



Appendix B

E-UTRA Band 4



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CONTENT

1	EFFECTIVE (ISOTROPIC) RADIATED POWER	3
1.1.	TEST RESULT	3
2.	PEAK-TO-AVERAGE RATIO (CCDF)	11
2.1.	TEST RESULT	11
2.2.	TEST PLOTS.....	11
3.	MODULATION CHARACTERISTICS	15
3.1.	TEST MODE = LTE /TM1 20MHZ.....	15
3.1.1.	TEST CHANNEL = MCH.....	15
3.2.	TEST MODE = LTE /TM2 20MHZ.....	16
3.2.1.	TEST CHANNEL = MCH.....	16
4.	26DB BANDWIDTH AND OCCUPIED BANDWIDTH	17
4.1.	TEST RESULT	17
4.2.	TEST PLOTS.....	18
5.	BAND EDGE COMPLIANCE	36
5.1.	TEST PLOTS.....	36
6.	SPURIOUS EMISSION AT ANTENNA TERMINAL	60
6.1.	TEST RESULT	60
6.2.	TEST PLOTS.....	60
7.	FIELD STRENGTH OF SPURIOUS RADIATION	67
7.1.	TEST MODE =LTE/TM1	67
7.1.1.	TEST CHANNEL = LCH	67
7.1.2.	TEST CHANNEL = MCH.....	67
7.1.3.	TEST CHANNEL = HCH.....	68
8.	FREQUENCY STABILITY.....	69
8.1.	FREQUENCY VS VOLTAGE	69
8.2.	FREQUENCY VS TEMPERATURE	69



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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	23.12	24.52	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#2	23.27	24.67	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	22.92	24.32	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#1	23.26	24.66	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#0	23.12	24.52	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#3	23.31	24.71	30.00	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	22.28	23.68	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#5	23.01	24.41	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	23.33	24.73	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#2	23.38	24.78	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#0	23.24	24.64	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#1	23.37	24.77	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#3	23.23	24.63	30.00	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	22.35	23.75	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#2	23.23	24.63	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	23.18	24.58	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	23.23	24.63	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#0	23.19	24.59	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#3	23.39	24.79	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#1	23.32	24.72	30.00	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	22.30	23.70	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#2	22.06	23.46	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	21.80	23.20	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	21.78	23.18	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#0	22.35	23.75	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#1	22.33	23.73	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#3	22.50	23.90	30.00	PASS



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Band4	1.4MHz	16QAM	19957	6RB#0	21.29	22.69	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#5	21.86	23.26	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	22.01	23.41	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#2	21.90	23.30	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#3	22.51	23.91	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#1	22.48	23.88	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#0	22.46	23.86	30.00	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	21.49	22.89	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#2	22.14	23.54	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#5	22.06	23.46	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	21.78	23.18	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#3	22.56	23.96	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#1	22.49	23.89	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#0	22.55	23.95	30.00	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	21.39	22.79	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#14	23.12	24.52	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#0	23.25	24.65	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#8	22.95	24.35	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#7	22.26	23.66	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#4	22.23	23.63	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#0	22.15	23.55	30.00	PASS
Band4	3MHz	QPSK	19965	15RB#0	22.37	23.77	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#14	23.38	24.78	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#8	23.09	24.49	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#0	23.45	24.85	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#7	22.43	23.83	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#0	22.27	23.67	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#4	22.46	23.86	30.00	PASS
Band4	3MHz	QPSK	20175	15RB#0	22.42	23.82	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#14	23.12	24.52	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#8	23.01	24.41	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#0	23.27	24.67	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#4	22.34	23.74	30.00	PASS



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Band4	3MHz	QPSK	20385	8RB#0	22.38	23.78	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#7	22.32	23.72	30.00	PASS
Band4	3MHz	QPSK	20385	15RB#0	22.31	23.71	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#8	22.02	23.42	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#14	21.92	23.32	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#0	21.92	23.32	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#0	21.11	22.51	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#7	21.17	22.57	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#4	21.10	22.50	30.00	PASS
Band4	3MHz	16QAM	19965	15RB#0	21.35	22.75	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#8	21.93	23.33	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#14	21.96	23.36	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#0	21.98	23.38	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#4	21.62	23.02	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#0	21.27	22.67	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#7	21.33	22.73	30.00	PASS
Band4	3MHz	16QAM	20175	15RB#0	21.45	22.85	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#14	22.13	23.53	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#0	21.90	23.30	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#8	21.99	23.39	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#0	21.24	22.64	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#7	21.22	22.62	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#4	21.13	22.53	30.00	PASS
Band4	3MHz	16QAM	20385	15RB#0	21.38	22.78	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#24	23.40	24.80	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#12	23.15	24.55	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#0	23.33	24.73	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#6	22.09	23.49	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#0	22.35	23.75	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#13	22.30	23.70	30.00	PASS
Band4	5MHz	QPSK	19975	25RB#0	22.26	23.66	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#24	23.48	24.88	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#0	23.25	24.65	30.00	PASS



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Band4	5MHz	QPSK	20175	1RB#12	23.19	24.59	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#6	22.55	23.95	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#0	22.27	23.67	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#13	22.33	23.73	30.00	PASS
Band4	5MHz	QPSK	20175	25RB#0	22.43	23.83	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#0	23.38	24.78	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#12	23.24	24.64	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#24	23.36	24.76	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#0	22.29	23.69	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#6	22.24	23.64	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#13	22.38	23.78	30.00	PASS
Band4	5MHz	QPSK	20375	25RB#0	22.41	23.81	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#0	22.00	23.40	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#12	22.28	23.68	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#24	21.88	23.28	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#13	21.31	22.71	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#0	21.35	22.75	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#6	21.41	22.81	30.00	PASS
Band4	5MHz	16QAM	19975	25RB#0	21.24	22.64	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#0	21.95	23.35	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#12	22.42	23.82	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#24	22.07	23.47	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#0	21.26	22.66	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#13	21.42	22.82	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#6	21.44	22.84	30.00	PASS
Band4	5MHz	16QAM	20175	25RB#0	21.36	22.76	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#0	21.91	23.31	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#24	22.01	23.41	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#12	22.46	23.86	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#0	21.22	22.62	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#6	21.35	22.75	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#13	21.50	22.90	30.00	PASS
Band4	5MHz	16QAM	20375	25RB#0	21.41	22.81	30.00	PASS



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Band4	10MHz	QPSK	20000	1RB#0	23.35	24.75	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#24	23.32	24.72	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#49	23.51	24.91	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#12	22.29	23.69	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#0	22.15	23.55	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#25	22.49	23.89	30.00	PASS
Band4	10MHz	QPSK	20000	50RB#0	22.20	23.60	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#49	23.12	24.52	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#0	23.21	24.61	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#24	23.60	25.00	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#0	22.36	23.76	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#12	22.58	23.98	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#25	22.32	23.72	30.00	PASS
Band4	10MHz	QPSK	20175	50RB#0	22.34	23.74	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#24	23.64	25.04	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#49	23.14	24.54	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#0	23.51	24.91	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#0	22.60	24.00	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#25	22.20	23.60	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#12	22.35	23.75	30.00	PASS
Band4	10MHz	QPSK	20350	50RB#0	22.42	23.82	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#24	22.11	23.51	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#49	21.82	23.22	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#0	22.12	23.52	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#0	21.36	22.76	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#12	21.47	22.87	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#25	21.34	22.74	30.00	PASS
Band4	10MHz	16QAM	20000	50RB#0	21.29	22.69	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#49	22.12	23.52	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#0	22.02	23.42	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#24	22.20	23.60	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#25	21.39	22.79	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#12	21.44	22.84	30.00	PASS



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Band4	10MHz	16QAM	20175	25RB#0	21.41	22.81	30.00	PASS
Band4	10MHz	16QAM	20175	50RB#0	21.39	22.79	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#24	22.02	23.42	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#49	22.04	23.44	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#0	22.19	23.59	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#25	21.45	22.85	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#12	21.51	22.91	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#0	21.52	22.92	30.00	PASS
Band4	10MHz	16QAM	20350	50RB#0	21.38	22.78	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#74	23.23	24.63	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#0	23.39	24.79	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#38	23.38	24.78	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#39	22.39	23.79	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#18	22.49	23.89	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#0	22.24	23.64	30.00	PASS
Band4	15MHz	QPSK	20025	75RB#0	22.25	23.65	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#74	23.22	24.62	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#38	23.54	24.94	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#0	23.32	24.72	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#0	22.36	23.76	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#39	22.40	23.80	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#18	22.65	24.05	30.00	PASS
Band4	15MHz	QPSK	20175	75RB#0	22.41	23.81	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#74	22.87	24.27	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#38	23.41	24.81	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#0	23.49	24.89	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#18	22.35	23.75	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#0	22.47	23.87	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#39	22.22	23.62	30.00	PASS
Band4	15MHz	QPSK	20325	75RB#0	22.47	23.87	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#0	21.99	23.39	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#74	22.07	23.47	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#38	22.05	23.45	30.00	PASS



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Band4	15MHz	16QAM	20025	36RB#0	21.31	22.71	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#39	21.26	22.66	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#18	21.51	22.91	30.00	PASS
Band4	15MHz	16QAM	20025	75RB#0	21.31	22.71	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#38	21.86	23.26	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#74	21.75	23.15	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#0	22.02	23.42	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#18	21.43	22.83	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#0	21.42	22.82	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#39	21.36	22.76	30.00	PASS
Band4	15MHz	16QAM	20175	75RB#0	21.35	22.75	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#74	22.07	23.47	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#0	22.12	23.52	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#38	22.00	23.40	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#0	21.51	22.91	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#39	21.50	22.90	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#18	21.31	22.71	30.00	PASS
Band4	15MHz	16QAM	20325	75RB#0	21.43	22.83	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#99	23.19	24.59	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#49	23.52	24.92	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#0	23.21	24.61	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#25	22.55	23.95	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#0	22.15	23.55	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#50	22.38	23.78	30.00	PASS
Band4	20MHz	QPSK	20050	100RB#0	22.27	23.67	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#99	23.07	24.47	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#0	23.20	24.60	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#49	23.63	25.03	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#25	22.56	23.96	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#0	22.22	23.62	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#50	22.26	23.66	30.00	PASS
Band4	20MHz	QPSK	20175	100RB#0	22.20	23.60	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#0	23.40	24.80	30.00	PASS



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Band4	20MHz	QPSK	20300	1RB#49	23.61	25.01	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#99	22.98	24.38	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#0	22.54	23.94	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#25	22.48	23.88	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#50	22.18	23.58	30.00	PASS
Band4	20MHz	QPSK	20300	100RB#0	22.49	23.89	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#0	22.00	23.40	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#49	21.94	23.34	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#99	21.90	23.30	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#50	21.46	22.86	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#0	21.27	22.67	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#25	21.36	22.76	30.00	PASS
Band4	20MHz	16QAM	20050	100RB#0	21.44	22.84	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#0	22.06	23.46	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#49	21.93	23.33	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#99	21.59	22.99	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#0	21.42	22.82	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#50	21.21	22.61	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#25	21.37	22.77	30.00	PASS
Band4	20MHz	16QAM	20175	100RB#0	21.36	22.76	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#0	22.11	23.51	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#99	21.91	23.31	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#49	22.25	23.65	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#0	21.43	22.83	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#25	21.46	22.86	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#50	21.47	22.87	30.00	PASS
Band4	20MHz	16QAM	20300	100RB#0	21.46	22.86	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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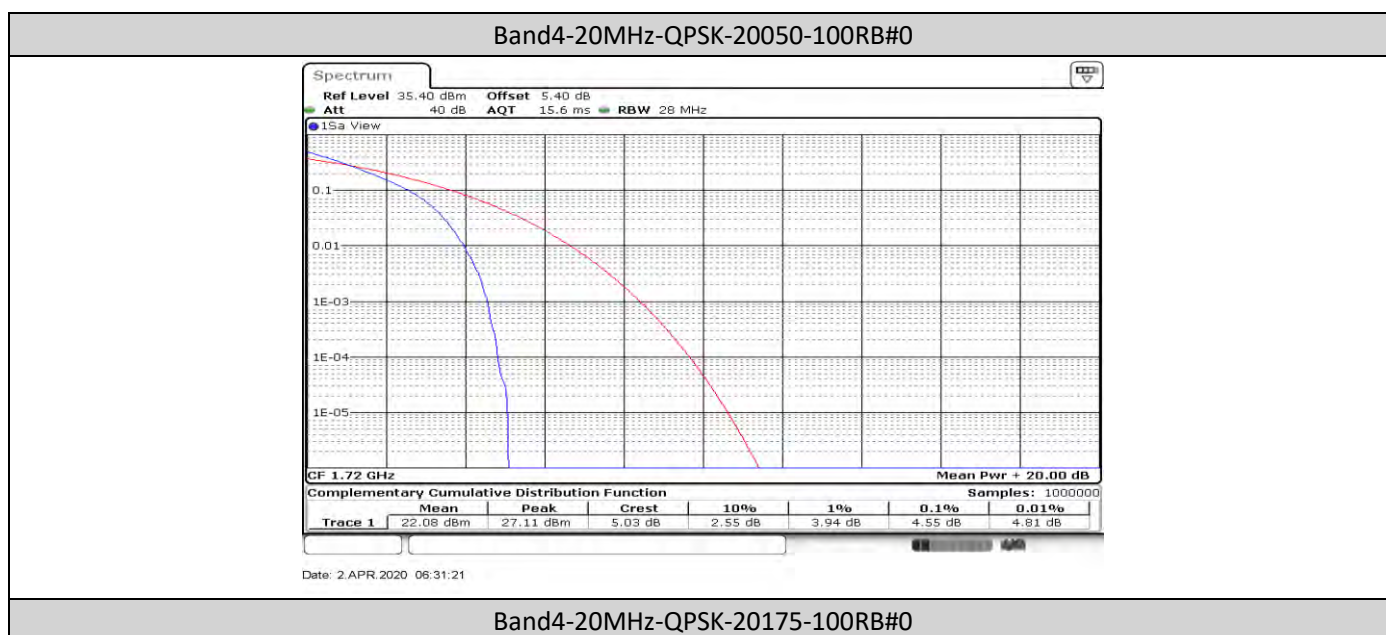


2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	20MHz	QPSK	20050	100RB#0	4.55	13.00	PASS
Band4	20MHz	QPSK	20175	100RB#0	4.52	13.00	PASS
Band4	20MHz	QPSK	20300	100RB#0	4.46	13.00	PASS
Band4	20MHz	16QAM	20050	100RB#0	5.33	13.00	PASS
Band4	20MHz	16QAM	20175	100RB#0	5.36	13.00	PASS
Band4	20MHz	16QAM	20300	100RB#0	5.30	13.00	PASS

2.2. Test Plots





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



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





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

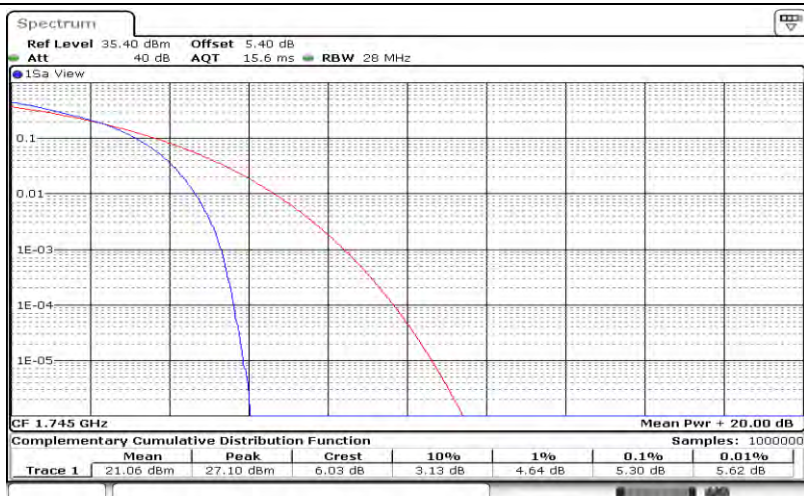


Band4-20MHz-16QAM-20300-100RB#0



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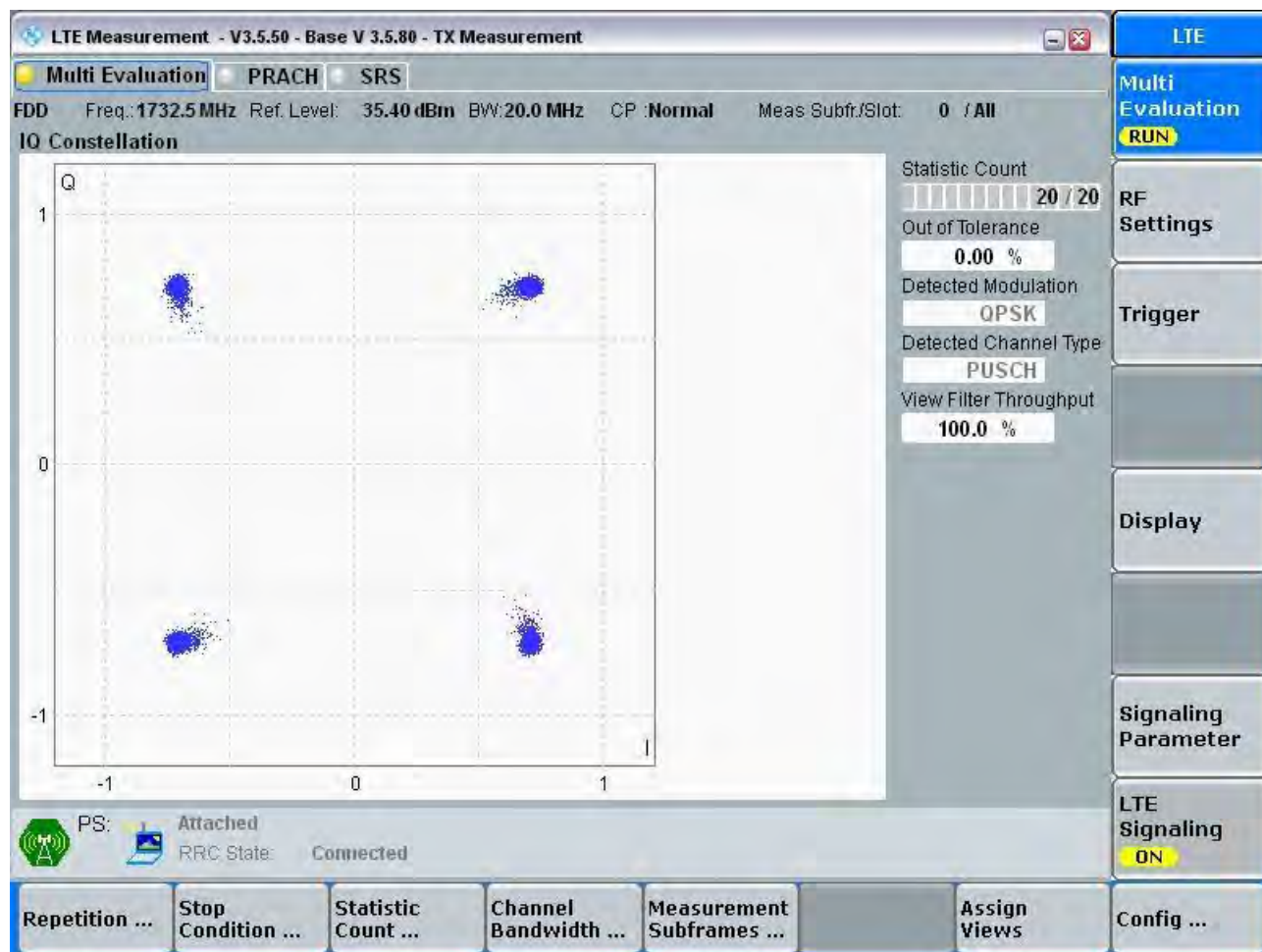
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3. Modulation Characteristics

3.1. Test Mode = LTE /TM1 20MHz

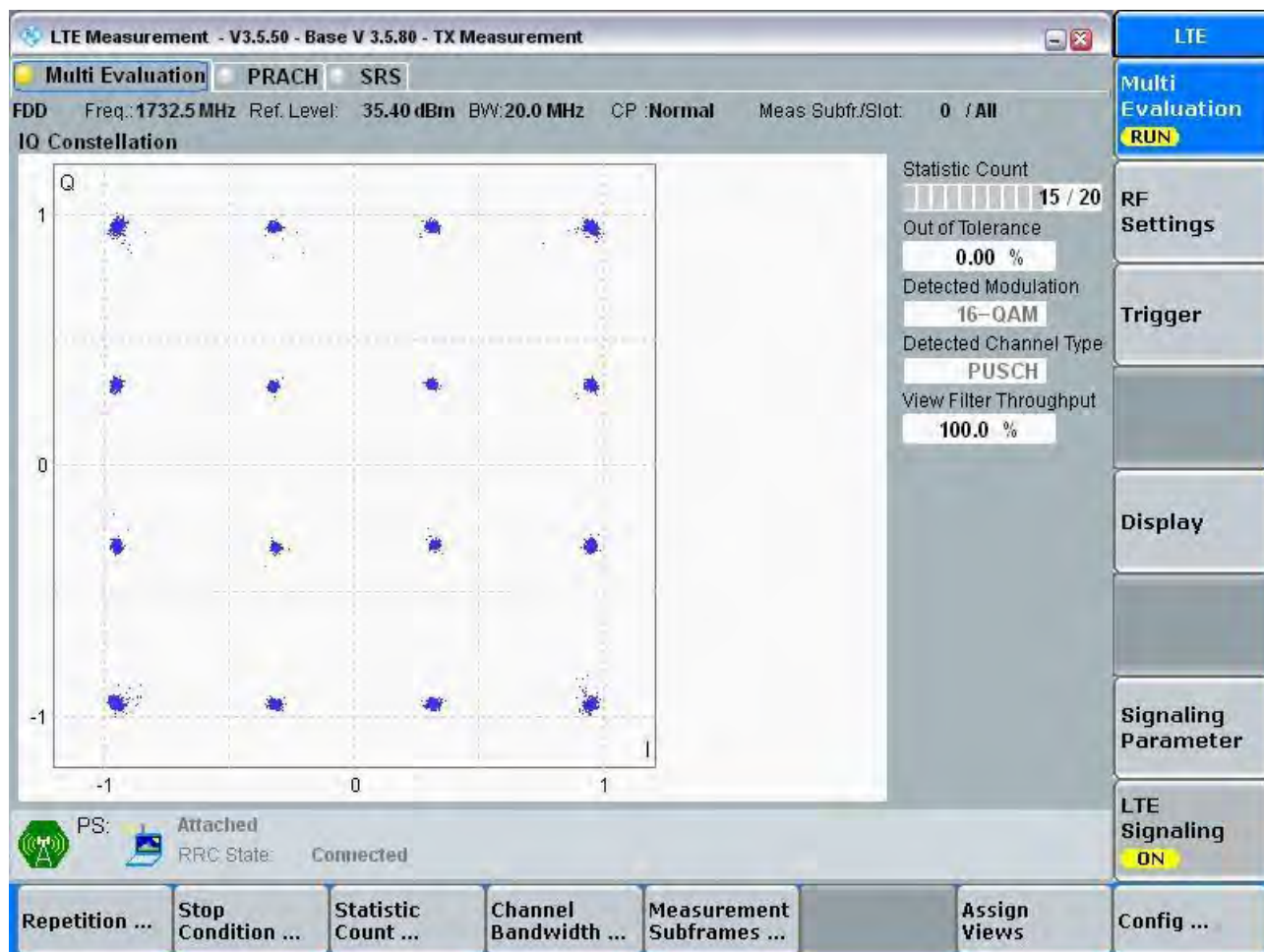
3.1.1. Test Channel = MCH





3.2. Test Mode = LTE /TM2 20MHz

3.2.1. 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	1.094	1.305	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.100	1.302	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	1.094	1.305	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	1.091	1.308	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.094	1.308	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	1.091	1.299	PASS
Band4	3MHz	QPSK	19965	15RB#0	2.697	3.018	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.697	3.012	PASS
Band4	3MHz	QPSK	20385	15RB#0	2.697	3.000	PASS
Band4	3MHz	16QAM	19965	15RB#0	2.685	2.976	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.685	2.982	PASS
Band4	3MHz	16QAM	20385	15RB#0	2.685	2.988	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.476	4.900	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.476	4.930	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.466	4.910	PASS
Band4	5MHz	16QAM	19975	25RB#0	4.486	4.970	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.486	4.970	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.486	4.970	PASS
Band4	10MHz	QPSK	20000	50RB#0	8.931	9.760	PASS
Band4	10MHz	QPSK	20175	50RB#0	8.911	9.740	PASS
Band4	10MHz	QPSK	20350	50RB#0	8.931	9.740	PASS
Band4	10MHz	16QAM	20000	50RB#0	8.911	9.800	PASS
Band4	10MHz	16QAM	20175	50RB#0	8.911	9.740	PASS
Band4	10MHz	16QAM	20350	50RB#0	8.931	9.780	PASS
Band4	15MHz	QPSK	20025	75RB#0	13.397	14.610	PASS
Band4	15MHz	QPSK	20175	75RB#0	13.457	14.670	PASS
Band4	15MHz	QPSK	20325	75RB#0	13.427	14.730	PASS
Band4	15MHz	16QAM	20025	75RB#0	13.457	14.760	PASS
Band4	15MHz	16QAM	20175	75RB#0	13.427	14.700	PASS
Band4	15MHz	16QAM	20325	75RB#0	13.427	14.730	PASS
Band4	20MHz	QPSK	20050	100RB#0	17.862	19.400	PASS



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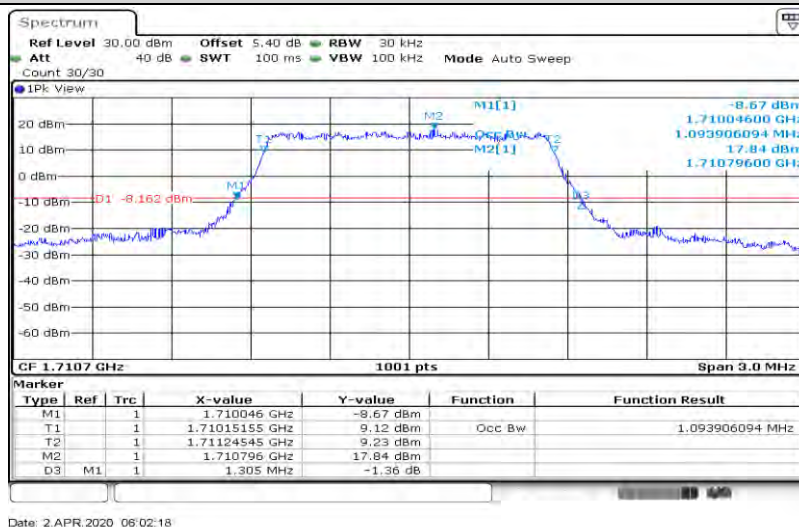
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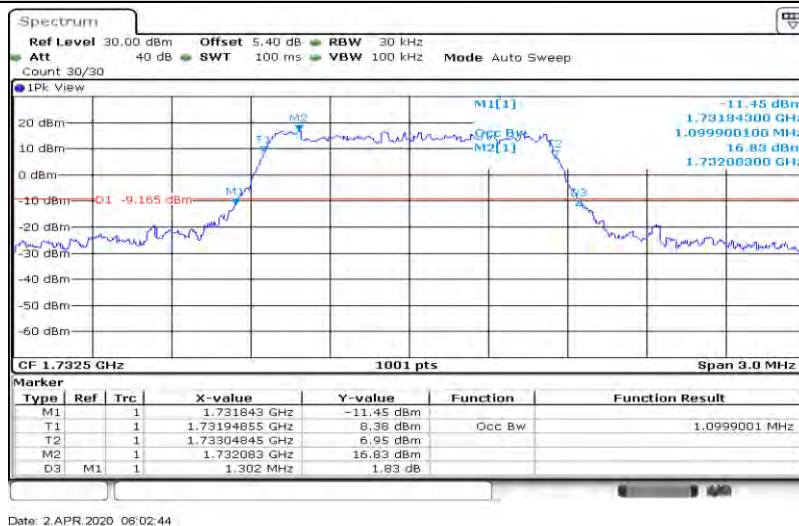
Band4	20MHz	QPSK	20175	100RB#0	17.862	19.400	PASS
Band4	20MHz	QPSK	20300	100RB#0	17.822	19.360	PASS
Band4	20MHz	16QAM	20050	100RB#0	17.862	19.440	PASS
Band4	20MHz	16QAM	20175	100RB#0	17.822	19.480	PASS
Band4	20MHz	16QAM	20300	100RB#0	17.862	19.400	PASS

4.2. Test Plots

Band4-1.4MHz-QPSK-19957-6RB#0-1.094

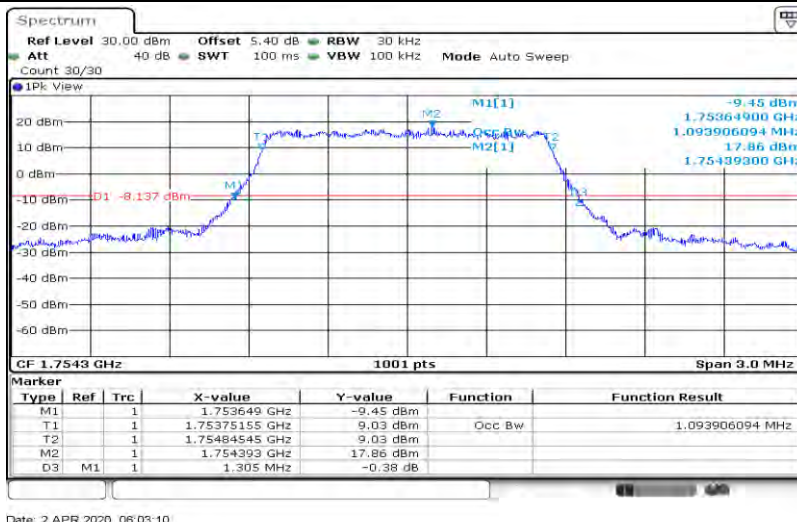


Band4-1.4MHz-QPSK-20175-6RB#0-1.1

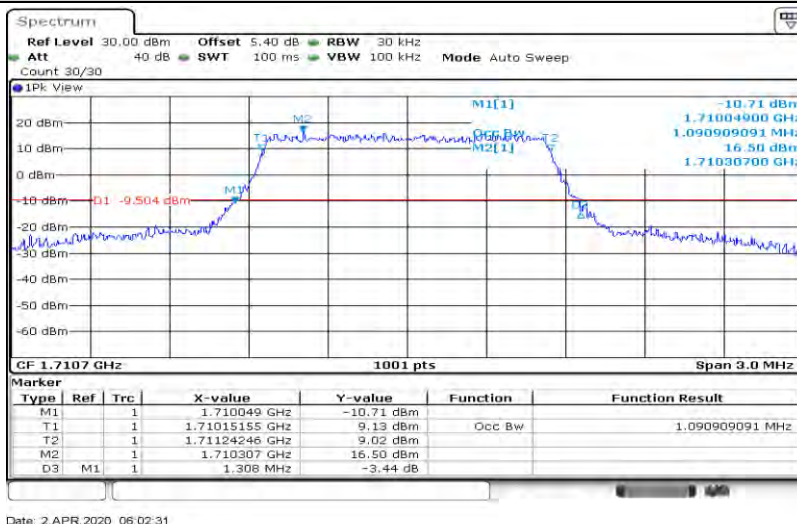


Band4-1.4MHz-QPSK-20393-6RB#0-1.094



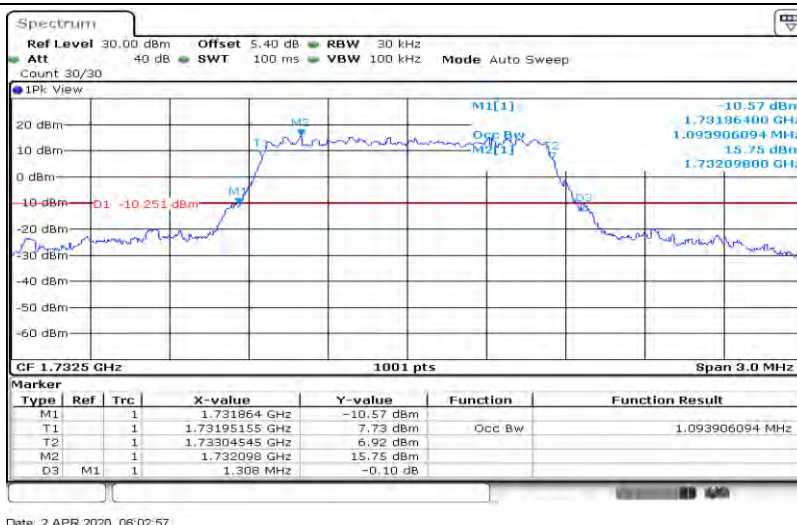


Band4-1.4MHz-16QAM-19957-6RB#0-1.091

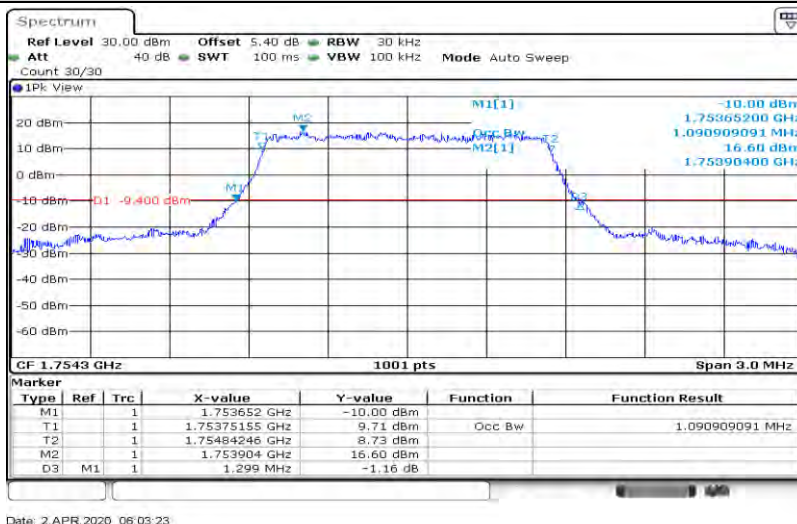


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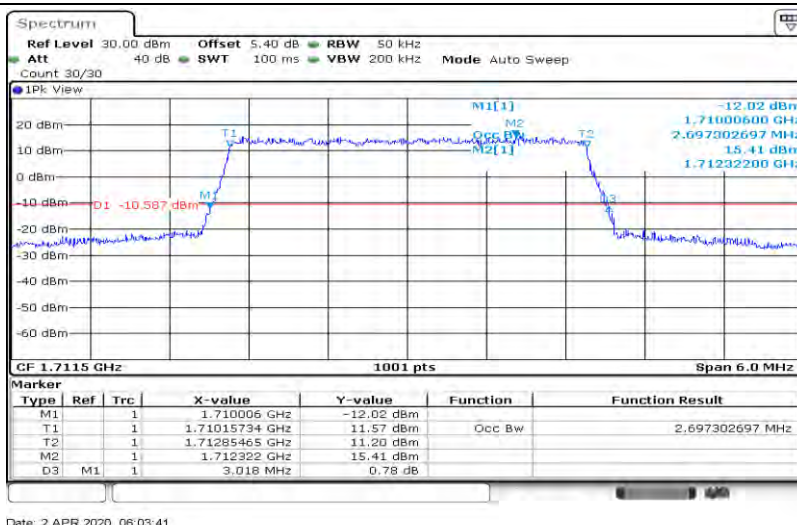


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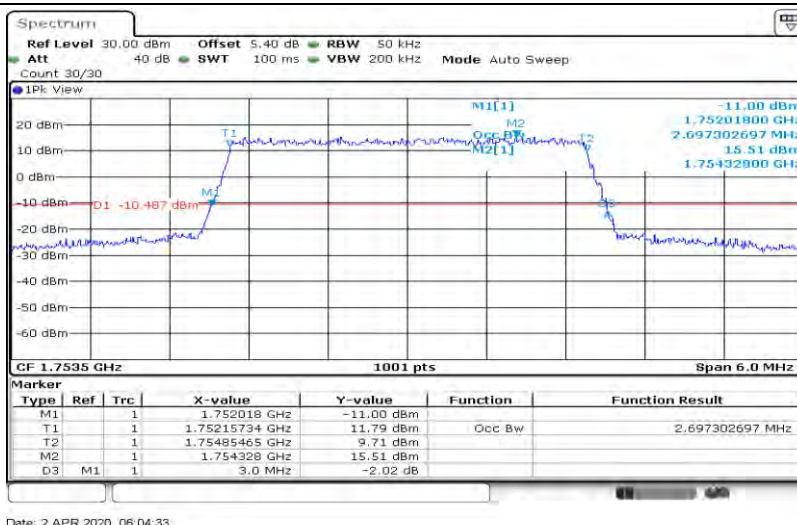


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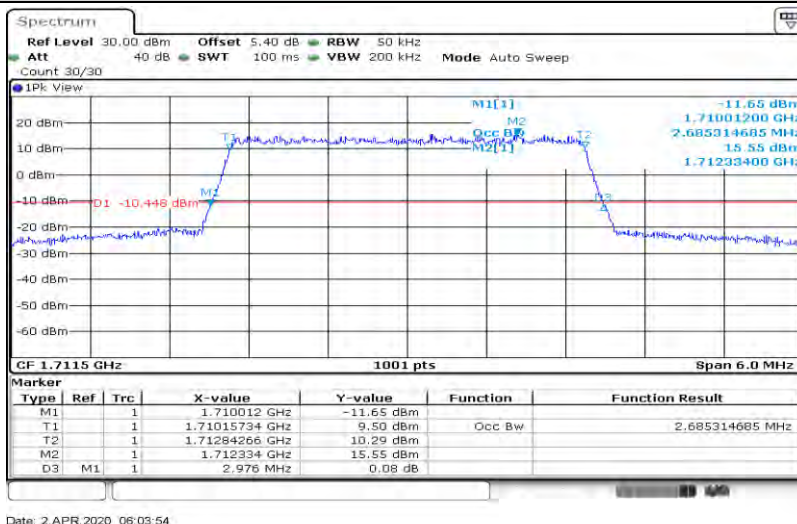


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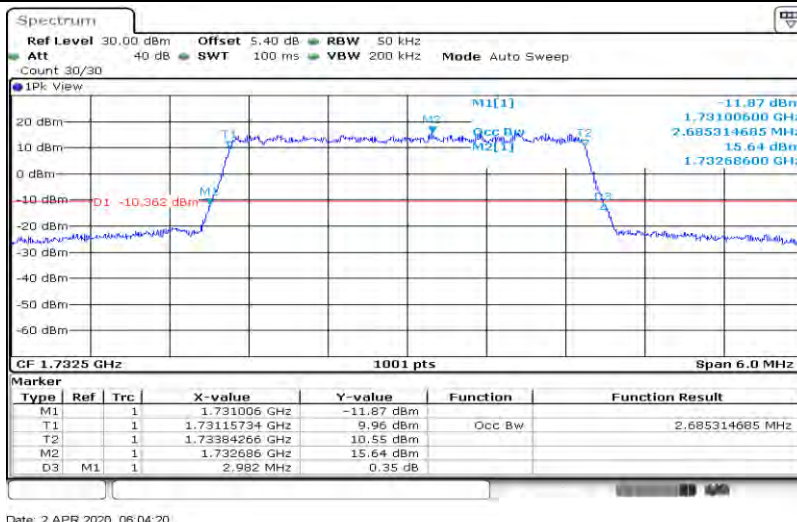


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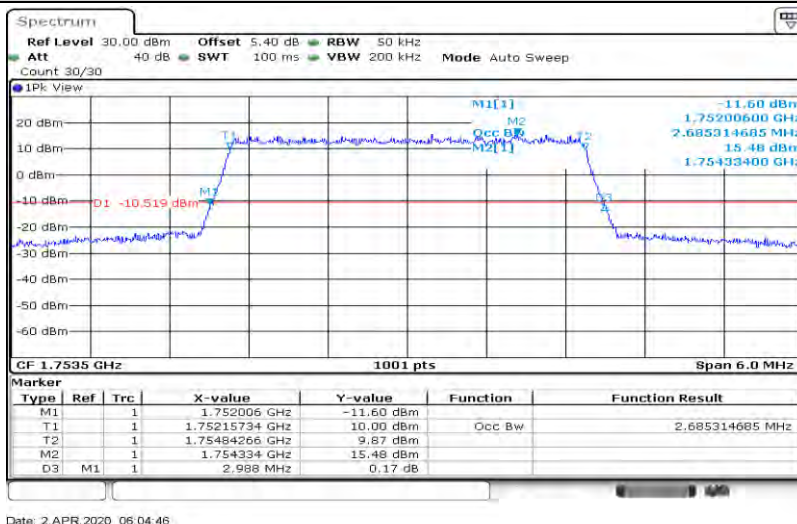


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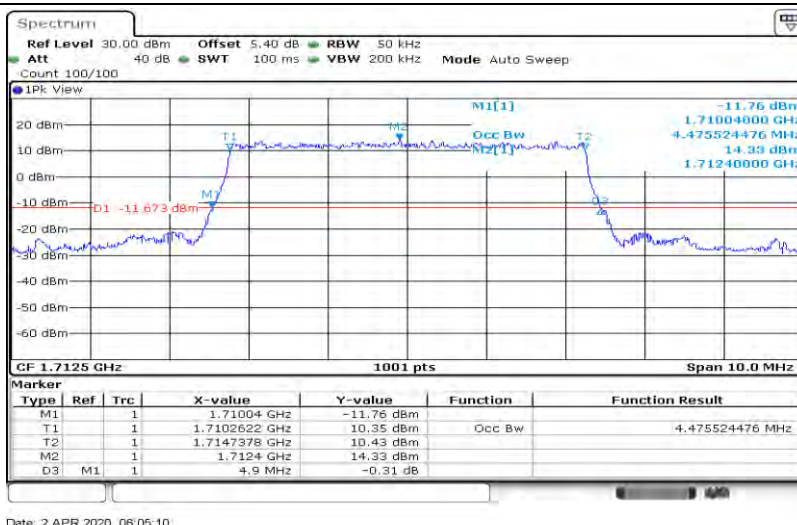


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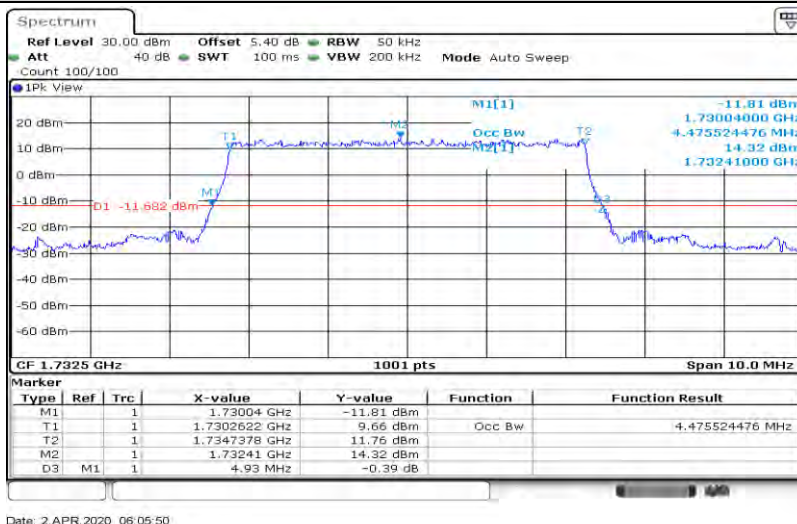


Band4-5MHz-QPSK-19975-25RB#0-4.476





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

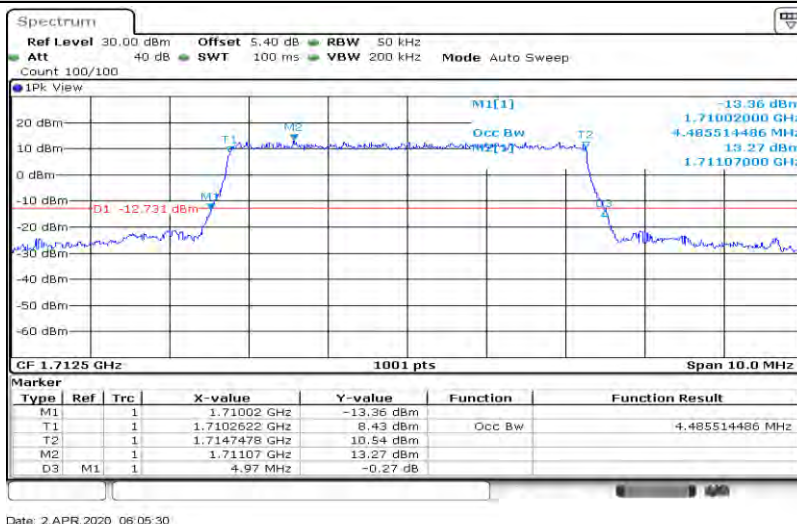


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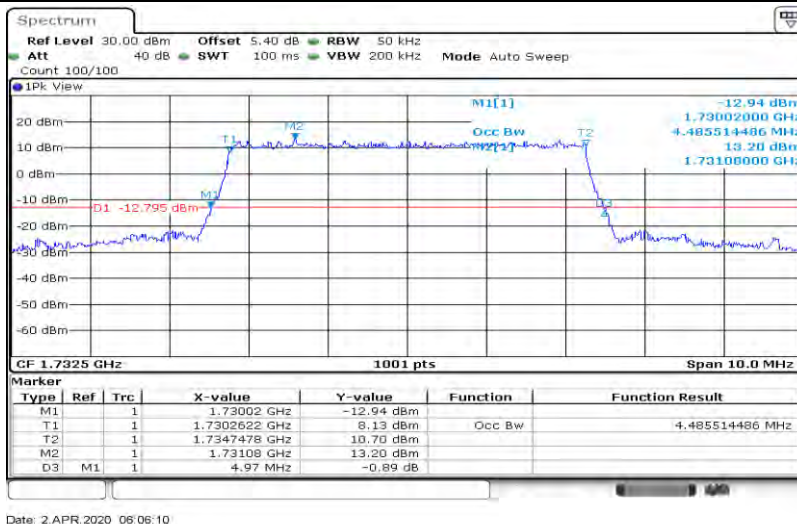


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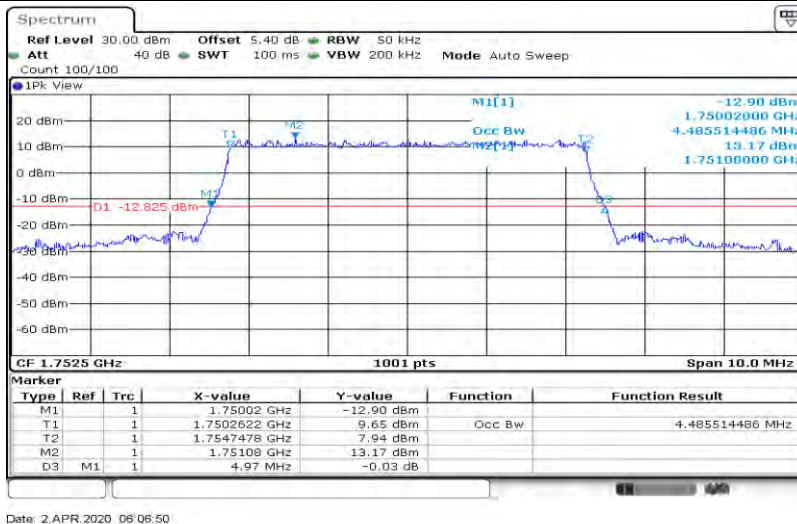


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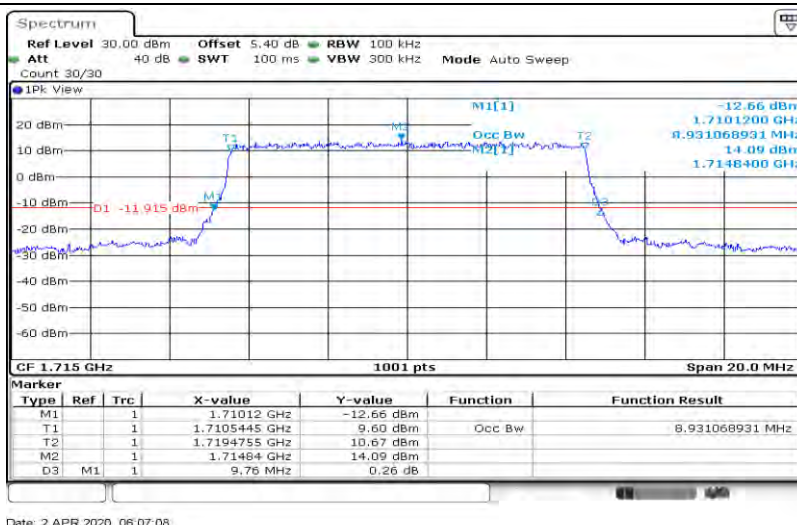


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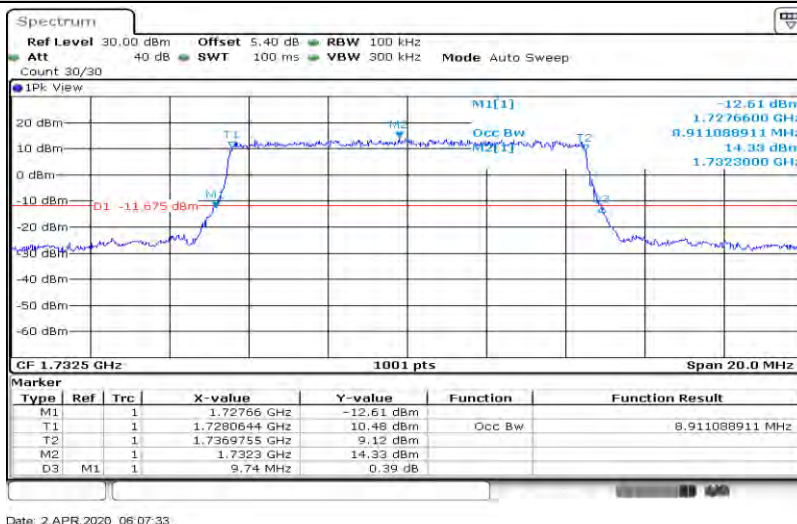


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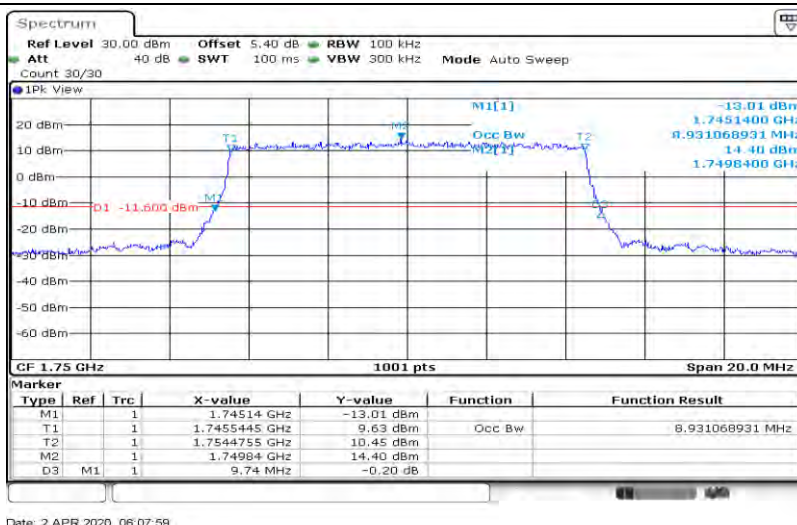


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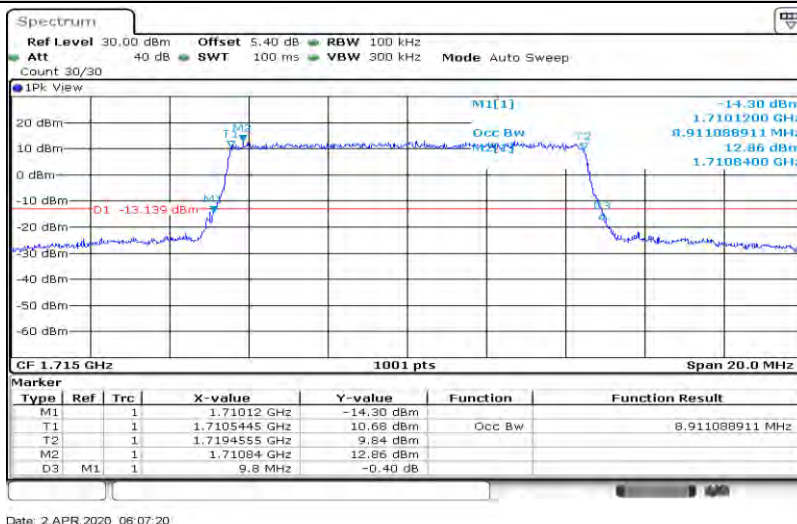


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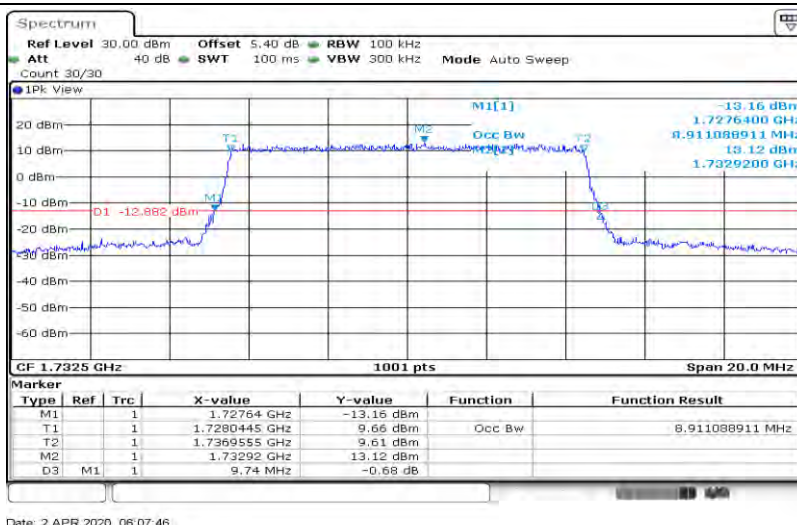


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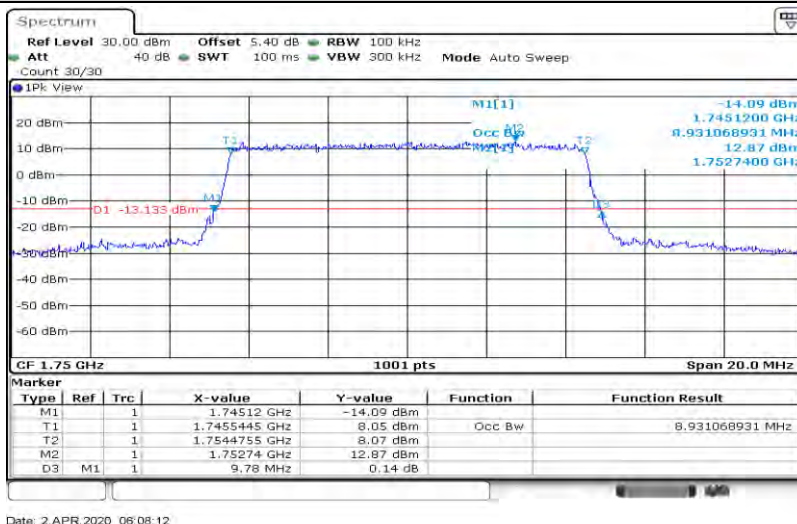


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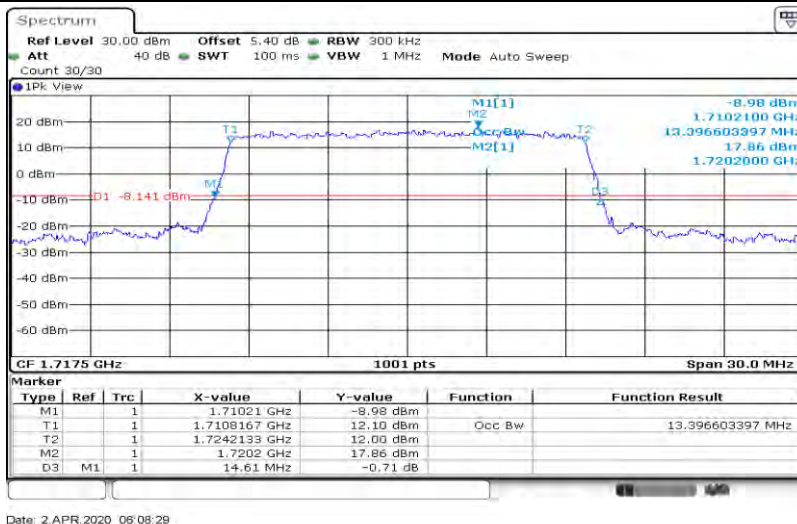


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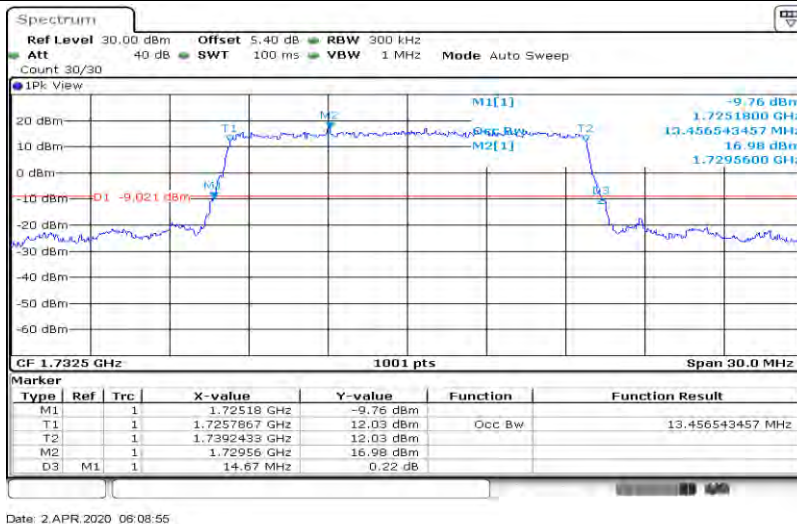


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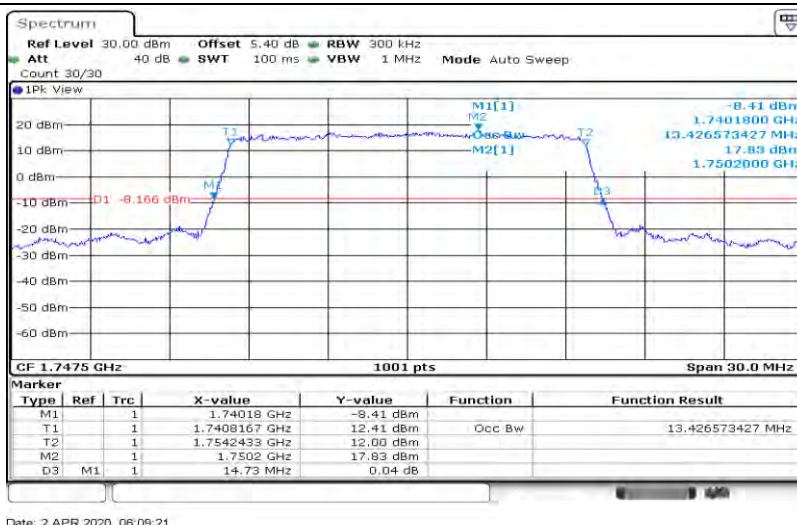


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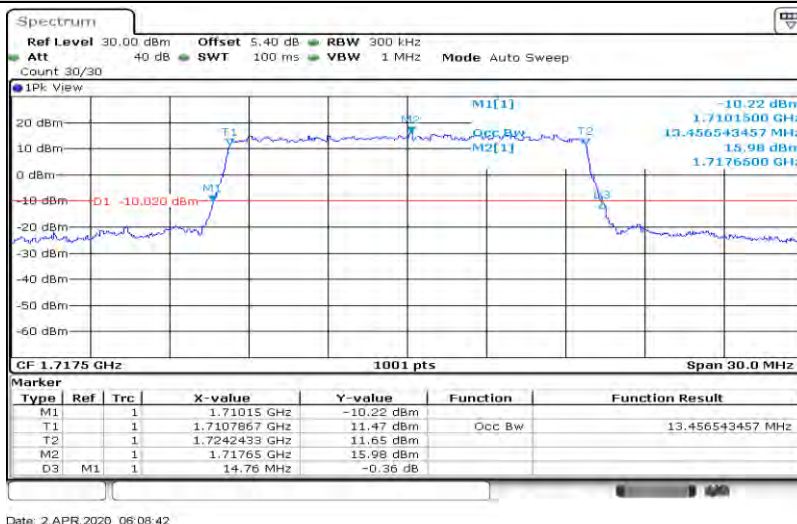


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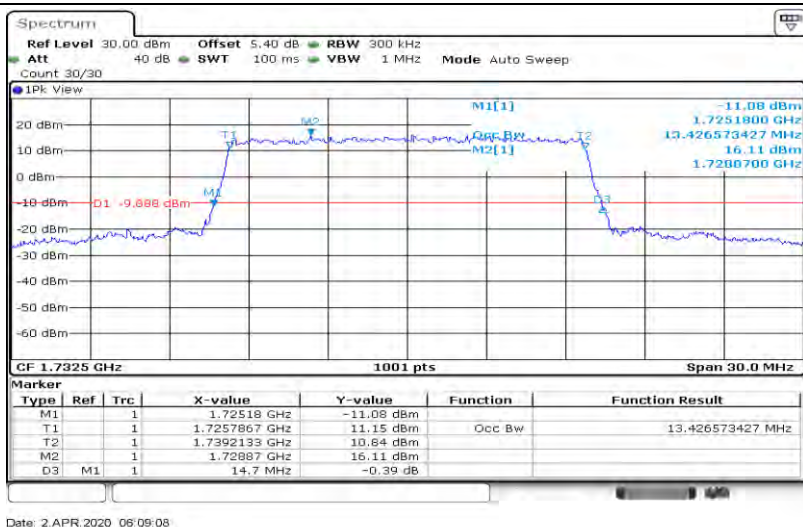


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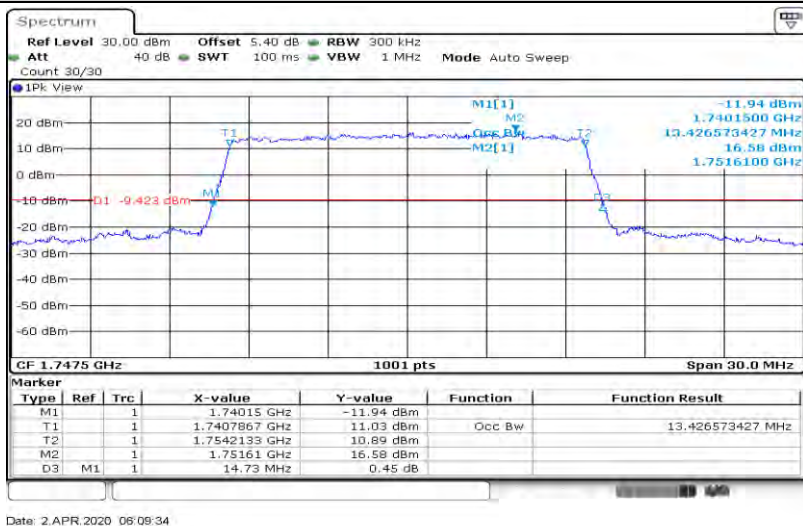


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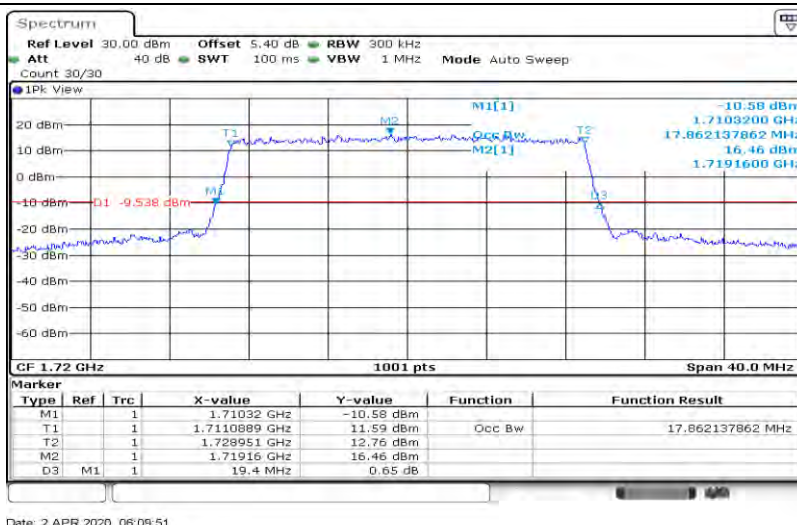


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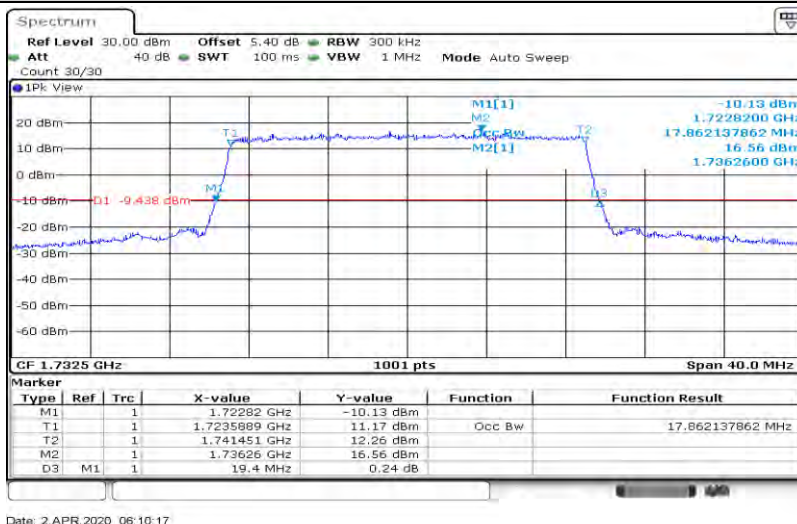


Band4-20MHz-QPSK-20050-100RB#0-17.862



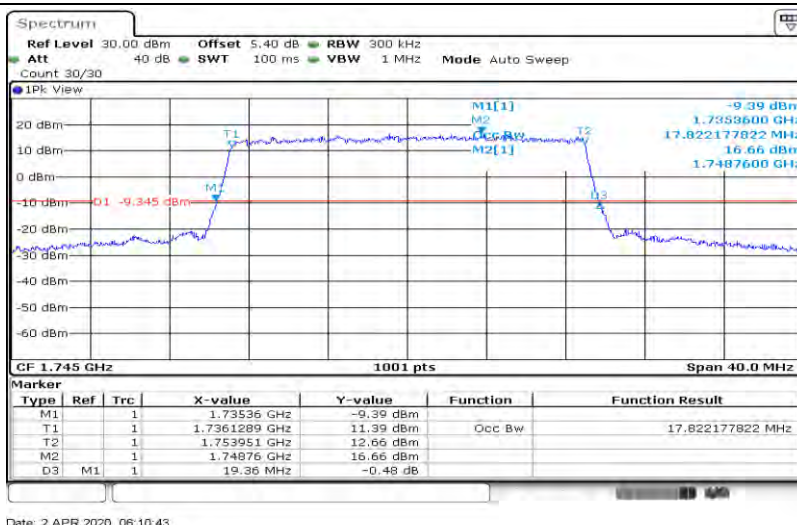


Band4-20MHz-QPSK-20175-100RB#0-17.862

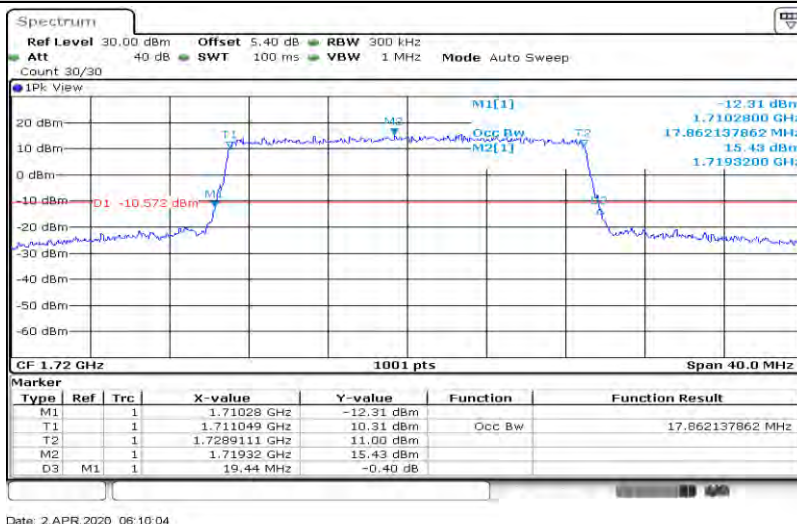


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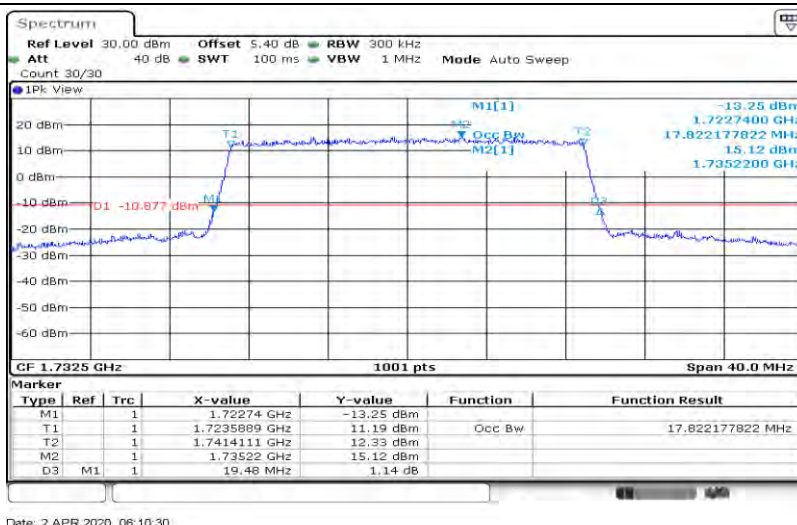


Band4-20MHz-16QAM-20050-100RB#0-17.862

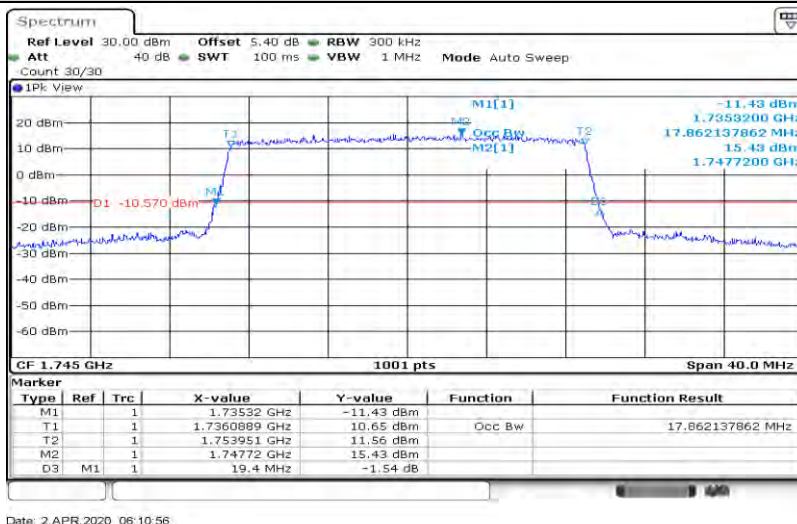


Band4-20MHz-16QAM-20175-100RB#0-17.822





Band4-20MHz-16QAM-20300-100RB#0-17.862



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5. Band Edge Compliance

5.1. Test Plots

Band4-1.4MHz-QPSK-19957-1RB#0



Band4-1.4MHz-QPSK-19957-6RB#0



Band4-1.4MHz-QPSK-20393-1RB#5





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



Band4-1.4MHz-16QAM-19957-1RB#0



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch (South China) CEC Laboratory

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

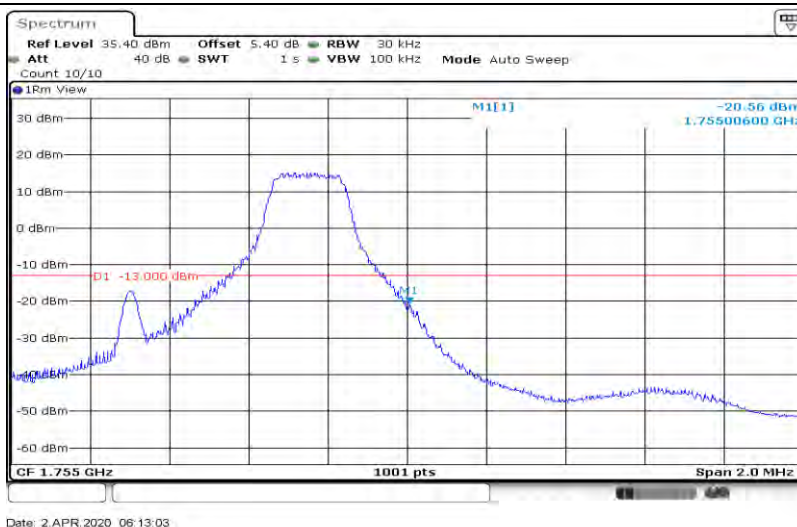


Band4-1.4MHz-16QAM-20393-1RB#5



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



Band4-3MHz-QPSK-19965-1RB#0





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



Band4-3MHz-QPSK-20385-1RB#14



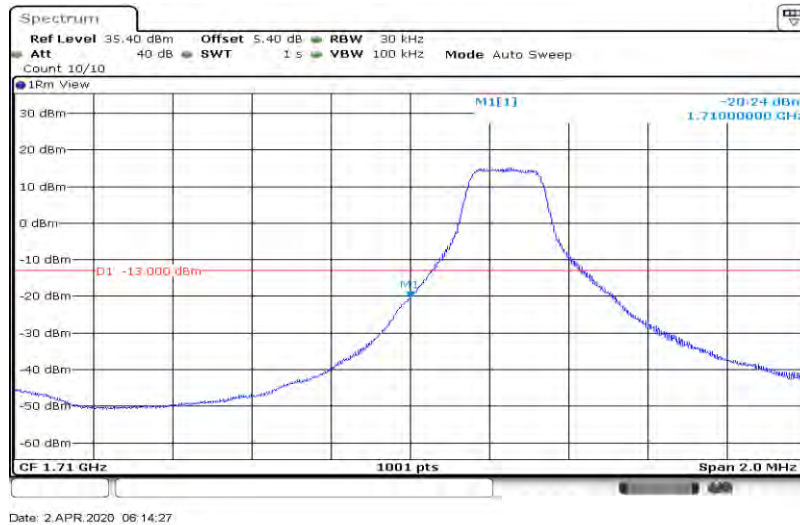


Band4-3MHz-QPSK-20385-15RB#0



Band4-3MHz-16QAM-19965-1RB#0





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



Band4-3MHz-16QAM-20385-1RB#14





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



Band4-5MHz-QPSK-19975-1RB#0



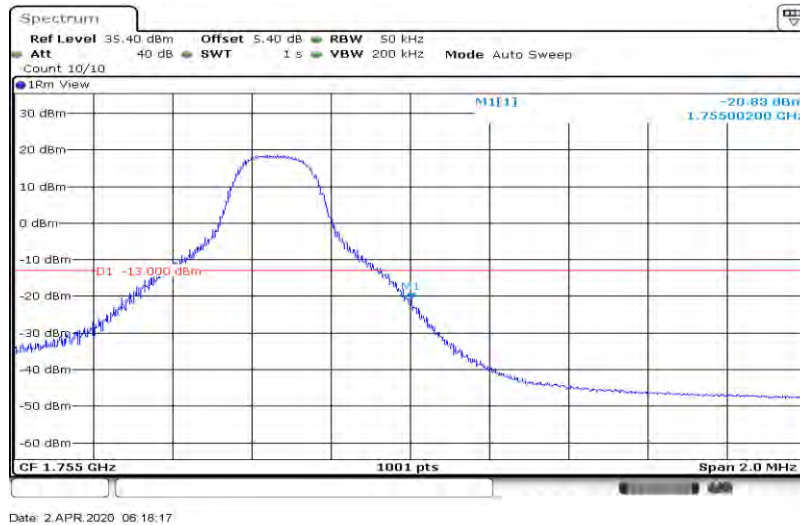


Band4-5MHz-QPSK-19975-25RB#0



Band4-5MHz-QPSK-20375-1RB#24





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



Band4-5MHz-16QAM-19975-1RB#0



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



Band4-5MHz-16QAM-20375-1RB#24



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



Band4-10MHz-QPSK-20000-1RB#0



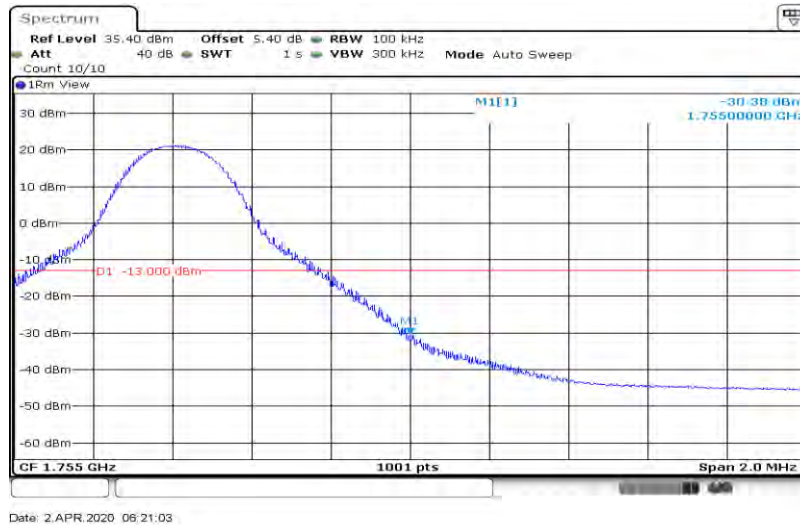


Band4-10MHz-QPSK-20000-50RB#0



Band4-10MHz-QPSK-20350-1RB#49





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



Band4-10MHz-16QAM-20000-1RB#0



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Band4-10MHz-16QAM-20000-50RB#0

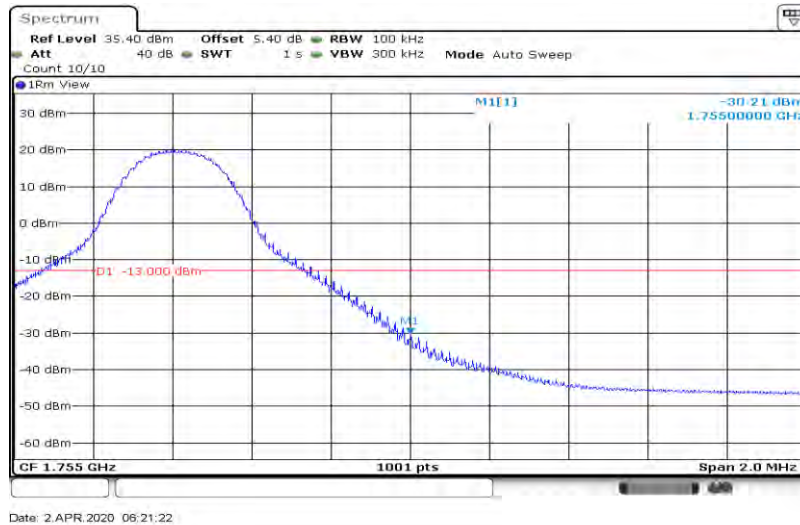


Band4-10MHz-16QAM-20350-1RB#49



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Band4-10MHz-16QAM-20350-50RB#0



Band4-15MHz-QPSK-20025-1RB#0





Band4-15MHz-QPSK-20025-75RB#0



Band4-15MHz-QPSK-20325-1RB#74





Date: 2 APR 2020 06:23:48

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



Date: 2 APR 2020 06:24:27

Band4-15MHz-16QAM-20025-1RB#0



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Date: 2 APR 2020 06:22:45

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



Date: 2 APR 2020 06:23:24

Band4-15MHz-16QAM-20325-1RB#74



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



Band4-20MHz-QPSK-20050-1RB#0





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



Band4-20MHz-QPSK-20300-1RB#99





Date: 2 APR 2020 06:26:33

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



Date: 2 APR 2020 06:27:12

Band4-20MHz-16QAM-20050-1RB#0



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



Band4-20MHz-16QAM-20300-1RB#99



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Band4-20MHz-16QAM-20300-100RB#0





6. Spurious Emission at Antenna Terminal

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

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

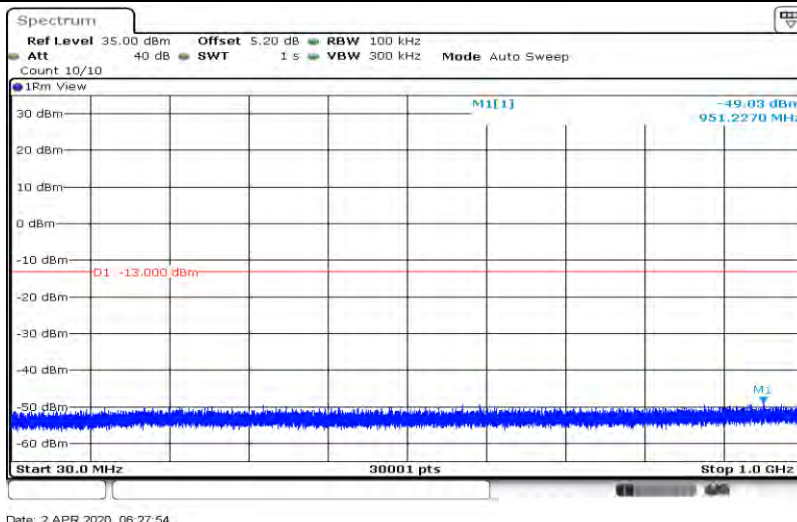
6.1. Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band4	20MHz	QPSK	20050	1RB#0	Range1:30~1000MHz	-49.03	PASS
Band4	20MHz	QPSK	20050	1RB#0	Range2:1000~20000MHz	-37.07	PASS
Band4	20MHz	QPSK	20175	1RB#0	Range1:30~1000MHz	-49.25	PASS
Band4	20MHz	QPSK	20175	1RB#0	Range2:1000~20000MHz	-36.49	PASS
Band4	20MHz	QPSK	20300	1RB#0	Range1:30~1000MHz	-48.97	PASS
Band4	20MHz	QPSK	20300	1RB#0	Range2:1000~20000MHz	-36.91	PASS
Band4	20MHz	16QAM	20050	1RB#0	Range1:30~1000MHz	-48.75	PASS
Band4	20MHz	16QAM	20050	1RB#0	Range2:1000~20000MHz	-37.03	PASS
Band4	20MHz	16QAM	20175	1RB#0	Range1:30~1000MHz	-48.74	PASS
Band4	20MHz	16QAM	20175	1RB#0	Range2:1000~20000MHz	-37.17	PASS
Band4	20MHz	16QAM	20300	1RB#0	Range1:30~1000MHz	-49.16	PASS
Band4	20MHz	16QAM	20300	1RB#0	Range2:1000~20000MHz	-36.44	PASS

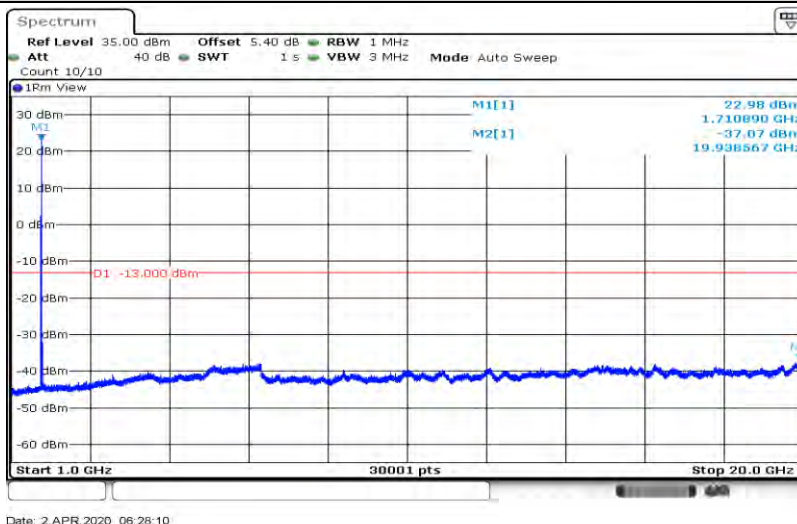
6.2. Test Plots

Band4-20MHz-QPSK-20050-1RB#0-Range1:30~1000MHz





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



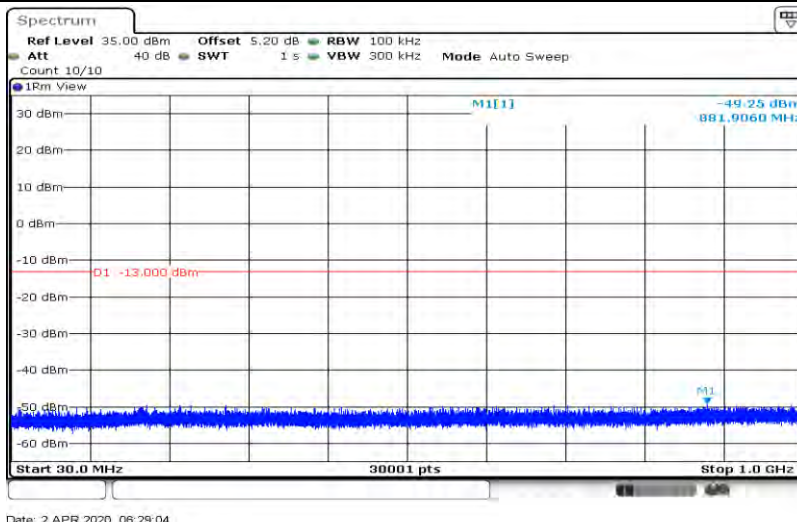
Band4-20MHz-QPSK-20175-1RB#0-Range1:30~1000MHz



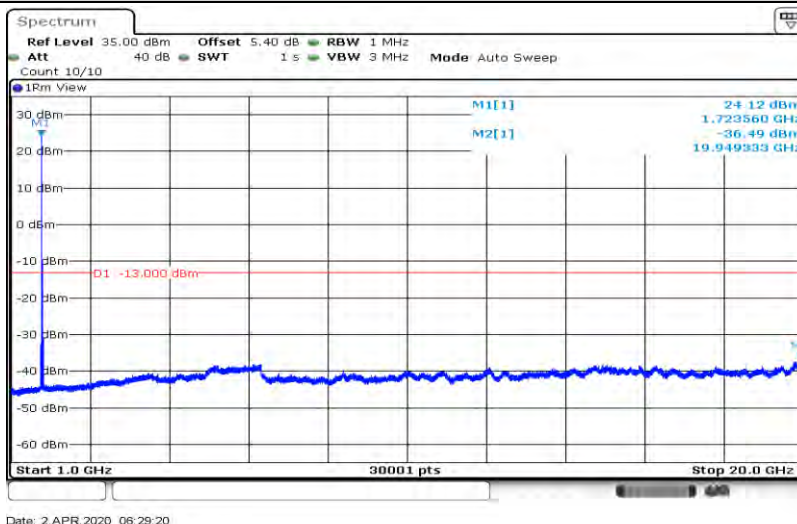
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Band4-20MHz-QPSK-20175-1RB#0-Range2:1000~20000MHz



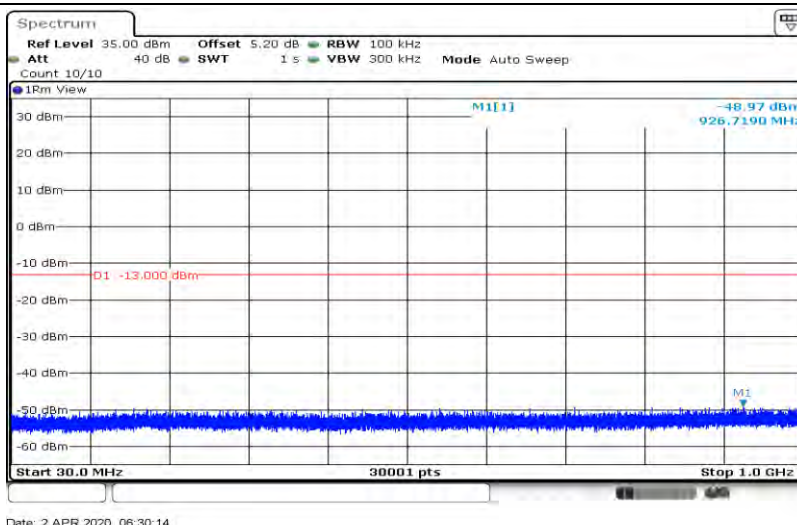
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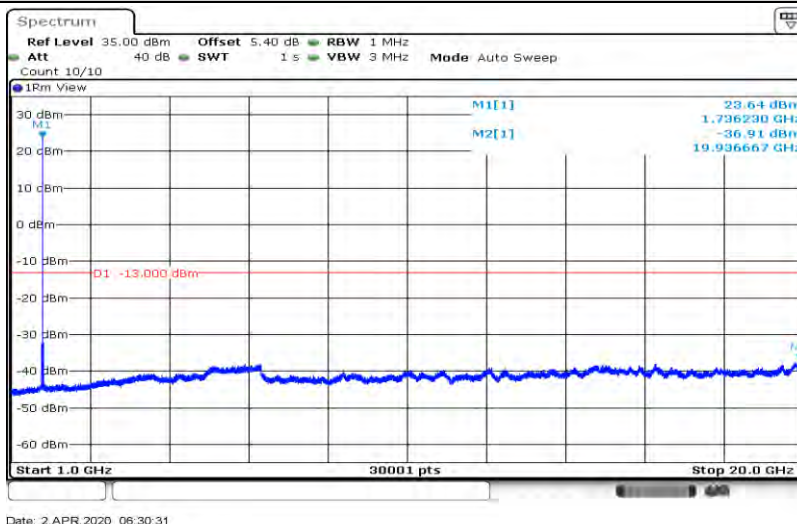
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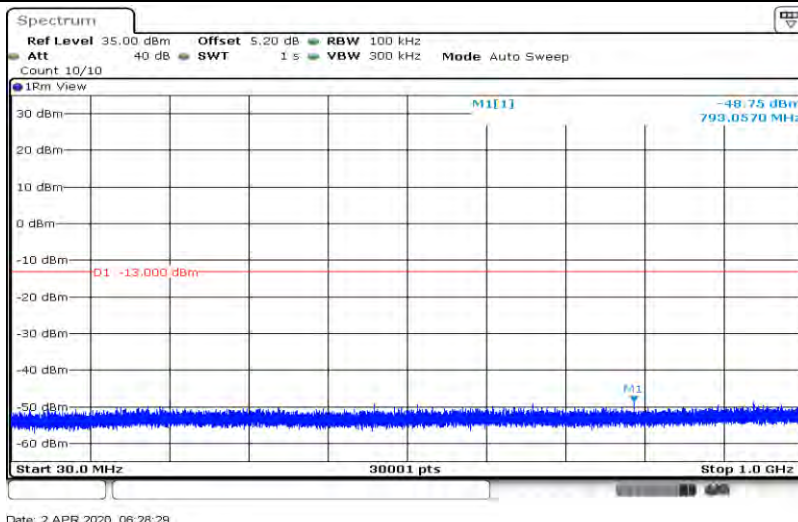


Band4-20MHz-QPSK-20300-1RB#0-Range2:1000~20000MHz

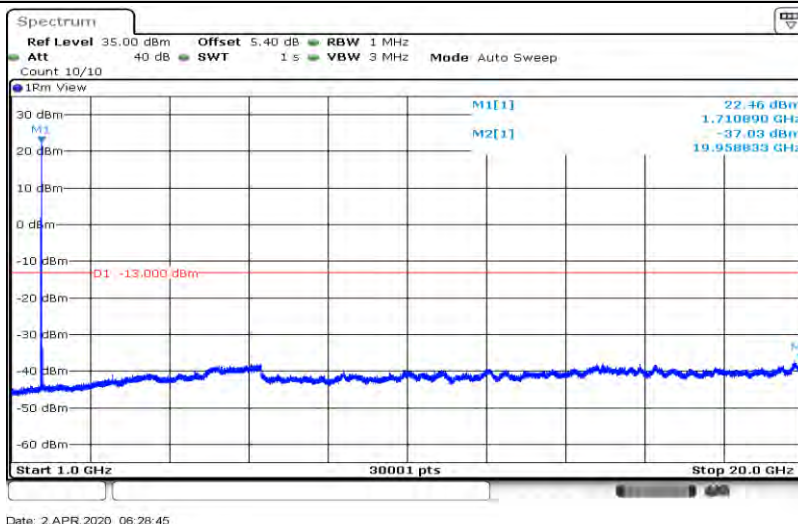


Band4-20MHz-16QAM-20050-1RB#0-Range1:30~1000MHz





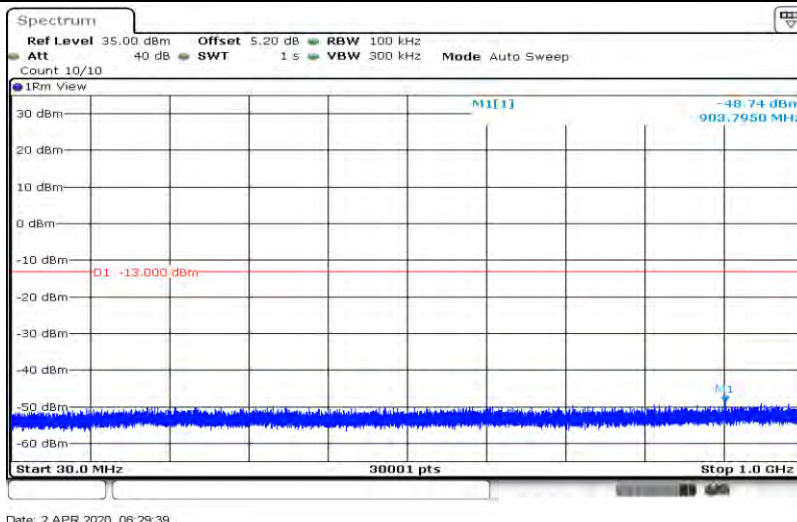
Band4-20MHz-16QAM-20050-1RB#0-Range2:1000~20000MHz



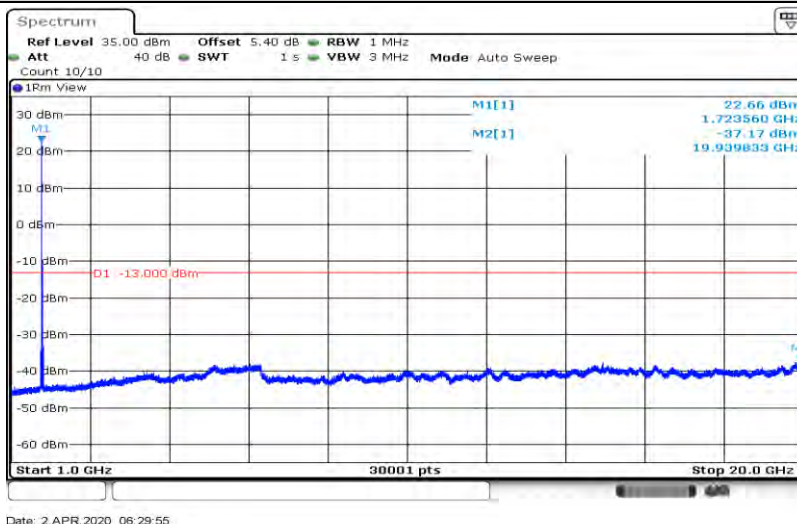
Band4-20MHz-16QAM-20175-1RB#0-Range1:30~1000MHz



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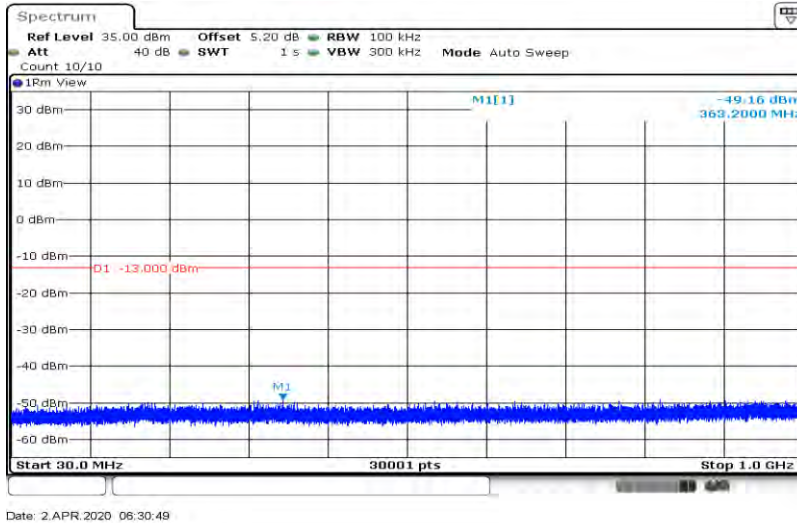


Band4-20MHz-16QAM-20175-1RB#0-Range2:1000~20000MHz

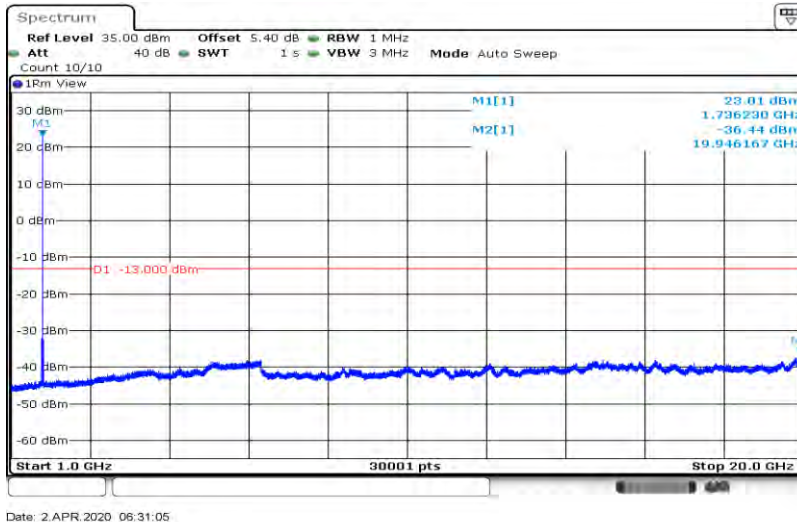


Band4-20MHz-16QAM-20300-1RB#0-Range1:30~1000MHz





Band4-20MHz-16QAM-20300-1RB#0-Range2:1000~20000MHz



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7. Field Strength of Spurious Radiation

7.1. Test Mode =LTE/TM1

7.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
56.2883	-65.59	-13.00	52.59	Vertical
3422.0141	-47.17	-13.00	34.17	Vertical
5133.0711	-51.70	-13.00	38.70	Vertical
6844.1281	-47.75	-13.00	34.75	Vertical
14469.8823	-46.24	-13.00	33.24	Vertical
17997.9999	-38.04	-13.00	25.04	Vertical
44.7932	-64.59	-13.00	51.59	Horizontal
2701.5403	-35.29	-13.00	22.29	Horizontal
3422.0141	-41.83	-13.00	28.83	Horizontal
5133.5711	-56.16	-13.00	43.16	Horizontal
6844.1281	-52.94	-13.00	39.94	Horizontal
16399.9467	-42.36	-13.00	29.36	Horizontal

7.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
57.3554	-64.79	-13.00	51.79	Vertical
2706.7413	-36.31	-13.00	23.31	Vertical
3447.0149	-46.80	-13.00	33.80	Vertical
5170.5724	-55.03	-13.00	42.03	Vertical
6894.1298	-54.91	-13.00	41.91	Vertical
17997.9999	-38.47	-13.00	25.47	Vertical
42.5136	-64.24	-13.00	51.24	Horizontal
674.5002	-64.12	-13.00	51.12	Horizontal
2703.9408	-35.23	-13.00	22.23	Horizontal
3447.0149	-41.76	-13.00	28.76	Horizontal
5170.5724	-56.33	-13.00	43.33	Horizontal
16385.9462	-42.67	-13.00	29.67	Horizontal





7.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
57.5979	-65.10	-13.00	52.10	Vertical
506.1968	-67.04	-13.00	54.04	Vertical
2705.1410	-36.49	-13.00	23.49	Vertical
3472.0157	-48.76	-13.00	35.76	Vertical
5208.0736	-58.17	-13.00	45.17	Vertical
17998.5000	-38.11	-13.00	25.11	Vertical
44.5992	-64.38	-13.00	51.38	Horizontal
236.8628	-68.29	-13.00	55.29	Horizontal
2700.3401	-35.18	-13.00	22.18	Horizontal
3472.0157	-46.49	-13.00	33.49	Horizontal
7911.1637	-55.11	-13.00	42.11	Horizontal
16385.9462	-42.73	-13.00	29.73	Horizontal

Remark:

- 1 According to 971168 D01 Power Meas License Digital Systems, The amplitudes of unwanted emissions that are attenuated more than 20 dB below the applicable limit are not required to be reported.
- 2 The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data displayed in this report.





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	1.20	0.000698	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	VN	NT	2.10	0.001221	±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	2.40	0.001385	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	VN	NT	1.40	0.000808	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	VH	NT	1.70	0.000981	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	VL	NT	-3.70	-0.002120	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	VN	NT	-1.40	-0.000802	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	VH	NT	-1.00	-0.000573	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	VL	NT	0.70	0.000407	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	VN	NT	0.70	0.000407	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	VH	NT	2.20	0.001279	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	VL	NT	0.80	0.000462	±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	1.20	0.000693	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	VL	NT	-2.40	-0.001375	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	VN	NT	-4.40	-0.002521	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	VH	NT	-1.80	-0.001032	±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	0.40	0.000233	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	-20	0.30	0.000174	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	0	2.40	0.001395	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	10	0.90	0.000523	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	20	1.10	0.000640	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	30	0.80	0.000465	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	40	0.20	0.000116	±2.5	PASS



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Band4	20MHz	QPSK	20050	100RB#0	NV	50	0.60	0.000349	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	-30	1.60	0.000924	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	-20	2.00	0.001154	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	0	-0.20	-0.000115	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	10	0.10	0.000058	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	20	1.70	0.000981	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	30	-0.20	-0.000115	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	40	0.10	0.000058	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	50	0.30	0.000173	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	-30	-1.80	-0.001032	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	-20	-3.40	-0.001948	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	0	-3.80	-0.002178	±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	-2.70	-0.001547	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	30	-1.90	-0.001089	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	40	-2.00	-0.001146	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	50	-1.50	-0.000860	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	-30	-0.30	-0.000174	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	-20	3.10	0.001802	±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	2.10	0.001221	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	20	2.40	0.001395	±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	3.40	0.001977	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	50	2.10	0.001221	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	-30	-0.10	-0.000058	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	-20	-0.40	-0.000231	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	0	0.50	0.000289	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	10	0.80	0.000462	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	20	0.30	0.000173	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	30	-0.30	-0.000173	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	40	0.10	0.000058	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	50	0.40	0.000231	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	-30	-3.10	-0.001777	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	-20	-2.90	-0.001662	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	0	-3.50	-0.002006	±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	-1.60	-0.000917	±2.5	PASS



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Band4	20MHz	16QAM	20300	100RB#0	NV	30	4.20	0.002407	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	40	-3.40	-0.001948	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	50	-3.30	-0.001891	±2.5	PASS



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