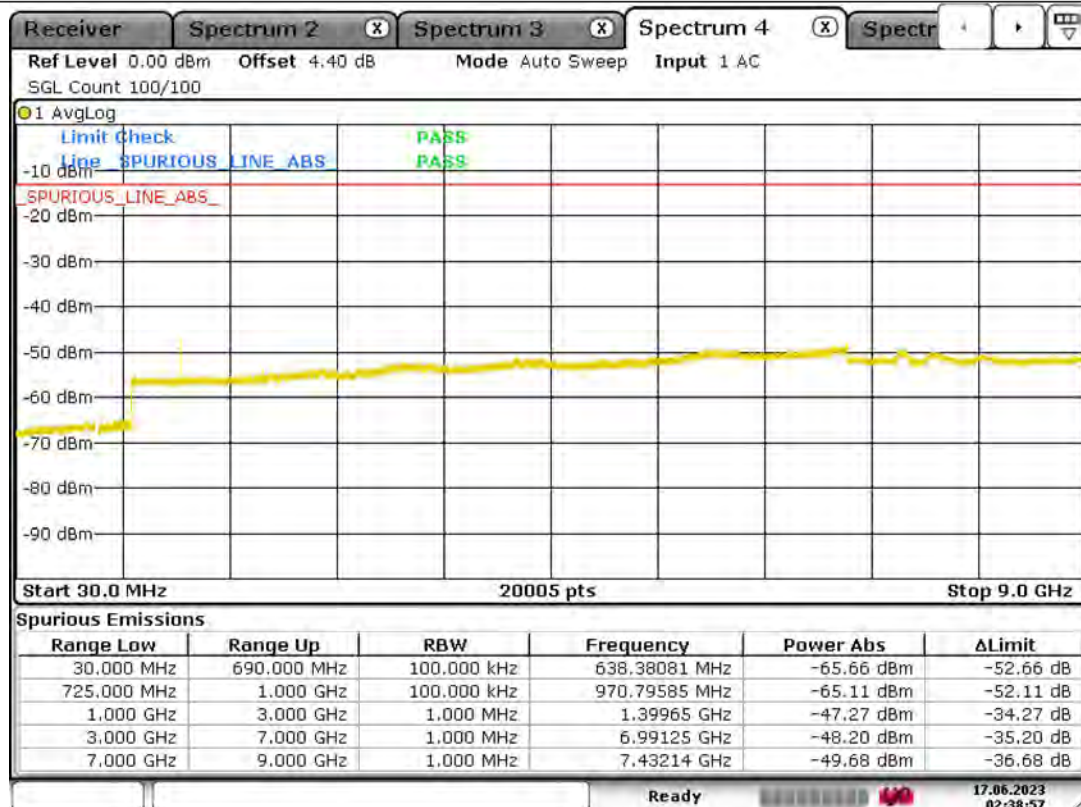




BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05

Band12-10MHz-16QAM-23060-1RB#0-Range:30~90000MHz



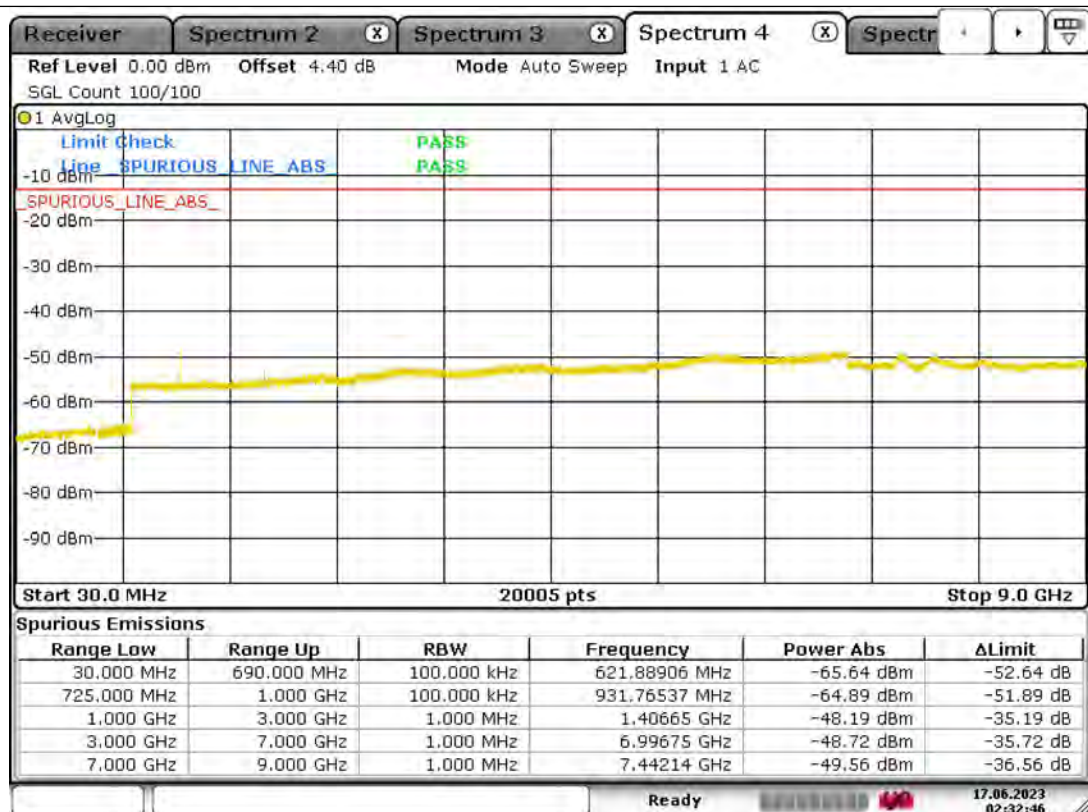
Date: 17.JUN.2023 02:38:57

Band12-10MHz-16QAM-23095-1RB#0-Range:30~90000MHz



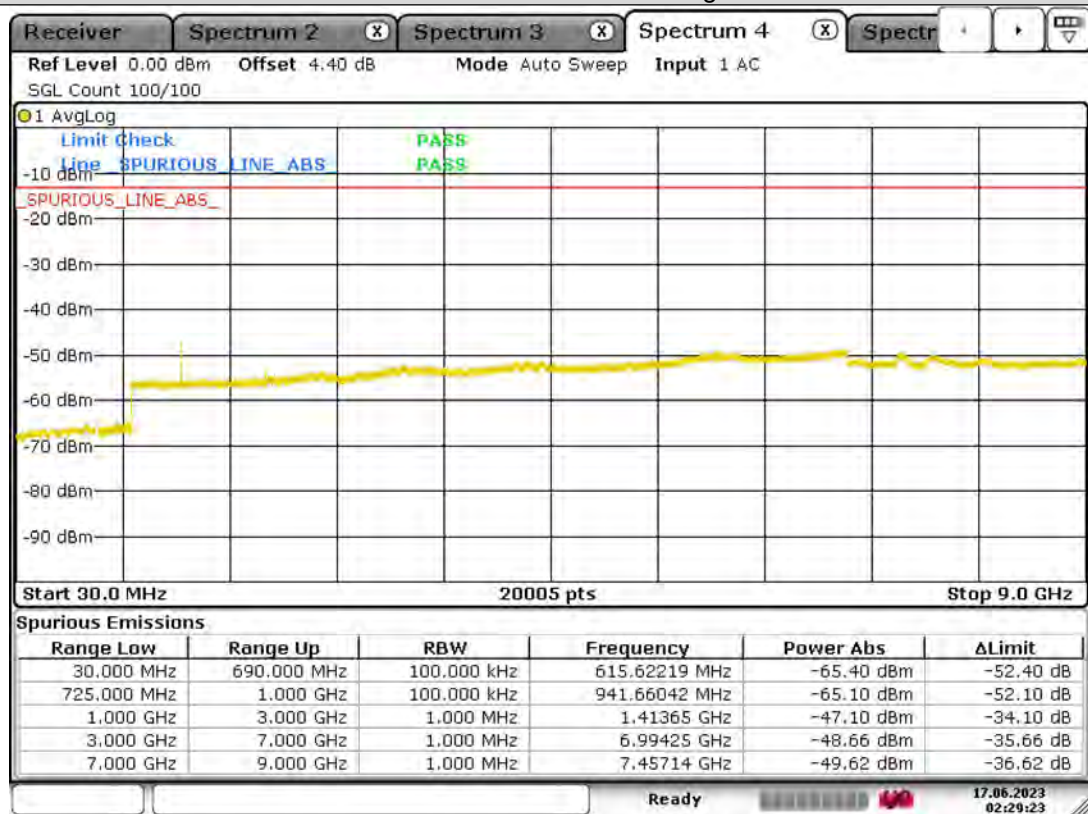
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 02:32:47

Band12-10MHz-16QAM-23130-1RB#0-Range:30~90000MHz



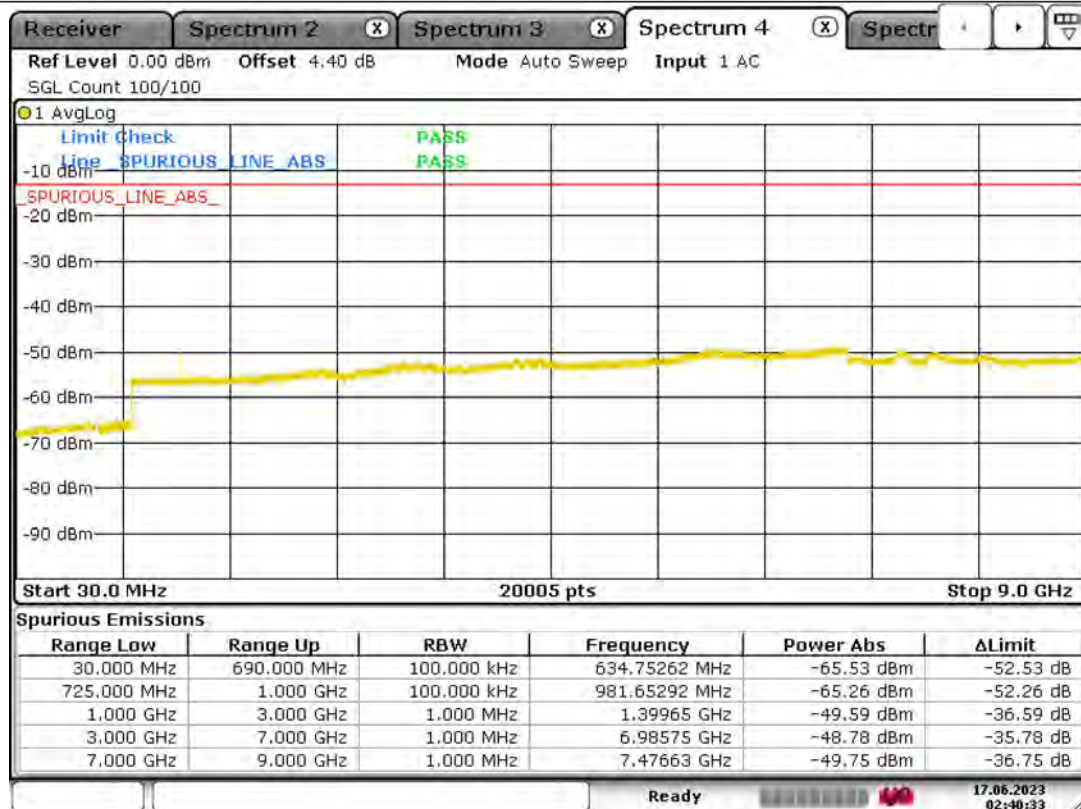
Date: 17.JUN.2023 02:29:23



BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05

Band12-10MHz-64QAM-23060-1RB#0-Range:30~90000MHz



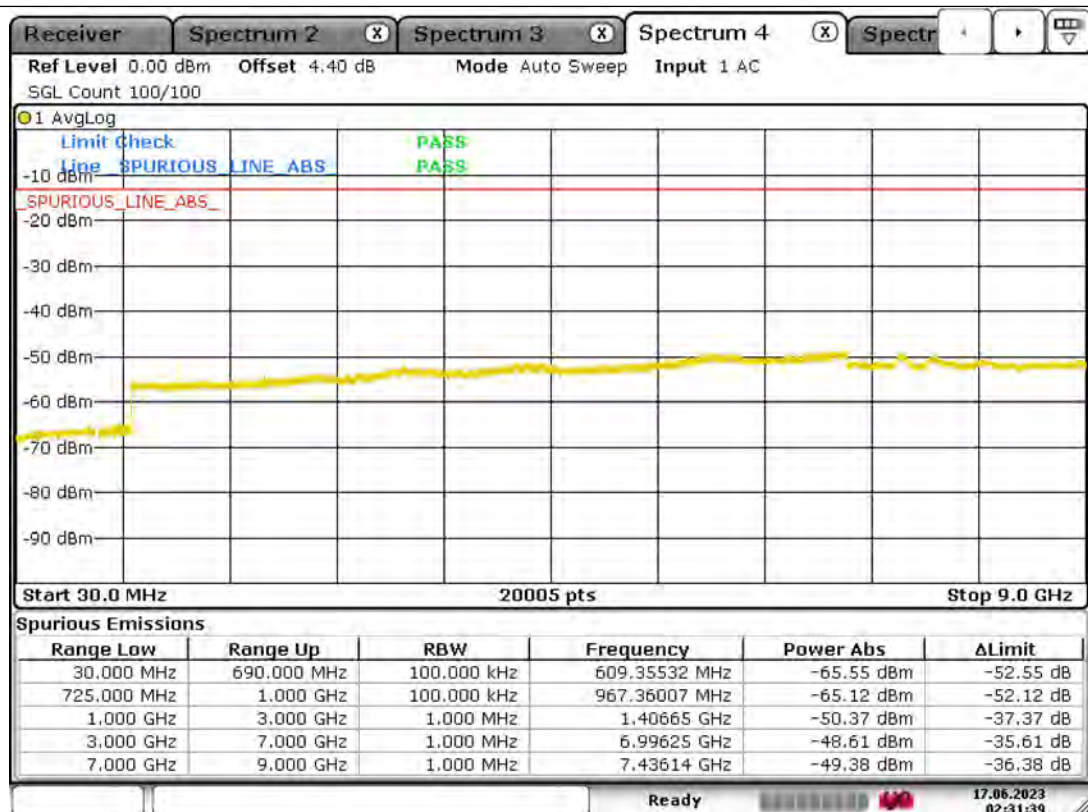
Date: 17.JUN.2023 02:40:33

Band12-10MHz-64QAM-23095-1RB#0-Range:30~90000MHz



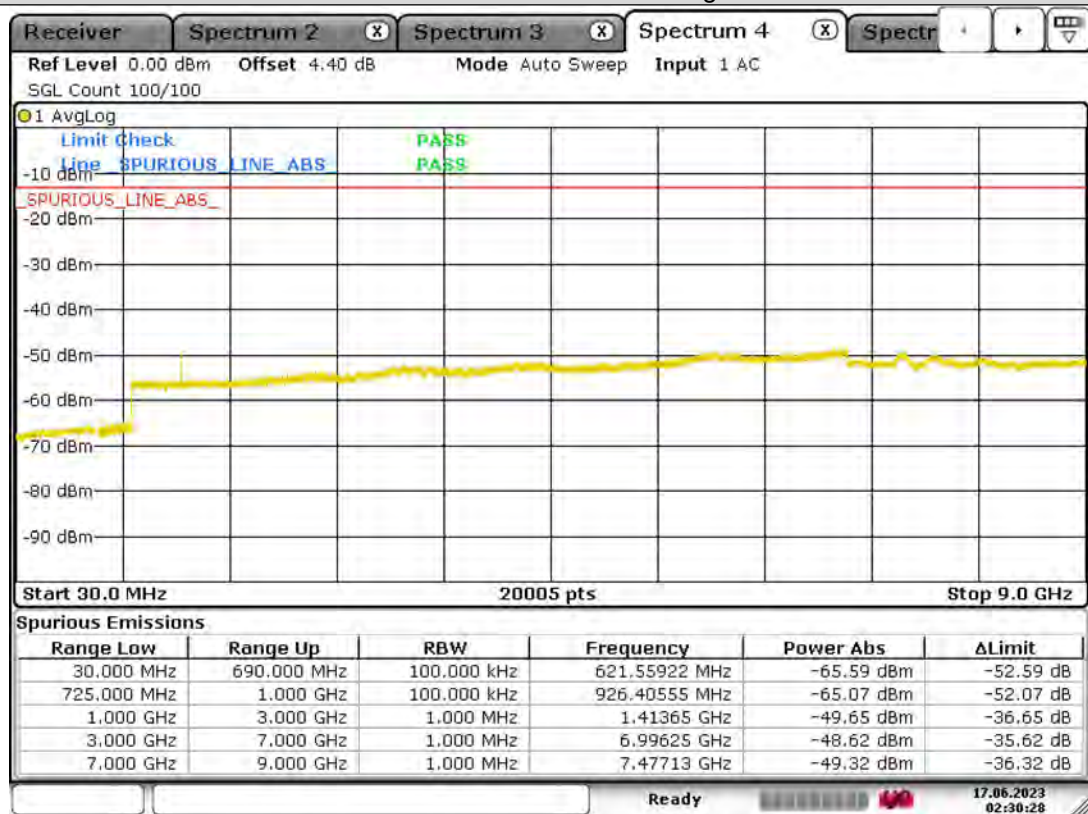
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 02:31:39

Band12-10MHz-64QAM-23130-1RB#0-Range:30~90000MHz



Date: 17.JUN.2023 02:30:29

FREQUENCY STABILITY

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	VL	NT	5.8	0.008239	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VN	NT	3.5	0.004972	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VH	NT	-4.9	-0.006960	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VL	NT	8.8	0.012438	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VN	NT	4	0.005654	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VH	NT	-5.1	-0.007208	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VL	NT	4.9	0.006892	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VN	NT	2.2	0.003094	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VH	NT	-15	-0.021097	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VL	NT	15	0.021307	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VN	NT	-6.3	-0.008949	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VH	NT	-3.8	-0.005398	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VL	NT	-5.6	-0.007915	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VN	NT	2.4	0.003392	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VH	NT	-5.5	-0.007774	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VL	NT	0.8	0.001125	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VN	NT	4.1	0.005767	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VH	NT	-12.6	-0.017722	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	VL	NT	-2	-0.002841	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	VN	NT	4.2	0.005966	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	VH	NT	-4	-0.005682	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	VL	NT	-2.6	-0.003675	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	VN	NT	10.6	0.014982	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	VH	NT	3.9	0.005512	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	VL	NT	-0.4	-0.000563	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	VN	NT	-12.8	-0.018003	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	VH	NT	-12	-0.016878	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	NV	-30	-9.3	-0.013210	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-20	23.9	0.033949	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-10	13.6	0.000590	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	0	-14.3	-0.020313	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	10	-13.6	-0.019318	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	20	-13.5	-0.019176	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	30	-2.1	-0.002983	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	40	12.4	0.017614	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	50	0.1	0.000142	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-30	-17.4	-0.024594	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-20	15.8	0.022332	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-10	9.3	0.013145	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	0	6.4	0.009046	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	10	-19.8	-0.027986	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	20	11.5	0.016254	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	30	-22.9	-0.032367	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	40	-18.6	-0.026290	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	50	16.4	0.023180	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-30	-5	-0.007032	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-20	-18	-0.025316	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-10	-21.9	-0.030802	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	0	12.7	0.017862	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	10	20.3	0.028551	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	20	-4.7	-0.006610	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	30	-10.7	-0.015049	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	40	19.9	0.027989	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	50	-14.7	-0.020675	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-30	-4	-0.005682	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-20	2.2	0.003125	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-10	25	0.035511	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	0	1	0.001420	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	10	-20.7	-0.029403	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	20	-22	-0.031250	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	30	0.1	0.000142	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	40	-3.6	-0.005114	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	50	-21.7	-0.030824	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-30	16.7	0.023604	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-20	-7.8	-0.011025	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-10	-22.6	-0.031943	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	0	-6.2	-0.008763	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	10	-14.1	-0.019929	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	20	11.5	0.016254	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	30	-0.6	-0.000848	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	40	-6.3	-0.008905	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	50	12.9	0.018233	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-30	3.1	0.004360	±2.5	PASS

Band12	10MHz	16QAM	23130	50RB#0	NV	-20	19.7	0.027707	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-10	-7.6	-0.010689	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	0	-8.8	-0.012377	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	10	-8.8	-0.012377	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	20	15.5	0.021800	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	30	-13.1	-0.018425	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	40	-0.8	-0.001125	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	50	19.3	0.027145	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	-30	24.8	0.035227	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	-20	10	0.014205	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	-10	21	0.029830	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	0	-20.3	-0.028835	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	10	-15.9	-0.022585	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	20	-7.6	-0.010795	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	30	-11.5	-0.016335	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	40	4.7	0.006676	±2.5	PASS
Band12	10MHz	64QAM	23060	50RB#0	NV	50	-2.9	-0.004119	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	-30	-15.3	-0.021625	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	-20	6.5	0.009187	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	-10	-21.8	-0.030813	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	0	-23.2	-0.032792	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	10	-10.7	-0.015124	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	20	-8	-0.011307	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	30	-19.9	-0.028127	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	40	12.6	0.017809	±2.5	PASS
Band12	10MHz	64QAM	23095	50RB#0	NV	50	10.2	0.014417	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	-30	-15.3	-0.021519	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	-20	-4.7	-0.006610	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	-10	-13.6	-0.019128	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	0	-21.3	-0.029958	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	10	-12.3	-0.017300	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	20	-18.9	-0.026582	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	30	-3.6	-0.005063	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	40	18.2	0.025598	±2.5	PASS
Band12	10MHz	64QAM	23130	50RB#0	NV	50	-0.4	-0.000563	±2.5	PASS

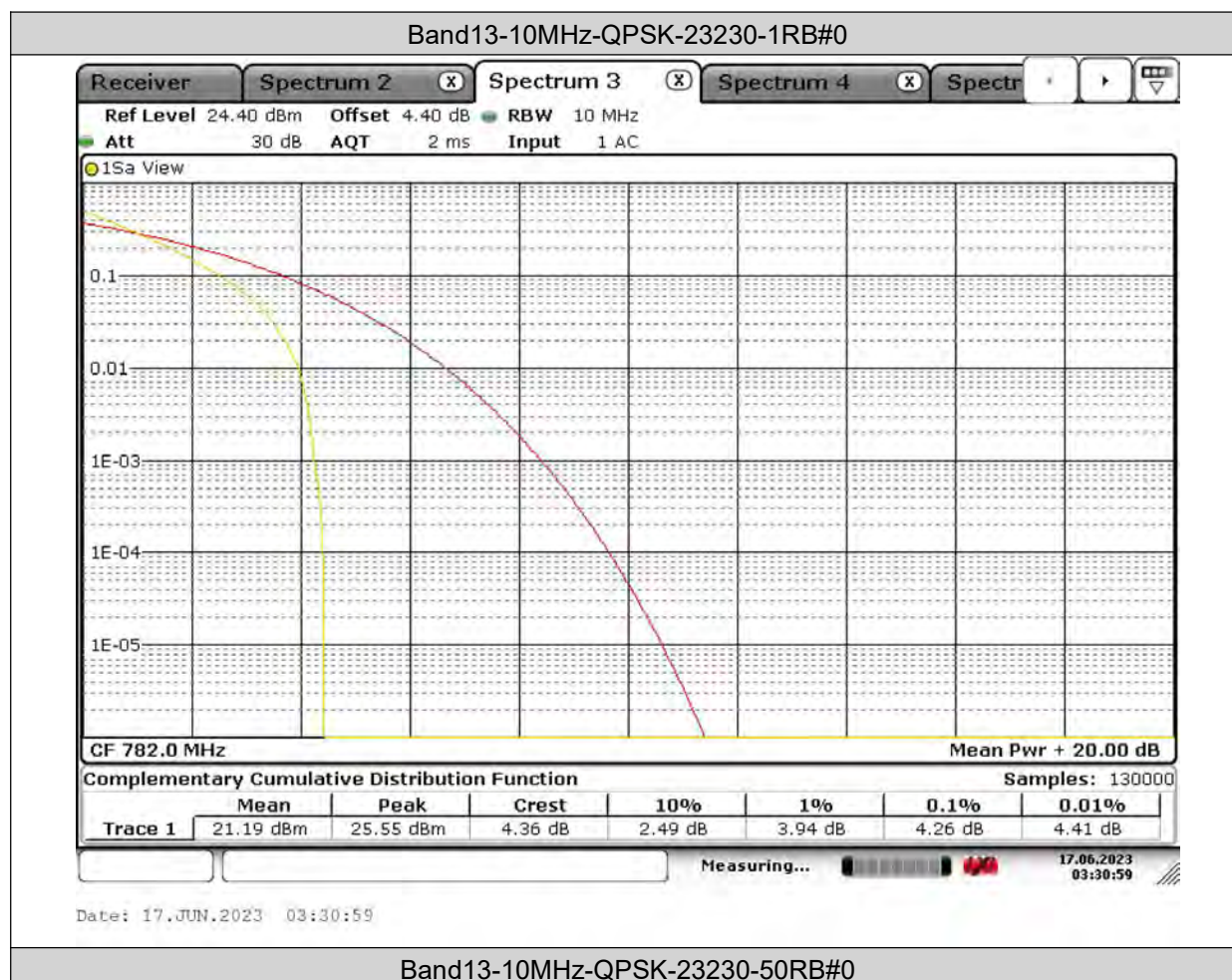
LTE BAND13

PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band13	10MHz	QPSK	23230	1RB#0	4.26	13	PASS
Band13	10MHz	QPSK	23230	50RB#0	5.13	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	5.88	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	5.88	13	PASS
Band13	10MHz	64QAM	23230	1RB#0	5.77	13	PASS
Band13	10MHz	64QAM	23230	50RB#0	6.35	13	PASS

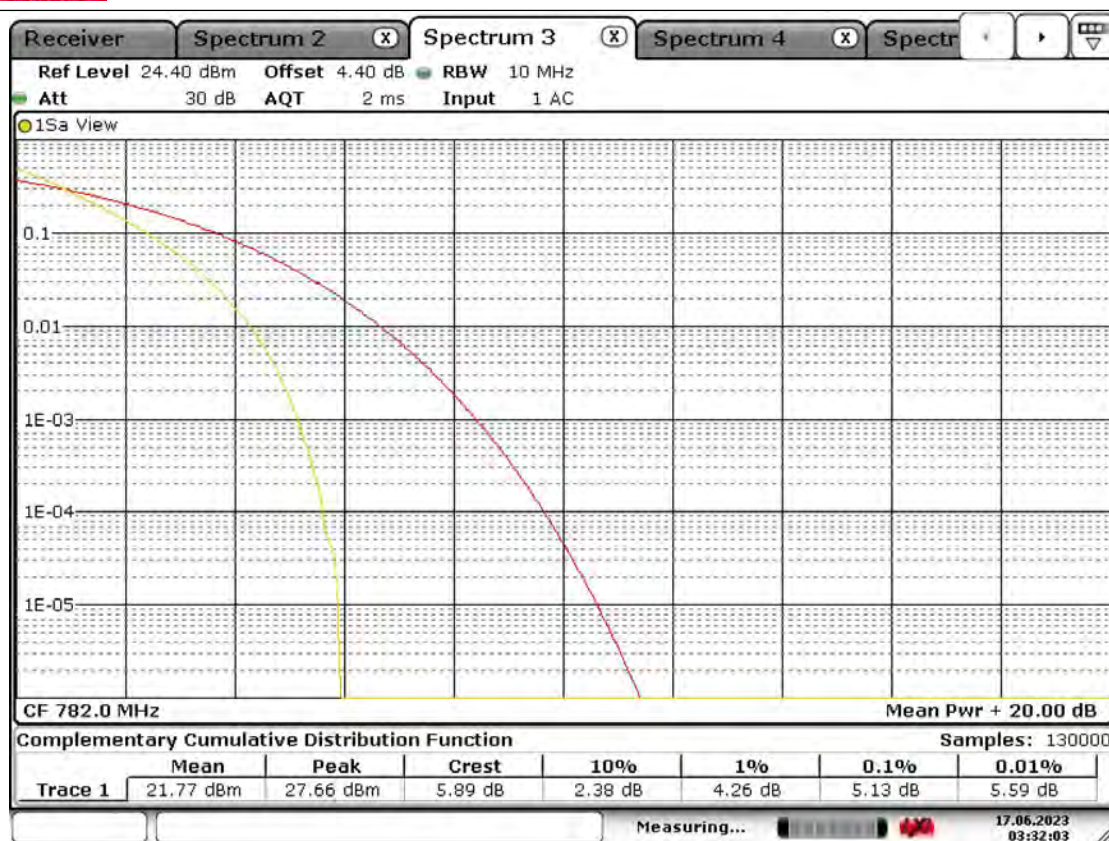
Test Graphs





BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:32:03

Band13-10MHz-16QAM-23230-1RB#0



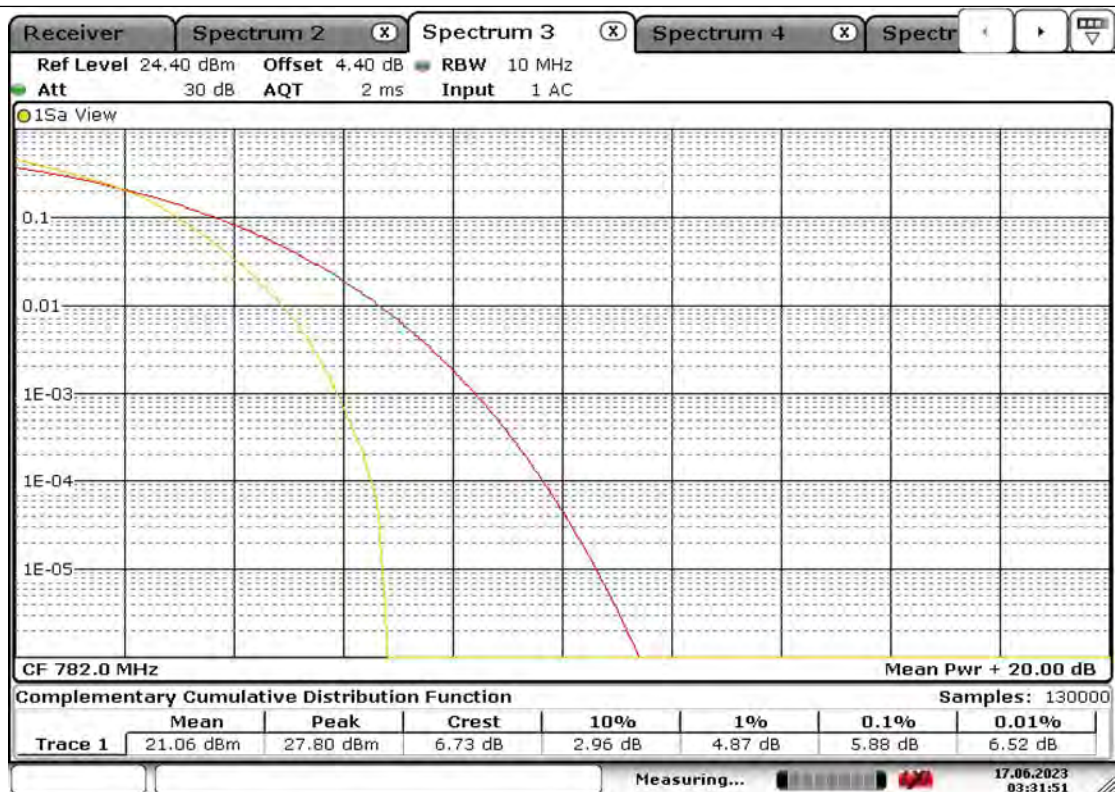
Date: 17.JUN.2023 04:30:48

Band13-10MHz-16QAM-23230-50RB#0



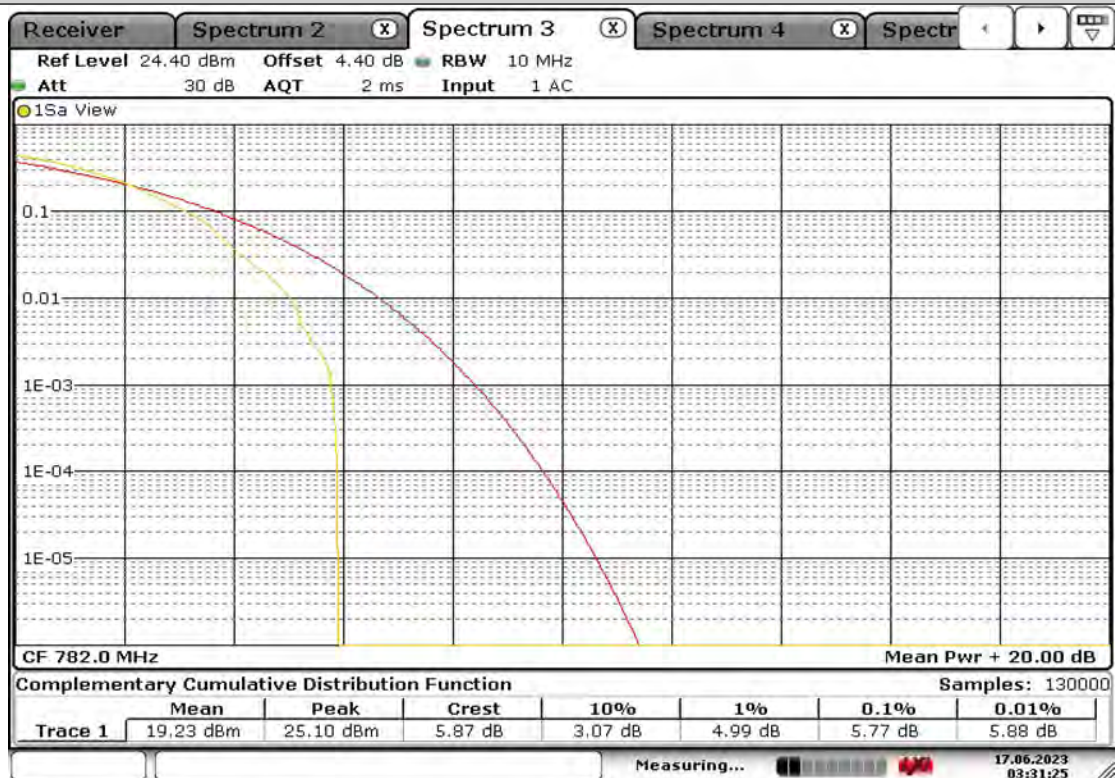
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:31:51

Band13-10MHz-64QAM-23230-1RB#0



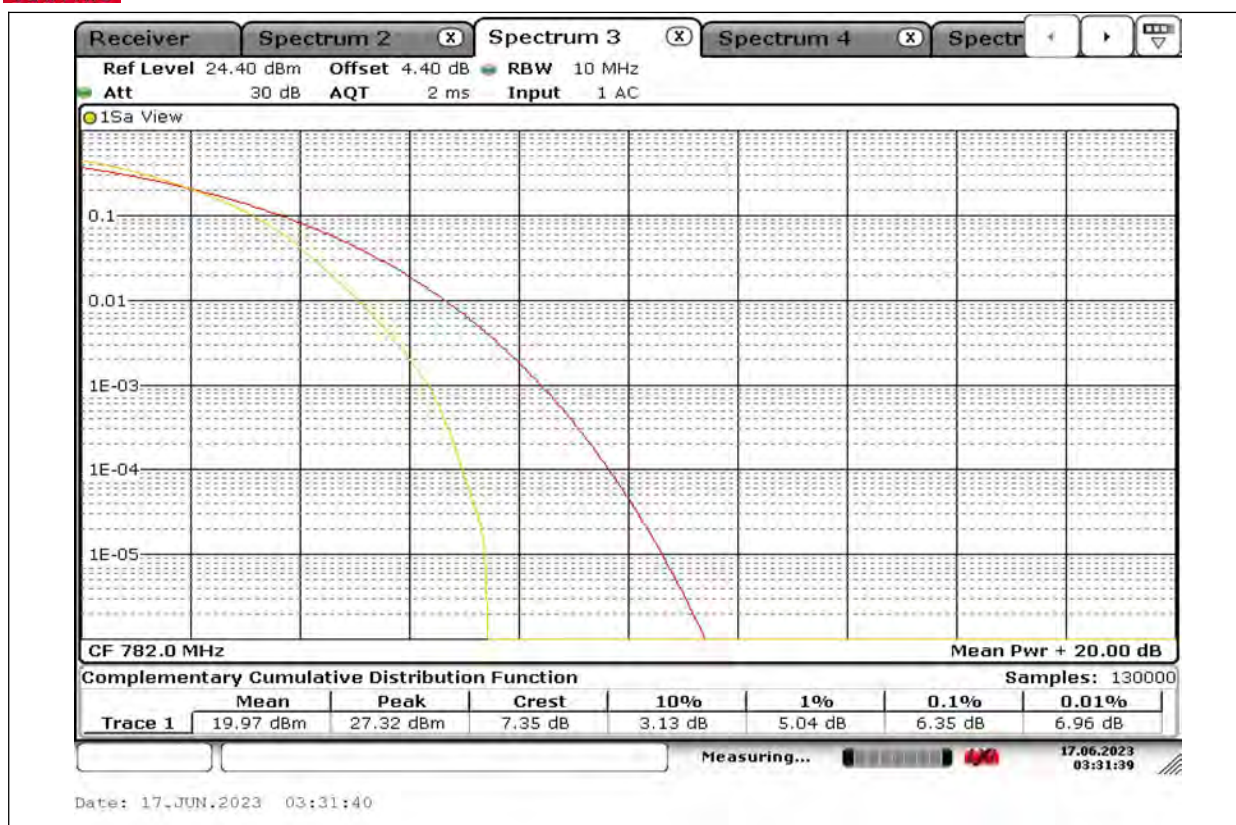
Date: 17.JUN.2023 03:31:26

Band13-10MHz-64QAM-23230-50RB#0



BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band13	5MHz	QPSK	23205	25RB#0	4.5007	4.906	PASS
Band13	5MHz	QPSK	23230	25RB#0	4.4718	4.848	PASS
Band13	5MHz	QPSK	23255	25RB#0	4.5007	4.92	PASS
Band13	5MHz	16QAM	23205	25RB#0	4.5007	4.949	PASS
Band13	5MHz	16QAM	23230	25RB#0	4.4863	4.877	PASS
Band13	5MHz	16QAM	23255	25RB#0	4.4863	4.848	PASS
Band13	5MHz	64QAM	23205	25RB#0	4.5151	4.863	PASS
Band13	5MHz	64QAM	23230	25RB#0	4.5151	4.949	PASS
Band13	5MHz	64QAM	23255	25RB#0	4.4863	4.964	PASS
Band13	10MHz	QPSK	23230	50RB#0	9.0593	9.783	PASS
Band13	10MHz	16QAM	23230	50RB#0	9.0593	9.725	PASS
Band13	10MHz	64QAM	23230	50RB#0	9.0014	9.638	PASS

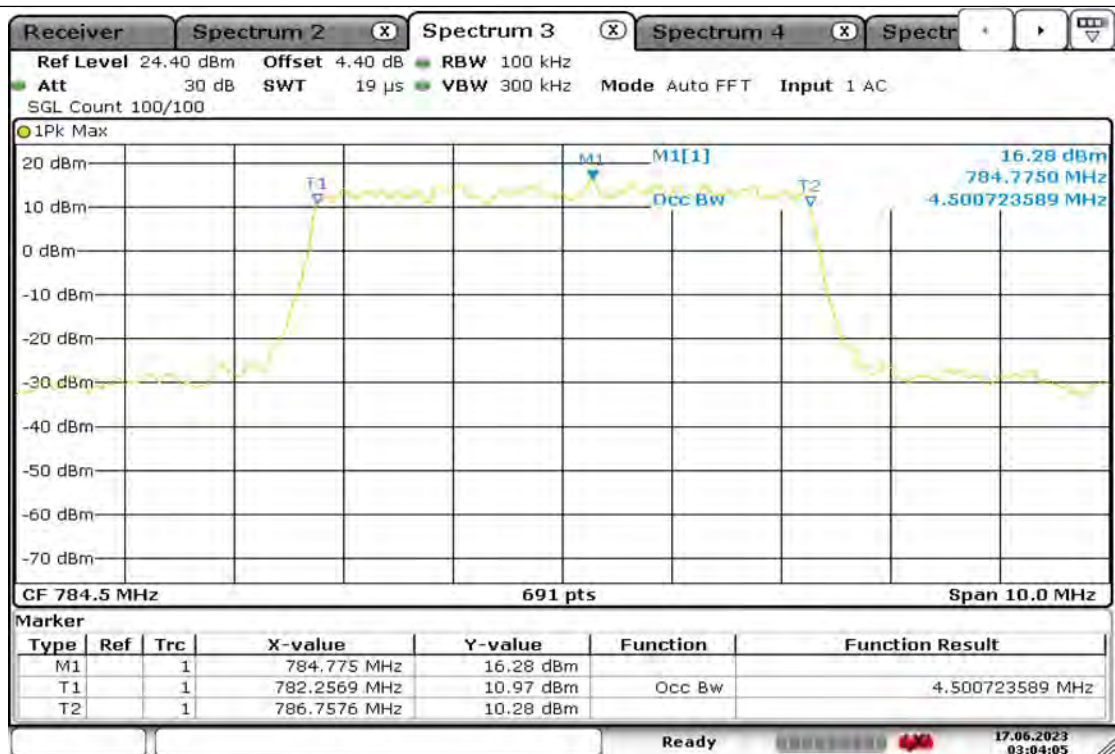
Test Graphs





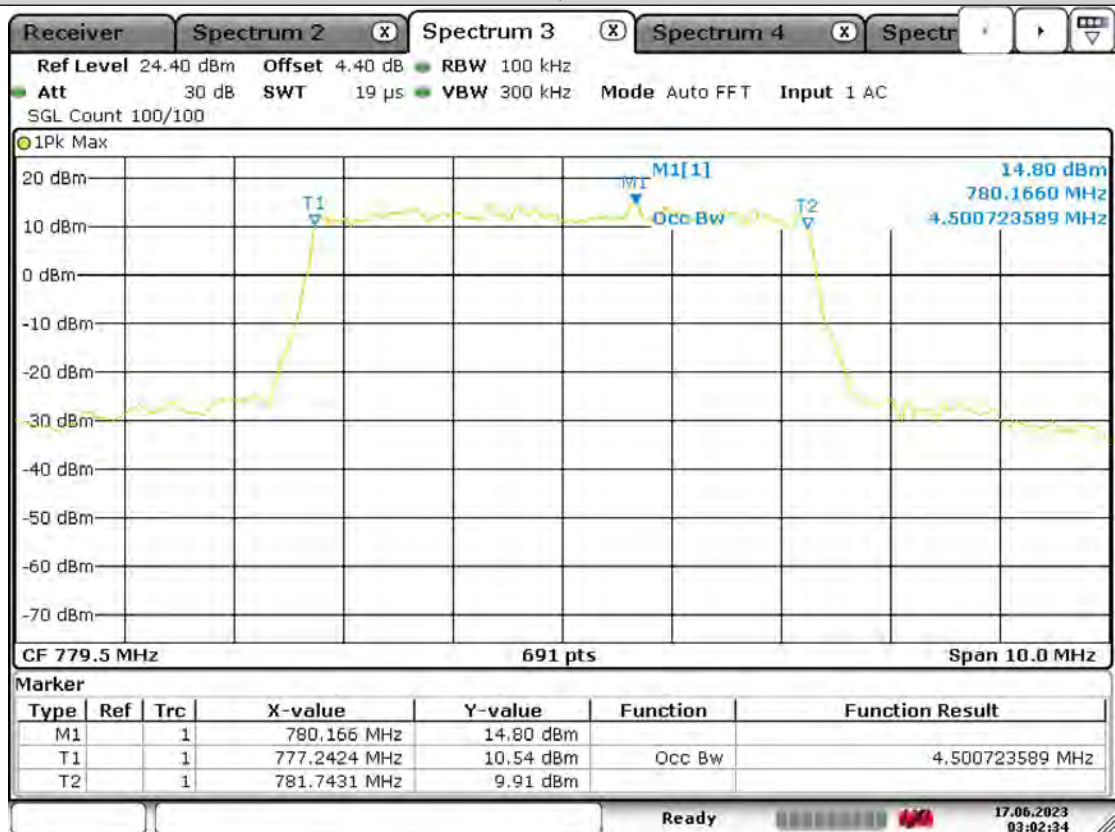
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:04:05

Band13-5MHz-16QAM-23205-25RB#0



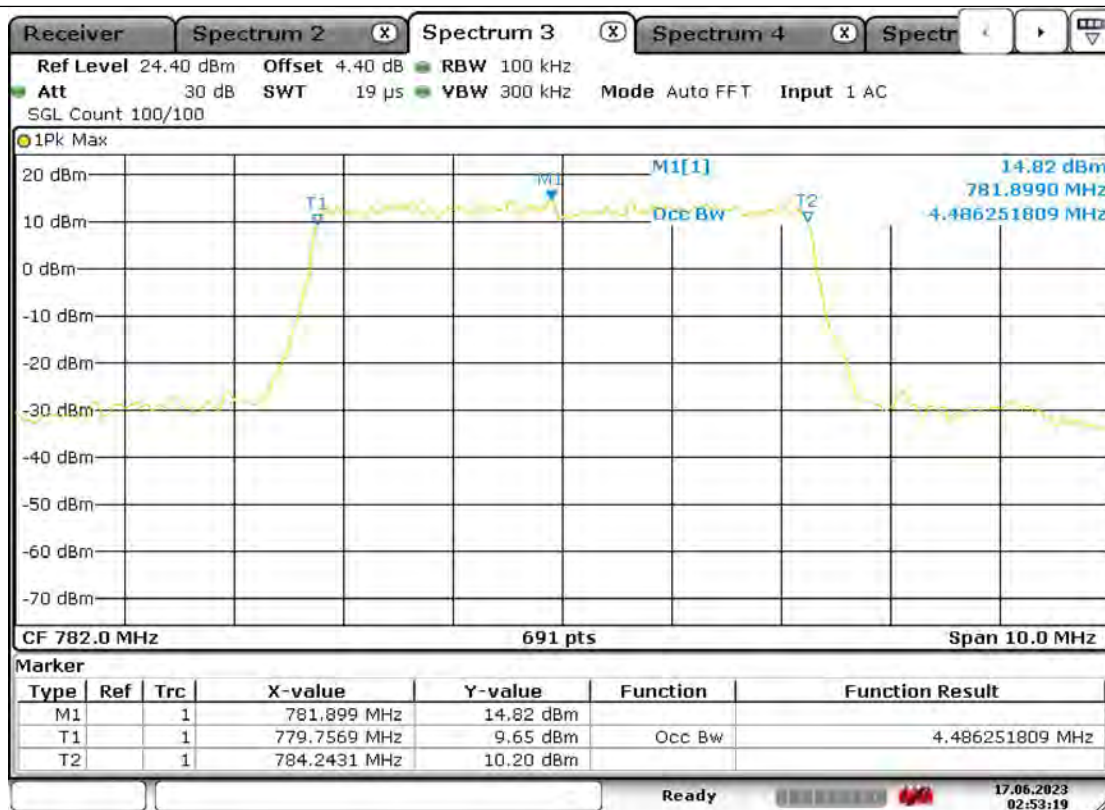
Date: 17.JUN.2023 03:02:35

Band13-5MHz-16QAM-23230-25RB#0



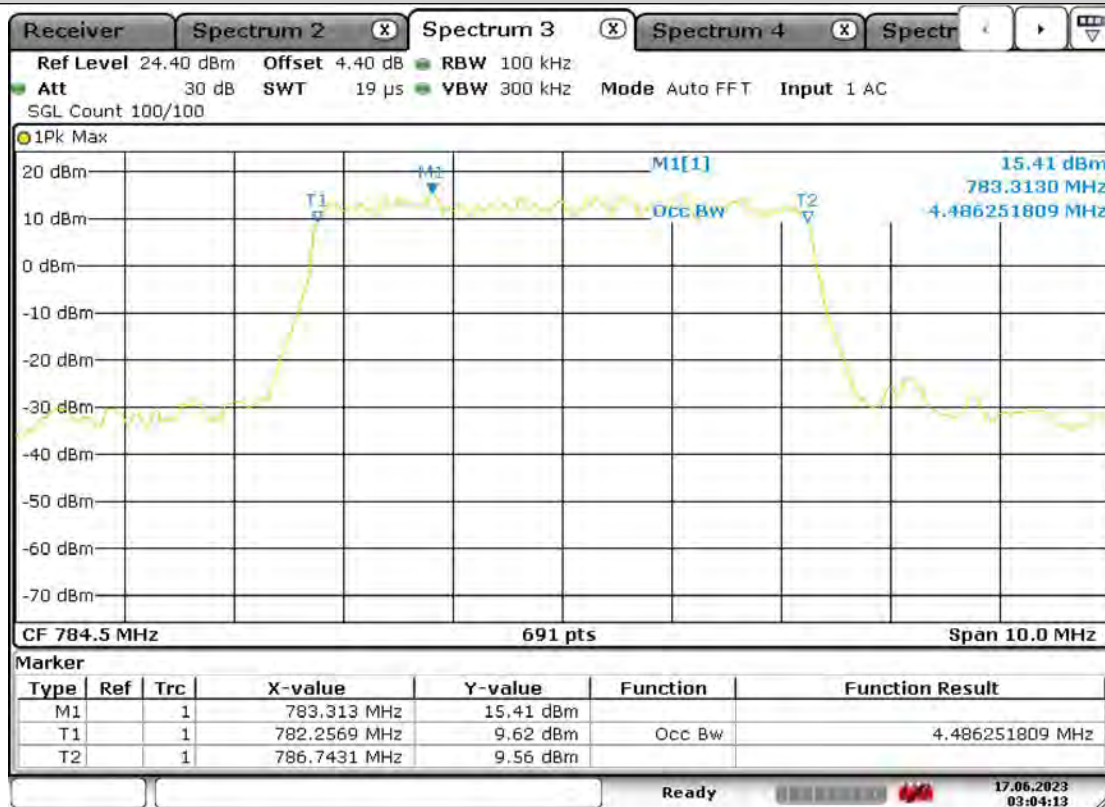
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 02:53:19

Band13-5MHz-16QAM-23255-25RB#0



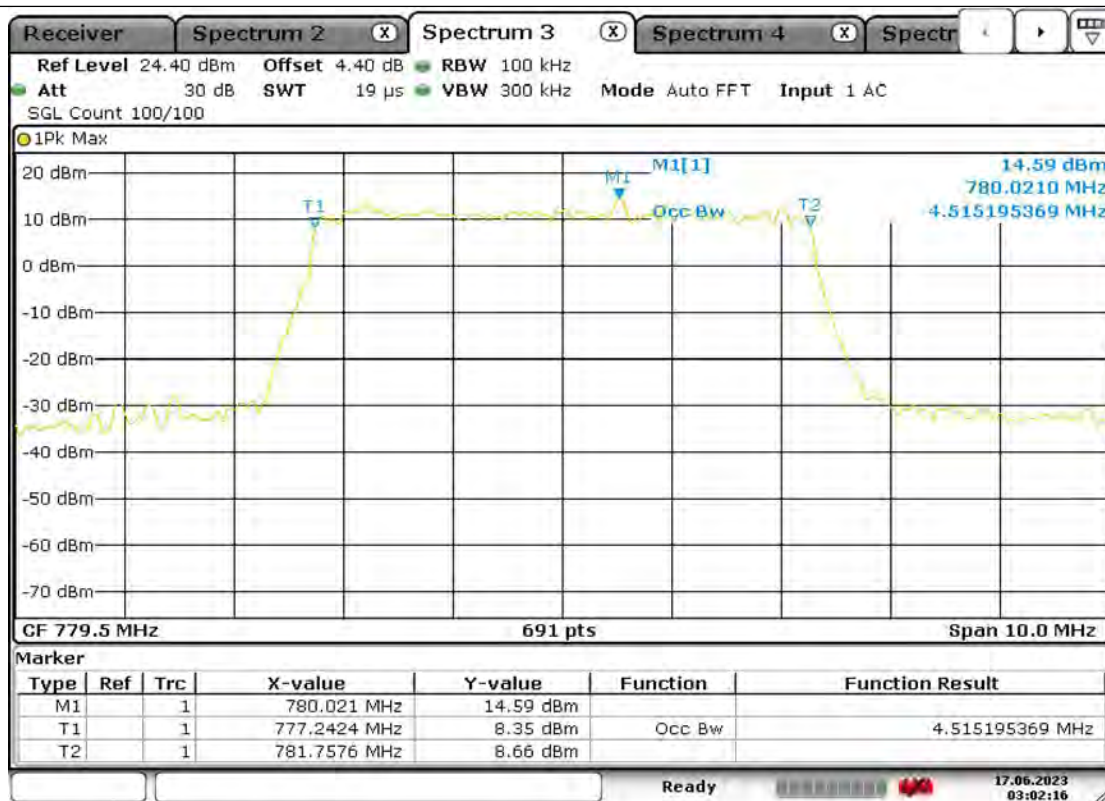
Date: 17.JUN.2023 03:04:13

Band13-5MHz-64QAM-23205-25RB#0



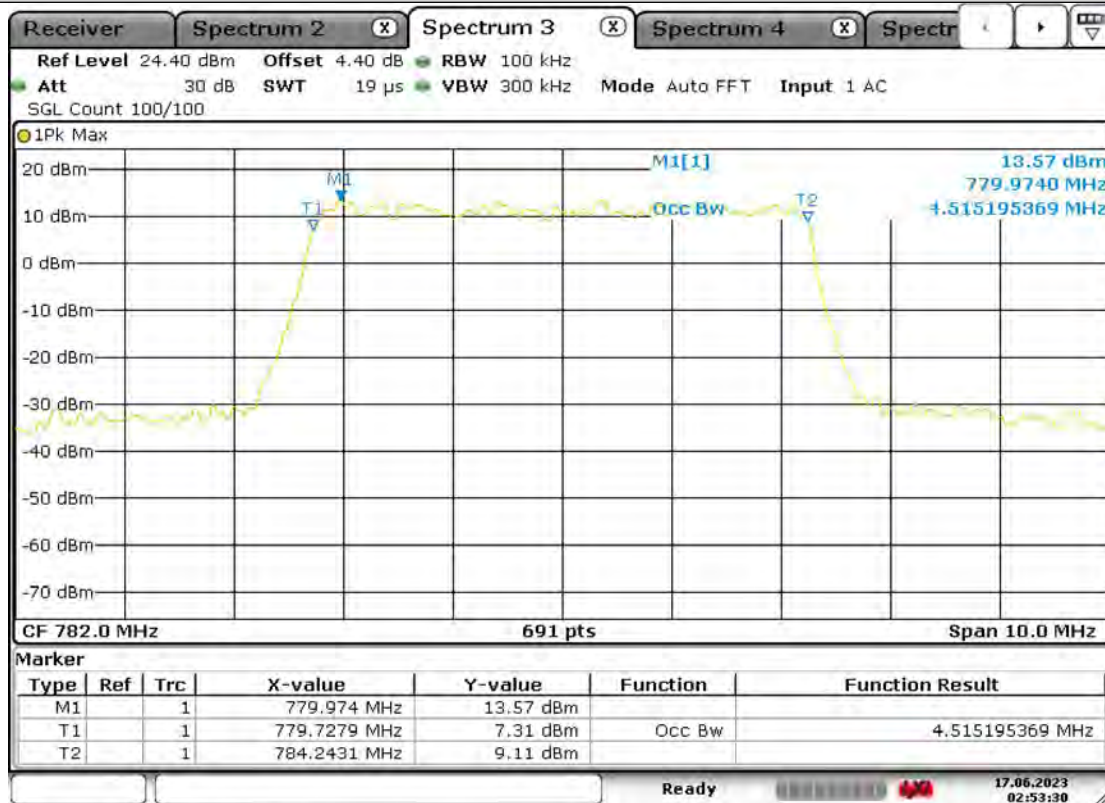
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:02:17

Band13-5MHz-64QAM-23230-25RB#0



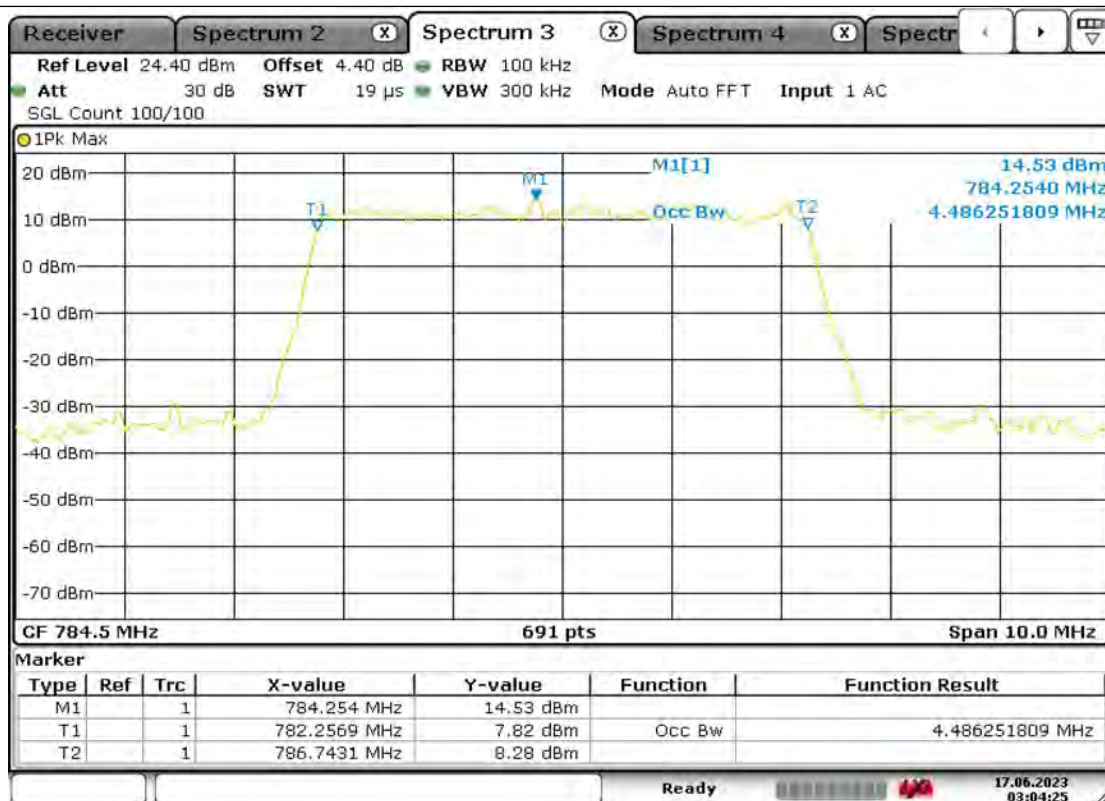
Date: 17.JUN.2023 02:53:31

Band13-5MHz-64QAM-23255-25RB#0



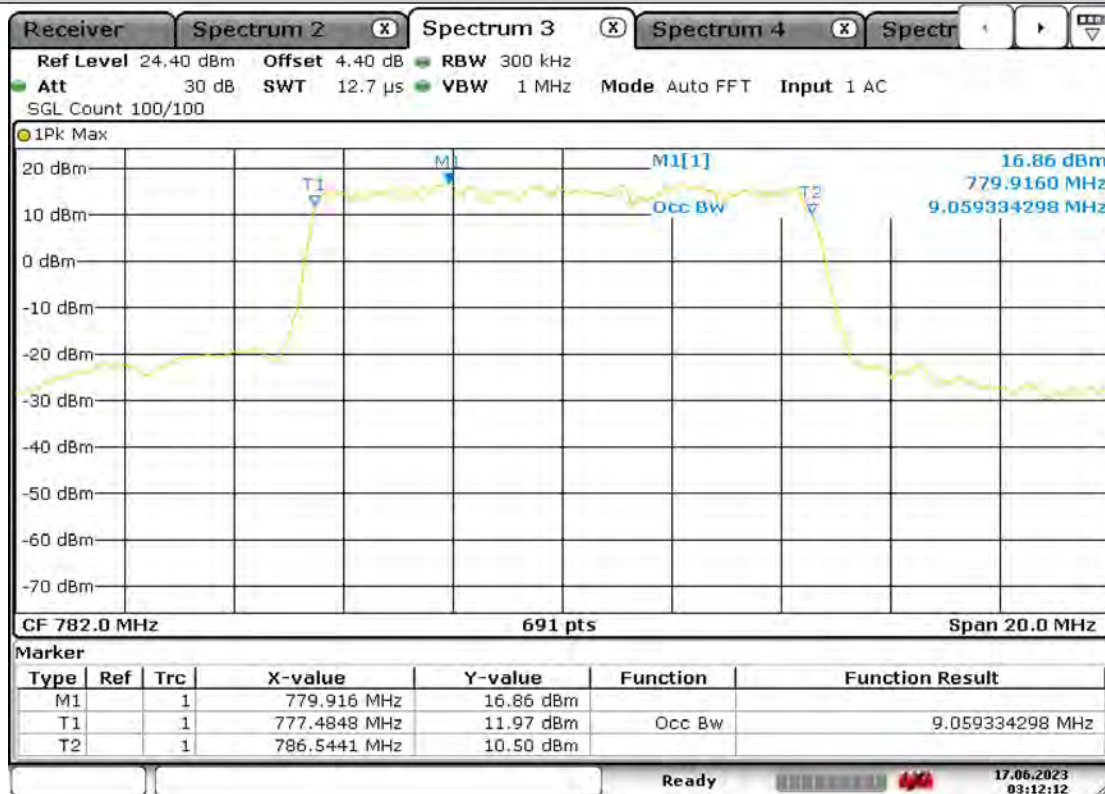
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:04:25

Band13-10MHz-QPSK-23230-50RB#0



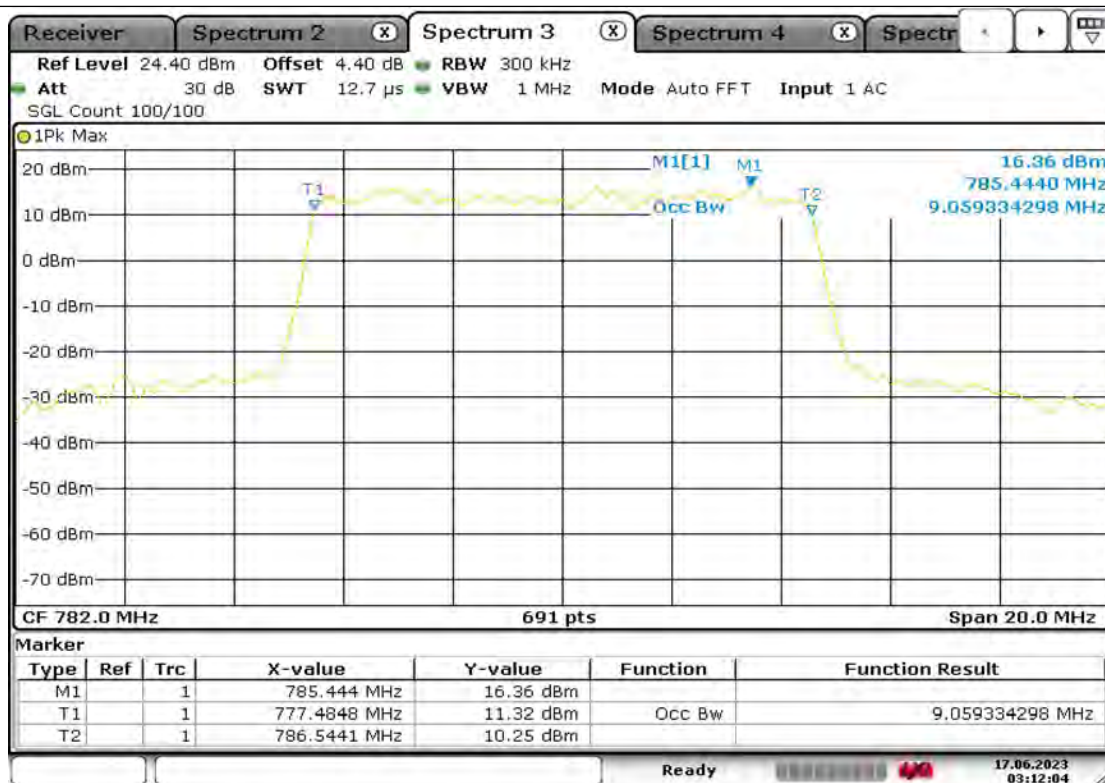
Date: 17.JUN.2023 03:12:13

Band13-10MHz-16QAM-23230-50RB#0



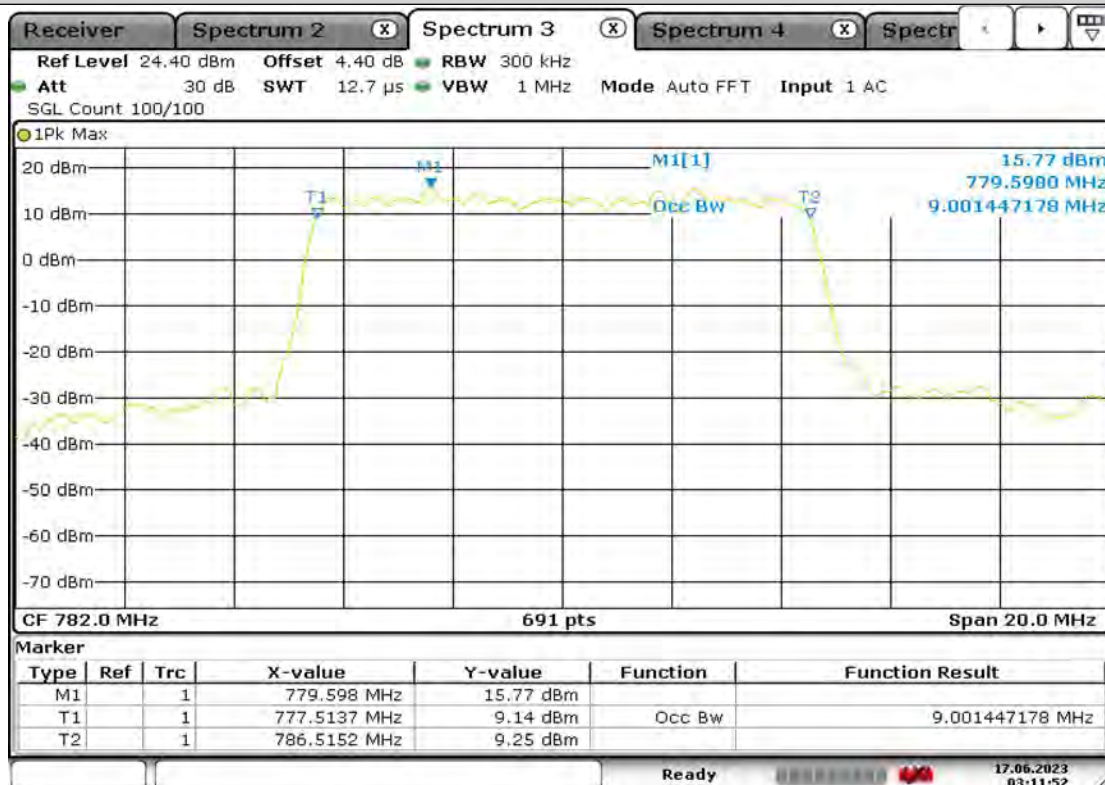
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:12:04

Band13-10MHz-64QAM-23230-50RB#0



Date: 17.JUN.2023 03:11:52

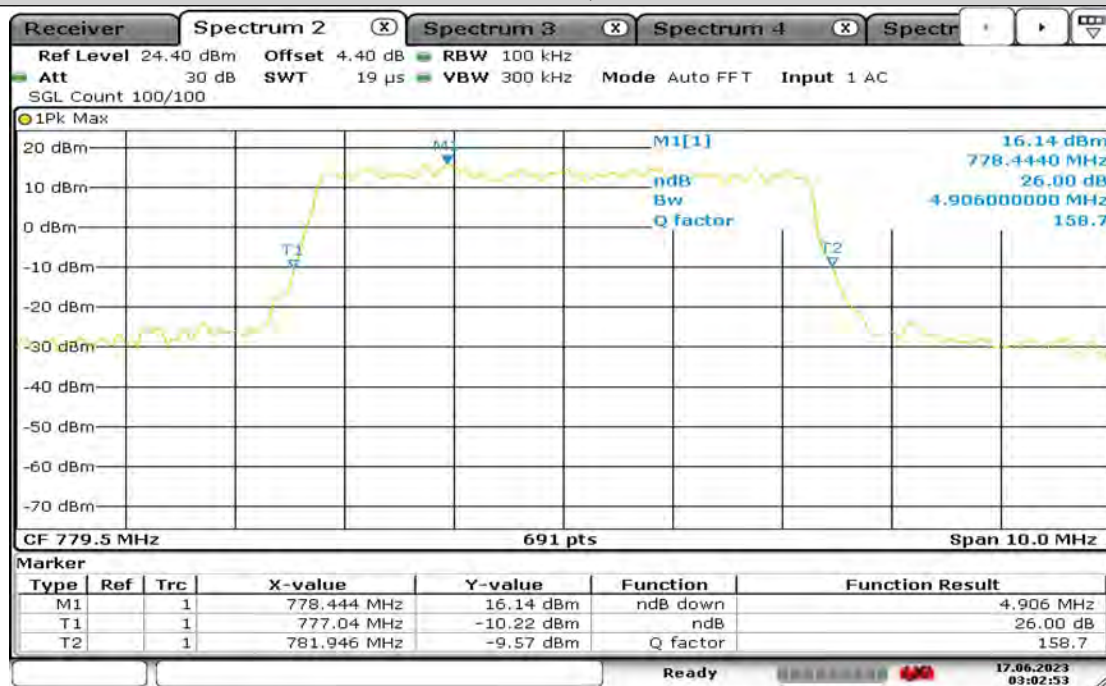
26dB Bandwidth



BUREAU
VERITAS

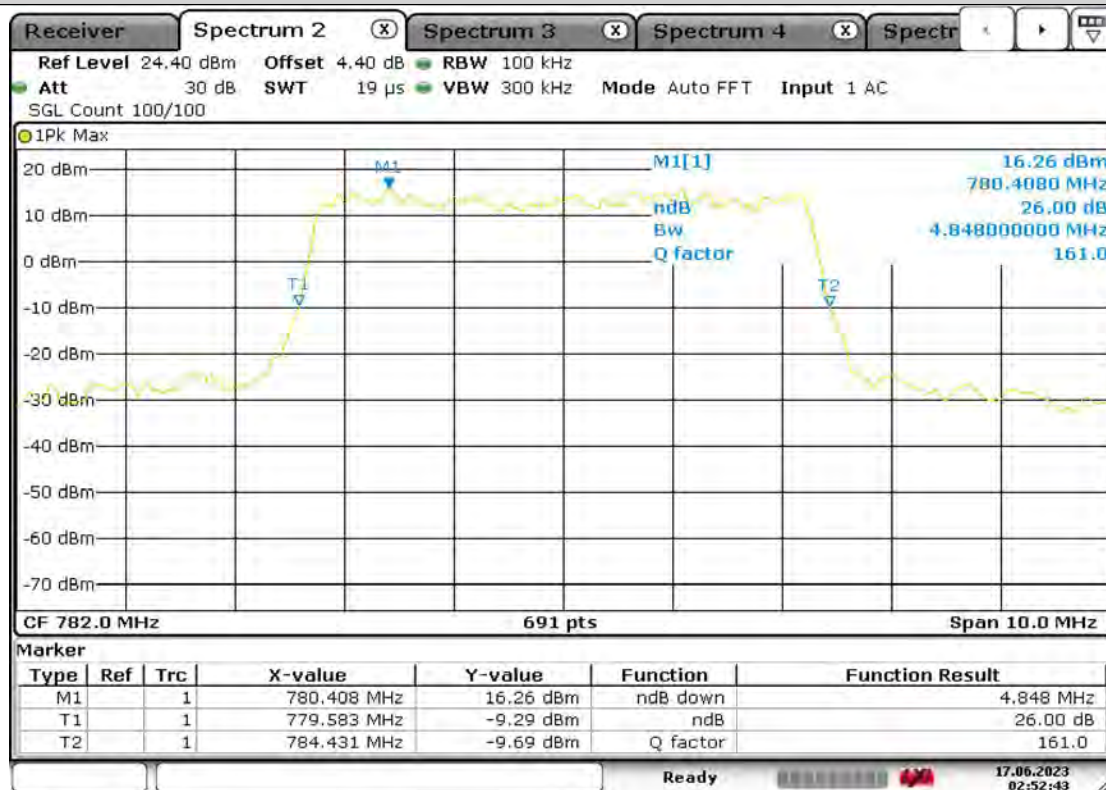
Test Report No.: PSU-QSU2306120115RF05

Band13-5MHz-QPSK-23205-25RB#0



Date: 17.JUN.2023 03:02:54

Band13-5MHz-QPSK-23230-25RB#0



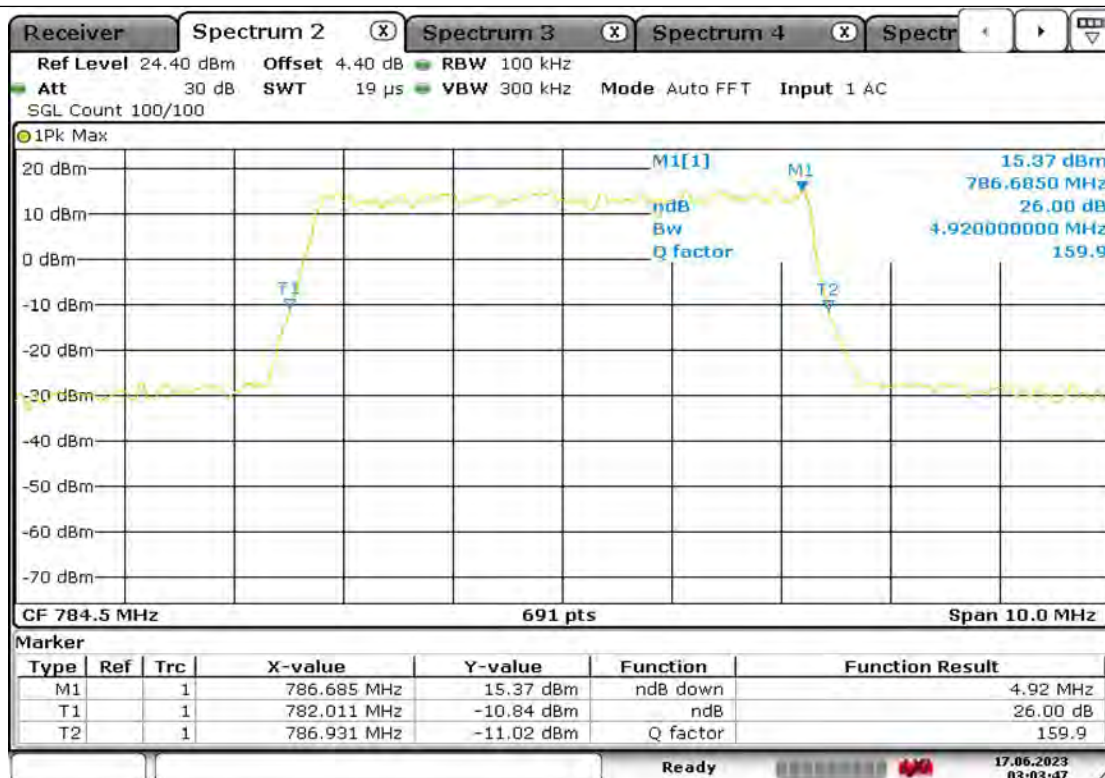
Date: 17.JUN.2023 02:52:43

Band13-5MHz-QPSK-23255-25RB#0



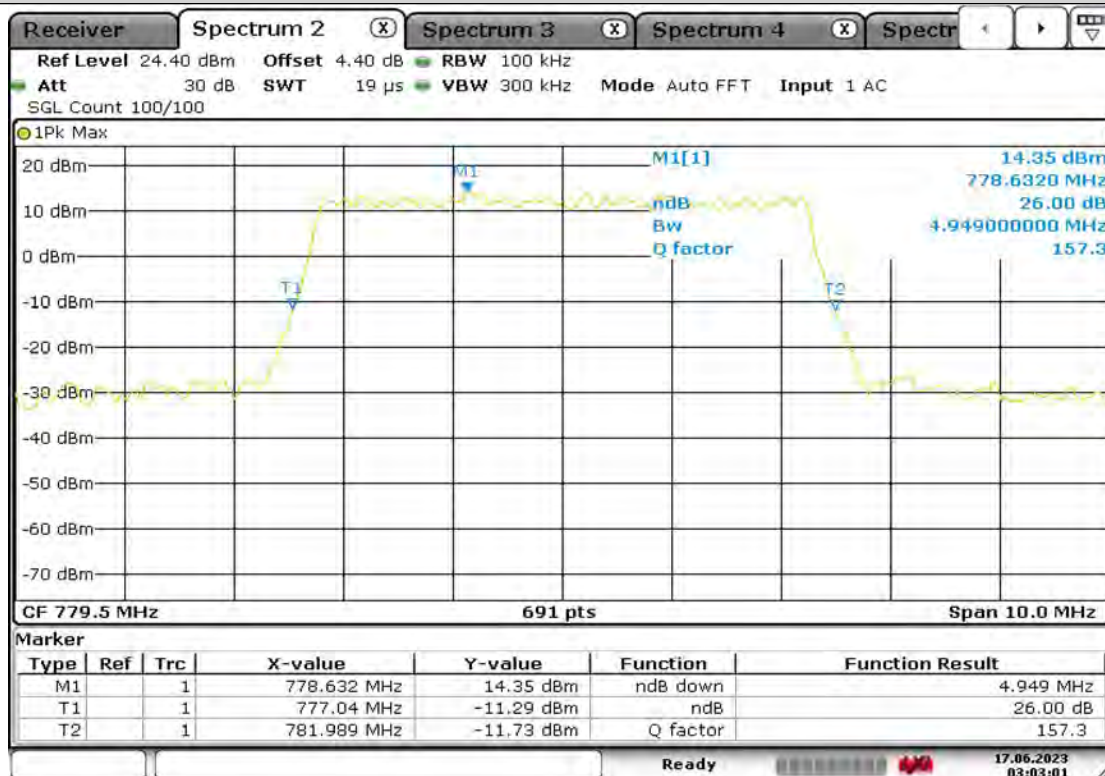
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:03:48

Band13-5MHz-16QAM-23205-25RB#0



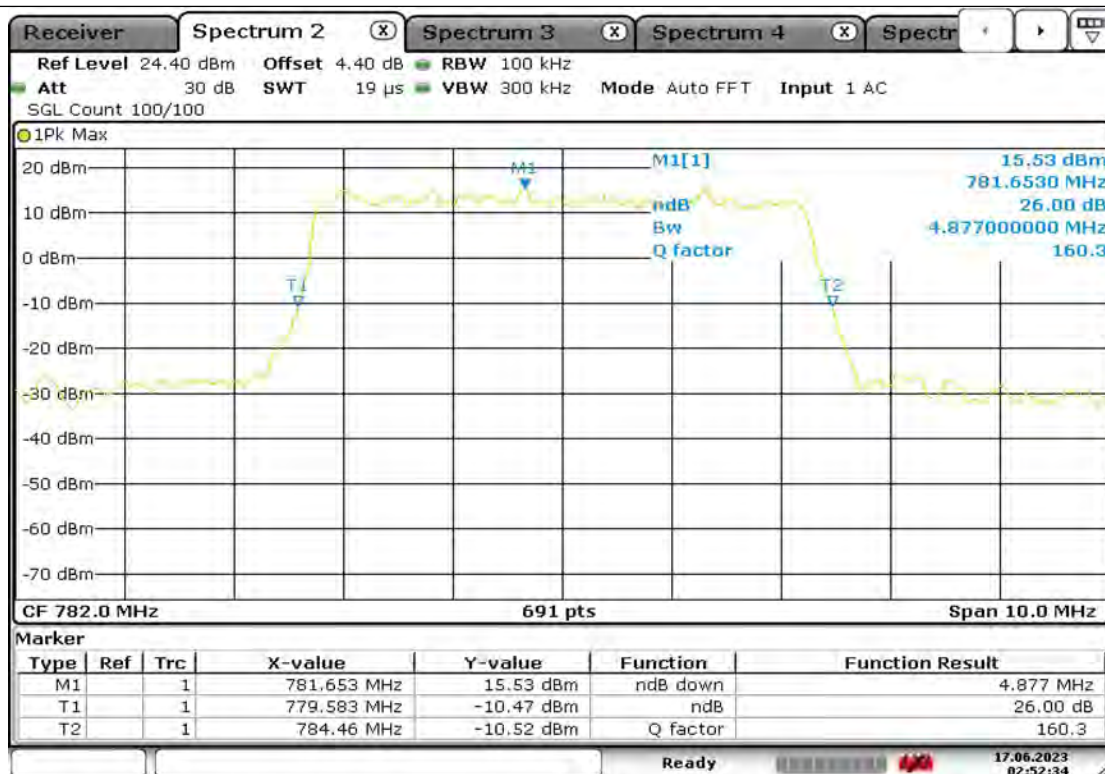
Date: 17.JUN.2023 03:03:01

Band13-5MHz-16QAM-23230-25RB#0



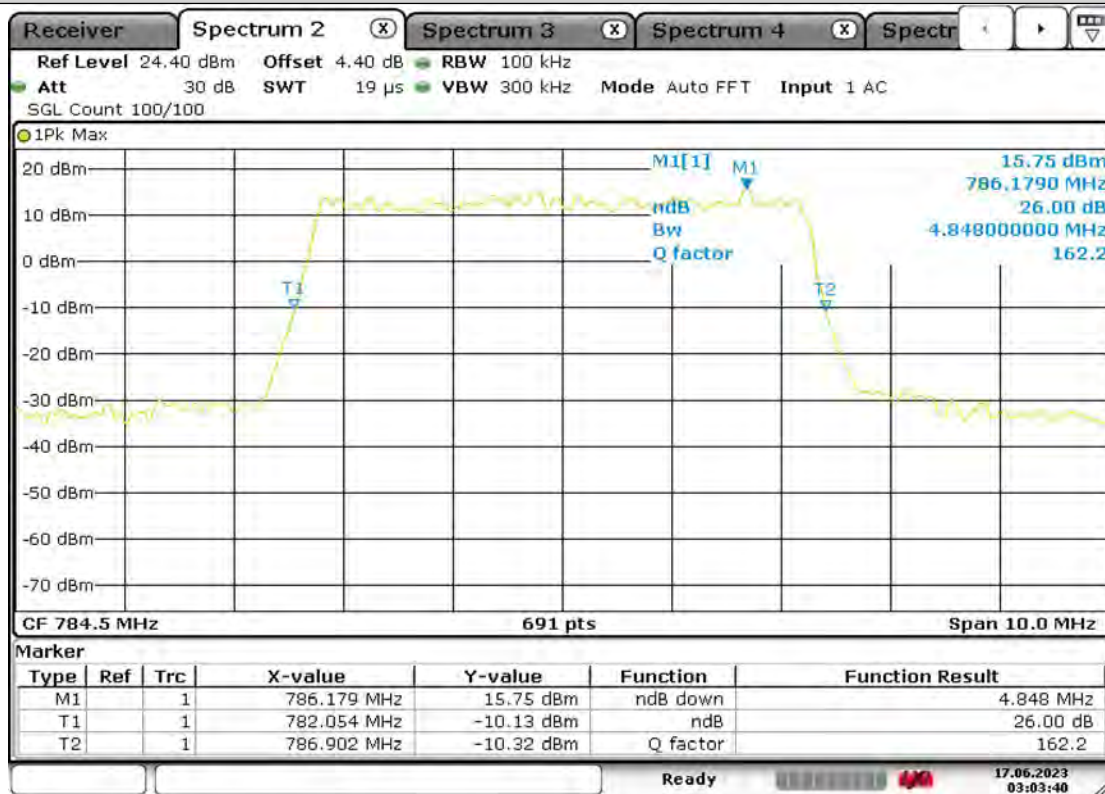
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 02:52:35

Band13-5MHz-16QAM-23255-25RB#0



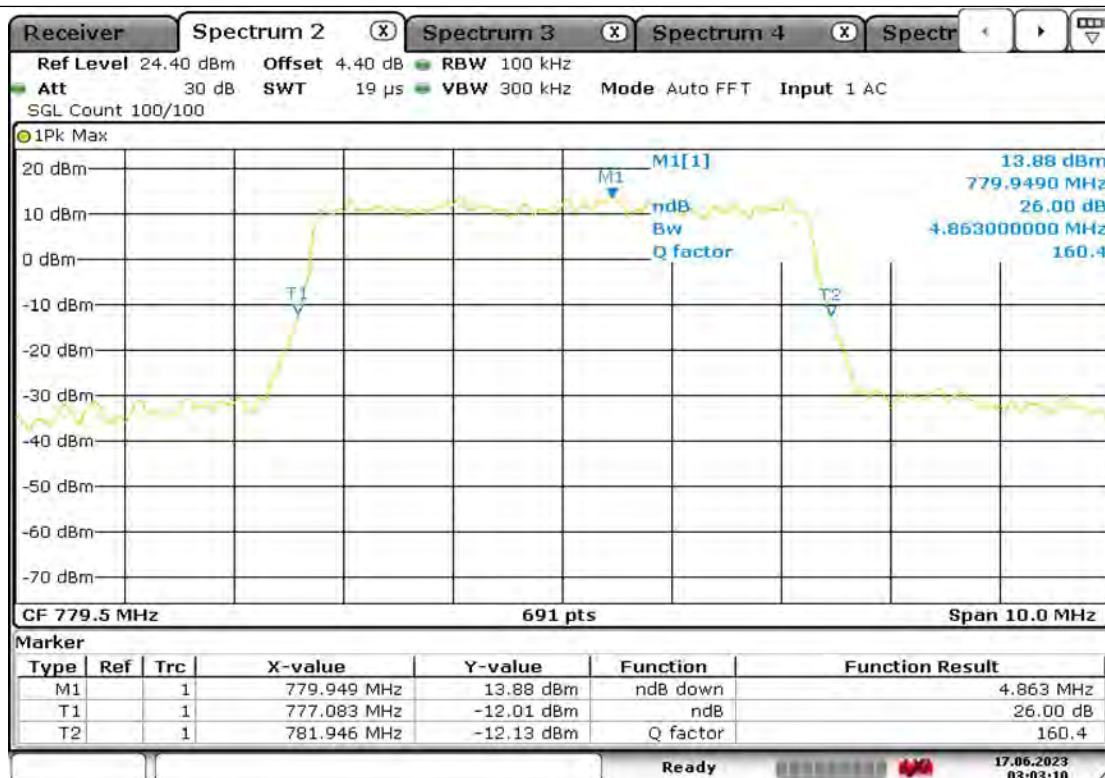
Date: 17.JUN.2023 03:03:41

Band13-5MHz-64QAM-23205-25RB#0



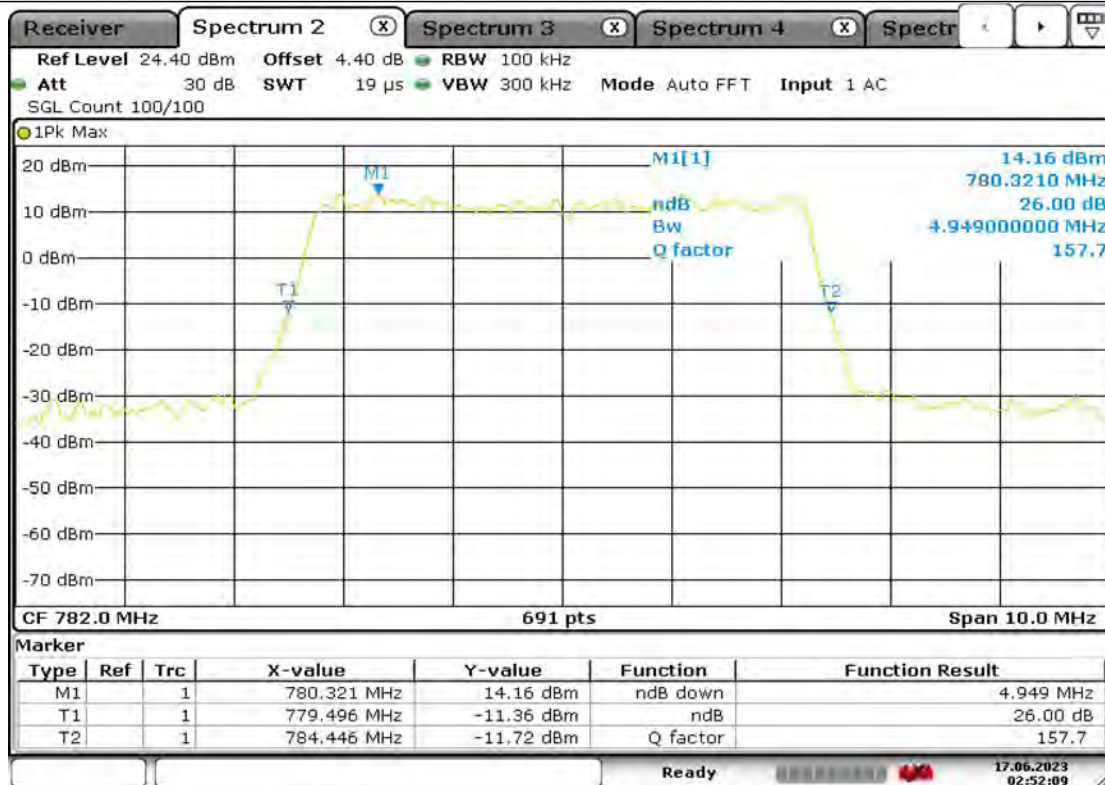
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:03:11

Band13-5MHz-64QAM-23230-25RB#0



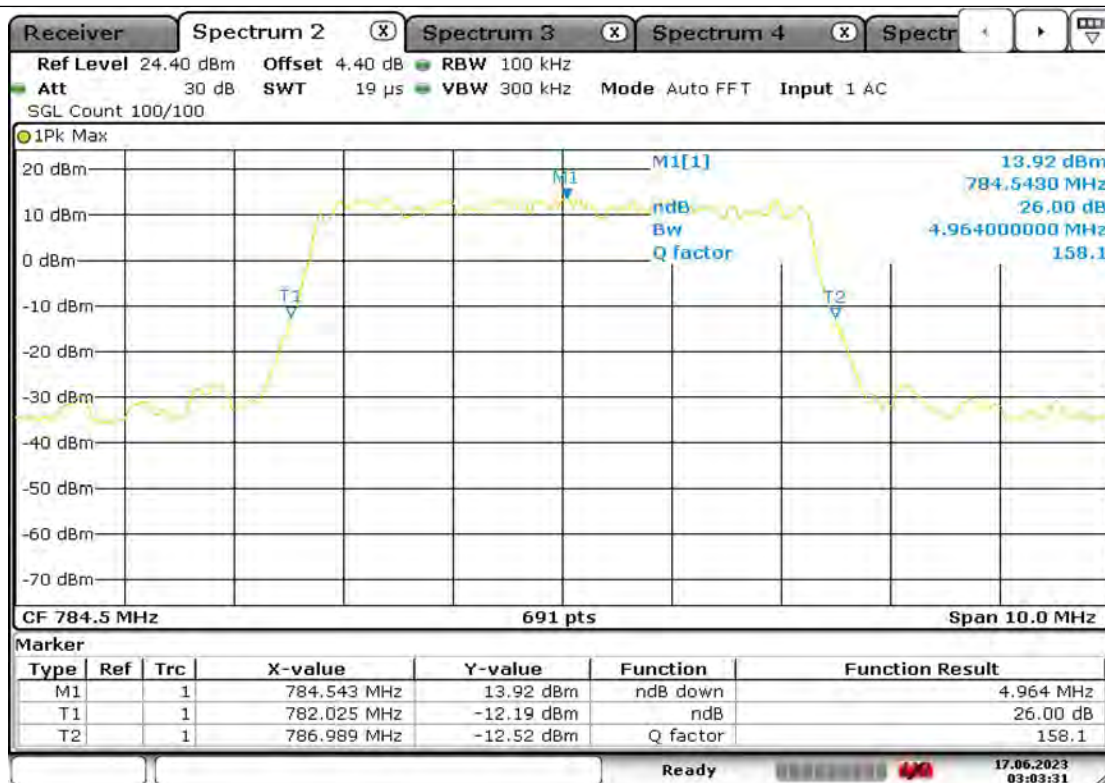
Date: 17.JUN.2023 02:52:09

Band13-5MHz-64QAM-23255-25RB#0



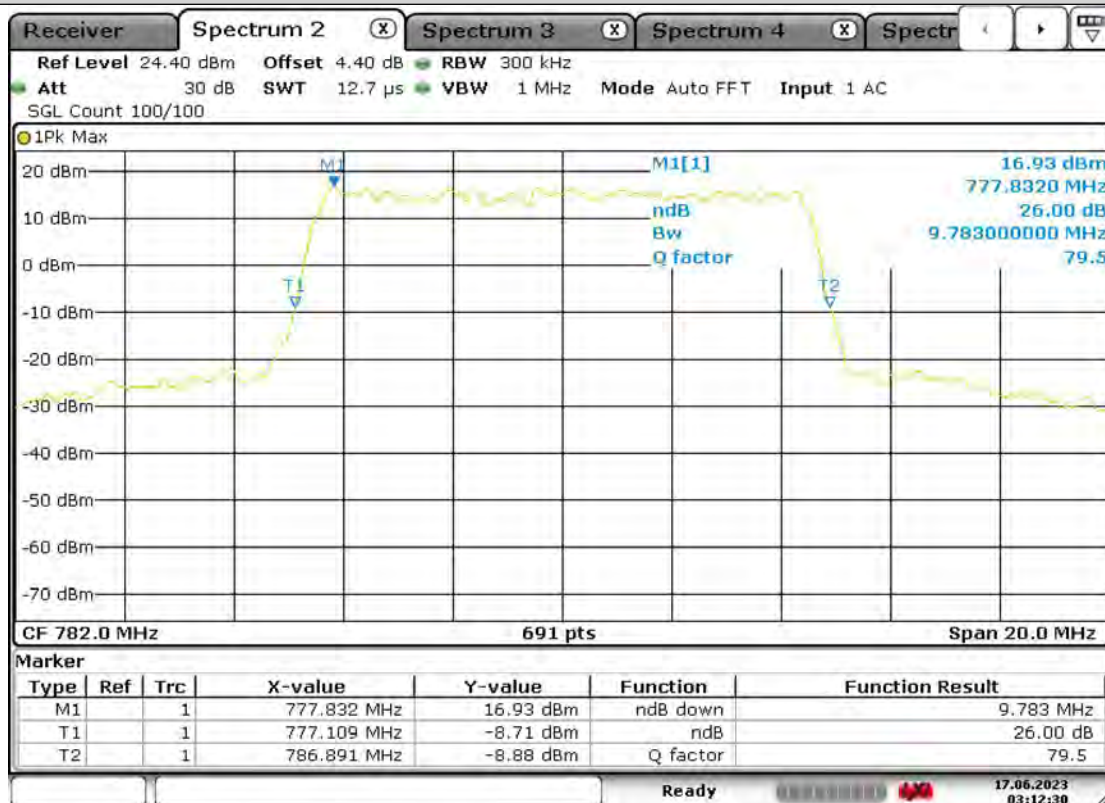
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:03:31

Band13-10MHz-QPSK-23230-50RB#0



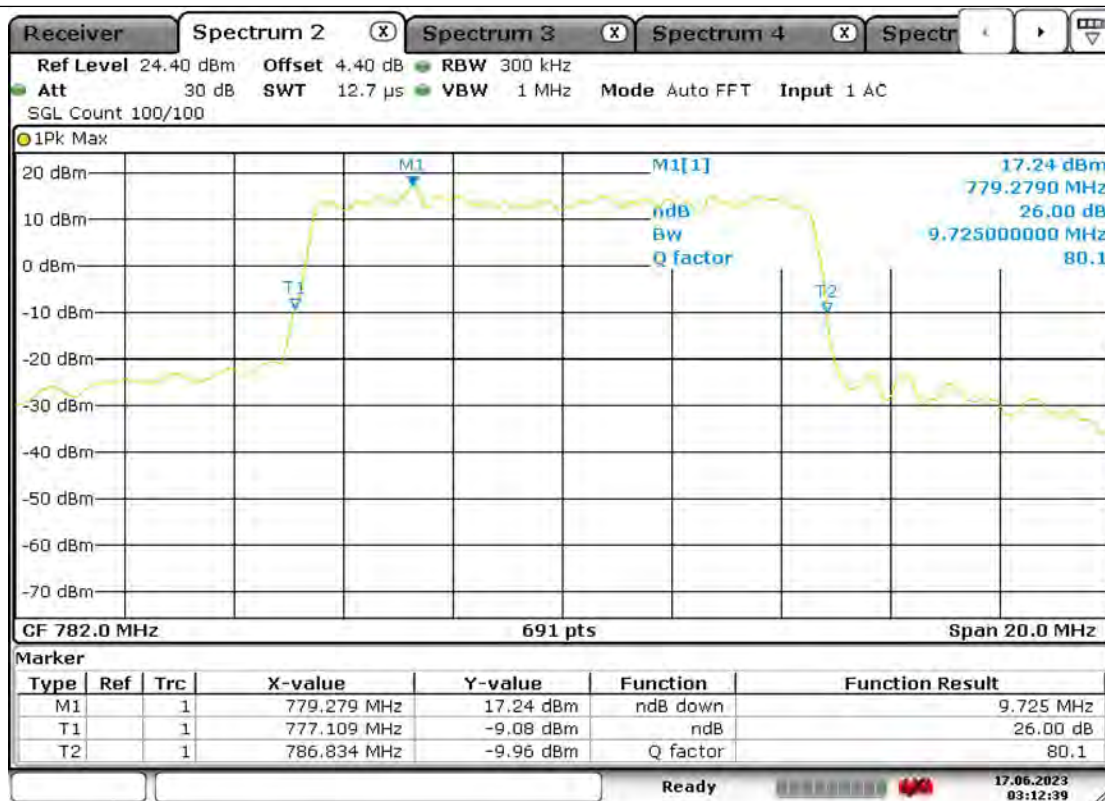
Date: 17.JUN.2023 03:12:30

Band13-10MHz-16QAM-23230-50RB#0



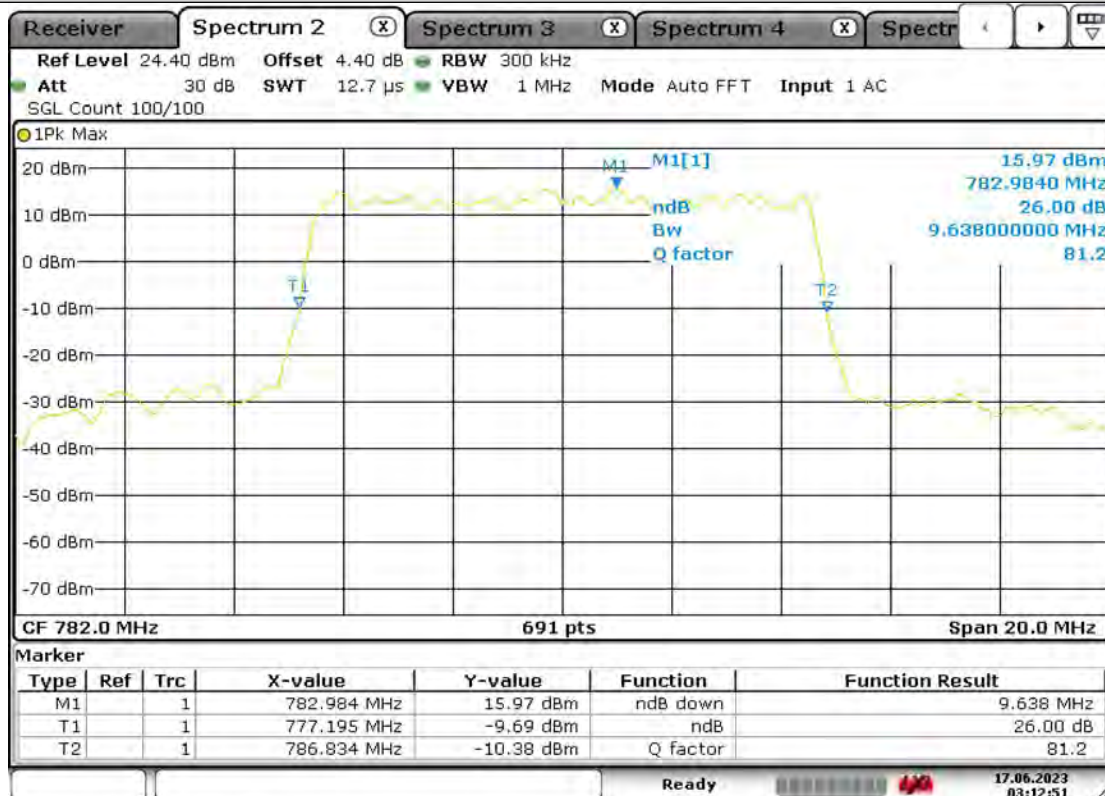
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:12:39

Band13-10MHz-64QAM-23230-50RB#0



Date: 17.JUN.2023 03:12:51

BAND EDGE

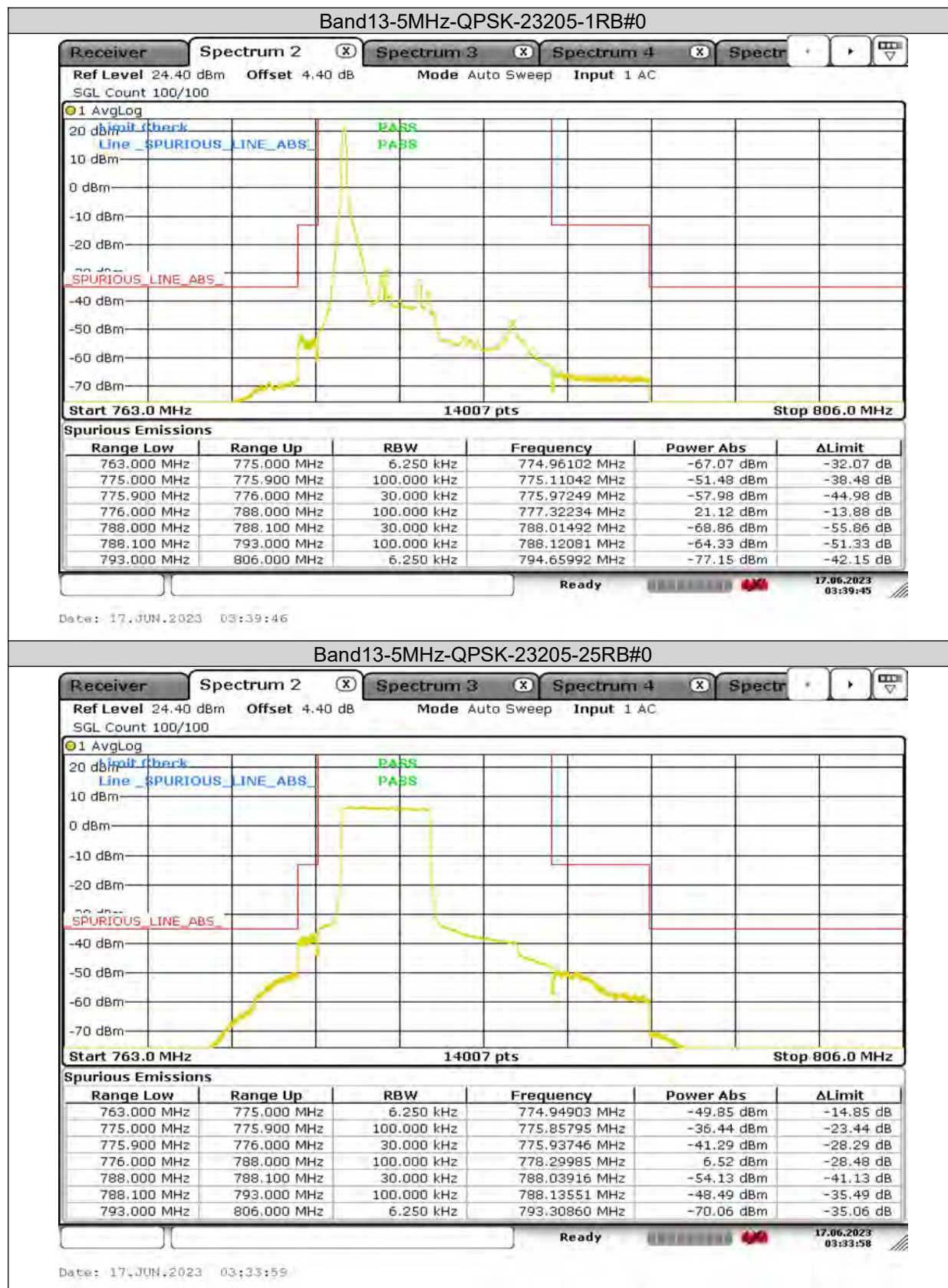
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	-51.48	PASS
Band13	5MHz	QPSK	23205	25RB#0	-36.44	PASS
Band13	5MHz	QPSK	23255	1RB#24	-51.02	PASS
Band13	5MHz	QPSK	23255	25RB#0	-38.22	PASS
Band13	5MHz	16QAM	23205	1RB#0	-52.19	PASS
Band13	5MHz	16QAM	23205	25RB#0	-38.74	PASS
Band13	5MHz	16QAM	23255	1RB#24	-51.90	PASS
Band13	5MHz	16QAM	23255	25RB#0	-39.56	PASS
Band13	10MHz	QPSK	23230	1RB#0	-53.76	PASS
Band13	10MHz	QPSK	23230	1RB#49	-51.50	PASS
Band13	10MHz	QPSK	23230	50RB#0	-37.28	PASS
Band13	10MHz	16QAM	23230	1RB#0	-54.69	PASS
Band13	10MHz	16QAM	23230	1RB#49	-53.33	PASS
Band13	10MHz	16QAM	23230	50RB#0	-40.26	PASS
Band13	5MHz	64QAM	23205	1RB#0	-53.39	PASS
Band13	5MHz	64QAM	23205	25RB#0	-41.02	PASS
Band13	5MHz	64QAM	23255	1RB#24	-54.01	PASS
Band13	5MHz	64QAM	23255	25RB#0	-41.85	PASS
Band13	10MHz	64QAM	23230	1RB#0	-55.96	PASS
Band13	10MHz	64QAM	23230	1RB#49	-53.64	PASS
Band13	10MHz	64QAM	23230	50RB#0	-43.30	PASS



Test Report No.: PSU-QSU2306120115RF05

Test Graphs

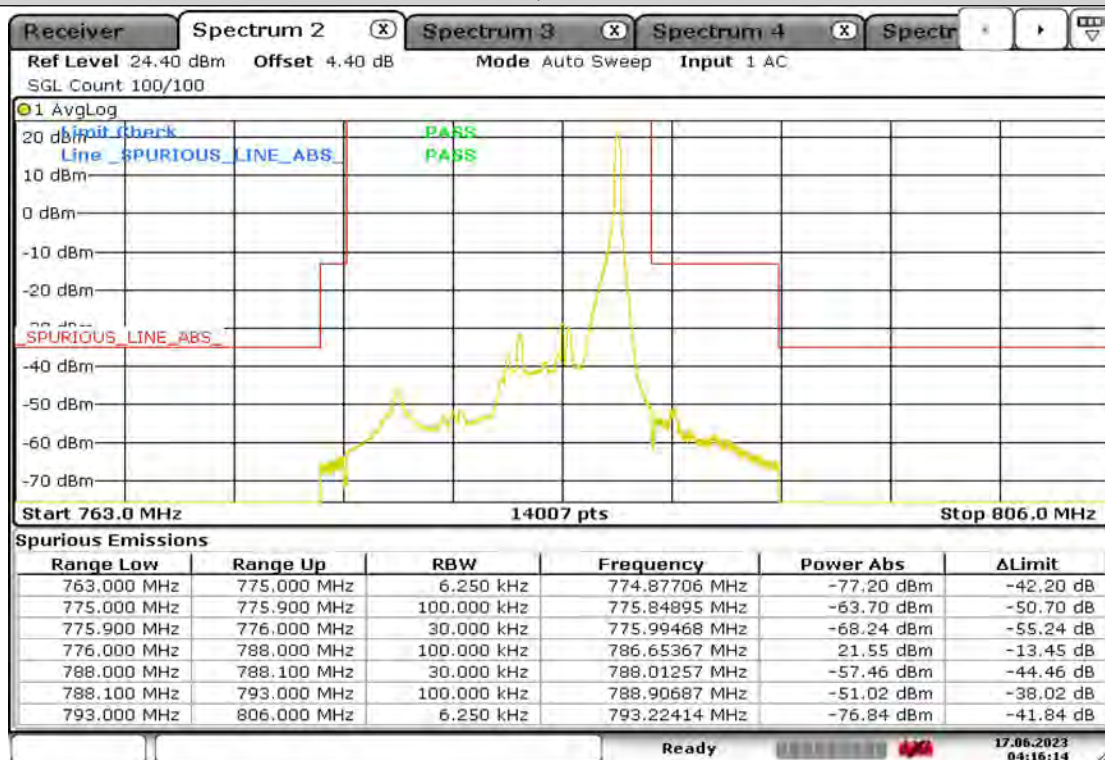




BUREAU
VERITAS

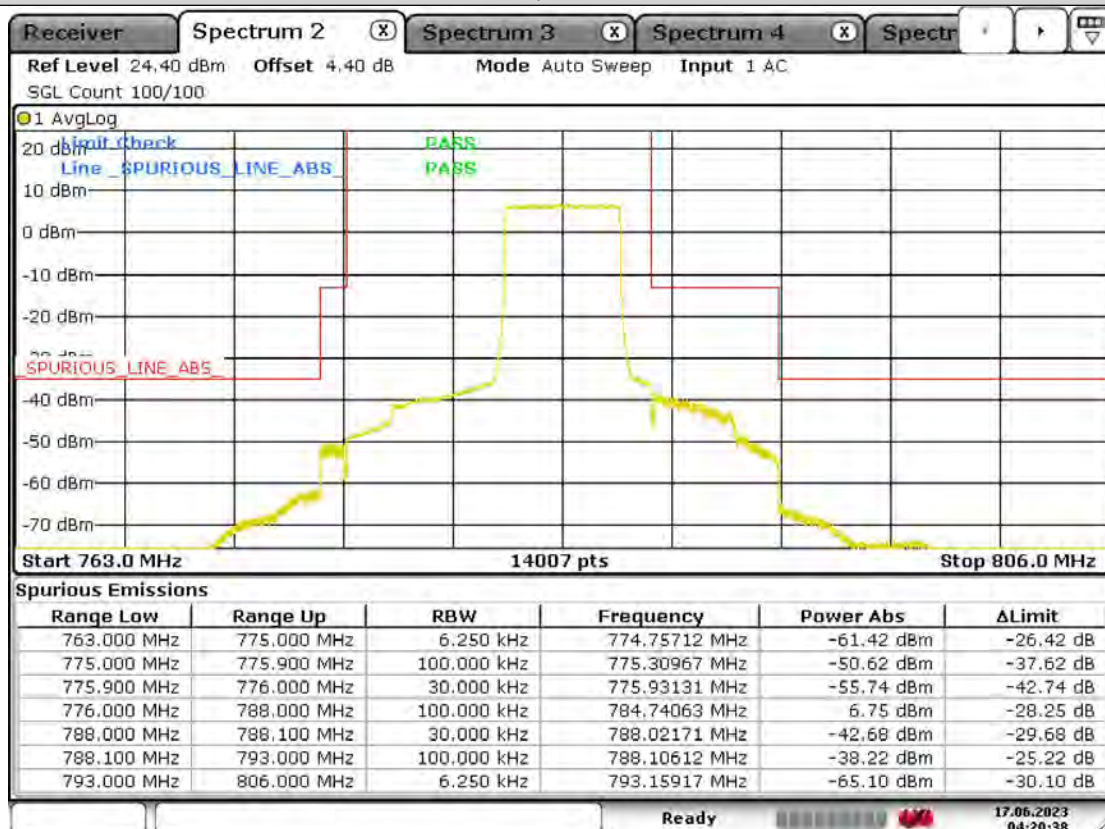
Test Report No.: PSU-QSU2306120115RF05

Band13-5MHz-QPSK-23255-1RB#24



Date: 17.JUN.2023 04:16:14

Band13-5MHz-QPSK-23255-25RB#0



Date: 17.JUN.2023 04:20:38

Band13-5MHz-16QAM-23205-1RB#0

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

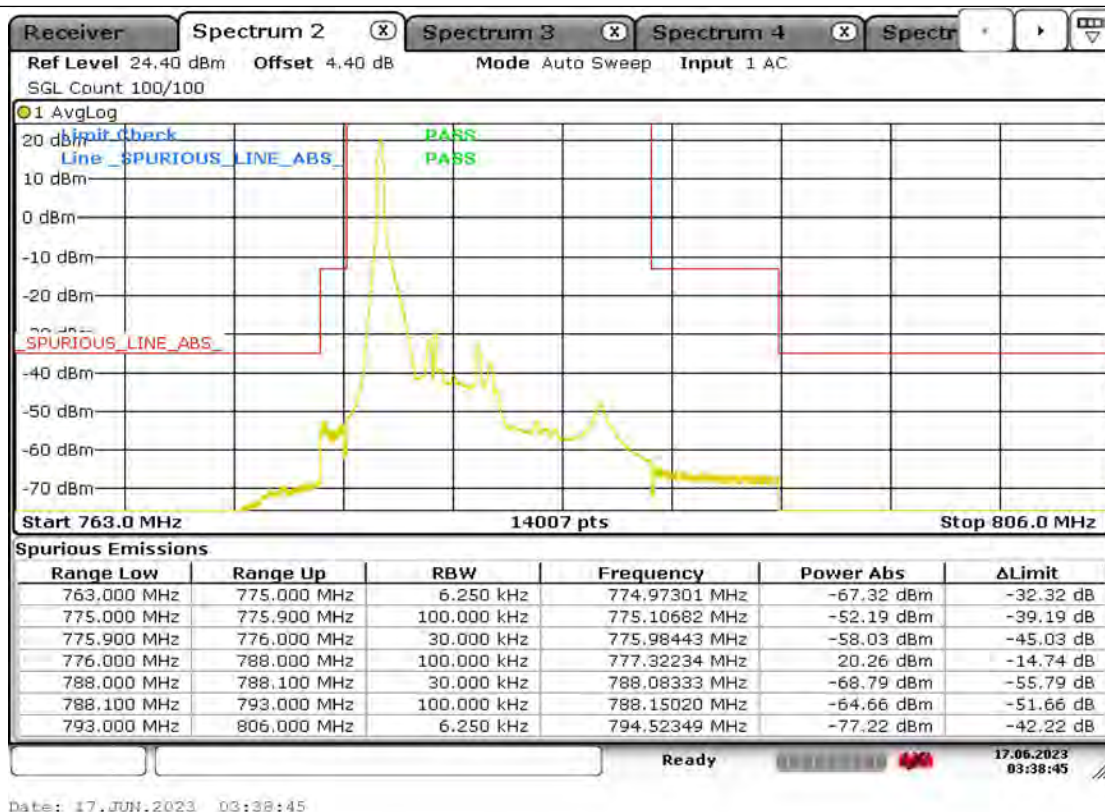
Tower N, Innovation Center, 88 Zhuyi Road,
High-tech District, Suzhou City, Anhui Province

Tel: +86 (0557) 368 1008

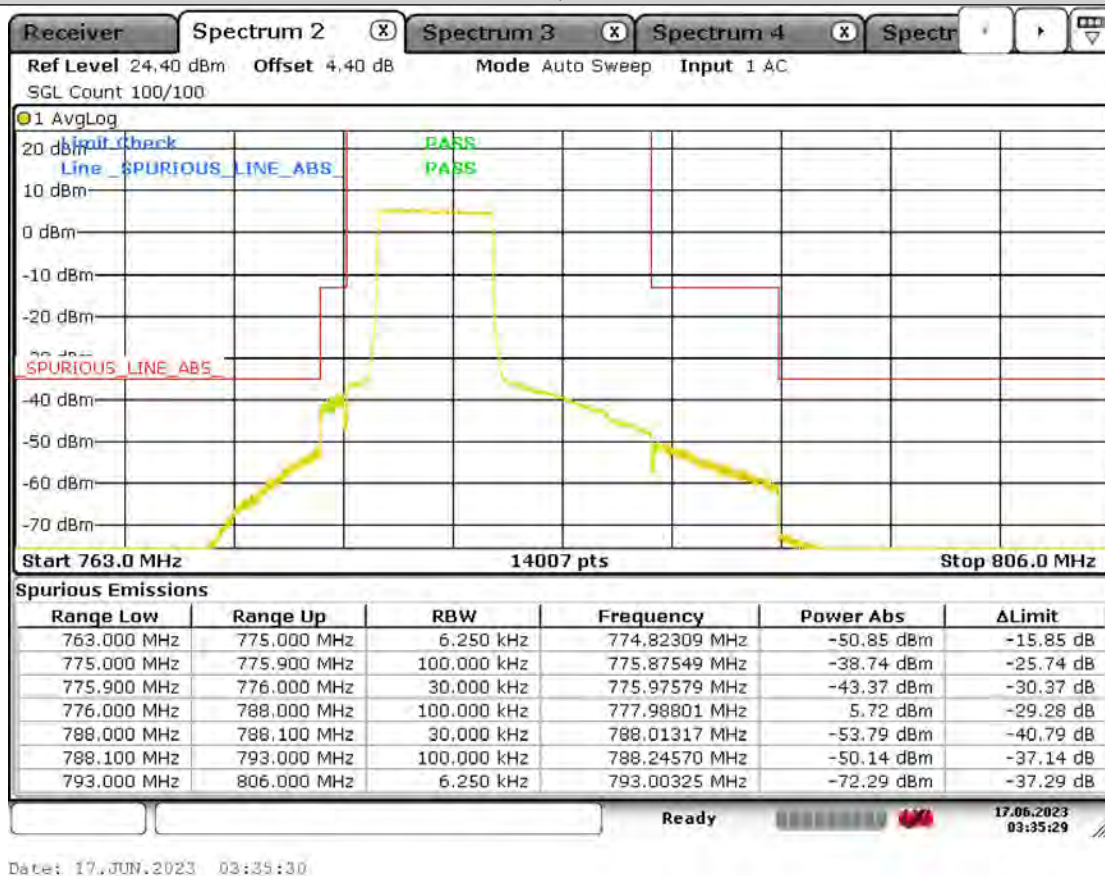


BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Band13-5MHz-16QAM-23205-25RB#0

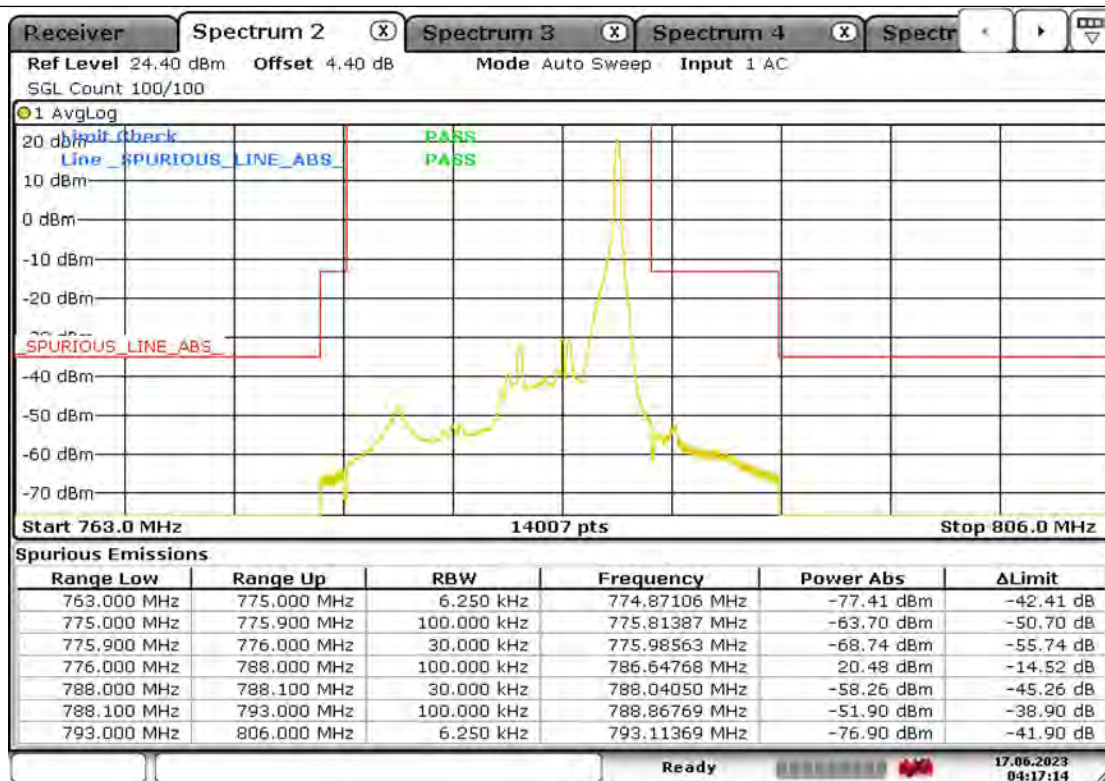


Band13-5MHz-16QAM-23255-1RB#24



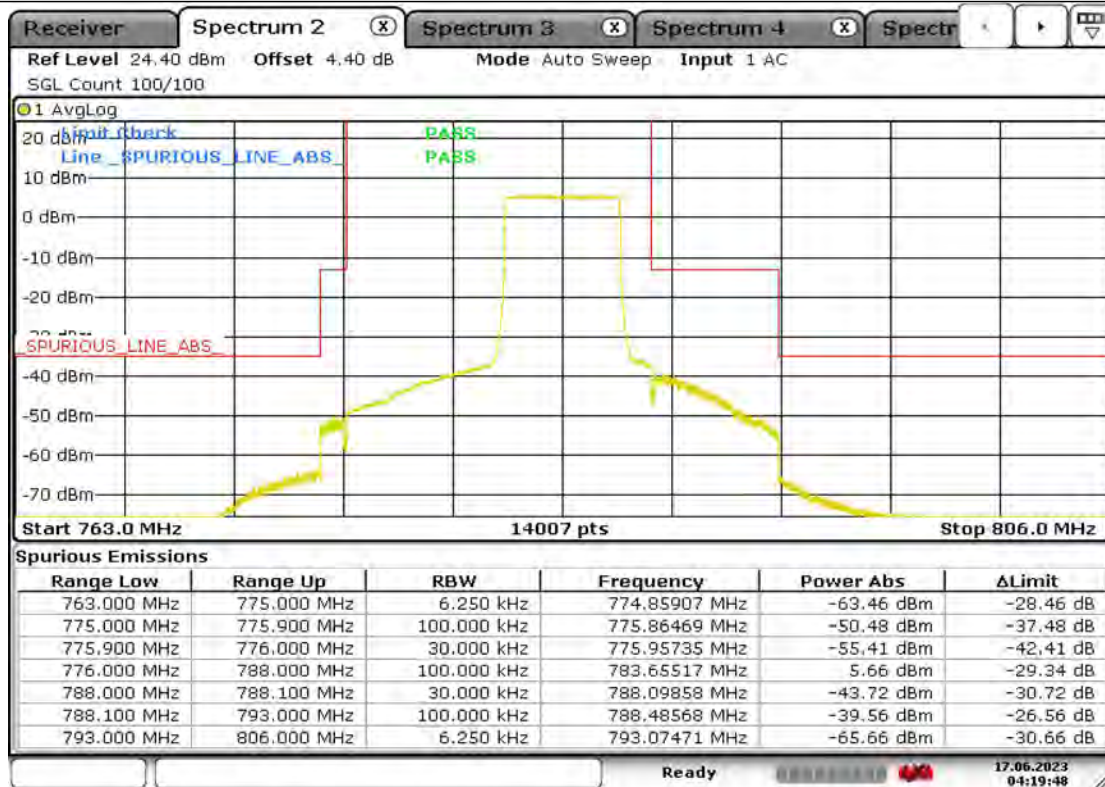
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 04:17:14

Band13-5MHz-16QAM-23255-25RB#0



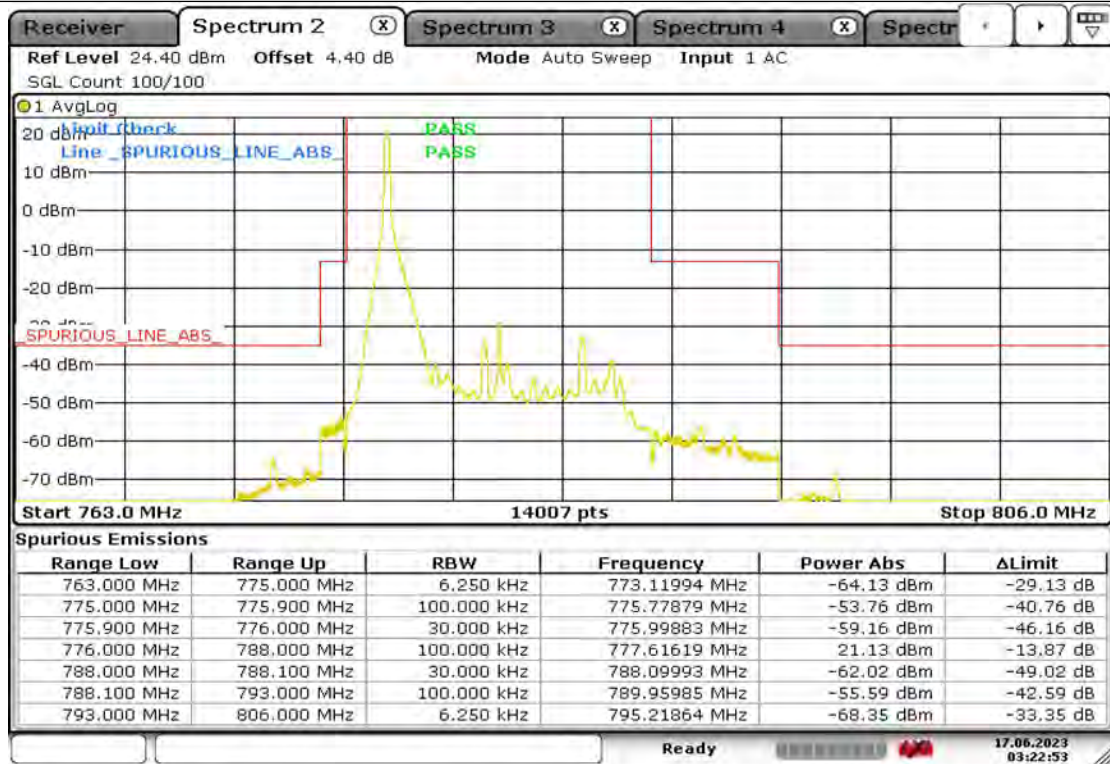
Date: 17.JUN.2023 04:19:48

Band13-10MHz-QPSK-23230-1RB#0



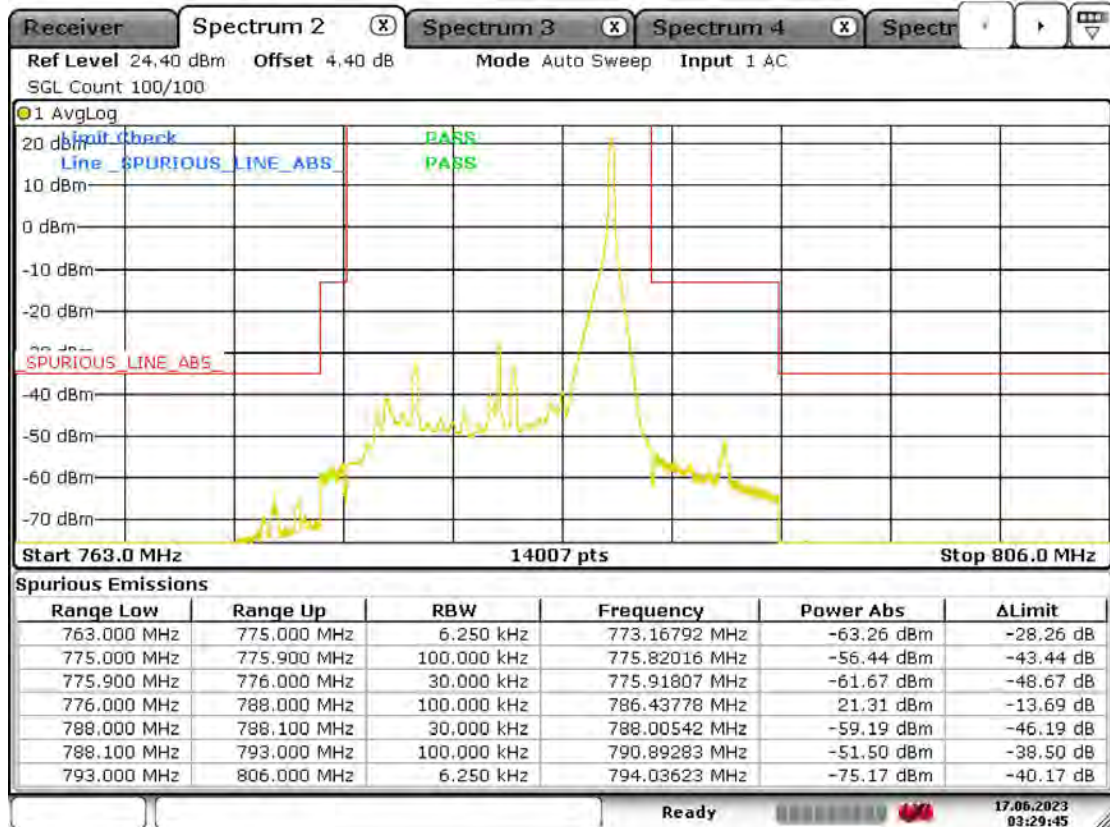
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:22:53

Band13-10MHz-QPSK-23230-1RB#49



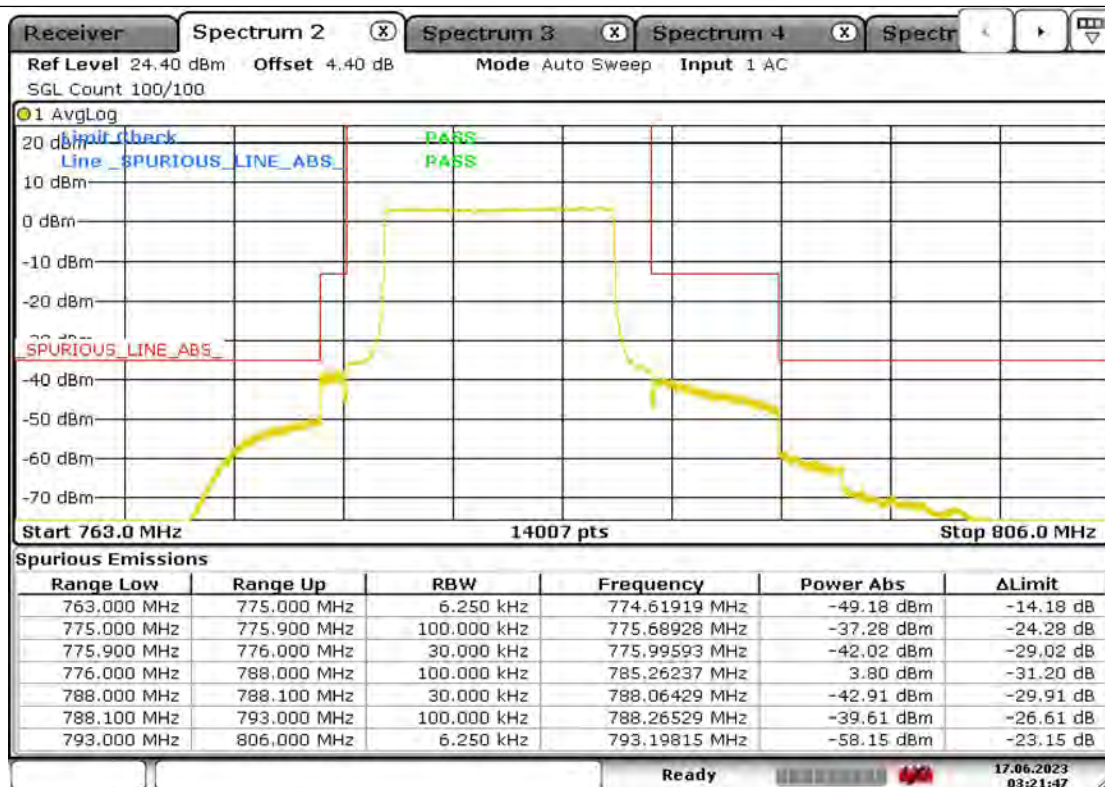
Date: 17.JUN.2023 03:29:46

Band13-10MHz-QPSK-23230-50RB#0



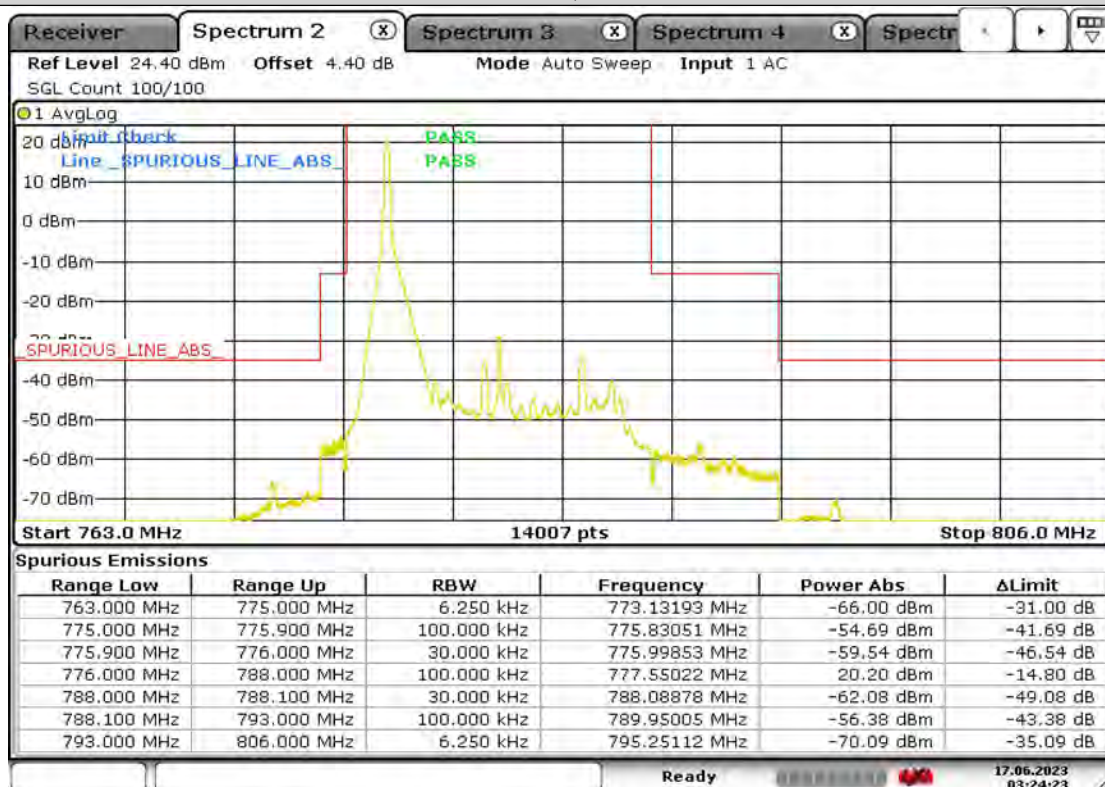
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:21:47

Band13-10MHz-16QAM-23230-1RB#0



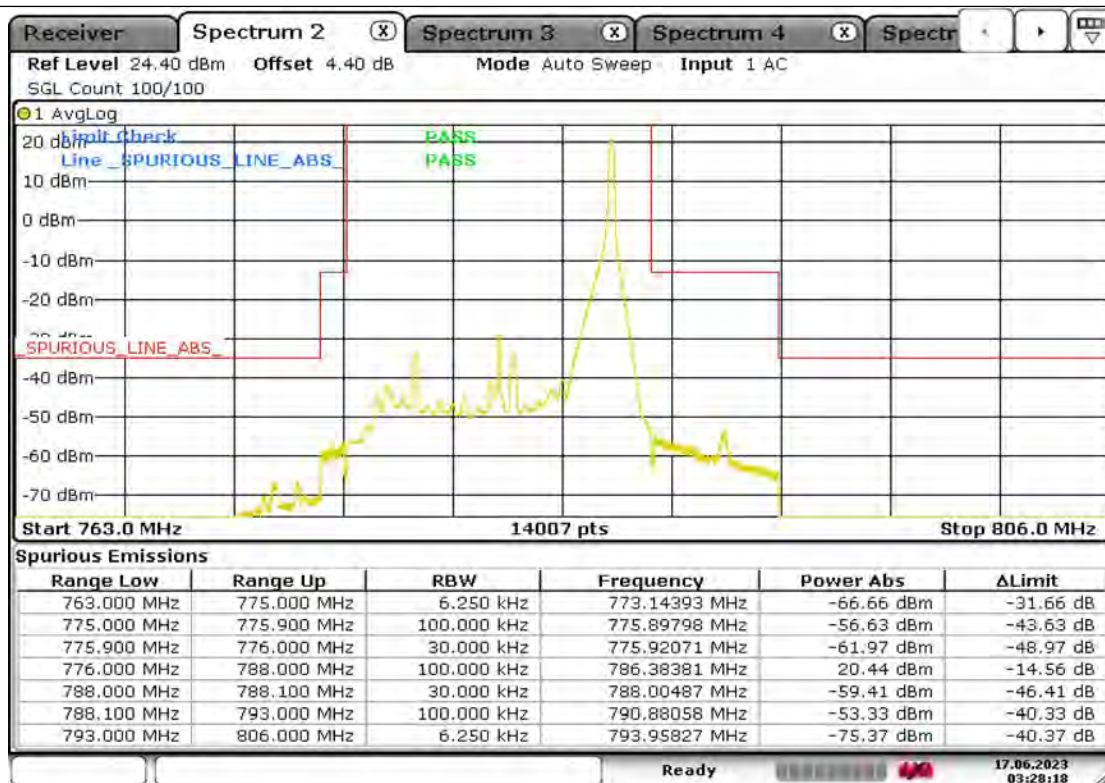
Date: 17.JUN.2023 03:24:24

Band13-10MHz-16QAM-23230-1RB#49



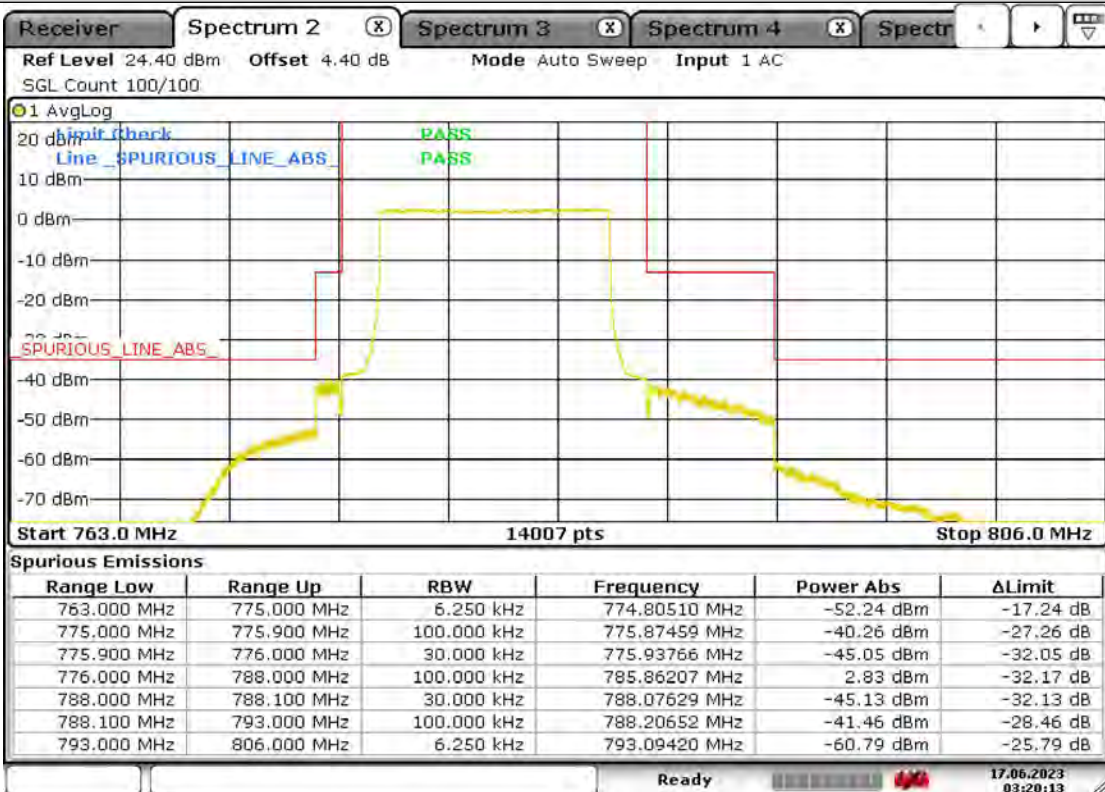
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:28:18

Band13-10MHz-16QAM-23230-50RB#0



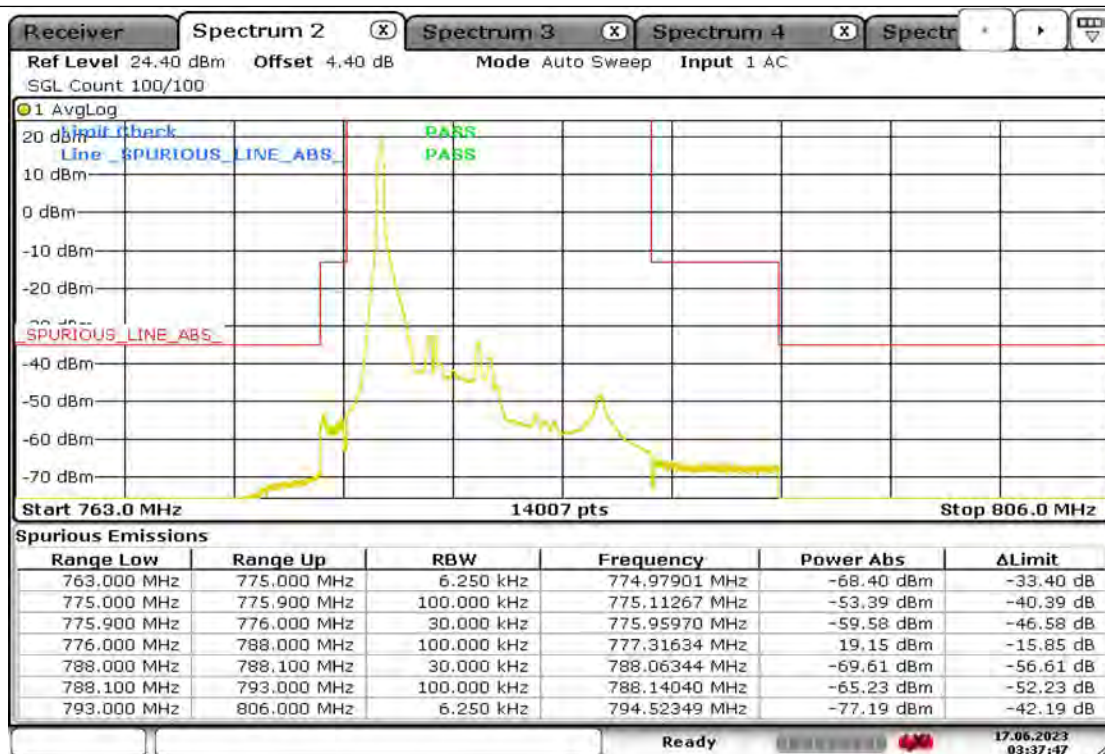
Date: 17.JUN.2023 03:20:13

Band13-5MHz-64QAM-23205-1RB#0



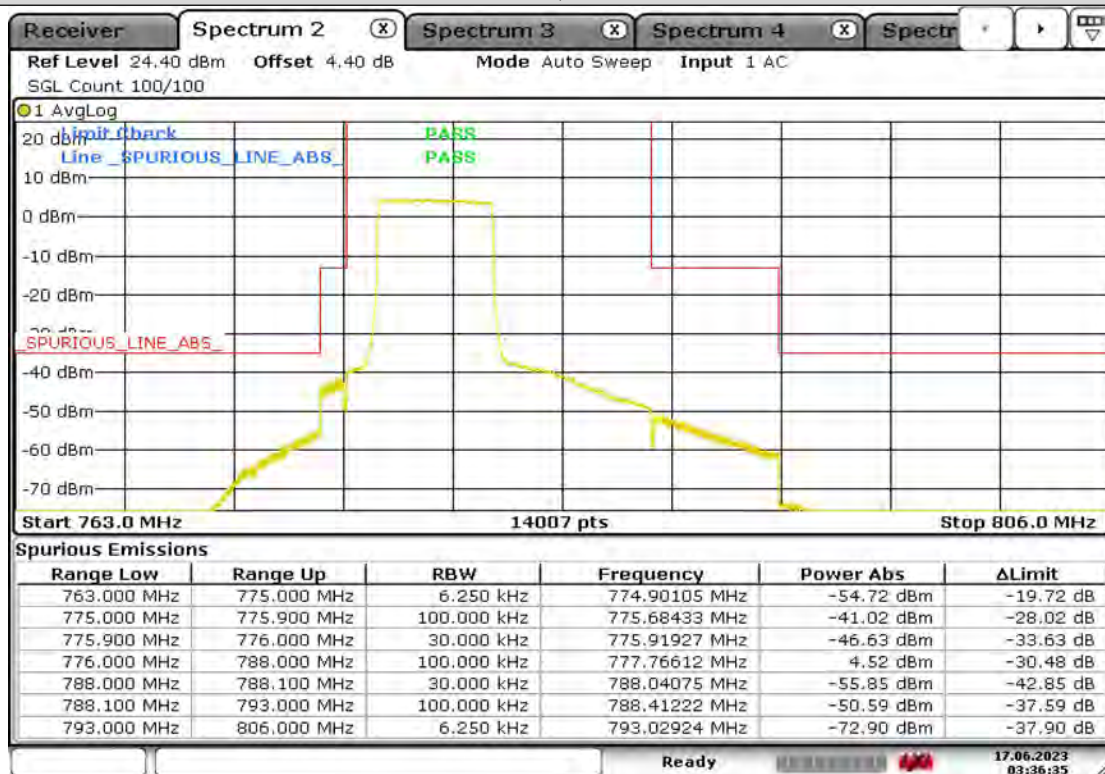
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:37:47

Band13-5MHz-64QAM-23205-25RB#0



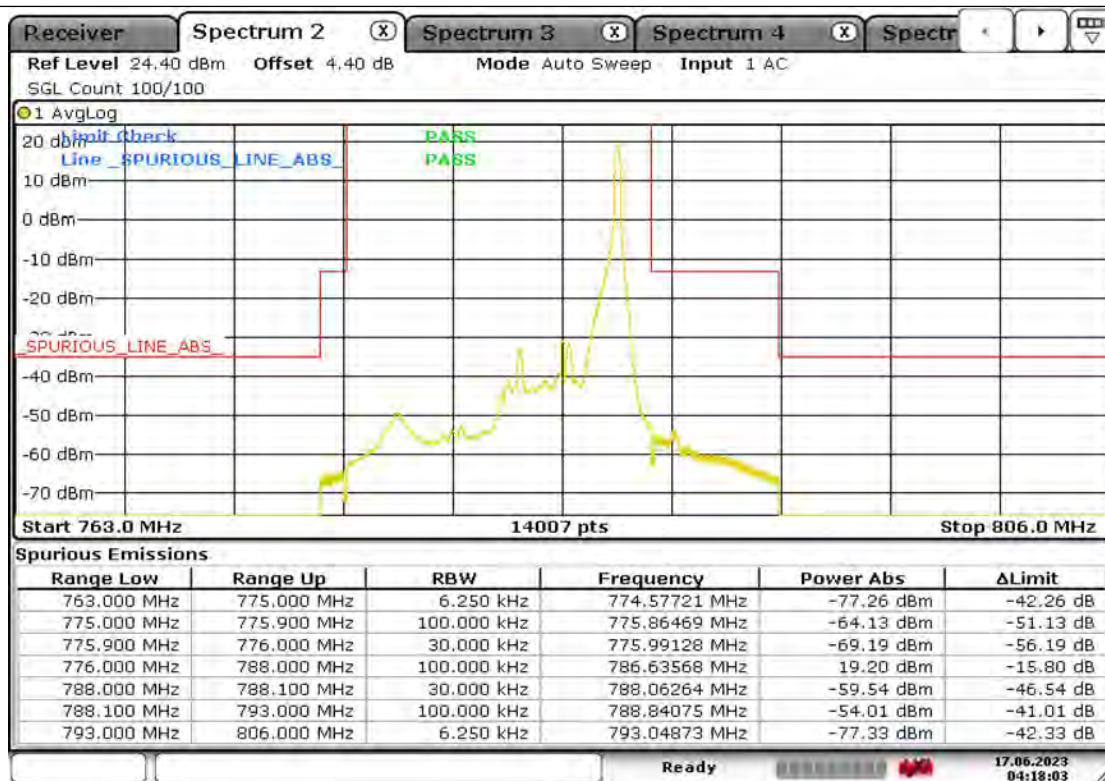
Date: 17.JUN.2023 03:36:35

Band13-5MHz-64QAM-23255-1RB#24



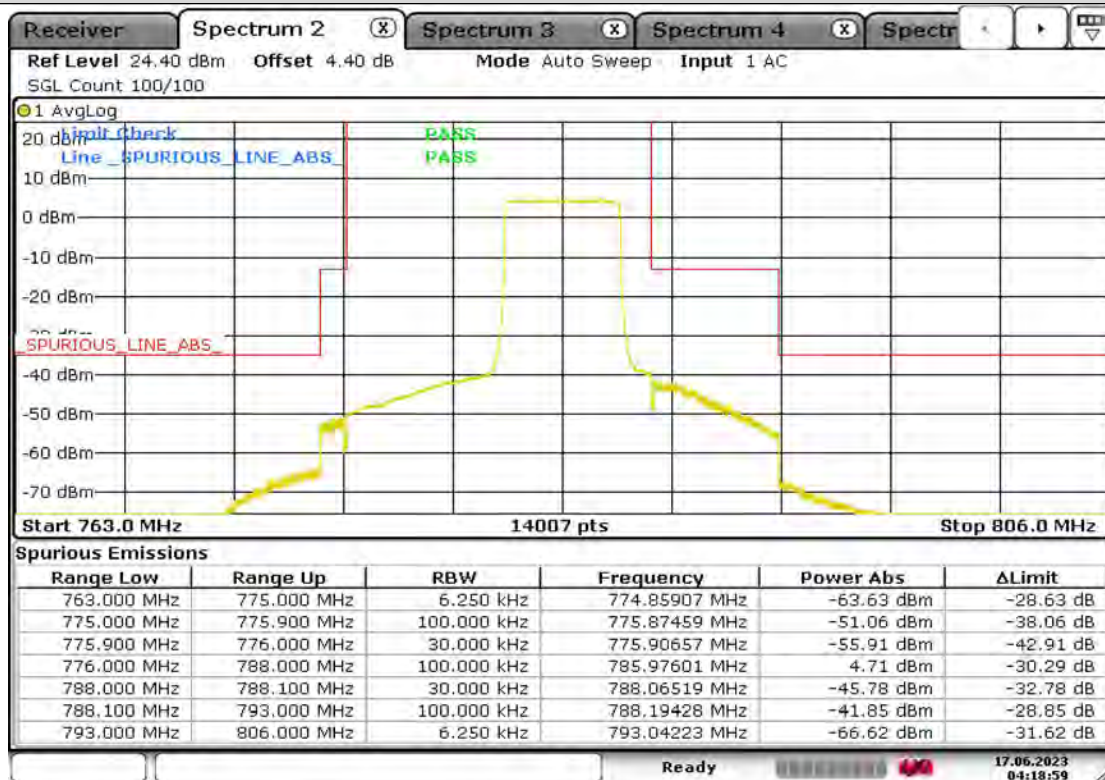
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 04:18:03

Band13-5MHz-64QAM-23255-25RB#0



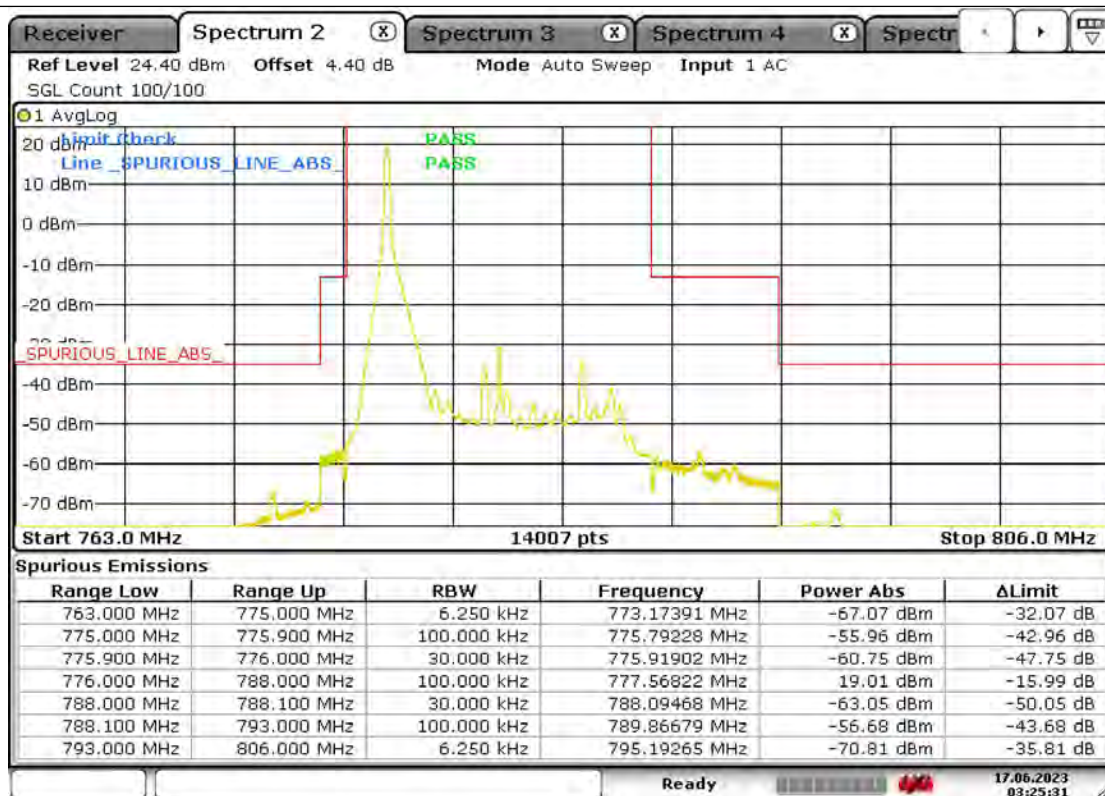
Date: 17.JUN.2023 04:18:59

Band13-10MHz-64QAM-23230-1RB#0



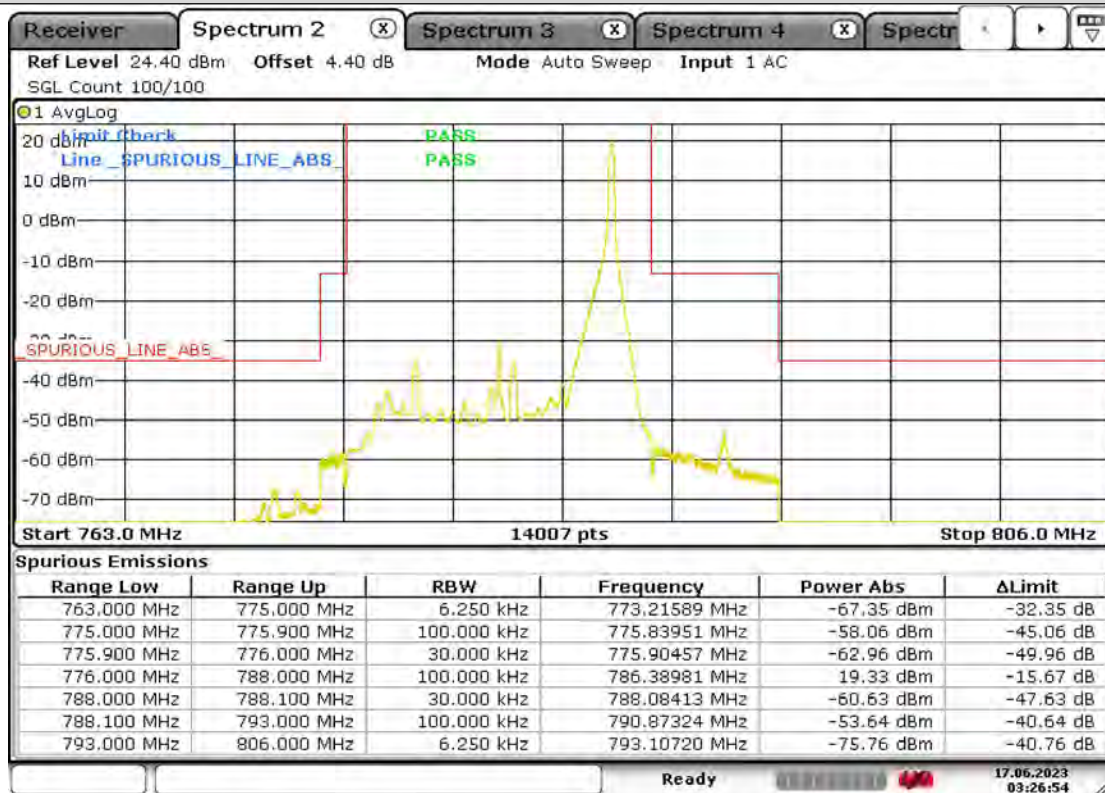
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:25:32

Band13-10MHz-64QAM-23230-1RB#49



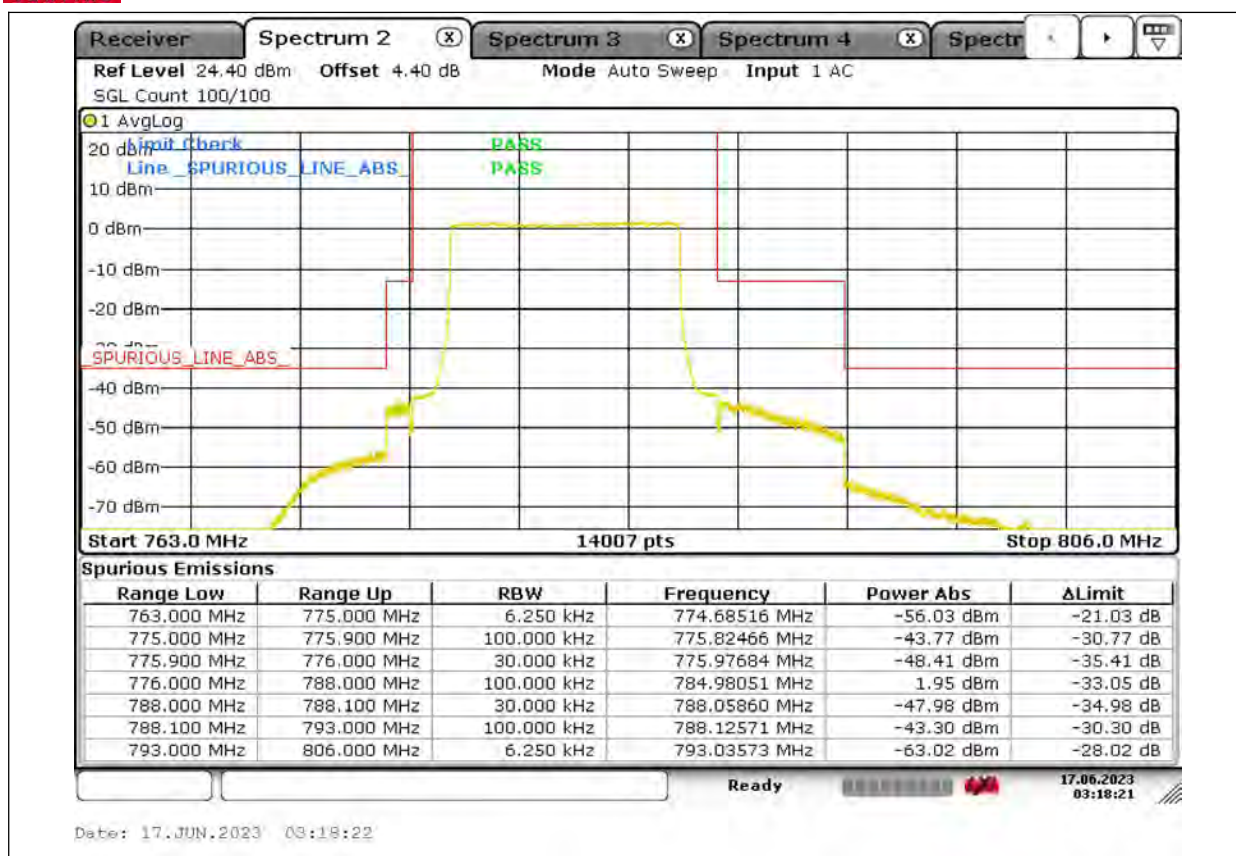
Date: 17.JUN.2023 03:26:54

Band13-10MHz-64QAM-23230-50RB#0



BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05





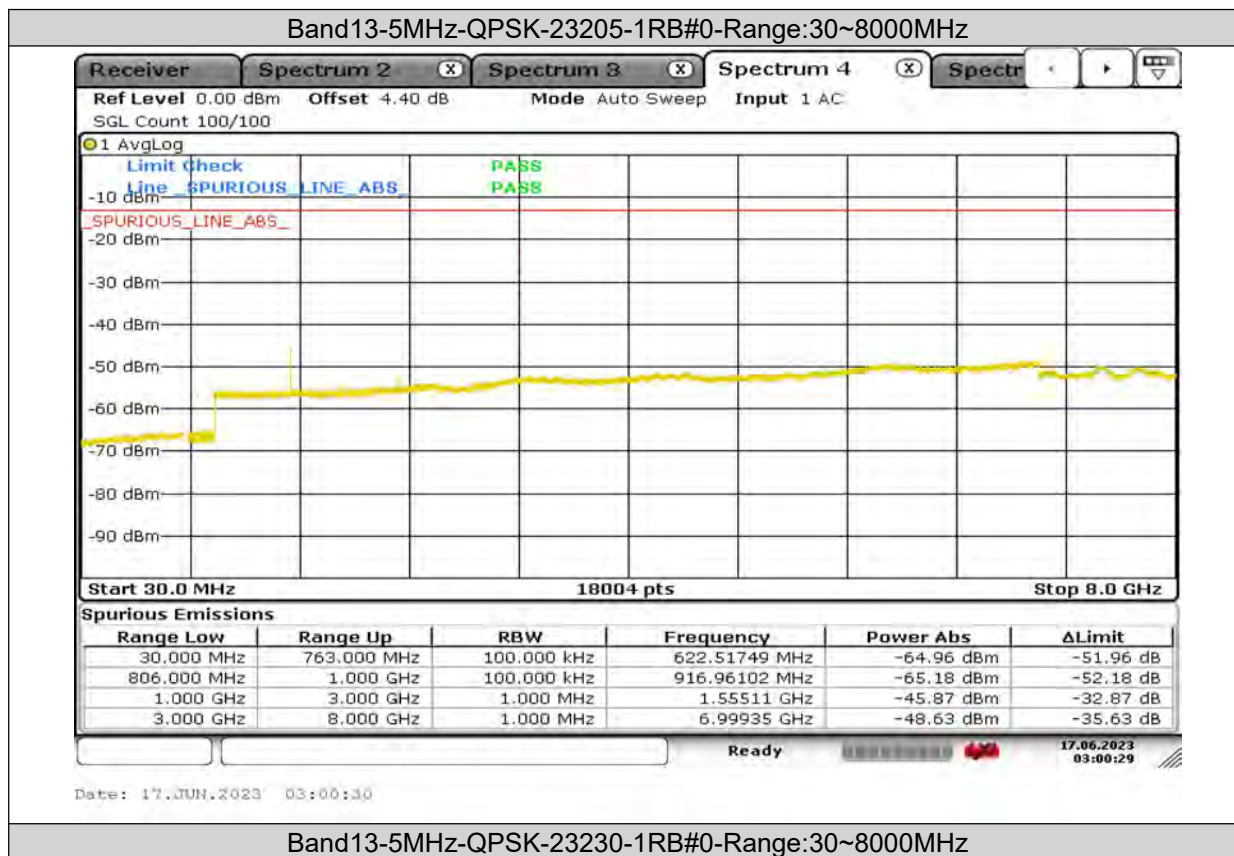
Test Report No.: PSU-QSU2306120115RF05

CONDUCTED SPURIOUS EMISSION

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band13	5MHz	QPSK	23205	1RB#0	Range:30~8000MHz	-45.87	PASS
Band13	5MHz	QPSK	23230	1RB#0	Range:30~8000MHz	-45.14	PASS
Band13	5MHz	QPSK	23255	1RB#0	Range:30~8000MHz	-45.84	PASS
Band13	5MHz	64QAM	23205	1RB#0	Range:30~8000MHz	-47.29	PASS
Band13	5MHz	64QAM	23230	1RB#0	Range:30~8000MHz	-46.03	PASS
Band13	5MHz	64QAM	23255	1RB#0	Range:30~8000MHz	-47.41	PASS
Band13	5MHz	16QAM	23205	1RB#0	Range:30~8000MHz	-48.52	PASS
Band13	5MHz	16QAM	23230	1RB#0	Range:30~8000MHz	-48.21	PASS
Band13	5MHz	16QAM	23255	1RB#0	Range:30~8000MHz	-48.50	PASS
Band13	10MHz	QPSK	23230	1RB#0	Range:30~8000MHz	-45.59	PASS
Band13	10MHz	16QAM	23230	1RB#0	Range:30~8000MHz	-47.32	PASS
Band13	10MHz	64QAM	23230	1RB#0	Range:30~8000MHz	-48.54	PASS

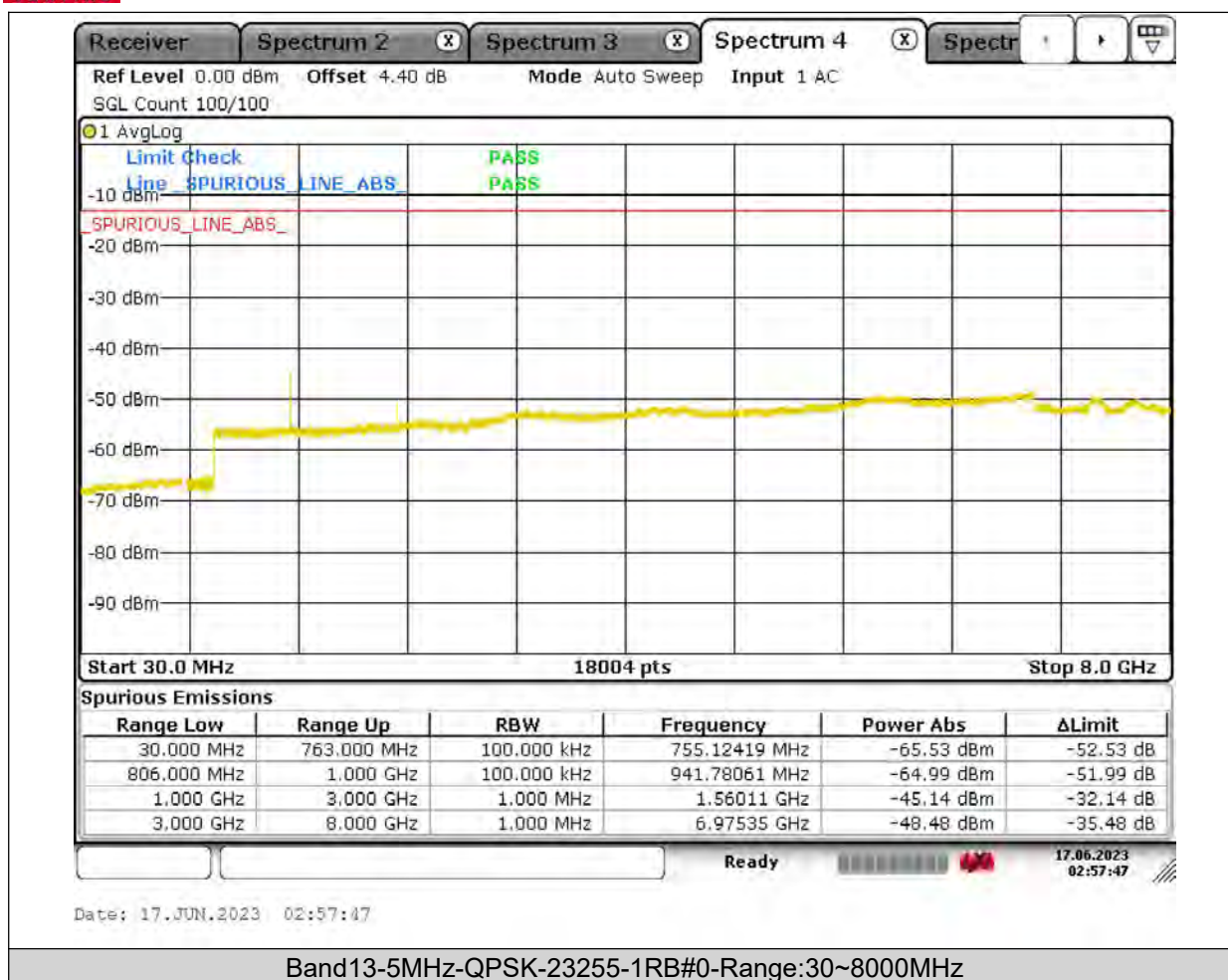
Test Graphs





BUREAU
VERITAS

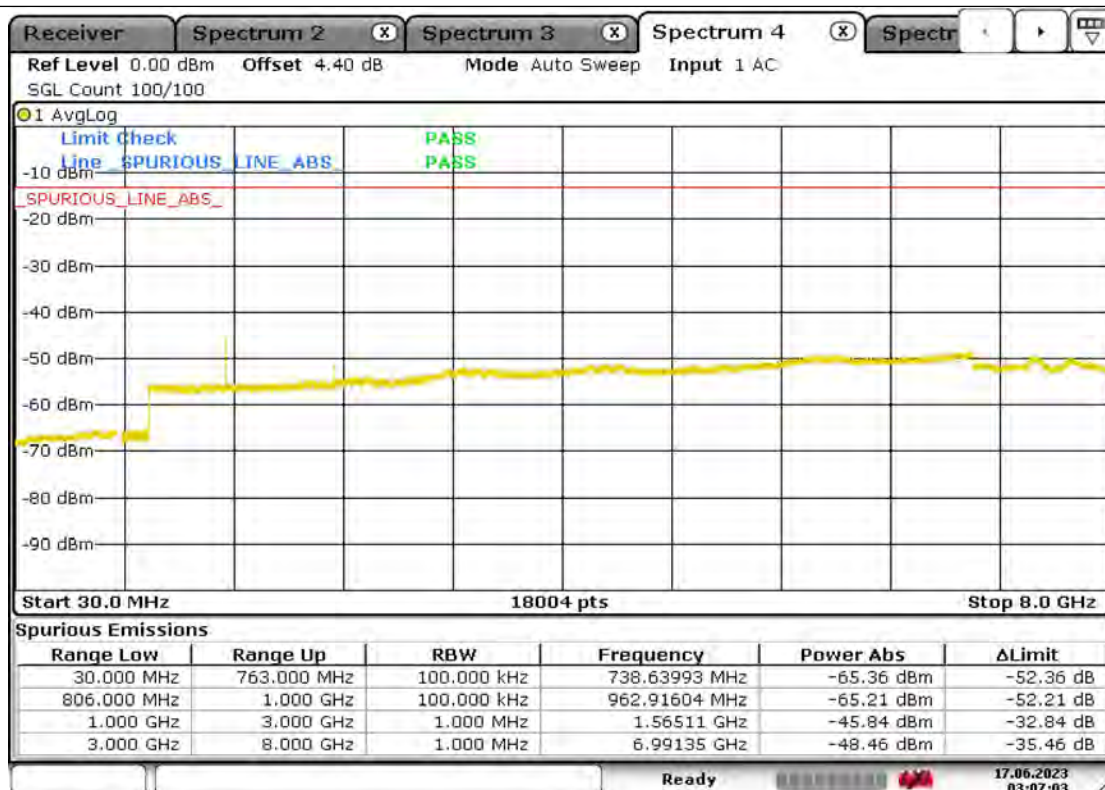
Test Report No.: PSU-QSU2306120115RF05





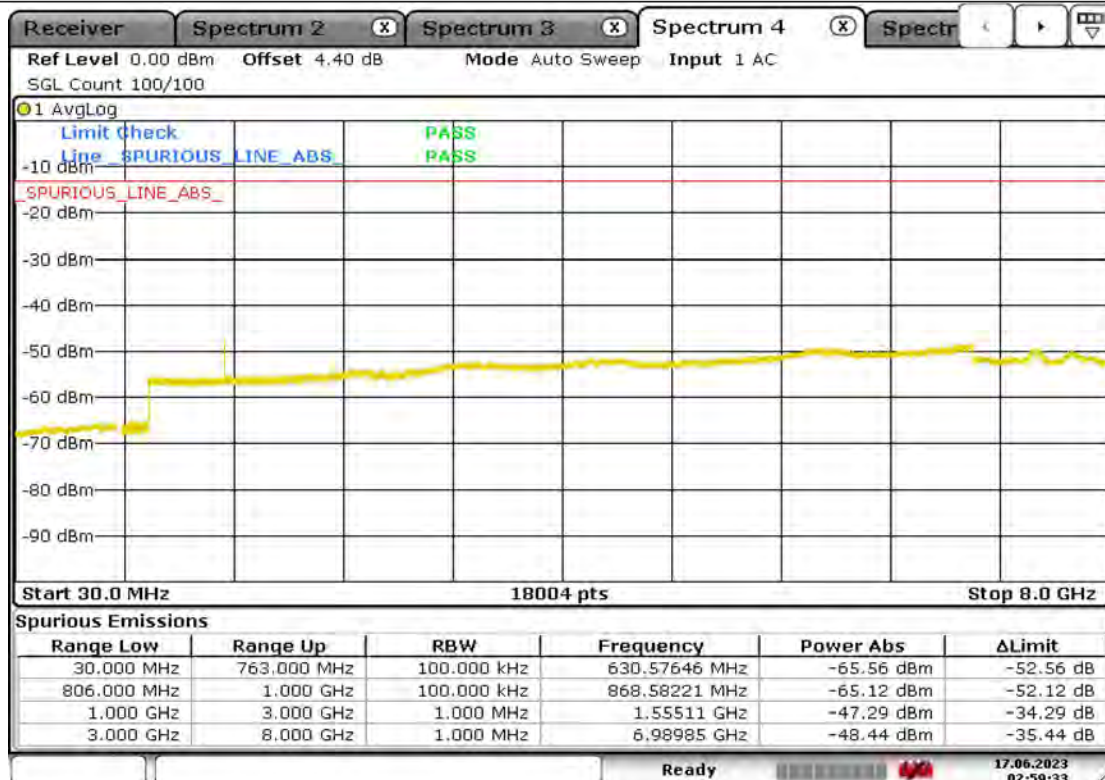
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:07:03

Band13-5MHz-16QAM-23205-1RB#0-Range:30~8000MHz



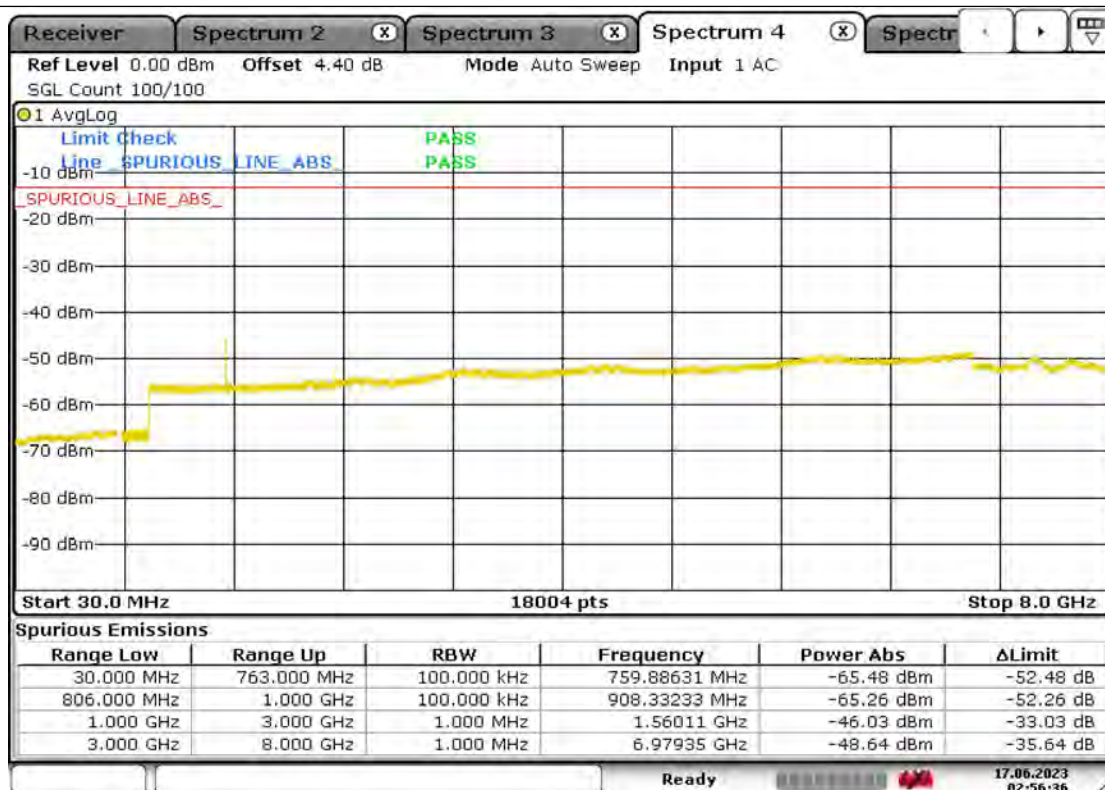
Date: 17.JUN.2023 02:59:34

Band13-5MHz-16QAM-23230-1RB#0-Range:30~8000MHz



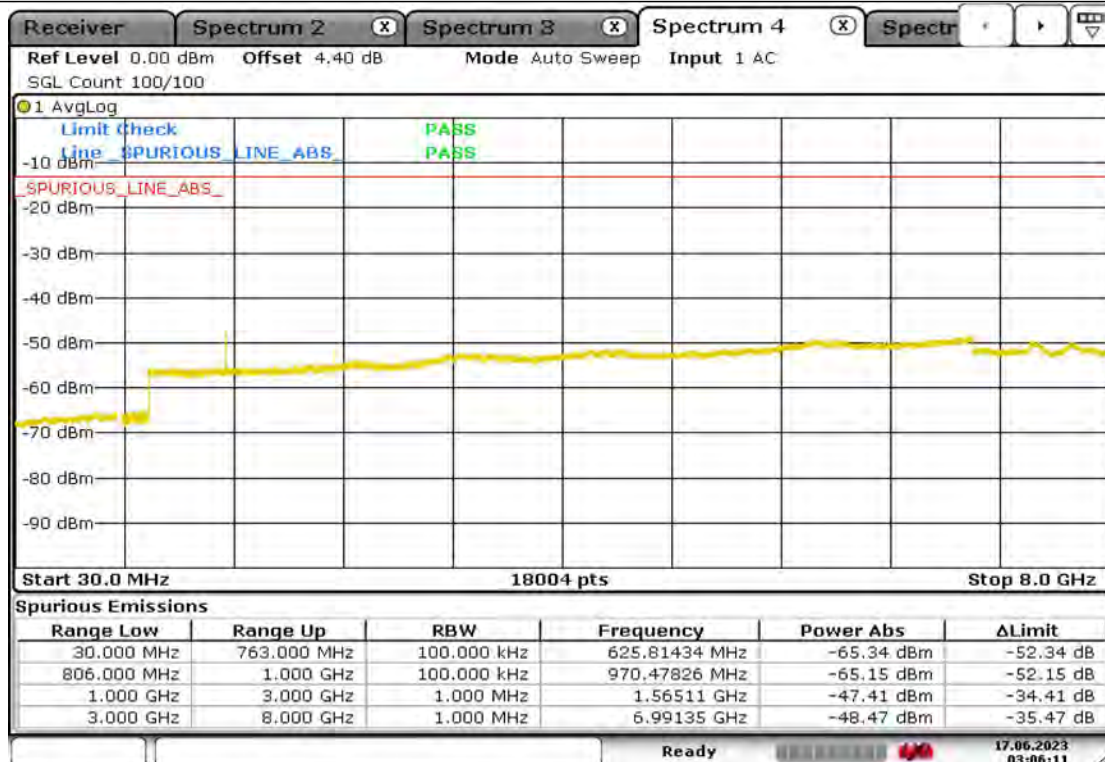
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 02:56:36

Band13-5MHz-16QAM-23255-1RB#0-Range:30~8000MHz



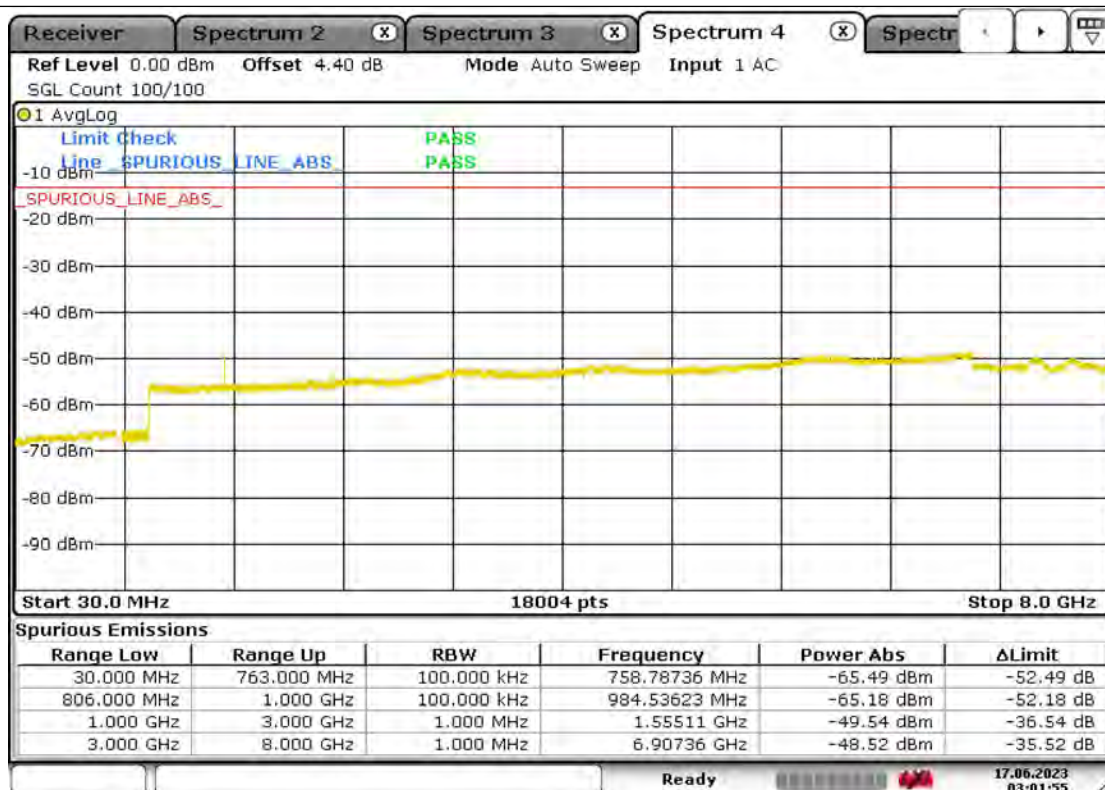
Date: 17.JUN.2023 03:06:12

Band13-5MHz-64QAM-23205-1RB#0-Range:30~8000MHz



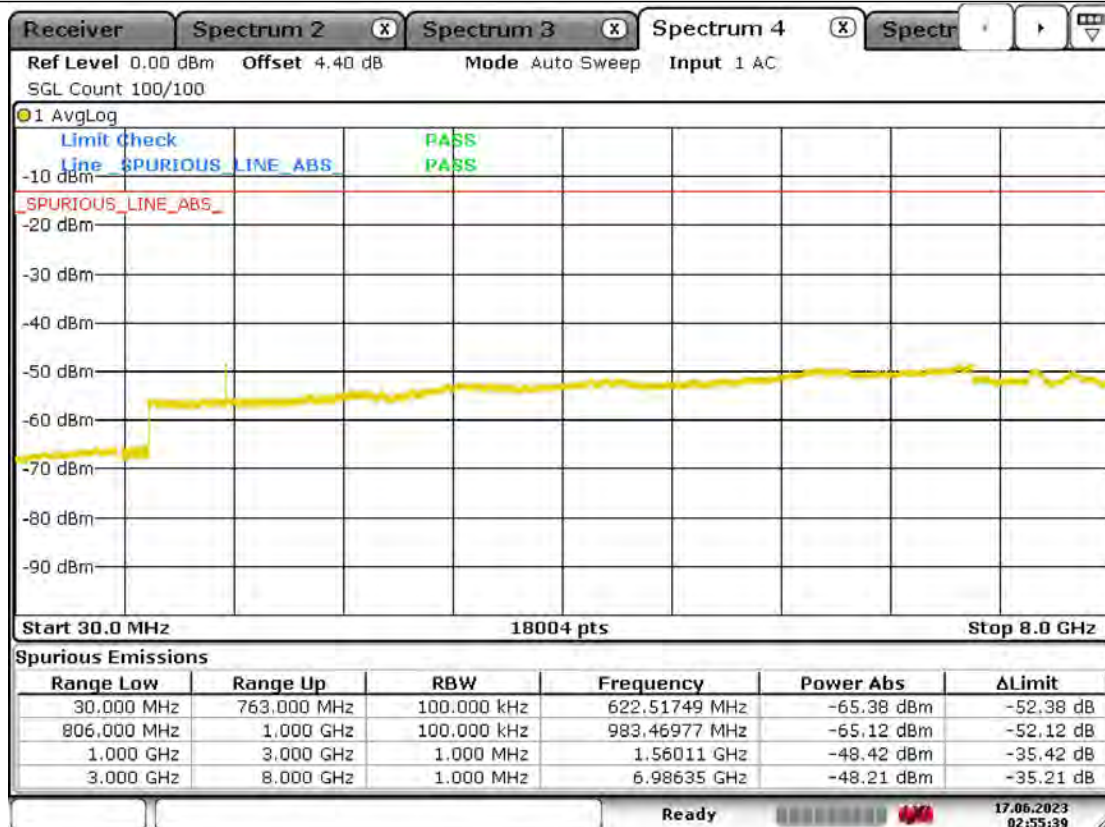
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:01:55

Band13-5MHz-64QAM-23230-1RB#0-Range:30~8000MHz



Date: 17.JUN.2023 02:55:40

Band13-5MHz-64QAM-23255-1RB#0-Range:30~8000MHz

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

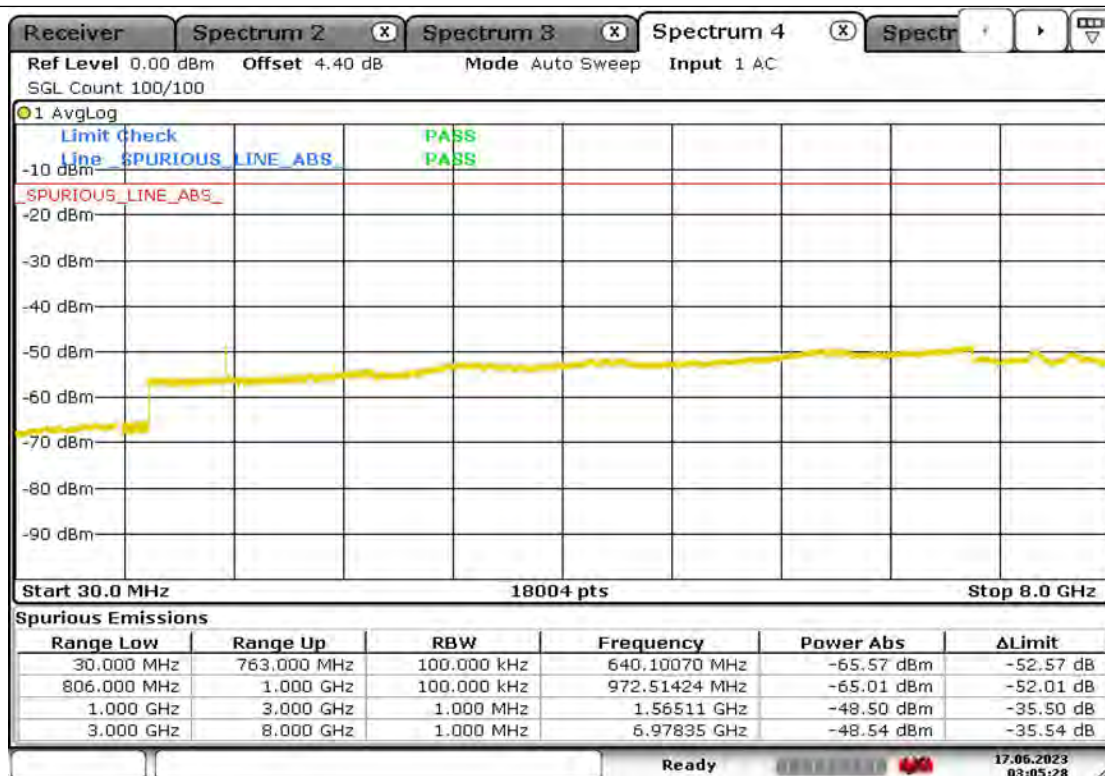
Tower N, Innovation Center, 88 Zhuyi Road,
High-tech District, Suzhou City, Anhui Province

Tel: +86 (0557) 368 1008



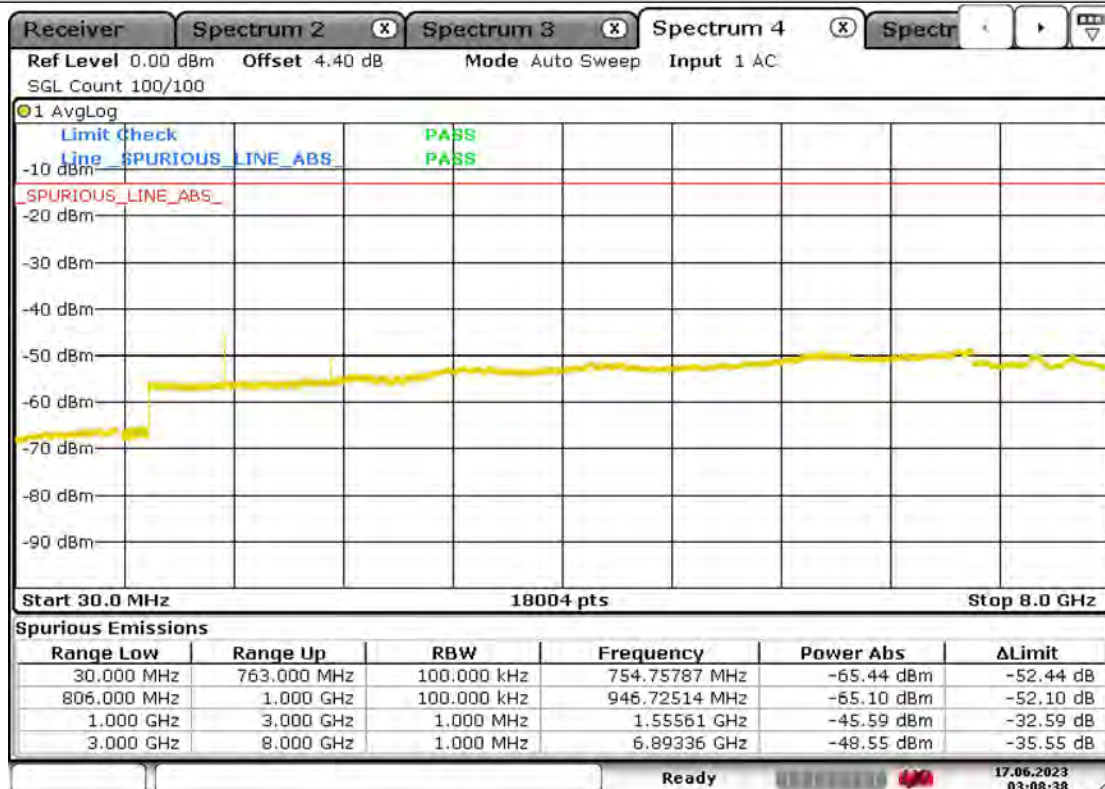
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:05:29

Band13-10MHz-QPSK-23230-1RB#0-Range:30~8000MHz



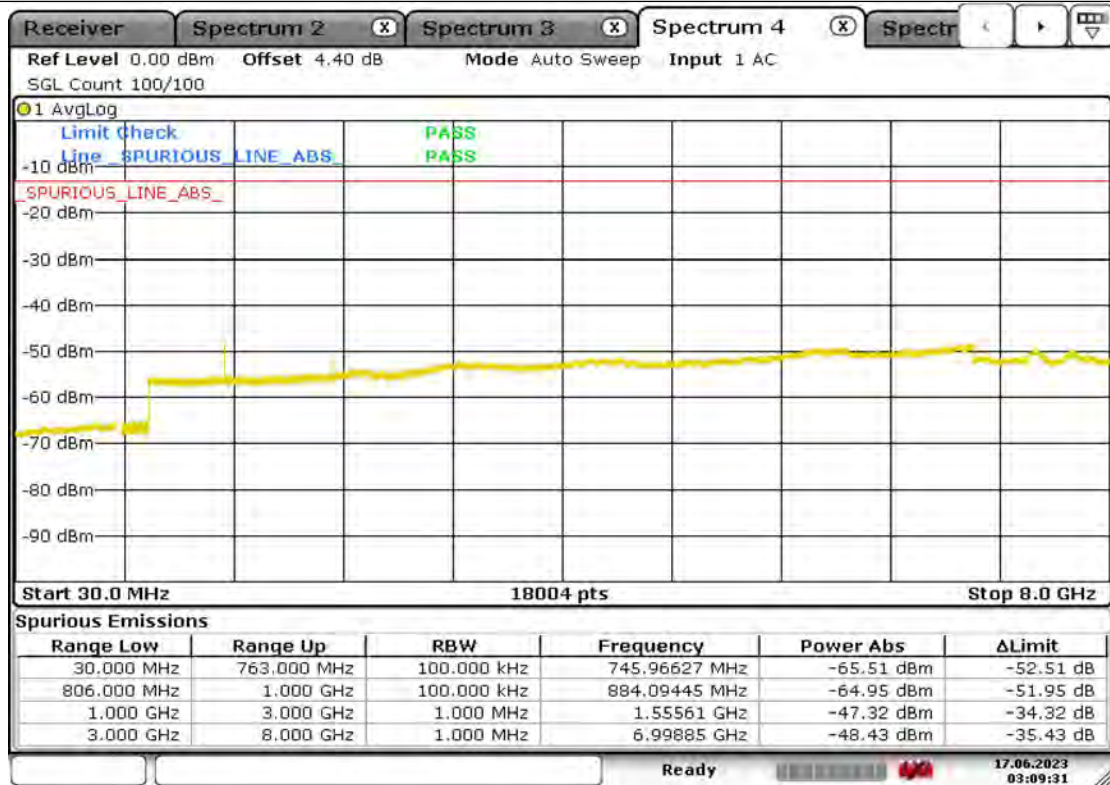
Date: 17.JUN.2023 03:08:38

Band13-10MHz-16QAM-23230-1RB#0-Range:30~8000MHz



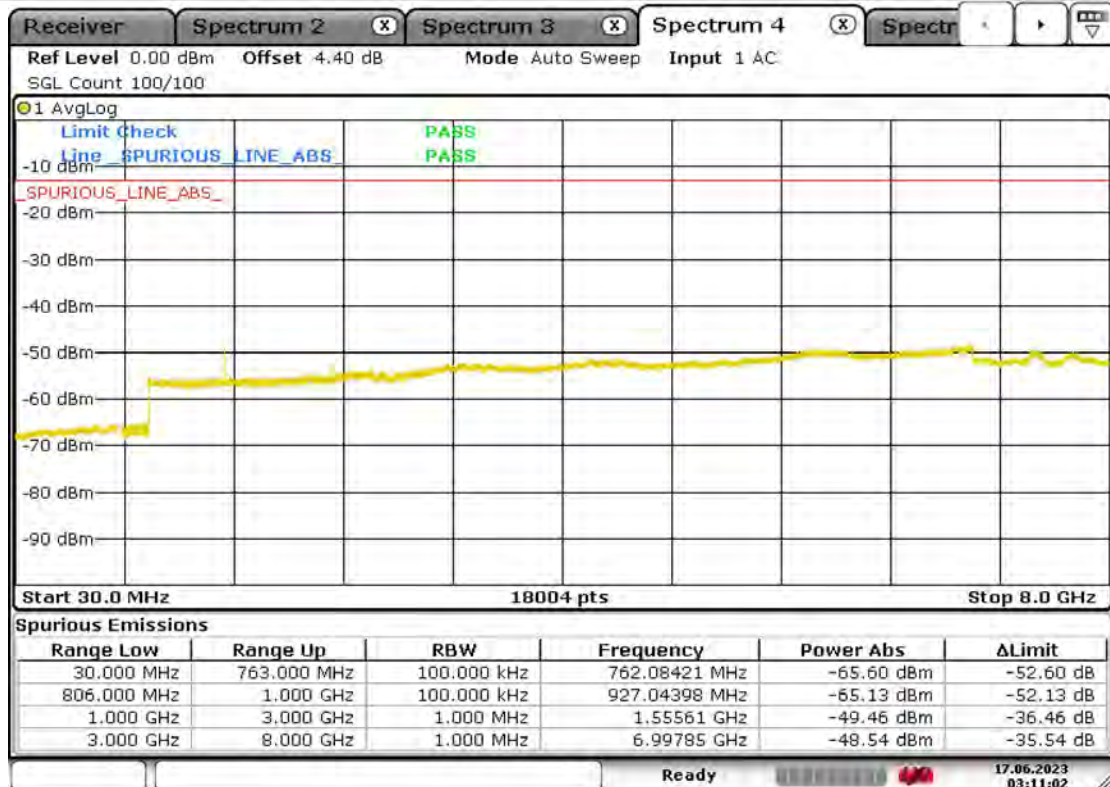
BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



Date: 17.JUN.2023 03:09:31

Band13-10MHz-64QAM-23230-1RB#0-Range:30~8000MHz



Date: 17.JUN.2023 03:11:02

FREQUENCY STABILITY

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band13	10MHz	QPSK	23230	50RB#0	VL	NT	-16.1	-0.020588	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	VN	NT	17.7	0.022634	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	VH	NT	-19.3	-0.024680	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	VL	NT	27	0.034527	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	VN	NT	-15.5	-0.019821	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	VH	NT	-16.7	-0.021355	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	VL	NT	27	0.034527	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	VN	NT	5.1	0.006522	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	VH	NT	4.6	0.005882	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configuration	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band13	10MHz	QPSK	23230	50RB#0	NV	-30	-24	-0.030691	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-20	-2.6	-0.003325	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-10	16.5	0.000710	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	0	15.7	0.020077	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	10	6.3	0.008056	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	20	-0.6	-0.000767	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	30	16.9	0.021611	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	40	21.3	0.027238	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	50	-12.9	-0.016496	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	-30	-3.1	-0.003964	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	-20	-17.8	-0.022762	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-10	21.2	0.000913	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	0	6.1	0.007801	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	10	-23.9	-0.030563	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	20	23	0.029412	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	30	-9	-0.011509	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	40	14.3	0.018286	±2.5	PASS
Band13	10MHz	16QAM	23230	50RB#0	NV	50	22	0.028133	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	-30	-8.2	-0.010486	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	-20	5.2	0.006650	±2.5	PASS
Band13	10MHz	QPSK	23230	50RB#0	NV	-10	-9.2	-0.000396	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	0	-3.1	-0.003964	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	10	-14.2	-0.018159	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	20	-0.3	-0.000384	±2.5	PASS

Band13	10MHz	64QAM	23230	50RB#0	NV	30	-17	-0.021739	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	40	-22.8	-0.029156	±2.5	PASS
Band13	10MHz	64QAM	23230	50RB#0	NV	50	-24.6	-0.031458	±2.5	PASS

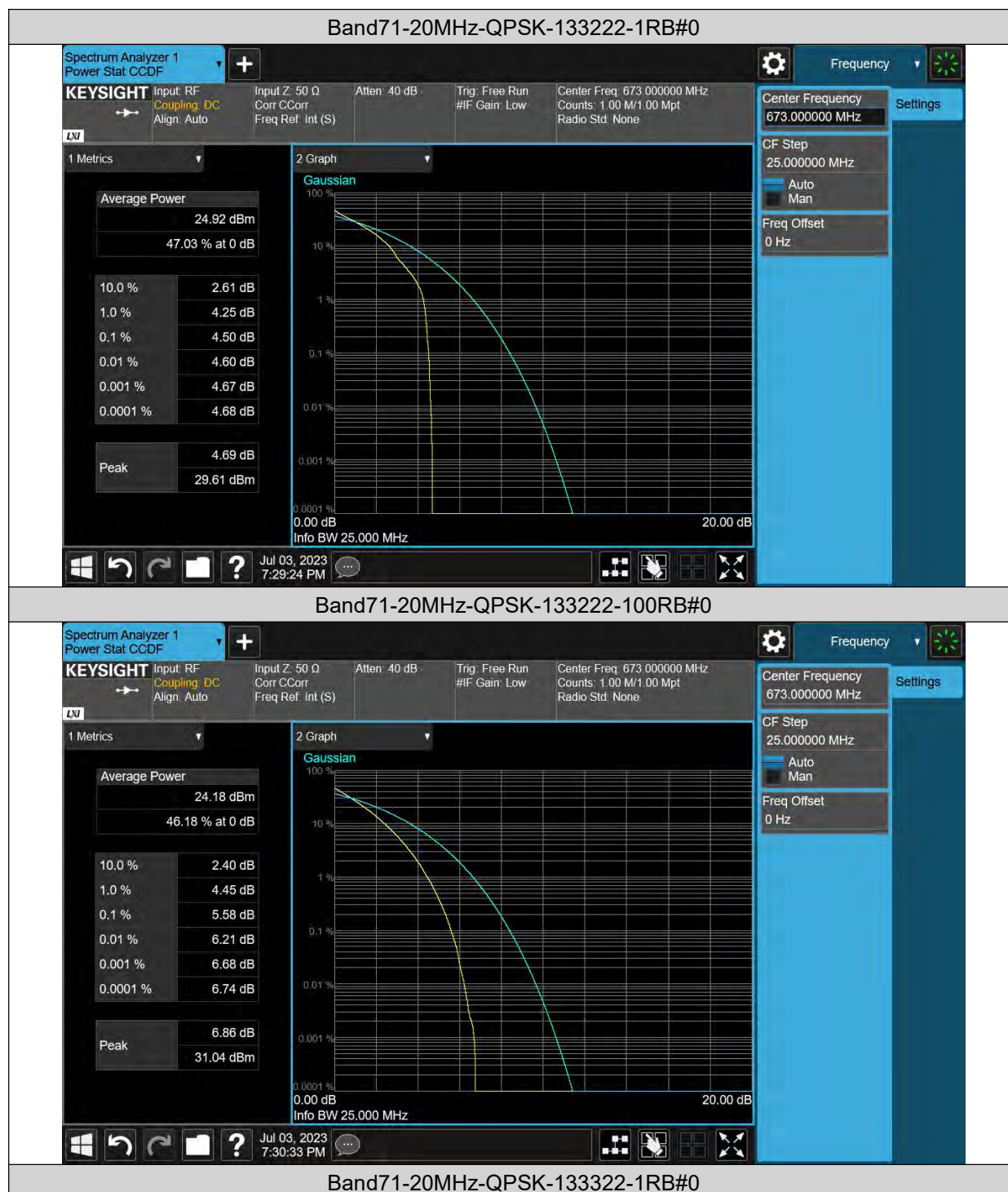
LTE BAND 71

PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band71	20MHz	QPSK	133222	1RB#0	4.50	13	PASS
Band71	20MHz	QPSK	133222	100RB#0	5.58	13	PASS
Band71	20MHz	QPSK	133322	1RB#0	4.90	13	PASS
Band71	20MHz	QPSK	133322	100RB#0	5.68	13	PASS
Band71	20MHz	QPSK	133372	1RB#0	4.85	13	PASS
Band71	20MHz	QPSK	133372	100RB#0	5.56	13	PASS
Band71	20MHz	16QAM	133222	1RB#0	5.35	13	PASS
Band71	20MHz	16QAM	133222	100RB#0	6.38	13	PASS
Band71	20MHz	16QAM	133322	1RB#0	5.56	13	PASS
Band71	20MHz	16QAM	133322	100RB#0	6.43	13	PASS
Band71	20MHz	16QAM	133372	1RB#0	5.84	13	PASS
Band71	20MHz	16QAM	133372	100RB#0	6.32	13	PASS
Band71	20MHz	64QAM	133222	1RB#0	6.05	13	PASS
Band71	20MHz	64QAM	133222	100RB#0	6.69	13	PASS
Band71	20MHz	64QAM	133322	1RB#0	6.29	13	PASS
Band71	20MHz	64QAM	133322	100RB#0	6.67	13	PASS
Band71	20MHz	64QAM	133372	1RB#0	6.21	13	PASS
Band71	20MHz	64QAM	133372	100RB#0	6.50	13	PASS

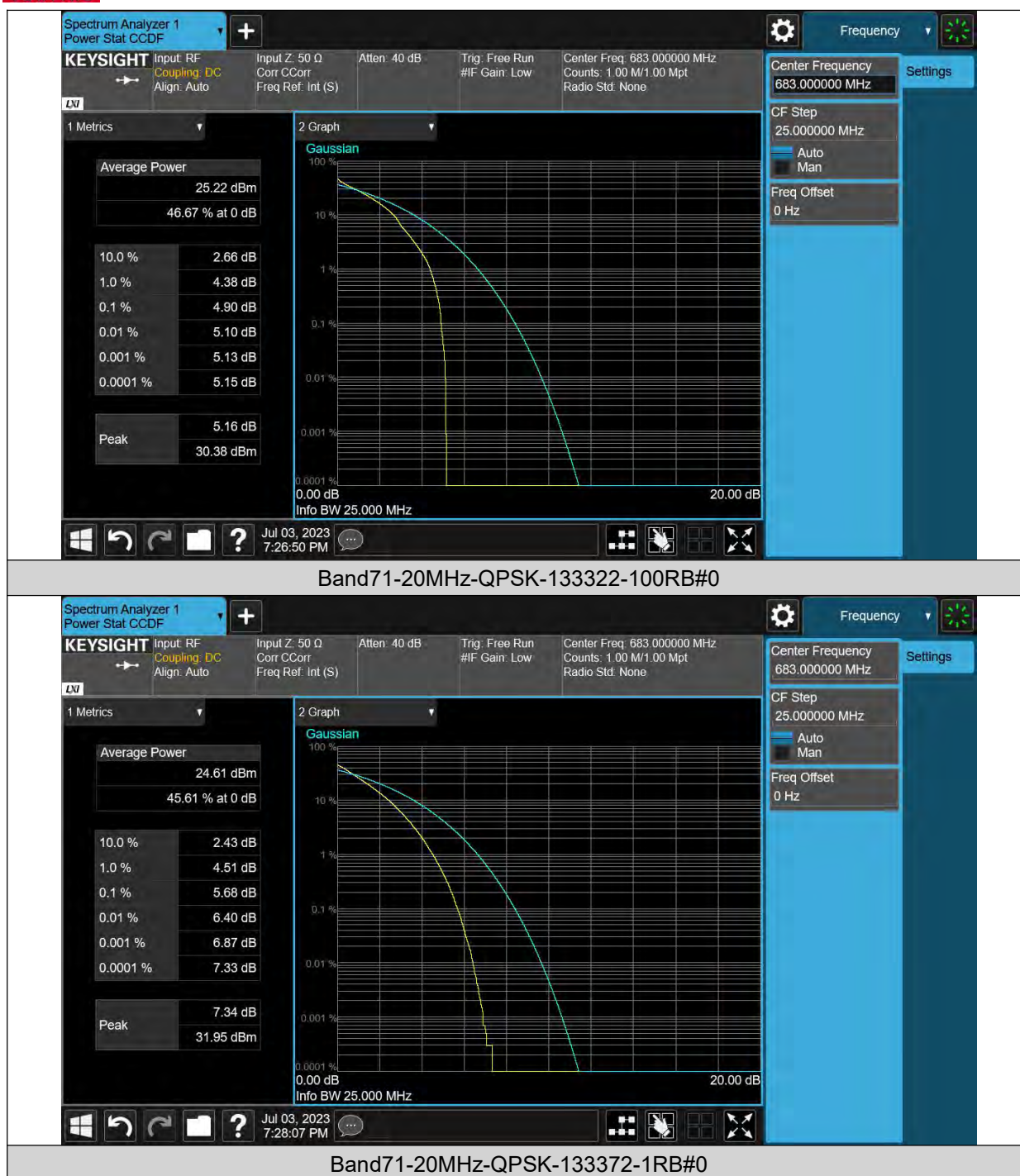
Test Graphs





BUREAU
VERITAS

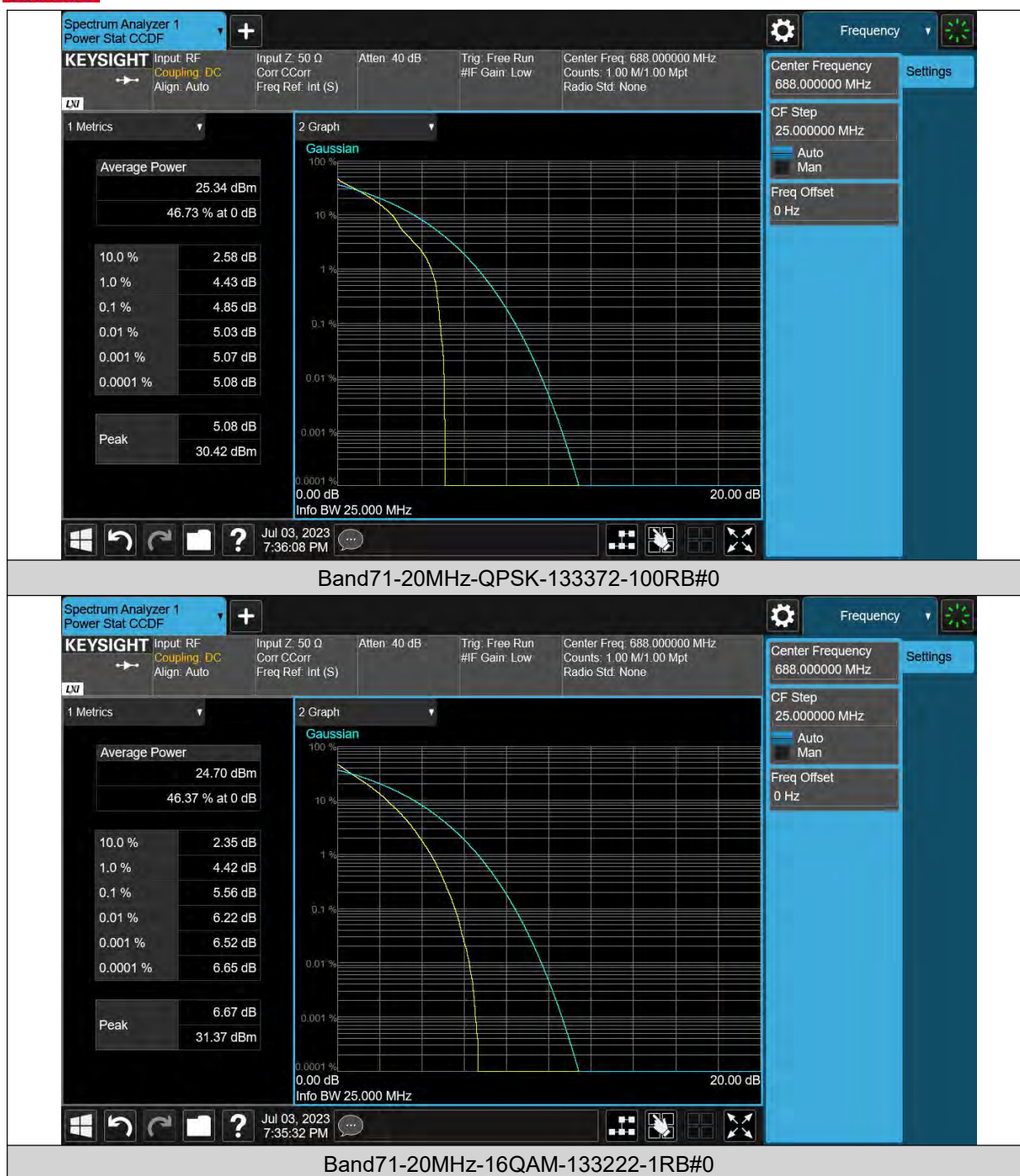
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

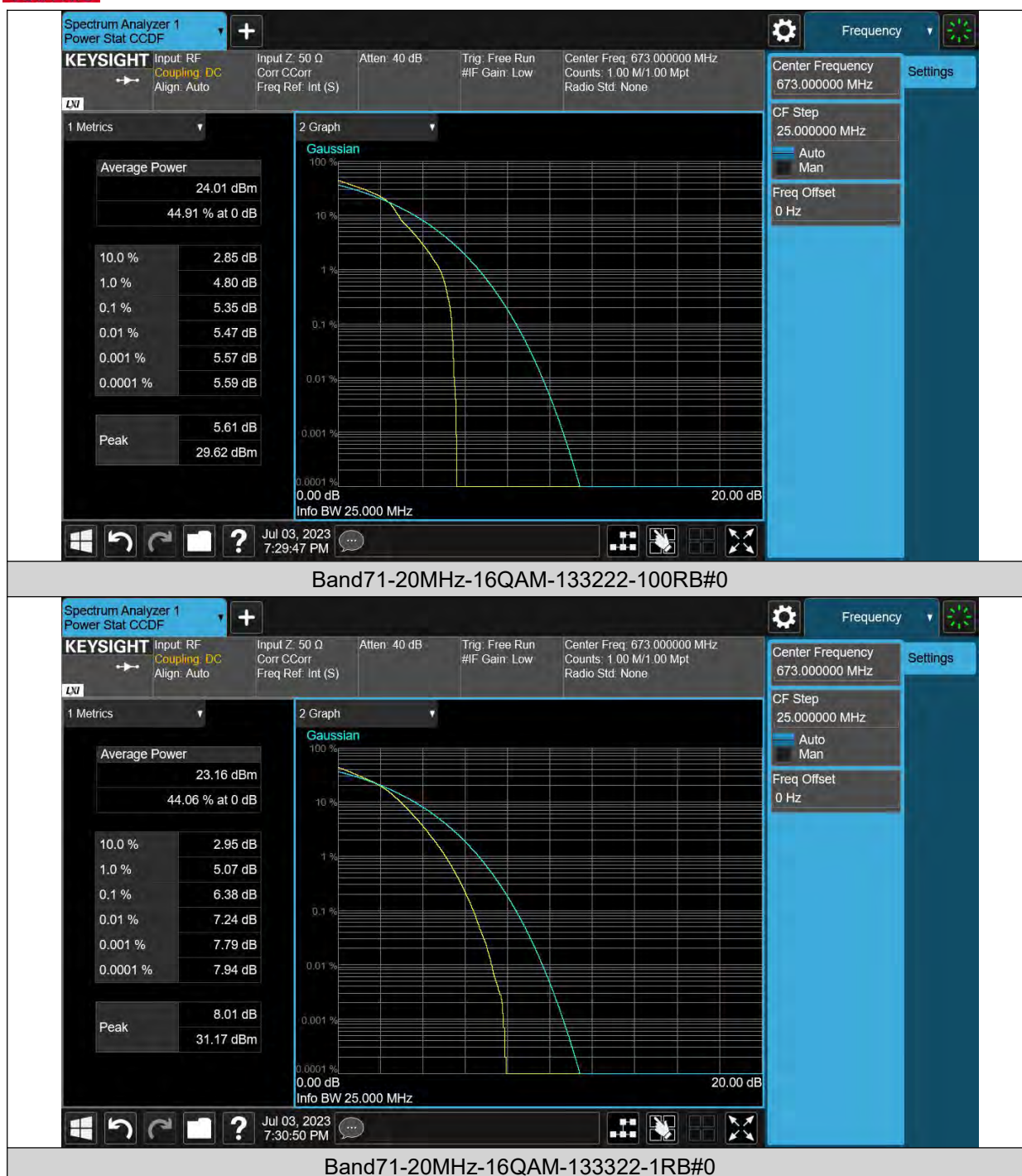
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

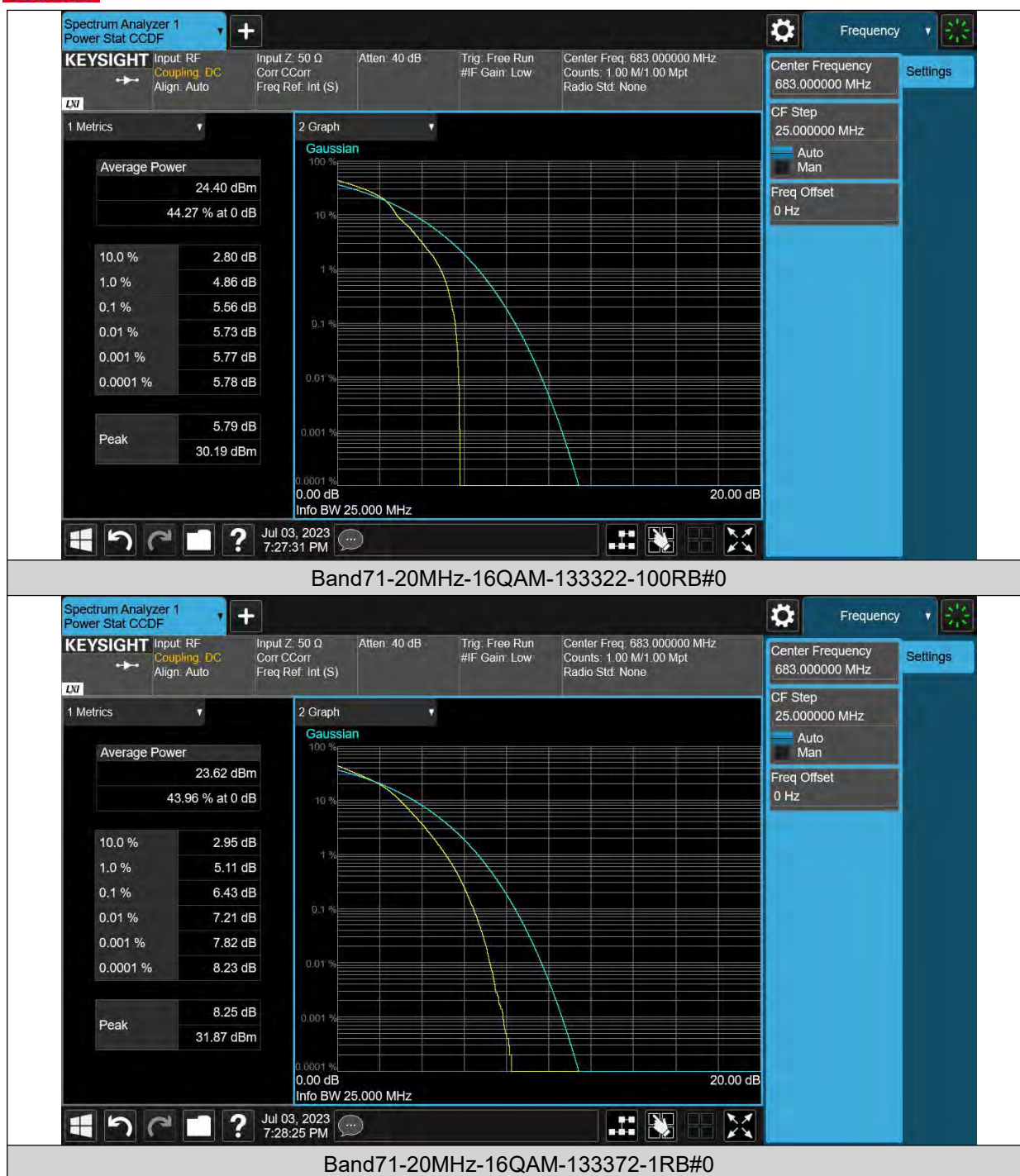
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

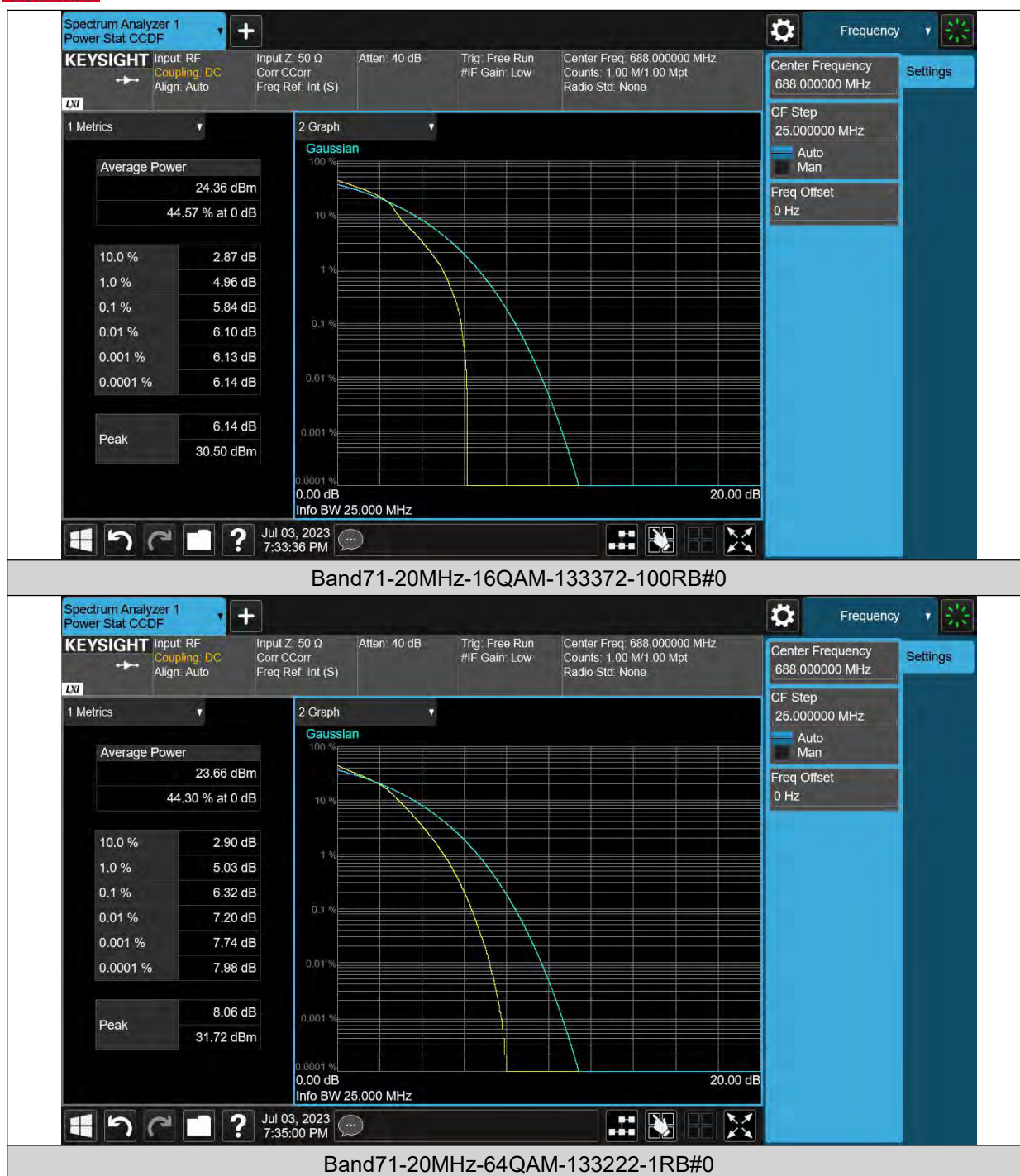
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

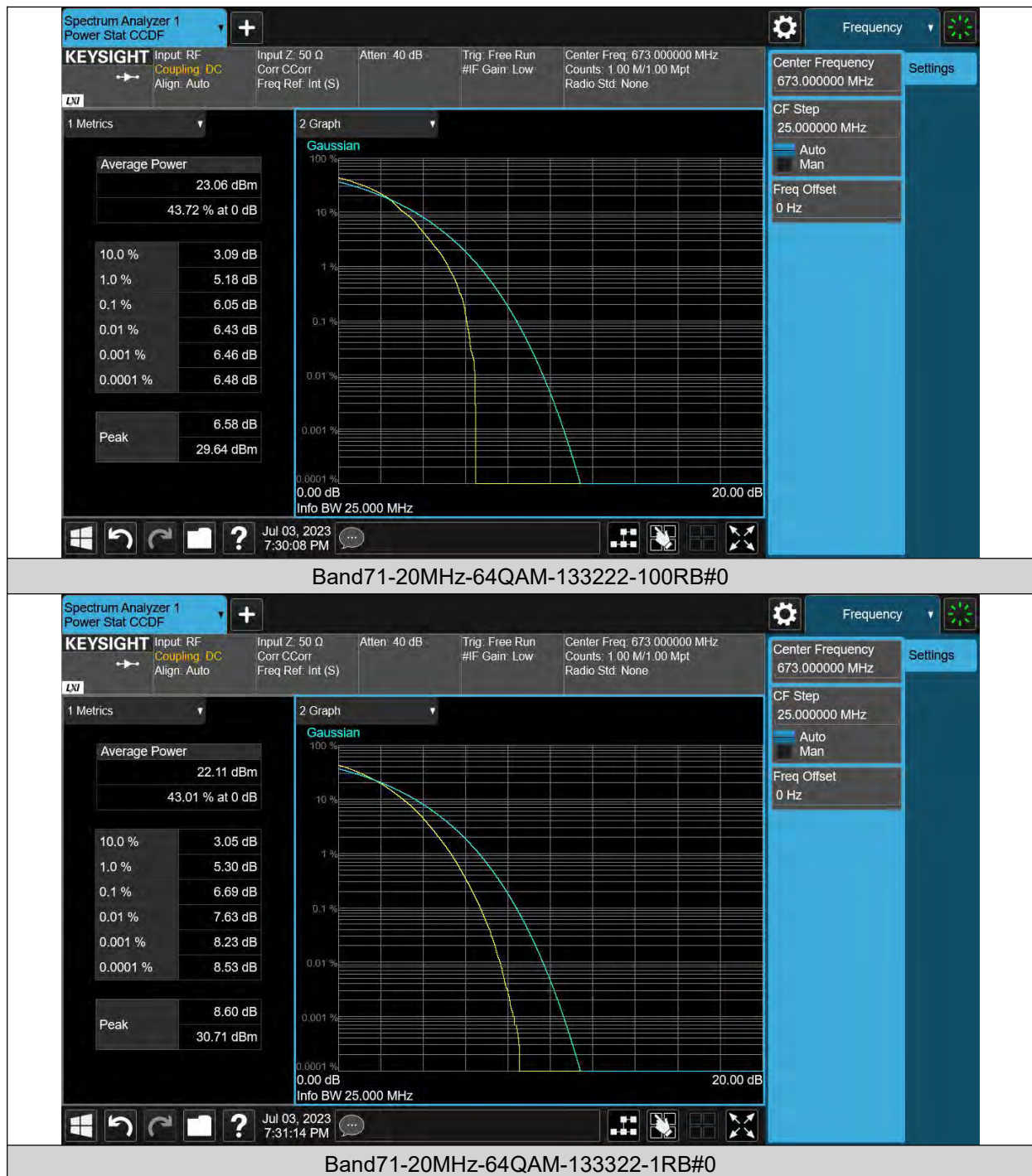
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

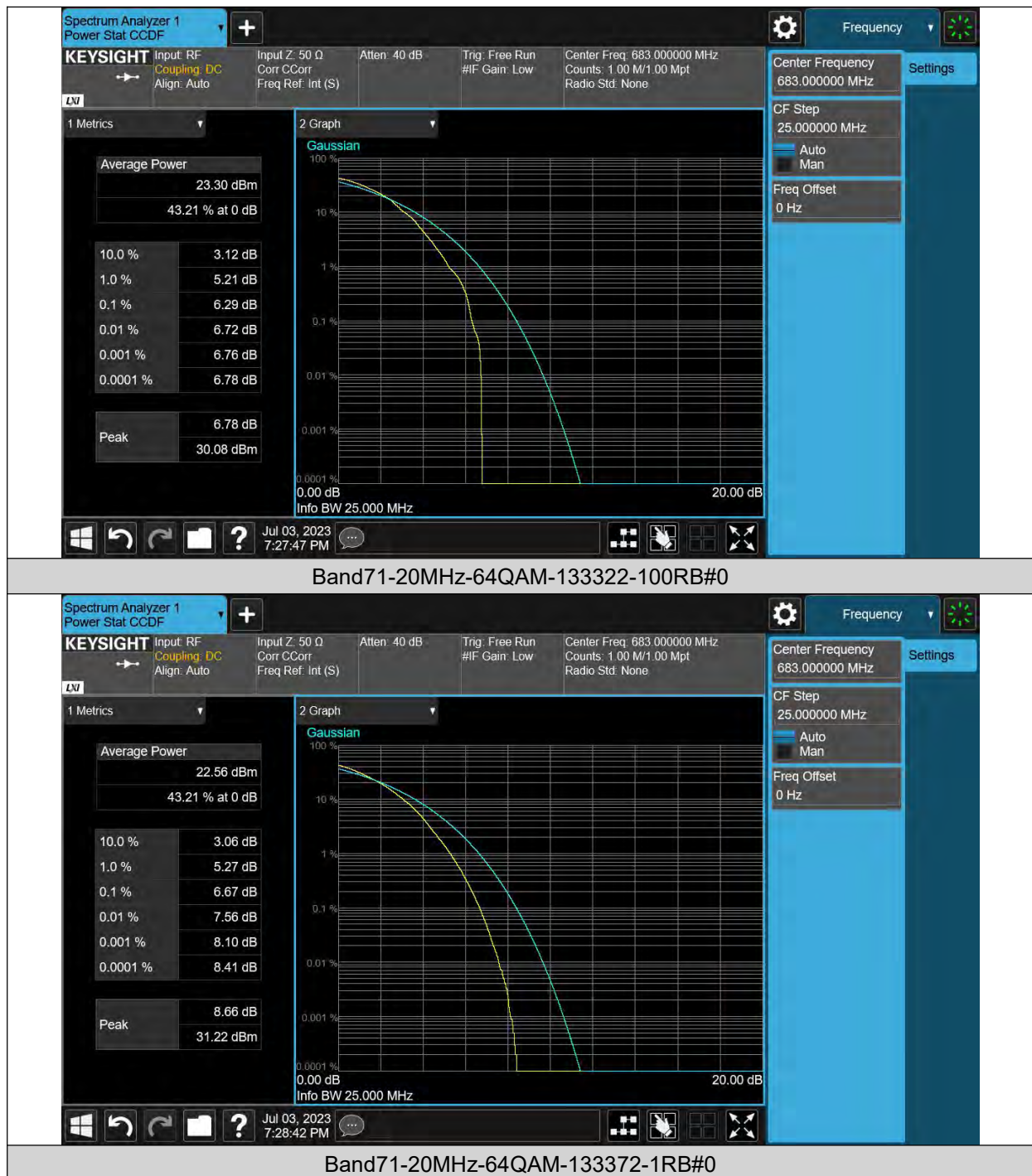
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

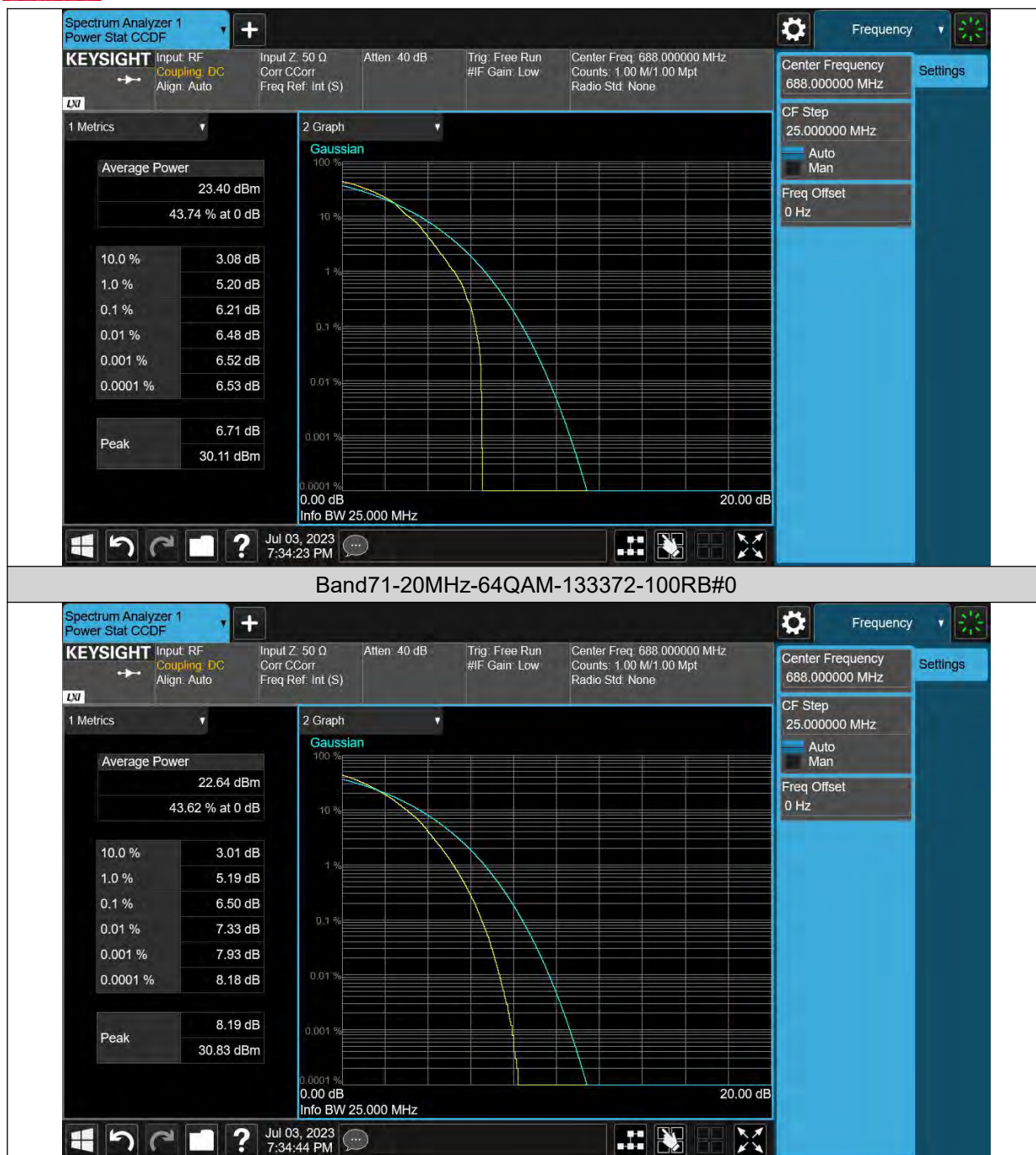
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05

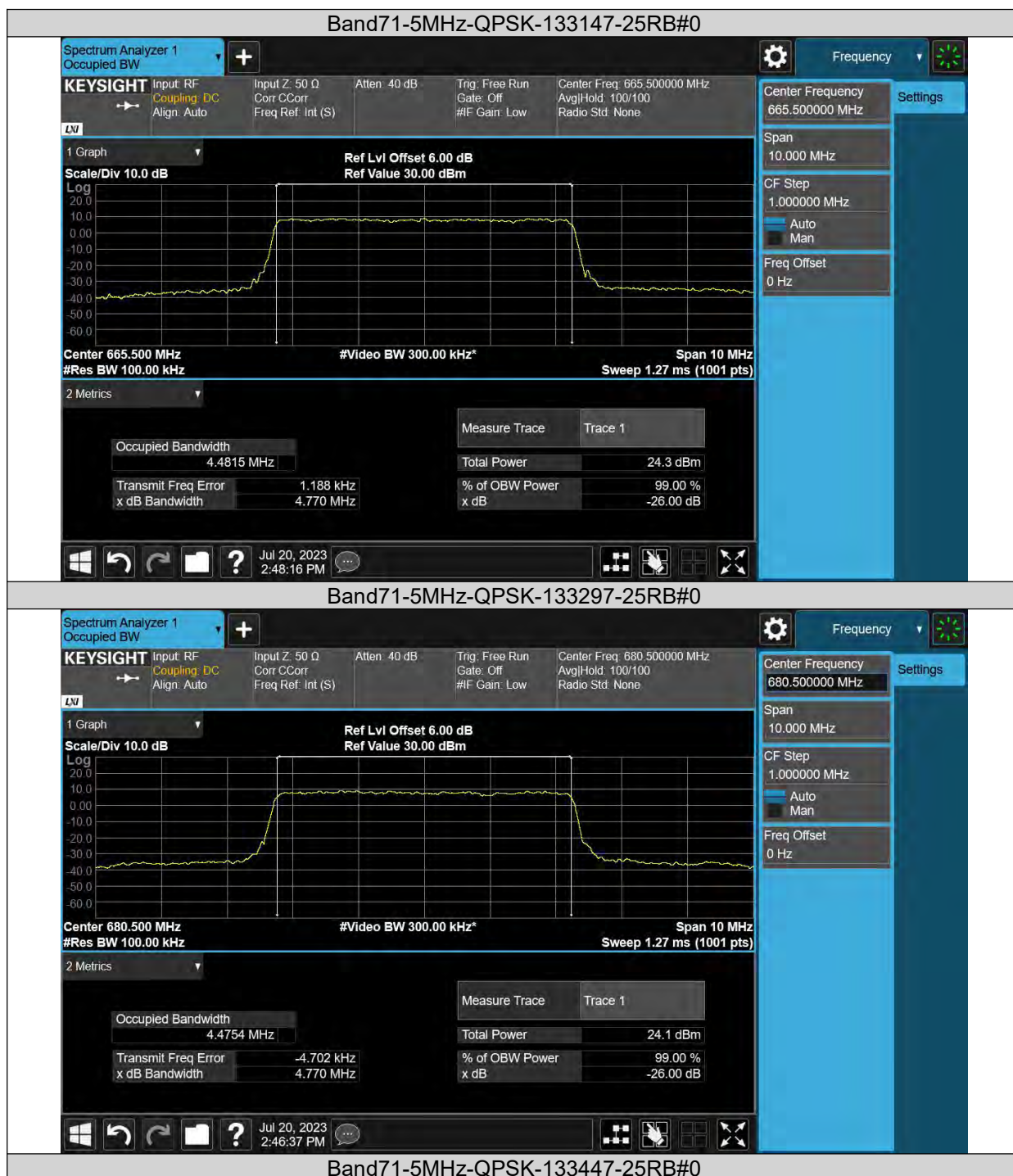


26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band71	5MHz	QPSK	133147	25RB#0	4.4815	4.770	PASS
Band71	5MHz	QPSK	133297	25RB#0	4.4754	4.770	PASS
Band71	5MHz	QPSK	133447	25RB#0	4.4827	4.787	PASS
Band71	5MHz	16QAM	133147	25RB#0	4.4832	4.784	PASS
Band71	5MHz	16QAM	133297	25RB#0	4.4894	4.782	PASS
Band71	5MHz	16QAM	133447	25RB#0	4.4733	4.804	PASS
Band71	5MHz	64QAM	133147	25RB#0	4.4815	4.770	PASS
Band71	5MHz	64QAM	133297	25RB#0	4.4811	4.775	PASS
Band71	5MHz	64QAM	133447	25RB#0	4.4893	4.810	PASS
Band71	10MHz	QPSK	133172	50RB#0	8.9496	9.500	PASS
Band71	10MHz	QPSK	133297	50RB#0	8.9566	9.487	PASS
Band71	10MHz	QPSK	133422	50RB#0	8.9660	9.552	PASS
Band71	10MHz	16QAM	133172	50RB#0	8.9629	9.495	PASS
Band71	10MHz	16QAM	133297	50RB#0	8.9692	9.475	PASS
Band71	10MHz	16QAM	133422	50RB#0	8.9648	9.509	PASS
Band71	10MHz	64QAM	133172	50RB#0	8.9589	9.509	PASS
Band71	10MHz	64QAM	133297	50RB#0	8.9479	9.479	PASS
Band71	10MHz	64QAM	133422	50RB#0	8.9722	9.493	PASS
Band71	15MHz	QPSK	133197	75RB#0	13.445	14.21	PASS
Band71	15MHz	QPSK	133297	75RB#0	13.412	14.20	PASS
Band71	15MHz	QPSK	133397	75RB#0	13.459	14.26	PASS
Band71	15MHz	16QAM	133197	75RB#0	13.439	14.26	PASS
Band71	15MHz	16QAM	133297	75RB#0	13.387	14.18	PASS
Band71	15MHz	16QAM	133397	75RB#0	13.479	14.22	PASS
Band71	15MHz	64QAM	133197	75RB#0	13.454	14.23	PASS
Band71	15MHz	64QAM	133297	75RB#0	13.426	14.21	PASS
Band71	15MHz	64QAM	133397	75RB#0	13.466	14.26	PASS
Band71	20MHz	QPSK	133222	100RB#0	17.898	18.90	PASS
Band71	20MHz	QPSK	133322	100RB#0	17.921	18.90	PASS
Band71	20MHz	QPSK	133372	100RB#0	17.931	18.94	PASS
Band71	20MHz	16QAM	133222	100RB#0	17.927	18.94	PASS
Band71	20MHz	16QAM	133322	100RB#0	17.902	18.90	PASS
Band71	20MHz	16QAM	133372	100RB#0	17.924	18.93	PASS
Band71	20MHz	64QAM	133222	100RB#0	17.897	18.93	PASS
Band71	20MHz	64QAM	133322	100RB#0	17.897	18.92	PASS
Band71	20MHz	64QAM	133372	100RB#0	17.932	18.91	PASS

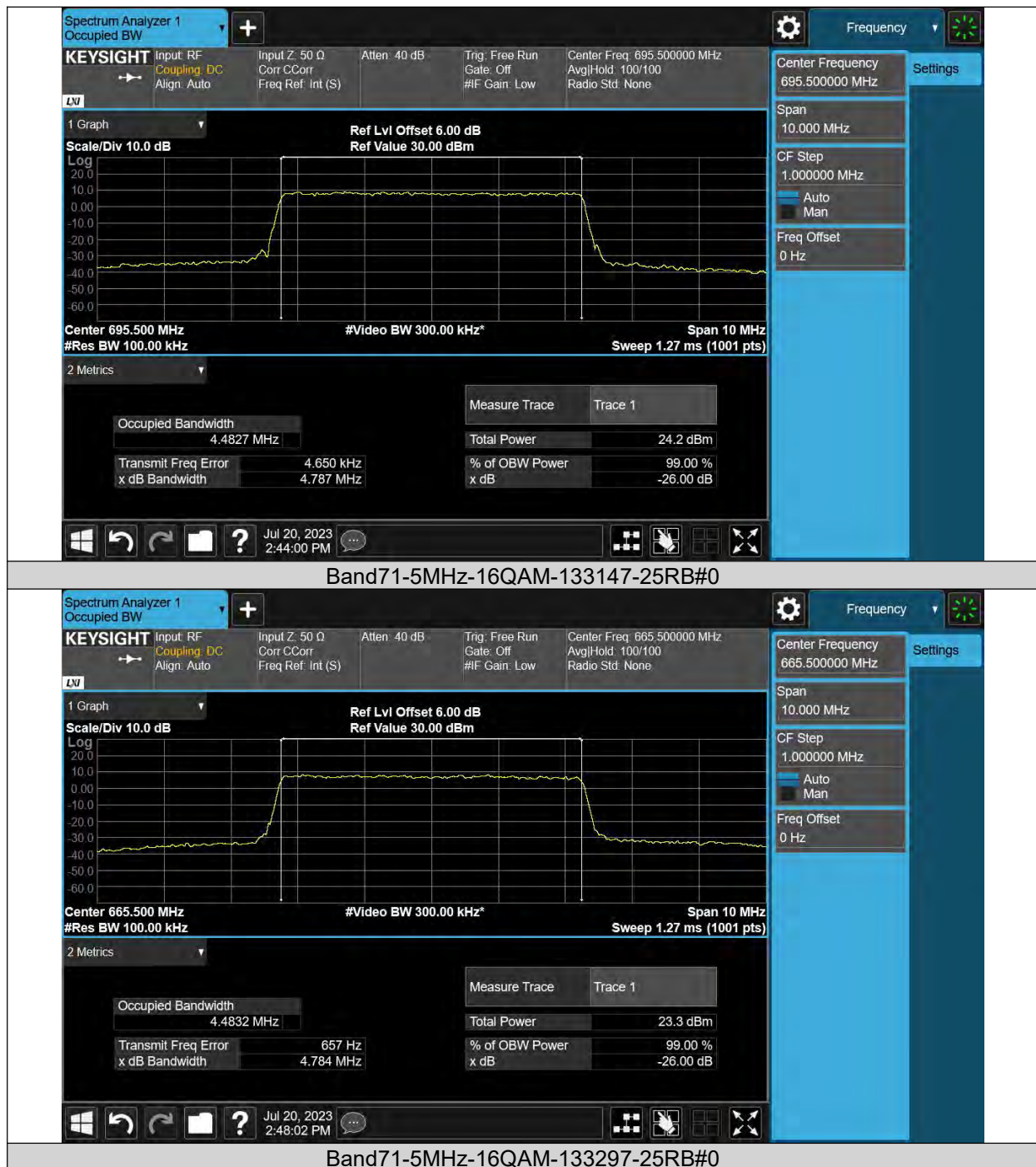
Test Graphs





BUREAU
VERITAS

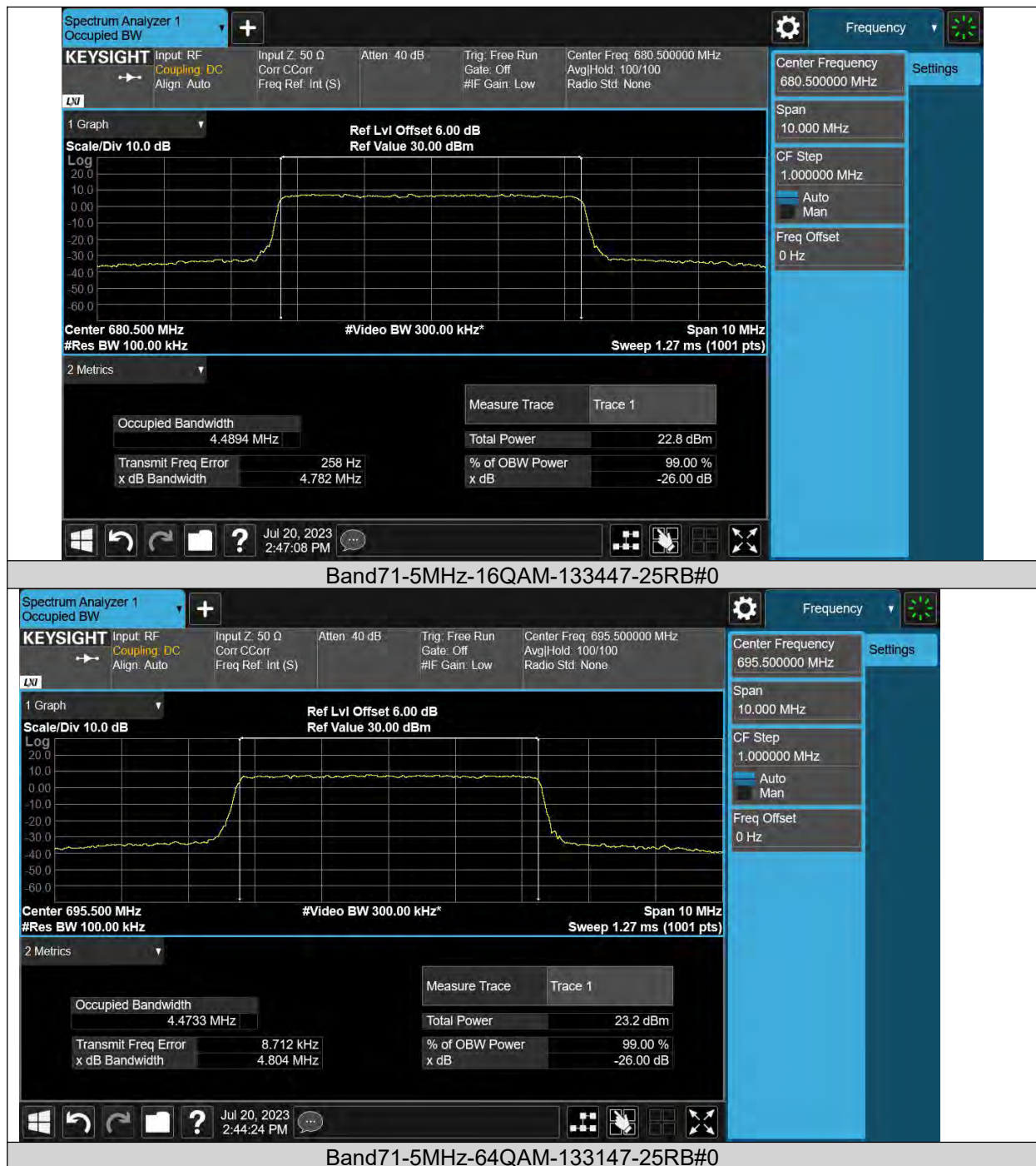
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

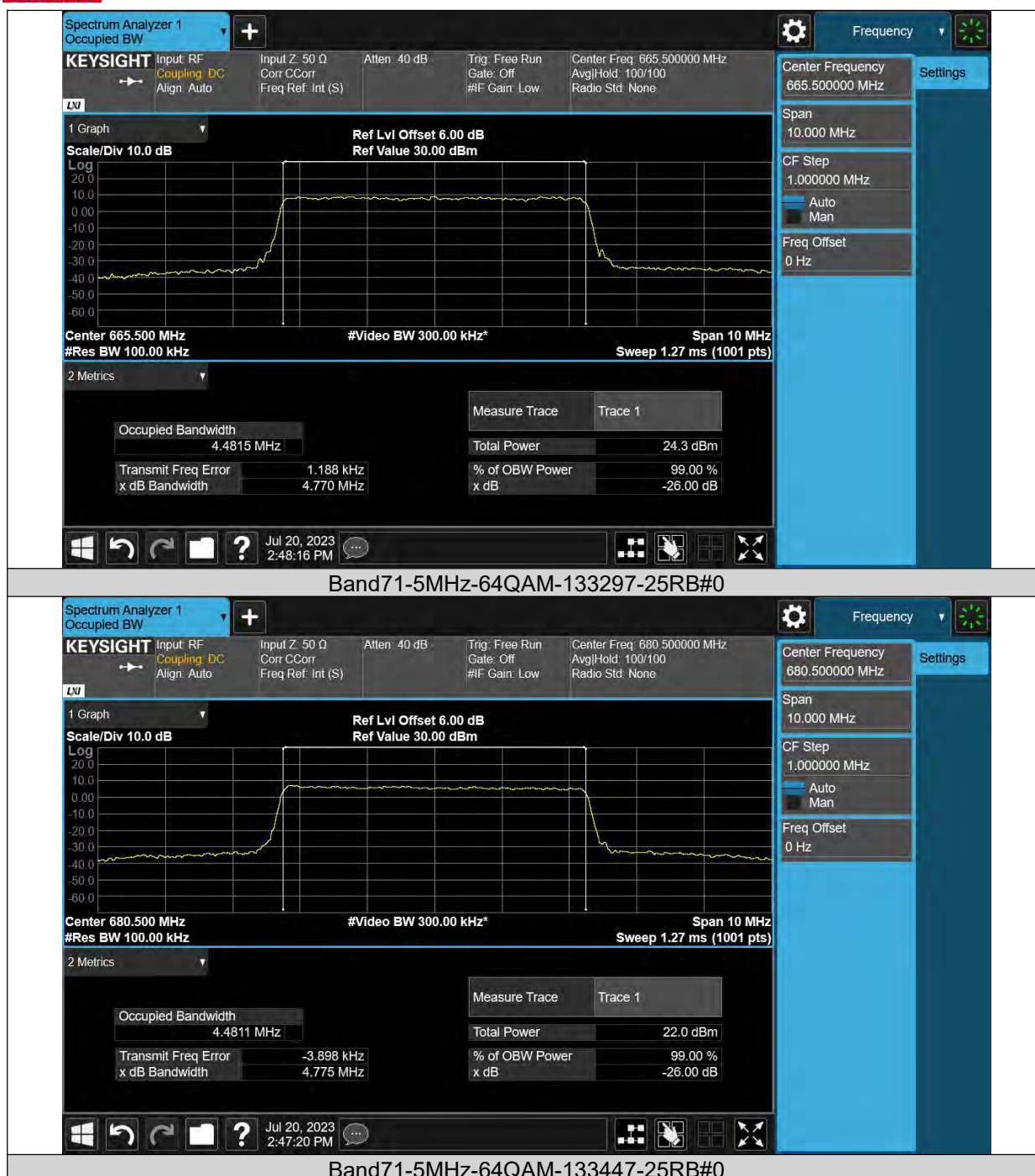
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

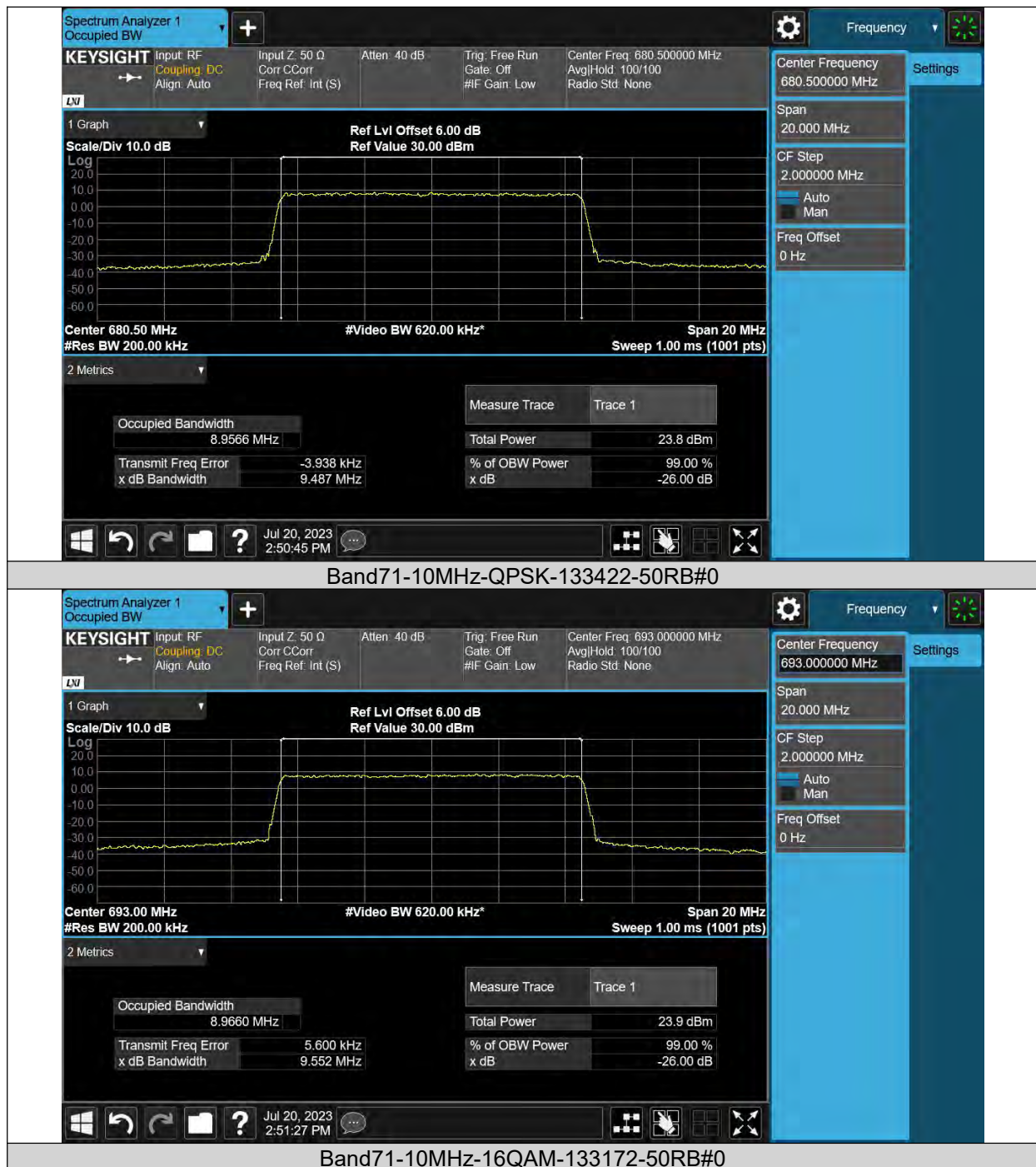
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

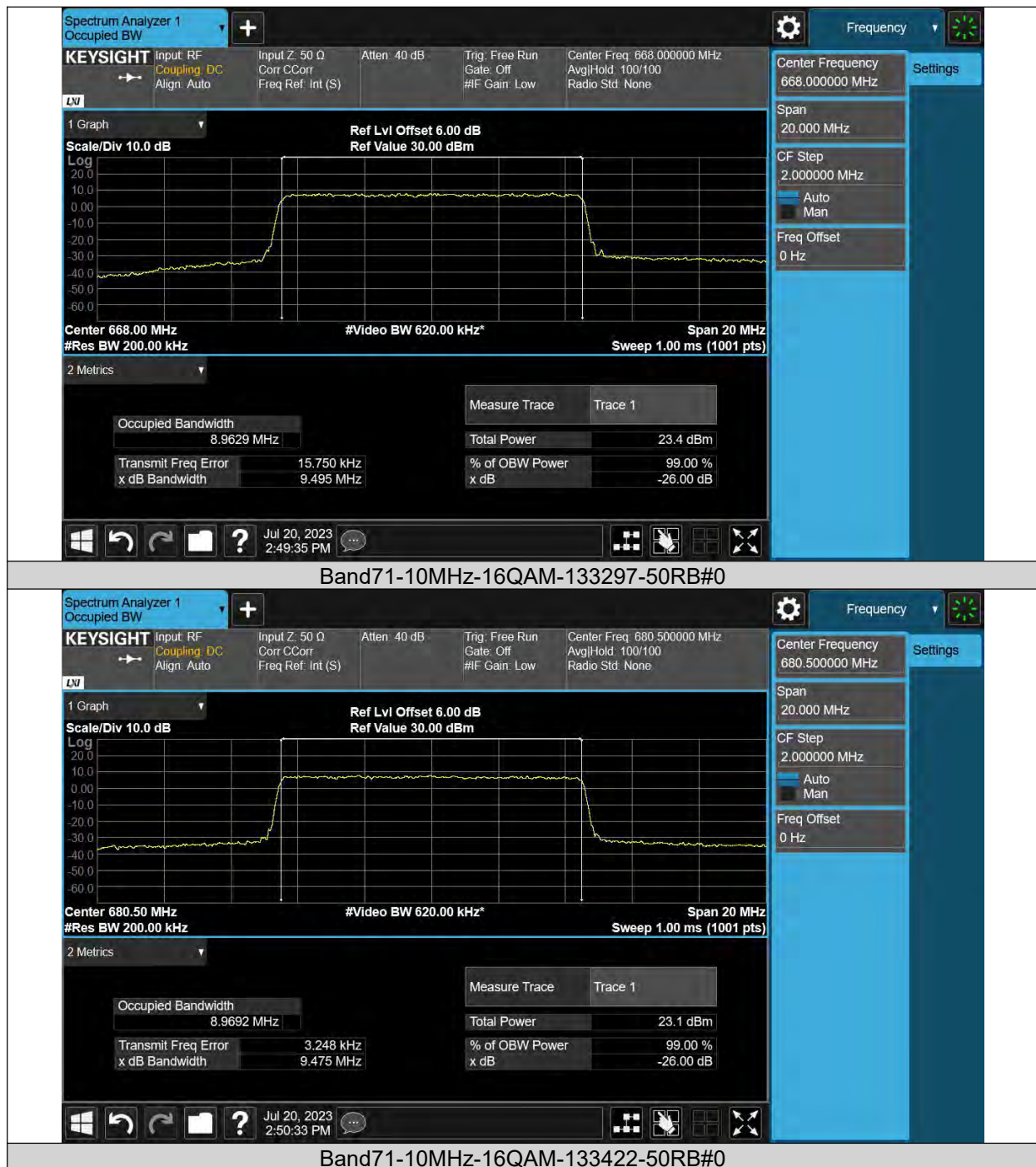
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

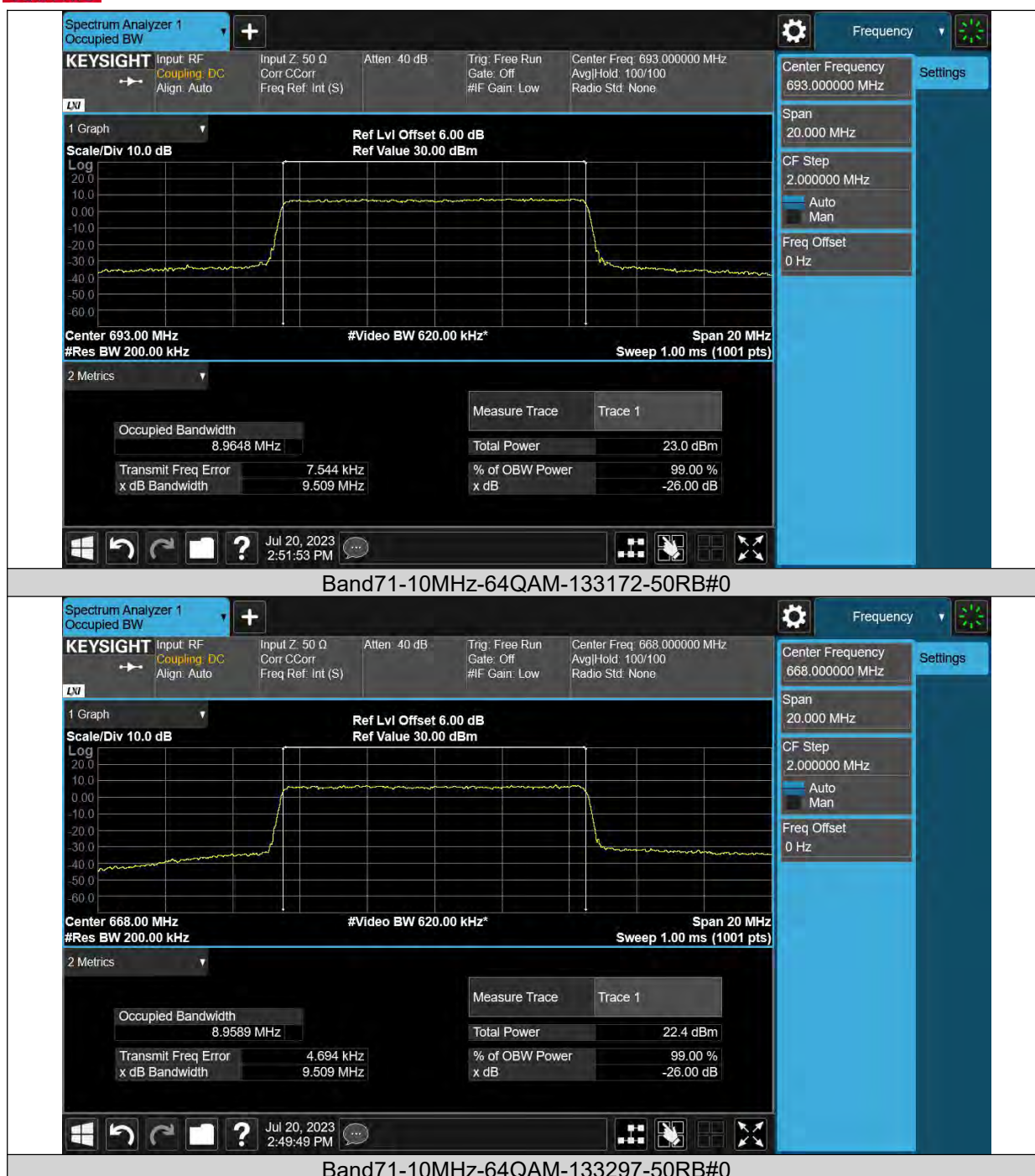
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

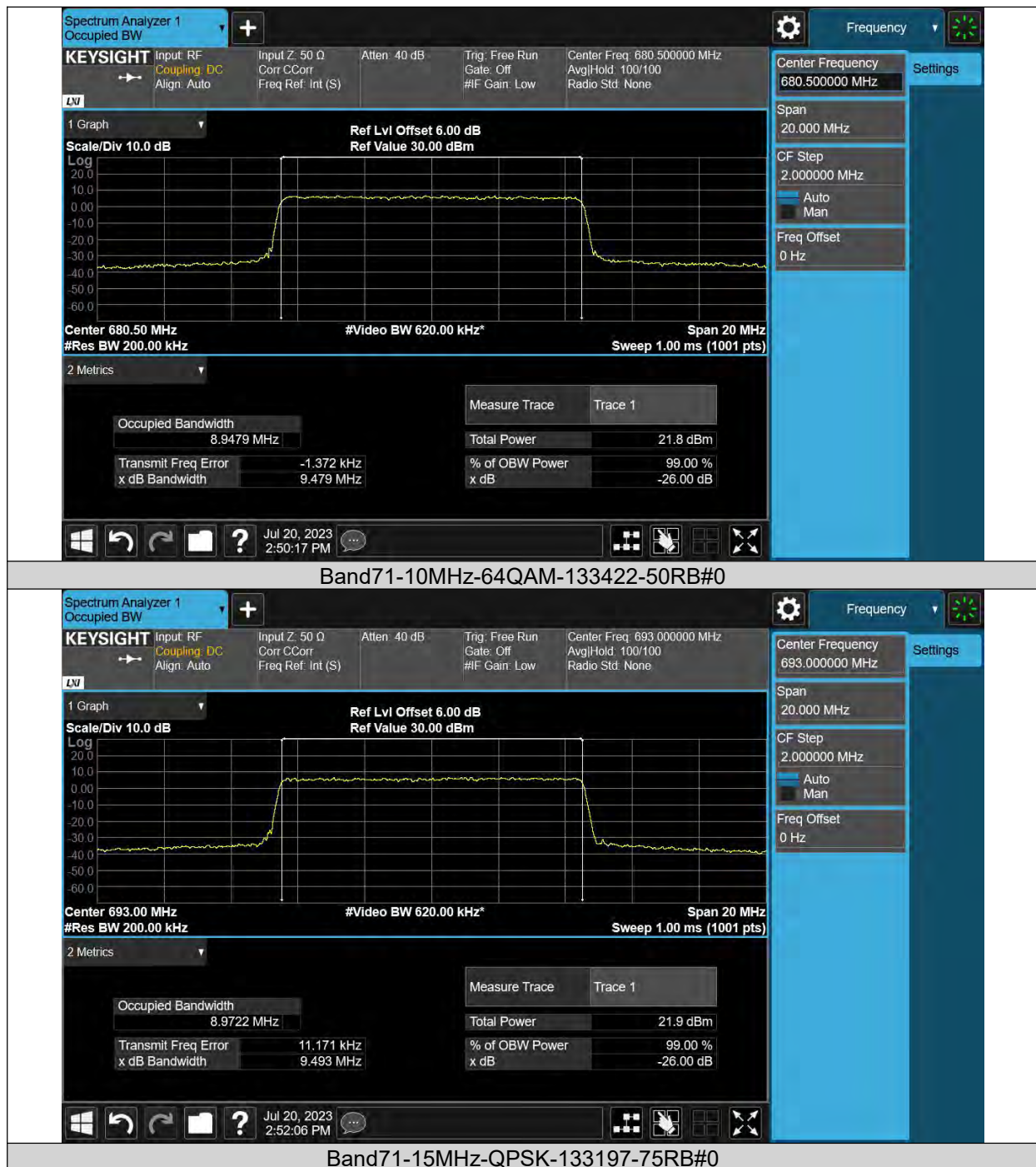
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

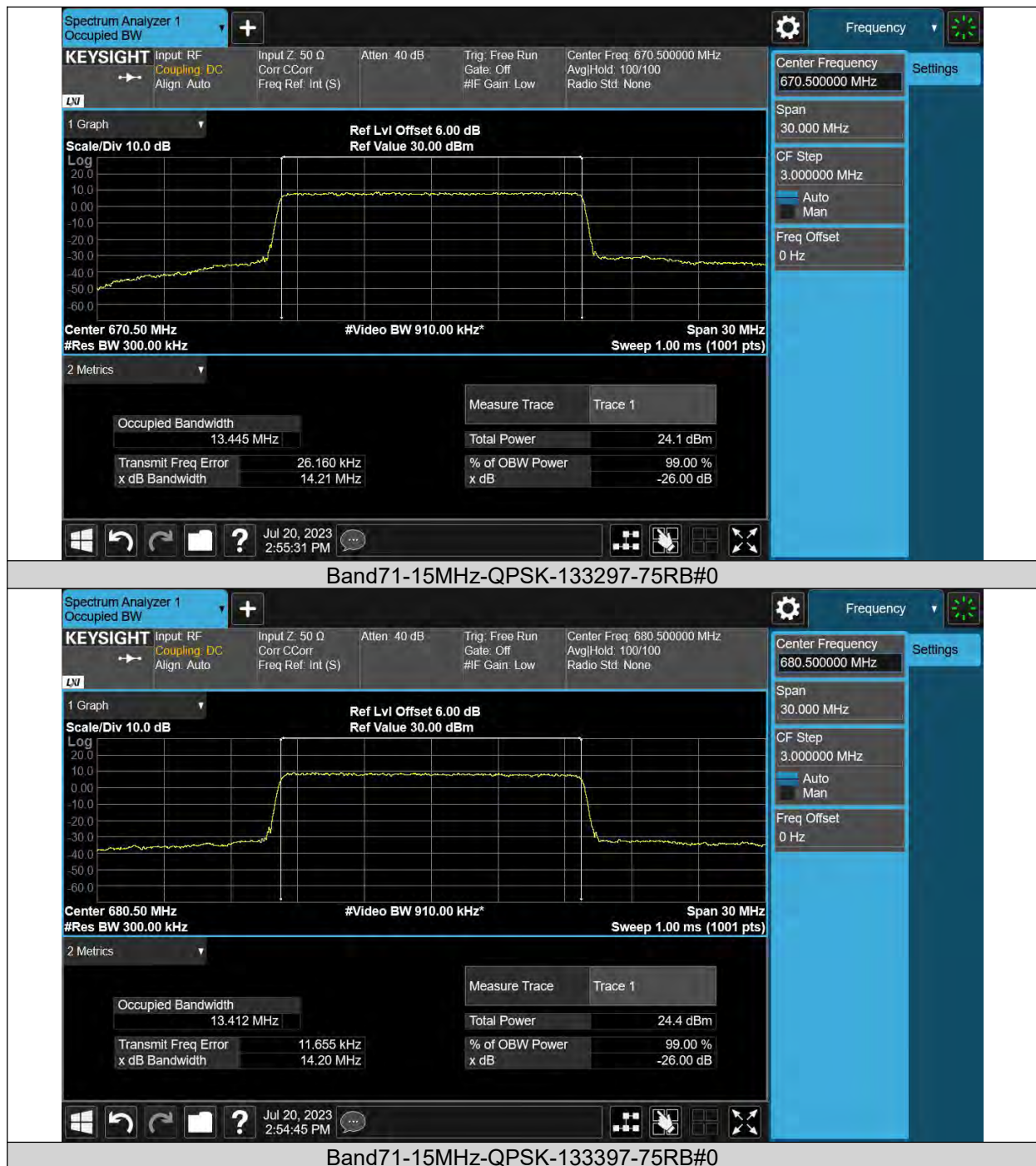
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

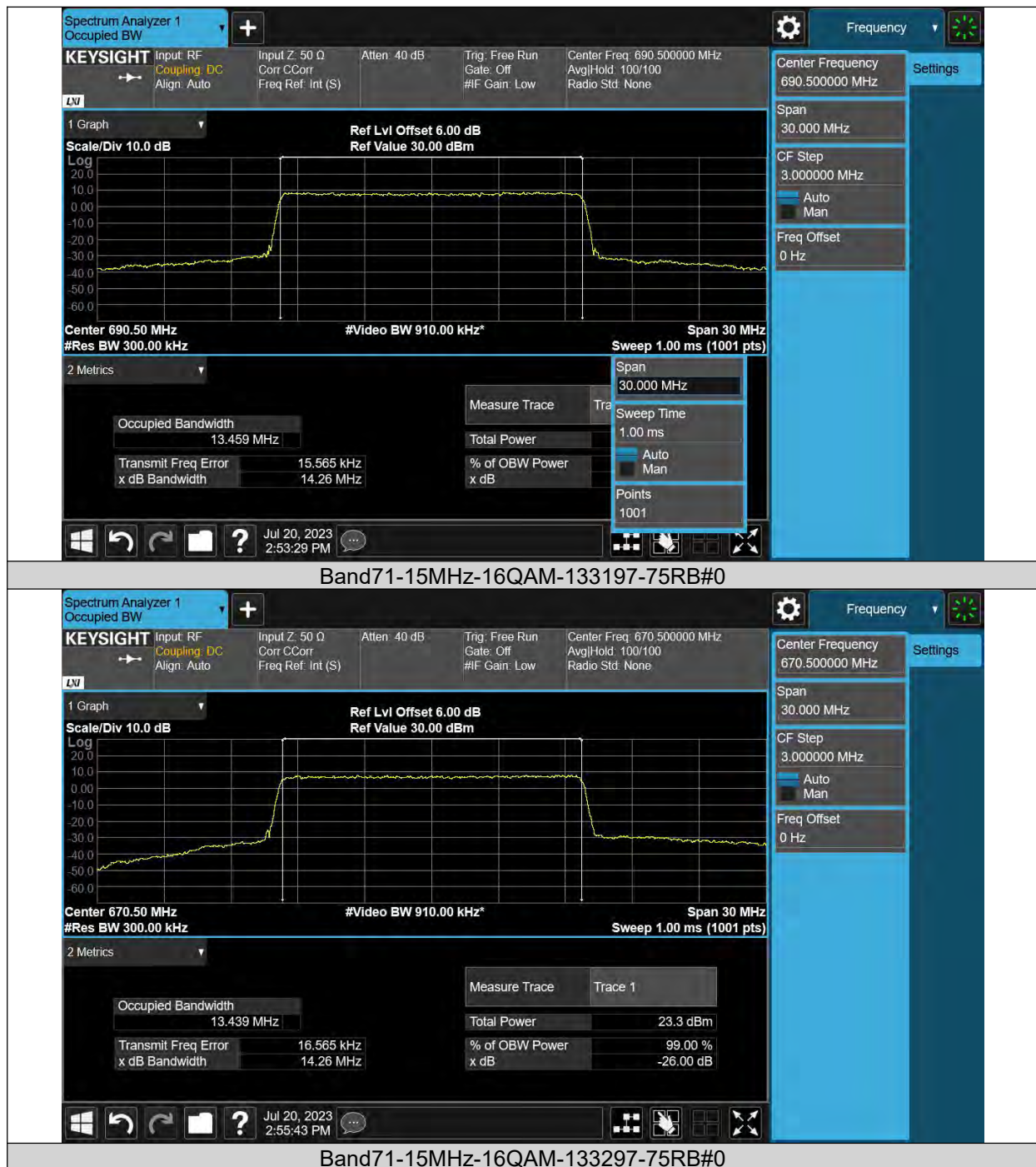
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

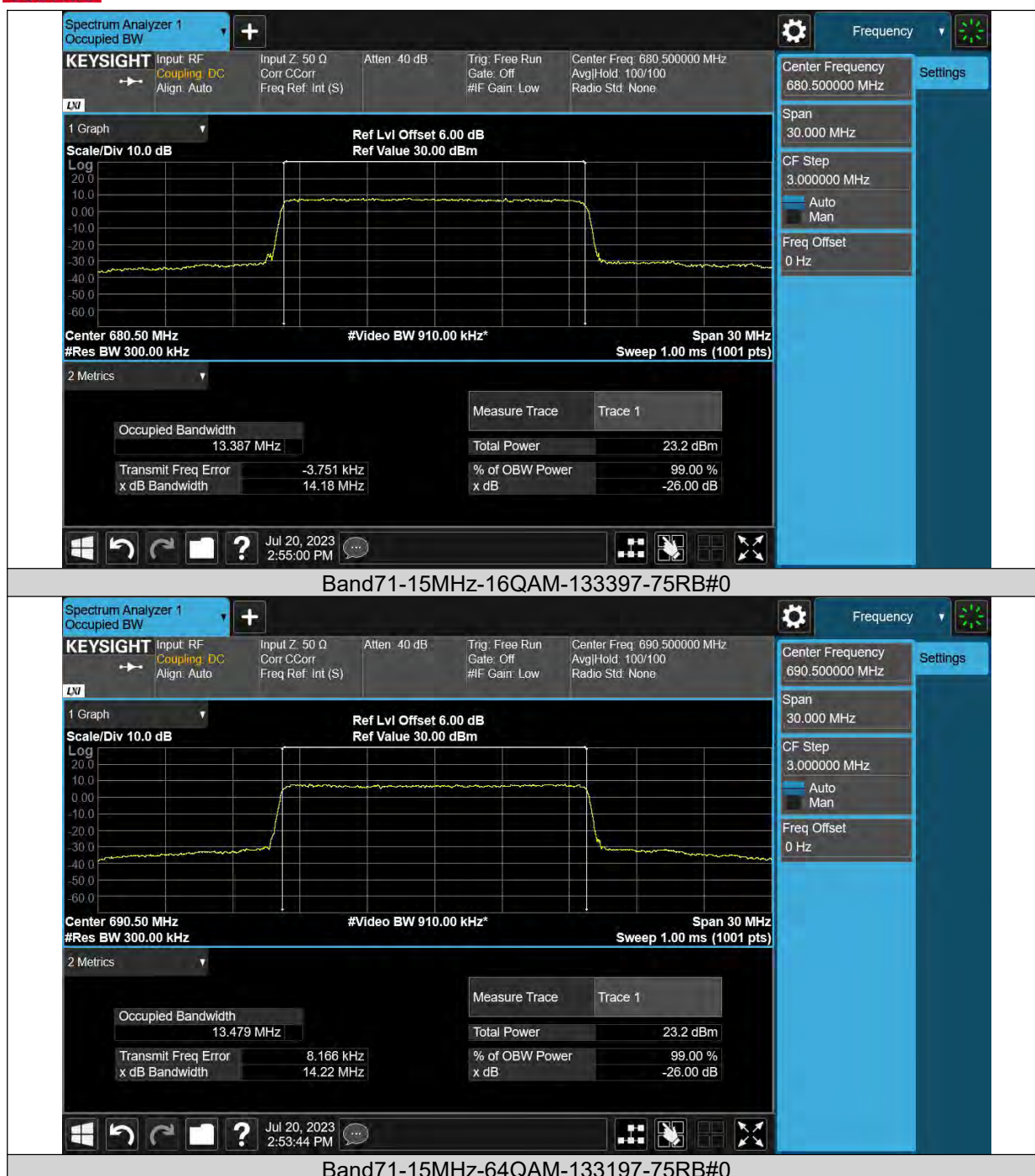
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

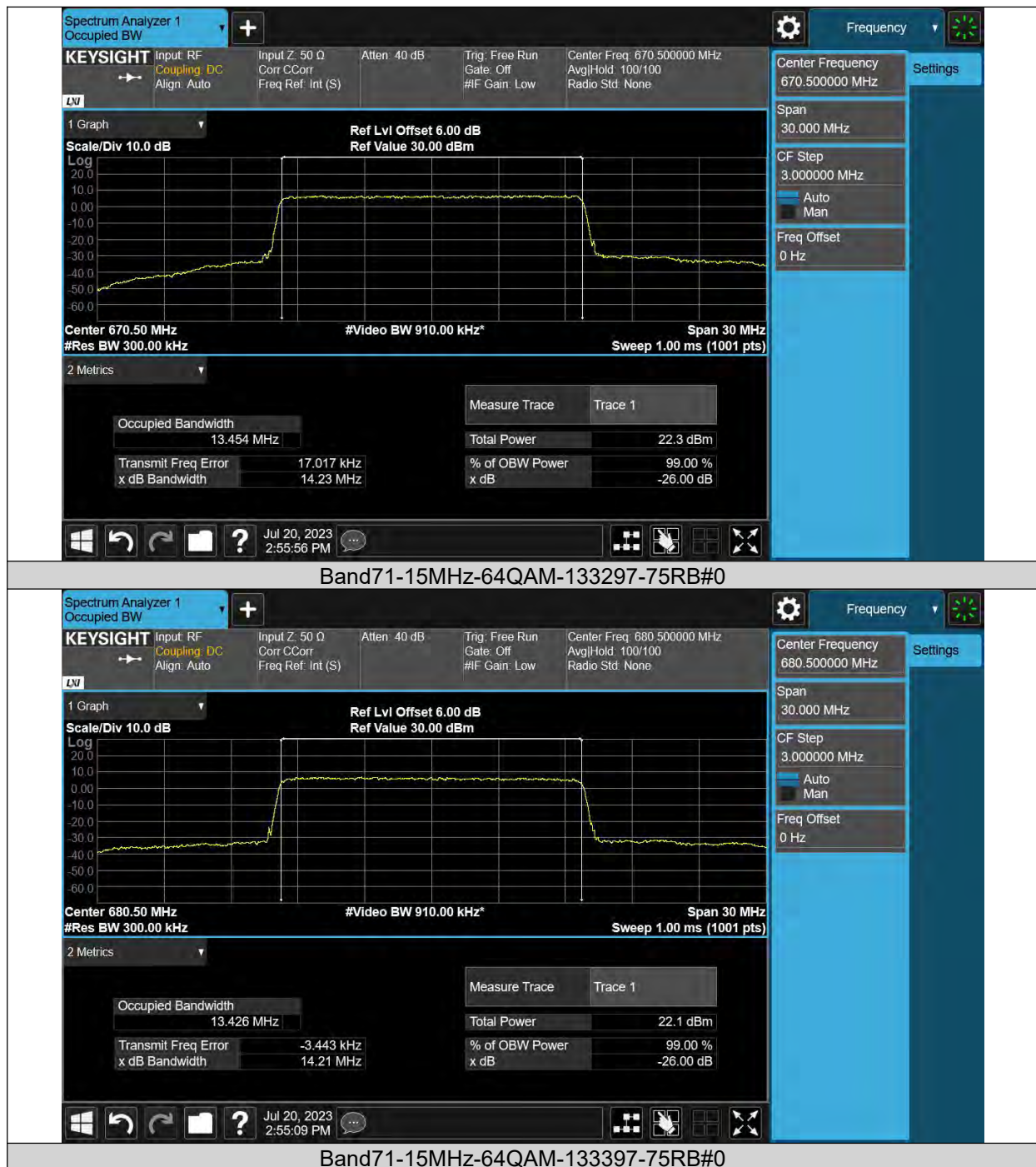
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

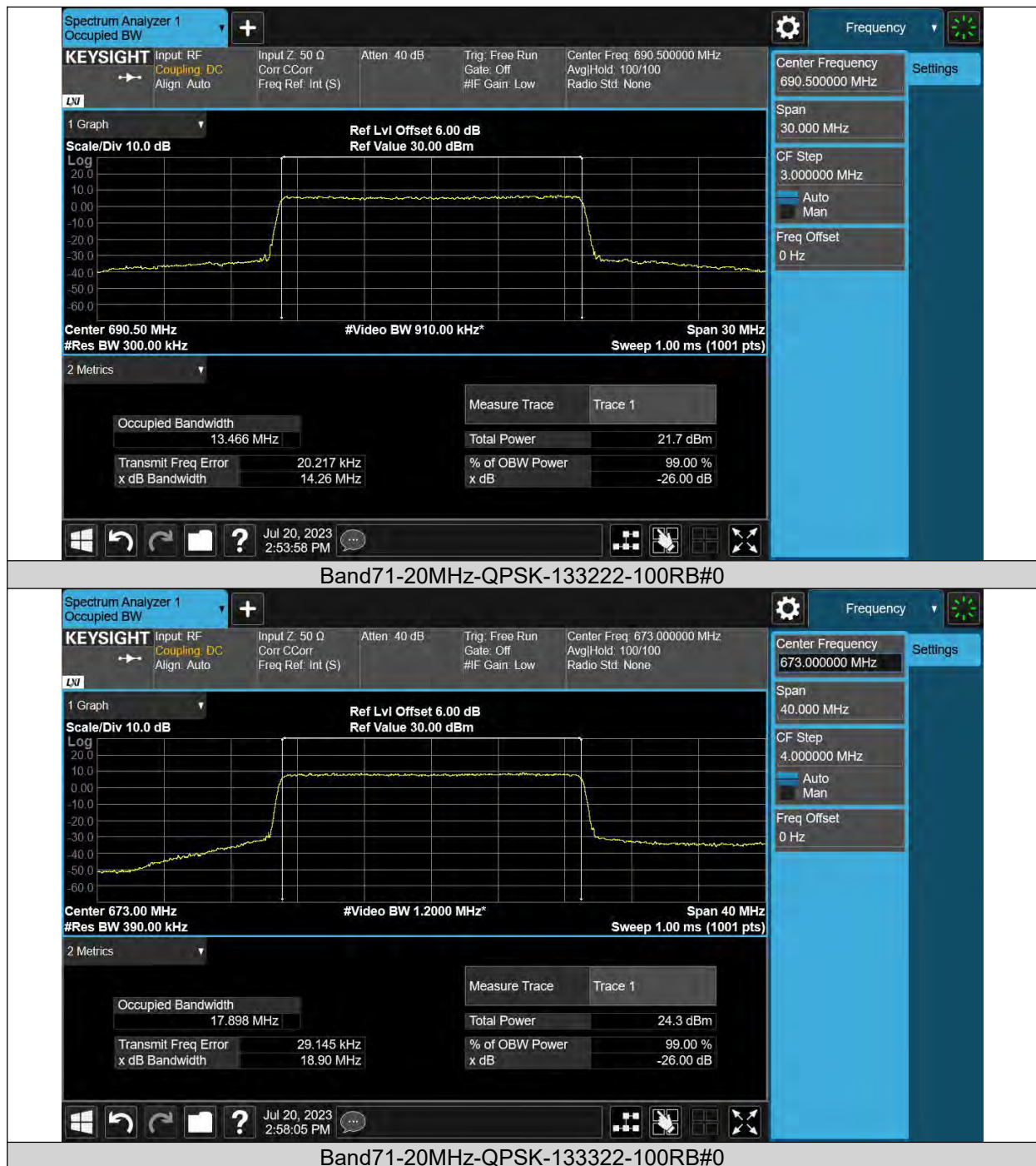
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

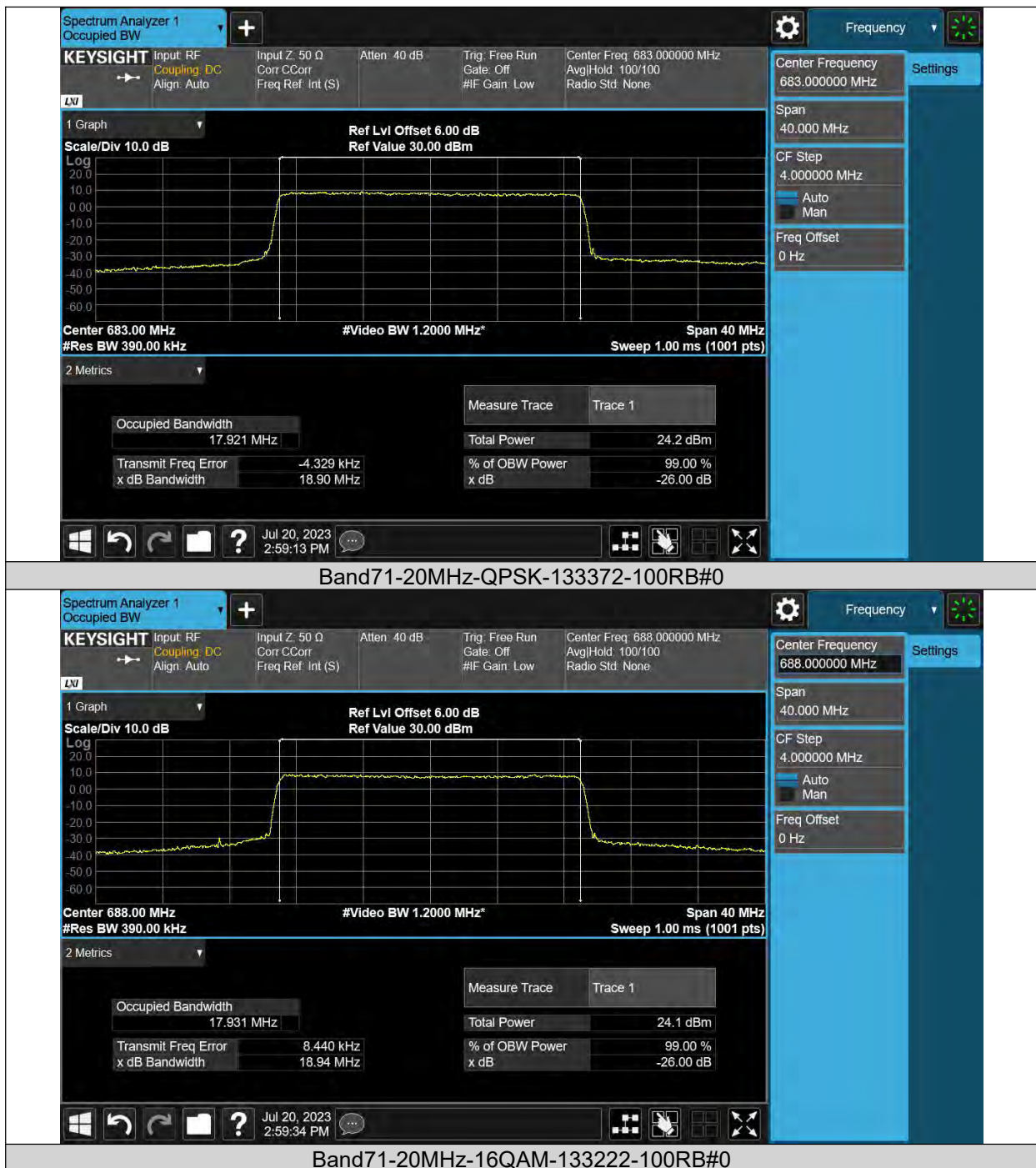
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

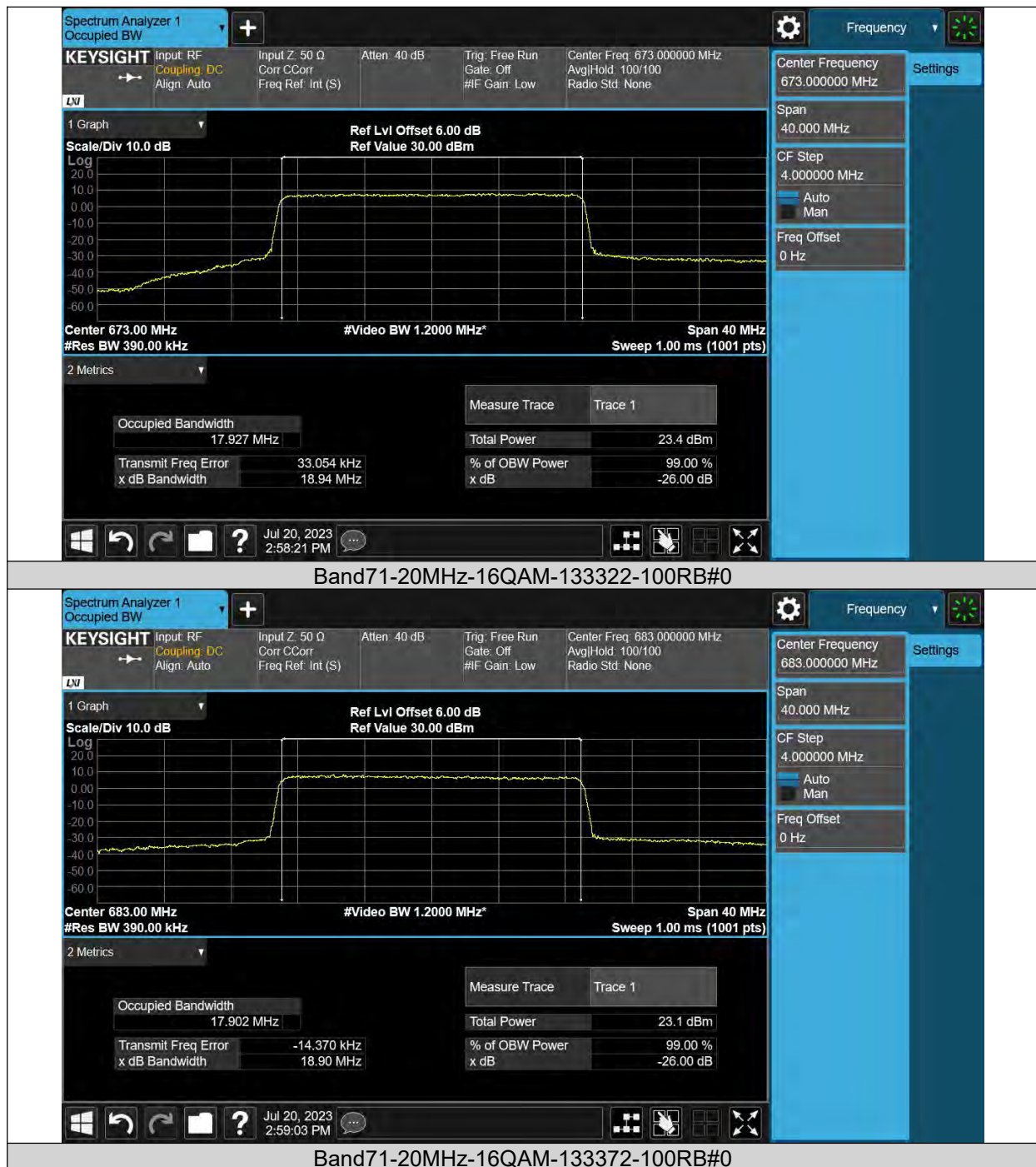
Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05





BUREAU
VERITAS

Test Report No.: PSU-QSU2306120115RF05



BAND EDGE

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band71	5MHz	QPSK	133147	1RB#0	-23.52	PASS
Band71	5MHz	QPSK	133147	25RB#0	-36.99	PASS
Band71	5MHz	QPSK	133447	1RB#24	-25.82	PASS
Band71	5MHz	QPSK	133447	25RB#0	-37.08	PASS
Band71	5MHz	16QAM	133147	1RB#0	-25.25	PASS
Band71	5MHz	16QAM	133147	25RB#0	-35.80	PASS
Band71	5MHz	16QAM	133447	1RB#24	-25.82	PASS
Band71	5MHz	16QAM	133447	25RB#0	-37.08	PASS
Band71	5MHz	64QAM	133147	1RB#0	-25.56	PASS
Band71	5MHz	64QAM	133147	25RB#0	-37.09	PASS
Band71	5MHz	64QAM	133447	1RB#24	-26.97	PASS
Band71	5MHz	64QAM	133447	25RB#0	-37.98	PASS
Band71	10MHz	QPSK	133172	1RB#0	-32.13	PASS
Band71	10MHz	QPSK	133172	50RB#0	-41.50	PASS
Band71	10MHz	QPSK	133422	1RB#49	-32.04	PASS
Band71	10MHz	QPSK	133422	50RB#0	-39.23	PASS
Band71	10MHz	16QAM	133172	1RB#0	-32.53	PASS
Band71	10MHz	16QAM	133172	50RB#0	-39.20	PASS
Band71	10MHz	16QAM	133422	1RB#49	-32.54	PASS
Band71	10MHz	16QAM	133422	50RB#0	-39.49	PASS
Band71	10MHz	64QAM	133172	1RB#0	-32.47	PASS
Band71	10MHz	64QAM	133172	50RB#0	-39.65	PASS
Band71	10MHz	64QAM	133422	1RB#49	-34.11	PASS
Band71	10MHz	64QAM	133422	50RB#0	-40.32	PASS
Band71	15MHz	QPSK	133197	1RB#0	-44.87	PASS
Band71	15MHz	QPSK	133197	75RB#0	-36.75	PASS
Band71	15MHz	QPSK	133397	1RB#74	-48.59	PASS
Band71	15MHz	QPSK	133397	75RB#0	-36.35	PASS
Band71	15MHz	16QAM	133197	1RB#0	-28.92	PASS
Band71	15MHz	16QAM	133197	75RB#0	-39.38	PASS
Band71	15MHz	16QAM	133397	1RB#74	-49.06	PASS
Band71	15MHz	16QAM	133397	75RB#0	-37.58	PASS
Band71	15MHz	64QAM	133197	1RB#0	-30.58	PASS
Band71	15MHz	64QAM	133197	75RB#0	-49.29	PASS
Band71	15MHz	64QAM	133397	1RB#74	-49.24	PASS
Band71	15MHz	64QAM	133397	75RB#0	-36.85	PASS
Band71	20MHz	QPSK	133222	1RB#0	-31.26	PASS
Band71	20MHz	QPSK	133222	100RB#0	-44.51	PASS
Band71	20MHz	QPSK	133372	1RB#99	-32.85	PASS
Band71	20MHz	QPSK	133372	100RB#0	-41.25	PASS
Band71	20MHz	16QAM	133222	1RB#0	-34.62	PASS
Band71	20MHz	16QAM	133222	100RB#0	-40.14	PASS
Band71	20MHz	16QAM	133372	1RB#99	-32.69	PASS
Band71	20MHz	16QAM	133372	100RB#0	-38.92	PASS
Band71	20MHz	64QAM	133222	1RB#0	-33.79	PASS