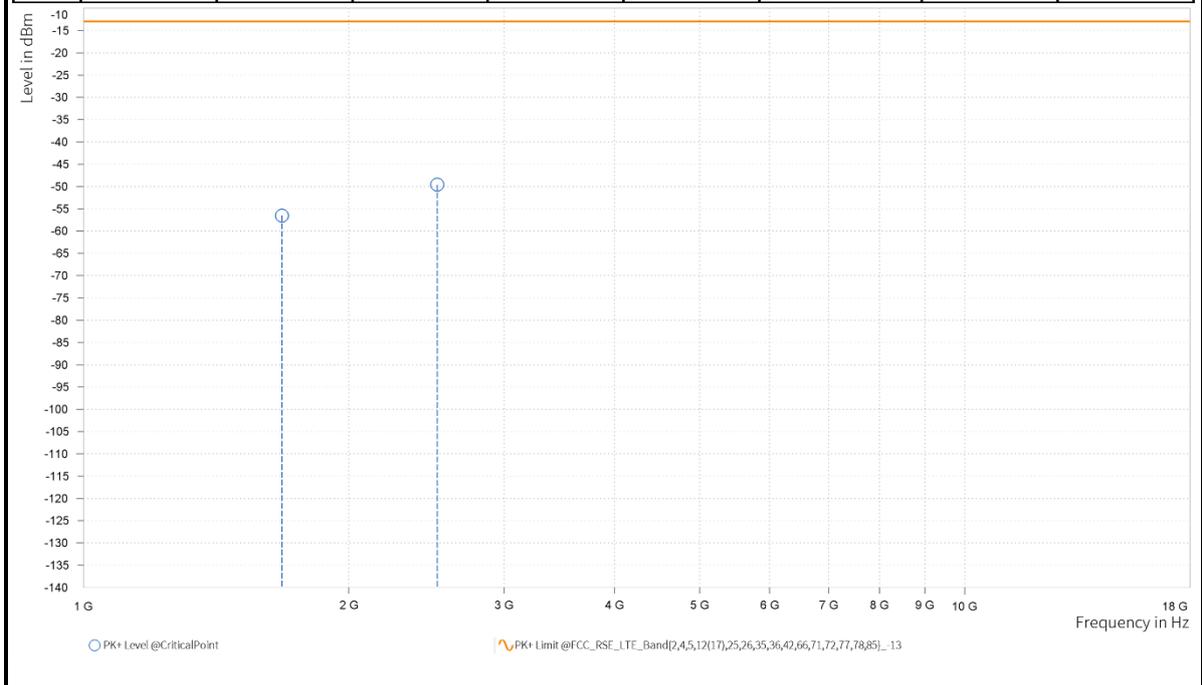




CHANNEL BANDWIDTH	10MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,679.000	-56.54	-13.00	43.54	14.56	V	359.1	1.00
3	2,518.500	-49.60	-13.00	36.60	21.13	V	1	1.00

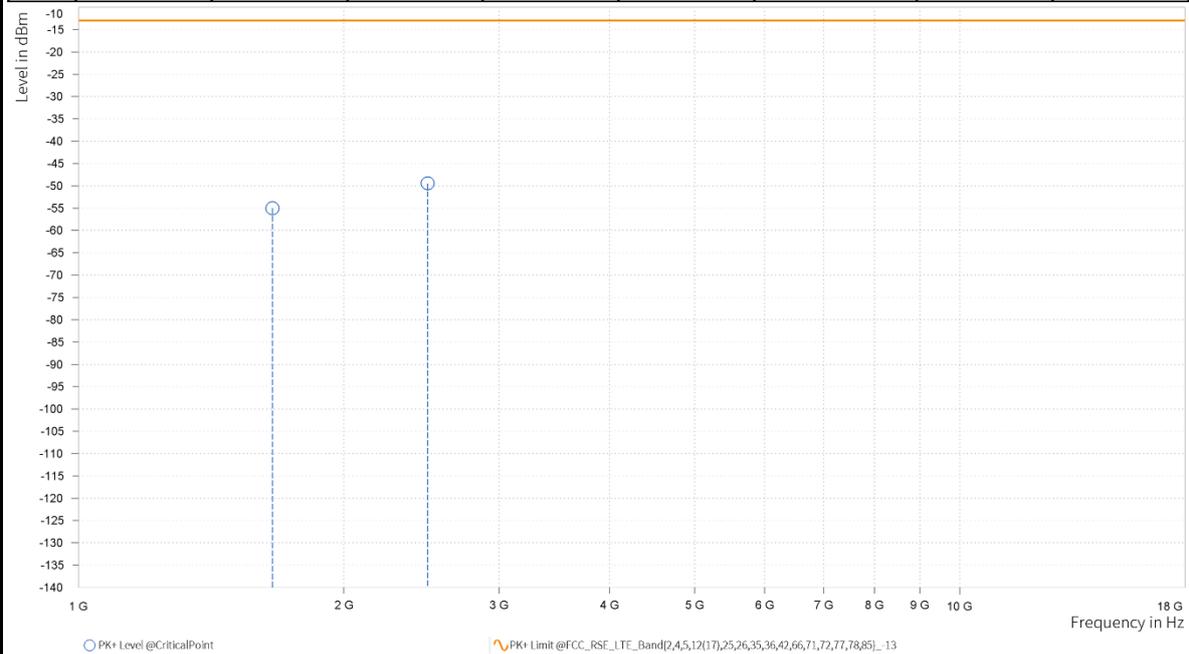




CHANNEL BANDWIDTH	15MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,659.500	-55.00	-13.00	42.00	15.24	H	359	2.00
3	2,489.250	-49.44	-13.00	36.44	20.68	H	1	1.00

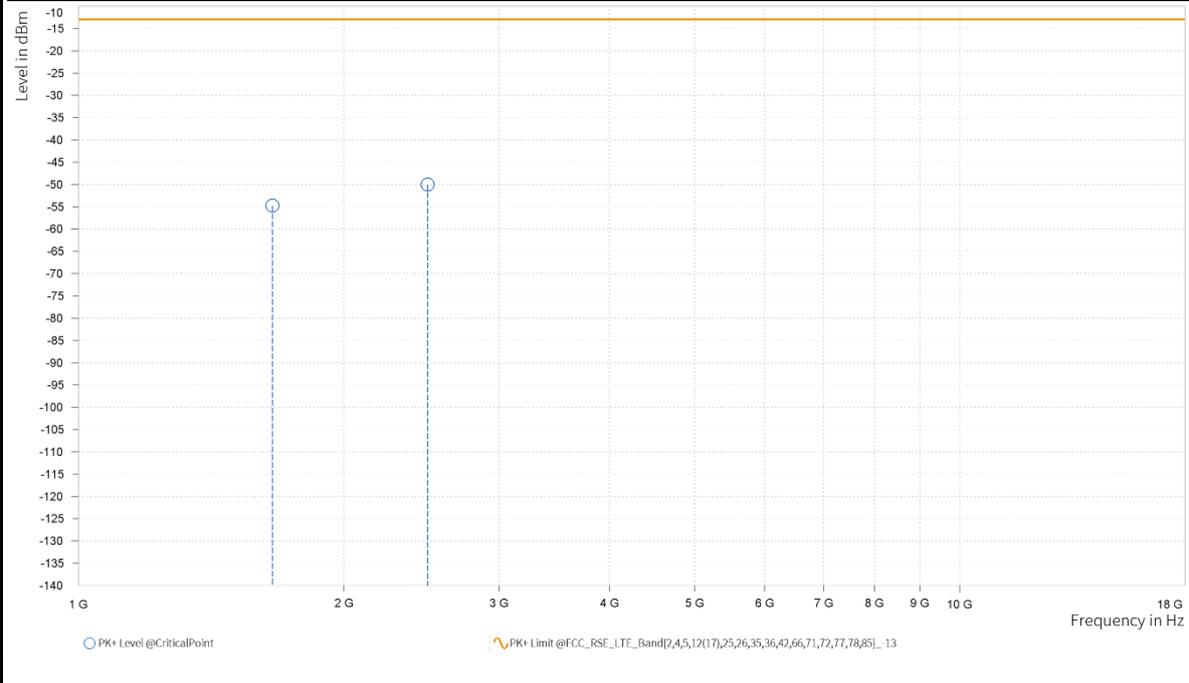




CHANNEL BANDWIDTH	15MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,659.500	-54.75	-13.00	41.75	14.12	V	106.1	2.00
3	2,489.250	-50.03	-13.00	37.03	20.91	V	165.4	2.00

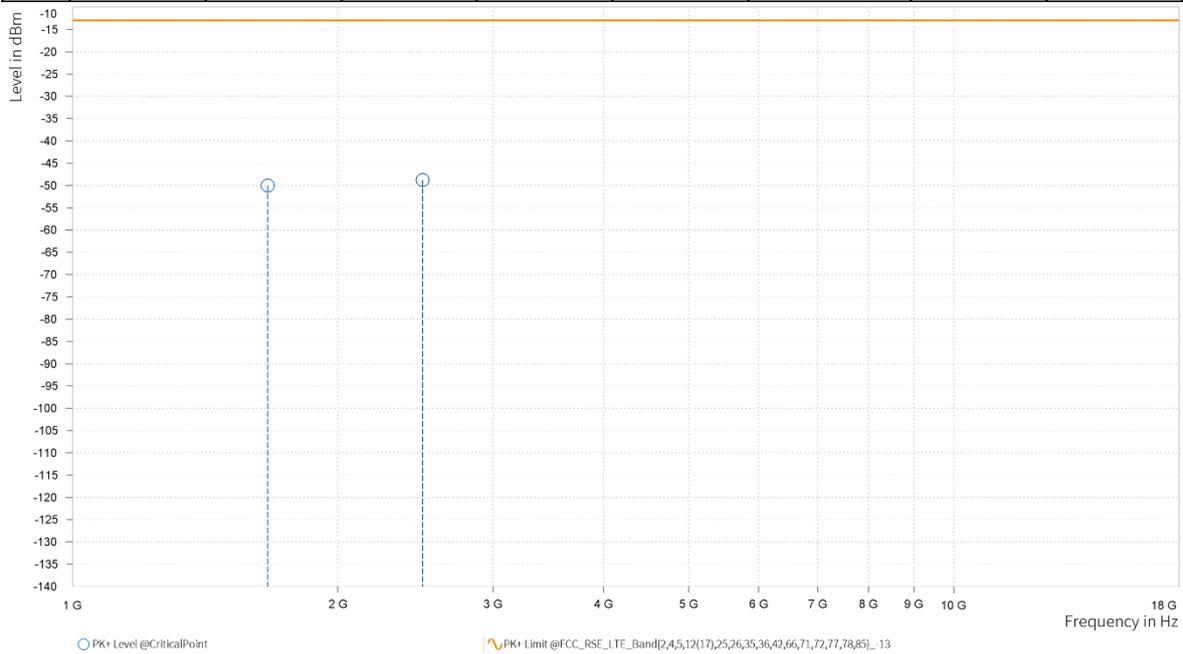




LTE Band 26 ANT1			
CHANNEL BANDWIDTH	10MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,664.000	-50.02	-13.00	37.02	15.32	H	313.4	1.00
3	2,496.000	-48.80	-13.00	35.80	20.76	H	62.8	1.00

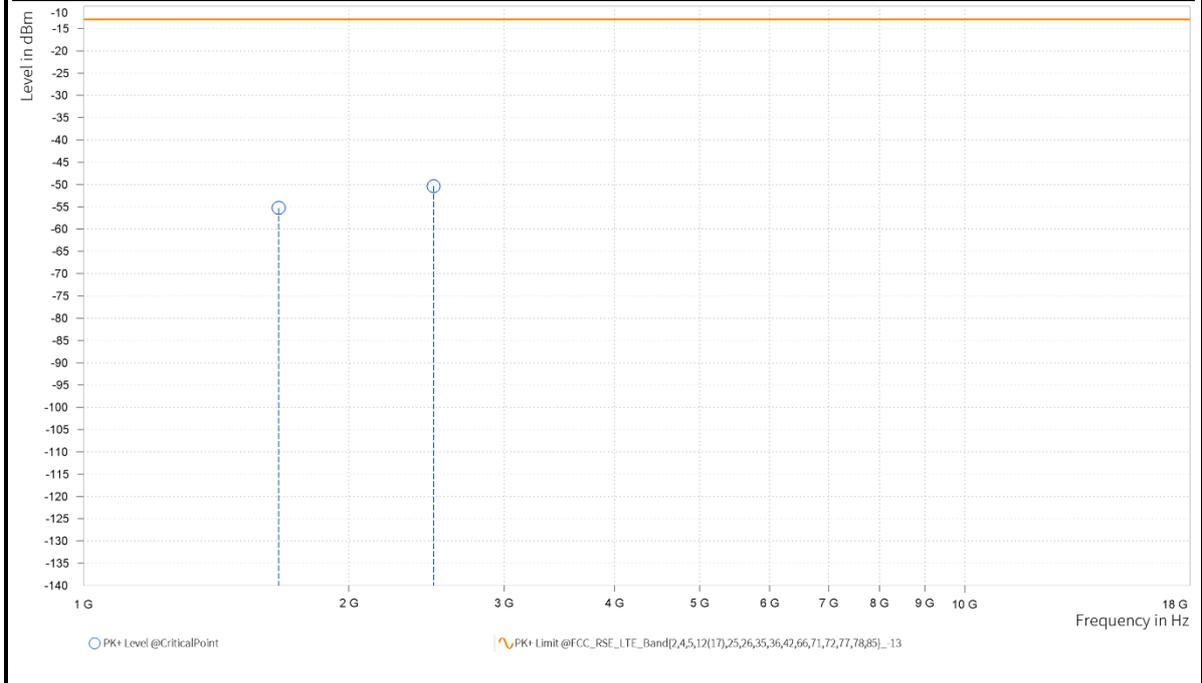




CHANNEL BANDWIDTH	10MHz/QPSK	MODE	TX channel 26915
FREQUENCY RANGE	Above 1000MHz	ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH
INPUT POWER	120Vac 60HZ	TESTED BY	Hanwen Xu

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,664.000	-55.25	-13.00	42.25	14.20	V	109.6	2.00
3	2,496.000	-50.35	-13.00	37.35	21.03	V	38.1	2.00



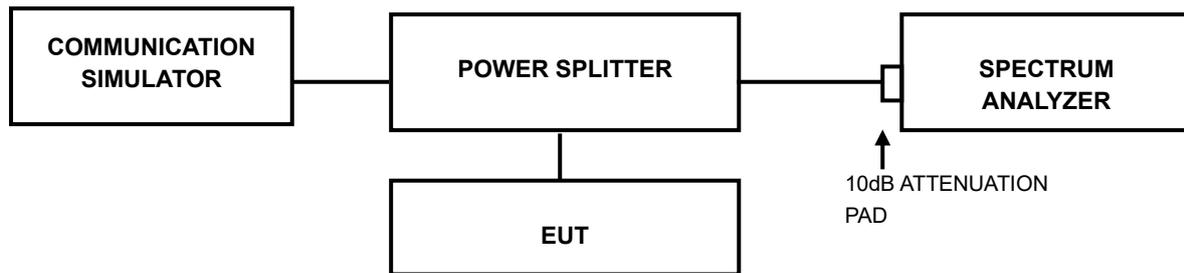


3.7 PEAK TO AVERAGE RATIO

3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

3.7.2 TEST SETUP



3.7.3 TEST PROCEDURES

1. Set resolution/measurement bandwidth \geq signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.



BUREAU VERITAS Test Report No.: PSU-QBJ2508070215RF01

3.7.4 TEST RESULTS

Please Refer to Appendix of this test report.



BUREAU VERITAS Test Report No.: PSU-QBJ2508070215RF01

4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



BUREAU VERITAS Test Report No.: PSU-QBJ2508070215RF01

5 INFORMATION ON THE TESTING LABORATORIES

We, Huarui 7layers High Technology (Suzhou) Co., Ltd. ,were founded in 2020 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

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

Lab Address:

Tower N, Innovation Center, 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province, China
Accredited Test Lab Cert 6613.01

If you have any comments, please feel free to contact us at the following:

Suzhou EMC/RF Lab:

Tel: +86 (0557) 368 1008



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6 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.



7 APPENDIX:

GSM850

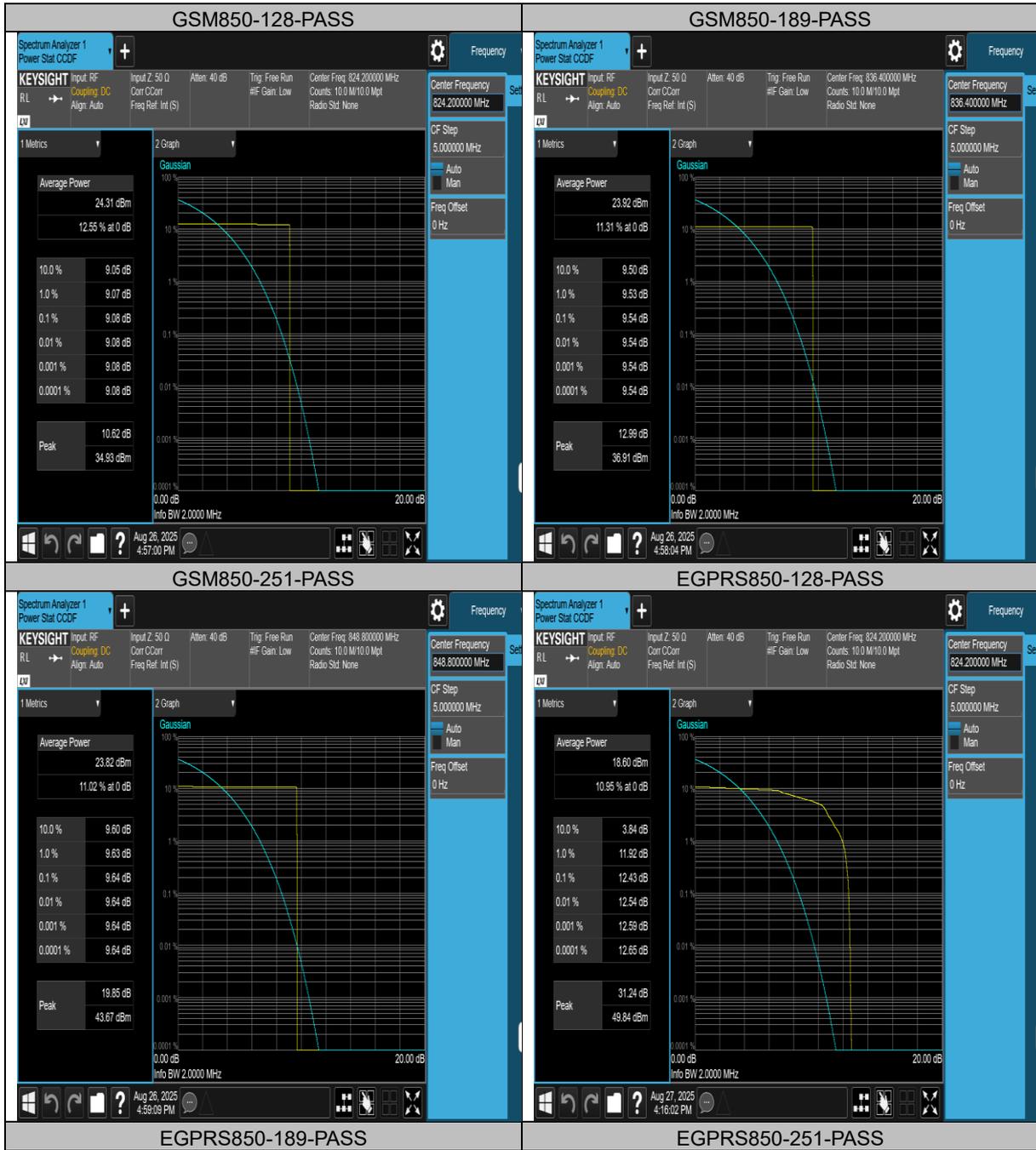
APPENDIX : PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

Band	Channel	Result(dB)	Limit(dB)	Verdict
GSM850	128	9.08	13	PASS
GSM850	189	9.54	13	PASS
GSM850	251	9.64	13	PASS
EGPRS850	128	12.43	13	PASS
EGPRS850	189	12.55	13	PASS
EGPRS850	251	12.45	13	PASS

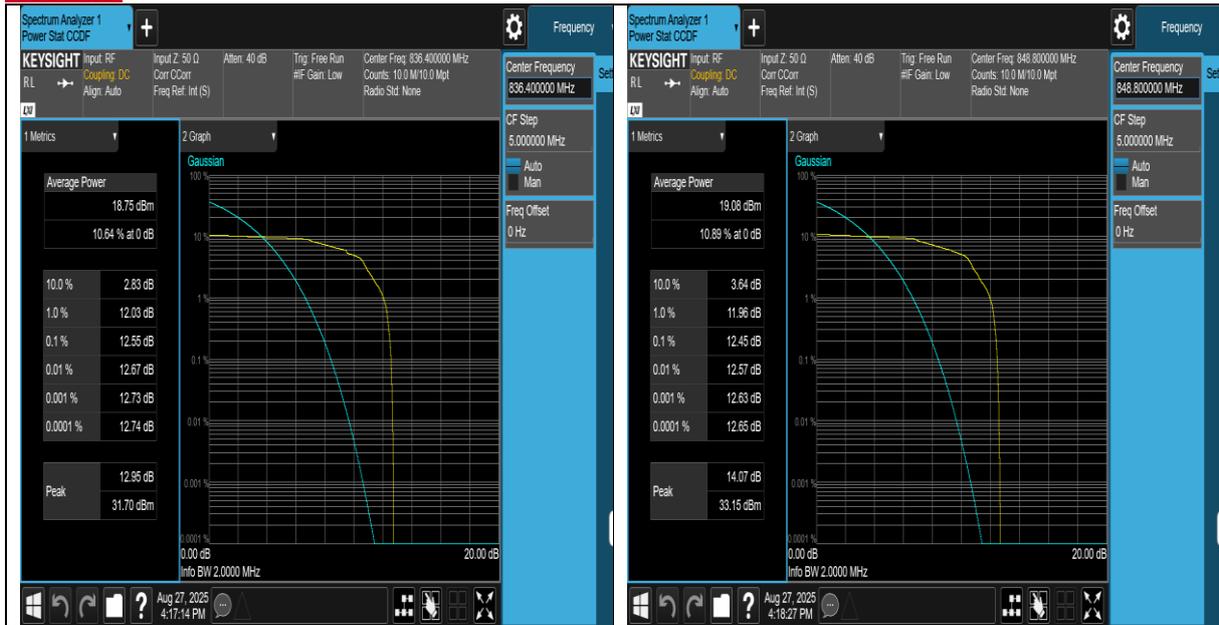


Test Graphs





BUREAU VERITAS Test Report No.: PSU-QBJ2508070215RF01



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

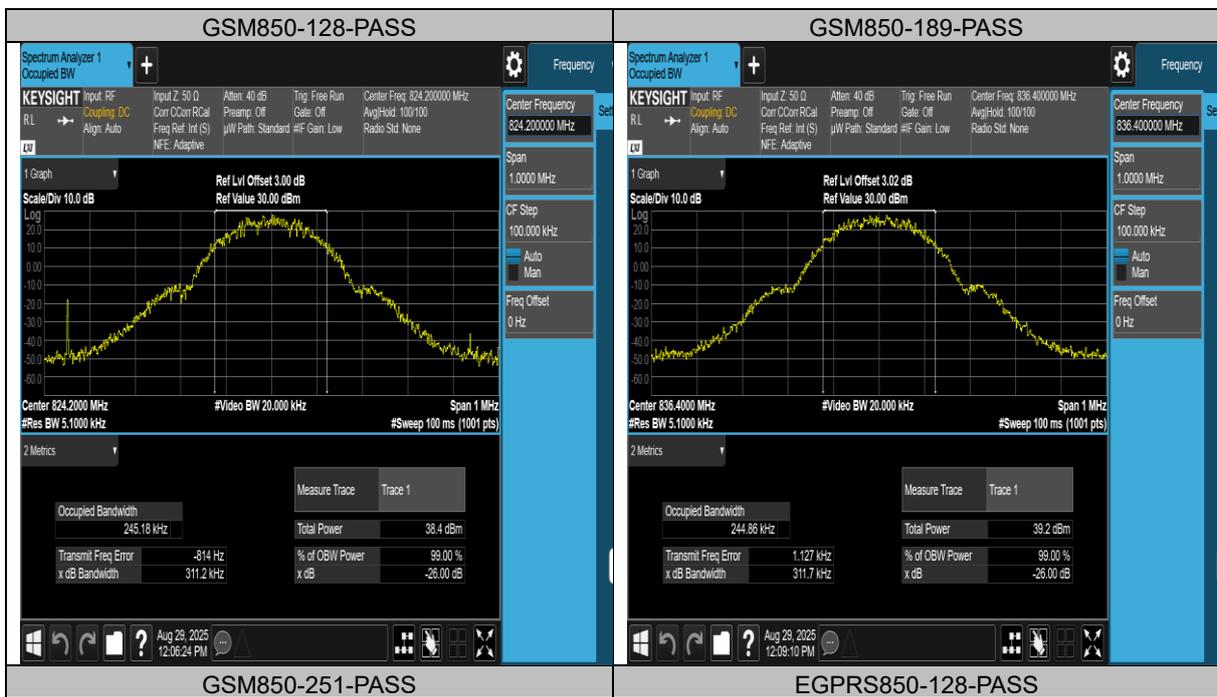


APPENDIX : 26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

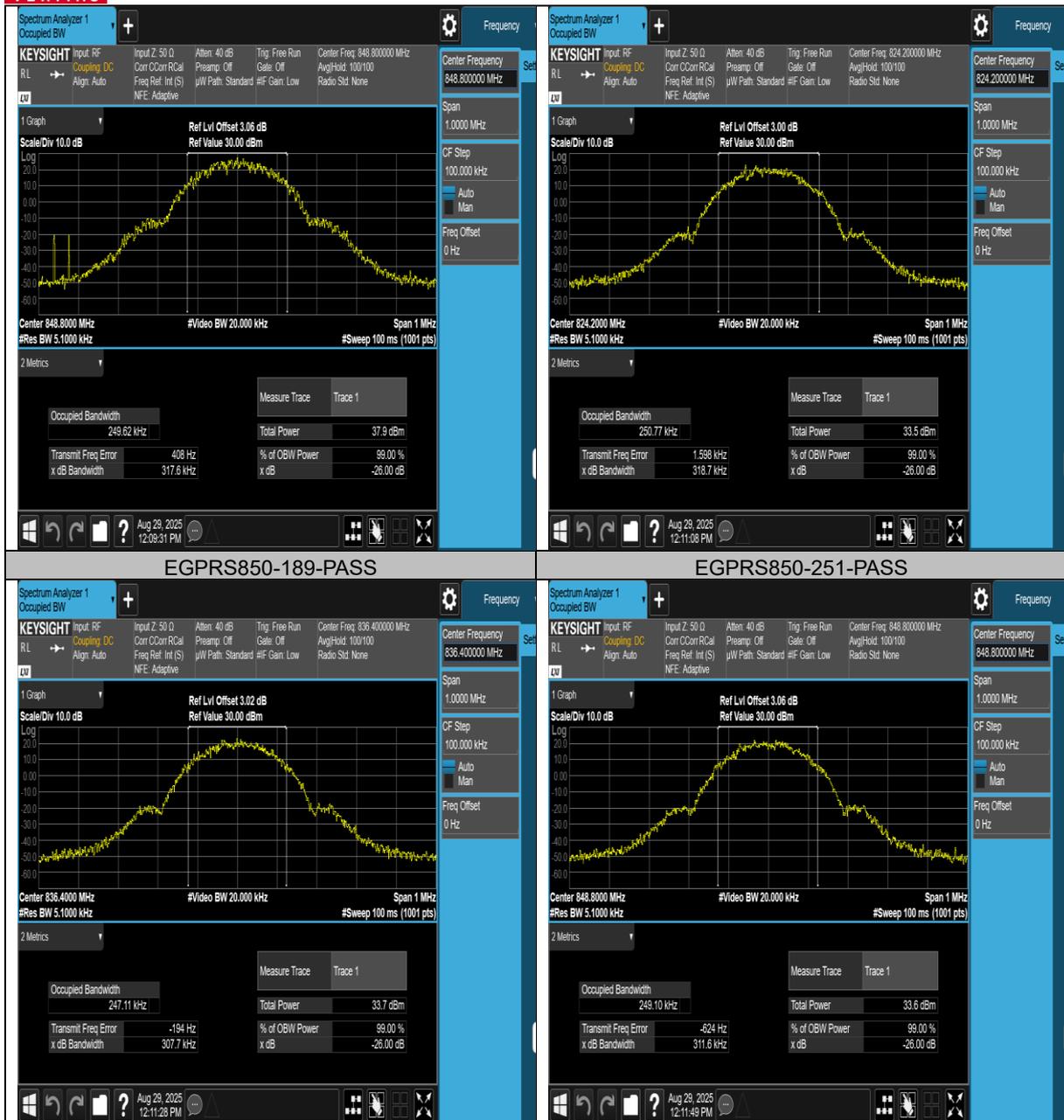
Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	0.24518	0.3112	---	PASS
GSM850	189	0.24486	0.3117	---	PASS
GSM850	251	0.24962	0.3176	---	PASS
EGPRS850	128	0.25077	0.3187	---	PASS
EGPRS850	189	0.24711	0.3077	---	PASS
EGPRS850	251	0.24910	0.3116	---	PASS

Test Graphs





BUREAU VERITAS Test Report No.: PSU-QBJ2508070215RF01

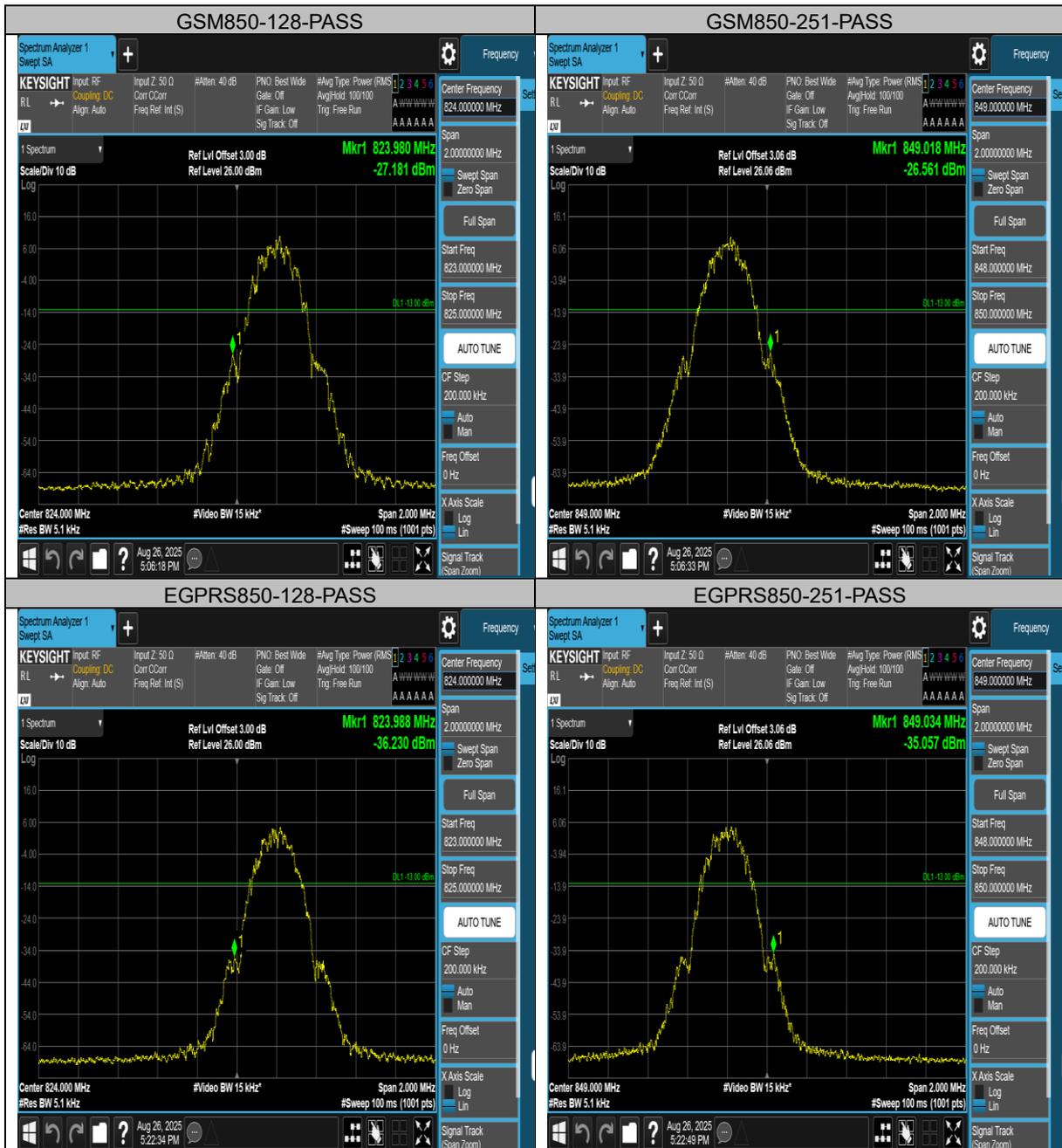




Test Result

Band	Channel	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	823.98	-27.18	-13	PASS
GSM850	251	849.02	-26.56	-13	PASS
EGPRS850	128	823.99	-36.23	-13	PASS
EGPRS850	251	849.03	-35.06	-13	PASS

Test Graphs





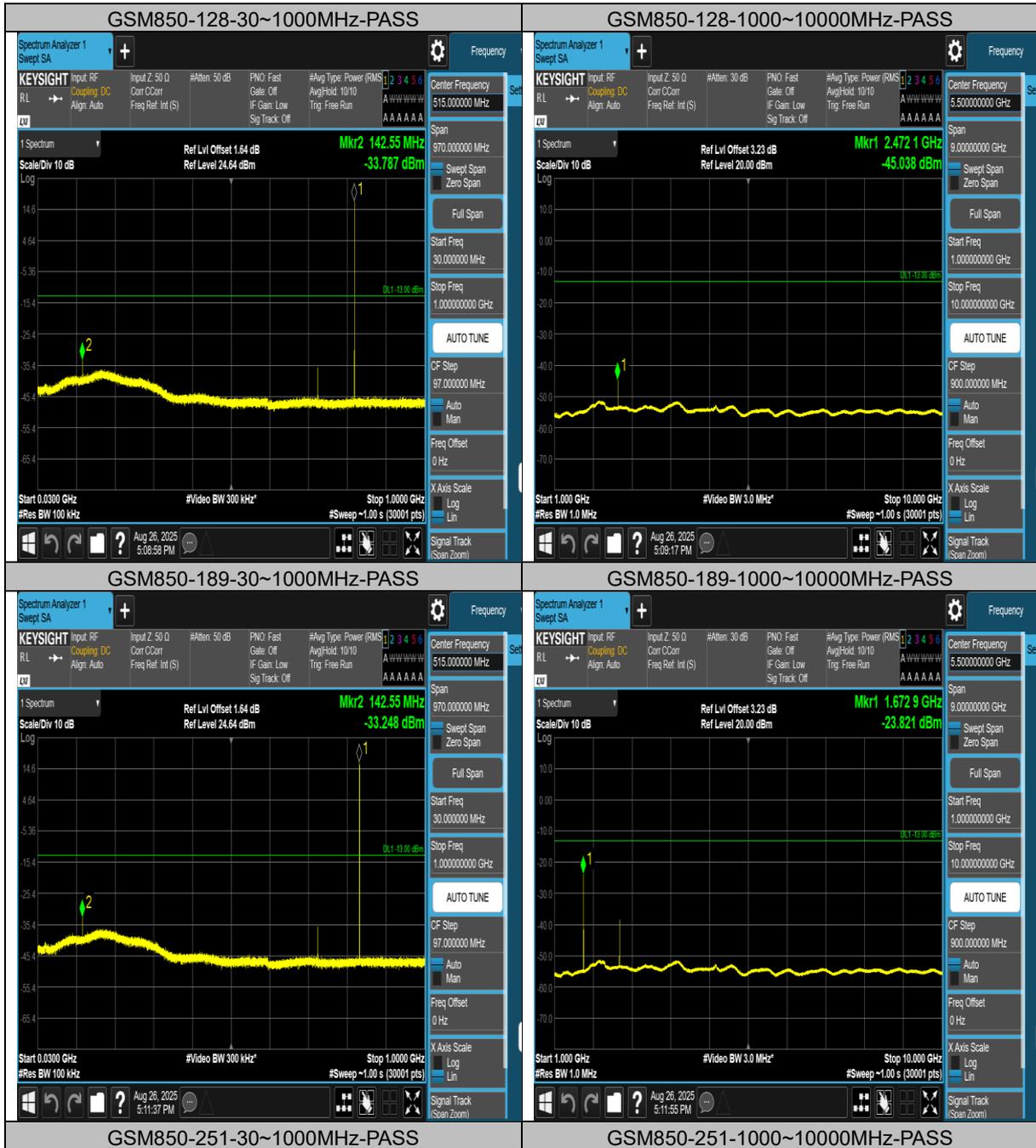
APPENDIX : CONDUCTED SPURIOUS EMISSION

Test Result

Band	Channel	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	30~1000MHz	142.55	-33.79	-13	PASS
GSM850	128	1000~10000MHz	2472.1	-45.04	-13	PASS
GSM850	189	30~1000MHz	142.55	-33.25	-13	PASS
GSM850	189	1000~10000MHz	1672.9	-23.82	-13	PASS
GSM850	251	30~1000MHz	142.55	-33.17	-13	PASS
GSM850	251	1000~10000MHz	2137	-51.36	-13	PASS
EGPRS850	128	30~1000MHz	142.55	-33.23	-13	PASS
EGPRS850	128	1000~10000MHz	2472.7	-48.71	-13	PASS
EGPRS850	189	30~1000MHz	142.58	-32.74	-13	PASS
EGPRS850	189	1000~10000MHz	1672.9	-26.87	-13	PASS
EGPRS850	251	30~1000MHz	142.58	-33.35	-13	PASS
EGPRS850	251	1000~10000MHz	1696.9	-36.15	-13	PASS



Test Graphs





BUREAU VERITAS Test Report No.: PSU-QBJ2508070215RF01



EGPRS850-128-30~1000MHz-PASS

EGPRS850-128-1000~1000MHz-PASS

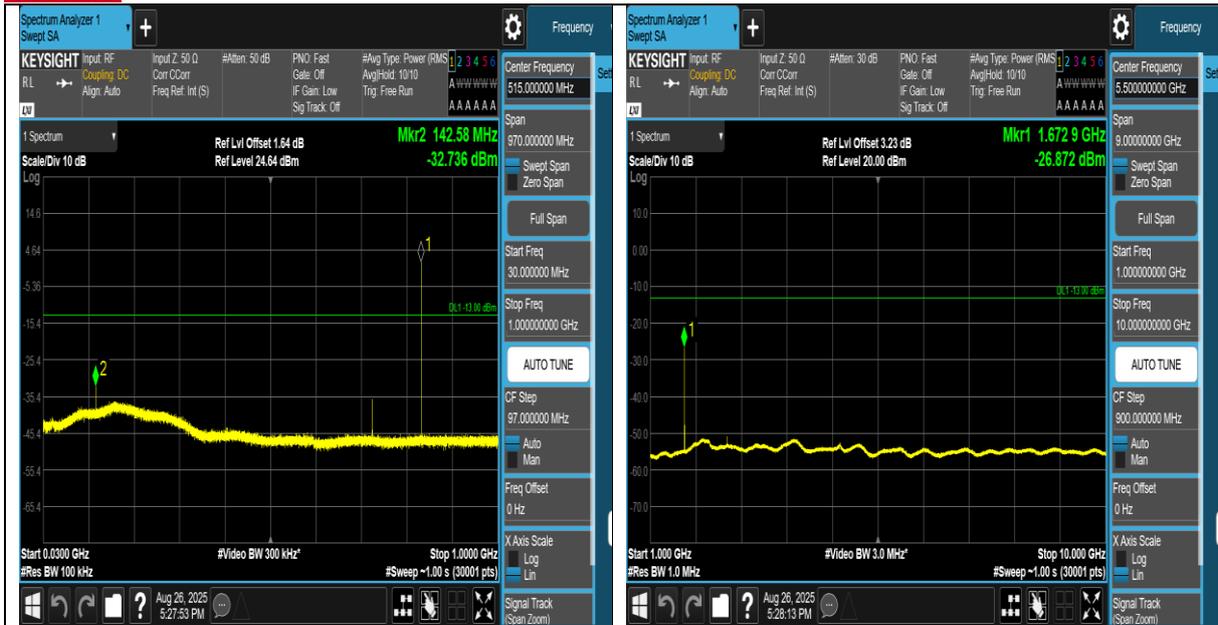


EGPRS850-189-30~1000MHz-PASS

EGPRS850-189-1000~1000MHz-PASS



BUREAU VERITAS Test Report No.: PSU-QBJ2508070215RF01



EGPRS850-251-30~1000MHz-PASS

EGPRS850-251-1000~1000MHz-PASS





APPENDIX: FREQUENCY STABILITY

Test Result

Voltage							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	VN	NT	-960.00	-1.164766	±2.5	PASS
GSM850	128	VL	NT	770.00	0.934239	±2.5	PASS
GSM850	128	VH	NT	300.00	0.363989	±2.5	PASS
GSM850	251	VN	NT	-460.00	-0.541942	±2.5	PASS
GSM850	251	VL	NT	1280.00	1.508011	±2.5	PASS
GSM850	251	VH	NT	60.00	0.070688	±2.5	PASS

Temperature							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	NV	-30	-140.00	-0.169862	±2.5	PASS
GSM850	128	NV	-20	200.00	0.242660	±2.5	PASS
GSM850	128	NV	-10	140.00	0.169862	±2.5	PASS
GSM850	128	NV	0	-80.00	-0.097064	±2.5	PASS
GSM850	128	NV	10	-30.00	-0.036399	±2.5	PASS
GSM850	128	NV	20	-1200.00	-1.455957	±2.5	PASS
GSM850	128	NV	30	-290.00	-0.351856	±2.5	PASS
GSM850	128	NV	40	750.00	0.909973	±2.5	PASS
GSM850	128	NV	50	-470.00	-0.570250	±2.5	PASS
GSM850	251	NV	-30	670.00	0.789350	±2.5	PASS
GSM850	251	NV	-20	370.00	0.435910	±2.5	PASS
GSM850	251	NV	-10	330.00	0.388784	±2.5	PASS
GSM850	251	NV	0	270.00	0.318096	±2.5	PASS
GSM850	251	NV	10	-460.00	-0.541942	±2.5	PASS
GSM850	251	NV	20	260.00	0.306315	±2.5	PASS
GSM850	251	NV	30	490.00	0.577286	±2.5	PASS
GSM850	251	NV	40	170.00	0.200283	±2.5	PASS
GSM850	251	NV	50	1470.00	1.731857	±2.5	PASS

WCDMA B5

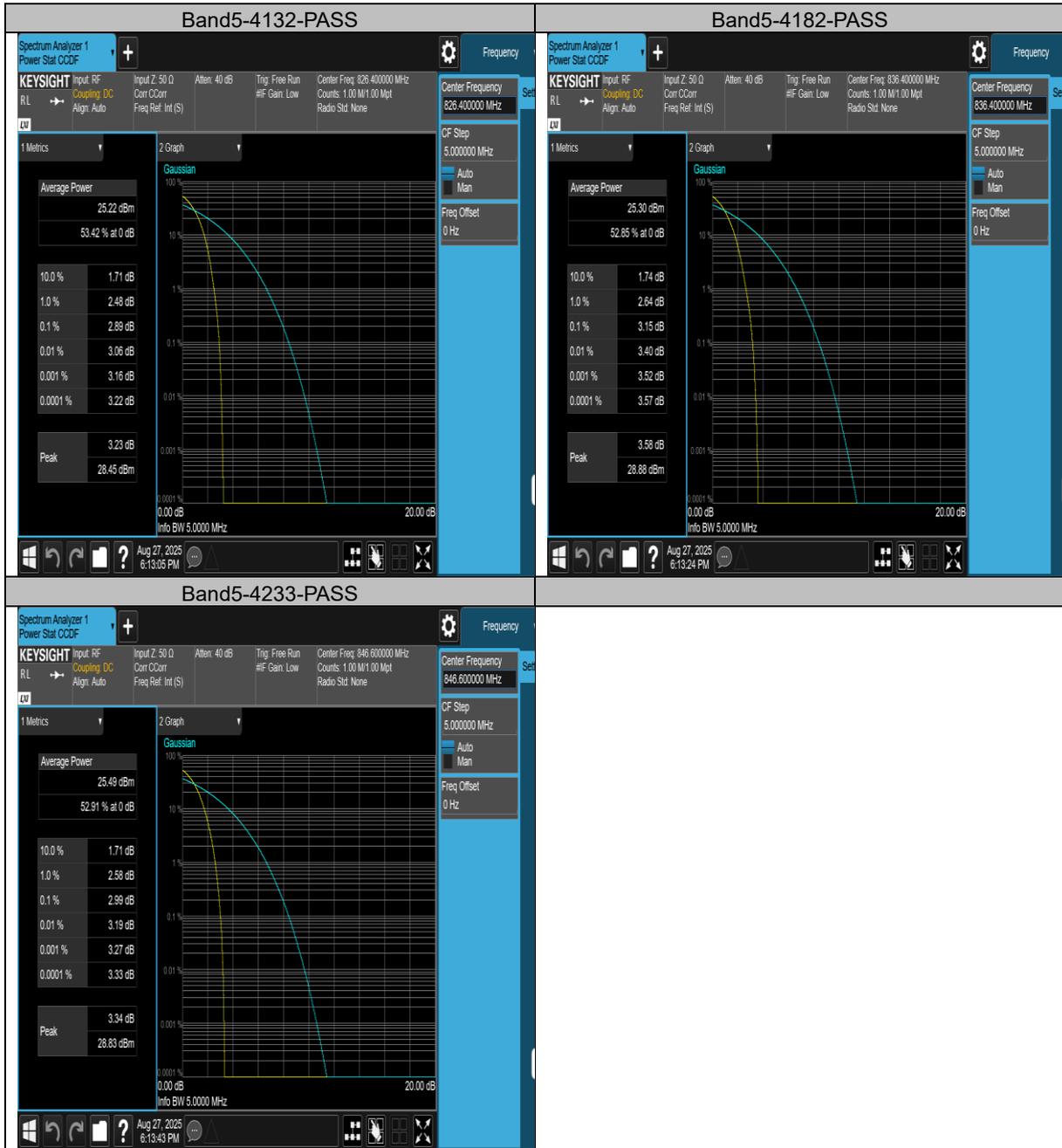
APPENDIX : PEAK-TO-AVERAGE RATIO

Test Result

Band	Channel	Peak-to-Average Ratio(dB)	Limit(dBm)	Verdict
Band5	4132	2.89	13	PASS
Band5	4182	3.15	13	PASS
Band5	4233	2.99	13	PASS



Test Graphs



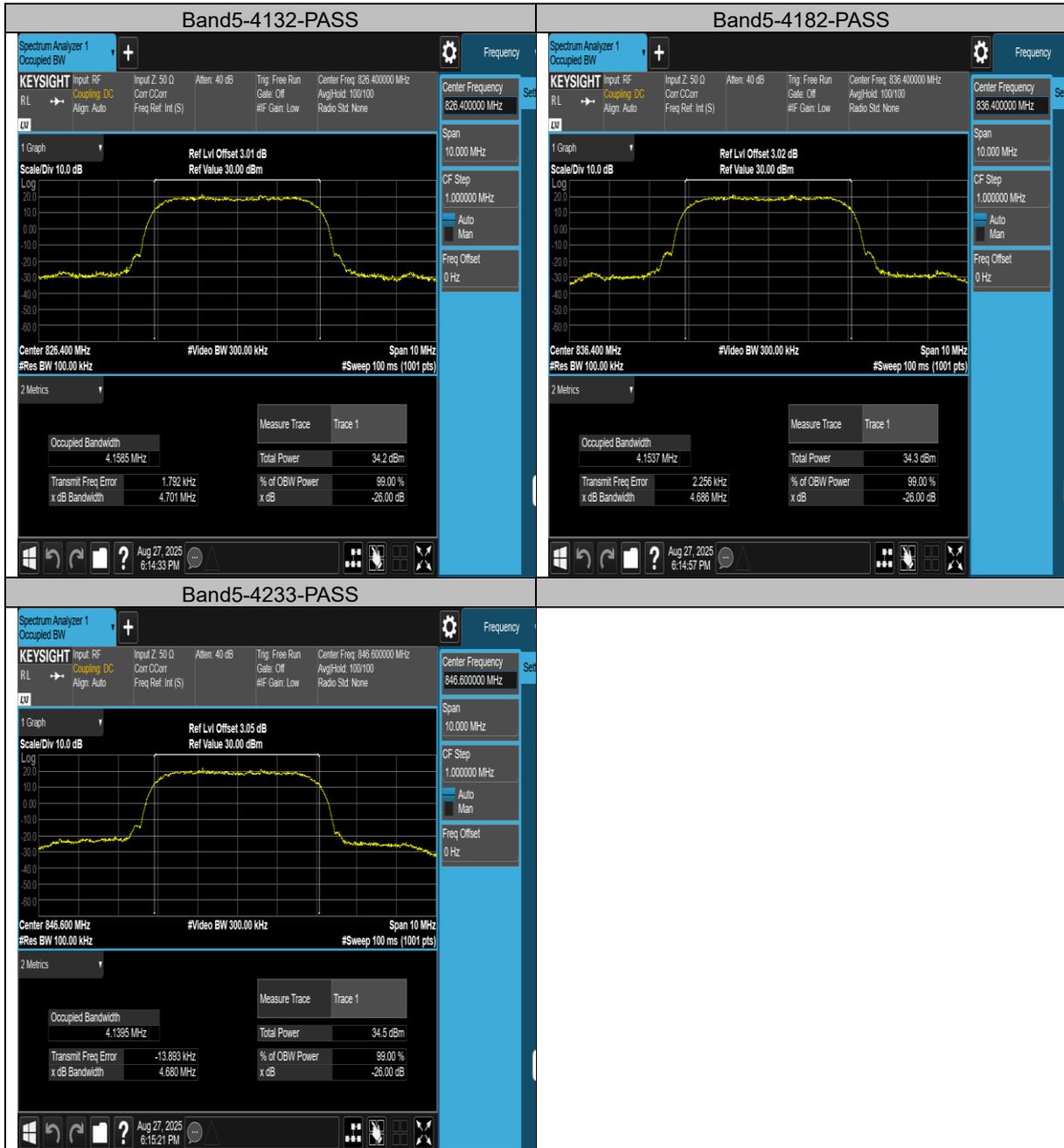
APPENDIX : 26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(kHz)	Verdict
Band5	4132	4.1585	4.701	---	PASS
Band5	4182	4.1537	4.686	---	PASS
Band5	4233	4.1395	4.680	---	PASS



Test Graphs



APPENDIX : BAND EDGE

Test Result

Band	Channel	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band5	4132	823.87	-27.51	-13	PASS
Band5	4233	849.00	-28.27	-13	PASS



Test Graphs



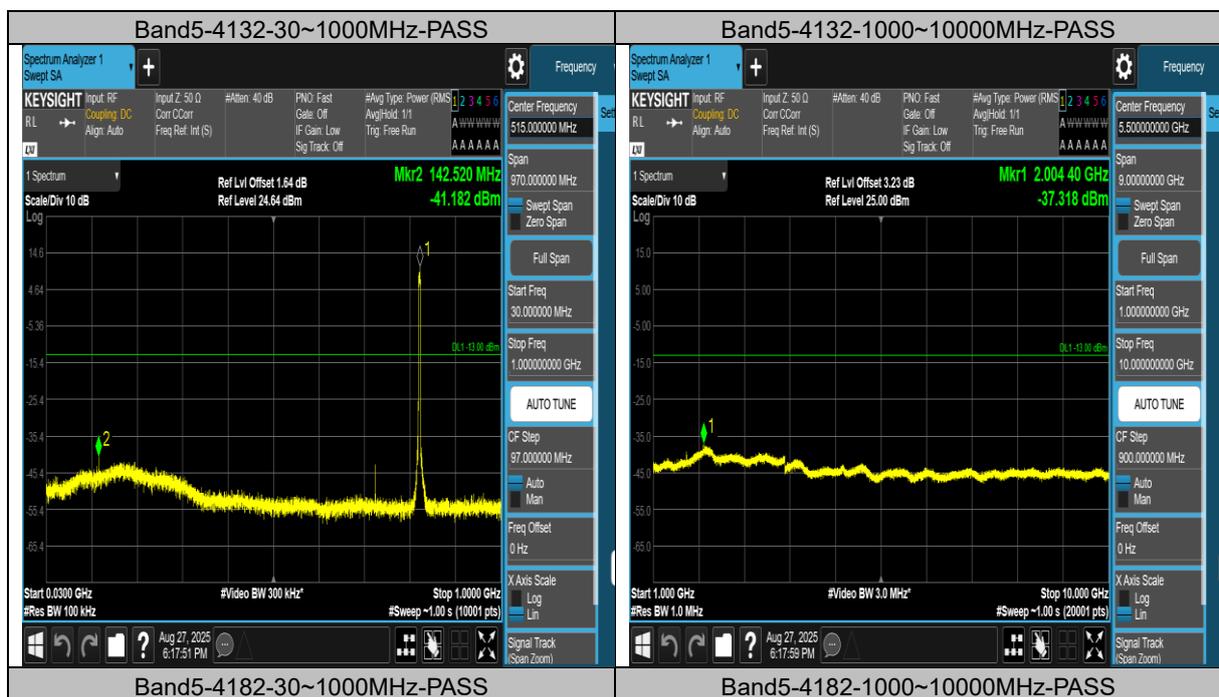


BUREAU VERITAS Test Report No.: PSU-QBJ2508070215RF01
APPENDIX : CONDUCTED SPURIOUS EMISSION

Test Result

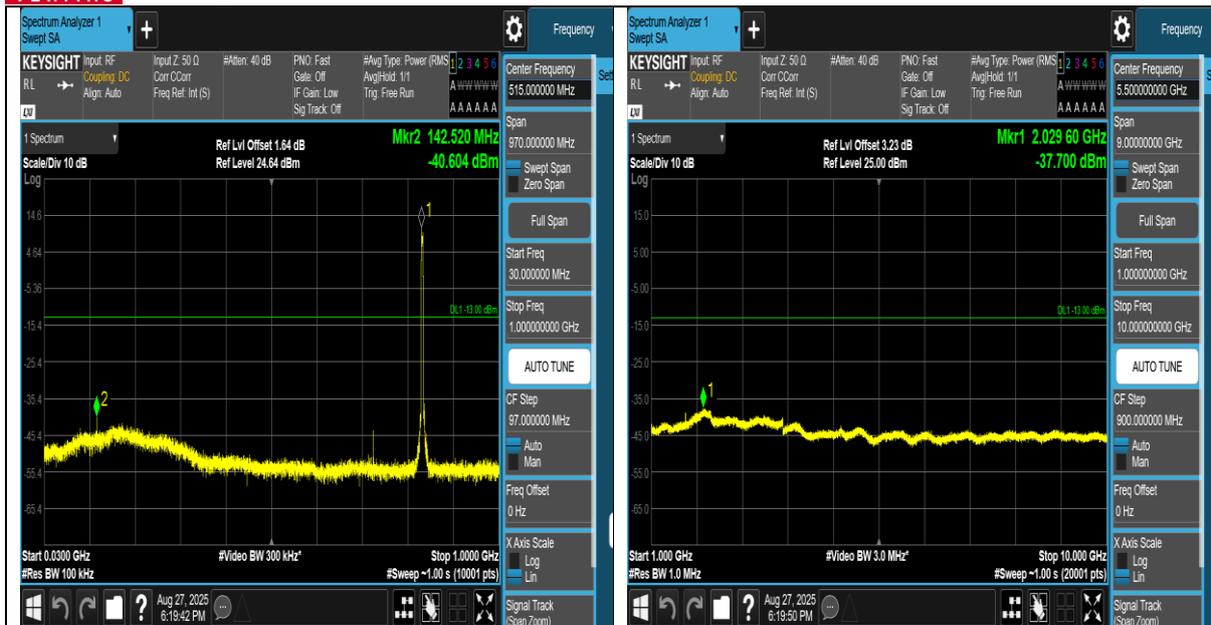
Band	Channel	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band5	4132	30~1000MHz	142.52	-41.18	-13	PASS
Band5	4132	1000~10000MHz	2004.4	-37.32	-13	PASS
Band5	4182	30~1000MHz	142.52	-40.6	-13	PASS
Band5	4182	1000~10000MHz	2029.6	-37.7	-13	PASS
Band5	4233	30~1000MHz	142.62	-40.81	-13	PASS
Band5	4233	1000~10000MHz	2151.1	-37.64	-13	PASS

Test Graphs



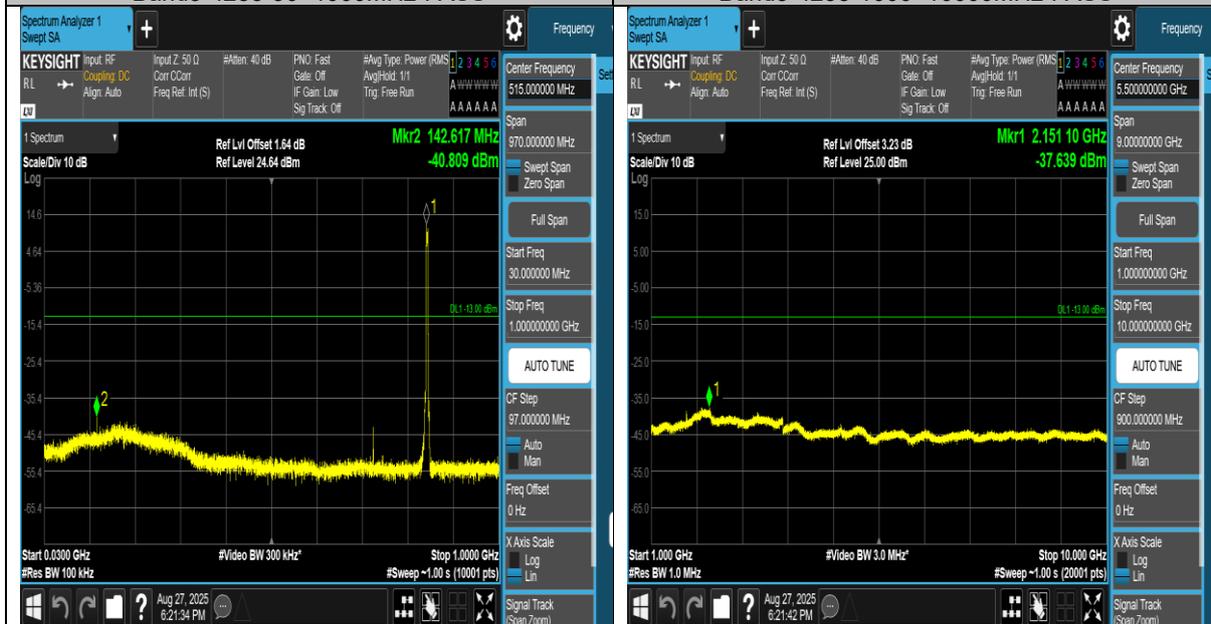


BUREAU VERITAS Test Report No.: PSU-QBJ2508070215RF01



Band5-4233-30~1000MHz-PASS

Band5-4233-1000~10000MHz-PASS



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

Tel: +86 (0557) 368 1008



APPENDIX : FREQUENCY STABILITY

Test Result

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	4132	VN	NT	-6.51	-0.007878	±2.5	PASS
Band5	4132	VL	NT	-5.62	-0.006801	±2.5	PASS
Band5	4132	VH	NT	-5.74	-0.006946	±2.5	PASS
Band5	4182	VN	NT	-1.17	-0.001399	±2.5	PASS
Band5	4182	VL	NT	-2.80	-0.003348	±2.5	PASS
Band5	4182	VH	NT	-2.42	-0.002893	±2.5	PASS
Band5	4233	VN	NT	-2.89	-0.003414	±2.5	PASS
Band5	4233	VL	NT	-4.09	-0.004831	±2.5	PASS
Band5	4233	VH	NT	-0.92	-0.001087	±2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	4132	NV	-30	-3.65	-0.004417	±2.5	PASS
Band5	4132	NV	-20	-3.93	-0.004756	±2.5	PASS
Band5	4132	NV	-10	-5.66	-0.006849	±2.5	PASS
Band5	4132	NV	0	-4.33	-0.005240	±2.5	PASS
Band5	4132	NV	10	-6.63	-0.008023	±2.5	PASS
Band5	4132	NV	20	-3.18	-0.003848	±2.5	PASS
Band5	4132	NV	30	-6.43	-0.007781	±2.5	PASS
Band5	4132	NV	40	-2.80	-0.003388	±2.5	PASS
Band5	4132	NV	50	-3.45	-0.004175	±2.5	PASS
Band5	4182	NV	-30	-2.71	-0.003240	±2.5	PASS
Band5	4182	NV	-20	-0.66	-0.000789	±2.5	PASS
Band5	4182	NV	-10	-1.77	-0.002116	±2.5	PASS
Band5	4182	NV	0	-1.41	-0.001686	±2.5	PASS
Band5	4182	NV	10	-4.33	-0.005177	±2.5	PASS
Band5	4182	NV	20	-3.74	-0.004472	±2.5	PASS
Band5	4182	NV	30	-1.06	-0.001267	±2.5	PASS
Band5	4182	NV	40	-2.25	-0.002690	±2.5	PASS
Band5	4182	NV	50	-2.40	-0.002869	±2.5	PASS
Band5	4233	NV	-30	-2.06	-0.002433	±2.5	PASS
Band5	4233	NV	-20	-3.17	-0.003744	±2.5	PASS
Band5	4233	NV	-10	-4.72	-0.005575	±2.5	PASS
Band5	4233	NV	0	-4.26	-0.005032	±2.5	PASS
Band5	4233	NV	10	-6.29	-0.007430	±2.5	PASS
Band5	4233	NV	20	-2.43	-0.002870	±2.5	PASS
Band5	4233	NV	30	-1.87	-0.002209	±2.5	PASS
Band5	4233	NV	40	-3.63	-0.004288	±2.5	PASS
Band5	4233	NV	50	-5.11	-0.006036	±2.5	PASS



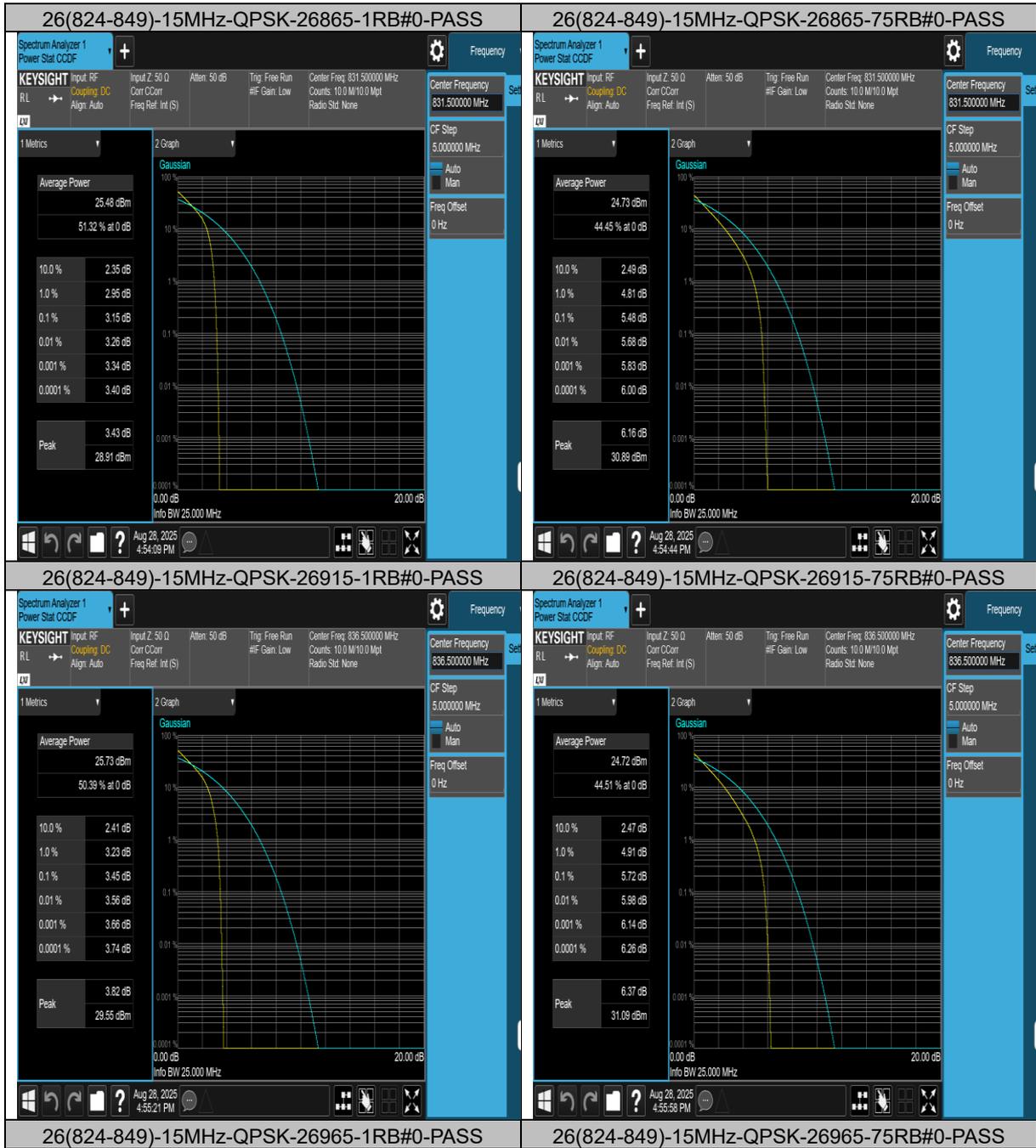
APPENDIX : PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
26(824-849)	15MHz	QPSK	26865	1RB#0	3.15	13	PASS
26(824-849)	15MHz	QPSK	26865	75RB#0	5.48	13	PASS
26(824-849)	15MHz	QPSK	26915	1RB#0	3.45	13	PASS
26(824-849)	15MHz	QPSK	26915	75RB#0	5.72	13	PASS
26(824-849)	15MHz	QPSK	26965	1RB#0	4.03	13	PASS
26(824-849)	15MHz	QPSK	26965	75RB#0	5.75	13	PASS
26(824-849)	15MHz	64QAM	26865	1RB#0	3.12	13	PASS
26(824-849)	15MHz	64QAM	26865	75RB#0	5.38	13	PASS
26(824-849)	15MHz	64QAM	26915	1RB#0	3.64	13	PASS
26(824-849)	15MHz	64QAM	26915	75RB#0	5.56	13	PASS
26(824-849)	15MHz	64QAM	26965	1RB#0	4.18	13	PASS
26(824-849)	15MHz	64QAM	26965	75RB#0	5.64	13	PASS
26(824-849)	15MHz	16QAM	26865	1RB#0	4.04	13	PASS
26(824-849)	15MHz	16QAM	26865	75RB#0	6.16	13	PASS
26(824-849)	15MHz	16QAM	26915	1RB#0	4.59	13	PASS
26(824-849)	15MHz	16QAM	26915	75RB#0	6.31	13	PASS
26(824-849)	15MHz	16QAM	26965	1RB#0	5.03	13	PASS
26(824-849)	15MHz	16QAM	26965	75RB#0	6.35	13	PASS

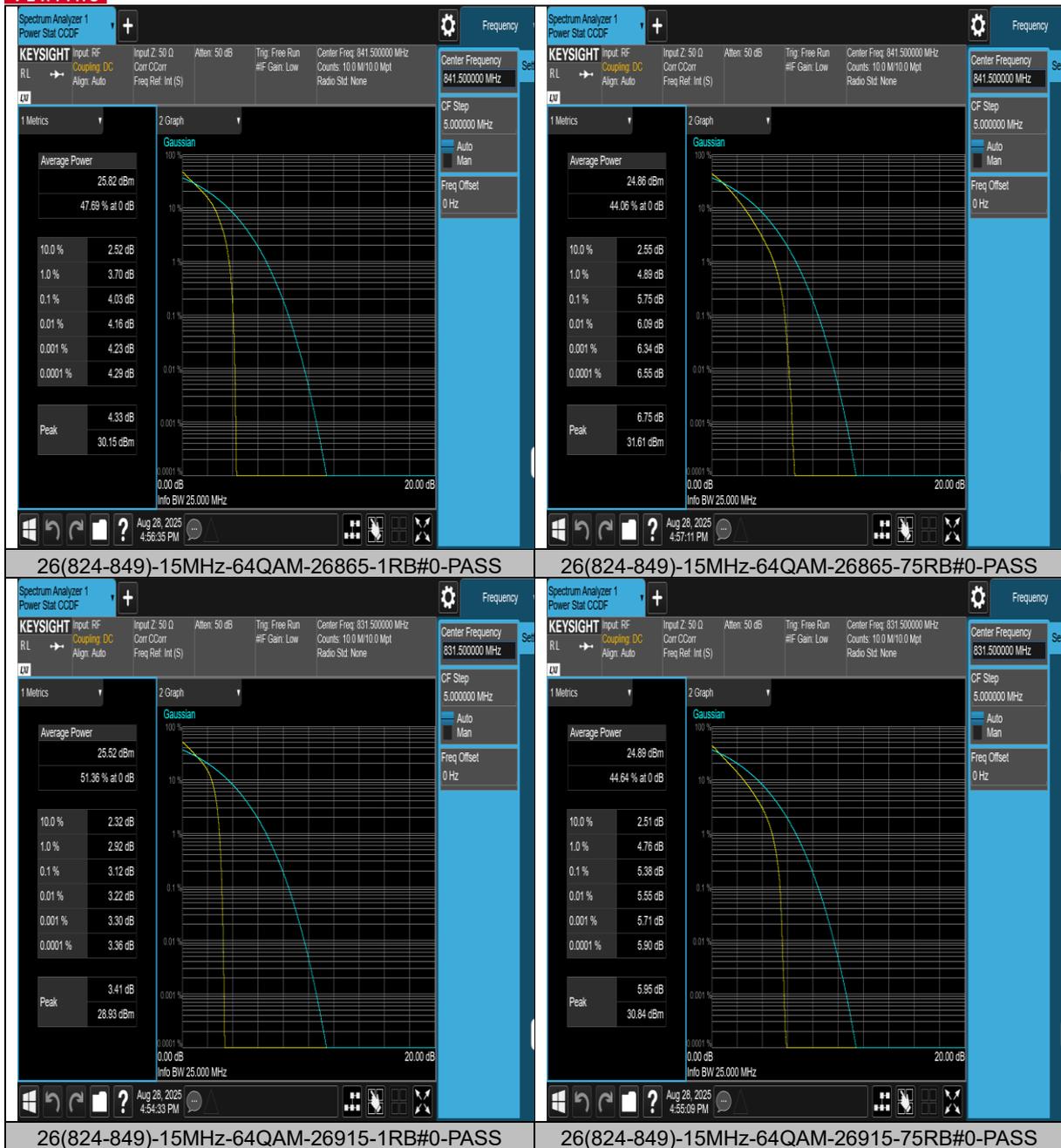


Test Graphs



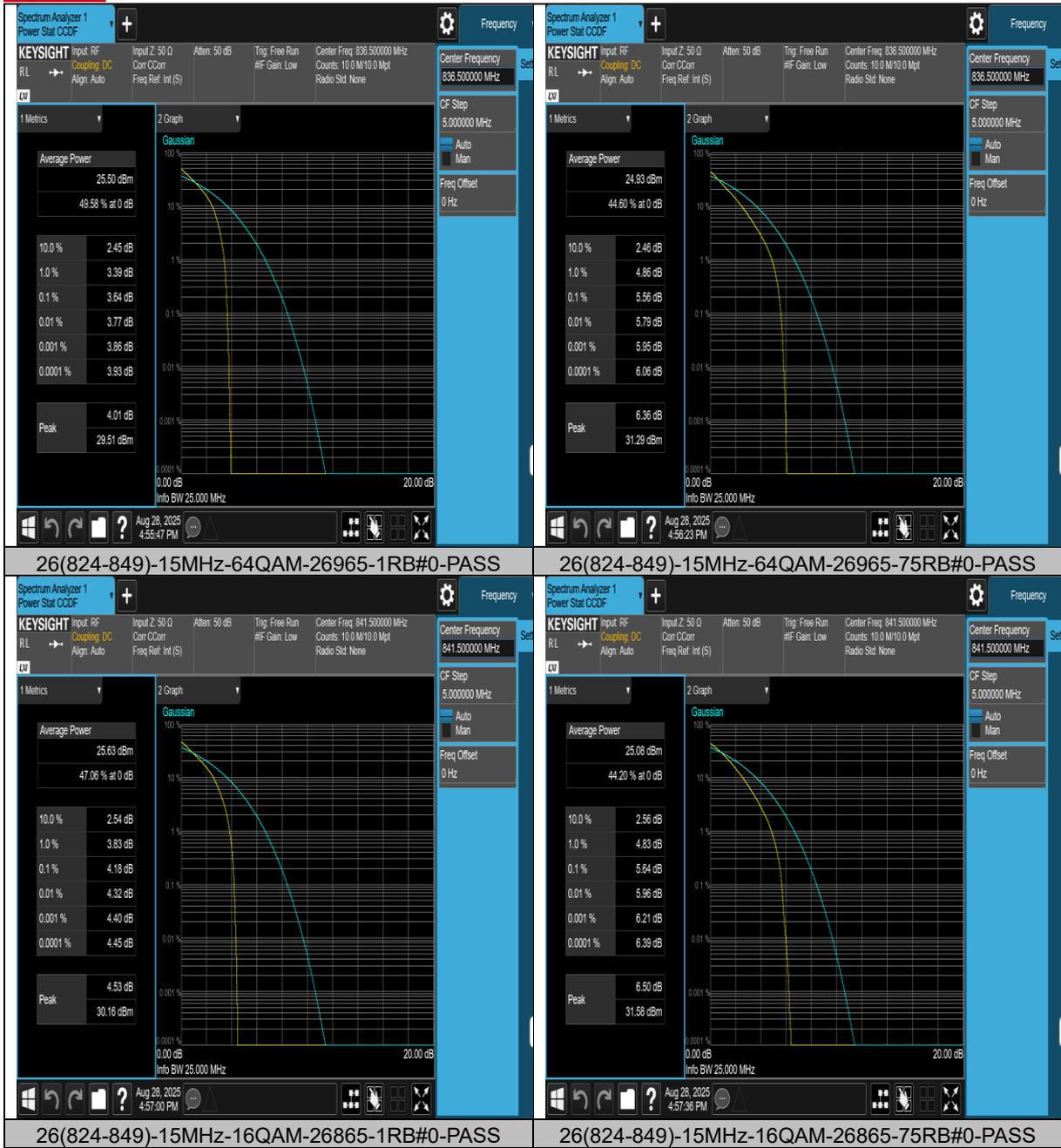


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BUREAU VERITAS Test Report No.: PSU-QBJ2508070215RF01

