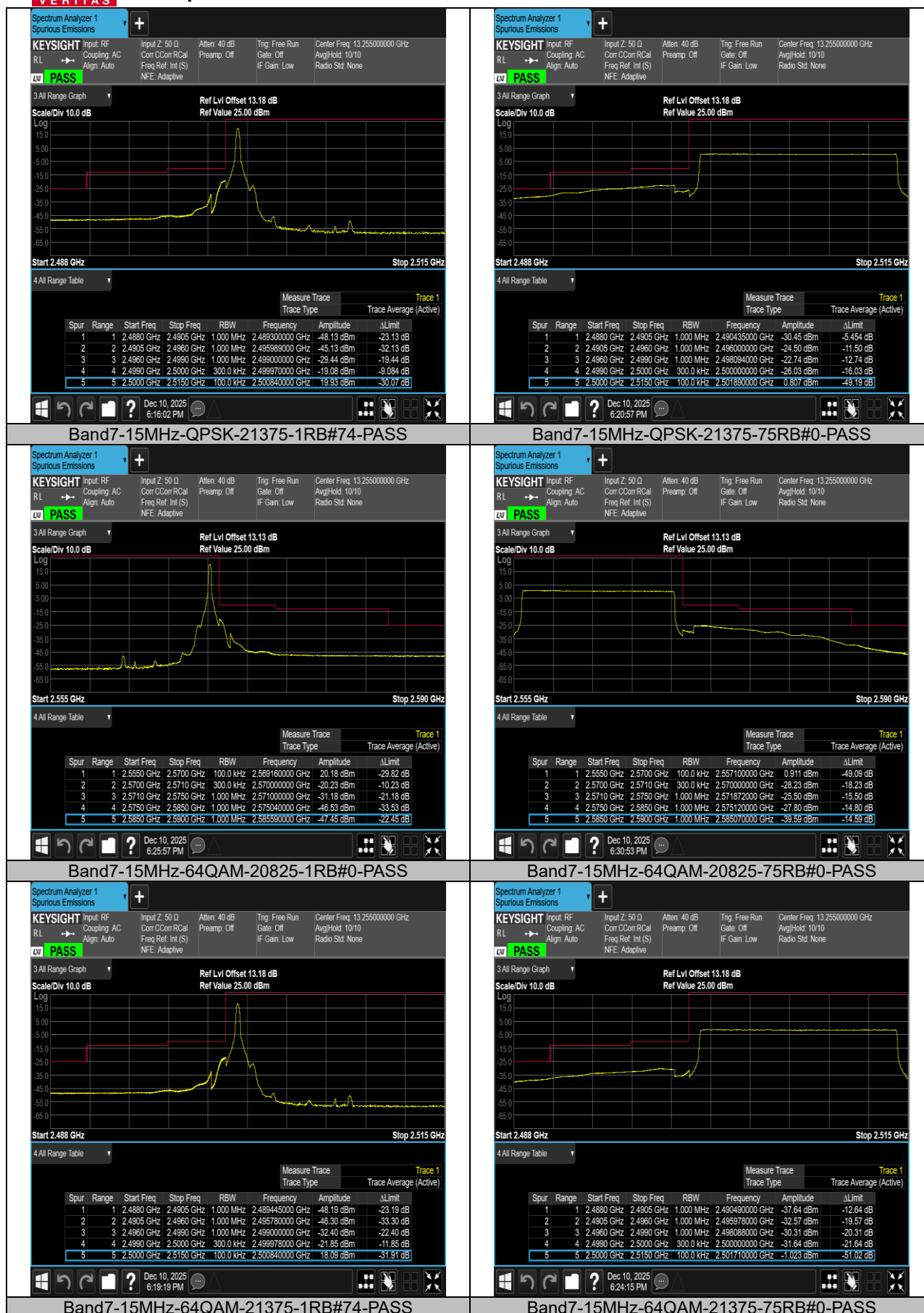




BUREAU
VERITAS

Test Report No.: PSU-QBJ2512030110RF03



Huarui 7layers High Technology
(Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



BUREAU
VERITAS

Test Report No.: PSU-QBJ2512030110RF03



Huarui 7layers High Technology
(Suzhou) Co., Ltd.

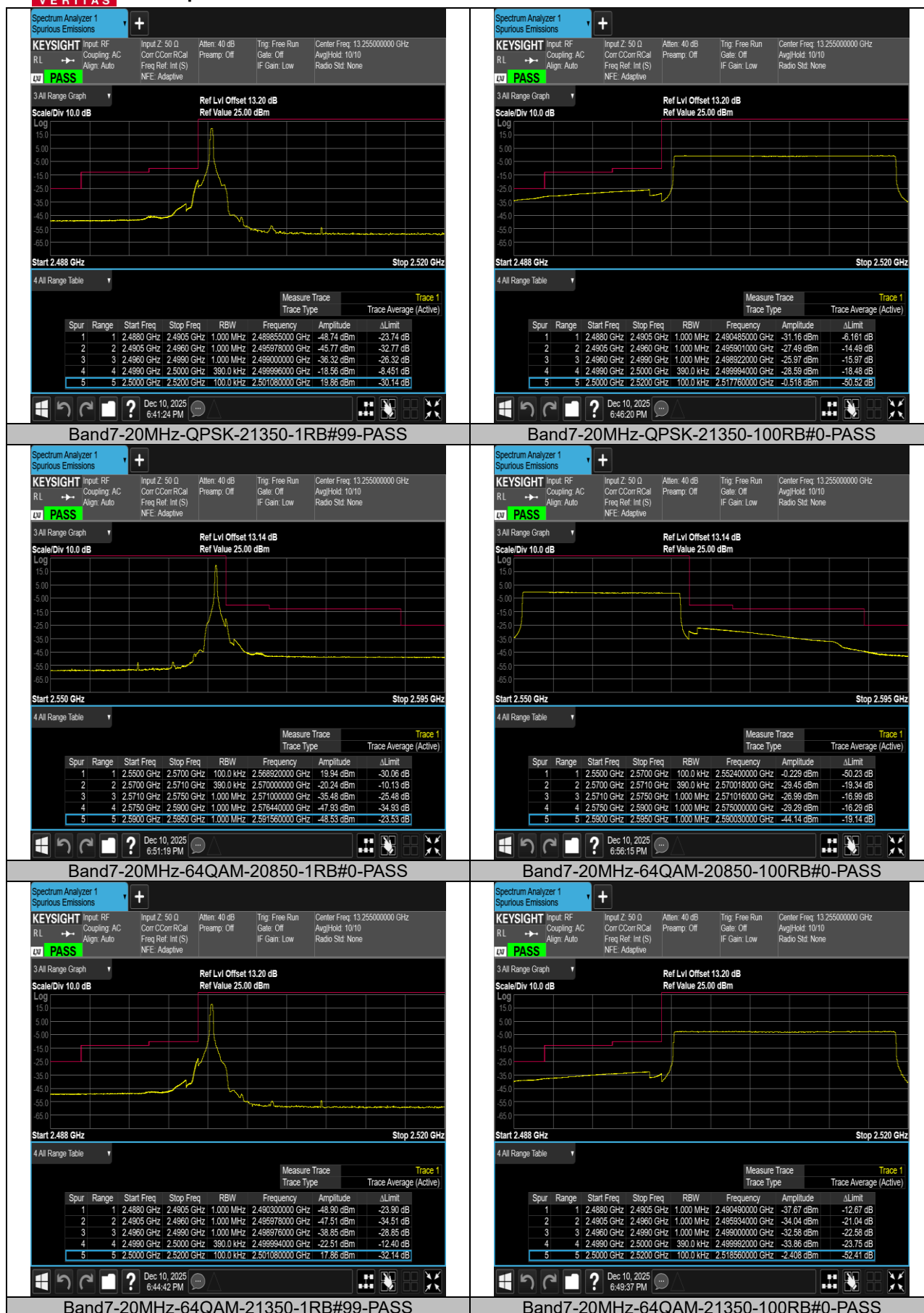
Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



BUREAU
VERITAS

Test Report No.: PSU-QBJ2512030110RF03



Huarui 7layers High Technology
(Suzhou) Co., Ltd.

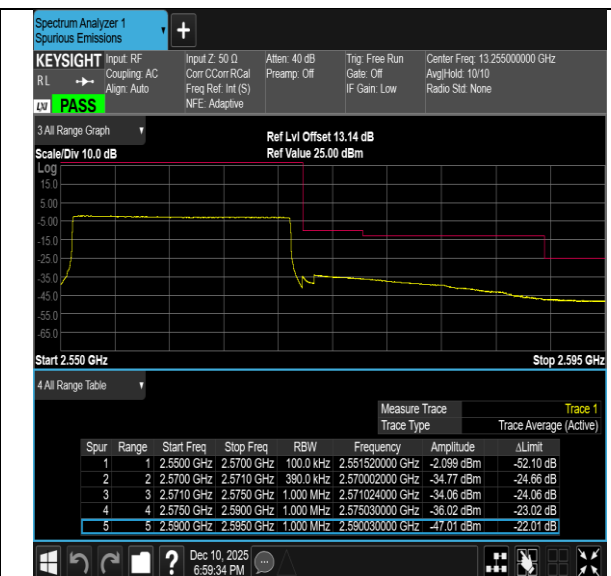
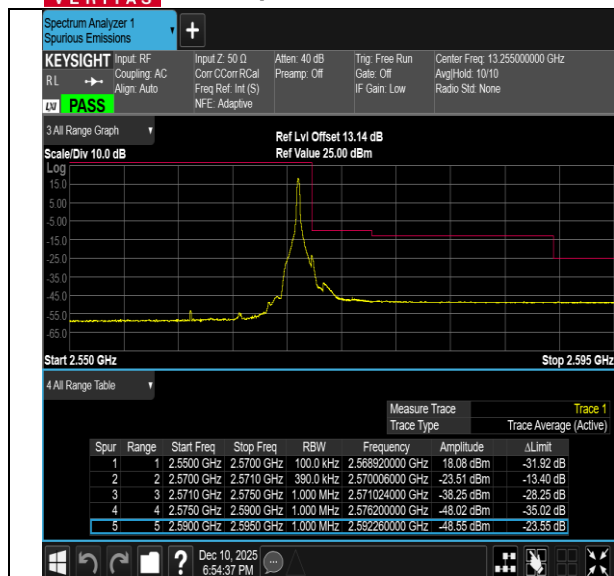
Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



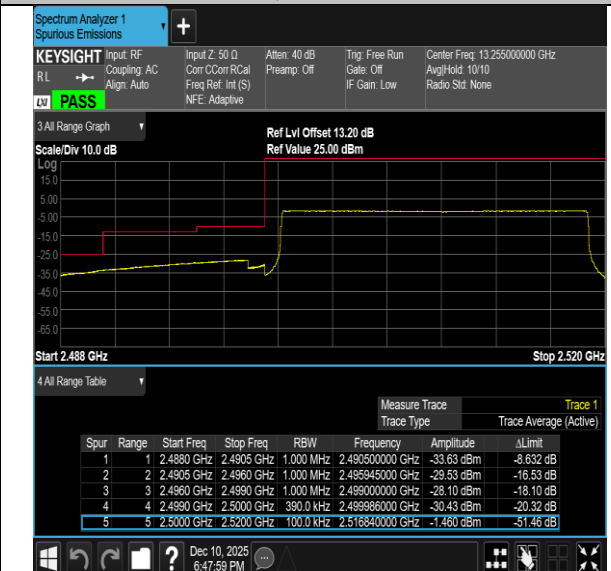
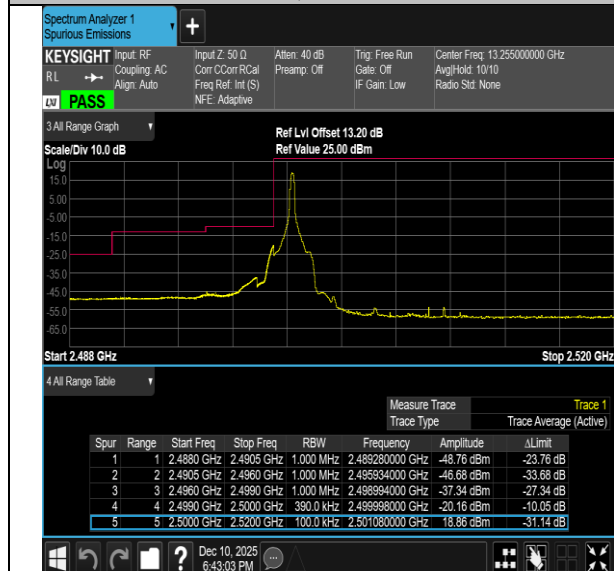
BUREAU
VERITAS

Test Report No.: PSU-QBJ2512030110RF03



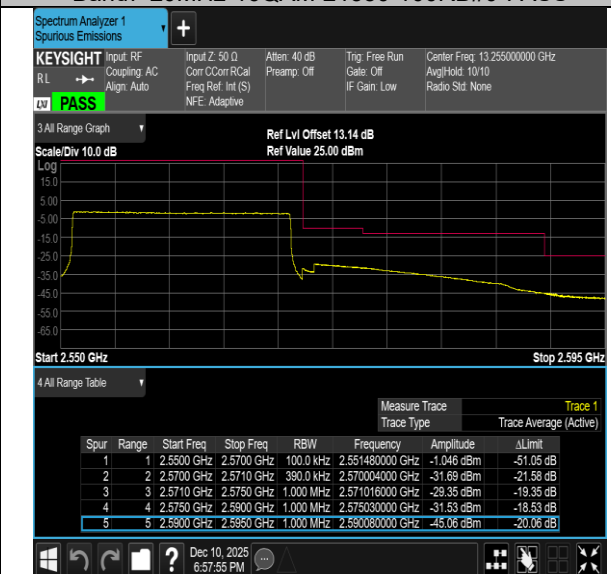
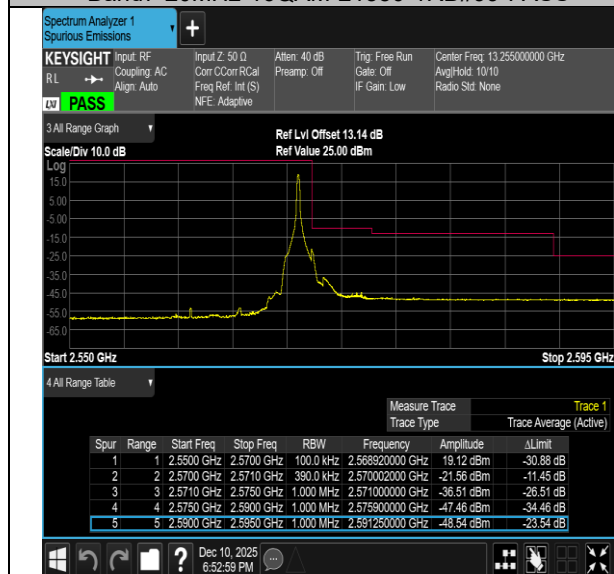
Band7-20MHz-16QAM-20850-1RB#0-PASS

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



Band7-20MHz-16QAM-21350-1RB#99-PASS

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





Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	30~1000	-54.68	PASS
Band7	5MHz	QPSK	20775	1RB#0	1000~3000	-47.33	PASS
Band7	5MHz	QPSK	20775	1RB#0	3000~18000	-36.61	PASS
Band7	5MHz	QPSK	20775	1RB#0	18000~27000	-34.31	PASS
Band7	5MHz	QPSK	21100	1RB#0	30~1000	-54.29	PASS
Band7	5MHz	QPSK	21100	1RB#0	1000~3000	-47.26	PASS
Band7	5MHz	QPSK	21100	1RB#0	3000~18000	-36.90	PASS
Band7	5MHz	QPSK	21100	1RB#0	18000~27000	-35.25	PASS
Band7	5MHz	QPSK	21425	1RB#0	30~1000	-53.65	PASS
Band7	5MHz	QPSK	21425	1RB#0	1000~3000	-47.53	PASS
Band7	5MHz	QPSK	21425	1RB#0	3000~18000	-36.92	PASS
Band7	5MHz	QPSK	21425	1RB#0	18000~27000	-34.77	PASS
Band7	10MHz	QPSK	20800	1RB#0	30~1000	-53.89	PASS
Band7	10MHz	QPSK	20800	1RB#0	1000~3000	-47.79	PASS
Band7	10MHz	QPSK	20800	1RB#0	3000~18000	-36.73	PASS
Band7	10MHz	QPSK	20800	1RB#0	18000~27000	-34.79	PASS
Band7	10MHz	QPSK	21100	1RB#0	30~1000	-53.50	PASS
Band7	10MHz	QPSK	21100	1RB#0	1000~3000	-47.67	PASS
Band7	10MHz	QPSK	21100	1RB#0	3000~18000	-36.45	PASS
Band7	10MHz	QPSK	21100	1RB#0	18000~27000	-34.40	PASS
Band7	10MHz	QPSK	21400	1RB#0	30~1000	-54.42	PASS
Band7	10MHz	QPSK	21400	1RB#0	1000~3000	-47.04	PASS
Band7	10MHz	QPSK	21400	1RB#0	3000~18000	-35.48	PASS
Band7	10MHz	QPSK	21400	1RB#0	18000~27000	-34.95	PASS
Band7	15MHz	QPSK	20825	1RB#0	30~1000	-53.52	PASS
Band7	15MHz	QPSK	20825	1RB#0	1000~3000	-47.70	PASS
Band7	15MHz	QPSK	20825	1RB#0	3000~18000	-36.19	PASS
Band7	15MHz	QPSK	20825	1RB#0	18000~27000	-34.99	PASS
Band7	15MHz	QPSK	21100	1RB#0	30~1000	-53.96	PASS
Band7	15MHz	QPSK	21100	1RB#0	1000~3000	-47.69	PASS
Band7	15MHz	QPSK	21100	1RB#0	3000~18000	-36.81	PASS
Band7	15MHz	QPSK	21100	1RB#0	18000~27000	-34.03	PASS
Band7	15MHz	QPSK	21375	1RB#0	30~1000	-54.26	PASS
Band7	15MHz	QPSK	21375	1RB#0	1000~3000	-48.26	PASS
Band7	15MHz	QPSK	21375	1RB#0	3000~18000	-37.04	PASS
Band7	15MHz	QPSK	21375	1RB#0	18000~27000	-34.48	PASS
Band7	20MHz	QPSK	20850	1RB#0	30~1000	-53.56	PASS
Band7	20MHz	QPSK	20850	1RB#0	1000~3000	-47.00	PASS
Band7	20MHz	QPSK	20850	1RB#0	3000~18000	-37.48	PASS
Band7	20MHz	QPSK	20850	1RB#0	18000~27000	-34.76	PASS
Band7	20MHz	QPSK	21100	1RB#0	30~1000	-54.24	PASS
Band7	20MHz	QPSK	21100	1RB#0	1000~3000	-48.27	PASS
Band7	20MHz	QPSK	21100	1RB#0	3000~18000	-36.48	PASS
Band7	20MHz	QPSK	21100	1RB#0	18000~27000	-35.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	30~1000	-54.40	PASS
Band7	20MHz	QPSK	21350	1RB#0	1000~3000	-47.97	PASS
Band7	20MHz	QPSK	21350	1RB#0	3000~18000	-36.93	PASS
Band7	20MHz	QPSK	21350	1RB#0	18000~27000	-34.92	PASS

Test Graphs

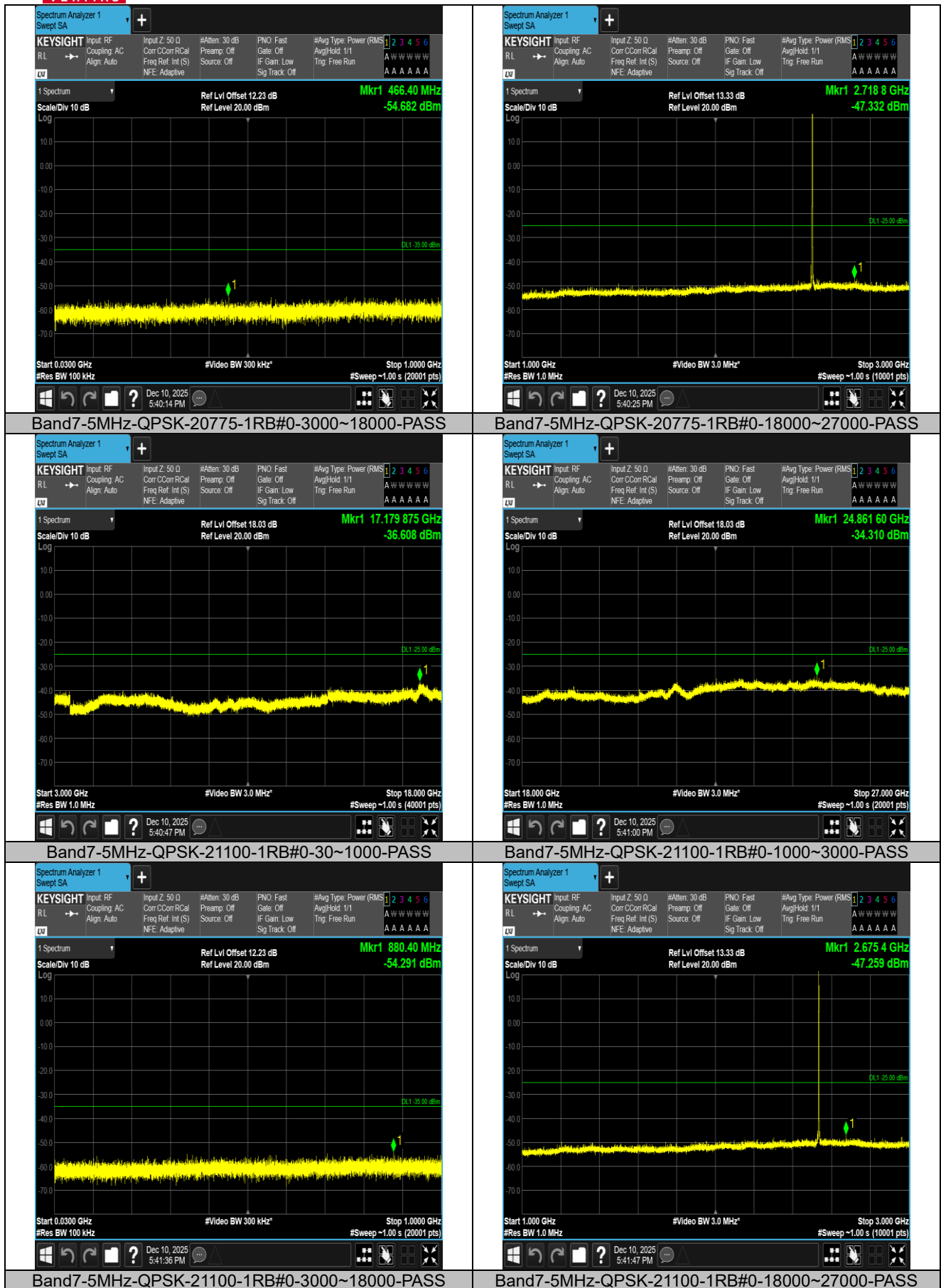
Band7-5MHz-QPSK-20775-1RB#0-30~1000-PASS

Band7-5MHz-QPSK-20775-1RB#0-1000~3000-PASS



BUREAU
VERITAS

Test Report No.: PSU-QBJ2512030110RF03



Huarui 7layers High Technology
(Suzhou) Co., Ltd.

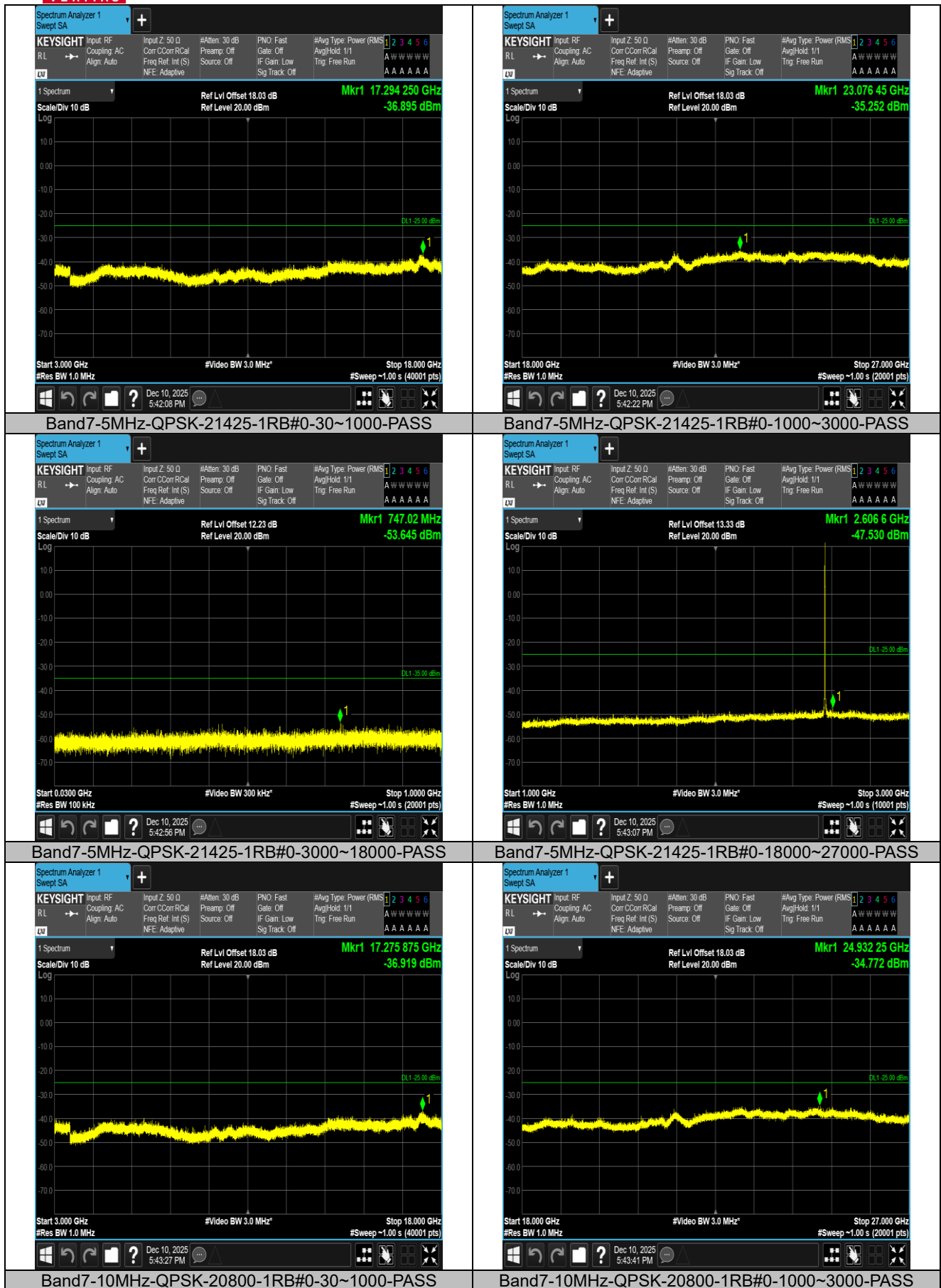
Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



BUREAU
VERITAS

Test Report No.: PSU-QBJ2512030110RF03



Huarui 7layers High Technology
(Suzhou) Co., Ltd.

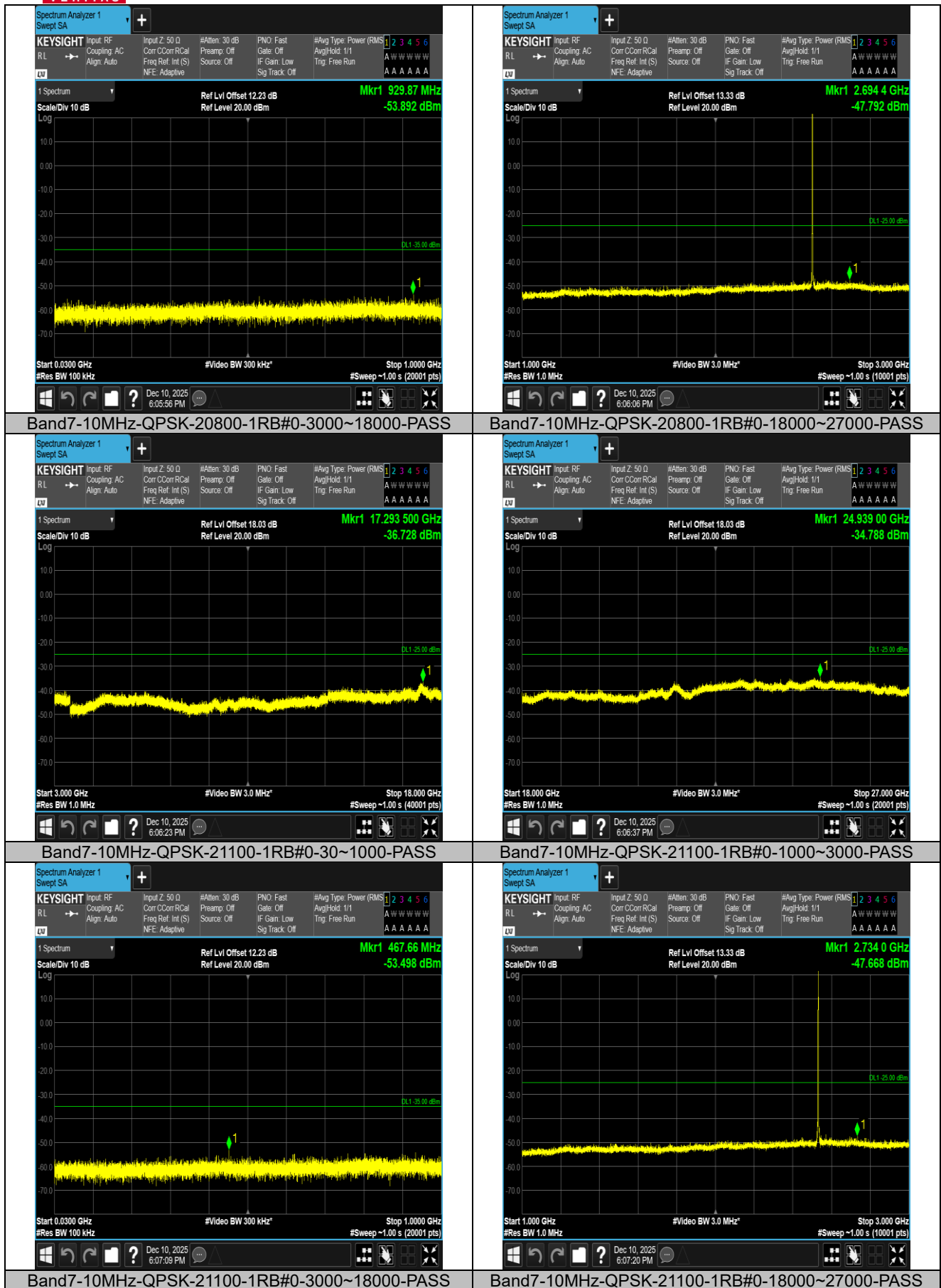
Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



BUREAU
VERITAS

Test Report No.: PSU-QBJ2512030110RF03



Huarui 7layers High Technology
(Suzhou) Co., Ltd.

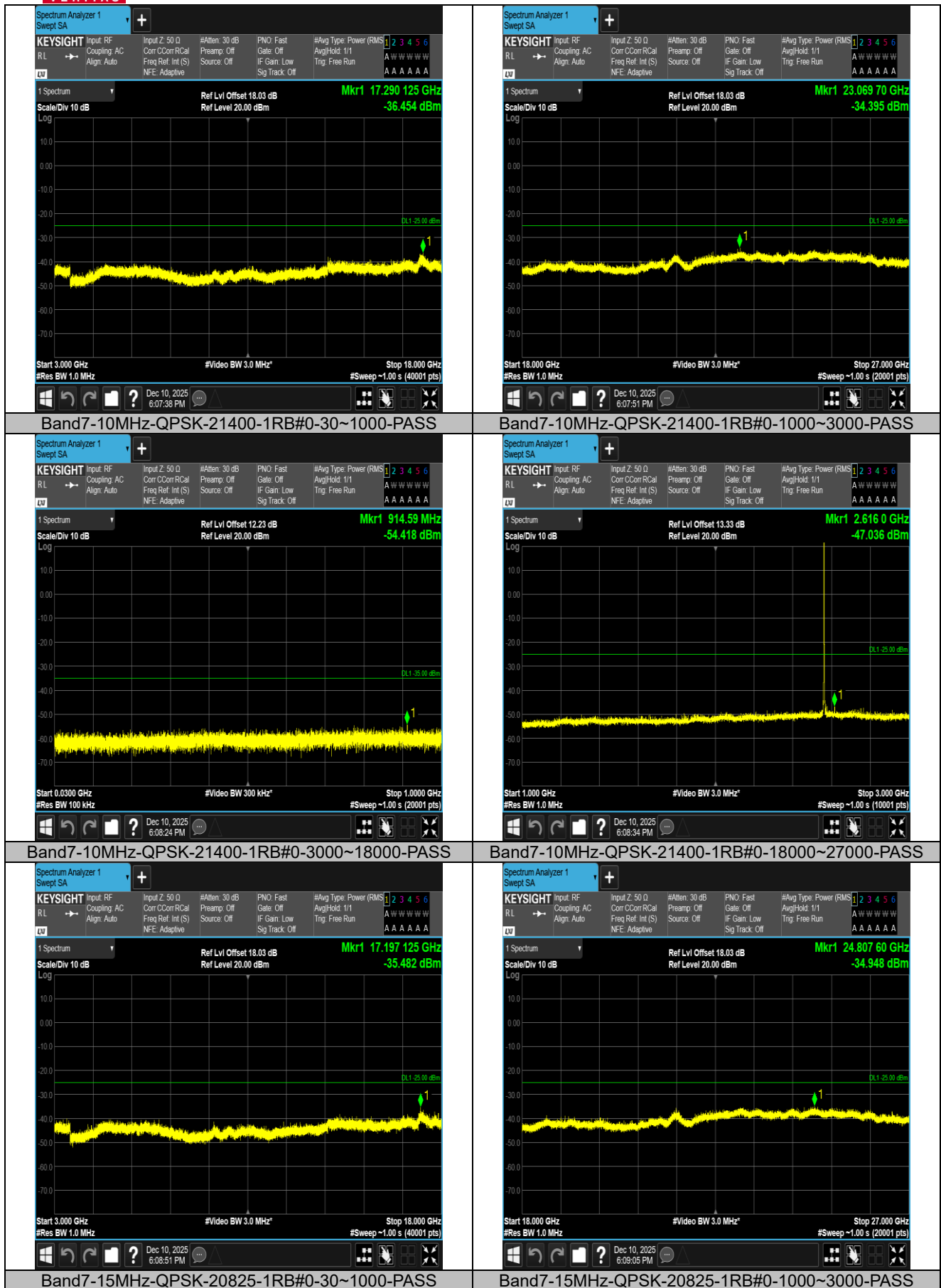
Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



BUREAU
VERITAS

Test Report No.: PSU-QBJ2512030110RF03



Huarui 7layers High Technology
(Suzhou) Co., Ltd.

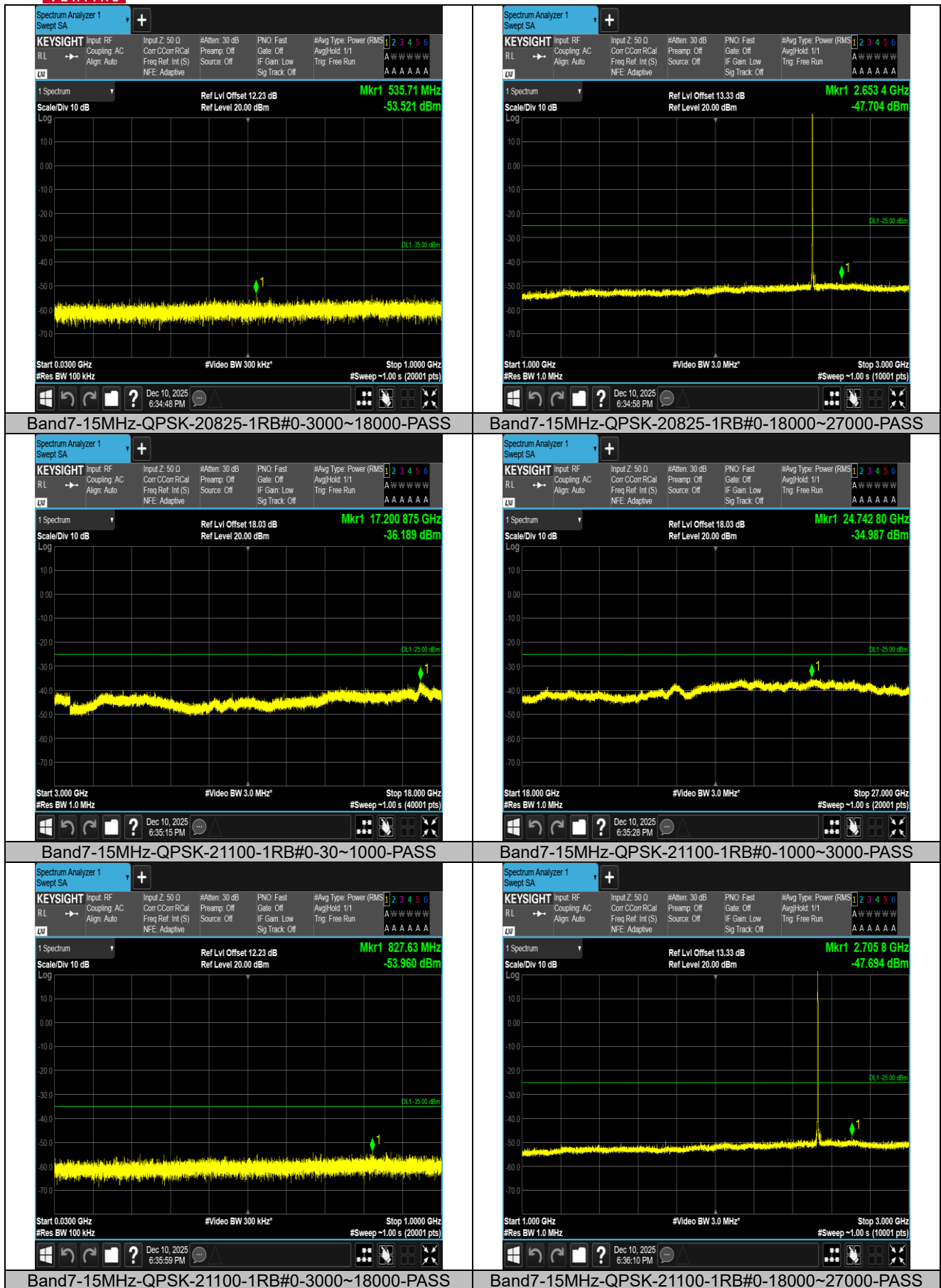
Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



BUREAU
VERITAS

Test Report No.: PSU-QBJ2512030110RF03



Huarui 7layers High Technology
(Suzhou) Co., Ltd.

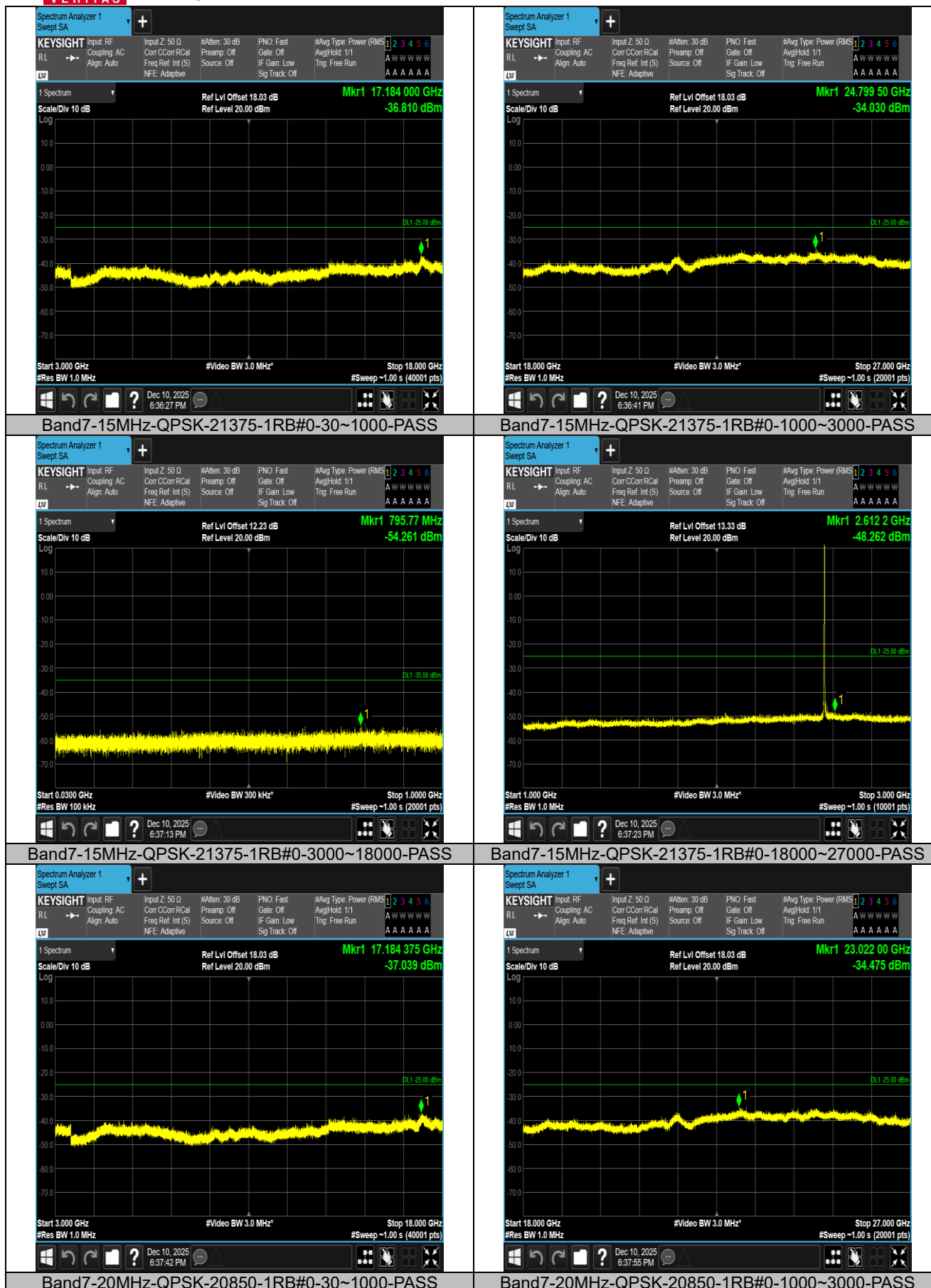
Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



BUREAU
VERITAS

Test Report No.: PSU-QBJ2512030110RF03



Huarui 7layers High Technology
(Suzhou) Co., Ltd.

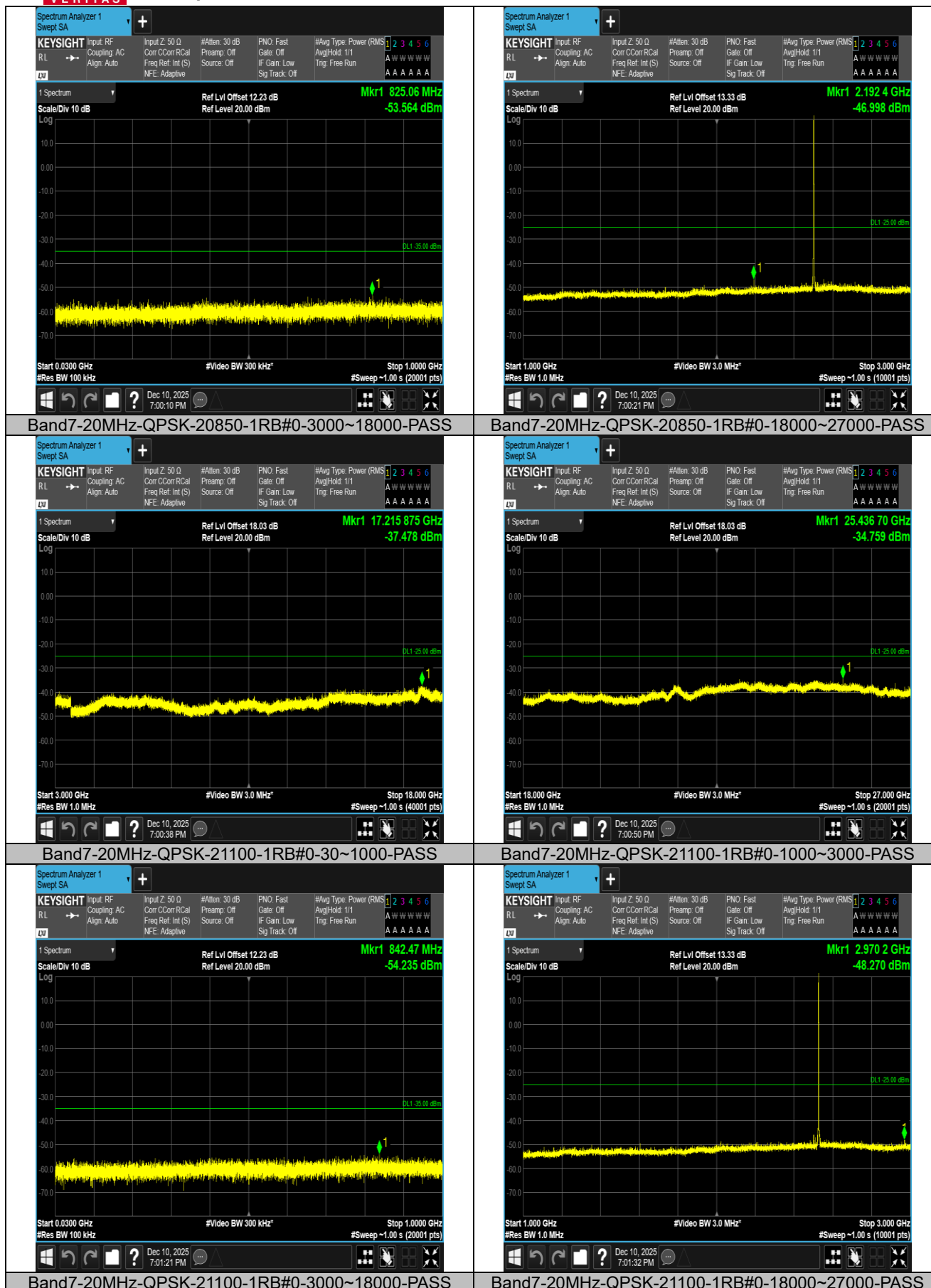
Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



BUREAU
VERITAS

Test Report No.: PSU-QBJ2512030110RF03



Huarui 7layers High Technology
(Suzhou) Co., Ltd.

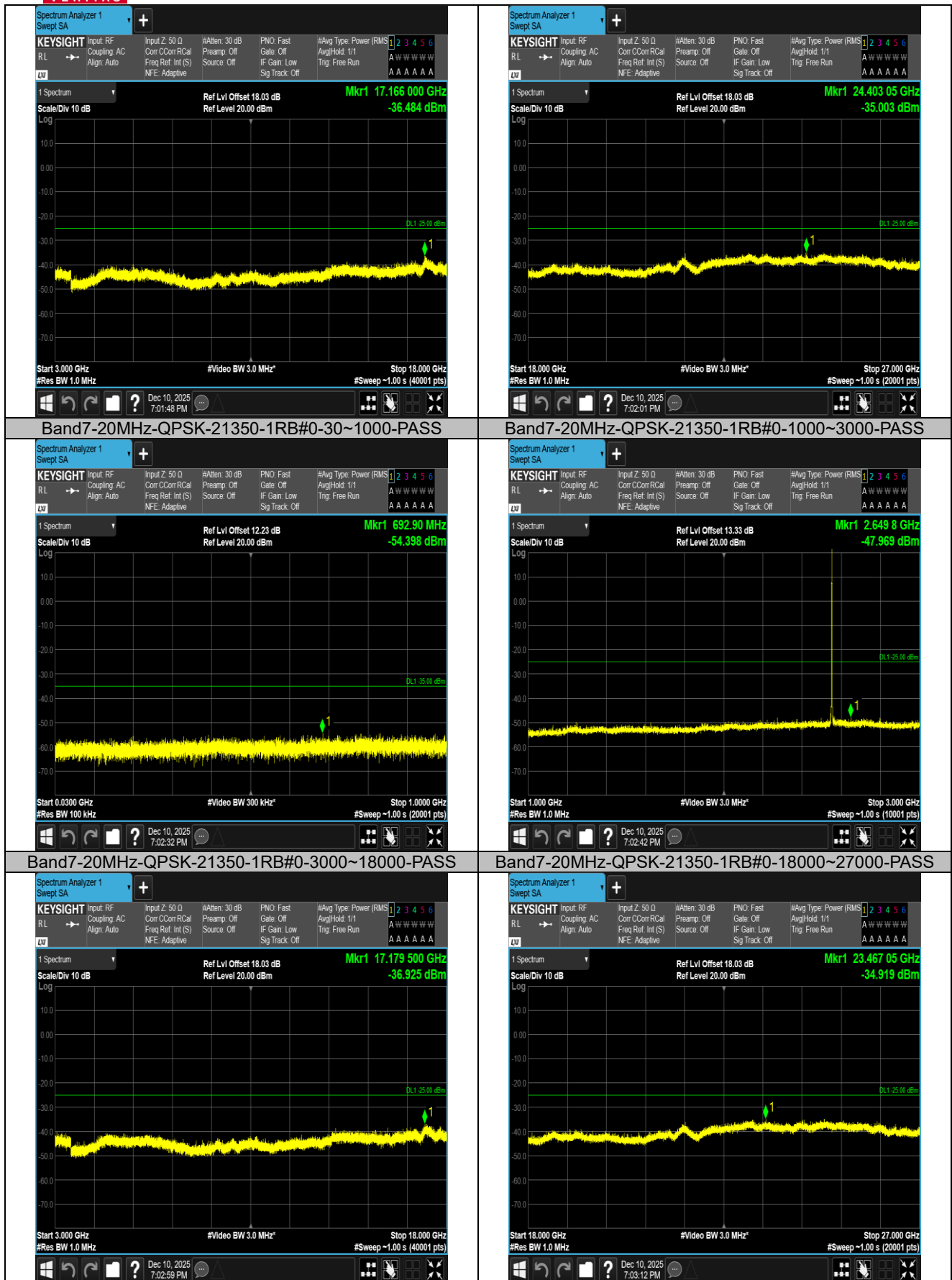
Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



BUREAU
VERITAS

Test Report No.: PSU-QBJ2512030110RF03



Huarui 7layers High Technology
(Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	10MHz	QPSK	20800	50RB#0	VN	NT	-5.33	-0.002128	±2.5	PASS
Band7	10MHz	QPSK	20800	50RB#0	VL	NT	-3.83	-0.001529	±2.5	PASS
Band7	10MHz	QPSK	20800	50RB#0	VH	NT	-3.76	-0.001501	±2.5	PASS
Band7	10MHz	QPSK	21400	50RB#0	VN	NT	-4.20	-0.001637	±2.5	PASS
Band7	10MHz	QPSK	21400	50RB#0	VL	NT	-5.10	-0.001988	±2.5	PASS
Band7	10MHz	QPSK	21400	50RB#0	VH	NT	-5.03	-0.001961	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band7	10MHz	QPSK	20800	50RB#0	NV	-30	-3.99	-0.001593	±2.5	PASS
Band7	10MHz	QPSK	20800	50RB#0	NV	-20	-3.25	-0.001297	±2.5	PASS
Band7	10MHz	QPSK	20800	50RB#0	NV	-10	-3.40	-0.001357	±2.5	PASS
Band7	10MHz	QPSK	20800	50RB#0	NV	0	-2.69	-0.001074	±2.5	PASS
Band7	10MHz	QPSK	20800	50RB#0	NV	10	-3.16	-0.001261	±2.5	PASS
Band7	10MHz	QPSK	20800	50RB#0	NV	20	-4.36	-0.001741	±2.5	PASS
Band7	10MHz	QPSK	20800	50RB#0	NV	30	2.77	0.001106	±2.5	PASS
Band7	10MHz	QPSK	20800	50RB#0	NV	40	-3.86	-0.001541	±2.5	PASS
Band7	10MHz	QPSK	20800	50RB#0	NV	50	-4.64	-0.001852	±2.5	PASS
Band7	10MHz	QPSK	21400	50RB#0	NV	-30	-6.76	-0.002635	±2.5	PASS
Band7	10MHz	QPSK	21400	50RB#0	NV	-20	3.86	0.001505	±2.5	PASS
Band7	10MHz	QPSK	21400	50RB#0	NV	-10	3.92	0.001528	±2.5	PASS
Band7	10MHz	QPSK	21400	50RB#0	NV	0	-4.42	-0.001723	±2.5	PASS
Band7	10MHz	QPSK	21400	50RB#0	NV	10	-2.94	-0.001146	±2.5	PASS
Band7	10MHz	QPSK	21400	50RB#0	NV	20	3.15	0.001228	±2.5	PASS
Band7	10MHz	QPSK	21400	50RB#0	NV	30	5.05	0.001969	±2.5	PASS
Band7	10MHz	QPSK	21400	50RB#0	NV	40	-3.09	-0.001205	±2.5	PASS
Band7	10MHz	QPSK	21400	50RB#0	NV	50	4.17	0.001626	±2.5	PASS



LTE BAND 12

Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	4.16	13	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	4.99	13	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	4.11	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	4.96	13	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	3.89	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	4.62	13	PASS
Band12	1.4MHz	64QAM	23017	1RB#0	6.07	13	PASS
Band12	1.4MHz	64QAM	23017	6RB#0	6.48	13	PASS
Band12	1.4MHz	64QAM	23095	1RB#0	5.96	13	PASS
Band12	1.4MHz	64QAM	23095	6RB#0	6.41	13	PASS
Band12	1.4MHz	64QAM	23173	1RB#0	5.84	13	PASS
Band12	1.4MHz	64QAM	23173	6RB#0	6.20	13	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	5.17	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	5.95	13	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	5.09	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	5.90	13	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	4.86	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	5.57	13	PASS
Band12	3MHz	QPSK	23025	1RB#0	4.13	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	5.03	13	PASS
Band12	3MHz	QPSK	23095	1RB#0	4.06	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	5.00	13	PASS
Band12	3MHz	QPSK	23165	1RB#0	4.08	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	4.86	13	PASS
Band12	3MHz	64QAM	23025	1RB#0	6.10	13	PASS
Band12	3MHz	64QAM	23025	15RB#0	6.50	13	PASS
Band12	3MHz	64QAM	23095	1RB#0	6.01	13	PASS
Band12	3MHz	64QAM	23095	15RB#0	6.42	13	PASS
Band12	3MHz	64QAM	23165	1RB#0	6.06	13	PASS
Band12	3MHz	64QAM	23165	15RB#0	6.35	13	PASS
Band12	3MHz	16QAM	23025	1RB#0	5.16	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	5.96	13	PASS
Band12	3MHz	16QAM	23095	1RB#0	5.12	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	5.92	13	PASS
Band12	3MHz	16QAM	23165	1RB#0	5.13	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	5.80	13	PASS
Band12	5MHz	QPSK	23035	1RB#0	4.16	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	5.07	13	PASS
Band12	5MHz	QPSK	23095	1RB#0	4.06	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	5.00	13	PASS
Band12	5MHz	QPSK	23155	1RB#0	4.19	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	5.00	13	PASS
Band12	5MHz	64QAM	23035	1RB#0	6.09	13	PASS
Band12	5MHz	64QAM	23035	25RB#0	6.47	13	PASS
Band12	5MHz	64QAM	23095	1RB#0	5.96	13	PASS
Band12	5MHz	64QAM	23095	25RB#0	6.42	13	PASS
Band12	5MHz	64QAM	23155	1RB#0	6.09	13	PASS
Band12	5MHz	64QAM	23155	25RB#0	6.46	13	PASS
Band12	5MHz	16QAM	23035	1RB#0	5.14	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	5.97	13	PASS
Band12	5MHz	16QAM	23095	1RB#0	5.02	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	5.94	13	PASS
Band12	5MHz	16QAM	23155	1RB#0	5.22	13	PASS
Band12	5MHz	16QAM	23155	25RB#0	5.93	13	PASS

Huarui 7layers High Technology
(Suzhou) Co., Ltd.

Tower N, Innovation Center, 88 Zuyi Road, High-tech
District, Suzhou City, Anhui Province, China

Tel: +86 (0557) 368 1008



Band12	10MHz	QPSK	23060	1RB#0	4.15	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	5.08	13	PASS
Band12	10MHz	QPSK	23095	1RB#0	4.08	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.01	13	PASS
Band12	10MHz	QPSK	23130	1RB#0	4.08	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.16	13	PASS
Band12	10MHz	64QAM	23060	1RB#0	6.06	13	PASS
Band12	10MHz	64QAM	23060	50RB#0	6.42	13	PASS
Band12	10MHz	64QAM	23095	1RB#0	6.00	13	PASS
Band12	10MHz	64QAM	23095	50RB#0	6.31	13	PASS
Band12	10MHz	64QAM	23130	1RB#0	5.98	13	PASS
Band12	10MHz	64QAM	23130	50RB#0	6.38	13	PASS
Band12	10MHz	16QAM	23060	1RB#0	5.11	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	5.94	13	PASS
Band12	10MHz	16QAM	23095	1RB#0	5.07	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	5.92	13	PASS
Band12	10MHz	16QAM	23130	1RB#0	5.09	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.00	13	PASS



Test Graphs

