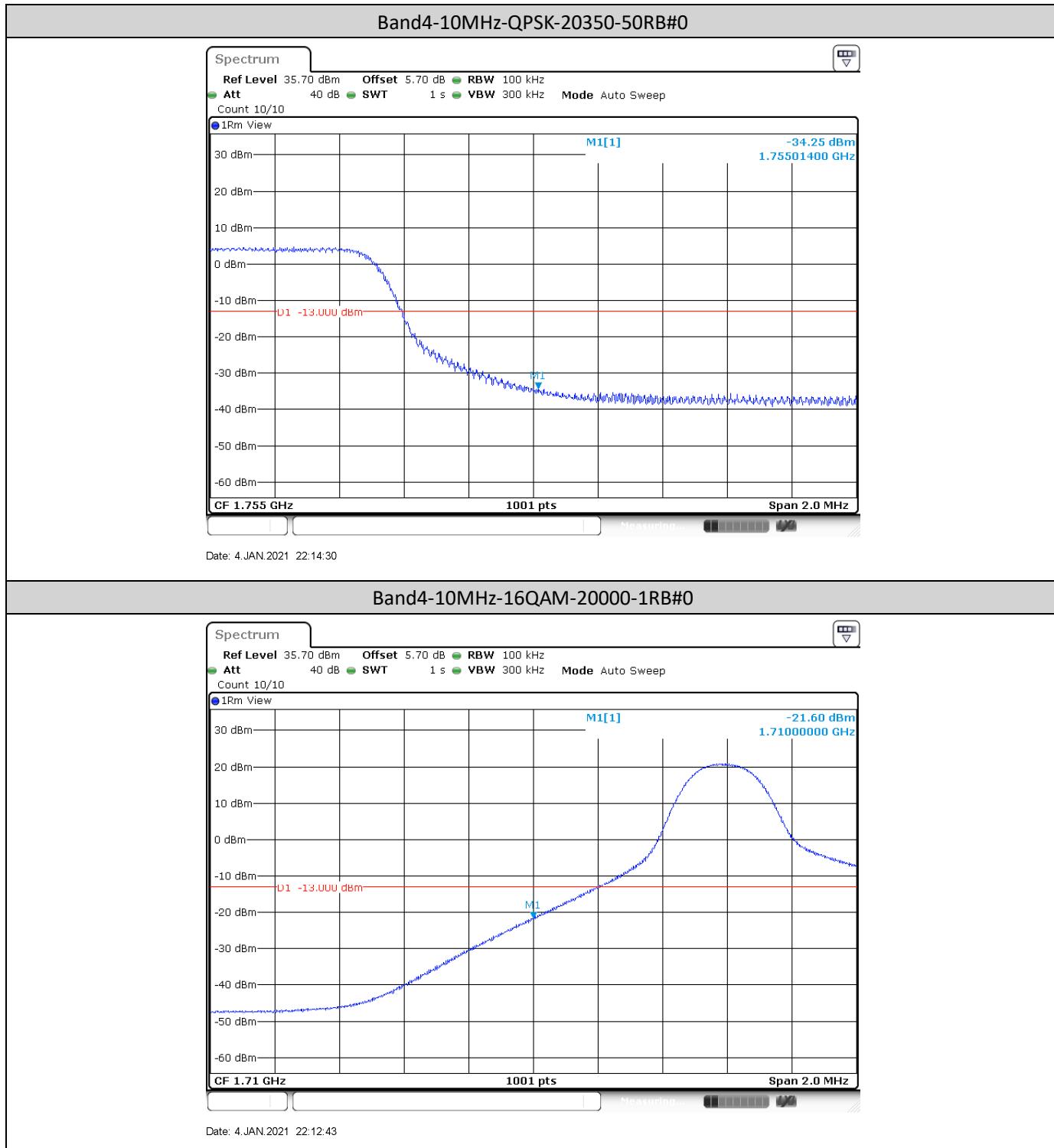


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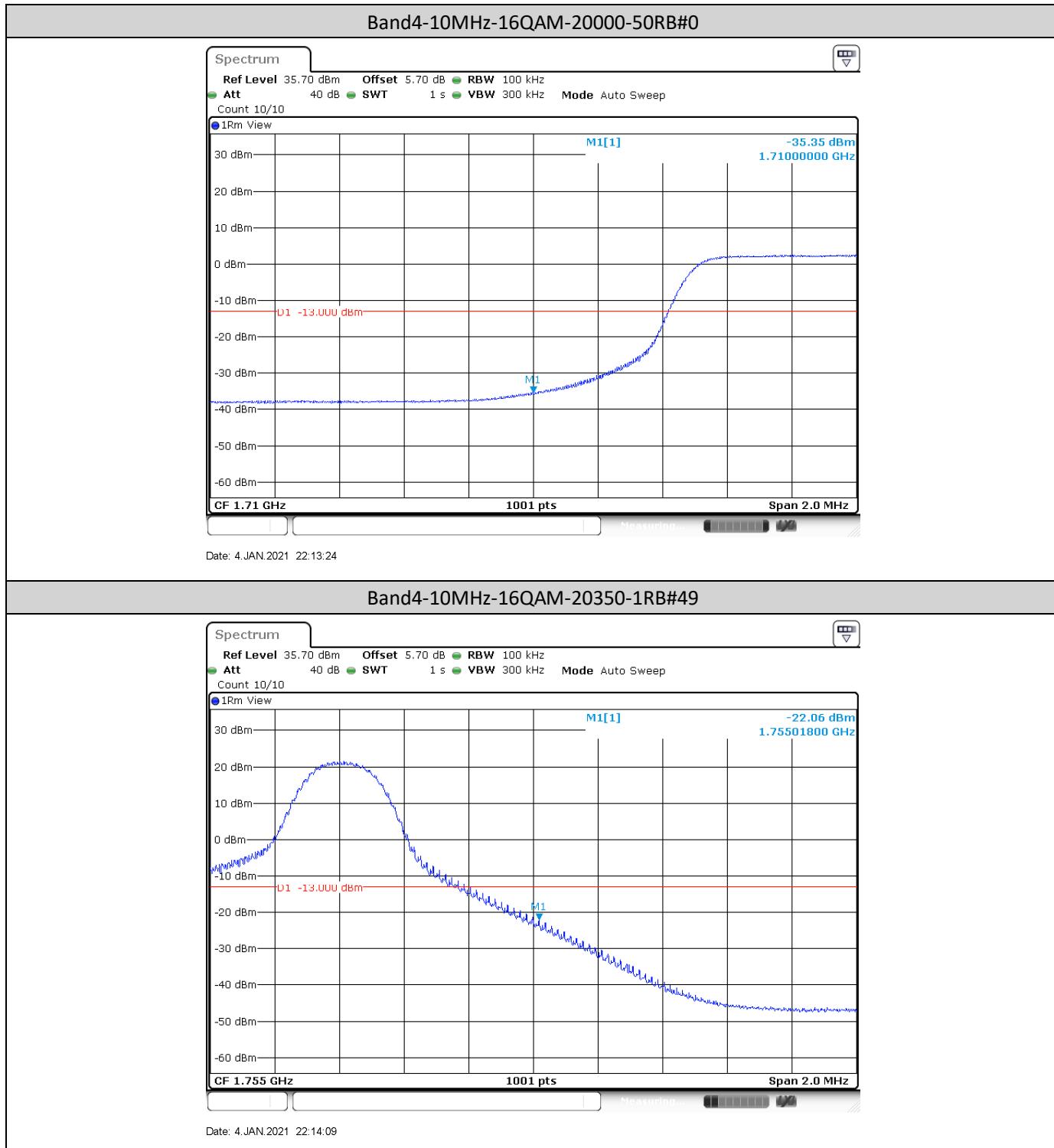


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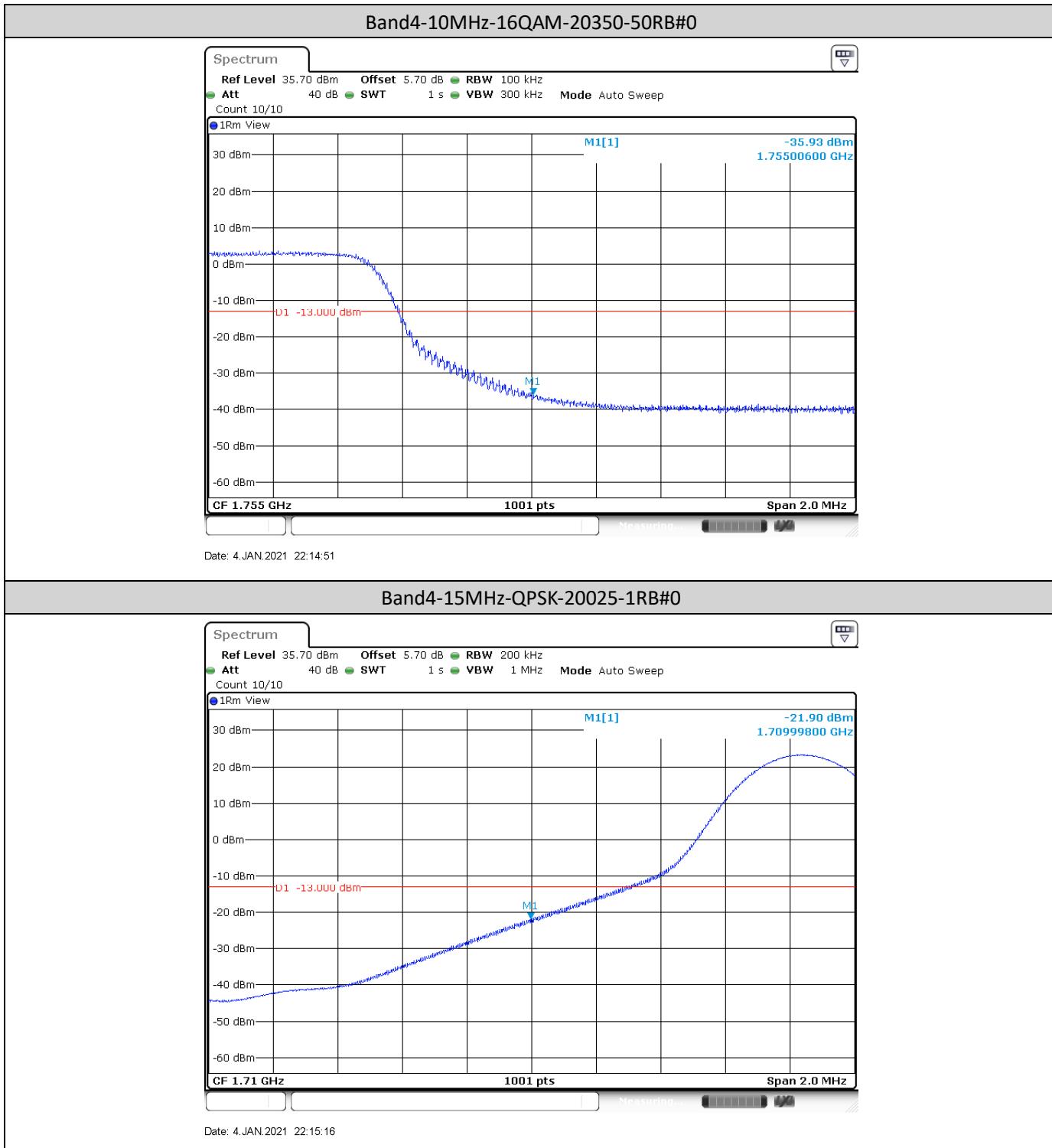


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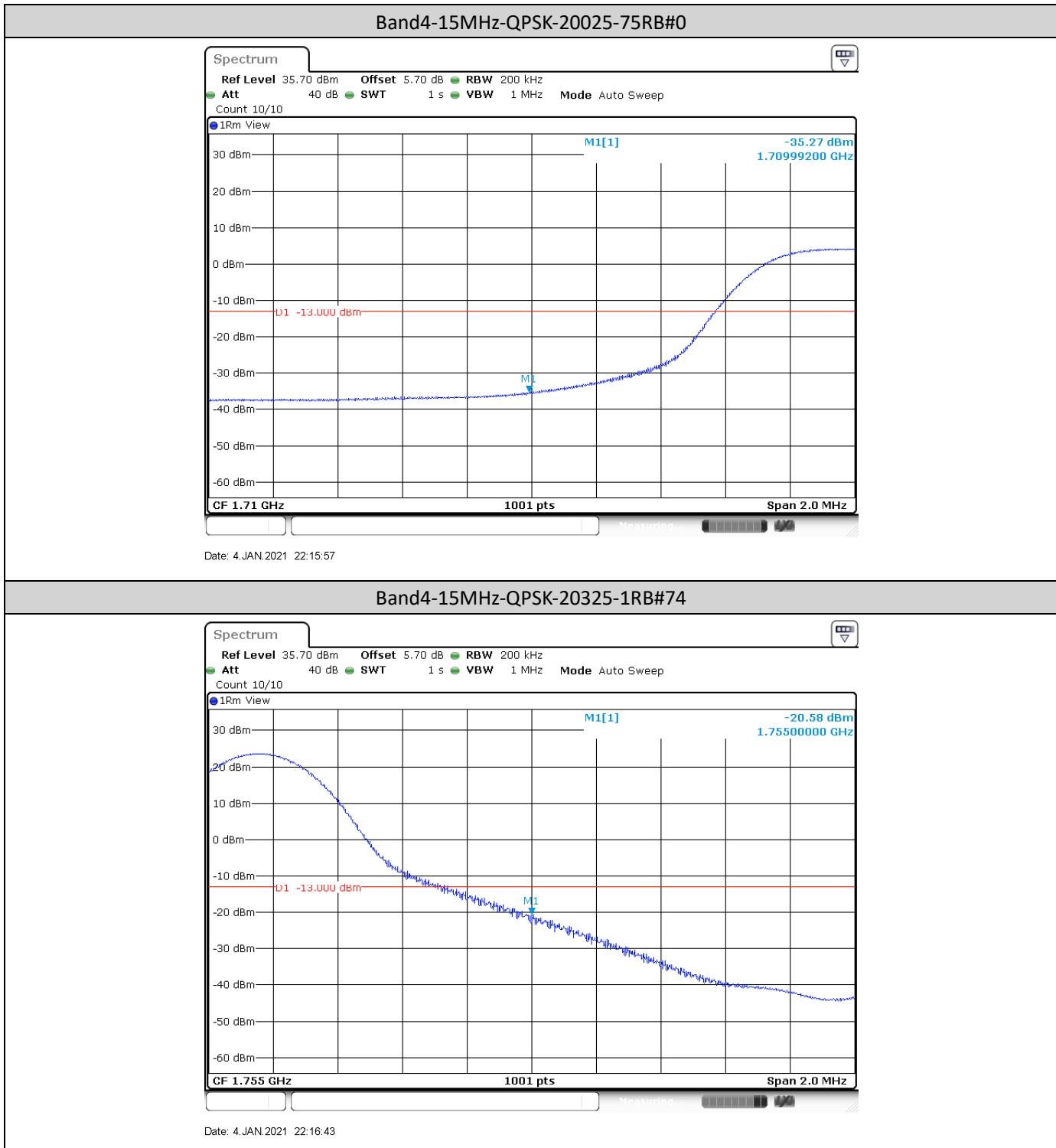


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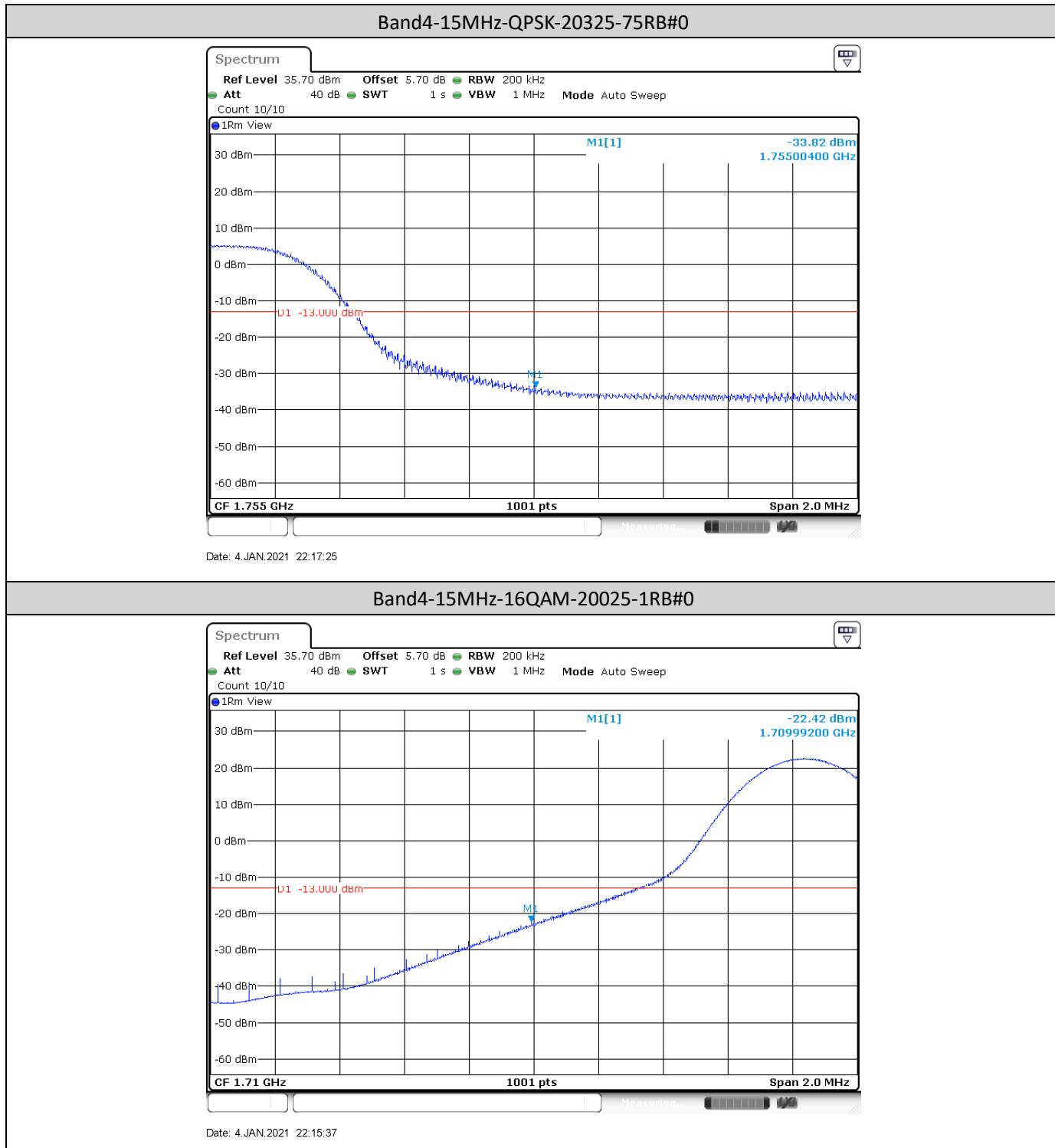


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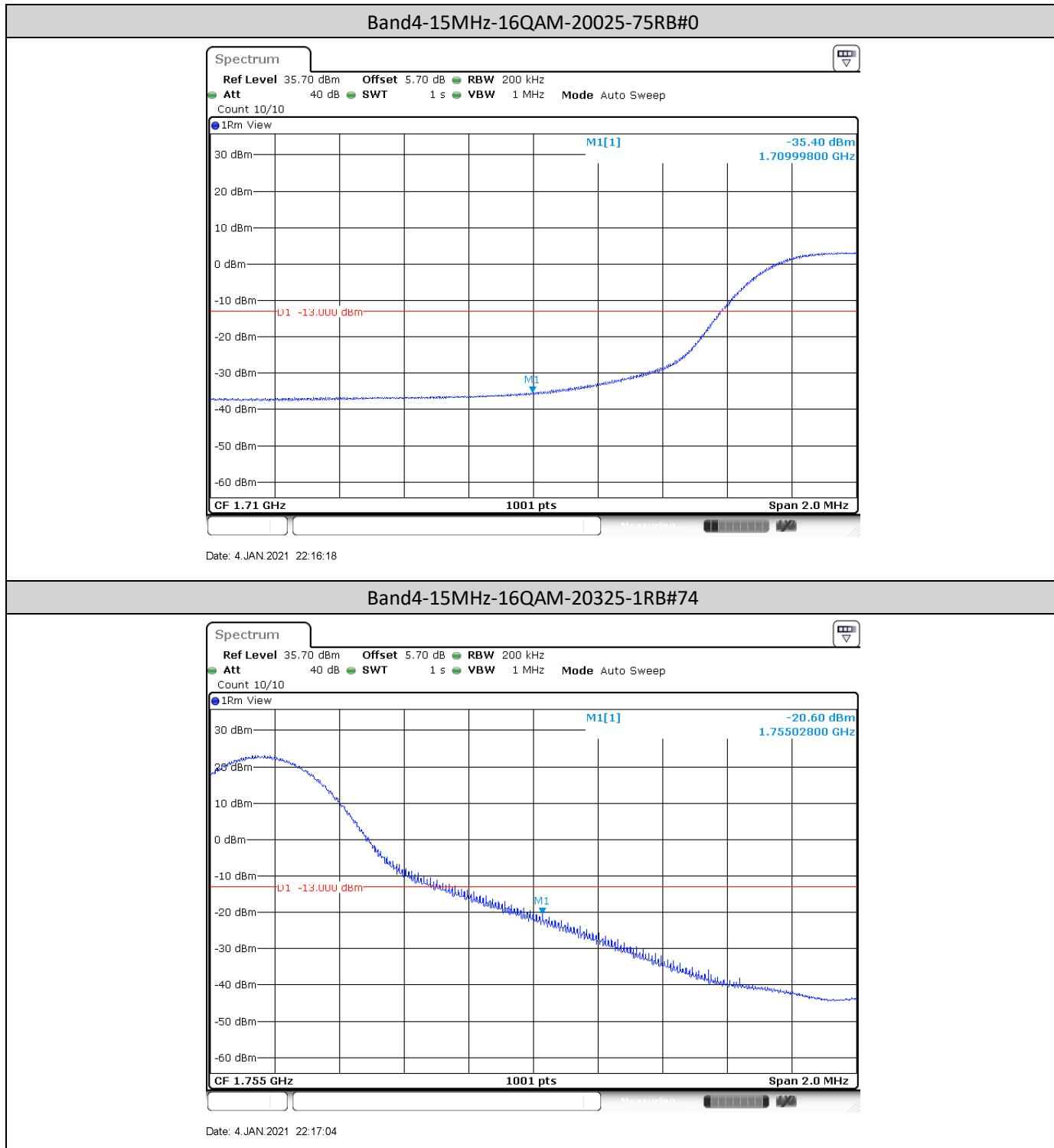


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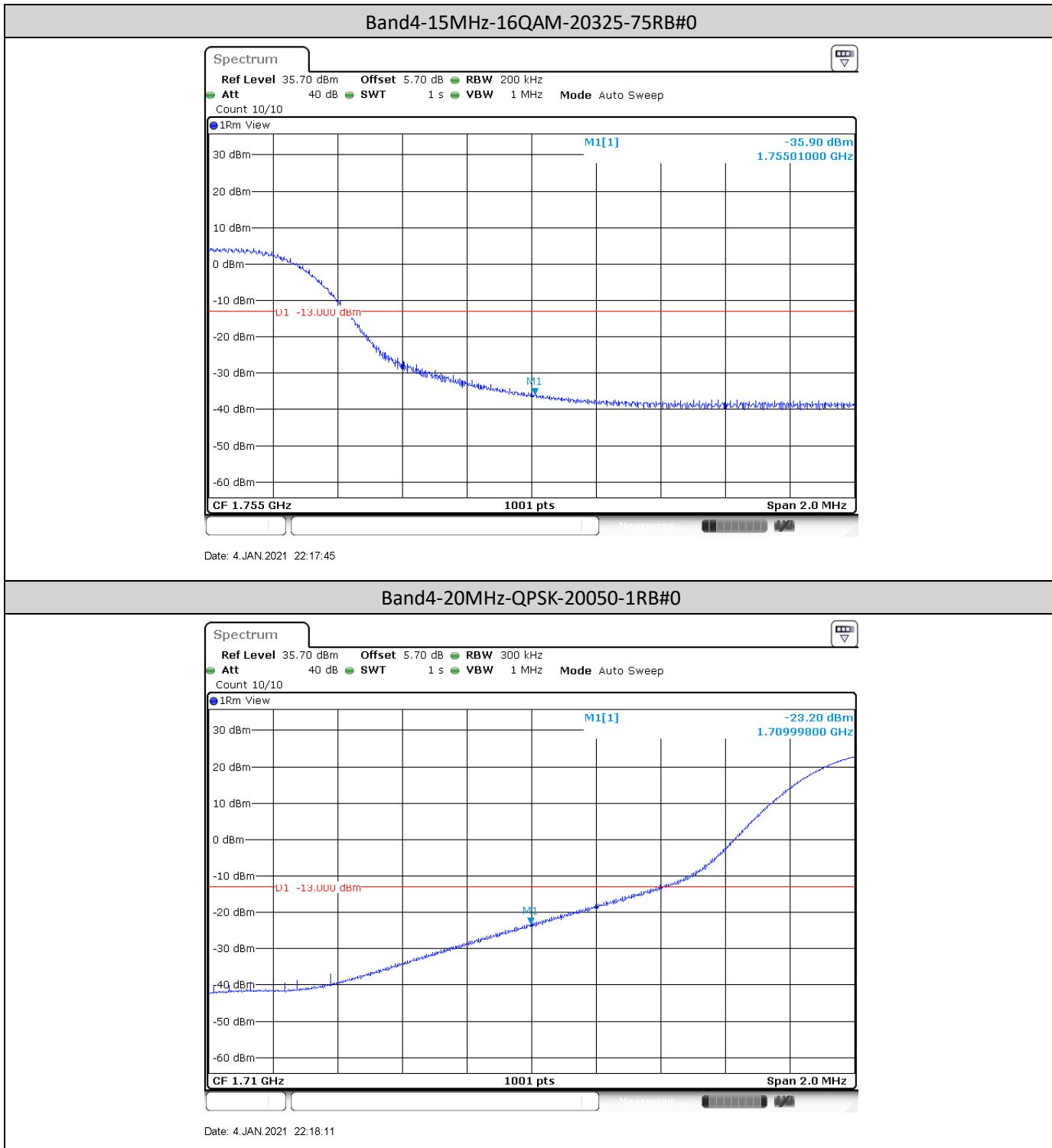


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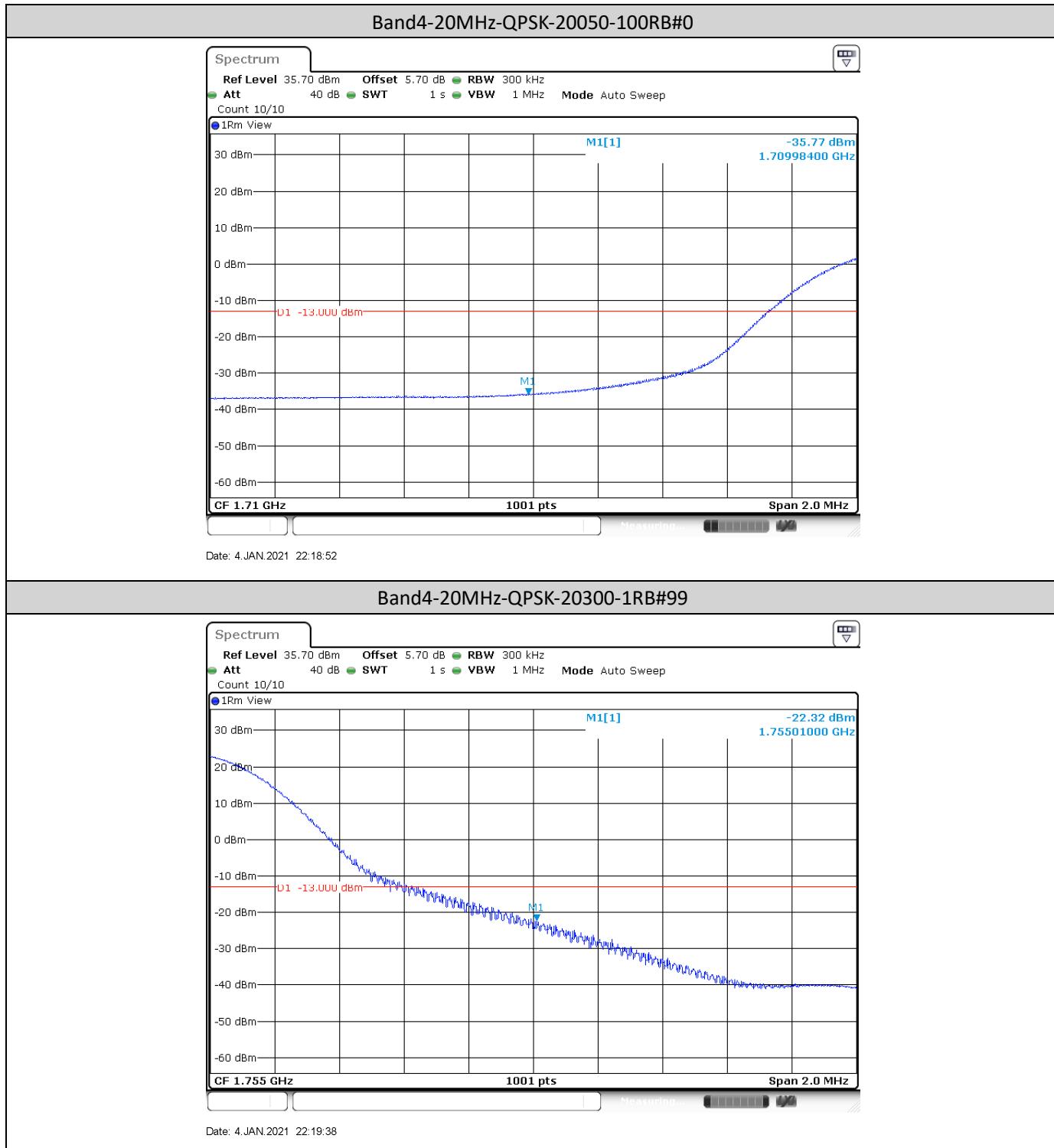


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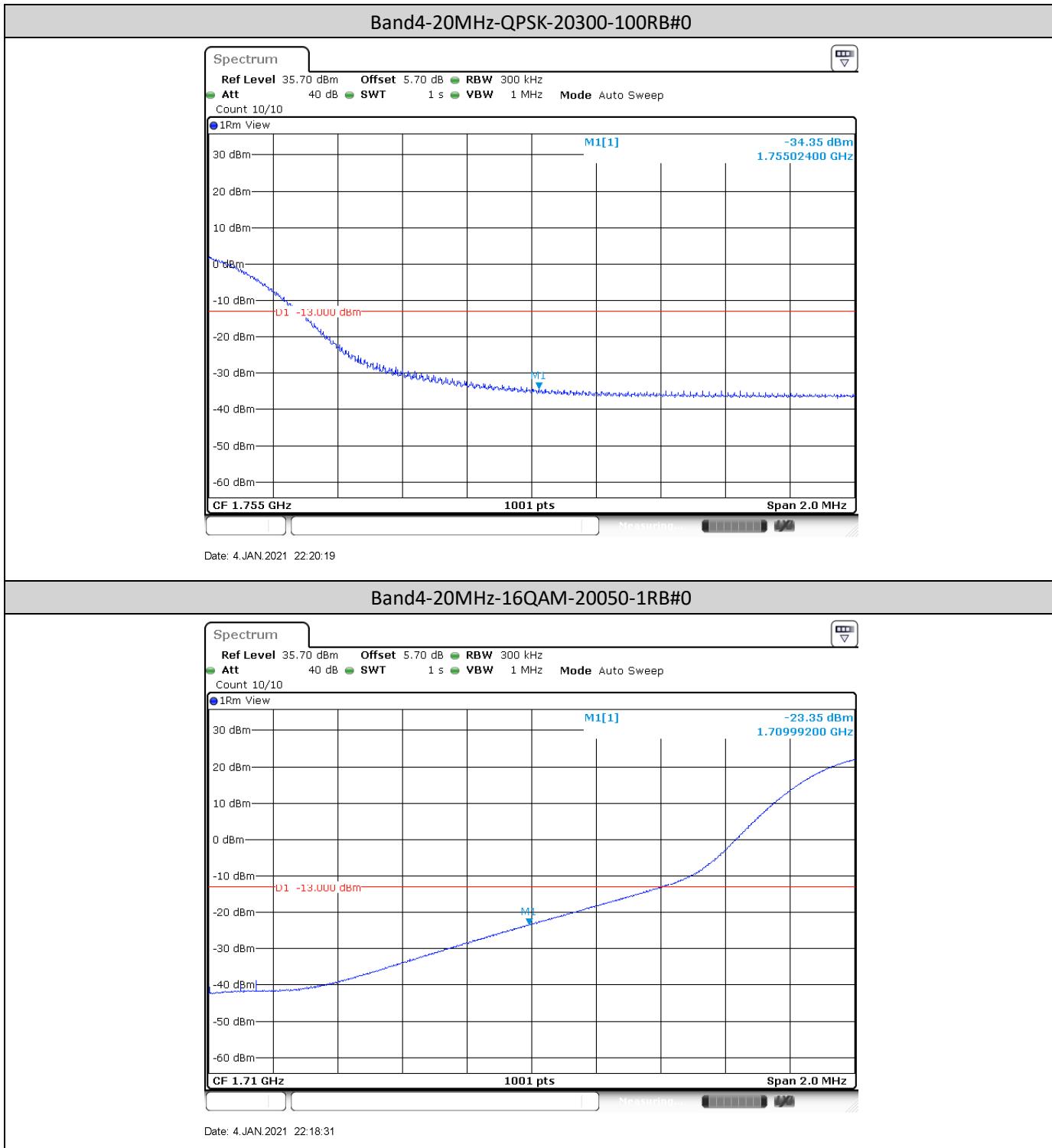


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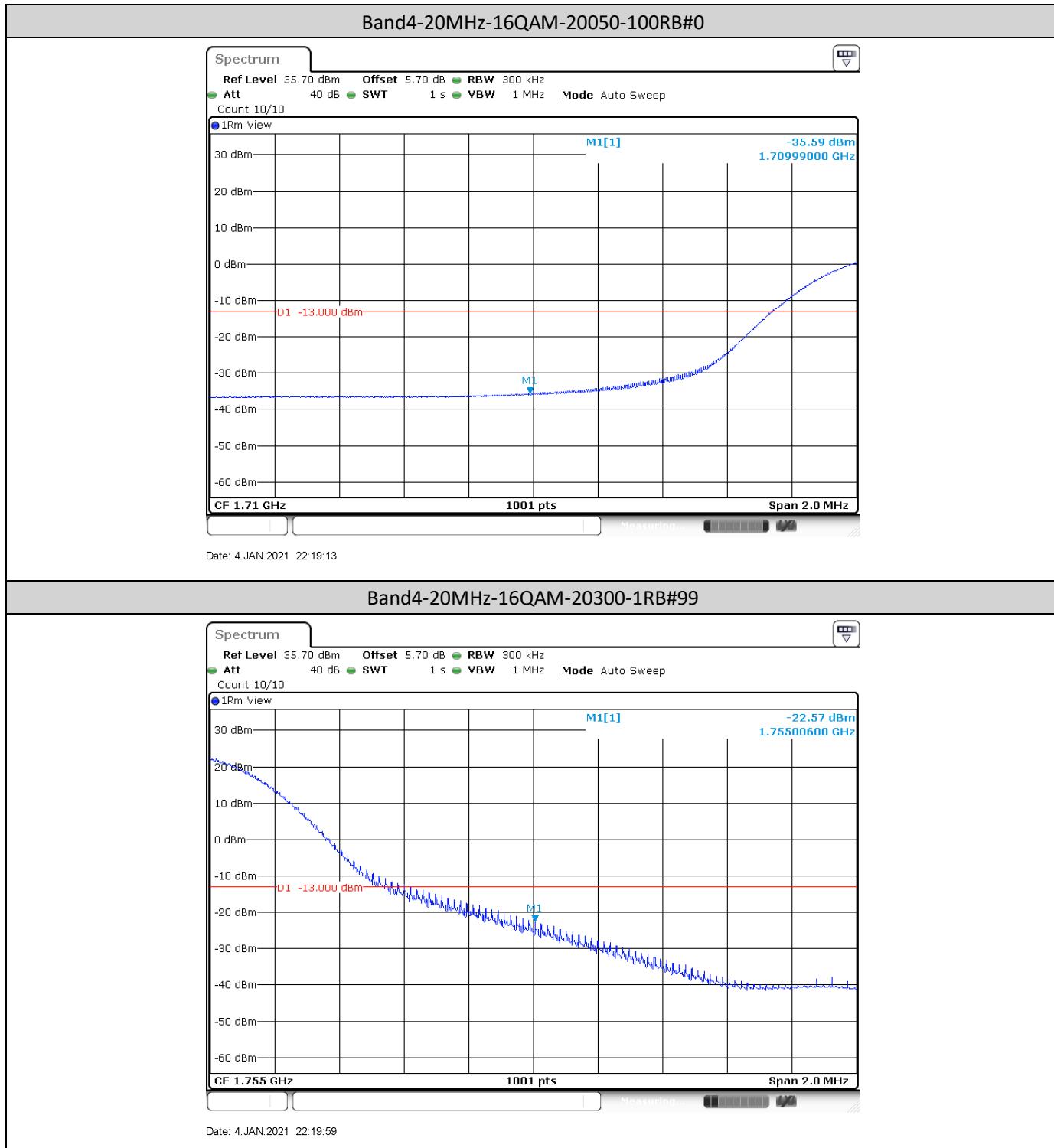


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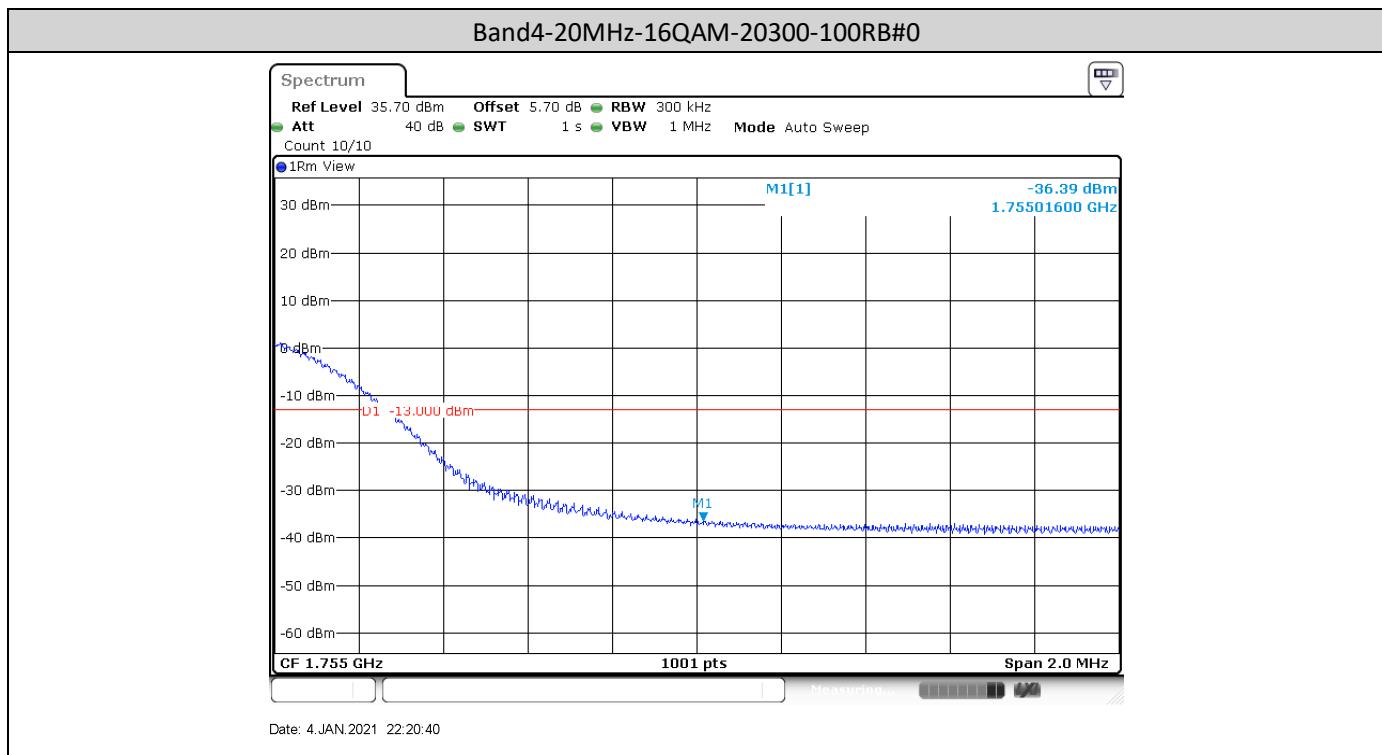


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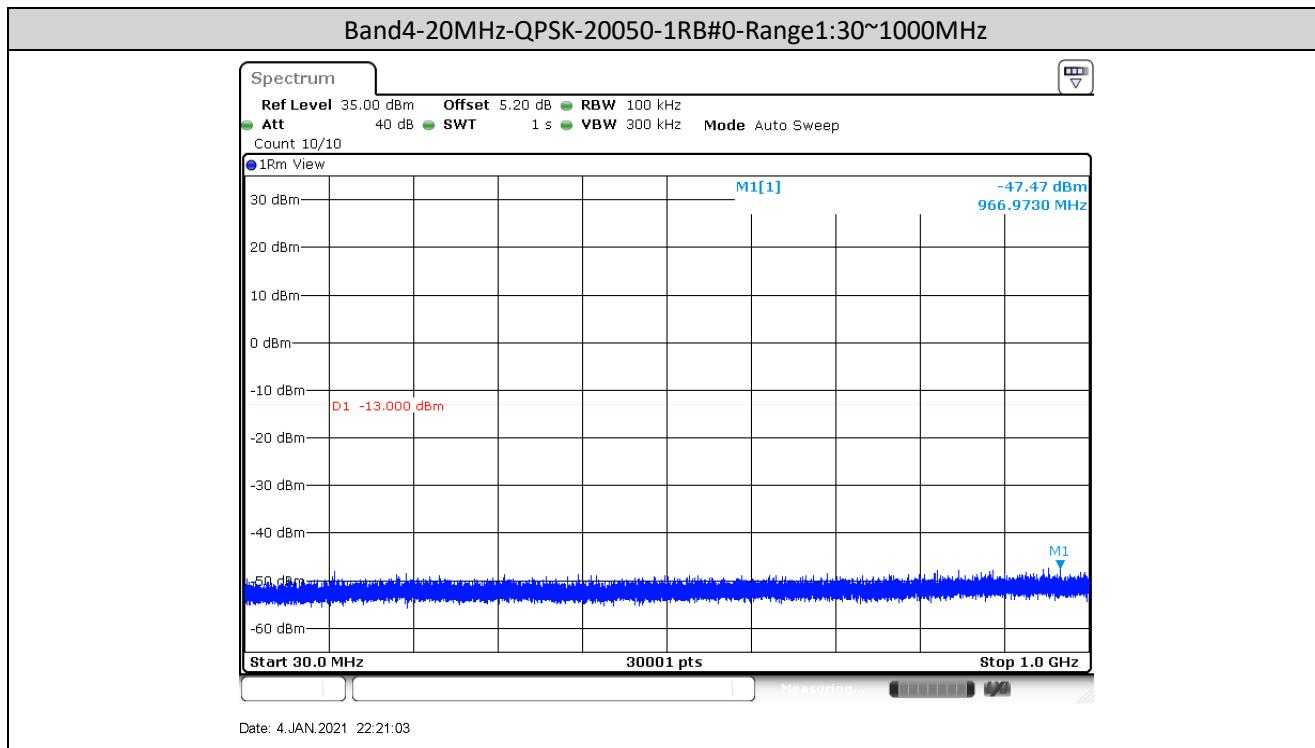
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6. Spurious Emission at Antenna Terminal

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 $< \text{RBW}/2$ 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



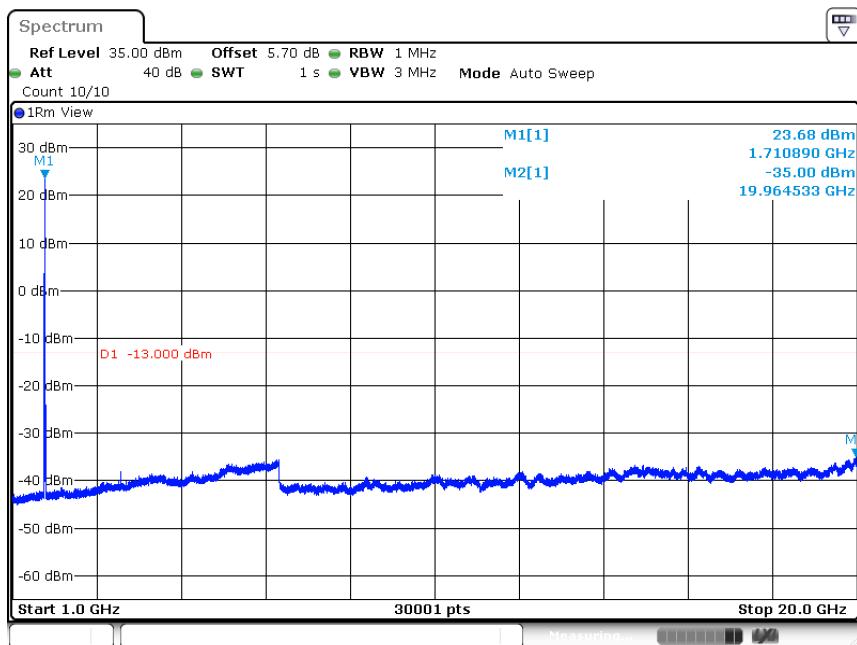
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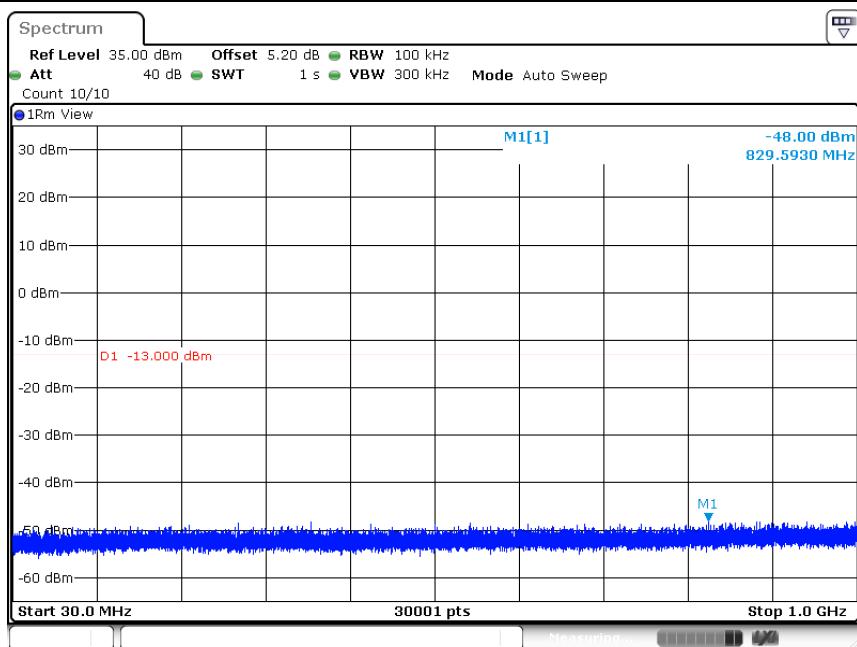
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Band4-20MHz-QPSK-20050-1RB#0-Range2:1000~20000MHz



Date: 4.JAN.2021 22:21:19

Band4-20MHz-QPSK-20175-1RB#0-Range1:30~1000MHz



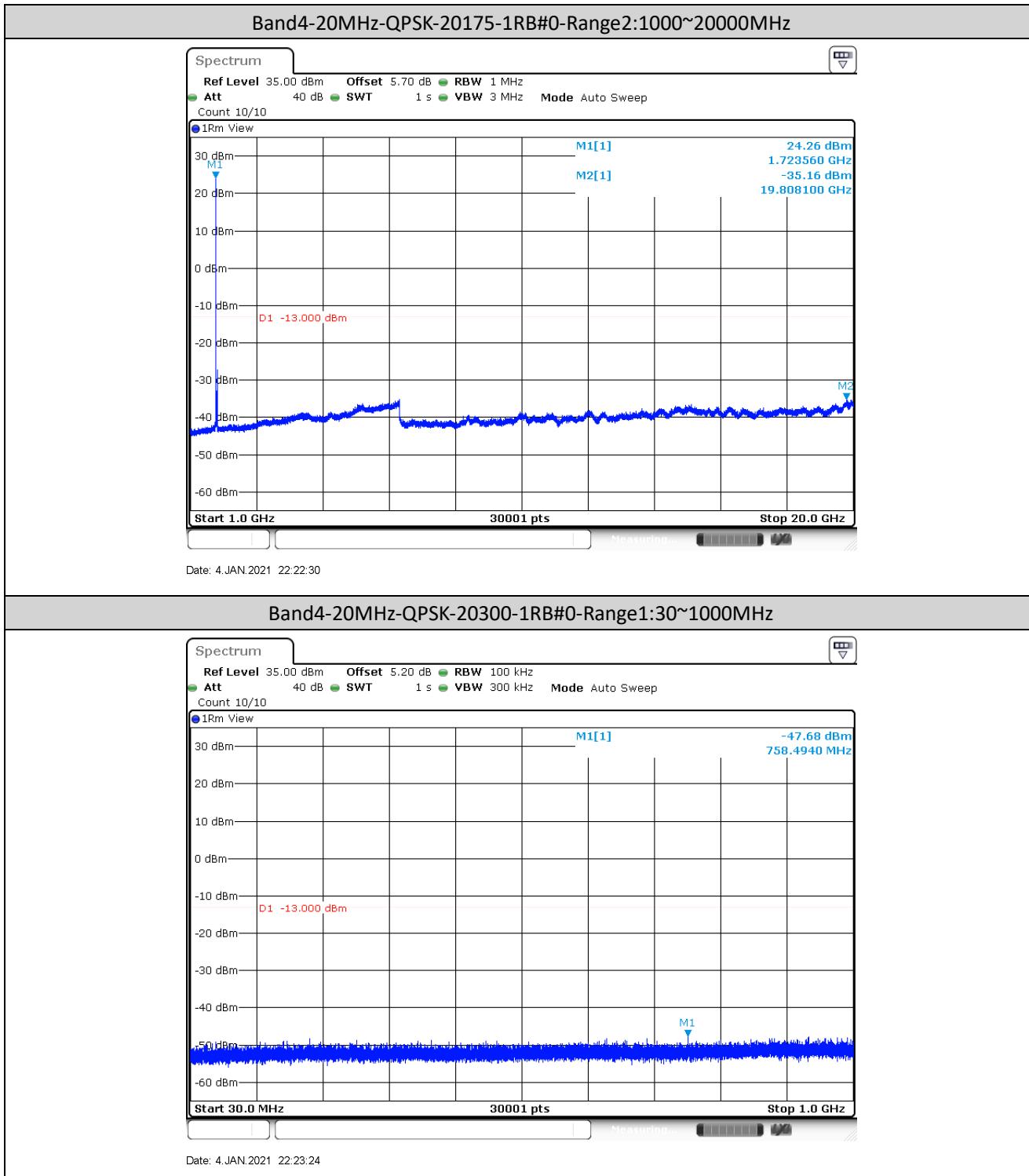
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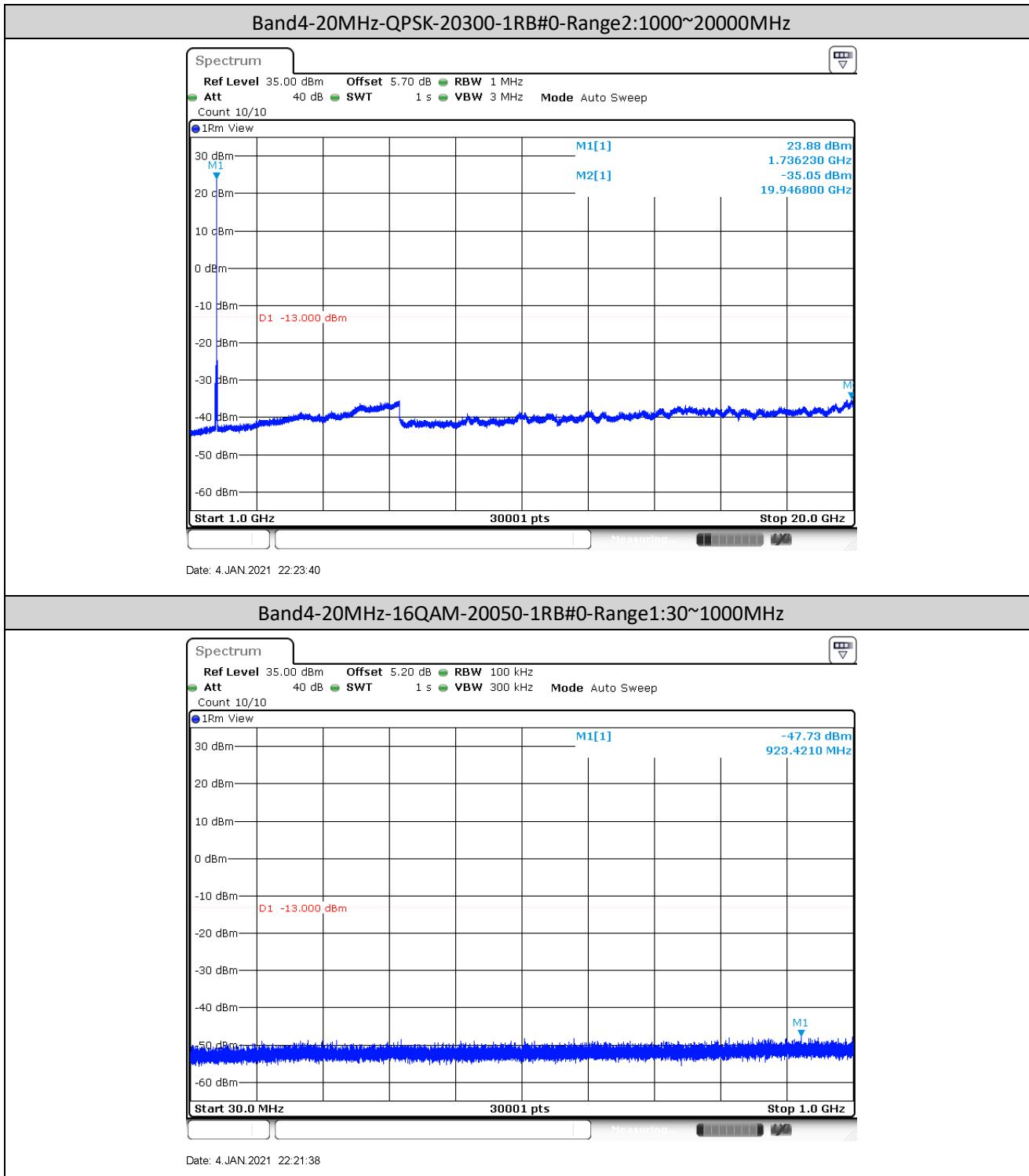


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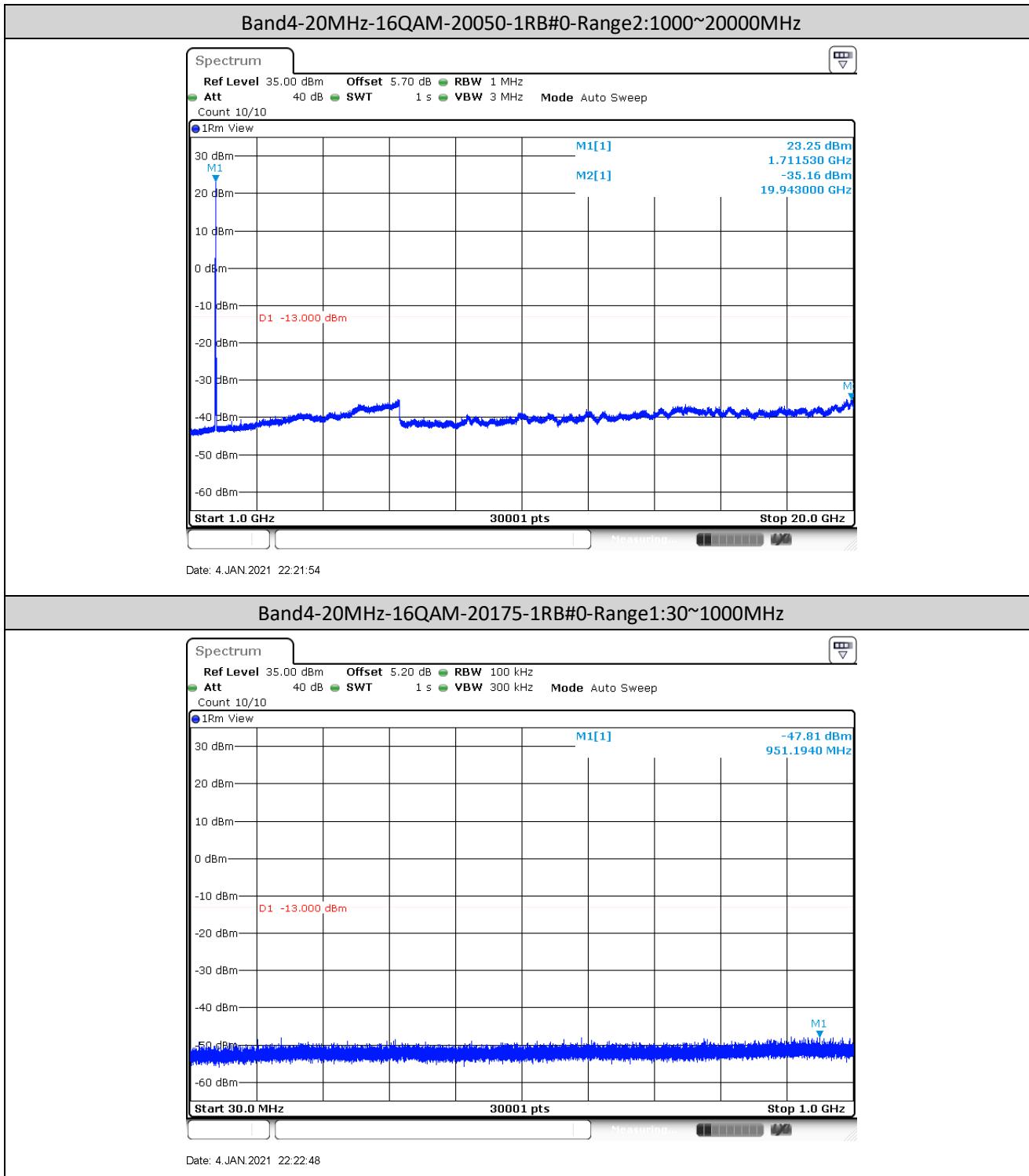


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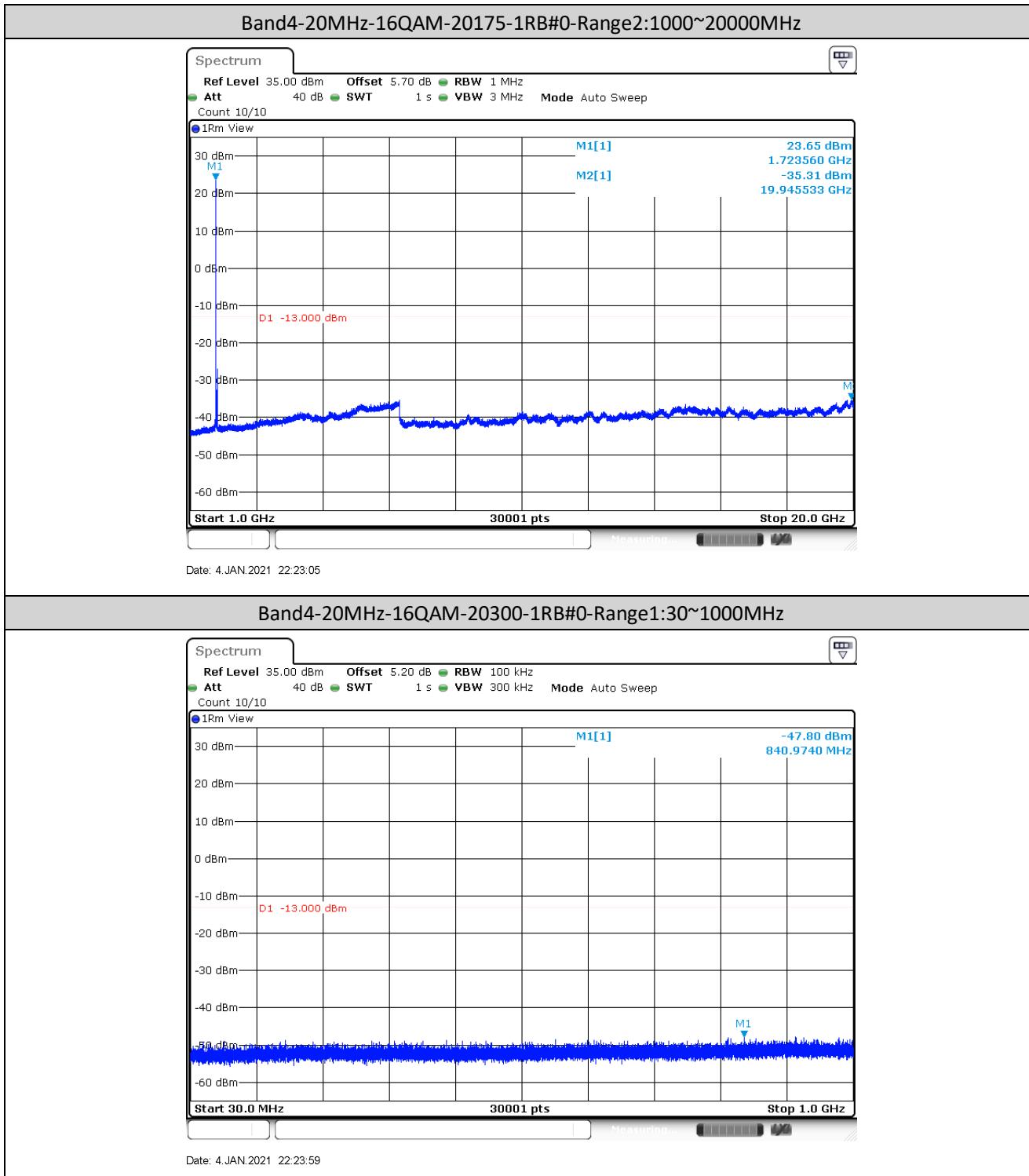


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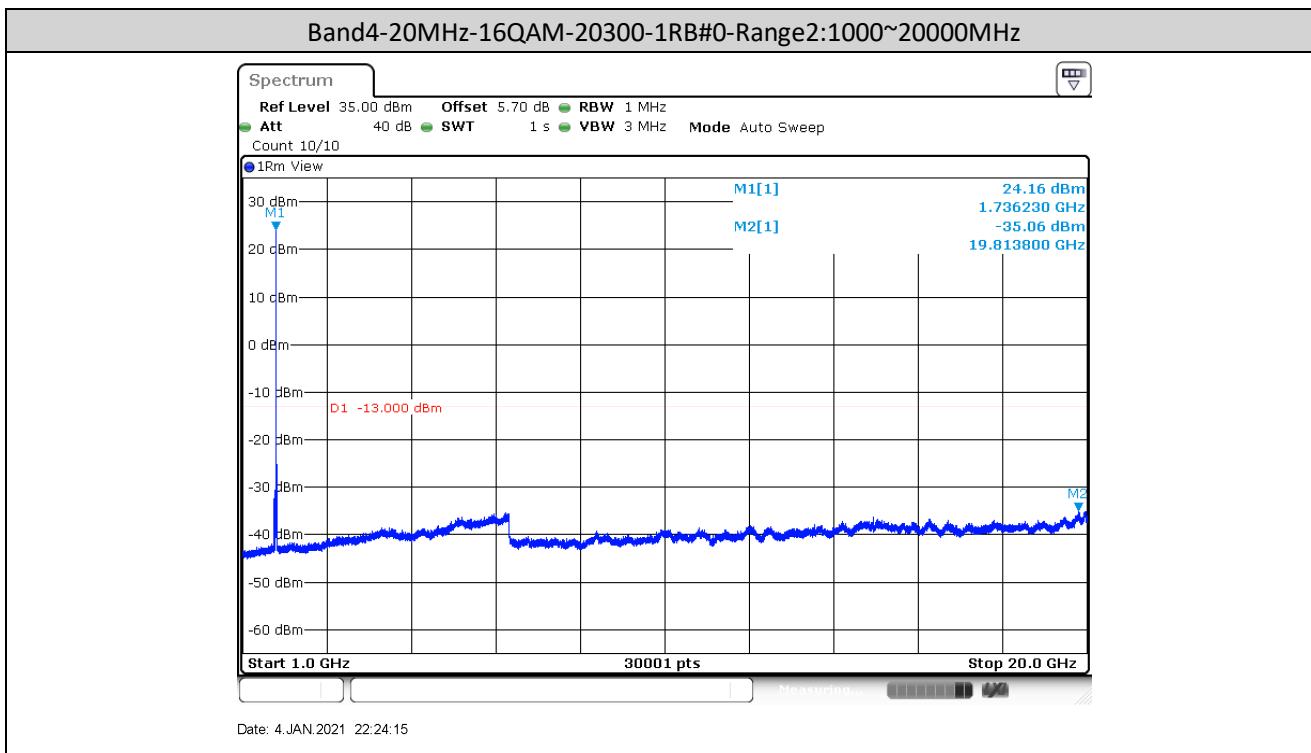


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7. Field Strength of Spurious Radiation

7.1. Test Band = LTE_4_TM1

7.1.1. Test Channel = Low Channel

Suspected Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	45.5693	-63.97	-13.00	50.97	Horizontal
2	249.5220	-65.28	-13.00	52.28	Horizontal
3	3422.5141	-52.62	-13.00	39.62	Horizontal
4	6844.1281	-55.84	-13.00	42.84	Horizontal
5	8555.1852	-47.93	-13.00	34.93	Horizontal
6	16380.446	-43.85	-13.00	30.85	Horizontal

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7.2. Test Band = LTE_4_TM1**7.2.1. Test Channel = Low Channel**

Suspected Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	106.4398	-64.84	-13.00	51.84	Vertical
2	623.1847	-63.59	-13.00	50.59	Vertical
3	3422.0141	-54.85	-13.00	41.85	Vertical
4	8555.1852	-50.79	-13.00	37.79	Vertical
5	14504.383	-47.68	-13.00	34.68	Vertical
6	17994.999	-40.39	-13.00	27.39	Vertical

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7.3. Test Band = LTE_4_TM1**7.3.1. Test Channel = Mid Channel**

Suspected Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	44.2597	-63.97	-13.00	50.97	Horizontal
2	420.6385	-66.94	-13.00	53.94	Horizontal
3	3447.0149	-54.42	-13.00	41.42	Horizontal
4	6894.6298	-55.56	-13.00	42.56	Horizontal
5	8617.6873	-47.86	-13.00	34.86	Horizontal
6	16393.946	-43.69	-13.00	30.69	Horizontal

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7.4. Test Band = LTE_4_TM1**7.4.1. Test Channel = Mid Channel**

Suspected Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	107.1674	-64.86	-13.00	51.86	Vertical
2	629.4900	-62.77	-13.00	49.77	Vertical
3	3447.0149	-57.52	-13.00	44.52	Vertical
4	8618.1873	-51.61	-13.00	38.61	Vertical
5	14445.381	-47.97	-13.00	34.97	Vertical
6	17998.500	-40.02	-13.00	27.02	Vertical

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7.5. Test Band = LTE_4_TM1**7.5.1. Test Channel = High Channel**

Suspected Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	43.6292	-63.56	-13.00	50.56	Horizontal
2	323.3427	-69.28	-13.00	56.28	Horizontal
3	3472.0157	-53.89	-13.00	40.89	Horizontal
4	6944.6315	-55.77	-13.00	42.77	Horizontal
5	8680.1893	-49.32	-13.00	36.32	Horizontal
6	16370.945	-44.22	-13.00	31.22	Horizontal

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7.6. Test Band = LTE_4_TM1**7.6.1. Test Channel = High Channel**

Suspected Data List					
NO.	Freq. [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	112.4056	-64.33	-13.00	51.33	Vertical
2	749.3880	-61.75	-13.00	48.75	Vertical
3	3472.0157	-53.88	-13.00	40.88	Vertical
4	8680.1893	-50.86	-13.00	37.86	Vertical
5	14503.383	-47.96	-13.00	34.96	Vertical
6	17995.499	-40.44	-13.00	27.44	Vertical

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
Band4	20MHz	QPSK	20050	100RB#0	VL	NT	-3.60	-0.002093	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	VN	NT	-9.30	-0.005407	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	VH	NT	-10.30	-0.005988	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	VL	NT	-9.80	-0.005657	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	VN	NT	-13.40	-0.007734	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	VH	NT	-9.40	-0.005426	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	VL	NT	-1.70	-0.000974	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	VN	NT	-4.50	-0.002579	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	VH	NT	-2.70	-0.001547	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	VL	NT	-5.30	-0.003081	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	VN	NT	-8.10	-0.004709	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	VH	NT	-6.80	-0.003953	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	VL	NT	-1.90	-0.001097	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	VN	NT	-3.00	-0.001732	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	VH	NT	-9.10	-0.005253	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	VL	NT	2.60	0.001490	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	VN	NT	-9.10	-0.005215	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	VH	NT	-4.20	-0.002407	±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
Band4	20MHz	QPSK	20050	100RB#0	NV	-30	-10.60	-0.006163	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	-20	-4.90	-0.002849	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	-10	-6.60	-0.003837	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	0	-7.80	-0.004535	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	10	-7.60	-0.004419	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	20	-8.30	-0.004826	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	30	-5.40	-0.003140	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	40	-8.90	-0.005174	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	50	-3.00	-0.001744	±2.5	PASS

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Band4	20MHz	QPSK	20175	100RB#0	NV	-30	-5.60	-0.003232	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	-20	-6.30	-0.003636	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	-10	-6.10	-0.003521	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	0	-6.70	-0.003867	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	10	-5.40	-0.003117	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	20	-3.70	-0.002136	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	30	-3.80	-0.002193	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	40	-2.30	-0.001328	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	50	-2.50	-0.001443	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	-30	-5.90	-0.003381	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	-20	-1.10	-0.000630	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	-10	-4.90	-0.002808	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	0	-8.60	-0.004928	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	10	-2.00	-0.001146	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	20	-1.10	-0.000630	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	30	-9.20	-0.005272	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	40	-6.90	-0.003954	±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	-4.10	-0.002384	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	-20	-9.20	-0.005349	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	-10	-8.40	-0.004884	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	0	-8.00	-0.004651	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	10	-9.20	-0.005349	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	20	-10.50	-0.006105	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	30	-1.90	-0.001105	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	40	-8.00	-0.004651	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	50	-1.90	-0.001105	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	-30	-3.10	-0.001789	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	-20	-5.00	-0.002886	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	-10	-10.60	-0.006118	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	0	-8.60	-0.004964	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	10	-12.50	-0.007215	±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	30	-5.20	-0.003001	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	40	-4.00	-0.002309	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	50	-1.30	-0.000750	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	-30	-0.20	-0.000115	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	-20	-8.90	-0.005100	±2.5	PASS

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Band4	20MHz	16QAM	20300	100RB#0	NV	-10	-1.70	-0.000974	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	0	-3.60	-0.002063	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	10	-3.40	-0.001948	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	20	-5.80	-0.003324	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	30	-6.80	-0.003897	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	40	-4.00	-0.002292	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	50	-0.70	-0.000401	±2.5	PASS

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