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# 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	23.19	25.19	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#2	22.94	24.94	30.00	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	23.12	25.12	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#0	22.98	24.98	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#1	22.9	24.90	30.00	PASS
Band4	1.4MHz	QPSK	19957	3RB#3	22.83	24.83	30.00	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	21.83	23.83	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	23.06	25.06	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#2	22.82	24.82	30.00	PASS
Band4	1.4MHz	QPSK	20175	1RB#5	23.14	25.14	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#0	23.07	25.07	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#1	23.19	25.19	30.00	PASS
Band4	1.4MHz	QPSK	20175	3RB#3	22.93	24.93	30.00	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	21.9	23.90	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	22.94	24.94	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#2	22.9	24.90	30.00	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	22.81	24.81	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#0	22.87	24.87	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#1	22.93	24.93	30.00	PASS
Band4	1.4MHz	QPSK	20393	3RB#3	22.97	24.97	30.00	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	21.87	23.87	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	21.9	23.90	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#2	21.94	23.94	30.00	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	21.94	23.94	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#0	22.16	24.16	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#1	21.81	23.81	30.00	PASS
Band4	1.4MHz	16QAM	19957	3RB#3	21.96	23.96	30.00	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	20.96	22.96	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	22.15	24.15	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#2	21.95	23.95	30.00	PASS
Band4	1.4MHz	16QAM	20175	1RB#5	22.1	24.10	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#0	21.97	23.97	30.00	PASS



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Band4	1.4MHz	16QAM	20175	3RB#1	21.98	23.98	30.00	PASS
Band4	1.4MHz	16QAM	20175	3RB#3	21.99	23.99	30.00	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	21.14	23.14	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	21.94	23.94	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#2	21.89	23.89	30.00	PASS
Band4	1.4MHz	16QAM	20393	1RB#5	22.01	24.01	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#0	22.08	24.08	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#1	22.16	24.16	30.00	PASS
Band4	1.4MHz	16QAM	20393	3RB#3	21.98	23.98	30.00	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	21	23.00	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#0	23.19	25.19	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#8	22.91	24.91	30.00	PASS
Band4	3MHz	QPSK	19965	1RB#14	23.16	25.16	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#0	21.91	23.91	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#4	21.9	23.90	30.00	PASS
Band4	3MHz	QPSK	19965	8RB#7	21.83	23.83	30.00	PASS
Band4	3MHz	QPSK	19965	15RB#0	21.84	23.84	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#0	22.87	24.87	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#8	22.99	24.99	30.00	PASS
Band4	3MHz	QPSK	20175	1RB#14	22.92	24.92	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#0	21.83	23.83	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#4	22.19	24.19	30.00	PASS
Band4	3MHz	QPSK	20175	8RB#7	21.96	23.96	30.00	PASS
Band4	3MHz	QPSK	20175	15RB#0	21.86	23.86	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#0	22.92	24.92	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#8	22.89	24.89	30.00	PASS
Band4	3MHz	QPSK	20385	1RB#14	22.97	24.97	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#0	21.88	23.88	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#4	22	24.00	30.00	PASS
Band4	3MHz	QPSK	20385	8RB#7	21.87	23.87	30.00	PASS
Band4	3MHz	QPSK	20385	15RB#0	21.93	23.93	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#0	21.95	23.95	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#8	22.19	24.19	30.00	PASS
Band4	3MHz	16QAM	19965	1RB#14	22.01	24.01	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#0	20.96	22.96	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#4	21.08	23.08	30.00	PASS
Band4	3MHz	16QAM	19965	8RB#7	21.19	23.19	30.00	PASS
Band4	3MHz	16QAM	19965	15RB#0	20.96	22.96	30.00	PASS



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			1				I	I
Band4	3MHz	16QAM	20175	1RB#0	21.87	23.87	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#8	22.17	24.17	30.00	PASS
Band4	3MHz	16QAM	20175	1RB#14	21.83	23.83	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#0	21.06	23.06	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#4	20.99	22.99	30.00	PASS
Band4	3MHz	16QAM	20175	8RB#7	20.89	22.89	30.00	PASS
Band4	3MHz	16QAM	20175	15RB#0	20.86	22.86	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#0	21.99	23.99	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#8	22.03	24.03	30.00	PASS
Band4	3MHz	16QAM	20385	1RB#14	21.81	23.81	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#0	21.14	23.14	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#4	21.04	23.04	30.00	PASS
Band4	3MHz	16QAM	20385	8RB#7	21.01	23.01	30.00	PASS
Band4	3MHz	16QAM	20385	15RB#0	20.91	22.91	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#0	22.94	24.94	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#12	23.05	25.05	30.00	PASS
Band4	5MHz	QPSK	19975	1RB#24	22.88	24.88	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#0	22.18	24.18	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#6	22	24.00	30.00	PASS
Band4	5MHz	QPSK	19975	12RB#13	22.18	24.18	30.00	PASS
Band4	5MHz	QPSK	19975	25RB#0	21.97	23.97	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#0	23.1	25.10	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#12	23.15	25.15	30.00	PASS
Band4	5MHz	QPSK	20175	1RB#24	22.91	24.91	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#0	21.91	23.91	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#6	22.16	24.16	30.00	PASS
Band4	5MHz	QPSK	20175	12RB#13	21.92	23.92	30.00	PASS
Band4	5MHz	QPSK	20175	25RB#0	21.9	23.90	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#0	22.99	24.99	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#12	22.93	24.93	30.00	PASS
Band4	5MHz	QPSK	20375	1RB#24	23.18	25.18	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#0	21.93	23.93	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#6	21.85	23.85	30.00	PASS
Band4	5MHz	QPSK	20375	12RB#13	21.81	23.81	30.00	PASS
Band4	5MHz	QPSK	20375	25RB#0	21.86	23.86	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#0	22.05	24.05	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#12	21.96	23.96	30.00	PASS
Band4	5MHz	16QAM	19975	1RB#24	22.04	24.04	30.00	PASS



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Band4	5MHz	16QAM	19975	12RB#0	21.2	23.20	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#6	21.03	23.03	30.00	PASS
Band4	5MHz	16QAM	19975	12RB#13	21.06	23.06	30.00	PASS
Band4	5MHz	16QAM	19975	25RB#0	21.1	23.10	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#0	22.05	24.05	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#12	22.16	24.16	30.00	PASS
Band4	5MHz	16QAM	20175	1RB#24	22.11	24.11	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#0	21.05	23.05	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#6	21.01	23.01	30.00	PASS
Band4	5MHz	16QAM	20175	12RB#13	21.11	23.11	30.00	PASS
Band4	5MHz	16QAM	20175	25RB#0	20.9	22.90	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#0	21.98	23.98	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#12	21.82	23.82	30.00	PASS
Band4	5MHz	16QAM	20375	1RB#24	21.86	23.86	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#0	20.83	22.83	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#6	20.93	22.93	30.00	PASS
Band4	5MHz	16QAM	20375	12RB#13	21.08	23.08	30.00	PASS
Band4	5MHz	16QAM	20375	25RB#0	20.89	22.89	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#0	22.89	24.89	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#24	22.92	24.92	30.00	PASS
Band4	10MHz	QPSK	20000	1RB#49	22.97	24.97	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#0	21.95	23.95	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#12	21.86	23.86	30.00	PASS
Band4	10MHz	QPSK	20000	25RB#25	22.04	24.04	30.00	PASS
Band4	10MHz	QPSK	20000	50RB#0	21.83	23.83	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#0	23.06	25.06	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#24	22.89	24.89	30.00	PASS
Band4	10MHz	QPSK	20175	1RB#49	22.92	24.92	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#0	21.87	23.87	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#12	22.02	24.02	30.00	PASS
Band4	10MHz	QPSK	20175	25RB#25	21.89	23.89	30.00	PASS
Band4	10MHz	QPSK	20175	50RB#0	21.88	23.88	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#0	22.82	24.82	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#24	23.2	25.20	30.00	PASS
Band4	10MHz	QPSK	20350	1RB#49	23.15	25.15	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#0	21.85	23.85	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#12	22.19	24.19	30.00	PASS
Band4	10MHz	QPSK	20350	25RB#25	22	24.00	30.00	PASS



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5 4	40141	0.001/	22252	5000 #0	00.40	04.40	00.00	D4.00
Band4	10MHz	QPSK	20350	50RB#0	22.16	24.16	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#0	22.1	24.10	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#24	21.81	23.81	30.00	PASS
Band4	10MHz	16QAM	20000	1RB#49	21.97	23.97	30.00	PASS
Band4	10MHz	16QAM	20000	27RB#0	22.17	24.17	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#0	21.9	23.90	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#24	21.98	23.98	30.00	PASS
Band4	10MHz	16QAM	20175	1RB#49	21.88	23.88	30.00	PASS
Band4	10MHz	16QAM	20175	27RB#0	22.08	24.08	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#0	21.84	23.84	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#24	22.06	24.06	30.00	PASS
Band4	10MHz	16QAM	20350	1RB#49	22.17	24.17	30.00	PASS
Band4	10MHz	16QAM	20350	27RB#0	22.09	24.09	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#0	23.09	25.09	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#38	23.15	25.15	30.00	PASS
Band4	15MHz	QPSK	20025	1RB#74	23.11	25.11	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#0	21.88	23.88	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#18	22.02	24.02	30.00	PASS
Band4	15MHz	QPSK	20025	36RB#39	21.96	23.96	30.00	PASS
Band4	15MHz	QPSK	20025	75RB#0	21.81	23.81	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#0	23.05	25.05	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#38	23.11	25.11	30.00	PASS
Band4	15MHz	QPSK	20175	1RB#74	23.18	25.18	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#0	21.82	23.82	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#18	22.03	24.03	30.00	PASS
Band4	15MHz	QPSK	20175	36RB#39	21.84	23.84	30.00	PASS
Band4	15MHz	QPSK	20175	75RB#0	22.06	24.06	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#0	23.16	25.16	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#38	22.95	24.95	30.00	PASS
Band4	15MHz	QPSK	20325	1RB#74	22.91	24.91	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#0	21.88	23.88	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#18	22.13	24.13	30.00	PASS
Band4	15MHz	QPSK	20325	36RB#39	22.03	24.03	30.00	PASS
Band4	15MHz	QPSK	20325	75RB#0	22.07	24.07	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#0	22.05	24.05	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#38	22	24.00	30.00	PASS
Band4	15MHz	16QAM	20025	1RB#74	21.94	23.94	30.00	PASS
Band4	15MHz	16QAM	20025	27RB#0	22.12	24.12	30.00	PASS



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Band4	15MHz	16QAM	20175	1RB#0	22.15	24.15	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#38	21.84	23.84	30.00	PASS
Band4	15MHz	16QAM	20175	1RB#74	21.83	23.83	30.00	PASS
Band4	15MHz	16QAM	20175	27RB#0	21.87	23.87	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#0	22.09	24.09	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#38	21.84	23.84	30.00	PASS
Band4	15MHz	16QAM	20325	1RB#74	21.98	23.98	30.00	PASS
Band4	15MHz	16QAM	20325	27RB#0	22.01	24.01	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#0	22.83	24.83	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#49	22.86	24.86	30.00	PASS
Band4	20MHz	QPSK	20050	1RB#99	23.07	25.07	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#0	22.01	24.01	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#25	21.81	23.81	30.00	PASS
Band4	20MHz	QPSK	20050	50RB#50	21.92	23.92	30.00	PASS
Band4	20MHz	QPSK	20050	100RB#0	22.18	24.18	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#0	23.13	25.13	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#49	22.99	24.99	30.00	PASS
Band4	20MHz	QPSK	20175	1RB#99	23.03	25.03	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#0	21.91	23.91	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#25	22.12	24.12	30.00	PASS
Band4	20MHz	QPSK	20175	50RB#50	21.95	23.95	30.00	PASS
Band4	20MHz	QPSK	20175	100RB#0	22.16	24.16	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#0	23.2	25.20	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#49	22.87	24.87	30.00	PASS
Band4	20MHz	QPSK	20300	1RB#99	22.91	24.91	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#0	22.15	24.15	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#25	21.98	23.98	30.00	PASS
Band4	20MHz	QPSK	20300	50RB#50	21.96	23.96	30.00	PASS
Band4	20MHz	QPSK	20300	100RB#0	22.05	24.05	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#0	21.88	23.88	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#49	22.16	24.16	30.00	PASS
Band4	20MHz	16QAM	20050	1RB#99	22.04	24.04	30.00	PASS
Band4	20MHz	16QAM	20050	27RB#0	22.18	24.18	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#0	22.19	24.19	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#49	22.05	24.05	30.00	PASS
Band4	20MHz	16QAM	20175	1RB#99	22.14	24.14	30.00	PASS
Band4	20MHz	16QAM	20175	27RB#0	22.18	24.18	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#0	22.06	24.06	30.00	PASS



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Band4	20MHz	16QAM	20300	1RB#49	22.11	24.11	30.00	PASS
Band4	20MHz	16QAM	20300	1RB#99	21.9	23.90	30.00	PASS
Band4	20MHz	16QAM	20300	27RB#0	21.88	23.88	30.00	PASS

#### Remark:

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

ERP [dBm] = Conducted Power [dBm] + Gain [dBd]

EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]



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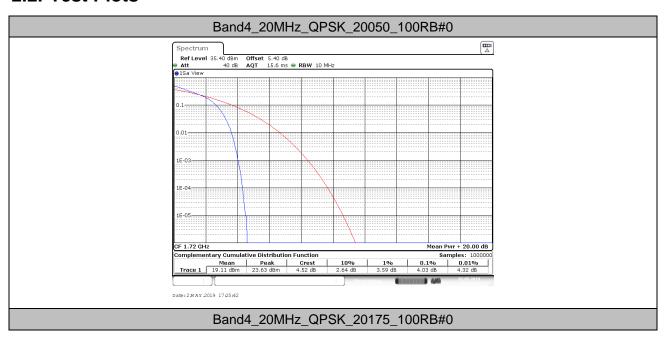
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#### 2. Peak-to-Average Ratio(CCDF)

#### 2.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	20MHz	QPSK	20050	100RB#0	4.03	13	PASS
Band4	20MHz	QPSK	20175	100RB#0	3.97	13	PASS
Band4	20MHz	QPSK	20300	100RB#0	4.06	13	PASS
Band4	20MHz	16QAM	20050	27RB#0	5.80	13	PASS
Band4	20MHz	16QAM	20175	27RB#0	5.68	13	PASS
Band4	20MHz	16QAM	20300	27RB#0	5.86	13	PASS

#### 2.2. Test Plots



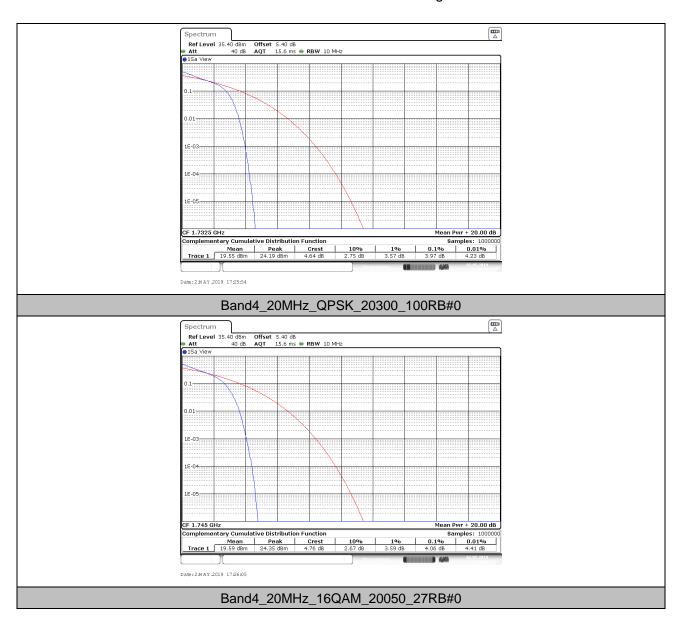


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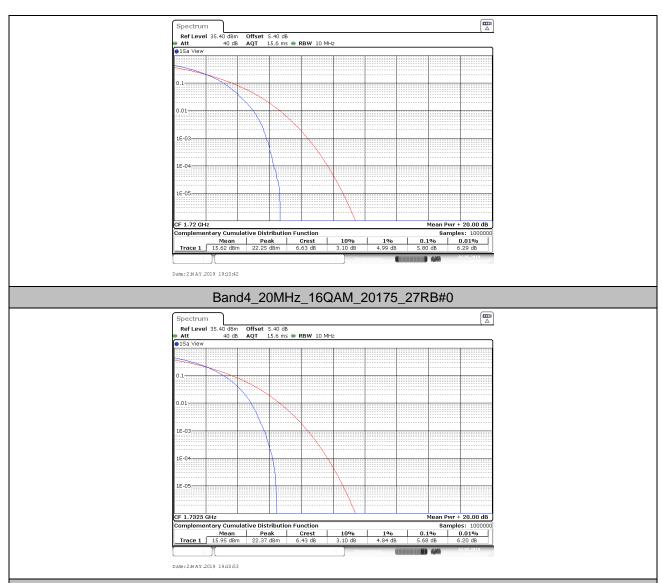
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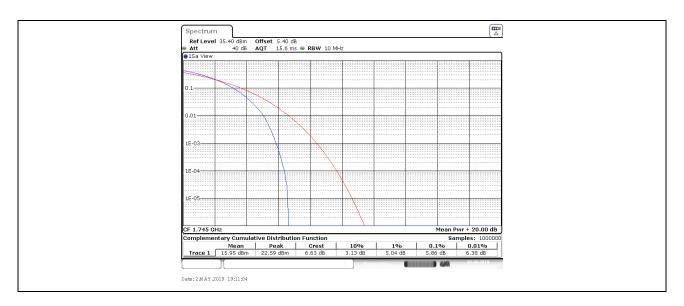


Band4\_20MHz\_16QAM\_20300\_27RB#0



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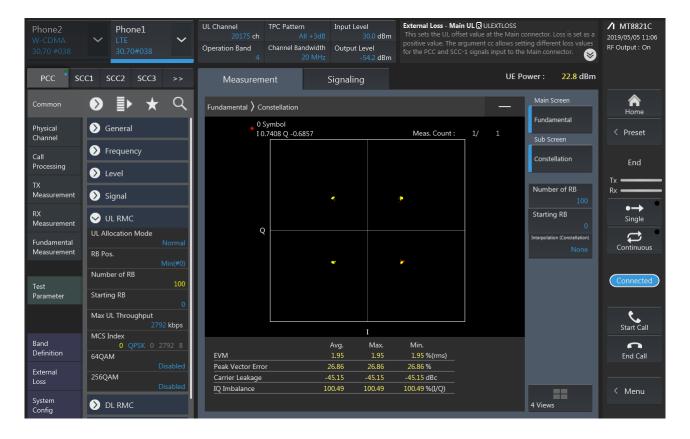
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#### 3. Modulation Characteristics

- 3.1. Test BAND = LTE Band 4
- 3.2. Test Mode = LTE /TM1 20MHz
- 3.2.1.Test Channel = MCH

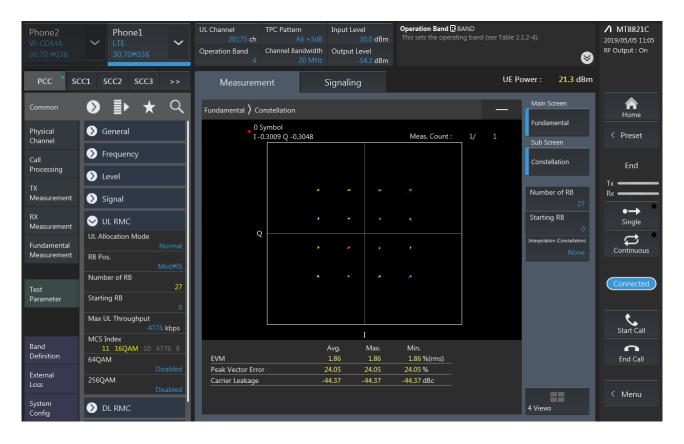




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#### 3.3. Test Mode = LTE /TM2 20MHz

#### 3.3.1.Test Channel = MCH





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#### 4. 26dB Bandwidth and Occupied Bandwidth

#### 4.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	1.088	1.239	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.094	1.233	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	1.088	1.242	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	1.088	1.239	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.082	1.221	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	1.088	1.239	PASS
Band4	3MHz	QPSK	19965	15RB#0	2.691	3.012	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.697	3.012	PASS
Band4	3MHz	QPSK	20385	15RB#0	2.697	2.988	PASS
Band4	3MHz	16QAM	19965	15RB#0	2.685	2.982	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.685	2.982	PASS
Band4	3MHz	16QAM	20385	15RB#0	2.685	2.982	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.476	4.890	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.476	4.900	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.466	4.890	PASS
Band4	5MHz	16QAM	19975	25RB#0	4.486	4.920	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.486	4.910	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.486	4.930	PASS
Band4	10MHz	QPSK	20000	50RB#0	8.931	9.620	PASS
Band4	10MHz	QPSK	20175	50RB#0	8.931	9.700	PASS
Band4	10MHz	QPSK	20350	50RB#0	8.931	9.660	PASS
Band4	10MHz	16QAM	20000	27RB#0	4.855	5.660	PASS
Band4	10MHz	16QAM	20175	27RB#0	4.875	5.660	PASS
Band4	10MHz	16QAM	20350	27RB#0	4.875	5.660	PASS
Band4	15MHz	QPSK	20025	75RB#0	13.457	14.790	PASS
Band4	15MHz	QPSK	20175	75RB#0	13.457	14.730	PASS
Band4	15MHz	QPSK	20325	75RB#0	13.457	14.790	PASS
Band4	15MHz	16QAM	20025	27RB#0	5.035	5.970	PASS
Band4	15MHz	16QAM	20175	27RB#0	5.065	6.090	PASS
Band4	15MHz	16QAM	20325	27RB#0	5.065	6.090	PASS
Band4	20MHz	QPSK	20050	100RB#0	17.902	19.400	PASS



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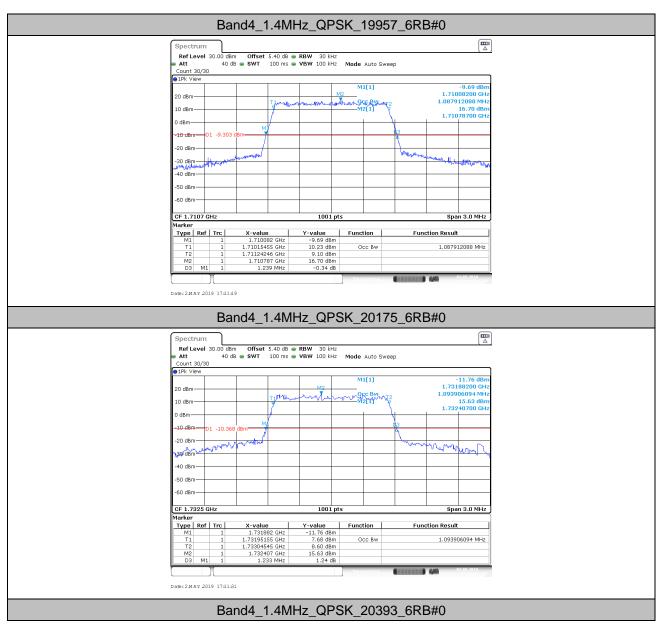


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Band4	20MHz	QPSK	20175	100RB#0	17.862	19.360	PASS
Band4	20MHz	QPSK	20300	100RB#0	17.902	19.440	PASS
Band4	20MHz	16QAM	20050	27RB#0	5.195	6.480	PASS
Band4	20MHz	16QAM	20175	27RB#0	5.155	6.480	PASS
Band4	20MHz	16QAM	20300	27RB#0	5.155	6.400	PASS

#### 4.2. Test Plots





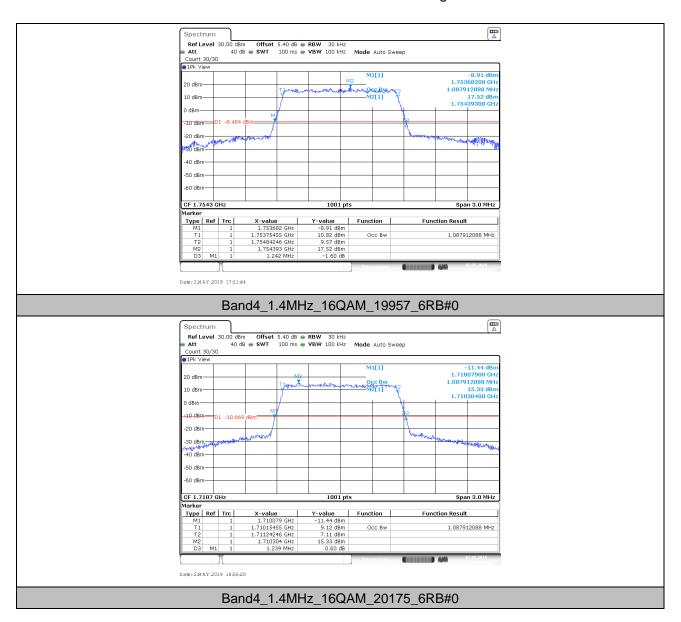
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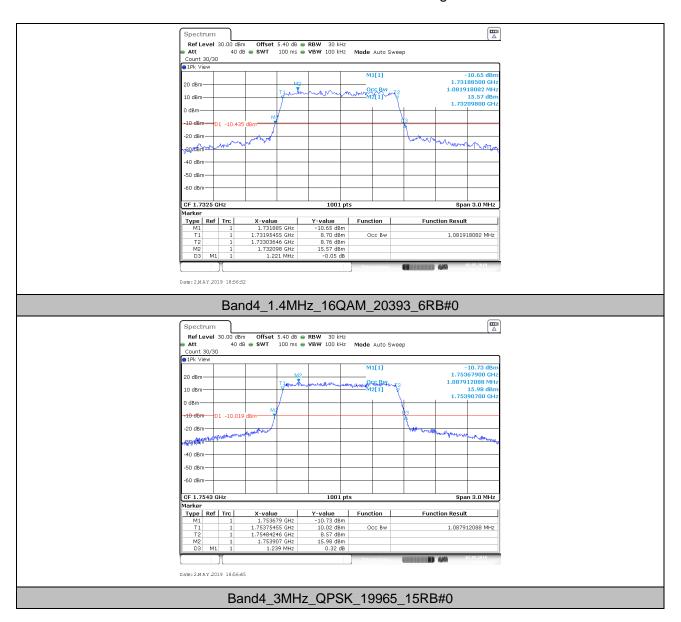






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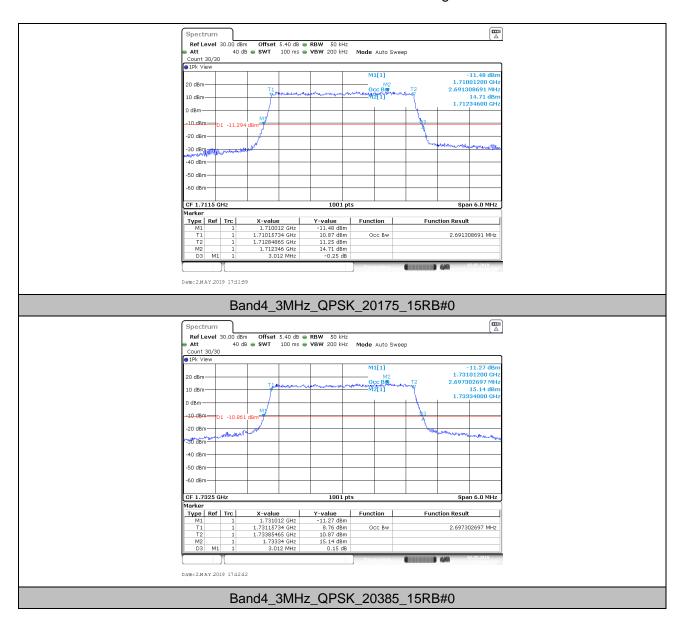






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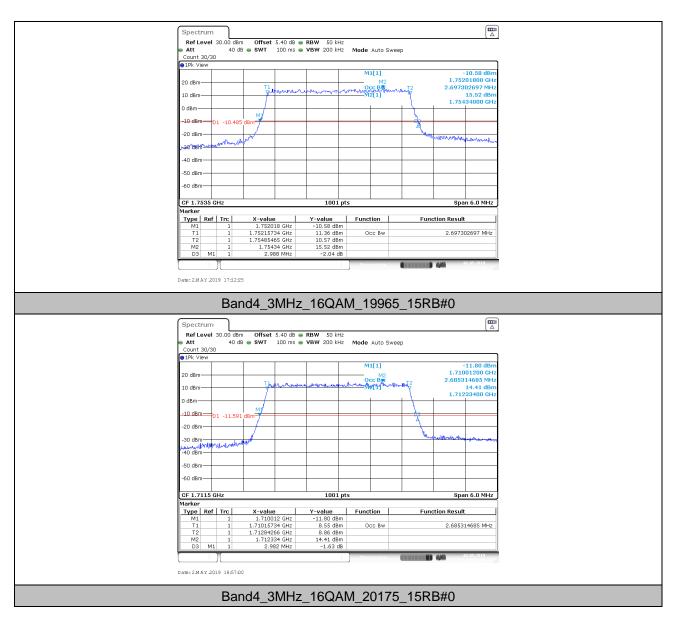






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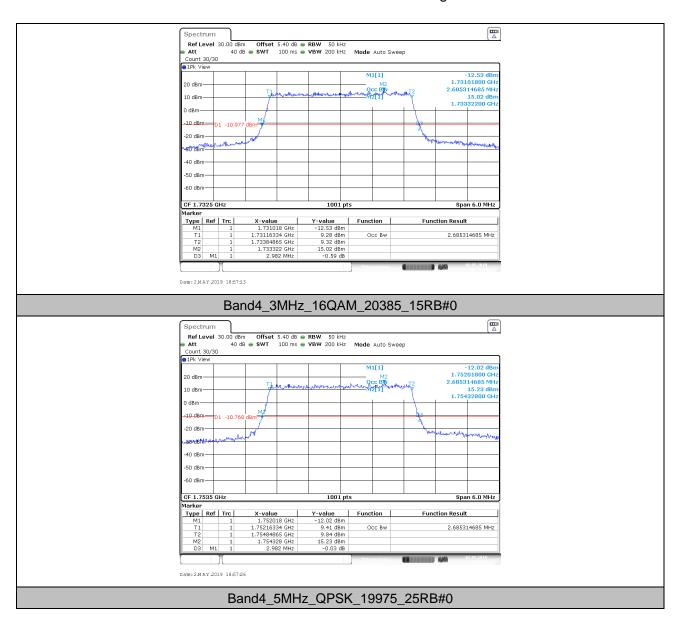
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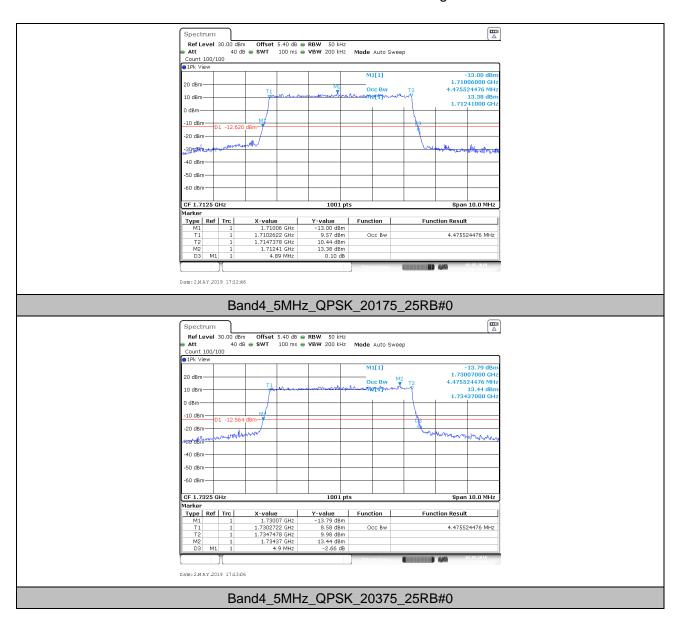






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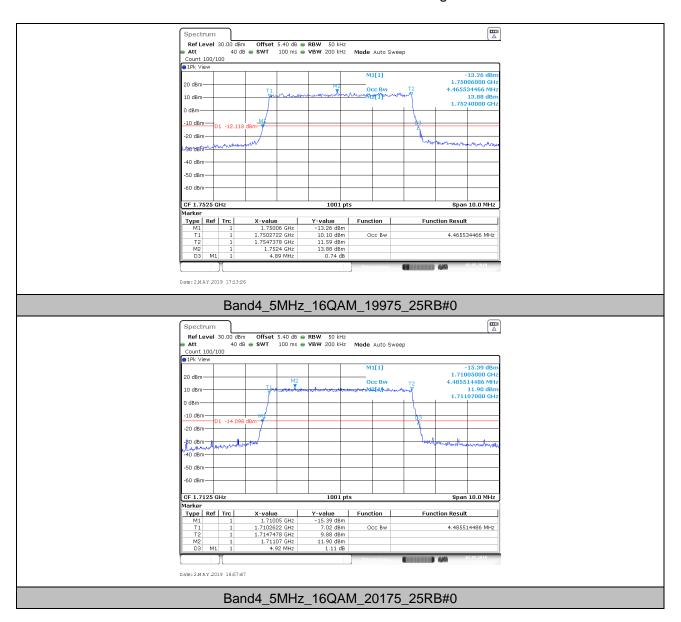
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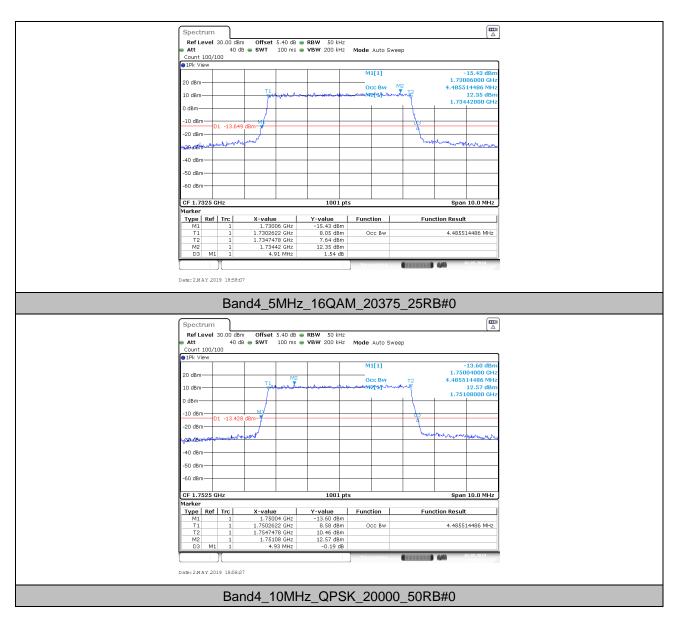






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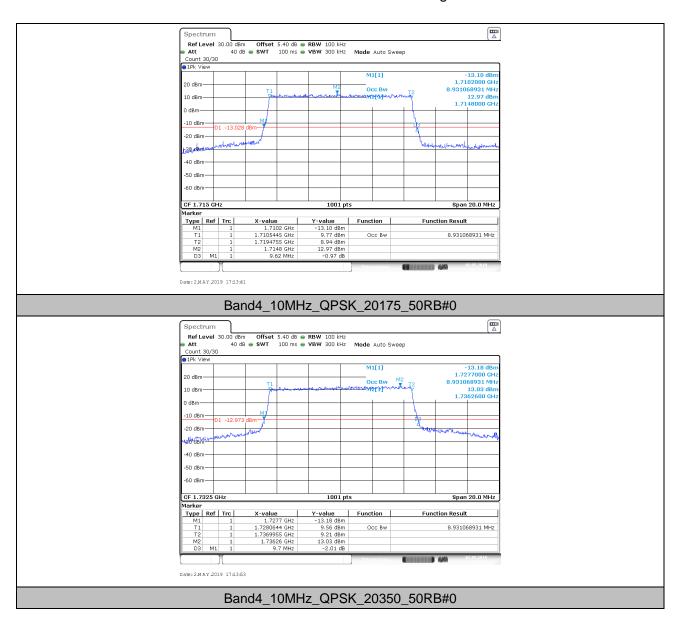






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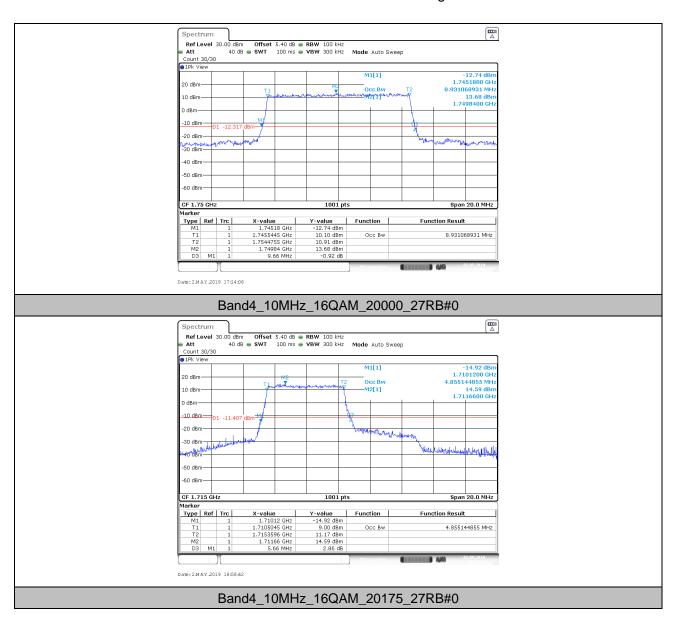
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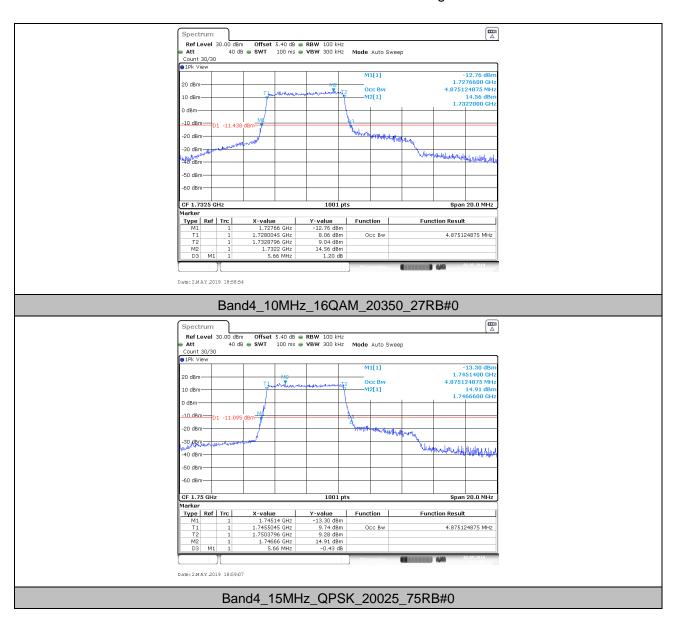
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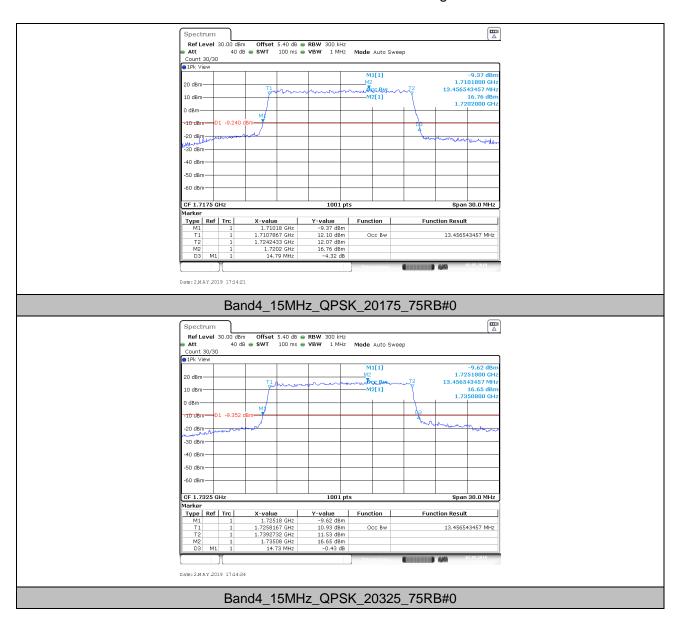
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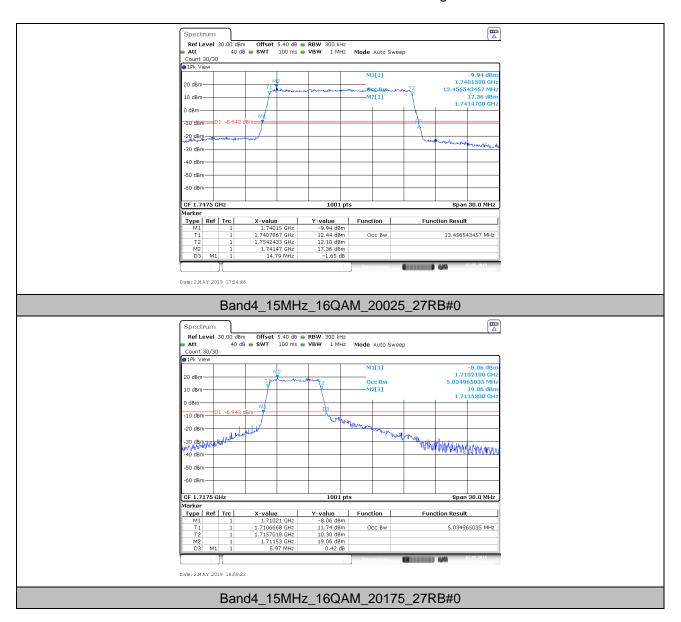
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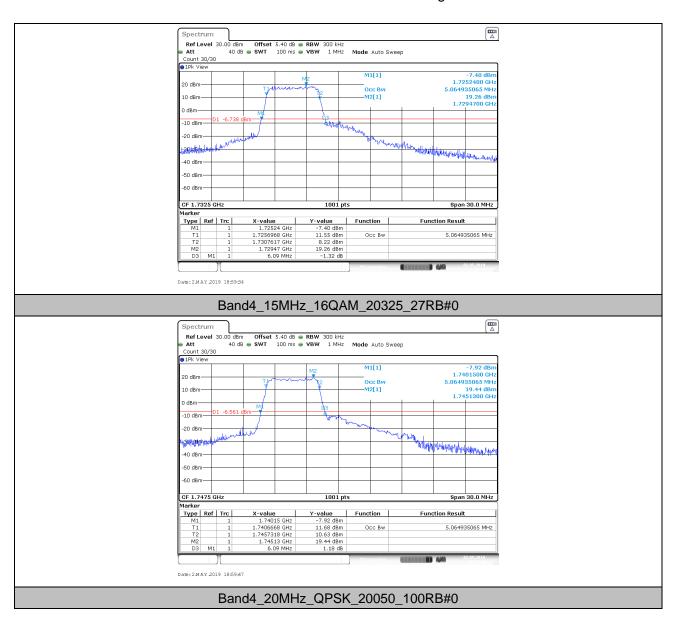






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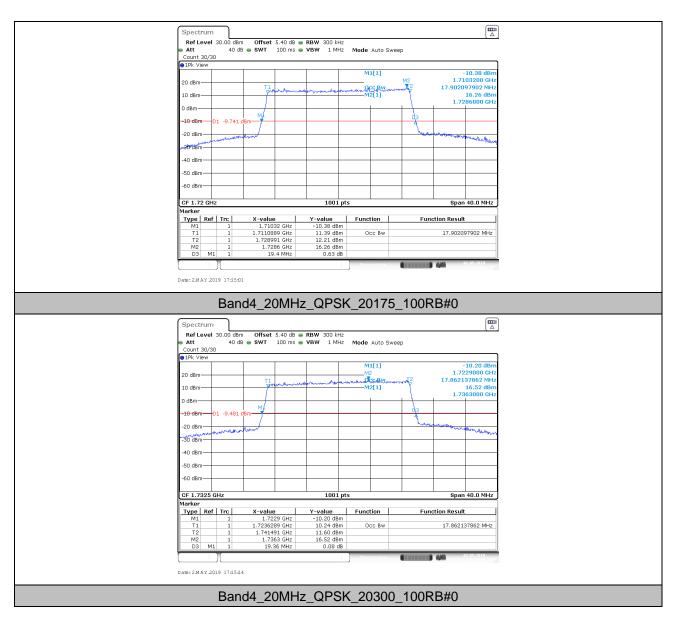
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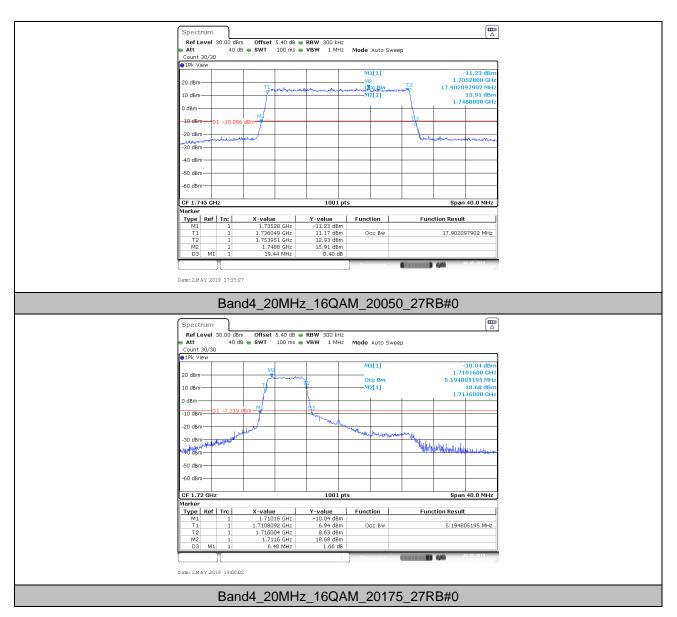






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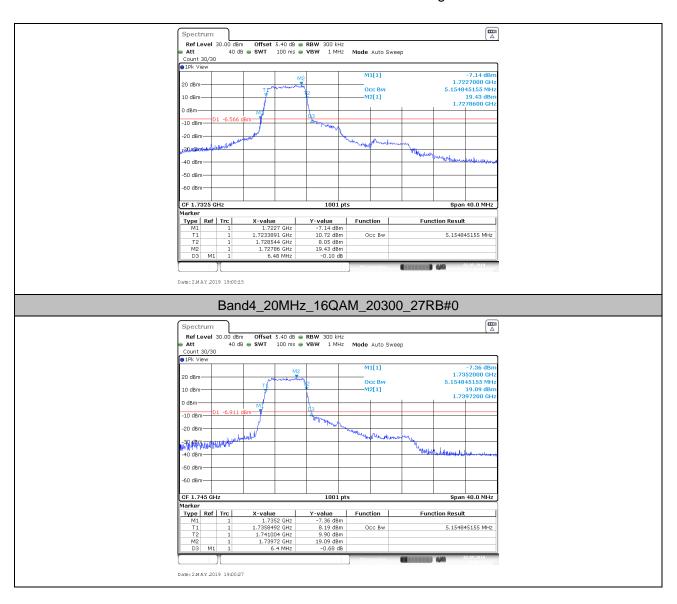
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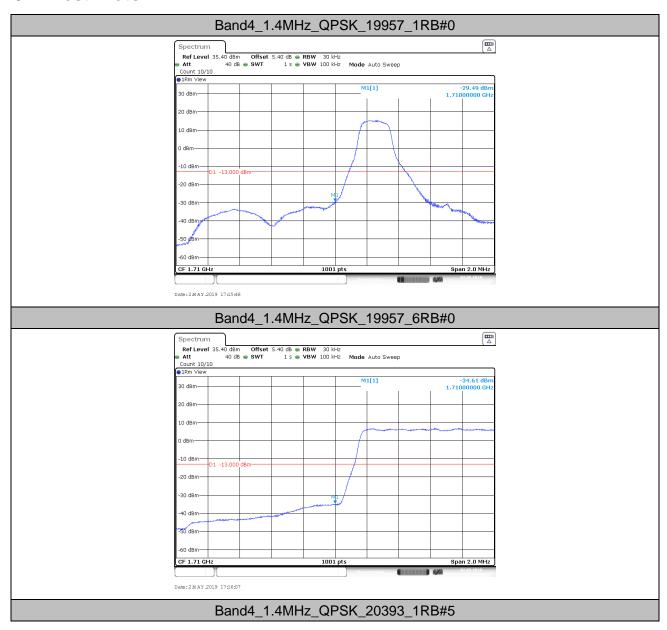
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#### 5. Band Edge Compliance

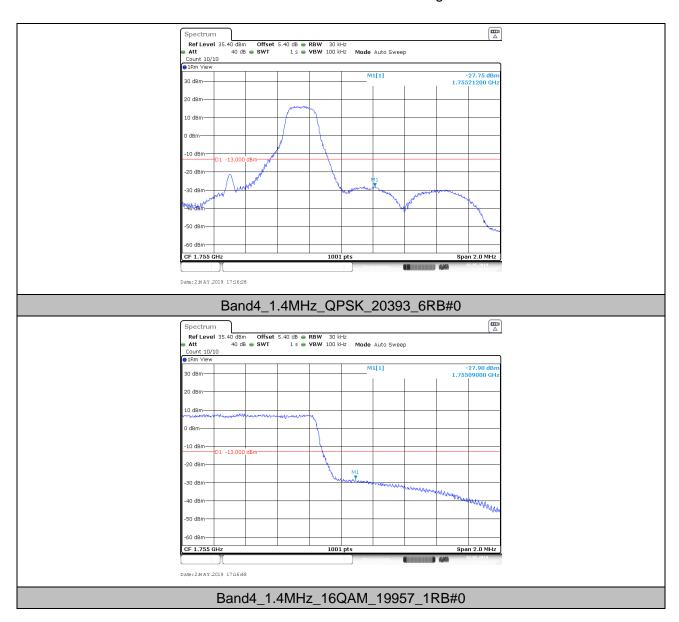
#### 5.1. Test Plots





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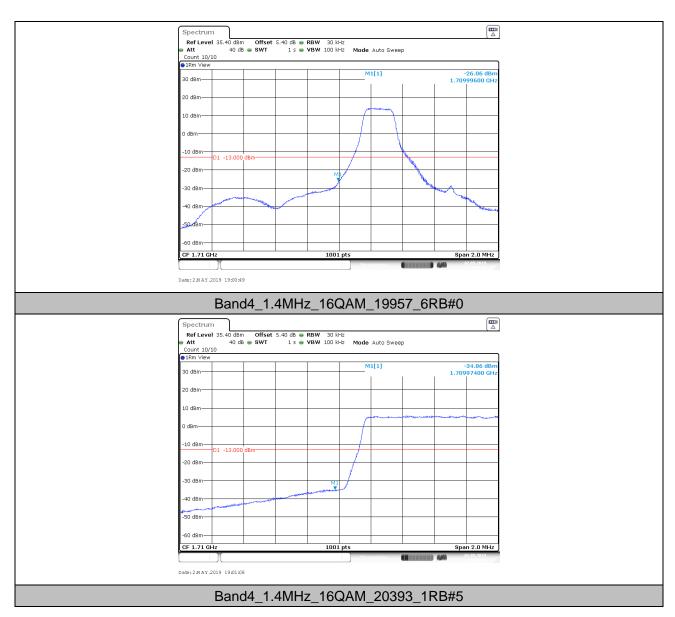
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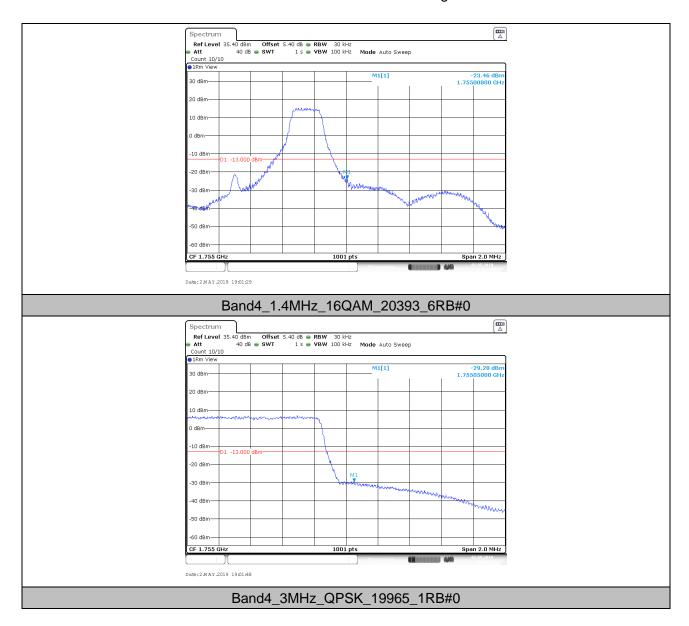
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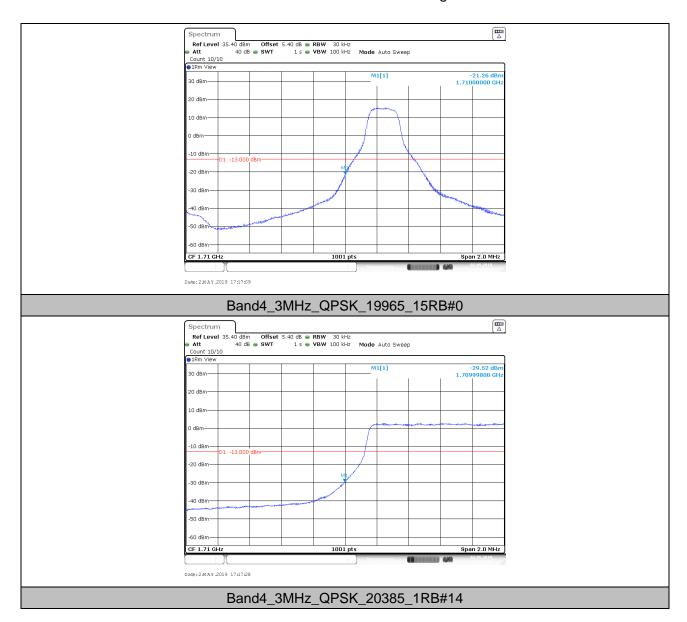
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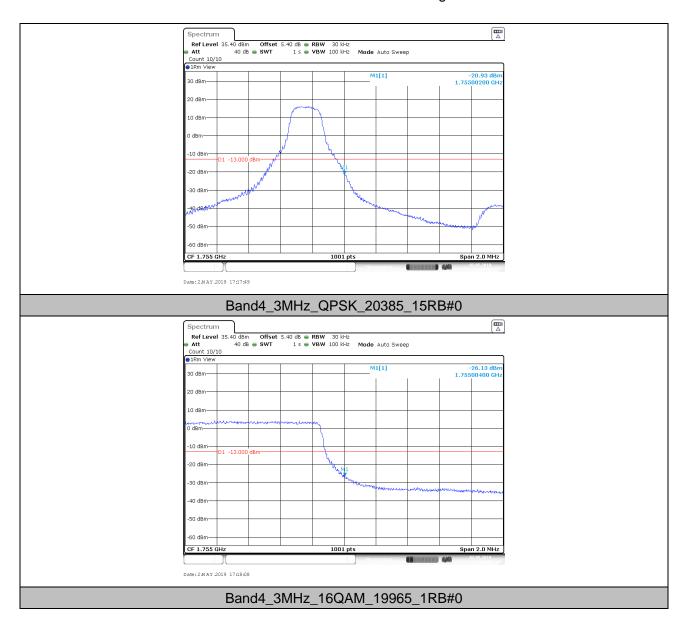
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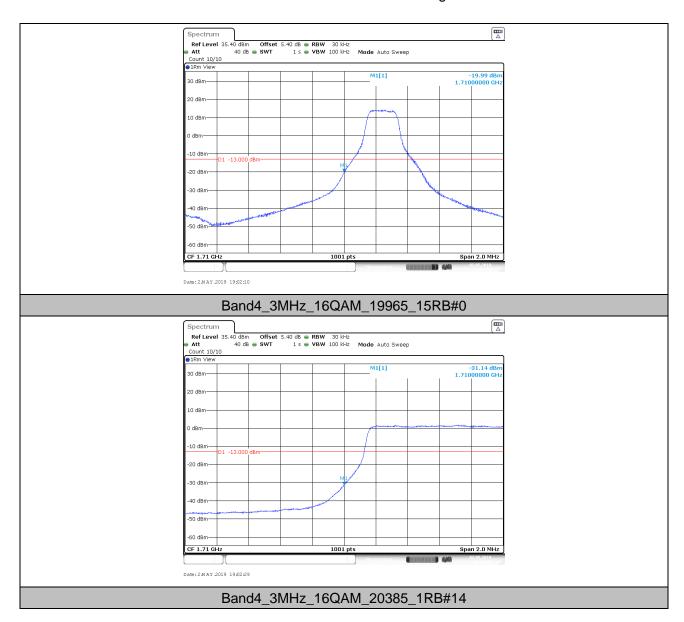
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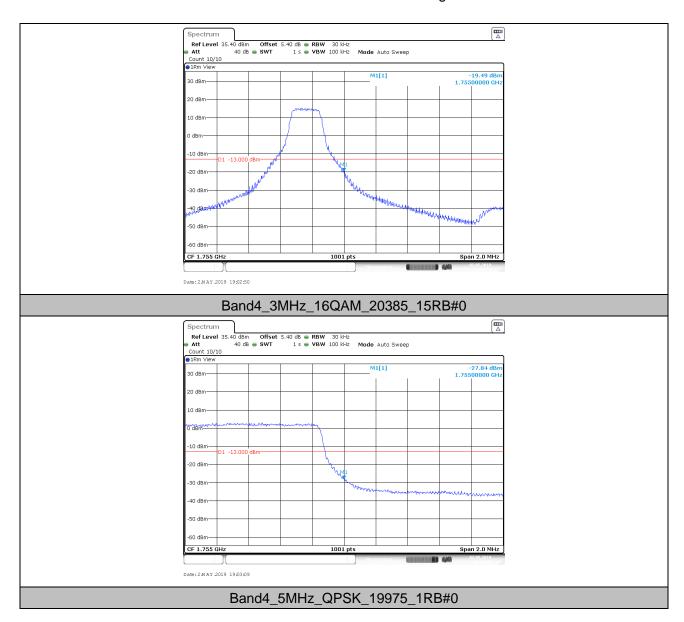






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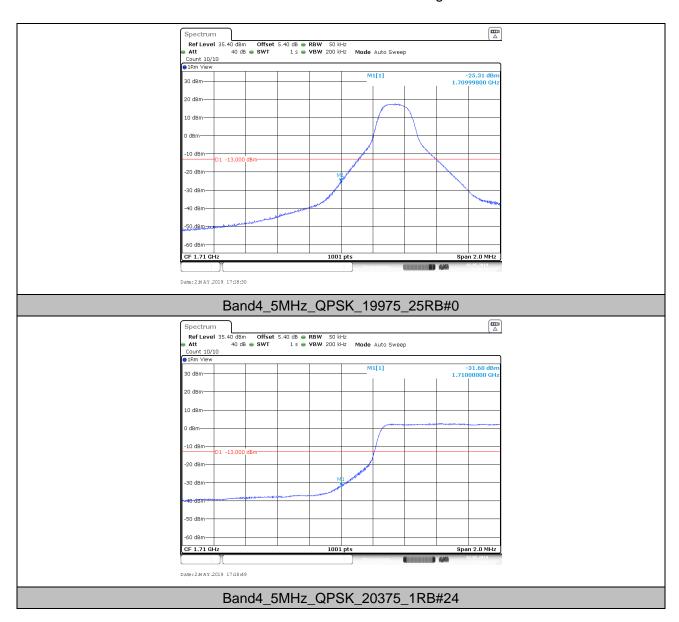
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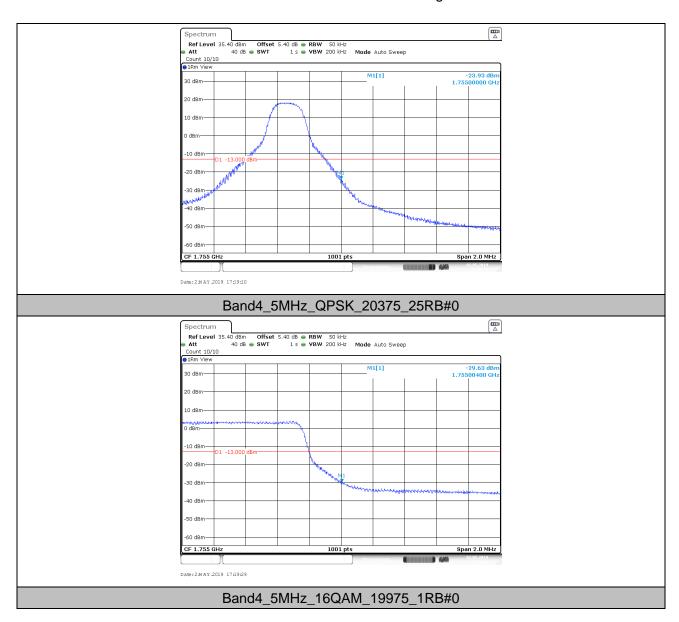
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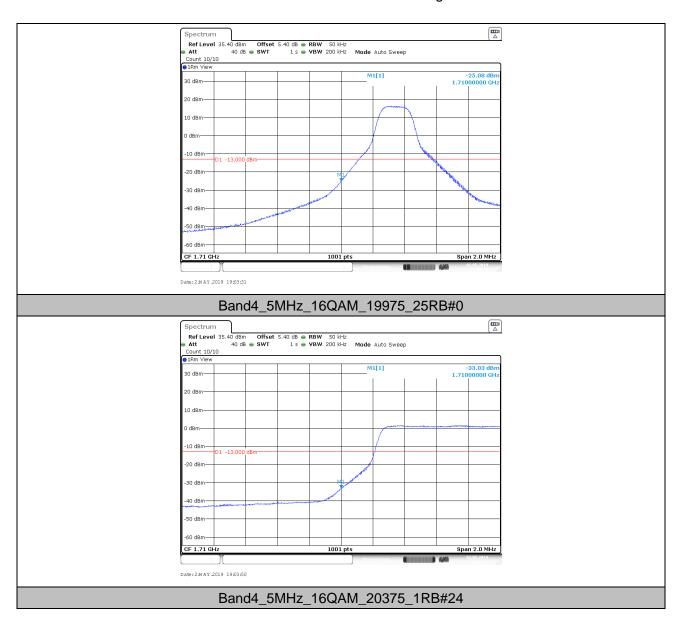
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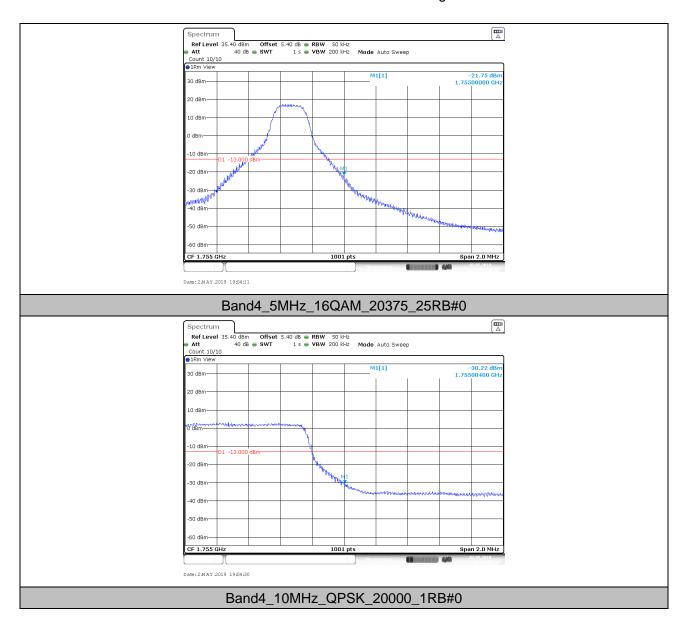
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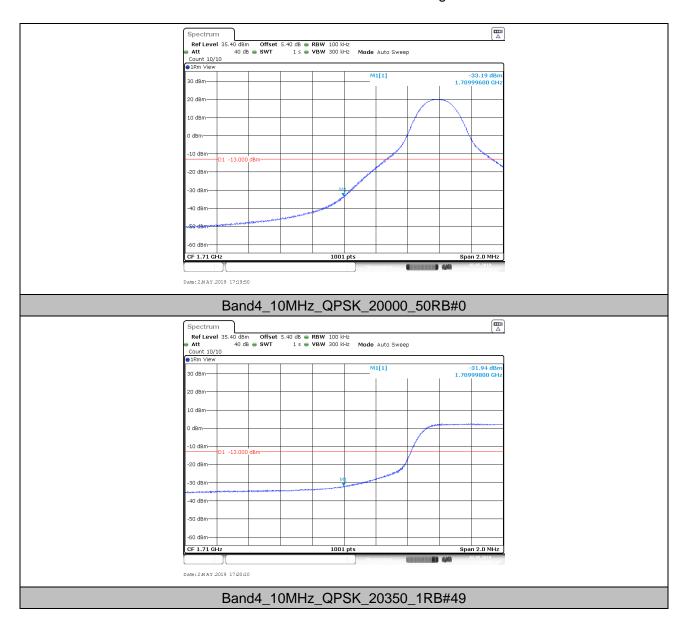
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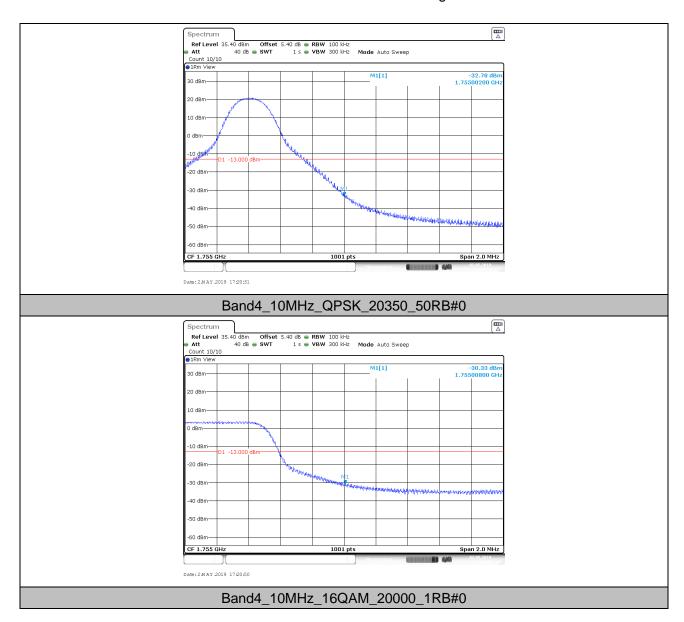






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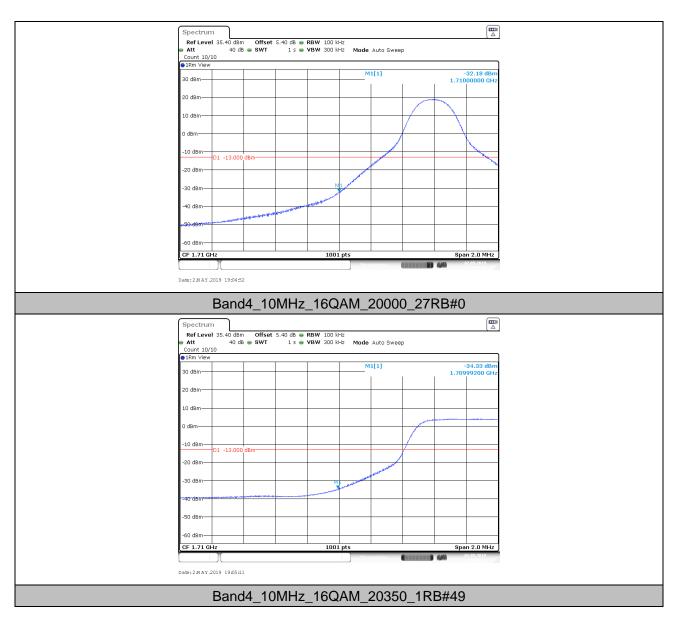
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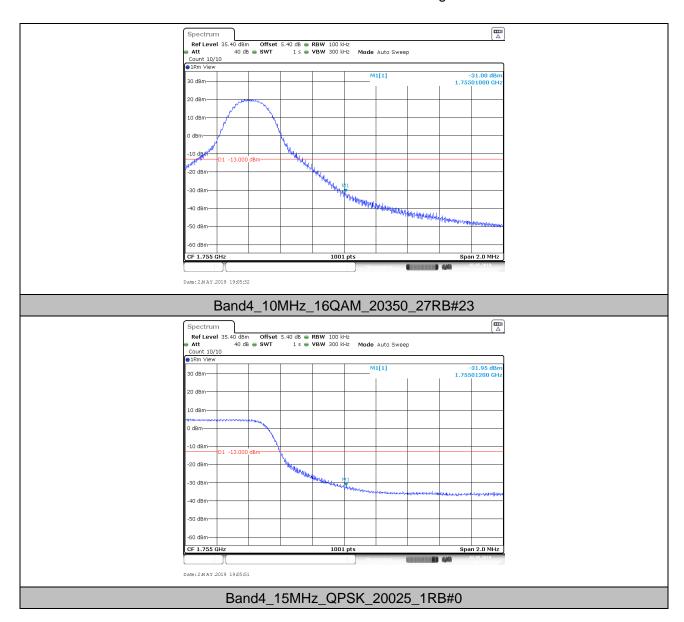






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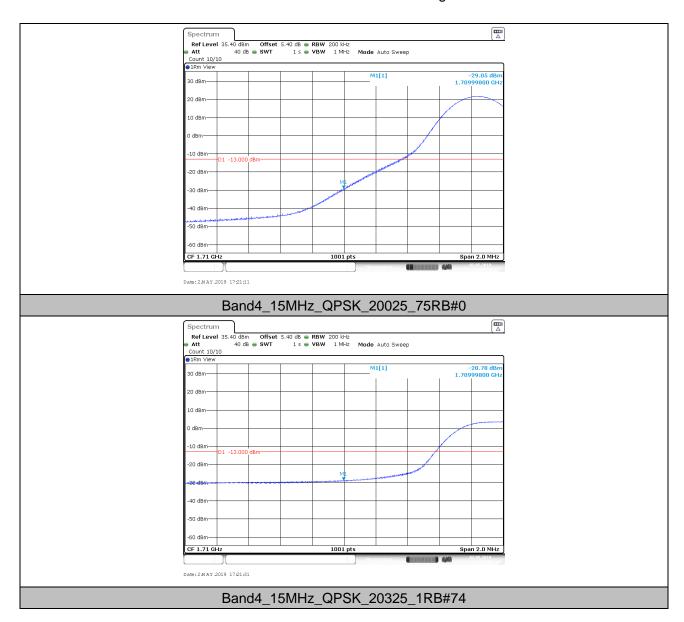
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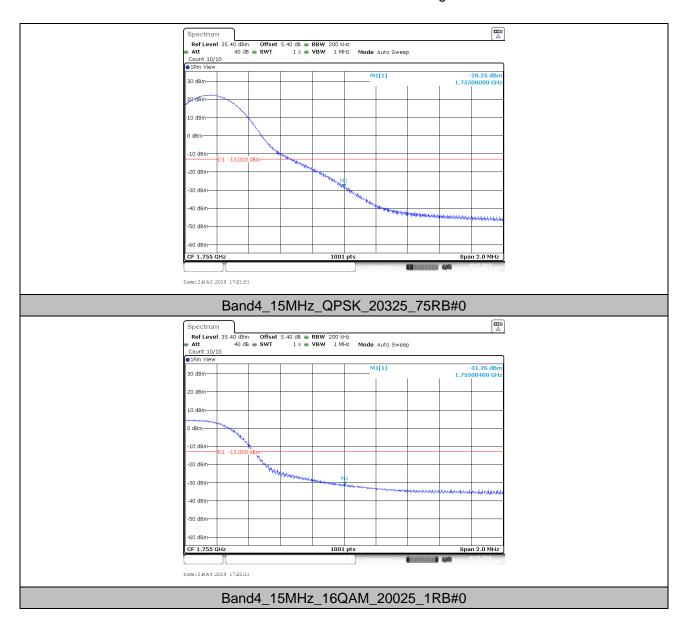
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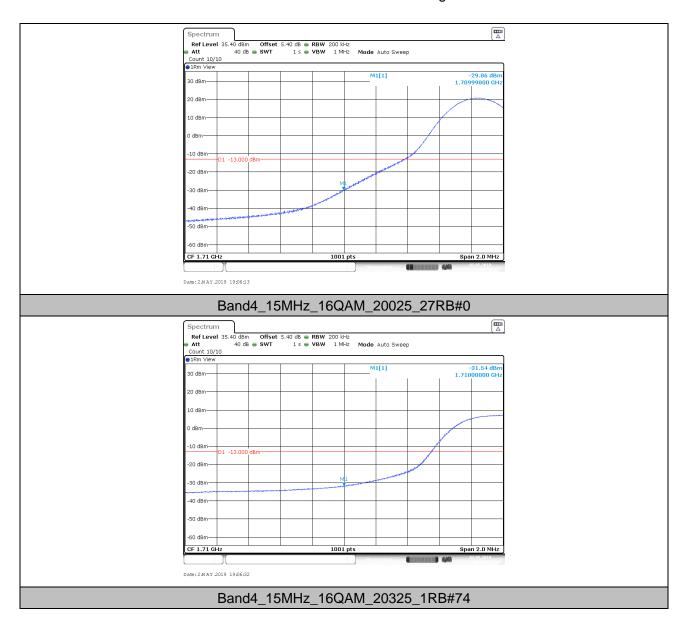
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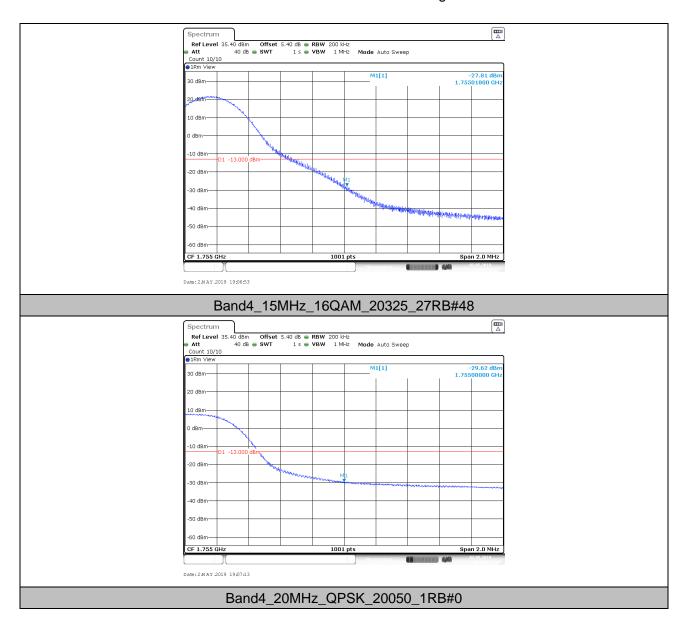
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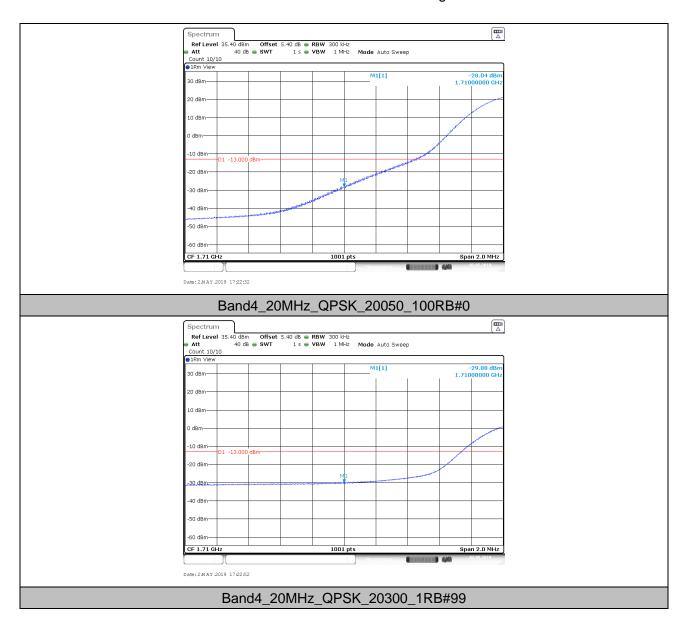






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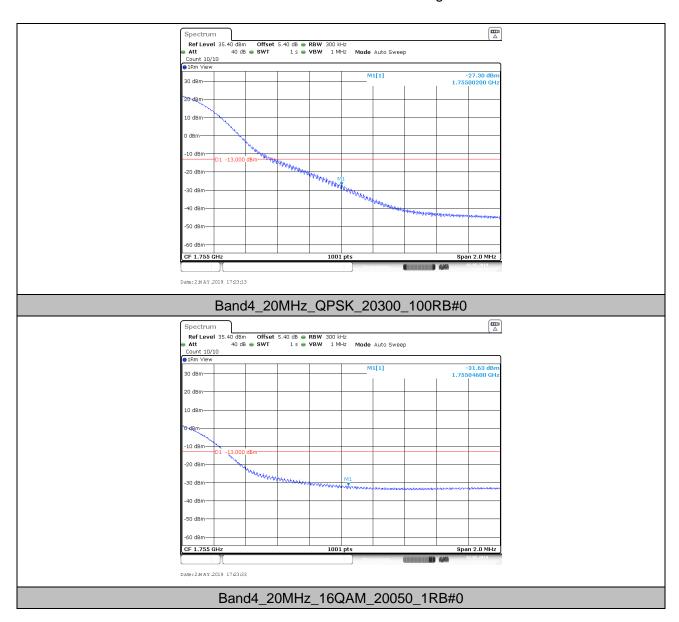






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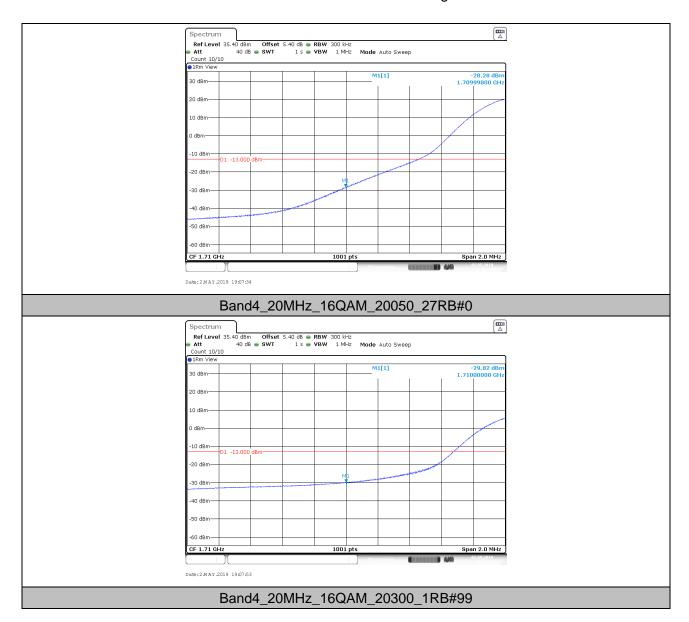
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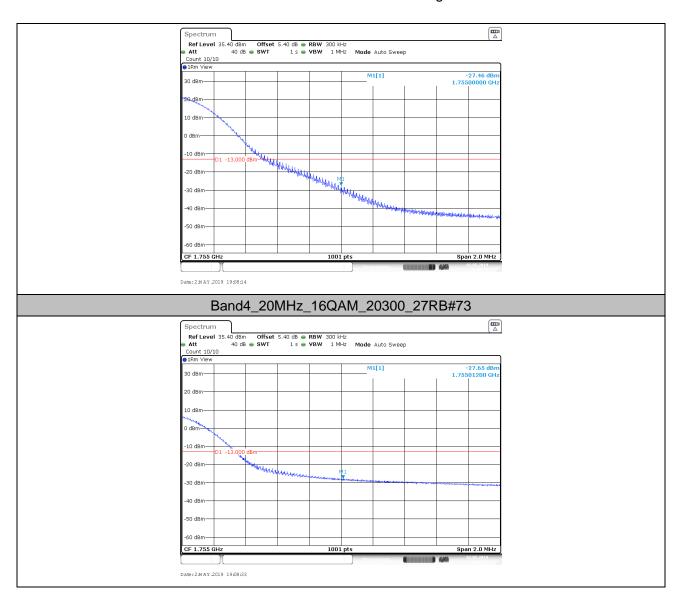






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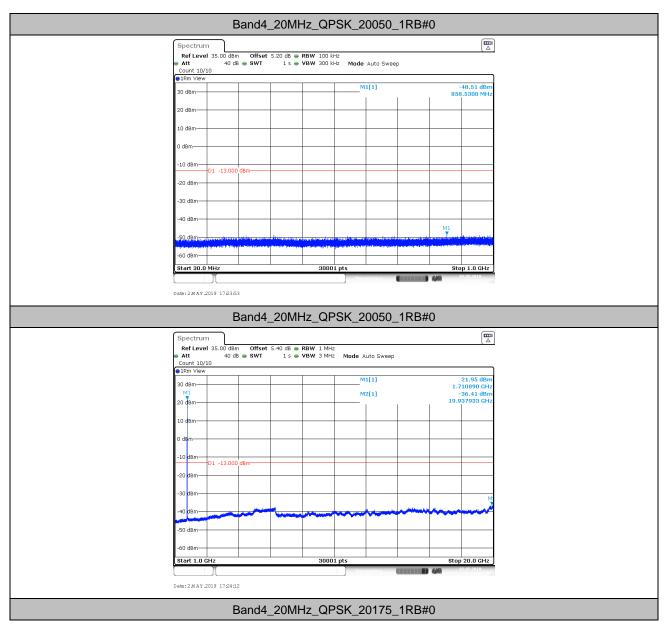
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#### 6. Spurious Emission at Antenna Terminal

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 \* (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

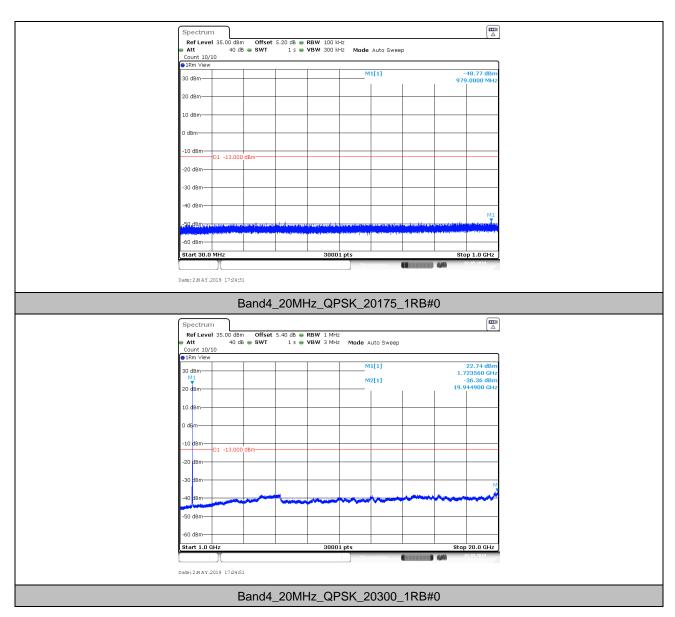






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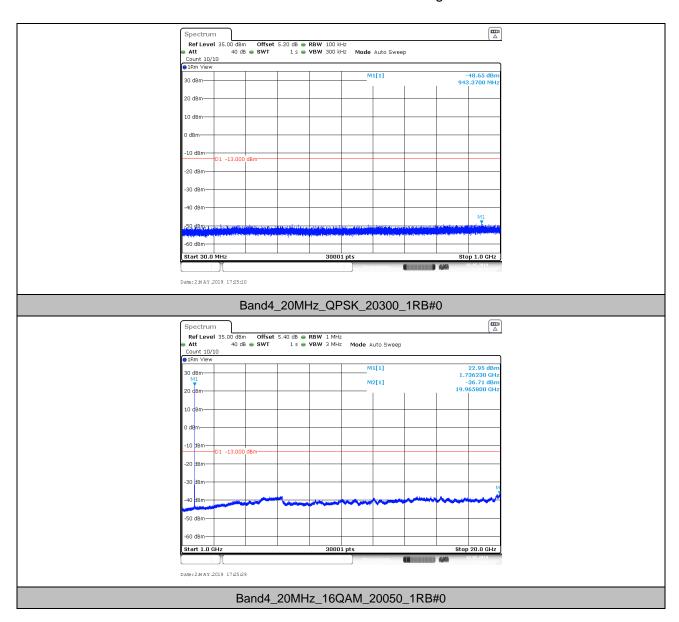






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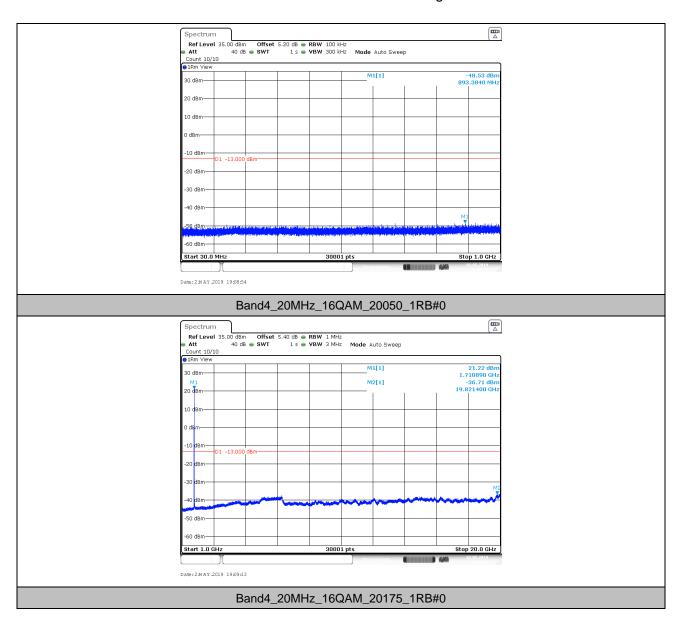






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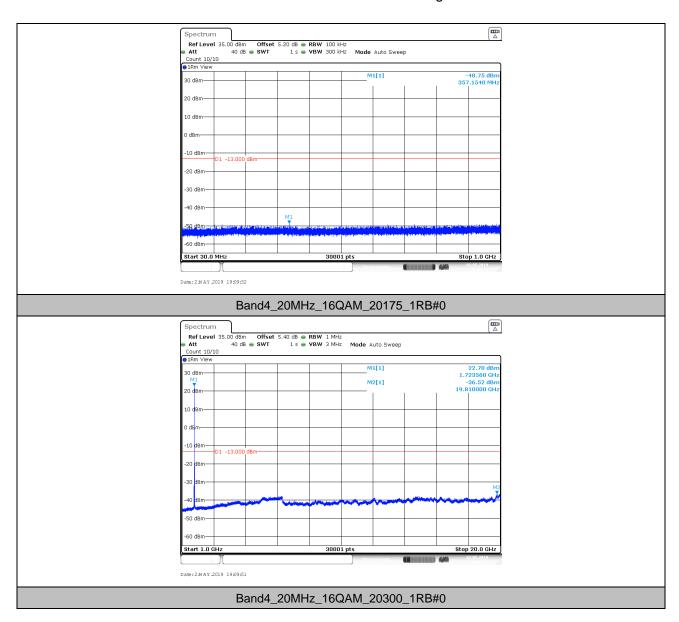






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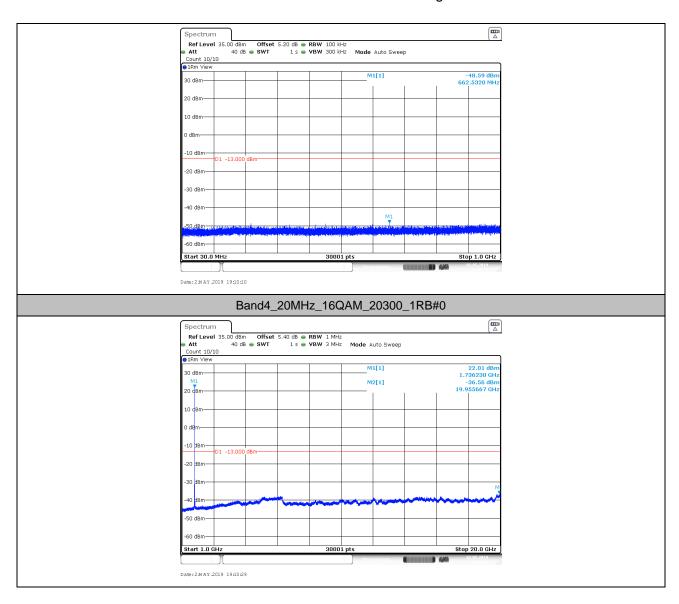






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#### 7. Field Strength of Spurious Radiation

#### 7.1. Test BAND = LTE Band 4

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

#### 7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
78.1508	-65.62	-13	52.62	Vertical
135.7380	-65.43	-13	52.43	Vertical
746.7053	-62.62	-13	49.62	Vertical
3801.1972	-48.83	-13	35.83	Vertical
5728.1324	-44.58	-13	31.58	Vertical
17986.0368	-30.87	-13	17.87	Vertical
24.7341	-65.27	-13	52.27	Horizontal
140.9265	-64.04	-13	51.04	Horizontal
505.4232	-67.25	-13	54.25	Horizontal
2687.9713	-36.88	-13	23.88	Horizontal
5736.1921	-47.67	-13	34.67	Horizontal
17979.9962	-36.03	-13	23.03	Horizontal

#### 7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
63.8788	-65.33	-13	52.33	Vertical
116.1441	-65.54	-13	52.54	Vertical
746.5081	-62.56	-13	49.56	Vertical
3805.6559	-48.10	-13	35.10	Vertical
5723.4559	-43.41	-13	30.41	Vertical
17969.8610	-29.52	-13	16.52	Vertical
59.7806	-63.54	-13	50.54	Horizontal
140.5199	-63.96	-13	50.96	Horizontal
515.1620	-67.21	-13	54.21	Horizontal
2708.4388	-36.32	-13	23.32	Horizontal
5740.7130	-47.90	-13	34.90	Horizontal
17968.7620	-36.05	-13	23.05	Horizontal



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#### 7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
69.9289	-65.88	-13	52.88	Vertical
111.1643	-64.48	-13	51.48	Vertical
739.2278	-61.91	-13	48.91	Vertical
3822.4030	-49.50	-13	36.50	Vertical
5741.3358	-44.51	-13	31.51	Vertical
17995.2113	-30.47	-13	17.47	Vertical
23.3780	-65.09	-13	52.09	Horizontal
136.8734	-62.79	-13	49.79	Horizontal
480.3862	-67.33	-13	54.33	Horizontal
2696.2408	-37.16	-13	24.16	Horizontal
5721.5638	-46.88	-13	33.88	Horizontal
17984.0986	-35.25	-13	22.25	Horizontal

#### Remark:

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.

We have tested all modulation and all Bandwidth, but only the worst case data presented in this report.



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#### 8. Frequency Stability

#### 8.1. Frequency Vs Voltage

	Voltage									
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	20MHz	QPSK	20050	100RB#0	VL	NT	-10.52	-0.006118	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	VN	NT	-9.80	-0.005698	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	VH	NT	-3.68	-0.002137	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	VL	NT	-5.24	-0.003023	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	VN	NT	2.24	0.001290	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	VH	NT	-4.22	-0.002433	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	VL	NT	9.75	0.005587	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	VN	NT	3.74	0.002142	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	VH	NT	12.30	0.007049	±2.5	PASS
Band4	20MHz	16QAM	20050	27RB#0	VL	NT	-0.51	-0.000294	±2.5	PASS
Band4	20MHz	16QAM	20050	27RB#0	VN	NT	-3.93	-0.002287	±2.5	PASS
Band4	20MHz	16QAM	20050	27RB#0	VH	NT	0.43	0.000250	±2.5	PASS
Band4	20MHz	16QAM	20175	27RB#0	VL	NT	-11.55	-0.006668	±2.5	PASS
Band4	20MHz	16QAM	20175	27RB#0	VN	NT	-4.62	-0.002668	±2.5	PASS
Band4	20MHz	16QAM	20175	27RB#0	VH	NT	-13.12	-0.007573	±2.5	PASS
Band4	20MHz	16QAM	20300	27RB#0	VL	NT	-4.86	-0.002787	±2.5	PASS
Band4	20MHz	16QAM	20300	27RB#0	VN	NT	6.53	0.003744	±2.5	PASS
Band4	20MHz	16QAM	20300	27RB#0	VH	NT	10.92	0.006258	±2.5	PASS

#### 8.2. Frequency Vs Temperature

	Temperature									
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	20MHz	QPSK	20050	100RB#0	NV	-30	-12.37	-0.007191	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	-20	-7.30	-0.004242	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	0	13.29	0.007725	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	10	-4.13	-0.002403	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	20	-7.11	-0.004133	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	30	6.49	0.003775	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	40	-13.48	-0.007838	±2.5	PASS
Band4	20MHz	QPSK	20050	100RB#0	NV	50	8.67	0.005041	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	-30	-6.75	-0.003894	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	-20	-13.02	-0.007513	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	0	7.29	0.004209	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	10	11.91	0.006873	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	20	-6.78	-0.003916	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	30	11.25	0.006495	±2.5	PASS
Band4	20MHz	QPSK	20175	100RB#0	NV	40	5.79	0.003342	±2.5	PASS



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Band4	20MHz	QPSK	20175	100RB#0	NV	50	1.83	0.001056	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	-30	9.41	0.005391	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	-20	-0.83	-0.000479	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	0	-14.36	-0.008228	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	10	-8.17	-0.004683	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	20	-6.00	-0.003439	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	30	-8.56	-0.004904	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	40	-5.42	-0.003104	±2.5	PASS
Band4	20MHz	QPSK	20300	100RB#0	NV	50	-1.05	-0.000604	±2.5	PASS
Band4	20MHz	16QAM	20050	27RB#0	NV	-30	-12.64	-0.007352	±2.5	PASS
Band4	20MHz	16QAM	20050	27RB#0	NV	-20	-6.92	-0.004022	±2.5	PASS
Band4	20MHz	16QAM	20050	27RB#0	NV	0	-14.20	-0.008258	±2.5	PASS
Band4	20MHz	16QAM	20050	27RB#0	NV	10	-12.42	-0.007219	±2.5	PASS
Band4	20MHz	16QAM	20050	27RB#0	NV	20	9.62	0.005592	±2.5	PASS
Band4	20MHz	16QAM	20050	27RB#0	NV	30	-1.30	-0.000759	±2.5	PASS
Band4	20MHz	16QAM	20050	27RB#0	NV	40	-5.21	-0.003029	±2.5	PASS
Band4	20MHz	16QAM	20050	27RB#0	NV	50	0.12	0.000068	±2.5	PASS
Band4	20MHz	16QAM	20175	27RB#0	NV	-30	13.45	0.007762	±2.5	PASS
Band4	20MHz	16QAM	20175	27RB#0	NV	-20	-11.28	-0.006511	±2.5	PASS
Band4	20MHz	16QAM	20175	27RB#0	NV	0	-1.15	-0.000666	±2.5	PASS
Band4	20MHz	16QAM	20175	27RB#0	NV	10	4.99	0.002880	±2.5	PASS
Band4	20MHz	16QAM	20175	27RB#0	NV	20	10.48	0.006051	±2.5	PASS
Band4	20MHz	16QAM	20175	27RB#0	NV	30	-9.79	-0.005650	±2.5	PASS
Band4	20MHz	16QAM	20175	27RB#0	NV	40	14.18	0.008182	±2.5	PASS
Band4	20MHz	16QAM	20175	27RB#0	NV	50	1.40	0.000810	±2.5	PASS
Band4	20MHz	16QAM	20300	27RB#0	NV	-30	-3.16	-0.001810	±2.5	PASS
Band4	20MHz	16QAM	20300	27RB#0	NV	-20	-13.14	-0.007529	±2.5	PASS
Band4	20MHz	16QAM	20300	27RB#0	NV	0	1.56	0.000896	±2.5	PASS
Band4	20MHz	16QAM	20300	27RB#0	NV	10	-13.56	-0.007769	±2.5	PASS
Band4	20MHz	16QAM	20300	27RB#0	NV	20	12.36	0.007082	±2.5	PASS
Band4	20MHz	16QAM	20300	27RB#0	NV	30	2.61	0.001495	±2.5	PASS
Band4	20MHz	16QAM	20300	27RB#0	NV	40	2.45	0.001402	±2.5	PASS
Band4	20MHz	16QAM	20300	27RB#0	NV	50	-6.08	-0.003485	±2.5	PASS

The End

