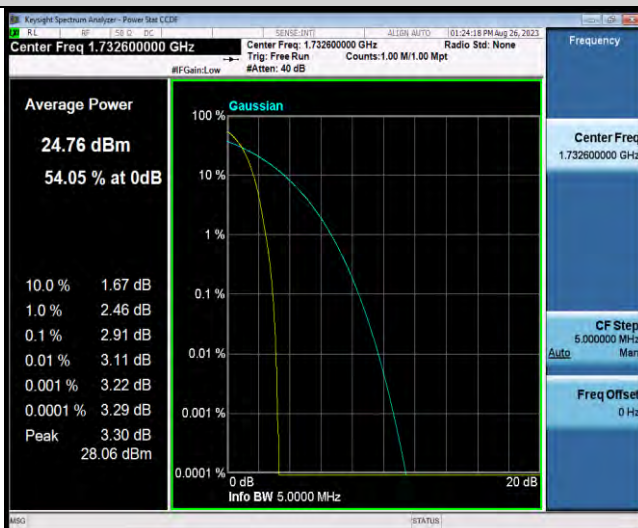


Test Graphs

Band4-1312



Band4-1413



Band4-1513





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Test Report No.:W7L-P23080006RF06

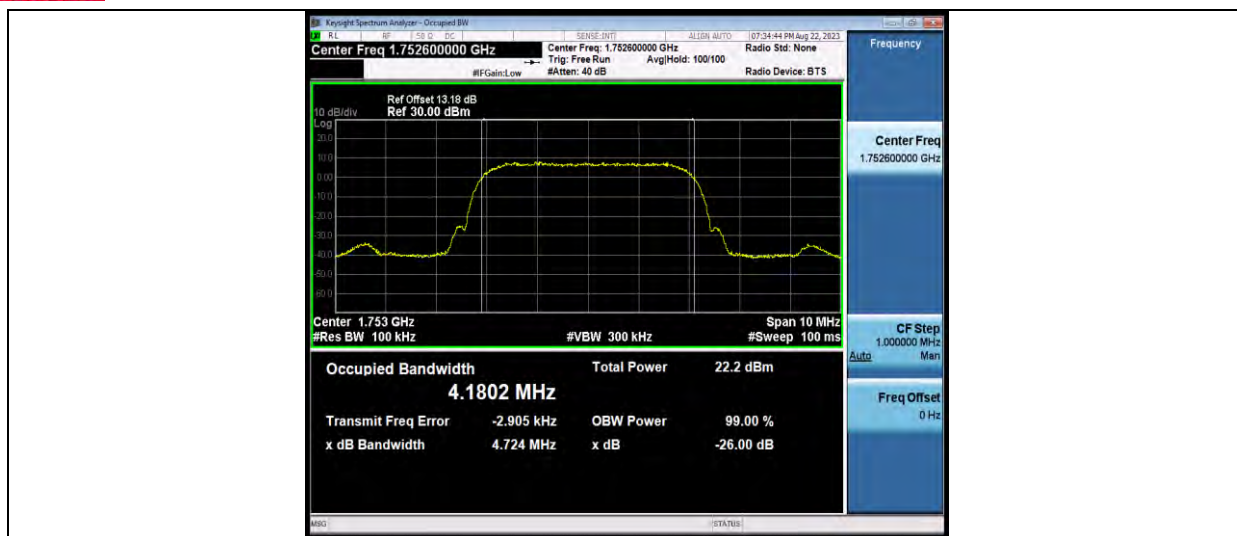
26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(kHz)	Verdict
Band4	1312	4.1801	4.720	---	PASS
Band4	1413	4.1801	4.707	---	PASS
Band4	1513	4.1802	4.724	---	PASS

Test Graphs







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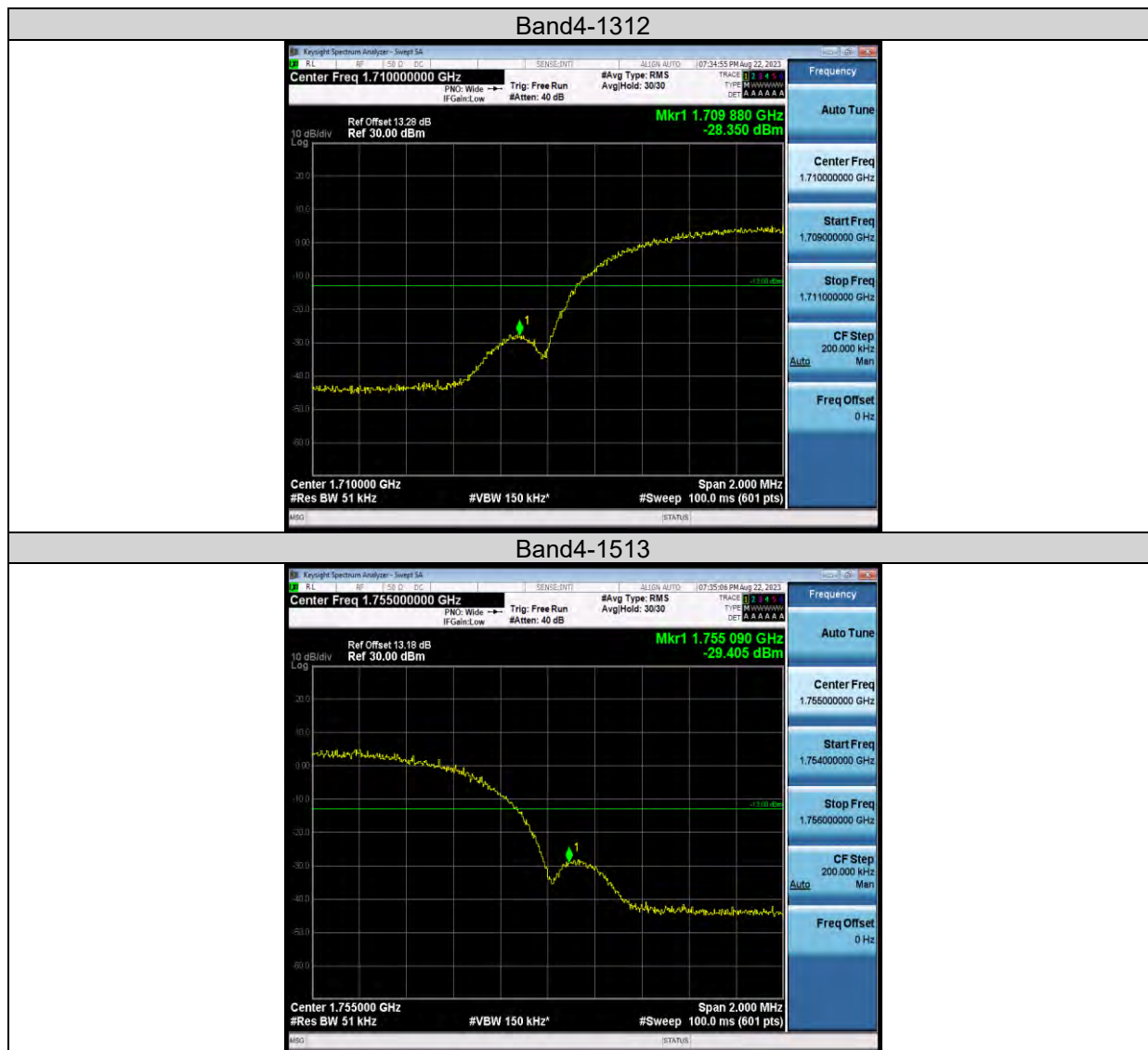
Test Report No.:W7L-P23080006RF06

BAND EDGE

Test Result

Band	Channel	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band4	1312	1709.88	-27.40	-13	PASS
Band4	1513	1755.09	-28.13	-13	PASS

Test Graphs





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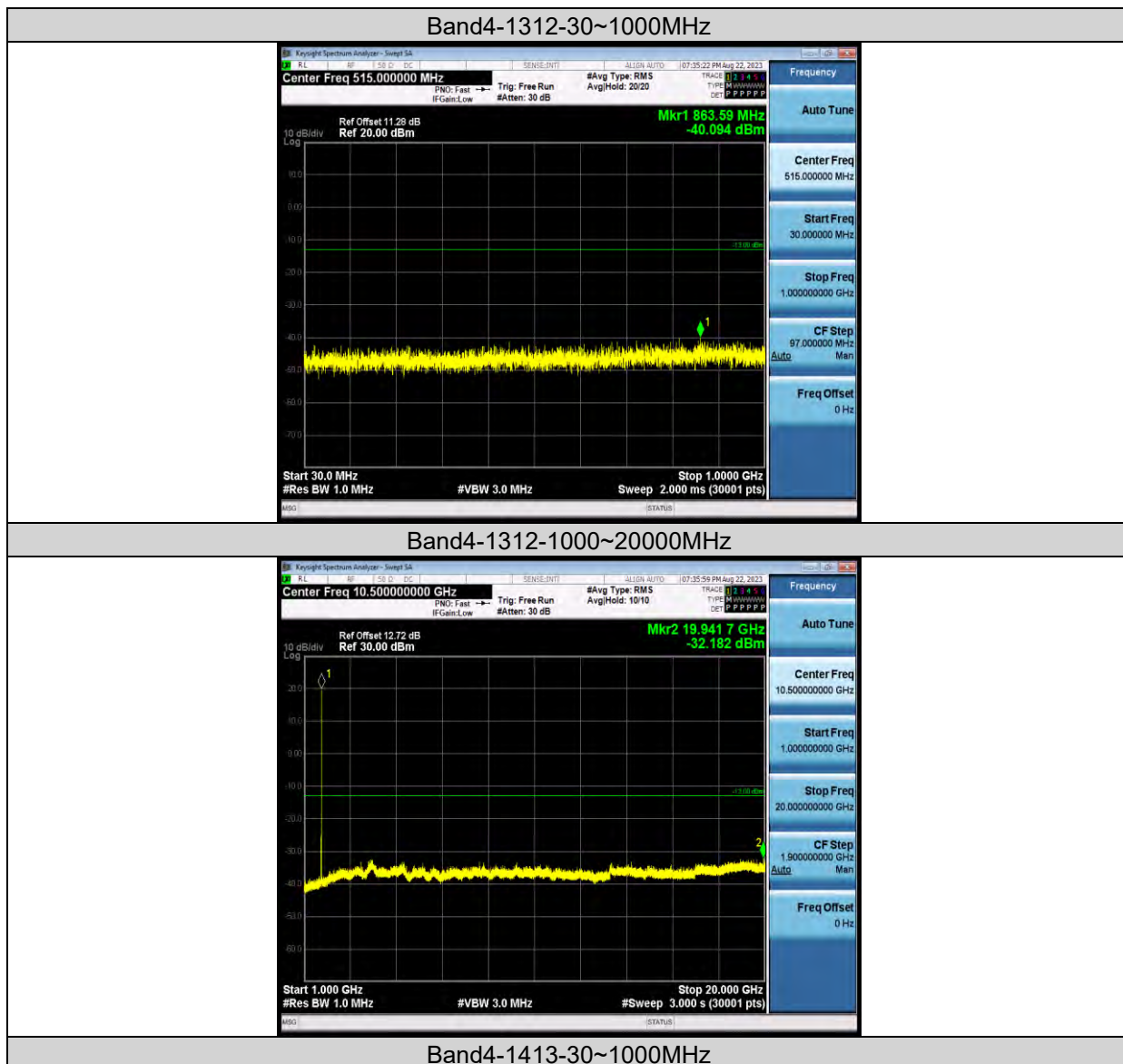
Test Report No.:W7L-P23080006RF06

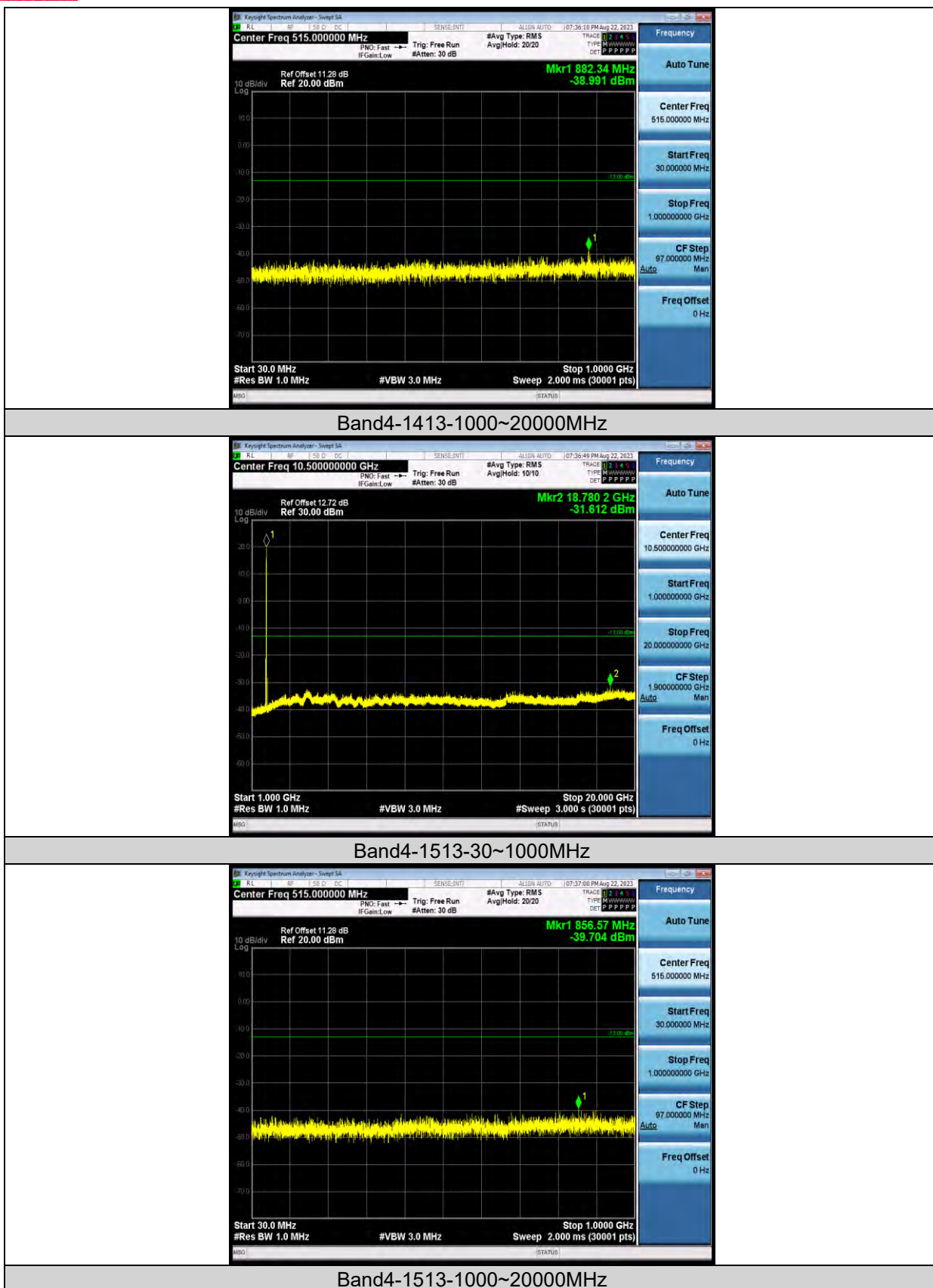
CONDUCTED SPURIOUS EMISSION

Test Result

Band	Channel	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band4	1312	30~1000MHz	863.59	-40.09	-13	PASS
Band4	1312	1000~20000MHz	19941.73	-32.18	-13	PASS
Band4	1413	30~1000MHz	882.34	-38.99	-13	PASS
Band4	1413	1000~20000MHz	18780.2	-31.61	-13	PASS
Band4	1513	30~1000MHz	856.57	-39.7	-13	PASS
Band4	1513	1000~20000MHz	19115.23	-32.38	-13	PASS

Test Graphs







FREQUENCY STABILITY

Test Result

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	LV	NT	-9.70	-0.005665	±2.5	PASS
Band4	1312	NV	NT	-9.04	-0.005279	±2.5	PASS
Band4	1312	HV	NT	-9.99	-0.005834	±2.5	PASS
Band4	1413	LV	NT	-10.60	-0.006118	±2.5	PASS
Band4	1413	NV	NT	-10.18	-0.005876	±2.5	PASS
Band4	1413	HV	NT	-12.29	-0.007093	±2.5	PASS
Band4	1513	LV	NT	-7.67	-0.004376	±2.5	PASS
Band4	1513	NV	NT	-6.48	-0.003697	±2.5	PASS
Band4	1513	HV	NT	-4.50	-0.002568	±2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	NV	-30	-10.20	-0.005957	±2.5	PASS
Band4	1312	NV	-20	-13.10	-0.007650	±2.5	PASS
Band4	1312	NV	-10	-11.30	-0.006599	±2.5	PASS
Band4	1312	NV	0	-13.19	-0.007703	±2.5	PASS
Band4	1312	NV	10	-12.17	-0.007107	±2.5	PASS
Band4	1312	NV	20	-13.35	-0.007796	±2.5	PASS
Band4	1312	NV	30	-11.87	-0.006932	±2.5	PASS
Band4	1312	NV	40	-12.24	-0.007148	±2.5	PASS
Band4	1312	NV	50	-12.52	-0.007311	±2.5	PASS
Band4	1413	NV	-30	-7.14	-0.004121	±2.5	PASS
Band4	1413	NV	-20	-11.59	-0.006689	±2.5	PASS
Band4	1413	NV	-10	-14.20	-0.008196	±2.5	PASS
Band4	1413	NV	0	-15.30	-0.008831	±2.5	PASS
Band4	1413	NV	10	-11.79	-0.006805	±2.5	PASS
Band4	1413	NV	20	-15.31	-0.008836	±2.5	PASS
Band4	1413	NV	30	-10.35	-0.005974	±2.5	PASS
Band4	1413	NV	40	-14.29	-0.008248	±2.5	PASS
Band4	1413	NV	50	-13.68	-0.007896	±2.5	PASS
Band4	1513	NV	-30	-6.07	-0.003463	±2.5	PASS
Band4	1513	NV	-20	-8.29	-0.004730	±2.5	PASS
Band4	1513	NV	-10	-8.93	-0.005095	±2.5	PASS
Band4	1513	NV	0	-9.28	-0.005295	±2.5	PASS
Band4	1513	NV	10	-8.67	-0.004947	±2.5	PASS
Band4	1513	NV	20	-11.12	-0.006345	±2.5	PASS
Band4	1513	NV	30	-9.23	-0.005266	±2.5	PASS
Band4	1513	NV	40	-6.52	-0.003720	±2.5	PASS
Band4	1513	NV	50	-6.44	-0.003675	±2.5	PASS

MAX Deviation calculation

Frequency Stability	Frequency (MHz)	Limit Line(MHz)	Result
$f_L - \text{MAX}(\Delta f) $	1710.309934	≥ 1710	PASS
$f_H + \text{MAX}(\Delta f) $	1754.690116	≤ 1755	

- Note :
1. $|\text{MAX}(\Delta f)|$ = Max Deviation
 2. f_L = Occ low channel f_L (-13dBm/MHz)
 3. f_H = Occ High channel f_H (-13dBm/MHz)
 4. $|\text{MAX}(\Delta f)|$ = 15.31Hz.



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LTE BAND7

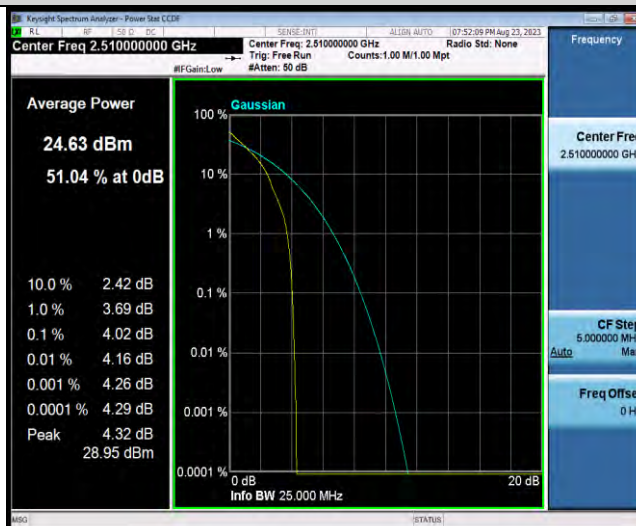
PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

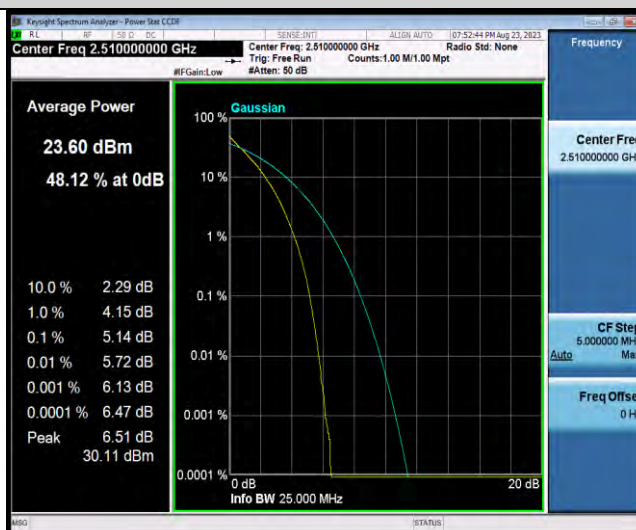
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	20MHz	QPSK	20850	1RB#0	4.02	13	PASS
Band7	20MHz	QPSK	20850	100RB#0	5.14	13	PASS
Band7	20MHz	QPSK	21100	1RB#0	3.89	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.12	13	PASS
Band7	20MHz	QPSK	21350	1RB#0	4.00	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.11	13	PASS
Band7	20MHz	16QAM	20850	1RB#0	4.77	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	5.94	13	PASS
Band7	20MHz	16QAM	21100	1RB#0	4.69	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	5.90	13	PASS
Band7	20MHz	16QAM	21350	1RB#0	4.82	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	5.90	13	PASS
Band7	20MHz	64QAM	20850	1RB#0	4.74	13	PASS
Band7	20MHz	64QAM	20850	100RB#0	5.95	13	PASS
Band7	20MHz	64QAM	21100	1RB#0	4.59	13	PASS
Band7	20MHz	64QAM	21100	100RB#0	5.89	13	PASS
Band7	20MHz	64QAM	21350	1RB#0	4.76	13	PASS
Band7	20MHz	64QAM	21350	100RB#0	5.90	13	PASS

Test Graphs

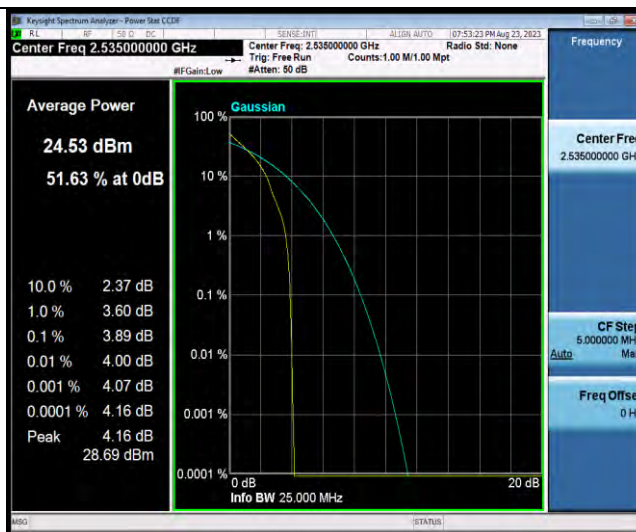
Band7-20MHz-QPSK-20850-1RB#0



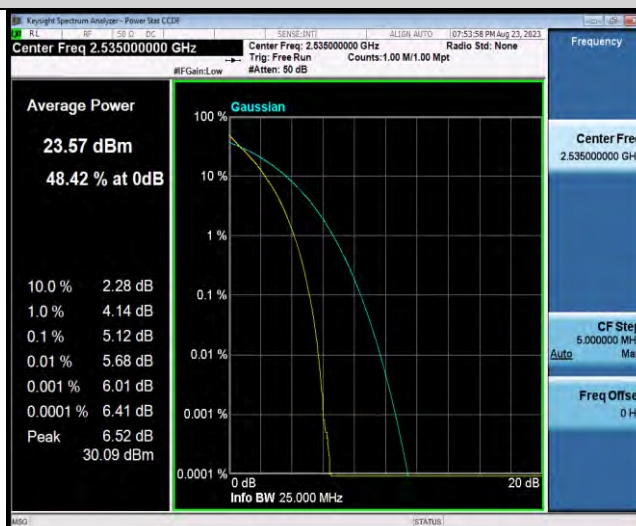
Band7-20MHz-QPSK-20850-100RB#0



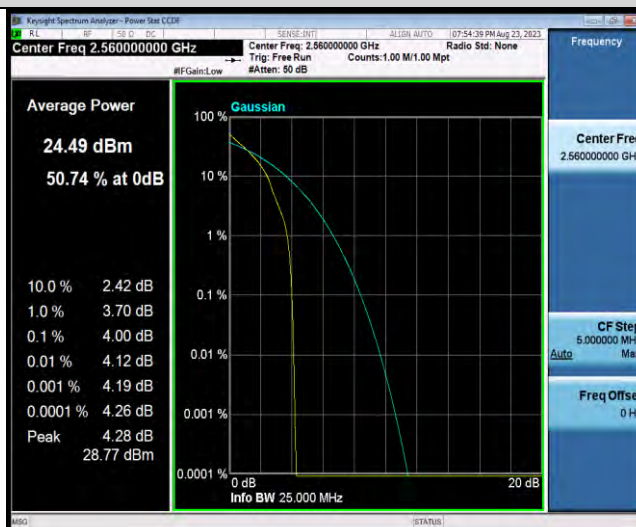
Band7-20MHz-QPSK-21100-1RB#0



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



Band7-20MHz-QPSK-21350-1RB#0

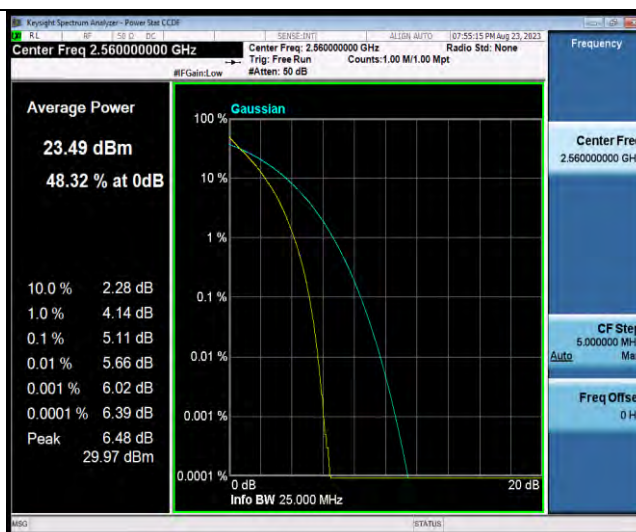


Band7-20MHz-QPSK-21350-100RB#0

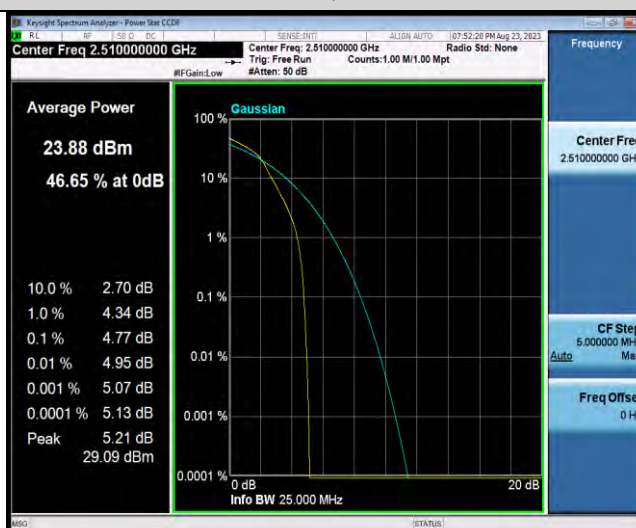


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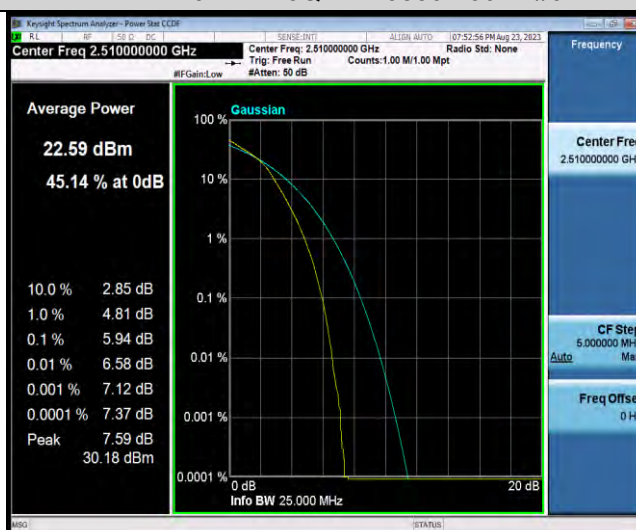
Test Report No.:W7L-P23080006RF06



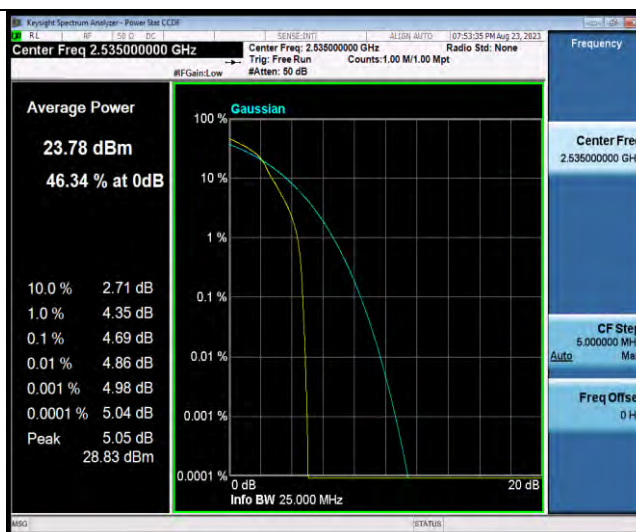
Band7-20MHz-16QAM-20850-1RB#0



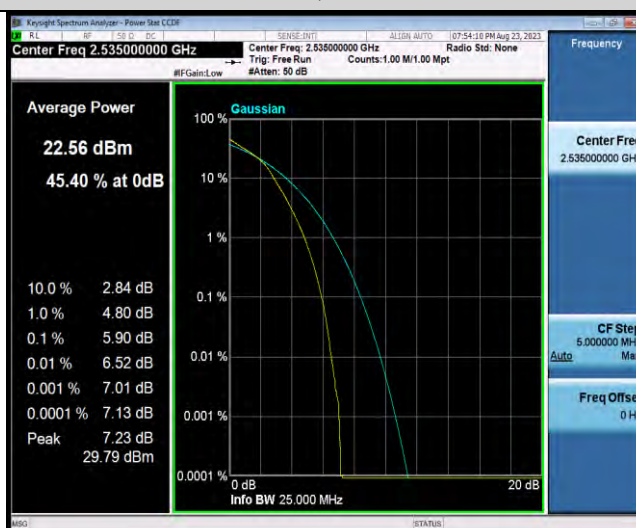
Band7-20MHz-16QAM-20850-100RB#0



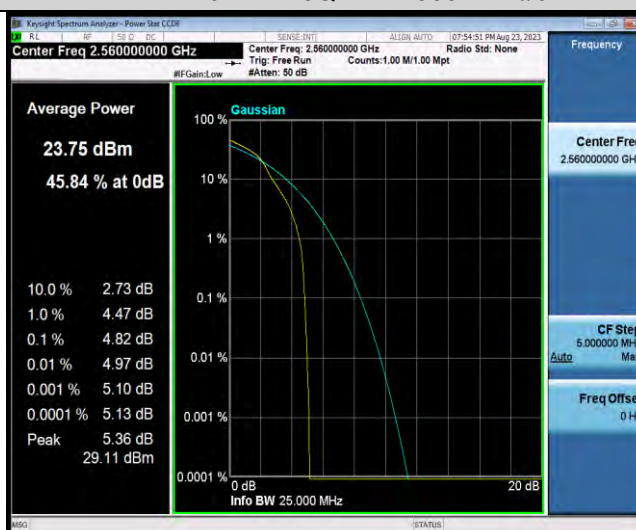
Band7-20MHz-16QAM-21100-1RB#0



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



Band7-20MHz-16QAM-21350-1RB#0



Band7-20MHz-16QAM-21350-100RB#0

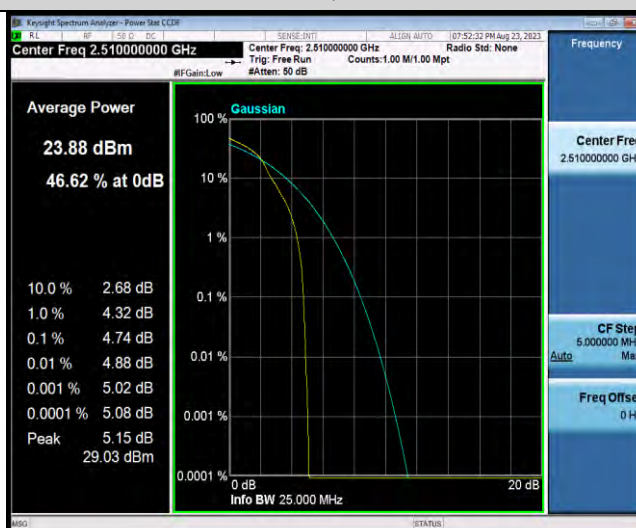


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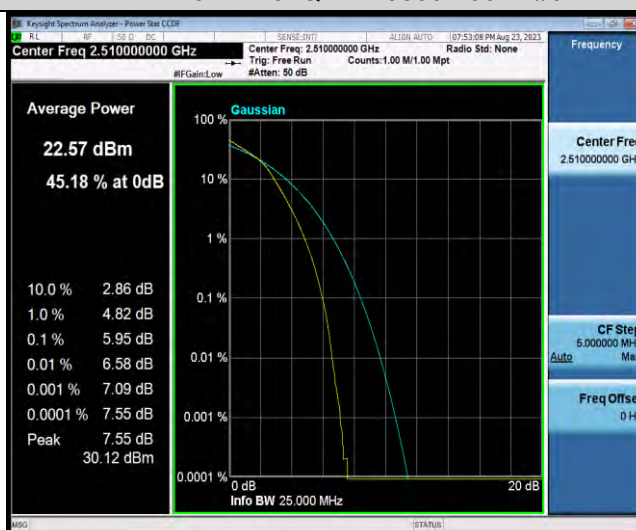
Test Report No.:W7L-P23080006RF06



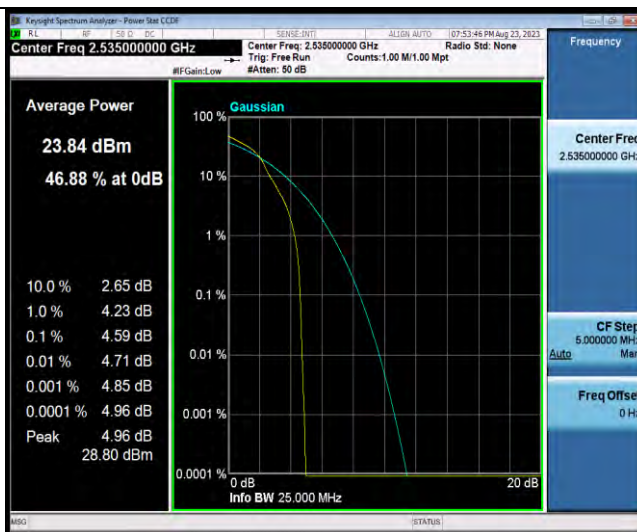
Band7-20MHz-64QAM-20850-1RB#0



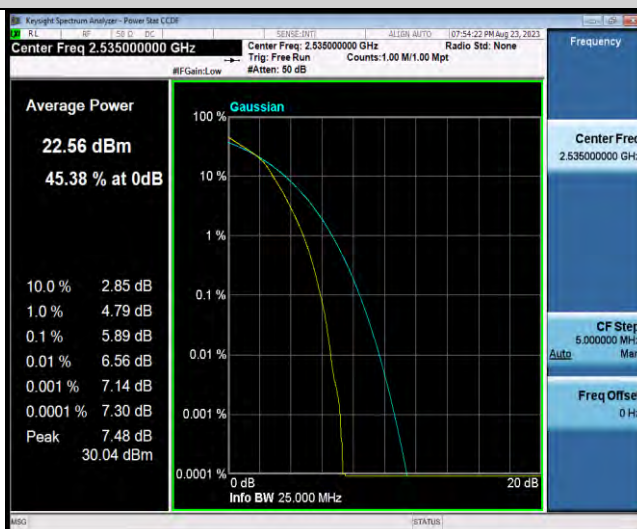
Band7-20MHz-64QAM-20850-100RB#0



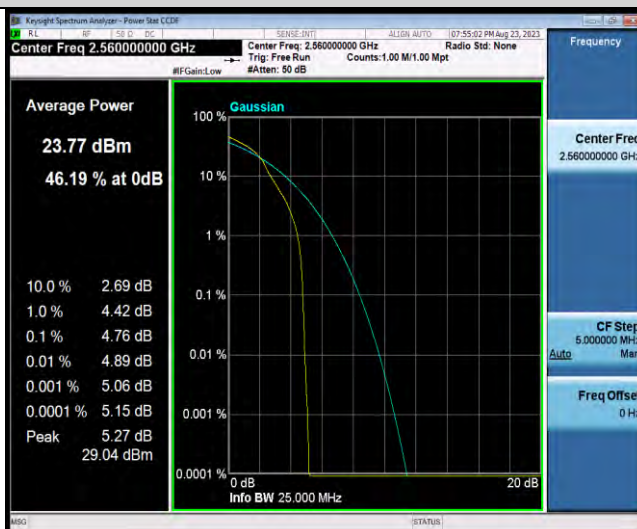
Band7-20MHz-64QAM-21100-1RB#0



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



Band7-20MHz-64QAM-21350-1RB#0

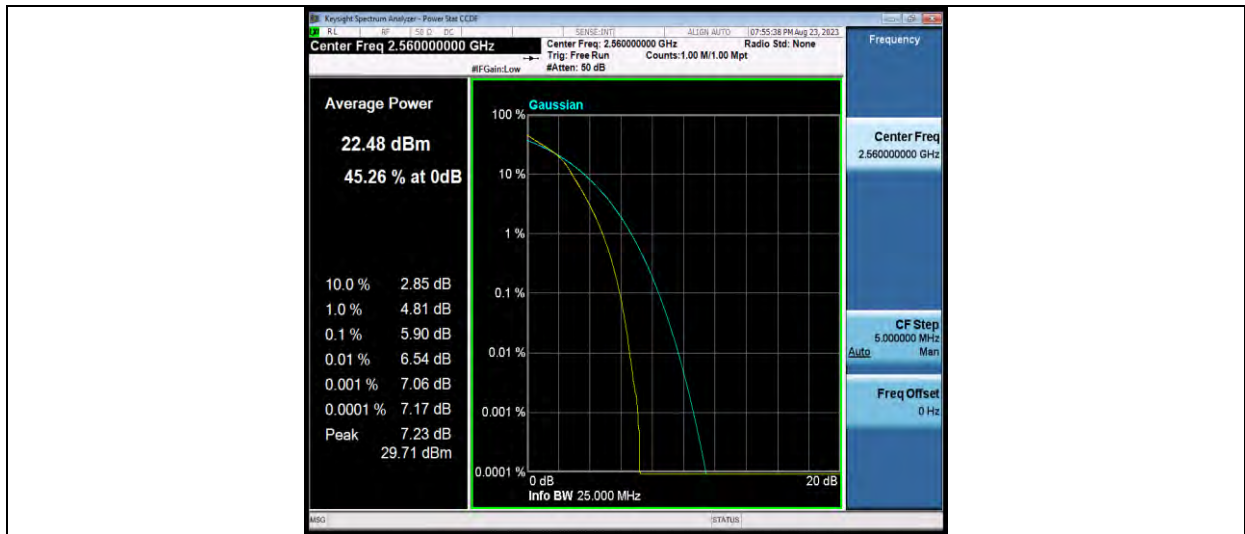


Band7-20MHz-64QAM-21350-100RB#0



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26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.4970	5.014	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.4976	4.908	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.4951	5.065	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.5009	4.955	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.5021	4.939	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.5007	4.953	PASS
Band7	5MHz	64QAM	20775	25RB#0	4.5011	4.957	PASS
Band7	5MHz	64QAM	21100	25RB#0	4.5002	4.955	PASS
Band7	5MHz	64QAM	21425	25RB#0	4.5049	4.938	PASS
Band7	10MHz	QPSK	20800	50RB#0	9.0164	9.929	PASS
Band7	10MHz	QPSK	21100	50RB#0	9.0055	9.853	PASS
Band7	10MHz	QPSK	21400	50RB#0	9.0097	9.870	PASS
Band7	10MHz	16QAM	20800	50RB#0	8.9823	9.796	PASS
Band7	10MHz	16QAM	21100	50RB#0	8.9866	9.799	PASS
Band7	10MHz	16QAM	21400	50RB#0	8.9941	9.756	PASS
Band7	10MHz	64QAM	20800	50RB#0	8.9771	9.756	PASS
Band7	10MHz	64QAM	21100	50RB#0	9.0055	9.800	PASS
Band7	10MHz	64QAM	21400	50RB#0	8.9913	9.804	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.503	15.67	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.480	14.73	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.495	14.76	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.492	16.63	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.488	14.56	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.500	14.65	PASS
Band7	15MHz	64QAM	20825	75RB#0	13.481	16.39	PASS
Band7	15MHz	64QAM	21100	75RB#0	13.490	14.66	PASS
Band7	15MHz	64QAM	21375	75RB#0	13.472	14.67	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.972	21.58	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.969	19.54	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.966	19.45	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.934	19.40	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.969	19.32	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.939	19.37	PASS
Band7	20MHz	64QAM	20850	100RB#0	17.930	19.37	PASS
Band7	20MHz	64QAM	21100	100RB#0	17.972	19.37	PASS
Band7	20MHz	64QAM	21350	100RB#0	17.982	19.71	PASS

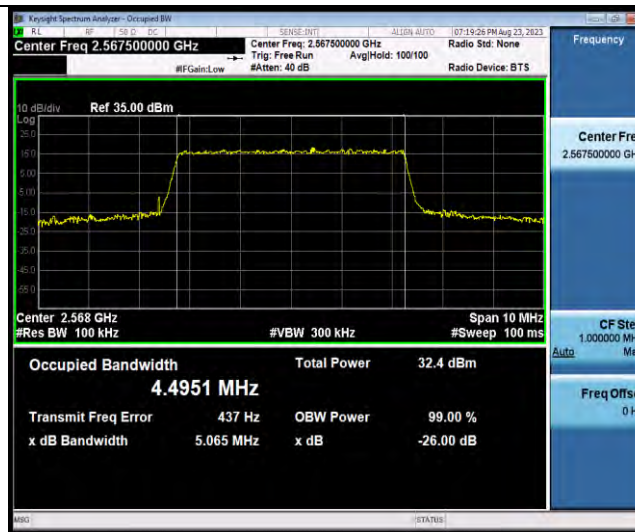
Test Graphs



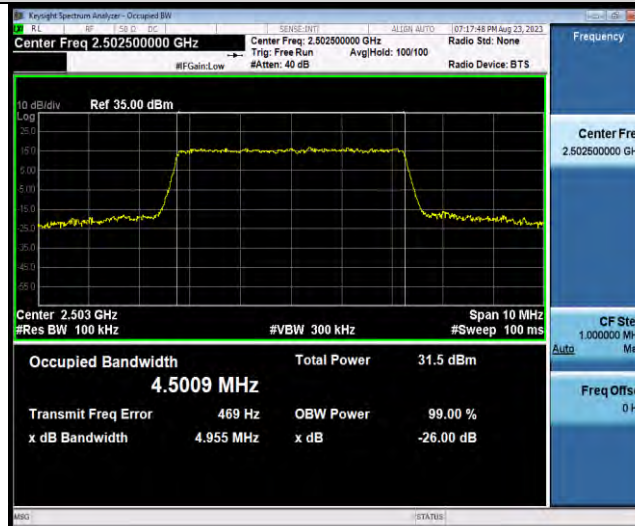


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Band7-5MHz-16QAM-20775-25RB#0



Band7-5MHz-16QAM-21100-25RB#0



Band7-5MHz-16QAM-21425-25RB#0

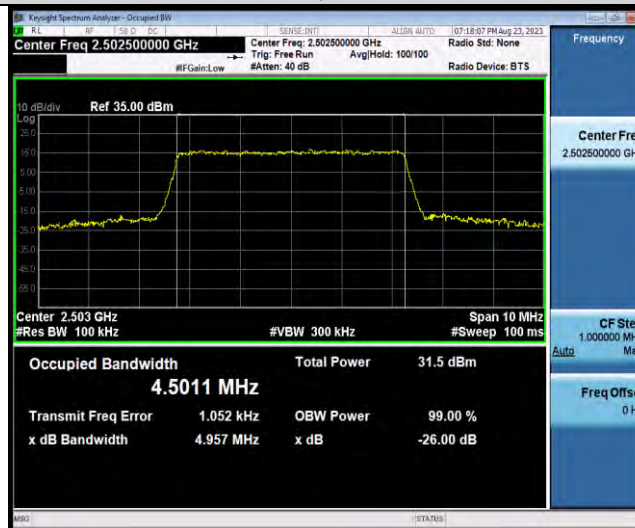


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Test Report No.:W7L-P23080006RF06



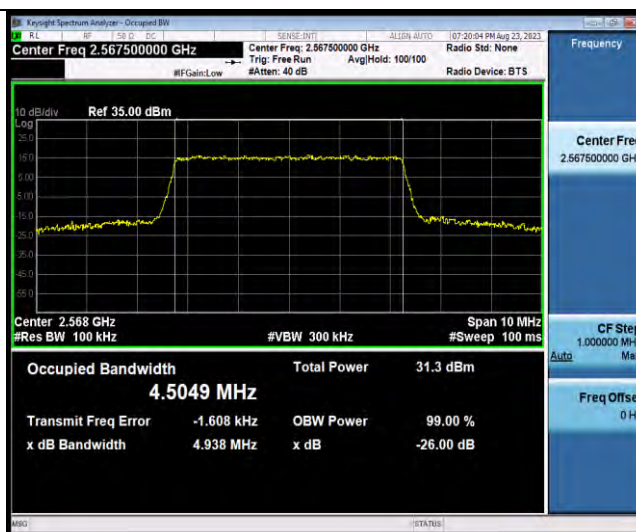
Band7-5MHz-64QAM-20775-25RB#0



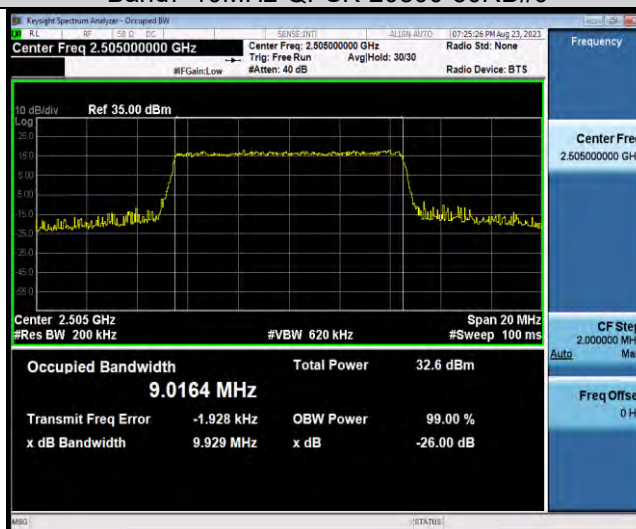
Band7-5MHz-64QAM-21100-25RB#0



Band7-5MHz-64QAM-21425-25RB#0



Band7-10MHz-QPSK-20800-50RB#0



Band7-10MHz-QPSK-21100-50RB#0



Band7-10MHz-QPSK-21400-50RB#0



Band7-10MHz-16QAM-20800-50RB#0



Band7-10MHz-16QAM-21100-50RB#0



Band7-10MHz-16QAM-21400-50RB#0

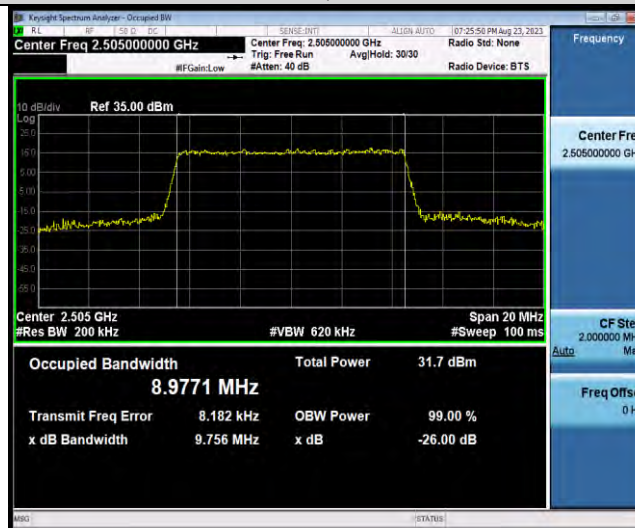


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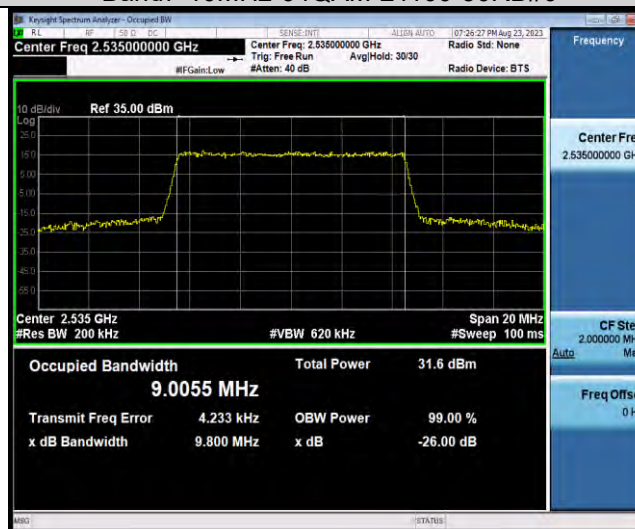
Test Report No.:W7L-P23080006RF06



Band7-10MHz-64QAM-20800-50RB#0



Band7-10MHz-64QAM-21100-50RB#0



Band7-10MHz-64QAM-21400-50RB#0

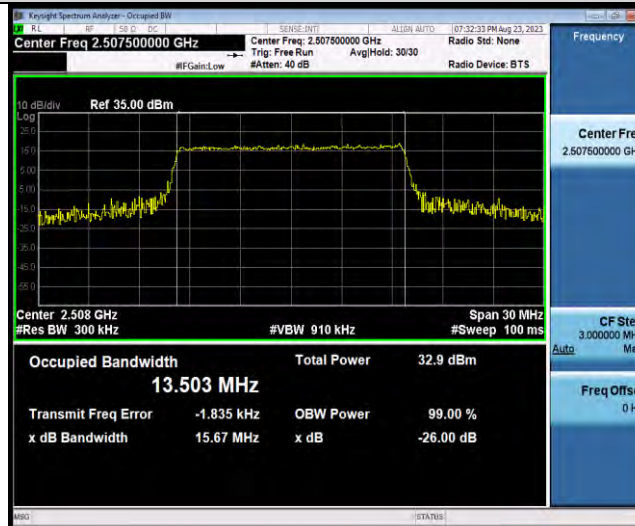


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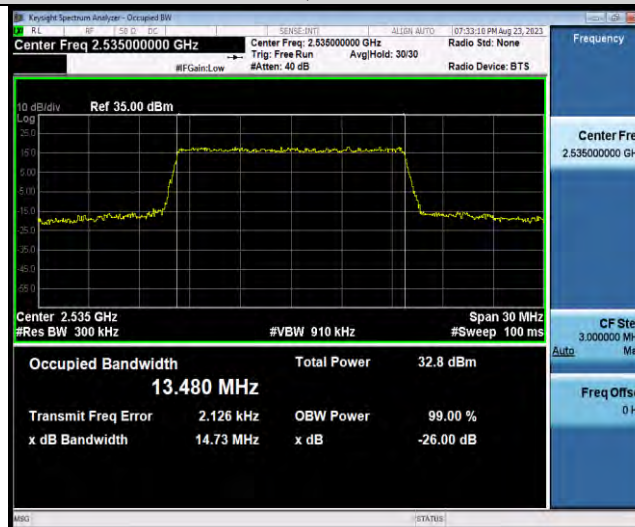
Test Report No.:W7L-P23080006RF06



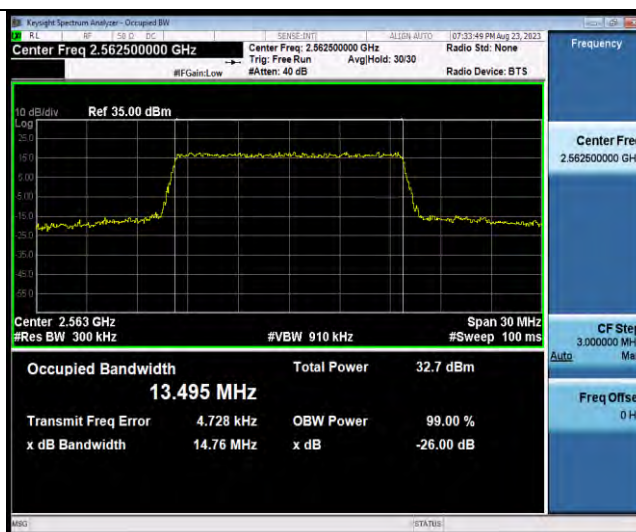
Band7-15MHz-QPSK-20825-75RB#0



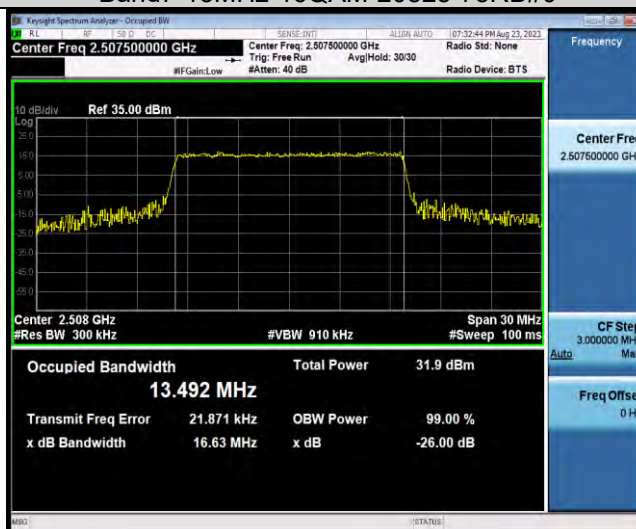
Band7-15MHz-QPSK-21100-75RB#0



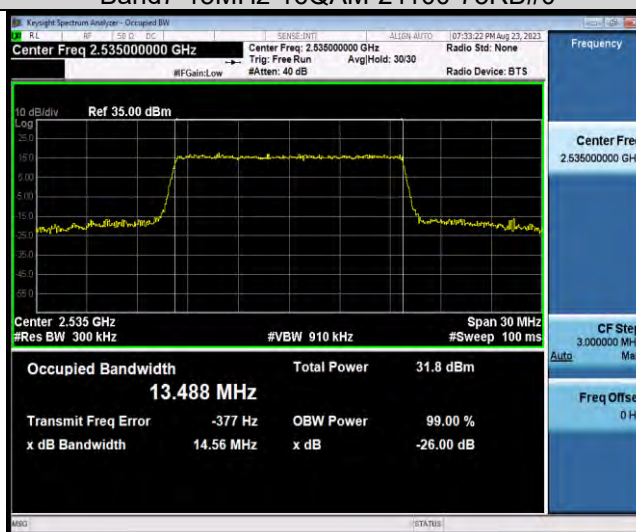
Band7-15MHz-QPSK-21375-75RB#0



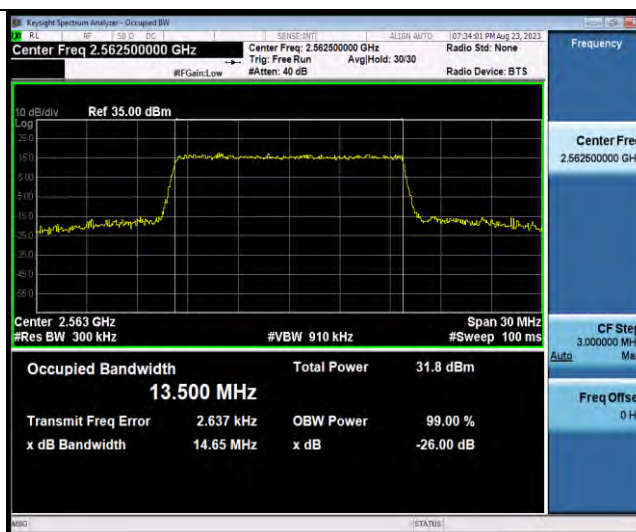
Band7-15MHz-16QAM-20825-75RB#0



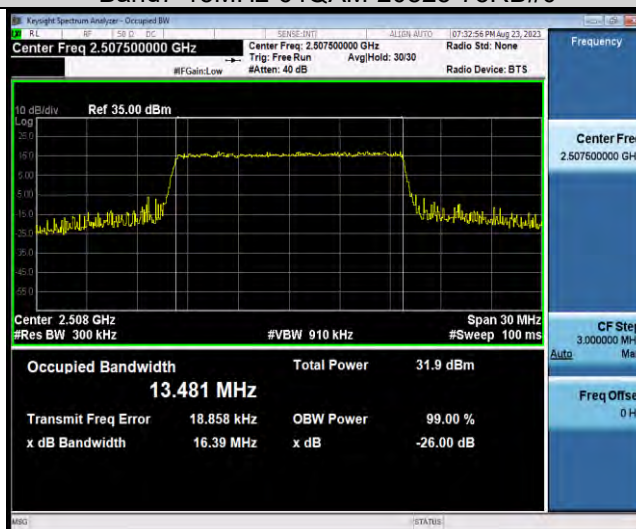
Band7-15MHz-16QAM-21100-75RB#0



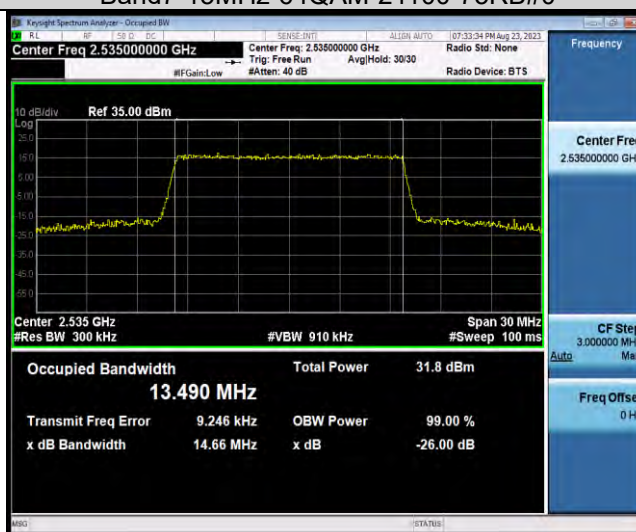
Band7-15MHz-16QAM-21375-75RB#0



Band7-15MHz-64QAM-20825-75RB#0



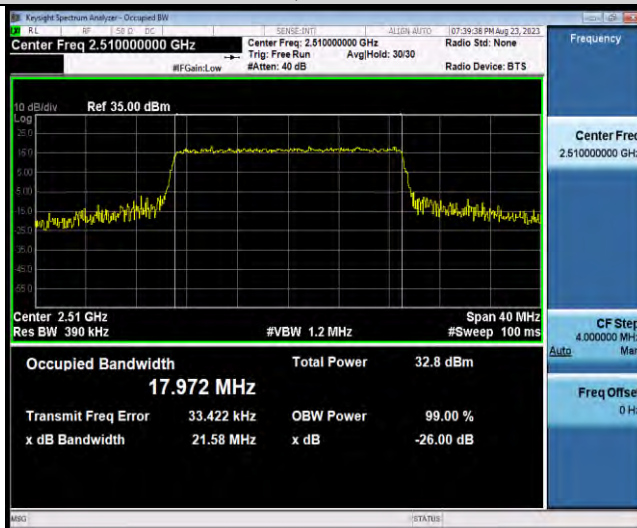
Band7-15MHz-64QAM-21100-75RB#0



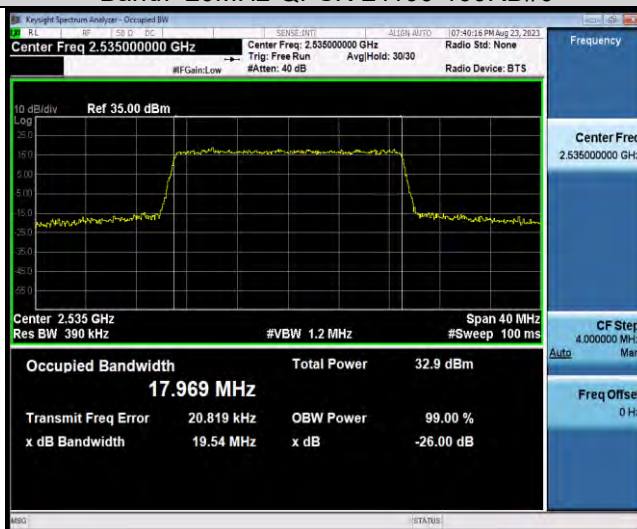
Band7-15MHz-64QAM-21375-75RB#0



Band7-20MHz-QPSK-20850-100RB#0



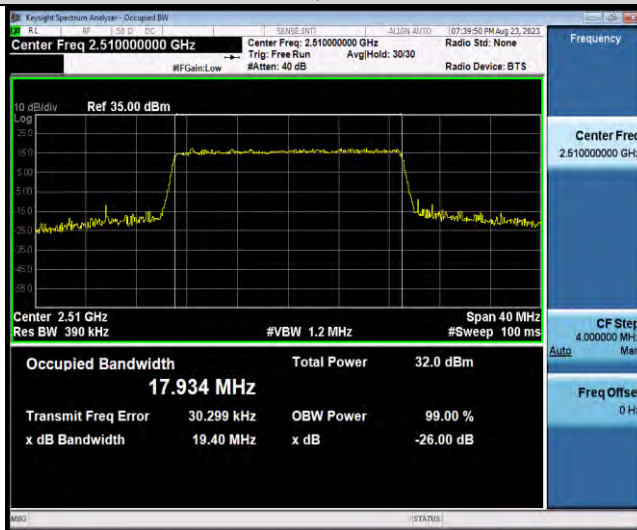
Band7-20MHz-QPSK-21100-100RB#0



Band7-20MHz-QPSK-21350-100RB#0



Band7-20MHz-16QAM-20850-100RB#0



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



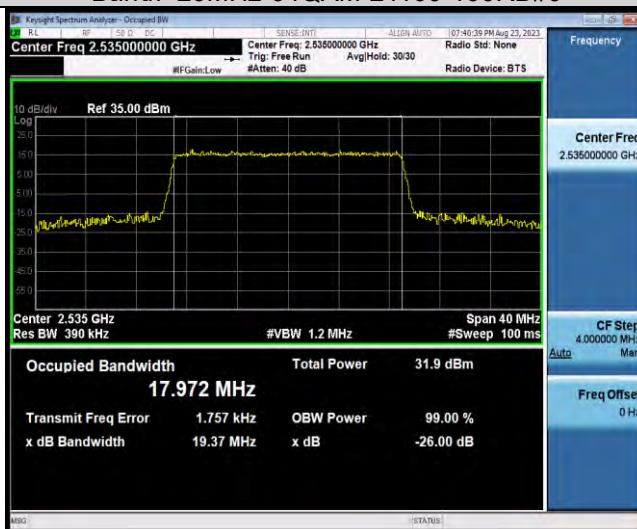
Band7-20MHz-16QAM-21350-100RB#0



Band7-20MHz-64QAM-20850-100RB#0



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

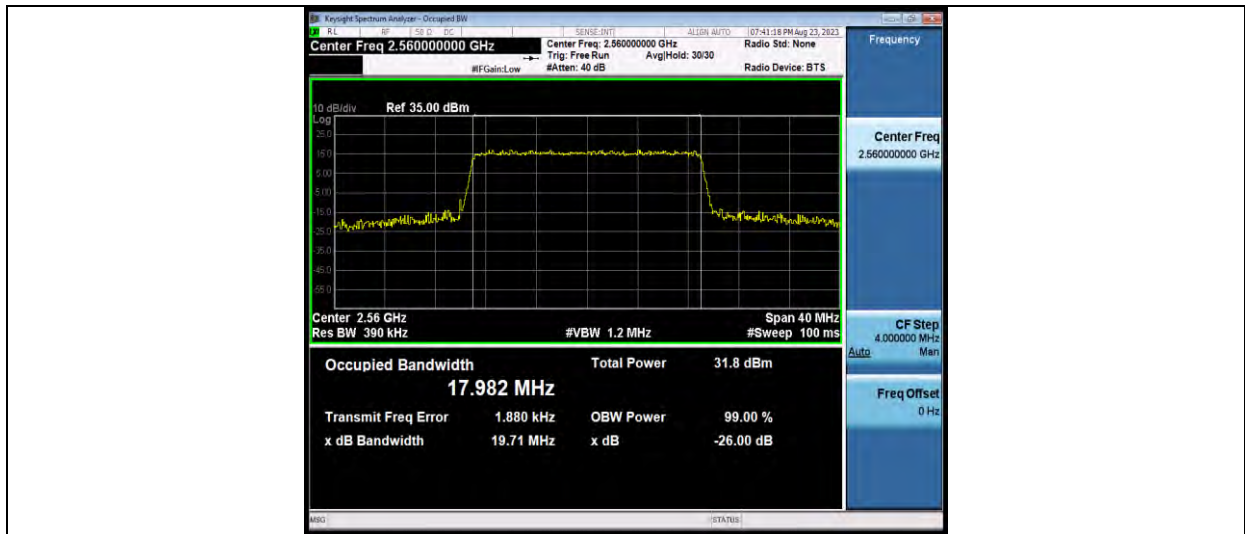


Band7-20MHz-64QAM-21350-100RB#0



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VERITAS

Test Report No.:W7L-P23080006RF06





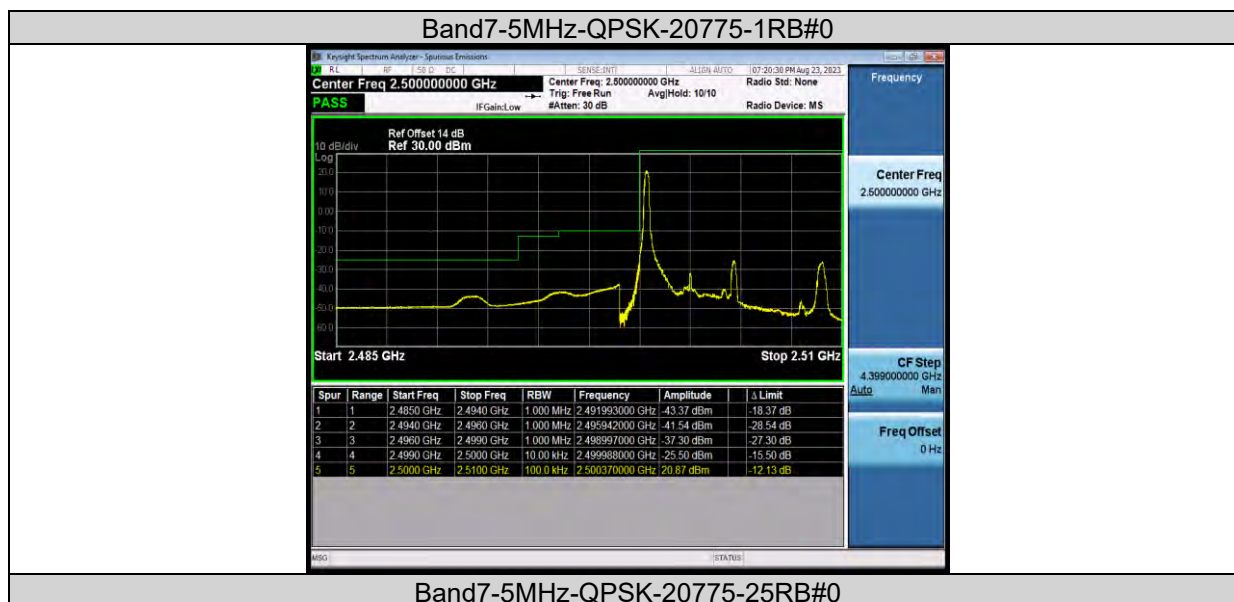
Test Report No.:W7L-P23080006RF06

BAND EDGE

Test Result

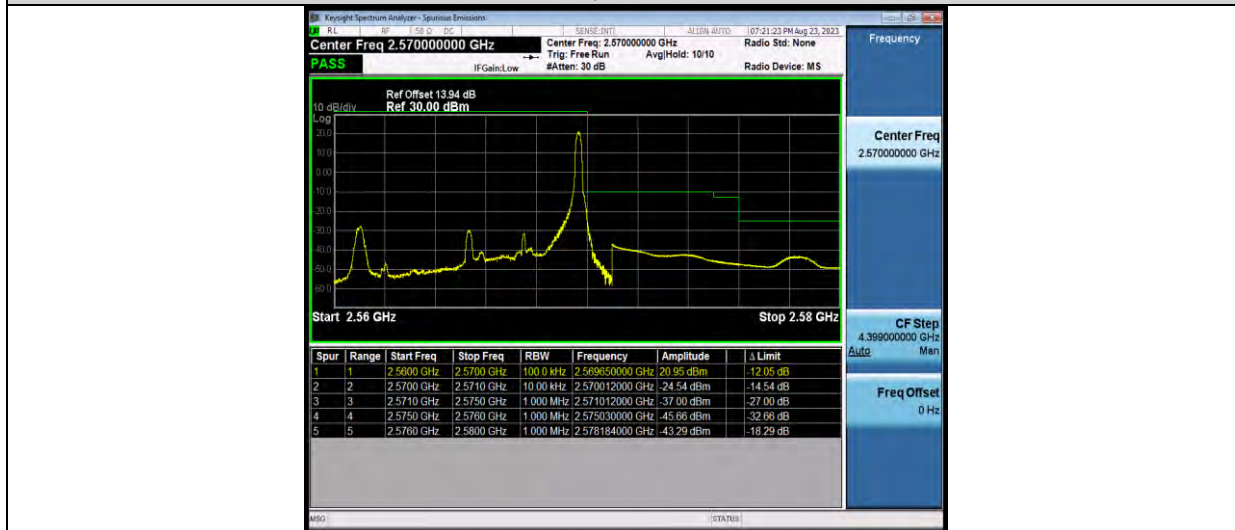
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	-43.37,-41.54,-37.30,-25.50	PASS
Band7	5MHz	QPSK	20775	25RB#0	-36.59,-31.56,-22.79,-27.60	PASS
Band7	5MHz	QPSK	21425	1RB#24	-24.54,-37.00,-45.66,-43.29	PASS
Band7	5MHz	QPSK	21425	25RB#0	-26.20,-21.16,-33.60,-34.46	PASS
Band7	5MHz	16QAM	20775	1RB#0	-44.30,-41.93,-37.45,-27.45	PASS
Band7	5MHz	16QAM	20775	25RB#0	-36.54,-31.81,-25.22,-30.84	PASS
Band7	5MHz	16QAM	21425	1RB#24	-27.86,-37.46,-45.42,-44.70	PASS
Band7	5MHz	16QAM	21425	25RB#0	-29.21,-24.41,-32.82,-34.38	PASS
Band7	5MHz	64QAM	20775	1RB#0	-44.41,-42.11,-37.64,-26.33	PASS
Band7	5MHz	64QAM	20775	25RB#0	-36.58,-32.03,-25.48,-30.37	PASS
Band7	5MHz	64QAM	21425	1RB#24	-26.59,-37.51,-45.46,-44.40	PASS
Band7	5MHz	64QAM	21425	25RB#0	-29.63,-24.49,-32.83,-34.75	PASS
Band7	10MHz	QPSK	20800	1RB#0	-47.82,-42.07,-39.36,-32.26	PASS
Band7	10MHz	QPSK	20800	50RB#0	-38.96,-28.30,-24.91,-27.45	PASS
Band7	10MHz	QPSK	21400	1RB#49	-31.36,-39.39,-43.99,-48.13	PASS
Band7	10MHz	QPSK	21400	50RB#0	-25.87,-23.01,-27.06,-35.64	PASS
Band7	10MHz	16QAM	20800	1RB#0	-48.09,-42.57,-39.57,-30.49	PASS
Band7	10MHz	16QAM	20800	50RB#0	-38.17,-30.66,-27.89,-30.83	PASS
Band7	10MHz	16QAM	21400	1RB#49	-34.01,-39.84,-44.50,-47.94	PASS
Band7	10MHz	16QAM	21400	50RB#0	-29.10,-26.49,-29.60,-34.97	PASS
Band7	10MHz	64QAM	20800	1RB#0	-48.06,-42.78,-39.76,-34.09	PASS
Band7	10MHz	64QAM	20800	50RB#0	-38.25,-30.76,-27.95,-31.09	PASS
Band7	10MHz	64QAM	21400	1RB#49	-30.68,-39.85,-44.56,-48.04	PASS
Band7	10MHz	64QAM	21400	50RB#0	-29.41,-26.21,-29.53,-34.97	PASS
Band7	15MHz	QPSK	20825	1RB#0	-45.31,-43.02,-39.57,-32.82	PASS
Band7	15MHz	QPSK	20825	75RB#0	-33.49,-27.78,-24.36,-27.60	PASS
Band7	15MHz	QPSK	21375	1RB#74	-32.93,-39.46,-41.90,-48.72	PASS
Band7	15MHz	QPSK	21375	75RB#0	-25.29,-22.73,-24.64,-36.52	PASS
Band7	15MHz	16QAM	20825	1RB#0	-45.69,-43.69,-39.96,-34.75	PASS
Band7	15MHz	16QAM	20825	75RB#0	-35.66,-31.12,-28.26,-31.38	PASS
Band7	15MHz	16QAM	21375	1RB#74	-36.24,-39.98,-42.94,-48.58	PASS
Band7	15MHz	16QAM	21375	75RB#0	-29.16,-26.45,-28.42,-36.22	PASS
Band7	15MHz	64QAM	20825	1RB#0	-45.97,-43.68,-40.05,-35.68	PASS
Band7	15MHz	64QAM	20825	75RB#0	-35.85,-31.20,-28.47,-31.82	PASS
Band7	15MHz	64QAM	21375	1RB#74	-35.07,-40.17,-42.91,-48.47	PASS
Band7	15MHz	64QAM	21375	75RB#0	-29.93,-27.21,-28.65,-36.33	PASS
Band7	20MHz	QPSK	20850	1RB#0	-46.98,-44.56,-42.15,-37.54	PASS
Band7	20MHz	QPSK	20850	100RB#0	-34.28,-30.04,-28.18,-29.87	PASS
Band7	20MHz	QPSK	21350	1RB#99	-37.41,-41.80,-43.92,-48.96	PASS
Band7	20MHz	QPSK	21350	100RB#0	-28.36,-26.28,-27.96,-40.61	PASS
Band7	20MHz	16QAM	20850	1RB#0	-47.26,-44.75,-42.48,-38.46	PASS
Band7	20MHz	16QAM	20850	100RB#0	-36.34,-32.68,-31.31,-33.01	PASS
Band7	20MHz	16QAM	21350	1RB#99	-37.92,-42.43,-44.30,-48.99	PASS
Band7	20MHz	16QAM	21350	100RB#0	-31.64,-29.51,-30.53,-39.14	PASS
Band7	20MHz	64QAM	20850	1RB#0	-47.30,-44.79,-42.49,-37.47	PASS
Band7	20MHz	64QAM	20850	100RB#0	-36.35,-32.79,-31.06,-33.07	PASS
Band7	20MHz	64QAM	21350	1RB#99	-38.27,-42.22,-44.30,-49.00	PASS
Band7	20MHz	64QAM	21350	100RB#0	-31.80,-29.77,-30.67,-39.33	PASS

Test Graphs





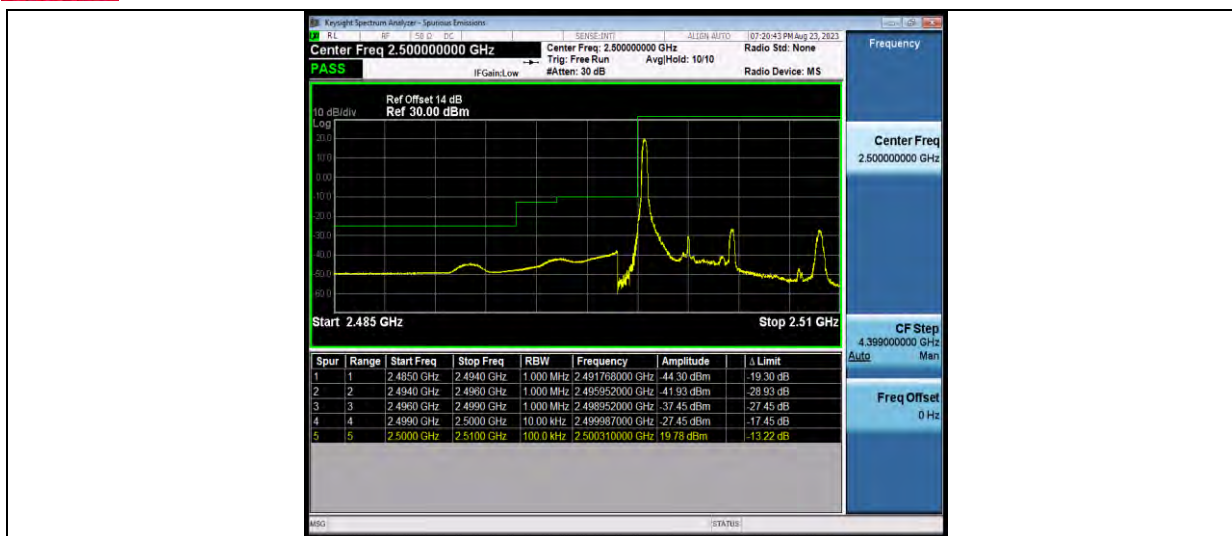
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Band7-5MHz-QPSK-21425-25RB#0



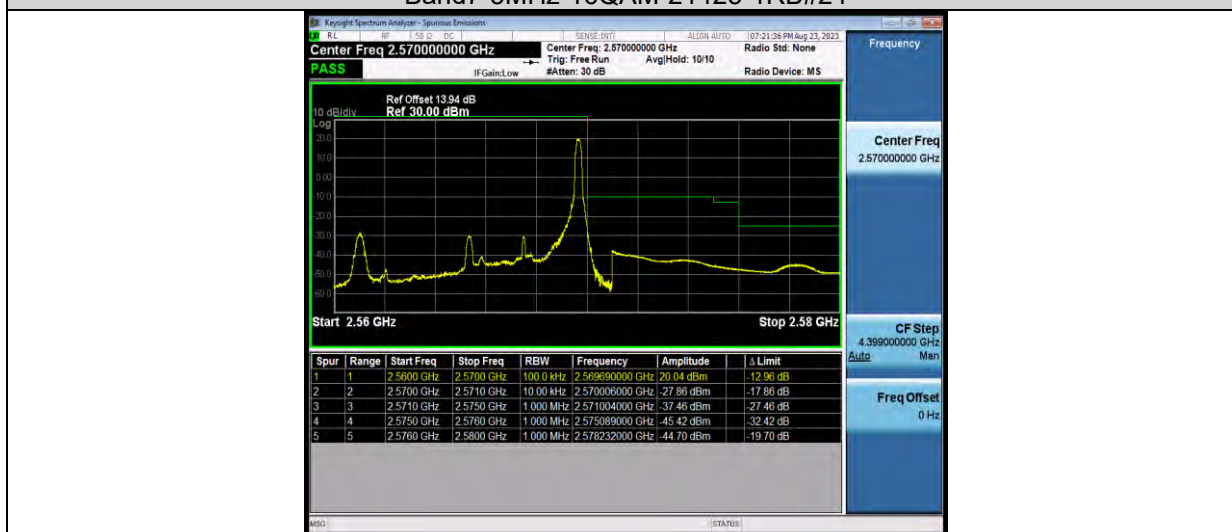
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Band7-5MHz-16QAM-20775-25RB#0



Band7-5MHz-16QAM-21425-1RB#24



Band7-5MHz-16QAM-21425-25RB#0



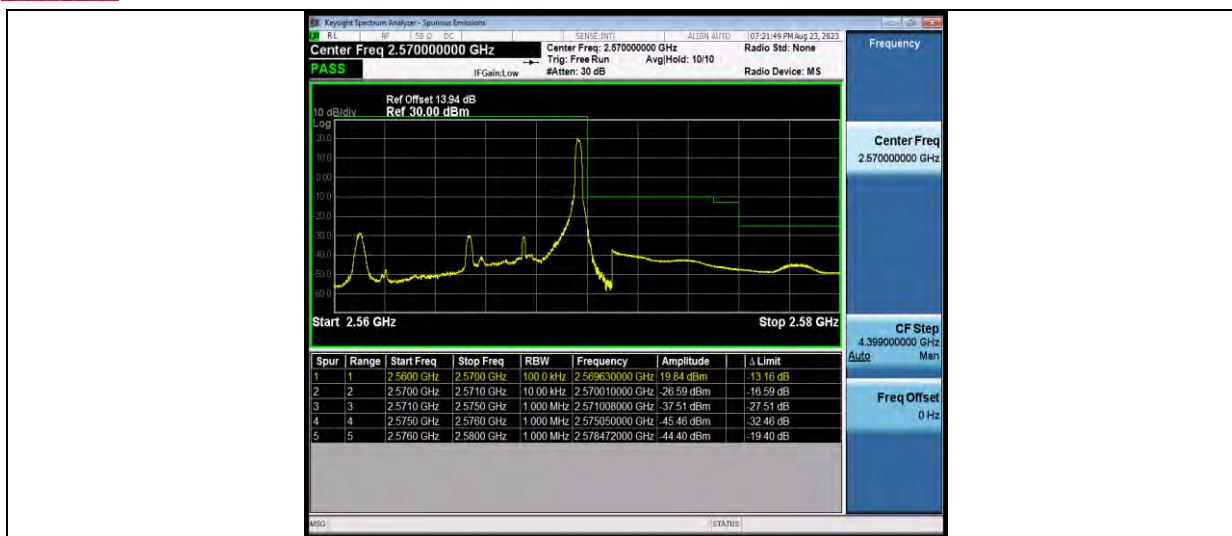
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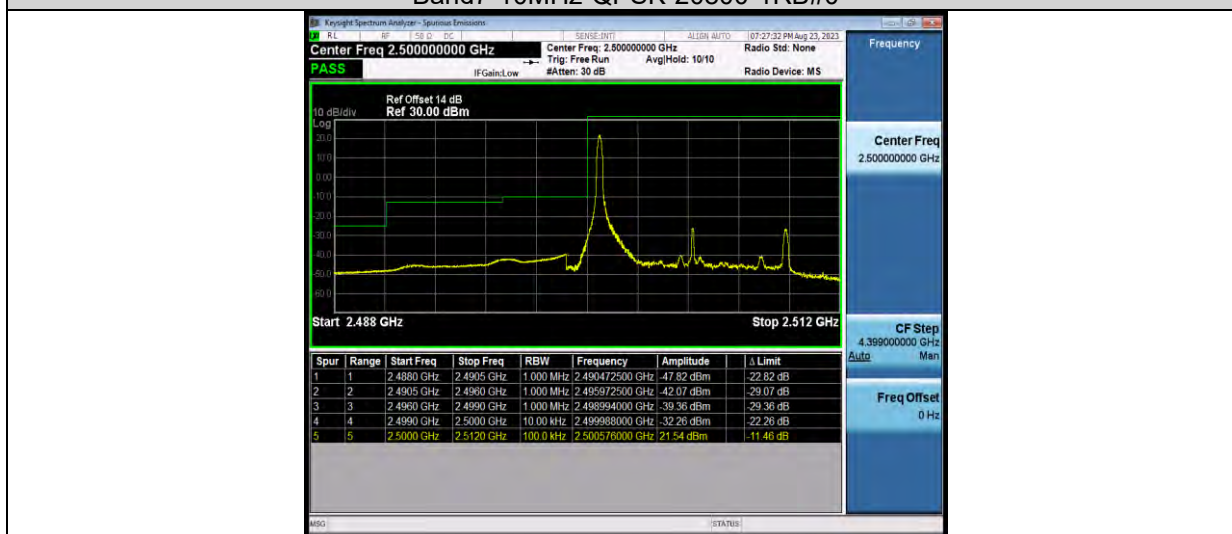
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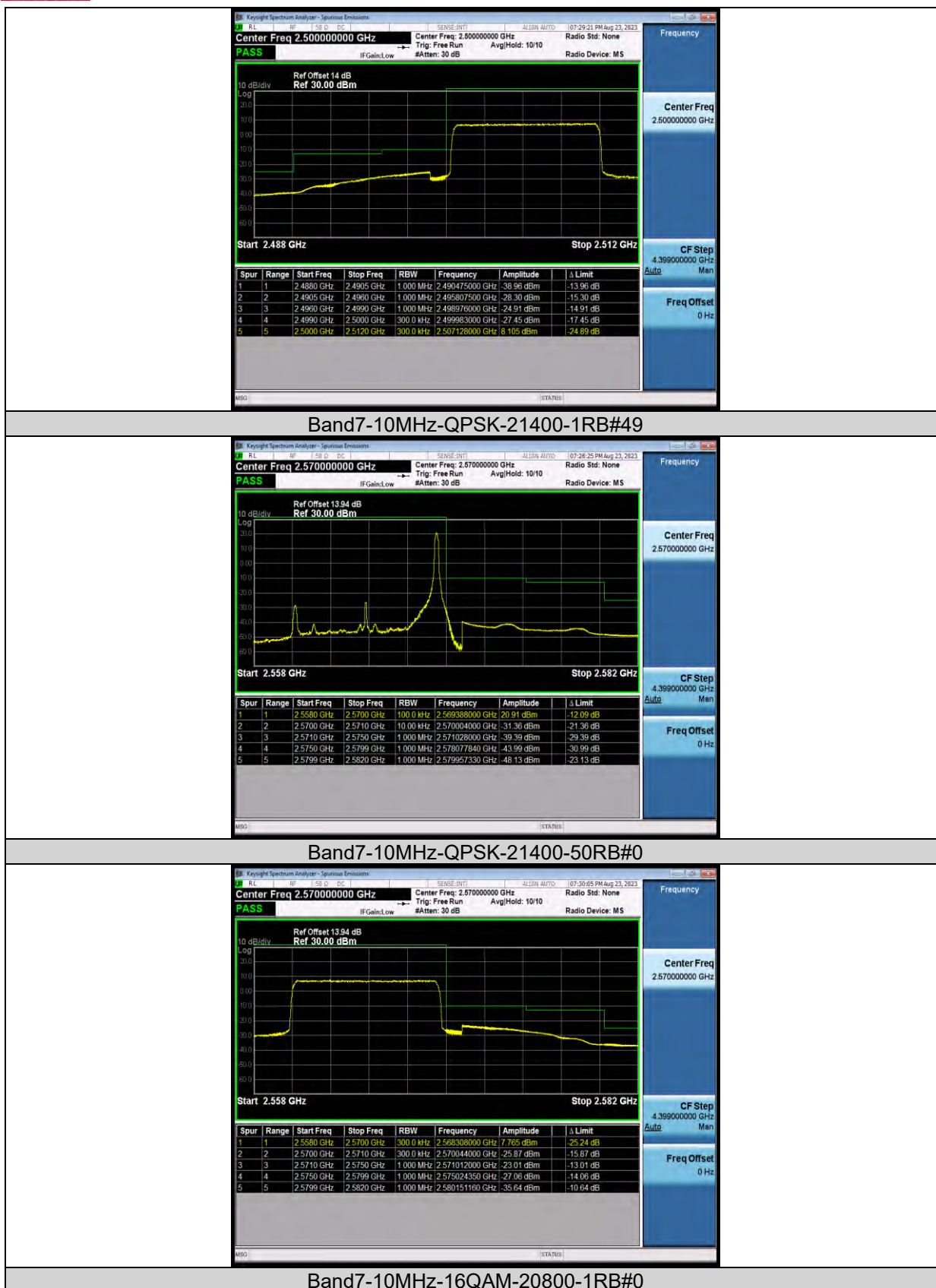
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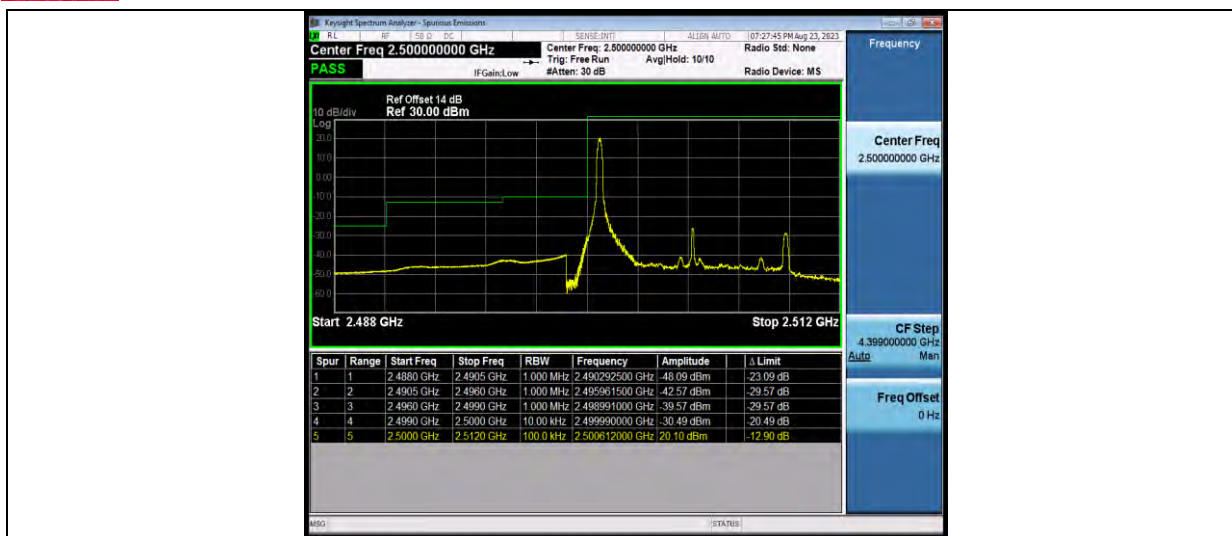


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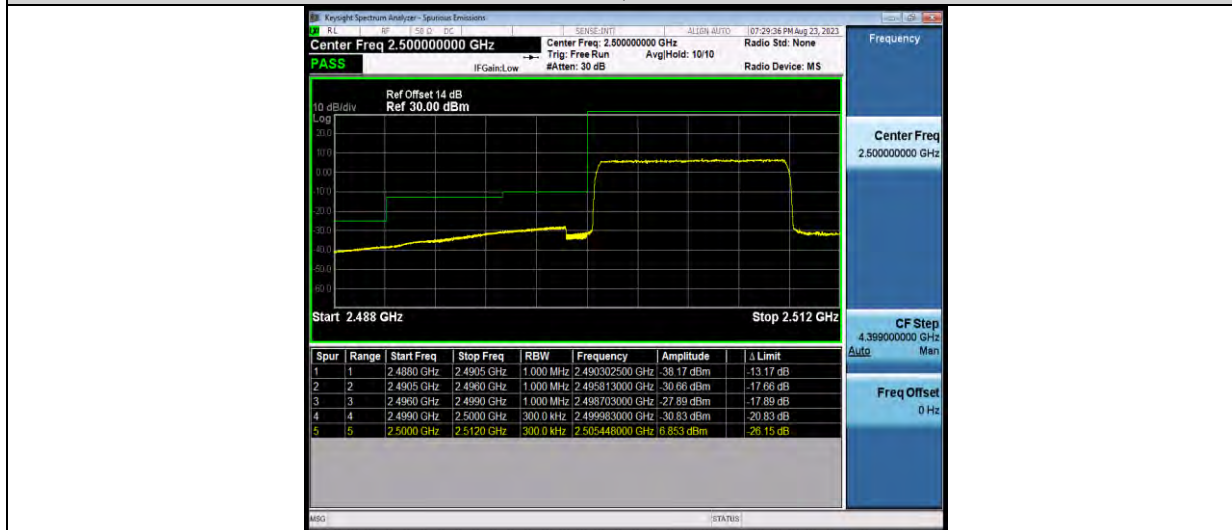


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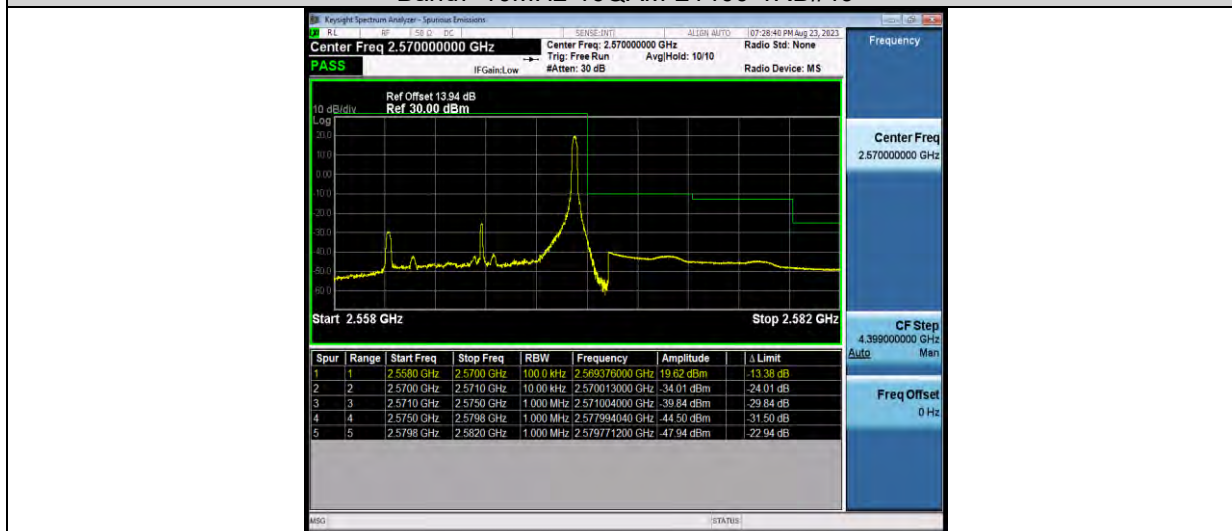




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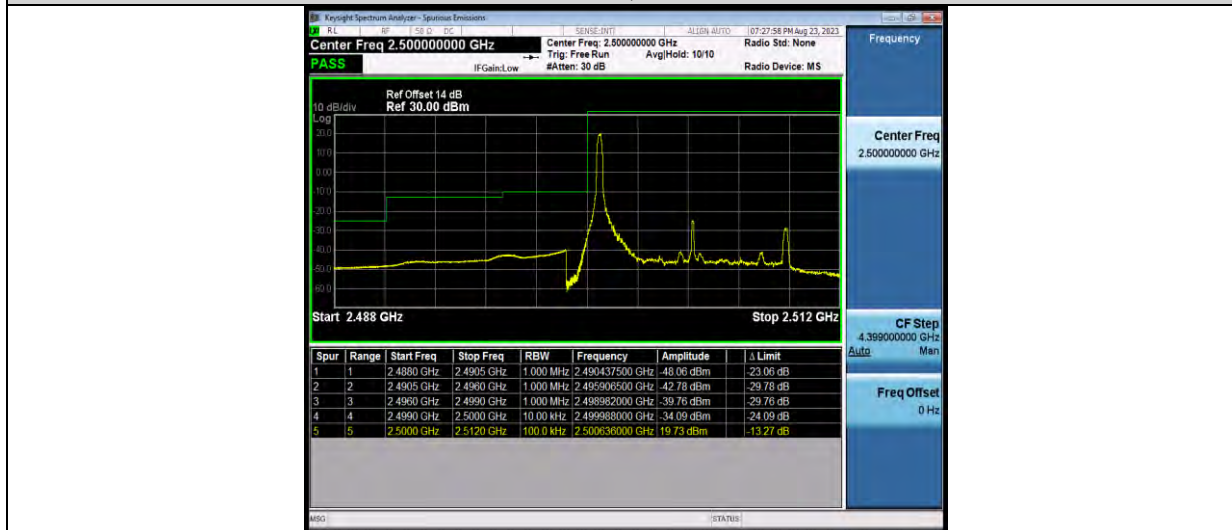
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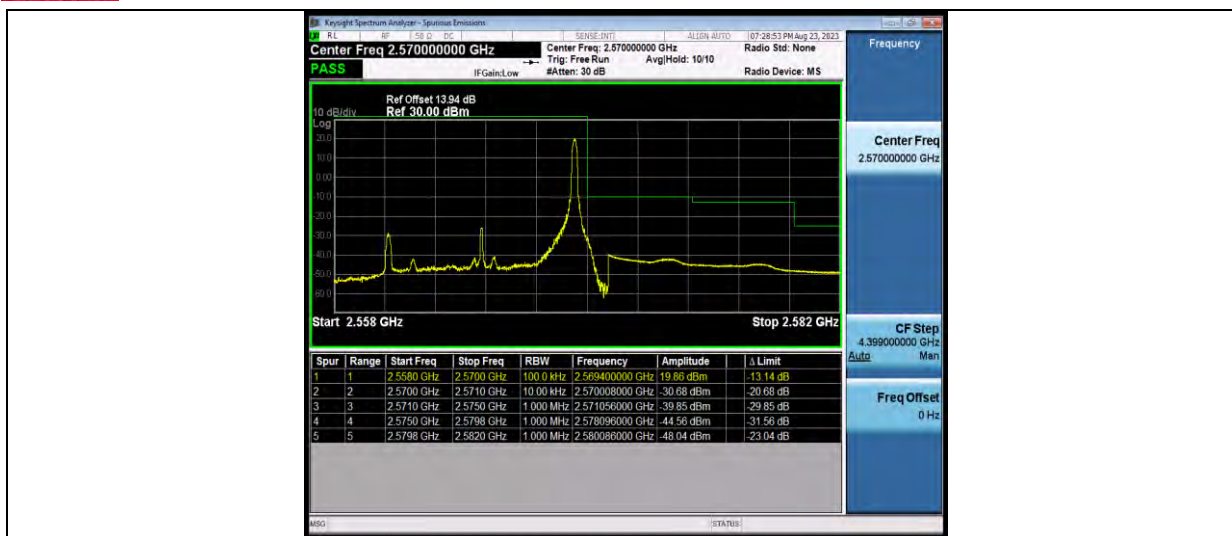
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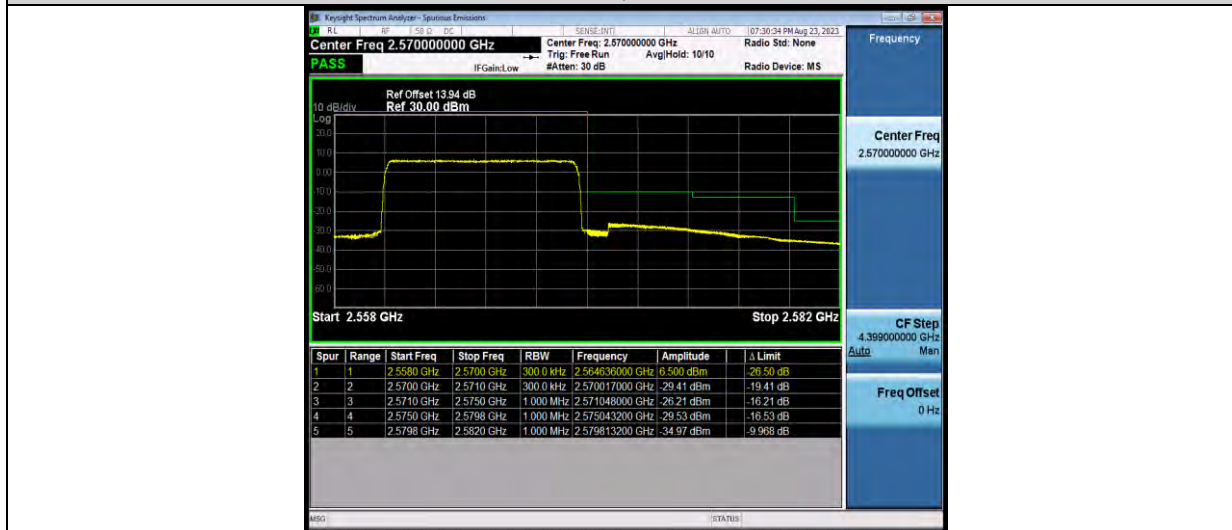
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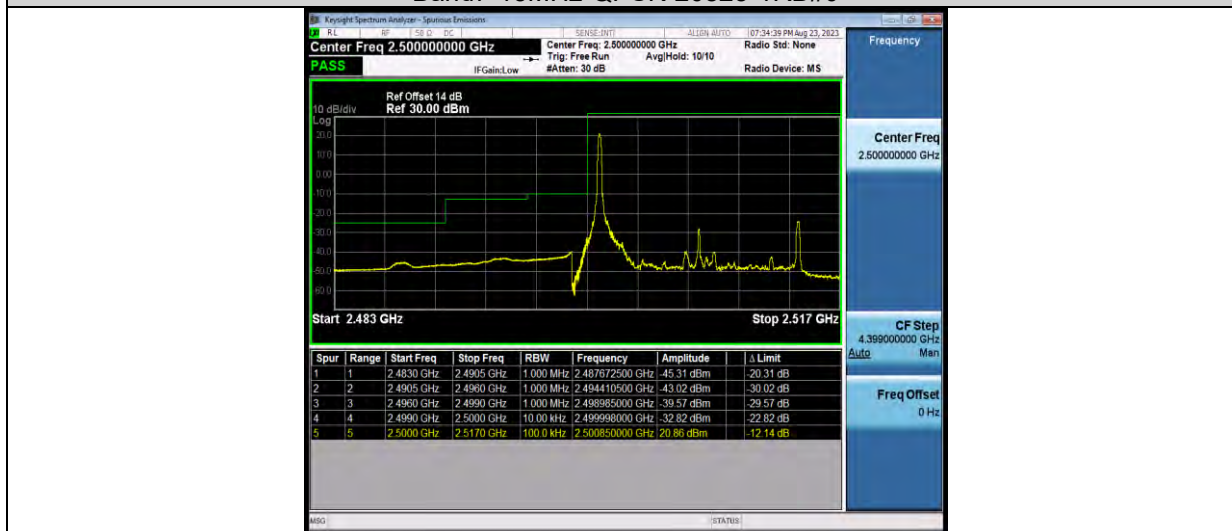
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Band7-10MHz-64QAM-21400-50RB#0



Band7-15MHz-QPSK-20825-1RB#0



Band7-15MHz-QPSK-20825-75RB#0

