

LTE BAND 30

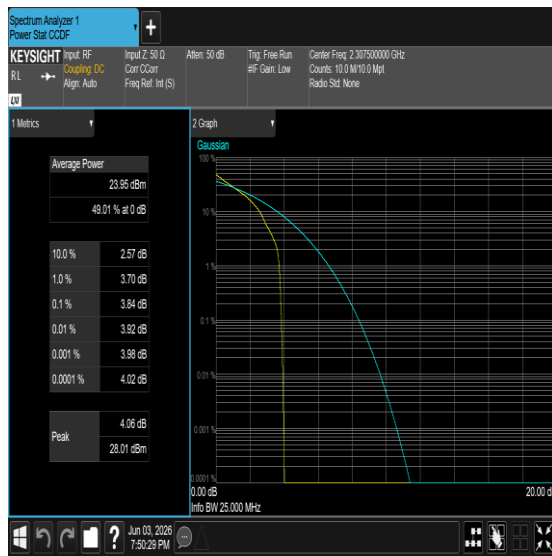
Peak-to-Average Ratio(CCDF)

Test Result

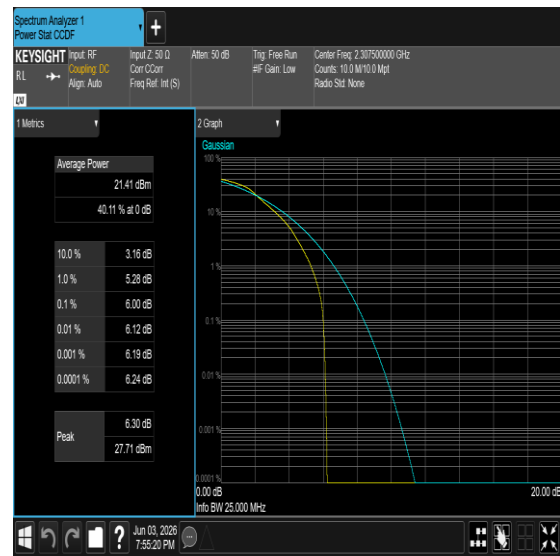
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band30	5MHz	QPSK	27685	1RB#0	3.84	13	PASS
Band30	5MHz	QPSK	27685	25RB#0	6.00	13	PASS
Band30	5MHz	QPSK	27710	1RB#0	4.92	13	PASS
Band30	5MHz	QPSK	27710	25RB#0	5.85	13	PASS
Band30	5MHz	QPSK	27735	1RB#0	4.24	13	PASS
Band30	5MHz	QPSK	27735	25RB#0	6.24	13	PASS
Band30	5MHz	64QAM	27685	1RB#0	3.71	13	PASS
Band30	5MHz	64QAM	27685	25RB#0	6.16	13	PASS
Band30	5MHz	64QAM	27710	1RB#0	5.62	13	PASS
Band30	5MHz	64QAM	27710	25RB#0	6.32	13	PASS
Band30	5MHz	64QAM	27735	1RB#0	5.76	13	PASS
Band30	5MHz	64QAM	27735	25RB#0	6.31	13	PASS
Band30	5MHz	16QAM	27685	1RB#0	4.62	13	PASS
Band30	5MHz	16QAM	27685	25RB#0	6.56	13	PASS
Band30	5MHz	16QAM	27710	1RB#0	6.02	13	PASS
Band30	5MHz	16QAM	27710	25RB#0	6.36	13	PASS
Band30	5MHz	16QAM	27735	1RB#0	5.84	13	PASS
Band30	5MHz	16QAM	27735	25RB#0	6.87	13	PASS
Band30	10MHz	QPSK	27710	1RB#0	3.62	13	PASS
Band30	10MHz	QPSK	27710	50RB#0	4.63	13	PASS
Band30	10MHz	64QAM	27710	1RB#0	5.29	13	PASS
Band30	10MHz	64QAM	27710	50RB#0	6.05	13	PASS
Band30	10MHz	16QAM	27710	1RB#0	4.41	13	PASS
Band30	10MHz	16QAM	27710	50RB#0	5.78	13	PASS

Test Graphs

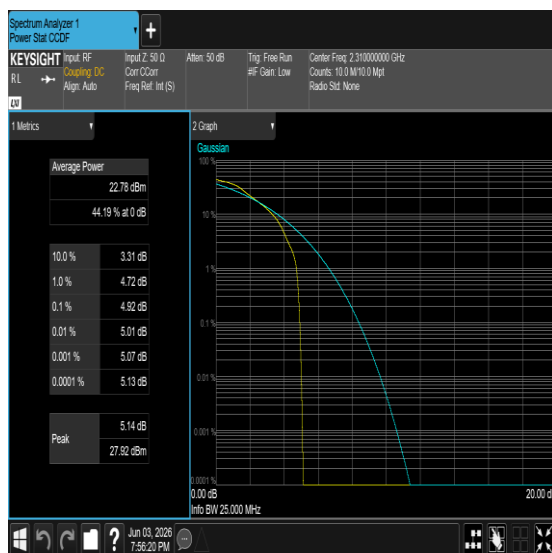
Band30-5MHz-QPSK-27685-1RB#0-PASS



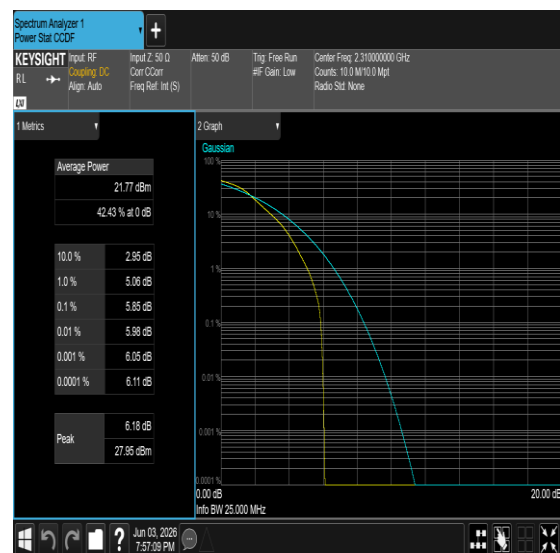
Band30-5MHz-QPSK-27685-25RB#0-PASS



Band30-5MHz-QPSK-27710-1RB#0-PASS



Band30-5MHz-QPSK-27710-25RB#0-PASS

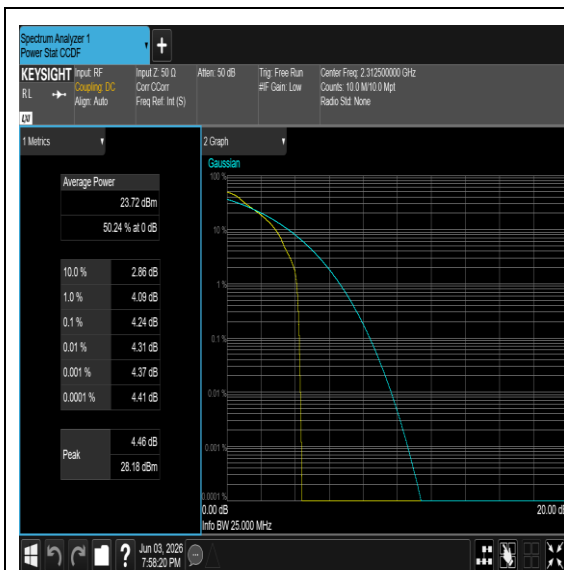


Band30-5MHz-QPSK-27735-1RB#0-PASS



Band30-5MHz-QPSK-27735-25RB#0-PASS

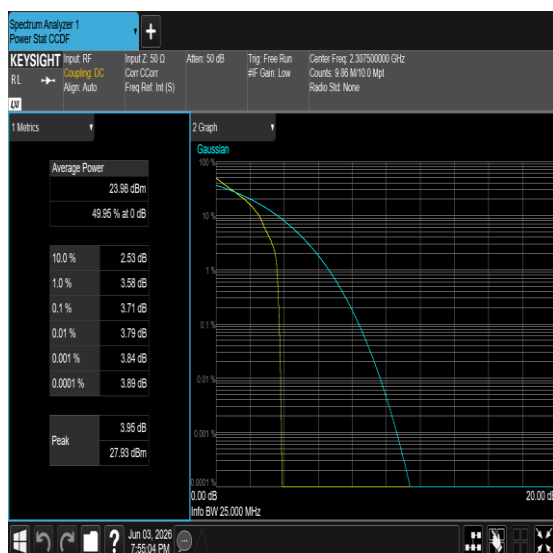




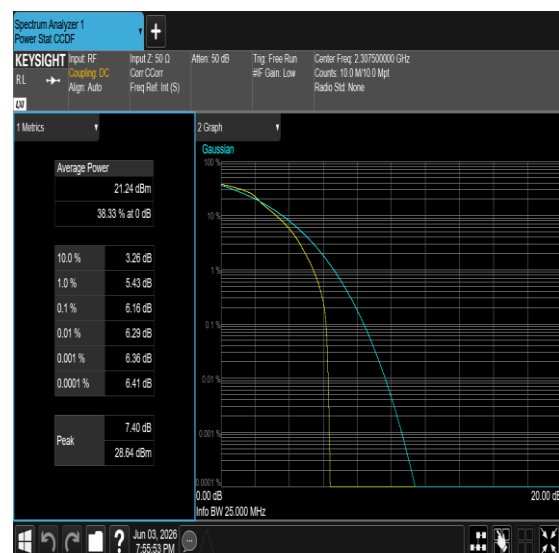
Band30-5MHz-64QAM-27685-1RB#0-PASS



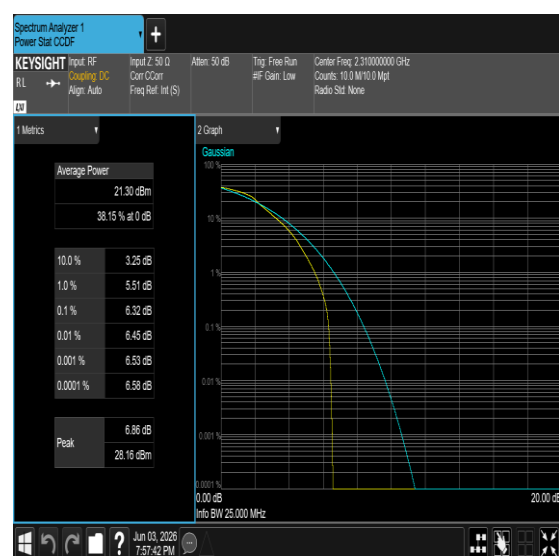
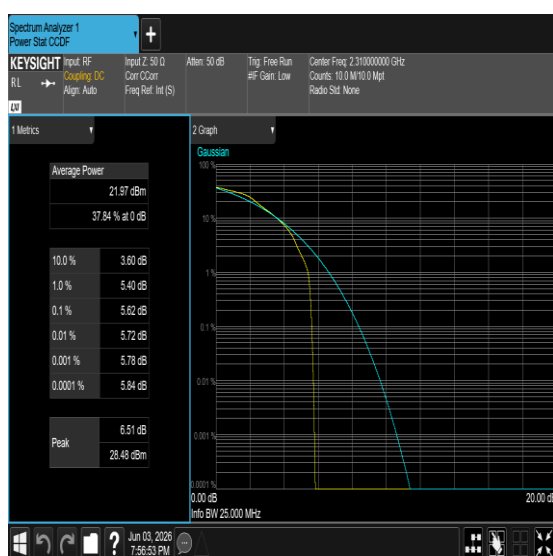
Band30-5MHz-64QAM-27685-25RB#0-PASS



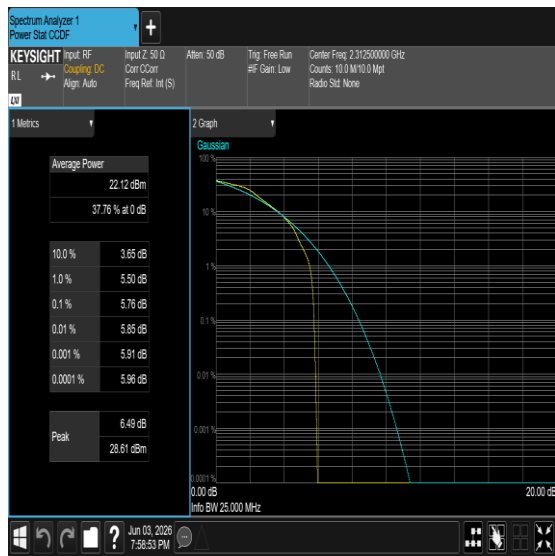
Band30-5MHz-64QAM-27710-1RB#0-PASS



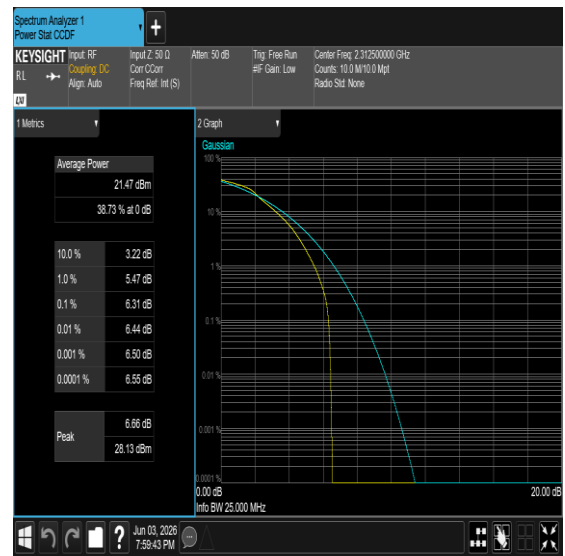
Band30-5MHz-64QAM-27710-25RB#0-PASS



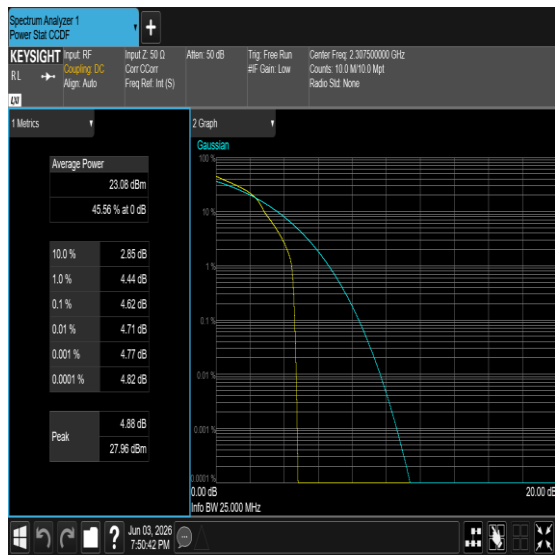
Band30-5MHz-64QAM-27735-1RB#0-PASS



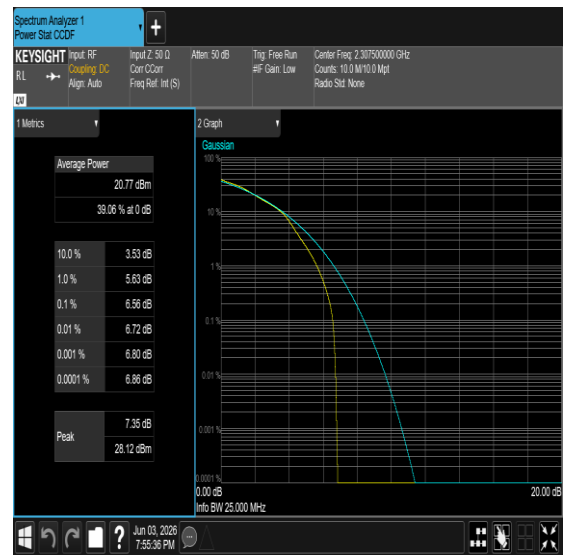
Band30-5MHz-64QAM-27735-25RB#0-PASS



Band30-5MHz-16QAM-27685-1RB#0-PASS

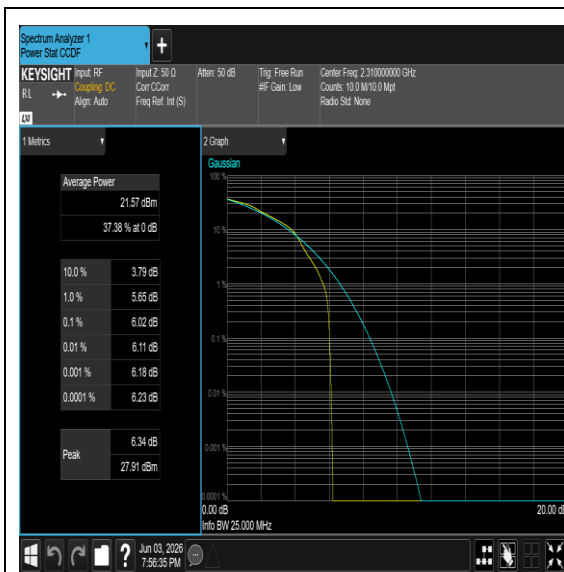


Band30-5MHz-16QAM-27685-25RB#0-PASS

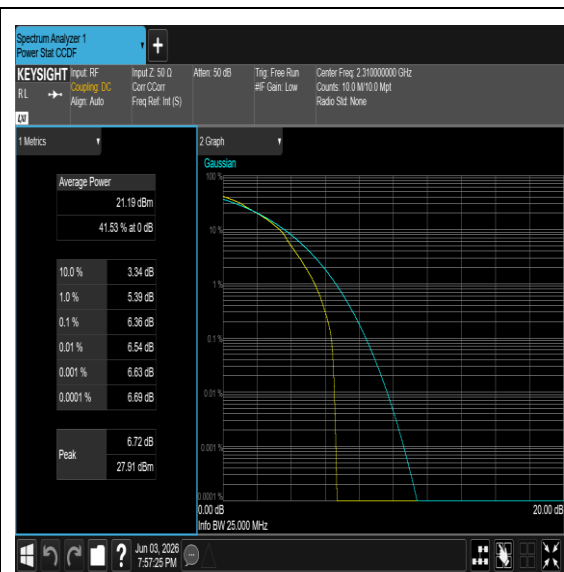


Band30-5MHz-16QAM-27710-1RB#0-PASS

Band30-5MHz-16QAM-27710-25RB#0-PASS



Band30-5MHz-16QAM-27735-1RB#0-PASS



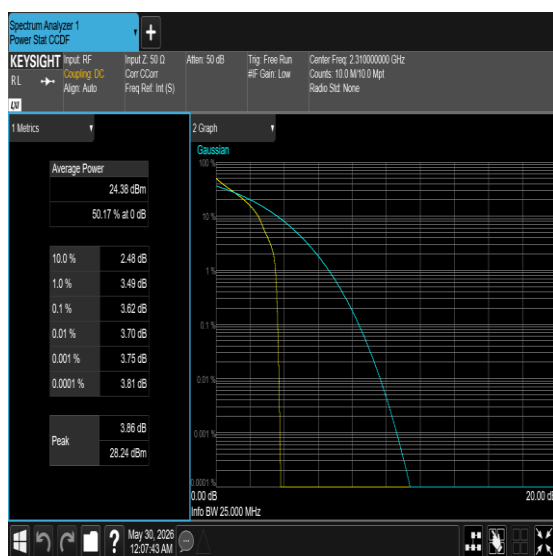
Band30-5MHz-16QAM-27735-25RB#0-PASS



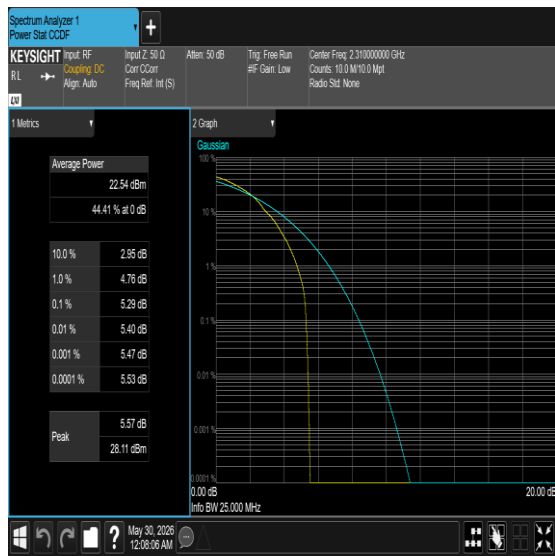
Band30-10MHz-QPSK-27710-1RB#0-PASS



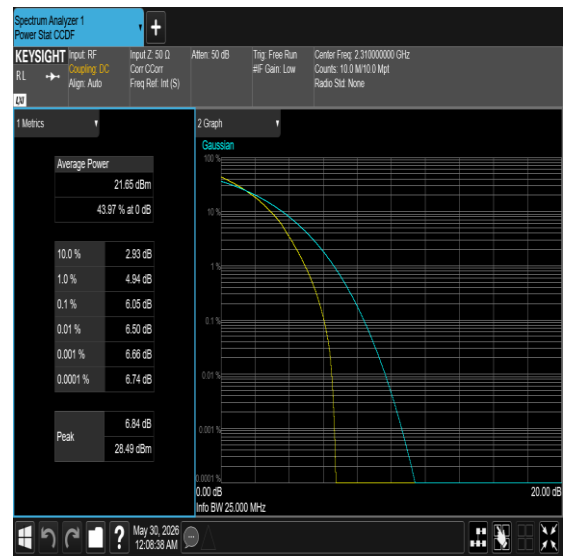
Band30-10MHz-QPSK-27710-50RB#0-PASS



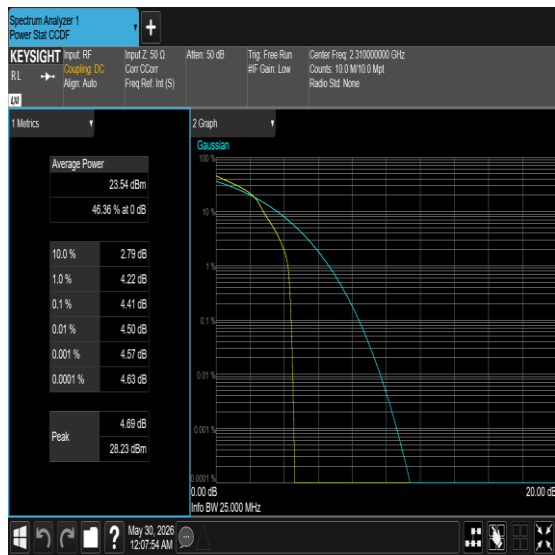
Band30-10MHz-64QAM-27710-1RB#0-PASS



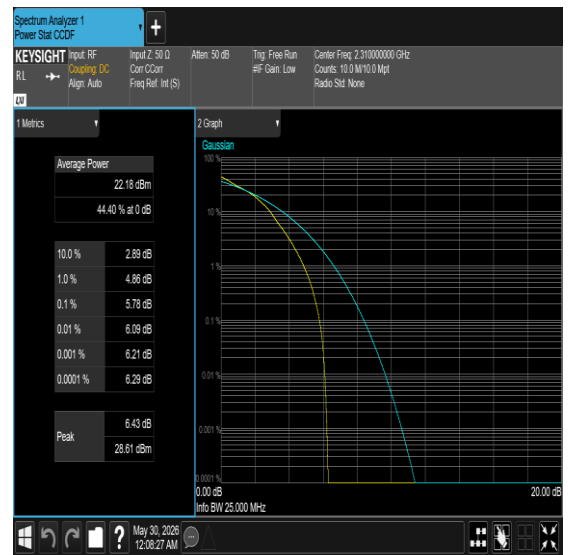
Band30-10MHz-64QAM-27710-50RB#0-PASS



Band30-10MHz-16QAM-27710-1RB#0-PASS



Band30-10MHz-16QAM-27710-50RB#0-PASS

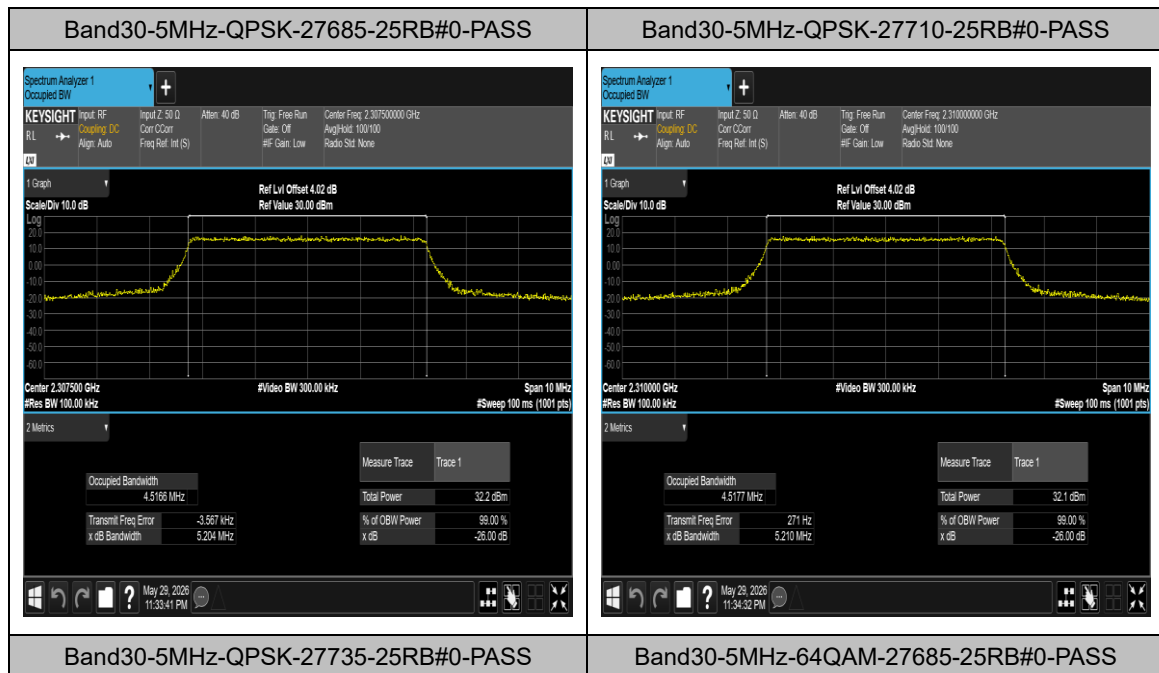


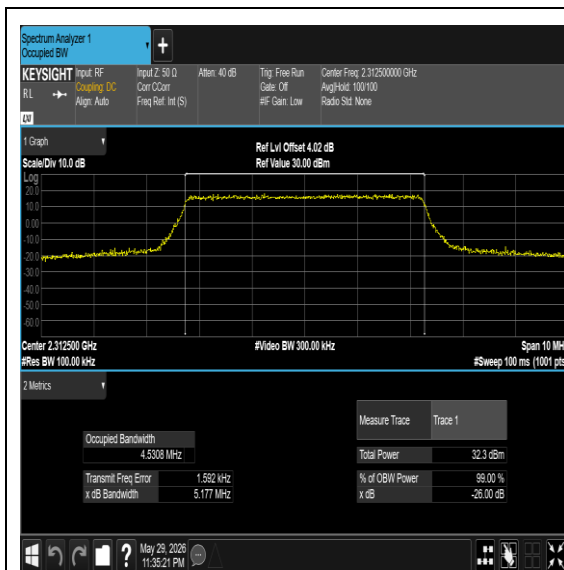
26dB Bandwidth and Occupied Bandwidth

Test Result

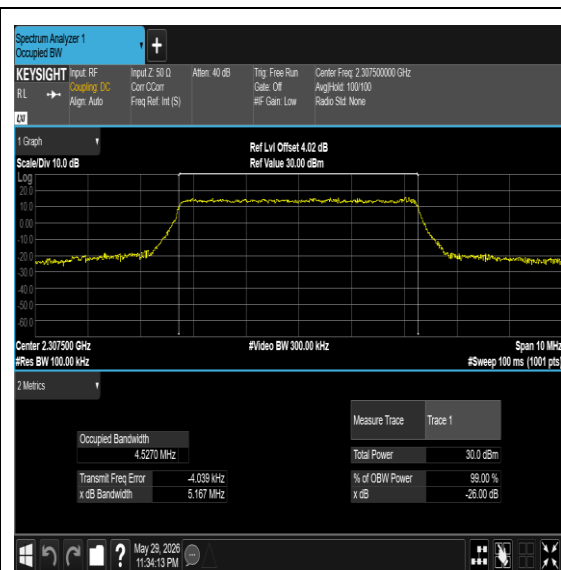
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band30	5MHz	QPSK	27685	25RB#0	4.5166	5.204	PASS
Band30	5MHz	QPSK	27710	25RB#0	4.5177	5.210	PASS
Band30	5MHz	QPSK	27735	25RB#0	4.5308	5.177	PASS
Band30	5MHz	64QAM	27685	25RB#0	4.5270	5.167	PASS
Band30	5MHz	64QAM	27710	25RB#0	4.5241	5.260	PASS
Band30	5MHz	64QAM	27735	25RB#0	4.5409	5.267	PASS
Band30	5MHz	16QAM	27685	25RB#0	4.5293	5.228	PASS
Band30	5MHz	16QAM	27710	25RB#0	4.5265	5.211	PASS
Band30	5MHz	16QAM	27735	25RB#0	4.5147	5.262	PASS
Band30	10MHz	QPSK	27710	50RB#0	9.0001	10.07	PASS
Band30	10MHz	64QAM	27710	50RB#0	9.0051	9.940	PASS
Band30	10MHz	16QAM	27710	50RB#0	9.0322	10.10	PASS

Test Graphs

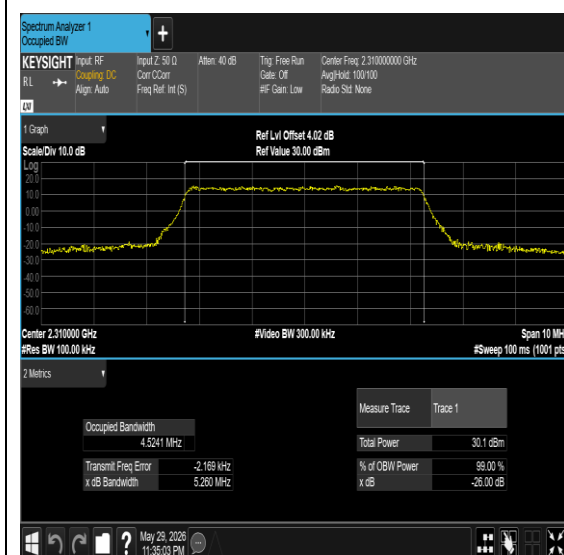




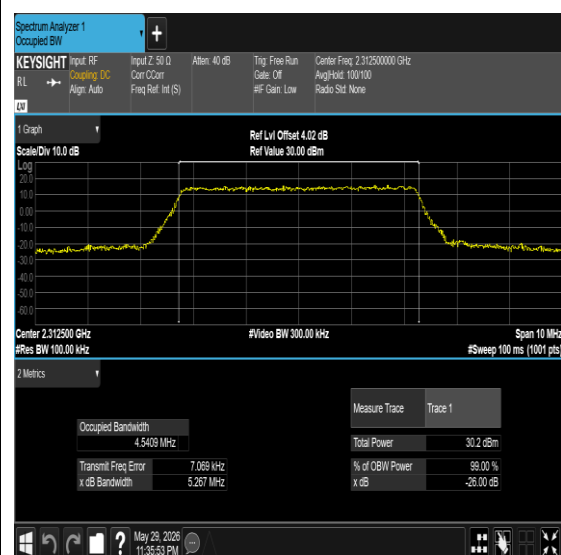
Band30-5MHz-64QAM-27710-25RB#0-PASS



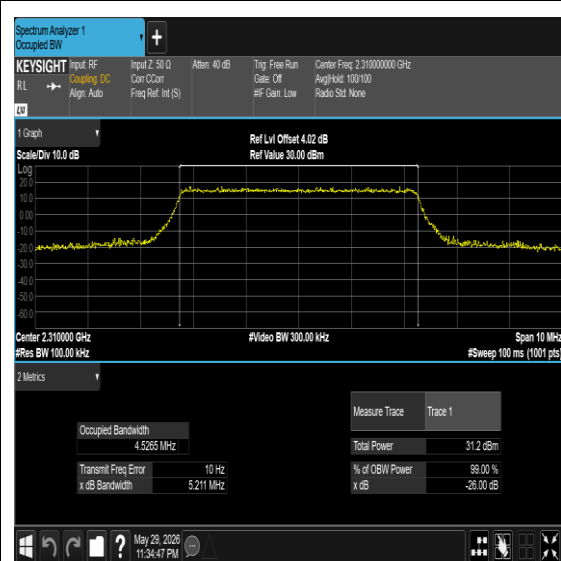
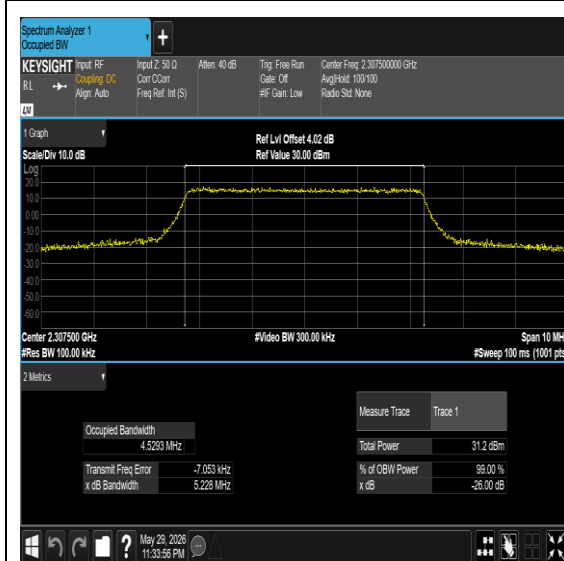
Band30-5MHz-64QAM-27735-25RB#0-PASS



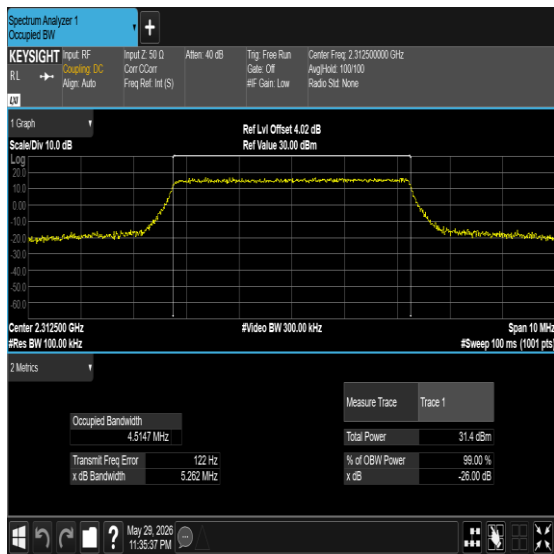
Band30-5MHz-16QAM-27685-25RB#0-PASS



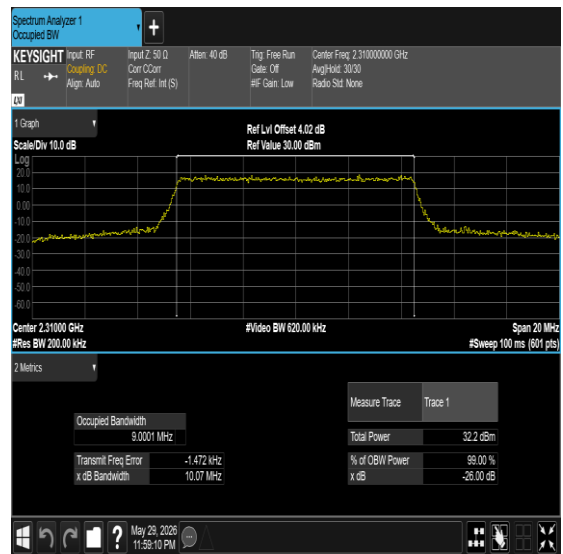
Band30-5MHz-16QAM-27710-25RB#0-PASS



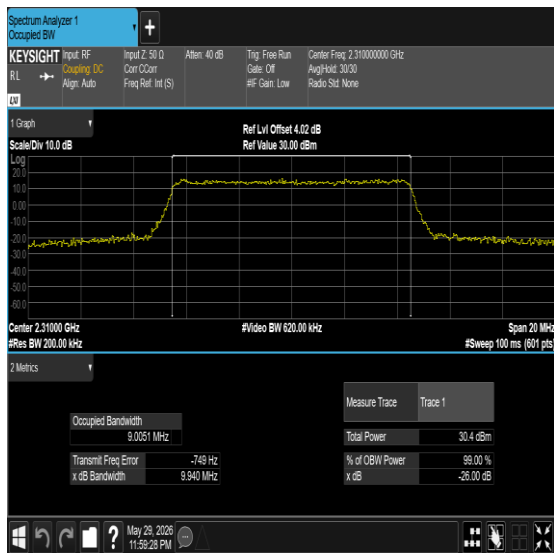
Band30-5MHz-16QAM-27735-25RB#0-PASS



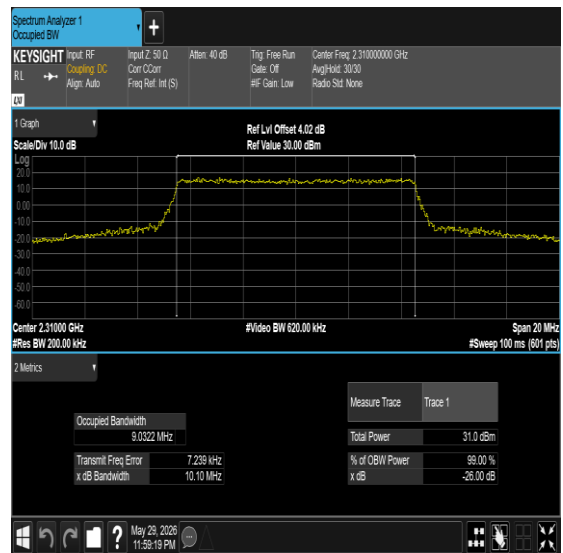
Band30-10MHz-QPSK-27710-50RB#0-PASS



Band30-10MHz-64QAM-27710-50RB#0-PASS



Band30-10MHz-16QAM-27710-50RB#0-PASS

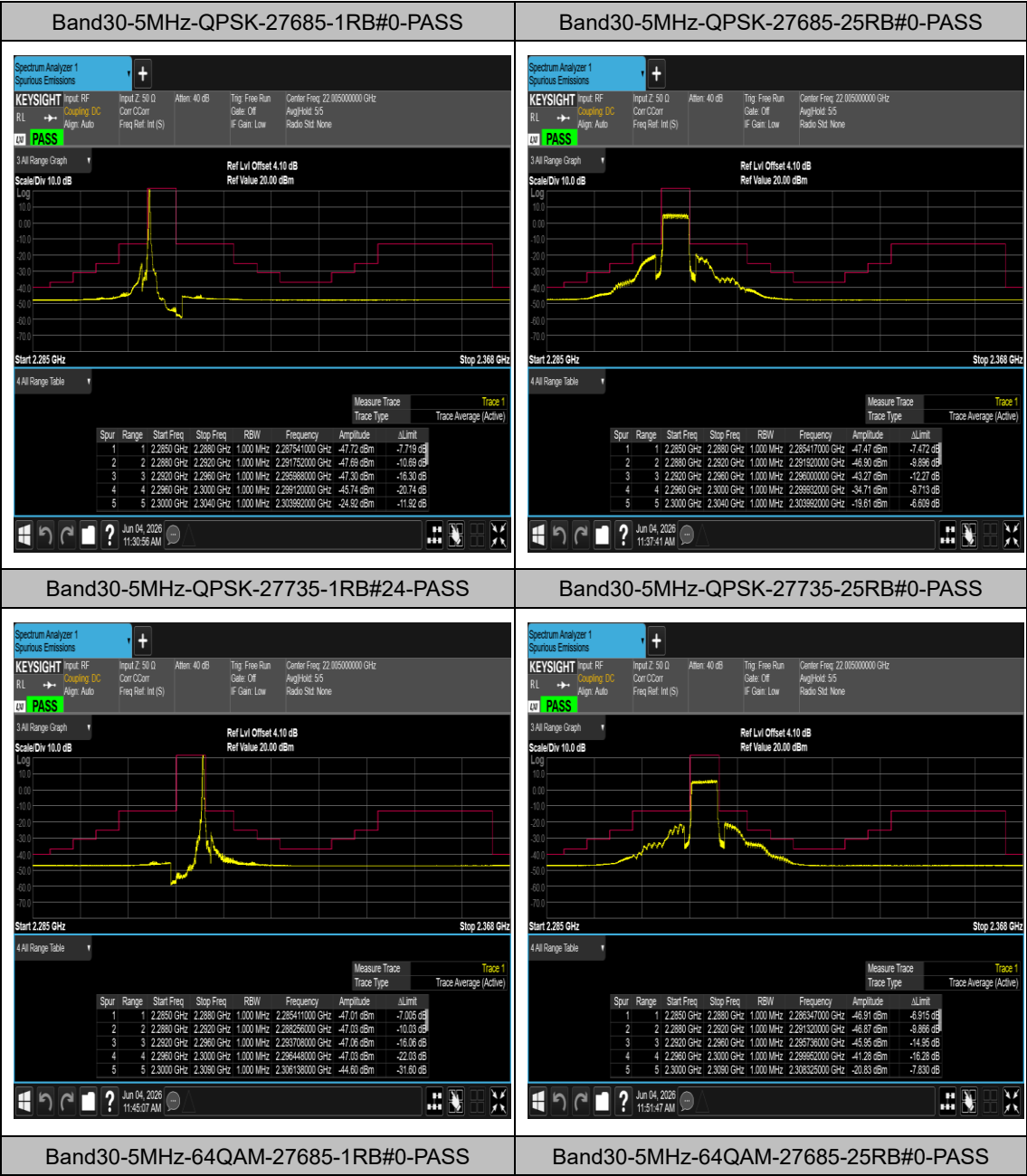


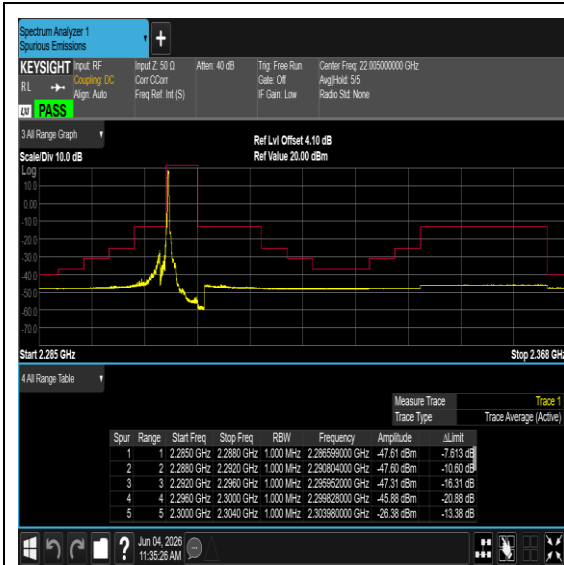
Band Edge

Test Result

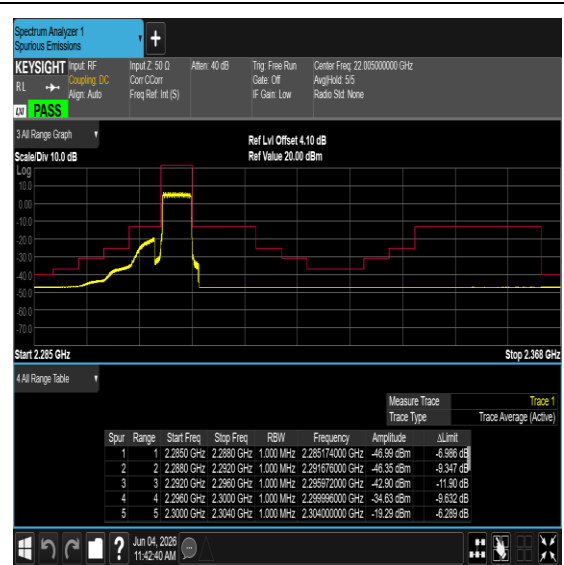
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band30	5MHz	QPSK	27685	1RB#0	-19.09	PASS
Band30	5MHz	QPSK	27685	25RB#0	-19.19	PASS
Band30	5MHz	QPSK	27735	1RB#24	-19.75	PASS
Band30	5MHz	QPSK	27735	25RB#0	-46.90	PASS
Band30	5MHz	64QAM	27685	1RB#0	-47.47	PASS
Band30	5MHz	64QAM	27685	25RB#0	-19.29	PASS
Band30	5MHz	64QAM	27735	1RB#24	-19.22	PASS
Band30	5MHz	64QAM	27735	25RB#0	-31.70	PASS
Band30	5MHz	16QAM	27685	1RB#0	-47.57	PASS
Band30	5MHz	16QAM	27685	25RB#0	-46.98	PASS
Band30	5MHz	16QAM	27735	1RB#24	-46.95	PASS
Band30	5MHz	16QAM	27735	25RB#0	-31.52	PASS
Band30	10MHz	QPSK	27710	1RB#0	-46.88	PASS
Band30	10MHz	QPSK	27710	1RB#49	0.00	FAIL
Band30	10MHz	QPSK	27710	1RB#49	-47.29	PASS_Final1
Band30	10MHz	QPSK	27710	50RB#0	-24.86	FAIL
Band30	10MHz	QPSK	27710	50RB#0	-26.19	PASS_Final1
Band30	10MHz	64QAM	27710	1RB#0	-46.69	PASS
Band30	10MHz	64QAM	27710	1RB#49	-46.70	PASS
Band30	10MHz	64QAM	27710	50RB#0	-25.78	PASS
Band30	10MHz	16QAM	27710	1RB#0	-46.82	PASS
Band30	10MHz	16QAM	27710	1RB#49	-46.78	PASS
Band30	10MHz	16QAM	27710	50RB#0	-25.83	PASS

Test Graphs

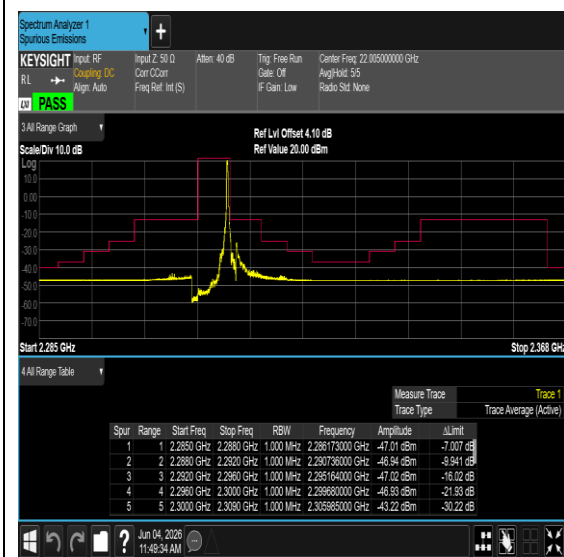




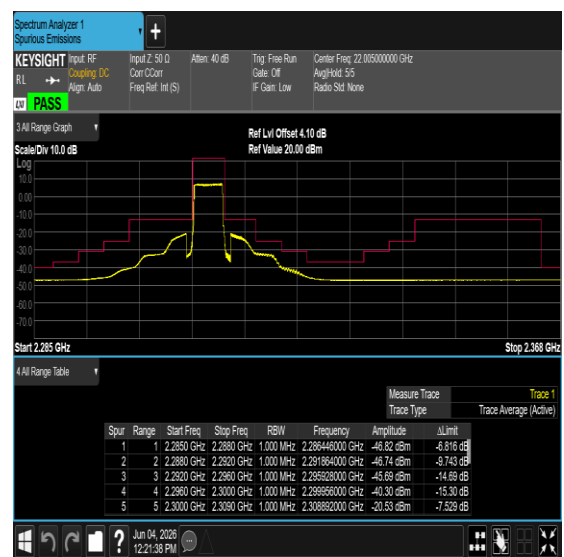
Band30-5MHz-64QAM-27735-1RB#24-PASS



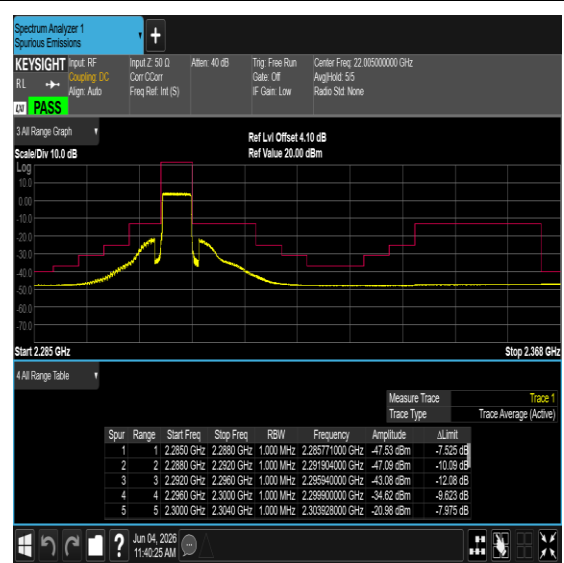
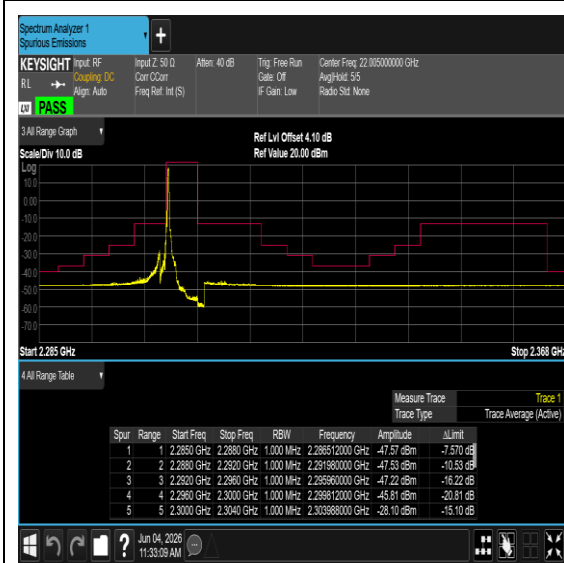
Band30-5MHz-64QAM-27735-25RB#0-PASS



Band30-5MHz-16QAM-27685-1RB#0-PASS



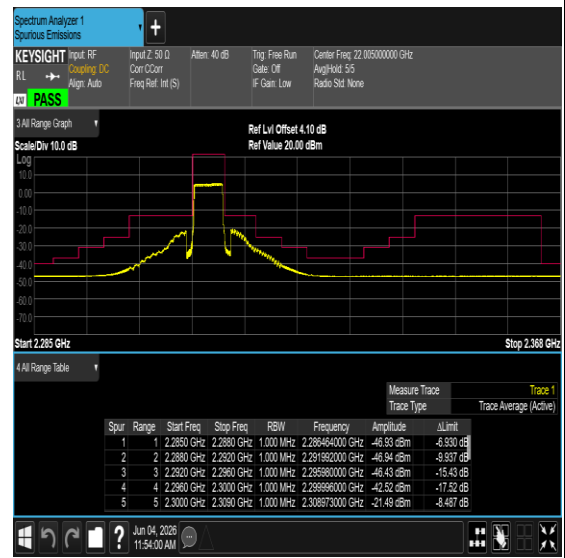
Band30-5MHz-16QAM-27685-25RB#0-PASS



Band30-5MHz-16QAM-27735-1RB#24-PASS



Band30-5MHz-16QAM-27735-25RB#0-PASS



Band30-10MHz-QPSK-27710-1RB#0-PASS

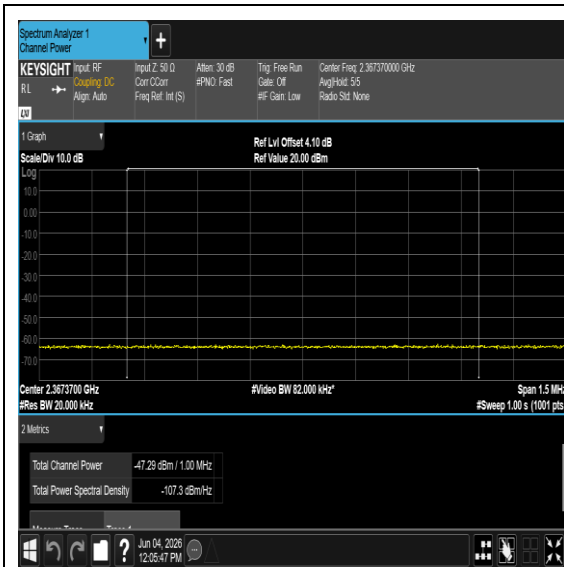


Band30-10MHz-QPSK-27710-1RB#49-FAIL

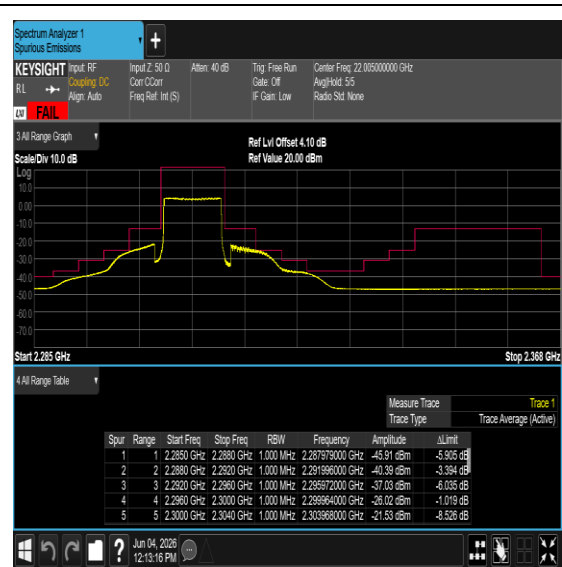


Band30-10MHz-QPSK-27710-1RB#49- PASS_Final1

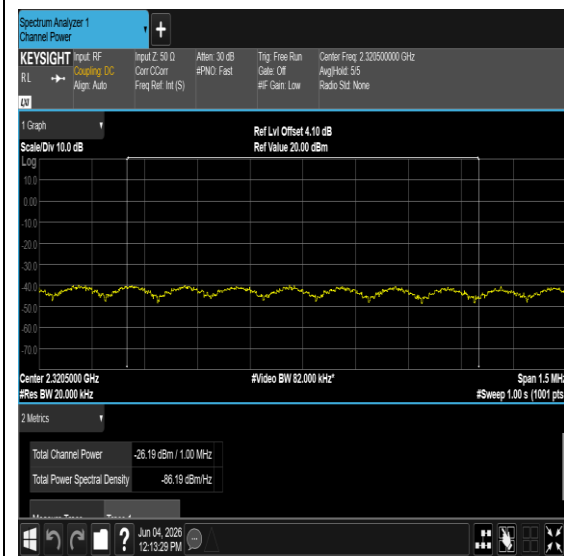
Band30-10MHz-QPSK-27710-50RB#0-FAIL



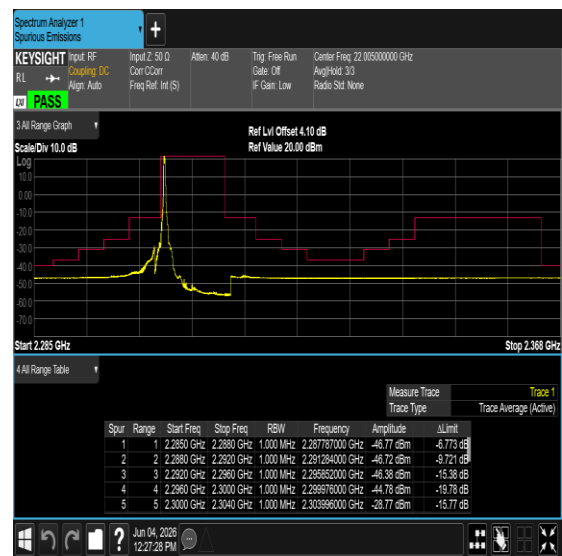
Band30-10MHz-QPSK-27710-50RB#0-PASS_Final1



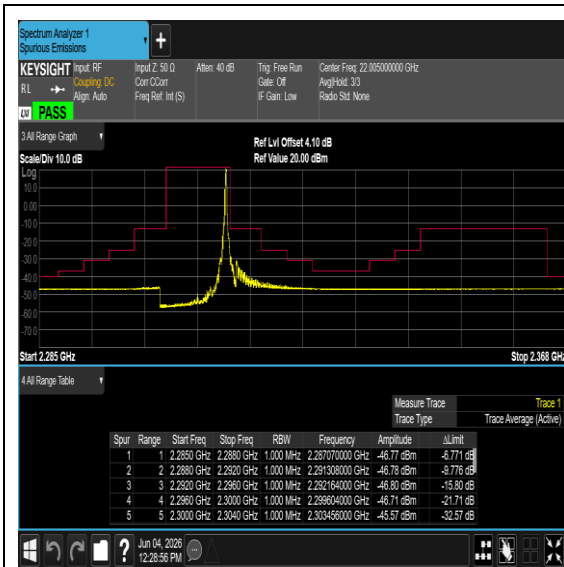
Band30-10MHz-64QAM-27710-1RB#0-PASS



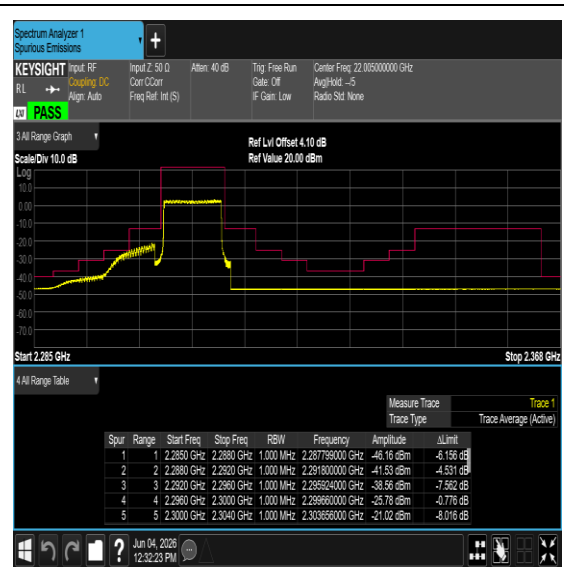
Band30-10MHz-64QAM-27710-1RB#49-PASS



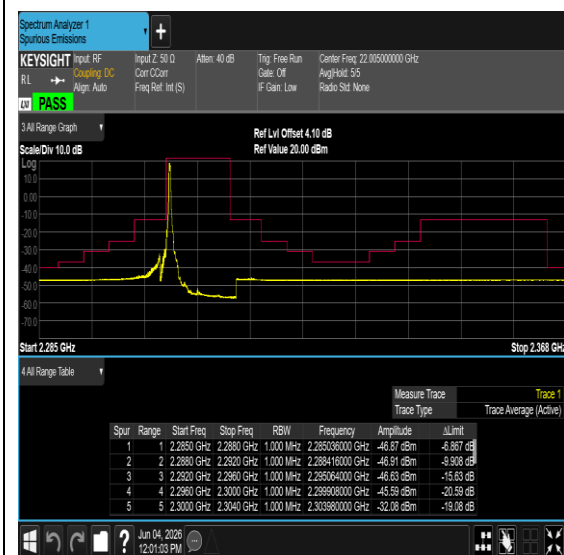
Band30-10MHz-64QAM-27710-50RB#0-PASS



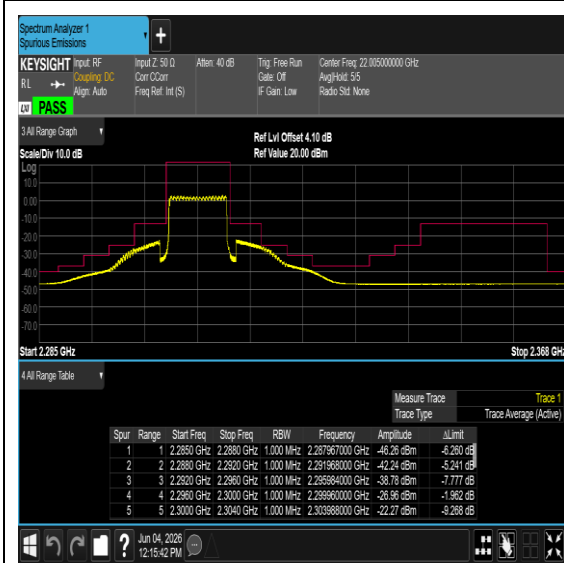
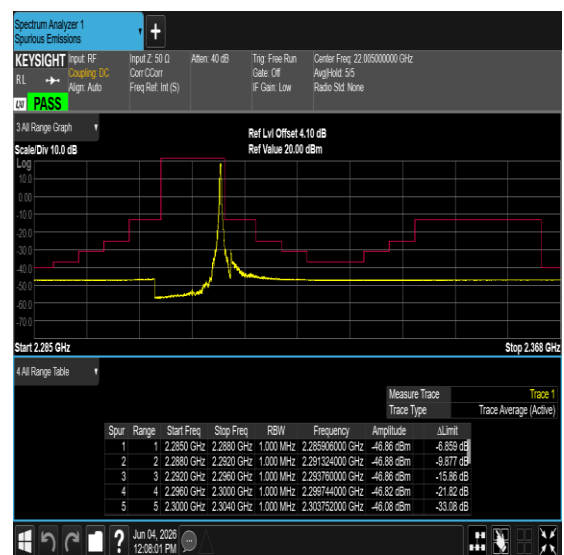
Band30-10MHz-16QAM-27710-1RB#0-PASS



Band30-10MHz-16QAM-27710-1RB#49-PASS



Band30-10MHz-16QAM-27710-50RB#0-PASS

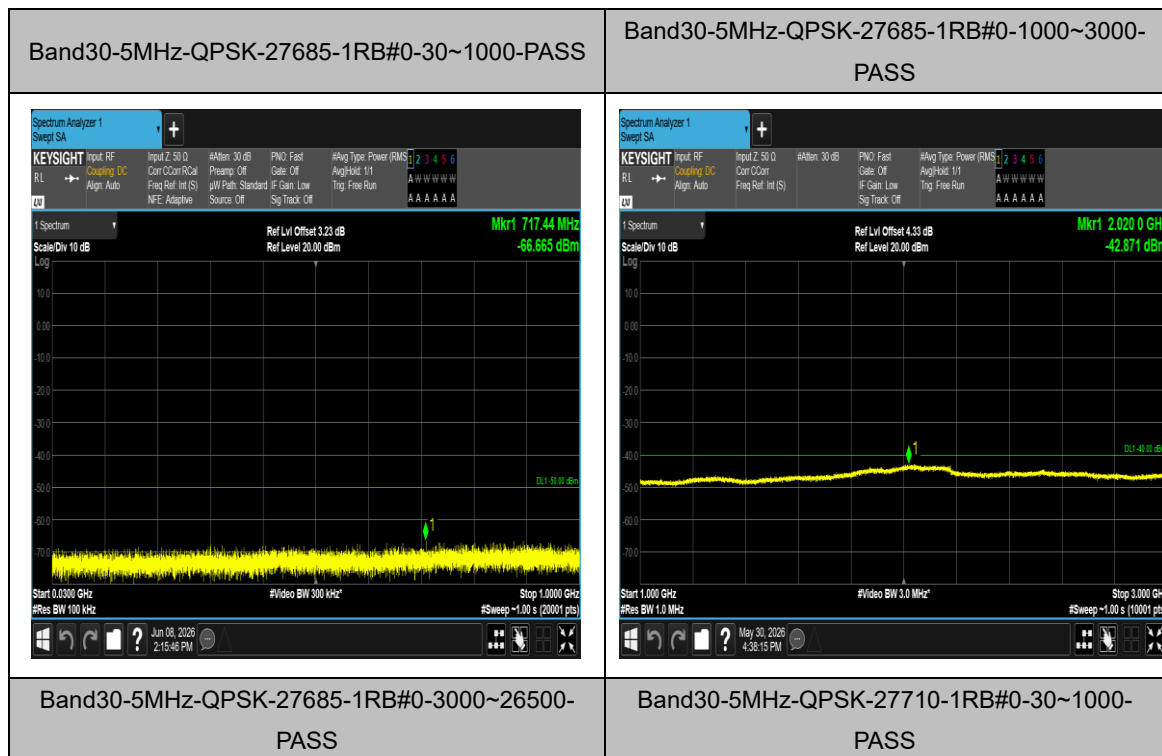


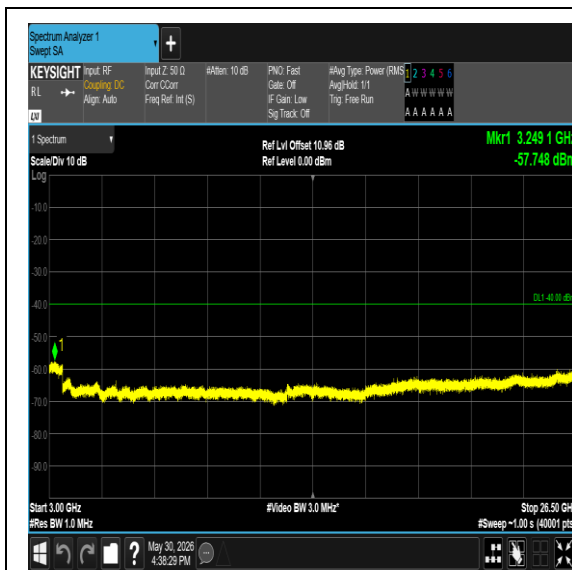
Conducted Spurious Emission

Test Result

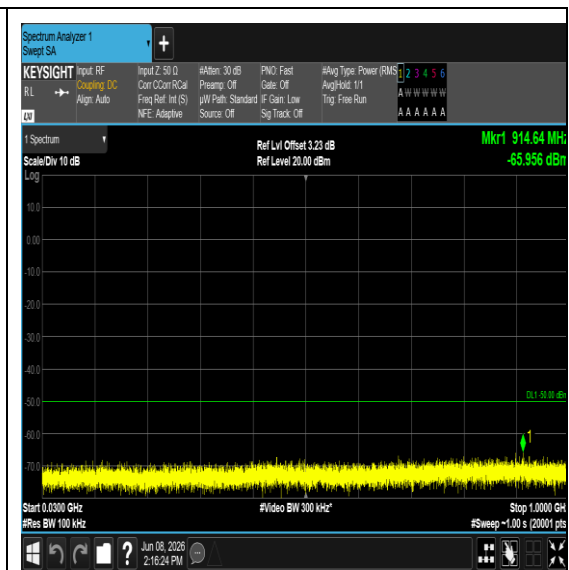
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band30	5MHz	QPSK	27685	1RB#0	30~1000	-66.67	PASS
Band30	5MHz	QPSK	27685	1RB#0	1000~3000	-42.87	PASS
Band30	5MHz	QPSK	27685	1RB#0	3000~26500	-57.75	PASS
Band30	5MHz	QPSK	27710	1RB#0	30~1000	-65.96	PASS
Band30	5MHz	QPSK	27710	1RB#0	1000~3000	-42.68	PASS
Band30	5MHz	QPSK	27710	1RB#0	3000~26500	-56.89	PASS
Band30	5MHz	QPSK	27735	1RB#0	30~1000	-66.26	PASS
Band30	5MHz	QPSK	27735	1RB#0	1000~3000	-42.92	PASS
Band30	5MHz	QPSK	27735	1RB#0	3000~26500	-56.90	PASS
Band30	10MHz	QPSK	27710	1RB#0	30~1000	-66.27	PASS
Band30	10MHz	QPSK	27710	1RB#0	1000~3000	-42.71	PASS
Band30	10MHz	QPSK	27710	1RB#0	3000~26500	-44.41	PASS

Test Graphs





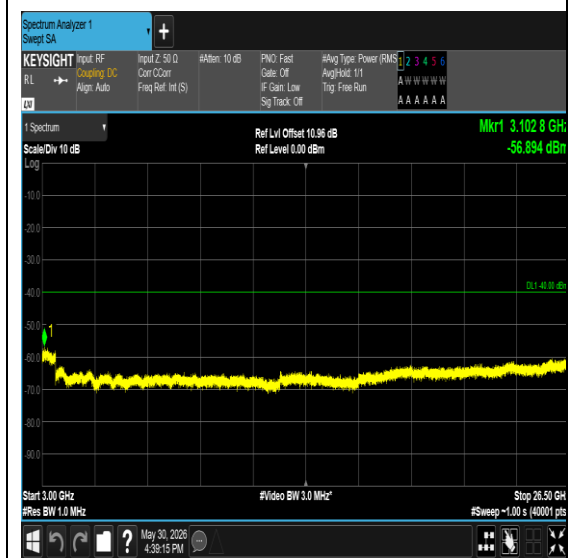
Band30-5MHz-QPSK-27710-1RB#0-1000~3000-PASS



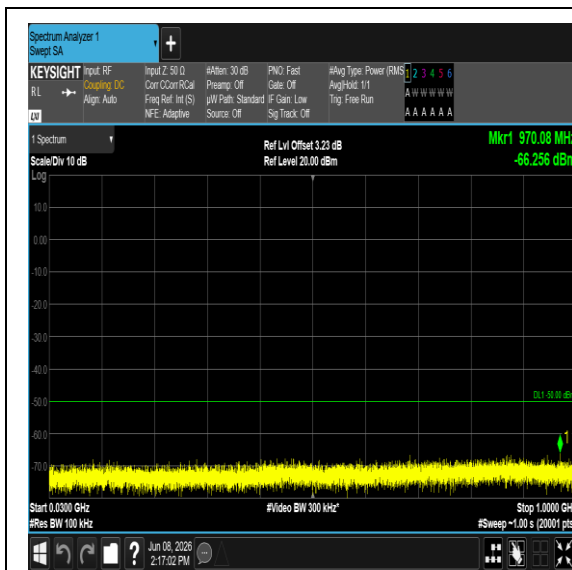
Band30-5MHz-QPSK-27710-1RB#0-3000~26500-PASS



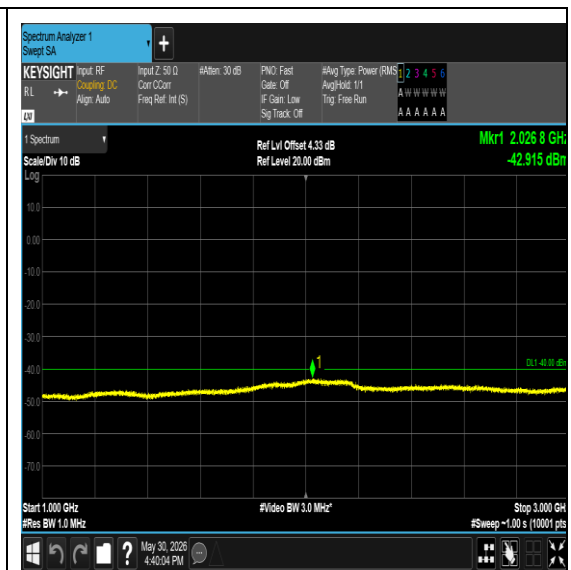
Band30-5MHz-QPSK-27735-1RB#0-30~1000-PASS



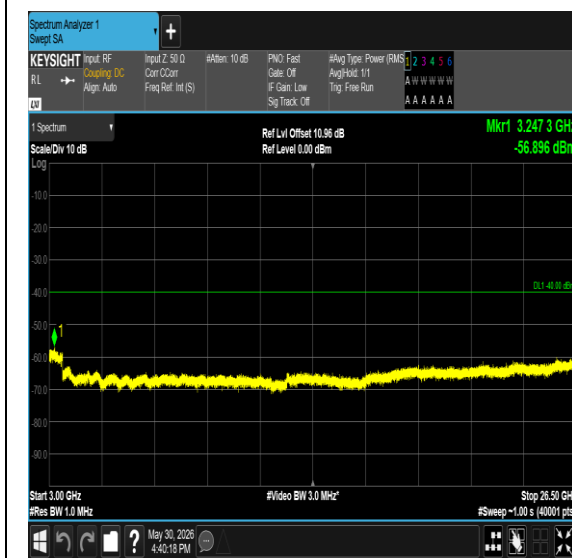
Band30-5MHz-QPSK-27735-1RB#0-1000~3000-PASS



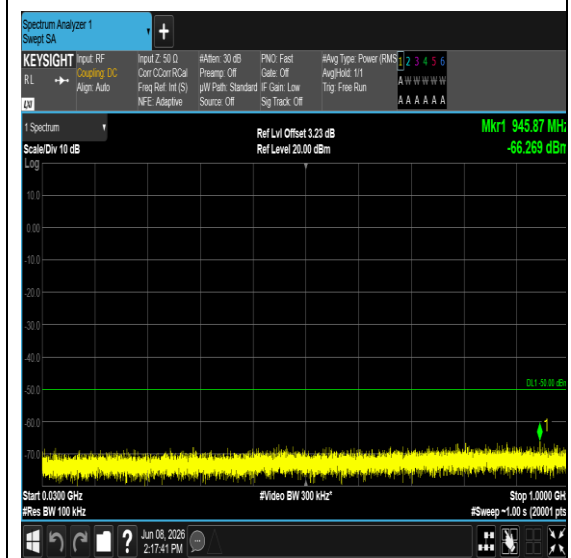
Band30-5MHz-QPSK-27735-1RB#0-3000~26500-PASS



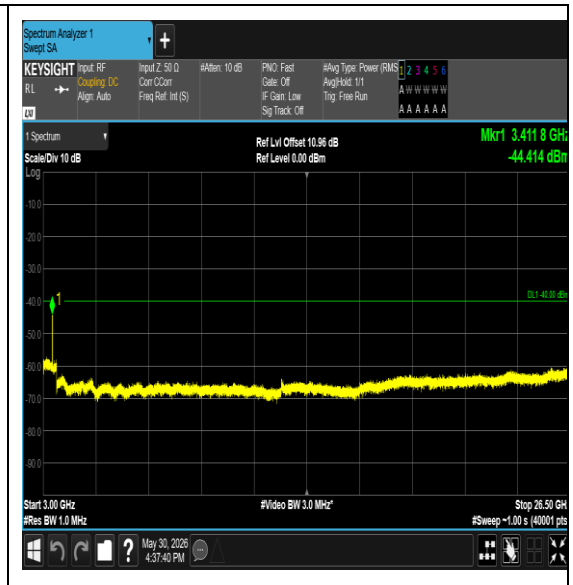
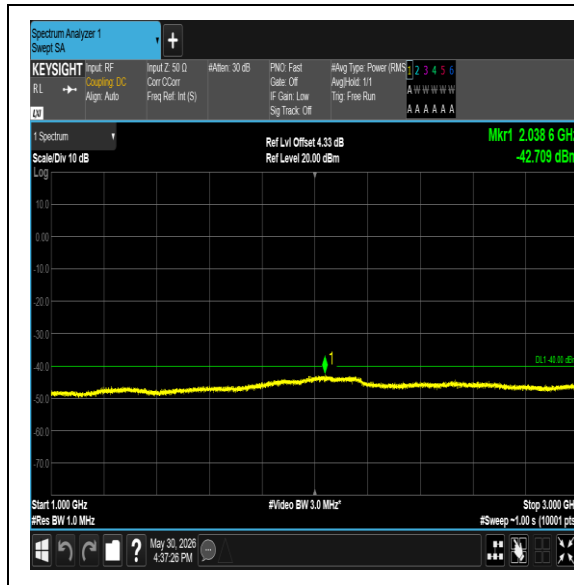
Band30-10MHz-QPSK-27710-1RB#0-30~1000-PASS



Band30-10MHz-QPSK-27710-1RB#0-1000~3000-PASS



Band30-10MHz-QPSK-27710-1RB#0-3000~26500-PASS



Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band30	5MHz	QPSK	27685	25RB#0	VN	NT	-1480.00	-0.641387	±2.5	PASS
Band30	5MHz	QPSK	27685	25RB#0	VL	NT	-710.00	-0.307692	±2.5	PASS
Band30	5MHz	QPSK	27685	25RB#0	VH	NT	-790.00	-0.342362	±2.5	PASS
Band30	5MHz	QPSK	27735	25RB#0	VN	NT	3270.00	1.414054	±2.5	PASS
Band30	5MHz	QPSK	27735	25RB#0	VL	NT	1720.00	0.743784	±2.5	PASS
Band30	5MHz	QPSK	27735	25RB#0	VH	NT	-180.00	-0.077838	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band30	5MHz	QPSK	27685	25RB#0	NV	-30	-770.00	-0.333694	±2.5	PASS
Band30	5MHz	QPSK	27685	25RB#0	NV	-20	840.00	0.364030	±2.5	PASS
Band30	5MHz	QPSK	27685	25RB#0	NV	-10	-2610.00	-1.131094	±2.5	PASS
Band30	5MHz	QPSK	27685	25RB#0	NV	0	-2890.00	-1.252438	±2.5	PASS
Band30	5MHz	QPSK	27685	25RB#0	NV	10	-2490.00	-1.079090	±2.5	PASS
Band30	5MHz	QPSK	27685	25RB#0	NV	20	-4860.00	-2.106176	±2.5	PASS
Band30	5MHz	QPSK	27685	25RB#0	NV	30	-2810.00	-1.217768	±2.5	PASS
Band30	5MHz	QPSK	27685	25RB#0	NV	40	-600.00	-0.260022	±2.5	PASS
Band30	5MHz	QPSK	27685	25RB#0	NV	50	-2530.00	-1.096425	±2.5	PASS
Band30	5MHz	QPSK	27735	25RB#0	NV	-30	3010.00	1.301622	±2.5	PASS
Band30	5MHz	QPSK	27735	25RB#0	NV	-20	3320.00	1.435676	±2.5	PASS
Band30	5MHz	QPSK	27735	25RB#0	NV	-10	3400.00	1.470270	±2.5	PASS
Band30	5MHz	QPSK	27735	25RB#0	NV	0	-80.00	-0.034595	±2.5	PASS
Band30	5MHz	QPSK	27735	25RB#0	NV	10	5360.00	2.317838	±2.5	PASS
Band30	5MHz	QPSK	27735	25RB#0	NV	20	3030.00	1.310270	±2.5	PASS
Band30	5MHz	QPSK	27735	25RB#0	NV	30	-1680.00	-0.726486	±2.5	PASS
Band30	5MHz	QPSK	27735	25RB#0	NV	40	2270.00	0.981622	±2.5	PASS
Band30	5MHz	QPSK	27735	25RB#0	NV	50	1520.00	0.657297	±2.5	PASS

FCC-SA N30

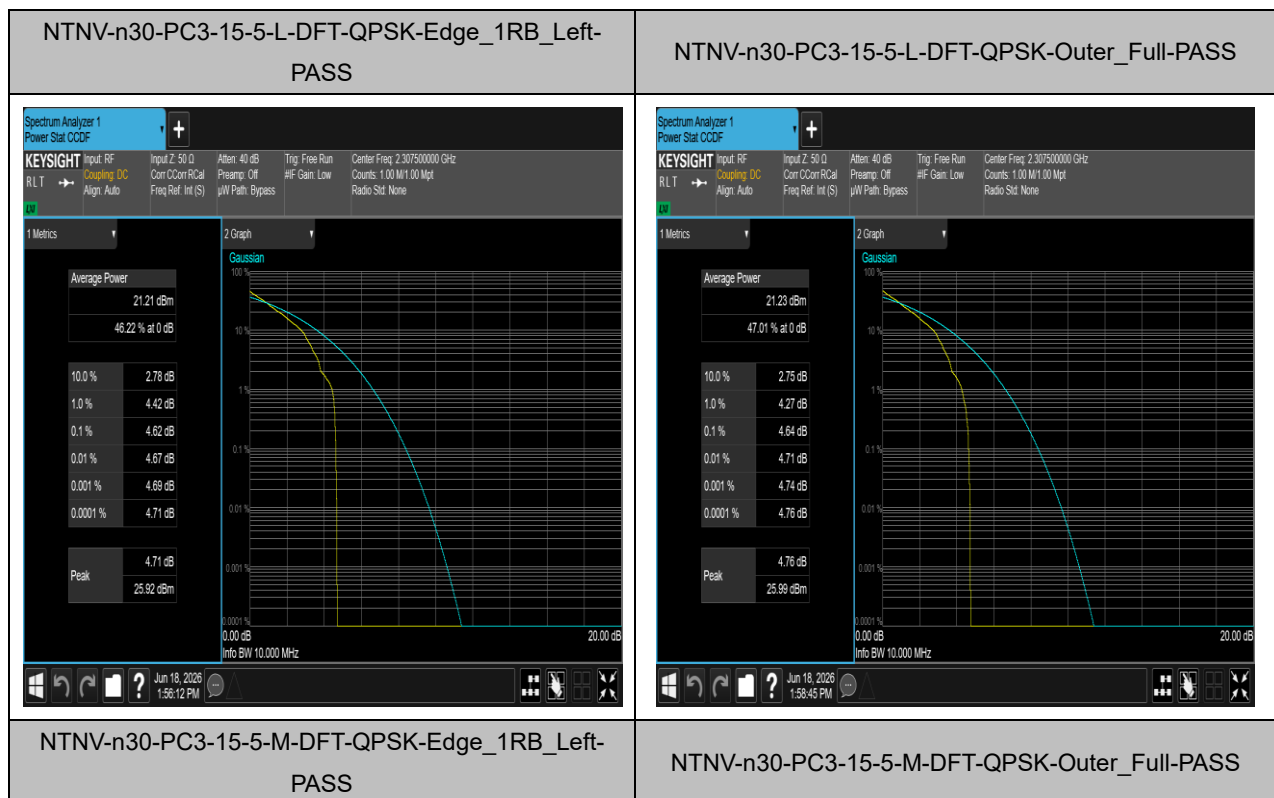
Peak-to-Average Ratio for SA

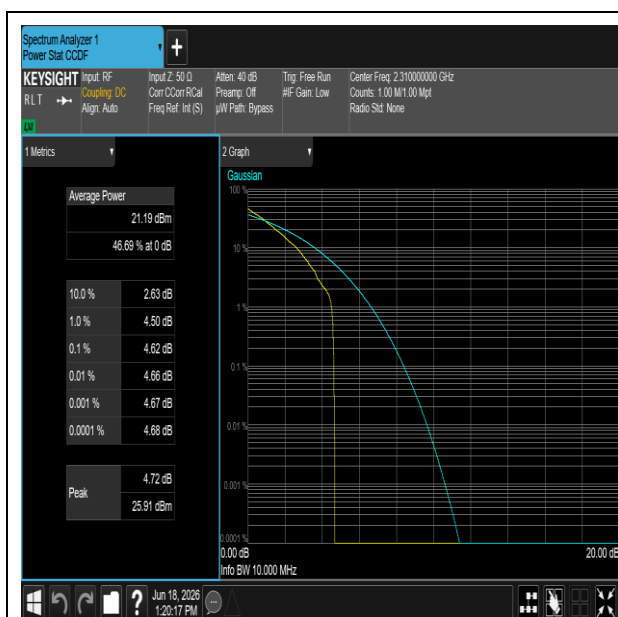
Peak-to-Average Ratio(CCDF)

Test Result

Band	SCS (kHz)	Bandwidth (MHz)	Modulation	Channel	RB Config	Result (dB)	Limit	Verdict
n30	15	5	DFT-QPSK	L	Edge_1RB_Left	4.62	≤13dB	PASS
n30	15	5	DFT-QPSK	L	Outer_Full	4.64	≤13dB	PASS
n30	15	5	DFT-QPSK	M	Edge_1RB_Left	4.62	≤13dB	PASS
n30	15	5	DFT-QPSK	M	Outer_Full	4.7	≤13dB	PASS
n30	15	5	DFT-QPSK	H	Edge_1RB_Left	4.17	≤13dB	PASS
n30	15	5	DFT-QPSK	H	Outer_Full	4.45	≤13dB	PASS
n30	15	10	DFT-QPSK	M	Edge_1RB_Left	3.99	≤13dB	PASS
n30	15	10	DFT-QPSK	M	Outer_Full	4.61	≤13dB	PASS

Test Graphs

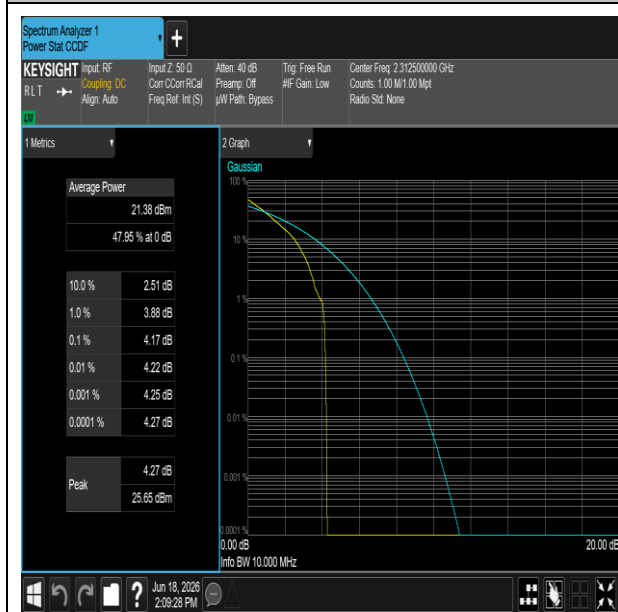




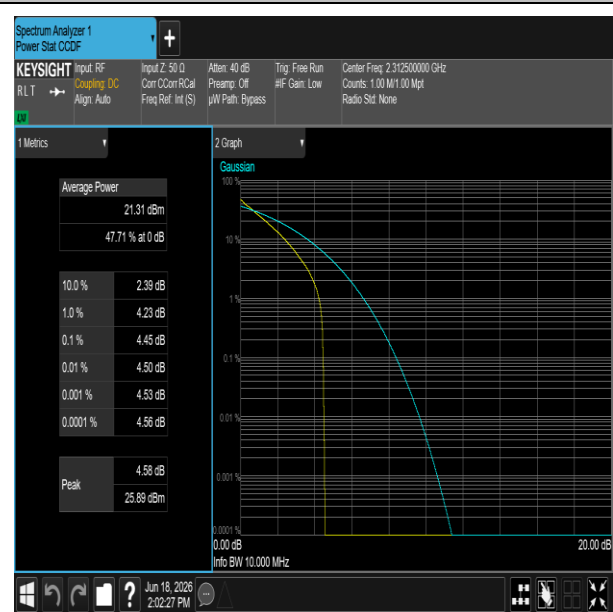
NTNV-n30-PC3-15-5-H-DFT-QPSK-Edge_1RB_Left-PASS



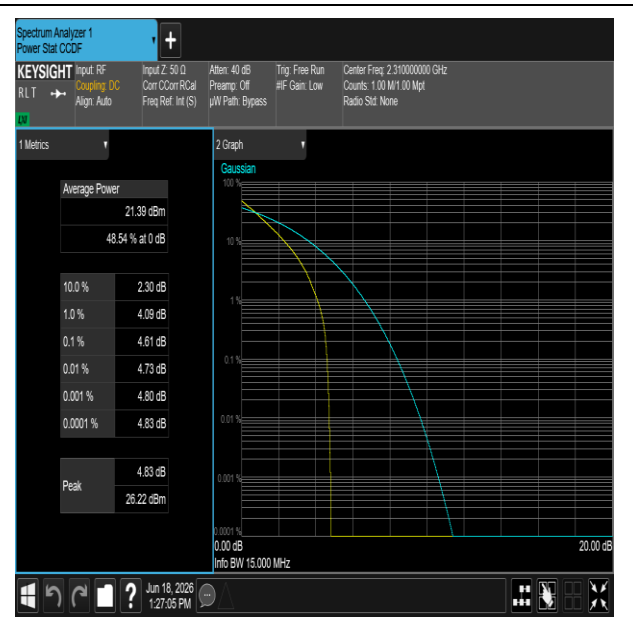
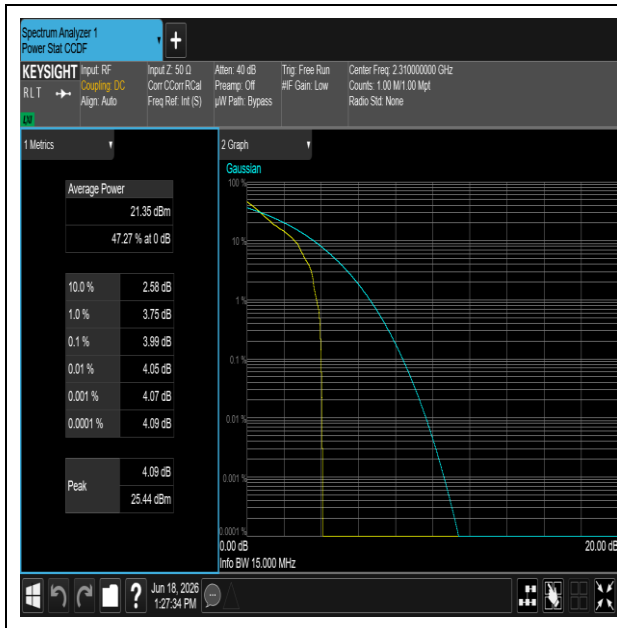
NTNV-n30-PC3-15-5-H-DFT-QPSK-Outer_Full-PASS



NTNV-n30-PC3-15-10-M-DFT-QPSK-Edge_1RB_Left-PASS



NTNV-n30-PC3-15-10-M-DFT-QPSK-Outer_Full-PASS



26dB Bandwidth and Occupied Bandwidth for SA

Test Result

Band	SCS (kHz)	Bandwidth (MHz)	Modulation	Channel	RB Config	OBW (MHz)	EBW (MHz)	Verdict
n30	15	5	DFT-BPSK	M	Outer_Full	4.5792	5.331	PASS
n30	15	5	DFT-QPSK	M	Outer_Full	4.5913	5.420	PASS
n30	15	5	DFT-16QAM	M	Outer_Full	4.5266	5.153	PASS
n30	15	5	DFT-64QAM	M	Outer_Full	4.5527	5.281	PASS
n30	15	5	DFT-256QAM	M	Outer_Full	4.5635	5.470	PASS
n30	15	10	DFT-BPSK	M	Outer_Full	8.9984	9.906	PASS
n30	15	10	DFT-QPSK	M	Outer_Full	8.9644	9.805	PASS
n30	15	10	DFT-16QAM	M	Outer_Full	8.9870	9.745	PASS
n30	15	10	DFT-64QAM	M	Outer_Full	8.9742	9.971	PASS
n30	15	10	DFT-256QAM	M	Outer_Full	8.9837	9.885	PASS

Test Graphs

