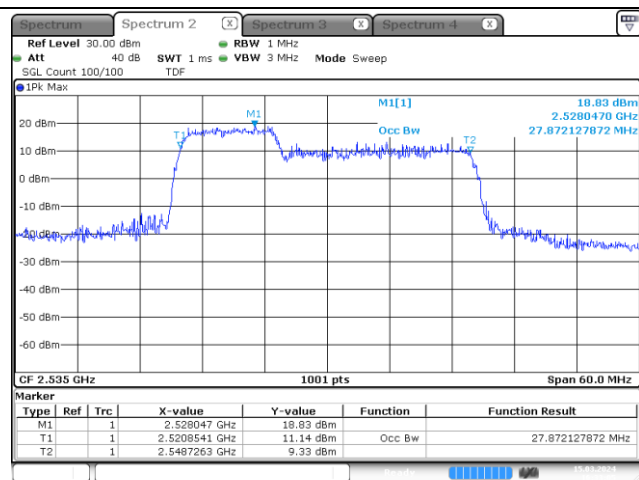
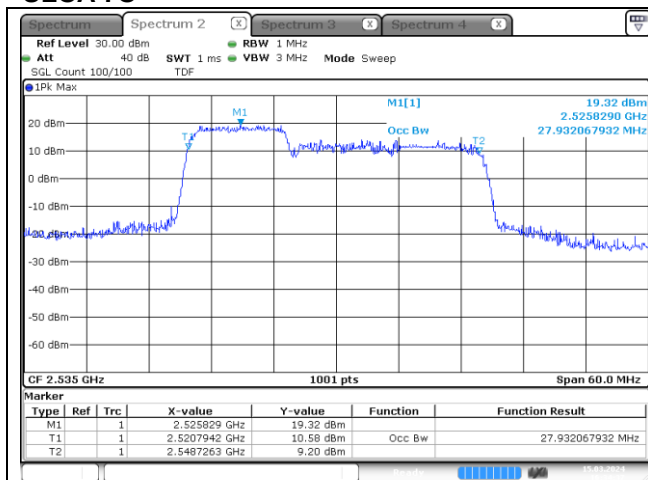
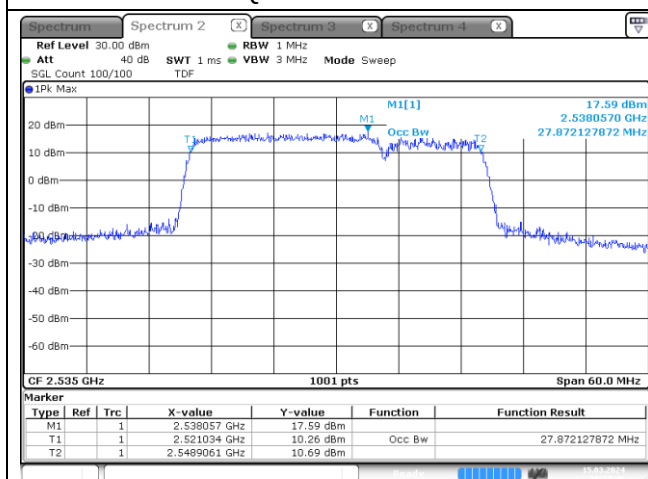


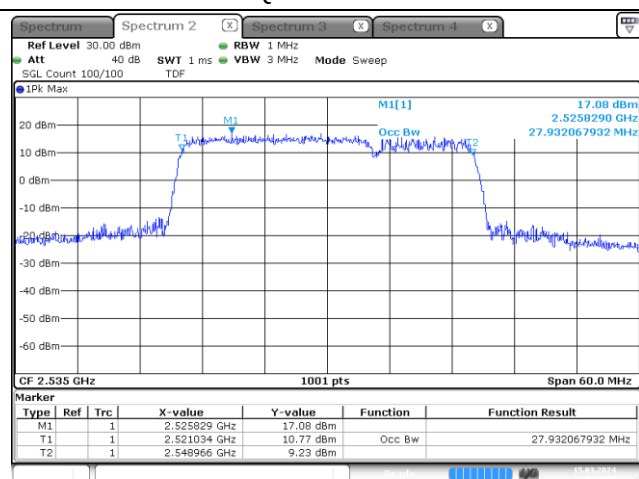
ULCA 7C



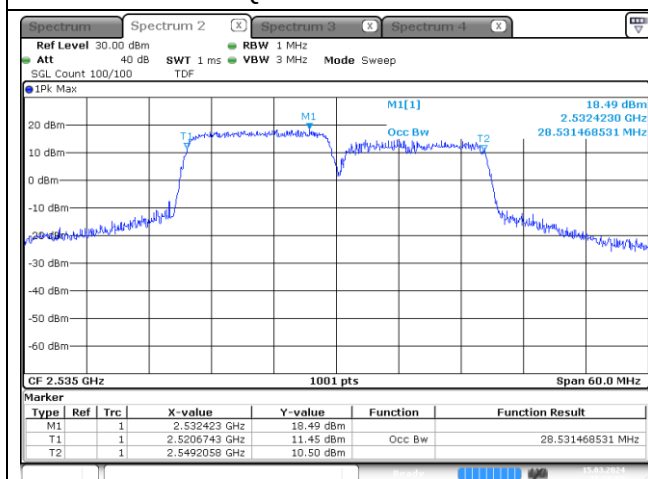
10 MHz + 20 MHz QPSK Middle Channel - Full RB



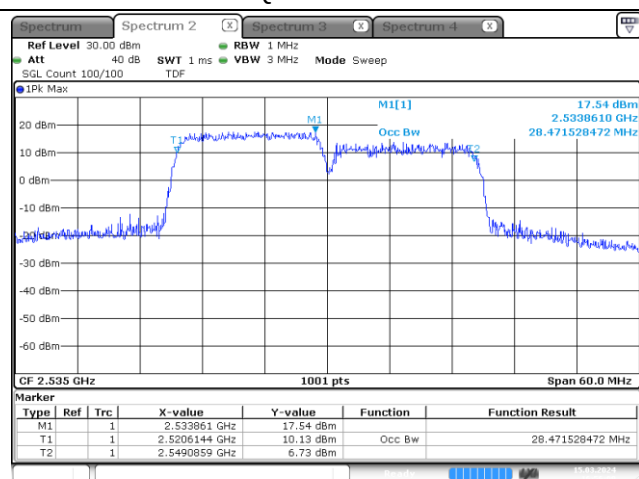
10 MHz + 20 MHz 16QAM Middle Channel - Full RB



20 MHz + 10 MHz QPSK Middle Channel - Full RB



20 MHz + 10 MHz 16QAM Middle Channel - Full RB



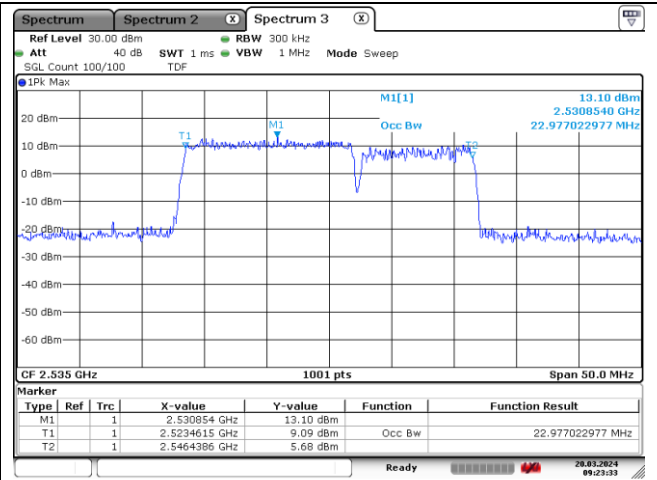
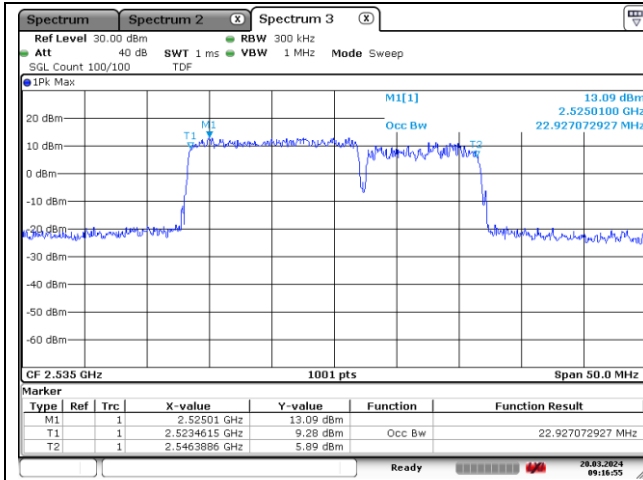
15 MHz + 15 MHz QPSK Middle Channel - Full RB



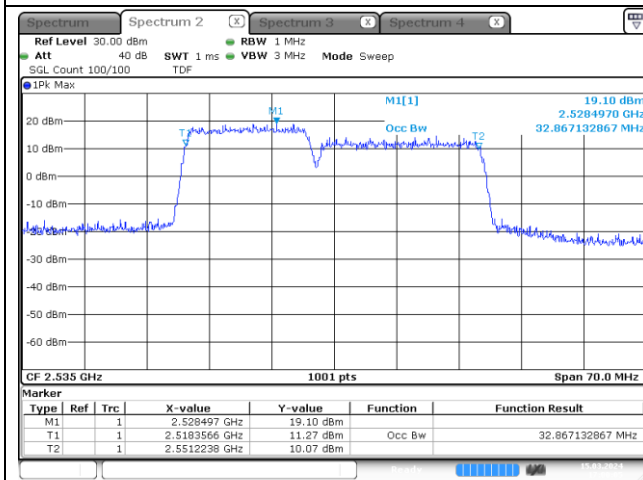
15 MHz + 15 MHz 16QAM Middle Channel - Full RB



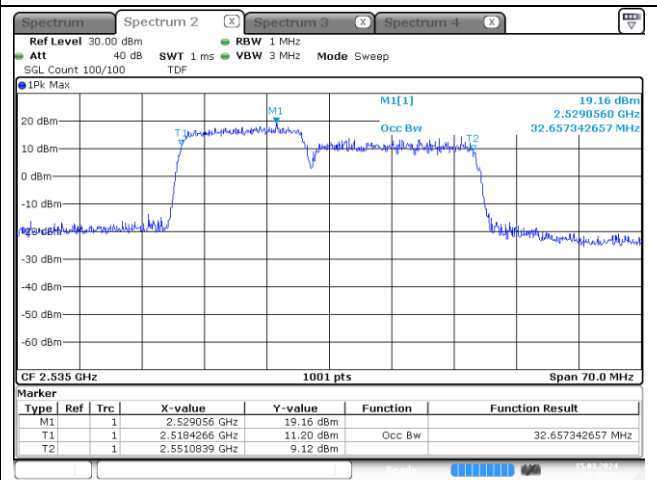
ULCA 7C



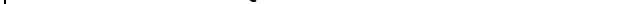
15 MHz + 10 MHz QPSK Middle Channel - Full RB



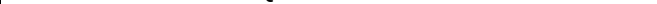
15 MHz + 10 MHz 16QAM Middle Channel - Full RB



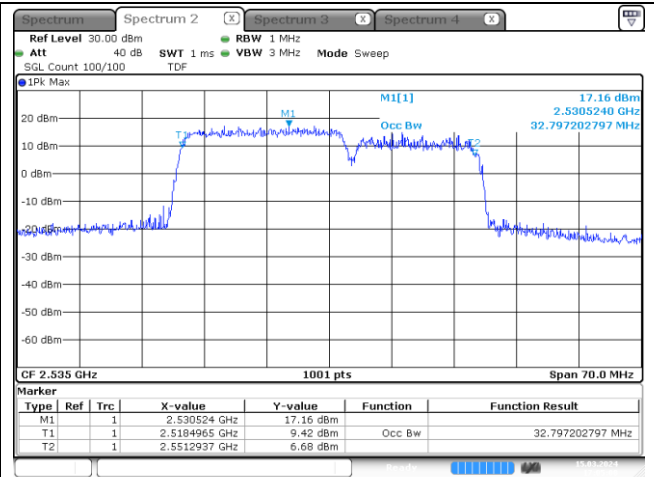
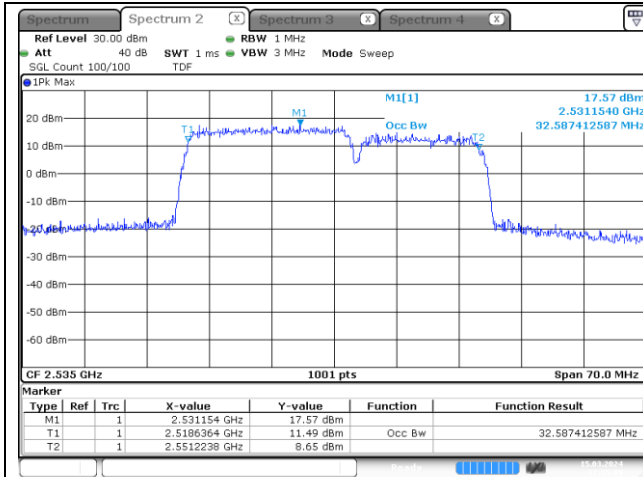
15 MHz + 20 MHz QPSK Middle Channel - Full RB



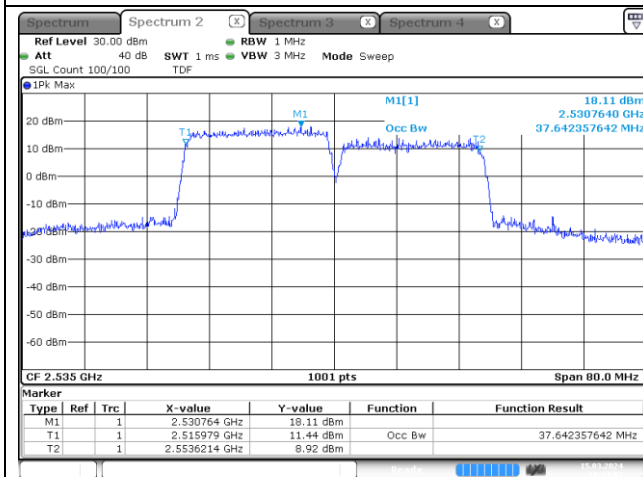
15 MHz + 20 MHz 16QAM Middle Channel - Full RB



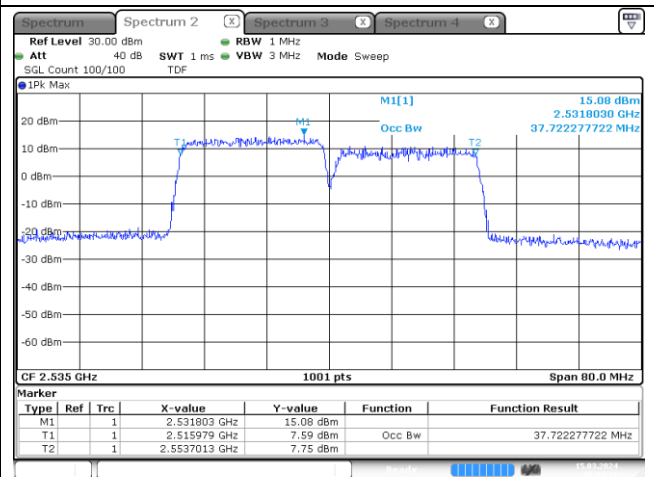
ULCA 7C



20 MHz + 15 MHz QPSK Middle Channel - Full RB



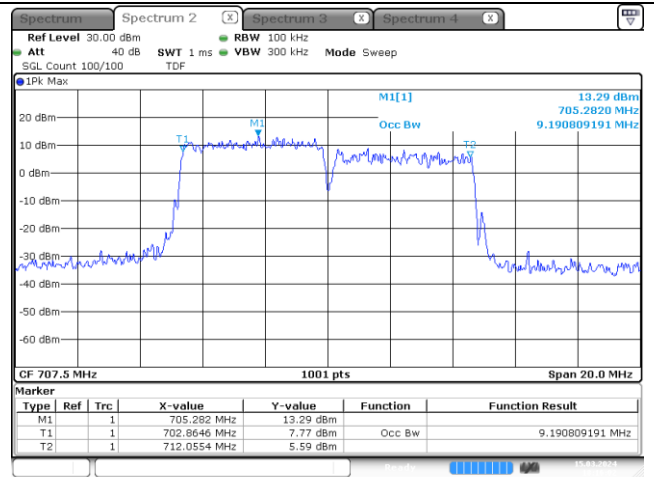
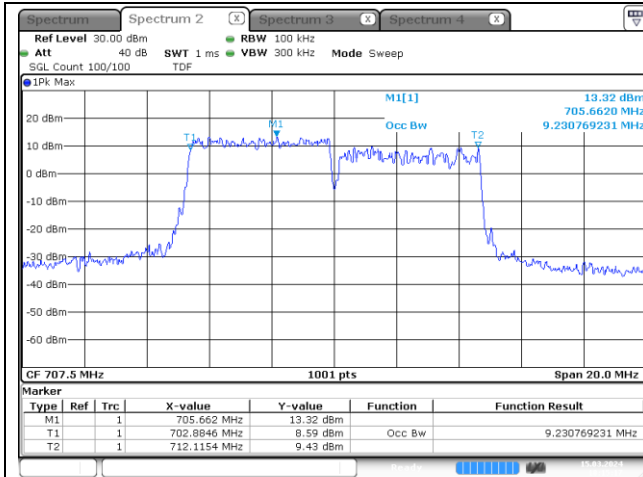
20 MHz + 15 MHz 16QAM Middle Channel - Full RB



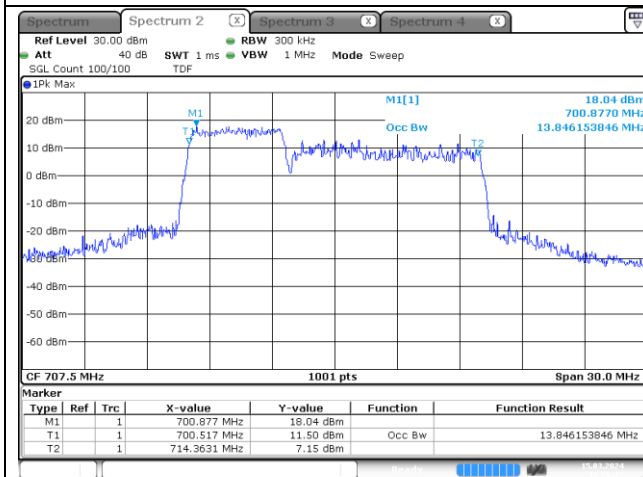
20 MHz + 20 MHz QPSK Middle Channel - Full RB

20 MHz + 20 MHz 16QAM Middle Channel - Full RB

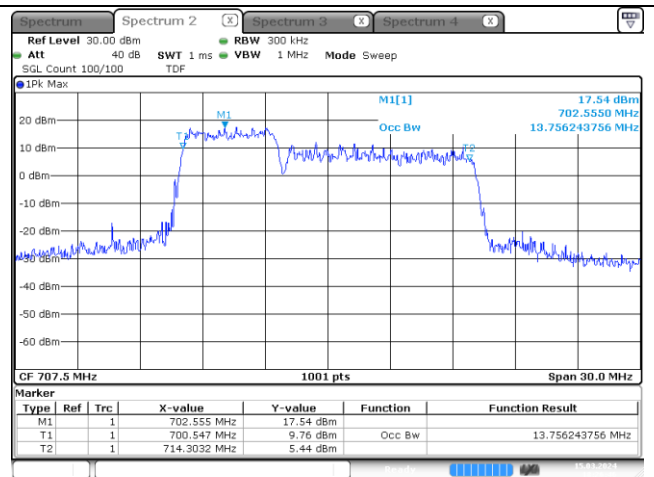
ULCA 12B



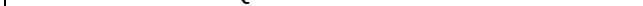
5 MHz + 5 MHz QPSK Middle Channel - Full RB



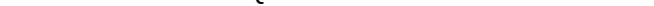
5 MHz + 5 MHz 16QAM Middle Channel - Full RB



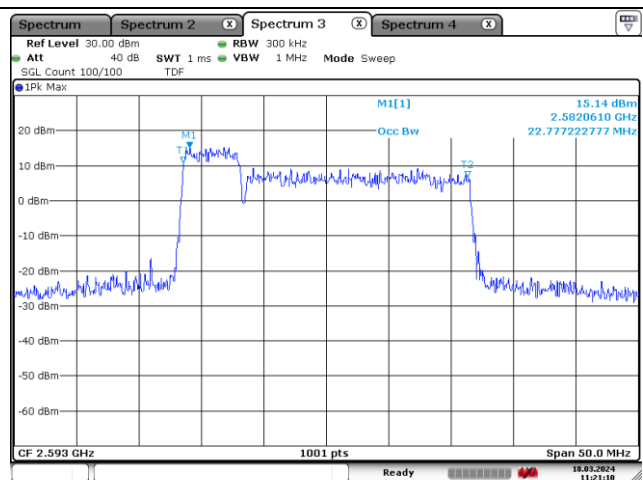
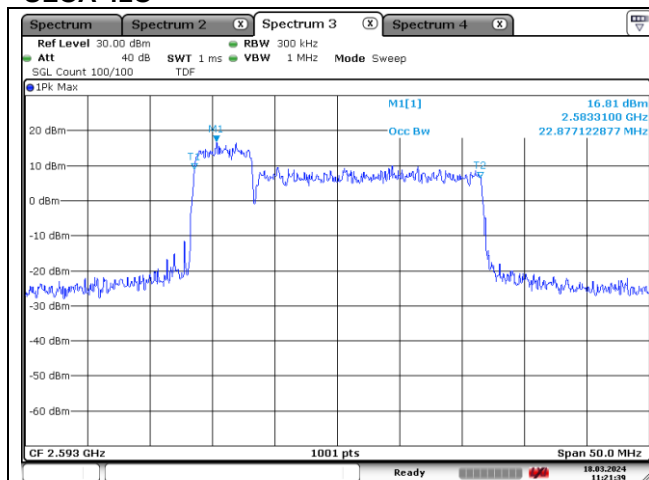
5 MHz + 10 MHz QPSK Middle Channel - Full RB



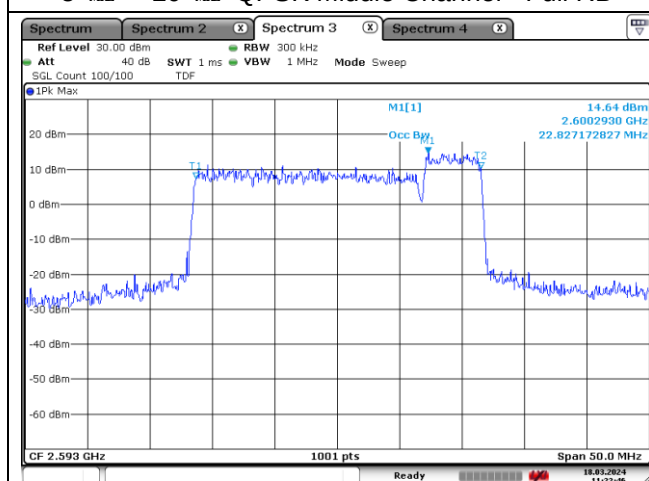
5 MHz + 10 MHz 16QAM Middle Channel - Full RB



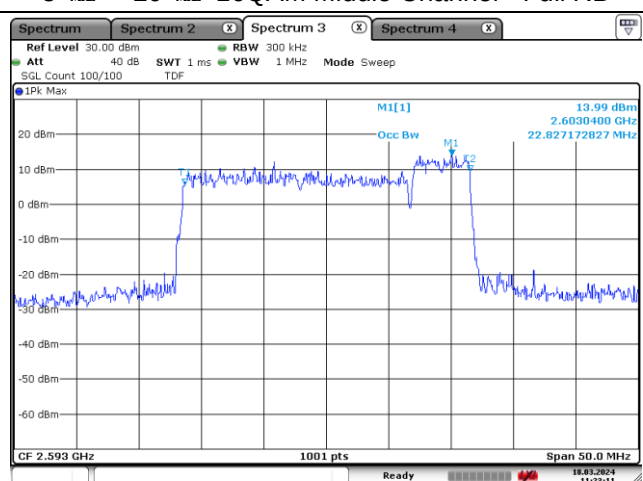
ULCA 41C



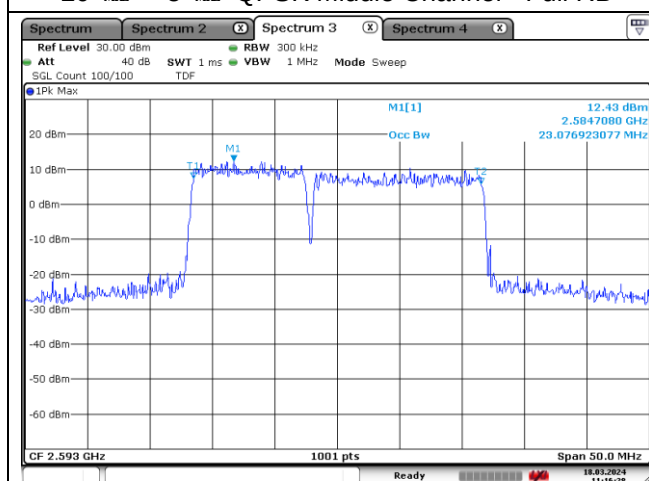
5 MHz + 20 MHz QPSK Middle Channel - Full RB



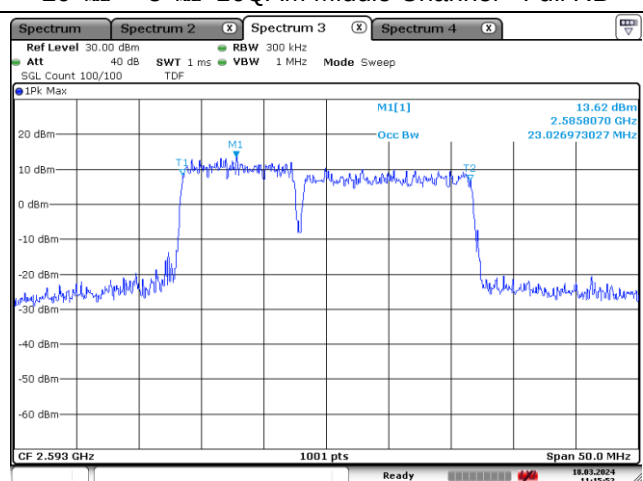
5 MHz + 20 MHz 16QAM Middle Channel - Full RB



20 MHz + 5 MHz QPSK Middle Channel - Full RB



20 MHz + 5 MHz 16QAM Middle Channel - Full RB



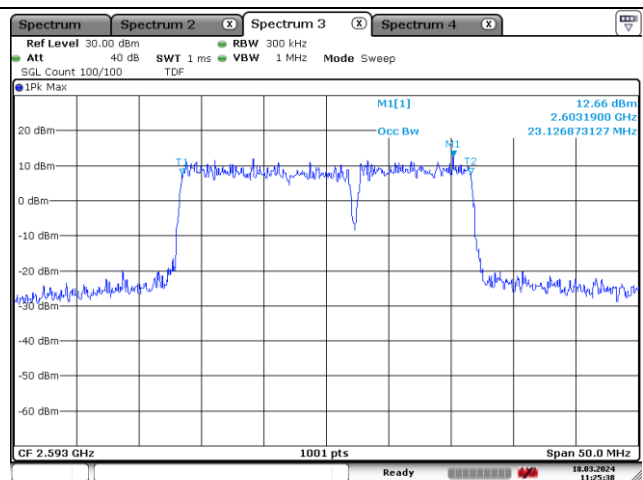
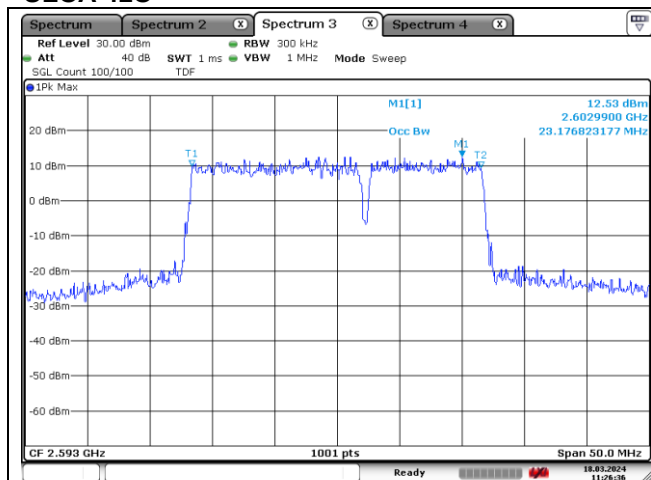
10 MHz + 15 MHz QPSK Middle Channel - Full RB



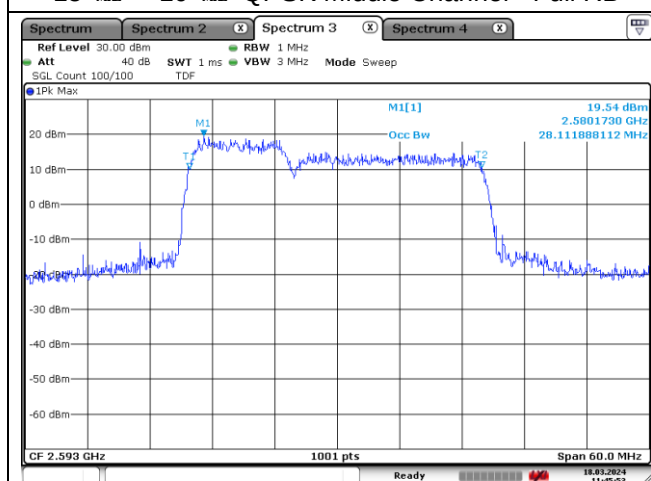
10 MHz + 15 MHz 16QAM Middle Channel - Full RB



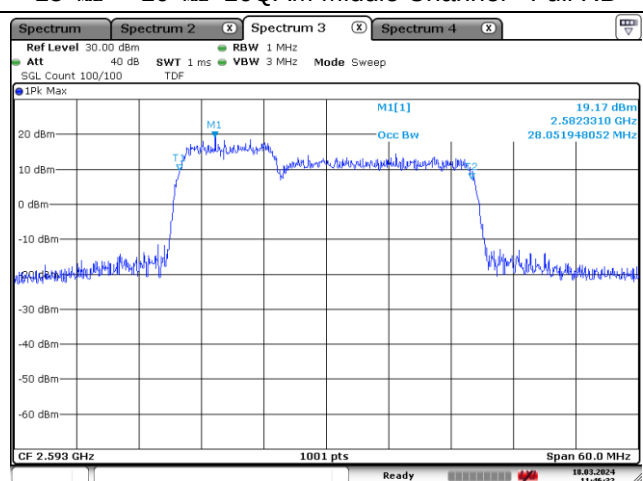
ULCA 41C



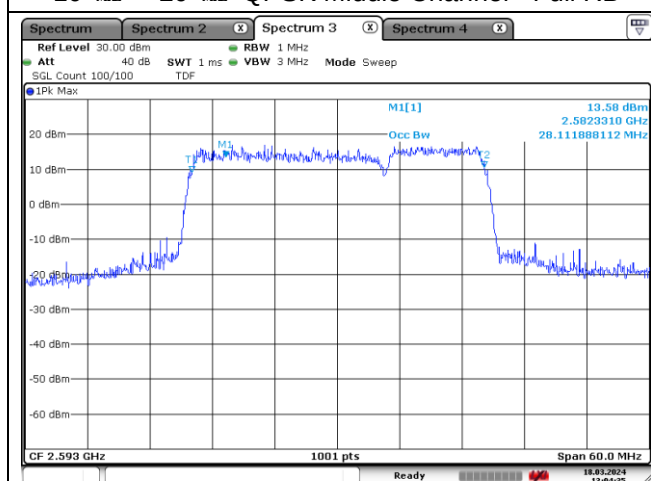
15 MHz + 10 MHz QPSK Middle Channel - Full RB



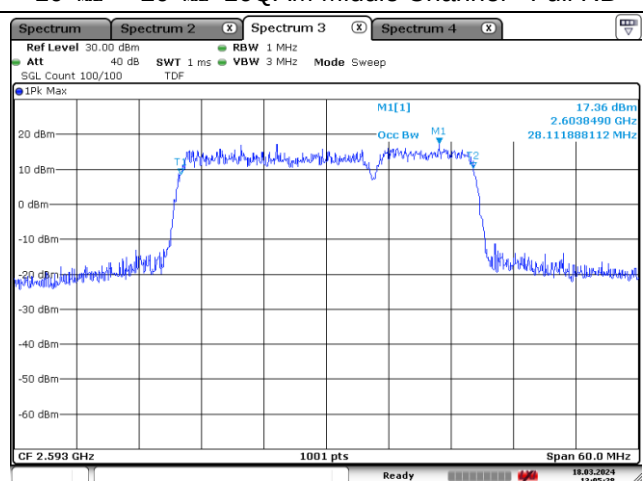
15 MHz + 10 MHz 16QAM Middle Channel - Full RB



10 MHz + 20 MHz QPSK Middle Channel - Full RB



10 MHz + 20 MHz 16QAM Middle Channel - Full RB



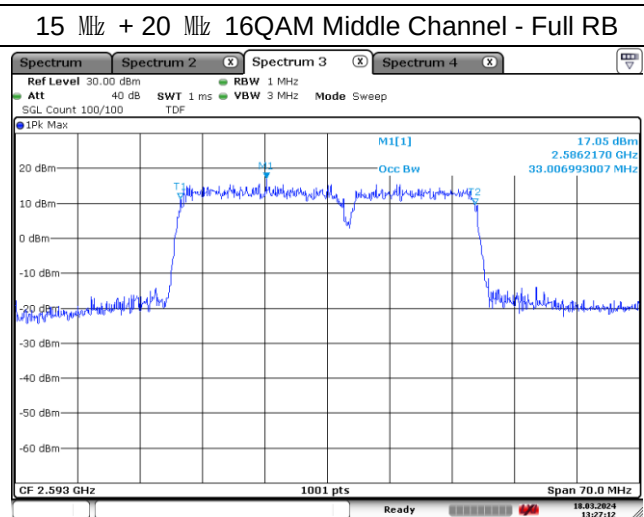
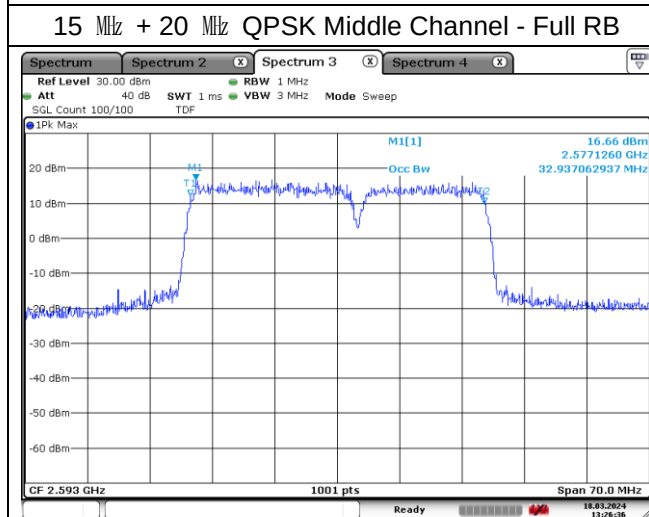
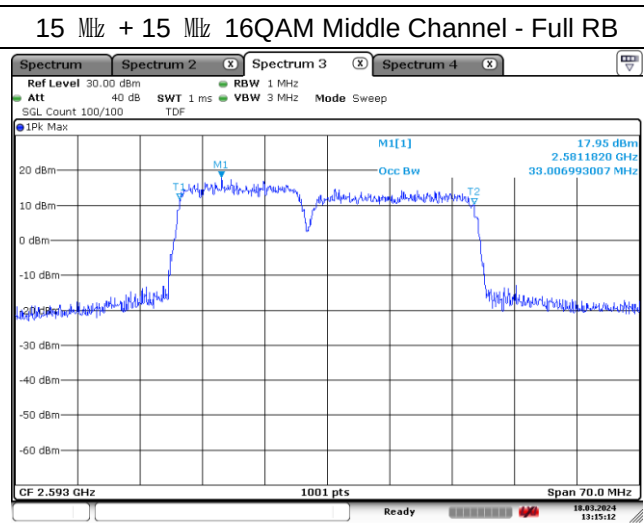
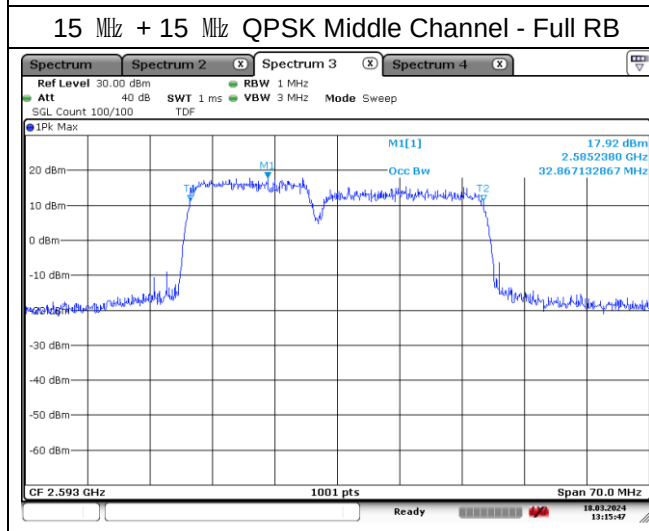
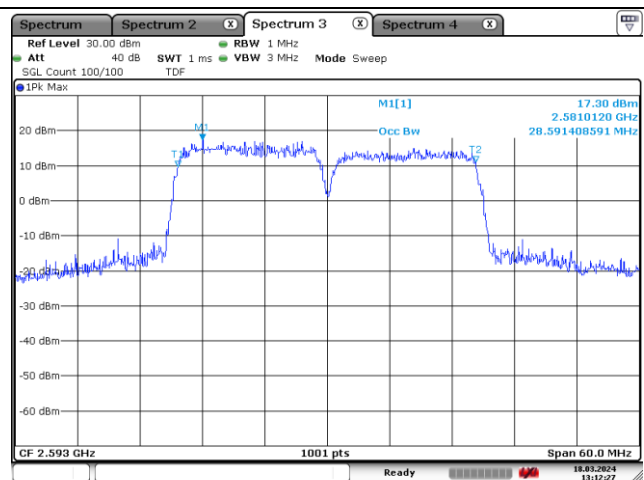
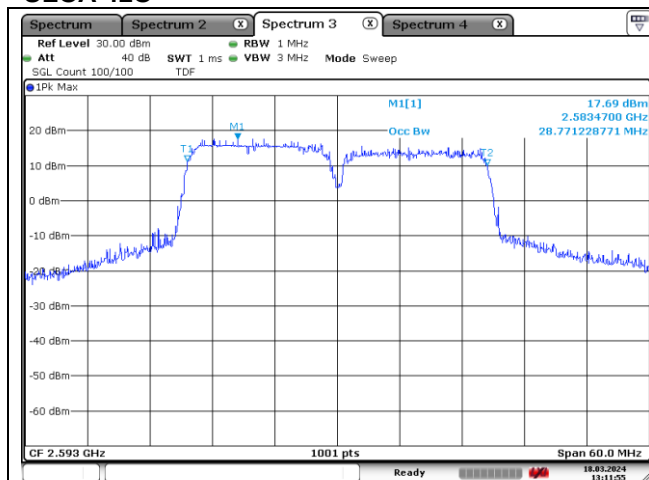
20 MHz + 10 MHz QPSK Middle Channel - Full RB



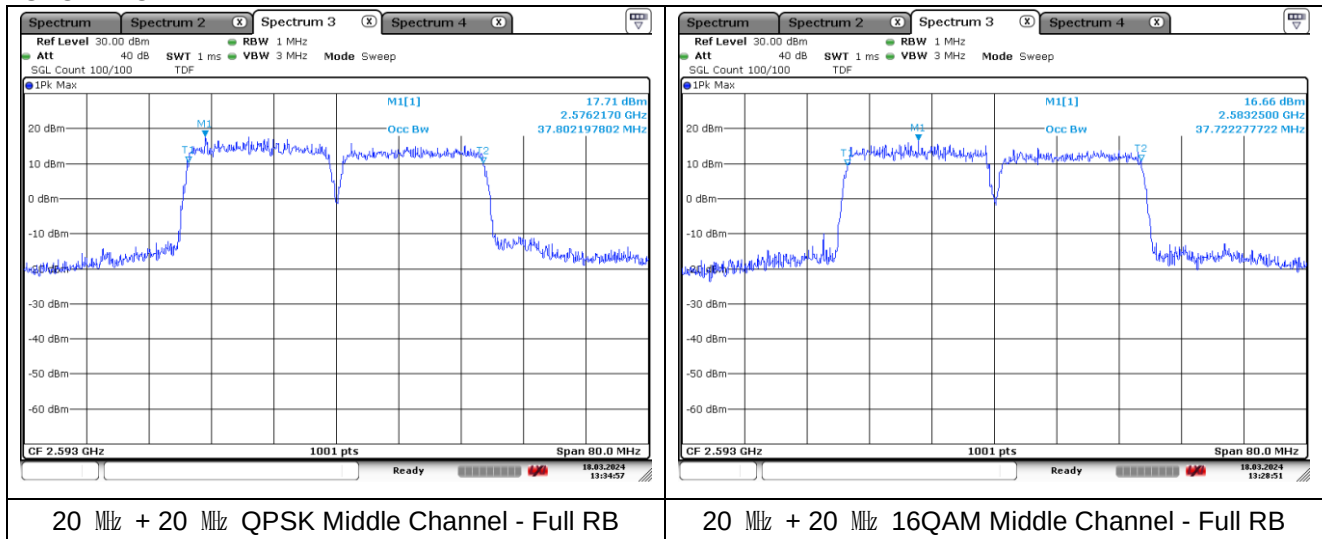
20 MHz + 10 MHz 16QAM Middle Channel - Full RB



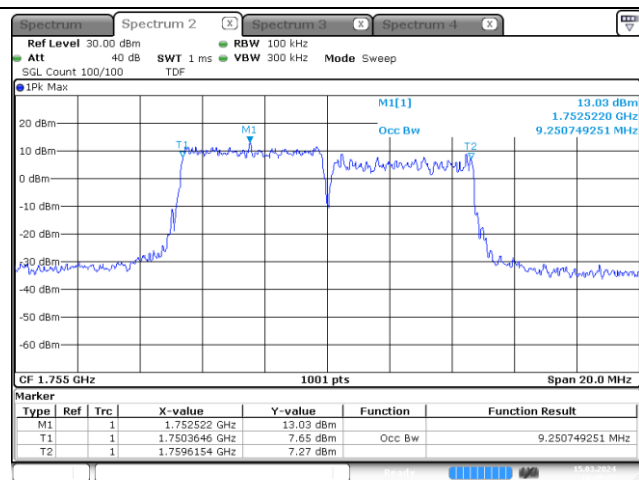
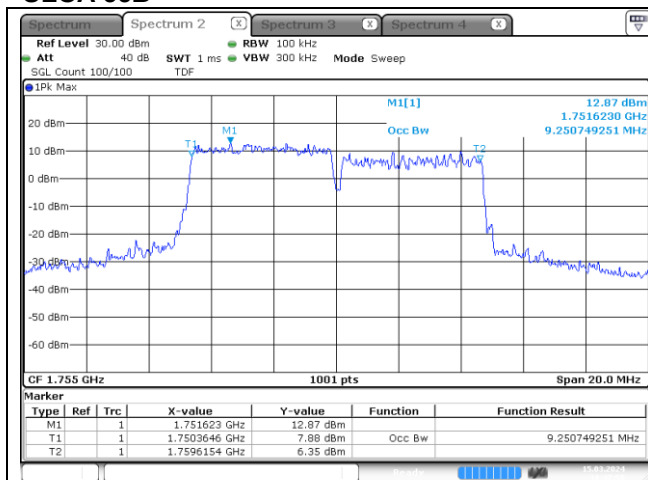
ULCA 41C



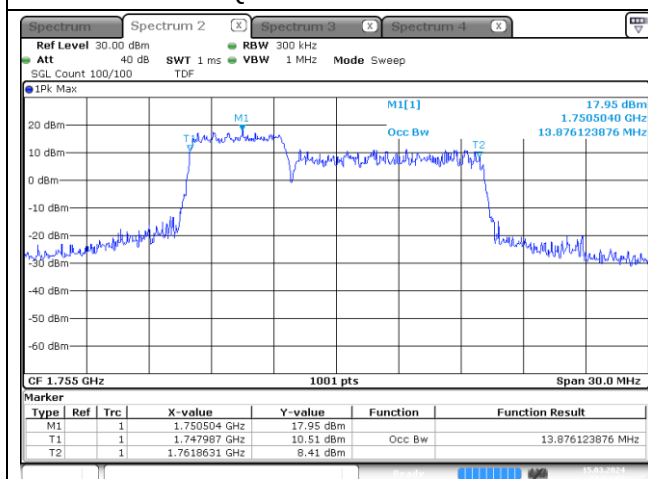
ULCA 41C



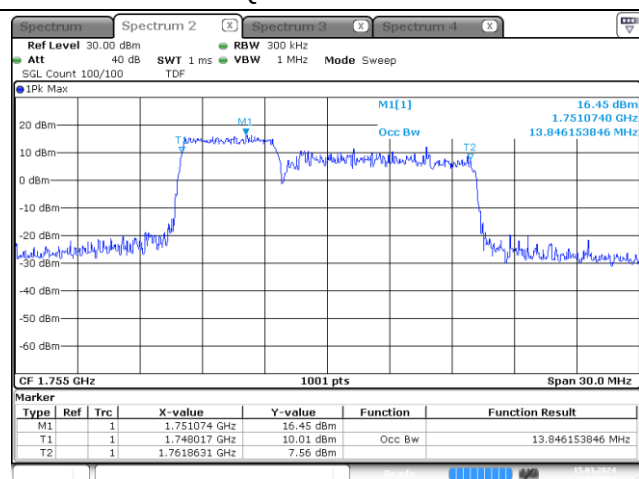
ULCA 66B



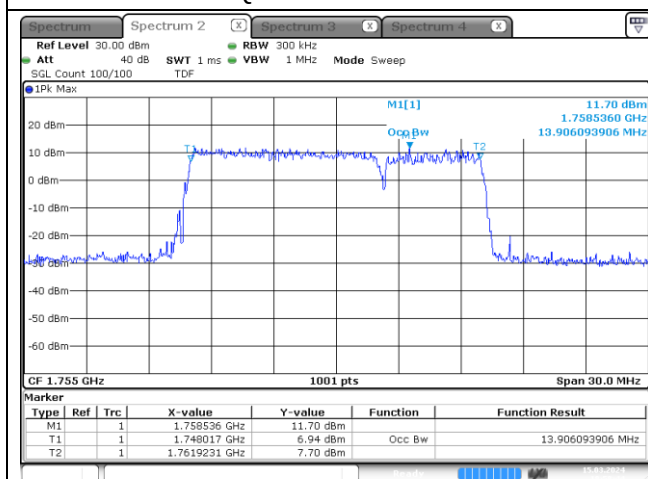
5 MHz + 5 MHz QPSK Middle Channel - Full RB



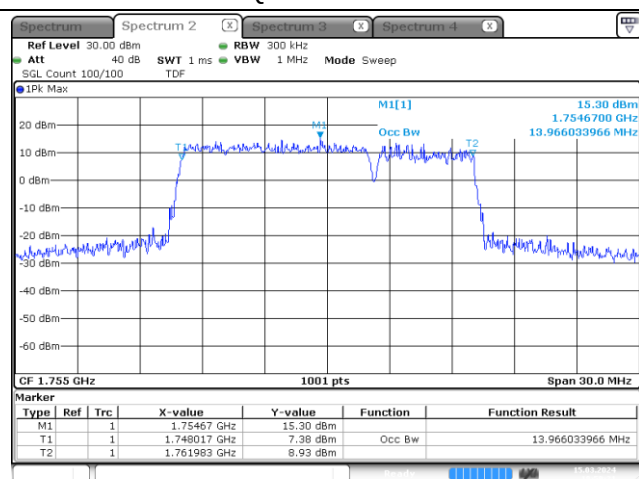
5 MHz + 5 MHz 16QAM Middle Channel - Full RB



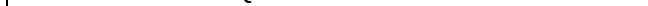
5 MHz + 10 MHz QPSK Middle Channel - Full RB



5 MHz + 10 MHz 16QAM Middle Channel - Full RB



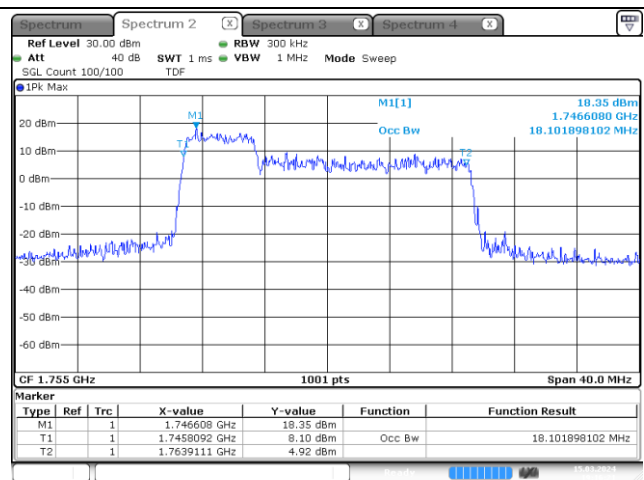
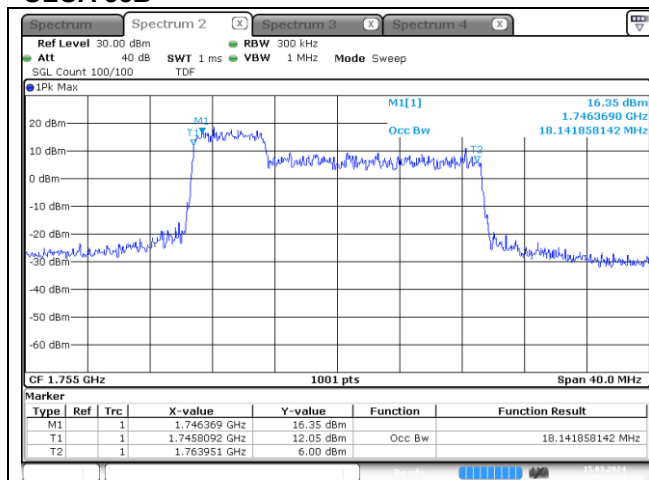
10 MHz + 5 MHz QPSK Middle Channel - Full RB



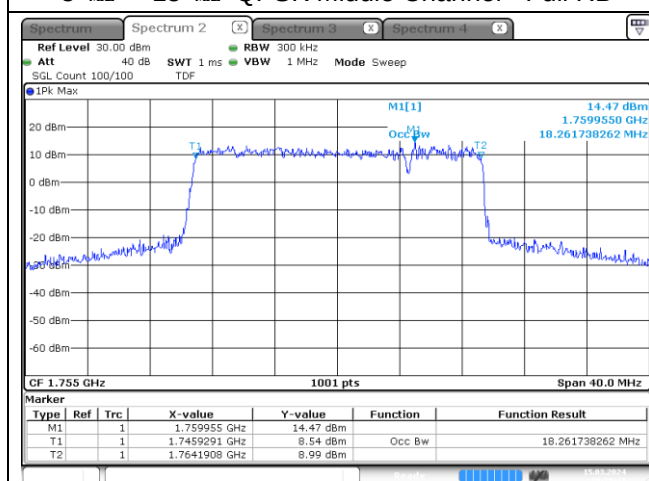
10 MHz + 5 MHz 16QAM Middle Channel - Full RB



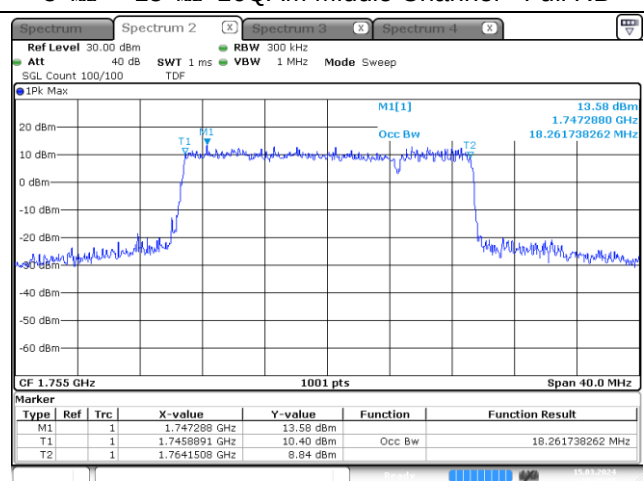
ULCA 66B



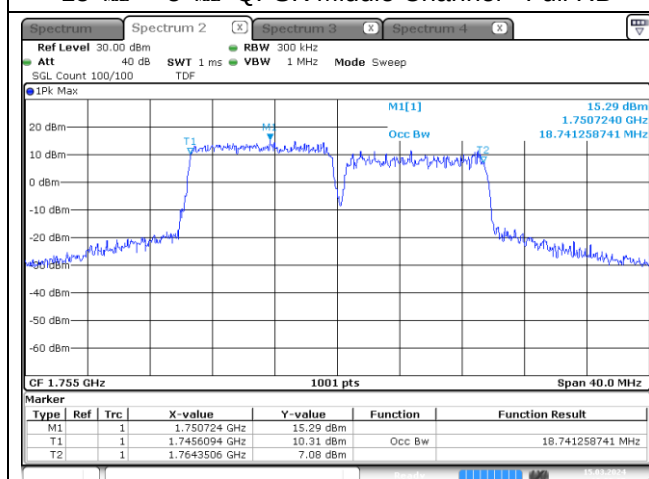
5 MHz + 15 MHz QPSK Middle Channel - Full RB



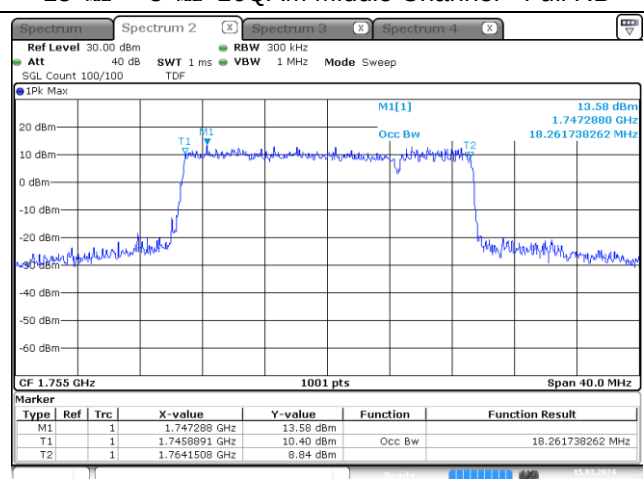
5 MHz + 15 MHz 16QAM Middle Channel - Full RB



15 MHz + 5 MHz QPSK Middle Channel - Full RB



15 MHz + 5 MHz 16QAM Middle Channel - Full RB



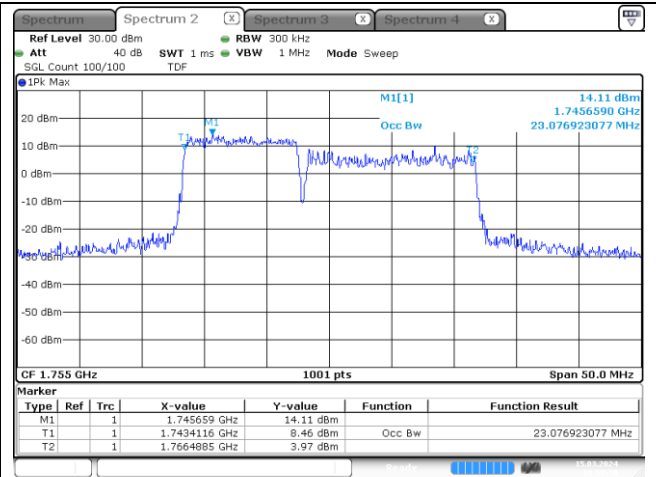
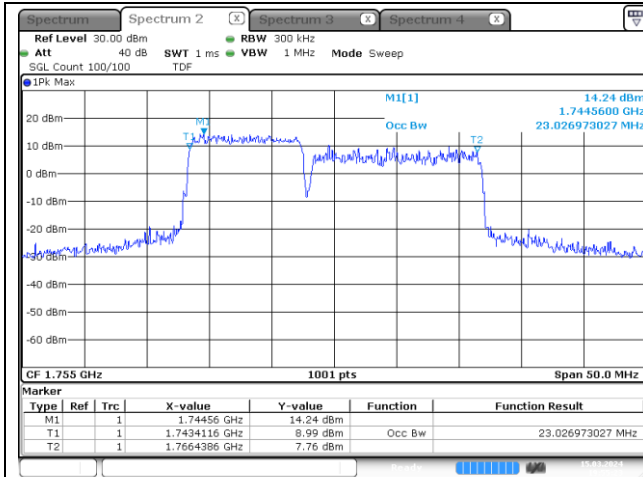
10 MHz + 10 MHz QPSK Middle Channel - Full RB



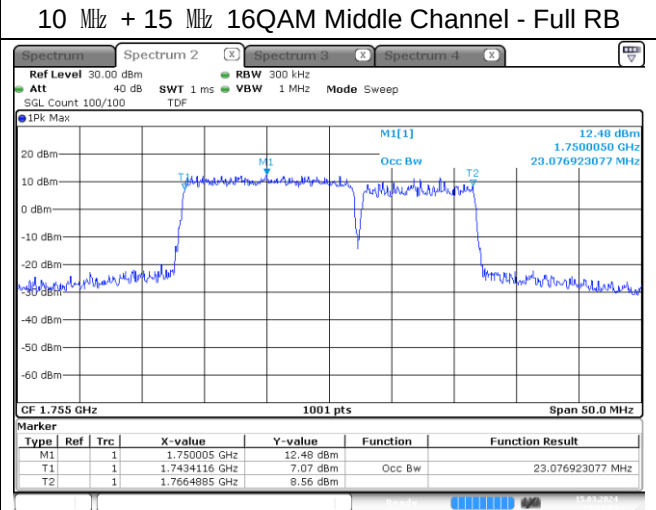
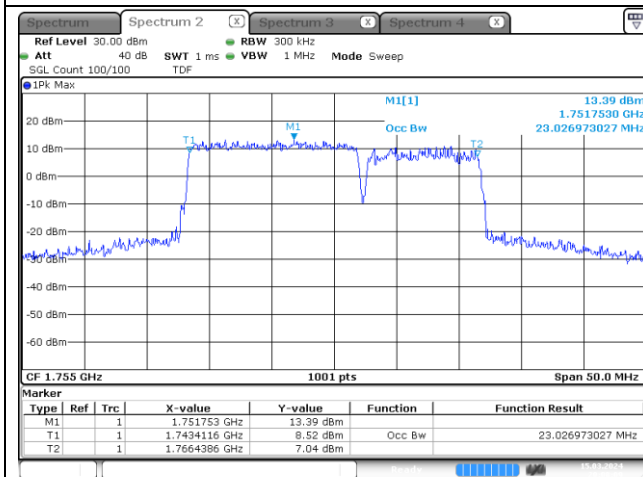
10 MHz + 10 MHz 16QAM Middle Channel - Full RB



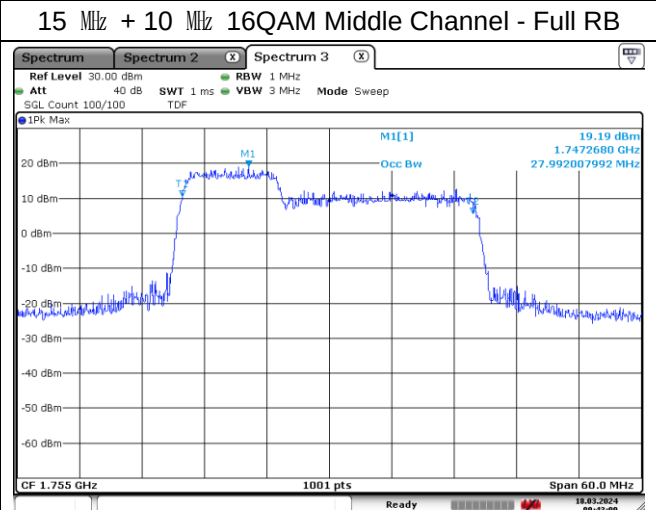
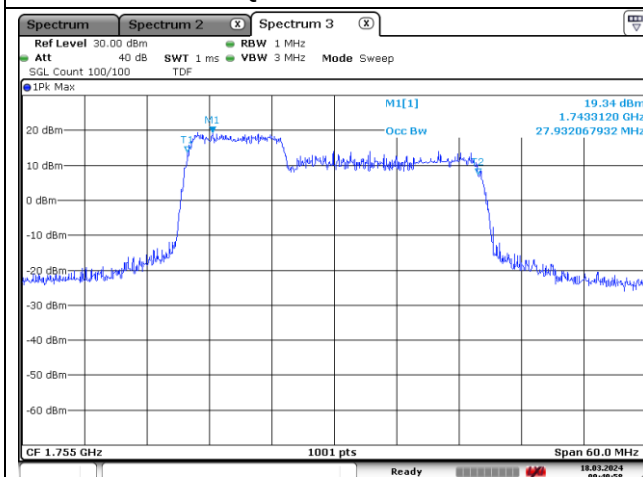
ULCA 66C



10 MHz + 15 MHz QPSK Middle Channel - Full RB



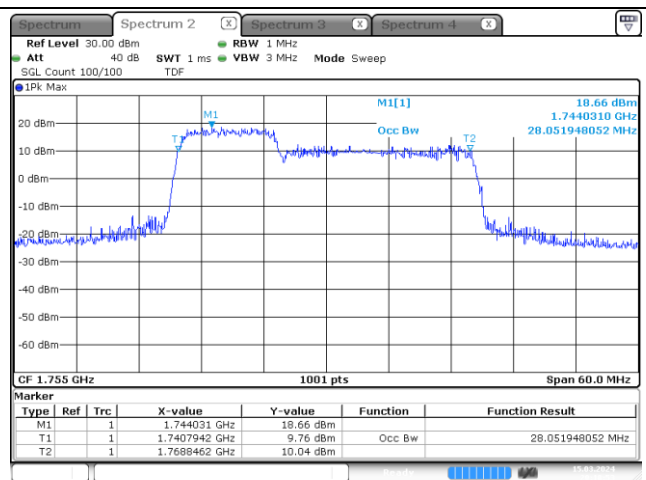
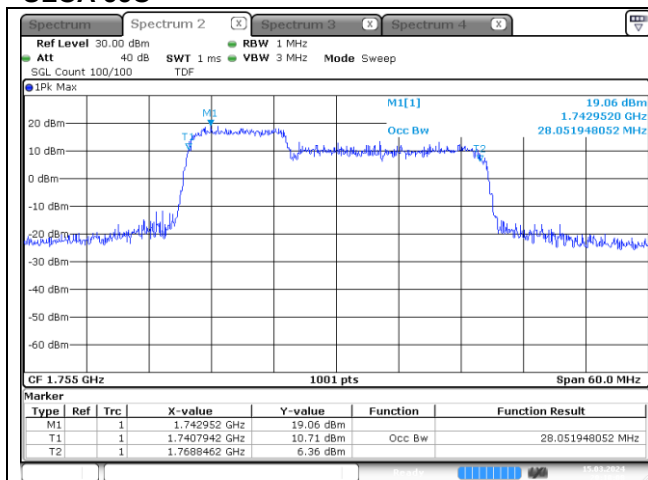
15 MHz + 10 MHz QPSK Middle Channel - Full RB



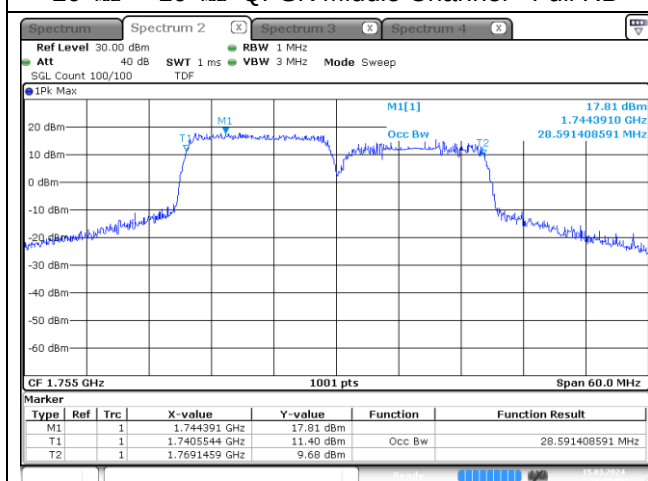
10 MHz + 20 MHz QPSK Middle Channel - Full RB

10 MHz + 20 MHz 16QAM Middle Channel - Full RB

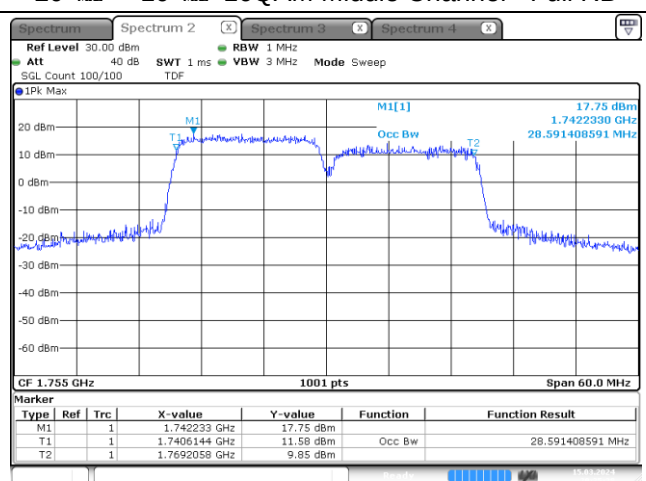
ULCA 66C



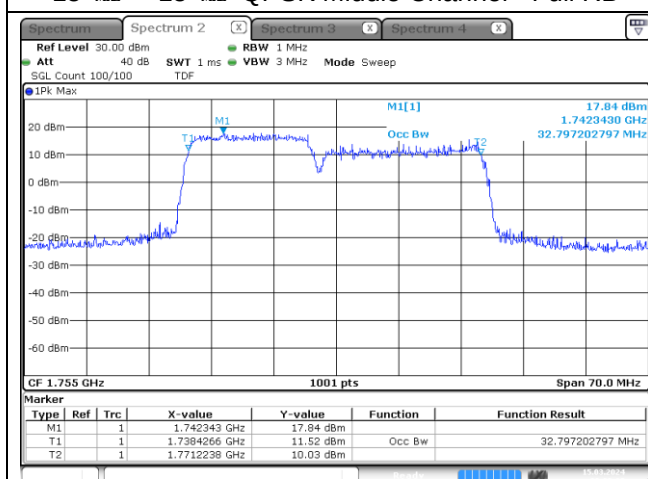
20 MHz + 10 MHz QPSK Middle Channel - Full RB



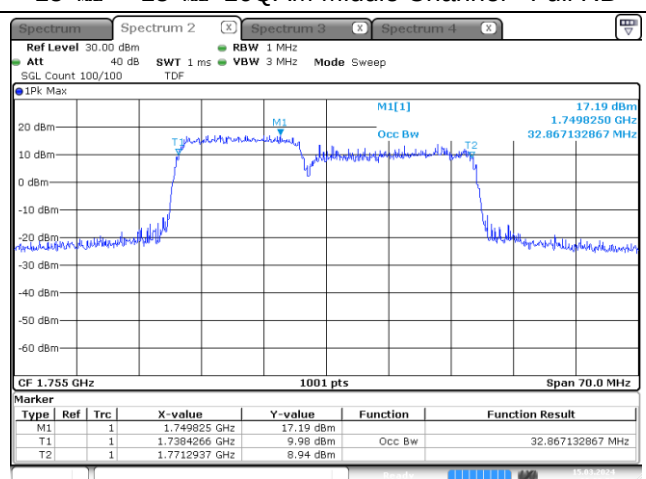
20 MHz + 10 MHz 16QAM Middle Channel - Full RB



15 MHz + 15 MHz QPSK Middle Channel - Full RB



15 MHz + 15 MHz 16QAM Middle Channel - Full RB



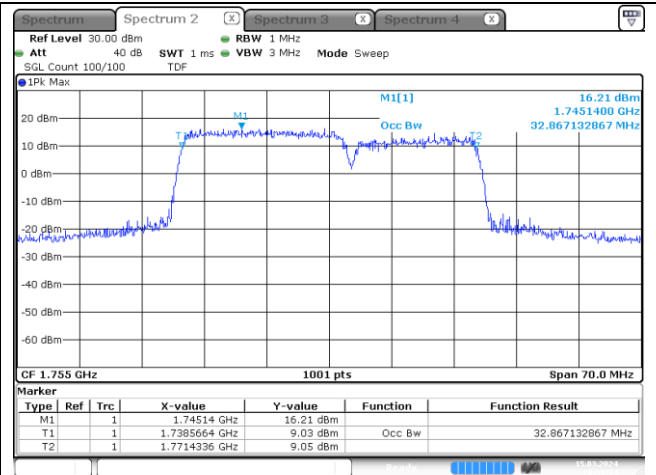
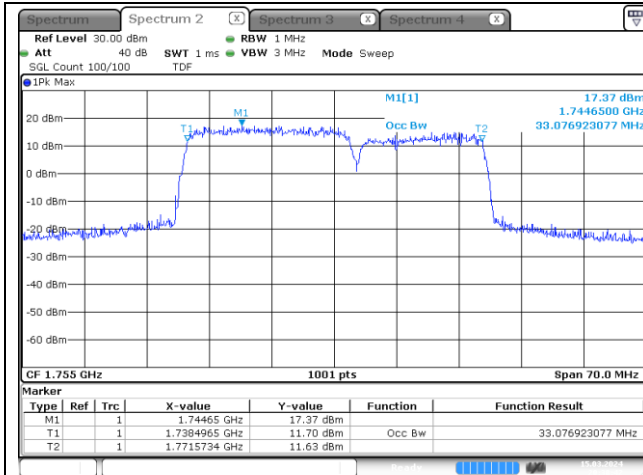
15 MHz + 20 MHz QPSK Middle Channel - Full RB



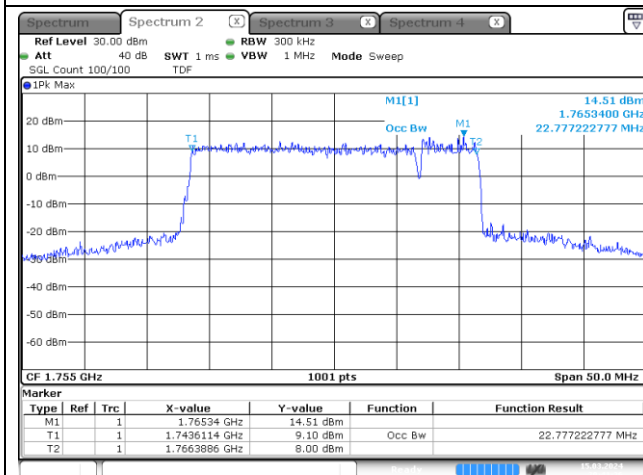
15 MHz + 20 MHz 16QAM Middle Channel - Full RB



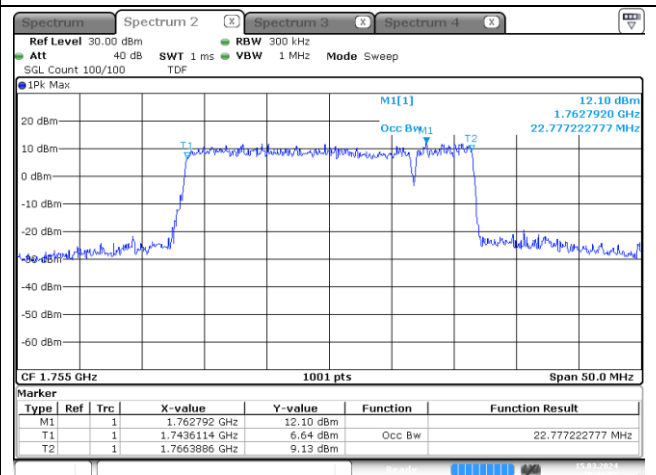
ULCA 66C



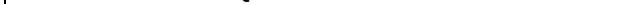
20 MHz + 15 MHz QPSK Middle Channel - Full RB



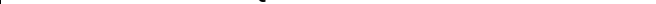
20 MHz + 15 MHz 16QAM Middle Channel - Full RB



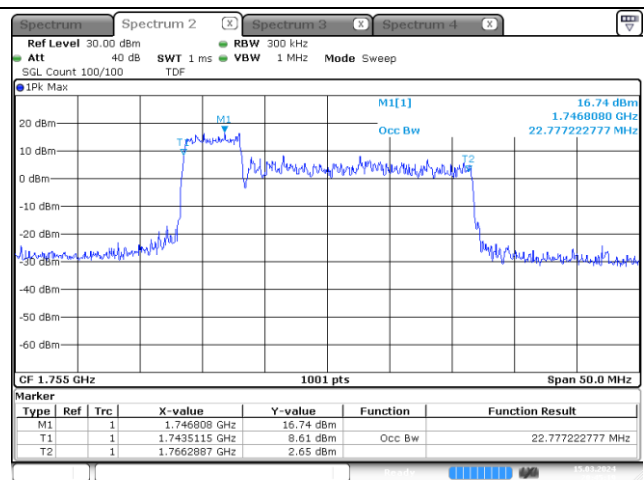
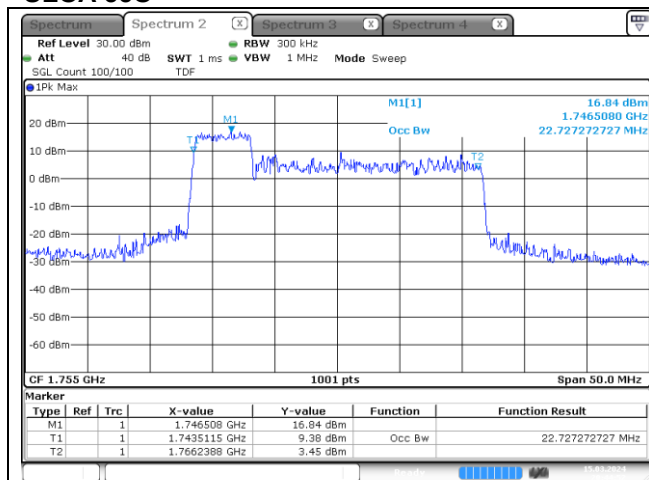
20 MHz + 5 MHz QPSK Middle Channel - Full RB



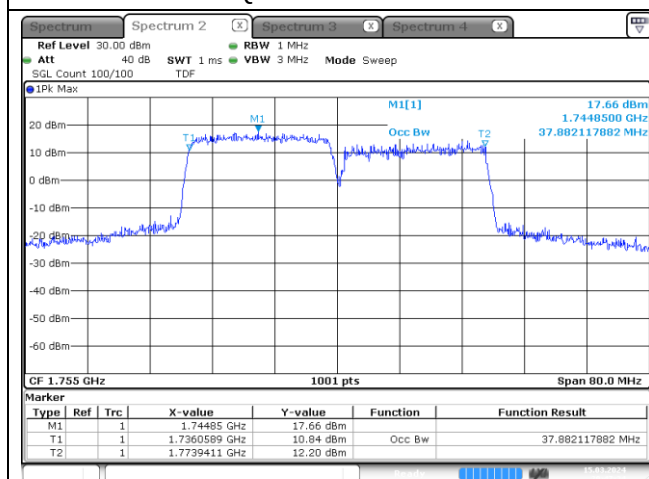
20 MHz + 5 MHz 16QAM Middle Channel - Full RB



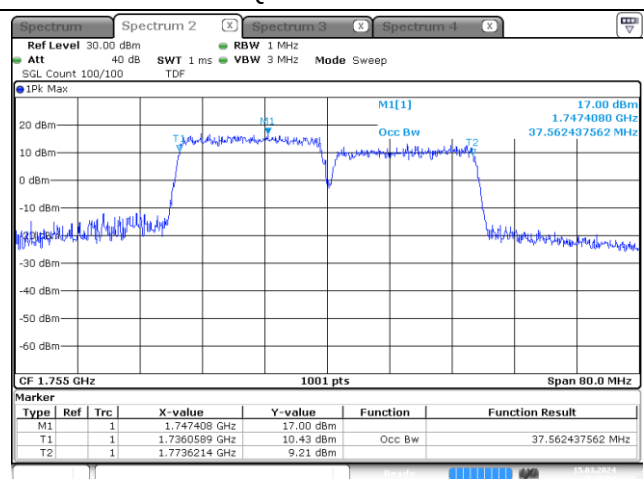
ULCA 66C



5 MHz + 20 MHz QPSK Middle Channel - Full RB



5 MHz + 20 MHz 16QAM Middle Channel - Full RB



20 MHz + 20 MHz QPSK Middle Channel - Full RB



20 MHz + 20 MHz 16QAM Middle Channel - Full RB



5. Peak-Average Ratio

5.1. Limit

- §22.913(d) measurement of the ERP of Cellular base transmitters and repeaters must be made using an average power measurement technique. The peak-to-average ratio (PAR) of the transmission must not exceed 13 dB.

- §24.232(d), power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51. 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.

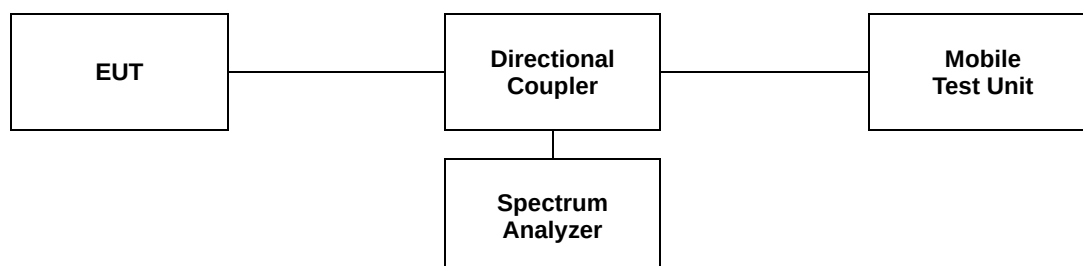
- §27.50(d)(5), power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (d)(6) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

5.2. Test Procedure

The test follows section 5.2.3.4 of ANSI C63.26-2015.

See instrumentation-specific application literature for further guidance regarding use of the CCDF capability. The following guidelines are offered for performing a CCDF measurement.

- a. Set resolution/measurement bandwidth $\geq$ OBW or specified reference bandwidth.
- b. Set the number of counts to a value that stabilizes the measured CCDF curve.
- c. Set the measurement interval as follows:
 - 1) For continuous transmissions, set to greater of $[10 \times (\text{number of points in sweep}) \times (\text{transmission symbol period})]$ or 1 ms.
 - 2) For burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize. Set the measurement interval to a time that is less than or equal to the burst duration.
 - 3) If there are several carriers in a single antenna port, the peak power shall be determined for each individual carrier (by disabling the other carriers while measuring the required carrier) and the total peak power calculated from the sum of the individual carrier peak powers.
- d. Record the maximum PAPR level associated with a probability of 0.1 %.
- e. The peak power level is calculated from the sum of the PAPR value from step d) to the measured average power.



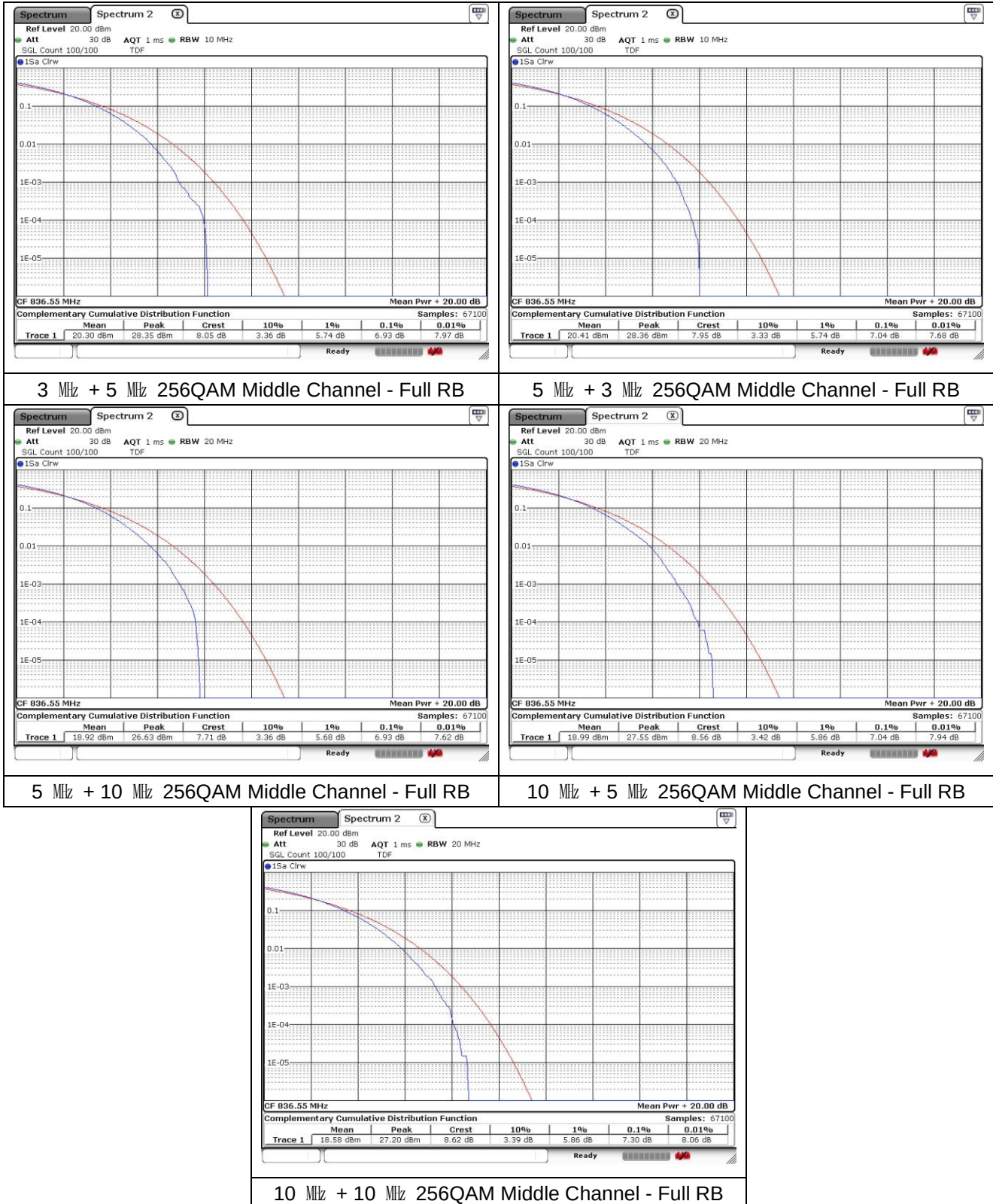
5.3 Test Results

Ambient temperature : (23 ± 1) °C
 Relative humidity : 47 % R.H.

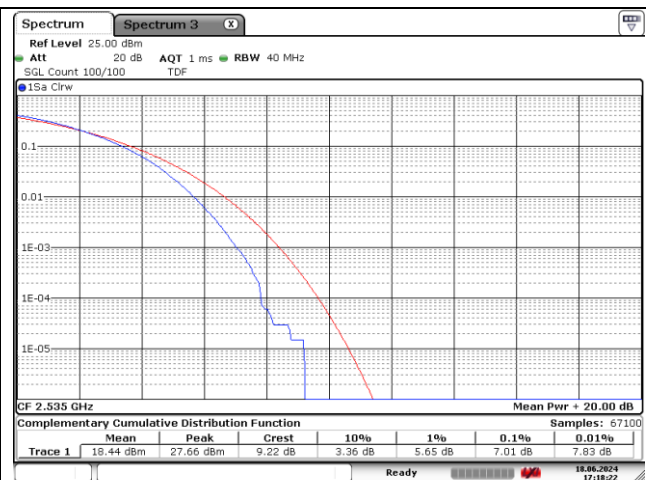
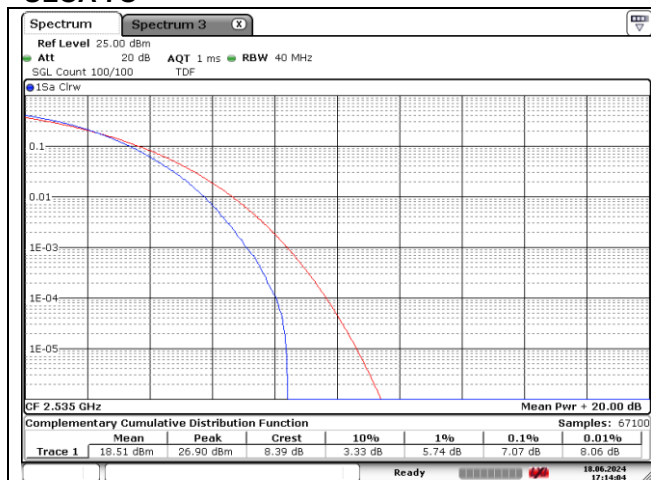
Band	PCC			SCC			PAR (dB)
	BW (MHz)	Frequency (MHz)	Channel	BW (MHz)	Frequency (MHz)	Channel	256QAM
5B	3	834.1	20501	5	838.0	20540	6.93
	5	835.0	20510	3	838.9	20549	7.04
	5	831.8	20478	10	839.0	20550	6.93
	10	834.0	20500	5	841.2	20572	7.04
	10	831.6	20476	10	841.5	20575	7.30
7C	10	2 525.6	21006	20	2 540.0	21150	7.07
	20	2 530.1	21051	10	2 544.5	21195	7.01
	15	2 530.1	21051	15	2 542.1	21171	6.93
	15	2 527.5	21025	10	2 542.5	21175	7.19
	15	2 525.3	21003	20	2 542.4	21174	7.10
	20	2 527.6	21026	15	2 544.7	21197	7.01
	20	2 525.1	21001	20	2 544.9	21199	7.28
12B	5	705.1	23071	5	709.9	23119	7.16
	5	702.8	23048	10	710.0	23120	7.19
41C	5	2 583.8	40528	20	2 595.5	40645	7.19
	20	2 590.5	40595	5	2 602.2	40712	7.13
	10	2 585.9	40549	15	2 597.9	40669	7.19
	15	2 588.1	40571	10	2 600.1	40691	6.67
	10	2 583.6	40526	20	2 598.0	40670	6.84
	20	2 588.1	40571	10	2 602.5	40715	6.84
	15	2 585.5	40545	15	2 600.5	40695	6.84
	15	2 583.3	40523	20	2 600.4	40694	6.93
	20	2 585.6	40546	15	2 602.7	40717	6.81
	20	2 583.1	40521	20	2 602.9	40719	7.10
66B	5	1 752.6	132398	5	1 757.4	132446	7.19
	5	1 750.3	132375	10	1 757.5	132447	7.25
	10	1 752.5	132397	5	1 759.7	132469	7.10
	5	1 748.1	132353	15	1 757.4	132446	7.04
	15	1 752.6	132398	5	1 761.9	132491	7.07
	10	1 750.1	132373	10	1 760.0	132472	7.19
66C	10	1 747.9	132351	15	1 759.9	132471	7.13
	15	1 750.1	132373	10	1 762.1	132493	7.19
	10	1 745.6	132328	20	1 760.0	132472	7.13
	20	1 750.1	132373	10	1 764.5	132517	6.90
	15	1 747.5	132347	15	1 762.5	132497	7.19
	15	1 745.3	132325	20	1 762.4	132496	6.96
	20	1 747.6	132348	15	1 764.7	132519	7.33
	20	1 752.5	132397	5	1 764.2	132514	6.99
	5	1 745.8	132330	20	1 757.5	132447	7.19
	20	1 745.1	132323	20	1 764.9	132521	7.10

- Test plots

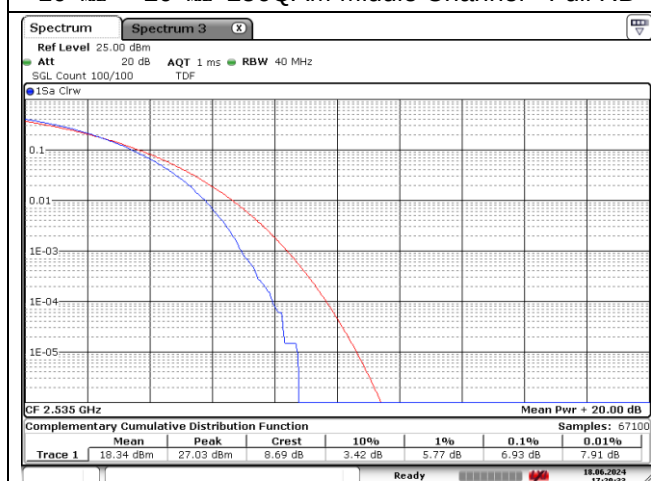
ULCA 5B



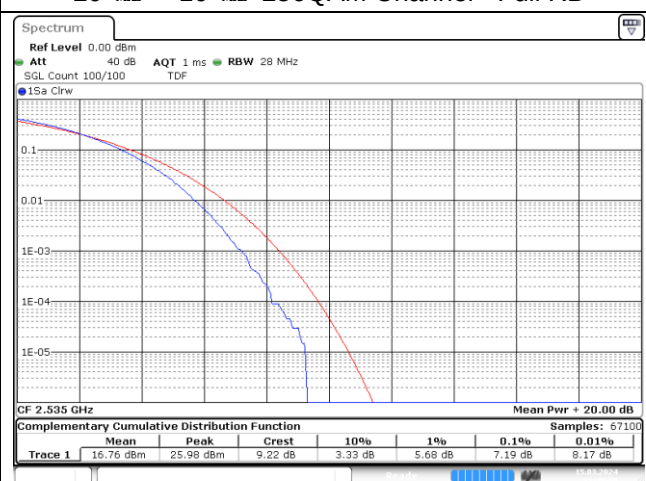
ULCA 7C



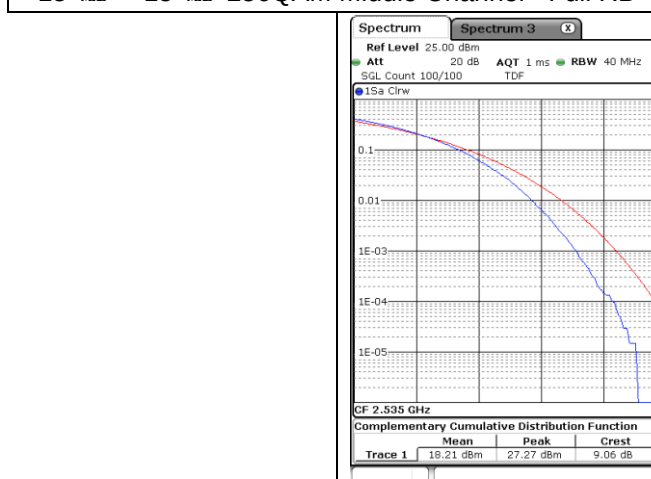
10 MHz + 20 MHz 256QAM Middle Channel - Full RB



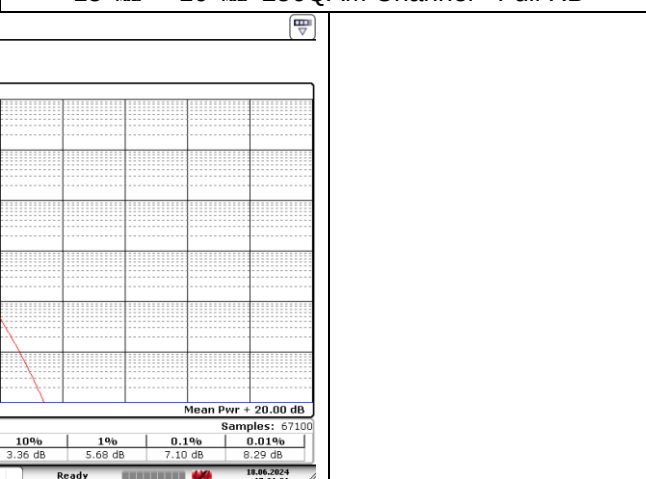
20 MHz + 10 MHz 256QAM Channel - Full RB



15 MHz + 15 MHz 256QAM Middle Channel - Full RB

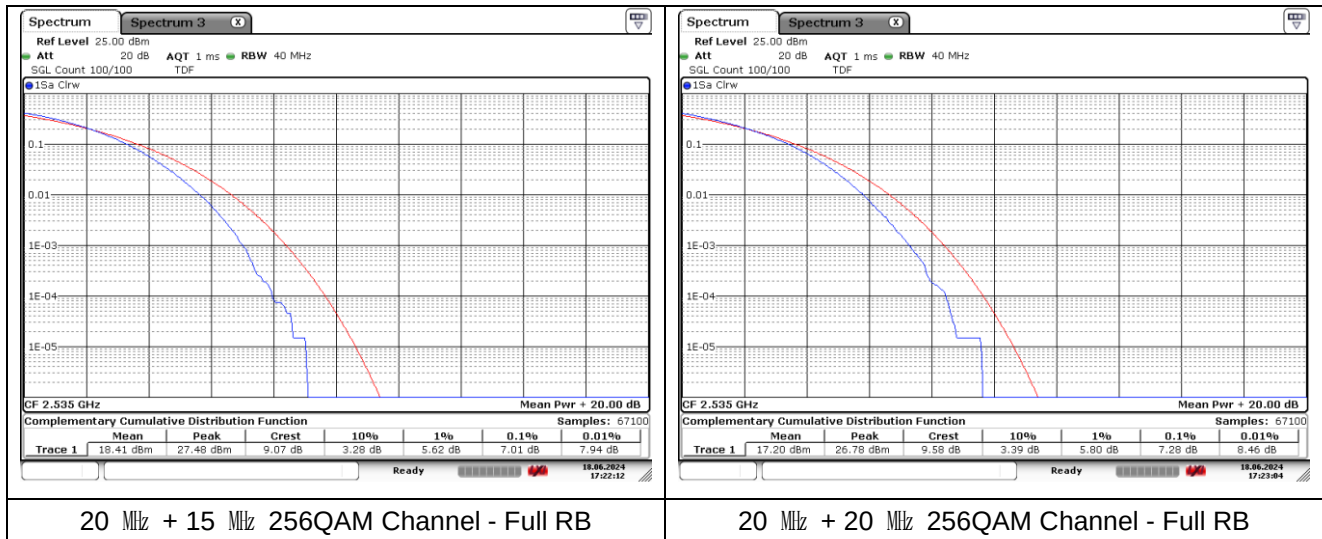


15 MHz + 10 MHz 256QAM Channel - Full RB

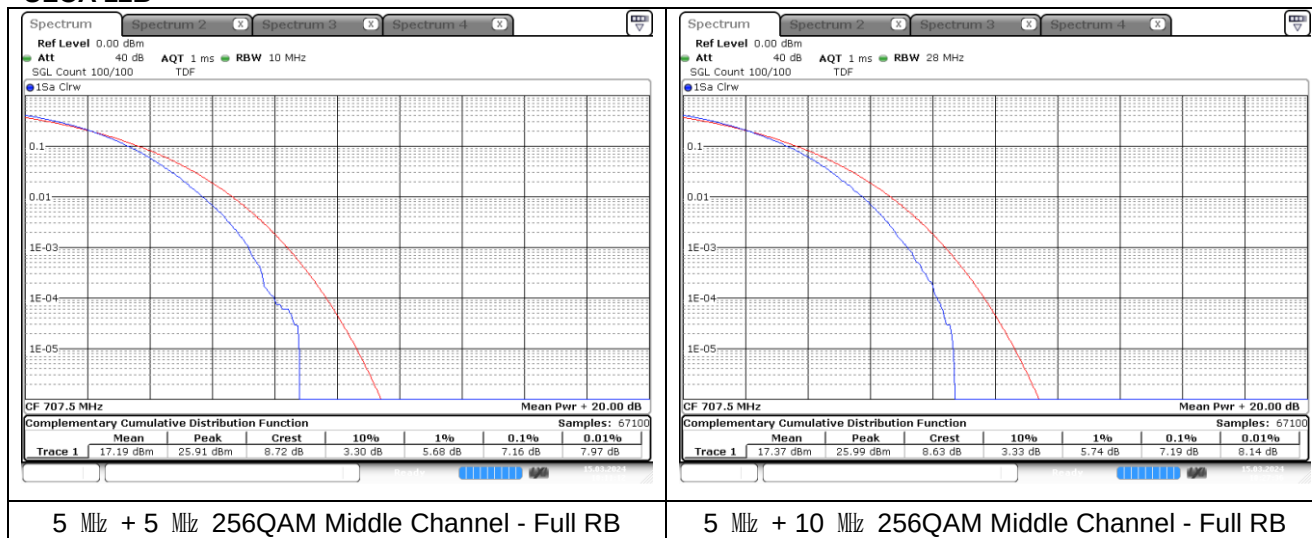


15 MHz + 20 MHz 256QAM Channel - Full RB

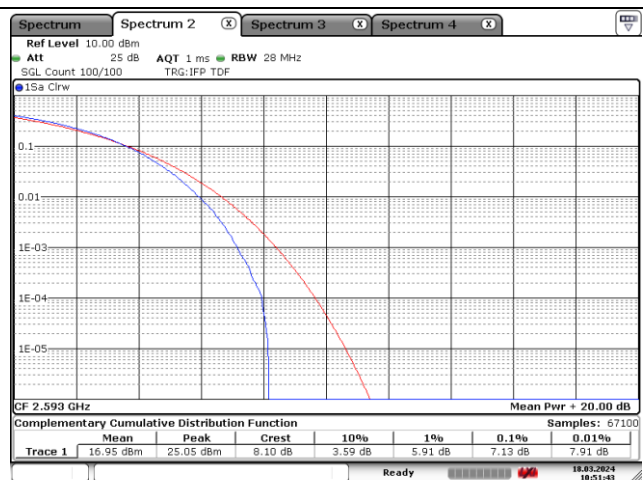
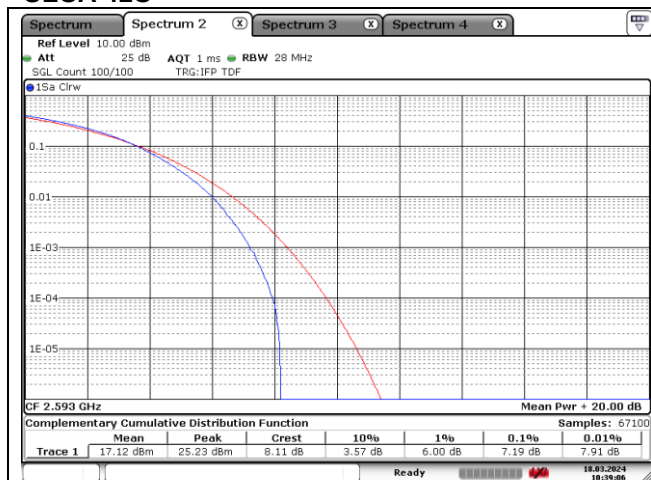




ULCA 12B



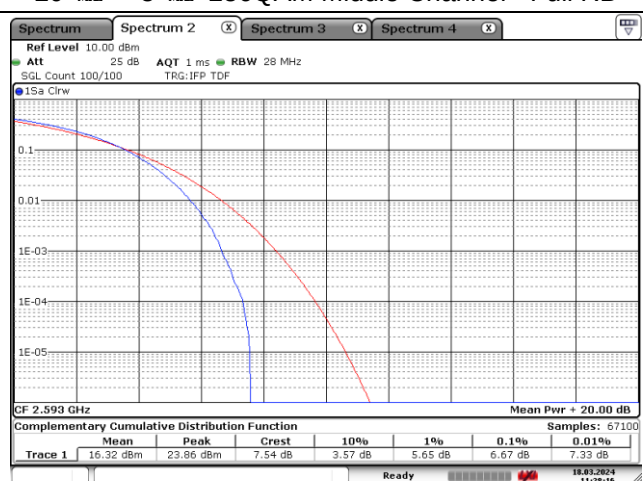
ULCA 41C



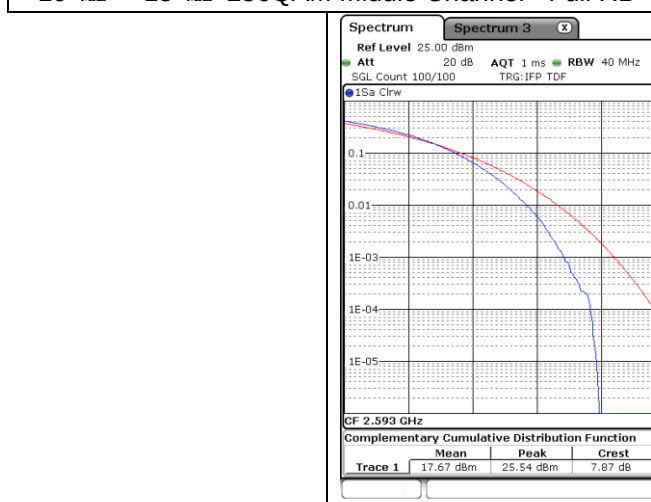
5 MHz + 20 MHz 256QAM Middle Channel - Full RB



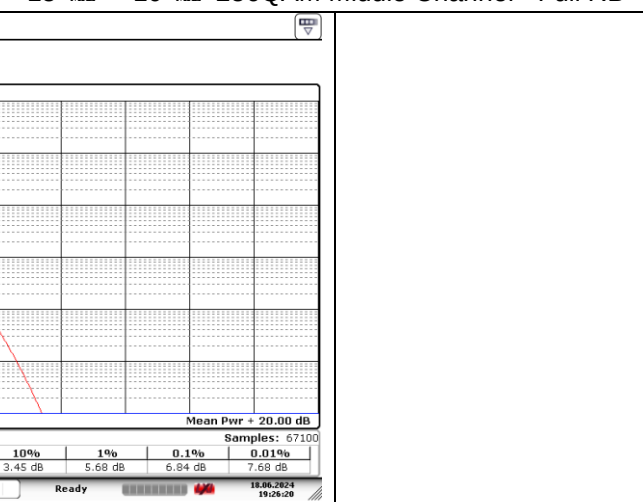
20 MHz + 5 MHz 256QAM Middle Channel - Full RB



10 MHz + 15 MHz 256QAM Middle Channel - Full RB



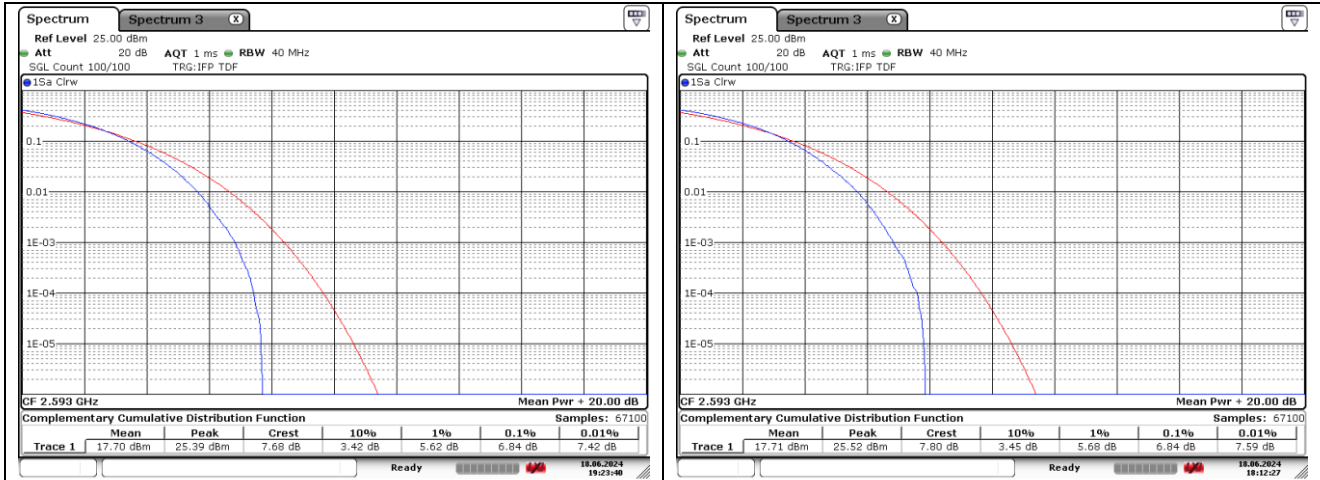
15 MHz + 10 MHz 256QAM Middle Channel - Full RB



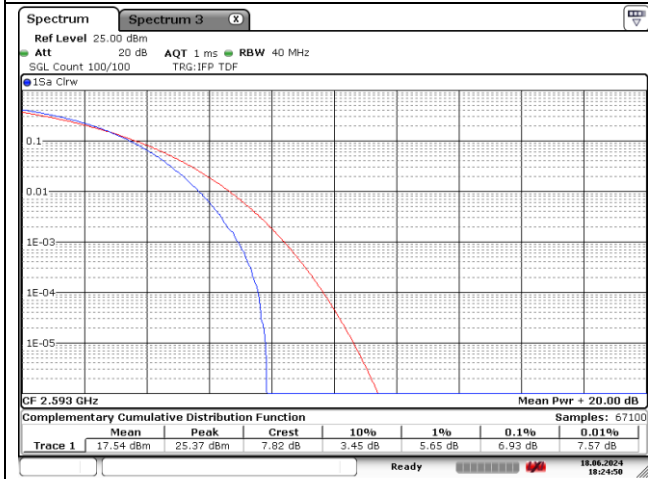
10 MHz + 20 MHz 256QAM Middle Channel - Full RB



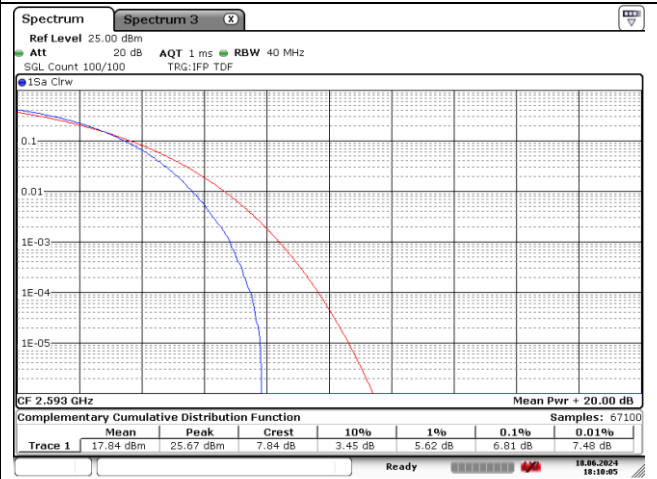
ULCA 41C



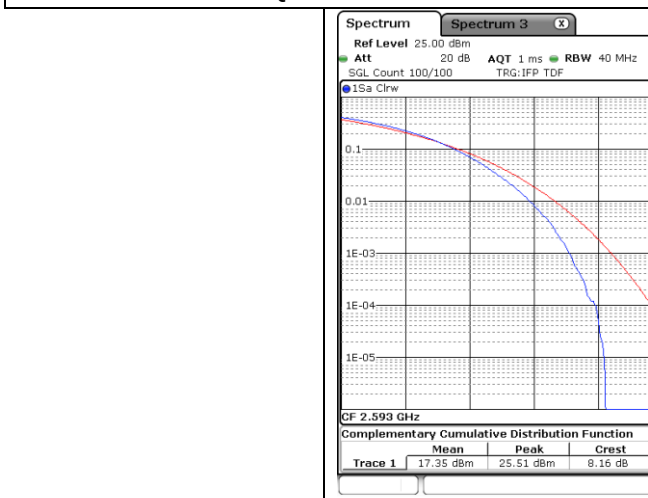
20 MHz + 10 MHz 256QAM Middle Channel - Full RB



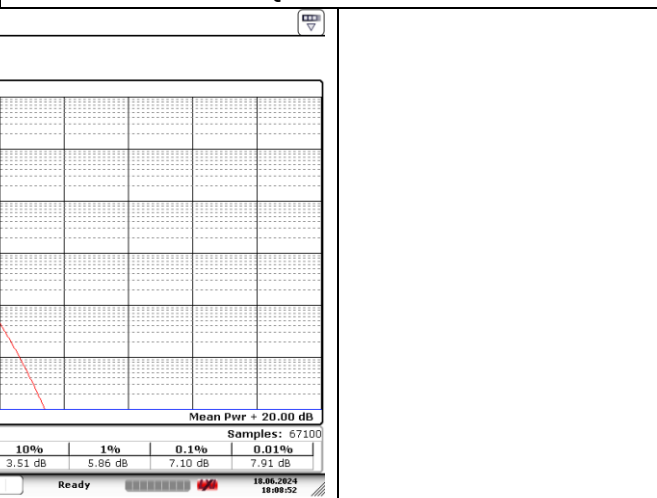
15 MHz + 15 MHz 256QAM Middle Channel - Full RB



15 MHz + 20 MHz 256QAM Middle Channel - Full RB



20 MHz + 15 MHz 256QAM Middle Channel - Full RB



20 MHz + 20 MHz 256QAM Middle Channel - Full RB