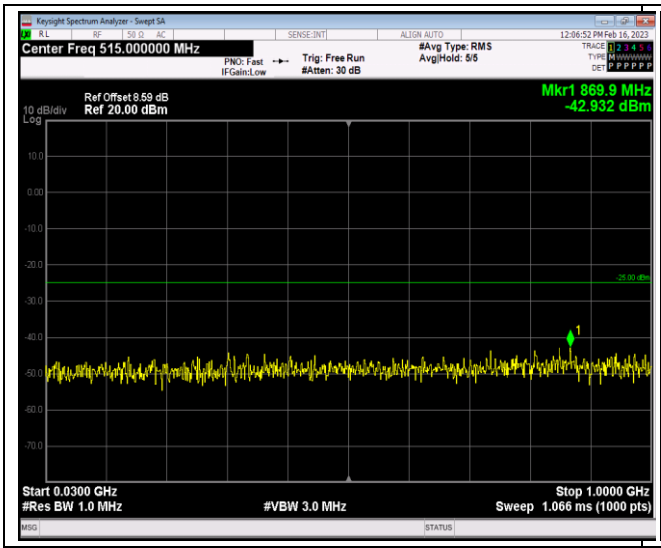
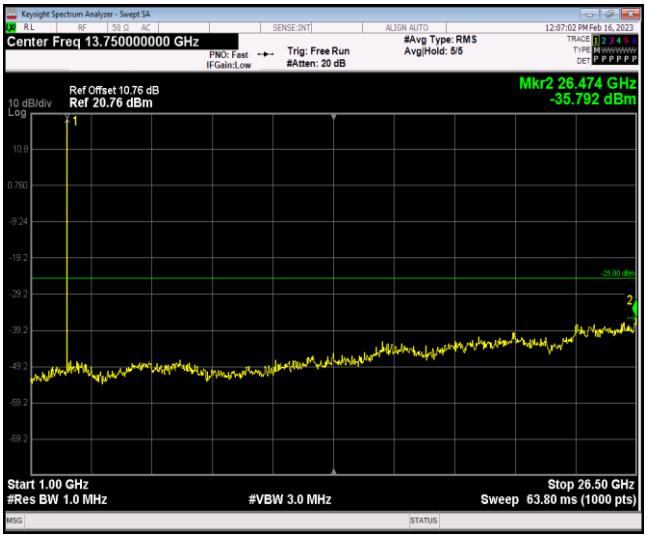
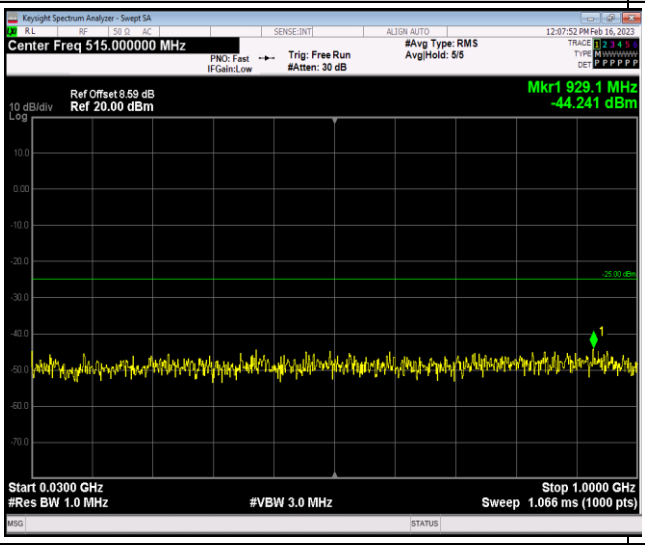


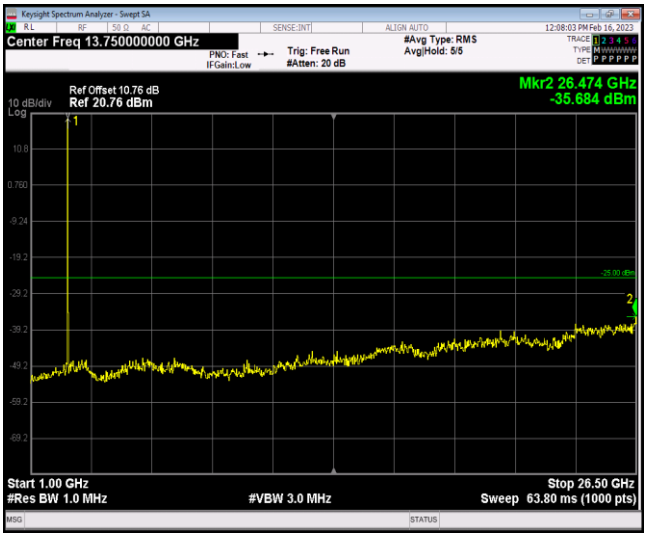
Band7-5MHz-64QAM-21425-1RB#0-Range1:30~1000MHz



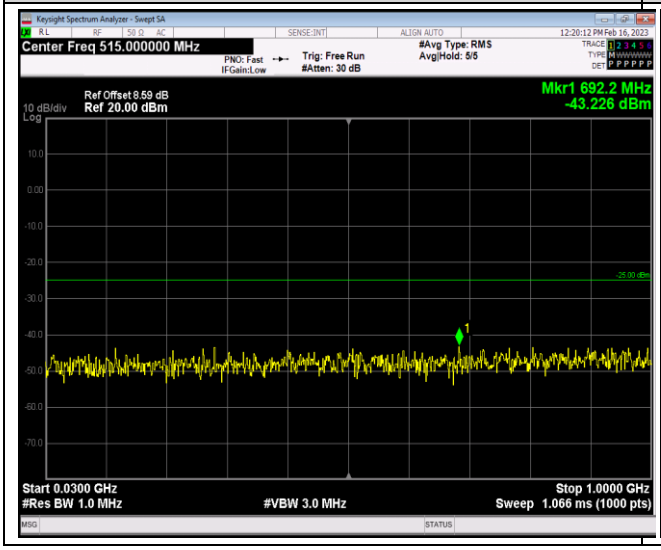
Band7-5MHz-64QAM-21425-1RB#0-Range2:1000~26500MHz

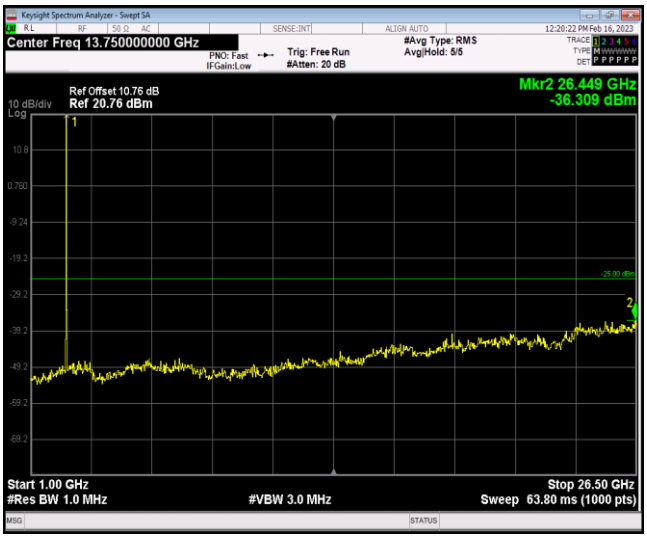


Band7-20MHz-QPSK-20850-1RB#0-Range1:30~1000MHz



Band7-20MHz-QPSK-20850-1RB#0-Range2:1000~26500MHz





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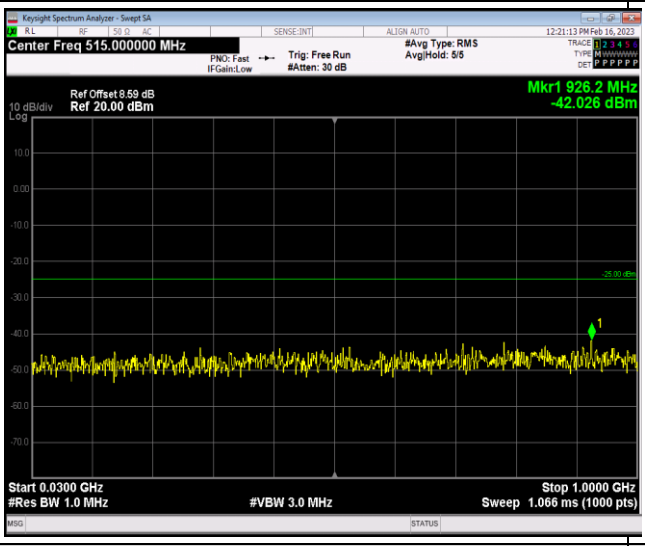	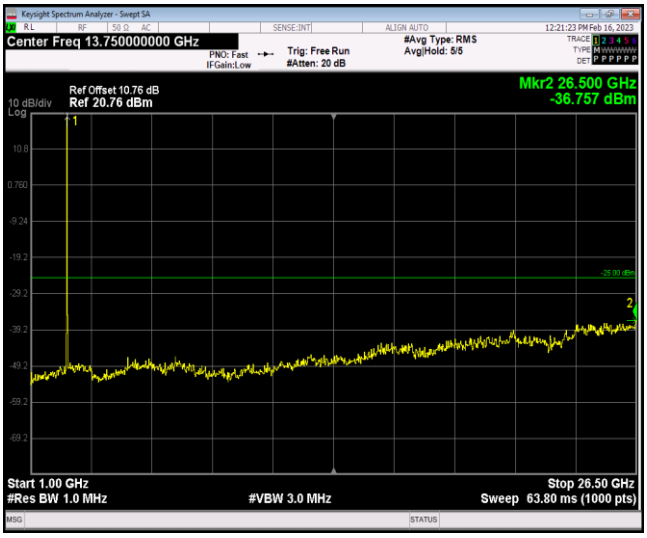
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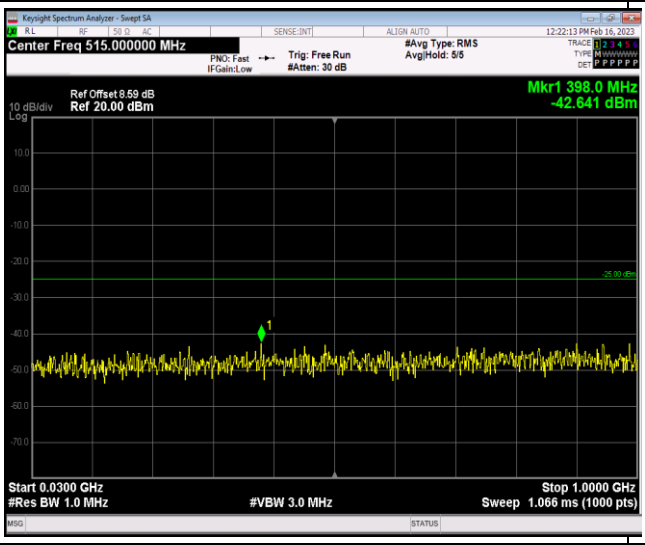
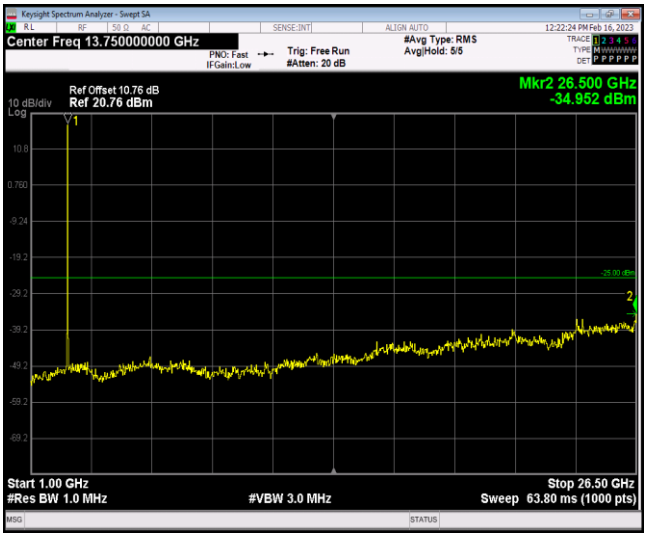
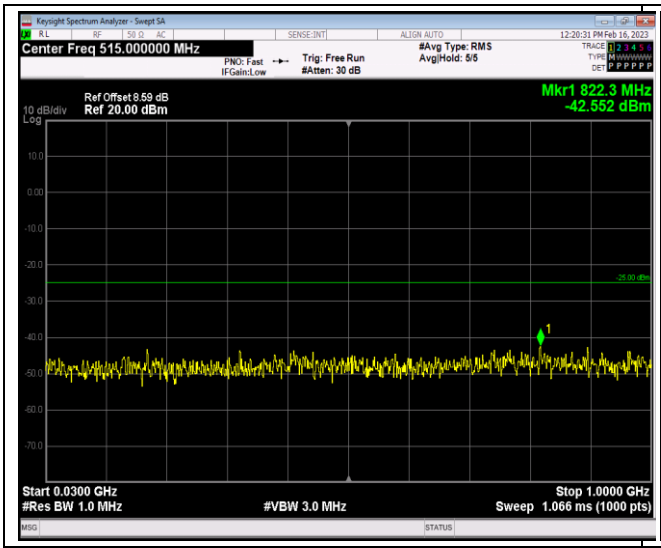
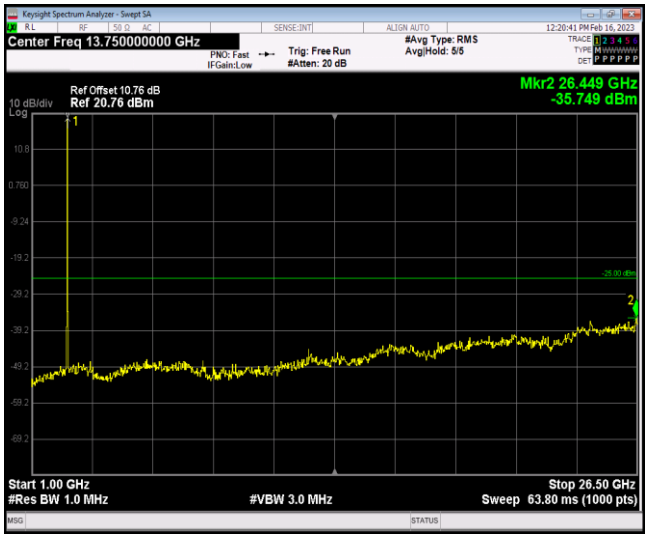
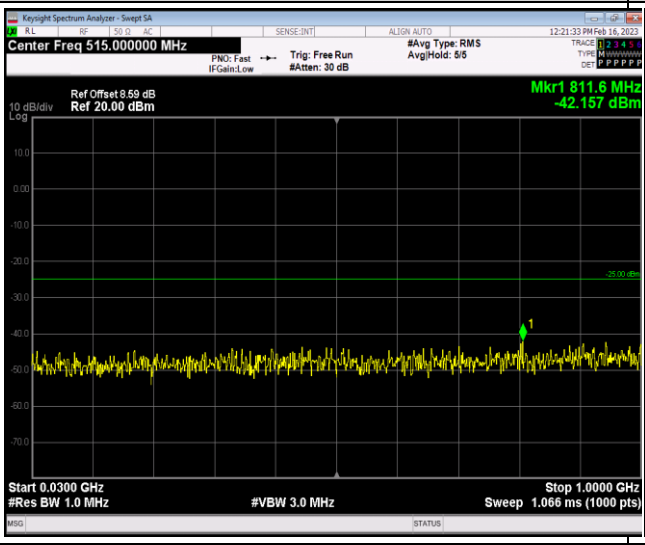
	
Band7-20MHz-16QAM-20850-1RB#0-Range1:30~1000MHz	Band7-20MHz-16QAM-20850-1RB#0-Range2:1000~26500MHz



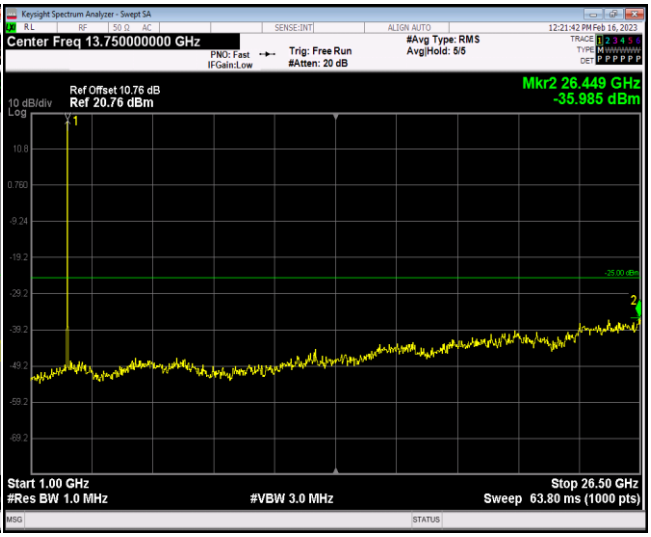
Band7-20MHz-16QAM-21100-1RB#0-Range1:30~1000MHz



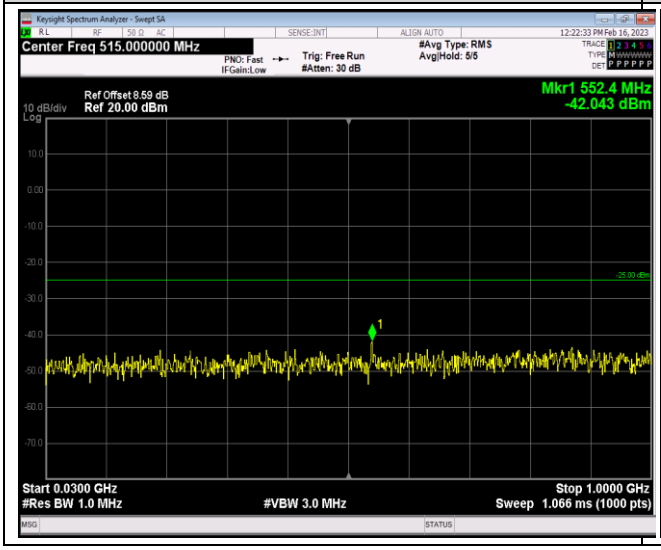
Band7-20MHz-16QAM-21100-1RB#0-Range2:1000~26500MHz

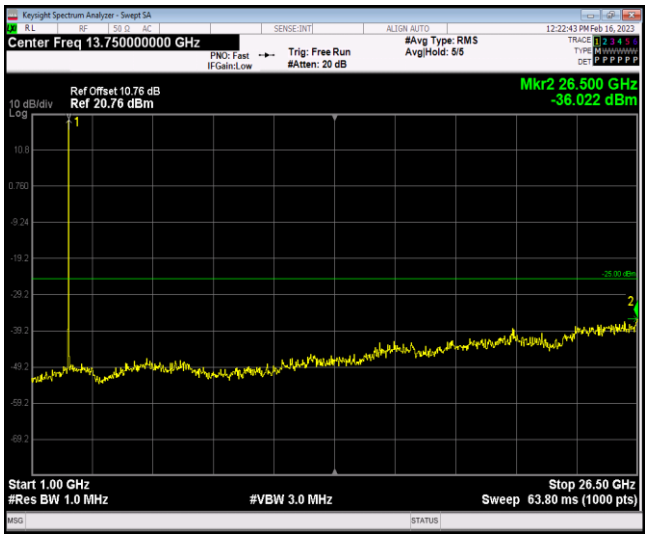


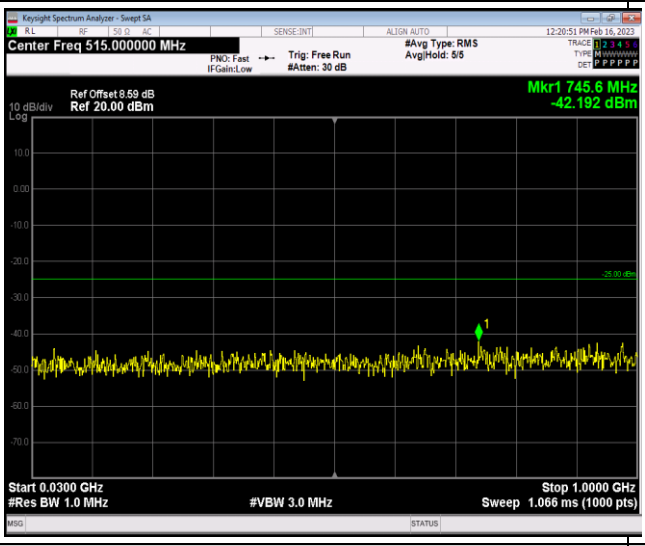
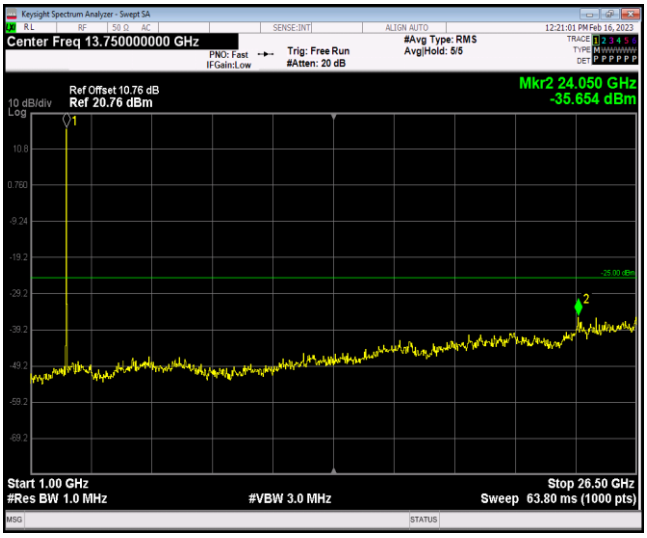
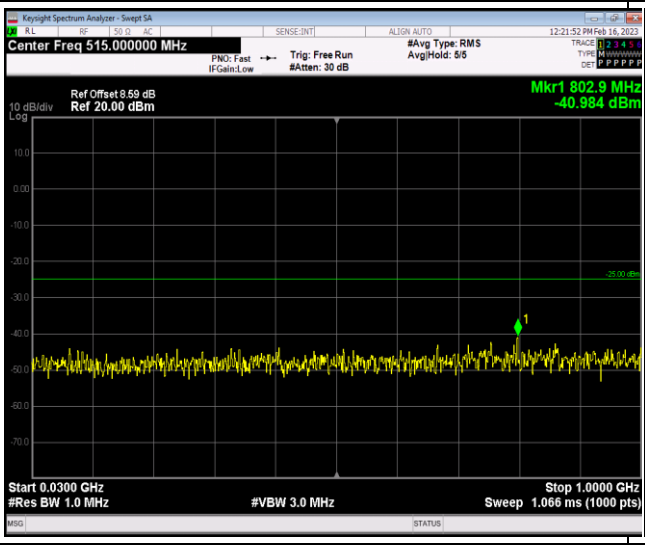
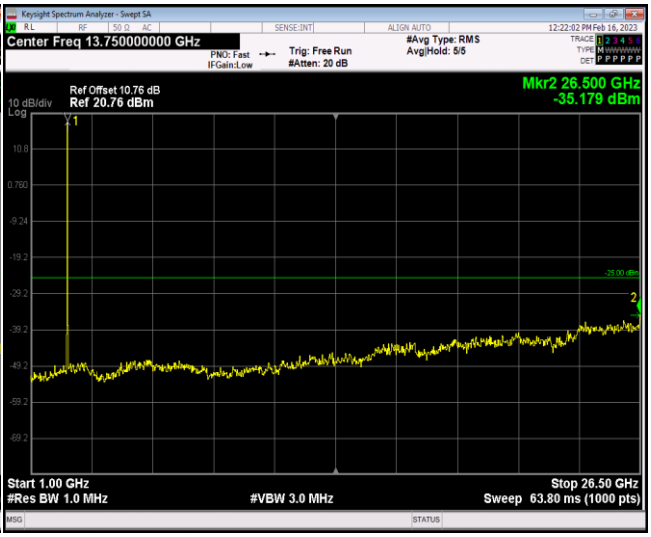
Band7-20MHz-16QAM-21350-1RB#0-Range1:30~1000MHz

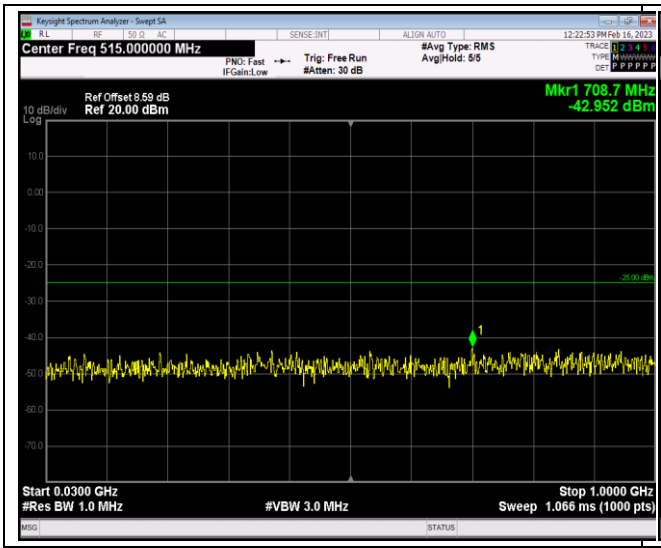


Band7-20MHz-16QAM-21350-1RB#0-Range2:1000~26500MHz

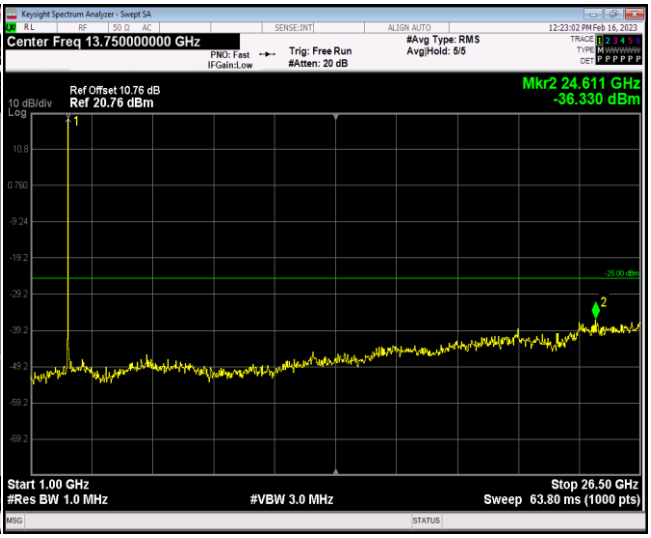




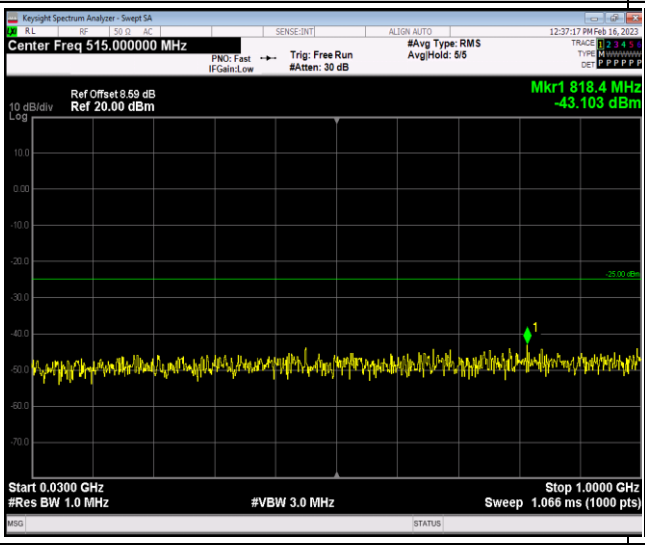
Band7-20MHz-64QAM-20850-1RB#0-Range1:30~1000MHz	Band7-20MHz-64QAM-20850-1RB#0-Range2:1000~26500MHz
	
Band7-20MHz-64QAM-21100-1RB#0-Range1:30~1000MHz	Band7-20MHz-64QAM-21100-1RB#0-Range2:1000~26500MHz
	
Band7-20MHz-64QAM-21350-1RB#0-Range1:30~1000MHz	Band7-20MHz-64QAM-21350-1RB#0-Range2:1000~26500MHz



Band41-5MHz-QPSK-39675-1RB#0-Range1:30~1000MHz



Band41-5MHz-QPSK-39675-1RB#0-Range2:1000~26500MHz



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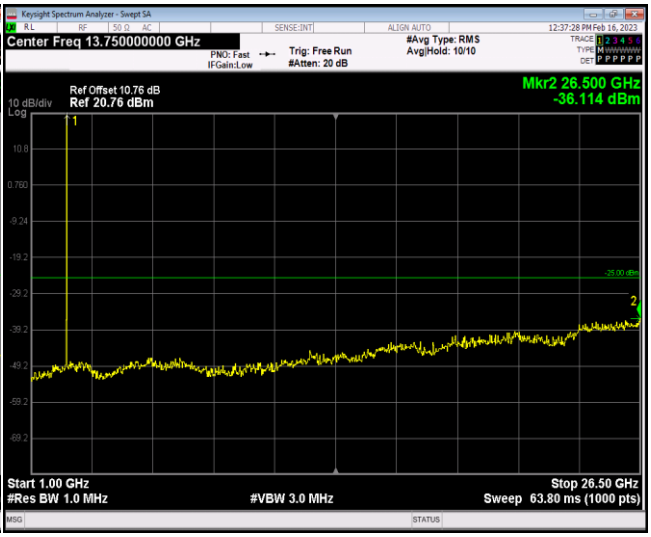

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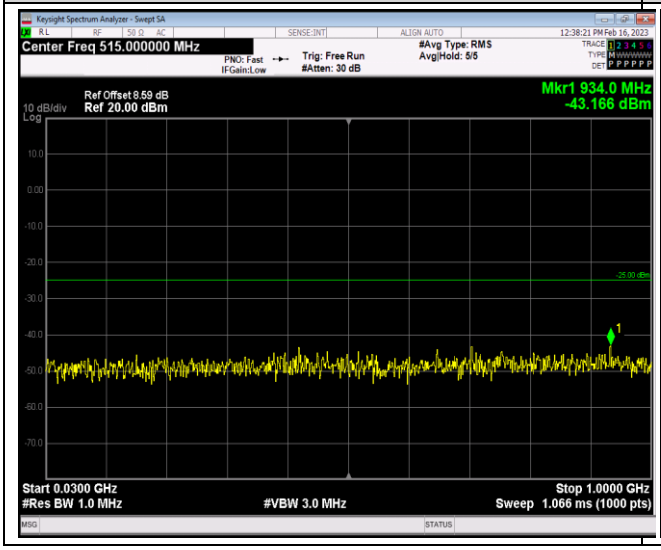
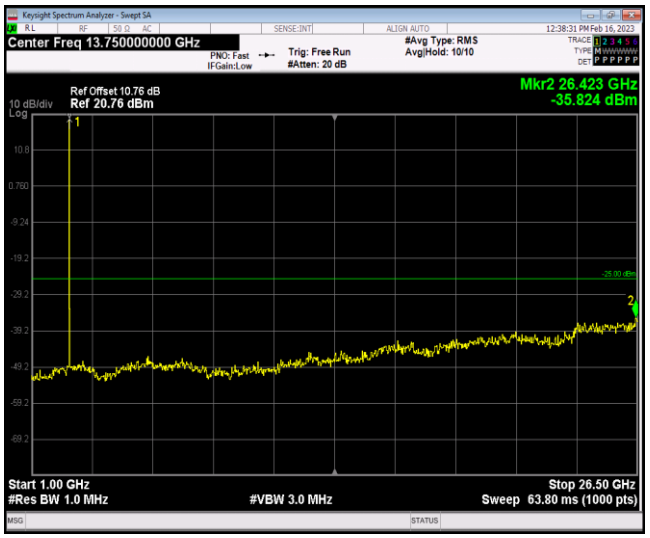
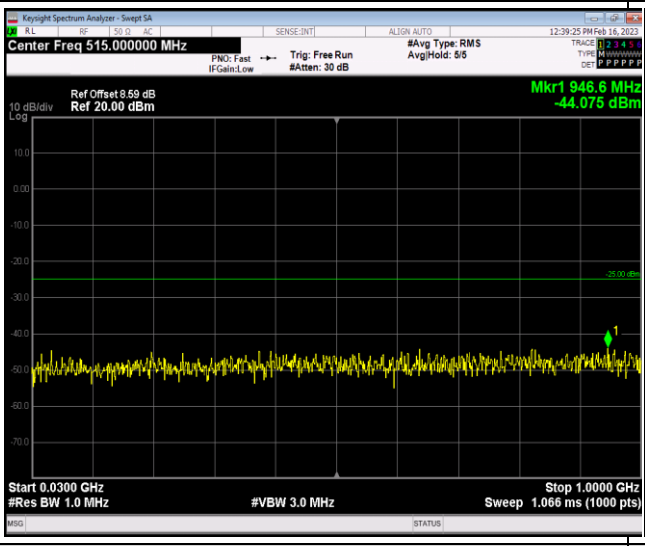




Band41-5MHz-QPSK-41565-1RB#0-Range1:30~1000MHz	Band41-5MHz-QPSK-41565-1RB#0-Range2:1000~26500MHz
	
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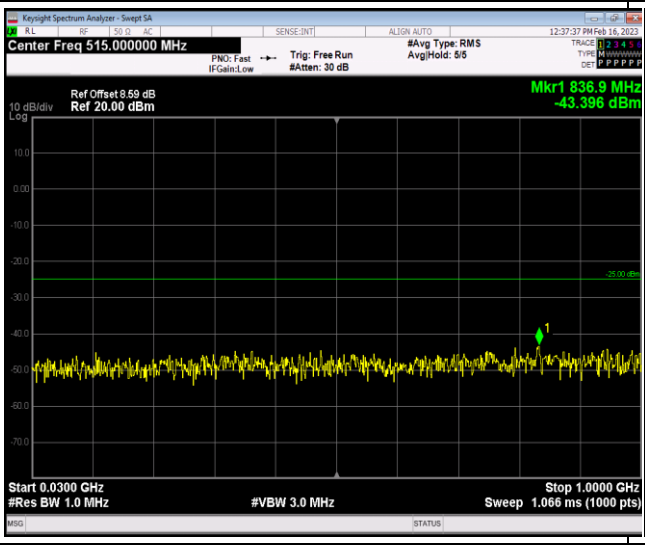
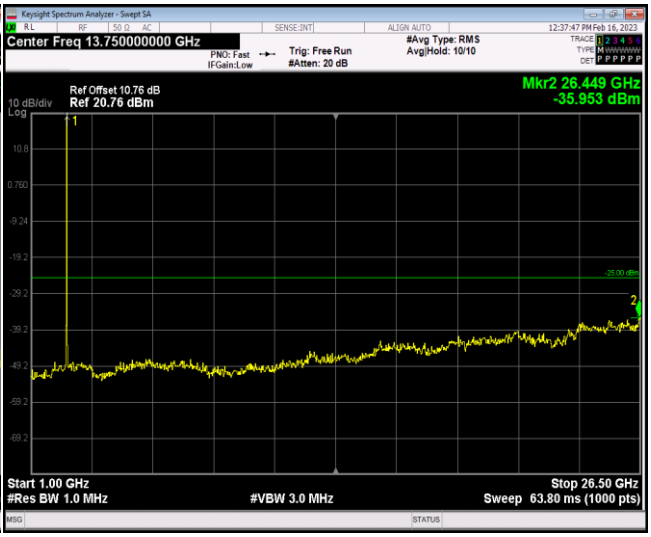
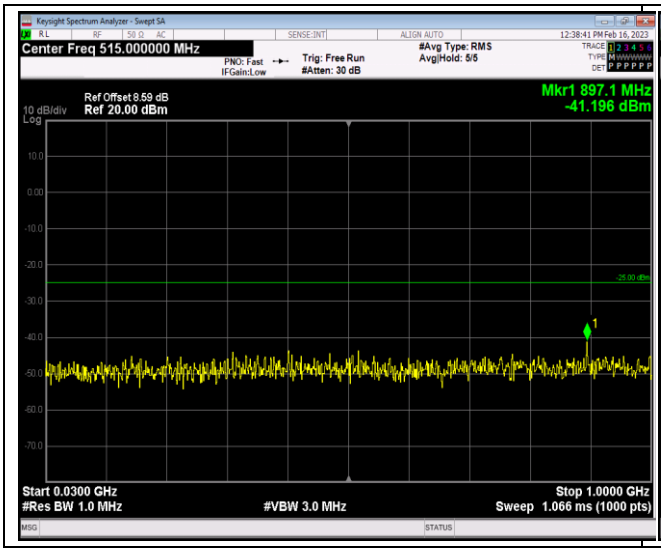
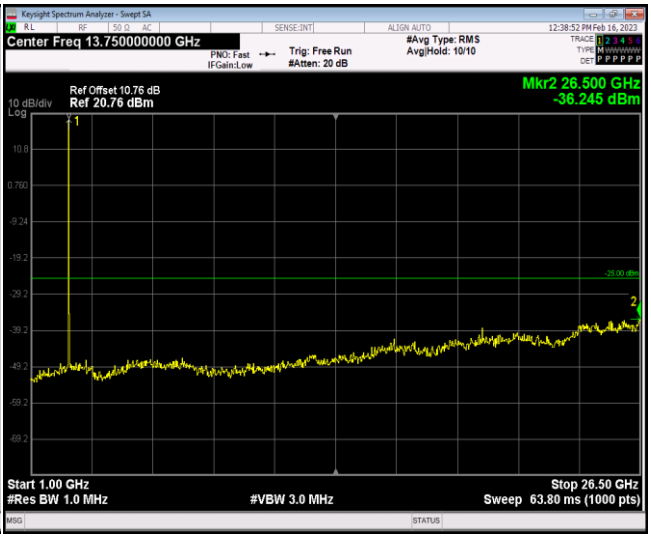
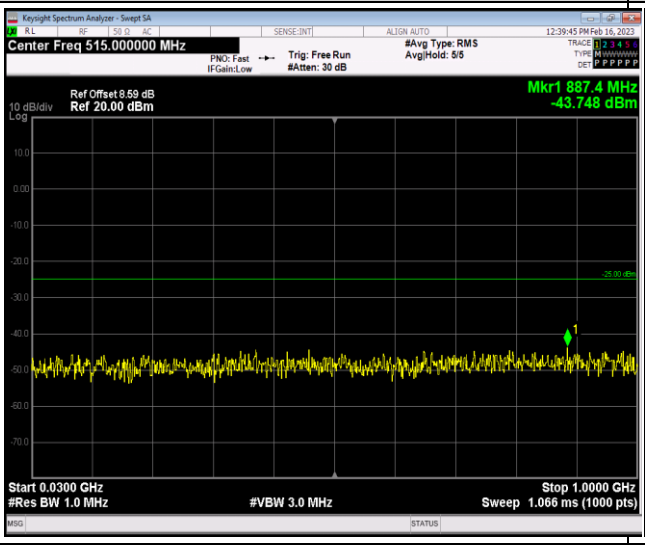
	
Band41-5MHz-16QAM-40620-1RB#0-Range1:30~1000MHz	Band41-5MHz-16QAM-40620-1RB#0-Range2:1000~26500MHz



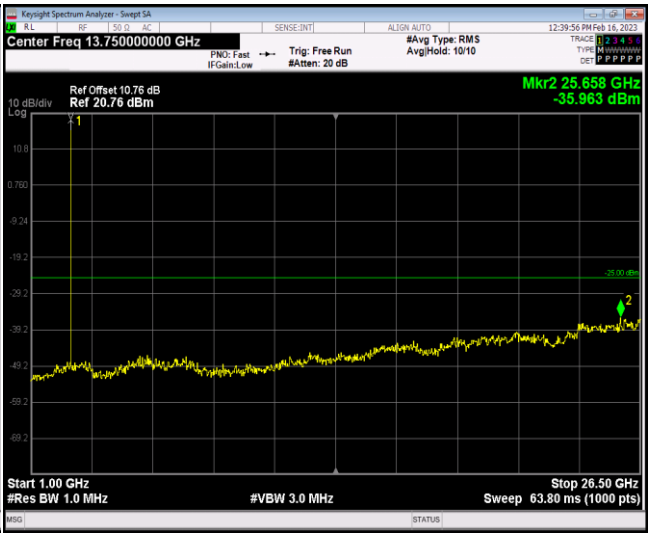
Band41-5MHz-16QAM-41565-1RB#0-Range1:30~1000MHz



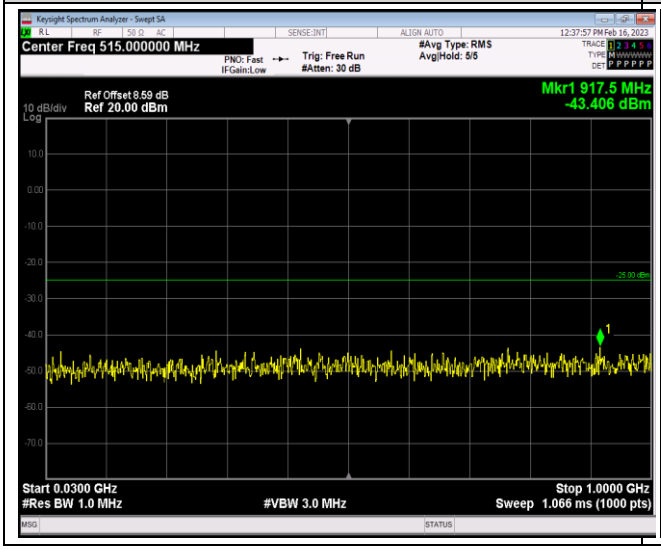
Band41-5MHz-16QAM-41565-1RB#0-Range2:1000~26500MHz

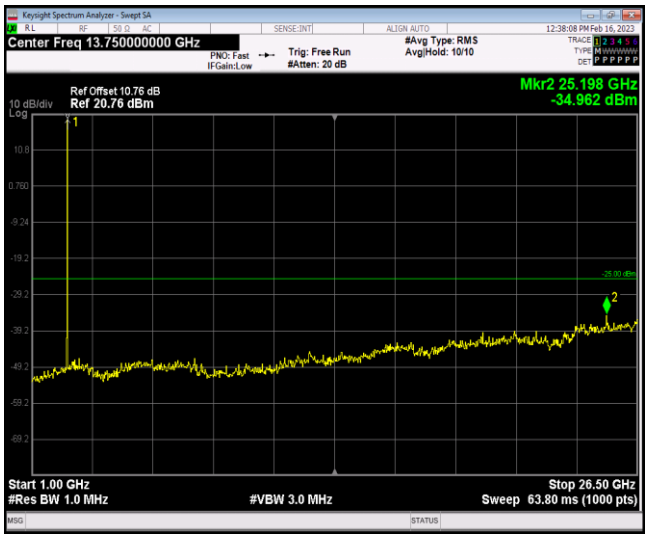


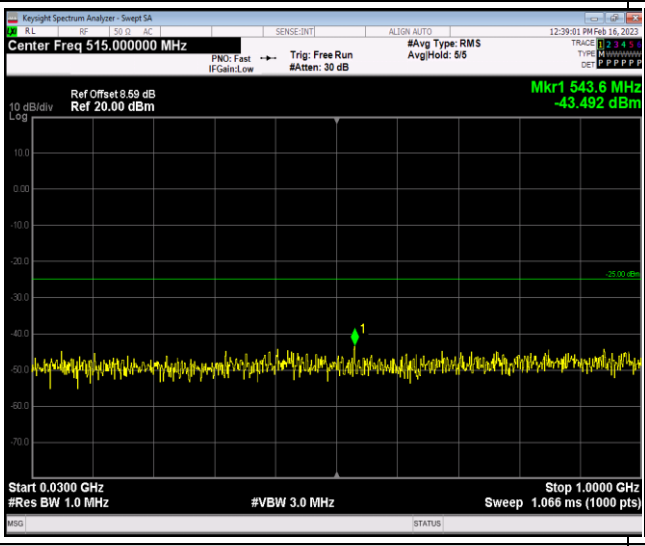
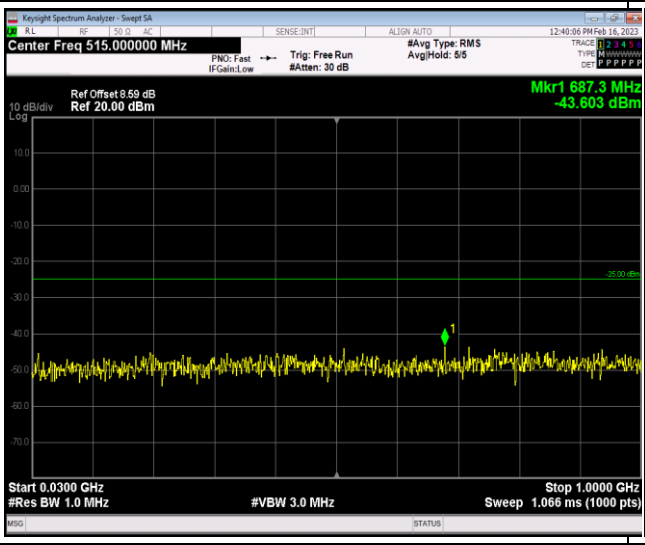
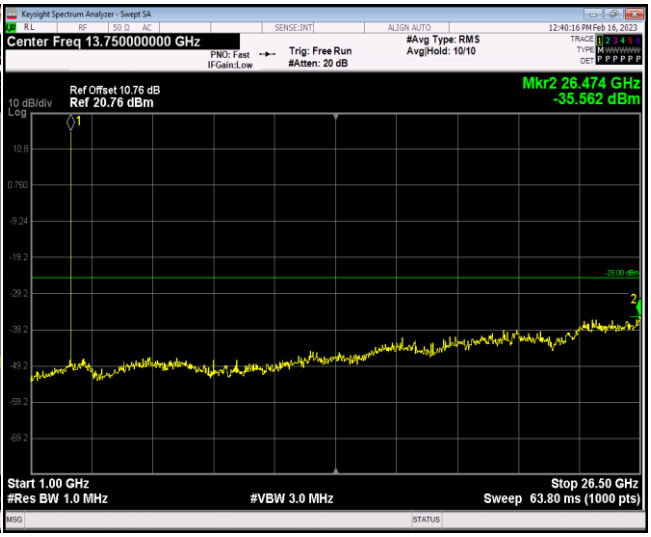
Band41-5MHz-64QAM-39675-1RB#0-Range1:30~1000MHz

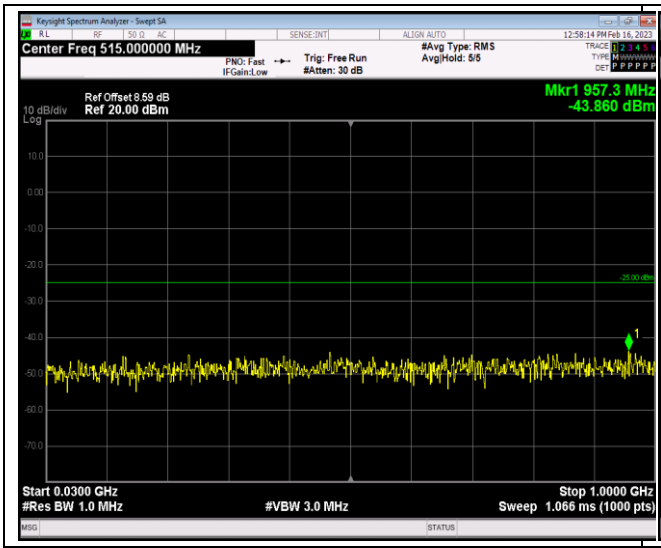


Band41-5MHz-64QAM-39675-1RB#0-Range2:1000~26500MHz

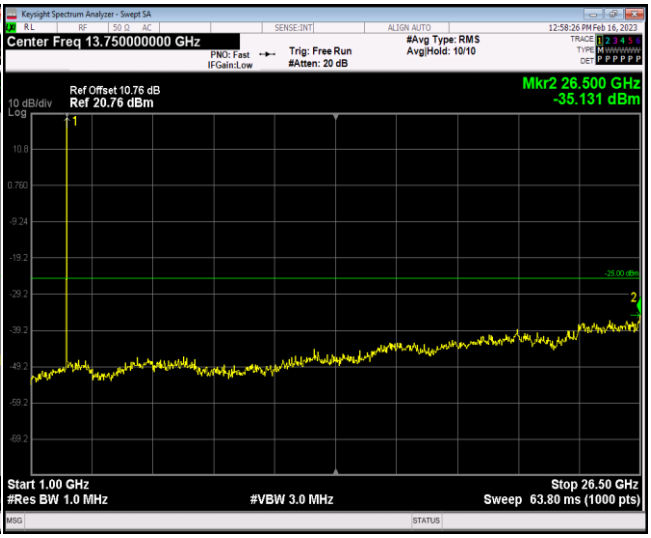




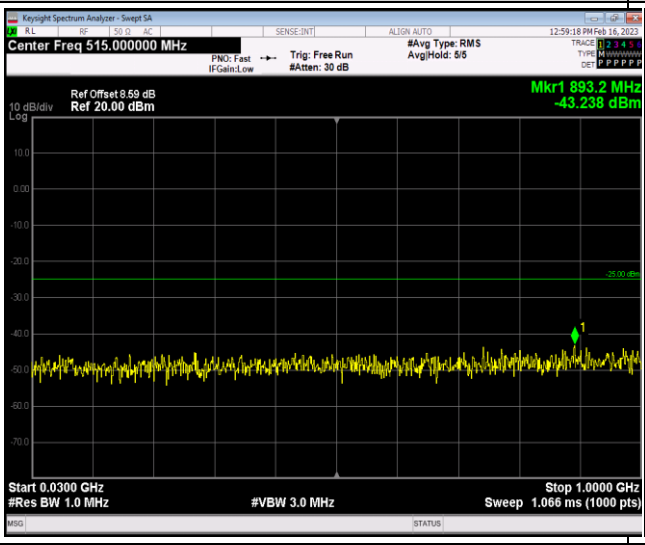
Band41-5MHz-64QAM-40620-1RB#0-Range1:30~1000MHz	Band41-5MHz-64QAM-40620-1RB#0-Range2:1000~26500MHz
	
Band41-5MHz-64QAM-41565-1RB#0-Range1:30~1000MHz	Band41-5MHz-64QAM-41565-1RB#0-Range2:1000~26500MHz
	
Band41-20MHz-QPSK-39750-1RB#0-Range1:30~1000MHz	Band41-20MHz-QPSK-39750-1RB#0-Range2:1000~26500MHz



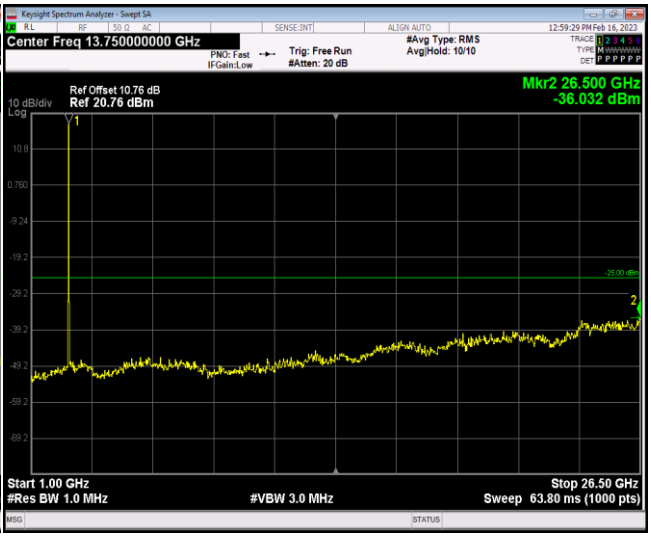
Band41-20MHz-QPSK-40620-1RB#0-Range1:30~1000MHz



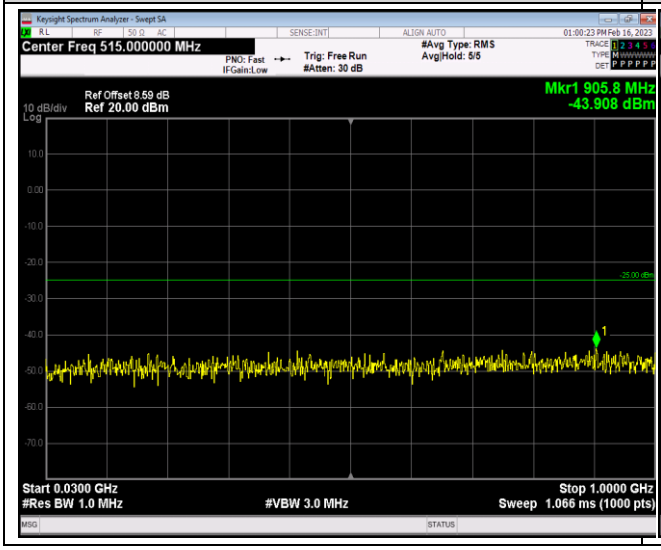
Band41-20MHz-QPSK-40620-1RB#0-Range2:1000~26500MHz

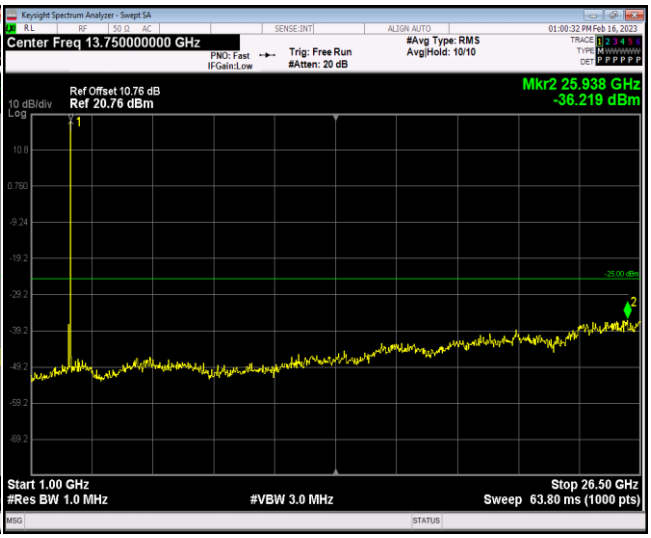


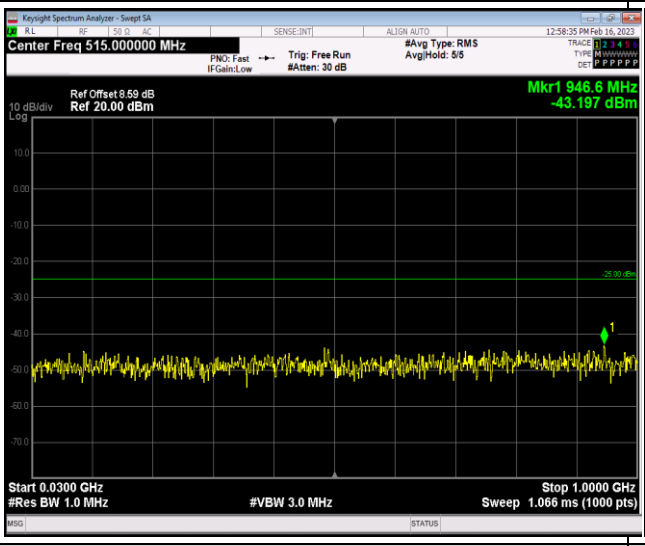
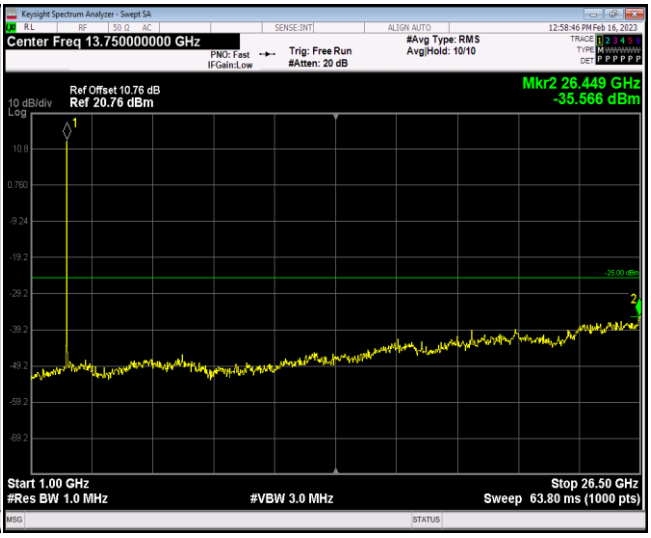
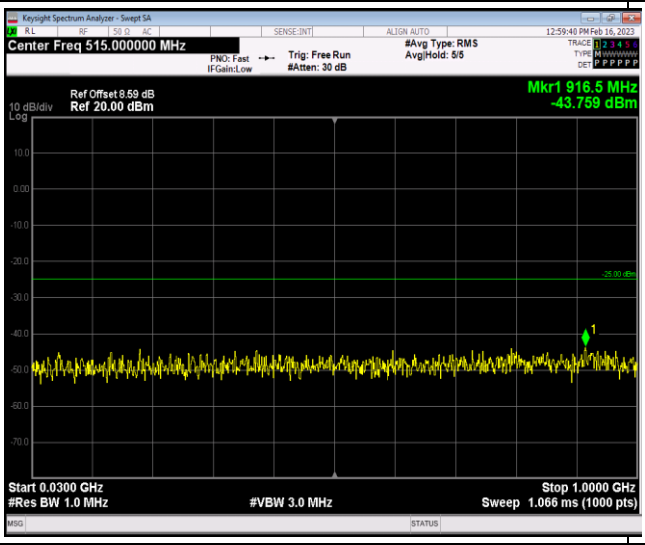
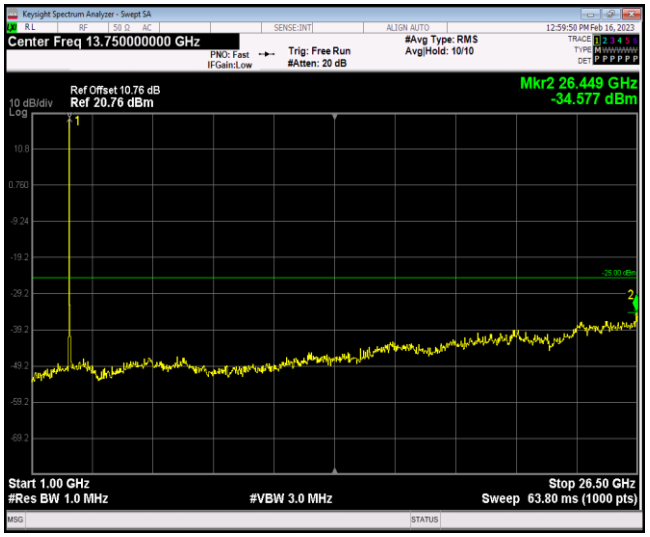
Band41-20MHz-QPSK-41490-1RB#0-Range1:30~1000MHz

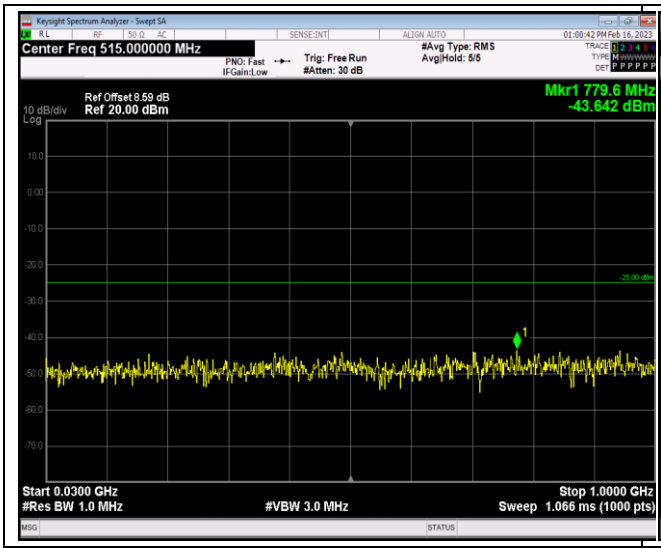


Band41-20MHz-QPSK-41490-1RB#0-Range2:1000~26500MHz

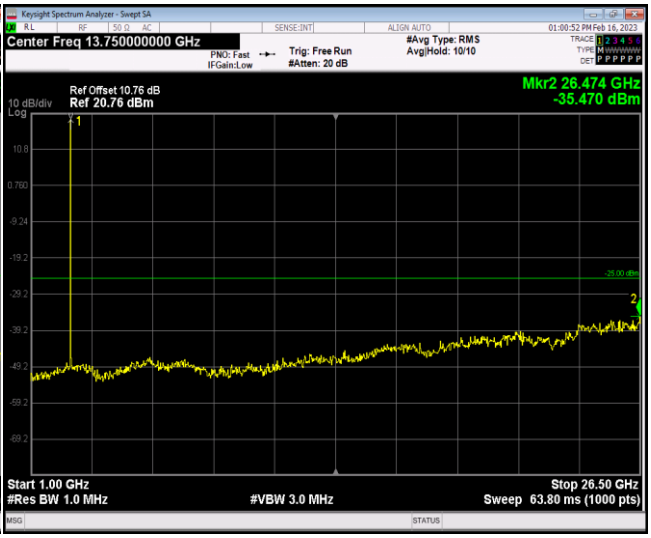




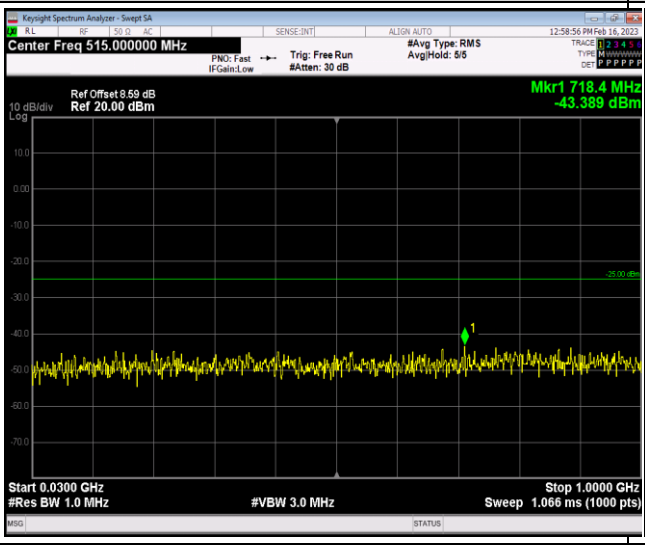
Band41-20MHz-16QAM-39750-1RB#0-Range1:30~1000MHz	Band41-20MHz-16QAM-39750-1RB#0-Range2:1000~26500MHz
	
Band41-20MHz-16QAM-40620-1RB#0-Range1:30~1000MHz	Band41-20MHz-16QAM-40620-1RB#0-Range2:1000~26500MHz
	
Band41-20MHz-16QAM-41490-1RB#0-Range1:30~1000MHz	Band41-20MHz-16QAM-41490-1RB#0-Range2:1000~26500MHz



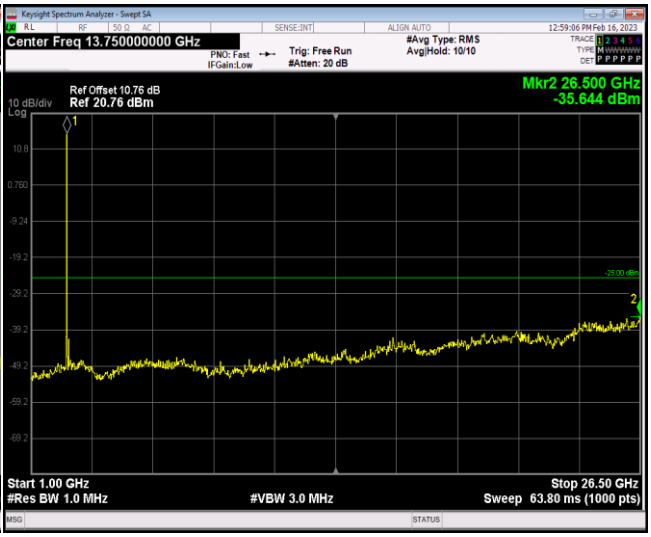
Band41-20MHz-64QAM-39750-1RB#0-Range1:30 ~1000MHz



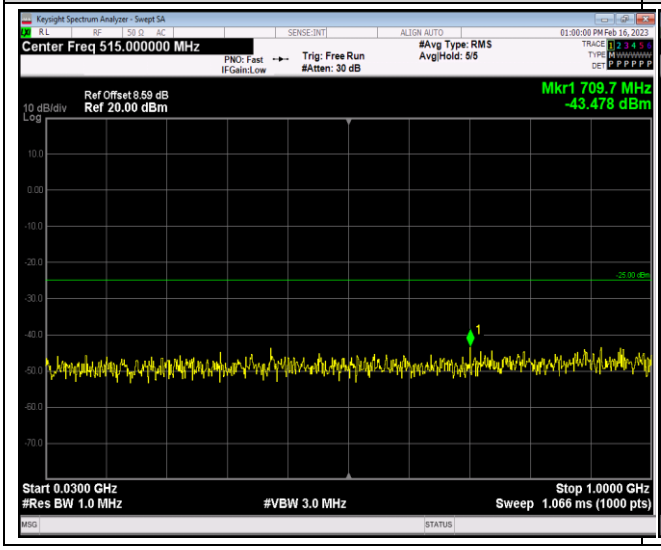
Band41-20MHz-64QAM-39750-1RB#0-Range2:1000~26500MHz



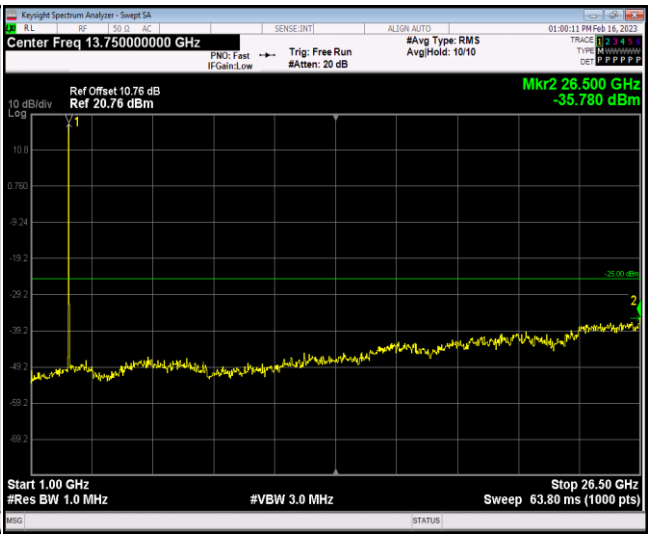
Band41-20MHz-64QAM-40620-1RB#0-Range1:30 ~1000MHz

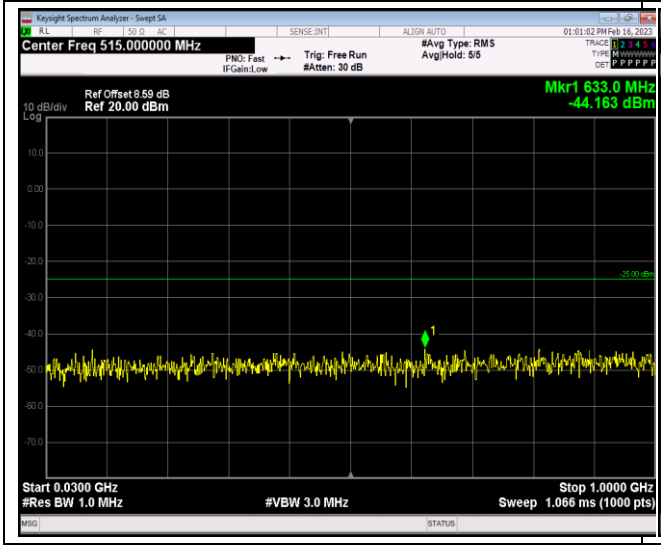
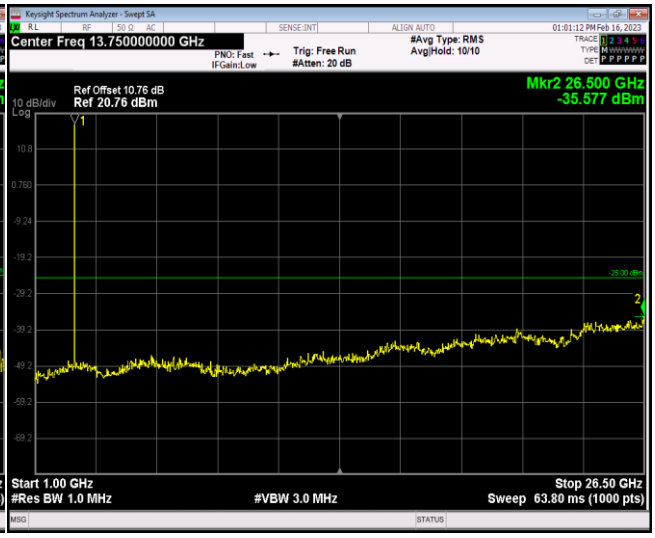


Band41-20MHz-64QAM-40620-1RB#0-Range2:1000~26500MHz



Band41-20MHz-64QAM-40620-1RB#0-Range2:1000~26500MHz



Band41-20MHz-64QAM-41490-1RB#0-Range1:30~1000MHz	Band41-20MHz-64QAM-41490-1RB#0-Range2:1000~26500MHz
	

Appendix F: Frequency Stability

Test Result

LTE Band 7 part:

Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	12.12	0.004781	Within authorized band for Band 7	Pass
	-20	10.97	0.004327		
	-10	12.12	0.004781		
	0	12.15	0.004793		
	10	6.32	0.002493		
	20	9.20	0.003629		
	30	4.82	0.001901		
	40	3.98	0.001570		
	50	6.15	0.002426		
16QAM					
3.87	-30	9.46	0.003732	Within authorized band for Band 7	Pass
	-20	12.55	0.004951		
	-10	13.05	0.005148		
	0	6.69	0.002639		
	10	10.06	0.003968		
	20	5.49	0.002166		
	30	10.03	0.003957		
	40	4.68	0.001846		
	50	-10.61	-0.004185		
64QAM					
3.87	-30	-12.73	-0.005022	Within authorized band for Band 7	Pass
	-20	-7.85	-0.003097		
	-10	7.48	0.002951		
	0	-5.11	-0.002016		
	10	6.44	0.002540		
	20	6.65	0.002623		
	30	-7.47	-0.002947		
	40	9.90	0.003905		
	50	-8.18	-0.003227		
Voltage					
Temperature	Power supplied	Frequency error		Limit (ppm)	Result

(℃)	(Vdc)	Hz	ppm		
QPSK					
25	3.45	8.96	0.003535	Within authorized band for Band 7	Pass
	3.87	7.75	0.003057		
	4.45	11.03	0.004351		
16QAM					
25	3.45	2.86	0.001128	Within authorized band for Band 7	Pass
	3.87	11.09	0.004375		
	4.45	11.87	0.004682		
64QAM					
25	3.45	12.09	0.004769	Within authorized band for Band 7	Pass
	3.87	5.85	0.002308		
	4.45	-7.44	-0.002935		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 41 part:

Reference Frequency: LTE Band 41 (10MHz) Middle channel=40620 Frequency=2593.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	7.07	0.002727	Within authorized band for Band 41	Pass
	-20	6.57	0.002534		
	-10	6.78	0.002615		
	0	8.05	0.003105		
	10	-5.06	-0.001951		
	20	-6.21	-0.002395		
	30	7.54	0.002908		
	40	-4.95	-0.001909		
	50	3.63	0.001400		
16QAM					
3.87	-30	-7.12	-0.002746	Within authorized band for Band 41	Pass
	-20	7.52	0.002900		
	-10	5.39	0.002079		
	0	3.02	0.001165		
	10	13.78	0.005314		
	20	11.39	0.004393		
	30	5.56	0.002144		
	40	5.36	0.002067		
	50	-7.45	-0.002873		
64QAM					
3.87	-30	8.27	0.003189	Within authorized band for Band 7	Pass
	-20	5.39	0.002079		
	-10	-6.95	-0.002680		
	0	-5.94	-0.002291		
	10	-7.28	-0.002808		
	20	5.02	0.001936		
	30	-6.94	-0.002676		
	40	6.95	0.002680		
	50	3.56	0.001373		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					

25	3.45	11.01	0.004246	Within authorized band for Band 41	Pass
	3.87	7.87	0.003035		
	4.45	4.46	0.001720		
16QAM					
25	3.45	5.66	0.002183	Within authorized band for Band41	Pass
	3.87	4.43	0.001708		
	4.45	9.80	0.003779		
64QAM					
25	3.45	5.69	0.002194	Within authorized band for Band 7	Pass
	3.87	3.52	0.001358		
	4.45	8.10	0.003124		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

Apendix G: Modulation Characteristics

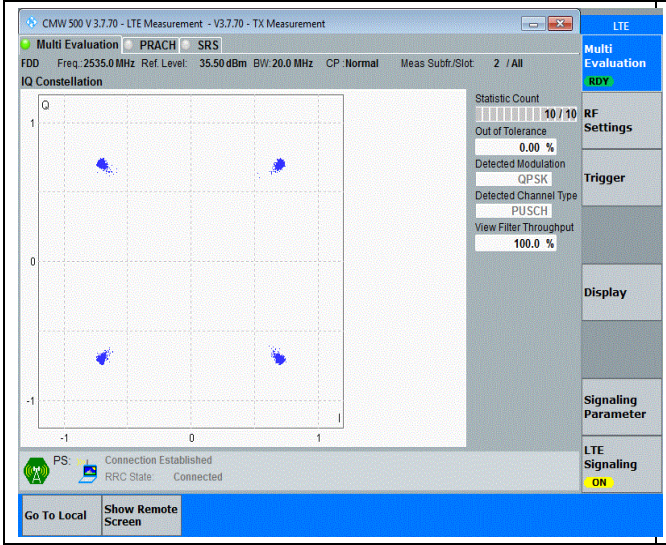
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result	Verdict
Band7	20MHz	QPSK	21100	100RB#0	PASS	PASS
Band7	20MHz	16QAM	21100	100RB#0	PASS	PASS
Band7	20MHz	64QAM	21100	100RB#0	PASS	PASS
Band41	20MHz	QPSK	40620	100RB#0	PASS	PASS
Band41	20MHz	16QAM	40620	100RB#0	PASS	PASS
Band41	20MHz	64QAM	40620	100RB#0	PASS	PASS

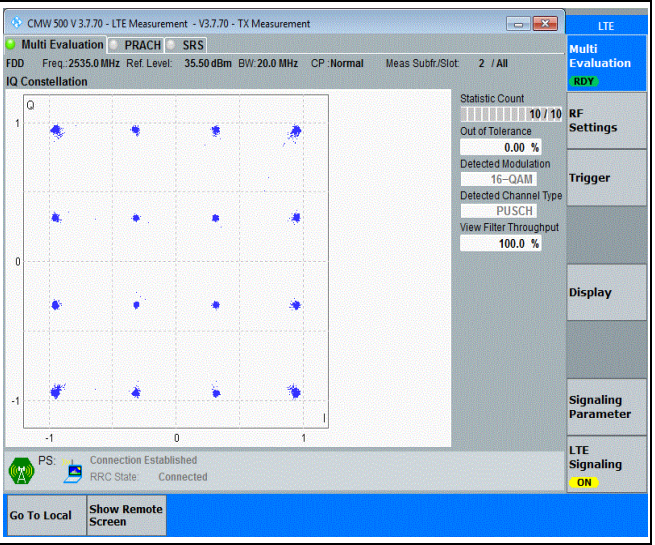
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.

Test Graphs

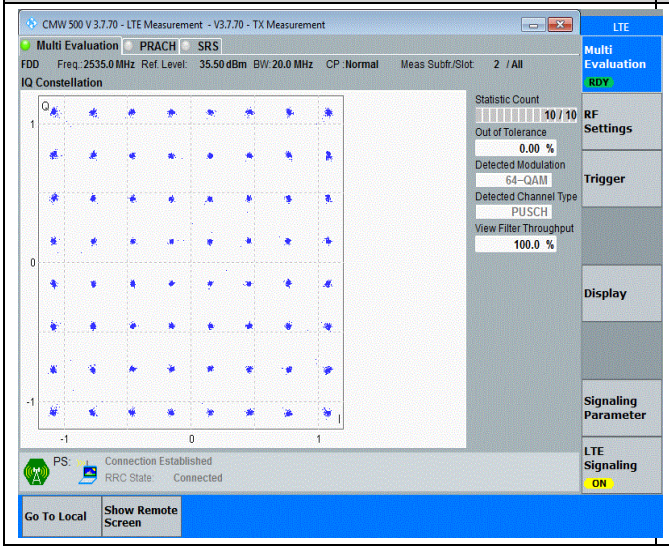
Band7-20MHz-QPSK-21100-100RB#0



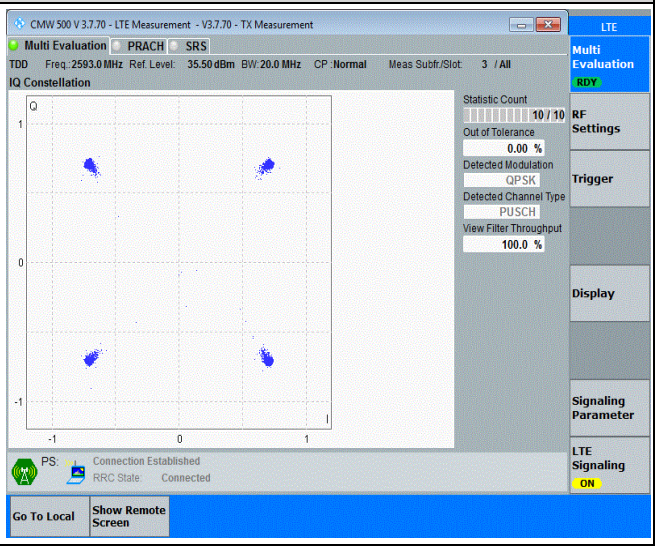
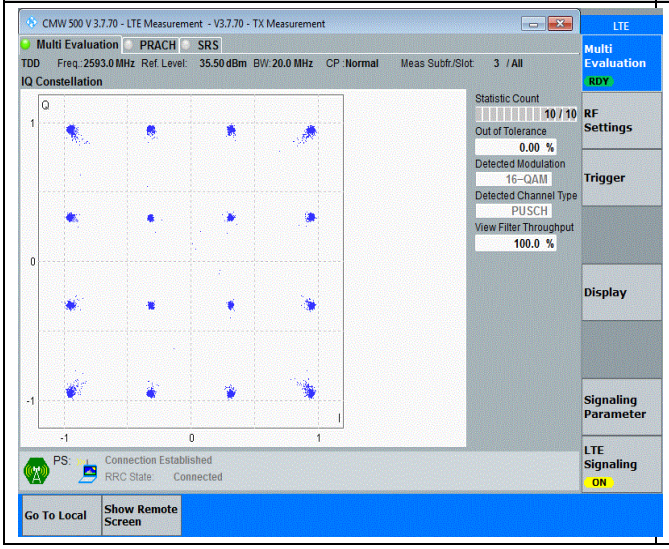
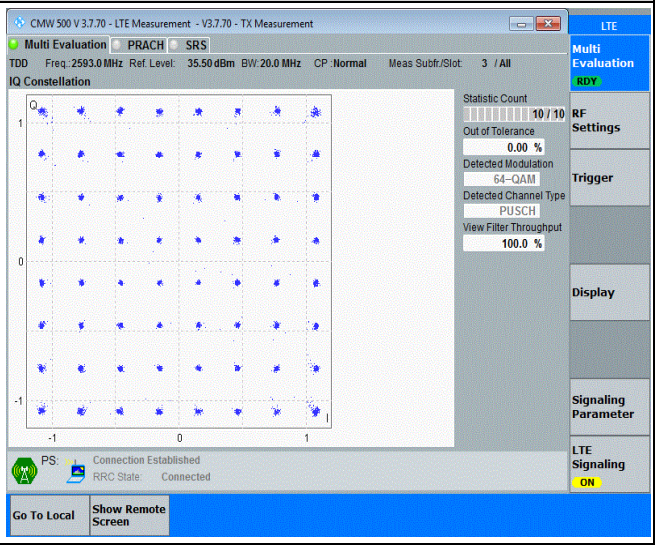
Band7-20MHz-16QAM-21100-100RB#0



Band7-20MHz-64QAM-21100-100RB#0



Band41-20MHz-QPSK-40620-100RB#0



Band41-20MHz-16QAM-40620-100RB#0	Band41-20MHz-64QAM-40620-100RB#0