



Appendix B

E-UTRA Band 4



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1. Effective (Isotropic) Radiated Power

1.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Conducted Power(dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	23.29	27.89	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#2	23.56	28.16	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	23.40	28.00	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#0	23.59	28.19	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#1	24.01	28.61	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#3	23.55	28.15	30.00	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	22.54	27.14	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	23.45	28.05	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#2	23.58	28.18	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#5	23.46	28.06	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#0	23.62	28.22	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#1	23.80	28.40	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#3	23.70	28.30	30.00	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	22.55	27.15	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	23.49	28.09	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#2	23.57	28.17	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	23.48	28.08	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#0	23.59	28.19	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#1	23.82	28.42	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#3	23.78	28.38	30.00	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	22.72	27.32	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	22.28	26.88	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#2	22.40	27.00	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	22.19	26.79	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#0	22.90	27.50	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#1	22.73	27.33	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#3	22.80	27.40	30.00	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	21.65	26.25	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	22.21	26.81	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#2	22.08	26.68	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#5	22.18	26.78	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#0	22.85	27.45	30.00	PASS



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Band4	1.4MHz	16QAM	20175	3RB#1	22.91	27.51	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#3	22.76	27.36	30.00	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	21.70	26.30	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	22.22	26.82	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#2	22.19	26.79	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#5	22.28	26.88	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#0	22.78	27.38	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#1	22.66	27.26	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#3	22.71	27.31	30.00	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	21.68	26.28	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#0	23.53	28.13	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#8	23.32	27.92	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#14	23.44	28.04	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#0	22.69	27.29	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#4	22.56	27.16	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#7	22.63	27.23	30.00	PASS
Band4	3MHz	QPSK	19965	15RB#0	22.56	27.16	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#0	23.53	28.13	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#8	23.60	28.20	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#14	23.49	28.09	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#0	22.54	27.14	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#4	22.60	27.20	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#7	22.59	27.19	30.00	PASS
Band4	3MHz	QPSK	20175	15RB#0	22.62	27.22	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#0	23.35	27.95	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#8	23.38	27.98	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#14	23.50	28.10	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#0	22.60	27.20	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#4	22.58	27.18	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#7	22.57	27.17	30.00	PASS
Band4	3MHz	QPSK	20385	15RB#0	22.60	27.20	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#0	21.96	26.56	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#8	22.22	26.82	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#14	22.26	26.86	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#0	21.55	26.15	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#4	21.51	26.11	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#7	21.48	26.08	30.00	PASS
Band4	3MHz	16QAM	19965	15RB#0	21.58	26.18	30.00	PASS



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Band4	3MHz	16QAM	20175	1RB#0	22.25	26.85	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#8	22.22	26.82	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#14	22.26	26.86	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#0	21.48	26.08	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#4	21.49	26.09	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#7	21.53	26.13	30.00	PASS
Band4	3MHz	16QAM	20175	15RB#0	21.49	26.09	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#0	22.08	26.68	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#8	22.20	26.80	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#14	22.26	26.86	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#0	21.44	26.04	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#4	21.42	26.02	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#7	21.54	26.14	30.00	PASS
Band4	3MHz	16QAM	20385	15RB#0	21.41	26.01	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#0	23.43	28.03	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#12	23.50	28.10	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#24	23.37	27.97	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#0	22.60	27.20	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#6	22.62	27.22	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#13	22.57	27.17	30.00	PASS
Band4	5MHz	QPSK	19975	25RB#0	22.61	27.21	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#0	23.28	27.88	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#12	23.77	28.37	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#24	23.46	28.06	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#0	22.59	27.19	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#6	22.63	27.23	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#13	22.58	27.18	30.00	PASS
Band4	5MHz	QPSK	20175	25RB#0	22.63	27.23	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#0	23.51	28.11	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#12	23.61	28.21	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#24	23.60	28.20	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#0	22.64	27.24	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#6	22.64	27.24	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#13	22.65	27.25	30.00	PASS
Band4	5MHz	QPSK	20375	25RB#0	22.78	27.38	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#0	22.15	26.75	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#12	22.49	27.09	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#24	22.17	26.77	30.00	PASS



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Band4	5MHz	16QAM	19975	12RB#0	21.58	26.18	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#6	21.42	26.02	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#13	21.52	26.12	30.00	PASS
Band4	5MHz	16QAM	19975	25RB#0	21.67	26.27	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#0	22.20	26.80	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#12	22.59	27.19	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#24	22.18	26.78	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#0	21.58	26.18	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#6	21.59	26.19	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#13	21.59	26.19	30.00	PASS
Band4	5MHz	16QAM	20175	25RB#0	21.68	26.28	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#0	22.20	26.80	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#12	22.49	27.09	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#24	22.34	26.94	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#0	21.54	26.14	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#6	21.64	26.24	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#13	21.58	26.18	30.00	PASS
Band4	5MHz	16QAM	20375	25RB#0	21.65	26.25	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#0	23.38	27.98	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#24	23.63	28.23	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#49	23.32	27.92	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#0	22.63	27.23	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#12	22.66	27.26	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#25	22.62	27.22	30.00	PASS
Band4	10MHz	QPSK	20000	50RB#0	22.66	27.26	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#0	23.34	27.94	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#24	23.71	28.31	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#49	23.33	27.93	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#0	22.64	27.24	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#12	22.64	27.24	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#25	22.53	27.13	30.00	PASS
Band4	10MHz	QPSK	20175	50RB#0	22.60	27.20	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#0	23.62	28.22	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#24	23.70	28.30	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#49	23.58	28.18	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#0	22.75	27.35	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#12	22.73	27.33	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#25	22.63	27.23	30.00	PASS



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Band4	10MHz	QPSK	20350	50RB#0	22.60	27.20	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#0	22.29	26.89	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#24	22.38	26.98	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#49	22.17	26.77	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#0	21.69	26.29	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#12	21.64	26.24	30.00	PASS
Band4	10MHz	16QAM	20000	25RB#25	21.58	26.18	30.00	PASS
Band4	10MHz	16QAM	20000	50RB#0	21.64	26.24	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#0	22.33	26.93	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#24	22.09	26.69	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#49	22.23	26.83	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#0	21.76	26.36	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#12	21.60	26.20	30.00	PASS
Band4	10MHz	16QAM	20175	25RB#25	21.64	26.24	30.00	PASS
Band4	10MHz	16QAM	20175	50RB#0	21.49	26.09	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#0	22.42	27.02	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#24	22.40	27.00	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#49	22.54	27.14	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#0	21.84	26.44	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#12	21.59	26.19	30.00	PASS
Band4	10MHz	16QAM	20350	25RB#25	21.72	26.32	30.00	PASS
Band4	10MHz	16QAM	20350	50RB#0	21.65	26.25	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#0	23.28	27.88	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#38	23.50	28.10	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#74	23.45	28.05	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#0	22.69	27.29	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#18	22.64	27.24	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#39	22.59	27.19	30.00	PASS
Band4	15MHz	QPSK	20025	75RB#0	22.64	27.24	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#0	23.46	28.06	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#38	23.64	28.24	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#74	23.38	27.98	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#0	22.71	27.31	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#18	22.64	27.24	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#39	22.56	27.16	30.00	PASS
Band4	15MHz	QPSK	20175	75RB#0	22.59	27.19	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#0	23.75	28.35	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#38	23.65	28.25	30.00	PASS



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Band4	15MHz	QPSK	20325	1RB#74	23.48	28.08	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#0	22.77	27.37	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#18	22.66	27.26	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#39	22.63	27.23	30.00	PASS
Band4	15MHz	QPSK	20325	75RB#0	22.68	27.28	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#0	22.33	26.93	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#38	22.17	26.77	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#74	22.34	26.94	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#0	21.56	26.16	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#18	21.64	26.24	30.00	PASS
Band4	15MHz	16QAM	20025	36RB#39	21.50	26.10	30.00	PASS
Band4	15MHz	16QAM	20025	75RB#0	21.69	26.29	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#0	22.37	26.97	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#38	22.12	26.72	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#74	22.22	26.82	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#0	21.58	26.18	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#18	21.64	26.24	30.00	PASS
Band4	15MHz	16QAM	20175	36RB#39	21.50	26.10	30.00	PASS
Band4	15MHz	16QAM	20175	75RB#0	21.54	26.14	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#0	22.56	27.16	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#38	22.34	26.94	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#74	22.40	27.00	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#0	21.62	26.22	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#18	21.60	26.20	30.00	PASS
Band4	15MHz	16QAM	20325	36RB#39	21.57	26.17	30.00	PASS
Band4	15MHz	16QAM	20325	75RB#0	21.55	26.15	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#0	23.58	28.18	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#49	23.57	28.17	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#99	23.28	27.88	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#0	22.63	27.23	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#25	22.64	27.24	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#50	22.63	27.23	30.00	PASS
Band4	20MHz	QPSK	20050	100RB#0	22.58	27.18	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#0	23.39	27.99	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#49	23.68	28.28	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#99	23.37	27.97	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#0	22.67	27.27	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#25	22.62	27.22	30.00	PASS



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Band4	20MHz	QPSK	20175	50RB#50	22.56	27.16	30.00	PASS
Band4	20MHz	QPSK	20175	100RB#0	22.62	27.22	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#0	23.68	28.28	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#49	23.67	28.27	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#99	23.46	28.06	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#0	22.91	27.51	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#25	22.72	27.32	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#50	22.62	27.22	30.00	PASS
Band4	20MHz	QPSK	20300	100RB#0	22.81	27.41	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#0	22.33	26.93	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#49	22.31	26.91	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#99	22.29	26.89	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#0	21.67	26.27	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#25	21.72	26.32	30.00	PASS
Band4	20MHz	16QAM	20050	50RB#50	21.59	26.19	30.00	PASS
Band4	20MHz	16QAM	20050	100RB#0	21.55	26.15	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#0	22.55	27.15	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#49	22.39	26.99	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#99	22.28	26.88	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#0	21.62	26.22	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#25	21.69	26.29	30.00	PASS
Band4	20MHz	16QAM	20175	50RB#50	21.59	26.19	30.00	PASS
Band4	20MHz	16QAM	20175	100RB#0	21.65	26.25	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#0	22.50	27.10	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#49	22.50	27.10	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#99	22.32	26.92	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#0	21.78	26.38	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#25	21.58	26.18	30.00	PASS
Band4	20MHz	16QAM	20300	50RB#50	21.60	26.20	30.00	PASS
Band4	20MHz	16QAM	20300	100RB#0	21.70	26.30	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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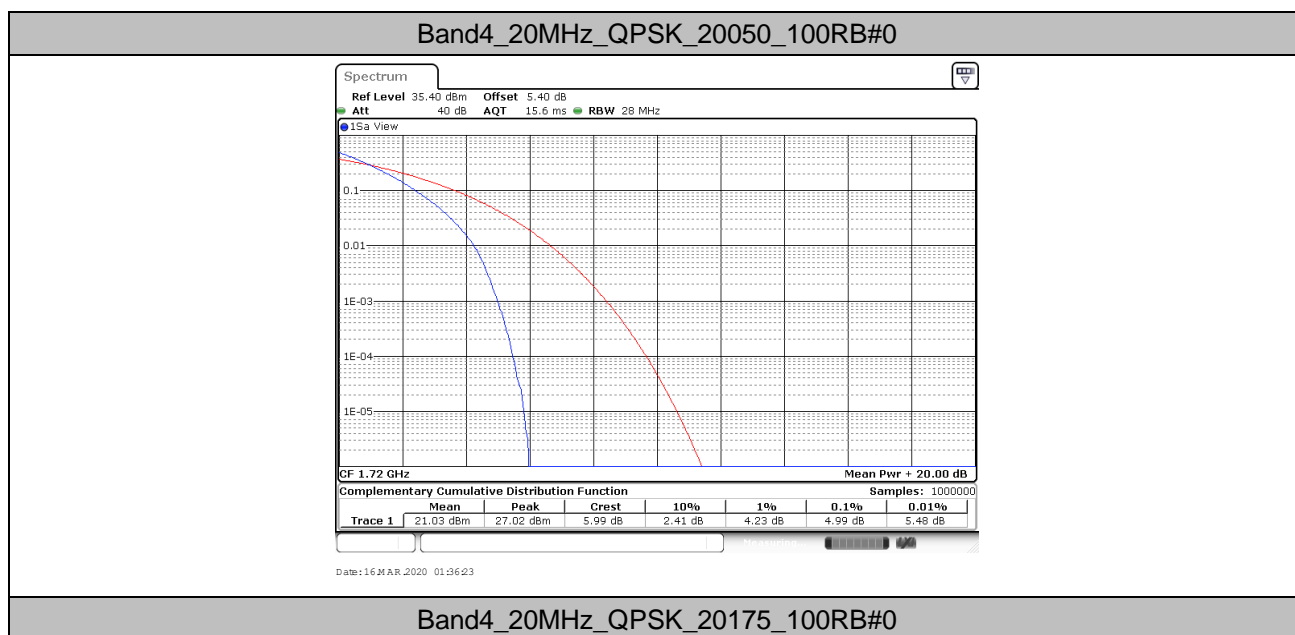
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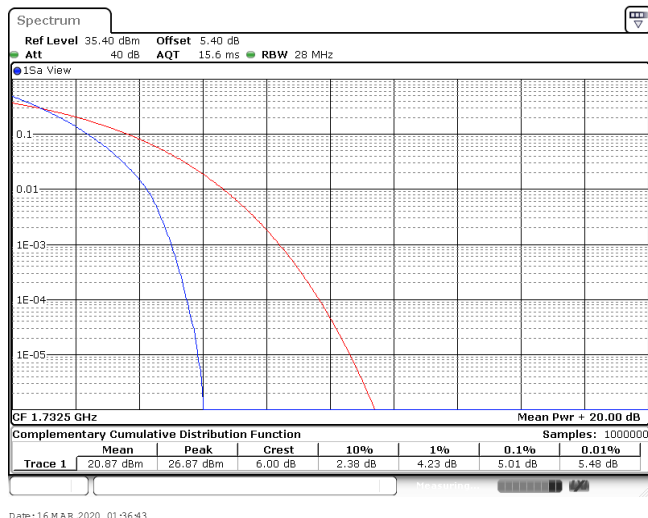
2. Peak-to-Average Ratio (CCDF)

2.1. Test Result

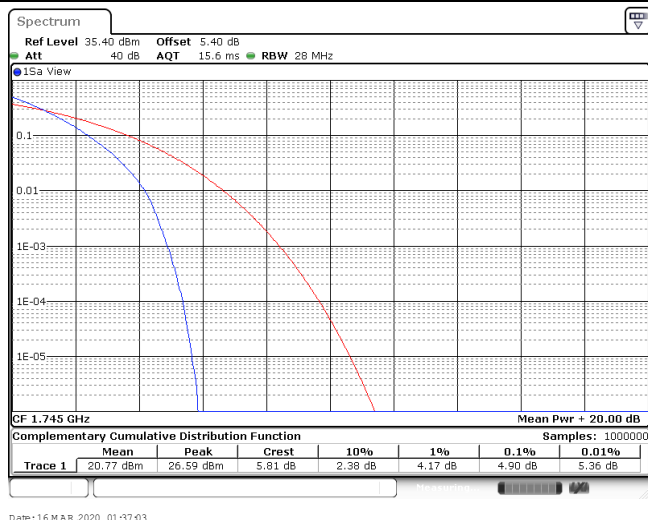
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	20MHz	QPSK	20050	100RB#0	4.99	13.00	PASS
Band4	20MHz	QPSK	20175	100RB#0	5.01	13.00	PASS
Band4	20MHz	QPSK	20300	100RB#0	4.90	13.00	PASS
Band4	20MHz	16QAM	20050	100RB#0	5.94	13.00	PASS
Band4	20MHz	16QAM	20175	100RB#0	5.94	13.00	PASS
Band4	20MHz	16QAM	20300	100RB#0	5.86	13.00	PASS

2.2. Test Plots





Band4_20MHz_QPSK_20300_100RB#0

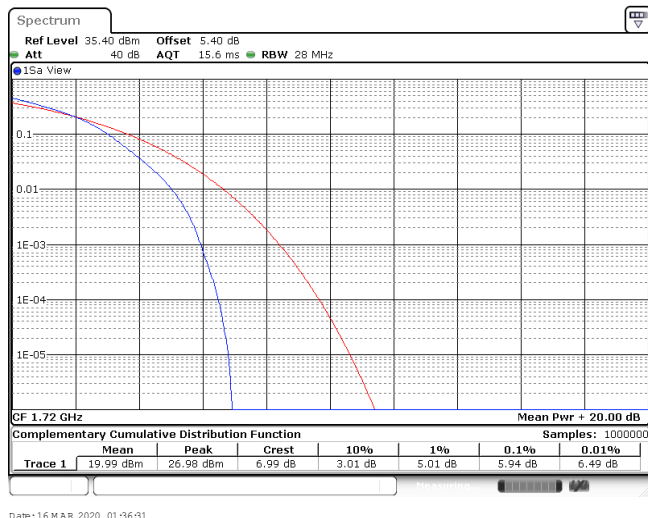


Band4_20MHz_16QAM_20050_100RB#0

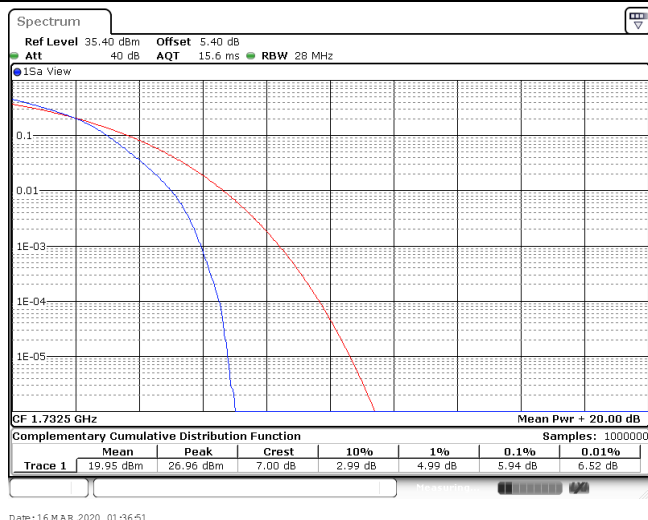


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Band4_20MHz_16QAM_20175_100RB#0

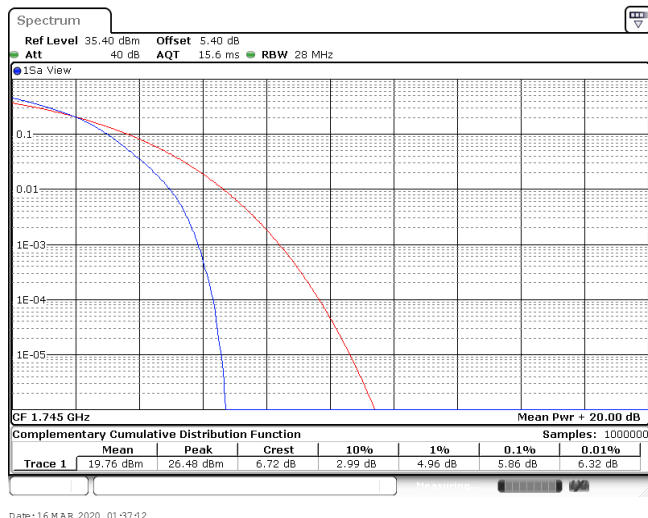


Band4_20MHz_16QAM_20300_100RB#0



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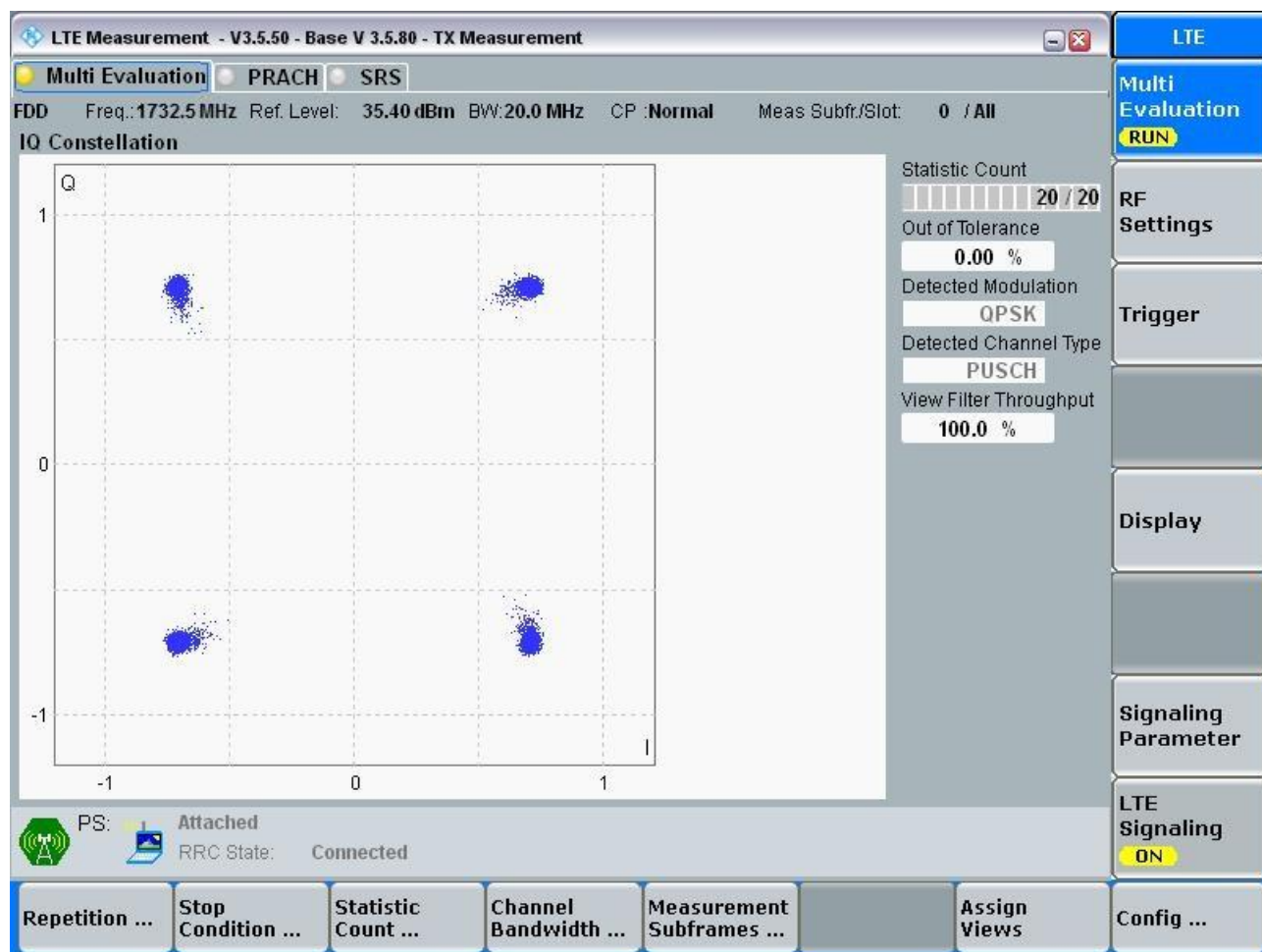
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3. Modulation Characteristics

3.1. Test Band = LTE Band 4

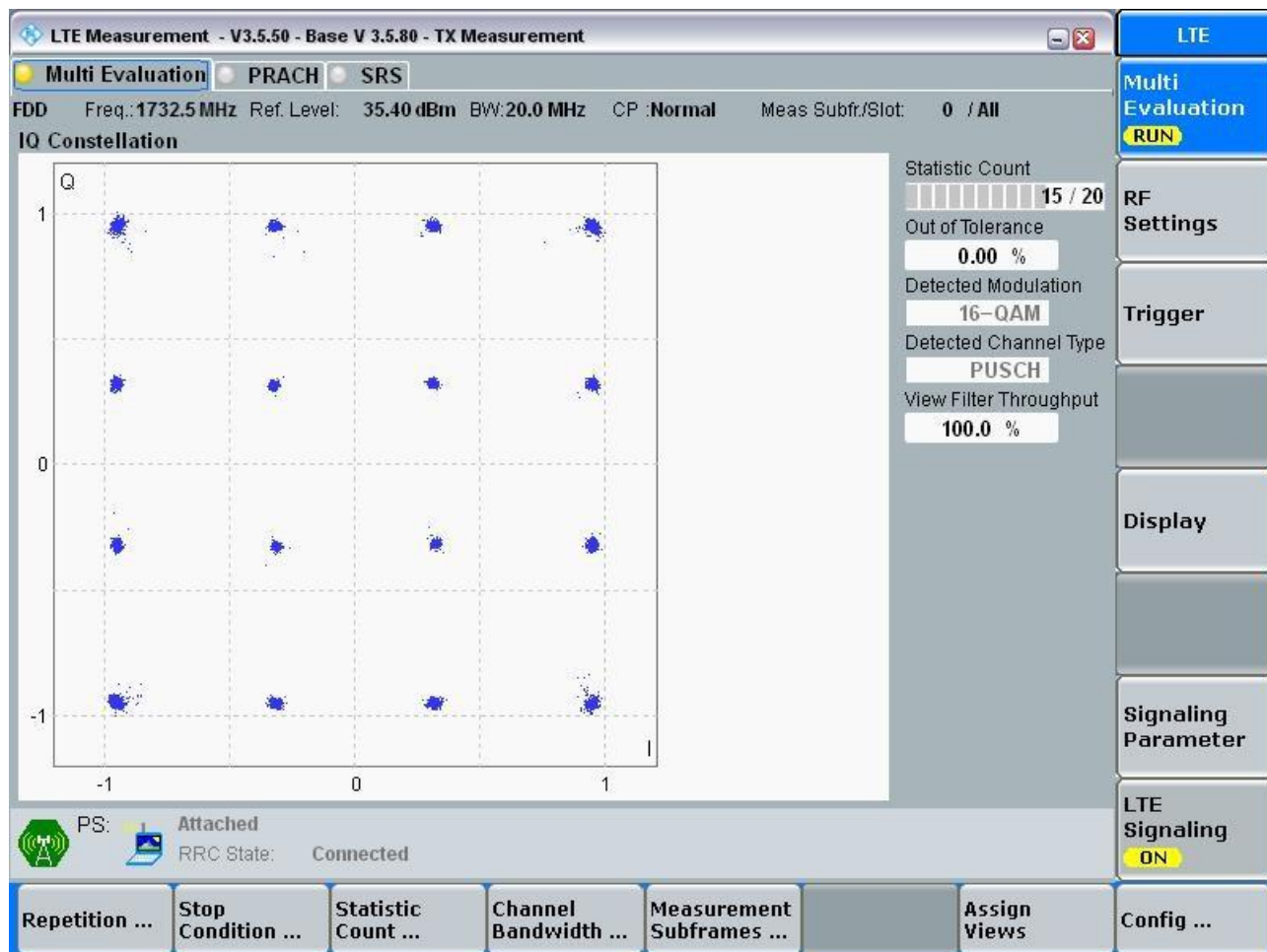
3.2. Test Mode = LTE /TM1 20MHz

3.2.1. Test Channel = MCH



3.3. Test Mode = LTE /TM2 20MHz

3.3.1. Test Channel = MCH





4. 26dB Bandwidth and Occupied Bandwidth

4.1. Test Result

Band	Bandwidth h	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	1.094	1.290	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.088	1.275	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	1.091	1.275	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	1.088	1.284	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.085	1.290	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	1.091	1.287	PASS
Band4	3MHz	QPSK	19965	15RB#0	2.697	3.000	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.697	2.988	PASS
Band4	3MHz	QPSK	20385	15RB#0	2.697	2.988	PASS
Band4	3MHz	16QAM	19965	15RB#0	2.685	2.970	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.685	2.970	PASS
Band4	3MHz	16QAM	20385	15RB#0	2.685	2.970	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.466	4.920	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.466	4.910	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.466	4.900	PASS
Band4	5MHz	16QAM	19975	25RB#0	4.486	4.950	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.486	4.950	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.486	4.940	PASS
Band4	10MHz	QPSK	20000	50RB#0	8.931	9.720	PASS
Band4	10MHz	QPSK	20175	50RB#0	8.931	9.700	PASS
Band4	10MHz	QPSK	20350	50RB#0	8.931	9.700	PASS
Band4	10MHz	16QAM	20000	50RB#0	8.911	9.680	PASS
Band4	10MHz	16QAM	20175	50RB#0	8.911	9.780	PASS
Band4	10MHz	16QAM	20350	50RB#0	8.931	9.700	PASS
Band4	15MHz	QPSK	20025	75RB#0	13.397	14.730	PASS
Band4	15MHz	QPSK	20175	75RB#0	13.397	14.670	PASS
Band4	15MHz	QPSK	20325	75RB#0	13.397	14.730	PASS
Band4	15MHz	16QAM	20025	75RB#0	13.397	14.700	PASS
Band4	15MHz	16QAM	20175	75RB#0	13.427	14.520	PASS
Band4	15MHz	16QAM	20325	75RB#0	13.427	14.760	PASS
Band4	20MHz	QPSK	20050	100RB#0	17.862	19.360	PASS

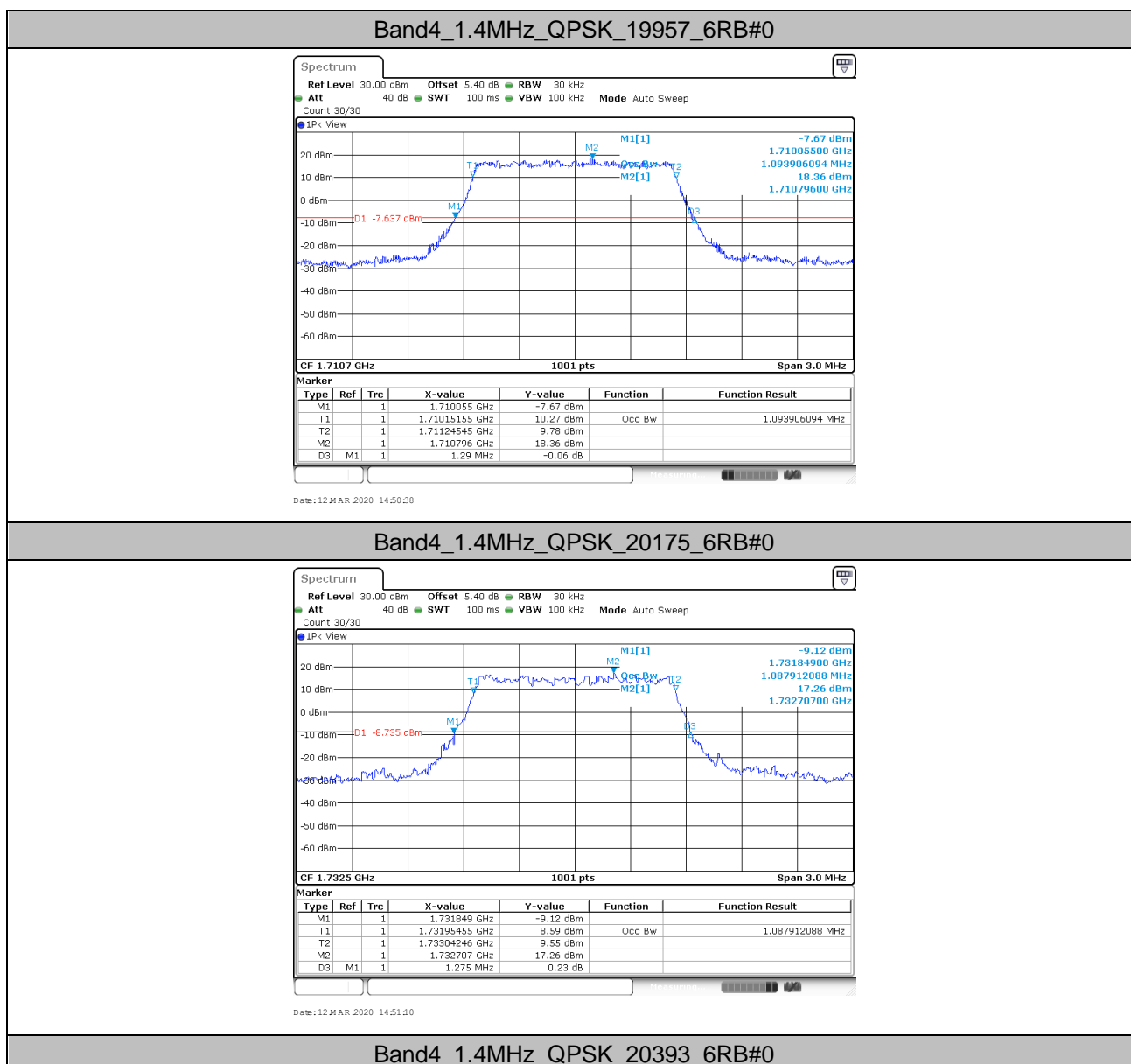


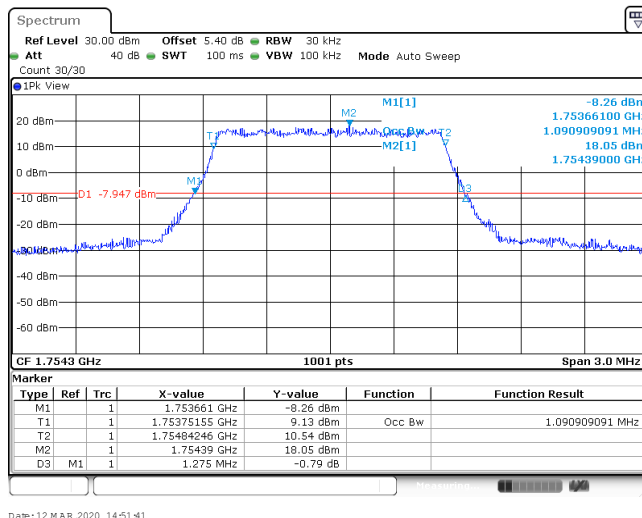
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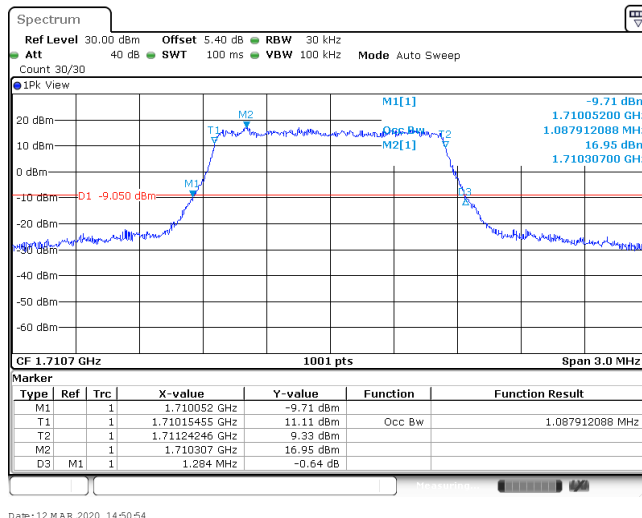
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Band4	20MHz	QPSK	20300	100RB#0	17.862	19.360	PASS
Band4	20MHz	16QAM	20050	100RB#0	17.862	19.400	PASS
Band4	20MHz	16QAM	20175	100RB#0	17.822	19.400	PASS
Band4	20MHz	16QAM	20300	100RB#0	17.822	19.400	PASS

4.2. Test Plots





Band4_1.4MHz_16QAM_19957_6RB#0

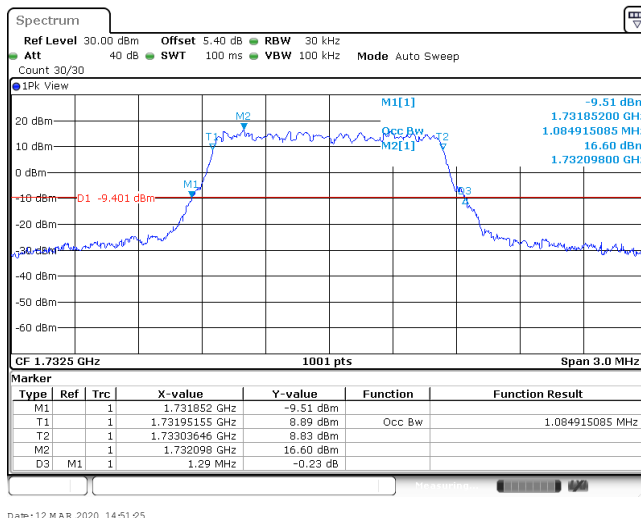


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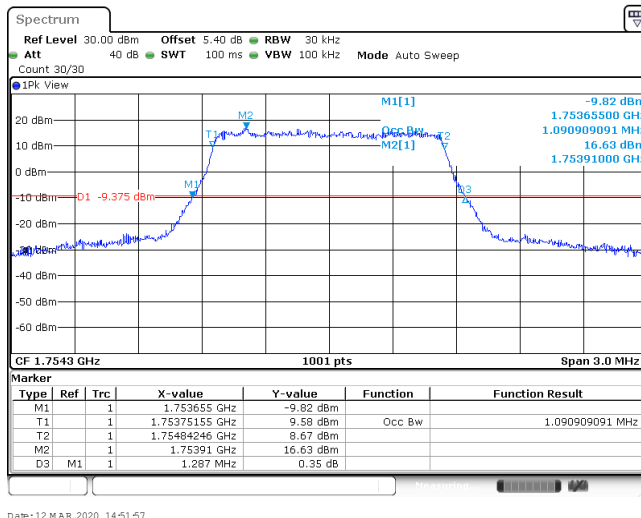
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Date: 12 MAR 2020 14:51:25

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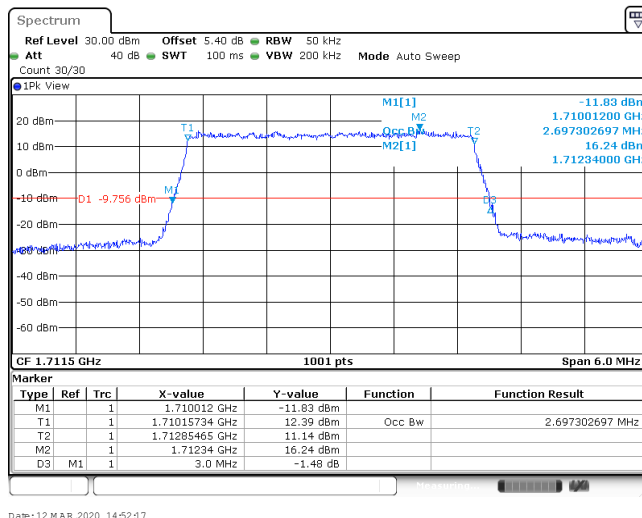
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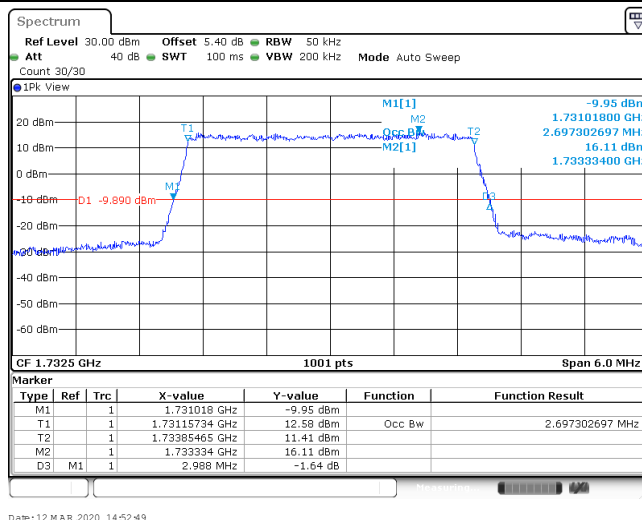


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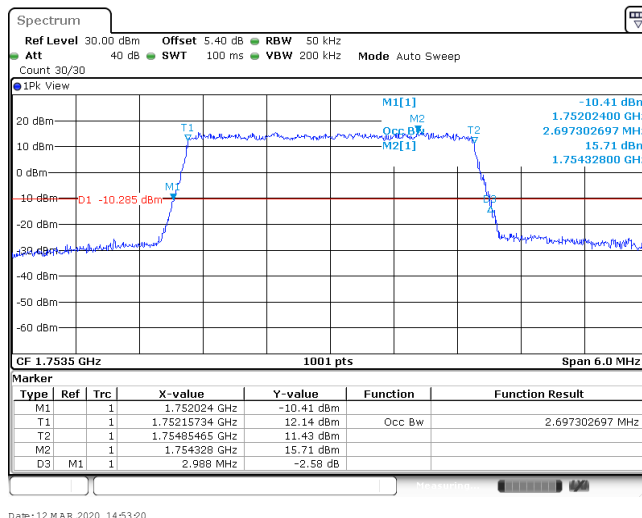


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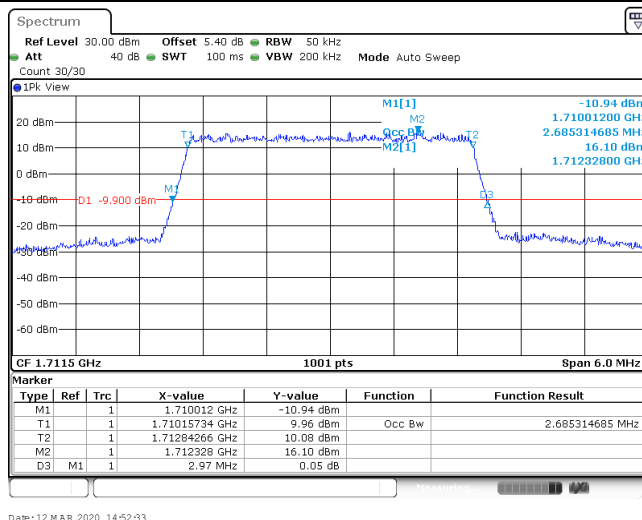


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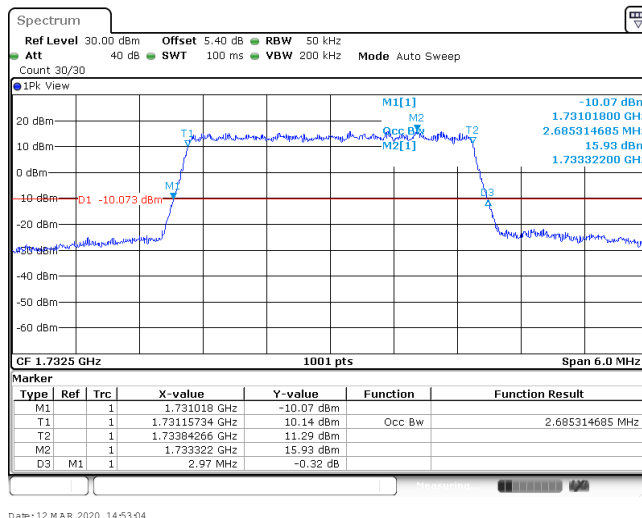


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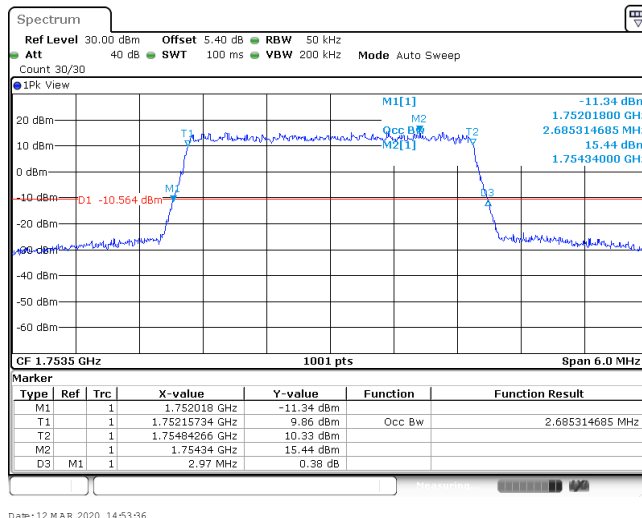


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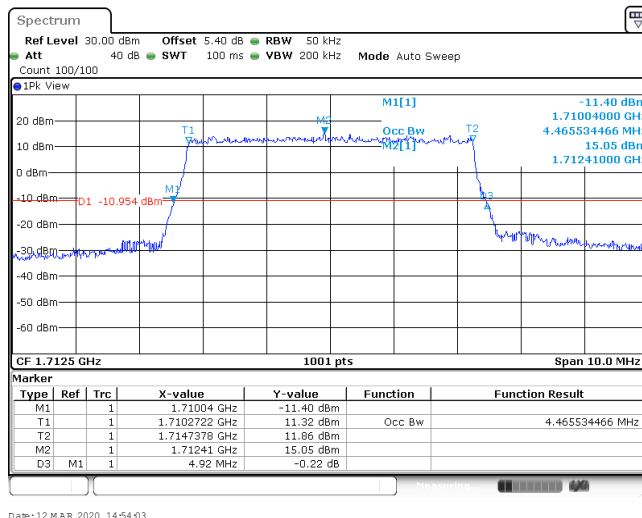


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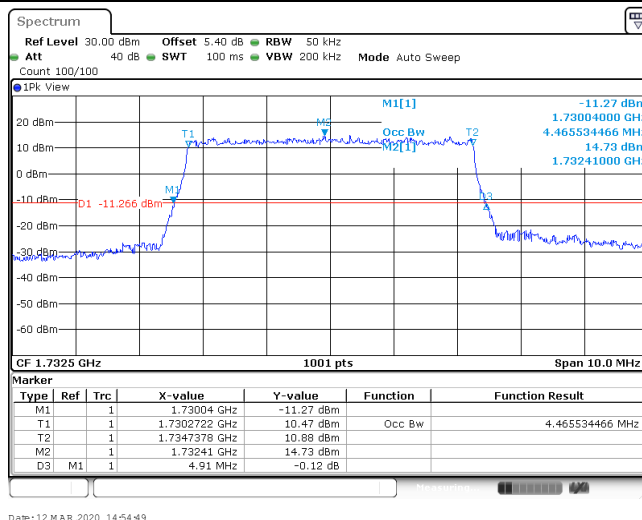


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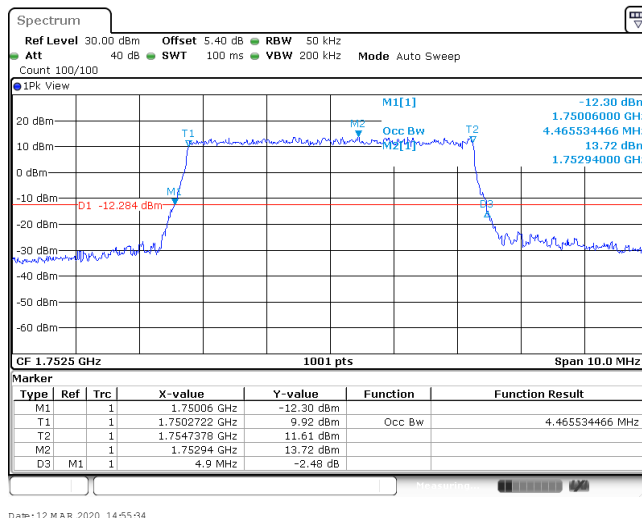


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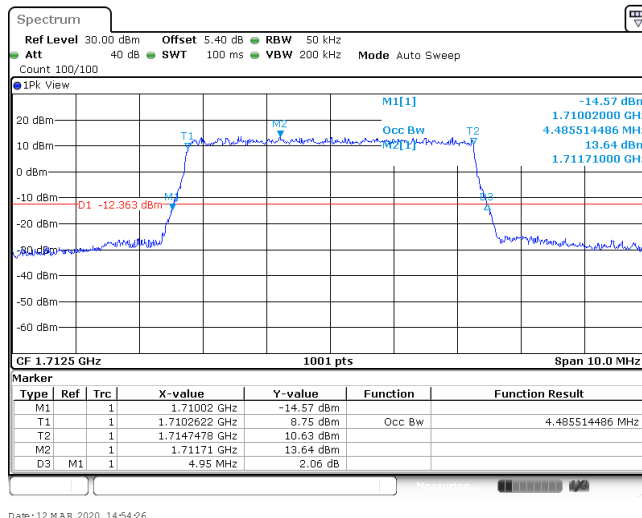
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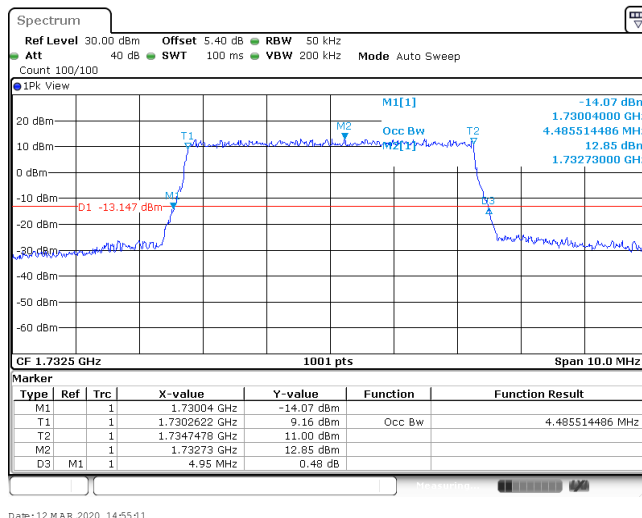
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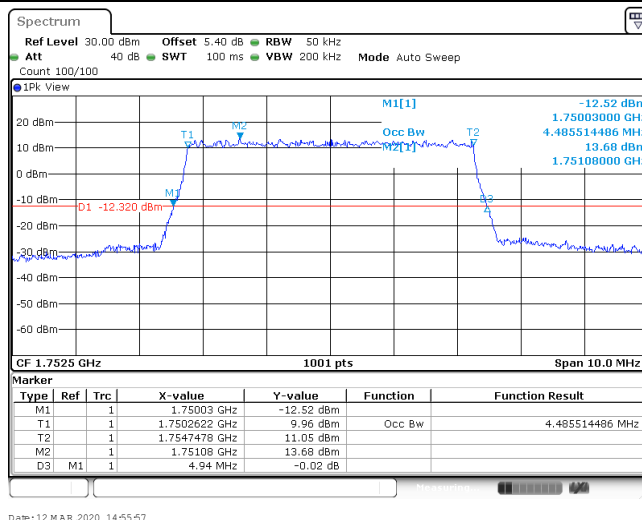
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Band4_5MHz_16QAM_20175_25RB#0





Band4_5MHz_16QAM_20375_25RB#0

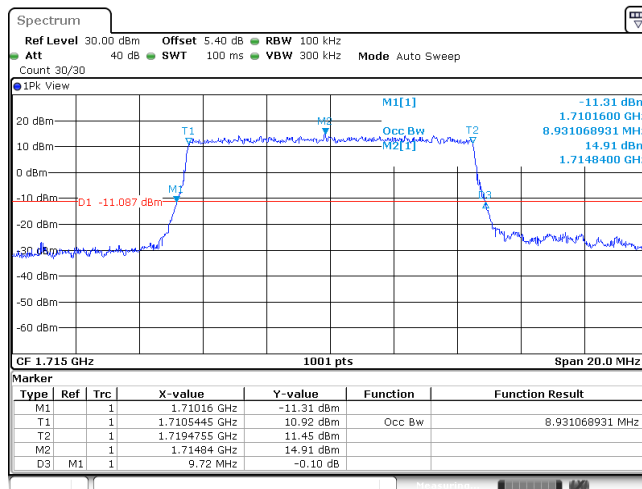


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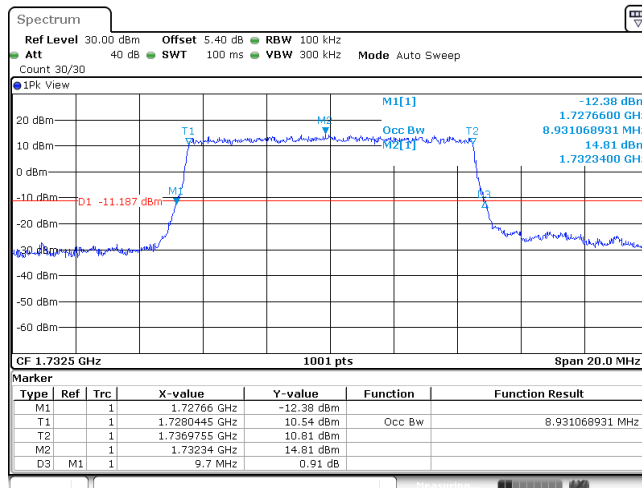
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Date: 12 MAR 2020 14:56:17

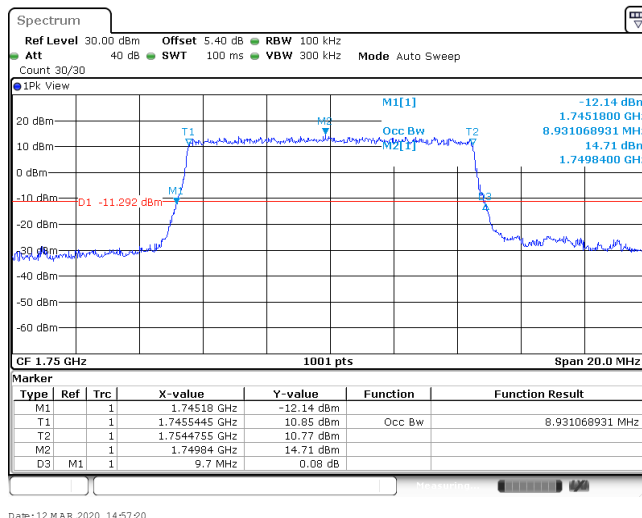
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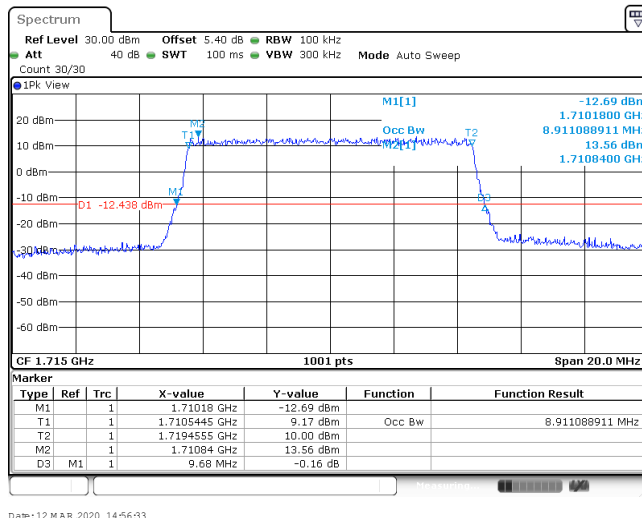
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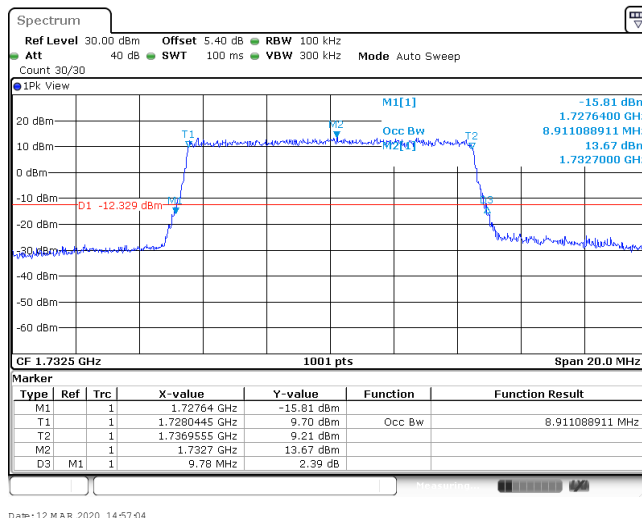
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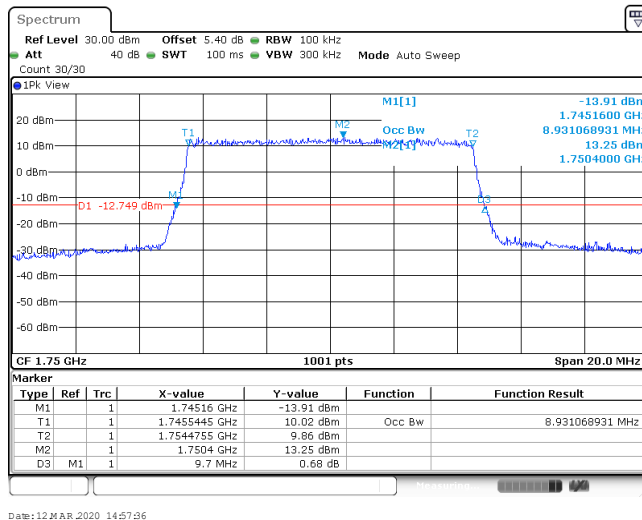
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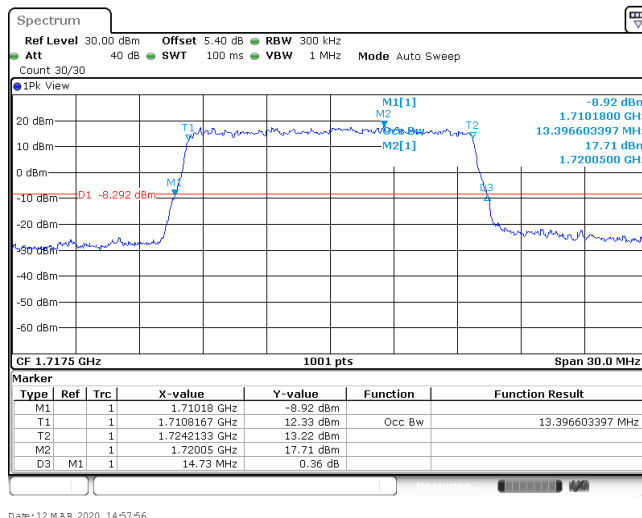


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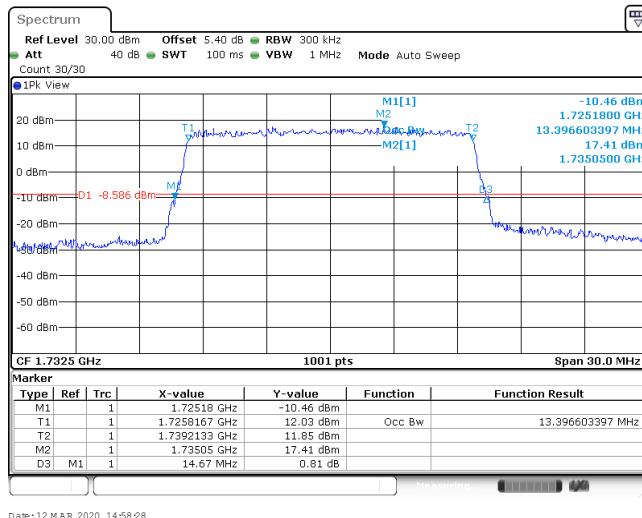
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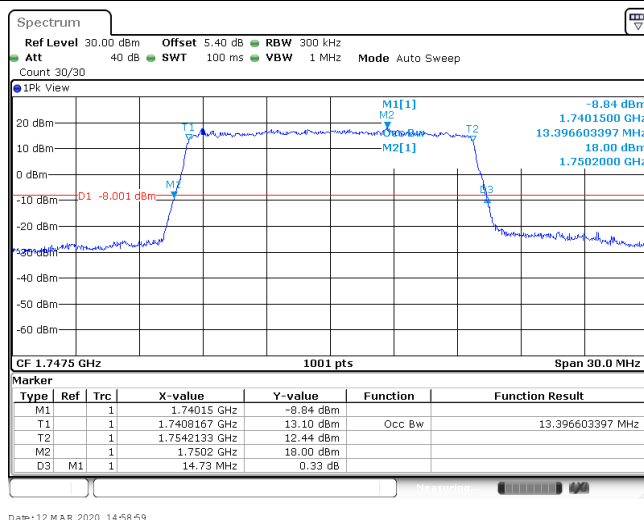
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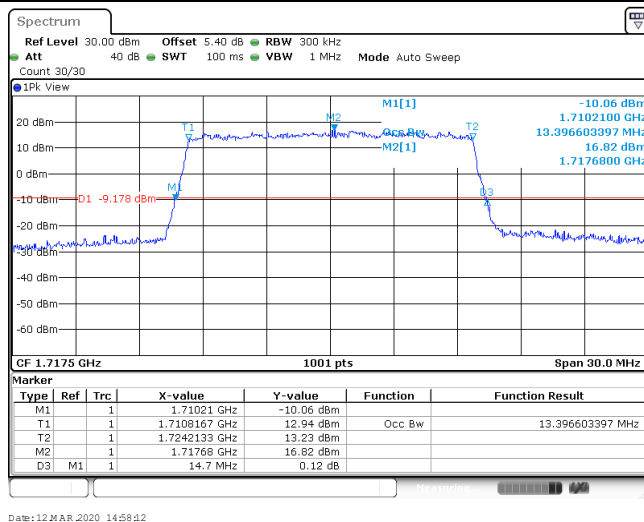


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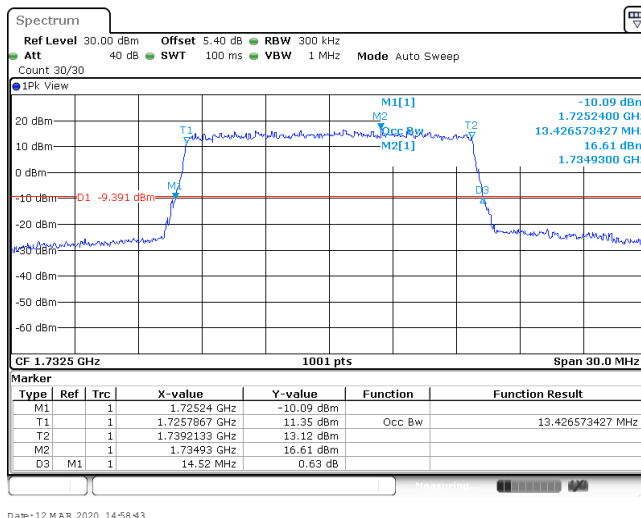


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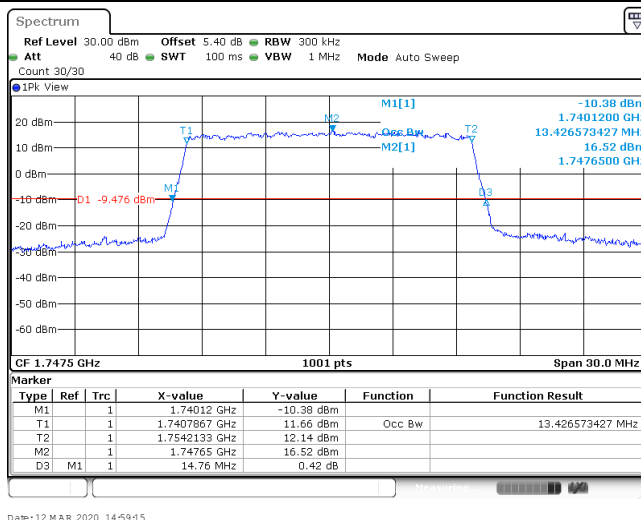


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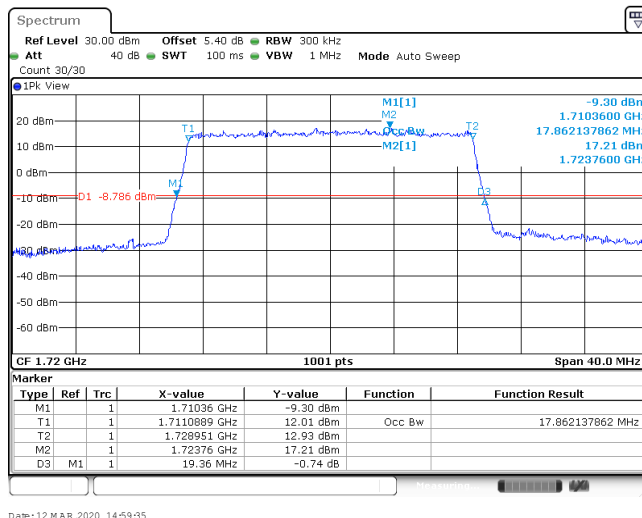


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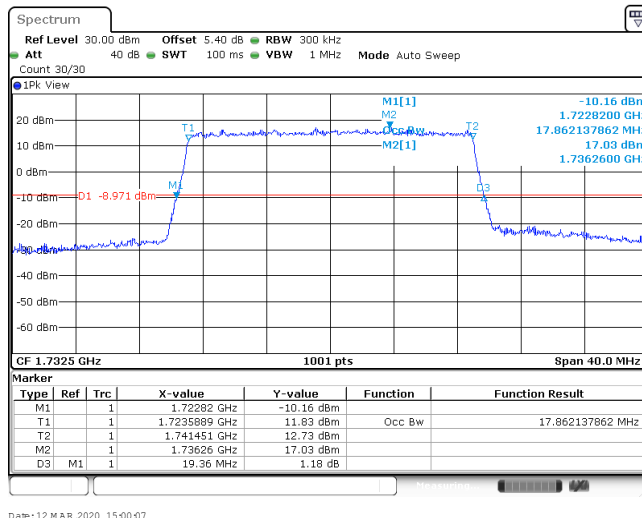
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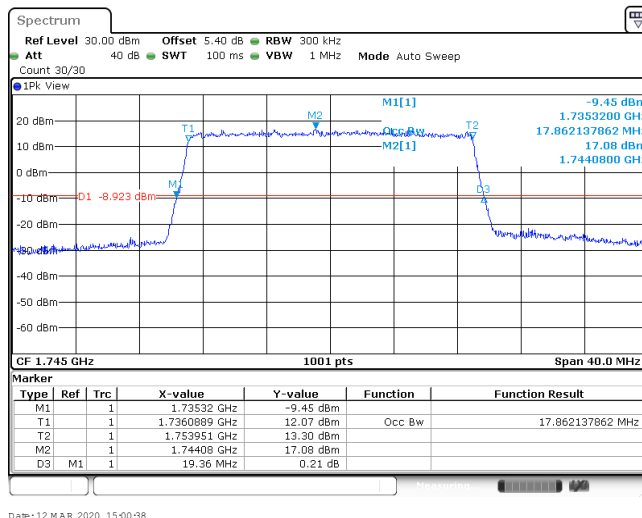
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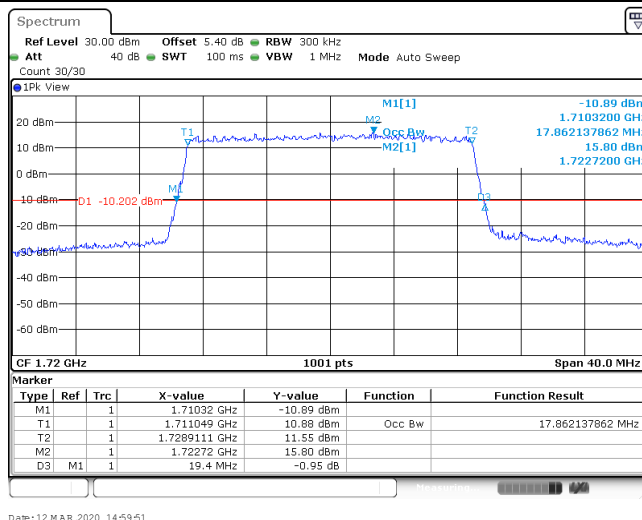


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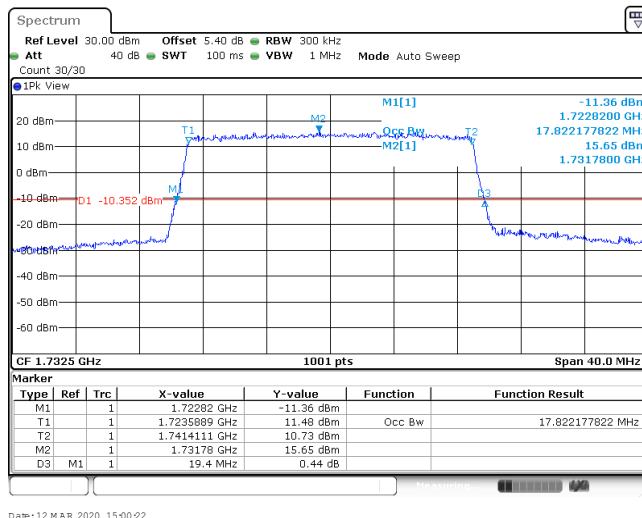


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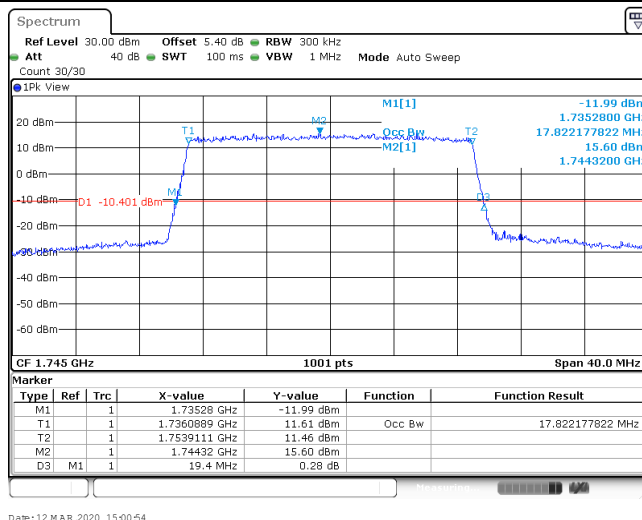


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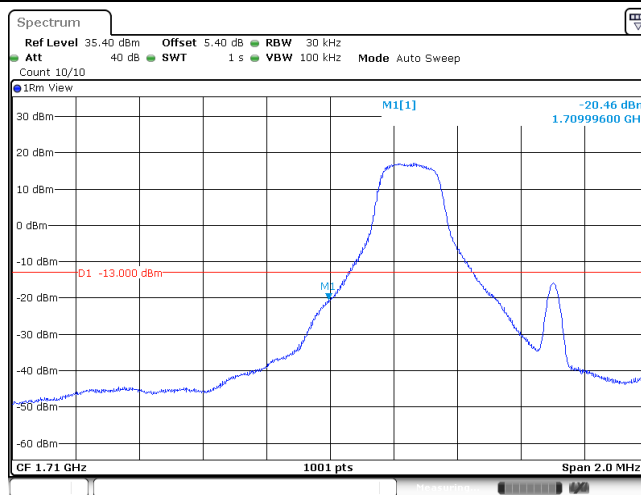
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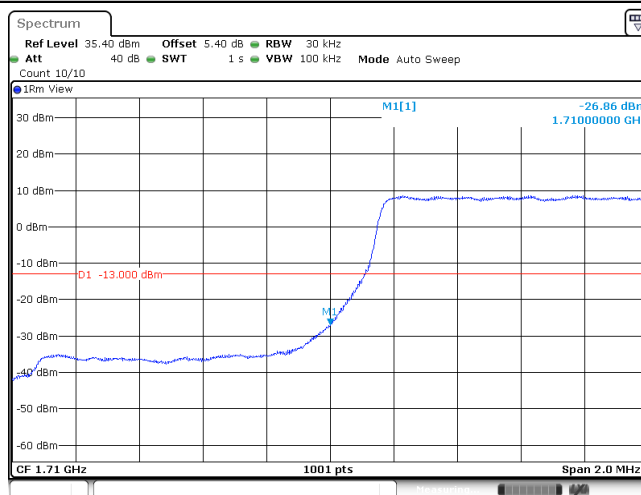
5. Band Edge Compliance

5.1. Test Plots

Band4_1.4MHz_QPSK_19957_1RB#0

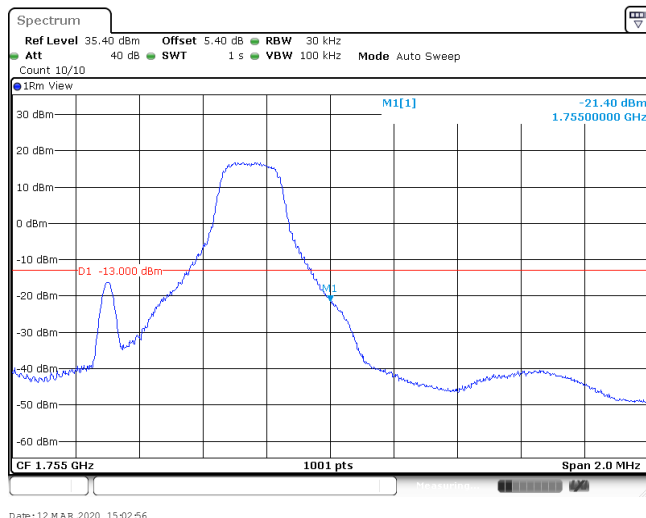


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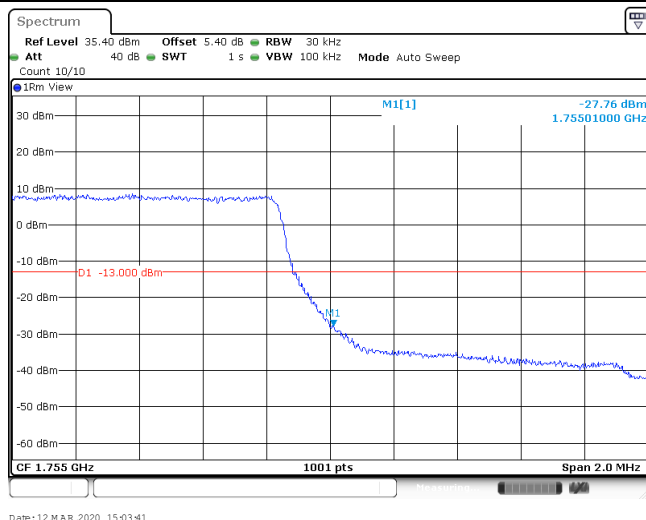


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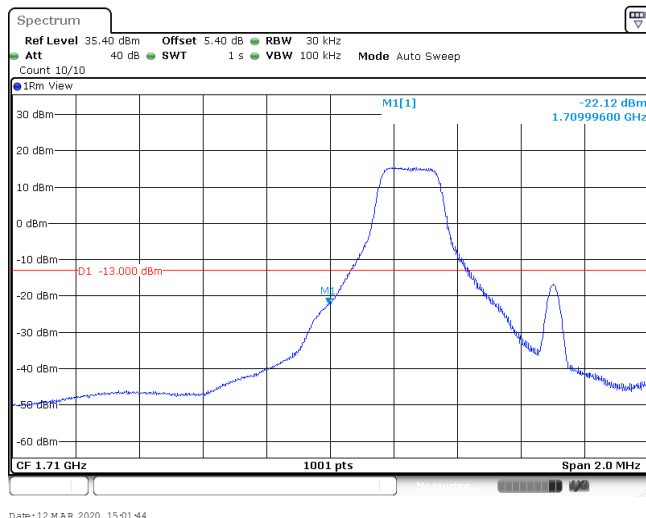


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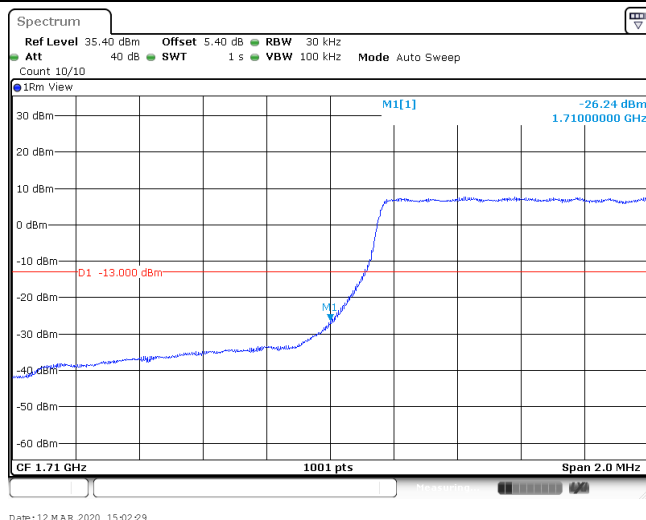


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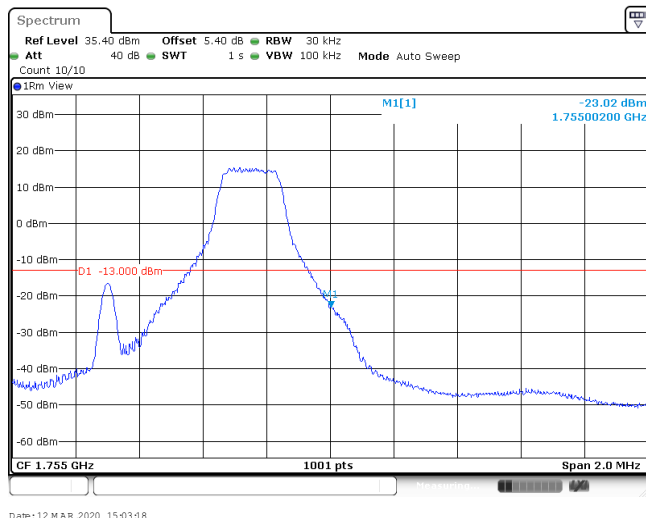
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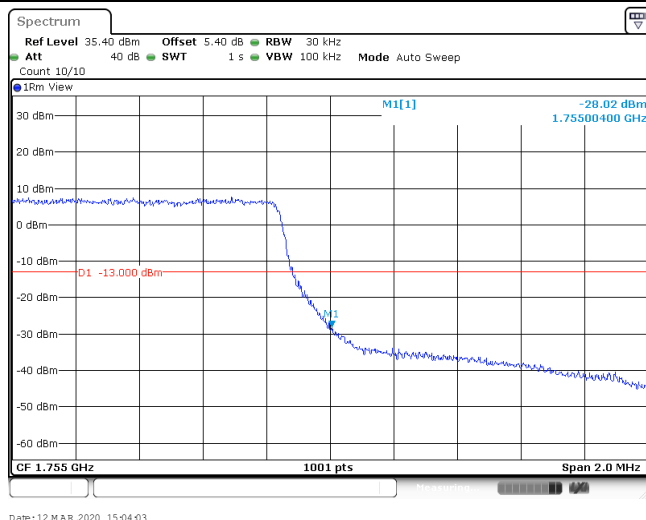
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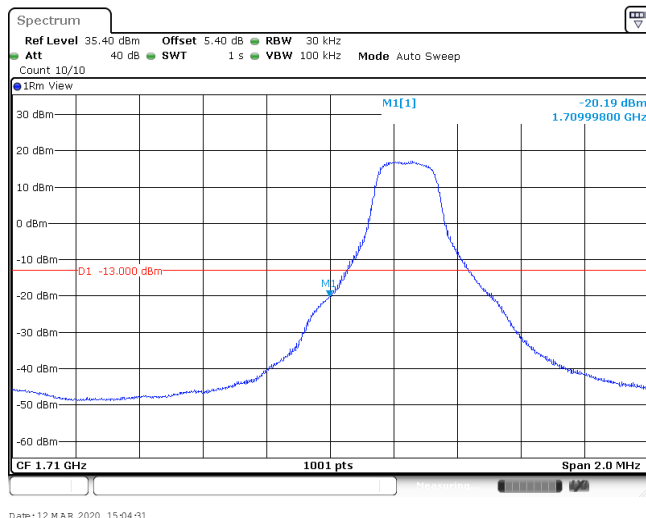
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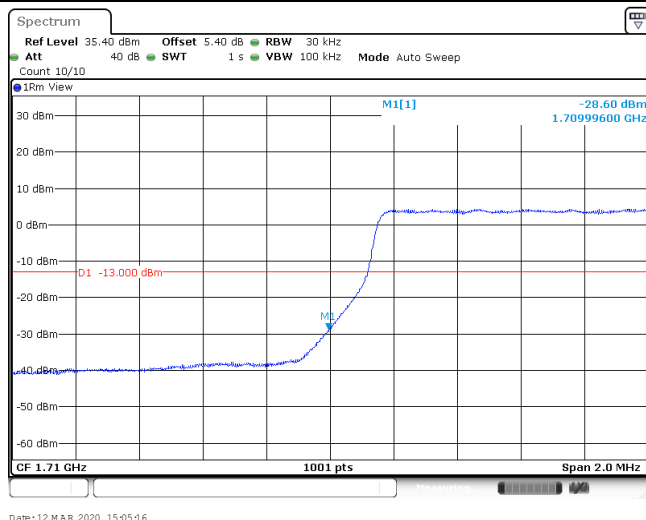
Band4_3MHz_QPSK_19965_1RB#0



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Band4_3MHz_QPSK_19965_15RB#0



Band4_3MHz_QPSK_20385_1RB#14

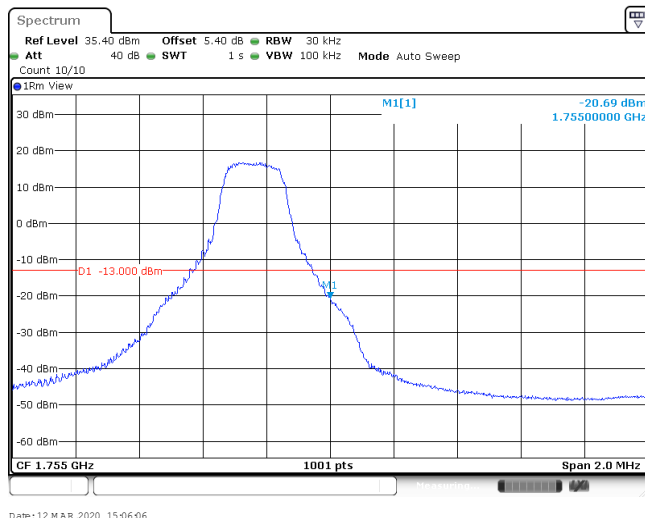


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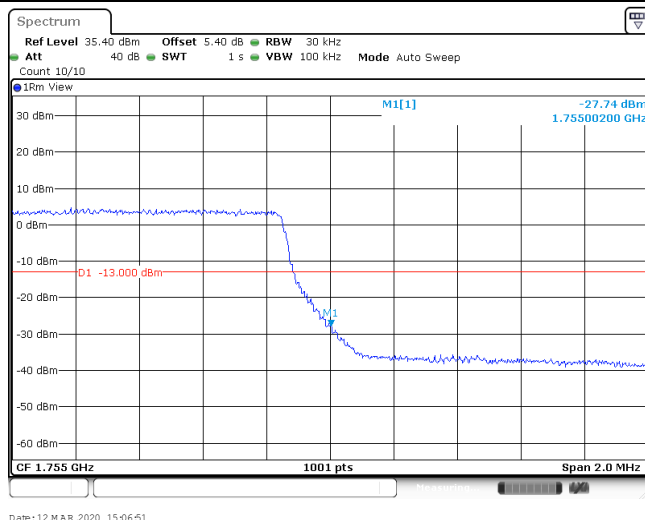
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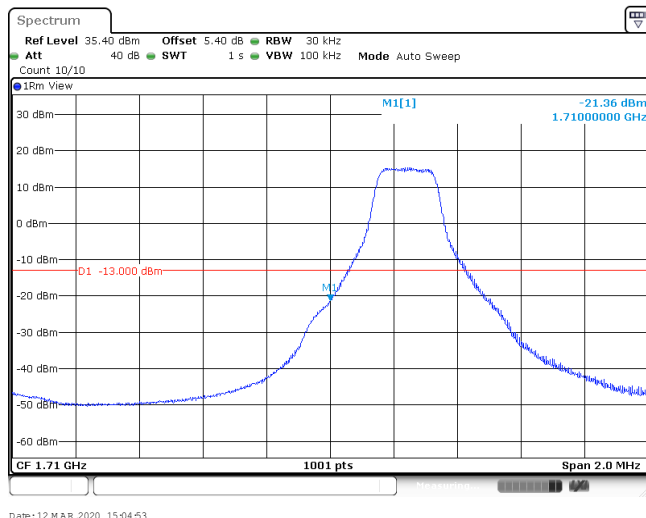


Band4_3MHz_QPSK_20385_15RB#0

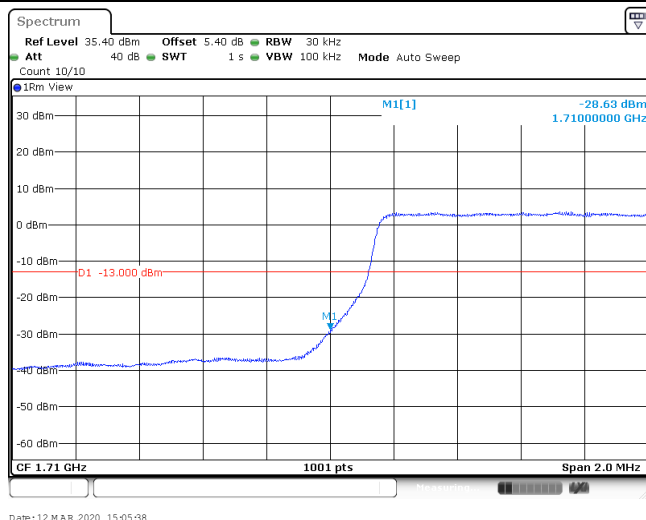


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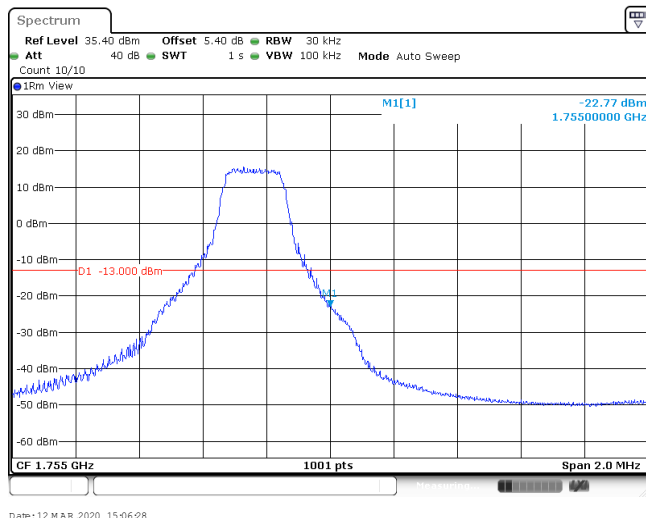


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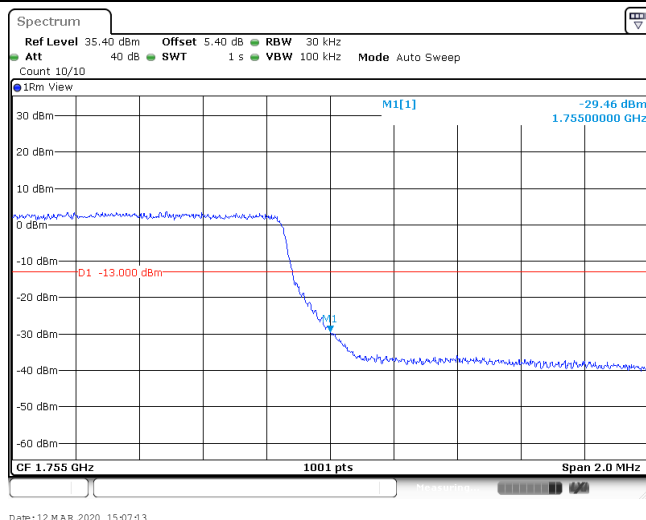


Band4_3MHz_16QAM_20385_1RB#14





Band4_3MHz_16QAM_20385_15RB#0



Band4_5MHz_QPSK_19975_1RB#0



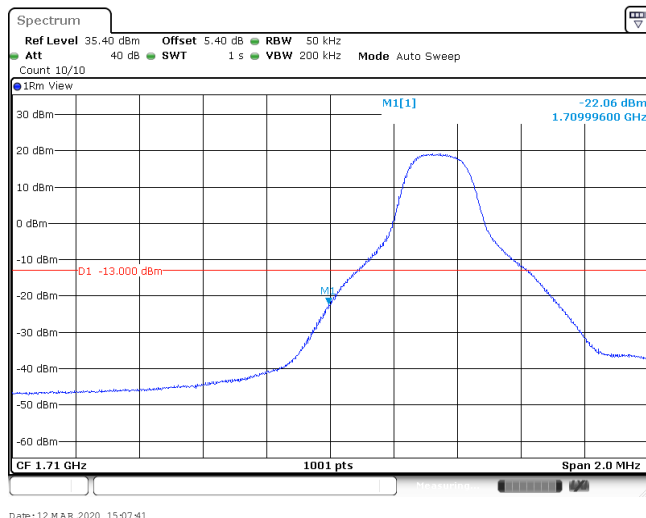
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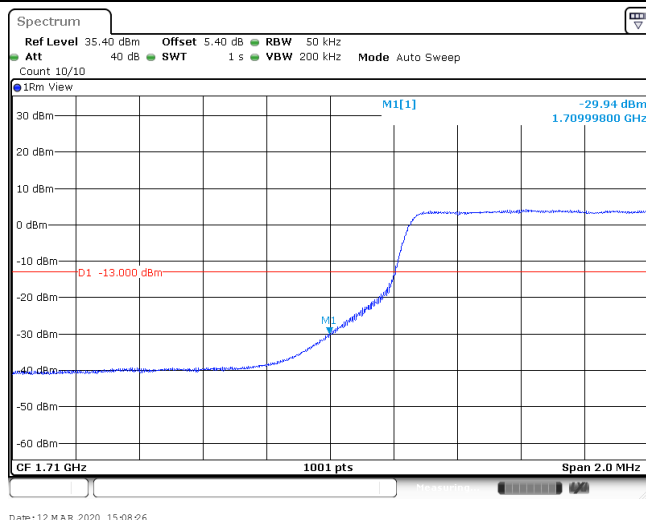
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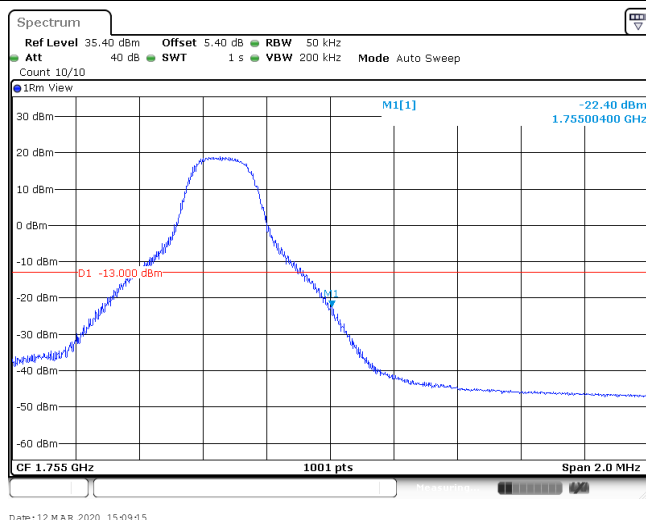


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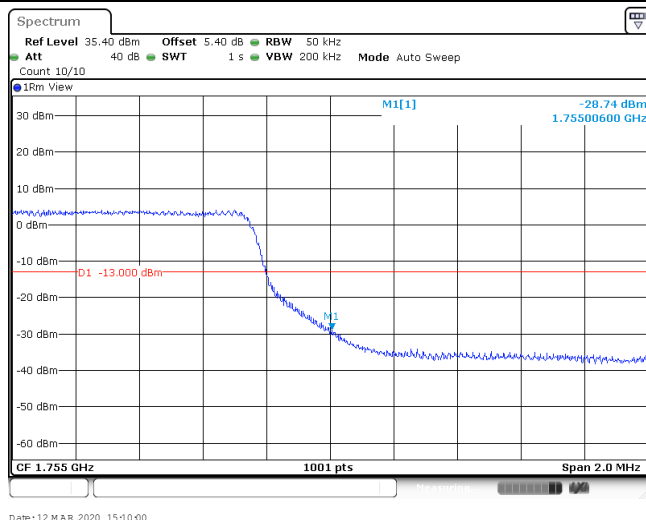


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Band4 5MHz QPSK 20375 25RB#0



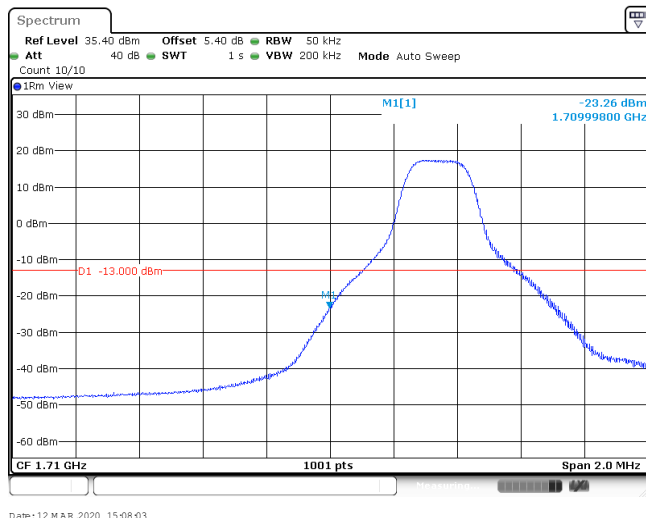
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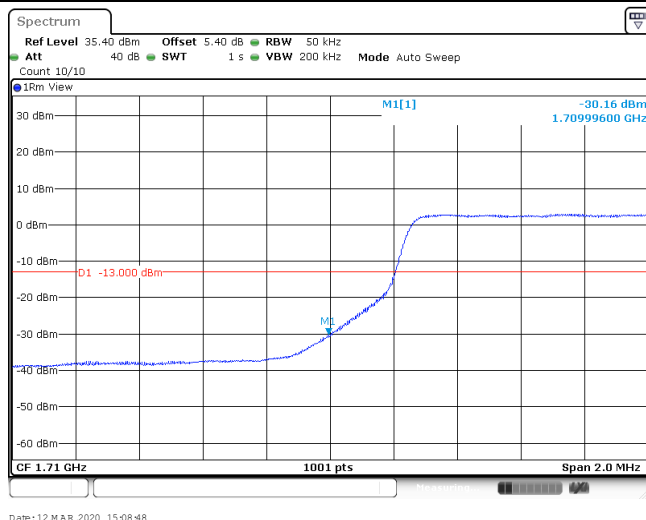
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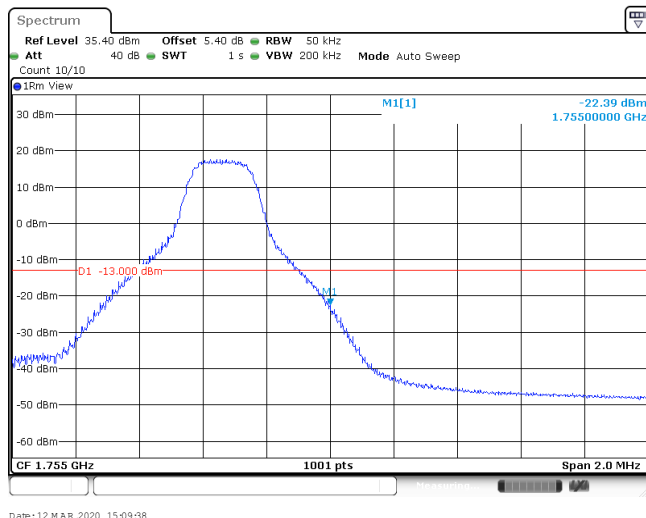


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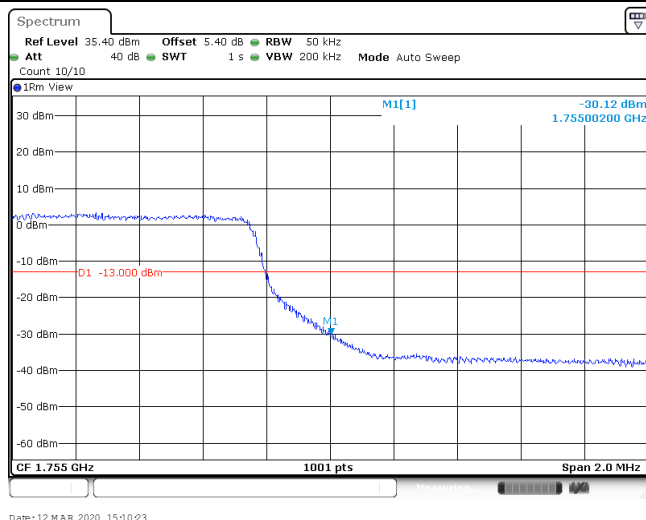


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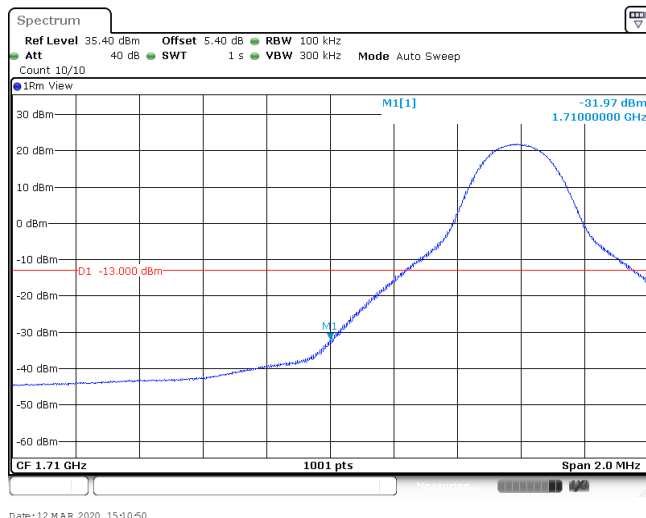


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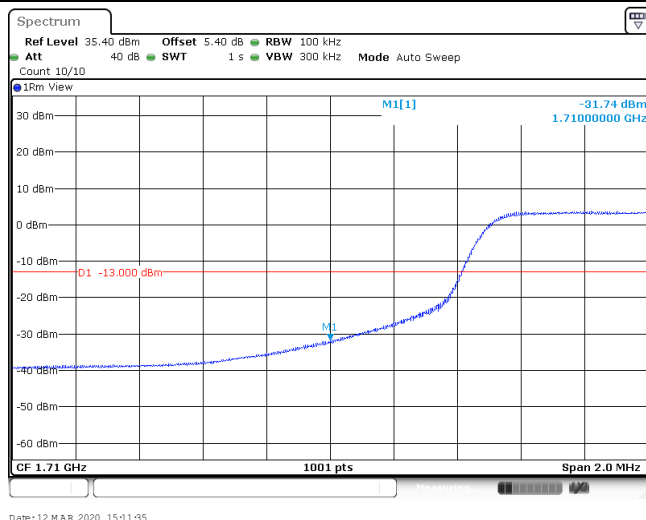
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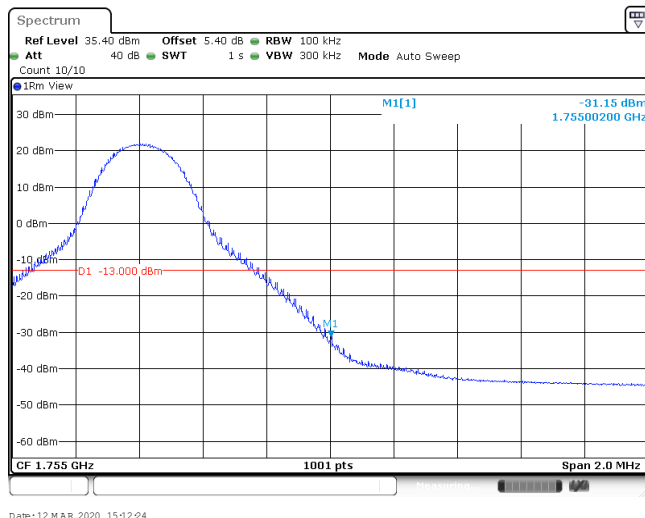
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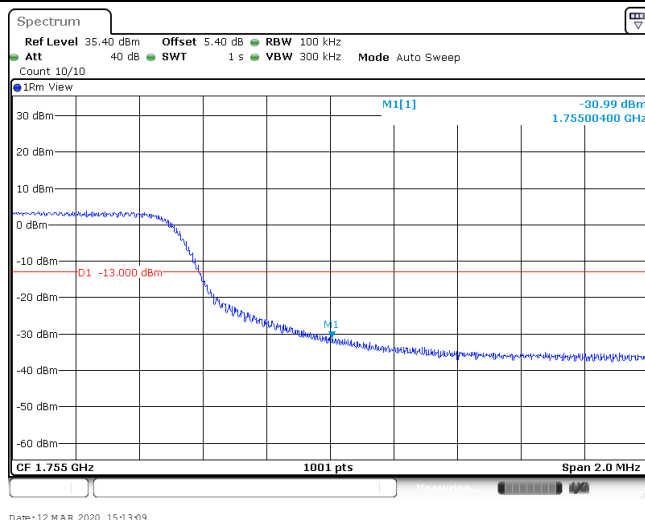
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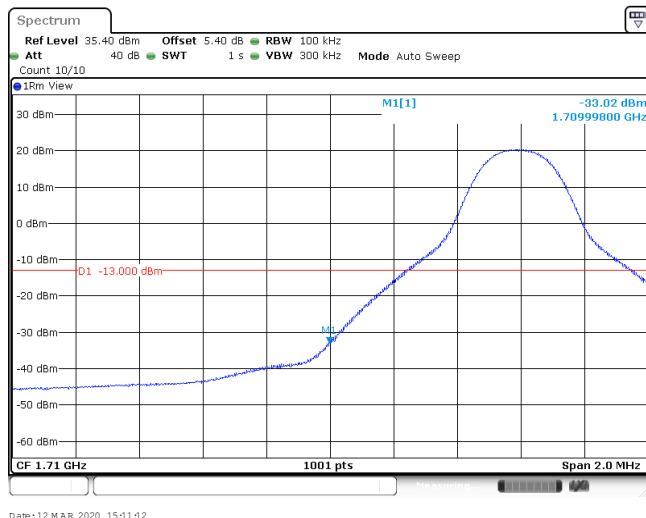


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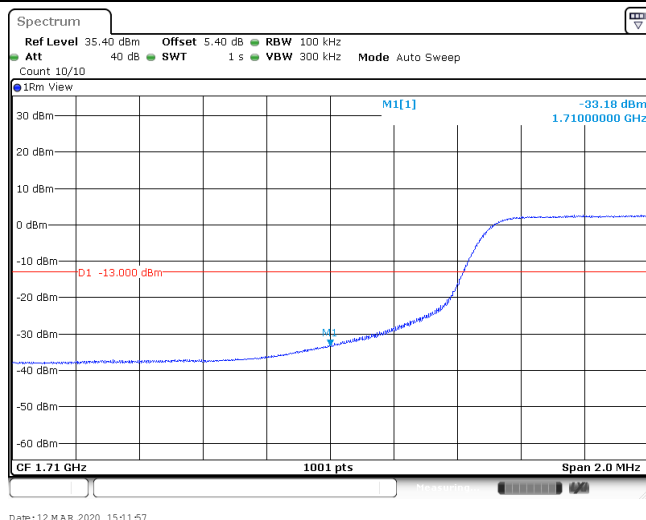


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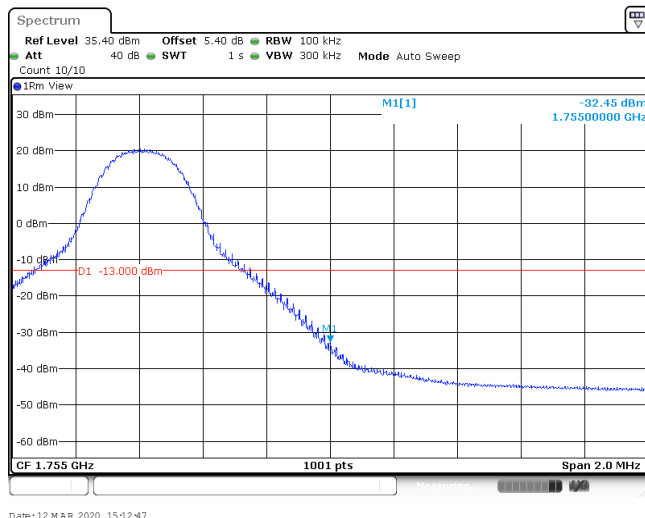
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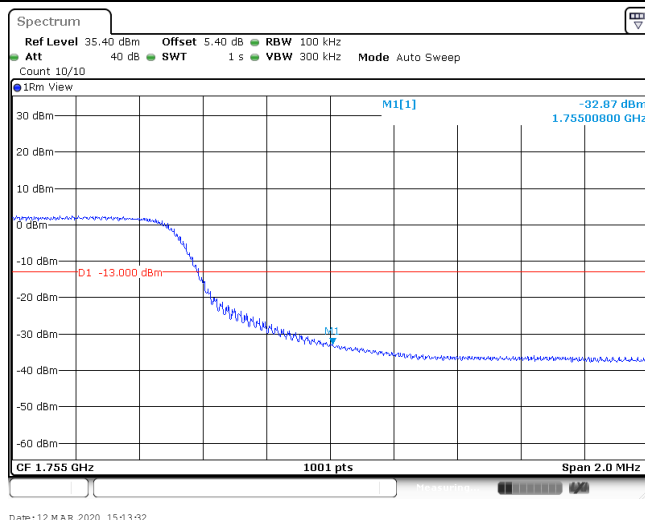
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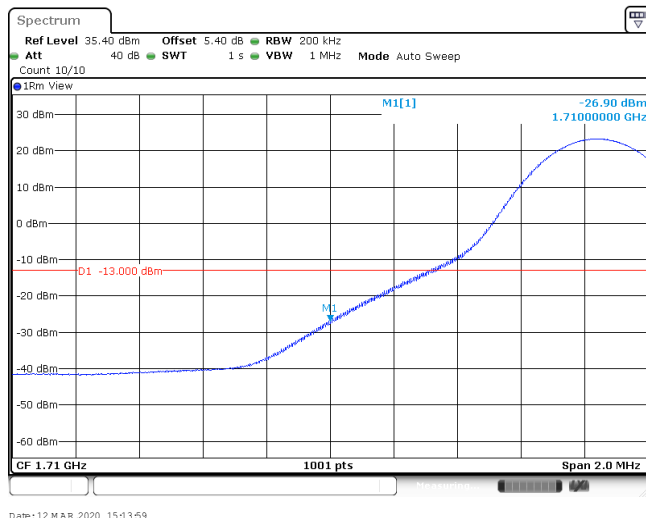


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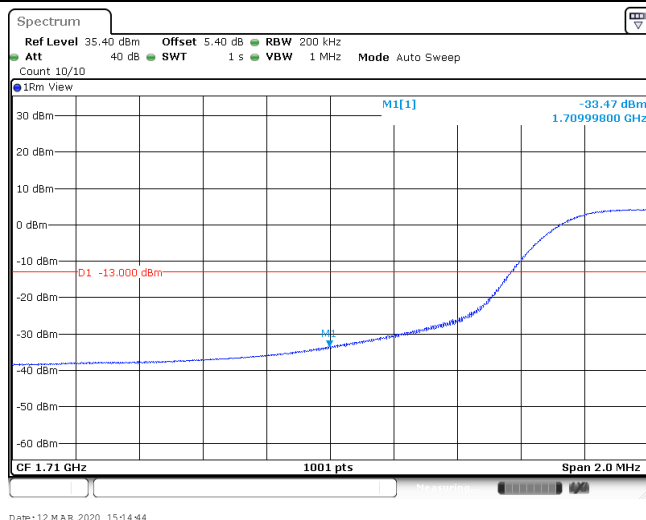


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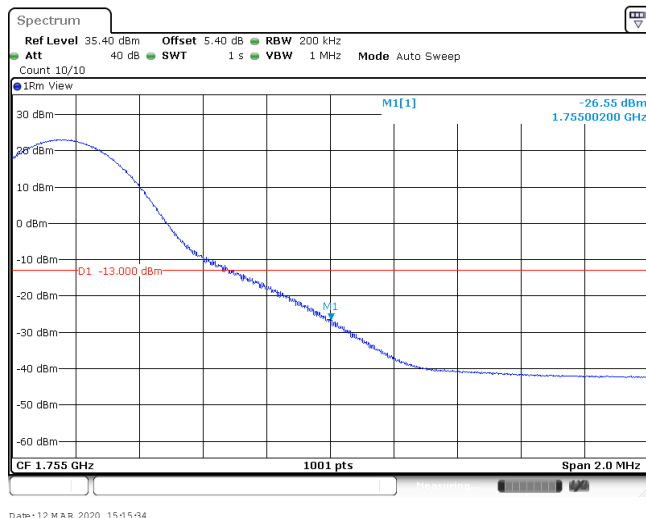


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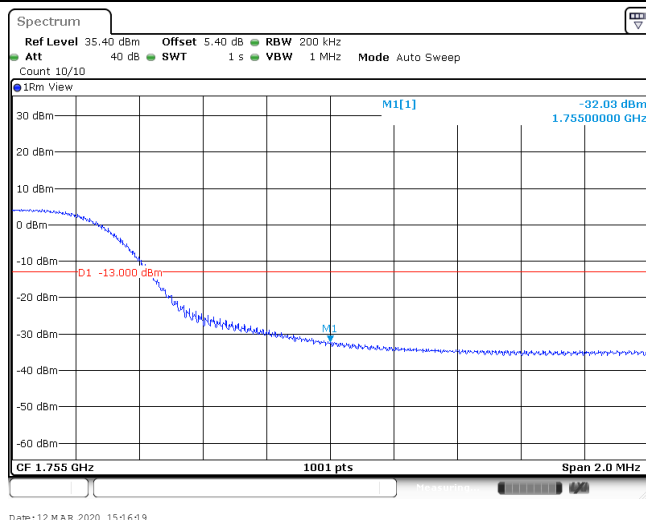


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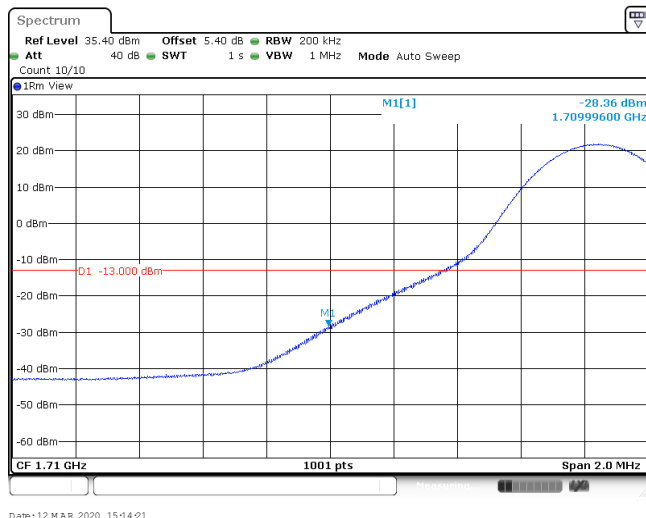
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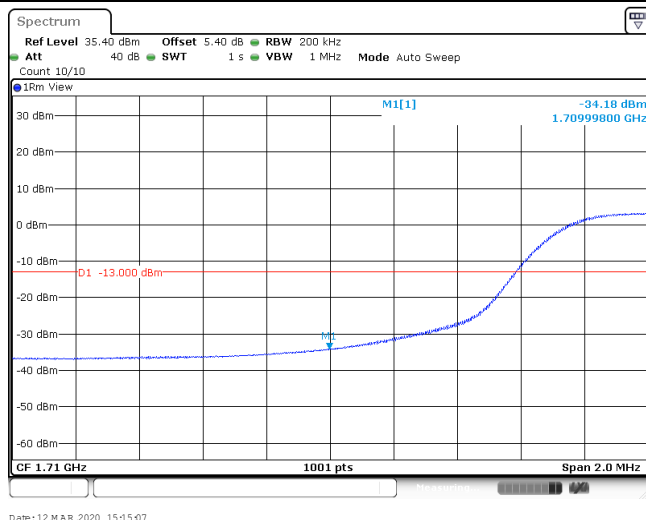
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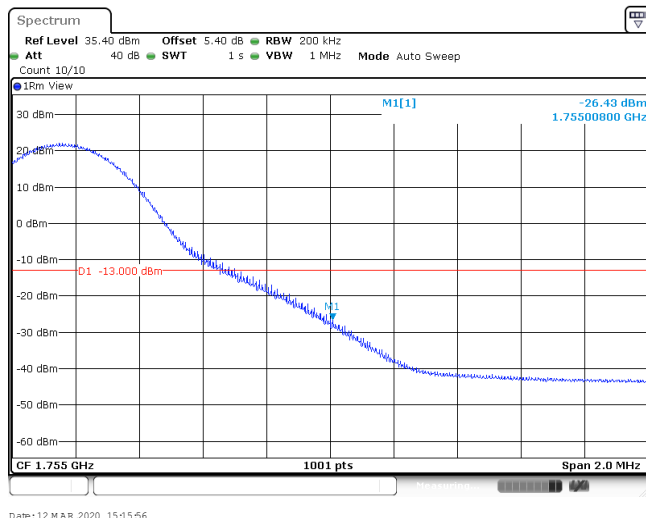
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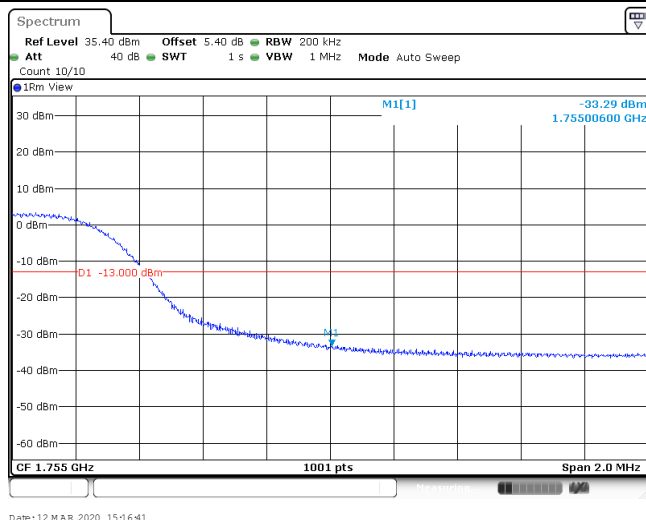
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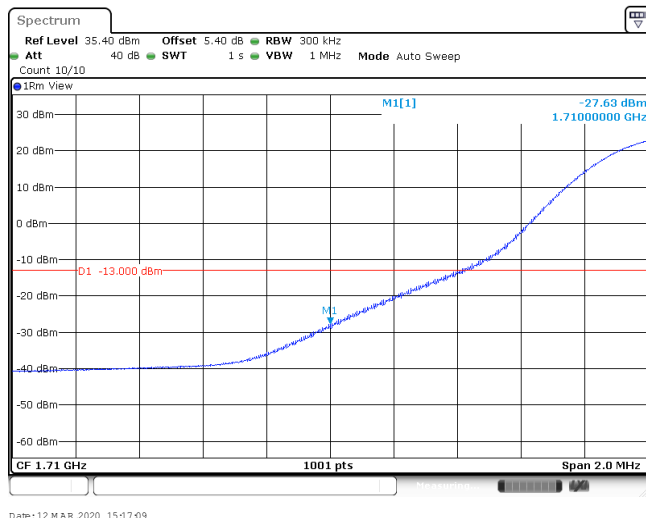


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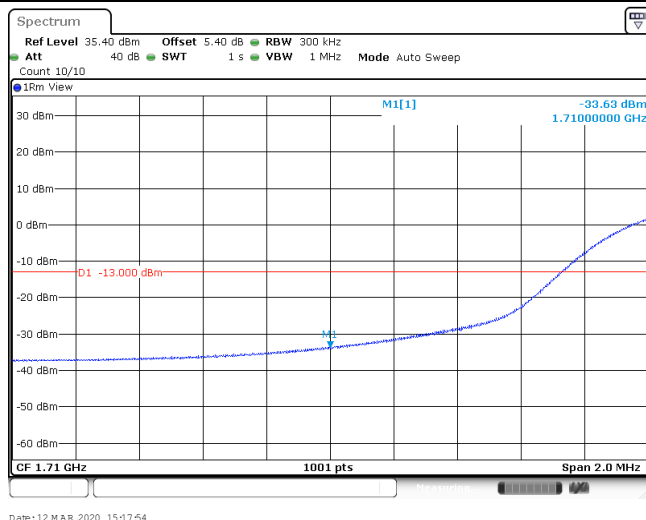


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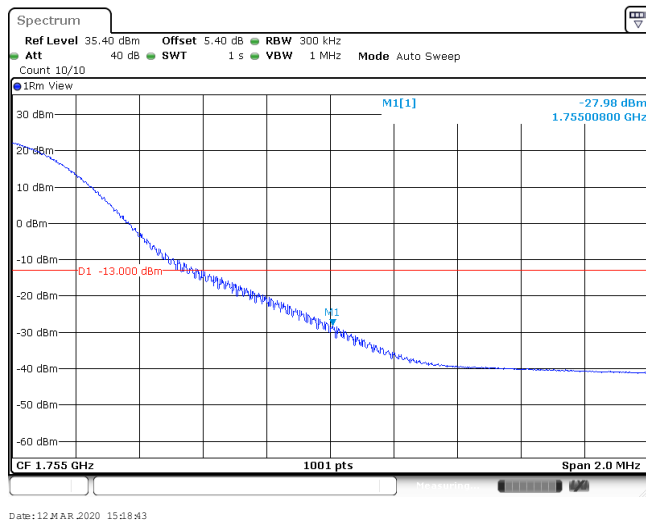
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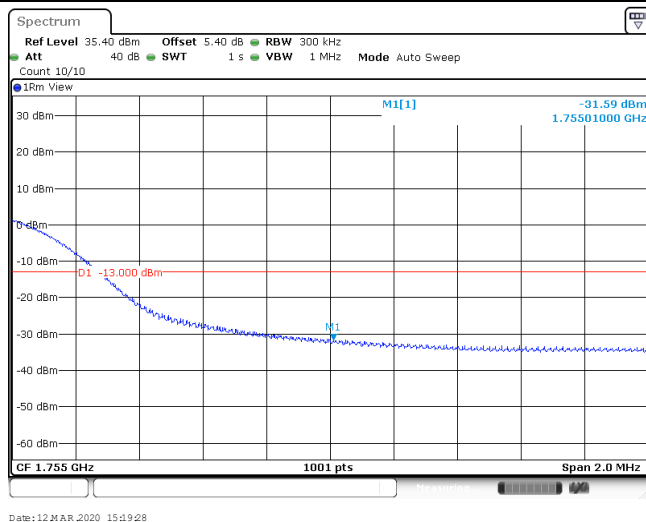
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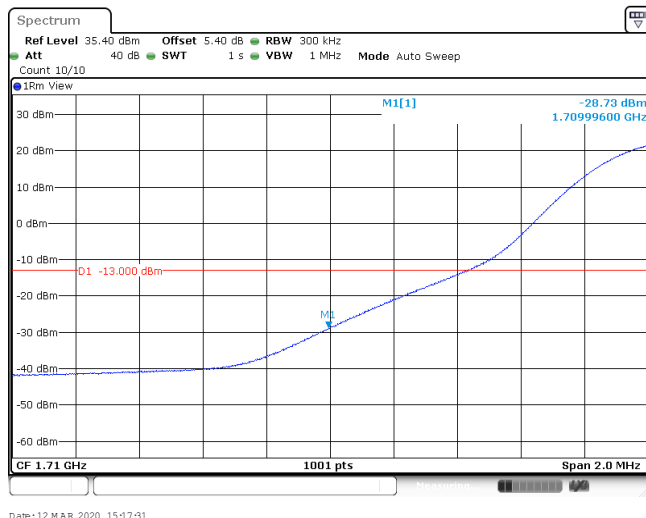


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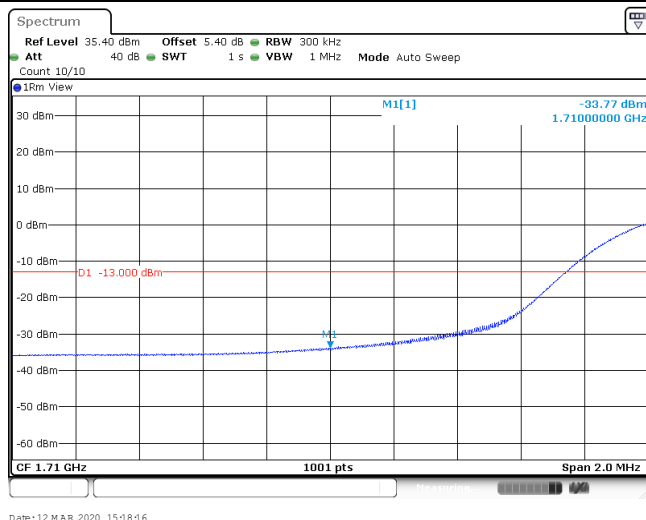


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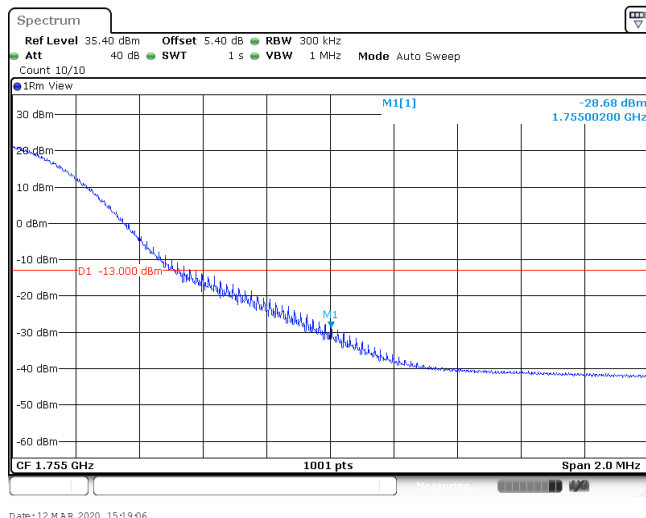


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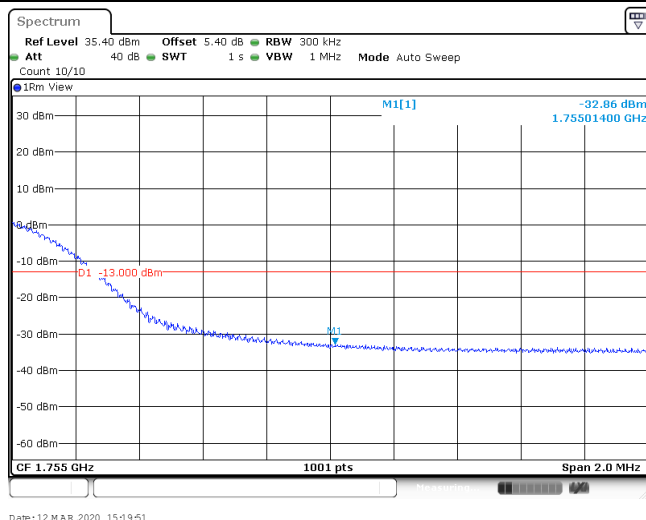


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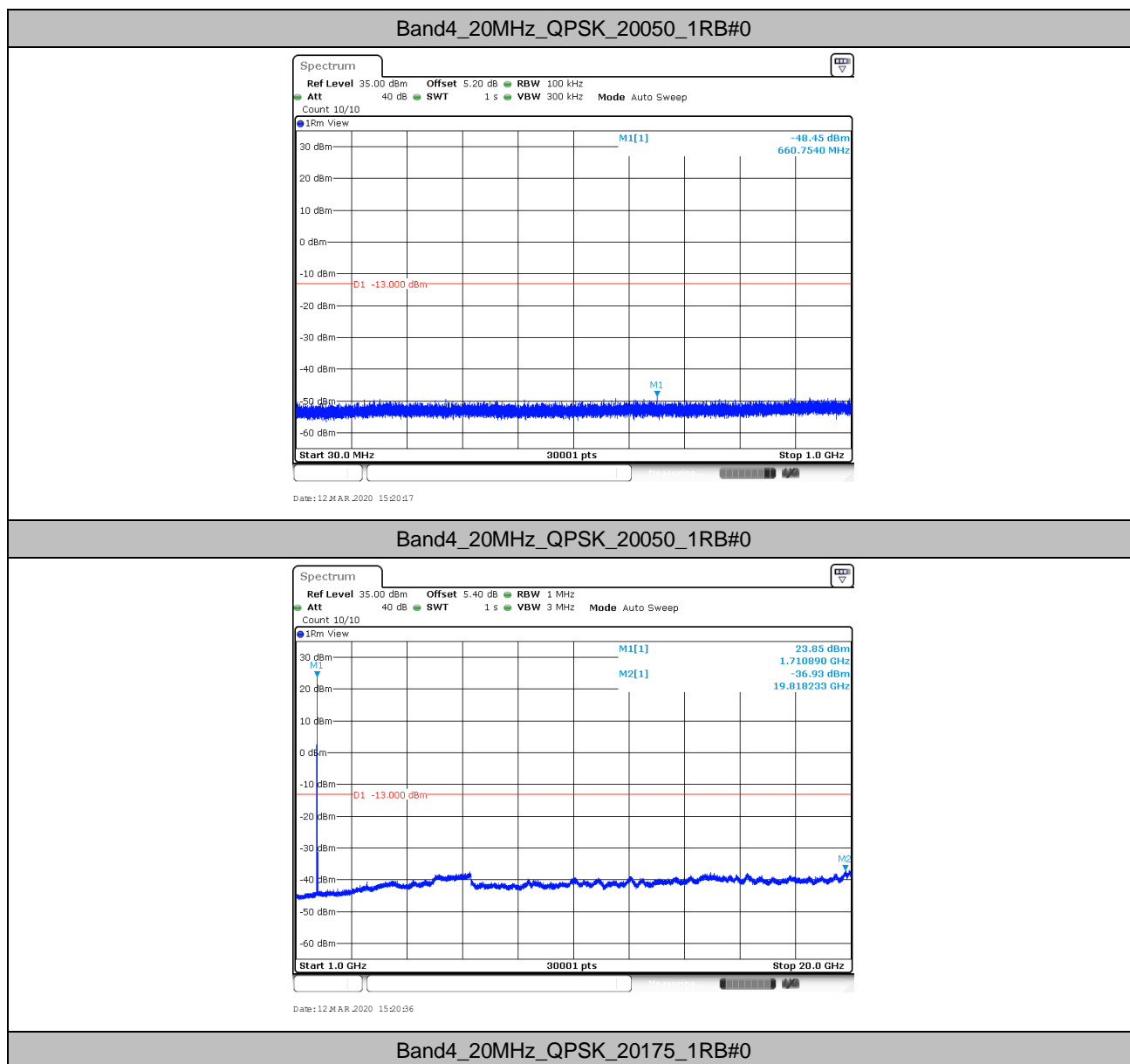


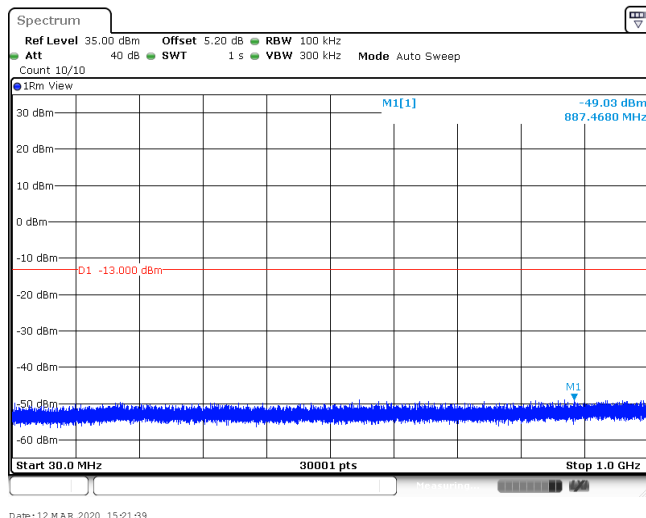
6. Spurious Emission at Antenna Terminal

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 $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (\text{Span} / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

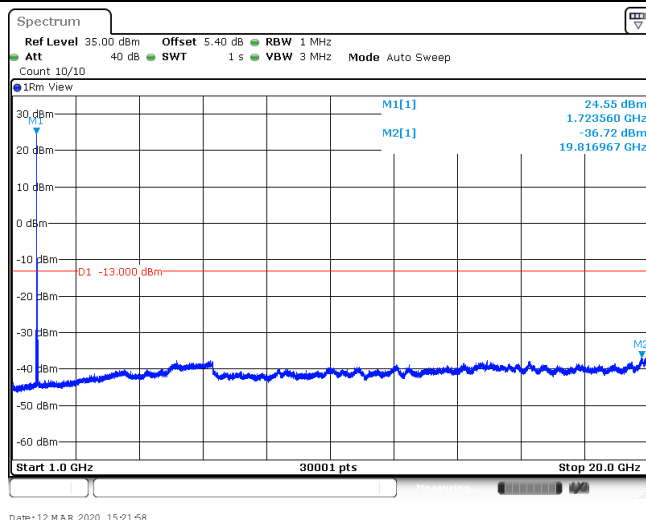
Remark2: only the worst case data displayed in this report.

6.1. Test Plots



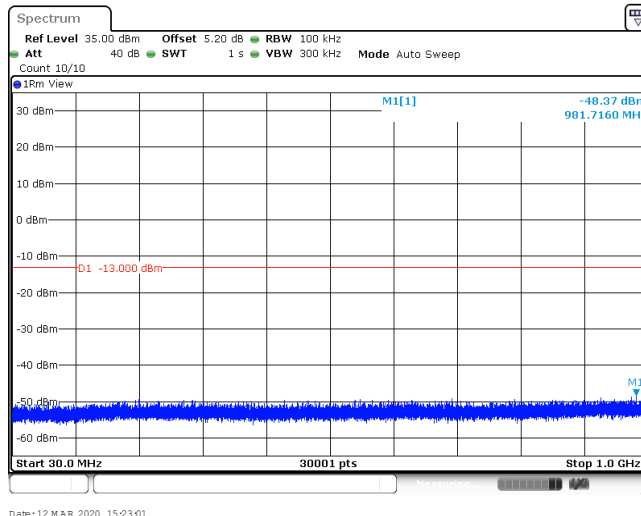


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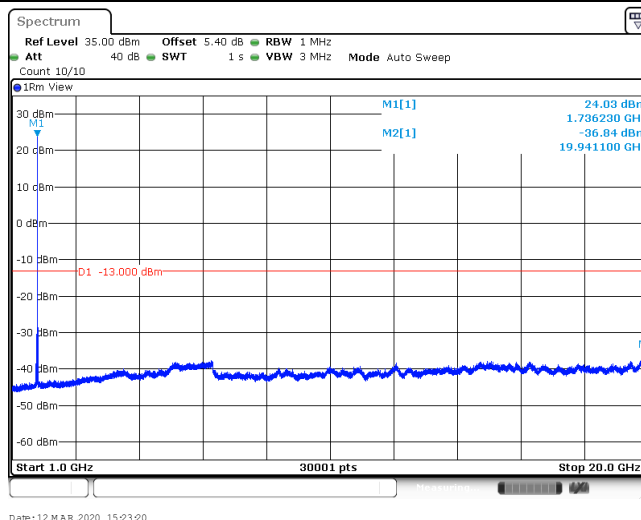


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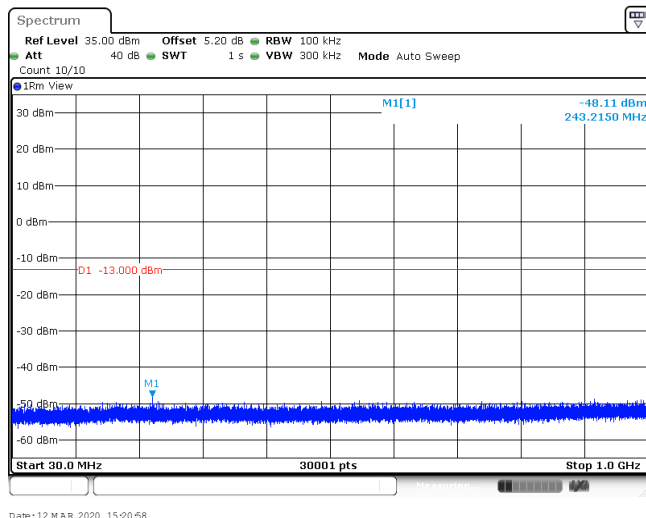


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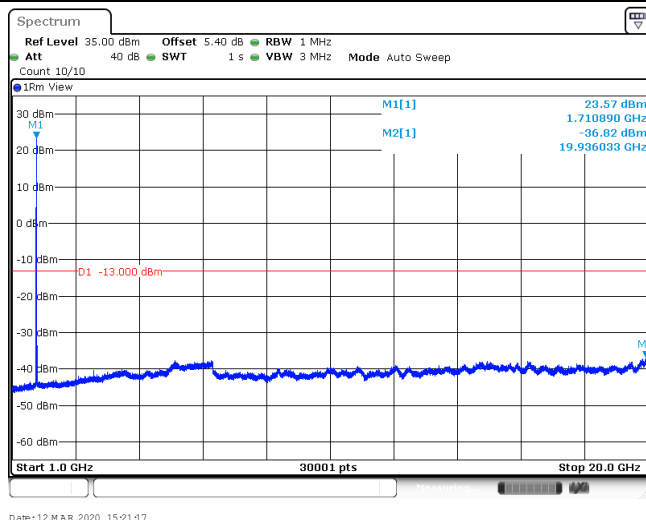


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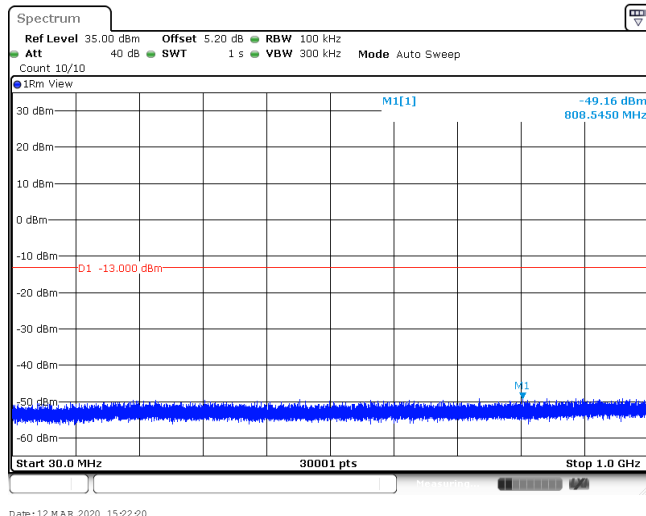


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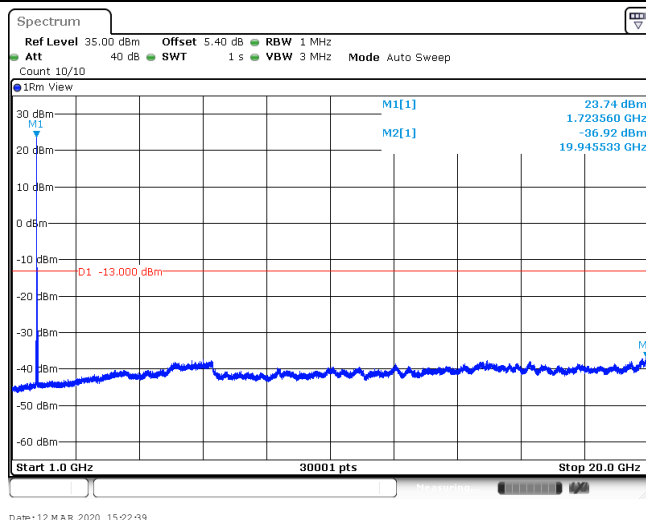


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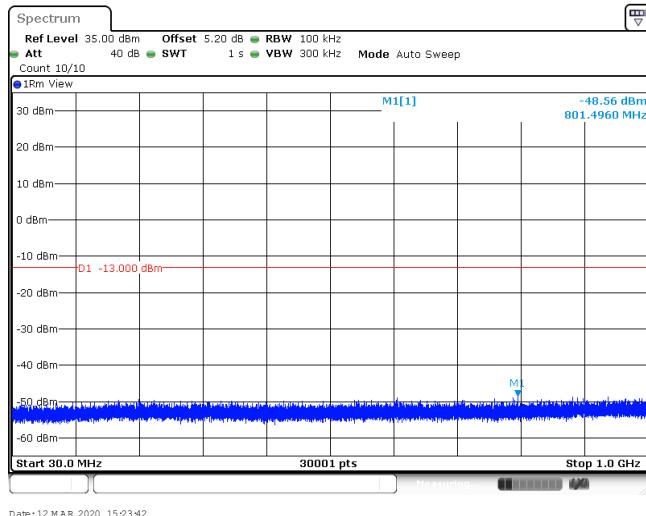


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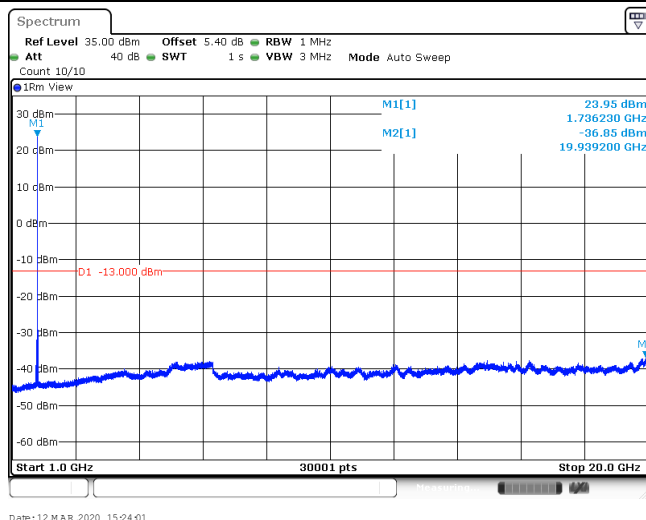
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Band4_20MHz_16QAM_20300_1RB#0



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7. Field Strength of Spurious Radiation

7.1. Test Band = LTE Band 4

7.1.1. Test Mode = LTE/TM1

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
108.6709	-65.83	-13.00	52.83	Vertical
658.5914	-63.72	-13.00	50.72	Vertical
2696.3393	-36.67	-13.00	23.67	Vertical
3422.0141	-58.69	-13.00	45.69	Vertical
14468.8823	-47.64	-13.00	34.64	Vertical
17998.5000	-40.13	-13.00	27.13	Vertical
43.4352	-64.30	-13.00	51.30	Horizontal
235.3108	-68.16	-13.00	55.16	Horizontal
2695.1390	-35.40	-13.00	22.40	Horizontal
3422.0141	-43.85	-13.00	30.85	Horizontal
16398.9466	-43.86	-13.00	30.86	Horizontal
17998.5000	-44.60	-13.00	31.60	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
109.9320	-65.12	-13.00	52.12	Vertical
603.1532	-64.12	-13.00	51.12	Vertical
2707.5415	-36.64	-13.00	23.64	Vertical
3447.0149	-58.89	-13.00	45.89	Vertical
14490.3830	-47.58	-13.00	34.58	Vertical
17989.9997	-39.86	-13.00	26.86	Vertical
39.5550	-64.59	-13.00	51.59	Horizontal
229.7330	-68.73	-13.00	55.73	Horizontal
2697.9396	-35.35	-13.00	22.35	Horizontal
3447.5149	-45.82	-13.00	32.82	Horizontal
16401.4467	-43.86	-13.00	30.86	Horizontal
17997.9999	-44.87	-13.00	31.87	Horizontal



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7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
113.2302	-64.90	-13.00	51.90	Vertical
700.1095	-62.94	-13.00	49.94	Vertical
2703.1406	-36.72	-13.00	23.72	Vertical
3472.5158	-59.91	-13.00	46.91	Vertical
14697.8899	-47.29	-13.00	34.29	Vertical
17997.9999	-39.45	-13.00	26.45	Vertical
45.2298	-64.21	-13.00	51.21	Horizontal
235.5048	-68.34	-13.00	55.34	Horizontal
2700.7401	-35.39	-13.00	22.39	Horizontal
3472.0157	-44.67	-13.00	31.67	Horizontal
16401.4467	-43.78	-13.00	30.78	Horizontal
17995.4999	-44.74	-13.00	31.74	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 had been displayed.





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	4.80	0.002791	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	VN	NT	-7.20	-0.004186	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	VH	NT	-1.10	-0.000640	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	VL	NT	-9.40	-0.005426	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	VN	NT	4.10	0.002367	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	VH	NT	-7.80	-0.004502	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	VL	NT	-8.50	-0.004871	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	VN	NT	-9.50	-0.005444	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	VH	NT	-8.20	-0.004699	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	VL	NT	3.90	0.002267	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	VN	NT	6.50	0.003779	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	VH	NT	1.50	0.000872	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	VL	NT	7.20	0.004156	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	VN	NT	-5.00	-0.002886	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	VH	NT	1.50	0.000866	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	VL	NT	0.40	0.000229	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	VN	NT	3.00	0.001719	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	VH	NT	-0.70	-0.000401	±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	-5.90	-0.003430	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	-20	6.40	0.003721	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	0	1.90	0.001105	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	10	-2.60	-0.001512	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	20	-7.00	-0.004070	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	30	6.70	0.003895	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	40	3.10	0.001802	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	50	-1.20	-0.000698	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	-30	2.70	0.001558	±2.5	PASS



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Band4	20MHz	QPSK	20175	100RB#0	NV	-20	-5.50	-0.003175	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	0	5.40	0.003117	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	10	-4.20	-0.002424	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	20	7.00	0.004040	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	30	-2.50	-0.001443	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	40	7.70	0.004444	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	50	0.00	0.000000	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	-30	-9.00	-0.005158	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	-20	7.60	0.004355	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	0	6.00	0.003438	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	10	5.40	0.003095	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	20	6.00	0.003438	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	30	3.00	0.001719	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	40	-1.00	-0.000573	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	50	-3.80	-0.002178	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	-30	0.60	0.000349	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	-20	-0.30	-0.000174	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	0	-2.30	-0.001337	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	10	-4.00	-0.002326	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	20	-4.00	-0.002326	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	30	-3.00	-0.001744	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	40	-1.40	-0.000814	±2.5	PASS
Band4	20MHz	16QAM	20050	100RB#0	NV	50	-1.40	-0.000814	±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	-7.10	-0.004098	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	0	5.00	0.002886	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	10	1.30	0.000750	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	20	-3.10	-0.001789	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	30	-5.90	-0.003405	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	40	3.80	0.002193	±2.5	PASS
Band4	20MHz	16QAM	20175	100RB#0	NV	50	0.20	0.000115	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	-30	-2.20	-0.001261	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	-20	-3.00	-0.001719	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	0	-3.80	-0.002178	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	10	-5.20	-0.002980	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	20	-6.10	-0.003496	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	30	-7.80	-0.004470	±2.5	PASS
Band4	20MHz	16QAM	20300	100RB#0	NV	40	-8.60	-0.004928	±2.5	PASS



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Band4	20MHz	16QAM	20300	100RB#0	NV	50	-8.50	-0.004871	±2.5	PASS
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