

Annex for FCC LTE Band 4

Test Report No. :CTL2203279012-WF07

Appendix A : RF Output Power

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	24.84	PASS
Band4	1.4MHz	QPSK	19957	1RB#2	24.95	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	24.78	PASS
Band4	1.4MHz	QPSK	19957	3RB#0	24.72	PASS
Band4	1.4MHz	QPSK	19957	3RB#1	24.69	PASS
Band4	1.4MHz	QPSK	19957	3RB#3	24.71	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	23.85	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	24.94	PASS
Band4	1.4MHz	QPSK	20175	1RB#2	25.12	PASS
Band4	1.4MHz	QPSK	20175	1RB#5	24.96	PASS
Band4	1.4MHz	QPSK	20175	3RB#0	24.63	PASS
Band4	1.4MHz	QPSK	20175	3RB#1	24.64	PASS
Band4	1.4MHz	QPSK	20175	3RB#3	24.62	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	24.02	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	24.73	PASS
Band4	1.4MHz	QPSK	20393	1RB#2	24.86	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	24.74	PASS
Band4	1.4MHz	QPSK	20393	3RB#0	24.67	PASS
Band4	1.4MHz	QPSK	20393	3RB#1	24.69	PASS
Band4	1.4MHz	QPSK	20393	3RB#3	24.67	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	23.81	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	23.48	PASS
Band4	1.4MHz	16QAM	19957	1RB#2	23.64	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	23.48	PASS
Band4	1.4MHz	16QAM	19957	3RB#0	23.45	PASS
Band4	1.4MHz	16QAM	19957	3RB#1	23.46	PASS
Band4	1.4MHz	16QAM	19957	3RB#3	23.44	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	22.77	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	23.47	PASS
Band4	1.4MHz	16QAM	20175	1RB#2	23.67	PASS
Band4	1.4MHz	16QAM	20175	1RB#5	23.47	PASS
Band4	1.4MHz	16QAM	20175	3RB#0	23.34	PASS
Band4	1.4MHz	16QAM	20175	3RB#1	23.32	PASS
Band4	1.4MHz	16QAM	20175	3RB#3	23.31	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	22.78	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	23.47	PASS

Band4	1.4MHz	16QAM	20393	1RB#2	23.60	PASS
Band4	1.4MHz	16QAM	20393	1RB#5	23.45	PASS
Band4	1.4MHz	16QAM	20393	3RB#0	23.45	PASS
Band4	1.4MHz	16QAM	20393	3RB#1	23.46	PASS
Band4	1.4MHz	16QAM	20393	3RB#3	23.39	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	22.77	PASS
Band4	3MHz	QPSK	19965	1RB#0	24.80	PASS
Band4	3MHz	QPSK	19965	1RB#8	24.89	PASS
Band4	3MHz	QPSK	19965	1RB#14	24.87	PASS
Band4	3MHz	QPSK	19965	8RB#0	23.78	PASS
Band4	3MHz	QPSK	19965	8RB#4	23.82	PASS
Band4	3MHz	QPSK	19965	8RB#7	23.75	PASS
Band4	3MHz	QPSK	19965	15RB#0	23.72	PASS
Band4	3MHz	QPSK	20175	1RB#0	24.89	PASS
Band4	3MHz	QPSK	20175	1RB#8	24.98	PASS
Band4	3MHz	QPSK	20175	1RB#14	25.01	PASS
Band4	3MHz	QPSK	20175	8RB#0	23.88	PASS
Band4	3MHz	QPSK	20175	8RB#4	23.85	PASS
Band4	3MHz	QPSK	20175	8RB#7	23.85	PASS
Band4	3MHz	QPSK	20175	15RB#0	23.73	PASS
Band4	3MHz	QPSK	20385	1RB#0	24.74	PASS
Band4	3MHz	QPSK	20385	1RB#8	24.84	PASS
Band4	3MHz	QPSK	20385	1RB#14	24.86	PASS
Band4	3MHz	QPSK	20385	8RB#0	23.77	PASS
Band4	3MHz	QPSK	20385	8RB#4	23.80	PASS
Band4	3MHz	QPSK	20385	8RB#7	23.73	PASS
Band4	3MHz	QPSK	20385	15RB#0	23.69	PASS
Band4	3MHz	16QAM	19965	1RB#0	23.54	PASS
Band4	3MHz	16QAM	19965	1RB#8	23.61	PASS
Band4	3MHz	16QAM	19965	1RB#14	23.51	PASS
Band4	3MHz	16QAM	19965	8RB#0	22.72	PASS
Band4	3MHz	16QAM	19965	8RB#4	22.78	PASS
Band4	3MHz	16QAM	19965	8RB#7	22.73	PASS
Band4	3MHz	16QAM	19965	15RB#0	22.60	PASS
Band4	3MHz	16QAM	20175	1RB#0	23.68	PASS
Band4	3MHz	16QAM	20175	1RB#8	23.65	PASS
Band4	3MHz	16QAM	20175	1RB#14	23.64	PASS
Band4	3MHz	16QAM	20175	8RB#0	22.67	PASS
Band4	3MHz	16QAM	20175	8RB#4	22.72	PASS
Band4	3MHz	16QAM	20175	8RB#7	22.74	PASS
Band4	3MHz	16QAM	20175	15RB#0	22.58	PASS
Band4	3MHz	16QAM	20385	1RB#0	23.66	PASS
Band4	3MHz	16QAM	20385	1RB#8	23.46	PASS
Band4	3MHz	16QAM	20385	1RB#14	23.48	PASS
Band4	3MHz	16QAM	20385	8RB#0	22.79	PASS
Band4	3MHz	16QAM	20385	8RB#4	22.75	PASS

Band4	3MHz	16QAM	20385	8RB#7	22.75	PASS
Band4	3MHz	16QAM	20385	15RB#0	22.63	PASS
Band4	5MHz	QPSK	19975	1RB#0	24.79	PASS
Band4	5MHz	QPSK	19975	1RB#12	24.91	PASS
Band4	5MHz	QPSK	19975	1RB#24	24.78	PASS
Band4	5MHz	QPSK	19975	12RB#0	23.72	PASS
Band4	5MHz	QPSK	19975	12RB#6	23.73	PASS
Band4	5MHz	QPSK	19975	12RB#13	23.65	PASS
Band4	5MHz	QPSK	19975	25RB#0	23.71	PASS
Band4	5MHz	QPSK	20175	1RB#0	24.88	PASS
Band4	5MHz	QPSK	20175	1RB#12	25.02	PASS
Band4	5MHz	QPSK	20175	1RB#24	24.88	PASS
Band4	5MHz	QPSK	20175	12RB#0	23.76	PASS
Band4	5MHz	QPSK	20175	12RB#6	23.76	PASS
Band4	5MHz	QPSK	20175	12RB#13	23.76	PASS
Band4	5MHz	QPSK	20175	25RB#0	23.77	PASS
Band4	5MHz	QPSK	20375	1RB#0	24.81	PASS
Band4	5MHz	QPSK	20375	1RB#12	24.91	PASS
Band4	5MHz	QPSK	20375	1RB#24	24.76	PASS
Band4	5MHz	QPSK	20375	12RB#0	23.72	PASS
Band4	5MHz	QPSK	20375	12RB#6	23.74	PASS
Band4	5MHz	QPSK	20375	12RB#13	23.75	PASS
Band4	5MHz	QPSK	20375	25RB#0	23.72	PASS
Band4	5MHz	16QAM	19975	1RB#0	23.59	PASS
Band4	5MHz	16QAM	19975	1RB#12	23.72	PASS
Band4	5MHz	16QAM	19975	1RB#24	23.63	PASS
Band4	5MHz	16QAM	19975	12RB#0	22.68	PASS
Band4	5MHz	16QAM	19975	12RB#6	22.67	PASS
Band4	5MHz	16QAM	19975	12RB#13	22.67	PASS
Band4	5MHz	16QAM	19975	25RB#0	22.75	PASS
Band4	5MHz	16QAM	20175	1RB#0	23.72	PASS
Band4	5MHz	16QAM	20175	1RB#12	23.79	PASS
Band4	5MHz	16QAM	20175	1RB#24	23.67	PASS
Band4	5MHz	16QAM	20175	12RB#0	22.67	PASS
Band4	5MHz	16QAM	20175	12RB#6	22.67	PASS
Band4	5MHz	16QAM	20175	12RB#13	22.70	PASS
Band4	5MHz	16QAM	20175	25RB#0	22.66	PASS
Band4	5MHz	16QAM	20375	1RB#0	23.55	PASS
Band4	5MHz	16QAM	20375	1RB#12	23.66	PASS
Band4	5MHz	16QAM	20375	1RB#24	23.53	PASS
Band4	5MHz	16QAM	20375	12RB#0	22.78	PASS
Band4	5MHz	16QAM	20375	12RB#6	22.73	PASS
Band4	5MHz	16QAM	20375	12RB#13	22.66	PASS
Band4	5MHz	16QAM	20375	25RB#0	22.79	PASS
Band4	10MHz	QPSK	20000	1RB#0	24.82	PASS
Band4	10MHz	QPSK	20000	1RB#24	24.88	PASS

Band4	10MHz	QPSK	20000	1RB#49	24.81	PASS
Band4	10MHz	QPSK	20000	25RB#0	23.77	PASS
Band4	10MHz	QPSK	20000	25RB#12	23.81	PASS
Band4	10MHz	QPSK	20000	25RB#25	23.76	PASS
Band4	10MHz	QPSK	20000	50RB#0	23.77	PASS
Band4	10MHz	QPSK	20175	1RB#0	24.99	PASS
Band4	10MHz	QPSK	20175	1RB#24	25.10	PASS
Band4	10MHz	QPSK	20175	1RB#49	24.96	PASS
Band4	10MHz	QPSK	20175	25RB#0	23.81	PASS
Band4	10MHz	QPSK	20175	25RB#12	23.80	PASS
Band4	10MHz	QPSK	20175	25RB#25	23.81	PASS
Band4	10MHz	QPSK	20175	50RB#0	23.77	PASS
Band4	10MHz	QPSK	20350	1RB#0	24.80	PASS
Band4	10MHz	QPSK	20350	1RB#24	24.98	PASS
Band4	10MHz	QPSK	20350	1RB#49	24.73	PASS
Band4	10MHz	QPSK	20350	25RB#0	23.76	PASS
Band4	10MHz	QPSK	20350	25RB#12	23.77	PASS
Band4	10MHz	QPSK	20350	25RB#25	23.70	PASS
Band4	10MHz	QPSK	20350	50RB#0	23.73	PASS
Band4	10MHz	16QAM	20000	1RB#0	23.66	PASS
Band4	10MHz	16QAM	20000	1RB#24	23.75	PASS
Band4	10MHz	16QAM	20000	1RB#49	23.71	PASS
Band4	10MHz	16QAM	20000	25RB#0	22.78	PASS
Band4	10MHz	16QAM	20000	25RB#12	22.76	PASS
Band4	10MHz	16QAM	20000	25RB#25	22.78	PASS
Band4	10MHz	16QAM	20000	50RB#0	22.82	PASS
Band4	10MHz	16QAM	20175	1RB#0	23.53	PASS
Band4	10MHz	16QAM	20175	1RB#24	23.74	PASS
Band4	10MHz	16QAM	20175	1RB#49	23.52	PASS
Band4	10MHz	16QAM	20175	25RB#0	22.76	PASS
Band4	10MHz	16QAM	20175	25RB#12	22.75	PASS
Band4	10MHz	16QAM	20175	25RB#25	22.73	PASS
Band4	10MHz	16QAM	20175	50RB#0	22.73	PASS
Band4	10MHz	16QAM	20350	1RB#0	23.46	PASS
Band4	10MHz	16QAM	20350	1RB#24	23.60	PASS
Band4	10MHz	16QAM	20350	1RB#49	23.42	PASS
Band4	10MHz	16QAM	20350	25RB#0	22.80	PASS
Band4	10MHz	16QAM	20350	25RB#12	22.74	PASS
Band4	10MHz	16QAM	20350	25RB#25	22.78	PASS
Band4	10MHz	16QAM	20350	50RB#0	22.75	PASS
Band4	15MHz	QPSK	20025	1RB#0	24.73	PASS
Band4	15MHz	QPSK	20025	1RB#38	24.82	PASS
Band4	15MHz	QPSK	20025	1RB#74	24.75	PASS
Band4	15MHz	QPSK	20025	38RB#0	23.71	PASS
Band4	15MHz	QPSK	20025	38RB#18	23.79	PASS
Band4	15MHz	QPSK	20025	38RB#37	23.65	PASS

Band4	15MHz	QPSK	20025	75RB#0	23.92	PASS
Band4	15MHz	QPSK	20175	1RB#0	24.77	PASS
Band4	15MHz	QPSK	20175	1RB#38	24.98	PASS
Band4	15MHz	QPSK	20175	1RB#74	24.82	PASS
Band4	15MHz	QPSK	20175	38RB#0	23.70	PASS
Band4	15MHz	QPSK	20175	38RB#18	23.78	PASS
Band4	15MHz	QPSK	20175	38RB#37	23.56	PASS
Band4	15MHz	QPSK	20175	75RB#0	24.00	PASS
Band4	15MHz	QPSK	20325	1RB#0	24.77	PASS
Band4	15MHz	QPSK	20325	1RB#38	24.91	PASS
Band4	15MHz	QPSK	20325	1RB#74	24.67	PASS
Band4	15MHz	QPSK	20325	38RB#0	23.65	PASS
Band4	15MHz	QPSK	20325	38RB#18	23.75	PASS
Band4	15MHz	QPSK	20325	38RB#37	23.66	PASS
Band4	15MHz	QPSK	20325	75RB#0	23.91	PASS
Band4	15MHz	16QAM	20025	1RB#0	23.60	PASS
Band4	15MHz	16QAM	20025	1RB#38	23.81	PASS
Band4	15MHz	16QAM	20025	1RB#74	23.64	PASS
Band4	15MHz	16QAM	20025	38RB#0	23.68	PASS
Band4	15MHz	16QAM	20025	38RB#18	23.81	PASS
Band4	15MHz	16QAM	20025	38RB#37	23.62	PASS
Band4	15MHz	16QAM	20025	75RB#0	22.81	PASS
Band4	15MHz	16QAM	20175	1RB#0	23.71	PASS
Band4	15MHz	16QAM	20175	1RB#38	23.69	PASS
Band4	15MHz	16QAM	20175	1RB#74	23.55	PASS
Band4	15MHz	16QAM	20175	38RB#0	23.63	PASS
Band4	15MHz	16QAM	20175	38RB#18	23.72	PASS
Band4	15MHz	16QAM	20175	38RB#37	23.54	PASS
Band4	15MHz	16QAM	20175	75RB#0	22.81	PASS
Band4	15MHz	16QAM	20325	1RB#0	23.56	PASS
Band4	15MHz	16QAM	20325	1RB#38	23.76	PASS
Band4	15MHz	16QAM	20325	1RB#74	23.58	PASS
Band4	15MHz	16QAM	20325	38RB#0	23.58	PASS
Band4	15MHz	16QAM	20325	38RB#18	23.69	PASS
Band4	15MHz	16QAM	20325	38RB#37	23.62	PASS
Band4	15MHz	16QAM	20325	75RB#0	22.82	PASS
Band4	20MHz	QPSK	20050	1RB#0	24.69	PASS
Band4	20MHz	QPSK	20050	1RB#49	24.96	PASS
Band4	20MHz	QPSK	20050	1RB#99	24.76	PASS
Band4	20MHz	QPSK	20050	50RB#0	23.91	PASS
Band4	20MHz	QPSK	20050	50RB#25	23.90	PASS
Band4	20MHz	QPSK	20050	50RB#50	23.76	PASS
Band4	20MHz	QPSK	20050	100RB#0	23.80	PASS
Band4	20MHz	QPSK	20175	1RB#0	24.71	PASS
Band4	20MHz	QPSK	20175	1RB#49	25.21	PASS
Band4	20MHz	QPSK	20175	1RB#99	24.76	PASS

Band4	20MHz	QPSK	20175	50RB#0	23.78	PASS
Band4	20MHz	QPSK	20175	50RB#25	23.76	PASS
Band4	20MHz	QPSK	20175	50RB#50	23.73	PASS
Band4	20MHz	QPSK	20175	100RB#0	23.76	PASS
Band4	20MHz	QPSK	20300	1RB#0	24.80	PASS
Band4	20MHz	QPSK	20300	1RB#49	25.16	PASS
Band4	20MHz	QPSK	20300	1RB#99	24.62	PASS
Band4	20MHz	QPSK	20300	50RB#0	23.61	PASS
Band4	20MHz	QPSK	20300	50RB#25	23.64	PASS
Band4	20MHz	QPSK	20300	50RB#50	23.65	PASS
Band4	20MHz	QPSK	20300	100RB#0	23.66	PASS
Band4	20MHz	16QAM	20050	1RB#0	23.62	PASS
Band4	20MHz	16QAM	20050	1RB#49	24.00	PASS
Band4	20MHz	16QAM	20050	1RB#99	23.60	PASS
Band4	20MHz	16QAM	20050	50RB#0	22.93	PASS
Band4	20MHz	16QAM	20050	50RB#25	22.92	PASS
Band4	20MHz	16QAM	20050	50RB#50	22.77	PASS
Band4	20MHz	16QAM	20050	100RB#0	22.80	PASS
Band4	20MHz	16QAM	20175	1RB#0	23.63	PASS
Band4	20MHz	16QAM	20175	1RB#49	23.95	PASS
Band4	20MHz	16QAM	20175	1RB#99	23.33	PASS
Band4	20MHz	16QAM	20175	50RB#0	22.72	PASS
Band4	20MHz	16QAM	20175	50RB#25	22.76	PASS
Band4	20MHz	16QAM	20175	50RB#50	22.69	PASS
Band4	20MHz	16QAM	20175	100RB#0	22.73	PASS
Band4	20MHz	16QAM	20300	1RB#0	23.37	PASS
Band4	20MHz	16QAM	20300	1RB#49	23.78	PASS
Band4	20MHz	16QAM	20300	1RB#99	23.40	PASS
Band4	20MHz	16QAM	20300	50RB#0	22.57	PASS
Band4	20MHz	16QAM	20300	50RB#25	22.56	PASS
Band4	20MHz	16QAM	20300	50RB#50	22.65	PASS
Band4	20MHz	16QAM	20300	100RB#0	22.64	PASS

Appendix B :Max Effective (Isotropic) Radiated Power

Test Result

LTE Band 4								
Antenna Gain(dBi)		2.74						
EIRP Limit(W)		1.00						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Output Power (dBm)	EIRP (dBm)	EIRP (W)	99% BW (KHz)	Emission Designator
1.4	QPSK	1710.7	1754.3	25.12	27.86	0.61094	1143.4	1M14G7D
	16QAM			23.67	26.41	0.43752	1106.8	1M11W7D
3.0	QPSK	1711.5	1753.5	25.01	27.75	0.59566	2708.0	2M71G7D
	16QAM			23.68	26.42	0.43853	2691.6	2M69W7D
5.0	QPSK	1712.5	1752.5	25.02	27.76	0.59704	4519.7	4M52G7D
	16QAM			23.79	26.53	0.44978	4528.2	4M53W7D
10.0	QPSK	1715.0	1750.0	25.10	27.84	0.60814	9067.2	9M07G7D
	16QAM			23.75	26.49	0.44566	9036.5	9M04W7D
15.0	QPSK	1717.5	1747.5	24.98	27.72	0.59156	13618	13M6G7D
	16QAM			23.81	26.55	0.45186	13569	13M6W7D
20.0	QPSK	1720.0	1745.0	25.21	27.95	0.62373	18138	18M1G7D
	16QAM			24.00	26.74	0.47206	18071	18M1W7D

Note: EIRP= Conducted Output Power + Antenna Gain

Appendix C Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	2.86	13	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	3.82	13	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	1.58	13	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	2.38	13	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	2.98	13	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	3.87	13	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	4.16	13	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	4.81	13	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	2.81	13	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	3.52	13	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	4.20	13	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	4.82	13	PASS
Band4	3MHz	QPSK	19965	1RB#0	2.83	13	PASS
Band4	3MHz	QPSK	19965	15RB#0	4.14	13	PASS
Band4	3MHz	QPSK	20175	1RB#0	1.65	13	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.72	13	PASS
Band4	3MHz	QPSK	20385	1RB#0	2.92	13	PASS
Band4	3MHz	QPSK	20385	15RB#0	4.00	13	PASS
Band4	3MHz	16QAM	19965	1RB#0	3.96	13	PASS
Band4	3MHz	16QAM	19965	15RB#0	5.01	13	PASS
Band4	3MHz	16QAM	20175	1RB#0	2.85	13	PASS
Band4	3MHz	16QAM	20175	15RB#0	3.77	13	PASS
Band4	3MHz	16QAM	20385	1RB#0	8.42	13	PASS
Band4	3MHz	16QAM	20385	15RB#0	4.91	13	PASS
Band4	5MHz	QPSK	19975	1RB#0	2.98	13	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.31	13	PASS
Band4	5MHz	QPSK	20175	1RB#0	1.84	13	PASS
Band4	5MHz	QPSK	20175	25RB#0	2.72	13	PASS
Band4	5MHz	QPSK	20375	1RB#0	2.94	13	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.04	13	PASS
Band4	5MHz	16QAM	19975	1RB#0	3.93	13	PASS
Band4	5MHz	16QAM	19975	25RB#0	5.15	13	PASS
Band4	5MHz	16QAM	20175	1RB#0	2.92	13	PASS
Band4	5MHz	16QAM	20175	25RB#0	3.72	13	PASS
Band4	5MHz	16QAM	20375	1RB#0	3.84	13	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.91	13	PASS
Band4	10MHz	QPSK	20000	1RB#0	2.94	13	PASS
Band4	10MHz	QPSK	20000	50RB#0	4.48	13	PASS
Band4	10MHz	QPSK	20175	1RB#0	1.92	13	PASS
Band4	10MHz	QPSK	20175	50RB#0	2.77	13	PASS
Band4	10MHz	QPSK	20350	1RB#0	2.36	13	PASS

Band4	10MHz	QPSK	20350	50RB#0	3.91	13	PASS
Band4	10MHz	16QAM	20000	1RB#0	3.95	13	PASS
Band4	10MHz	16QAM	20000	50RB#0	5.37	13	PASS
Band4	10MHz	16QAM	20175	1RB#0	3.07	13	PASS
Band4	10MHz	16QAM	20175	50RB#0	3.75	13	PASS
Band4	10MHz	16QAM	20350	1RB#0	3.51	13	PASS
Band4	10MHz	16QAM	20350	50RB#0	4.82	13	PASS
Band4	15MHz	QPSK	20025	1RB#0	3.02	13	PASS
Band4	15MHz	QPSK	20025	75RB#0	4.70	13	PASS
Band4	15MHz	QPSK	20175	1RB#0	2.36	13	PASS
Band4	15MHz	QPSK	20175	75RB#0	3.29	13	PASS
Band4	15MHz	QPSK	20325	1RB#0	2.00	13	PASS
Band4	15MHz	QPSK	20325	75RB#0	4.05	13	PASS
Band4	15MHz	16QAM	20025	1RB#0	4.08	13	PASS
Band4	15MHz	16QAM	20025	75RB#0	5.49	13	PASS
Band4	15MHz	16QAM	20175	1RB#0	3.59	13	PASS
Band4	15MHz	16QAM	20175	75RB#0	4.23	13	PASS
Band4	15MHz	16QAM	20325	1RB#0	3.11	13	PASS
Band4	15MHz	16QAM	20325	75RB#0	4.90	13	PASS
Band4	20MHz	QPSK	20050	1RB#0	3.26	13	PASS
Band4	20MHz	QPSK	20050	100RB#0	4.73	13	PASS
Band4	20MHz	QPSK	20175	1RB#0	3.00	13	PASS
Band4	20MHz	QPSK	20175	100RB#0	4.05	13	PASS
Band4	20MHz	QPSK	20300	1RB#0	1.81	13	PASS
Band4	20MHz	QPSK	20300	100RB#0	4.25	13	PASS
Band4	20MHz	16QAM	20050	1RB#0	4.44	13	PASS
Band4	20MHz	16QAM	20050	100RB#0	5.53	13	PASS
Band4	20MHz	16QAM	20175	1RB#0	3.90	13	PASS
Band4	20MHz	16QAM	20175	100RB#0	4.81	13	PASS
Band4	20MHz	16QAM	20300	1RB#0	3.01	13	PASS
Band4	20MHz	16QAM	20300	100RB#0	5.04	13	PASS

Test Graphs



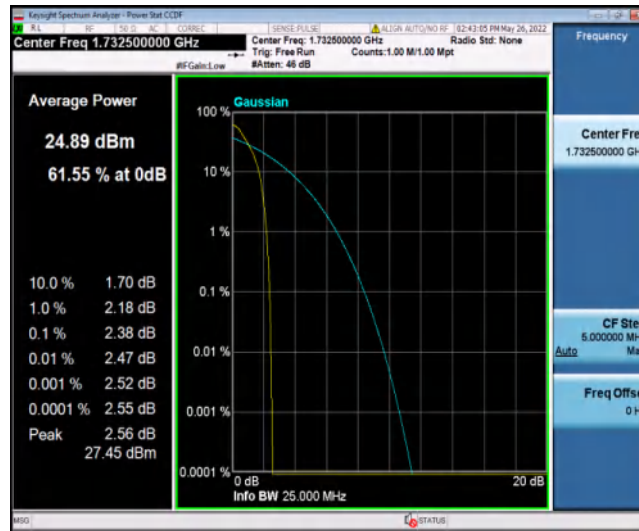
Band4-1.4MHz-QPSK-19957-1RB#0



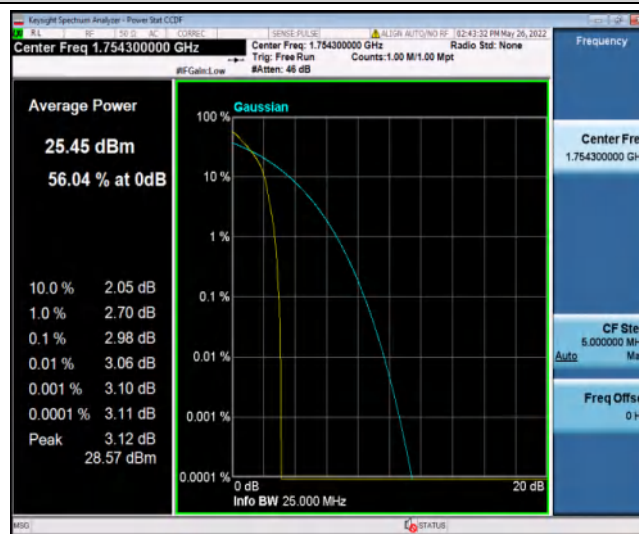
Band4-1.4MHz-QPSK-19957-6RB#0



Band4-1.4MHz-QPSK-20175-1RB#0



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



Band4-1.4MHz-QPSK-20393-1RB#0



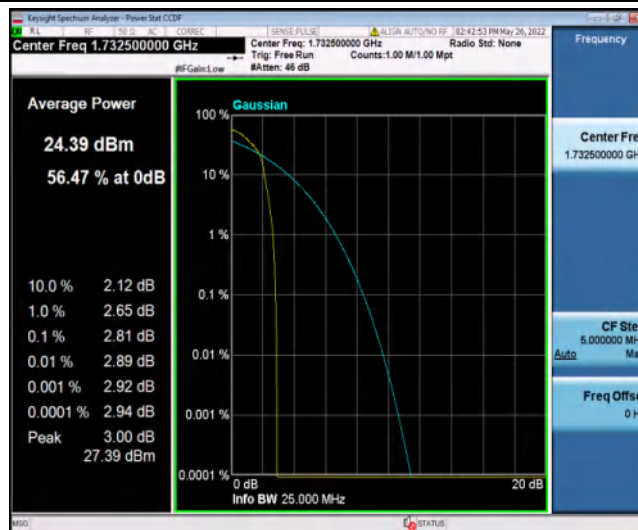
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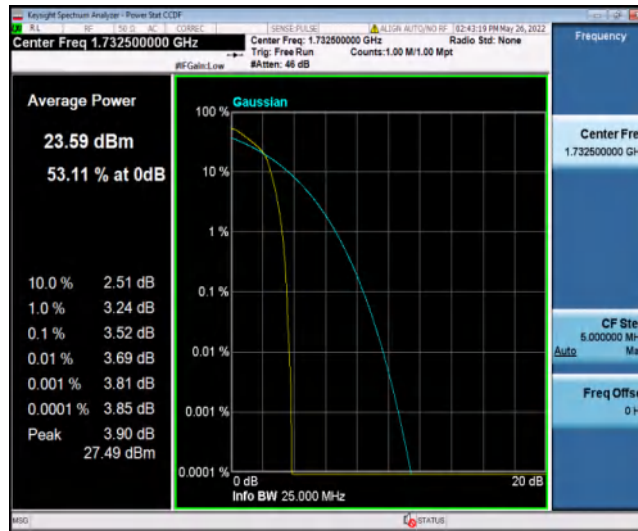
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Band4-1.4MHz-16QAM-19957-6RB#0



Band4-1.4MHz-16QAM-20175-1RB#0



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



Band4-1.4MHz-16QAM-20393-1RB#0



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



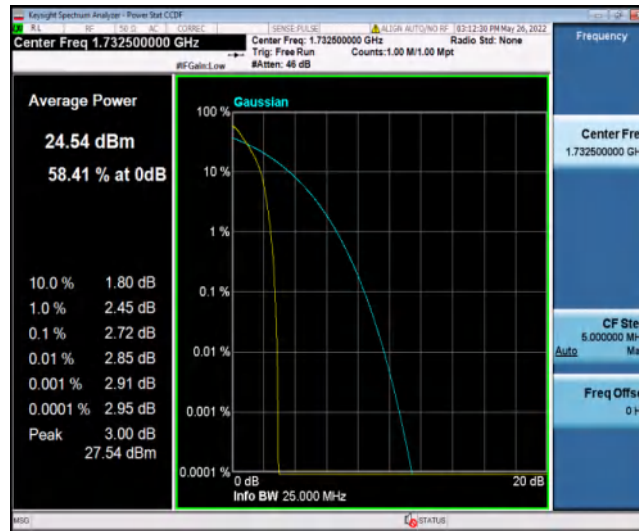
Band4-3MHz-QPSK-19965-1RB#0



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



Band4-3MHz-QPSK-20175-1RB#0



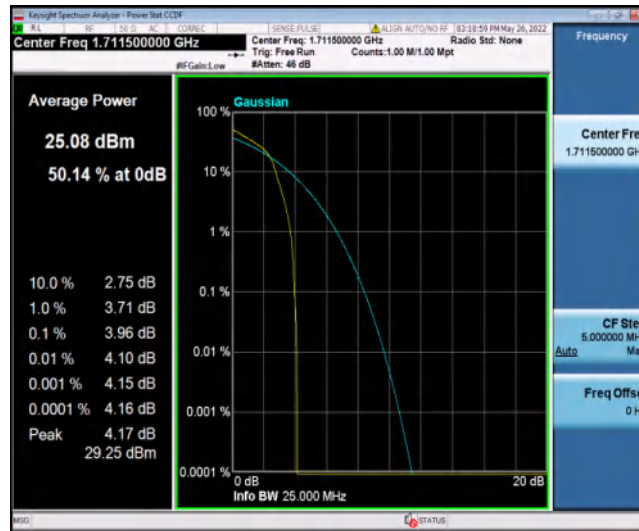
Band4-3MHz-QPSK-20175-15RB#0



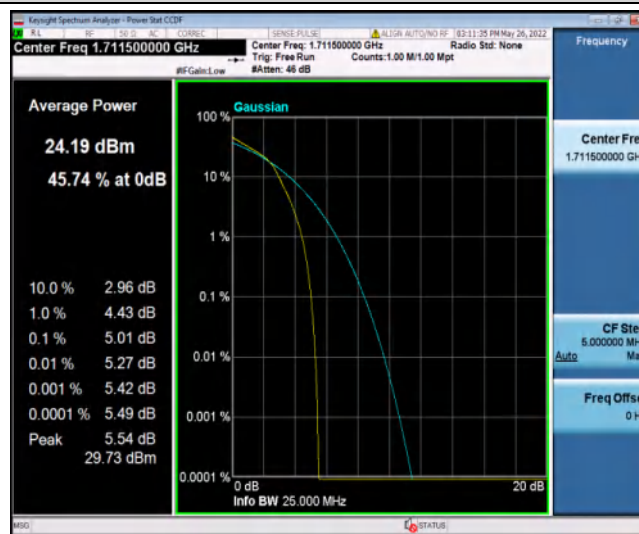
Band4-3MHz-QPSK-20385-1RB#0



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



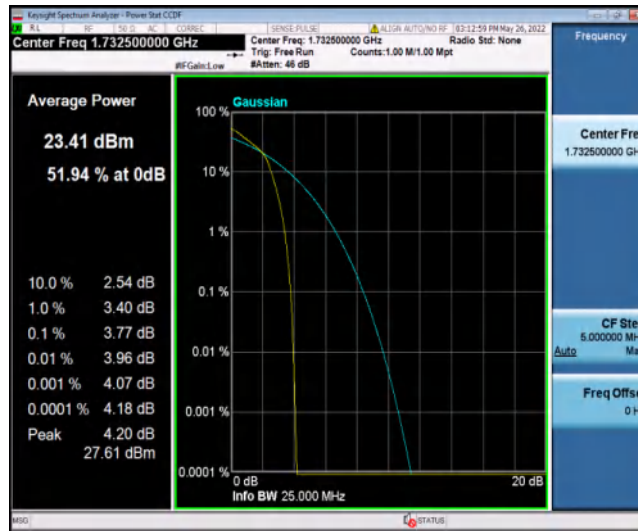
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Band4-3MHz-16QAM-19965-15RB#0



Band4-3MHz-16QAM-20175-1RB#0



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



Band4-3MHz-16QAM-20385-1RB#0



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



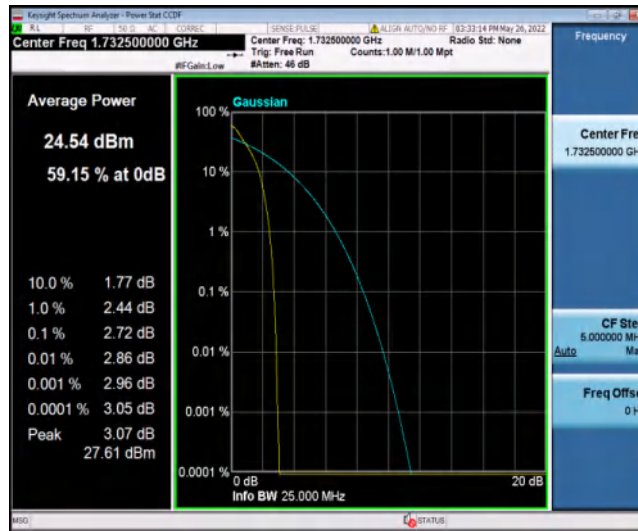
Band4-5MHz-QPSK-19975-1RB#0



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



Band4-5MHz-QPSK-20175-1RB#0



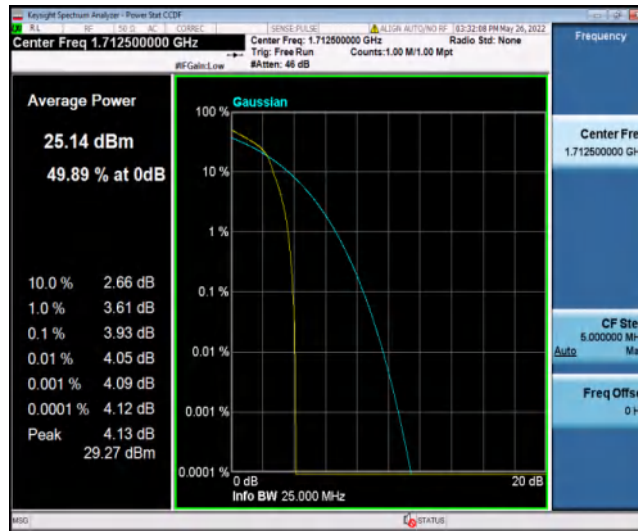
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Band4-5MHz-QPSK-20375-1RB#0



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



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



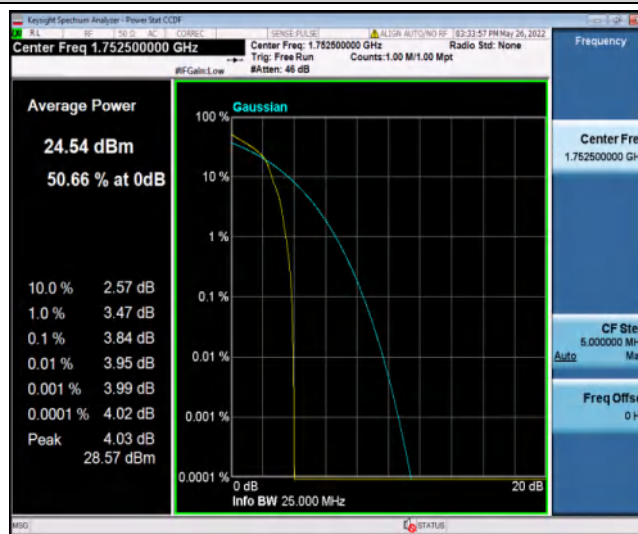
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Band4-5MHz-16QAM-20175-1RB#0



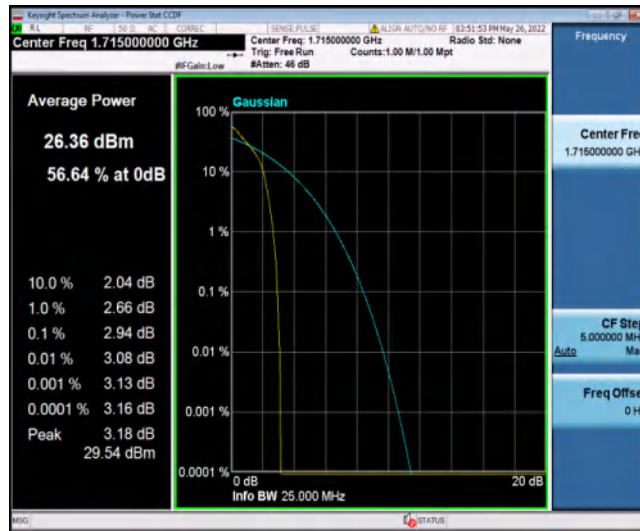
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Band4-5MHz-16QAM-20375-1RB#0



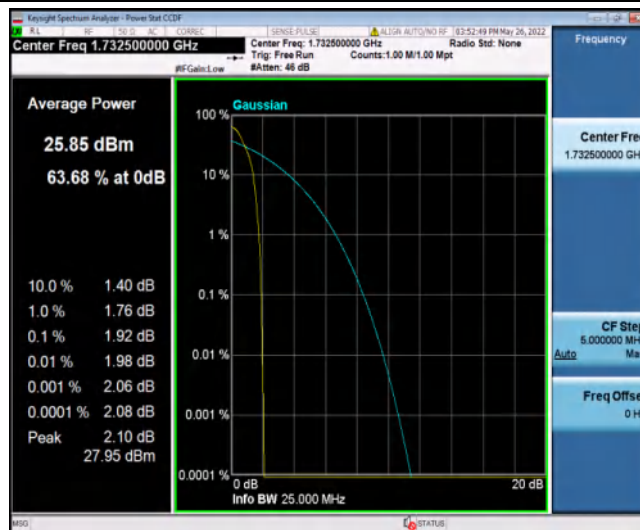
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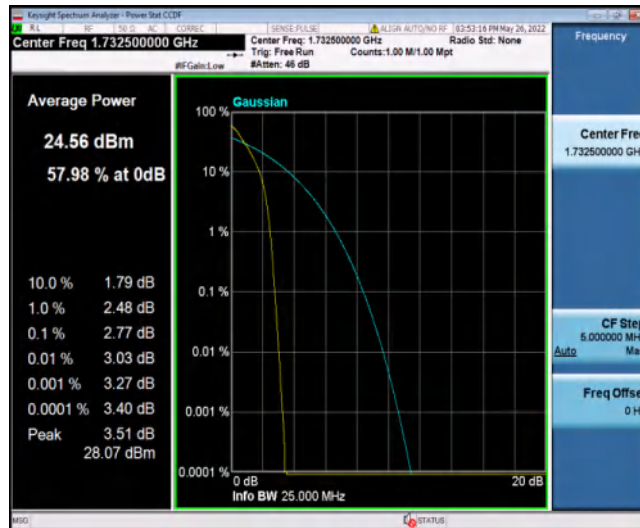
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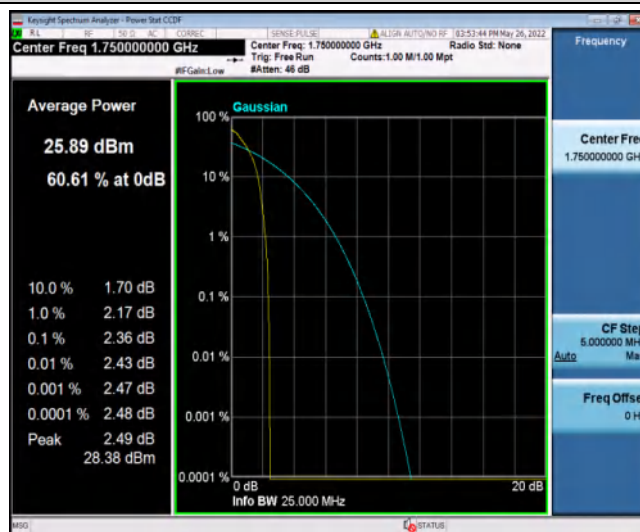
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Band4-10MHz-QPSK-20175-1RB#0



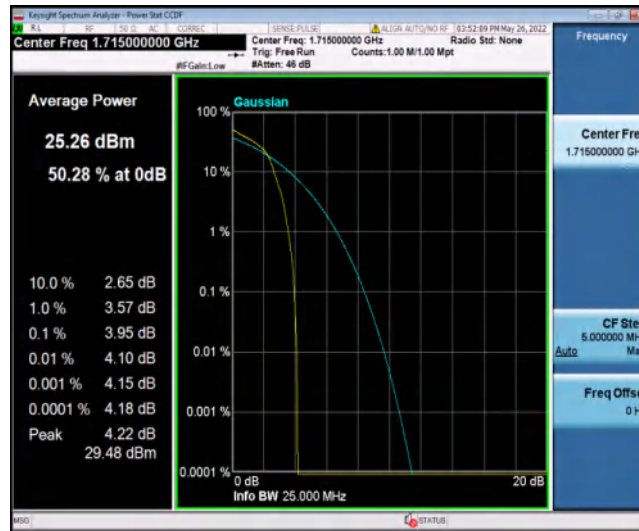
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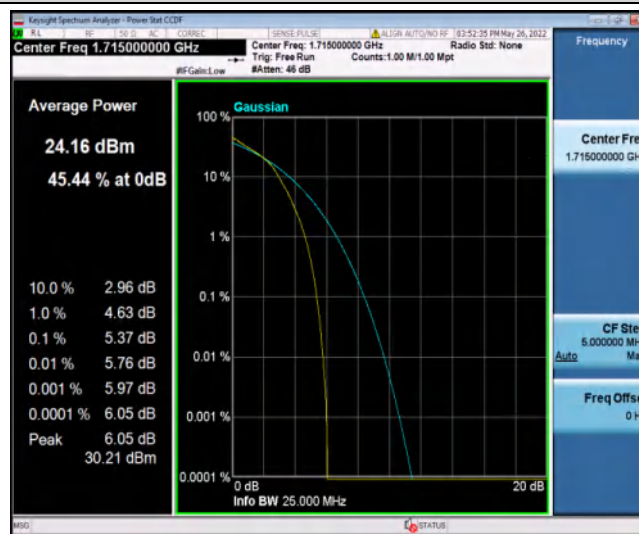
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Band4-10MHz-QPSK-20350-50RB#0



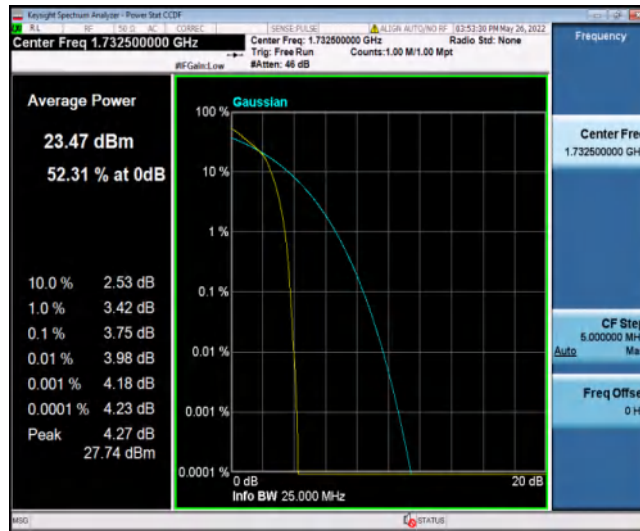
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Band4-10MHz-16QAM-20000-50RB#0



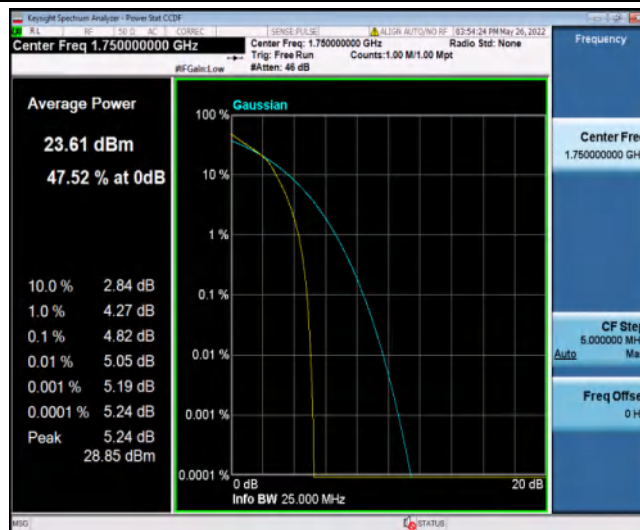
Band4-10MHz-16QAM-20175-1RB#0



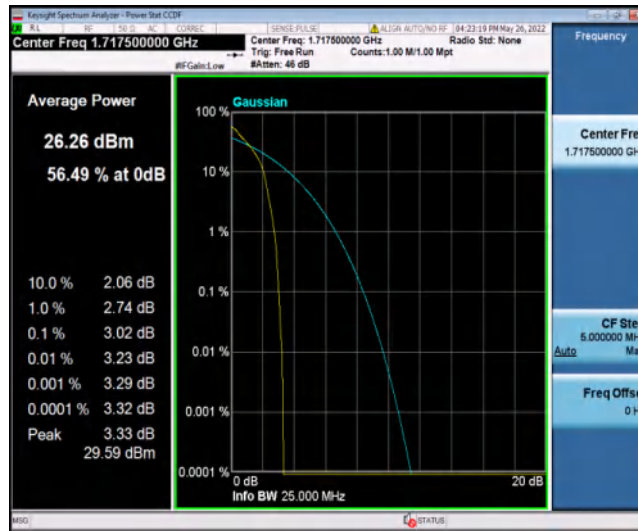
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Band4-10MHz-16QAM-20350-1RB#0



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



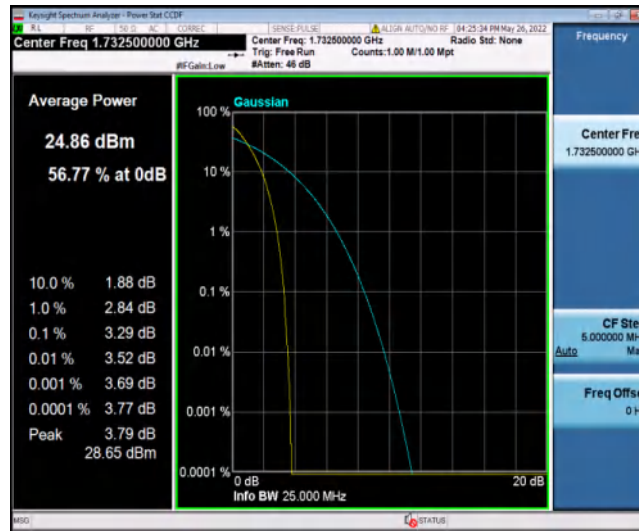
Band4-15MHz-QPSK-20025-1RB#0



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



Band4-15MHz-QPSK-20175-1RB#0



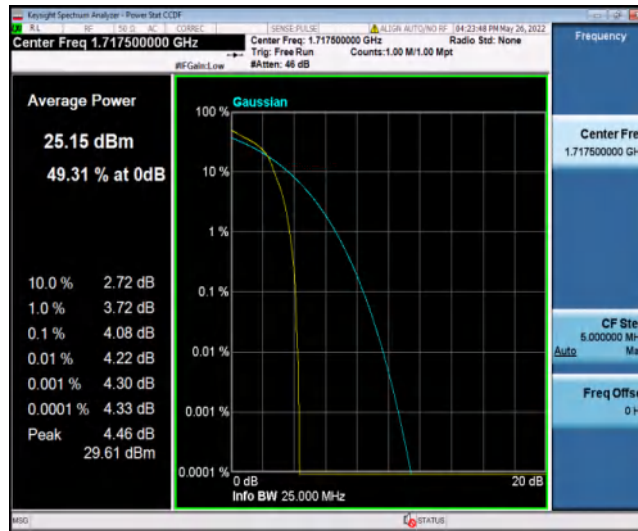
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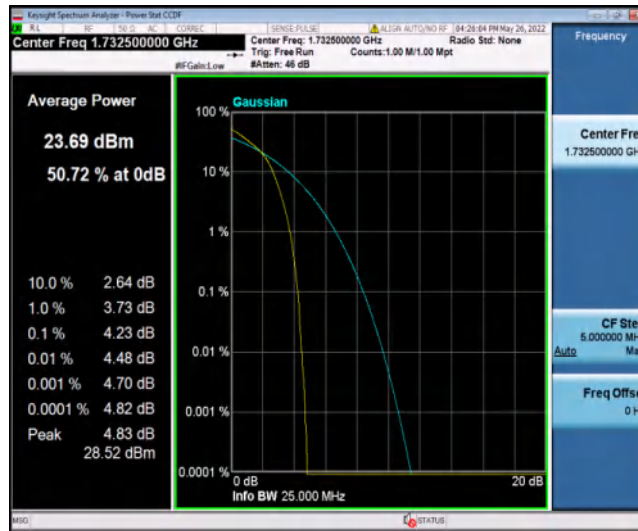
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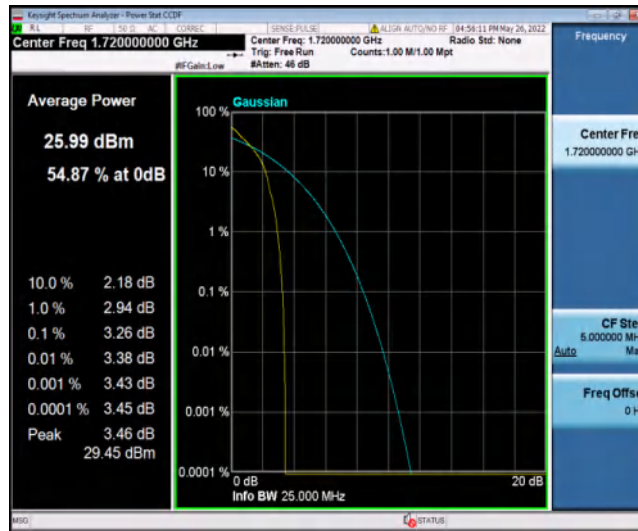
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Band4-15MHz-16QAM-20325-75RB#0



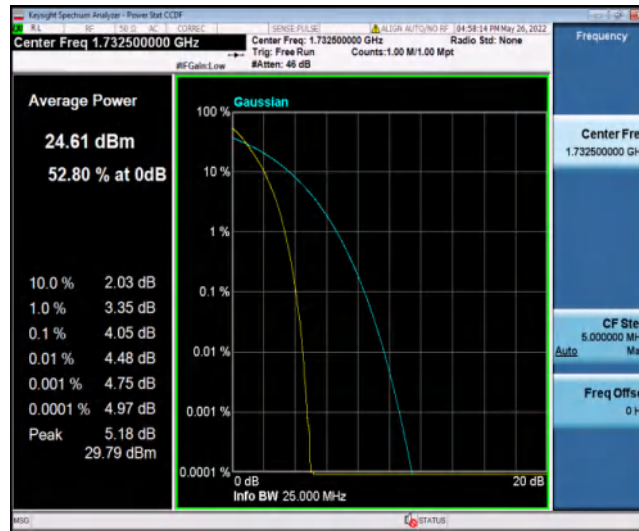
Band4-20MHz-QPSK-20050-1RB#0



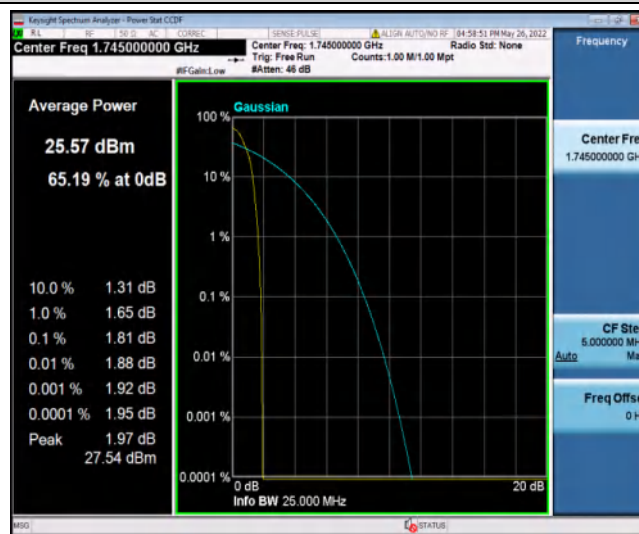
Band4-20MHz-QPSK-20050-100RB#0



Band4-20MHz-QPSK-20175-1RB#0



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



Band4-20MHz-QPSK-20300-1RB#0



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



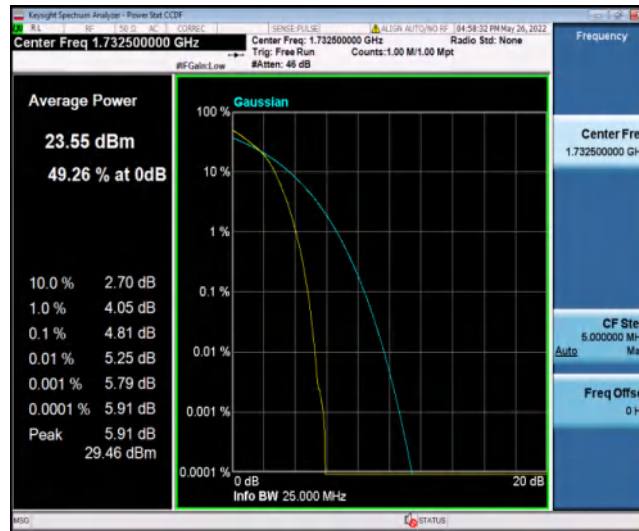
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Band4-20MHz-16QAM-20050-100RB#0



Band4-20MHz-16QAM-20175-1RB#0



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Band4-20MHz-16QAM-20300-1RB#0



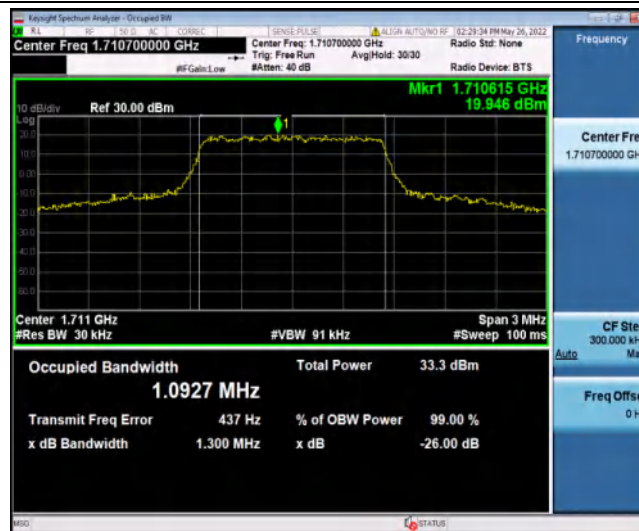
Band4-20MHz-16QAM-20300-100RB#0

Appendix D : 26dB Bandwidth and Occupied Bandwidth

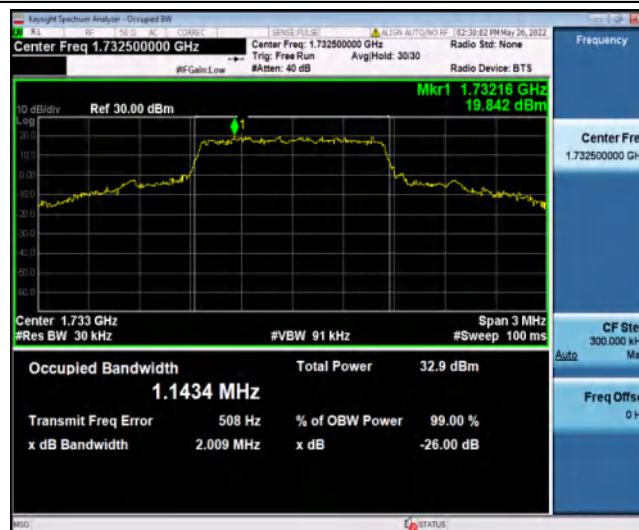
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	1.0927	1.093	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.1434	1.143	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	1.0921	1.092	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	1.1021	1.102	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.1068	1.107	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	1.0994	1.099	PASS
Band4	3MHz	QPSK	19965	15RB#0	2.6894	2.689	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.7080	2.708	PASS
Band4	3MHz	QPSK	20385	15RB#0	2.6921	2.692	PASS
Band4	3MHz	16QAM	19965	15RB#0	2.6830	2.683	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.6916	2.692	PASS
Band4	3MHz	16QAM	20385	15RB#0	2.6802	2.680	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.4971	4.497	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.5197	4.520	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.5015	4.501	PASS
Band4	5MHz	16QAM	19975	25RB#0	4.4917	4.492	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.5282	4.528	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.4944	4.494	PASS
Band4	10MHz	QPSK	20000	50RB#0	8.9960	8.996	PASS
Band4	10MHz	QPSK	20175	50RB#0	9.0672	9.067	PASS
Band4	10MHz	QPSK	20350	50RB#0	9.0151	9.015	PASS
Band4	10MHz	16QAM	20000	50RB#0	9.0036	9.004	PASS
Band4	10MHz	16QAM	20175	50RB#0	9.0365	9.037	PASS
Band4	10MHz	16QAM	20350	50RB#0	8.9993	8.999	PASS
Band4	15MHz	QPSK	20025	75RB#0	13.498	13.50	PASS
Band4	15MHz	QPSK	20175	75RB#0	13.618	13.62	PASS
Band4	15MHz	QPSK	20325	75RB#0	13.484	13.48	PASS
Band4	15MHz	16QAM	20025	75RB#0	13.510	13.51	PASS
Band4	15MHz	16QAM	20175	75RB#0	13.569	13.57	PASS
Band4	15MHz	16QAM	20325	75RB#0	13.503	13.50	PASS
Band4	20MHz	QPSK	20050	100RB#0	18.000	18.00	PASS
Band4	20MHz	QPSK	20175	100RB#0	18.138	18.14	PASS
Band4	20MHz	QPSK	20300	100RB#0	17.988	17.99	PASS
Band4	20MHz	16QAM	20050	100RB#0	17.990	17.99	PASS
Band4	20MHz	16QAM	20175	100RB#0	18.071	18.07	PASS
Band4	20MHz	16QAM	20300	100RB#0	17.969	17.97	PASS

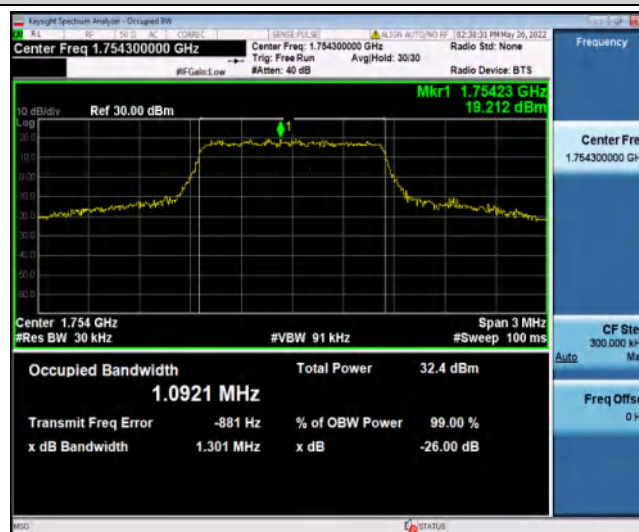
Test Graphs



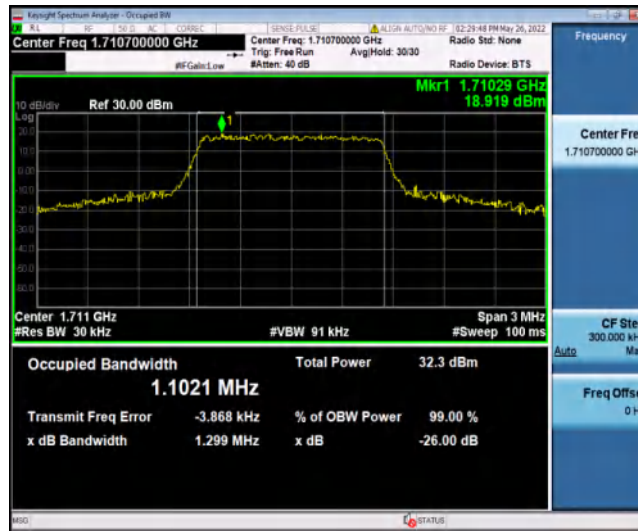
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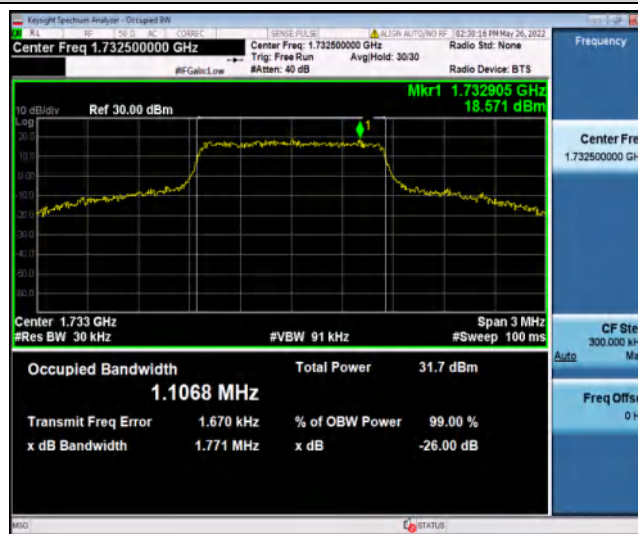
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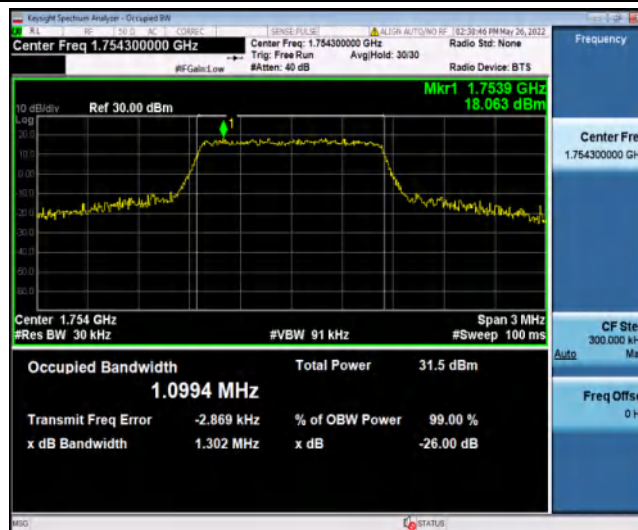
Band4-1.4MHz-QPSK-20393-6RB#0-1.0921



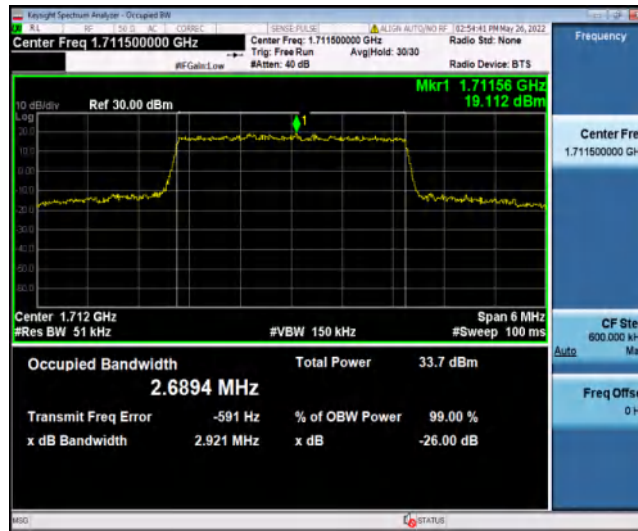
Band4-1.4MHz-16QAM-19957-6RB#0-1.1021



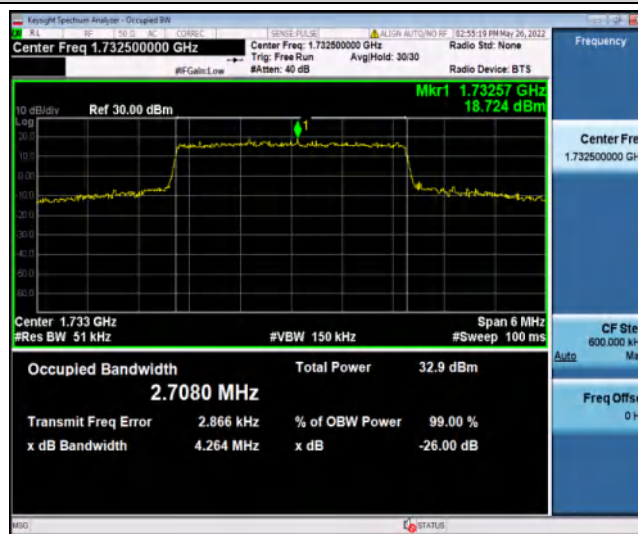
Band4-1.4MHz-16QAM-20175-6RB#0-1.1068



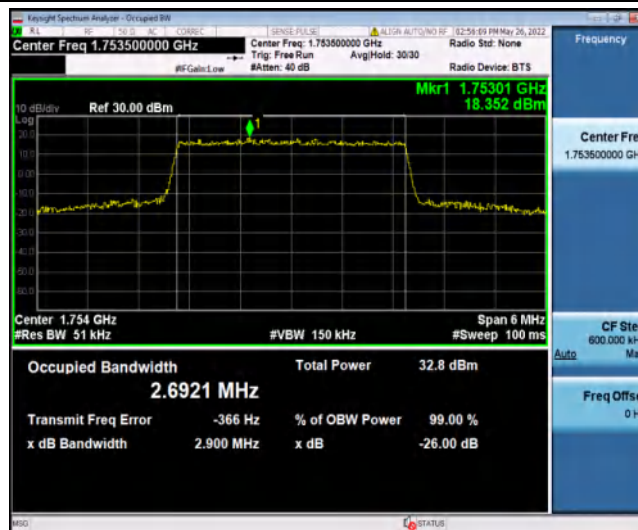
Band4-1.4MHz-16QAM-20393-6RB#0-1.0994



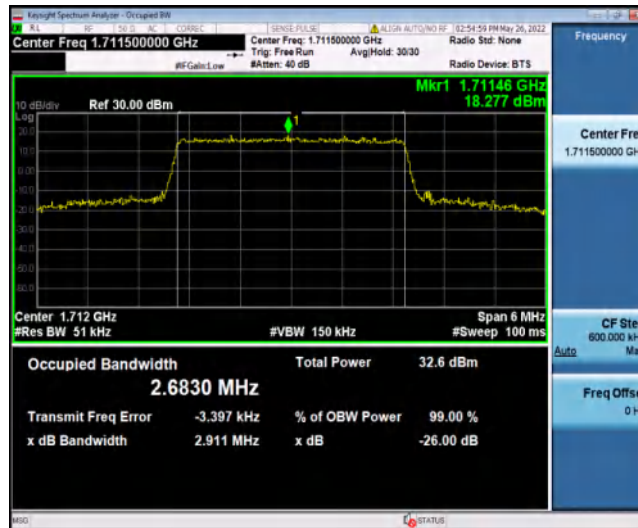
Band4-3MHz-QPSK-19965-15RB#0-2.6894



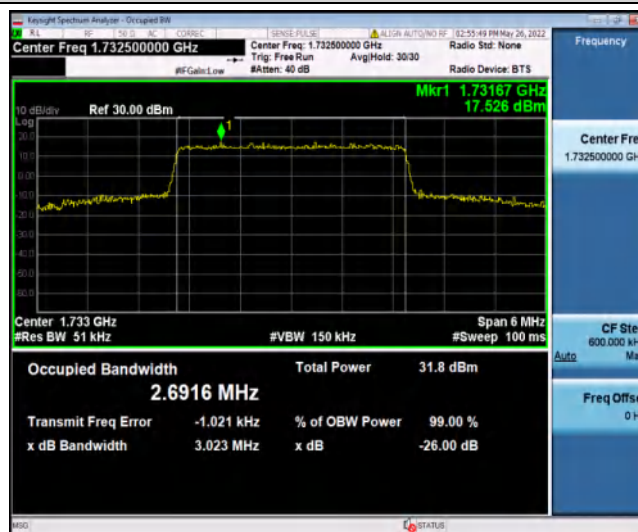
Band4-3MHz-QPSK-20175-15RB#0-2.7080



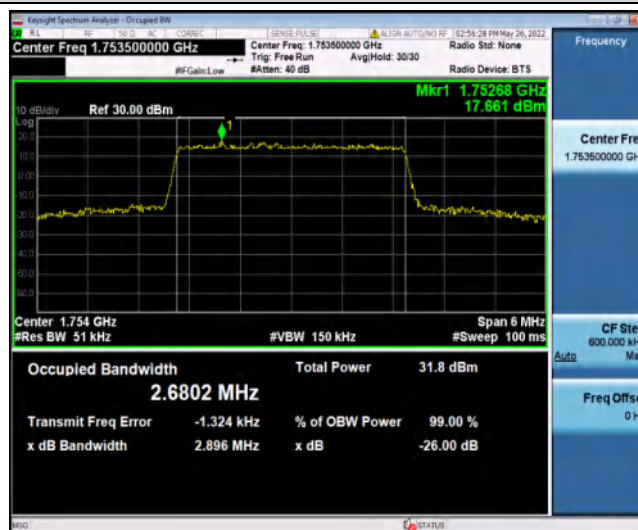
Band4-3MHz-QPSK-20385-15RB#0-2.6921



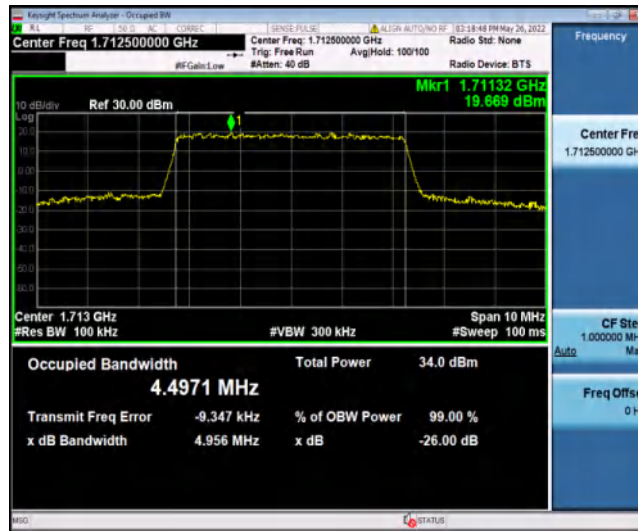
Band4-3MHz-16QAM-19965-15RB#0-2.6830



Band4-3MHz-16QAM-20175-15RB#0-2.6916



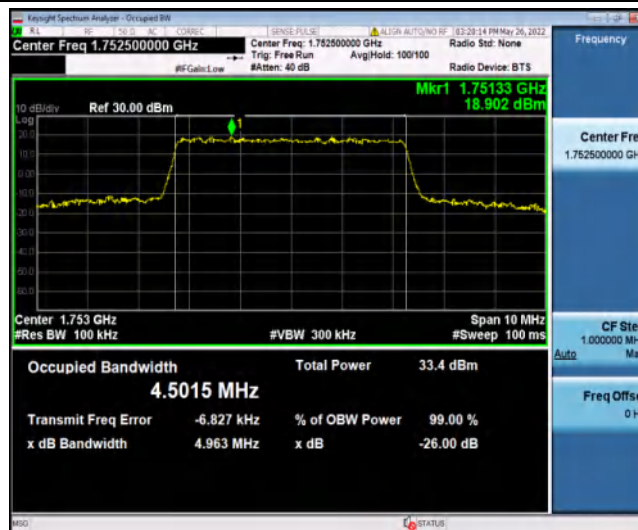
Band4-3MHz-16QAM-20385-15RB#0-2.6802



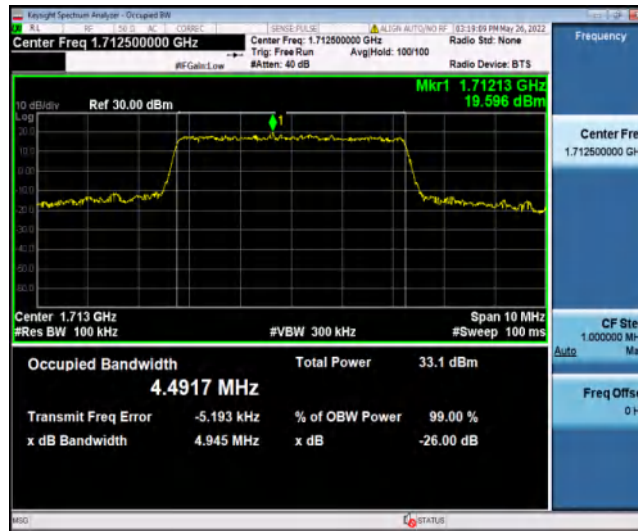
Band4-5MHz-QPSK-19975-25RB#0-4.4971



Band4-5MHz-QPSK-20175-25RB#0-4.5197



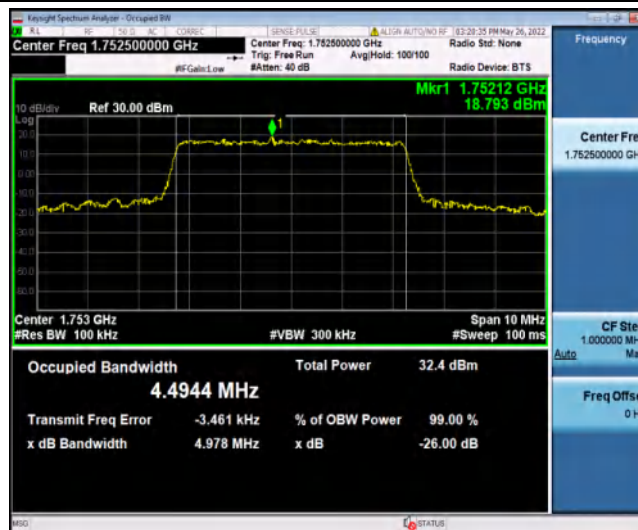
Band4-5MHz-QPSK-20375-25RB#0-4.5015



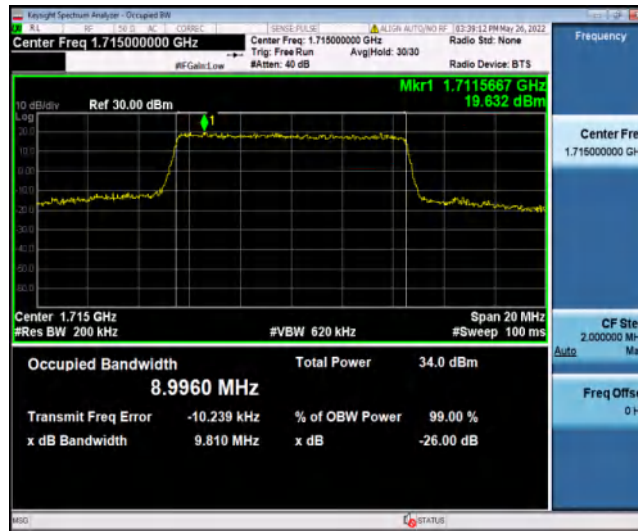
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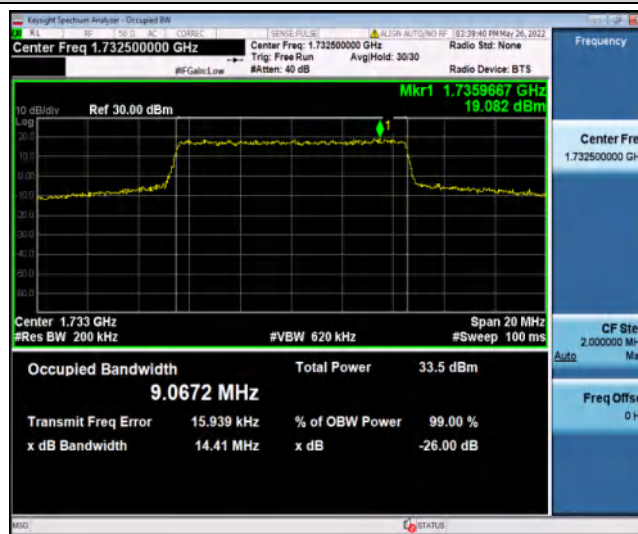
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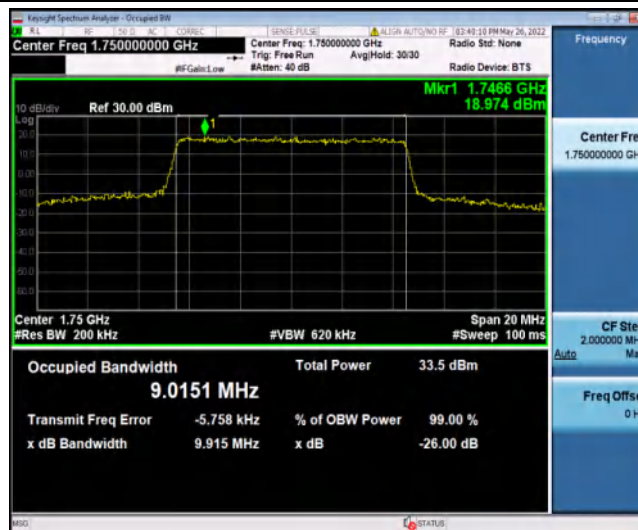
Band4-5MHz-16QAM-20375-25RB#0-4.4944



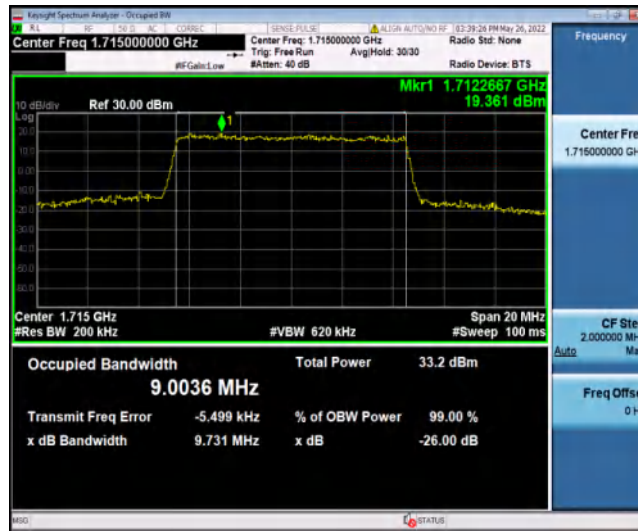
Band4-10MHz-QPSK-20000-50RB#0-8.9960



Band4-10MHz-QPSK-20175-50RB#0-9.0672



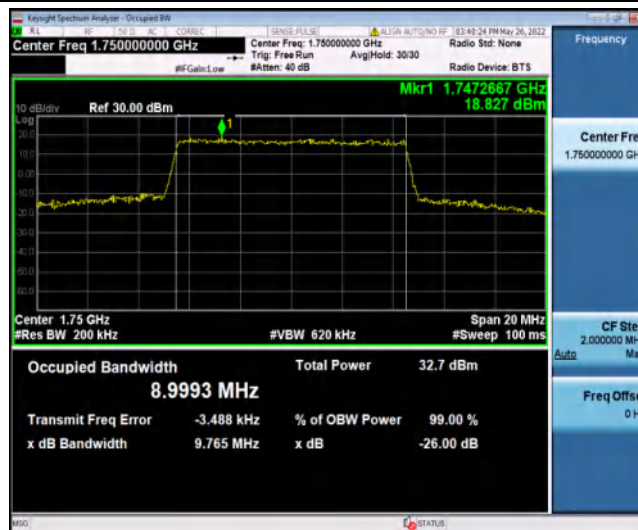
Band4-10MHz-QPSK-20350-50RB#0-9.0151



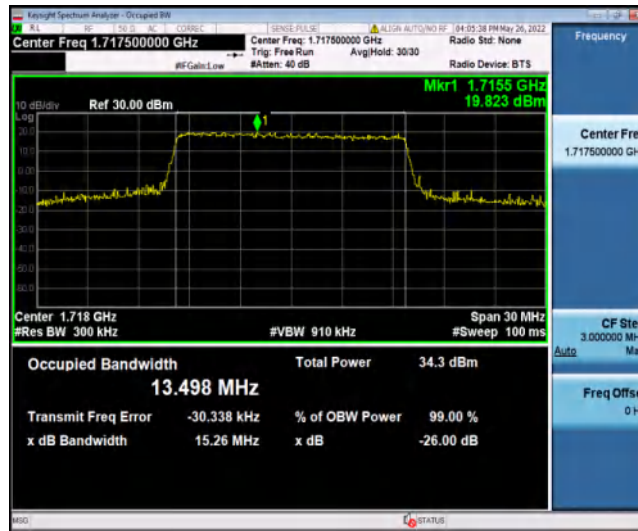
Band4-10MHz-16QAM-20000-50RB#0-9.0036



Band4-10MHz-16QAM-20175-50RB#0-9.0365



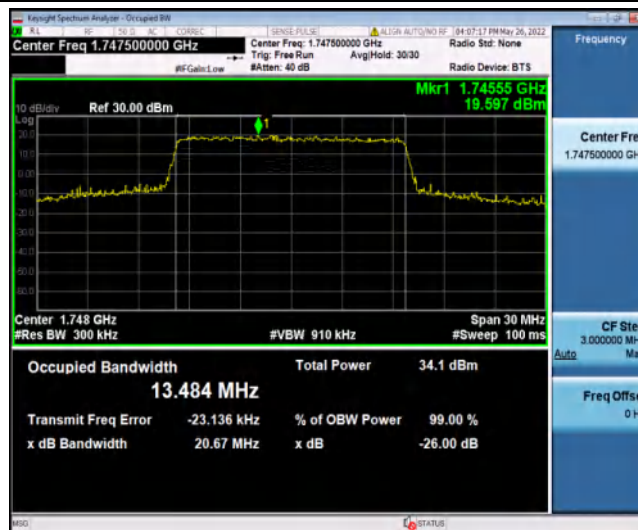
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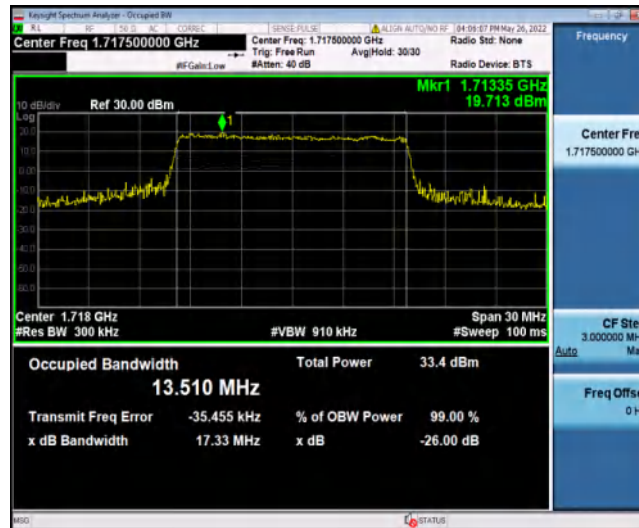
Band4-15MHz-QPSK-20025-75RB#0-13.498



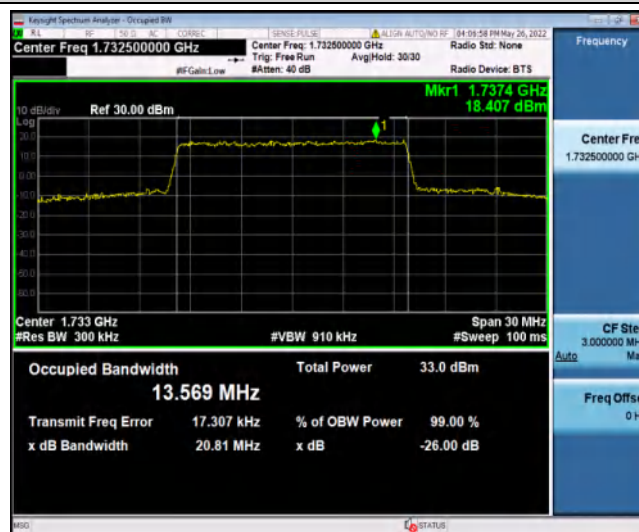
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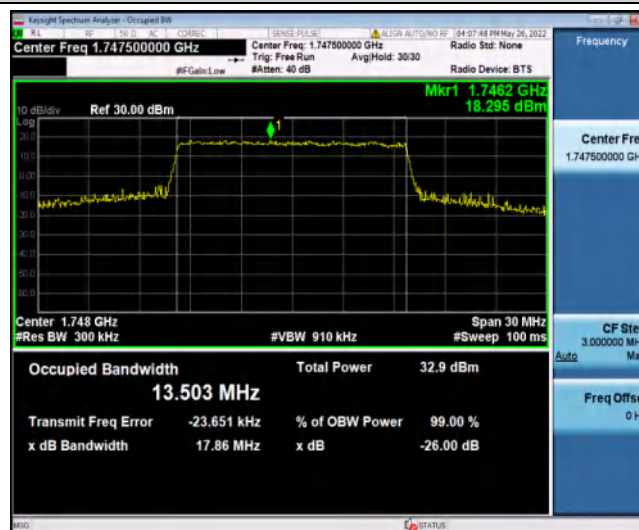
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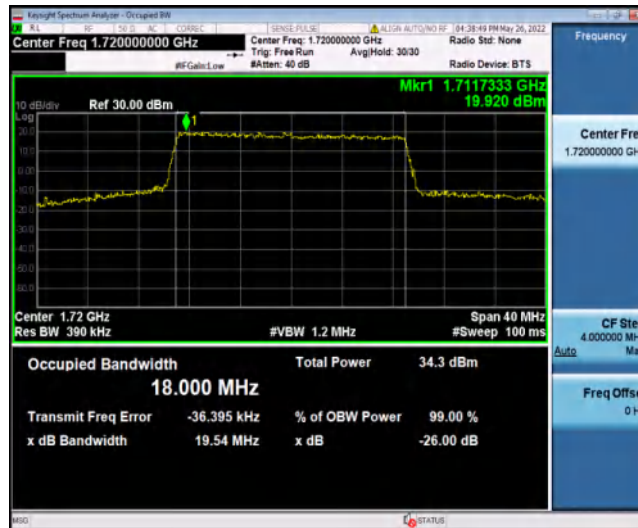
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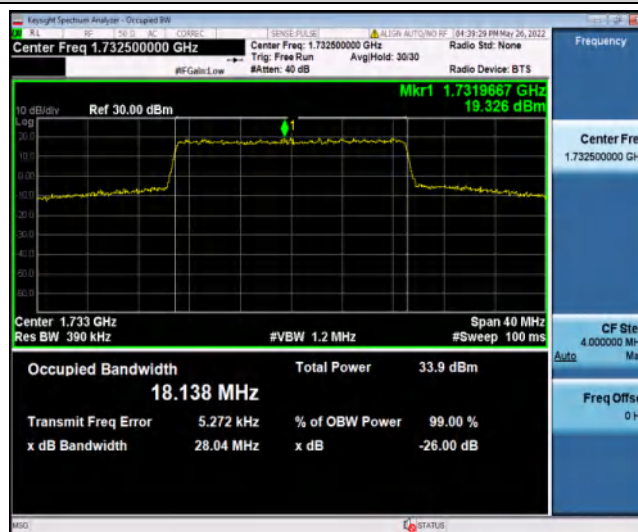
Band4-15MHz-16QAM-20175-75RB#0-13.569



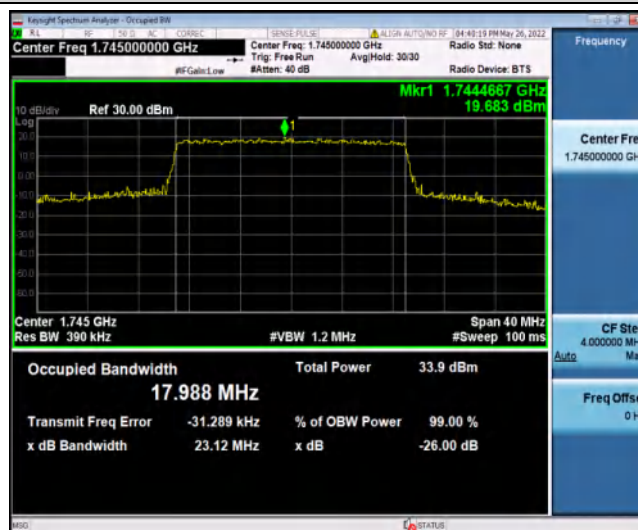
Band4-15MHz-16QAM-20325-75RB#0-13.503



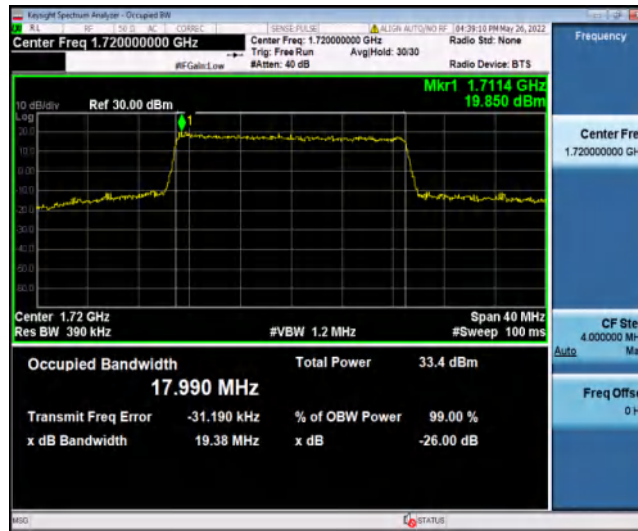
Band4-20MHz-QPSK-20050-100RB#0-18.000



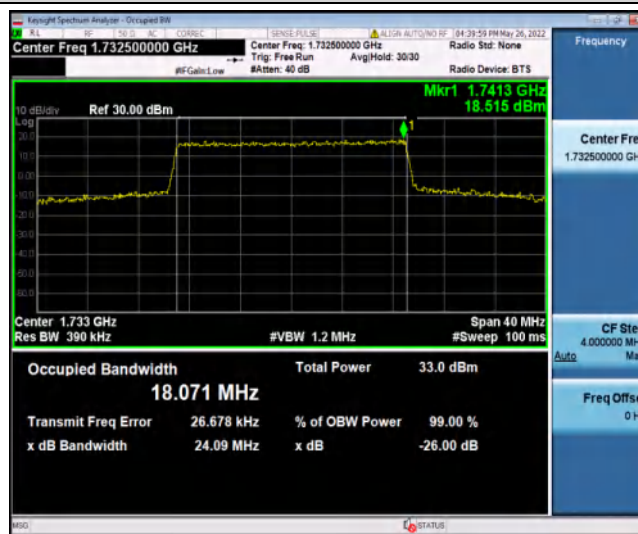
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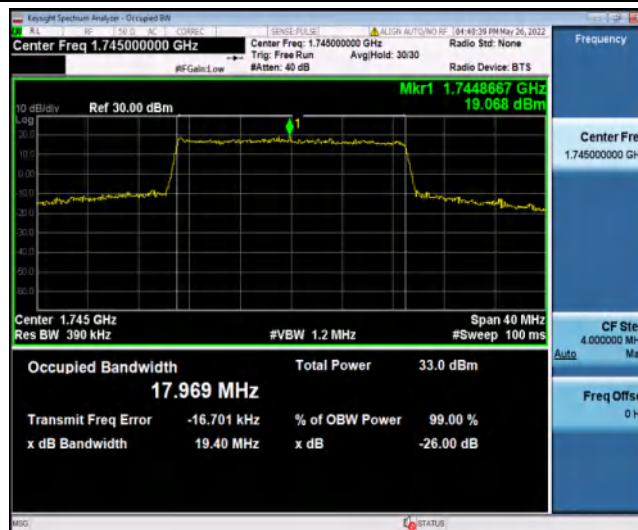
Band4-20MHz-QPSK-20300-100RB#0-17.988



Band4-20MHz-16QAM-20050-100RB#0-17.990



Band4-20MHz-16QAM-20175-100RB#0-18.071



Band4-20MHz-16QAM-20300-100RB#0-17.969

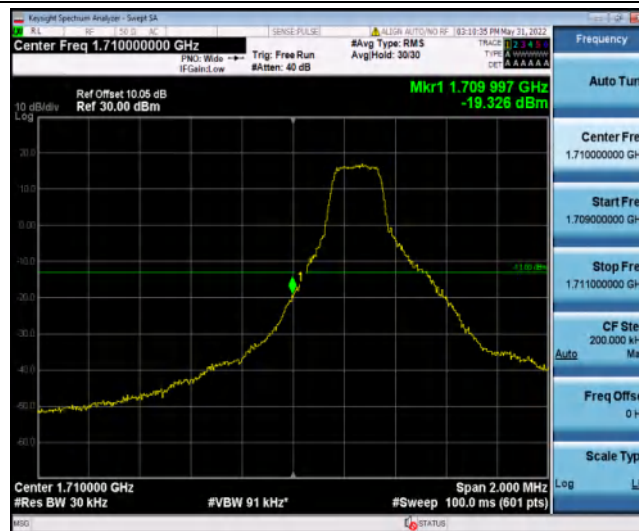
Appendix E : Band Edge

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	-19.33	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	-30.14	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	-27.34	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	-33.10	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	-21.59	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	-29.46	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	-19.73	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	-32.49	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	-27.14	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	-35.12	PASS
Band4	1.4MHz	16QAM	20393	1RB#5	-23.54	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	-30.26	PASS
Band4	3MHz	QPSK	19965	1RB#0	-17.94	PASS
Band4	3MHz	QPSK	19965	1RB#14	-42.00	PASS
Band4	3MHz	QPSK	19965	15RB#0	-30.24	PASS
Band4	3MHz	QPSK	20385	1RB#0	-45.64	PASS
Band4	3MHz	QPSK	20385	1RB#14	-19.46	PASS
Band4	3MHz	QPSK	20385	15RB#0	-31.34	PASS
Band4	3MHz	16QAM	19965	1RB#0	-19.24	PASS
Band4	3MHz	16QAM	19965	1RB#14	-45.92	PASS
Band4	3MHz	16QAM	19965	15RB#0	-29.56	PASS
Band4	3MHz	16QAM	20385	1RB#0	-45.59	PASS
Band4	3MHz	16QAM	20385	1RB#14	-21.86	PASS
Band4	3MHz	16QAM	20385	15RB#0	-32.90	PASS
Band4	5MHz	QPSK	19975	1RB#0	-15.70	PASS
Band4	5MHz	QPSK	19975	1RB#24	-45.83	PASS
Band4	5MHz	QPSK	19975	25RB#0	-28.05	PASS
Band4	5MHz	QPSK	20375	1RB#0	-45.71	PASS
Band4	5MHz	QPSK	20375	1RB#24	-16.32	PASS
Band4	5MHz	QPSK	20375	25RB#0	-29.23	PASS
Band4	5MHz	16QAM	19975	1RB#0	-16.36	PASS
Band4	5MHz	16QAM	19975	1RB#24	-45.99	PASS
Band4	5MHz	16QAM	19975	25RB#0	-28.61	PASS
Band4	5MHz	16QAM	20375	1RB#0	-44.22	PASS
Band4	5MHz	16QAM	20375	1RB#24	-17.87	PASS
Band4	5MHz	16QAM	20375	25RB#0	-29.94	PASS
Band4	10MHz	QPSK	20000	1RB#0	-18.00	PASS
Band4	10MHz	QPSK	20000	1RB#49	-45.41	PASS
Band4	10MHz	QPSK	20000	50RB#0	-31.09	PASS
Band4	10MHz	QPSK	20350	1RB#0	-44.22	PASS
Band4	10MHz	QPSK	20350	1RB#49	-17.64	PASS
Band4	10MHz	QPSK	20350	50RB#0	-32.69	PASS

Band4	10MHz	16QAM	20000	1RB#0	-19.22	PASS
Band4	10MHz	16QAM	20000	1RB#49	-45.01	PASS
Band4	10MHz	16QAM	20000	50RB#0	-31.20	PASS
Band4	10MHz	16QAM	20350	1RB#0	-44.33	PASS
Band4	10MHz	16QAM	20350	1RB#49	-18.33	PASS
Band4	10MHz	16QAM	20350	50RB#0	-31.94	PASS
Band4	15MHz	QPSK	20025	1RB#0	-19.18	PASS
Band4	15MHz	QPSK	20025	1RB#74	-44.95	PASS
Band4	15MHz	QPSK	20025	75RB#0	-32.24	PASS
Band4	15MHz	QPSK	20325	1RB#0	-43.46	PASS
Band4	15MHz	QPSK	20325	1RB#74	-19.93	PASS
Band4	15MHz	QPSK	20325	75RB#0	-32.52	PASS
Band4	15MHz	16QAM	20025	1RB#0	-19.80	PASS
Band4	15MHz	16QAM	20025	1RB#74	-44.99	PASS
Band4	15MHz	16QAM	20025	75RB#0	-32.36	PASS
Band4	15MHz	16QAM	20325	1RB#0	-43.94	PASS
Band4	15MHz	16QAM	20325	1RB#74	-21.00	PASS
Band4	15MHz	16QAM	20325	75RB#0	-31.69	PASS
Band4	20MHz	QPSK	20050	1RB#0	-21.52	PASS
Band4	20MHz	QPSK	20050	1RB#99	-43.88	PASS
Band4	20MHz	QPSK	20050	100RB#0	-33.26	PASS
Band4	20MHz	QPSK	20300	1RB#0	-43.39	PASS
Band4	20MHz	QPSK	20300	1RB#99	-21.65	PASS
Band4	20MHz	QPSK	20300	100RB#0	-31.20	PASS
Band4	20MHz	16QAM	20050	1RB#0	-21.91	PASS
Band4	20MHz	16QAM	20050	1RB#99	-44.05	PASS
Band4	20MHz	16QAM	20050	100RB#0	-32.54	PASS
Band4	20MHz	16QAM	20300	1RB#0	-43.52	PASS
Band4	20MHz	16QAM	20300	1RB#99	-22.45	PASS
Band4	20MHz	16QAM	20300	100RB#0	-30.68	PASS

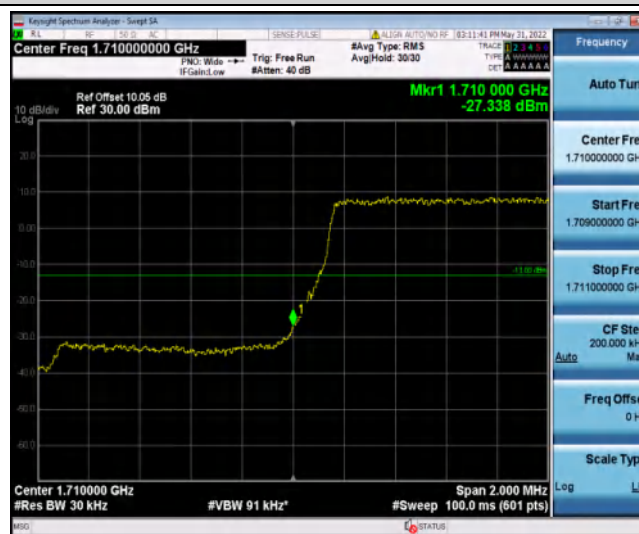
Test Graphs



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



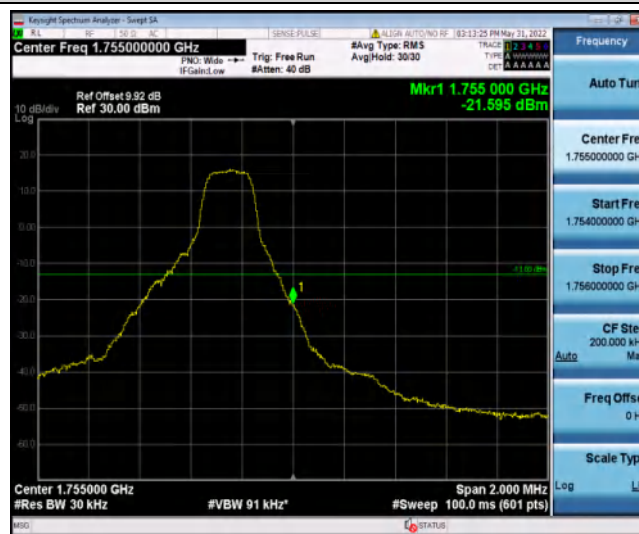
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Band4-1.4MHz-QPSK-19957-6RB#0



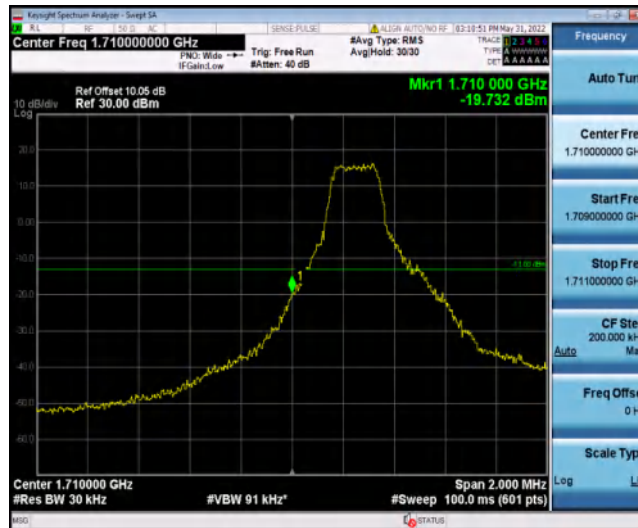
Band4-1.4MHz-QPSK-20393-1RB#0



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



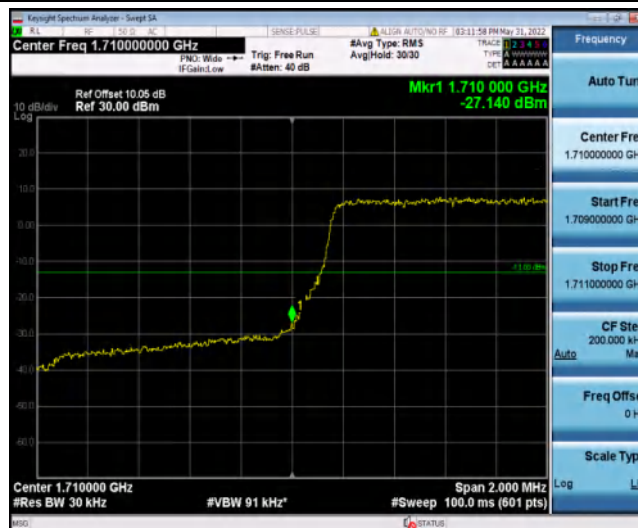
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Band4-1.4MHz-16QAM-19957-1RB#0



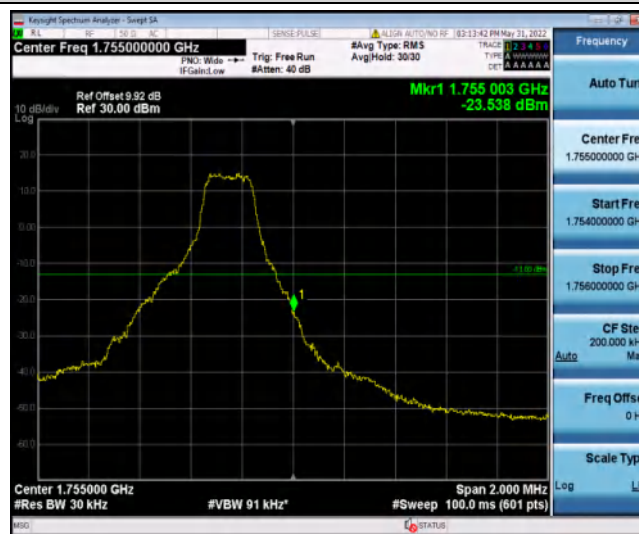
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Band4-1.4MHz-16QAM-19957-6RB#0



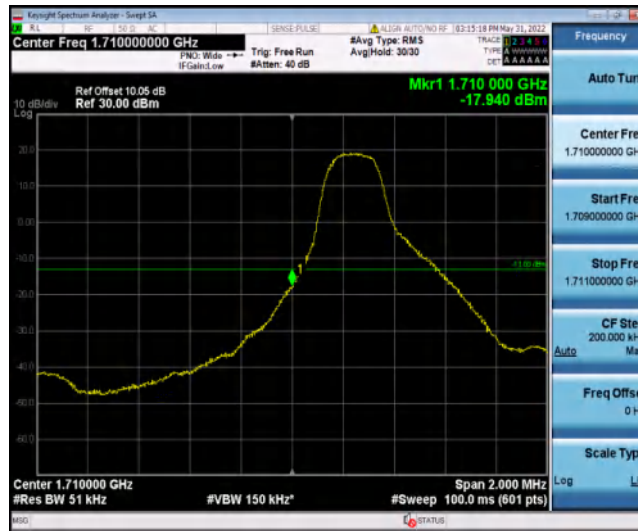
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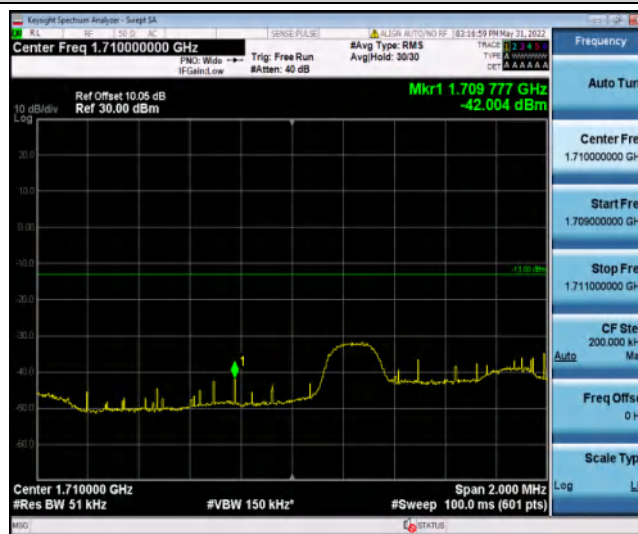
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Band4-1.4MHz-16QAM-20393-6RB#0



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



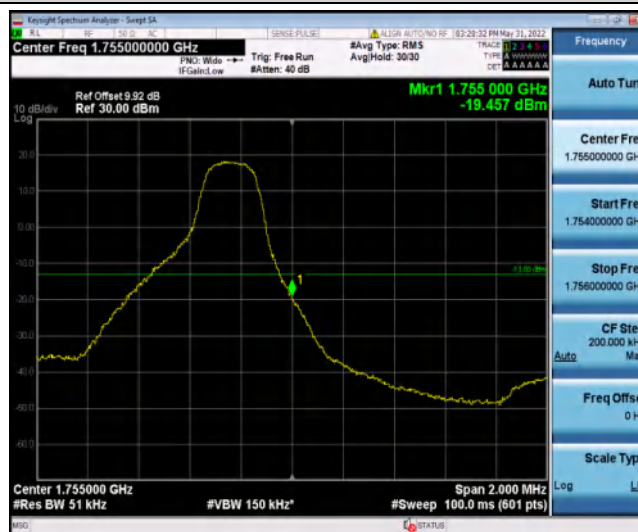
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Band4-3MHz-QPSK-19965-15RB#0



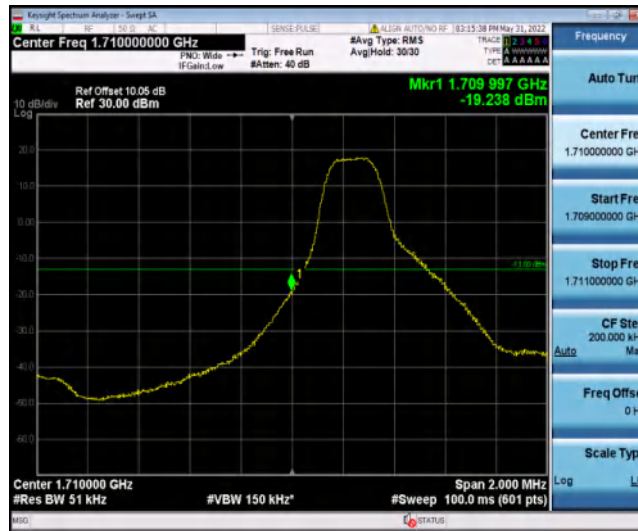
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Band4-3MHz-QPSK-20385-1RB#14



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



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



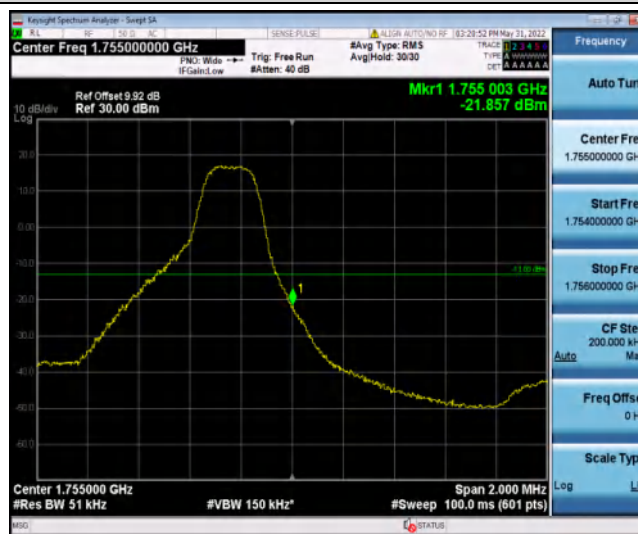
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Band4-3MHz-16QAM-19965-15RB#0



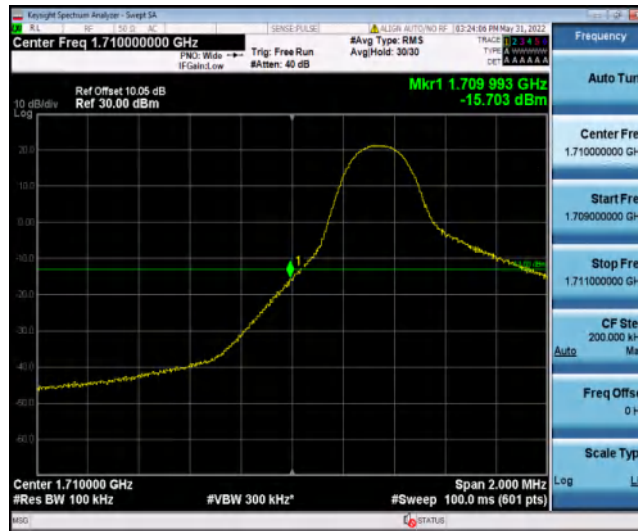
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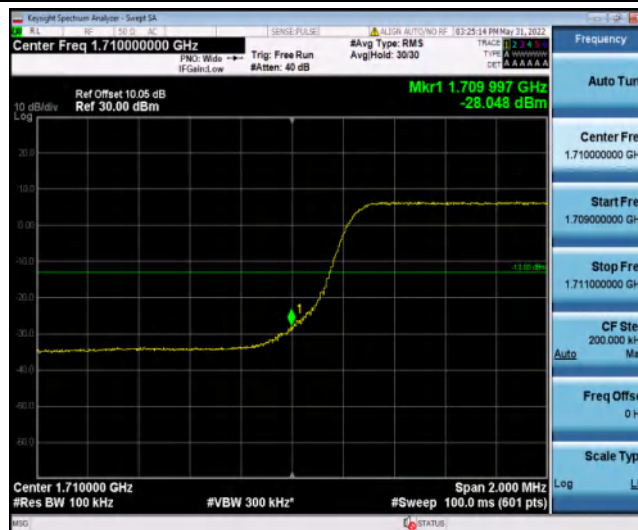
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Band4-5MHz-QPSK-19975-1RB#0



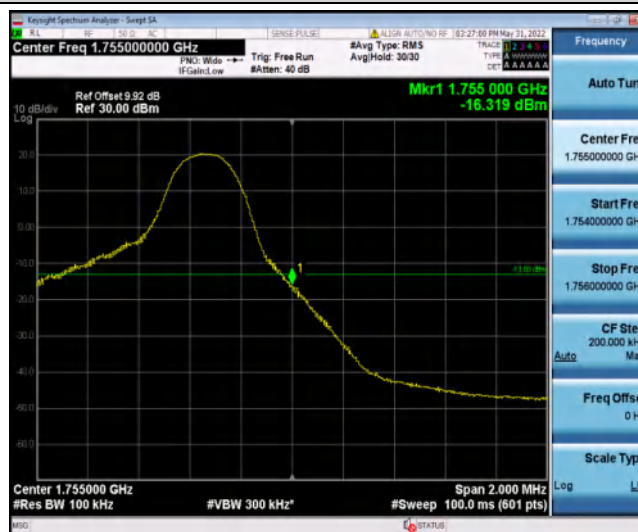
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Band4-5MHz-QPSK-19975-25RB#0



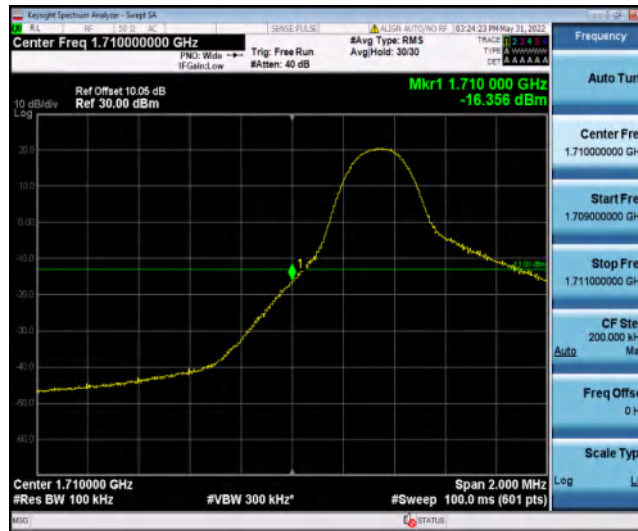
Band4-5MHz-QPSK-20375-1RB#0



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



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



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



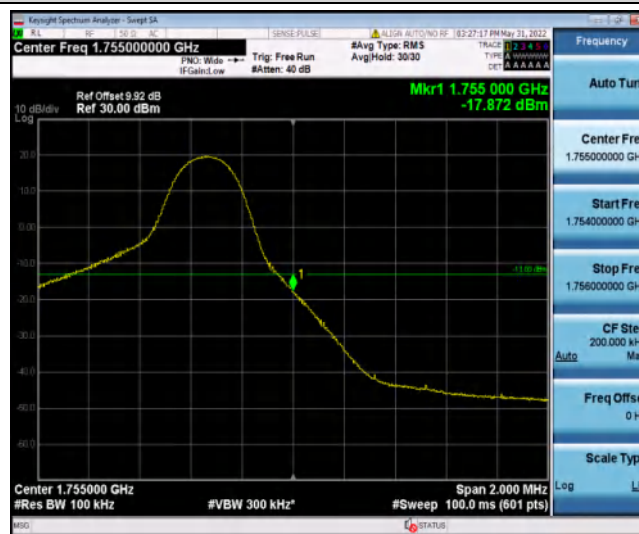
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Band4-5MHz-16QAM-19975-25RB#0



Band4-5MHz-16QAM-20375-1RB#0



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



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