

LTE Band Test Data

FCC ID : 2A9LB-T30

IC : 29740-T30

Company: : Eugeria

EUT : Idem Smart Display

Model Number : T30

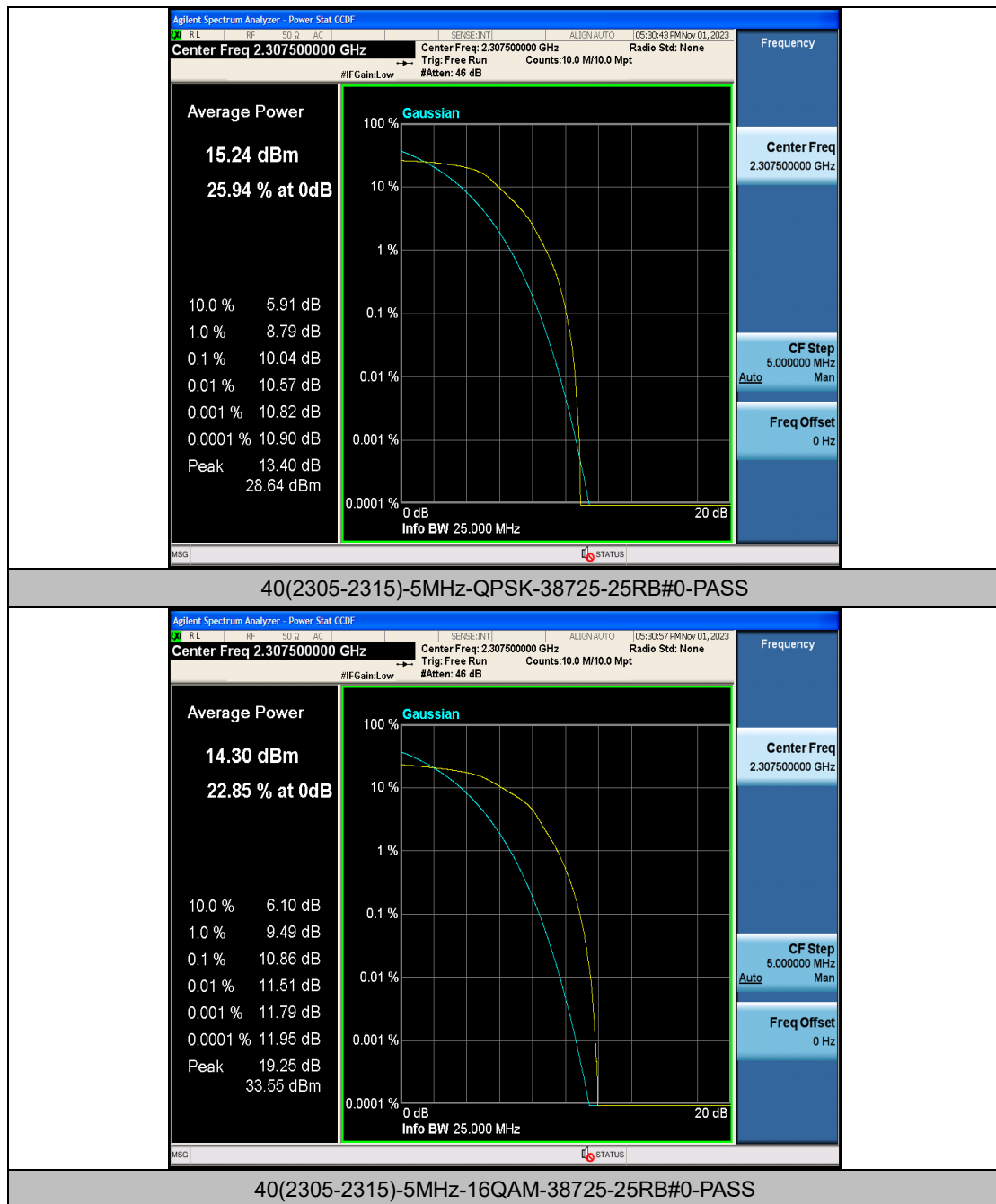
Reviewed By : Eric Wang

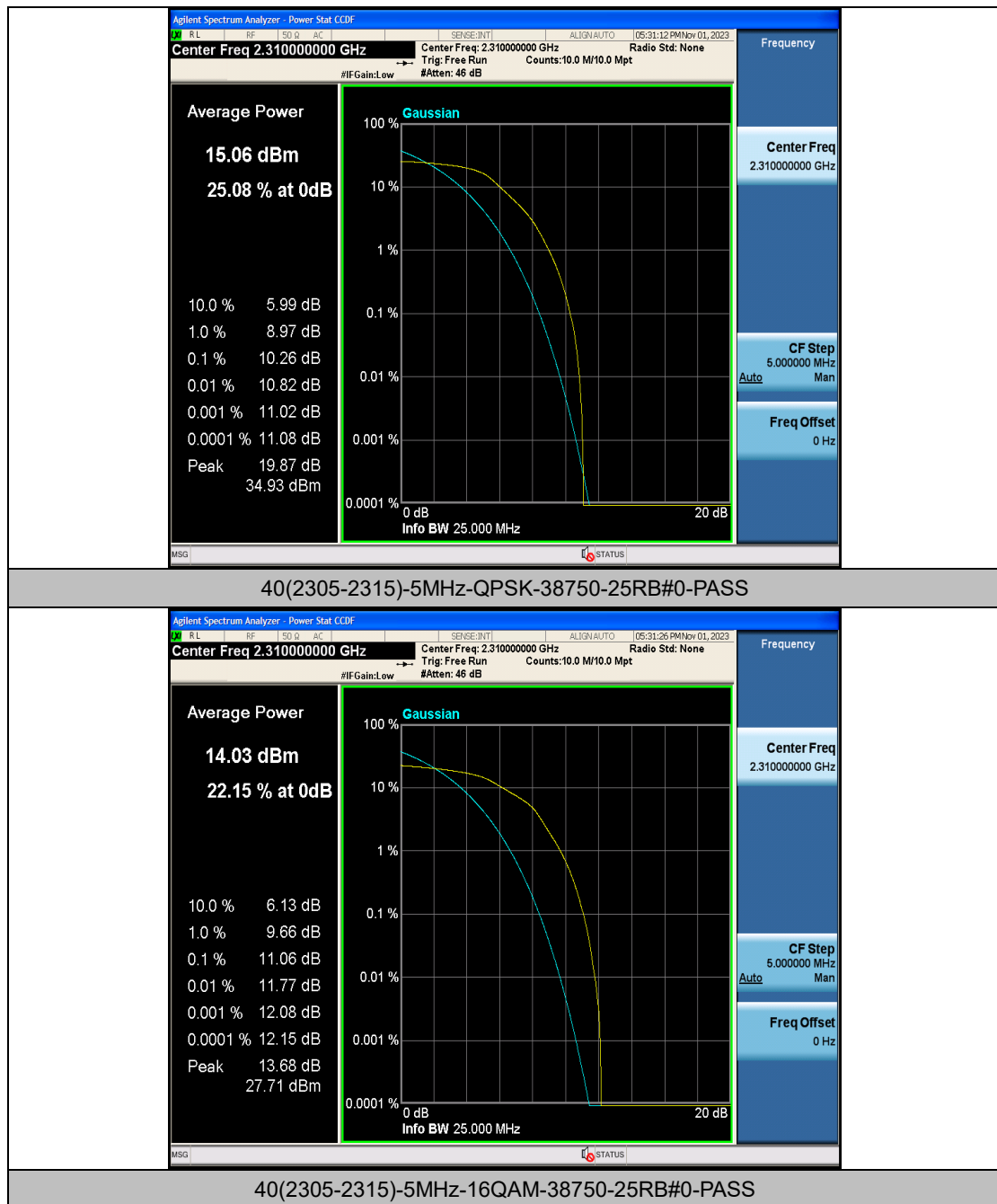
Appendix B: Peak-to-Average Ratio(CCDF)

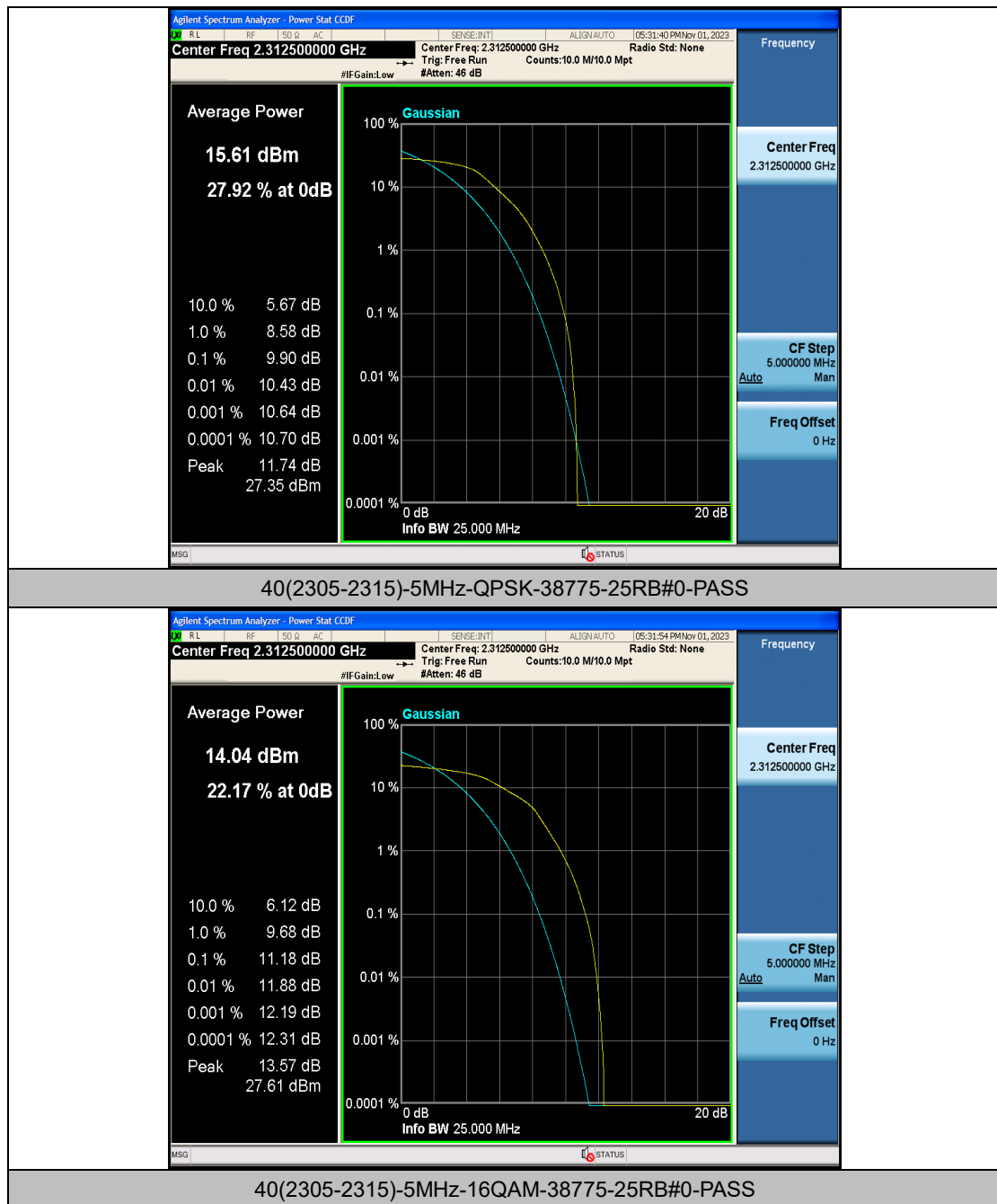
Test Result

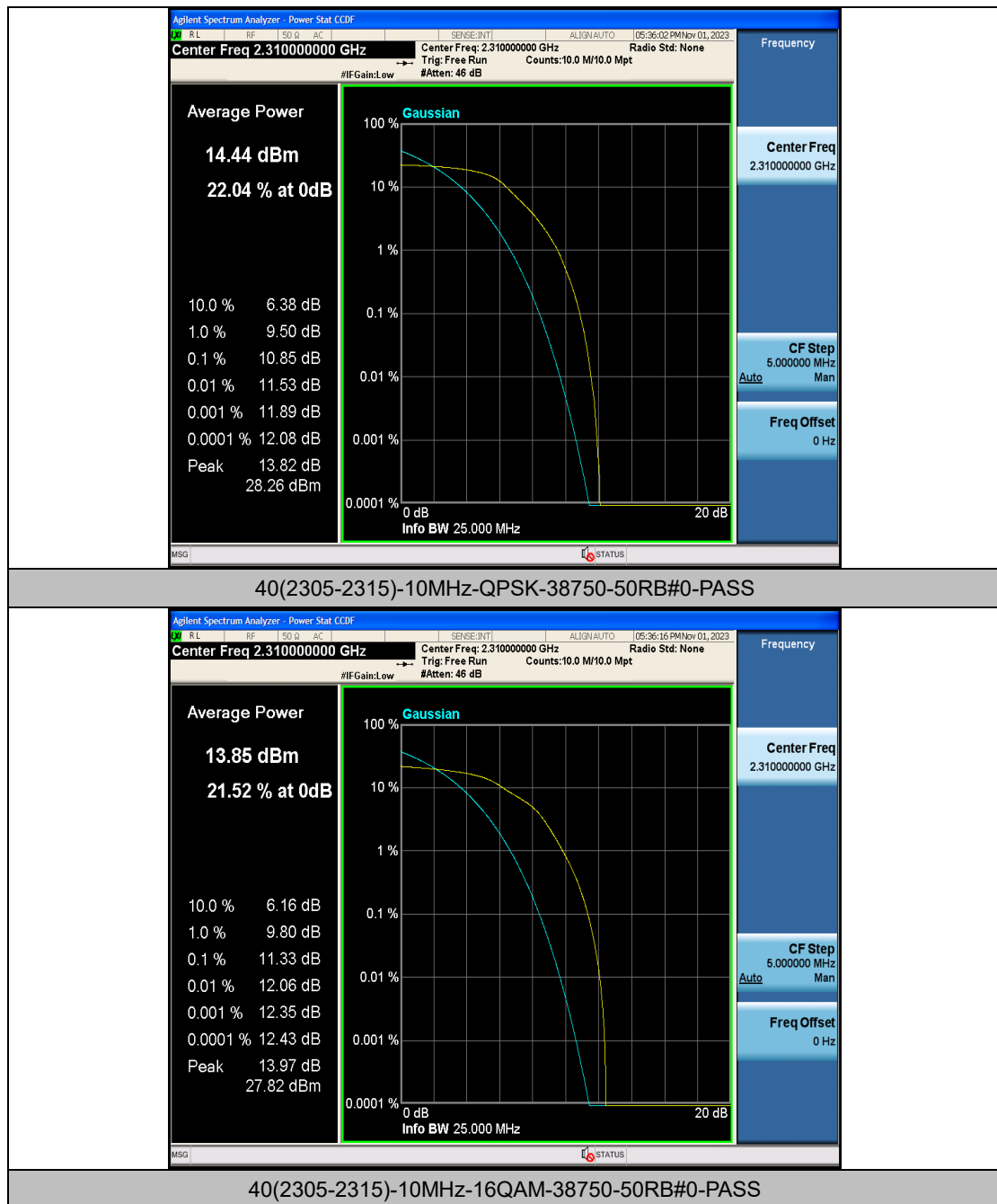
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
40(2305-2315)	5MHz	QPSK	38725	25RB#0	10.04	13	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	10.86	13	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	10.26	13	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	11.06	13	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	9.90	13	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	11.18	13	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	10.85	13	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	11.33	13	PASS

Test Graphs







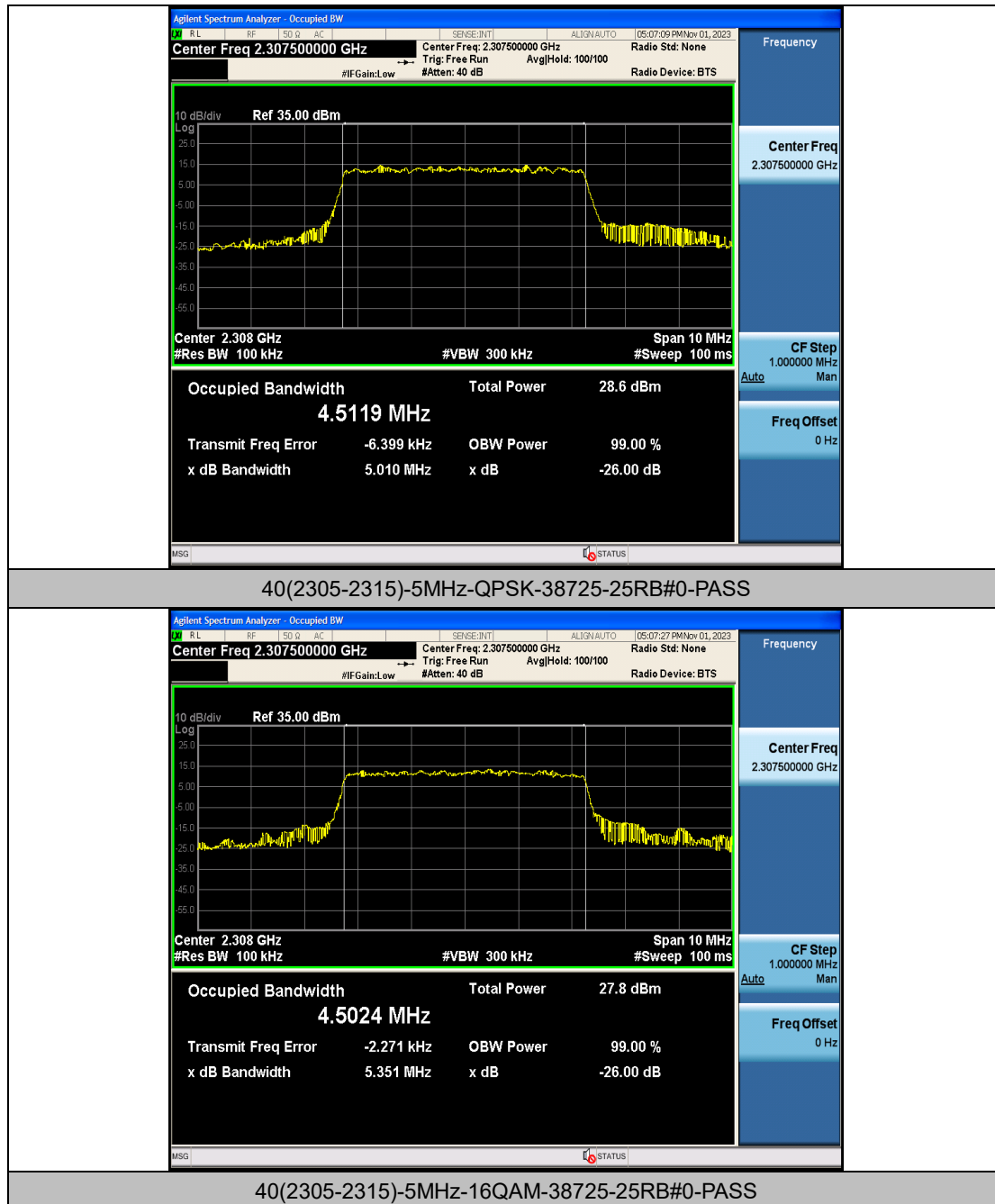


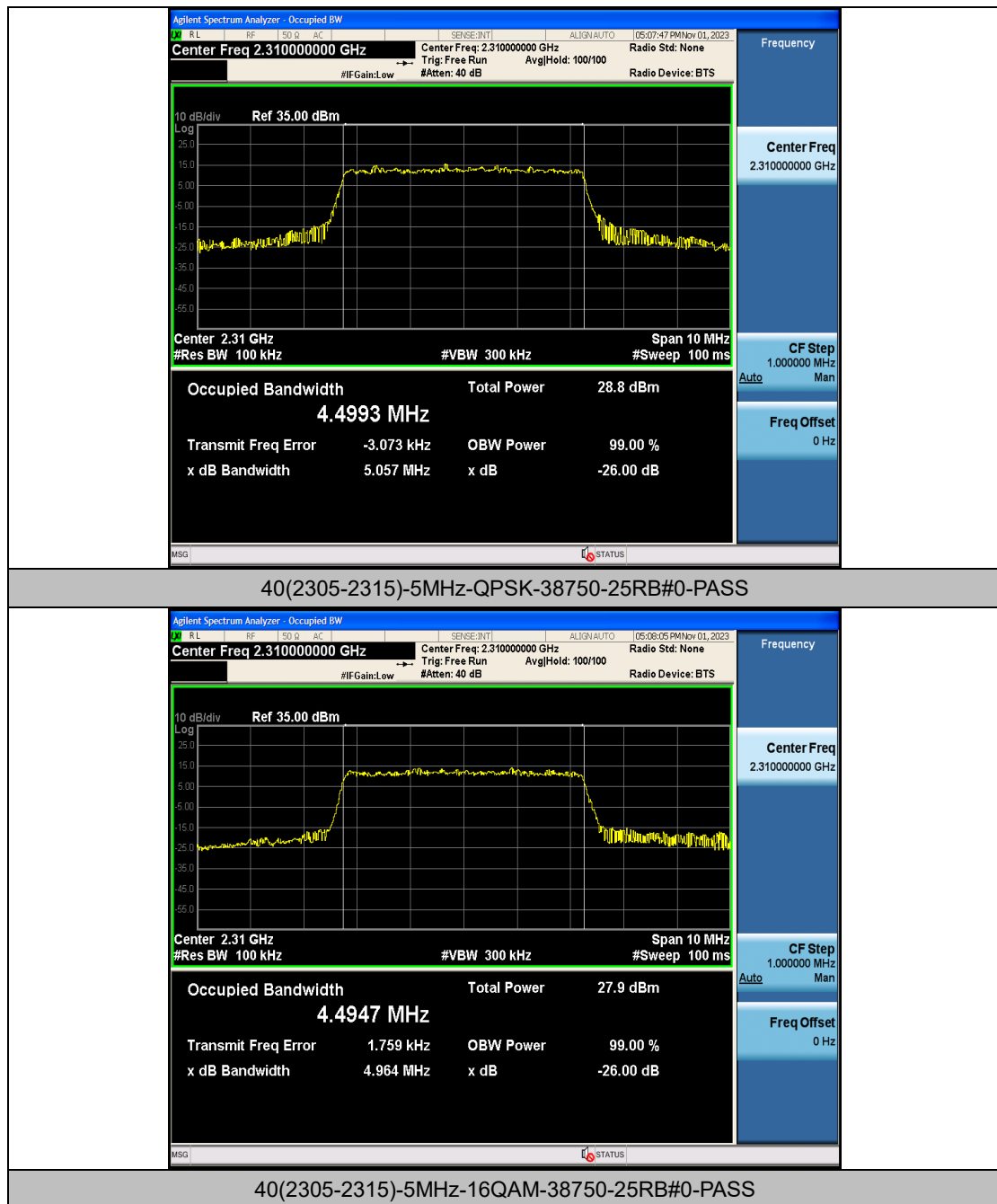
Appendix C: 26dB Bandwidth and Occupied Bandwidth

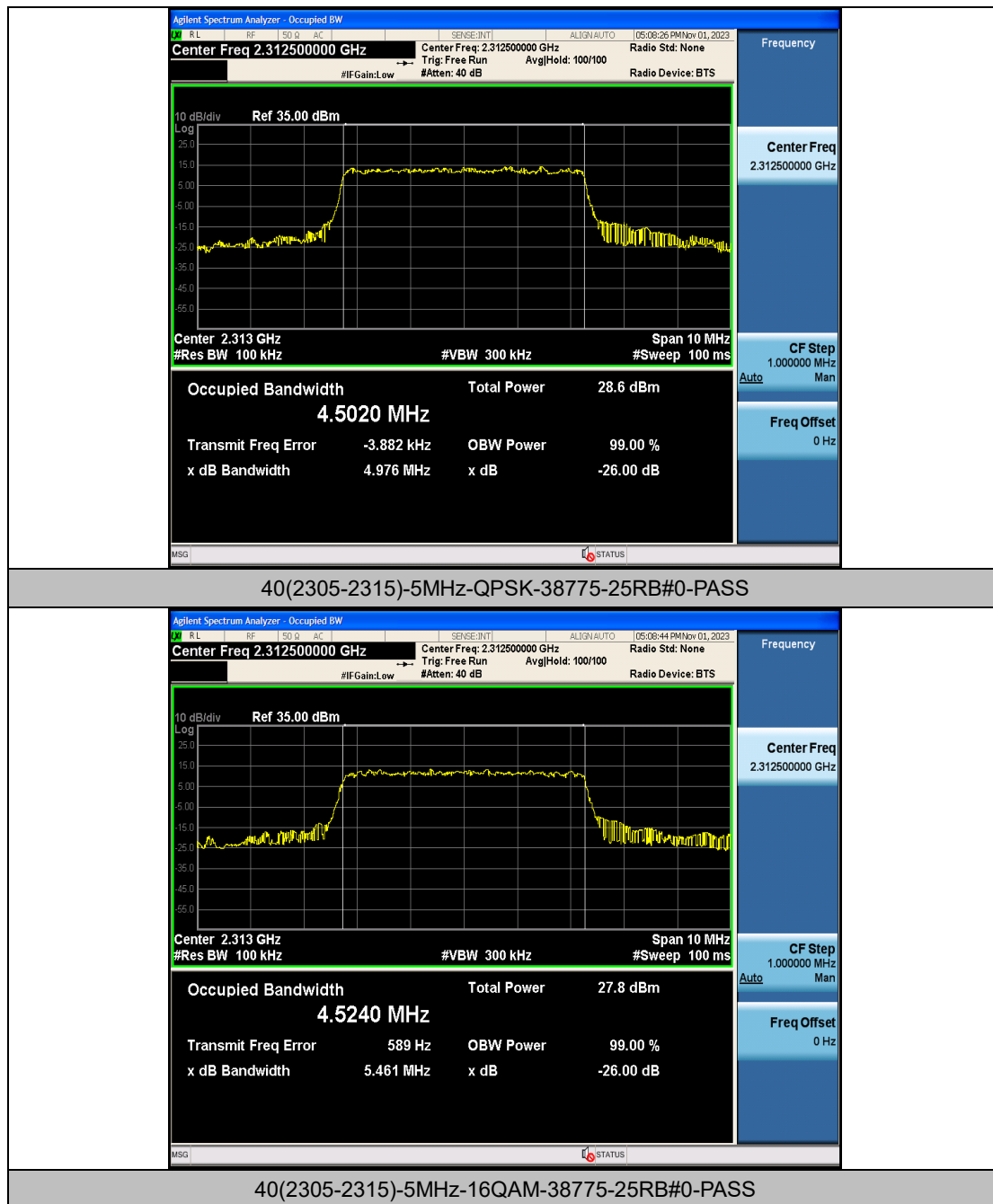
Test Result

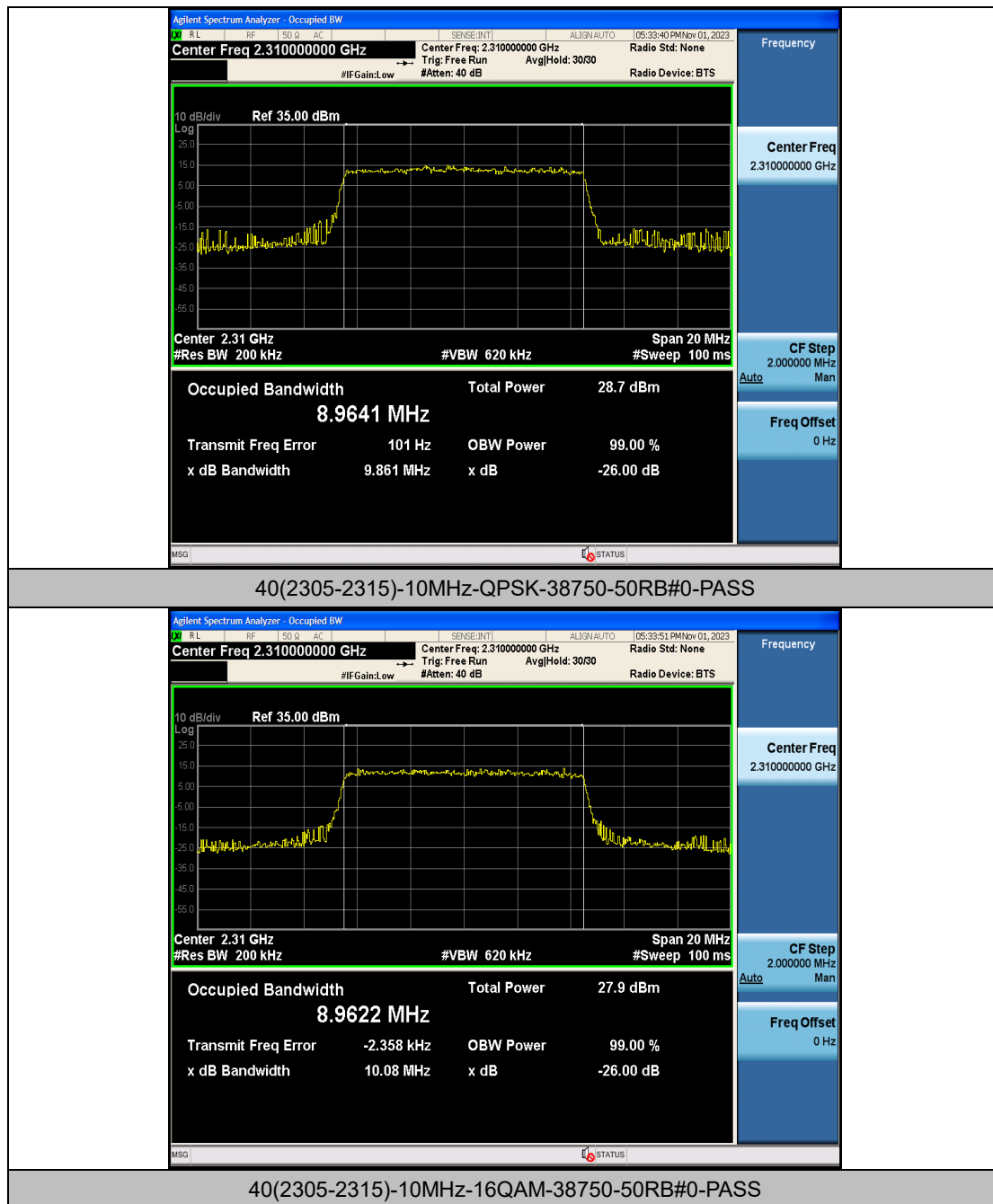
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
40(2305-2315)	5MHz	QPSK	38725	25RB#0	4.5119	5.010	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	4.5024	5.351	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	4.4993	5.057	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	4.4947	4.964	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	4.5020	4.976	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	4.5240	5.461	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	8.9641	9.861	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	8.9622	10.08	PASS

Test Graphs









40(2305-2315)-10MHz-QPSK-38750-50RB#0-PASS

Agilent Spectrum Analyzer - Occupied BW

RL

RF

50 Ω

AC

SENSE:INT

ALIGN:AUTO

05:33:51 PM Nov 01, 2023

Center Freq 2.310000000 GHz

Center Freq: 2.310000000 GHz

Trig: Free Run

Avg/Hold: 30/30

Radio Std: None

#IF Gain: Low

#Atten: 40 dB

Radio Device: BTS

10 dB/div

Ref 35.00 dBm

Center 2.31 GHz

#Res BW 200 kHz

#VBW 620 kHz

Span 20 MHz

#Sweep 100 ms

Occupied Bandwidth

8.9622 MHz

Total Power

27.9 dBm

Transmit Freq Error

-2.358 kHz

OBW Power

99.00 %

x dB Bandwidth

10.08 MHz

x dB

-26.00 dB

MSG

STATUS

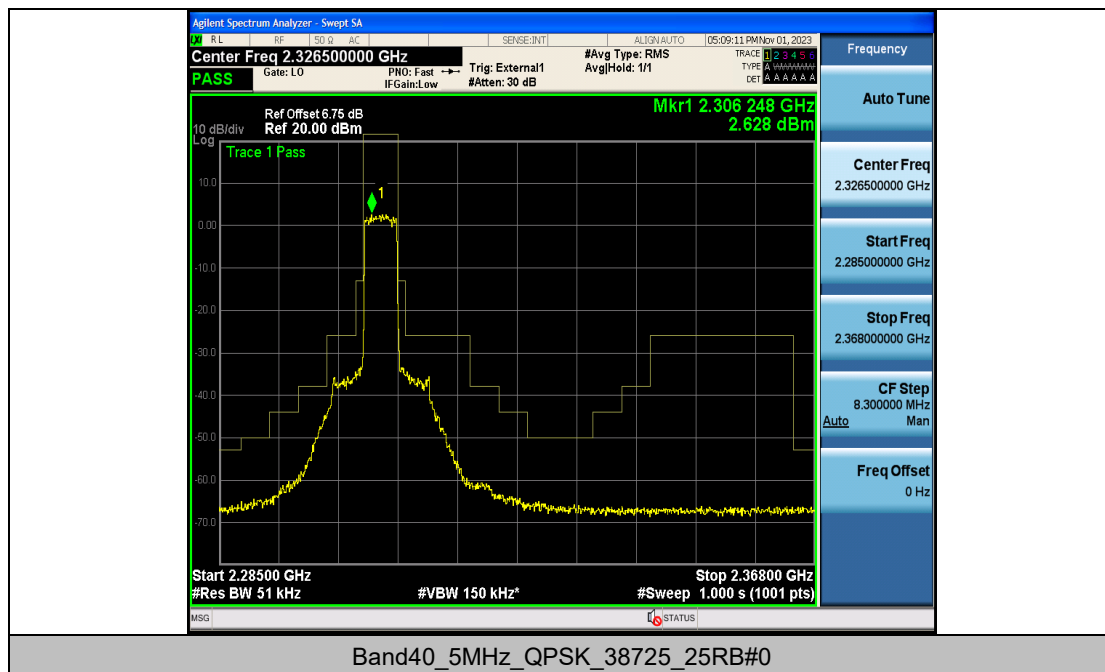
40(2305-2315)-10MHz-16QAM-38750-50RB#0-PASS

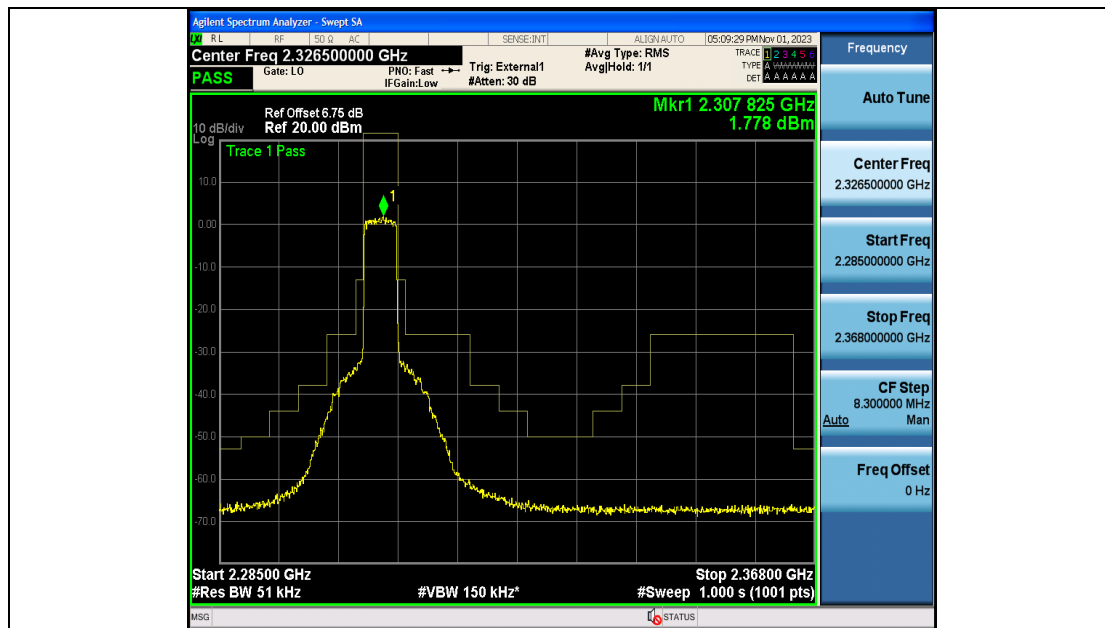
Appendix D: Band Edge

Test Result

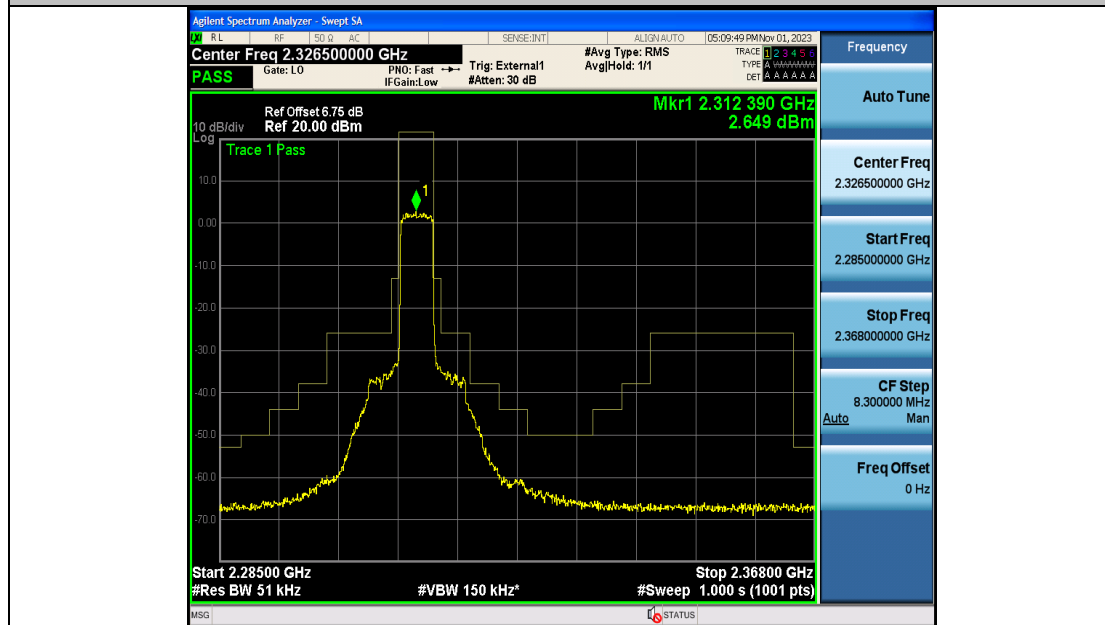
Band	Bandwidth	Modulation	Channel	RB Configuration	Verdict
40(2305-2315)	5MHz	QPSK	38725	25RB#0	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	PASS

Test Graphs

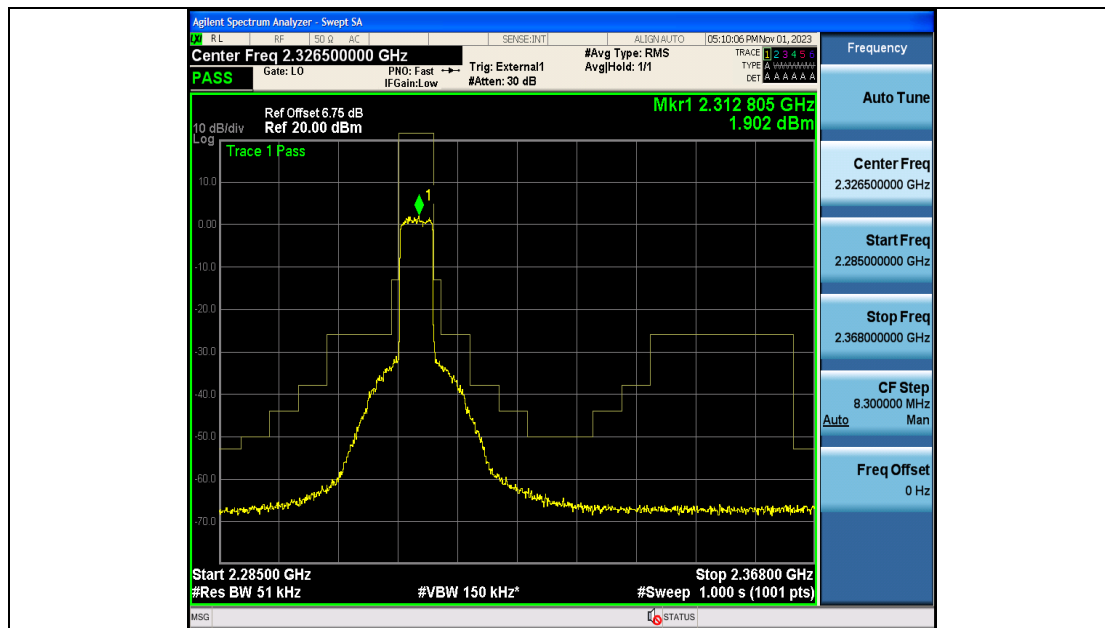




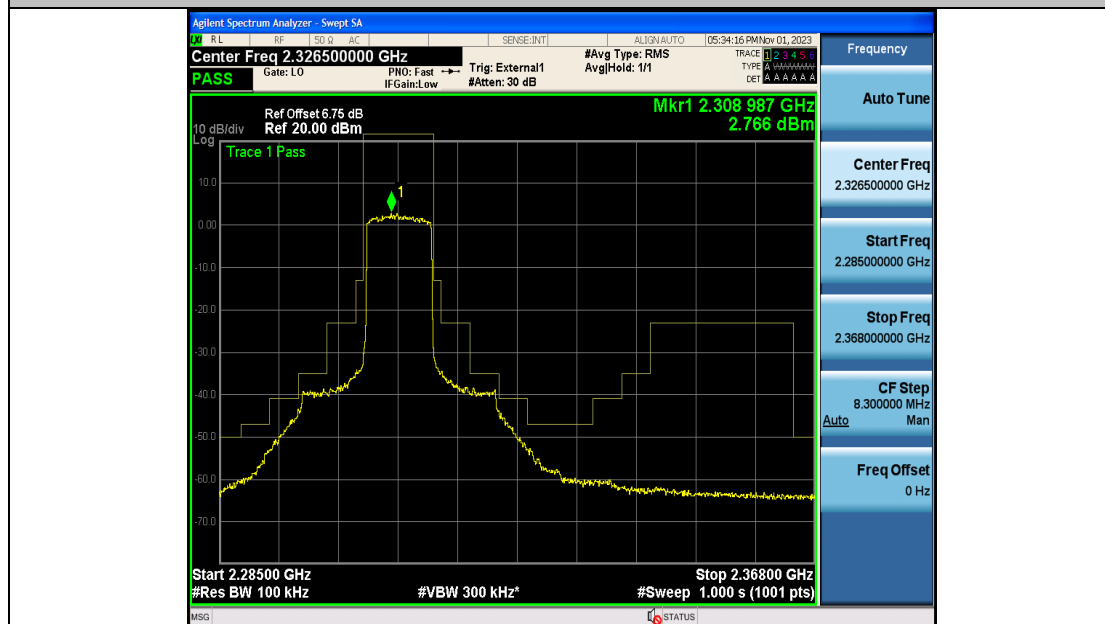
Band40_5MHz_16QAM_38725_25RB#0



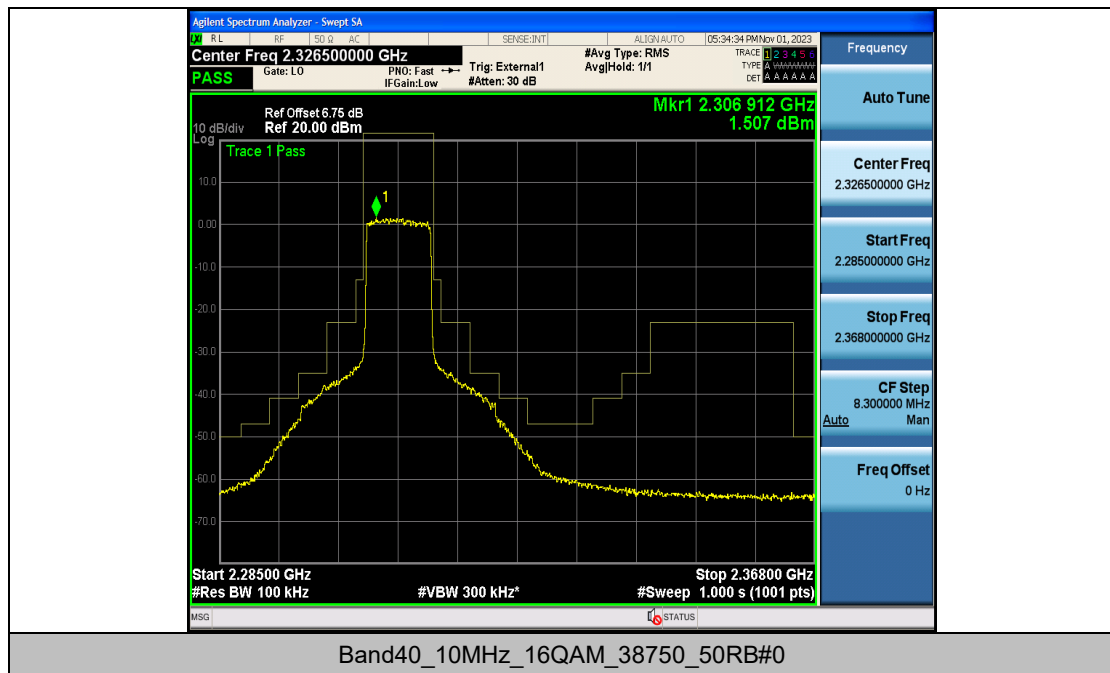
Band40_5MHz_QPSK_38775_25RB#0



Band40_5MHz_16QAM_38775_25RB#0



Band40_10MHz_QPSK_38750_50RB#0



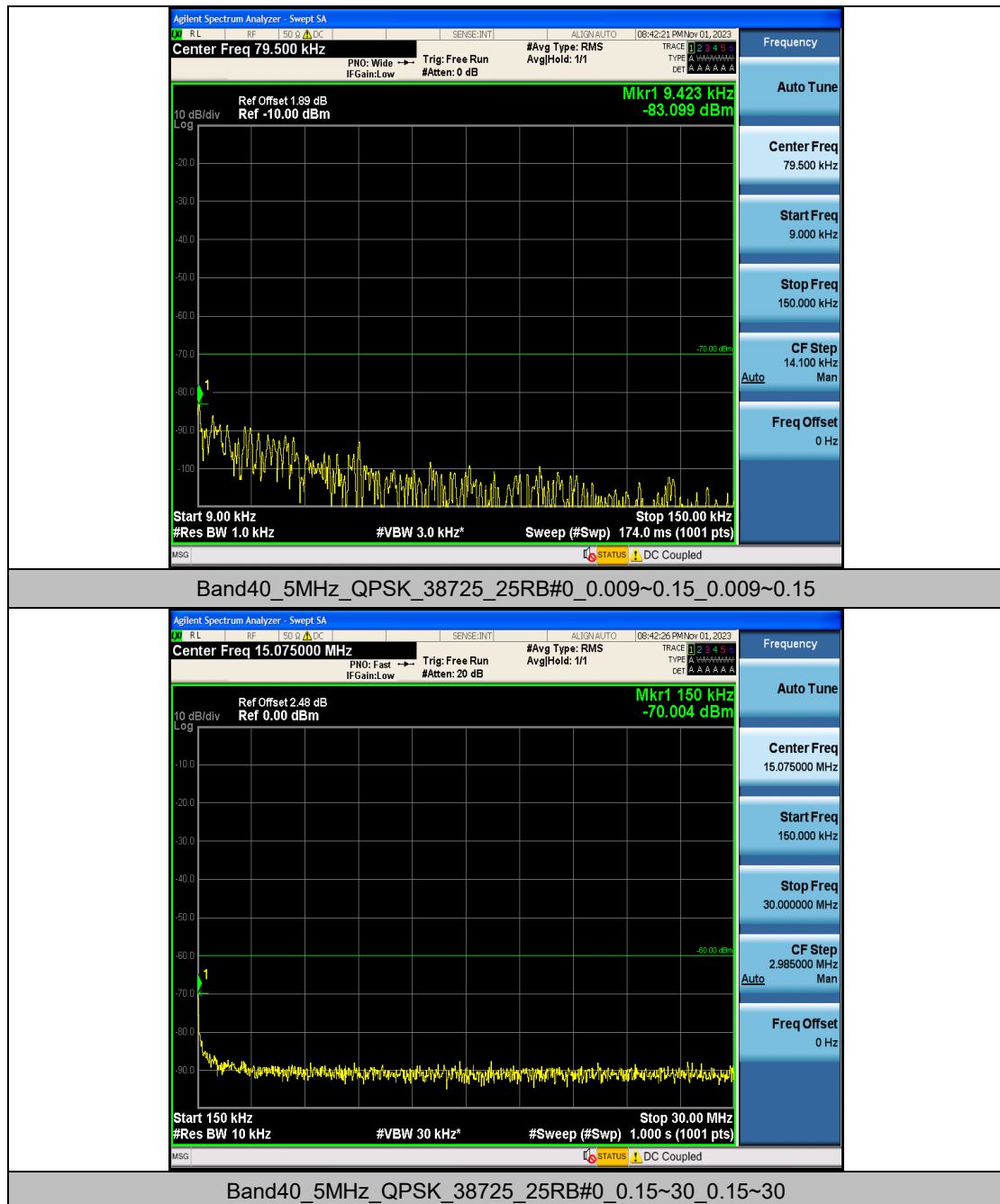
Appendix E: Conducted Spurious Emission

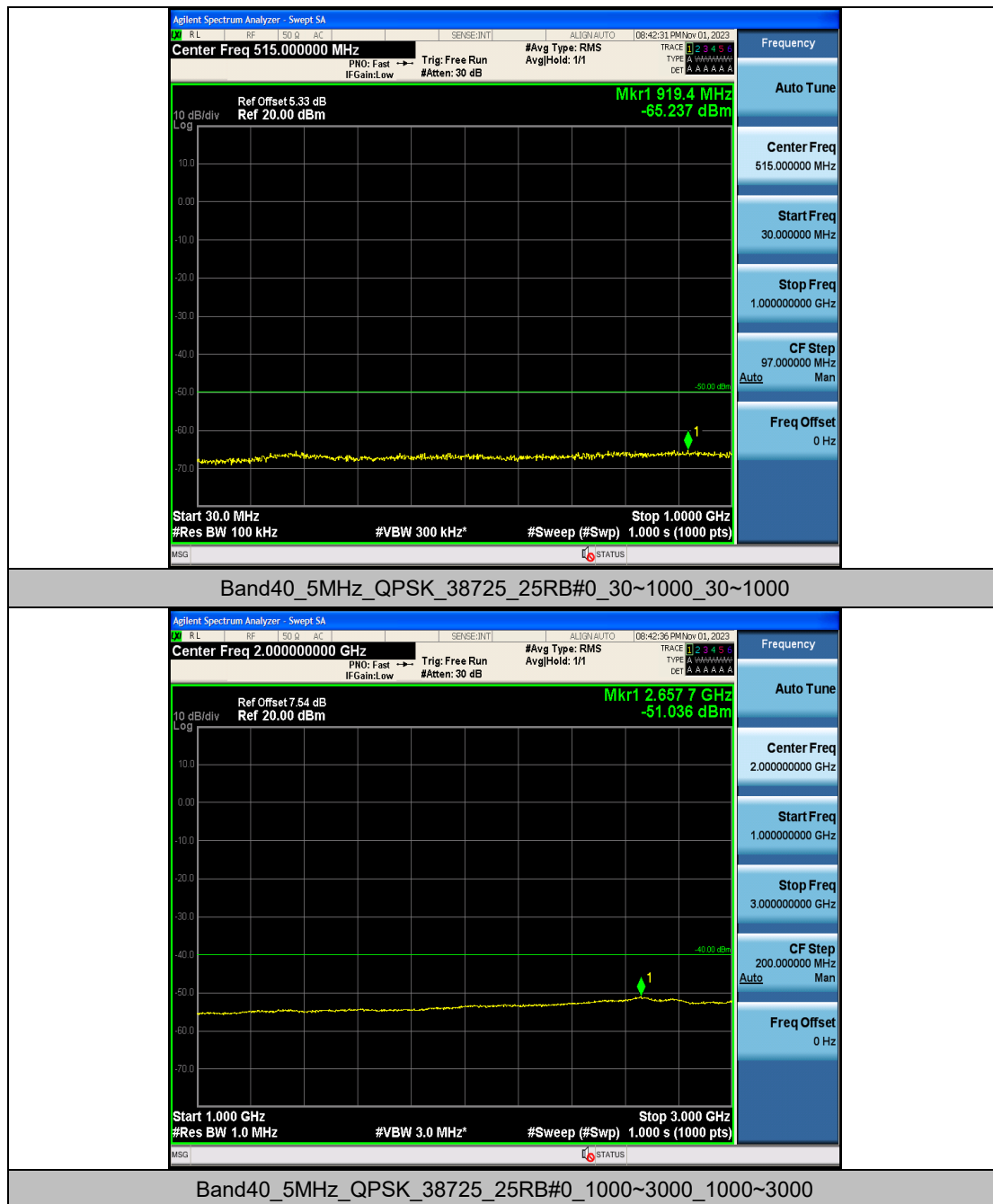
Test Result

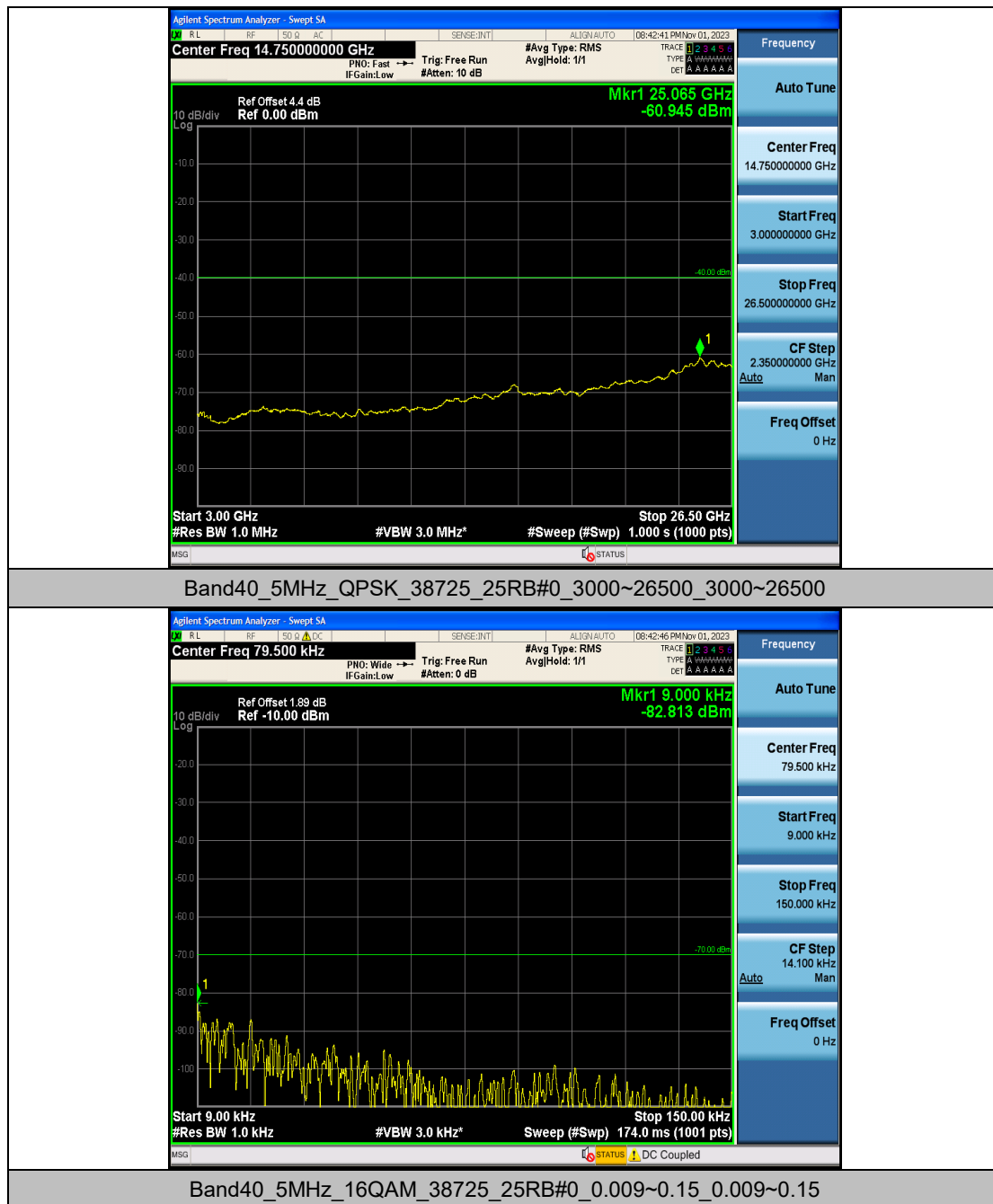
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
40(2305-2315)	5MHz	QPSK	38725	25RB#0	0.009~0.15	-83.10	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	0.15~30	-70.00	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	30~1000	-65.24	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	1000~3000	-51.04	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	3000~26500	-60.95	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	0.009~0.15	-82.81	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	30~1000	-65.01	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	1000~3000	-51.04	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	3000~26500	-61.26	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	0.009~0.15	-83.25	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	0.15~30	-70.18	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	30~1000	-65.11	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	0.15~30	-69.47	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	30~1000	-65.14	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	1000~3000	-50.89	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	3000~26500	-61.10	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	0.009~0.15	-82.96	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	0.15~30	-68.01	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	1000~3000	-51.17	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	3000~26500	-61.04	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	0.009~0.15	-82.37	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	0.15~30	-70.76	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	30~1000	-65.42	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	1000~3000	-51.13	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	3000~26500	-61.16	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	0.009~0.15	-85.18	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	0.15~30	-68.50	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	30~1000	-65.25	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	1000~3000	-51.05	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	3000~26500	-61.04	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	0.009~0.15	-85.19	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	0.15~30	-69.82	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	30~1000	-65.44	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	1000~3000	-50.94	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	3000~26500	-61.09	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	0.009~0.15	-86.41	PASS

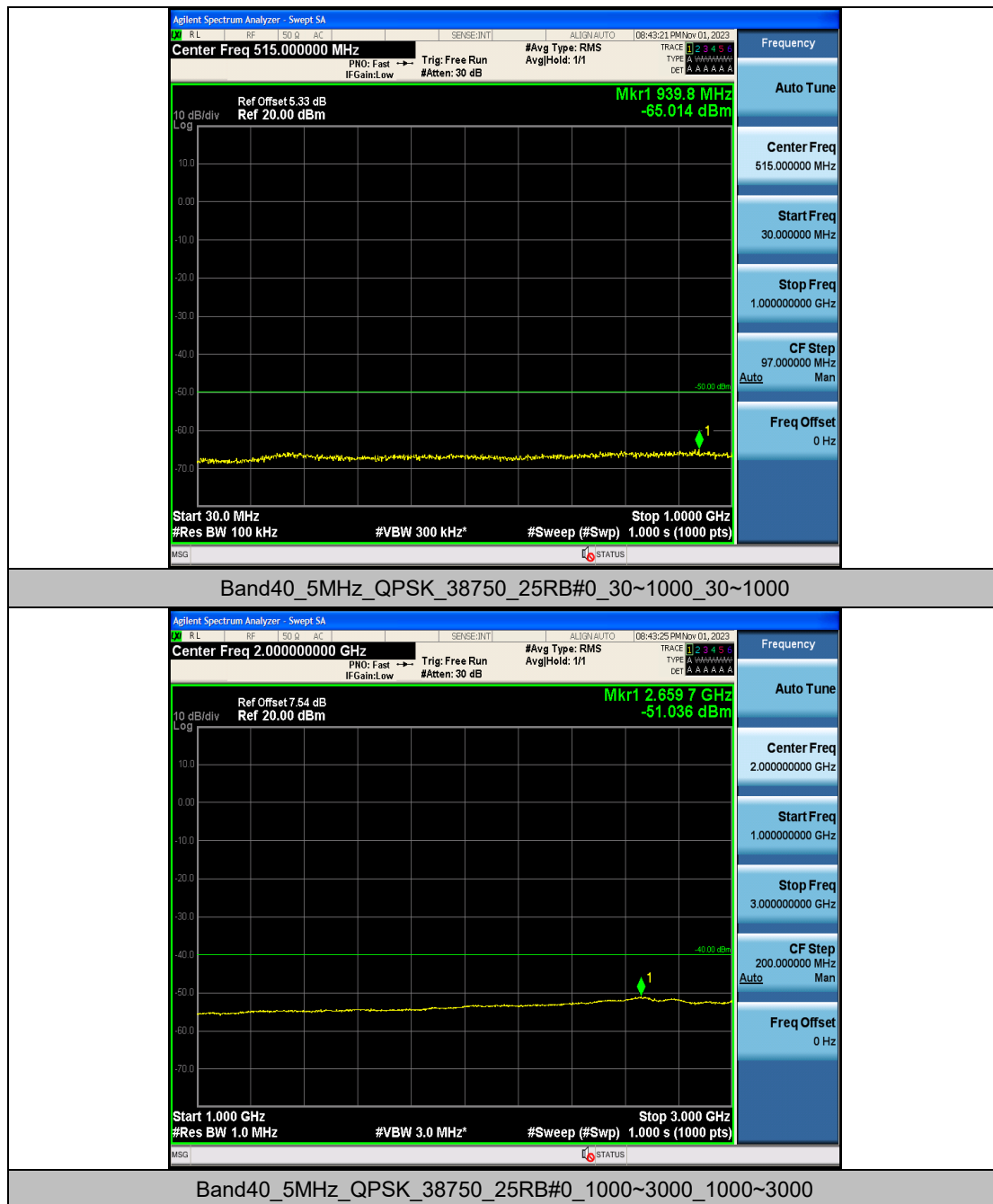
40(2305-2315)	10MHz	16QAM	38750	50RB#0	0.15~30	-69.29	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	30~1000	-65.31	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	1000~3000	-50.94	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	3000~26500	-61.21	PASS

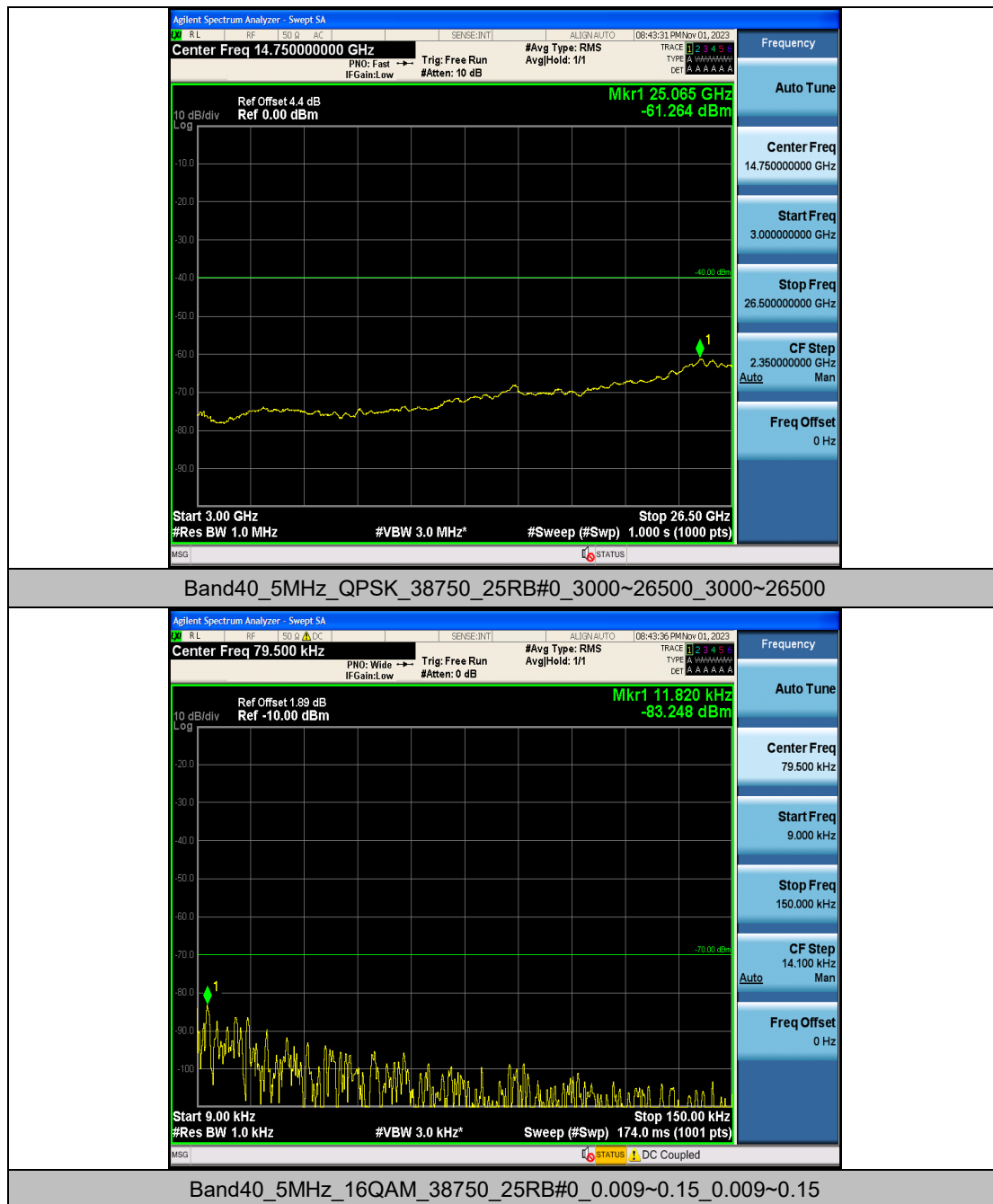
Test Graphs

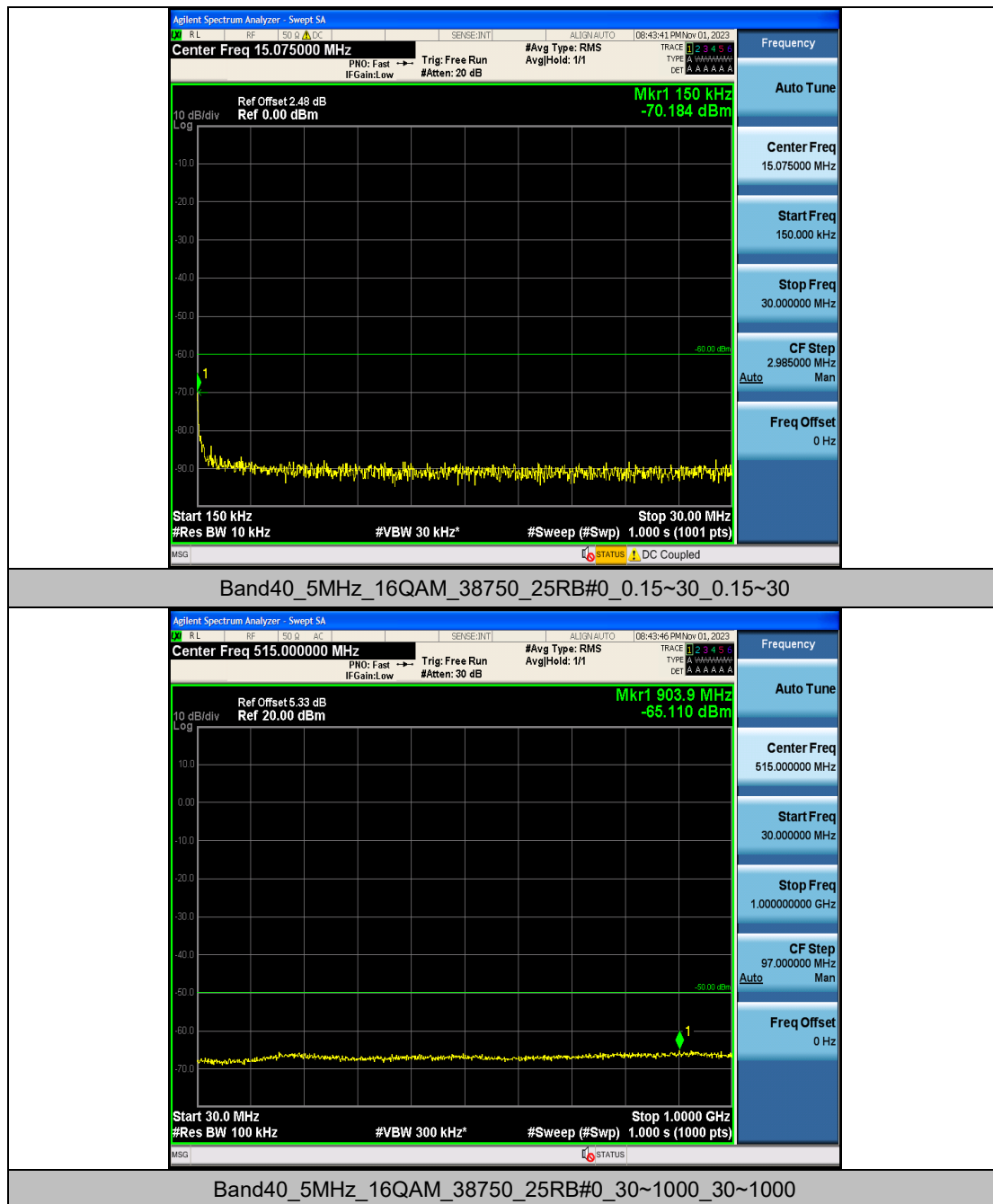


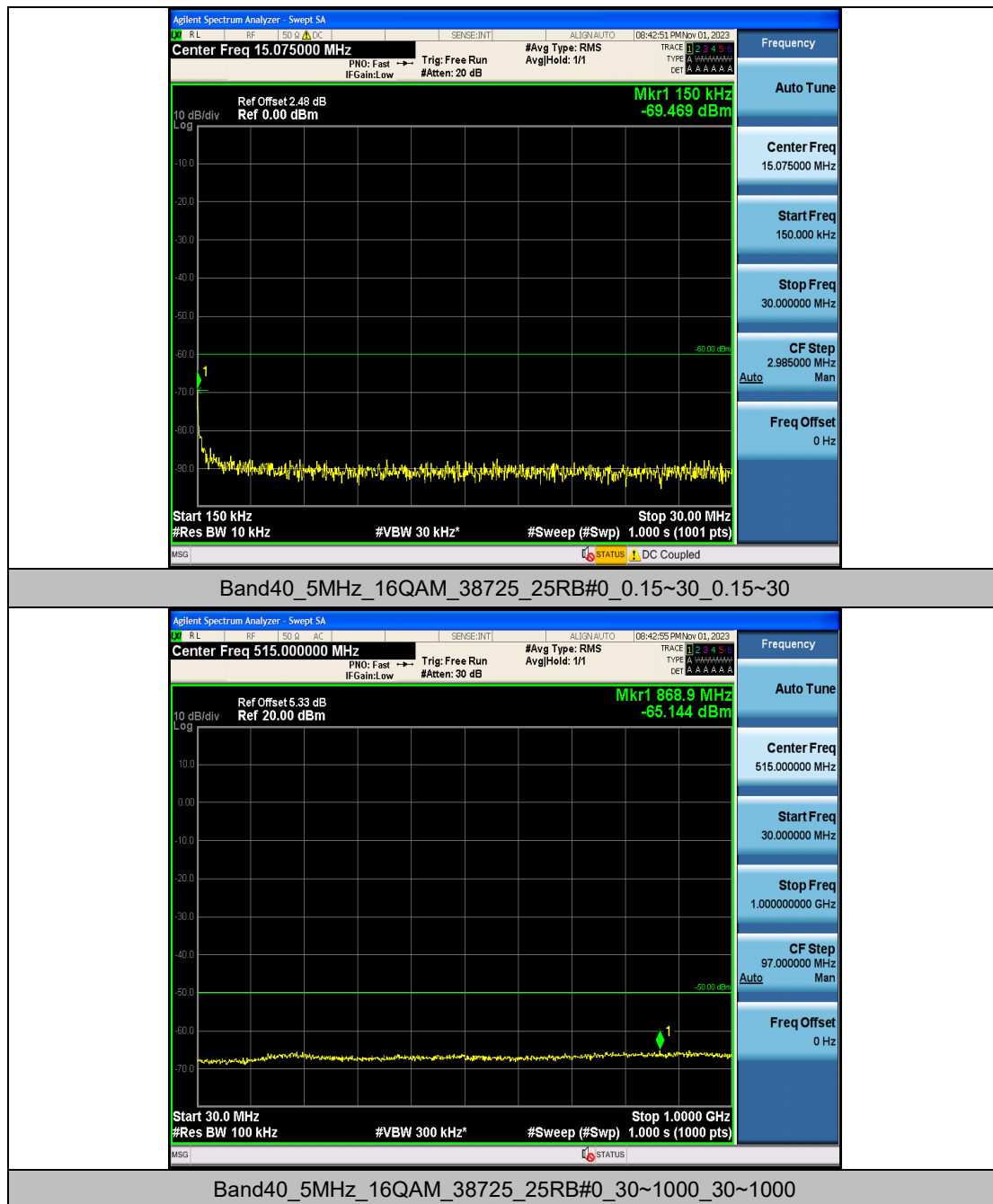


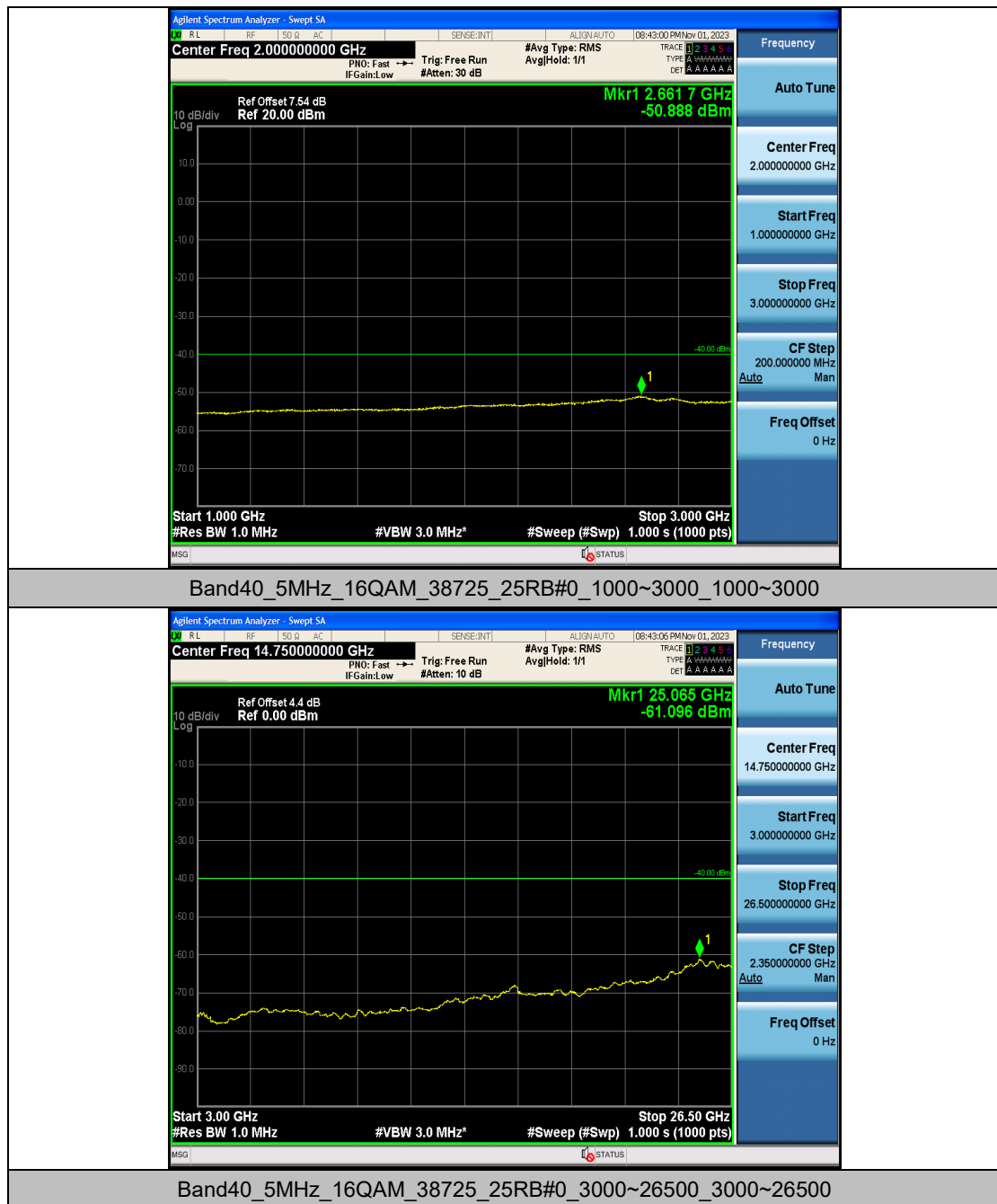


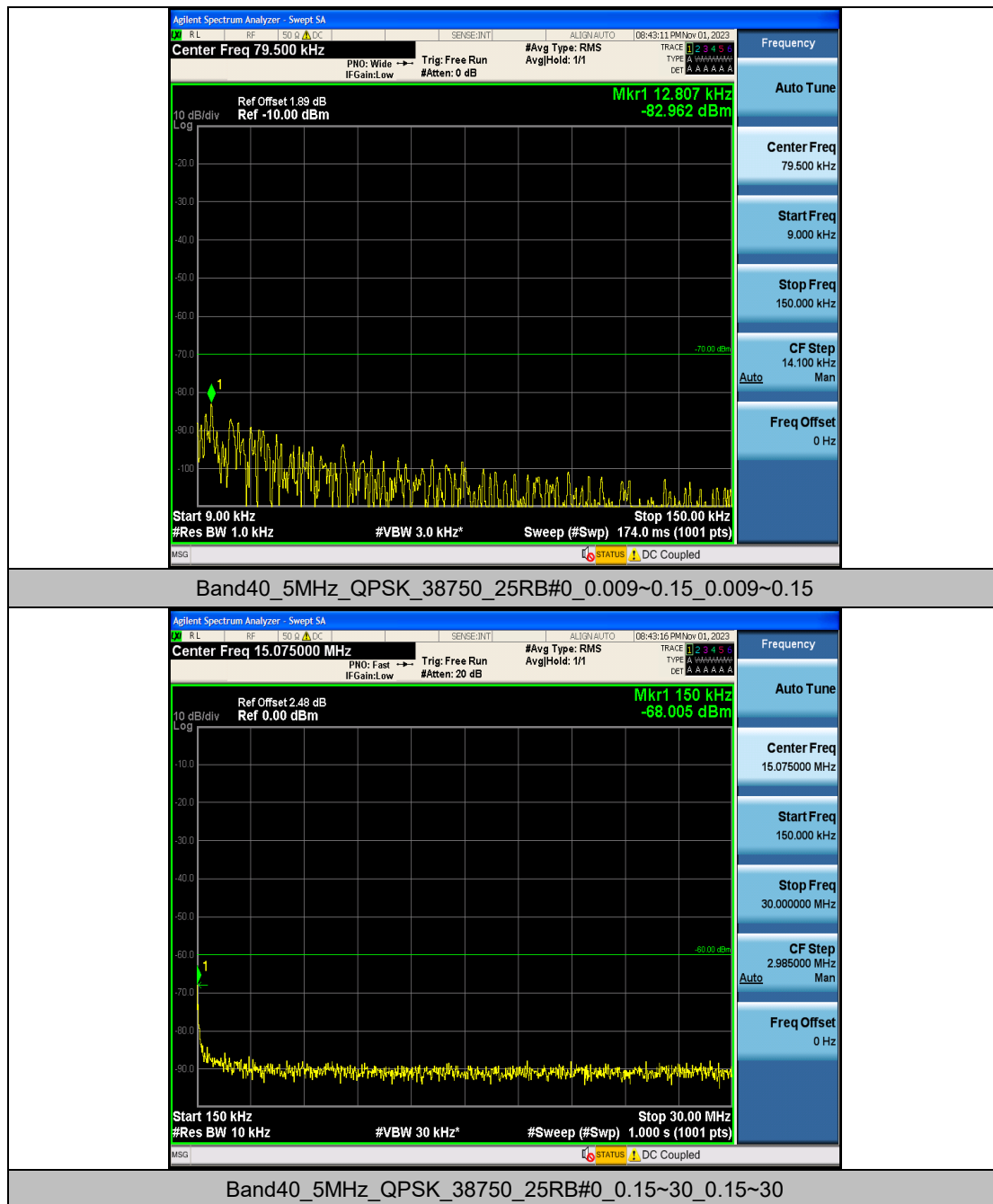


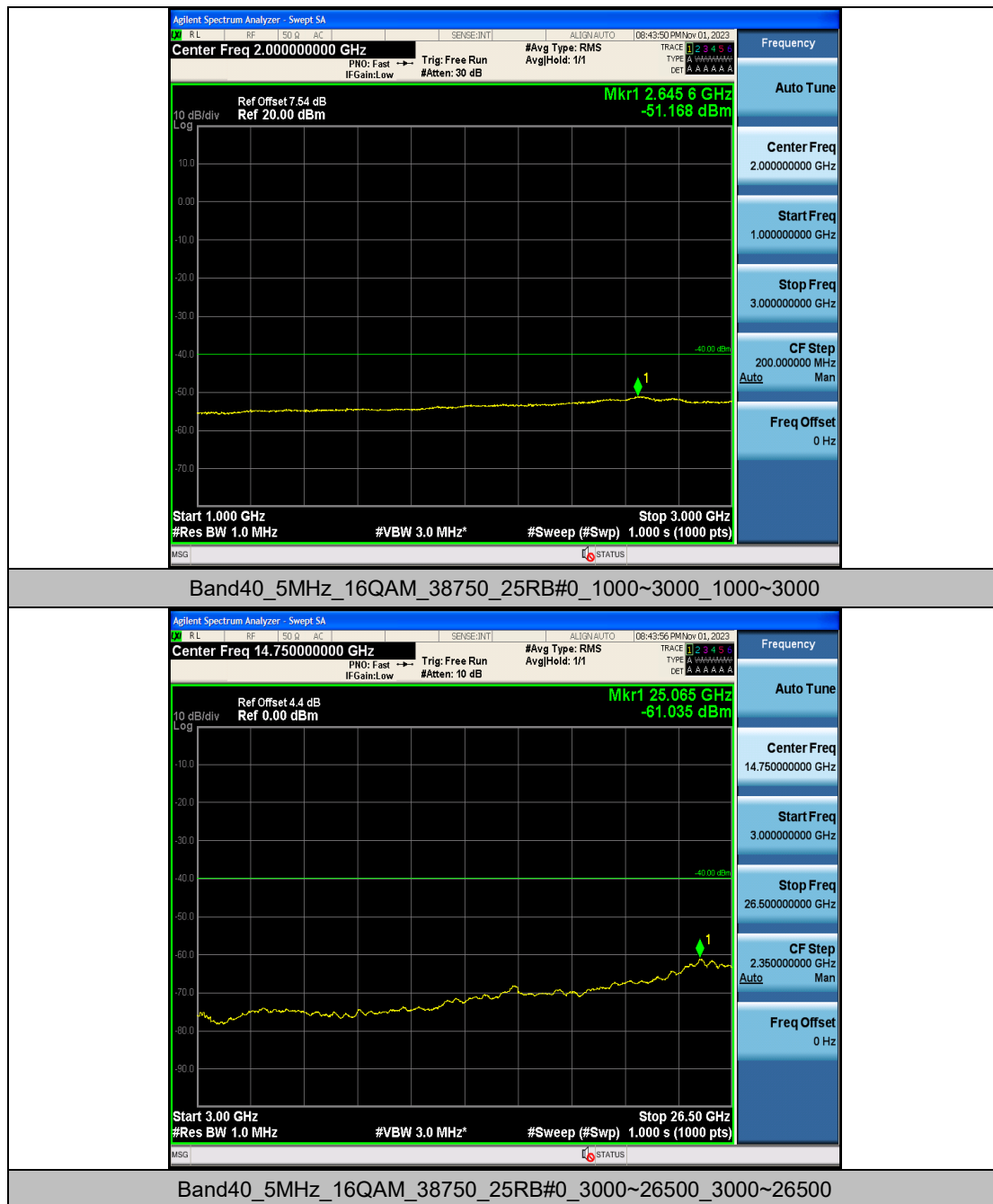


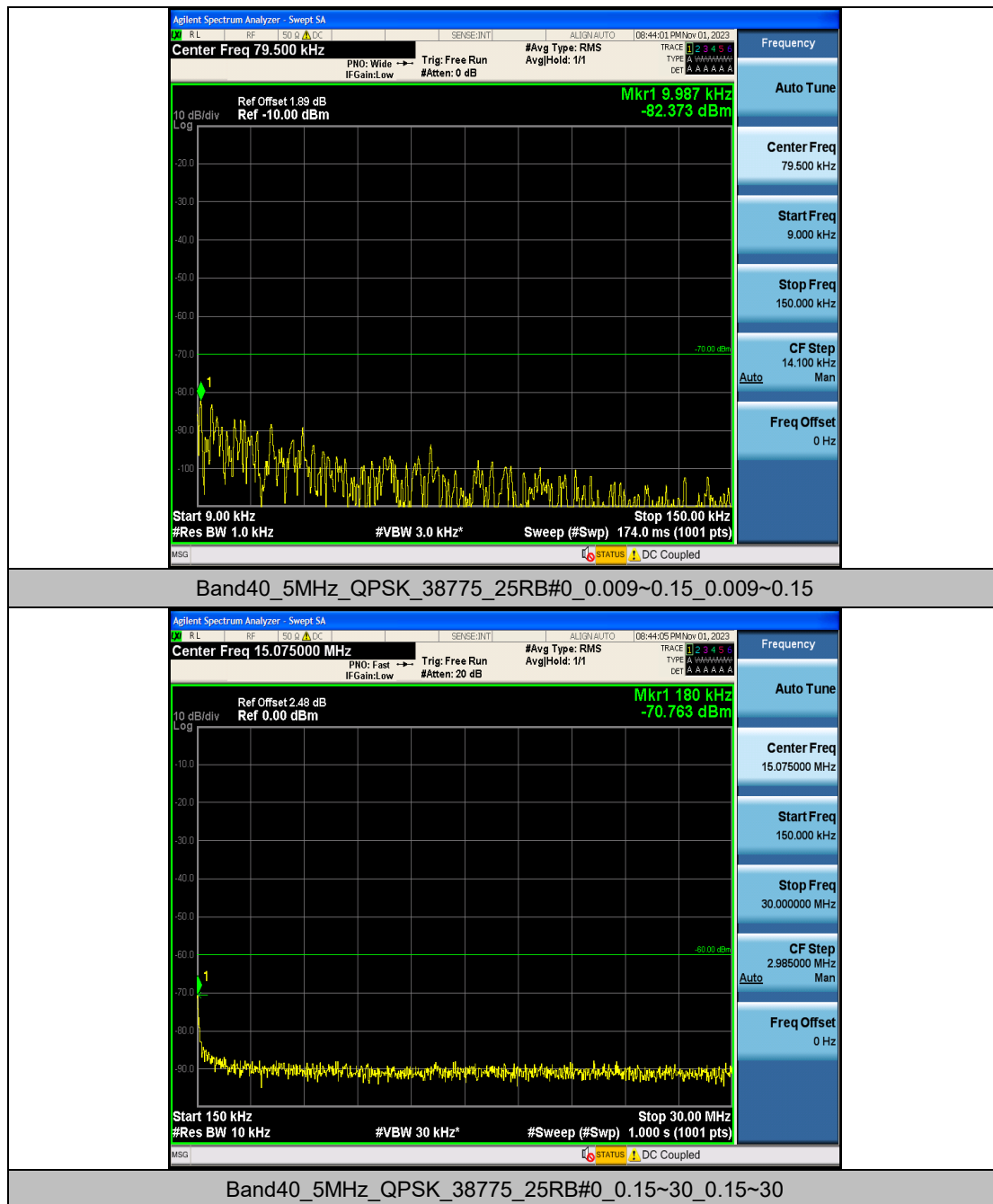


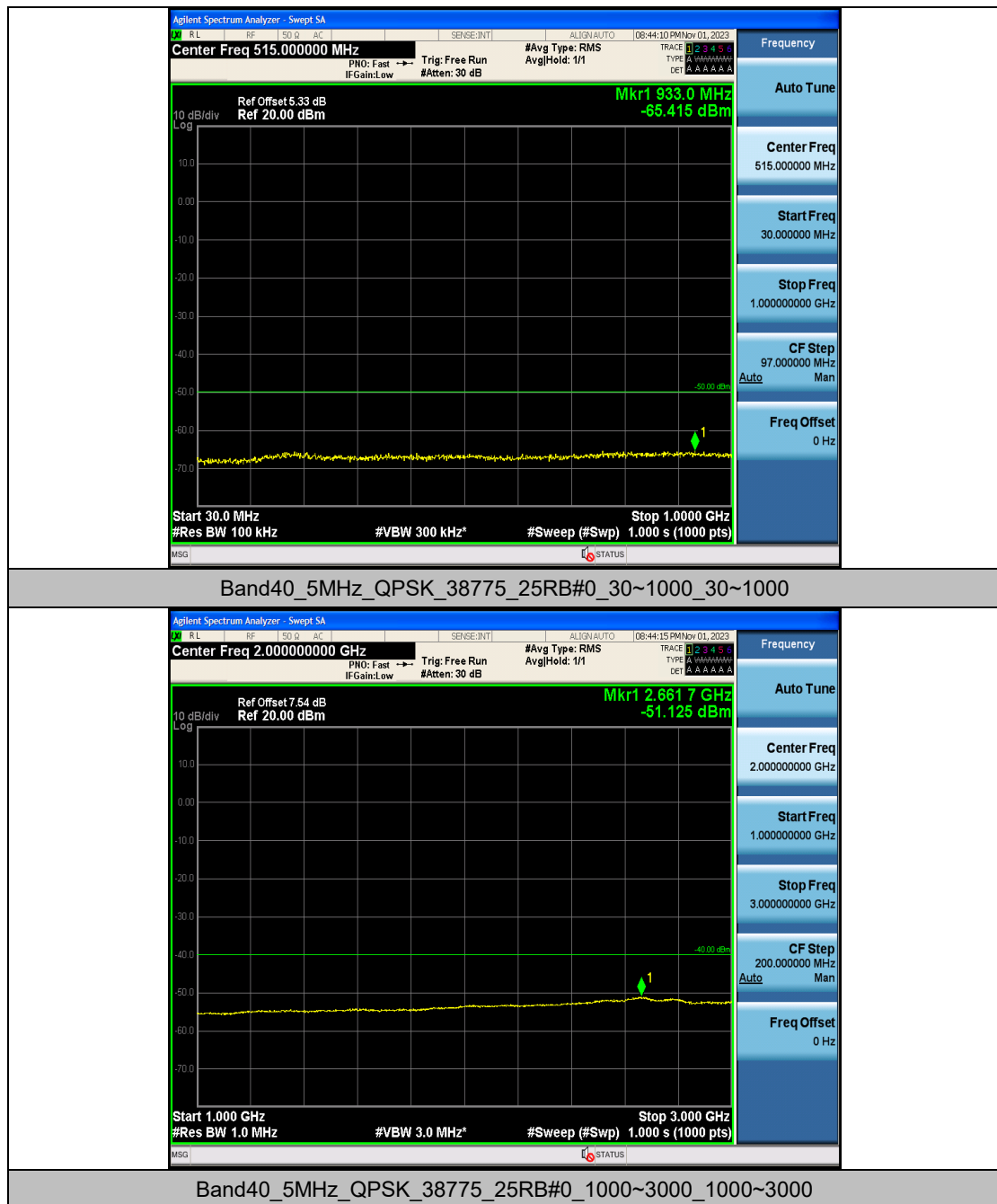


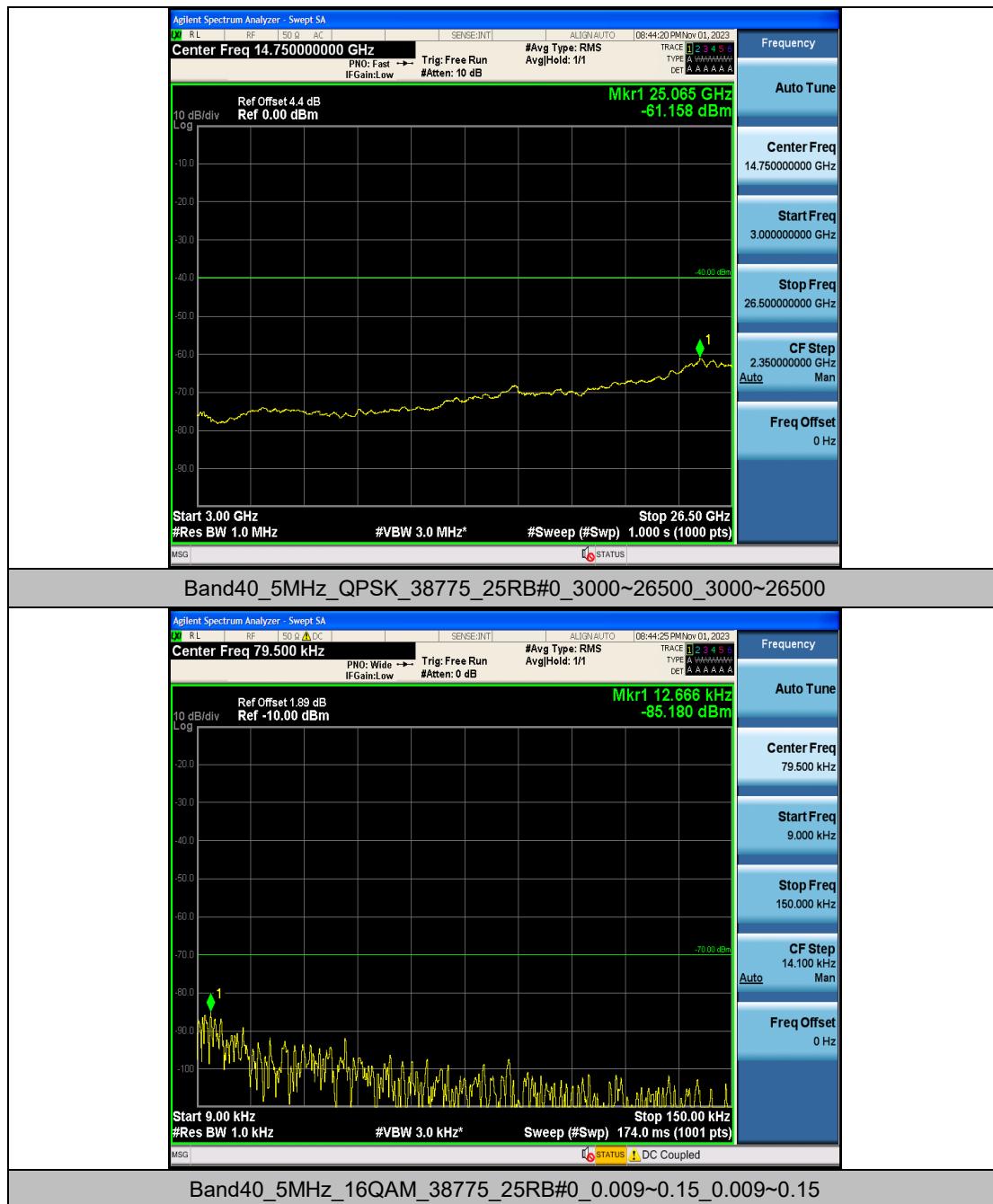


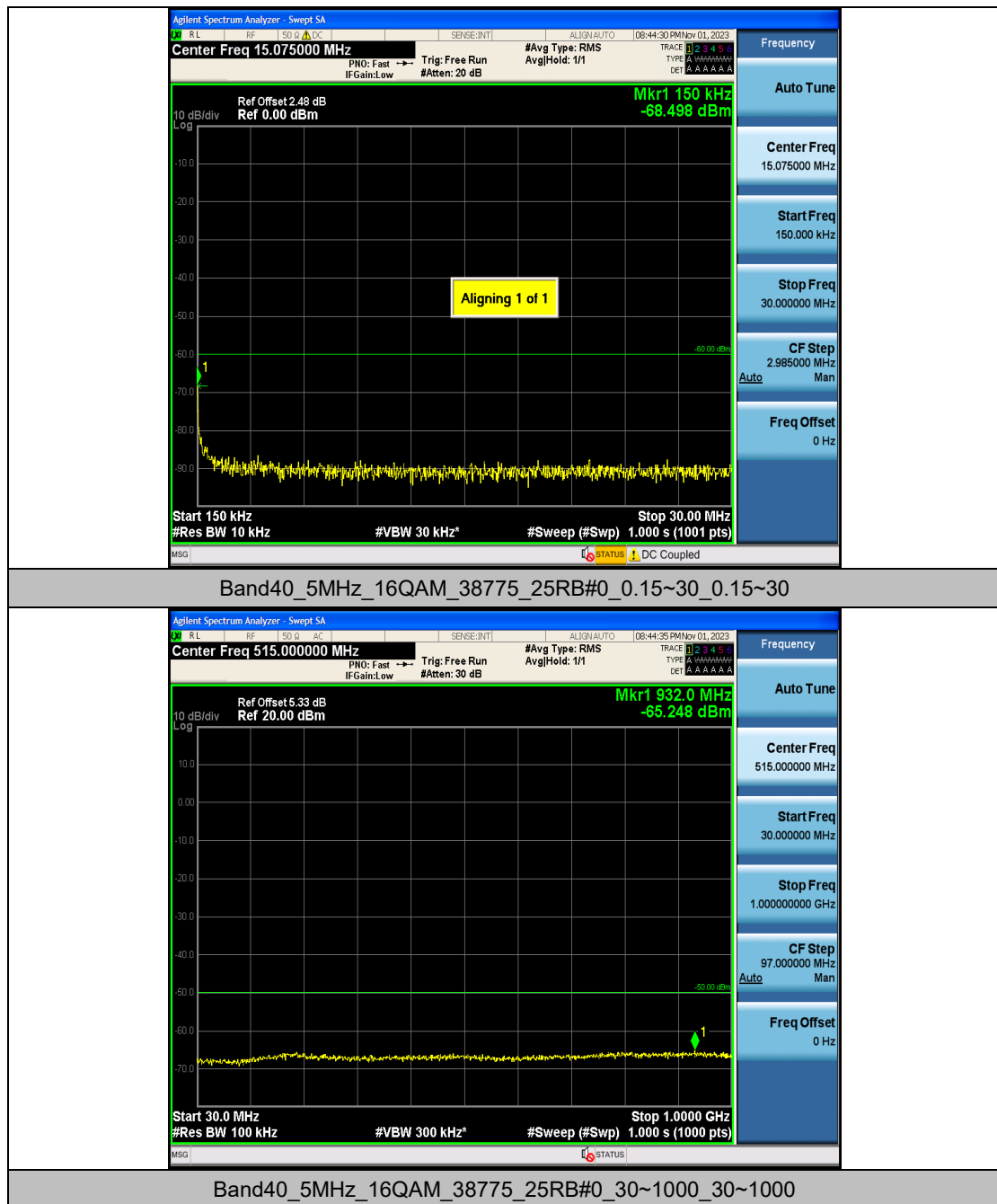


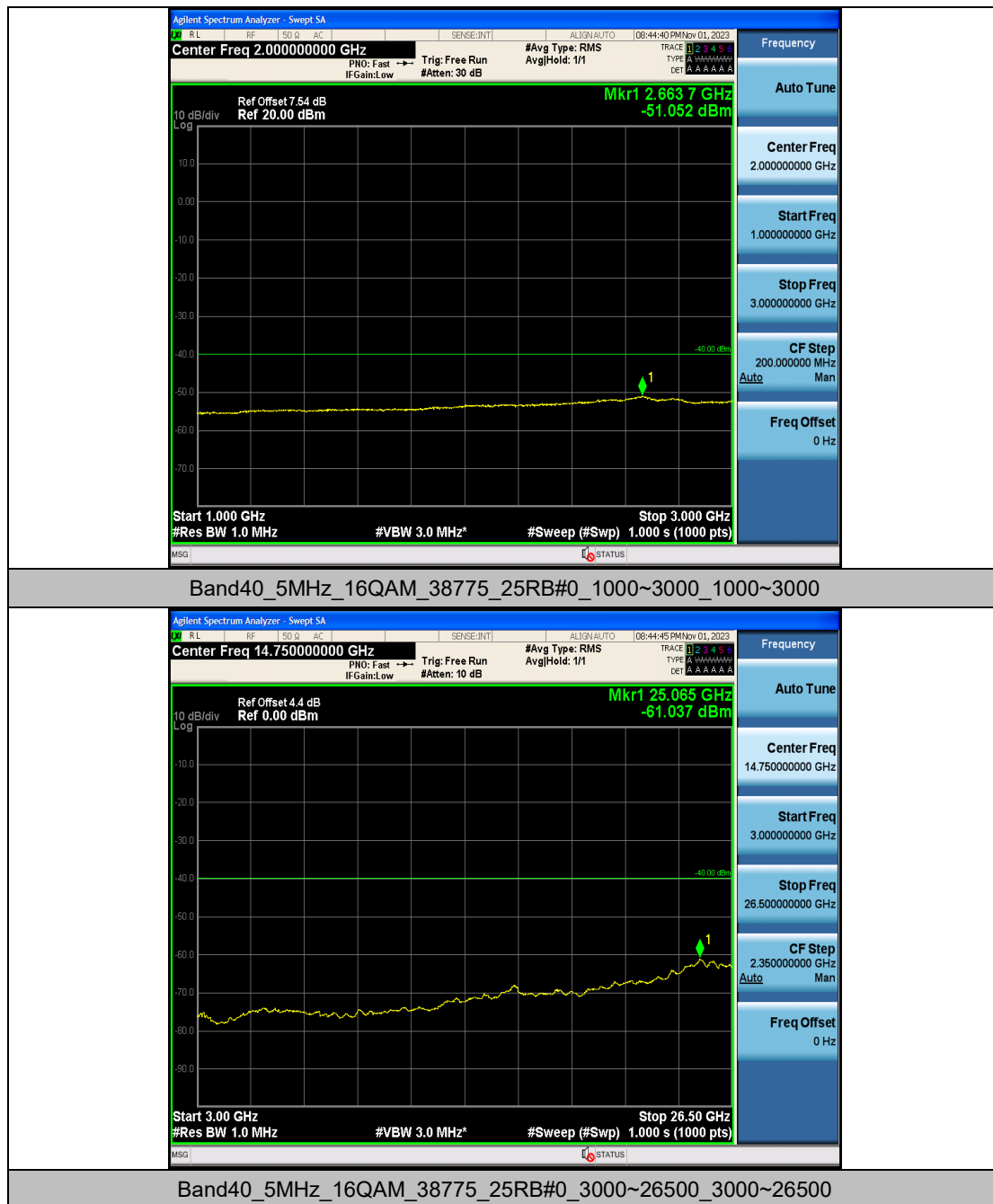


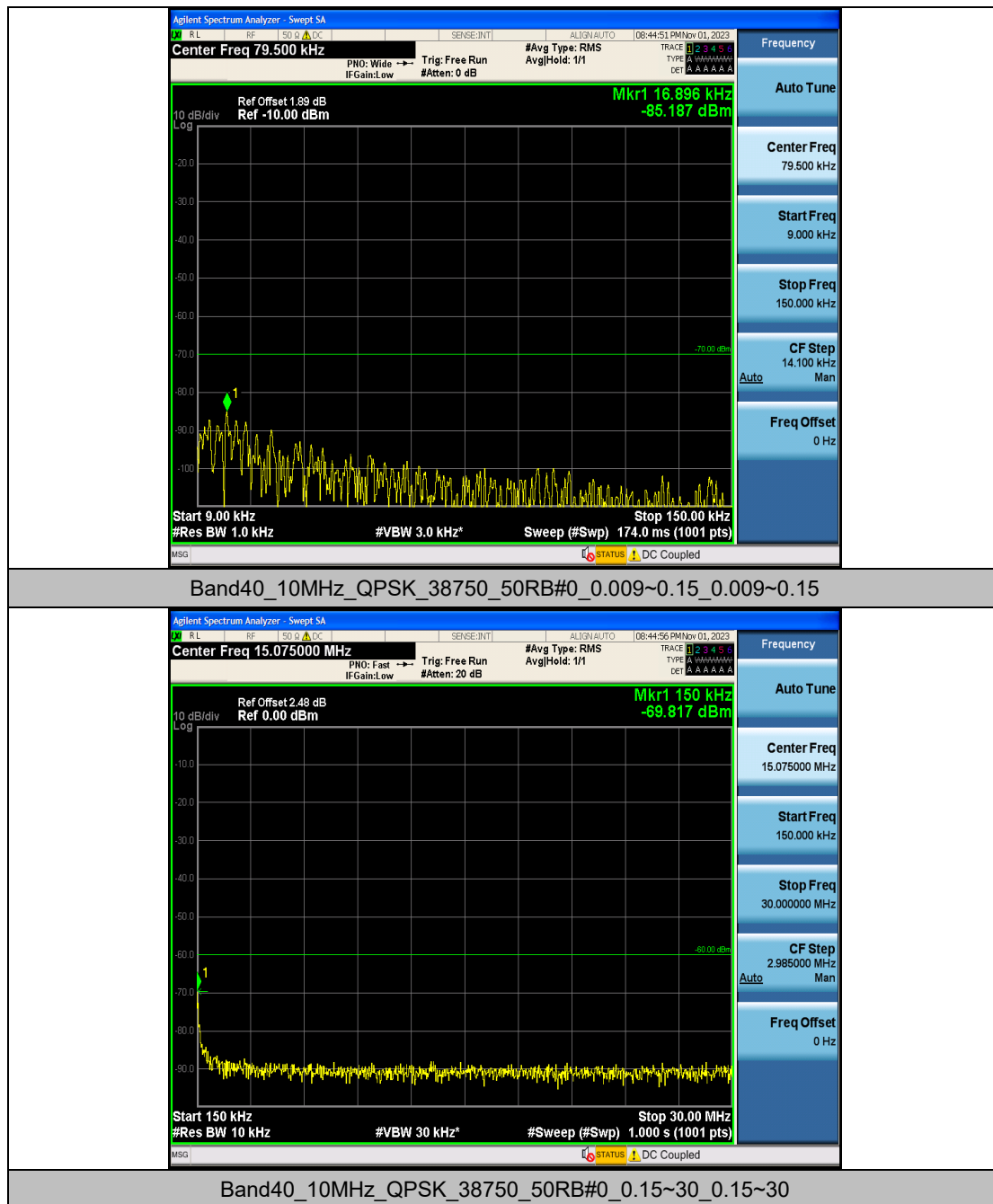


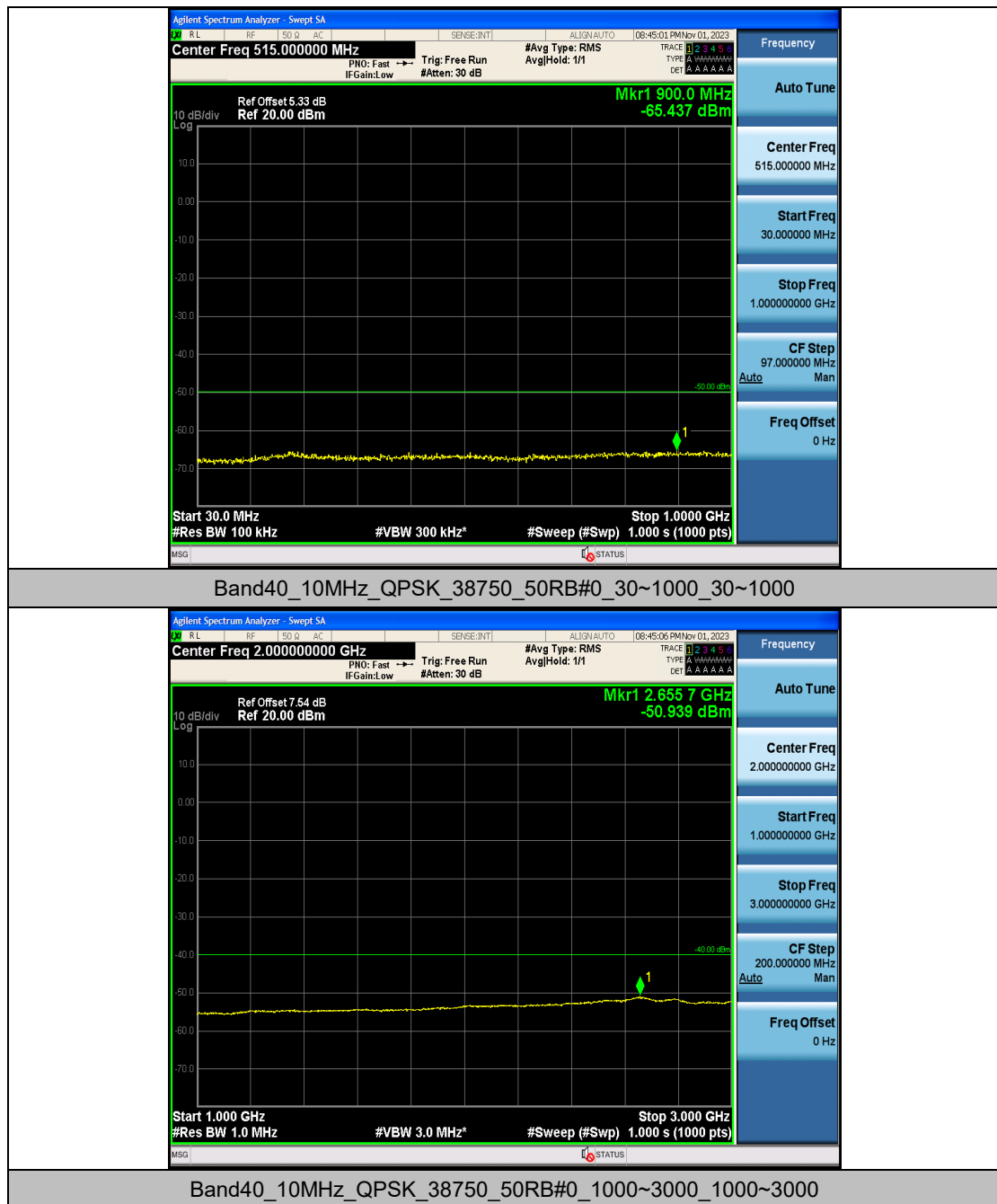


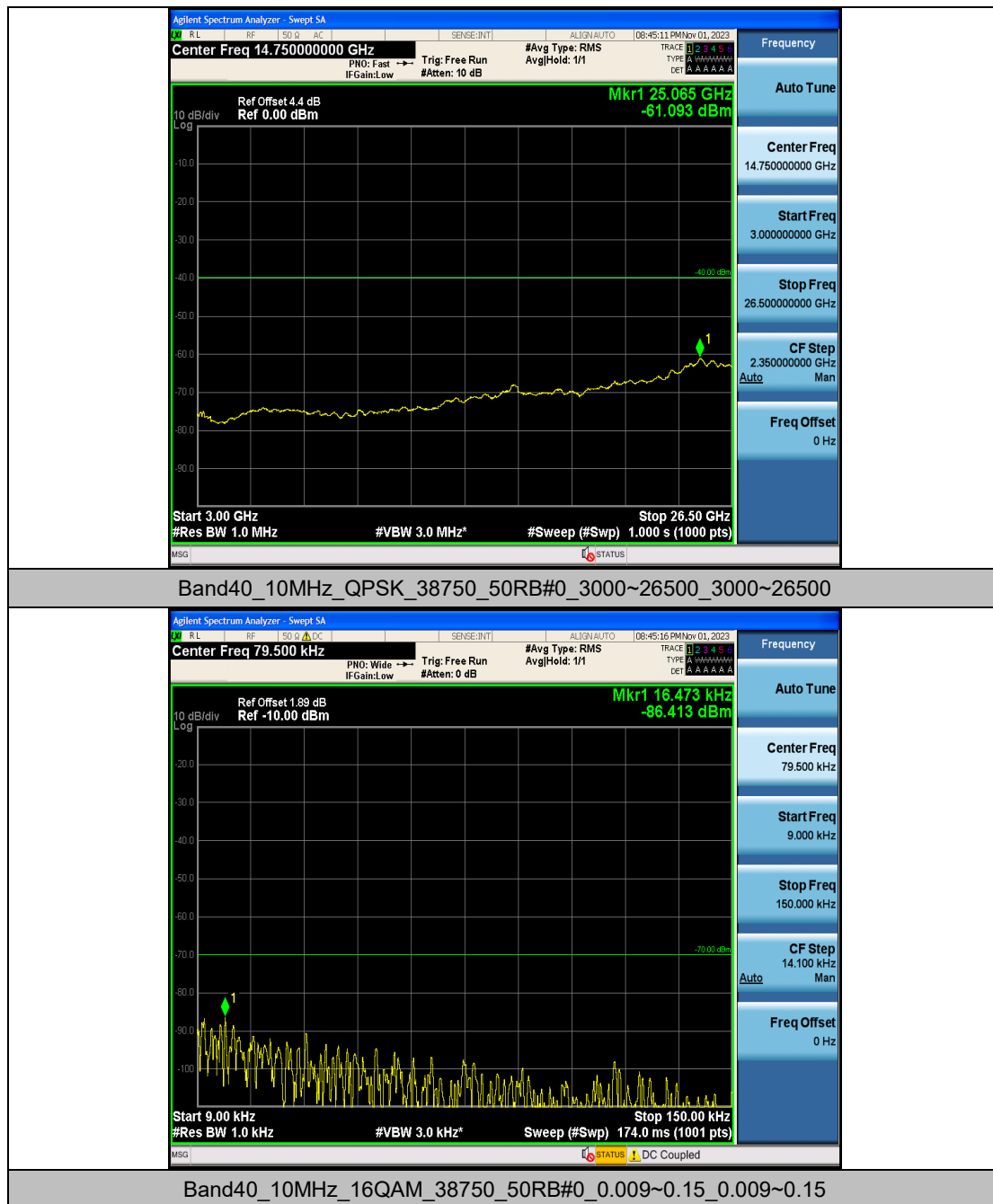


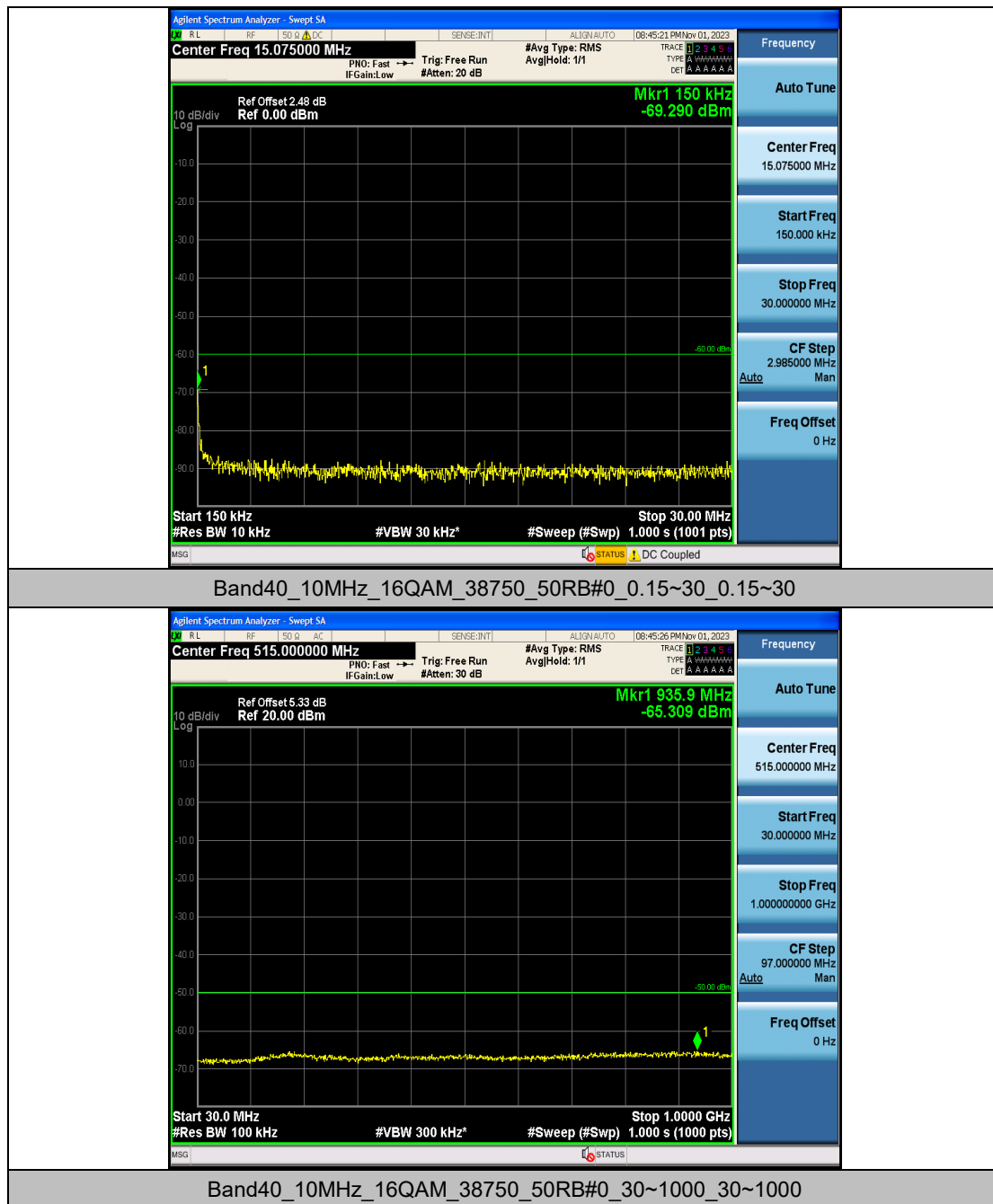


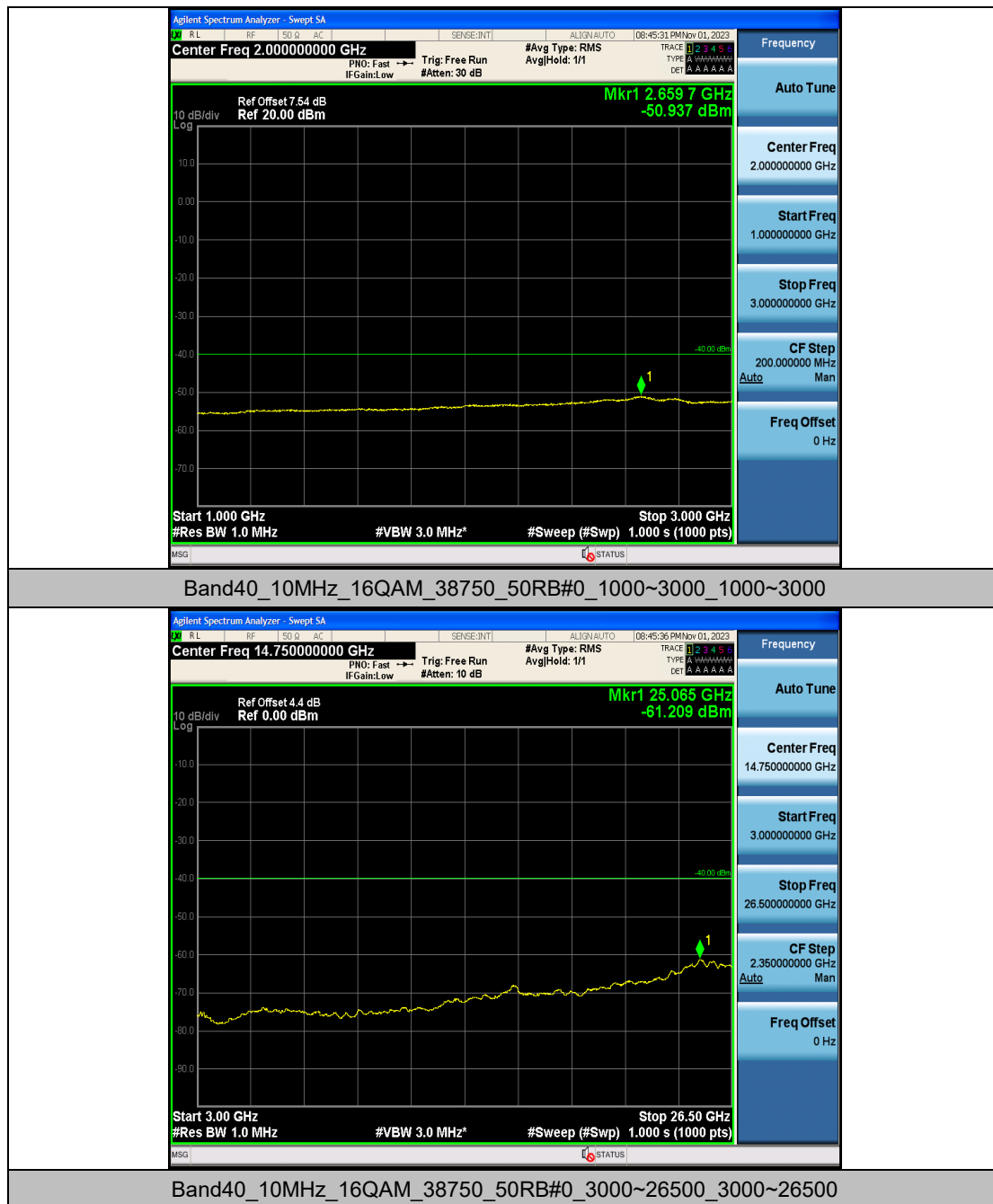












Appendix F: Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
40(2305-2315)	5MHz	QPSK	38725	25RB#0	VN	NT	-6.44	-0.002791	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	VL	NT	-7.52	-0.003259	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	VH	NT	-6.42	-0.002782	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	VN	NT	-7.37	-0.003194	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	VL	NT	-12.46	-0.005400	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	VH	NT	4.84	0.002098	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	VN	NT	-10.03	-0.004342	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	VL	NT	-11.53	-0.004991	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	VH	NT	-10.26	-0.004442	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	VN	NT	-11.27	-0.004879	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	VL	NT	-11.52	-0.004987	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	VH	NT	-12.79	-0.005537	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	VN	NT	-6.72	-0.002906	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	VL	NT	-10.87	-0.004701	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	VH	NT	-9.08	-0.003926	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	VN	NT	-10.77	-0.004657	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	VL	NT	-7.64	-0.003304	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	VH	NT	-7.28	-0.003148	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	VN	NT	-10.61	-0.004593	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	VL	NT	-8.21	-0.003554	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	VH	NT	-10.89	-0.004714	±2.5	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	VN	NT	-12.32	-0.005333	±2.5	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	VL	NT	-11.04	-0.004779	±2.5	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	VH	NT	-14.85	-0.006429	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	-30	6.15	0.002665	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	-20	-9.64	-0.004178	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	-10	5.75	0.002492	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	0	-6.22	-0.002696	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	10	-4.86	-0.002106	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	20	-6.02	-0.002609	±2.5	PASS

40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	30	-5.97	-0.002587	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	40	-5.56	-0.002410	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	50	6.15	0.002665	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	-30	-5.32	-0.002306	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	-20	-8.10	-0.003510	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	-10	-7.68	-0.003328	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	0	-10.91	-0.004728	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	10	-9.90	-0.004290	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	20	-7.27	-0.003151	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	30	-5.91	-0.002561	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	40	3.72	0.001612	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	50	-6.74	-0.002921	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	-30	-15.86	-0.006866	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	-20	-11.00	-0.004762	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	-10	-10.40	-0.004502	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	0	-14.16	-0.006130	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	10	-12.79	-0.005537	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	20	-8.90	-0.003853	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	30	-10.84	-0.004693	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	40	-10.80	-0.004675	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	50	-13.09	-0.005667	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	-30	-15.11	-0.006541	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	-20	-10.10	-0.004372	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	-10	-16.47	-0.007130	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	0	-11.23	-0.004861	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	10	-11.90	-0.005152	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	20	-11.23	-0.004861	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	30	-15.62	-0.006762	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	40	-11.92	-0.005160	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	50	-11.16	-0.004831	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	-30	-5.31	-0.002296	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	-20	-10.13	-0.004381	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	-10	-10.70	-0.004627	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	0	-11.12	-0.004809	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	10	-11.24	-0.004861	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	20	-5.68	-0.002456	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	30	-6.65	-0.002876	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	40	-11.36	-0.004912	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	50	-7.10	-0.003070	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	-30	-6.21	-0.002685	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	-20	-3.08	-0.001332	±2.5	PASS

40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	-10	-7.94	-0.003434	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	0	-10.43	-0.004510	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	10	-4.66	-0.002015	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	20	-8.83	-0.003818	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	30	-6.49	-0.002806	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	40	-9.33	-0.004035	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	50	-9.86	-0.004264	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	-30	-12.13	-0.005251	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	-20	-12.77	-0.005528	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	-10	-11.49	-0.004974	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	0	-10.79	-0.004671	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	10	-16.15	-0.006991	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	20	-11.66	-0.005048	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	30	-16.39	-0.007095	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	40	-11.96	-0.005177	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	50	-11.40	-0.004935	±2.5	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	NV	-30	-11.46	-0.004961	±2.5	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	NV	-20	-12.89	-0.005580	±2.5	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	NV	-10	-9.21	-0.003987	±2.5	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	NV	0	-11.59	-0.005017	±2.5	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	NV	10	-8.91	-0.003857	±2.5	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	NV	20	-13.02	-0.005636	±2.5	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	NV	30	-11.87	-0.005139	±2.5	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	NV	40	-12.15	-0.005260	±2.5	PASS
40(2305-2315)	10MHz	16QAM	38750	50RB#0	NV	50	-11.50	-0.004978	±2.5	PASS