



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	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
BAND4	1.4MHz	QPSK	19957	1RB#0	22.61	26.61	30.00	PASS
BAND4	1.4MHz	QPSK	19957	1RB#2	22.62	26.62	30.00	PASS
BAND4	1.4MHz	QPSK	19957	1RB#5	22.65	26.65	30.00	PASS
BAND4	1.4MHz	QPSK	19957	3RB#0	22.62	26.62	30.00	PASS
BAND4	1.4MHz	QPSK	19957	3RB#1	22.64	26.64	30.00	PASS
BAND4	1.4MHz	QPSK	19957	3RB#3	22.67	26.67	30.00	PASS
BAND4	1.4MHz	QPSK	19957	6RB#0	21.66	25.66	30.00	PASS
BAND4	1.4MHz	QPSK	20175	1RB#0	22.49	26.49	30.00	PASS
BAND4	1.4MHz	QPSK	20175	1RB#2	22.50	26.50	30.00	PASS
BAND4	1.4MHz	QPSK	20175	1RB#5	22.53	26.53	30.00	PASS
BAND4	1.4MHz	QPSK	20175	3RB#0	22.50	26.50	30.00	PASS
BAND4	1.4MHz	QPSK	20175	3RB#1	22.49	26.49	30.00	PASS
BAND4	1.4MHz	QPSK	20175	3RB#3	22.51	26.51	30.00	PASS
BAND4	1.4MHz	QPSK	20175	6RB#0	21.52	25.52	30.00	PASS
BAND4	1.4MHz	QPSK	20393	1RB#0	22.70	26.70	30.00	PASS
BAND4	1.4MHz	QPSK	20393	1RB#2	22.61	26.61	30.00	PASS
BAND4	1.4MHz	QPSK	20393	1RB#5	22.62	26.62	30.00	PASS
BAND4	1.4MHz	QPSK	20393	3RB#0	22.60	26.60	30.00	PASS
BAND4	1.4MHz	QPSK	20393	3RB#1	22.61	26.61	30.00	PASS
BAND4	1.4MHz	QPSK	20393	3RB#3	22.62	26.62	30.00	PASS
BAND4	1.4MHz	QPSK	20393	6RB#0	21.63	25.63	30.00	PASS
BAND4	1.4MHz	64QAM	19957	1RB#0	20.90	24.90	30.00	PASS
BAND4	1.4MHz	64QAM	19957	1RB#2	20.86	24.86	30.00	PASS
BAND4	1.4MHz	64QAM	19957	1RB#5	20.85	24.85	30.00	PASS
BAND4	1.4MHz	64QAM	19957	3RB#0	20.80	24.80	30.00	PASS
BAND4	1.4MHz	64QAM	19957	3RB#1	20.78	24.78	30.00	PASS
BAND4	1.4MHz	64QAM	19957	3RB#3	20.79	24.79	30.00	PASS
BAND4	1.4MHz	64QAM	19957	6RB#0	19.77	23.77	30.00	PASS
BAND4	1.4MHz	64QAM	20175	1RB#0	20.69	24.69	30.00	PASS
BAND4	1.4MHz	64QAM	20175	1RB#2	20.68	24.68	30.00	PASS
BAND4	1.4MHz	64QAM	20175	1RB#5	20.81	24.81	30.00	PASS
BAND4	1.4MHz	64QAM	20175	3RB#0	20.62	24.62	30.00	PASS
BAND4	1.4MHz	64QAM	20175	3RB#1	20.59	24.59	30.00	PASS
BAND4	1.4MHz	64QAM	20175	3RB#3	20.57	24.57	30.00	PASS



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BAND4	1.4MHz	64QAM	20175	6RB#0	19.63	23.63	30.00	PASS
BAND4	1.4MHz	64QAM	20393	1RB#0	20.90	24.90	30.00	PASS
BAND4	1.4MHz	64QAM	20393	1RB#2	20.82	24.82	30.00	PASS
BAND4	1.4MHz	64QAM	20393	1RB#5	20.84	24.84	30.00	PASS
BAND4	1.4MHz	64QAM	20393	3RB#0	20.72	24.72	30.00	PASS
BAND4	1.4MHz	64QAM	20393	3RB#1	20.67	24.67	30.00	PASS
BAND4	1.4MHz	64QAM	20393	3RB#3	20.72	24.72	30.00	PASS
BAND4	1.4MHz	64QAM	20393	6RB#0	19.73	23.73	30.00	PASS
BAND4	1.4MHz	16QAM	19957	1RB#0	21.84	25.84	30.00	PASS
BAND4	1.4MHz	16QAM	19957	1RB#2	21.81	25.81	30.00	PASS
BAND4	1.4MHz	16QAM	19957	1RB#5	21.93	25.93	30.00	PASS
BAND4	1.4MHz	16QAM	19957	3RB#0	21.72	25.72	30.00	PASS
BAND4	1.4MHz	16QAM	19957	3RB#1	21.72	25.72	30.00	PASS
BAND4	1.4MHz	16QAM	19957	3RB#3	21.77	25.77	30.00	PASS
BAND4	1.4MHz	16QAM	19957	6RB#0	20.74	24.74	30.00	PASS
BAND4	1.4MHz	16QAM	20175	1RB#0	21.74	25.74	30.00	PASS
BAND4	1.4MHz	16QAM	20175	1RB#2	21.70	25.70	30.00	PASS
BAND4	1.4MHz	16QAM	20175	1RB#5	21.68	25.68	30.00	PASS
BAND4	1.4MHz	16QAM	20175	3RB#0	21.58	25.58	30.00	PASS
BAND4	1.4MHz	16QAM	20175	3RB#1	21.58	25.58	30.00	PASS
BAND4	1.4MHz	16QAM	20175	3RB#3	21.60	25.60	30.00	PASS
BAND4	1.4MHz	16QAM	20175	6RB#0	20.56	24.56	30.00	PASS
BAND4	1.4MHz	16QAM	20393	1RB#0	21.94	25.94	30.00	PASS
BAND4	1.4MHz	16QAM	20393	1RB#2	21.89	25.89	30.00	PASS
BAND4	1.4MHz	16QAM	20393	1RB#5	21.94	25.94	30.00	PASS
BAND4	1.4MHz	16QAM	20393	3RB#0	21.75	25.75	30.00	PASS
BAND4	1.4MHz	16QAM	20393	3RB#1	21.77	25.77	30.00	PASS
BAND4	1.4MHz	16QAM	20393	3RB#3	21.76	25.76	30.00	PASS
BAND4	1.4MHz	16QAM	20393	6RB#0	20.73	24.73	30.00	PASS
BAND4	3MHz	QPSK	19965	1RB#0	22.54	26.54	30.00	PASS
BAND4	3MHz	QPSK	19965	1RB#8	22.65	26.65	30.00	PASS
BAND4	3MHz	QPSK	19965	1RB#14	22.64	26.64	30.00	PASS
BAND4	3MHz	QPSK	19965	8RB#0	21.66	25.66	30.00	PASS
BAND4	3MHz	QPSK	19965	8RB#4	21.66	25.66	30.00	PASS
BAND4	3MHz	QPSK	19965	8RB#7	21.68	25.68	30.00	PASS
BAND4	3MHz	QPSK	19965	15RB#0	21.65	25.65	30.00	PASS
BAND4	3MHz	QPSK	20175	1RB#0	22.44	26.44	30.00	PASS
BAND4	3MHz	QPSK	20175	1RB#8	22.46	26.46	30.00	PASS
BAND4	3MHz	QPSK	20175	1RB#14	22.44	26.44	30.00	PASS
BAND4	3MHz	QPSK	20175	8RB#0	21.50	25.50	30.00	PASS
BAND4	3MHz	QPSK	20175	8RB#4	21.50	25.50	30.00	PASS

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BAND4	3MHz	QPSK	20175	8RB#7	21.51	25.51	30.00	PASS
BAND4	3MHz	QPSK	20175	15RB#0	21.50	25.50	30.00	PASS
BAND4	3MHz	QPSK	20385	1RB#0	22.62	26.62	30.00	PASS
BAND4	3MHz	QPSK	20385	1RB#8	22.69	26.69	30.00	PASS
BAND4	3MHz	QPSK	20385	1RB#14	22.58	26.58	30.00	PASS
BAND4	3MHz	QPSK	20385	8RB#0	21.68	25.68	30.00	PASS
BAND4	3MHz	QPSK	20385	8RB#4	21.68	25.68	30.00	PASS
BAND4	3MHz	QPSK	20385	8RB#7	21.62	25.62	30.00	PASS
BAND4	3MHz	QPSK	20385	15RB#0	21.67	25.67	30.00	PASS
BAND4	3MHz	64QAM	19965	1RB#0	20.82	24.82	30.00	PASS
BAND4	3MHz	64QAM	19965	1RB#8	20.88	24.88	30.00	PASS
BAND4	3MHz	64QAM	19965	1RB#14	20.80	24.80	30.00	PASS
BAND4	3MHz	64QAM	19965	8RB#0	19.75	23.75	30.00	PASS
BAND4	3MHz	64QAM	19965	8RB#4	19.76	23.76	30.00	PASS
BAND4	3MHz	64QAM	19965	8RB#7	19.79	23.79	30.00	PASS
BAND4	3MHz	64QAM	19965	15RB#0	19.73	23.73	30.00	PASS
BAND4	3MHz	64QAM	20175	1RB#0	20.71	24.71	30.00	PASS
BAND4	3MHz	64QAM	20175	1RB#8	20.79	24.79	30.00	PASS
BAND4	3MHz	64QAM	20175	1RB#14	20.68	24.68	30.00	PASS
BAND4	3MHz	64QAM	20175	8RB#0	19.60	23.60	30.00	PASS
BAND4	3MHz	64QAM	20175	8RB#4	19.59	23.59	30.00	PASS
BAND4	3MHz	64QAM	20175	8RB#7	19.62	23.62	30.00	PASS
BAND4	3MHz	64QAM	20175	15RB#0	19.60	23.60	30.00	PASS
BAND4	3MHz	64QAM	20385	1RB#0	20.83	24.83	30.00	PASS
BAND4	3MHz	64QAM	20385	1RB#8	20.87	24.87	30.00	PASS
BAND4	3MHz	64QAM	20385	1RB#14	20.80	24.80	30.00	PASS
BAND4	3MHz	64QAM	20385	8RB#0	19.80	23.80	30.00	PASS
BAND4	3MHz	64QAM	20385	8RB#4	19.77	23.77	30.00	PASS
BAND4	3MHz	64QAM	20385	8RB#7	19.66	23.66	30.00	PASS
BAND4	3MHz	64QAM	20385	15RB#0	19.79	23.79	30.00	PASS
BAND4	3MHz	16QAM	19965	1RB#0	21.83	25.83	30.00	PASS
BAND4	3MHz	16QAM	19965	1RB#8	21.87	25.87	30.00	PASS
BAND4	3MHz	16QAM	19965	1RB#14	21.87	25.87	30.00	PASS
BAND4	3MHz	16QAM	19965	8RB#0	20.77	24.77	30.00	PASS
BAND4	3MHz	16QAM	19965	8RB#4	20.72	24.72	30.00	PASS
BAND4	3MHz	16QAM	19965	8RB#7	20.75	24.75	30.00	PASS
BAND4	3MHz	16QAM	19965	15RB#0	20.71	24.71	30.00	PASS
BAND4	3MHz	16QAM	20175	1RB#0	21.73	25.73	30.00	PASS
BAND4	3MHz	16QAM	20175	1RB#8	21.69	25.69	30.00	PASS
BAND4	3MHz	16QAM	20175	1RB#14	21.61	25.61	30.00	PASS
BAND4	3MHz	16QAM	20175	8RB#0	20.52	24.52	30.00	PASS

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BAND4	3MHz	16QAM	20175	8RB#4	20.57	24.57	30.00	PASS
BAND4	3MHz	16QAM	20175	8RB#7	20.56	24.56	30.00	PASS
BAND4	3MHz	16QAM	20175	15RB#0	20.53	24.53	30.00	PASS
BAND4	3MHz	16QAM	20385	1RB#0	21.83	25.83	30.00	PASS
BAND4	3MHz	16QAM	20385	1RB#8	21.88	25.88	30.00	PASS
BAND4	3MHz	16QAM	20385	1RB#14	21.83	25.83	30.00	PASS
BAND4	3MHz	16QAM	20385	8RB#0	20.76	24.76	30.00	PASS
BAND4	3MHz	16QAM	20385	8RB#4	20.75	24.75	30.00	PASS
BAND4	3MHz	16QAM	20385	8RB#7	20.69	24.69	30.00	PASS
BAND4	3MHz	16QAM	20385	15RB#0	20.72	24.72	30.00	PASS
BAND4	5MHz	QPSK	19975	1RB#0	22.69	26.69	30.00	PASS
BAND4	5MHz	QPSK	19975	1RB#12	22.70	26.70	30.00	PASS
BAND4	5MHz	QPSK	19975	1RB#24	22.78	26.78	30.00	PASS
BAND4	5MHz	QPSK	19975	12RB#0	21.77	25.77	30.00	PASS
BAND4	5MHz	QPSK	19975	12RB#6	21.78	25.78	30.00	PASS
BAND4	5MHz	QPSK	19975	12RB#13	21.80	25.80	30.00	PASS
BAND4	5MHz	QPSK	19975	25RB#0	21.75	25.75	30.00	PASS
BAND4	5MHz	QPSK	20175	1RB#0	22.54	26.54	30.00	PASS
BAND4	5MHz	QPSK	20175	1RB#12	22.58	26.58	30.00	PASS
BAND4	5MHz	QPSK	20175	1RB#24	22.60	26.60	30.00	PASS
BAND4	5MHz	QPSK	20175	12RB#0	21.64	25.64	30.00	PASS
BAND4	5MHz	QPSK	20175	12RB#6	21.65	25.65	30.00	PASS
BAND4	5MHz	QPSK	20175	12RB#13	21.64	25.64	30.00	PASS
BAND4	5MHz	QPSK	20175	25RB#0	21.60	25.60	30.00	PASS
BAND4	5MHz	QPSK	20375	1RB#0	22.76	26.76	30.00	PASS
BAND4	5MHz	QPSK	20375	1RB#12	22.75	26.75	30.00	PASS
BAND4	5MHz	QPSK	20375	1RB#24	22.71	26.71	30.00	PASS
BAND4	5MHz	QPSK	20375	12RB#0	21.78	25.78	30.00	PASS
BAND4	5MHz	QPSK	20375	12RB#6	21.79	25.79	30.00	PASS
BAND4	5MHz	QPSK	20375	12RB#13	21.79	25.79	30.00	PASS
BAND4	5MHz	QPSK	20375	25RB#0	21.75	25.75	30.00	PASS
BAND4	5MHz	64QAM	19975	1RB#0	21.01	25.01	30.00	PASS
BAND4	5MHz	64QAM	19975	1RB#12	20.97	24.97	30.00	PASS
BAND4	5MHz	64QAM	19975	1RB#24	21.05	25.05	30.00	PASS
BAND4	5MHz	64QAM	19975	12RB#0	19.92	23.92	30.00	PASS
BAND4	5MHz	64QAM	19975	12RB#6	19.93	23.93	30.00	PASS
BAND4	5MHz	64QAM	19975	12RB#13	19.90	23.90	30.00	PASS
BAND4	5MHz	64QAM	19975	25RB#0	19.86	23.86	30.00	PASS
BAND4	5MHz	64QAM	20175	1RB#0	20.73	24.73	30.00	PASS
BAND4	5MHz	64QAM	20175	1RB#12	20.75	24.75	30.00	PASS
BAND4	5MHz	64QAM	20175	1RB#24	20.80	24.80	30.00	PASS

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BAND4	5MHz	64QAM	20175	12RB#0	19.76	23.76	30.00	PASS
BAND4	5MHz	64QAM	20175	12RB#6	19.76	23.76	30.00	PASS
BAND4	5MHz	64QAM	20175	12RB#13	19.73	23.73	30.00	PASS
BAND4	5MHz	64QAM	20175	25RB#0	19.72	23.72	30.00	PASS
BAND4	5MHz	64QAM	20375	1RB#0	21.00	25.00	30.00	PASS
BAND4	5MHz	64QAM	20375	1RB#12	20.88	24.88	30.00	PASS
BAND4	5MHz	64QAM	20375	1RB#24	20.81	24.81	30.00	PASS
BAND4	5MHz	64QAM	20375	12RB#0	19.93	23.93	30.00	PASS
BAND4	5MHz	64QAM	20375	12RB#6	19.94	23.94	30.00	PASS
BAND4	5MHz	64QAM	20375	12RB#13	19.90	23.90	30.00	PASS
BAND4	5MHz	64QAM	20375	25RB#0	19.88	23.88	30.00	PASS
BAND4	5MHz	16QAM	19975	1RB#0	21.90	25.90	30.00	PASS
BAND4	5MHz	16QAM	19975	1RB#12	21.89	25.89	30.00	PASS
BAND4	5MHz	16QAM	19975	1RB#24	22.04	26.04	30.00	PASS
BAND4	5MHz	16QAM	19975	12RB#0	20.88	24.88	30.00	PASS
BAND4	5MHz	16QAM	19975	12RB#6	20.91	24.91	30.00	PASS
BAND4	5MHz	16QAM	19975	12RB#13	20.94	24.94	30.00	PASS
BAND4	5MHz	16QAM	19975	25RB#0	20.84	24.84	30.00	PASS
BAND4	5MHz	16QAM	20175	1RB#0	21.76	25.76	30.00	PASS
BAND4	5MHz	16QAM	20175	1RB#12	21.79	25.79	30.00	PASS
BAND4	5MHz	16QAM	20175	1RB#24	21.85	25.85	30.00	PASS
BAND4	5MHz	16QAM	20175	12RB#0	20.73	24.73	30.00	PASS
BAND4	5MHz	16QAM	20175	12RB#6	20.72	24.72	30.00	PASS
BAND4	5MHz	16QAM	20175	12RB#13	20.73	24.73	30.00	PASS
BAND4	5MHz	16QAM	20175	25RB#0	20.69	24.69	30.00	PASS
BAND4	5MHz	16QAM	20375	1RB#0	21.93	25.93	30.00	PASS
BAND4	5MHz	16QAM	20375	1RB#12	21.92	25.92	30.00	PASS
BAND4	5MHz	16QAM	20375	1RB#24	21.93	25.93	30.00	PASS
BAND4	5MHz	16QAM	20375	12RB#0	20.89	24.89	30.00	PASS
BAND4	5MHz	16QAM	20375	12RB#6	20.91	24.91	30.00	PASS
BAND4	5MHz	16QAM	20375	12RB#13	20.94	24.94	30.00	PASS
BAND4	5MHz	16QAM	20375	25RB#0	20.85	24.85	30.00	PASS
BAND4	10MHz	QPSK	20000	1RB#0	22.92	26.92	30.00	PASS
BAND4	10MHz	QPSK	20000	1RB#24	22.87	26.87	30.00	PASS
BAND4	10MHz	QPSK	20000	1RB#49	22.90	26.90	30.00	PASS
BAND4	10MHz	QPSK	20000	25RB#0	21.75	25.75	30.00	PASS
BAND4	10MHz	QPSK	20000	25RB#12	21.76	25.76	30.00	PASS
BAND4	10MHz	QPSK	20000	25RB#25	21.76	25.76	30.00	PASS
BAND4	10MHz	QPSK	20000	50RB#0	21.77	25.77	30.00	PASS
BAND4	10MHz	QPSK	20175	1RB#0	22.42	26.42	30.00	PASS
BAND4	10MHz	QPSK	20175	1RB#24	22.51	26.51	30.00	PASS

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BAND4	10MHz	QPSK	20175	1RB#49	22.65	26.65	30.00	PASS
BAND4	10MHz	QPSK	20175	25RB#0	21.51	25.51	30.00	PASS
BAND4	10MHz	QPSK	20175	25RB#12	21.50	25.50	30.00	PASS
BAND4	10MHz	QPSK	20175	25RB#25	21.49	25.49	30.00	PASS
BAND4	10MHz	QPSK	20175	50RB#0	21.50	25.50	30.00	PASS
BAND4	10MHz	QPSK	20350	1RB#0	22.73	26.73	30.00	PASS
BAND4	10MHz	QPSK	20350	1RB#24	22.78	26.78	30.00	PASS
BAND4	10MHz	QPSK	20350	1RB#49	22.74	26.74	30.00	PASS
BAND4	10MHz	QPSK	20350	25RB#0	21.68	25.68	30.00	PASS
BAND4	10MHz	QPSK	20350	25RB#12	21.68	25.68	30.00	PASS
BAND4	10MHz	QPSK	20350	25RB#25	21.70	25.70	30.00	PASS
BAND4	10MHz	QPSK	20350	50RB#0	21.68	25.68	30.00	PASS
BAND4	10MHz	64QAM	20000	1RB#0	21.03	25.03	30.00	PASS
BAND4	10MHz	64QAM	20000	1RB#24	21.10	25.10	30.00	PASS
BAND4	10MHz	64QAM	20000	1RB#49	21.10	25.10	30.00	PASS
BAND4	10MHz	64QAM	20000	25RB#0	19.90	23.90	30.00	PASS
BAND4	10MHz	64QAM	20000	25RB#12	19.90	23.90	30.00	PASS
BAND4	10MHz	64QAM	20000	25RB#25	19.93	23.93	30.00	PASS
BAND4	10MHz	64QAM	20000	50RB#0	19.83	23.83	30.00	PASS
BAND4	10MHz	64QAM	20175	1RB#0	20.81	24.81	30.00	PASS
BAND4	10MHz	64QAM	20175	1RB#24	20.75	24.75	30.00	PASS
BAND4	10MHz	64QAM	20175	1RB#49	20.92	24.92	30.00	PASS
BAND4	10MHz	64QAM	20175	25RB#0	19.67	23.67	30.00	PASS
BAND4	10MHz	64QAM	20175	25RB#12	19.65	23.65	30.00	PASS
BAND4	10MHz	64QAM	20175	25RB#25	19.66	23.66	30.00	PASS
BAND4	10MHz	64QAM	20175	50RB#0	19.59	23.59	30.00	PASS
BAND4	10MHz	64QAM	20350	1RB#0	20.94	24.94	30.00	PASS
BAND4	10MHz	64QAM	20350	1RB#24	20.94	24.94	30.00	PASS
BAND4	10MHz	64QAM	20350	1RB#49	21.04	25.04	30.00	PASS
BAND4	10MHz	64QAM	20350	25RB#0	19.80	23.80	30.00	PASS
BAND4	10MHz	64QAM	20350	25RB#12	19.81	23.81	30.00	PASS
BAND4	10MHz	64QAM	20350	25RB#25	19.84	23.84	30.00	PASS
BAND4	10MHz	64QAM	20350	50RB#0	19.74	23.74	30.00	PASS
BAND4	10MHz	16QAM	20000	1RB#0	21.99	25.99	30.00	PASS
BAND4	10MHz	16QAM	20000	1RB#24	22.16	26.16	30.00	PASS
BAND4	10MHz	16QAM	20000	1RB#49	22.16	26.16	30.00	PASS
BAND4	10MHz	16QAM	20000	25RB#0	20.85	24.85	30.00	PASS
BAND4	10MHz	16QAM	20000	25RB#12	20.86	24.86	30.00	PASS
BAND4	10MHz	16QAM	20000	25RB#25	20.84	24.84	30.00	PASS
BAND4	10MHz	16QAM	20000	50RB#0	20.81	24.81	30.00	PASS
BAND4	10MHz	16QAM	20175	1RB#0	21.64	25.64	30.00	PASS

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BAND4	10MHz	16QAM	20175	1RB#24	21.70	25.70	30.00	PASS
BAND4	10MHz	16QAM	20175	1RB#49	21.88	25.88	30.00	PASS
BAND4	10MHz	16QAM	20175	25RB#0	20.61	24.61	30.00	PASS
BAND4	10MHz	16QAM	20175	25RB#12	20.56	24.56	30.00	PASS
BAND4	10MHz	16QAM	20175	25RB#25	20.57	24.57	30.00	PASS
BAND4	10MHz	16QAM	20175	50RB#0	20.55	24.55	30.00	PASS
BAND4	10MHz	16QAM	20350	1RB#0	21.90	25.90	30.00	PASS
BAND4	10MHz	16QAM	20350	1RB#24	22.01	26.01	30.00	PASS
BAND4	10MHz	16QAM	20350	1RB#49	22.16	26.16	30.00	PASS
BAND4	10MHz	16QAM	20350	25RB#0	20.77	24.77	30.00	PASS
BAND4	10MHz	16QAM	20350	25RB#12	20.81	24.81	30.00	PASS
BAND4	10MHz	16QAM	20350	25RB#25	20.80	24.80	30.00	PASS
BAND4	10MHz	16QAM	20350	50RB#0	20.74	24.74	30.00	PASS
BAND4	15MHz	QPSK	20025	1RB#0	22.82	26.82	30.00	PASS
BAND4	15MHz	QPSK	20025	1RB#38	22.88	26.88	30.00	PASS
BAND4	15MHz	QPSK	20025	1RB#74	22.67	26.67	30.00	PASS
BAND4	15MHz	QPSK	20025	36RB#0	21.69	25.69	30.00	PASS
BAND4	15MHz	QPSK	20025	36RB#18	21.72	25.72	30.00	PASS
BAND4	15MHz	QPSK	20025	36RB#39	21.69	25.69	30.00	PASS
BAND4	15MHz	QPSK	20025	75RB#0	21.73	25.73	30.00	PASS
BAND4	15MHz	QPSK	20175	1RB#0	22.62	26.62	30.00	PASS
BAND4	15MHz	QPSK	20175	1RB#38	22.58	26.58	30.00	PASS
BAND4	15MHz	QPSK	20175	1RB#74	22.78	26.78	30.00	PASS
BAND4	15MHz	QPSK	20175	36RB#0	21.49	25.49	30.00	PASS
BAND4	15MHz	QPSK	20175	36RB#18	21.53	25.53	30.00	PASS
BAND4	15MHz	QPSK	20175	36RB#39	21.60	25.60	30.00	PASS
BAND4	15MHz	QPSK	20175	75RB#0	21.56	25.56	30.00	PASS
BAND4	15MHz	QPSK	20325	1RB#0	22.78	26.78	30.00	PASS
BAND4	15MHz	QPSK	20325	1RB#38	22.75	26.75	30.00	PASS
BAND4	15MHz	QPSK	20325	1RB#74	22.74	26.74	30.00	PASS
BAND4	15MHz	QPSK	20325	36RB#0	21.62	25.62	30.00	PASS
BAND4	15MHz	QPSK	20325	36RB#18	21.66	25.66	30.00	PASS
BAND4	15MHz	QPSK	20325	36RB#39	21.67	25.67	30.00	PASS
BAND4	15MHz	QPSK	20325	75RB#0	21.67	25.67	30.00	PASS
BAND4	15MHz	64QAM	20025	1RB#0	20.99	24.99	30.00	PASS
BAND4	15MHz	64QAM	20025	1RB#38	21.05	25.05	30.00	PASS
BAND4	15MHz	64QAM	20025	1RB#74	20.83	24.83	30.00	PASS
BAND4	15MHz	64QAM	20025	36RB#0	19.78	23.78	30.00	PASS
BAND4	15MHz	64QAM	20025	36RB#18	19.80	23.80	30.00	PASS
BAND4	15MHz	64QAM	20025	36RB#39	19.77	23.77	30.00	PASS
BAND4	15MHz	64QAM	20025	75RB#0	19.76	23.76	30.00	PASS

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BAND4	15MHz	64QAM	20175	1RB#0	20.87	24.87	30.00	PASS
BAND4	15MHz	64QAM	20175	1RB#38	20.87	24.87	30.00	PASS
BAND4	15MHz	64QAM	20175	1RB#74	20.91	24.91	30.00	PASS
BAND4	15MHz	64QAM	20175	36RB#0	19.58	23.58	30.00	PASS
BAND4	15MHz	64QAM	20175	36RB#18	19.64	23.64	30.00	PASS
BAND4	15MHz	64QAM	20175	36RB#39	19.69	23.69	30.00	PASS
BAND4	15MHz	64QAM	20175	75RB#0	19.64	23.64	30.00	PASS
BAND4	15MHz	64QAM	20325	1RB#0	20.87	24.87	30.00	PASS
BAND4	15MHz	64QAM	20325	1RB#38	20.96	24.96	30.00	PASS
BAND4	15MHz	64QAM	20325	1RB#74	20.97	24.97	30.00	PASS
BAND4	15MHz	64QAM	20325	36RB#0	19.70	23.70	30.00	PASS
BAND4	15MHz	64QAM	20325	36RB#18	19.72	23.72	30.00	PASS
BAND4	15MHz	64QAM	20325	36RB#39	19.73	23.73	30.00	PASS
BAND4	15MHz	64QAM	20325	75RB#0	19.70	23.70	30.00	PASS
BAND4	15MHz	16QAM	20025	1RB#0	22.01	26.01	30.00	PASS
BAND4	15MHz	16QAM	20025	1RB#38	22.05	26.05	30.00	PASS
BAND4	15MHz	16QAM	20025	1RB#74	21.85	25.85	30.00	PASS
BAND4	15MHz	16QAM	20025	36RB#0	20.78	24.78	30.00	PASS
BAND4	15MHz	16QAM	20025	36RB#18	20.78	24.78	30.00	PASS
BAND4	15MHz	16QAM	20025	36RB#39	20.77	24.77	30.00	PASS
BAND4	15MHz	16QAM	20025	75RB#0	20.76	24.76	30.00	PASS
BAND4	15MHz	16QAM	20175	1RB#0	21.79	25.79	30.00	PASS
BAND4	15MHz	16QAM	20175	1RB#38	21.83	25.83	30.00	PASS
BAND4	15MHz	16QAM	20175	1RB#74	21.90	25.90	30.00	PASS
BAND4	15MHz	16QAM	20175	36RB#0	20.54	24.54	30.00	PASS
BAND4	15MHz	16QAM	20175	36RB#18	20.58	24.58	30.00	PASS
BAND4	15MHz	16QAM	20175	36RB#39	20.67	24.67	30.00	PASS
BAND4	15MHz	16QAM	20175	75RB#0	20.59	24.59	30.00	PASS
BAND4	15MHz	16QAM	20325	1RB#0	22.00	26.00	30.00	PASS
BAND4	15MHz	16QAM	20325	1RB#38	21.89	25.89	30.00	PASS
BAND4	15MHz	16QAM	20325	1RB#74	21.95	25.95	30.00	PASS
BAND4	15MHz	16QAM	20325	36RB#0	20.68	24.68	30.00	PASS
BAND4	15MHz	16QAM	20325	36RB#18	20.73	24.73	30.00	PASS
BAND4	15MHz	16QAM	20325	36RB#39	20.75	24.75	30.00	PASS
BAND4	15MHz	16QAM	20325	75RB#0	20.72	24.72	30.00	PASS
BAND4	20MHz	QPSK	20050	1RB#0	22.88	26.88	30.00	PASS
BAND4	20MHz	QPSK	20050	1RB#49	22.83	26.83	30.00	PASS
BAND4	20MHz	QPSK	20050	1RB#99	22.62	26.62	30.00	PASS
BAND4	20MHz	QPSK	20050	50RB#0	21.77	25.77	30.00	PASS
BAND4	20MHz	QPSK	20050	50RB#25	21.75	25.75	30.00	PASS
BAND4	20MHz	QPSK	20050	50RB#50	21.58	25.58	30.00	PASS

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BAND4	20MHz	QPSK	20050	100RB#0	21.75	25.75	30.00	PASS
BAND4	20MHz	QPSK	20175	1RB#0	22.79	26.79	30.00	PASS
BAND4	20MHz	QPSK	20175	1RB#49	22.63	26.63	30.00	PASS
BAND4	20MHz	QPSK	20175	1RB#99	22.81	26.81	30.00	PASS
BAND4	20MHz	QPSK	20175	50RB#0	21.53	25.53	30.00	PASS
BAND4	20MHz	QPSK	20175	50RB#25	21.52	25.52	30.00	PASS
BAND4	20MHz	QPSK	20175	50RB#50	21.62	25.62	30.00	PASS
BAND4	20MHz	QPSK	20175	100RB#0	21.61	25.61	30.00	PASS
BAND4	20MHz	QPSK	20300	1RB#0	22.73	26.73	30.00	PASS
BAND4	20MHz	QPSK	20300	1RB#49	22.71	26.71	30.00	PASS
BAND4	20MHz	QPSK	20300	1RB#99	22.87	26.87	30.00	PASS
BAND4	20MHz	QPSK	20300	50RB#0	21.66	25.66	30.00	PASS
BAND4	20MHz	QPSK	20300	50RB#25	21.63	25.63	30.00	PASS
BAND4	20MHz	QPSK	20300	50RB#50	21.69	25.69	30.00	PASS
BAND4	20MHz	QPSK	20300	100RB#0	21.67	25.67	30.00	PASS
BAND4	20MHz	64QAM	20050	1RB#0	21.09	25.09	30.00	PASS
BAND4	20MHz	64QAM	20050	1RB#49	20.98	24.98	30.00	PASS
BAND4	20MHz	64QAM	20050	1RB#99	20.72	24.72	30.00	PASS
BAND4	20MHz	64QAM	20050	50RB#0	19.81	23.81	30.00	PASS
BAND4	20MHz	64QAM	20050	50RB#25	19.80	23.80	30.00	PASS
BAND4	20MHz	64QAM	20050	50RB#50	19.66	23.66	30.00	PASS
BAND4	20MHz	64QAM	20050	100RB#0	19.78	23.78	30.00	PASS
BAND4	20MHz	64QAM	20175	1RB#0	21.09	25.09	30.00	PASS
BAND4	20MHz	64QAM	20175	1RB#49	20.87	24.87	30.00	PASS
BAND4	20MHz	64QAM	20175	1RB#99	20.96	24.96	30.00	PASS
BAND4	20MHz	64QAM	20175	50RB#0	19.59	23.59	30.00	PASS
BAND4	20MHz	64QAM	20175	50RB#25	19.61	23.61	30.00	PASS
BAND4	20MHz	64QAM	20175	50RB#50	19.68	23.68	30.00	PASS
BAND4	20MHz	64QAM	20175	100RB#0	19.65	23.65	30.00	PASS
BAND4	20MHz	64QAM	20300	1RB#0	20.90	24.90	30.00	PASS
BAND4	20MHz	64QAM	20300	1RB#49	20.88	24.88	30.00	PASS
BAND4	20MHz	64QAM	20300	1RB#99	21.09	25.09	30.00	PASS
BAND4	20MHz	64QAM	20300	50RB#0	19.70	23.70	30.00	PASS
BAND4	20MHz	64QAM	20300	50RB#25	19.69	23.69	30.00	PASS
BAND4	20MHz	64QAM	20300	50RB#50	19.74	23.74	30.00	PASS
BAND4	20MHz	64QAM	20300	100RB#0	19.69	23.69	30.00	PASS
BAND4	20MHz	16QAM	20050	1RB#0	22.11	26.11	30.00	PASS
BAND4	20MHz	16QAM	20050	1RB#49	22.20	26.20	30.00	PASS
BAND4	20MHz	16QAM	20050	1RB#99	21.85	25.85	30.00	PASS
BAND4	20MHz	16QAM	20050	50RB#0	20.80	24.80	30.00	PASS
BAND4	20MHz	16QAM	20050	50RB#25	20.75	24.75	30.00	PASS

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BAND4	20MHz	16QAM	20050	50RB#50	20.65	24.65	30.00	PASS
BAND4	20MHz	16QAM	20050	100RB#0	20.77	24.77	30.00	PASS
BAND4	20MHz	16QAM	20175	1RB#0	22.04	26.04	30.00	PASS
BAND4	20MHz	16QAM	20175	1RB#49	21.75	25.75	30.00	PASS
BAND4	20MHz	16QAM	20175	1RB#99	22.01	26.01	30.00	PASS
BAND4	20MHz	16QAM	20175	50RB#0	20.58	24.58	30.00	PASS
BAND4	20MHz	16QAM	20175	50RB#25	20.59	24.59	30.00	PASS
BAND4	20MHz	16QAM	20175	50RB#50	20.67	24.67	30.00	PASS
BAND4	20MHz	16QAM	20175	100RB#0	20.64	24.64	30.00	PASS
BAND4	20MHz	16QAM	20300	1RB#0	21.97	25.97	30.00	PASS
BAND4	20MHz	16QAM	20300	1RB#49	21.91	25.91	30.00	PASS
BAND4	20MHz	16QAM	20300	1RB#99	22.11	26.11	30.00	PASS
BAND4	20MHz	16QAM	20300	50RB#0	20.73	24.73	30.00	PASS
BAND4	20MHz	16QAM	20300	50RB#25	20.67	24.67	30.00	PASS
BAND4	20MHz	16QAM	20300	50RB#50	20.73	24.73	30.00	PASS
BAND4	20MHz	16QAM	20300	100RB#0	20.69	24.69	30.00	PASS

Remark:

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

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

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

b: SGP=Signal Generator Level

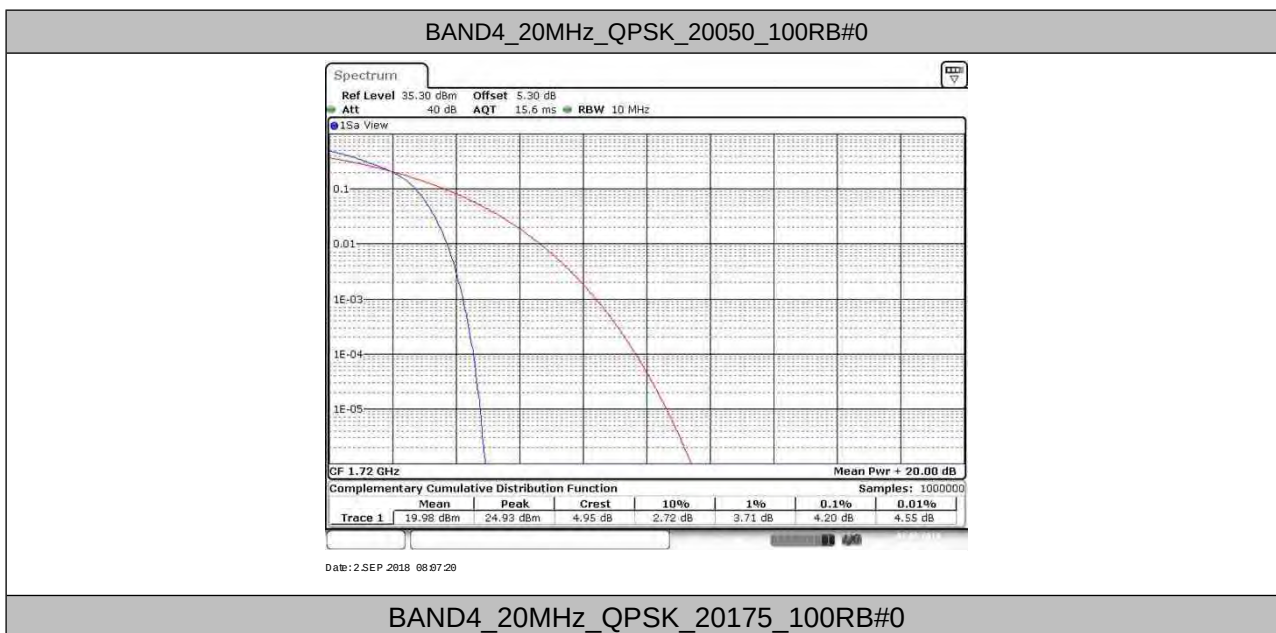


2. Peak-to-Average Ratio(CCDFF)

2.1. Test Result

BAND	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
BAND4	20MHz	QPSK	20050	100RB#0	4.20	13	PASS
BAND4	20MHz	QPSK	20175	100RB#0	4.06	13	PASS
BAND4	20MHz	QPSK	20300	100RB#0	4.32	13	PASS
BAND4	20MHz	64QAM	20050	100RB#0	6.26	13	PASS
BAND4	20MHz	64QAM	20175	100RB#0	6.00	13	PASS
BAND4	20MHz	64QAM	20300	100RB#0	6.23	13	PASS
BAND4	20MHz	16QAM	20050	100RB#0	5.88	13	PASS
BAND4	20MHz	16QAM	20175	100RB#0	5.65	13	PASS
BAND4	20MHz	16QAM	20300	100RB#0	5.86	13	PASS

2.2. Test Plots

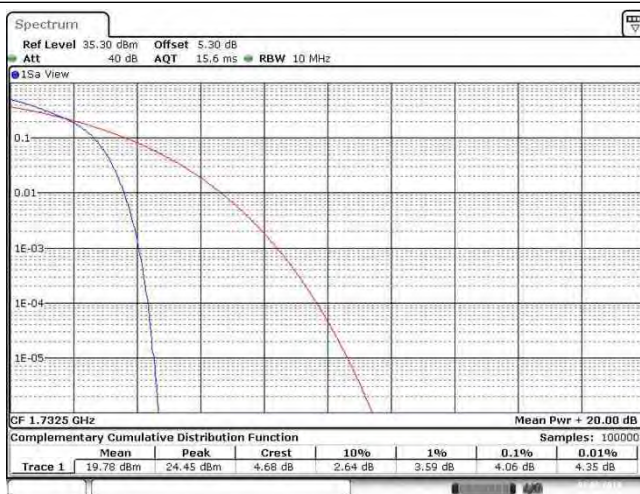




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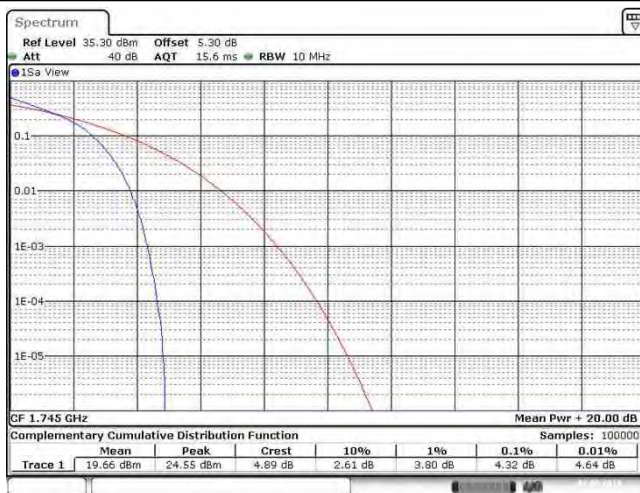
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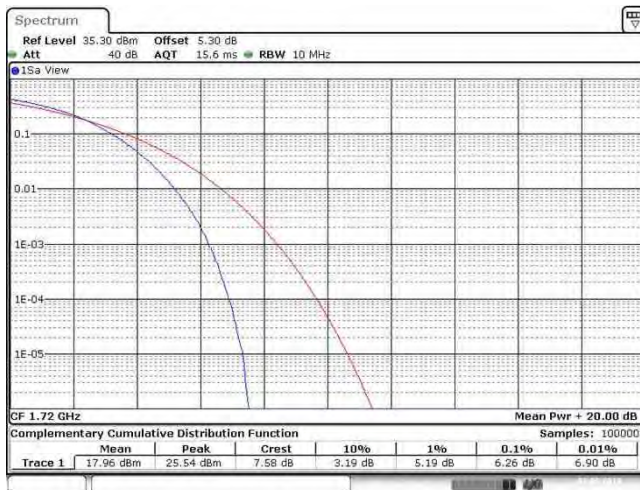
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BAND4_20MHz_QPSK_20300_100RB#0



Date: 2 SEP 2018 08:08:04

BAND4_20MHz_64QAM_20050_100RB#0



Date: 2 SEP 2018 08:19:34

BAND4_20MHz_64QAM_20175_100RB#0

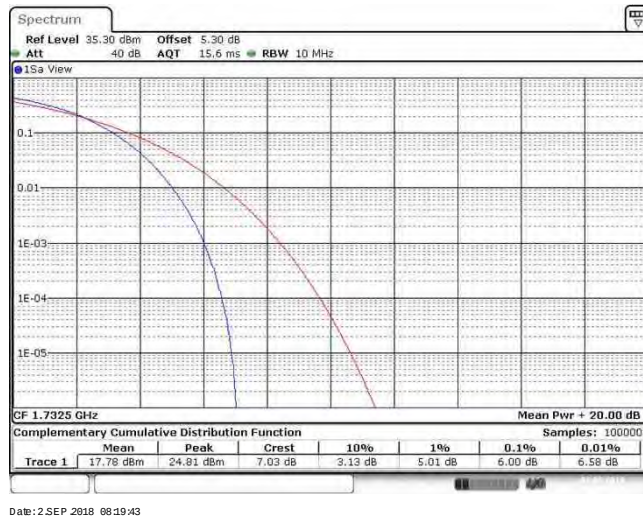
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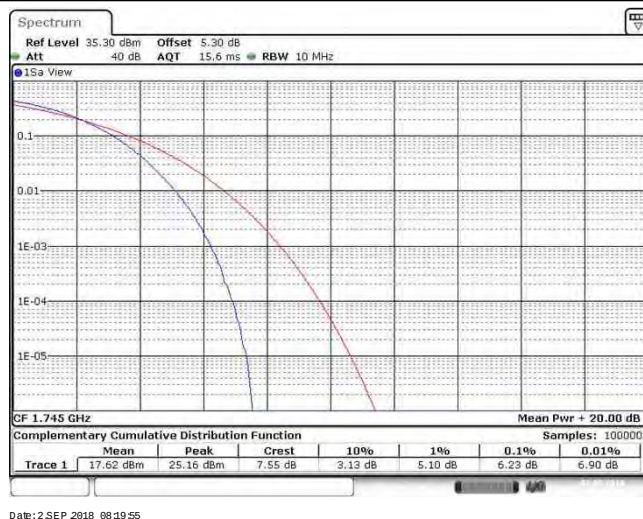
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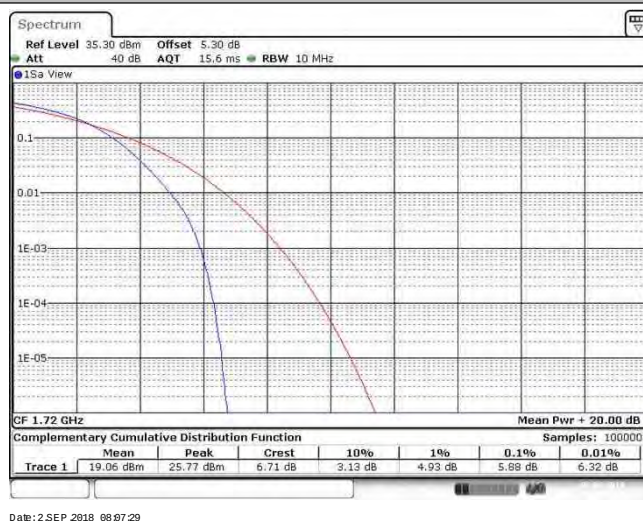
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BAND4_20MHz_64QAM_20300_100RB#0



BAND4_20MHz_16QAM_20050_100RB#0



BAND4_20MHz_16QAM_20175_100RB#0

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Date: 2 SEP 2018 08:07:52

BAND4_20MHz_16QAM_20300_100RB#0



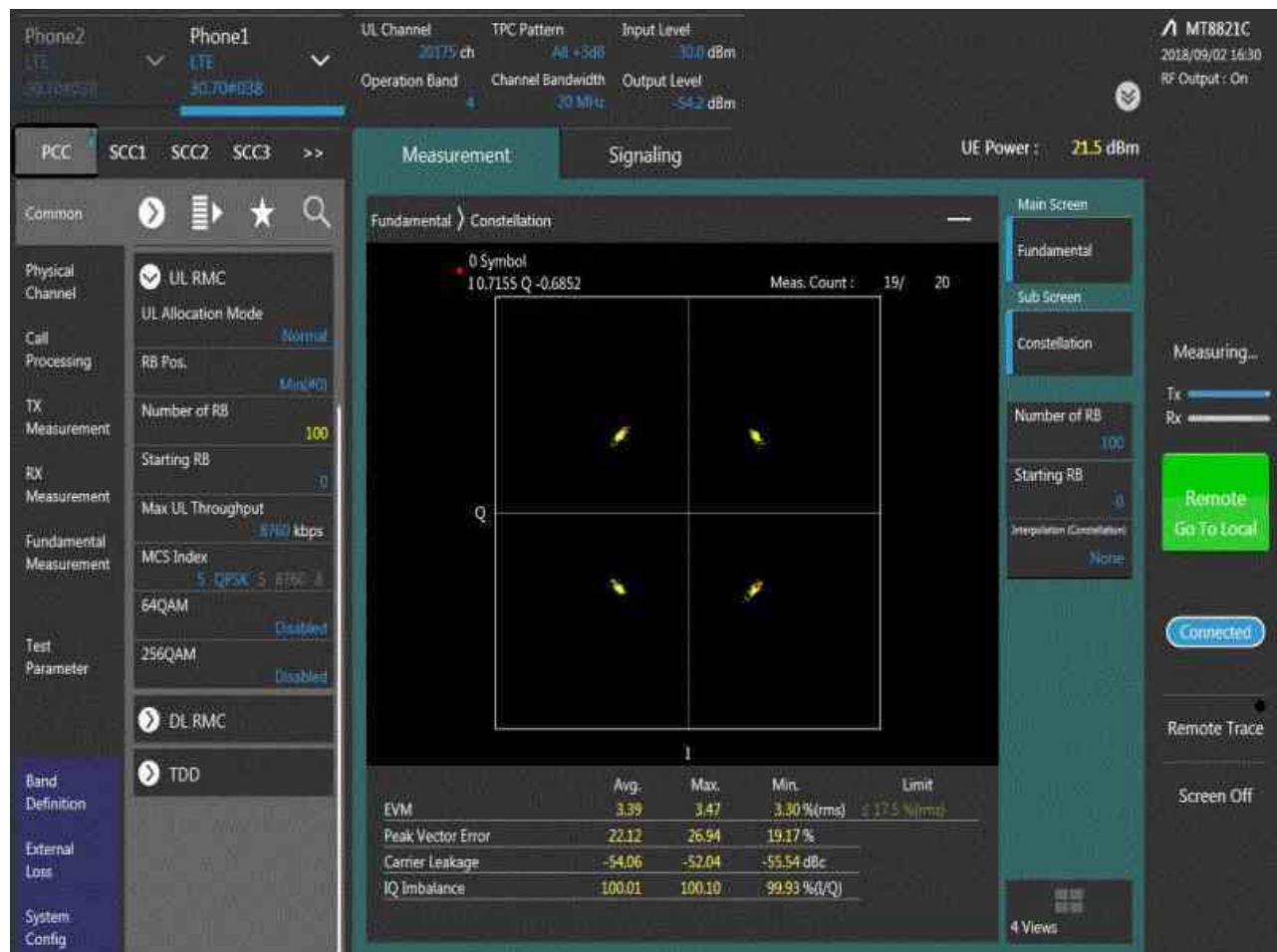
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3. Modulation Characteristics

3.1. Test BAND = LTE BAND4

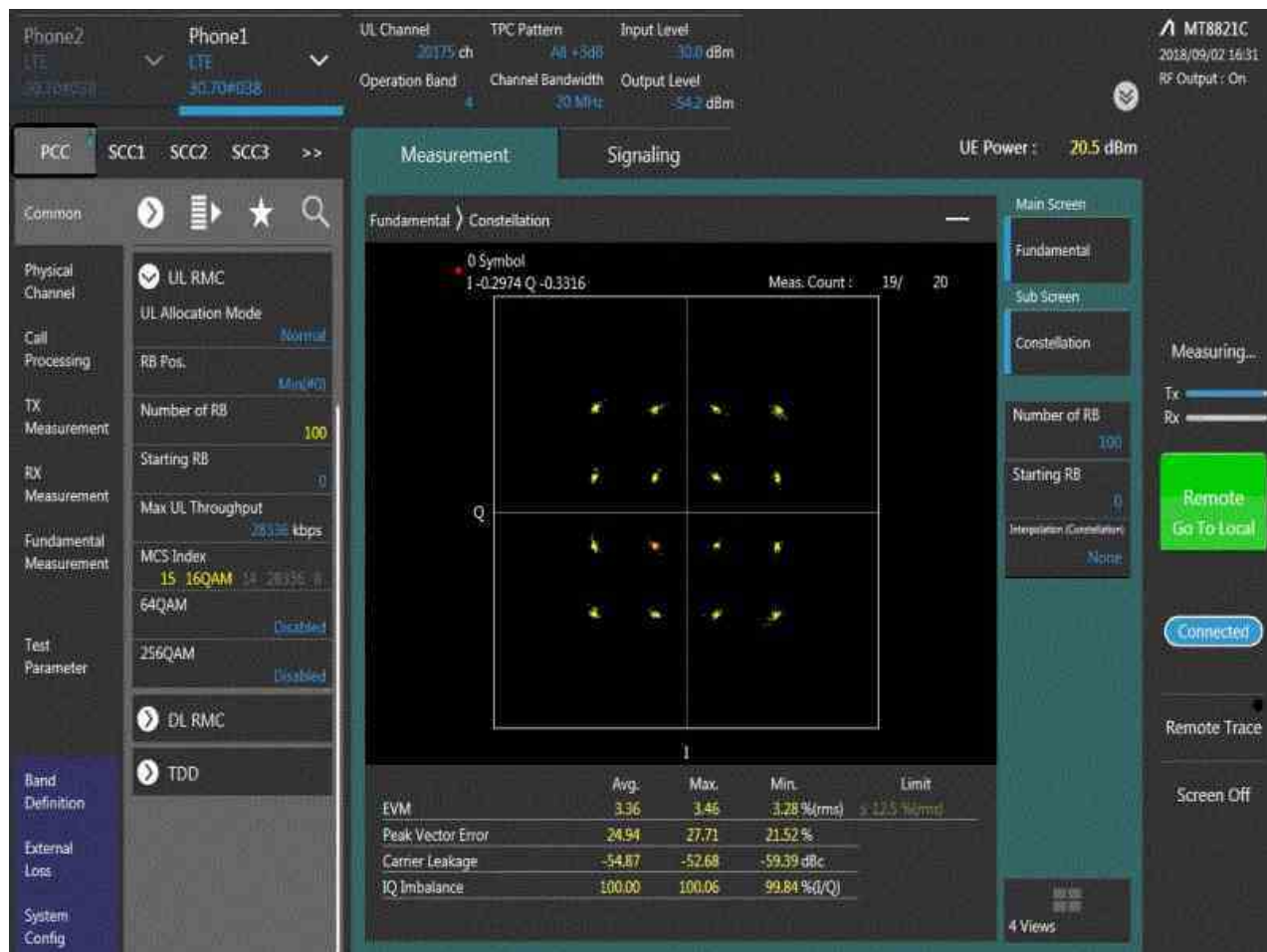
3.1.1. Test Mode = LTE /TM1 20MHz

3.1.1.1. Test Channel = MCH



3.1.2. Test Mode = LTE /TM2 20MHz

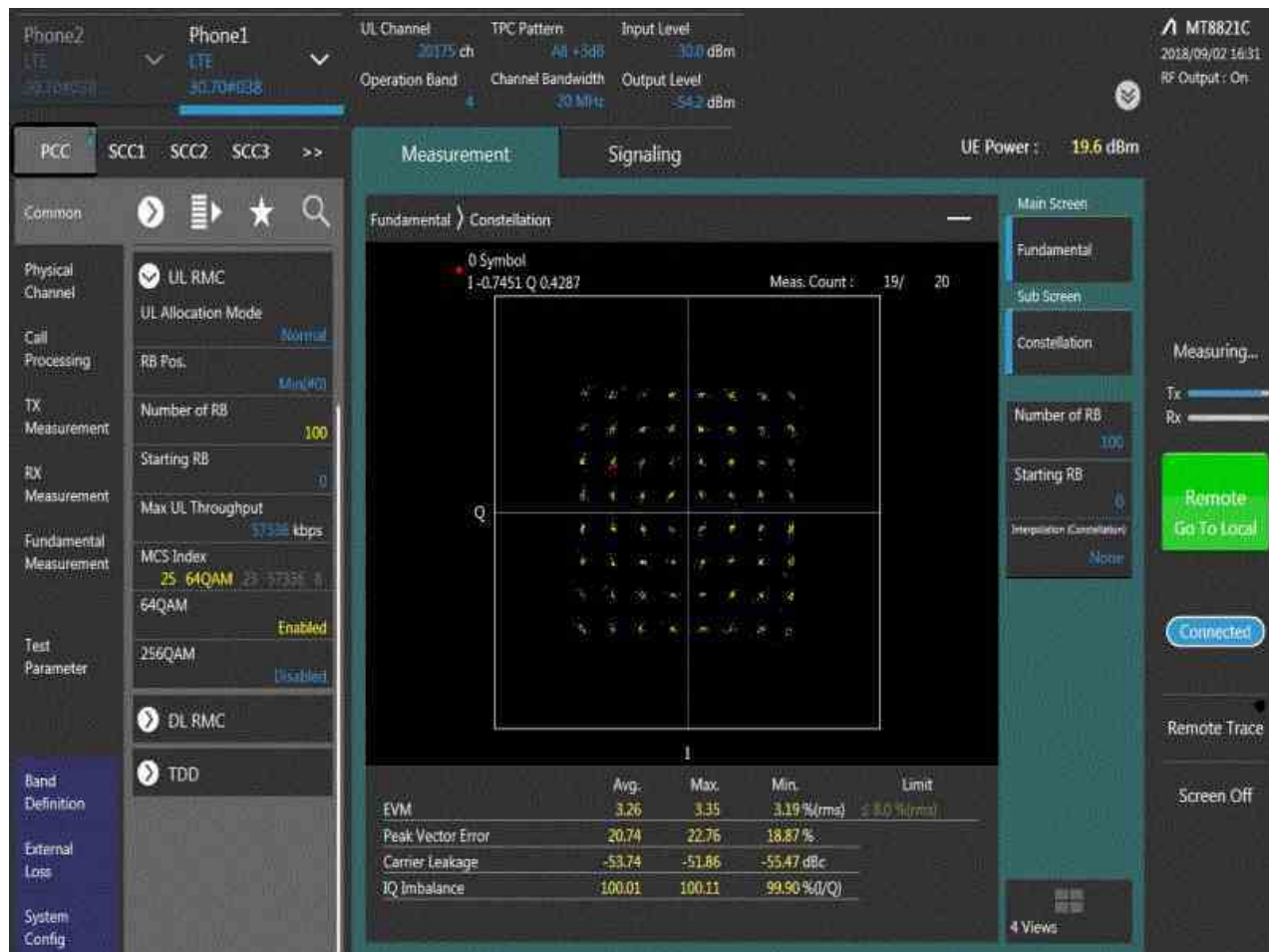
3.1.2.1. Test Channel = MCH





3.1.1. Test Mode = LTE /TM3 20MHz

3.1.1.1. 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	1.088	1.254	PASS
BAND4	1.4MHz	QPSK	20175	6RB#0	1.088	1.254	PASS
BAND4	1.4MHz	QPSK	20393	6RB#0	1.085	1.248	PASS
BAND4	1.4MHz	64QAM	19957	6RB#0	1.085	1.251	PASS
BAND4	1.4MHz	64QAM	20175	6RB#0	1.088	1.245	PASS
BAND4	1.4MHz	64QAM	20393	6RB#0	1.088	1.251	PASS
BAND4	1.4MHz	16QAM	19957	6RB#0	1.088	1.251	PASS
BAND4	1.4MHz	16QAM	20175	6RB#0	1.091	1.254	PASS
BAND4	1.4MHz	16QAM	20393	6RB#0	1.088	1.251	PASS
BAND4	3MHz	QPSK	19965	15RB#0	2.691	2.976	PASS
BAND4	3MHz	QPSK	20175	15RB#0	2.691	2.988	PASS
BAND4	3MHz	QPSK	20385	15RB#0	2.685	2.970	PASS
BAND4	3MHz	64QAM	19965	15RB#0	2.679	2.976	PASS
BAND4	3MHz	64QAM	20175	15RB#0	2.685	2.976	PASS
BAND4	3MHz	64QAM	20385	15RB#0	2.685	2.976	PASS
BAND4	3MHz	16QAM	19965	15RB#0	2.685	2.988	PASS
BAND4	3MHz	16QAM	20175	15RB#0	2.685	2.976	PASS
BAND4	3MHz	16QAM	20385	15RB#0	2.679	2.982	PASS
BAND4	5MHz	QPSK	19975	25RB#0	4.466	4.830	PASS
BAND4	5MHz	QPSK	20175	25RB#0	4.466	4.890	PASS
BAND4	5MHz	QPSK	20375	25RB#0	4.456	4.860	PASS
BAND4	5MHz	64QAM	19975	25RB#0	4.466	4.890	PASS
BAND4	5MHz	64QAM	20175	25RB#0	4.466	4.870	PASS
BAND4	5MHz	64QAM	20375	25RB#0	4.456	4.860	PASS
BAND4	5MHz	16QAM	19975	25RB#0	4.466	4.880	PASS
BAND4	5MHz	16QAM	20175	25RB#0	4.466	4.880	PASS
BAND4	5MHz	16QAM	20375	25RB#0	4.466	4.870	PASS
BAND4	10MHz	QPSK	20000	50RB#0	8.931	10.060	PASS
BAND4	10MHz	QPSK	20175	50RB#0	8.931	10.080	PASS
BAND4	10MHz	QPSK	20350	50RB#0	8.931	10.160	PASS
BAND4	10MHz	64QAM	20000	50RB#0	8.931	10.040	PASS
BAND4	10MHz	64QAM	20175	50RB#0	8.931	10.120	PASS
BAND4	10MHz	64QAM	20350	50RB#0	8.931	10.100	PASS



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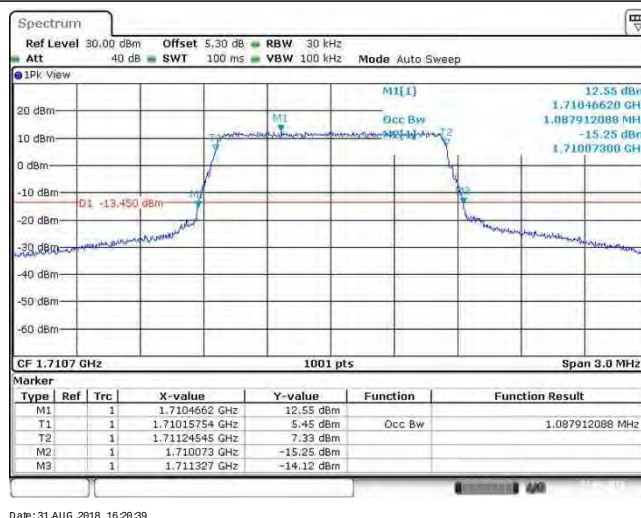
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BAND4	10MHz	16QAM	20000	50RB#0	8.911	10.080	PASS
BAND4	10MHz	16QAM	20175	50RB#0	8.931	10.160	PASS
BAND4	10MHz	16QAM	20350	50RB#0	8.931	10.120	PASS
BAND4	15MHz	QPSK	20025	75RB#0	13.427	14.880	PASS
BAND4	15MHz	QPSK	20175	75RB#0	13.457	15.150	PASS
BAND4	15MHz	QPSK	20325	75RB#0	13.457	15.240	PASS
BAND4	15MHz	64QAM	20025	75RB#0	13.457	15.000	PASS
BAND4	15MHz	64QAM	20175	75RB#0	13.457	15.060	PASS
BAND4	15MHz	64QAM	20325	75RB#0	13.457	15.390	PASS
BAND4	15MHz	16QAM	20025	75RB#0	13.427	15.030	PASS
BAND4	15MHz	16QAM	20175	75RB#0	13.457	15.030	PASS
BAND4	15MHz	16QAM	20325	75RB#0	13.457	15.180	PASS
BAND4	20MHz	QPSK	20050	100RB#0	17.822	19.480	PASS
BAND4	20MHz	QPSK	20175	100RB#0	17.862	19.480	PASS
BAND4	20MHz	QPSK	20300	100RB#0	17.902	19.600	PASS
BAND4	20MHz	64QAM	20050	100RB#0	17.822	19.200	PASS
BAND4	20MHz	64QAM	20175	100RB#0	17.862	19.320	PASS
BAND4	20MHz	64QAM	20300	100RB#0	17.902	19.480	PASS
BAND4	20MHz	16QAM	20050	100RB#0	17.822	19.240	PASS
BAND4	20MHz	16QAM	20175	100RB#0	17.822	19.400	PASS
BAND4	20MHz	16QAM	20300	100RB#0	17.902	19.600	PASS

4.2. Test Plots

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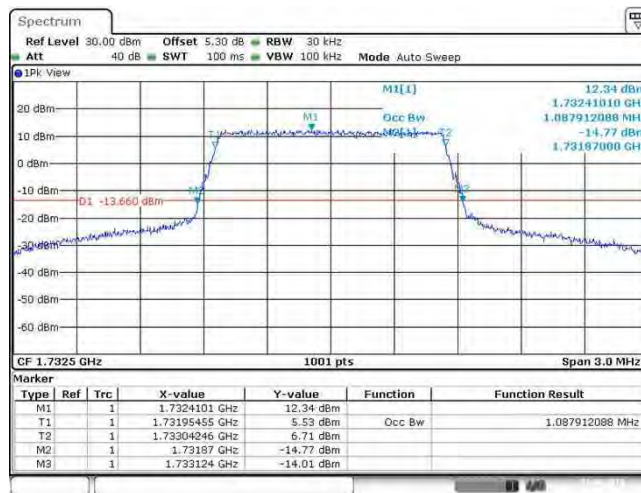
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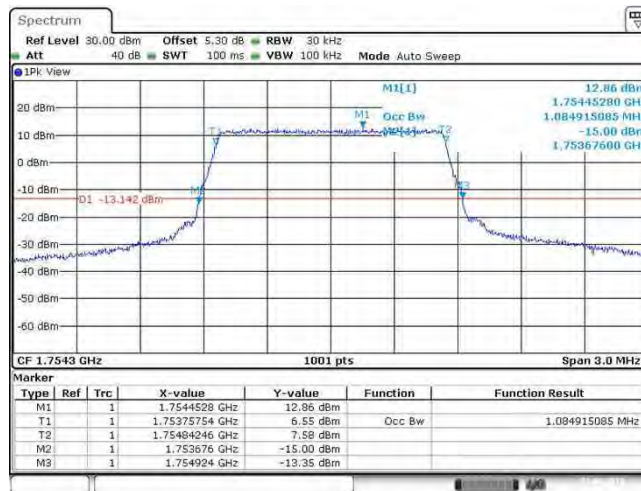
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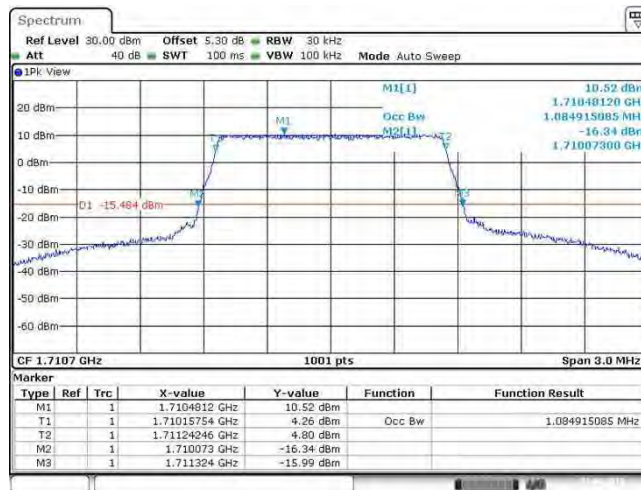
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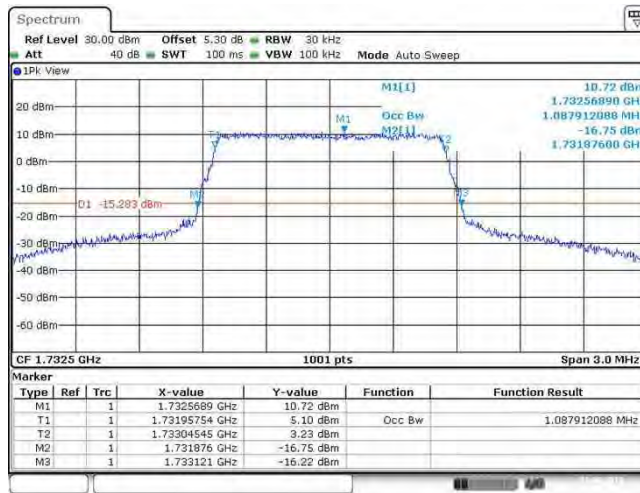
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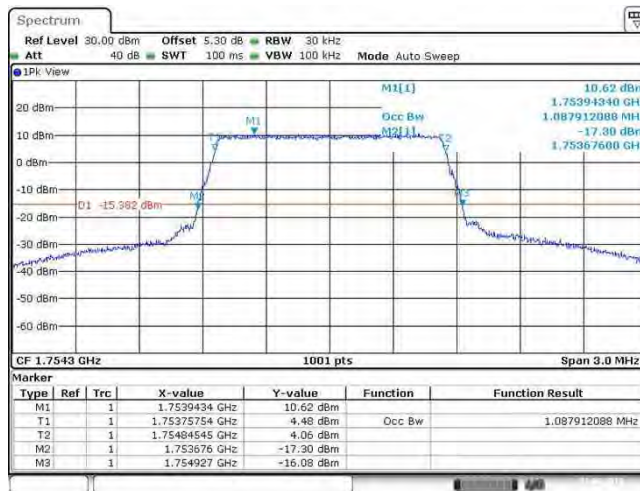
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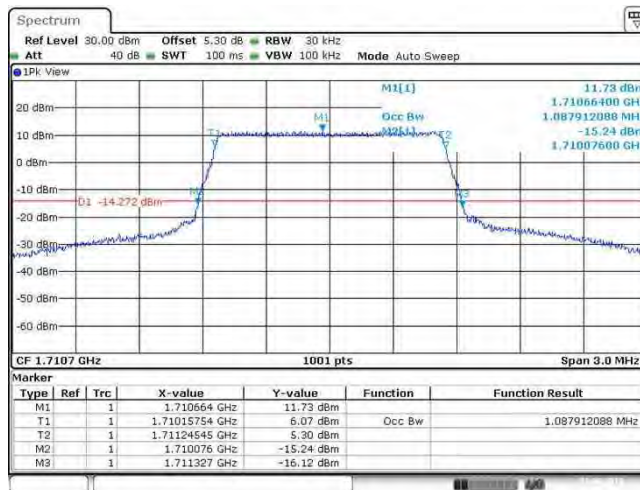
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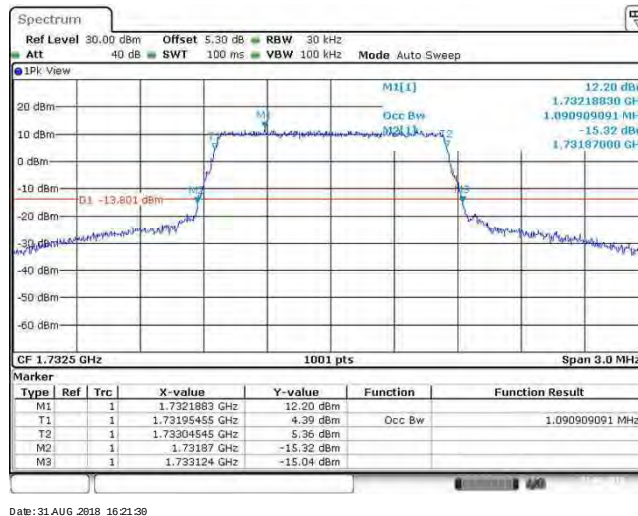
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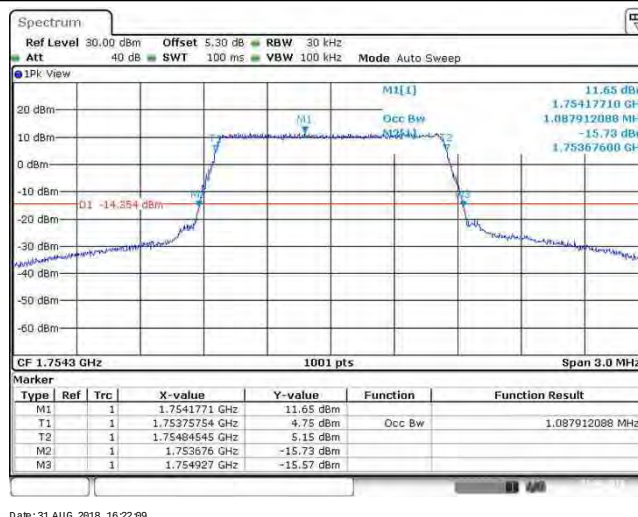
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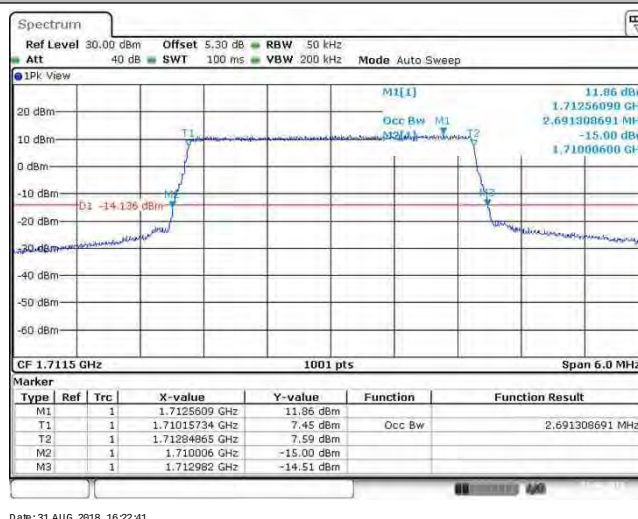
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BAND4_1.4MHz_16QAM_20393_6RB#0



BAND4_3MHz_QPSK_19965_15RB#0



BAND4_3MHz_QPSK_20175_15RB#0

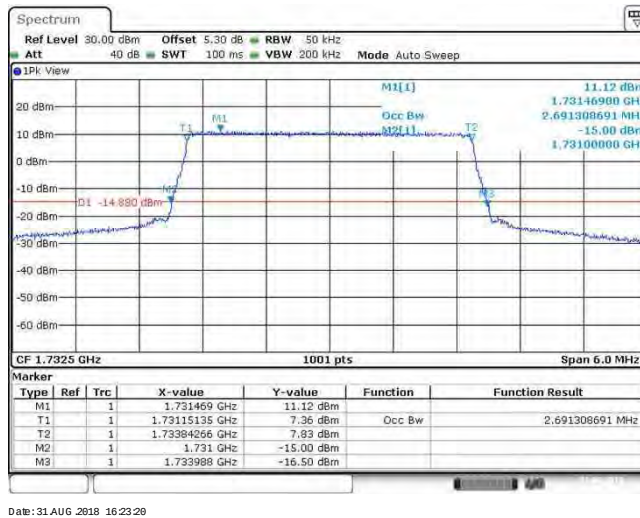
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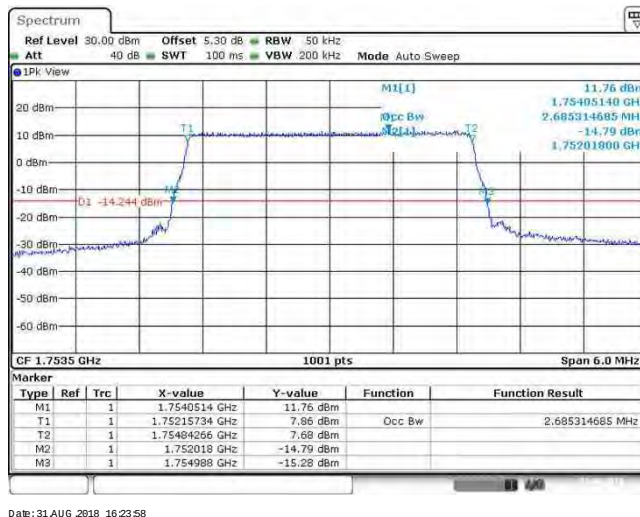
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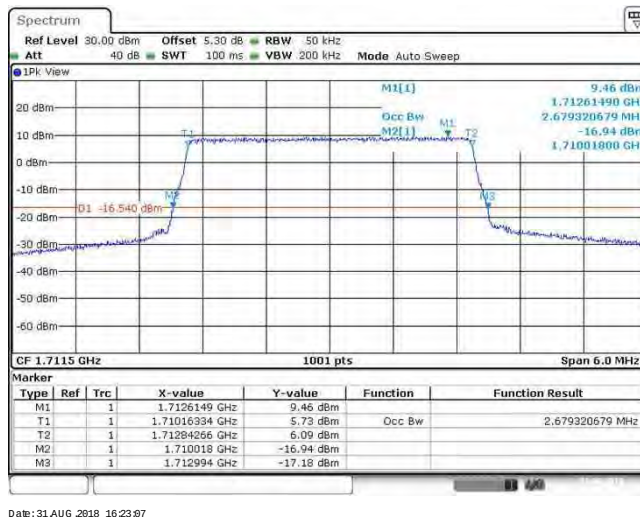
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BAND4_3MHz_QPSK_20385_15RB#0



BAND4_3MHz_64QAM_19965_15RB#0



BAND4_3MHz_64QAM_20175_15RB#0

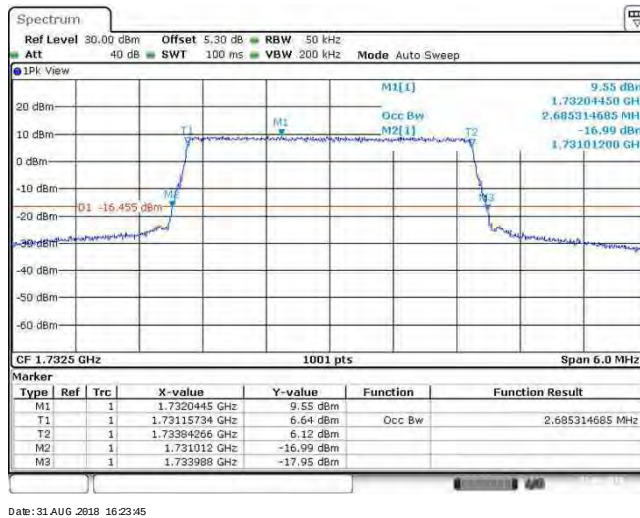
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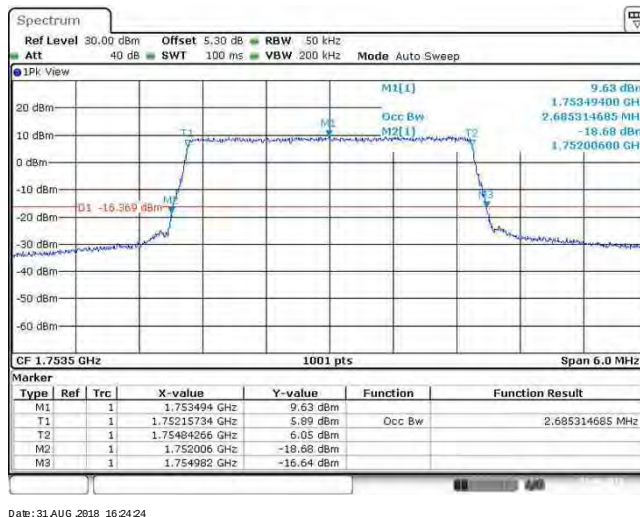
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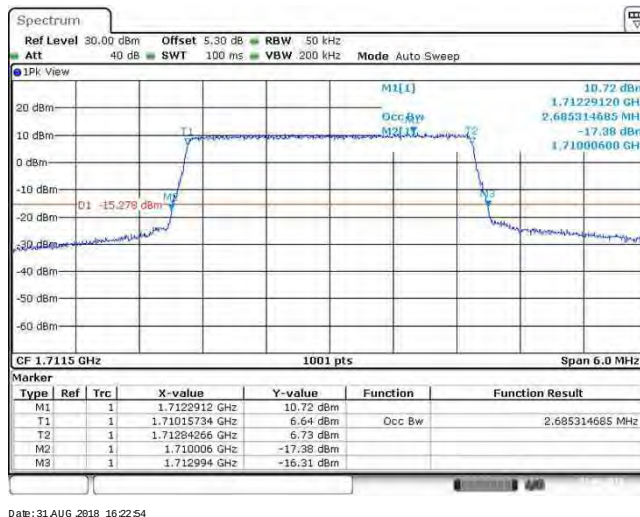
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BAND4_3MHz_16QAM_19965_15RB#0



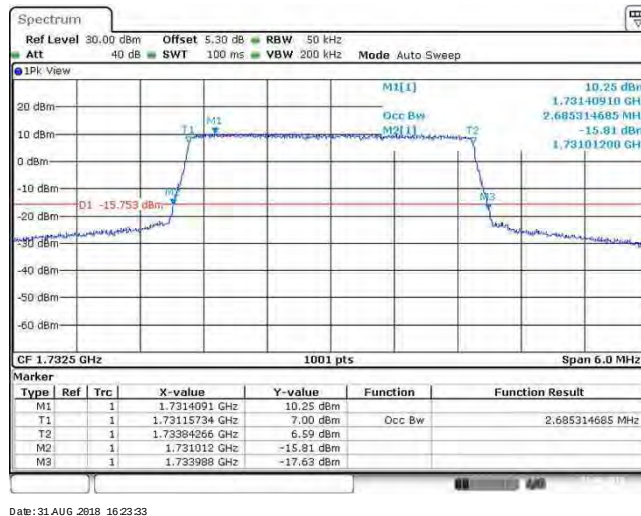
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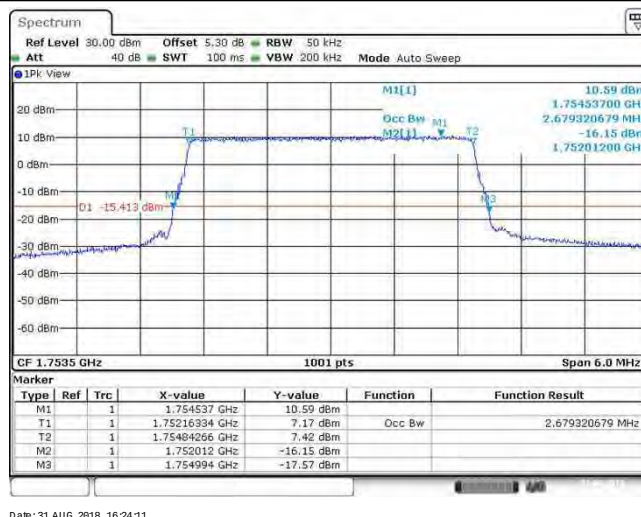
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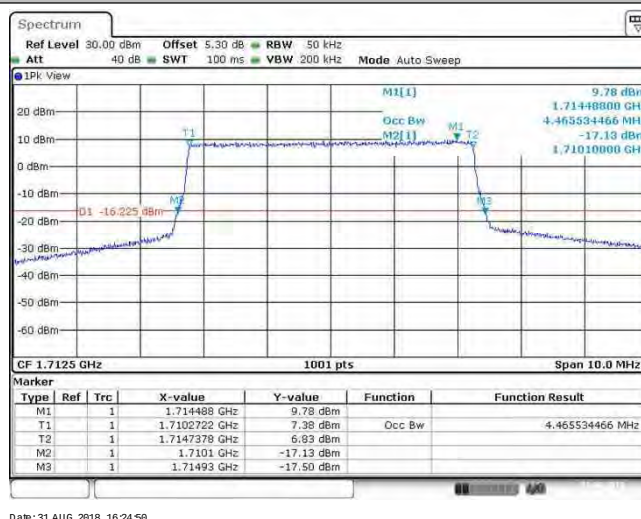
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BAND4_3MHz_16QAM_20385_15RB#0



BAND4_5MHz_QPSK_19975_25RB#0



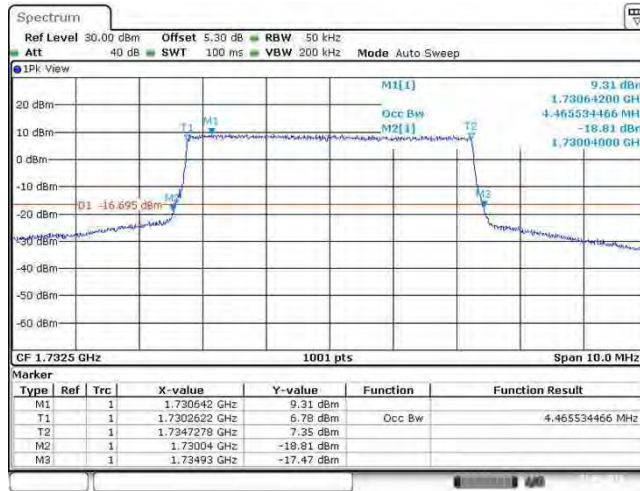
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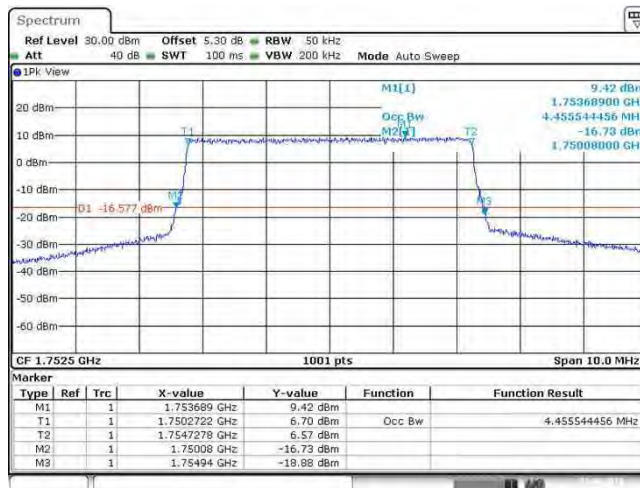
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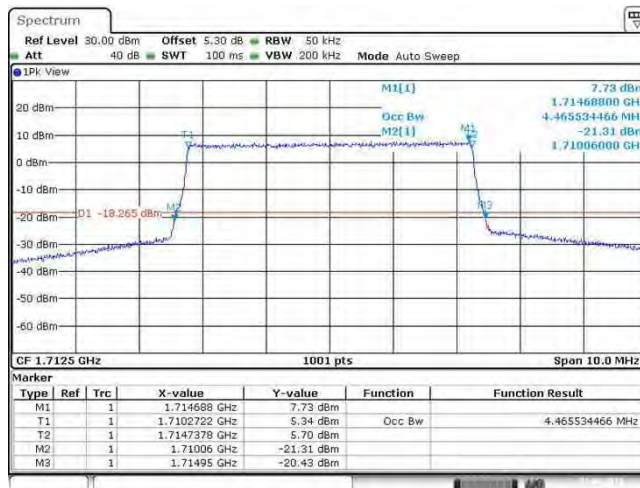
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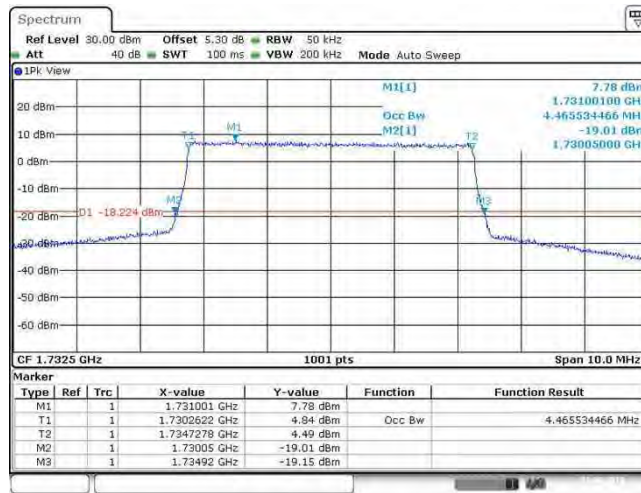
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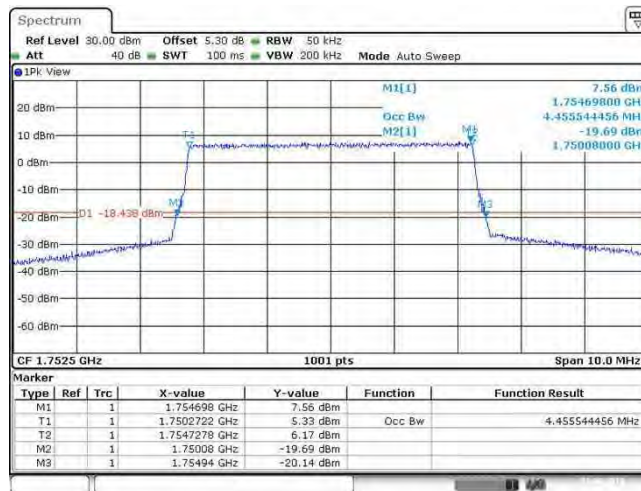
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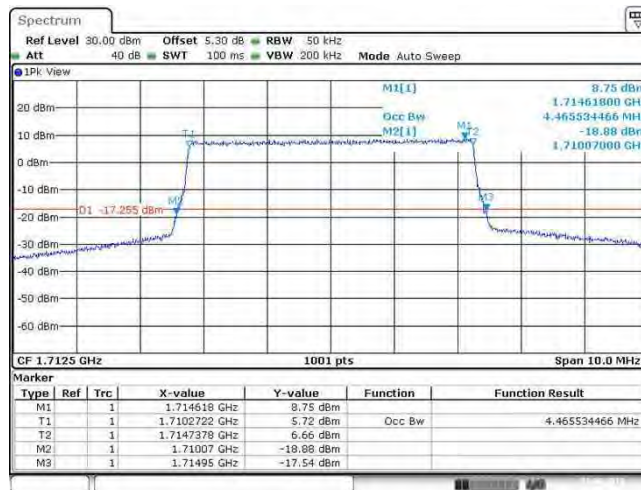
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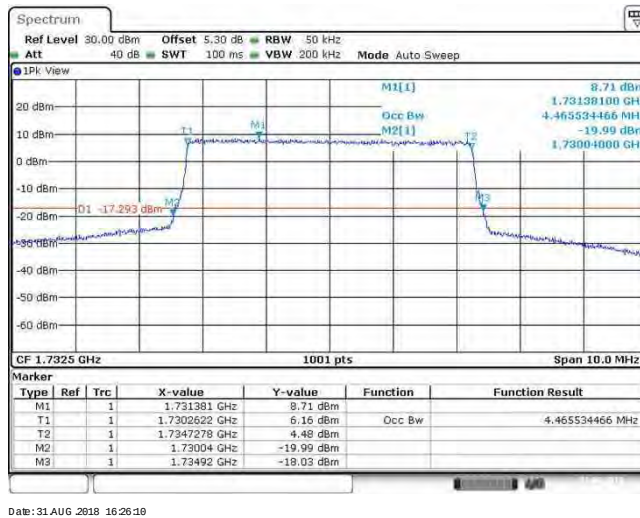
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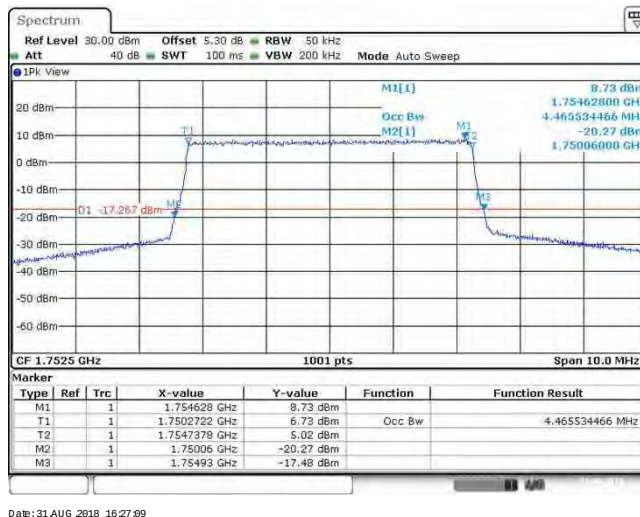
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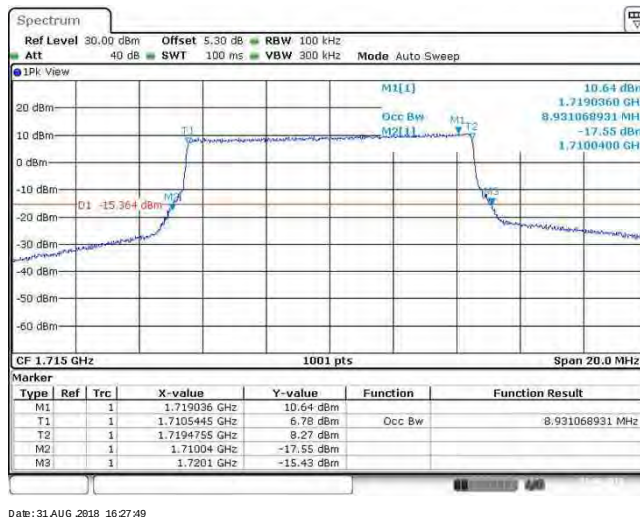
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BAND4_5MHz_16QAM_20375_25RB#0



BAND4_10MHz_QPSK_20000_50RB#0



BAND4_10MHz_QPSK_20175_50RB#0

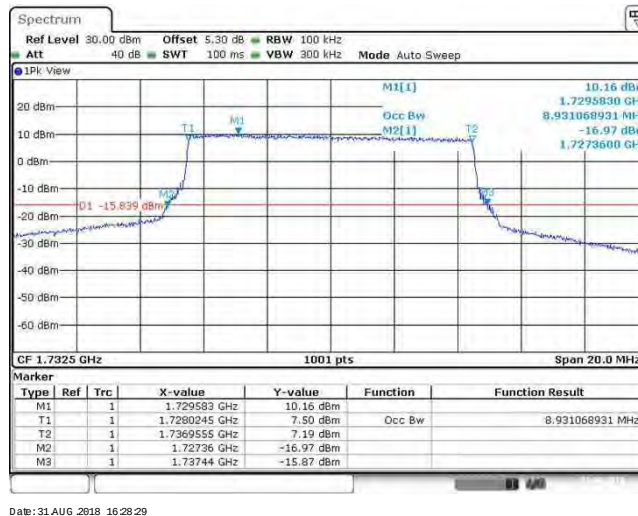
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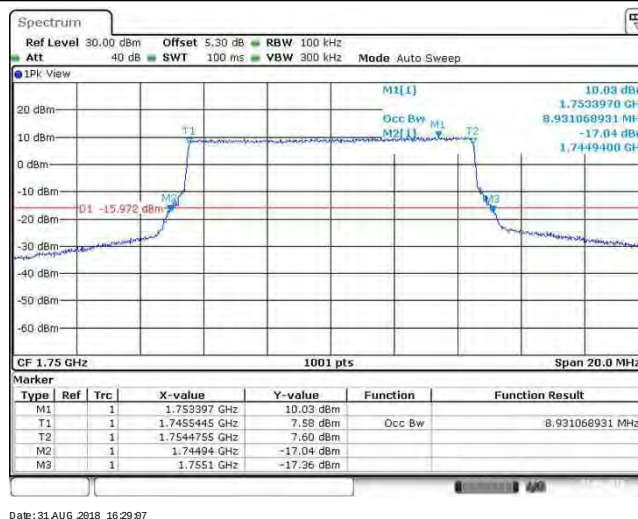
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Report No.: SZEM180500437001

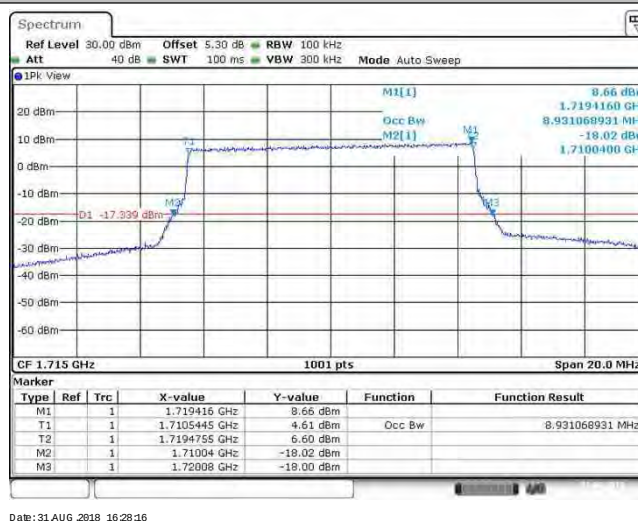
Page: 31 of 76



BAND4_10MHz_QPSK_20350_50RB#0



BAND4_10MHz_64QAM_20000_50RB#0



BAND4_10MHz_64QAM_20175_50RB#0

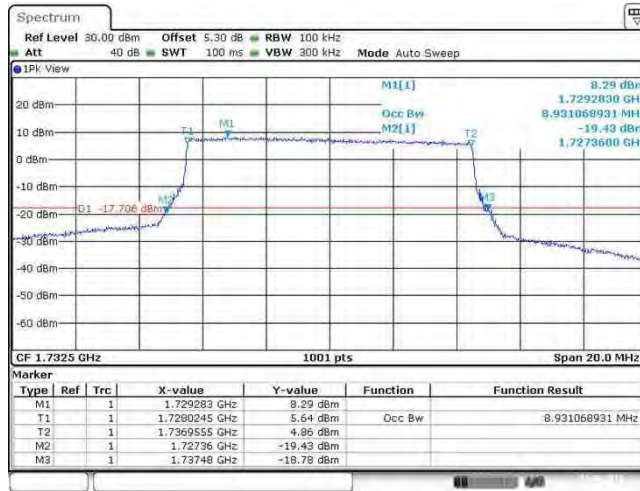
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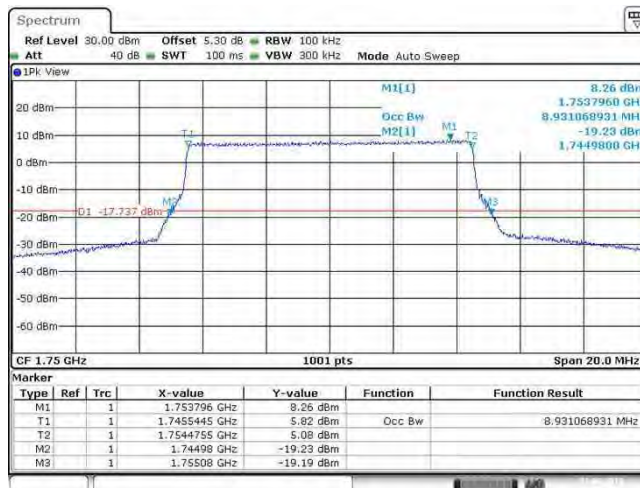
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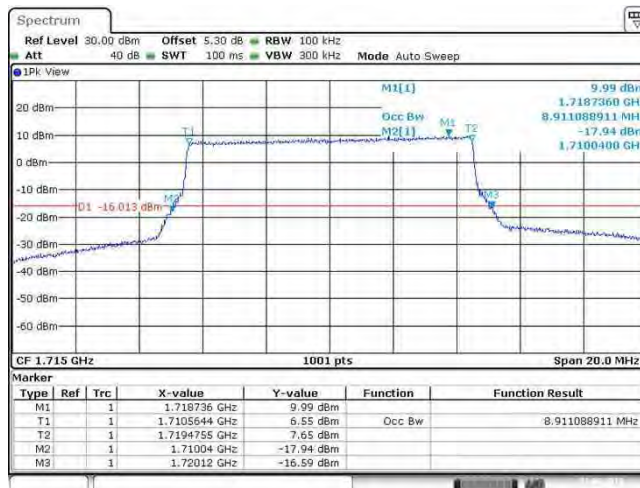
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Date: 31 AUG 2018 16:29:32

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Date: 31 AUG 2018 16:28:02

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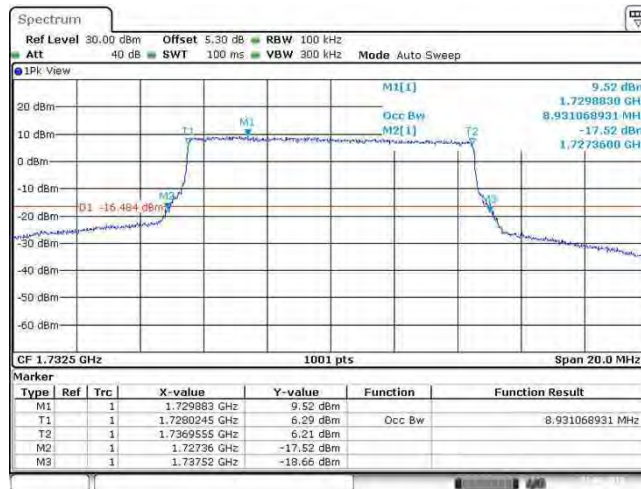
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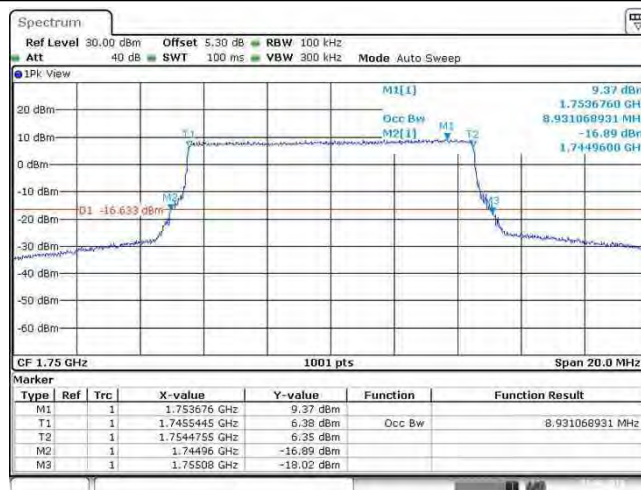
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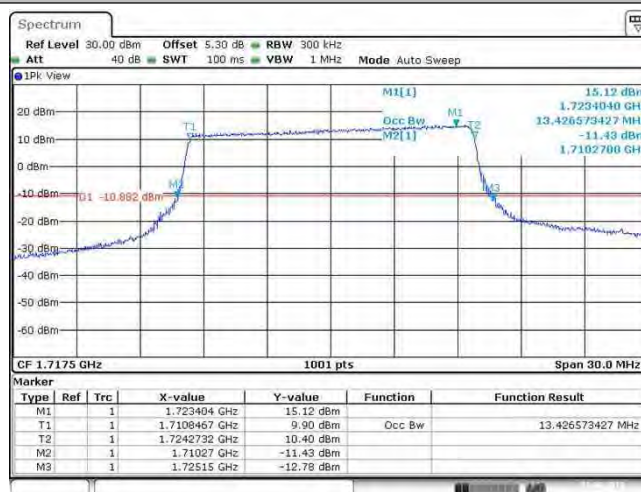
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Date: 31 AUG 2018 16:38:00

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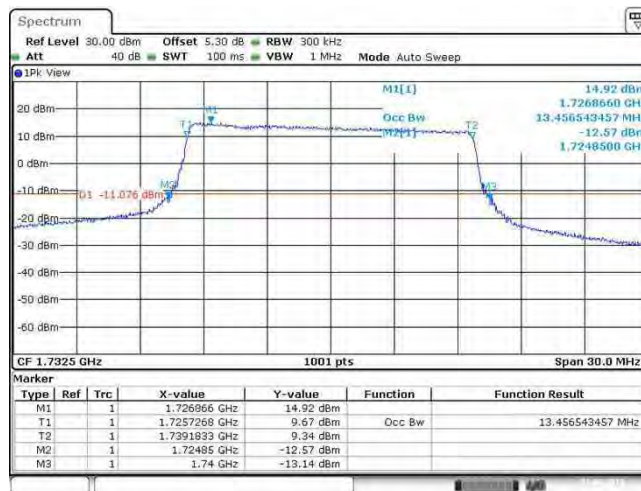
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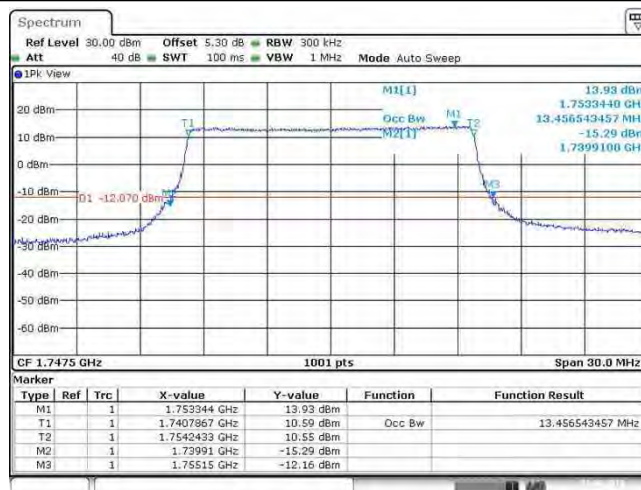
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Report No.: SZEM180500437001

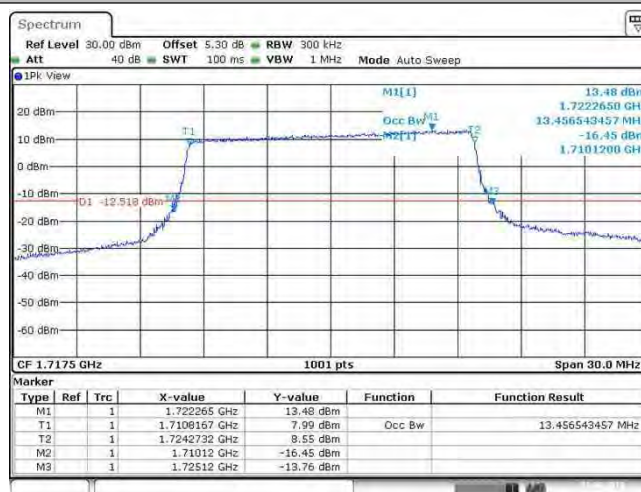
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BAND4_15MHz_QPSK_20325_75RB#0



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BAND4_15MHz_64QAM_20175_75RB#0

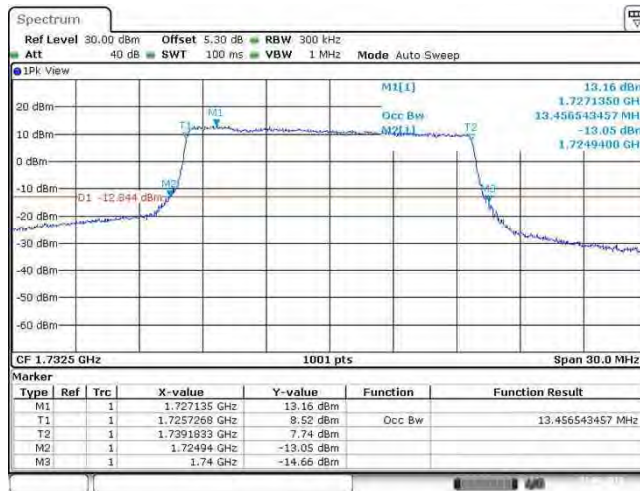
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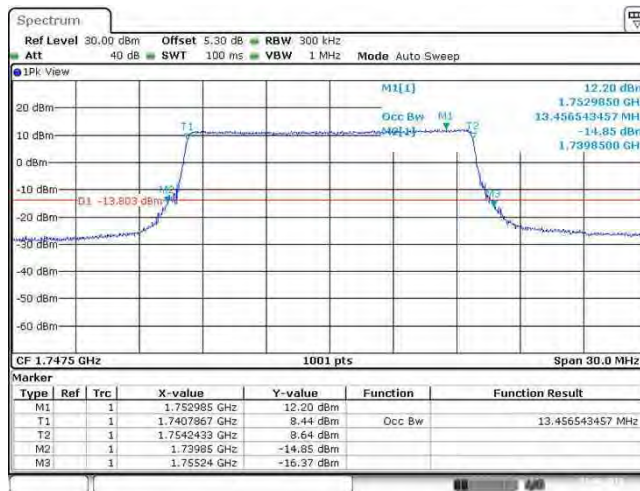
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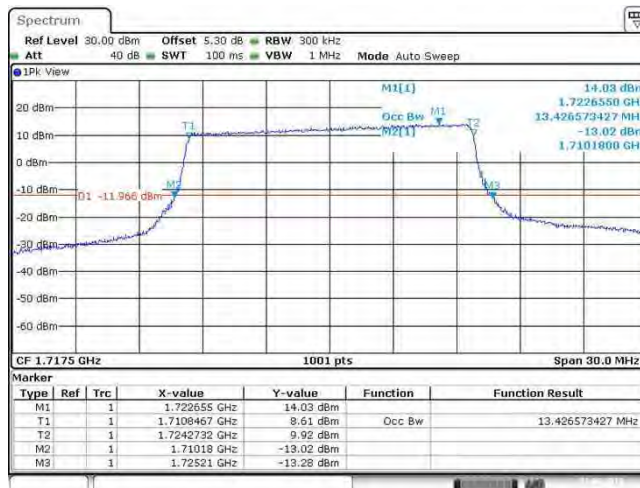
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Date: 31 AUG 2018 16:30:12

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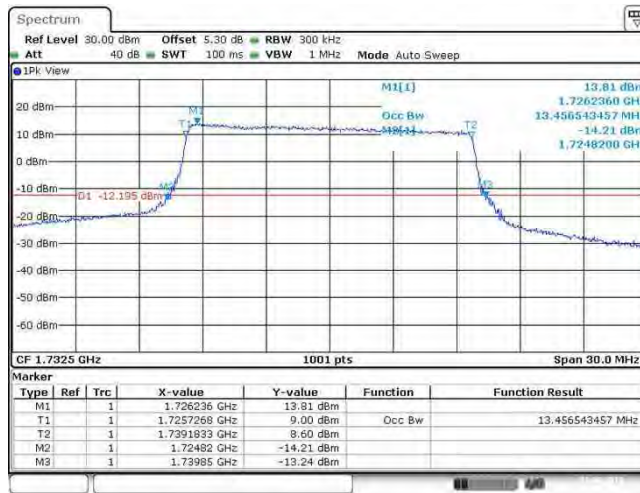
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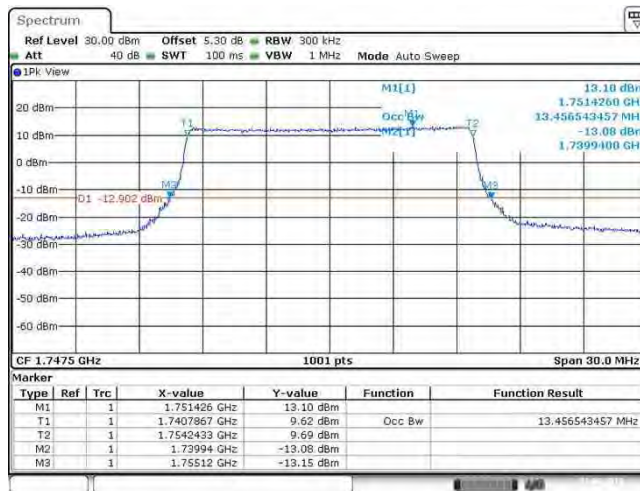
Report No.: SZEM180500437001

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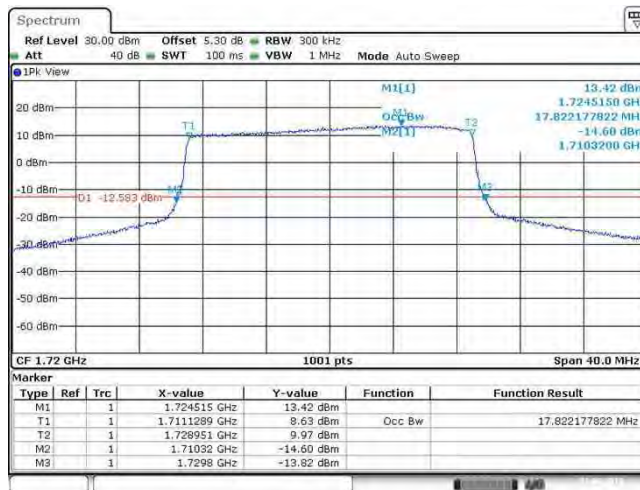
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Date: 31 AUG 2018 16:32:08

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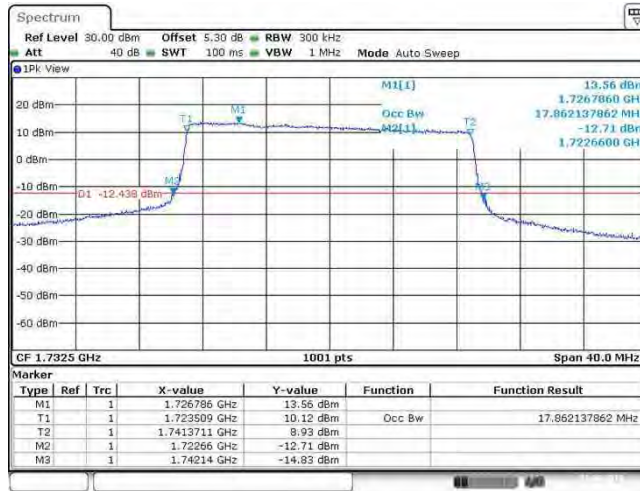
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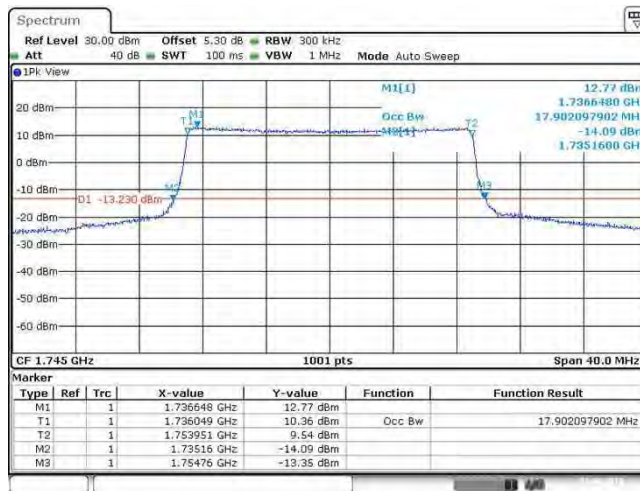
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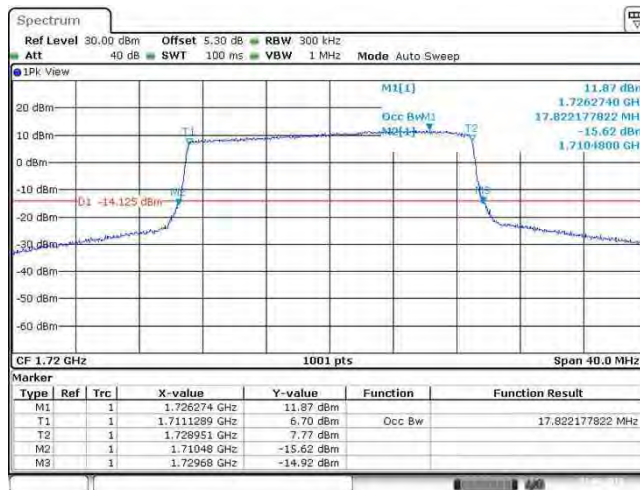
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BAND4_20MHz_QPSK_20300_100RB#0



BAND4_20MHz_64QAM_20050_100RB#0



BAND4_20MHz_64QAM_20175_100RB#0

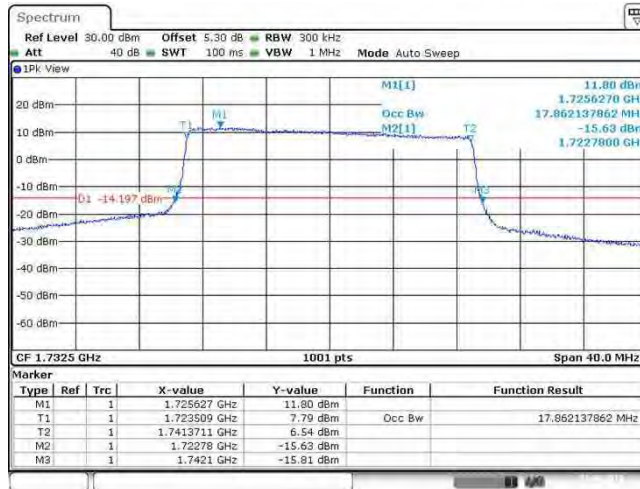
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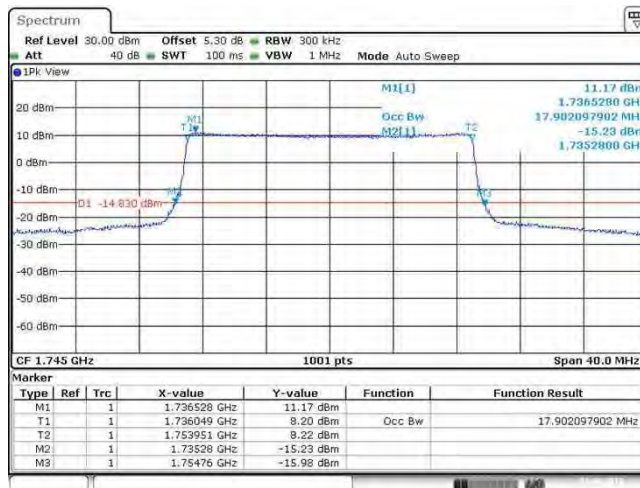
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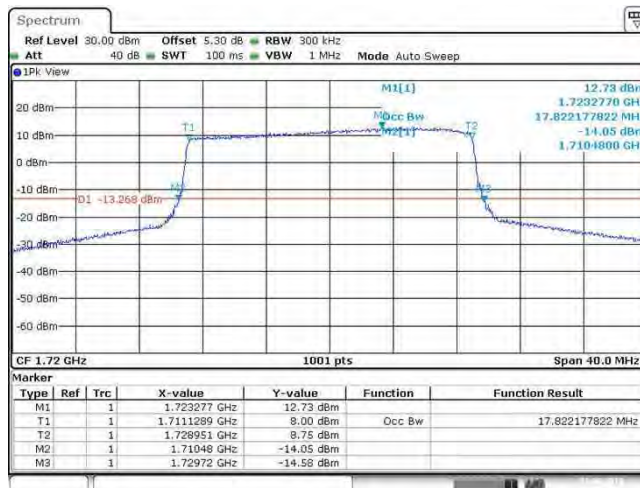
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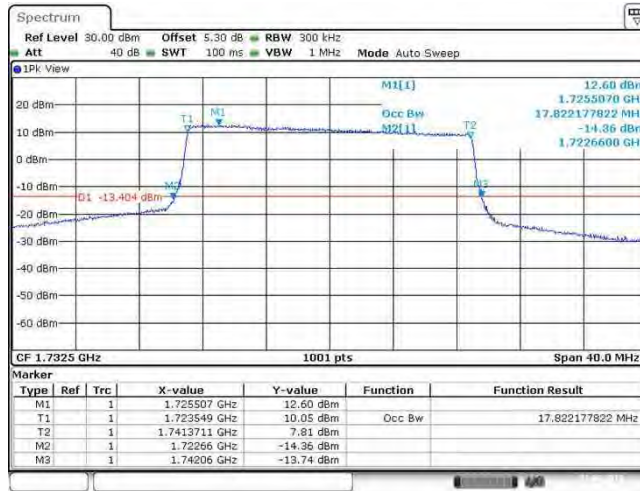
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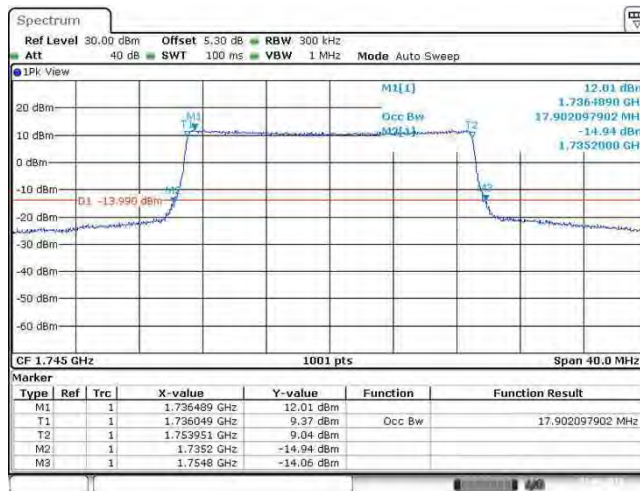
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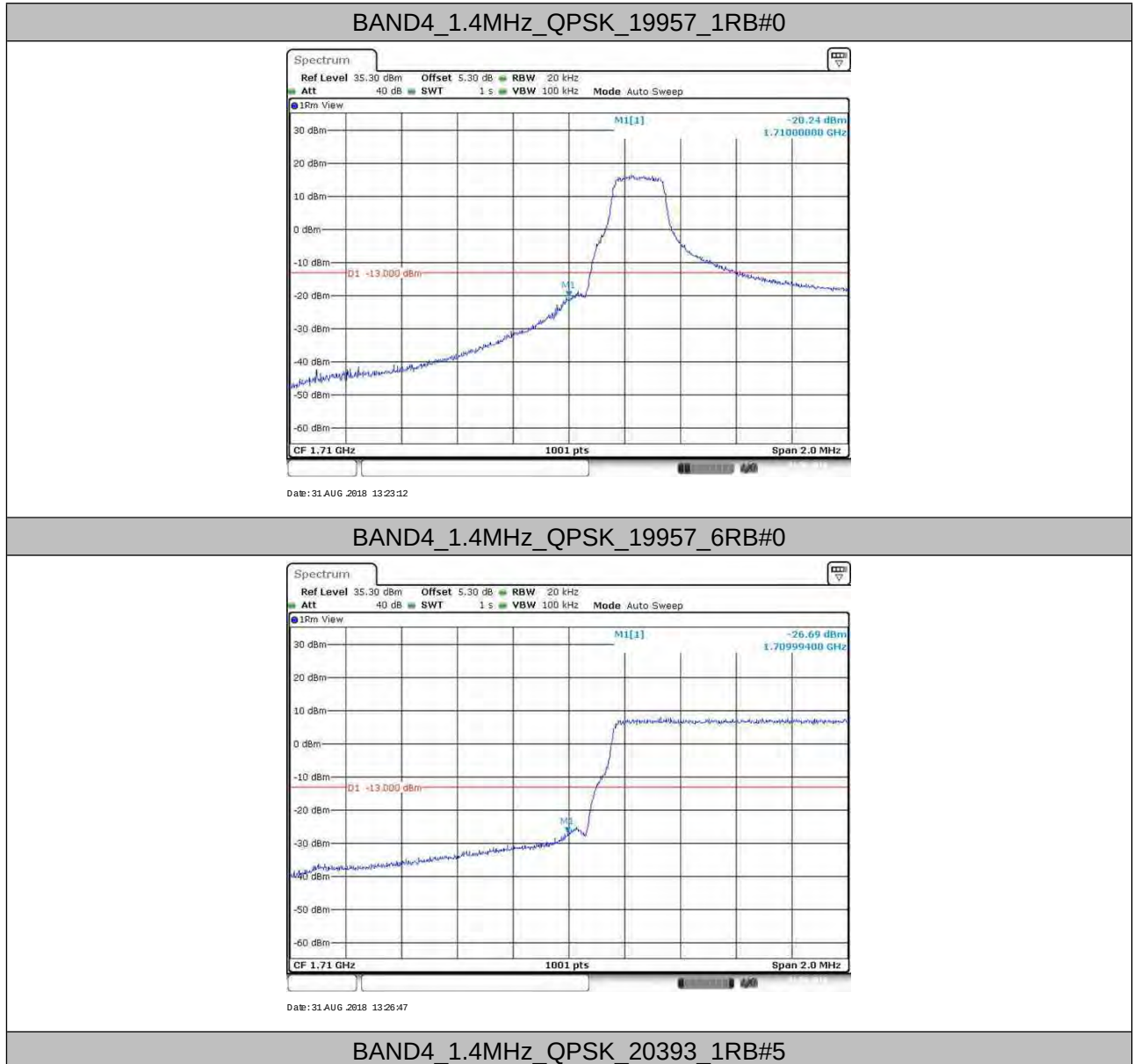


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5. Band Edge Compliance

5.1. Test Plots

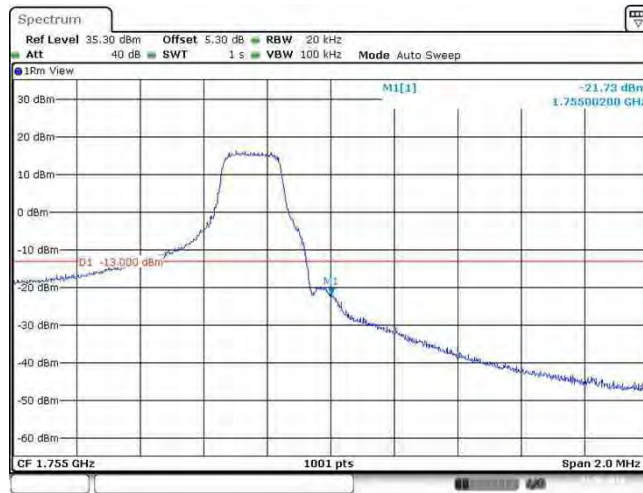




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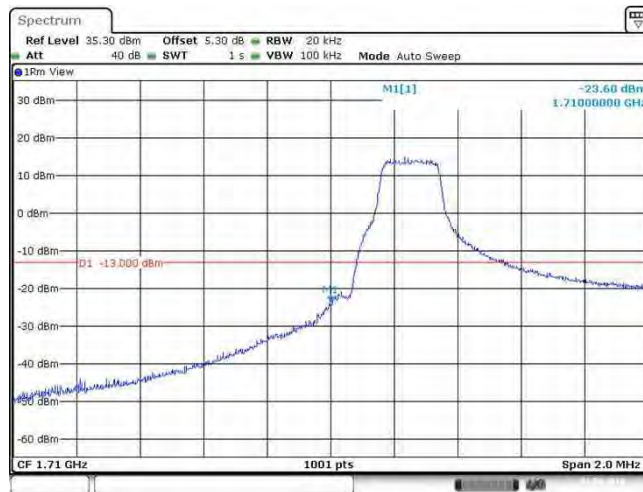
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Date: 31 AUG 2018 13:59:57

BAND4_1.4MHz_64QAM_19957_6RB#0



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Date: 31 AUG 2018 13:11:14

BAND4_1.4MHz_64QAM_20393_1RB#5



Date: 31 AUG 2018 13:10:12

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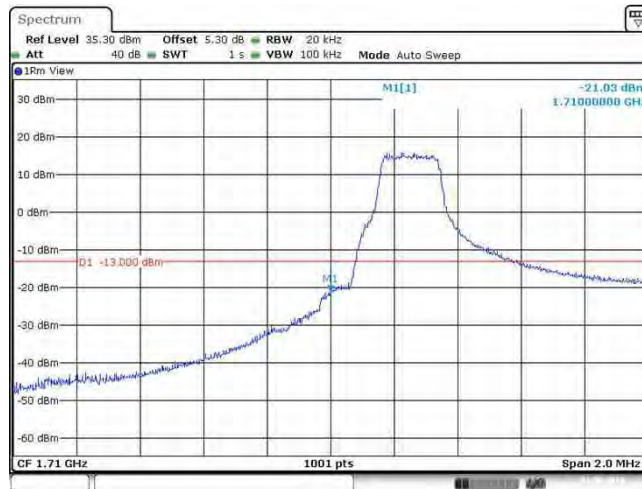
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Date: 31 AUG 2018 13:23:58

BAND4_1.4MHz_16QAM_19957_6RB#0



Date: 31 AUG 2018 13:27:33

BAND4_1.4MHz_16QAM_20393_1RB#5



Date: 31 AUG 2018 13:25:45

BAND4_1.4MHz_16QAM_20393_6RB#0

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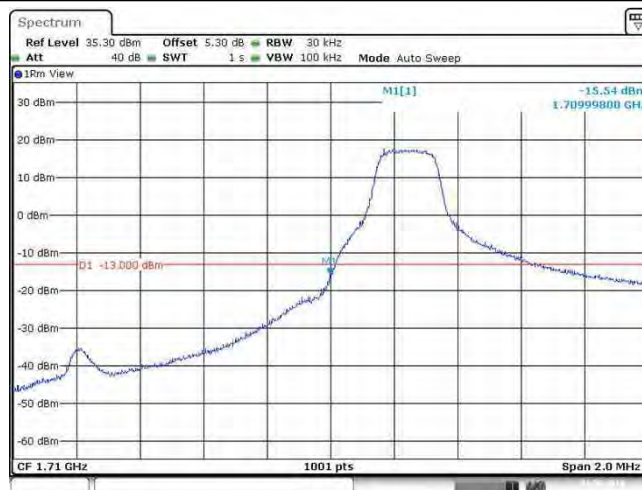
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Date: 31 AUG 2018 13:30:00

BAND4_3MHz_QPSK_19965_15RB#0



Date: 31 AUG 2018 13:33:12

BAND4_3MHz_QPSK_20385_1RB#14



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Date: 31 AUG 2018 13:31:36

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Date: 31 AUG 2018 13:34:44

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Date: 31 AUG 2018 13:12:56

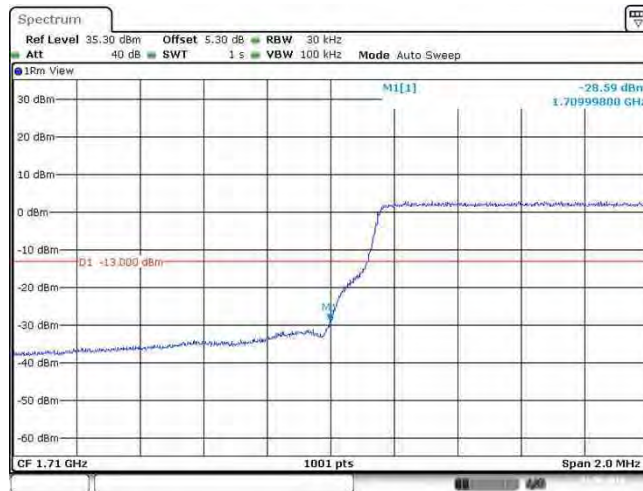
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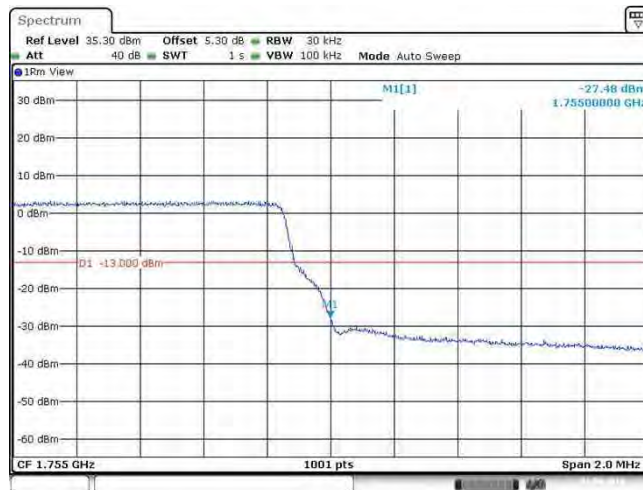
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Date: 31 AUG 2018 13:15:51

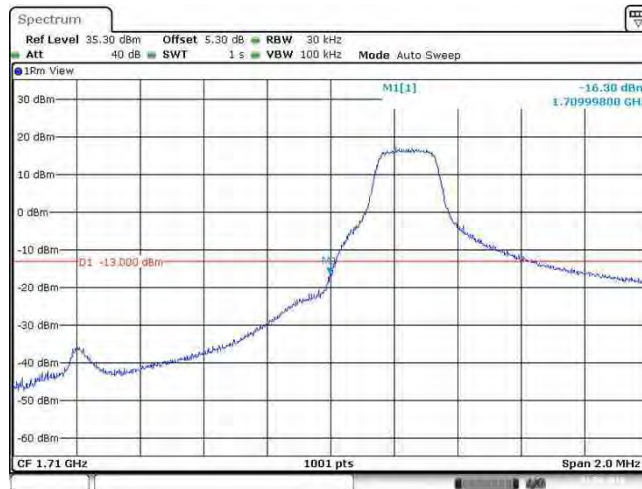
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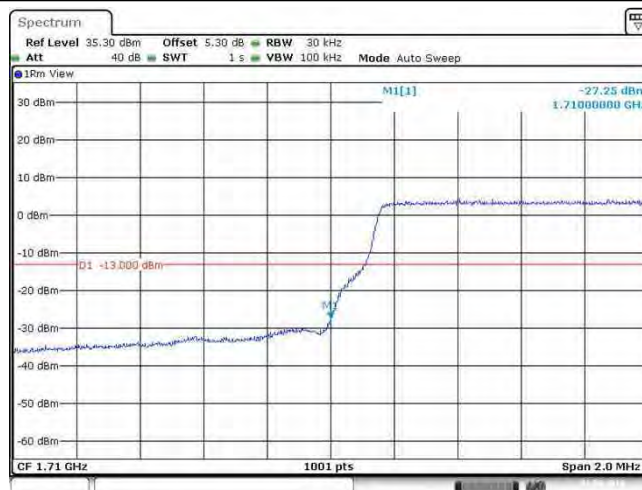
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BAND4_3MHz_16QAM_20385_1RB#14



Date: 31 AUG 2018 13:32:22

BAND4_3MHz_16QAM_20385_15RB#0



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Date: 31 AUG 2018 13:35:38

BAND4_5MHz_QPSK_19975_1RB#0



Date: 31 AUG 2018 13:36:21

BAND4_5MHz_QPSK_19975_25RB#0



Date: 31 AUG 2018 13:41:06

BAND4_5MHz_QPSK_20375_1RB#24



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Date: 31 AUG 2018 13:38:43

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Date: 31 AUG 2018 13:37:52

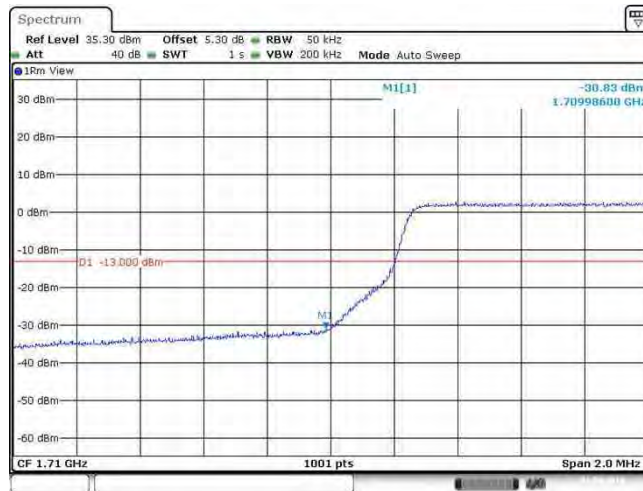
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Date: 31 AUG 2018 13:42:37

BAND4_5MHz_64QAM_20375_1RB#24



Date: 31 AUG 2018 13:40:15

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Date: 31 AUG 2018 13:44:54

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Date: 31 AUG 2018 13:37:07

BAND4_5MHz_16QAM_19975_25RB#0



Date: 31 AUG 2018 13:41:51

BAND4_5MHz_16QAM_20375_1RB#24



Date: 31 AUG 2018 13:39:29

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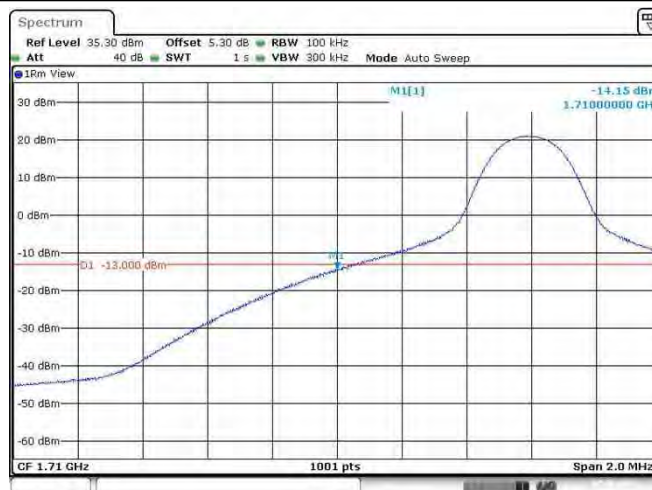
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Date: 31 AUG 2018 13:44:08

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Date: 2 SEP 2018 08:48:40

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Date: 31 AUG 2018 13:58:31

BAND4_10MHz_QPSK_20350_1RB#49

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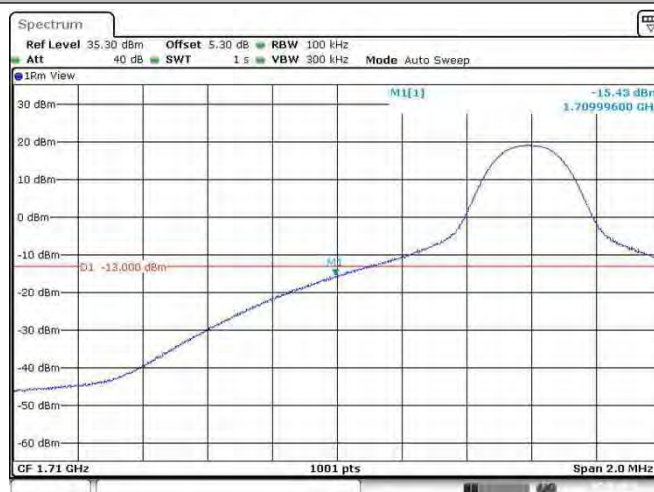
Date: 2 SEP 2018 08:51:14

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Date: 31 AUG 2018 13:52:48

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Date: 2 SEP 2018 08:50:11

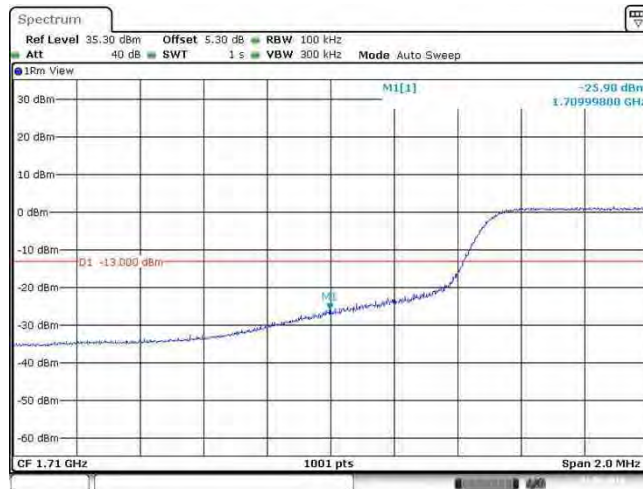
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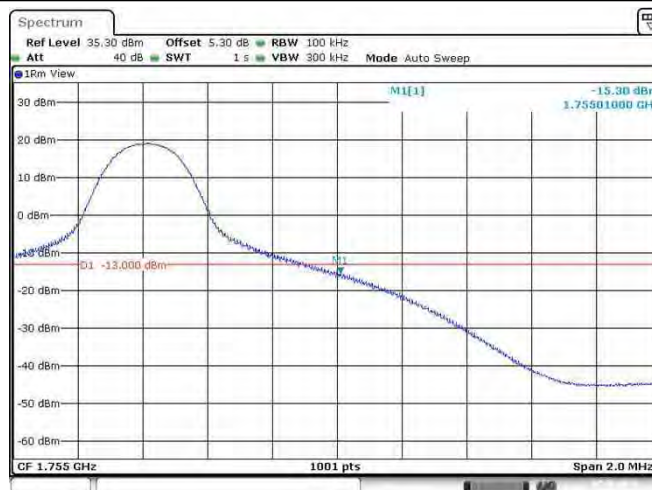
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Date: 31 AUG 2018 13:52:03

BAND4_10MHz_64QAM_20350_1RB#49



Date: 2 SEP 2018 08:52:45

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Date: 31 AUG 2018 13:54:20

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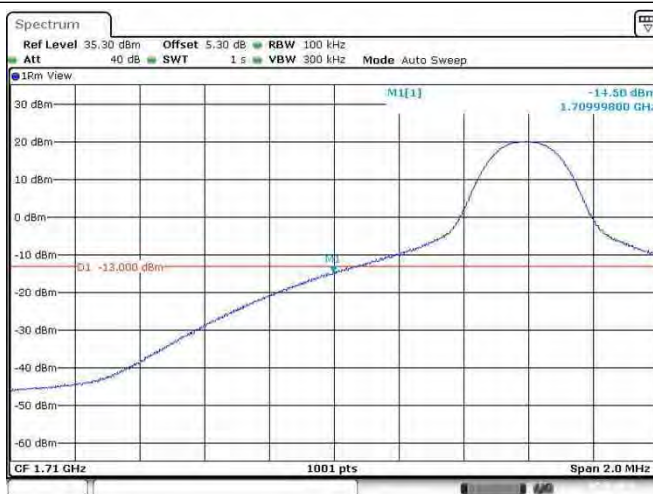
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Date: 2 SEP 2018 08:49:26

BAND4_10MHz_16QAM_20000_50RB#0



Date: 31 AUG 2018 13:51:17

BAND4_10MHz_16QAM_20350_1RB#49



Date: 2 SEP 2018 08:52:00

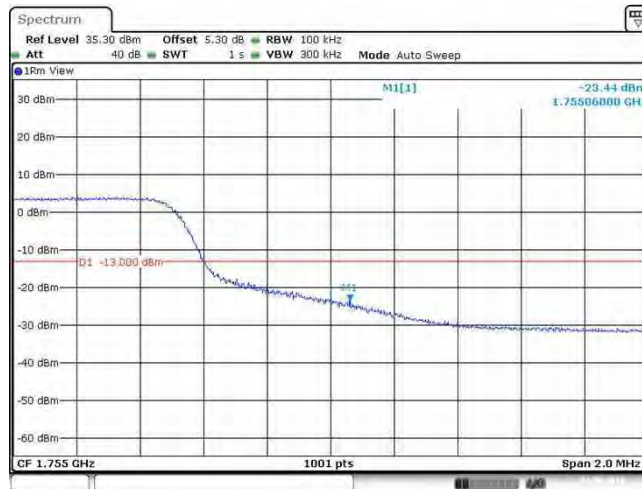
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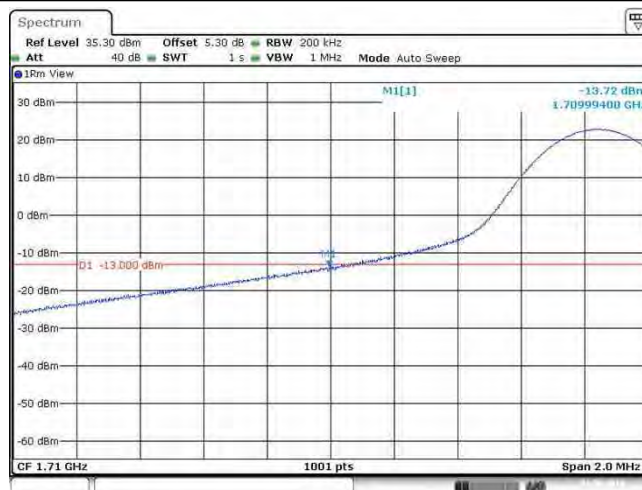
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Date: 31 AUG 2018 13:53:34

BAND4_15MHz_QPSK_20025_1RB#0



Date: 31 AUG 2018 13:55:29

BAND4_15MHz_QPSK_20025_75RB#0



Date: 31 AUG 2018 14:02:12

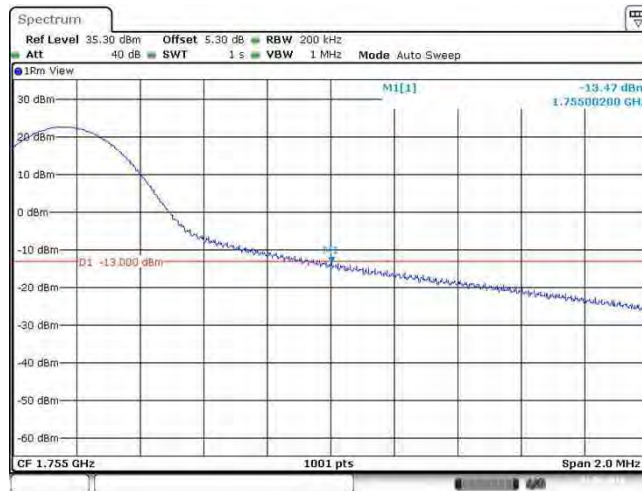
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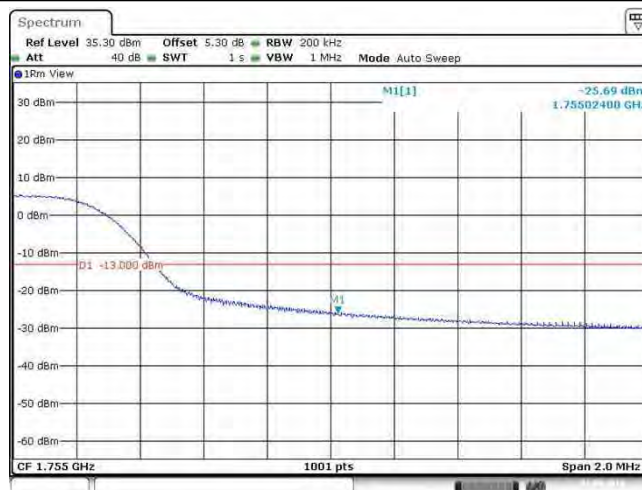
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Date: 31 AUG 2018 13:57:55

BAND4_15MHz_QPSK_20325_75RB#0



Date: 31 AUG 2018 14:04:33

BAND4_15MHz_64QAM_20025_1RB#0



Date: 31 AUG 2018 13:56:51

BAND4_15MHz_64QAM_20025_75RB#0

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Date: 31 AUG 2018 14:03:43

BAND4_15MHz_64QAM_20325_1RB#74



Date: 31 AUG 2018 13:59:27

BAND4_15MHz_64QAM_20325_75RB#0



Date: 31 AUG 2018 14:06:05

BAND4_15MHz_16QAM_20025_1RB#0

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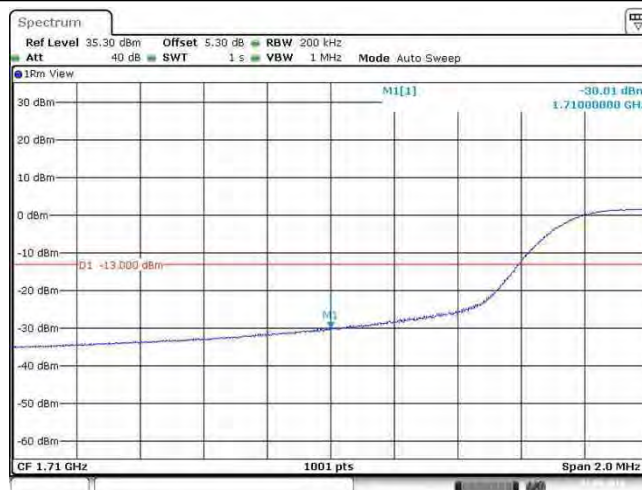
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Date: 31 AUG 2018 13:56:06

BAND4_15MHz_16QAM_20025_75RB#0



Date: 31 AUG 2018 14:02:58

BAND4_15MHz_16QAM_20325_1RB#74



Date: 31 AUG 2018 13:58:41

BAND4_15MHz_16QAM_20325_75RB#0

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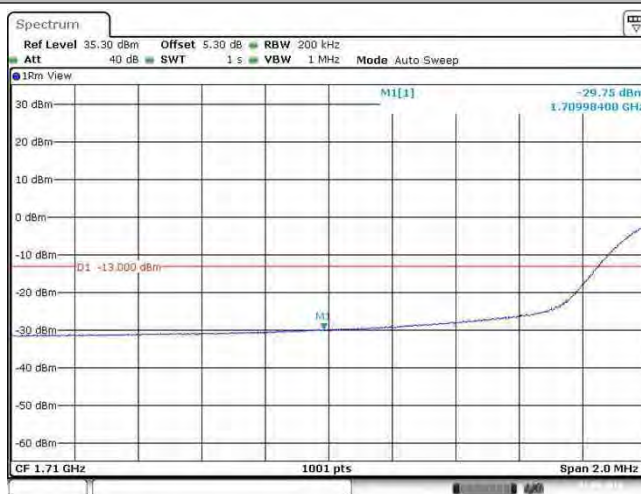
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BAND4_20MHz_QPSK_20050_1RB#0



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Date: 31 AUG 2018 14:21:17

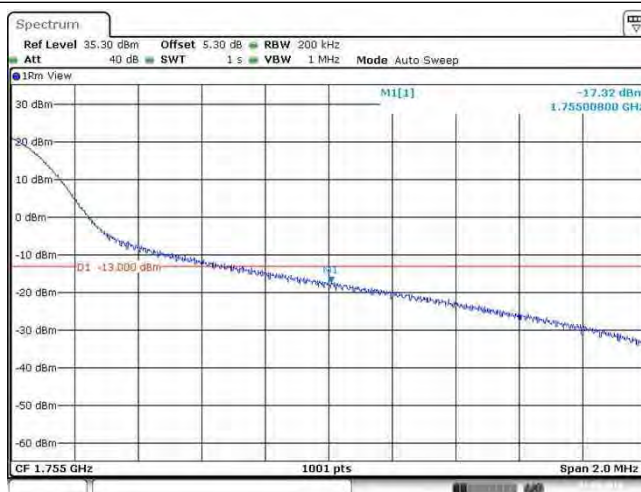
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SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

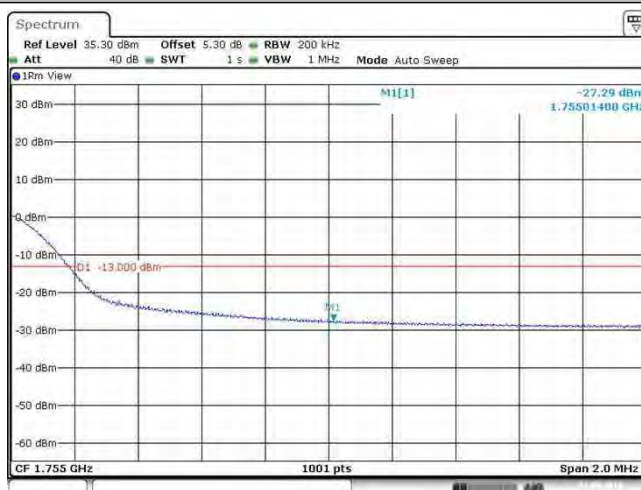
Report No.: SZEM180500437001

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Date: 31 AUG 2018 14:18:34

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BAND4_20MHz_64QAM_20050_1RB#0



Date: 31 AUG 2018 14:16:31

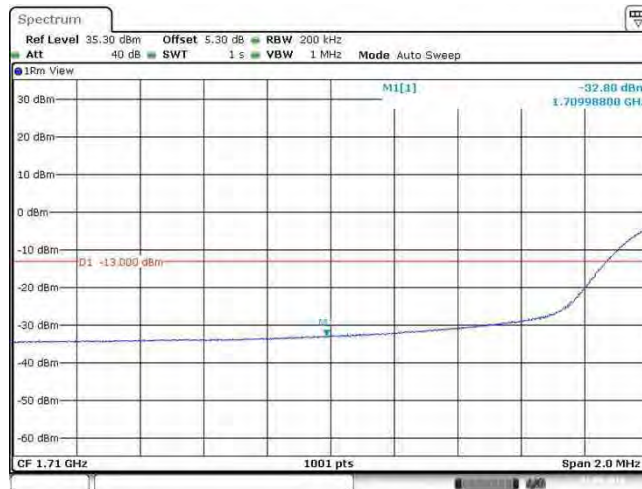
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SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

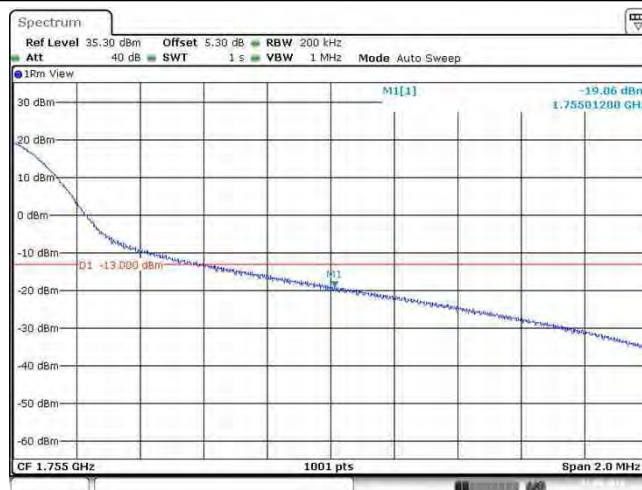
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Date: 31 AUG 2018 14:22:49

BAND4_20MHz_64QAM_20300_1RB#99



Date: 31 AUG 2018 14:29:25

BAND4_20MHz_64QAM_20300_100RB#0



Date: 31 AUG 2018 14:25:11

BAND4_20MHz_16QAM_20050_1RB#0

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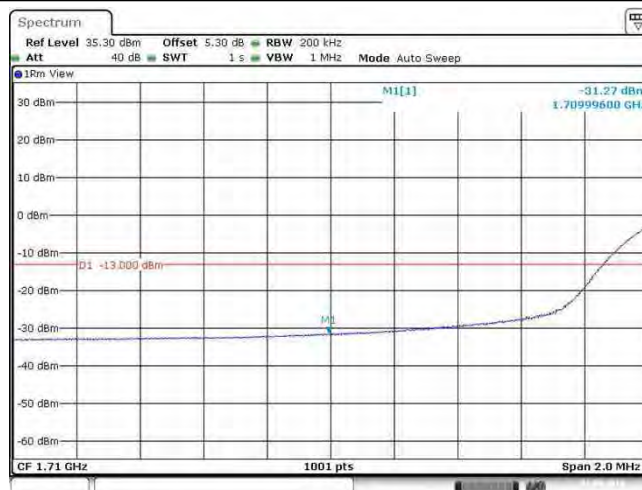
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Date: 31 AUG 2018 14:09:45

BAND4_20MHz_16QAM_20050_100RB#0



Date: 31 AUG 2018 14:22:83

BAND4_20MHz_16QAM_20300_1RB#99



Date: 31 AUG 2018 14:19:19

BAND4_20MHz_16QAM_20300_100RB#0

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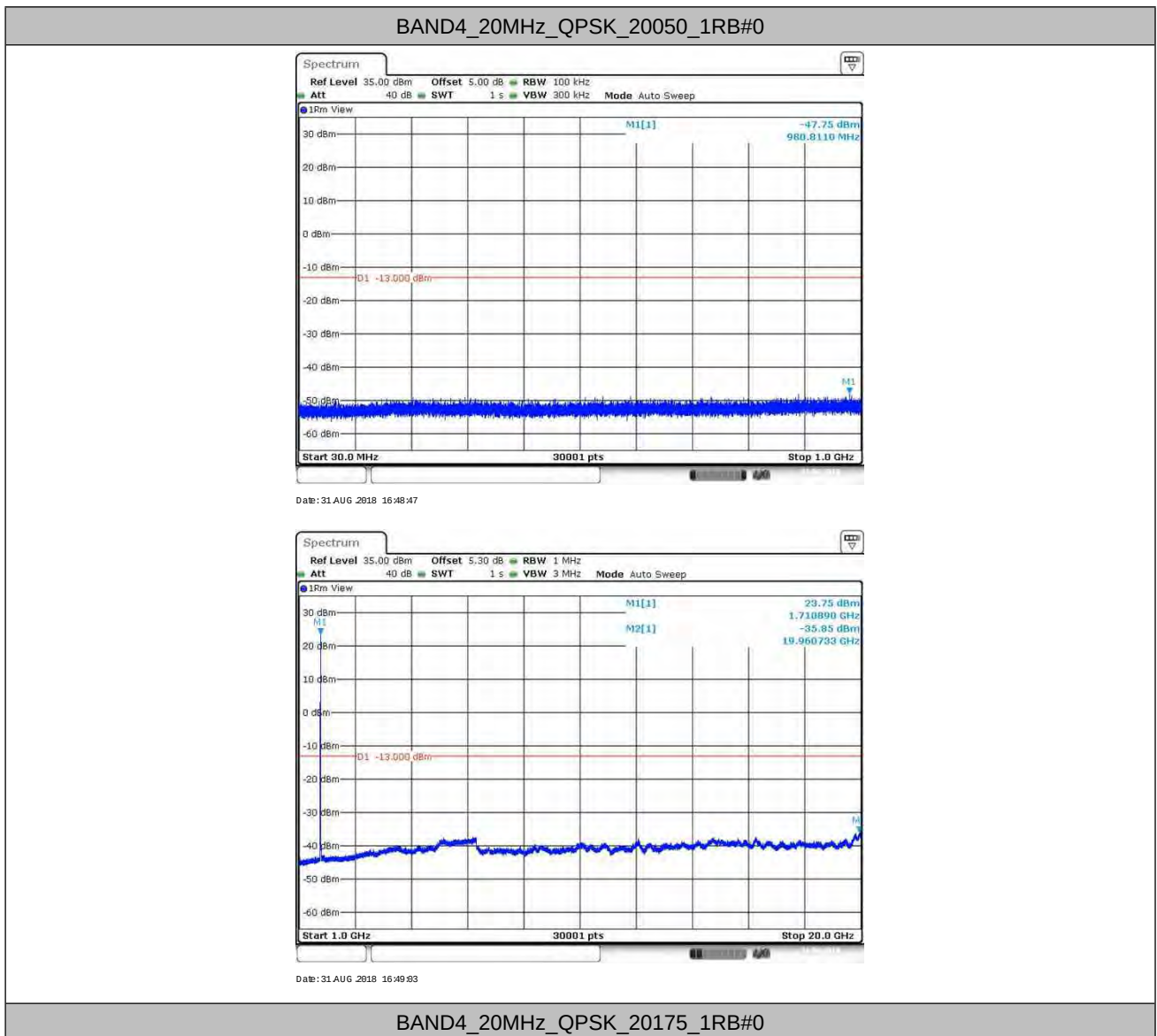


6. Spurious Emission at Antenna Terminal

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

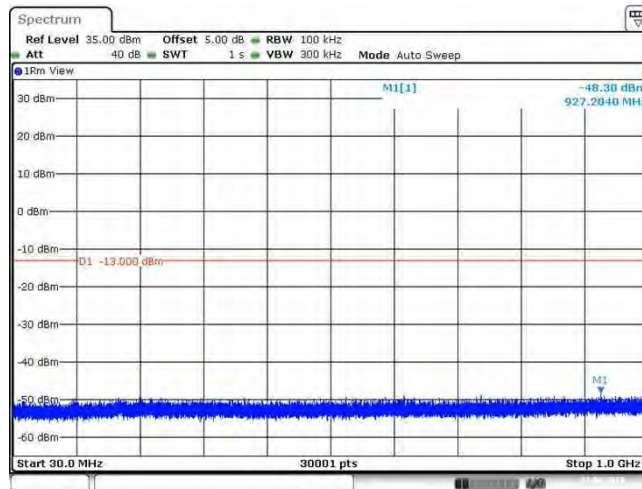




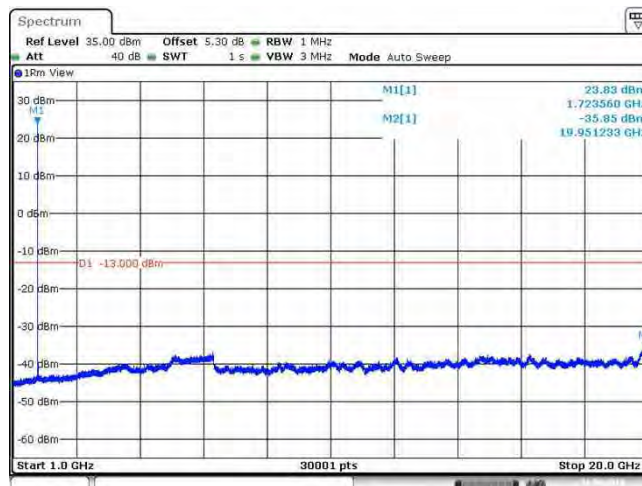
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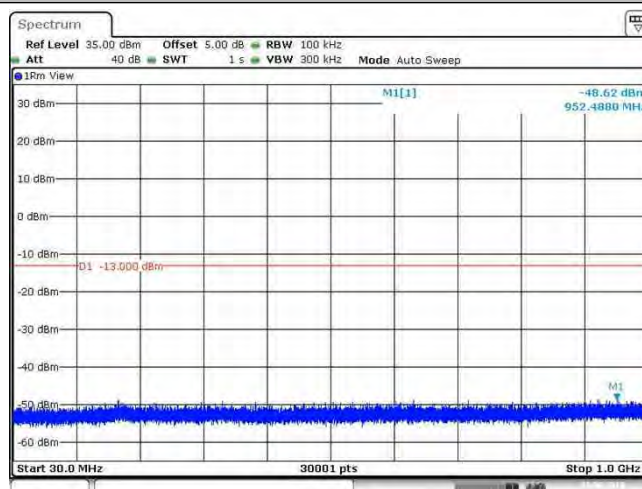


Date: 31 AUG 2018 16:58:26



Date: 31 AUG 2018 16:58:52

BAND4_20MHz_QPSK_20300_1RB#0



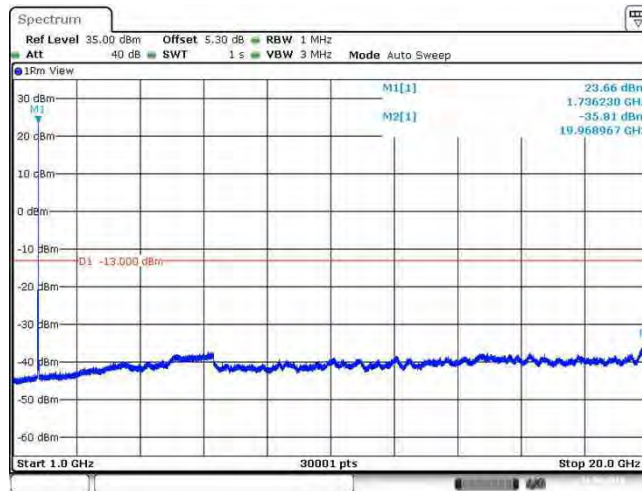
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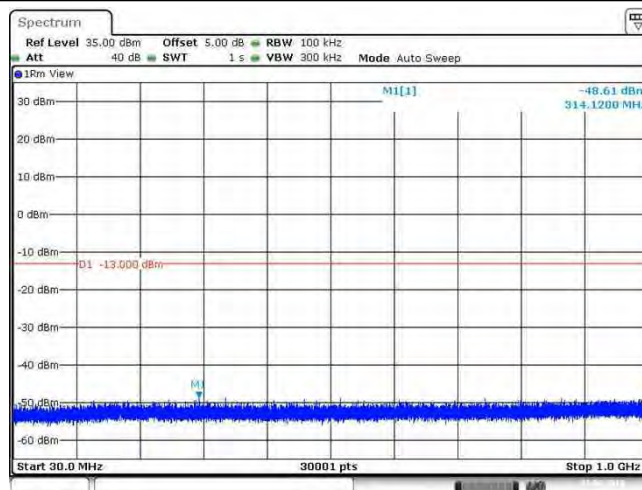
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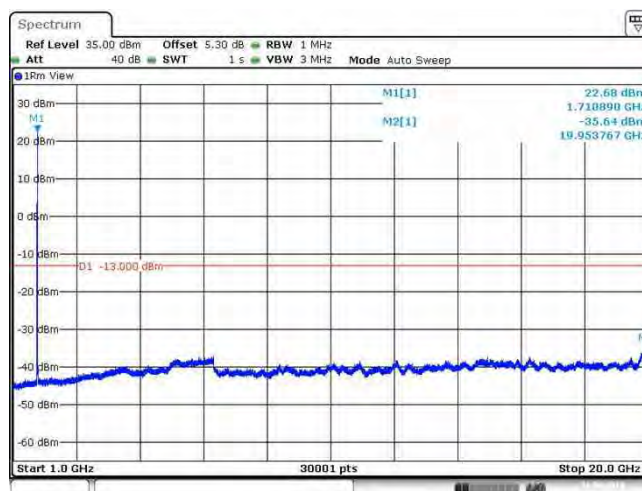


Date: 31 AUG 2018 16:52:36

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Date: 31 AUG 2018 16:59:13

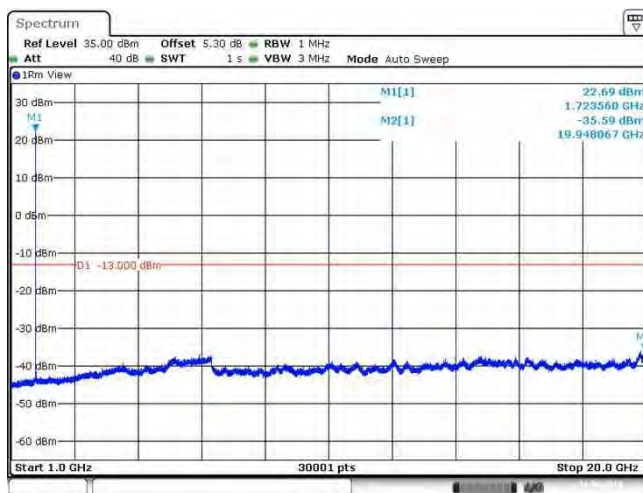
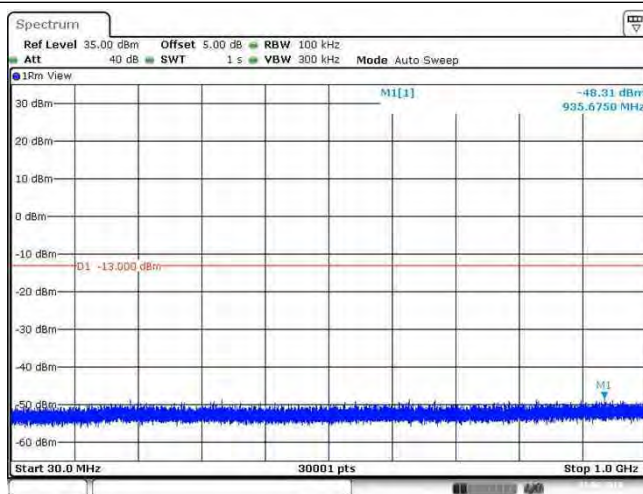
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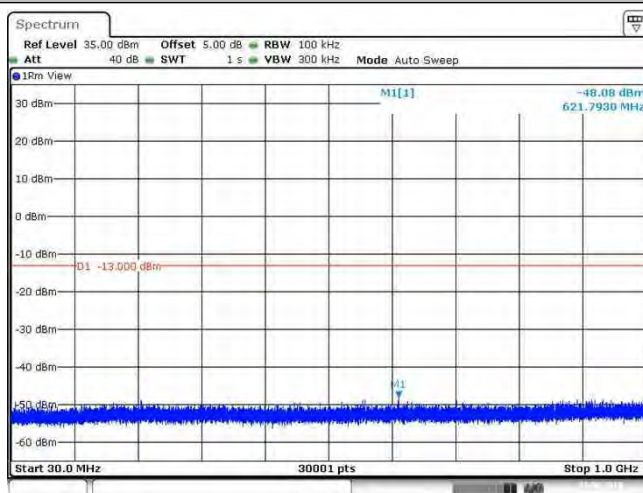
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BAND4_20MHz_64QAM_20300_1RB#0

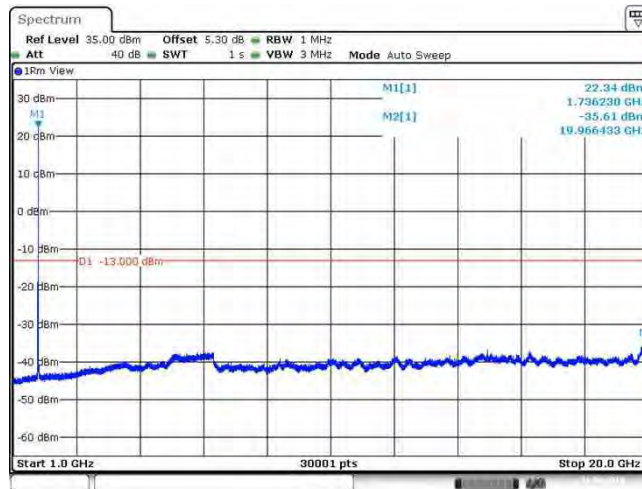




SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

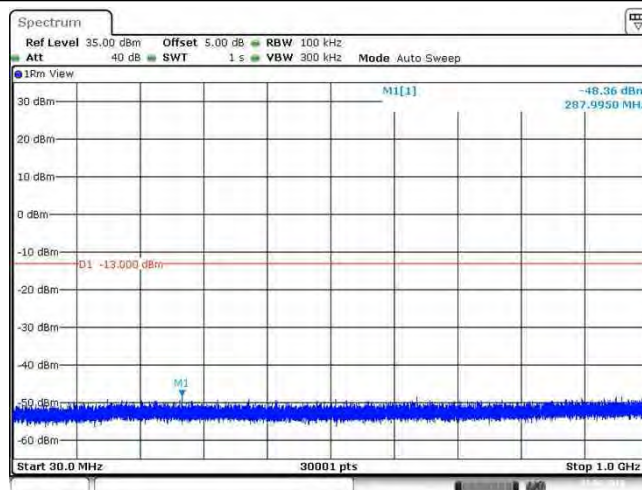
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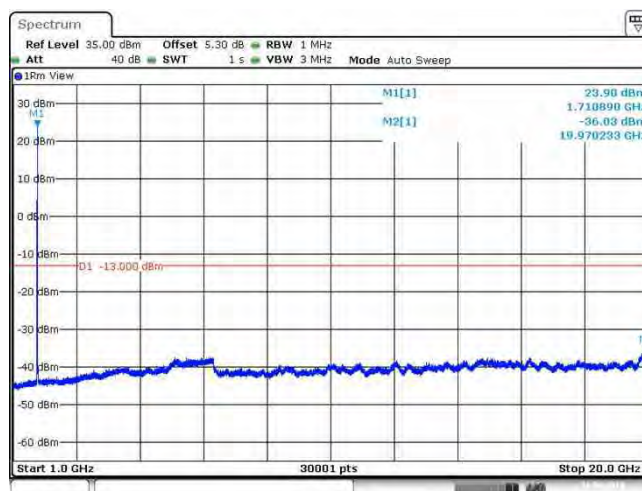


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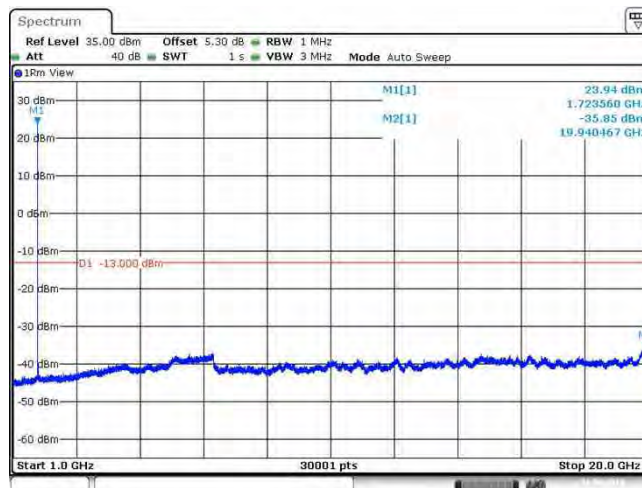
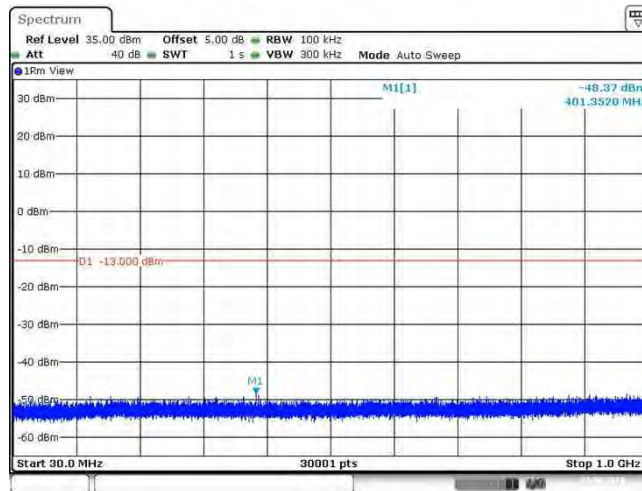
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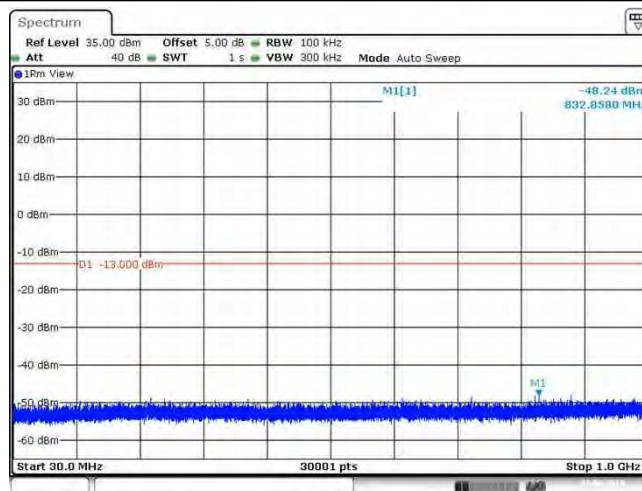
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BAND4_20MHz_16QAM_20300_1RB#0

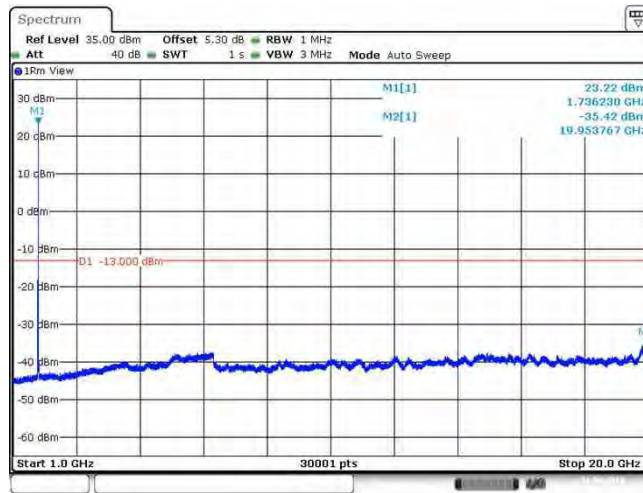




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7. Field Strength of Spurious Radiation

7.1. Test BAND = LTE BAND 4

7.1.1. Test Mode =LTE/TM1 20MHz

7.1.1.1. Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
64.100000	-81.69	-13.00	68.69	Vertical
104.300000	-65.39	-13.00	52.39	Vertical
1362.500000	-58.88	-13.00	45.88	Vertical
3762.775000	-68.52	-13.00	55.52	Vertical
5132.975000	-64.09	-13.00	51.09	Vertical
7800.575000	-64.18	-13.00	51.18	Vertical
62.550000	-77.98	-13.00	64.98	Horizontal
104.300000	-80.83	-13.00	67.83	Horizontal
1362.500000	-59.97	-13.00	46.97	Horizontal
4196.000000	-67.30	-13.00	54.30	Horizontal
5133.300000	-64.39	-13.00	51.39	Horizontal
8555.225000	-63.66	-13.00	50.66	Horizontal

7.1.1.2. Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
64.200000	-81.78	-13.00	68.78	Vertical
104.250000	-65.34	-13.00	52.34	Vertical
1375.000000	-61.08	-13.00	48.08	Vertical
4020.175000	-67.76	-13.00	54.76	Vertical
5170.675000	-64.54	-13.00	51.54	Vertical
7950.725000	-63.72	-13.00	50.72	Vertical
62.400000	-77.77	-13.00	64.77	Horizontal
104.300000	-81.21	-13.00	68.21	Horizontal
1375.000000	-60.95	-13.00	47.95	Horizontal
4452.100000	-67.36	-13.00	54.36	Horizontal



5170.350000	-65.38	-13.00	52.38	Horizontal
8617.625000	-62.92	-13.00	49.92	Horizontal

7.1.1.3. Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Margin (dB)	Polarization
64.400000	-81.79	-13.00	68.79	Vertical
104.250000	-65.14	-13.00	52.14	Vertical
1387.500000	-60.62	-13.00	47.62	Vertical
3471.900000	-68.46	-13.00	55.46	Vertical
5208.050000	-63.77	-13.00	50.77	Vertical
8615.675000	-63.71	-13.00	50.71	Vertical
55.750000	-78.05	-13.00	65.05	Horizontal
104.300000	-80.97	-13.00	67.97	Horizontal
1387.500000	-60.80	-13.00	47.80	Horizontal
3870.675000	-68.60	-13.00	55.60	Horizontal
5208.050000	-64.62	-13.00	51.62	Horizontal
8680.350000	-63.37	-13.00	50.37	Horizontal

Remark:

- 1) The disturbance above 12.75GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data had been displayed.
- 2) We have tested all modulation and all Bandwidth , but only the worst case data presented in this report.



8. Frequency Stability

8.1. Frequency Vs Voltage

Voltage										
BAND	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
BAND4	20MHz	QPSK	20050	100RB#0	VL	NT	0.80	0.000465	±2.5	PASS
BAND4	20MHz	QPSK	20050	100RB#0	VN	NT	0.90	0.000523	±2.5	PASS
BAND4	20MHz	QPSK	20050	100RB#0	VH	NT	1.90	0.001105	±2.5	PASS
BAND4	20MHz	QPSK	20175	100RB#0	VL	NT	1.60	0.000924	±2.5	PASS
BAND4	20MHz	QPSK	20175	100RB#0	VN	NT	2.90	0.001674	±2.5	PASS
BAND4	20MHz	QPSK	20175	100RB#0	VH	NT	0.30	0.000173	±2.5	PASS
BAND4	20MHz	QPSK	20300	100RB#0	VL	NT	2.60	0.001490	±2.5	PASS
BAND4	20MHz	QPSK	20300	100RB#0	VN	NT	1.50	0.000860	±2.5	PASS
BAND4	20MHz	QPSK	20300	100RB#0	VH	NT	2.20	0.001261	±2.5	PASS
BAND4	20MHz	64QAM	20050	100RB#0	VL	NT	1.10	0.000640	±2.5	PASS
BAND4	20MHz	64QAM	20050	100RB#0	VN	NT	-0.10	-0.000058	±2.5	PASS
BAND4	20MHz	64QAM	20050	100RB#0	VH	NT	3.00	0.001744	±2.5	PASS
BAND4	20MHz	64QAM	20175	100RB#0	VL	NT	2.60	0.001501	±2.5	PASS
BAND4	20MHz	64QAM	20175	100RB#0	VN	NT	1.90	0.001097	±2.5	PASS
BAND4	20MHz	64QAM	20175	100RB#0	VH	NT	2.00	0.001154	±2.5	PASS
BAND4	20MHz	64QAM	20300	100RB#0	VL	NT	0.30	0.000172	±2.5	PASS
BAND4	20MHz	64QAM	20300	100RB#0	VN	NT	1.10	0.000630	±2.5	PASS
BAND4	20MHz	64QAM	20300	100RB#0	VH	NT	2.30	0.001318	±2.5	PASS
BAND4	20MHz	16QAM	20050	100RB#0	VL	NT	2.30	0.001337	±2.5	PASS
BAND4	20MHz	16QAM	20050	100RB#0	VN	NT	3.40	0.001977	±2.5	PASS
BAND4	20MHz	16QAM	20050	100RB#0	VH	NT	2.70	0.001570	±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	3.30	0.001905	±2.5	PASS
BAND4	20MHz	16QAM	20300	100RB#0	VL	NT	2.50	0.001433	±2.5	PASS
BAND4	20MHz	16QAM	20300	100RB#0	VN	NT	2.20	0.001261	±2.5	PASS
BAND4	20MHz	16QAM	20300	100RB#0	VH	NT	0.70	0.000401	±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	2.50	0.001453	±2.5	PASS
BAND4	20MHz	QPSK	20050	100RB#0	NV	-20	-1.30	-0.000756	±2.5	PASS
BAND4	20MHz	QPSK	20050	100RB#0	NV	-10	2.30	0.001337	±2.5	PASS
BAND4	20MHz	QPSK	20050	100RB#0	NV	0	0.50	0.000291	±2.5	PASS
BAND4	20MHz	QPSK	20050	100RB#0	NV	10	0.70	0.000407	±2.5	PASS
BAND4	20MHz	QPSK	20050	100RB#0	NV	20	2.20	0.001279	±2.5	PASS
BAND4	20MHz	QPSK	20050	100RB#0	NV	30	2.10	0.001221	±2.5	PASS



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BAND4	20MHz	QPSK	20050	100RB#0	NV	40	2.50	0.001453	±2.5	PASS
BAND4	20MHz	QPSK	20050	100RB#0	NV	50	0.50	0.000291	±2.5	PASS
BAND4	20MHz	QPSK	20175	100RB#0	NV	-30	2.80	0.001616	±2.5	PASS
BAND4	20MHz	QPSK	20175	100RB#0	NV	-20	1.60	0.000924	±2.5	PASS
BAND4	20MHz	QPSK	20175	100RB#0	NV	-10	1.90	0.001097	±2.5	PASS
BAND4	20MHz	QPSK	20175	100RB#0	NV	0	2.30	0.001328	±2.5	PASS
BAND4	20MHz	QPSK	20175	100RB#0	NV	10	2.20	0.001270	±2.5	PASS
BAND4	20MHz	QPSK	20175	100RB#0	NV	20	2.70	0.001558	±2.5	PASS
BAND4	20MHz	QPSK	20175	100RB#0	NV	30	1.90	0.001097	±2.5	PASS
BAND4	20MHz	QPSK	20175	100RB#0	NV	40	2.30	0.001328	±2.5	PASS
BAND4	20MHz	QPSK	20175	100RB#0	NV	50	2.00	0.001154	±2.5	PASS
BAND4	20MHz	QPSK	20300	100RB#0	NV	-30	2.70	0.001547	±2.5	PASS
BAND4	20MHz	QPSK	20300	100RB#0	NV	-20	1.10	0.000630	±2.5	PASS
BAND4	20MHz	QPSK	20300	100RB#0	NV	-10	1.80	0.001032	±2.5	PASS
BAND4	20MHz	QPSK	20300	100RB#0	NV	0	2.20	0.001261	±2.5	PASS
BAND4	20MHz	QPSK	20300	100RB#0	NV	10	2.10	0.001203	±2.5	PASS
BAND4	20MHz	QPSK	20300	100RB#0	NV	20	1.40	0.000802	±2.5	PASS
BAND4	20MHz	QPSK	20300	100RB#0	NV	30	1.30	0.000745	±2.5	PASS
BAND4	20MHz	QPSK	20300	100RB#0	NV	40	2.70	0.001547	±2.5	PASS
BAND4	20MHz	QPSK	20300	100RB#0	NV	50	0.50	0.000287	±2.5	PASS
BAND4	20MHz	64QAM	20050	100RB#0	NV	-30	1.70	0.000988	±2.5	PASS
BAND4	20MHz	64QAM	20050	100RB#0	NV	-20	1.60	0.000930	±2.5	PASS
BAND4	20MHz	64QAM	20050	100RB#0	NV	-10	2.20	0.001279	±2.5	PASS
BAND4	20MHz	64QAM	20050	100RB#0	NV	0	0.90	0.000523	±2.5	PASS
BAND4	20MHz	64QAM	20050	100RB#0	NV	10	0.80	0.000465	±2.5	PASS
BAND4	20MHz	64QAM	20050	100RB#0	NV	20	1.40	0.000814	±2.5	PASS
BAND4	20MHz	64QAM	20050	100RB#0	NV	30	1.90	0.001105	±2.5	PASS
BAND4	20MHz	64QAM	20050	100RB#0	NV	40	3.30	0.001919	±2.5	PASS
BAND4	20MHz	64QAM	20050	100RB#0	NV	50	2.60	0.001512	±2.5	PASS
BAND4	20MHz	64QAM	20175	100RB#0	NV	-30	1.20	0.000693	±2.5	PASS
BAND4	20MHz	64QAM	20175	100RB#0	NV	-20	0.60	0.000346	±2.5	PASS
BAND4	20MHz	64QAM	20175	100RB#0	NV	-10	0.60	0.000346	±2.5	PASS
BAND4	20MHz	64QAM	20175	100RB#0	NV	0	0.80	0.000462	±2.5	PASS
BAND4	20MHz	64QAM	20175	100RB#0	NV	10	2.60	0.001501	±2.5	PASS
BAND4	20MHz	64QAM	20175	100RB#0	NV	20	1.60	0.000924	±2.5	PASS
BAND4	20MHz	64QAM	20175	100RB#0	NV	30	0.90	0.000519	±2.5	PASS
BAND4	20MHz	64QAM	20175	100RB#0	NV	40	2.30	0.001328	±2.5	PASS
BAND4	20MHz	64QAM	20175	100RB#0	NV	50	0.10	0.000058	±2.5	PASS
BAND4	20MHz	64QAM	20300	100RB#0	NV	-30	2.00	0.001146	±2.5	PASS
BAND4	20MHz	64QAM	20300	100RB#0	NV	-20	2.70	0.001547	±2.5	PASS
BAND4	20MHz	64QAM	20300	100RB#0	NV	-10	0.10	0.000057	±2.5	PASS
BAND4	20MHz	64QAM	20300	100RB#0	NV	0	1.10	0.000630	±2.5	PASS
BAND4	20MHz	64QAM	20300	100RB#0	NV	10	2.00	0.001146	±2.5	PASS
BAND4	20MHz	64QAM	20300	100RB#0	NV	20	2.20	0.001261	±2.5	PASS
BAND4	20MHz	64QAM	20300	100RB#0	NV	30	0.20	0.000115	±2.5	PASS
BAND4	20MHz	64QAM	20300	100RB#0	NV	40	1.70	0.000974	±2.5	PASS
BAND4	20MHz	64QAM	20300	100RB#0	NV	50	1.60	0.000917	±2.5	PASS
BAND4	20MHz	16QAM	20050	100RB#0	NV	-30	2.50	0.001453	±2.5	PASS

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BAND4	20MHz	16QAM	20050	100RB#0	NV	-20	3.00	0.001744	±2.5	PASS
BAND4	20MHz	16QAM	20050	100RB#0	NV	-10	1.80	0.001047	±2.5	PASS
BAND4	20MHz	16QAM	20050	100RB#0	NV	0	2.20	0.001279	±2.5	PASS
BAND4	20MHz	16QAM	20050	100RB#0	NV	10	0.30	0.000174	±2.5	PASS
BAND4	20MHz	16QAM	20050	100RB#0	NV	20	1.20	0.000698	±2.5	PASS
BAND4	20MHz	16QAM	20050	100RB#0	NV	30	1.10	0.000640	±2.5	PASS
BAND4	20MHz	16QAM	20050	100RB#0	NV	40	3.80	0.002209	±2.5	PASS
BAND4	20MHz	16QAM	20050	100RB#0	NV	50	1.50	0.000872	±2.5	PASS
BAND4	20MHz	16QAM	20175	100RB#0	NV	-30	3.00	0.001732	±2.5	PASS
BAND4	20MHz	16QAM	20175	100RB#0	NV	-20	3.30	0.001905	±2.5	PASS
BAND4	20MHz	16QAM	20175	100RB#0	NV	-10	2.90	0.001674	±2.5	PASS
BAND4	20MHz	16QAM	20175	100RB#0	NV	0	2.80	0.001616	±2.5	PASS
BAND4	20MHz	16QAM	20175	100RB#0	NV	10	1.60	0.000924	±2.5	PASS
BAND4	20MHz	16QAM	20175	100RB#0	NV	20	1.50	0.000866	±2.5	PASS
BAND4	20MHz	16QAM	20175	100RB#0	NV	30	1.60	0.000924	±2.5	PASS
BAND4	20MHz	16QAM	20175	100RB#0	NV	40	3.50	0.002020	±2.5	PASS
BAND4	20MHz	16QAM	20175	100RB#0	NV	50	1.20	0.000693	±2.5	PASS
BAND4	20MHz	16QAM	20300	100RB#0	NV	-30	3.00	0.001719	±2.5	PASS
BAND4	20MHz	16QAM	20300	100RB#0	NV	-20	2.70	0.001547	±2.5	PASS
BAND4	20MHz	16QAM	20300	100RB#0	NV	-10	1.20	0.000688	±2.5	PASS
BAND4	20MHz	16QAM	20300	100RB#0	NV	0	-0.10	-0.000057	±2.5	PASS
BAND4	20MHz	16QAM	20300	100RB#0	NV	10	1.80	0.001032	±2.5	PASS
BAND4	20MHz	16QAM	20300	100RB#0	NV	20	2.10	0.001203	±2.5	PASS
BAND4	20MHz	16QAM	20300	100RB#0	NV	30	2.90	0.001662	±2.5	PASS
BAND4	20MHz	16QAM	20300	100RB#0	NV	40	1.90	0.001089	±2.5	PASS
BAND4	20MHz	16QAM	20300	100RB#0	NV	50	2.20	0.001261	±2.5	PASS

The End