

n78L	80	30	3490.02	CP	QPSK	Inner_Full	24.37	25.57
n78L	80	30	3490.02	CP	QPSK	Edge_1RB_Left	21.39	22.59
n78L	80	30	3490.02	CP	QPSK	Edge_1RB_Right	22.20	23.40
n78L	80	30	3490.02	CP	QPSK	Outer_Full	22.41	23.61
n78L	80	30	3490.02	CP	16QAM	Inner_Full	24.35	25.55
n78L	80	30	3490.02	CP	16QAM	Edge_1RB_Left	21.73	22.93
n78L	80	30	3490.02	CP	16QAM	Edge_1RB_Right	22.45	23.65
n78L	80	30	3490.02	CP	16QAM	Outer_Full	22.26	23.46
n78L	80	30	3490.02	CP	64QAM	Inner_Full	23.25	24.45
n78L	80	30	3490.02	CP	64QAM	Edge_1RB_Left	21.32	22.52
n78L	80	30	3490.02	CP	64QAM	Edge_1RB_Right	21.91	23.11
n78L	80	30	3490.02	CP	64QAM	Outer_Full	22.42	23.62
n78L	80	30	3490.02	CP	256QAM	Inner_Full	19.85	21.05
n78L	80	30	3490.02	CP	256QAM	Edge_1RB_Left	19.46	20.66
n78L	80	30	3490.02	CP	256QAM	Edge_1RB_Right	20.29	21.49
n78L	80	30	3490.02	CP	256QAM	Outer_Full	19.51	20.71
n78L	80	30	3500.01	DFT	pi/2 BPSK	Inner_Full	25.58	26.78
n78L	80	30	3500.01	DFT	pi/2 BPSK	Edge_1RB_Left	21.45	22.65
n78L	80	30	3500.01	DFT	pi/2 BPSK	Edge_1RB_Right	22.32	23.52
n78L	80	30	3500.01	DFT	pi/2 BPSK	Outer_Full	24.63	25.83
n78L	80	30	3500.01	DFT	QPSK	Inner_Full	25.62	26.82
n78L	80	30	3500.01	DFT	QPSK	Edge_1RB_Left	22.31	23.51
n78L	80	30	3500.01	DFT	QPSK	Edge_1RB_Right	23.32	24.52
n78L	80	30	3500.01	DFT	QPSK	Outer_Full	25.53	26.73
n78L	80	30	3500.01	DFT	16QAM	Inner_Full	25.55	26.75
n78L	80	30	3500.01	DFT	16QAM	Edge_1RB_Left	22.45	23.65
n78L	80	30	3500.01	DFT	16QAM	Edge_1RB_Right	23.45	24.65
n78L	80	30	3500.01	DFT	16QAM	Outer_Full	25.11	26.31
n78L	80	30	3500.01	DFT	64QAM	Inner_Full	24.50	25.70
n78L	80	30	3500.01	DFT	64QAM	Edge_1RB_Left	21.32	22.52
n78L	80	30	3500.01	DFT	64QAM	Edge_1RB_Right	21.79	22.99
n78L	80	30	3500.01	DFT	64QAM	Outer_Full	24.48	25.68
n78L	80	30	3500.01	DFT	256QAM	Inner_Full	22.65	23.85
n78L	80	30	3500.01	DFT	256QAM	Edge_1RB_Left	20.69	21.89
n78L	80	30	3500.01	DFT	256QAM	Edge_1RB_Right	21.64	22.84
n78L	80	30	3500.01	DFT	256QAM	Outer_Full	22.49	23.69
n78L	80	30	3500.01	CP	QPSK	Inner_Full	24.58	25.78
n78L	80	30	3500.01	CP	QPSK	Edge_1RB_Left	21.34	22.54
n78L	80	30	3500.01	CP	QPSK	Edge_1RB_Right	22.18	23.38
n78L	80	30	3500.01	CP	QPSK	Outer_Full	22.59	23.79
n78L	80	30	3500.01	CP	16QAM	Inner_Full	24.61	25.81

n78L	80	30	3500.01	CP	16QAM	Edge_1RB_Left	21.50	22.70
n78L	80	30	3500.01	CP	16QAM	Edge_1RB_Right	22.40	23.60
n78L	80	30	3500.01	CP	16QAM	Outer_Full	22.61	23.81
n78L	80	30	3500.01	CP	64QAM	Inner_Full	23.56	24.76
n78L	80	30	3500.01	CP	64QAM	Edge_1RB_Left	21.33	22.53
n78L	80	30	3500.01	CP	64QAM	Edge_1RB_Right	21.91	23.11
n78L	80	30	3500.01	CP	64QAM	Outer_Full	22.49	23.69
n78L	80	30	3500.01	CP	256QAM	Inner_Full	20.01	21.21
n78L	80	30	3500.01	CP	256QAM	Edge_1RB_Left	19.29	20.49
n78L	80	30	3500.01	CP	256QAM	Edge_1RB_Right	20.28	21.48
n78L	80	30	3500.01	CP	256QAM	Outer_Full	19.55	20.75
n78L	80	30	3510	DFT	pi/2 BPSK	Inner_Full	25.67	26.87
n78L	80	30	3510	DFT	pi/2 BPSK	Edge_1RB_Left	21.36	22.56
n78L	80	30	3510	DFT	pi/2 BPSK	Edge_1RB_Right	22.16	23.36
n78L	80	30	3510	DFT	pi/2 BPSK	Outer_Full	24.60	25.80
n78L	80	30	3510	DFT	QPSK	Inner_Full	25.71	26.91
n78L	80	30	3510	DFT	QPSK	Edge_1RB_Left	22.27	23.47
n78L	80	30	3510	DFT	QPSK	Edge_1RB_Right	23.07	24.27
n78L	80	30	3510	DFT	QPSK	Outer_Full	25.63	26.83
n78L	80	30	3510	DFT	16QAM	Inner_Full	25.65	26.85
n78L	80	30	3510	DFT	16QAM	Edge_1RB_Left	22.40	23.60
n78L	80	30	3510	DFT	16QAM	Edge_1RB_Right	23.12	24.32
n78L	80	30	3510	DFT	16QAM	Outer_Full	25.09	26.29
n78L	80	30	3510	DFT	64QAM	Inner_Full	24.77	25.97
n78L	80	30	3510	DFT	64QAM	Edge_1RB_Left	21.35	22.55
n78L	80	30	3510	DFT	64QAM	Edge_1RB_Right	21.65	22.85
n78L	80	30	3510	DFT	64QAM	Outer_Full	24.61	25.81
n78L	80	30	3510	DFT	256QAM	Inner_Full	22.76	23.96
n78L	80	30	3510	DFT	256QAM	Edge_1RB_Left	20.70	21.90
n78L	80	30	3510	DFT	256QAM	Edge_1RB_Right	21.50	22.70
n78L	80	30	3510	DFT	256QAM	Outer_Full	22.61	23.81
n78L	80	30	3510	CP	QPSK	Inner_Full	24.68	25.88
n78L	80	30	3510	CP	QPSK	Edge_1RB_Left	21.44	22.64
n78L	80	30	3510	CP	QPSK	Edge_1RB_Right	22.00	23.20
n78L	80	30	3510	CP	QPSK	Outer_Full	22.57	23.77
n78L	80	30	3510	CP	16QAM	Inner_Full	24.69	25.89
n78L	80	30	3510	CP	16QAM	Edge_1RB_Left	21.48	22.68
n78L	80	30	3510	CP	16QAM	Edge_1RB_Right	22.31	23.51
n78L	80	30	3510	CP	16QAM	Outer_Full	22.60	23.80
n78L	80	30	3510	CP	64QAM	Inner_Full	23.67	24.87
n78L	80	30	3510	CP	64QAM	Edge_1RB_Left	21.31	22.51

n78L	80	30	3510	CP	64QAM	Edge_1RB_Right	21.64	22.84
n78L	80	30	3510	CP	64QAM	Outer_Full	22.54	23.74
n78L	80	30	3510	CP	256QAM	Inner_Full	20.23	21.43
n78L	80	30	3510	CP	256QAM	Edge_1RB_Left	19.25	20.45
n78L	80	30	3510	CP	256QAM	Edge_1RB_Right	19.88	21.08
n78L	80	30	3510	CP	256QAM	Outer_Full	19.68	20.88
n78L	90	30	3495	DFT	pi/2 BPSK	Inner_Full	25.38	26.58
n78L	90	30	3495	DFT	pi/2 BPSK	Edge_1RB_Left	21.54	22.74
n78L	90	30	3495	DFT	pi/2 BPSK	Edge_1RB_Right	22.29	23.49
n78L	90	30	3495	DFT	pi/2 BPSK	Outer_Full	24.52	25.72
n78L	90	30	3495	DFT	QPSK	Inner_Full	25.42	26.62
n78L	90	30	3495	DFT	QPSK	Edge_1RB_Left	22.52	23.72
n78L	90	30	3495	DFT	QPSK	Edge_1RB_Right	23.28	24.48
n78L	90	30	3495	DFT	QPSK	Outer_Full	25.41	26.61
n78L	90	30	3495	DFT	16QAM	Inner_Full	25.40	26.60
n78L	90	30	3495	DFT	16QAM	Edge_1RB_Left	22.79	23.99
n78L	90	30	3495	DFT	16QAM	Edge_1RB_Right	23.42	24.62
n78L	90	30	3495	DFT	16QAM	Outer_Full	24.96	26.16
n78L	90	30	3495	DFT	64QAM	Inner_Full	24.50	25.70
n78L	90	30	3495	DFT	64QAM	Edge_1RB_Left	21.32	22.52
n78L	90	30	3495	DFT	64QAM	Edge_1RB_Right	21.86	23.06
n78L	90	30	3495	DFT	64QAM	Outer_Full	24.48	25.68
n78L	90	30	3495	DFT	256QAM	Inner_Full	22.45	23.65
n78L	90	30	3495	DFT	256QAM	Edge_1RB_Left	20.94	22.14
n78L	90	30	3495	DFT	256QAM	Edge_1RB_Right	21.69	22.89
n78L	90	30	3495	DFT	256QAM	Outer_Full	22.50	23.70
n78L	90	30	3495	CP	QPSK	Inner_Full	24.46	25.66
n78L	90	30	3495	CP	QPSK	Edge_1RB_Left	21.40	22.60
n78L	90	30	3495	CP	QPSK	Edge_1RB_Right	22.21	23.41
n78L	90	30	3495	CP	QPSK	Outer_Full	22.65	23.85
n78L	90	30	3495	CP	16QAM	Inner_Full	24.38	25.58
n78L	90	30	3495	CP	16QAM	Edge_1RB_Left	21.75	22.95
n78L	90	30	3495	CP	16QAM	Edge_1RB_Right	22.51	23.71
n78L	90	30	3495	CP	16QAM	Outer_Full	22.49	23.69
n78L	90	30	3495	CP	64QAM	Inner_Full	23.49	24.69
n78L	90	30	3495	CP	64QAM	Edge_1RB_Left	21.31	22.51
n78L	90	30	3495	CP	64QAM	Edge_1RB_Right	21.86	23.06
n78L	90	30	3495	CP	64QAM	Outer_Full	22.53	23.73
n78L	90	30	3495	CP	256QAM	Inner_Full	19.94	21.14
n78L	90	30	3495	CP	256QAM	Edge_1RB_Left	19.44	20.64
n78L	90	30	3495	CP	256QAM	Edge_1RB_Right	20.04	21.24

n78L	90	30	3495	CP	256QAM	Outer_Full	19.54	20.74
n78L	90	30	3500.01	DFT	pi/2 BPSK	Inner_Full	25.57	26.77
n78L	90	30	3500.01	DFT	pi/2 BPSK	Edge_1RB_Left	22.01	23.21
n78L	90	30	3500.01	DFT	pi/2 BPSK	Edge_1RB_Right	22.27	23.47
n78L	90	30	3500.01	DFT	pi/2 BPSK	Outer_Full	24.43	25.63
n78L	90	30	3500.01	DFT	QPSK	Inner_Full	25.48	26.68
n78L	90	30	3500.01	DFT	QPSK	Edge_1RB_Left	22.95	24.15
n78L	90	30	3500.01	DFT	QPSK	Edge_1RB_Right	23.25	24.45
n78L	90	30	3500.01	DFT	QPSK	Outer_Full	25.55	26.75
n78L	90	30	3500.01	DFT	16QAM	Inner_Full	25.45	26.65
n78L	90	30	3500.01	DFT	16QAM	Edge_1RB_Left	23.14	24.34
n78L	90	30	3500.01	DFT	16QAM	Edge_1RB_Right	23.29	24.49
n78L	90	30	3500.01	DFT	16QAM	Outer_Full	24.91	26.11
n78L	90	30	3500.01	DFT	64QAM	Inner_Full	24.49	25.69
n78L	90	30	3500.01	DFT	64QAM	Edge_1RB_Left	21.37	22.57
n78L	90	30	3500.01	DFT	64QAM	Edge_1RB_Right	21.75	22.95
n78L	90	30	3500.01	DFT	64QAM	Outer_Full	24.54	25.74
n78L	90	30	3500.01	DFT	256QAM	Inner_Full	22.52	23.72
n78L	90	30	3500.01	DFT	256QAM	Edge_1RB_Left	21.31	22.51
n78L	90	30	3500.01	DFT	256QAM	Edge_1RB_Right	21.55	22.75
n78L	90	30	3500.01	DFT	256QAM	Outer_Full	22.60	23.80
n78L	90	30	3500.01	CP	QPSK	Inner_Full	24.39	25.59
n78L	90	30	3500.01	CP	QPSK	Edge_1RB_Left	21.81	23.01
n78L	90	30	3500.01	CP	QPSK	Edge_1RB_Right	22.16	23.36
n78L	90	30	3500.01	CP	QPSK	Outer_Full	22.55	23.75
n78L	90	30	3500.01	CP	16QAM	Inner_Full	24.48	25.68
n78L	90	30	3500.01	CP	16QAM	Edge_1RB_Left	22.21	23.41
n78L	90	30	3500.01	CP	16QAM	Edge_1RB_Right	22.68	23.88
n78L	90	30	3500.01	CP	16QAM	Outer_Full	22.61	23.81
n78L	90	30	3500.01	CP	64QAM	Inner_Full	23.60	24.80
n78L	90	30	3500.01	CP	64QAM	Edge_1RB_Left	21.64	22.84
n78L	90	30	3500.01	CP	64QAM	Edge_1RB_Right	21.85	23.05
n78L	90	30	3500.01	CP	64QAM	Outer_Full	22.60	23.80
n78L	90	30	3500.01	CP	256QAM	Inner_Full	19.98	21.18
n78L	90	30	3500.01	CP	256QAM	Edge_1RB_Left	19.89	21.09
n78L	90	30	3500.01	CP	256QAM	Edge_1RB_Right	20.28	21.48
n78L	90	30	3500.01	CP	256QAM	Outer_Full	19.66	20.86
n78L	90	30	3504.99	DFT	pi/2 BPSK	Inner_Full	25.76	26.96
n78L	90	30	3504.99	DFT	pi/2 BPSK	Edge_1RB_Left	21.33	22.53
n78L	90	30	3504.99	DFT	pi/2 BPSK	Edge_1RB_Right	22.14	23.34
n78L	90	30	3504.99	DFT	pi/2 BPSK	Outer_Full	24.56	25.76

n78L	90	30	3504.99	DFT	QPSK	Inner_Full	25.63	26.83
n78L	90	30	3504.99	DFT	QPSK	Edge_1RB_Left	22.30	23.50
n78L	90	30	3504.99	DFT	QPSK	Edge_1RB_Right	23.13	24.33
n78L	90	30	3504.99	DFT	QPSK	Outer_Full	25.59	26.79
n78L	90	30	3504.99	DFT	16QAM	Inner_Full	25.68	26.88
n78L	90	30	3504.99	DFT	16QAM	Edge_1RB_Left	22.50	23.70
n78L	90	30	3504.99	DFT	16QAM	Edge_1RB_Right	23.44	24.64
n78L	90	30	3504.99	DFT	16QAM	Outer_Full	25.12	26.32
n78L	90	30	3504.99	DFT	64QAM	Inner_Full	24.73	25.93
n78L	90	30	3504.99	DFT	64QAM	Edge_1RB_Left	21.36	22.56
n78L	90	30	3504.99	DFT	64QAM	Edge_1RB_Right	21.63	22.83
n78L	90	30	3504.99	DFT	64QAM	Outer_Full	24.57	25.77
n78L	90	30	3504.99	DFT	256QAM	Inner_Full	22.64	23.84
n78L	90	30	3504.99	DFT	256QAM	Edge_1RB_Left	20.53	21.73
n78L	90	30	3504.99	DFT	256QAM	Edge_1RB_Right	21.49	22.69
n78L	90	30	3504.99	DFT	256QAM	Outer_Full	22.47	23.67
n78L	90	30	3504.99	CP	QPSK	Inner_Full	24.67	25.87
n78L	90	30	3504.99	CP	QPSK	Edge_1RB_Left	21.33	22.53
n78L	90	30	3504.99	CP	QPSK	Edge_1RB_Right	21.98	23.18
n78L	90	30	3504.99	CP	QPSK	Outer_Full	22.53	23.73
n78L	90	30	3504.99	CP	16QAM	Inner_Full	24.38	25.58
n78L	90	30	3504.99	CP	16QAM	Edge_1RB_Left	21.61	22.81
n78L	90	30	3504.99	CP	16QAM	Edge_1RB_Right	22.43	23.63
n78L	90	30	3504.99	CP	16QAM	Outer_Full	22.56	23.76
n78L	90	30	3504.99	CP	64QAM	Inner_Full	23.75	24.95
n78L	90	30	3504.99	CP	64QAM	Edge_1RB_Left	21.36	22.56
n78L	90	30	3504.99	CP	64QAM	Edge_1RB_Right	21.72	22.92
n78L	90	30	3504.99	CP	64QAM	Outer_Full	22.61	23.81
n78L	90	30	3504.99	CP	256QAM	Inner_Full	20.18	21.38
n78L	90	30	3504.99	CP	256QAM	Edge_1RB_Left	19.25	20.45
n78L	90	30	3504.99	CP	256QAM	Edge_1RB_Right	19.95	21.15
n78L	90	30	3504.99	CP	256QAM	Outer_Full	19.67	20.87

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 0.764$  dB,  $k = 2$ .

## A.2 Emission Limit

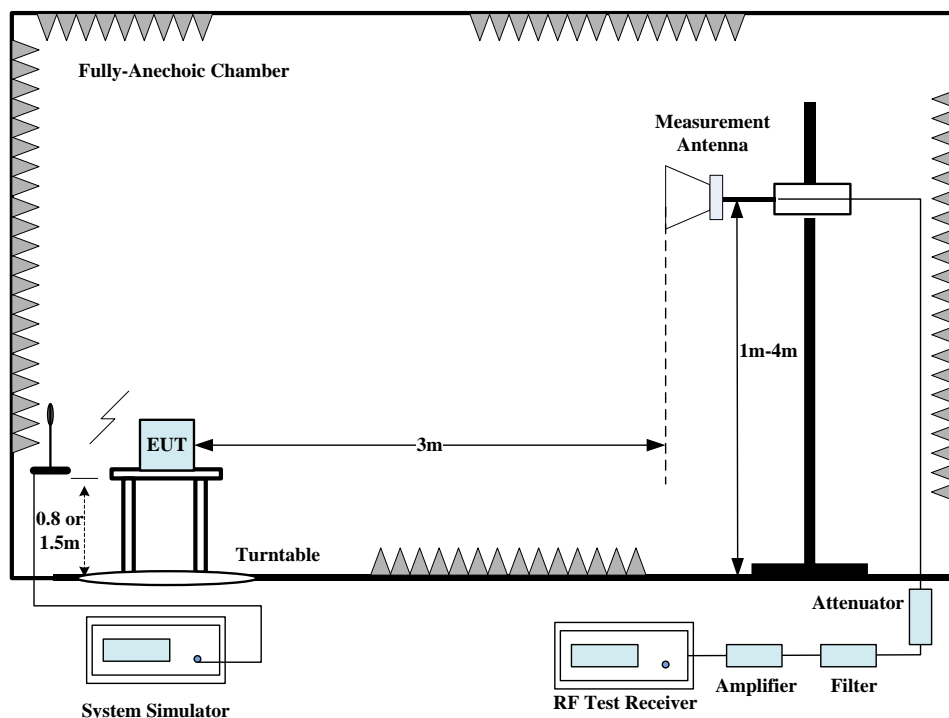
### **A.2.1 Measurement Method**

The measurement procedures in TIA-603E-2016 are used.

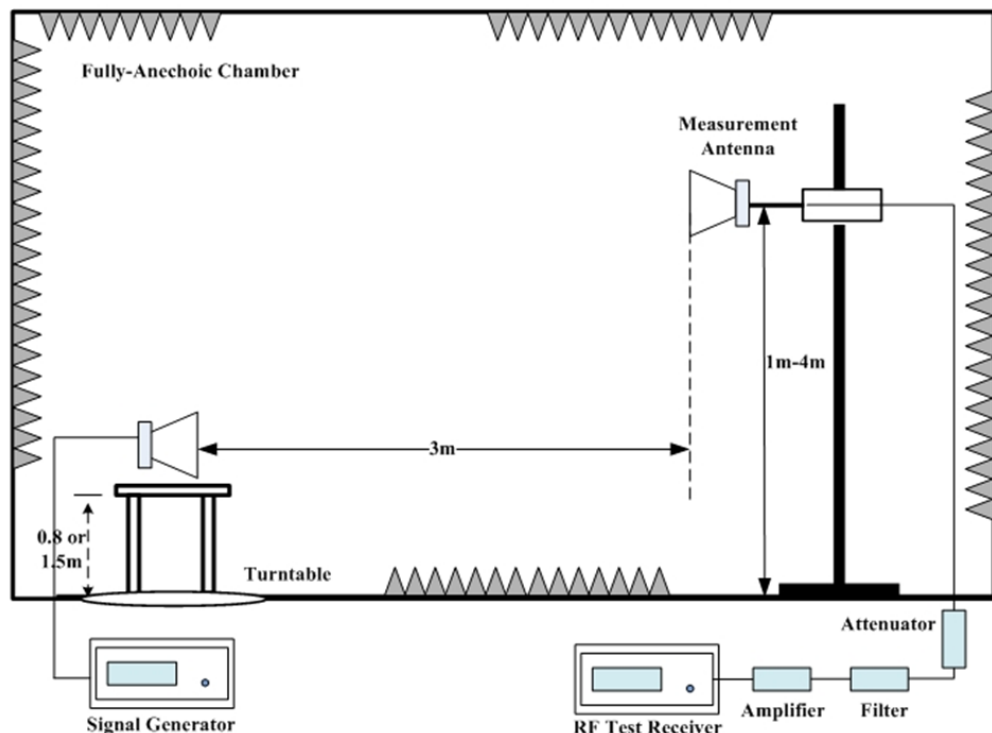
The spectrum was scanned from 30 MHz to the lower of the 10th harmonic of the highest fundamental frequency and 40GHz. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of each NR Band.

#### **The procedure of radiated spurious emissions is as follows:**

For measurements performed at frequencies less than or equal to 1 GHz, the EUT was placed on a 80cm-high non-conductive support; For measurements performed at frequencies above 1GHz,EUT was placed on a 1.5-meter-high non-conductive support. A measurement antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. In the initial test, the height of the measurement antenna was varied from 1 m to 4 m for the relative positioning that produces the maximum radiated signal level. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic were measured with peak detector.



1. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
2. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.



In the chamber, a substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. The height of measurement antenna varied between 1 m to 4 m to maximize the received signal amplitude for each emission that was detected and measured in the initial test. A power ( $P_{Mea}$ ) is applied to the input of the substitution antenna and adjusts the level of the signal generator output until the value of the receiver reach the previously recorded ( $P_r$ ). The power of signal source ( $P_{Mea}$ ) is recorded. The test was performed with the measurement antenna in both vertical and horizontal polarization.

3. The Path loss ( $P_{pl}$ ) between the Signal Source and the Substitution Antenna and the Substitution Antenna Gain ( $G_a$ ) were recorded after test. A amplifier was connected in for the test. The Path loss ( $P_{pl}$ ) is the summation of the cable loss and the gain of the amplifier.
4. The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{Mea} - P_{pl} + G_a$$

This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole,  $ERP = EIRP - 2.15\text{dBi}$ .

### A.2.2 Measurement Limit

NR n5: Part 22.917 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power ( $P$ ) by a factor of at least  $43 + 10 \log(P)$  dB.

NR n7/41: Part 27.53(m) specifies for mobile digital stations, the attenuation factor shall be not less than  $40 + 10 \log(P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log(P)$  dB on all frequencies between 5 megahertz and X megahertz

from the channel edge, and  $55 + 10 \log (P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than  $43 + 10 \log (P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log (P)$  dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

NR n2/25: Part 24.238 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.

NR n4/66: Part 27.53(h) specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.

NR n71: Part 27.53(g) states for operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log (P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

### **A.2.3 Measurement Results**

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of each NR Band. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of each NR Band into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this. The range of evaluated frequency is from 30MHz to 40GHz.

Note 1: All EN-DC UL bands have been tested, but only the worst cases were reported in this report.

Note 2: Both of Vertical and Horizontal polarizations are evaluated, but only the worst cases were reported in this report.



#### A.2.4 Measurement Results Table

Frequency	Channel	Frequency Range	Result
NR Bands	Low	9kHz-26GHz	Pass
	Middle	9kHz-26GHz	Pass
	High	9kHz-26GHz	Pass

NOTE 1: The Bands n77/n78 only have conducted emission limits according to Part 27.53 In this circumstances, the radiated emission tests are not applicable for these bands.

#### A.2.5 Sweep Table

Subrange	RBW	VBW
9~150 kHz	0.2kHz	0.6kHz
150kHz~30MHz	9kHz	27kHz
30MHz~1 GHz	100KHz	300KHz
1~20 GHz	1 MHz	3 MHz

### A.2.6 Measurement Result

#### SA n5,CH165300,BPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1658.50	-48.55	3.57	9.52	2.15	-44.75	-13.00	31.75	V
2481.00	-42.28	4.60	10.28	2.15	-38.75	-13.00	25.75	H
3294.50	-62.32	5.29	10.39	2.15	-59.37	-13.00	46.37	V
4119.00	-58.36	6.04	10.40	2.15	-56.15	-13.00	43.15	H
4946.00	-58.23	6.70	11.22	2.15	-55.86	-13.00	42.86	H
5797.50	-56.01	7.19	11.01	2.15	-54.34	-13.00	41.34	H

#### SA n5,CH167300,BPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1659.50	-49.25	3.57	9.52	2.15	-45.45	-13.00	32.45	H
2497.50	-42.65	4.62	10.21	2.15	-39.21	-13.00	26.21	H
3344.50	-61.06	5.31	10.49	2.15	-58.03	-13.00	45.03	V
4177.00	-57.51	6.15	10.45	2.15	-55.36	-13.00	42.36	H
5016.00	-57.58	6.58	11.33	2.15	-54.98	-13.00	41.98	H
5869.00	-56.16	7.30	10.69	2.15	-54.92	-13.00	41.92	V

#### SA n5,CH169300,BPSK

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1698.50	-48.74	3.60	9.60	2.15	-44.89	-13.00	31.89	H
2544.50	-42.20	4.66	10.11	2.15	-38.90	-13.00	25.90	V
3398.50	-62.31	5.36	10.50	2.15	-59.32	-13.00	46.32	H
4231.00	-58.42	6.26	10.56	2.15	-56.27	-13.00	43.27	V
5090.50	-58.54	6.75	11.48	2.15	-55.96	-13.00	42.96	V
5937.00	-55.17	7.47	10.50	2.15	-54.29	-13.00	41.29	H

**SA n7,CH505000,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5022.00	-68.74	6.57	9.93	-65.38	-25.00	40.38	H
7547.00	-64.14	8.20	12.24	-60.10	-25.00	35.10	V
10092.00	-62.62	9.44	12.94	-59.12	-25.00	34.12	H
12634.00	-59.83	10.41	13.28	-56.96	-25.00	31.96	V
15153.50	-59.54	11.38	13.91	-57.01	-25.00	32.01	V
17675.00	-55.35	12.42	15.15	-52.62	-25.00	27.62	H

**SA n7,CH507000,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5040.00	-68.99	6.60	9.96	-65.63	-25.00	40.63	H
7582.00	-65.01	8.05	12.27	-60.79	-25.00	35.79	H
10124.00	-62.95	9.42	12.95	-59.42	-25.00	34.42	V
12675.00	-58.87	10.34	13.31	-55.90	-25.00	30.90	V
15225.00	-59.41	11.37	13.87	-56.91	-25.00	31.91	V
17771.00	-55.22	12.57	15.28	-52.51	-25.00	27.51	H

**SA n7,CH513500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5130.00	-68.97	6.85	10.08	-65.74	-25.00	40.74	V
7682.00	-65.64	8.35	12.35	-61.64	-25.00	36.64	H
10299.50	-61.33	9.64	13.02	-57.95	-25.00	32.95	V
12860.00	-59.61	10.61	13.42	-56.80	-25.00	31.80	H
15376.50	-58.77	11.37	13.77	-56.37	-25.00	31.37	V
17997.50	-54.36	12.90	15.60	-51.66	-25.00	26.66	H

**SA n25,CH370500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3695.00	-59.43	6.44	8.47	-57.40	-13.00	44.40	H
5587.50	-58.38	7.22	10.58	-55.02	-13.00	42.02	V
7405.50	-54.00	8.13	12.09	-50.04	-13.00	37.04	V
9263.00	-50.03	9.07	13.26	-45.84	-13.00	32.84	V
11119.50	-51.53	9.75	13.18	-48.10	-13.00	35.10	V
12939.00	-50.89	10.49	13.46	-47.92	-13.00	34.92	H

**SA n25,CH376500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3788.50	-59.93	6.17	8.60	-57.50	-13.00	44.50	H
5670.00	-58.23	7.28	10.57	-54.94	-13.00	41.94	H
7541.00	-52.83	8.22	12.23	-48.82	-13.00	35.82	V
9412.50	-49.68	9.10	13.35	-45.43	-13.00	32.43	V
11307.50	-50.07	10.00	13.14	-46.93	-13.00	33.93	H
13168.00	-48.94	10.64	13.74	-45.84	-13.00	32.84	H

**SA n25,CH382500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3834.50	-59.55	6.07	8.67	-56.95	-13.00	43.95	V
5731.00	-57.49	7.29	10.55	-54.23	-13.00	41.23	V
7664.00	-54.80	8.26	12.33	-50.73	-13.00	37.73	V
9562.50	-50.66	9.32	13.34	-46.64	-13.00	33.64	H
11447.50	-50.28	9.94	13.11	-47.11	-13.00	34.11	V
13404.50	-48.99	10.57	14.07	-45.49	-13.00	32.49	H

**SA n41,CH500202,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4991.50	-59.30	6.62	9.89	-56.03	-25.00	31.03	V
7504.00	-52.45	8.38	12.20	-48.63	-25.00	23.63	V
10015.00	-52.12	9.22	12.91	-48.43	-25.00	23.43	H
12525.00	-50.08	10.25	13.22	-47.11	-25.00	22.11	V
14988.50	-49.70	11.21	14.01	-46.90	-25.00	21.90	H
17496.50	-44.22	12.72	14.89	-42.05	-25.00	17.05	V

**SA n41,CH518595,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5162.00	-58.93	6.90	10.13	-55.70	-25.00	30.70	V
7769.50	-55.01	8.33	12.42	-50.92	-25.00	25.92	H
10396.50	-50.57	9.80	13.06	-47.31	-25.00	22.31	V
12947.00	-50.62	10.49	13.47	-47.64	-25.00	22.64	H
15575.00	-49.60	11.50	13.70	-47.40	-25.00	22.40	V
16825.00	-44.11	12.09	13.73	-42.47	-25.00	17.47	H

**SA n41,CH537000,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5370.50	-56.59	6.89	10.42	-53.06	-25.00	28.06	H
8056.00	-53.93	8.32	12.64	-49.61	-25.00	24.61	V
10757.00	-51.15	9.44	13.15	-47.44	-25.00	22.44	H
13431.50	-48.79	10.59	14.10	-45.28	-25.00	20.28	V
16095.50	-48.21	11.85	13.68	-46.38	-25.00	21.38	H
17469.00	-44.73	12.65	14.83	-42.55	-25.00	17.55	V

**SA n71,CH133100,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1333.50	-46.26	3.15	4.63	2.15	-46.93	-13.00	33.93	V
1995.50	-41.25	4.04	4.61	2.15	-42.83	-13.00	29.83	H
2676.50	-37.37	4.77	6.42	2.15	-37.87	-13.00	24.87	V
3341.00	-58.77	5.31	7.82	2.15	-58.41	-13.00	45.41	H
3998.50	-56.89	6.07	8.90	2.15	-56.21	-13.00	43.21	V
4653.50	-57.32	6.47	9.55	2.15	-56.39	-13.00	43.39	H

**SA n71,CH136100,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1358.50	-47.16	3.18	4.76	2.15	-47.73	-13.00	34.73	H
2041.00	-41.49	4.14	4.72	2.15	-43.06	-13.00	30.06	V
2727.50	-36.86	4.81	6.51	2.15	-37.31	-13.00	24.31	H
3410.00	-58.86	5.37	7.98	2.15	-58.40	-13.00	45.40	V
4076.00	-56.65	6.04	8.98	2.15	-55.86	-13.00	42.86	H
4754.50	-56.71	6.58	9.65	2.15	-55.79	-13.00	42.79	V

**SA n71,CH139100,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1393.50	-46.18	3.23	4.95	2.15	-46.61	-13.00	33.61	H
2100.00	-40.43	4.19	4.90	2.15	-41.87	-13.00	28.87	H
2785.50	-36.58	4.89	6.61	2.15	-37.01	-13.00	24.01	V
3475.00	-58.35	5.47	8.14	2.15	-57.83	-13.00	44.83	V
4171.50	-55.70	6.14	9.07	2.15	-54.92	-13.00	41.92	V
4869.50	-55.78	6.72	9.77	2.15	-54.88	-13.00	41.88	V

**SA n66,CH342500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3441.50	-68.96	5.41	8.06	-66.31	-13.00	53.31	H
5143.50	-67.73	6.87	10.10	-64.50	-13.00	51.50	V
6835.00	-64.48	7.85	11.40	-60.93	-13.00	47.93	V
8576.50	-63.34	8.54	13.02	-58.86	-13.00	45.86	H
10284.00	-60.87	9.59	13.01	-57.45	-13.00	44.45	V
11987.50	-58.49	10.11	13.00	-55.60	-13.00	42.60	H

**SA n66,CH349000,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3489.50	-68.68	5.50	8.17	-66.01	-13.00	53.01	V
5235.00	-66.63	7.00	10.23	-63.40	-13.00	50.40	V
7000.00	-64.22	8.30	11.60	-60.92	-13.00	47.92	V
8745.00	-63.84	8.49	13.05	-59.28	-13.00	46.28	H
10470.00	-57.81	9.70	13.09	-54.42	-13.00	41.42	V
12220.50	-57.75	10.05	13.09	-54.71	-13.00	41.71	H

**SA n66,CH355500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3555.00	-67.46	5.87	8.28	-65.05	-13.00	52.05	V
5332.50	-65.98	6.97	10.37	-62.58	-13.00	49.58	H
7116.50	-64.60	8.16	11.74	-61.02	-13.00	48.02	V
8887.00	-62.75	8.82	13.08	-58.49	-13.00	45.49	V
10665.00	-60.79	9.30	13.13	-56.96	-13.00	43.96	H
12462.00	-58.62	10.27	13.18	-55.71	-13.00	42.71	V

**DC 12A\_n2,CH370500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2620.00	-39.71	4.72	6.32	-38.11	-13.00	25.11	H
6494.00	-56.96	7.52	10.99	-53.49	-13.00	40.49	H
7763.50	-53.84	8.34	12.41	-49.77	-13.00	36.77	H
9075.00	-53.61	9.00	13.15	-49.46	-13.00	36.46	V
10390.00	-50.33	9.79	13.06	-47.06	-13.00	34.06	V
11695.00	-50.05	9.62	13.06	-46.61	-13.00	33.61	H

**DC 12A\_n2,CH376000,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2618.00	-39.25	4.71	6.31	-37.65	-13.00	24.65	H
6508.00	-57.25	7.51	11.01	-53.75	-13.00	40.75	V
7757.50	-55.72	8.35	12.41	-51.66	-13.00	38.66	V
9065.50	-53.75	9.03	13.14	-49.64	-13.00	36.64	V
10358.50	-49.85	9.74	13.04	-46.55	-13.00	33.55	H
11674.50	-50.50	9.66	13.07	-47.09	-13.00	34.09	V

**DC 12A\_n2,CH381500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2619.00	-40.26	4.71	6.31	-38.66	-13.00	25.66	V
6487.00	-57.40	7.53	10.99	-53.94	-13.00	40.94	V
7780.50	-54.65	8.31	12.42	-50.54	-13.00	37.54	V
9104.50	-53.61	8.93	13.16	-49.38	-13.00	36.38	H
10363.50	-50.76	9.74	13.05	-47.45	-13.00	34.45	V
11698.50	-50.52	9.61	13.06	-47.07	-13.00	34.07	V



**DC 7A\_n5,CH165300,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3533.00	-60.33	5.65	10.60	2.15	-57.53	-13.00	44.53	H
4252.00	-57.56	6.24	10.61	2.15	-55.34	-13.00	42.34	H
4945.00	-57.42	6.70	11.22	2.15	-55.05	-13.00	42.05	V
5652.50	-56.00	7.27	11.20	2.15	-54.22	-13.00	41.22	H
6361.50	-54.60	7.56	10.70	2.15	-53.61	-13.00	40.61	V
7081.00	-51.37	8.18	10.50	2.15	-51.20	-13.00	38.20	V

**DC 7A\_n5,CH167300,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1411.50	-49.24	3.25	7.82	2.15	-46.82	-13.00	33.82	V
2125.50	-42.97	4.22	8.26	2.15	-41.08	-13.00	28.08	V
2824.00	-37.83	4.95	10.60	2.15	-34.33	-13.00	21.33	H
3528.50	-60.70	5.60	10.60	2.15	-57.85	-13.00	44.85	H
4258.00	-57.64	6.23	10.63	2.15	-55.39	-13.00	42.39	V
4967.00	-57.07	6.66	11.23	2.15	-54.65	-13.00	41.65	V

**DC 7A\_n5,CH169300,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1412.00	-49.95	3.25	7.82	2.15	-47.53	-13.00	34.53	H
2135.50	-43.44	4.23	8.40	2.15	-41.42	-13.00	28.42	H
2841.50	-40.43	4.95	10.67	2.15	-36.86	-13.00	23.86	V
3526.00	-59.95	5.58	10.60	2.15	-57.08	-13.00	44.08	V
4243.50	-57.39	6.25	10.59	2.15	-55.20	-13.00	42.20	H
4943.00	-57.18	6.70	11.23	2.15	-54.80	-13.00	41.80	V

**DC 4A\_n7,CH500500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2622.00	-35.79	4.72	6.32	-34.19	-25.00	9.19	V
6490.00	-66.90	7.52	10.99	-63.43	-25.00	38.43	V
7778.00	-65.27	8.32	12.42	-61.17	-25.00	36.17	V
9058.00	-63.25	9.05	13.13	-59.17	-25.00	34.17	H
10401.00	-59.92	9.80	13.06	-56.66	-25.00	31.66	H
11686.50	-59.97	9.64	13.06	-56.55	-25.00	31.55	V

**DC 4A\_n7,CH507000,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2617.00	-50.45	4.71	6.31	-48.85	-25.00	23.85	H
6478.00	-66.73	7.53	10.98	-63.28	-25.00	38.28	V
7758.00	-65.33	8.35	12.41	-61.27	-25.00	36.27	V
9089.50	-63.48	8.96	13.15	-59.29	-25.00	34.29	V
10371.50	-60.13	9.76	13.05	-56.84	-25.00	31.84	H
11681.50	-60.06	9.65	13.06	-56.65	-25.00	31.65	H

**DC 4A\_n7,CH513500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2567.50	2.33	4.68	6.22	3.87	-25.00	-28.87	V
6501.00	-66.64	7.52	11.00	-63.16	-25.00	38.16	V
7807.00	-65.32	8.30	12.45	-61.17	-25.00	36.17	V
9048.00	-63.29	9.07	13.13	-59.23	-25.00	34.23	H
10375.50	-60.05	9.76	13.05	-56.76	-25.00	31.76	V
11685.50	-60.15	9.64	13.06	-56.73	-25.00	31.73	V

**DC 66A\_n25,CH370500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2600.00	-39.89	4.70	6.28	-38.31	-13.00	25.31	H
3864.50	-51.35	6.09	8.71	-48.73	-13.00	35.73	H
7798.50	-55.34	8.29	12.44	-51.19	-13.00	38.19	V
9054.00	-54.18	9.06	13.13	-50.11	-13.00	37.11	V
10392.00	-50.46	9.79	13.06	-47.19	-13.00	34.19	V
11642.50	-50.12	9.72	13.07	-46.77	-13.00	33.77	V

**DC 66A\_n25,CH376500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2616.00	-40.45	4.71	6.31	-38.85	-13.00	25.85	V
6497.00	-57.30	7.52	11.00	-53.82	-13.00	40.82	V
7766.00	-55.21	8.33	12.41	-51.13	-13.00	38.13	H
9088.50	-52.89	8.97	13.15	-48.71	-13.00	35.71	H
10384.50	-49.22	9.78	13.05	-45.95	-13.00	32.95	H
11655.00	-49.87	9.70	13.07	-46.50	-13.00	33.50	V

**DC 66A\_n25,CH382500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3819.50	-59.81	6.08	8.65	-57.24	-13.00	44.24	V
5761.00	-58.50	7.25	10.55	-55.20	-13.00	42.20	V
7627.00	-56.09	8.10	12.30	-51.89	-13.00	38.89	V
9556.00	-52.70	9.34	13.34	-48.70	-13.00	35.70	H
11485.00	-51.10	9.85	13.10	-47.85	-13.00	34.85	H
13408.00	-49.33	10.57	14.07	-45.83	-13.00	32.83	V

**DC 2A\_n41,CH500202,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2595.50	-39.15	4.70	6.27	-37.58	-25.00	12.58	H
6472.00	-57.50	7.54	10.97	-54.07	-25.00	29.07	H
7780.00	-54.91	8.32	12.42	-50.81	-25.00	25.81	H
9066.00	-54.02	9.03	13.14	-49.91	-25.00	24.91	V
10362.00	-50.65	9.74	13.04	-47.35	-25.00	22.35	V
11653.50	-49.25	9.70	13.07	-45.88	-25.00	20.88	H

**DC 2A\_n41,CH518598,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2593.00	20.95	4.70	6.27	22.52	-25.00	-47.52	V
6481.50	-56.86	7.53	10.98	-53.41	-25.00	28.41	H
7783.00	-55.86	8.31	12.43	-51.74	-25.00	26.74	V
9100.50	-53.26	8.93	13.16	-49.03	-25.00	24.03	H
10354.50	-49.30	9.73	13.04	-45.99	-25.00	20.99	H
11657.00	-50.73	9.69	13.07	-47.35	-25.00	22.35	H

**DC 2A\_n41,CH537000,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2685.50	17.77	4.77	6.43	19.43	-25.00	-44.43	H
5370.00	-52.85	6.89	10.42	-49.32	-25.00	24.32	V
8043.00	-54.31	8.32	12.63	-50.00	-25.00	25.00	V
9394.50	-53.01	9.04	13.34	-48.71	-25.00	23.71	V
10712.00	-52.12	9.33	13.14	-48.31	-25.00	23.31	H
12072.50	-49.92	10.27	13.03	-47.16	-25.00	22.16	H

**DC 12A\_n66,CH342500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3507.00	-69.19	5.53	8.21	-66.51	-13.00	53.51	V
5233.00	-68.38	7.00	10.23	-65.15	-13.00	52.15	V
7000.00	-64.72	8.30	11.60	-61.42	-13.00	48.42	V
8744.00	-63.90	8.49	13.05	-59.34	-13.00	46.34	H
10458.50	-59.74	9.71	13.08	-56.37	-13.00	43.37	H
12220.00	-58.93	10.05	13.09	-55.89	-13.00	42.89	V

**DC 12A\_n66,CH347500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3473.50	-69.52	5.47	8.14	-66.85	-13.00	53.85	H
5235.00	-68.34	7.00	10.23	-65.11	-13.00	52.11	V
7000.00	-64.74	8.30	11.60	-61.44	-13.00	48.44	H
8728.50	-63.67	8.45	13.05	-59.07	-13.00	46.07	H
10475.00	-59.72	9.69	13.09	-56.32	-13.00	43.32	V
12233.00	-59.01	10.04	13.09	-55.96	-13.00	42.96	H

**DC 12A\_n66,CH352500,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3507.00	-69.43	5.53	8.21	-66.75	-13.00	53.75	H
5233.50	-68.70	7.00	10.23	-65.47	-13.00	52.47	V
7000.00	-64.78	8.30	11.60	-61.48	-13.00	48.48	V
8736.50	-64.10	8.47	13.05	-59.52	-13.00	46.52	H
10452.50	-59.68	9.72	13.08	-56.32	-13.00	43.32	V
12227.50	-59.08	10.04	13.09	-56.03	-13.00	43.03	H

**DC 66A\_n71,CH133100,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1427.00	-47.10	3.27	5.12	2.15	-47.40	-13.00	34.40	H
2136.00	-40.38	4.23	5.01	2.15	-41.75	-13.00	28.75	H
2827.00	-36.63	4.95	6.69	2.15	-37.04	-13.00	24.04	V
3536.50	-58.89	5.68	8.25	2.15	-58.47	-13.00	45.47	V
4255.50	-57.47	6.23	9.16	2.15	-56.69	-13.00	43.69	H
4937.50	-56.85	6.71	9.84	2.15	-55.87	-13.00	42.87	V

**DC 66A\_n71,CH136100,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1401.00	-47.22	3.24	4.99	2.15	-47.62	-13.00	34.62	H
2137.00	-40.79	4.23	5.01	2.15	-42.16	-13.00	29.16	V
2834.00	-36.78	4.95	6.70	2.15	-37.18	-13.00	24.18	V
3522.50	-58.67	5.56	8.23	2.15	-58.15	-13.00	45.15	H
4255.50	-56.52	6.23	9.16	2.15	-55.74	-13.00	42.74	V
4962.00	-56.82	6.67	9.86	2.15	-55.78	-13.00	42.78	H

**DC 66A\_n71,CH139100,BPSK**

Frequency (MHz)	SG (dBm)	CableLoss (dB)	AntennaGain (dBi)	Correction	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1405.50	-46.86	3.24	5.01	2.15	-47.24	-13.00	34.24	H
2125.00	-40.38	4.22	4.97	2.15	-41.78	-13.00	28.78	H
2832.00	-36.50	4.95	6.70	2.15	-36.90	-13.00	23.90	H
3538.00	-58.84	5.70	8.25	2.15	-58.44	-13.00	45.44	V
4254.00	-57.62	6.24	9.15	2.15	-56.86	-13.00	43.86	H
4942.00	-56.93	6.70	9.84	2.15	-55.94	-13.00	42.94	V

Note: Peak EIRP (dBm) = P<sub>Mea</sub>(dBm) - Path Loss(dB) + Antenna Gain(dBi)

Note: The maximum value of expanded measurement uncertainty for this test item is U = 5.62 dB, k = 2.

## **A.3 Frequency Stability**

### **A.3.1 Method of Measurement**

Frequency stability is a measure of the frequency drift due to temperature and supply voltage variations, with reference to the frequency measured at +20 °C and rated supply voltage. Two reference points are established at the applicable unwanted emissions limit using a RBW equal to the RBW required by the unwanted emissions specification of the applicable regulatory standard. These reference points measured using the lowest and highest channel of operation shall be identified as  $F_L$  and  $F_H$  respectively.

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a "call mode". This is accomplished with the use of MT8000A.

1. Measure the carrier frequency at room temperature.
2. Subject the EUT to overnight soak at -30°C.
3. With the EUT, powered via nominal voltage, connected to the MT8000A, and in a simulated call on middle channel for each NR band, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
4. Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
5. Re-measure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments re-measuring carrier frequency at each voltage. Pause at nominal voltage for 1.5 hours unpowered, to allow any self-heating to stabilize, before continuing.
6. Subject the EUT to overnight soak at +50°C.
7. With the EUT, powered via nominal voltage, connected to the MT8000A and in a simulated call on the center channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
8. Repeat the above measurements at 10 °C decrements from +50°C to -30°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
9. At all temperature levels hold the temperature to +/- 0.5°C during the measurement procedure.

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. As this transceiver is considered "Hand carried, battery powered equipment" Section 2.1055(d)(2) applies. This requires that the lower voltage for frequency stability testing be specified by the manufacturer. This transceiver is specified to operate with an input voltage of the lower, higher and nominal voltage. Operation above or below these voltage limits is prohibited by transceiver software in order to prevent improper operation as well as to protect components from overstress.

### A.3.2 Measurement results

n5

#### Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	7.82	824.256	847.640	2.40	0.0029
50					
40					
30					
10					
0					
-10					
-20					
-30					

#### Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
6.6	20	824.256	847.640	6.50	0.0078
9				-1.30	0.0016

n7

#### Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	7.82	2500.448	2569.536	7.20	0.0028
50					
40					
30					
10					
0					
-10					
-20					
-30					

#### Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
6.6	20	2500.448	2569.536	-2.60	0.0010
9				1.00	0.0004



**n25**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	7.82	1850.080	1914.888	23.50	0.0125
50					
40					
30					
10					
0					
-10					
-20					
-30					

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
6.6	20	1850.080	1914.888	3.70	0.0020
9				21.80	0.0116

**n41**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	7.82	2496.736	2688.128	3.20	0.0012
50					
40					
30					
10					
0					
-10					
-20					
-30					

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
6.6	20	2496.736	2688.128	6.00	0.0023
9				18.80	0.0073

**n66**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	7.82	1710.064	1779.904		
50				8.20	0.0047
40				-2.00	0.0011
30				-5.60	0.0032
10				2.80	0.0016
0				-0.20	0.0001
-10				-0.20	0.0001
-20				-1.80	0.0010
-30				-1.60	0.0009

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
6.6	20	1710.064	1779.904	0.90	0.0005
9				-3.30	0.0019

**n71**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	7.82	663.432	696.464		
50				-3.10	0.0046
40				-0.30	0.0004
30				-1.00	0.0015
10				-1.10	0.0016
0				0.00	0.0000
-10				-0.40	0.0006
-20				-1.50	0.0022
-30				-3.30	0.0048

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
6.6	20	663.432	696.464	-2.90	0.0043
9				0.40	0.0006

**n77L**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	7.82	3450.720	3548.496		
50				9.80	0.0028
40				-4.30	0.0012
30				1.40	0.0004
10				14.50	0.0041
0				14.80	0.0042
-10				-0.50	0.0001
-20				11.70	0.0033
-30				3.40	0.0010

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
6.6	20	3450.720	3548.496	-9.90	0.0028
9				-4.90	0.0014

**n77H**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	7.82	3700.400	3978.512		
50				16.00	0.0042
40				-2.70	0.0007
30				-5.10	0.0013
10				-6.20	0.0016
0				10.20	0.0027
-10				26.20	0.0068
-20				-12.20	0.0032
-30				-4.20	0.0011

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
6.6	20	3700.400	3978.512	-22.80	0.0059
9				-1.70	0.0004

**n78L**
**Frequency Error vs Temperature**

Temperature(°C)	Voltage(V)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
20	7.82	3450.720	3548.496		
50				8.30	0.0024
40				-0.60	0.0002
30				-8.90	0.0025
10				3.30	0.0009
0				-10.70	0.0031
-10				0.80	0.0002
-20				9.70	0.0028
-30				11.70	0.0033

**Frequency Error vs Voltage**

Voltage(V)	Temperature(°C)	FL(MHz)	FH(MHz)	Offset(Hz)	Frequency error(ppm)
6.6	20	3450.720	3548.496	-11.90	0.0034
9				11.60	0.0033

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 0.047k \text{ Hz}$ ,  $k = 2$ .

#### **A.4 Occupied Bandwidth**

Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the mid frequencies frequency. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the following pages.

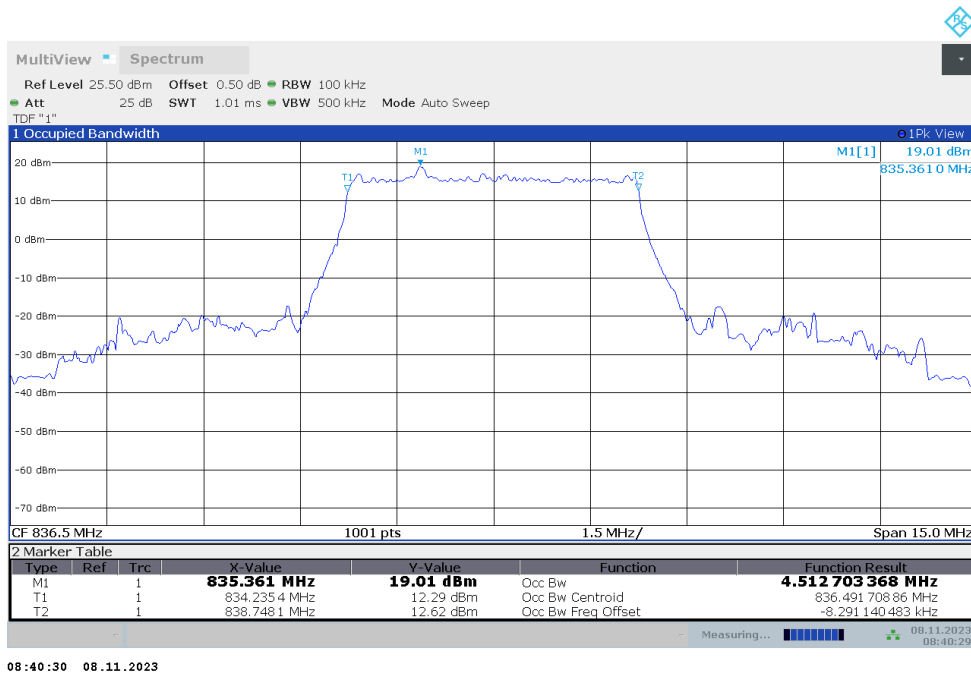
The measurement method is from ANSI C63.26:

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts.
- b) The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set  $\geq 3 \times$  RBW.
- c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation.
- d) Set the detection mode to peak, and the trace mode to max-hold.

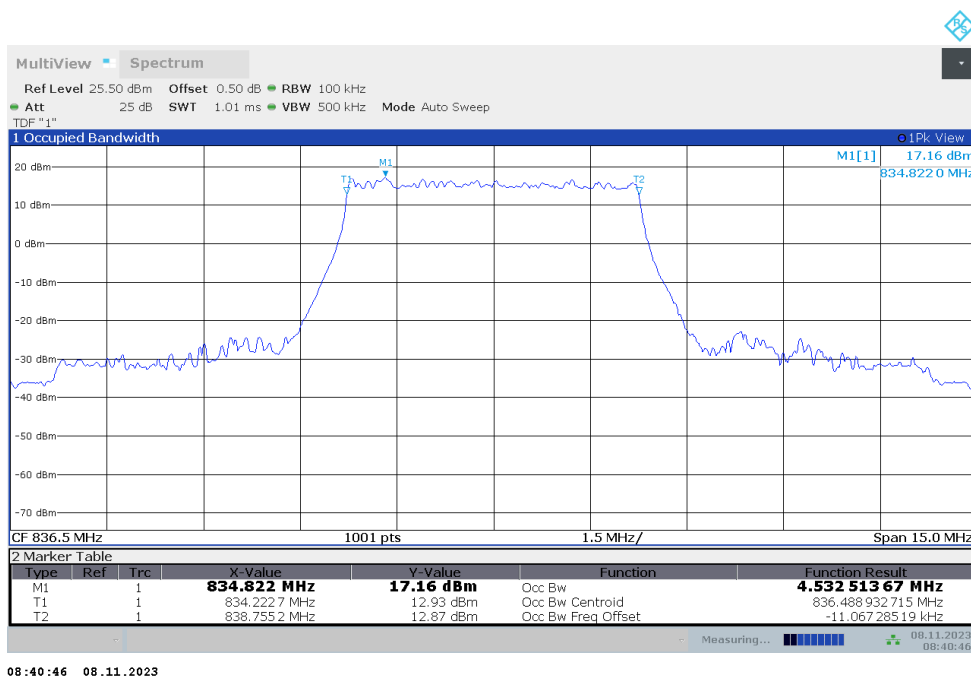
n5  
n5,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
836.5	4.513	4.533

n5,5MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



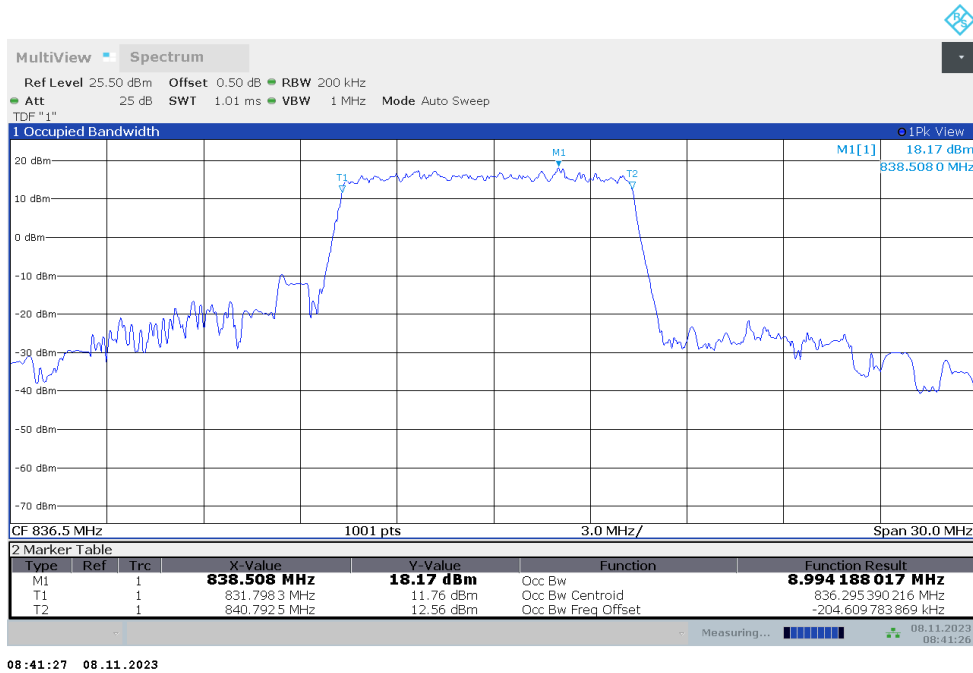
n5,5MHz Bandwidth,DFT-s-QPSK (99% BW)



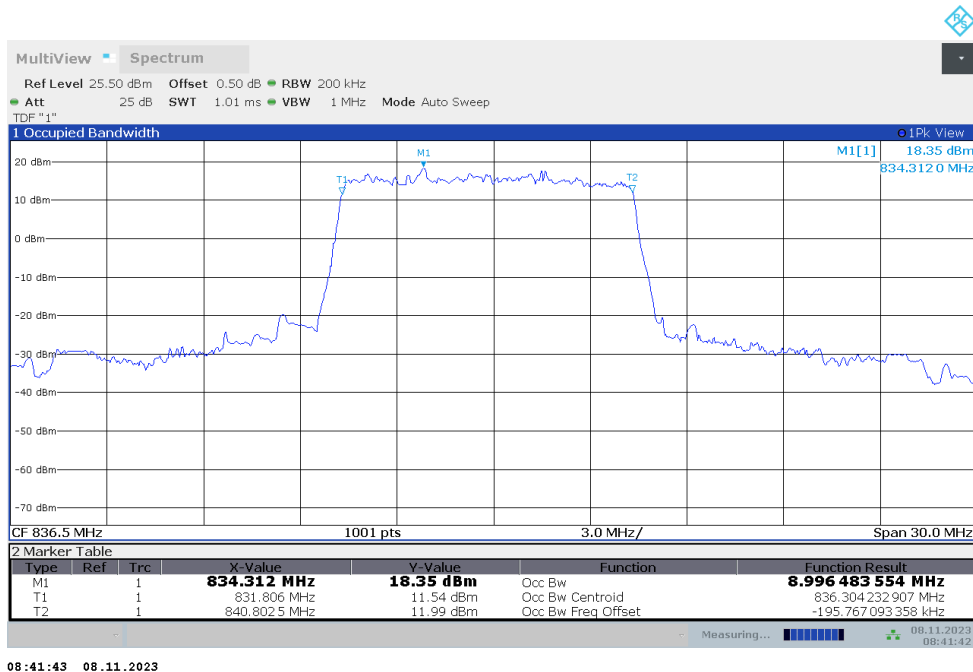
n5  
 n5,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
836.5	8.994	8.996

n5,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



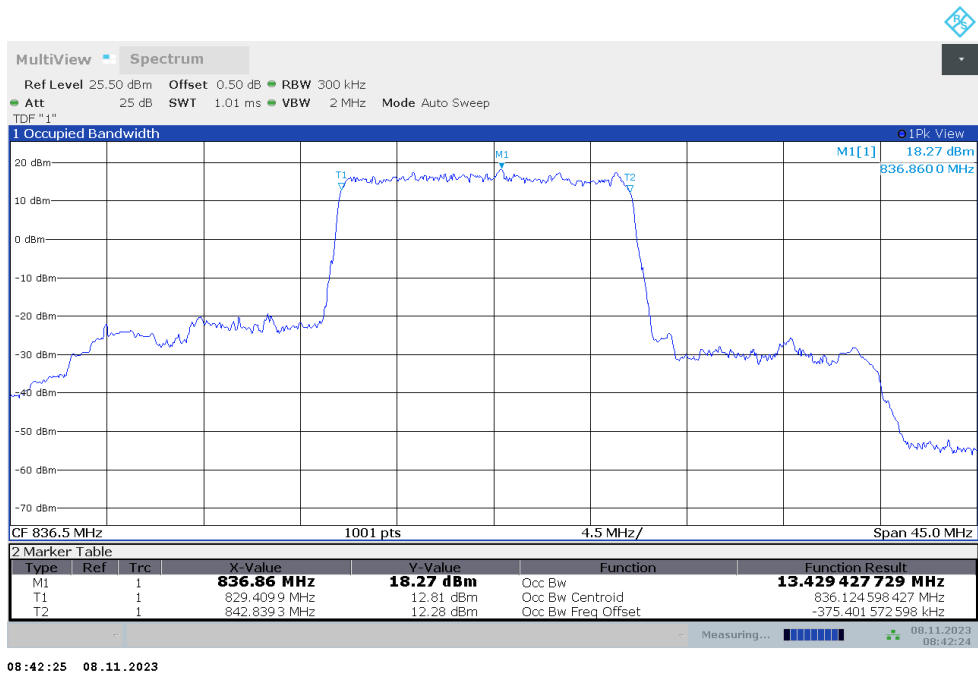
n5,10MHz Bandwidth,DFT-s-QPSK (99% BW)



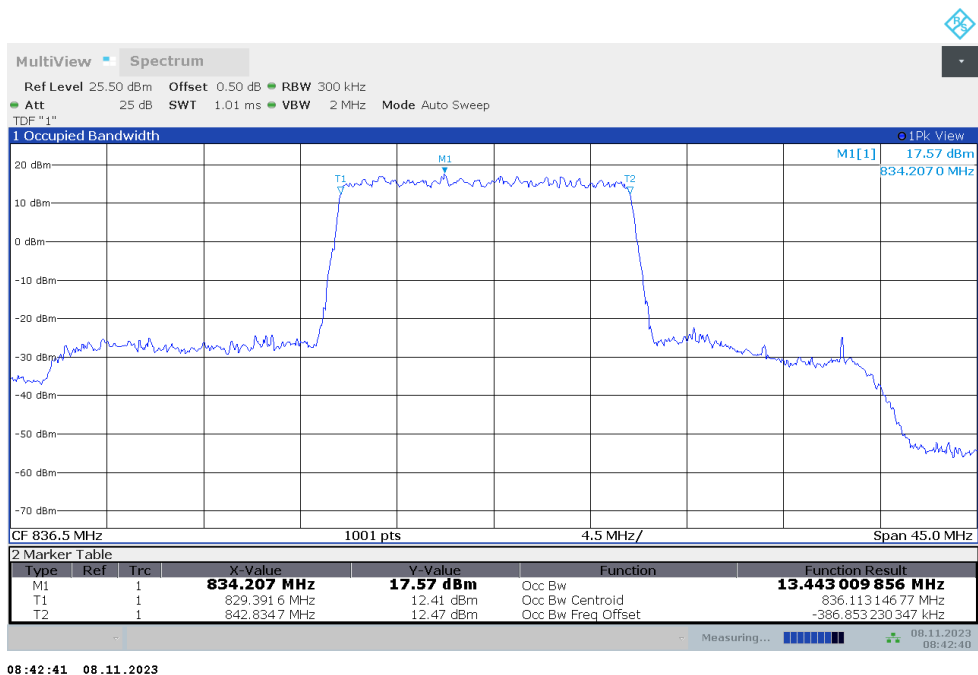
n5  
n5,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
836.5	13.429	13.443

n5,15MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n5,15MHz Bandwidth,DFT-s-QPSK (99% BW)

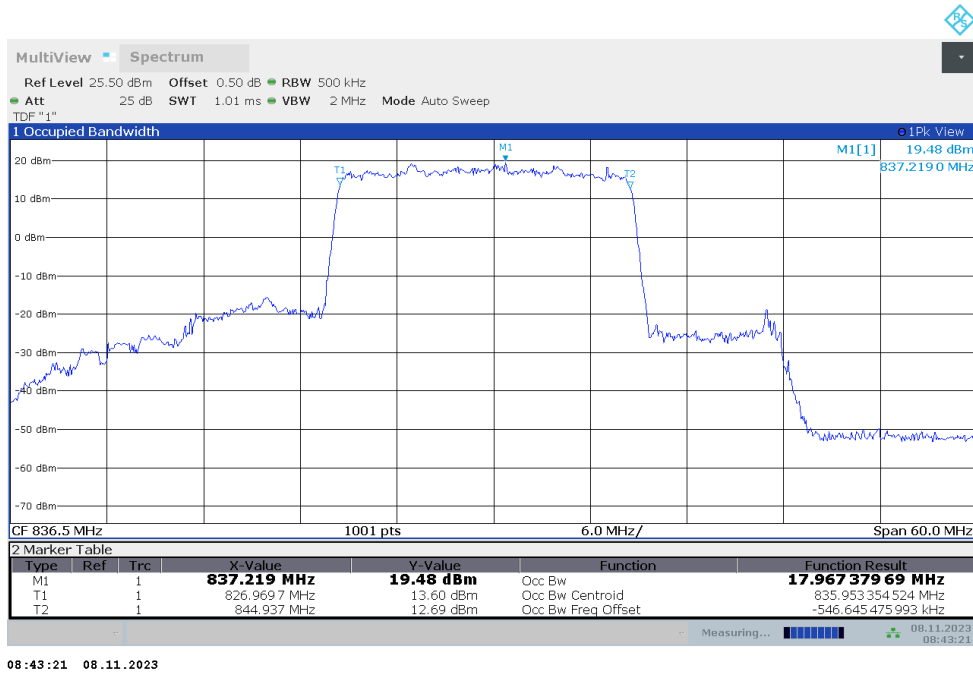




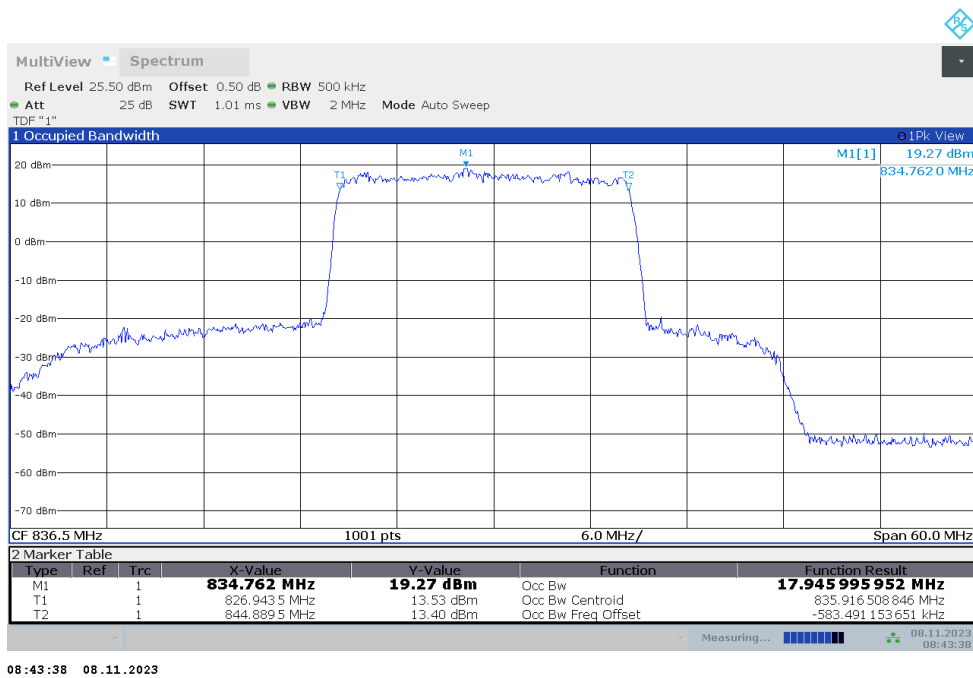
n5  
n5,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
836.5	17.967	17.946

n5,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n5,20MHz Bandwidth,DFT-s-QPSK (99% BW)

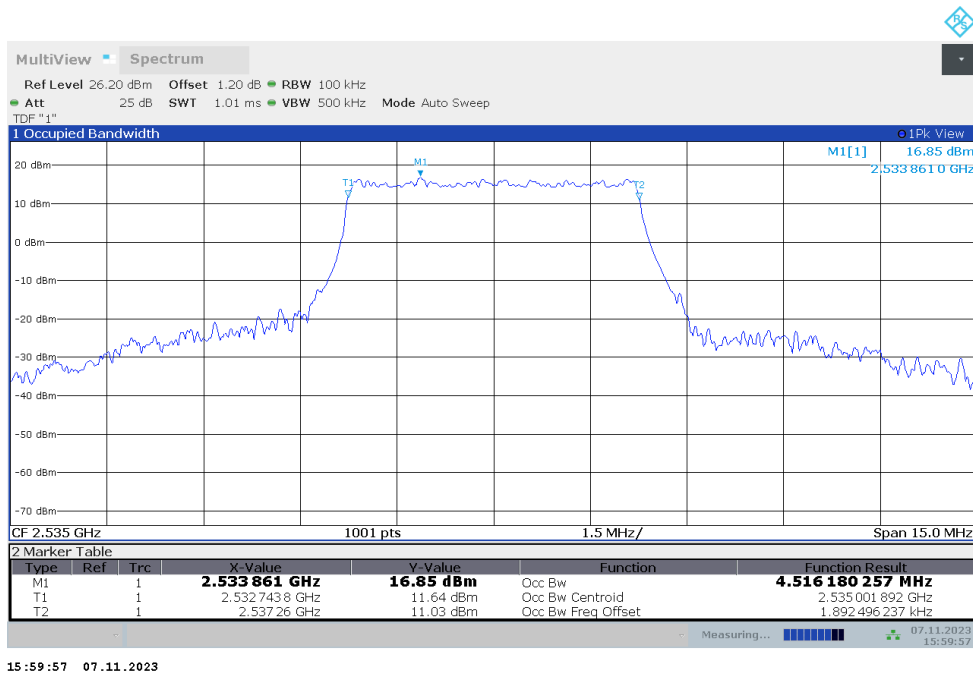


n7

n7,5MHz(99%)

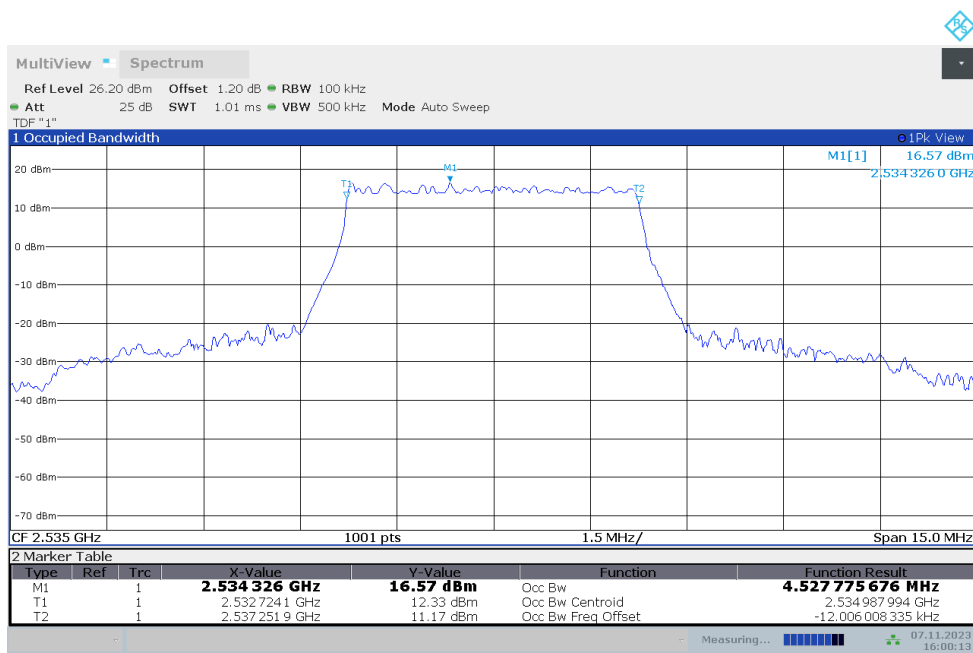
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2535	4.516	4.528

n7,5MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



15:59:57 07.11.2023

n7,5MHz Bandwidth,DFT-s-QPSK (99% BW)

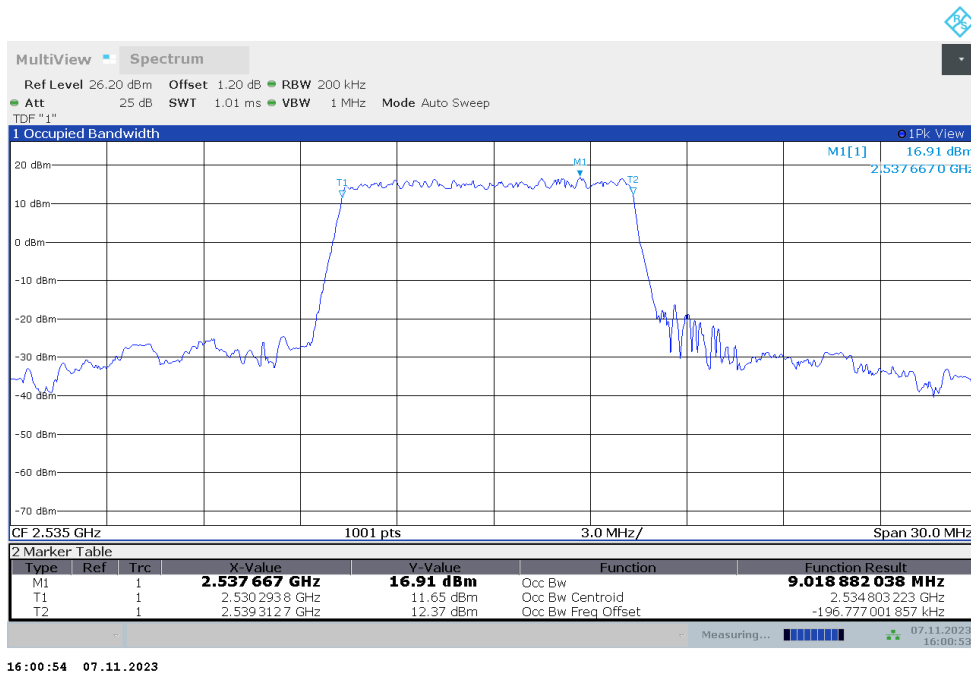


16:00:13 07.11.2023

n7  
 n7,10MHz(99%)

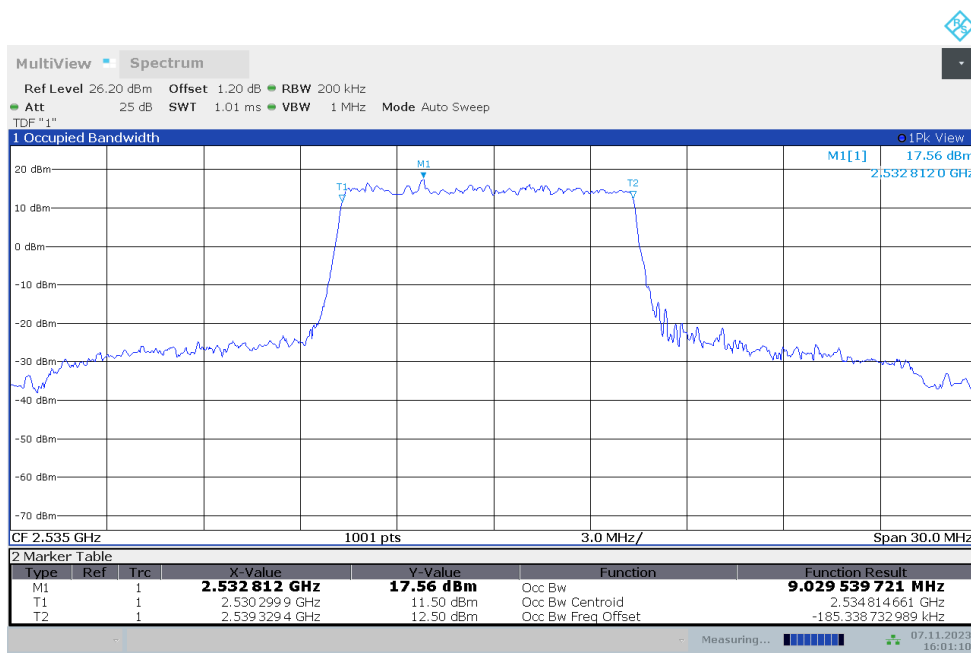
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2535	9.019	9.030

n7,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



16:00:54 07.11.2023

n7,10MHz Bandwidth,DFT-s-QPSK (99% BW)

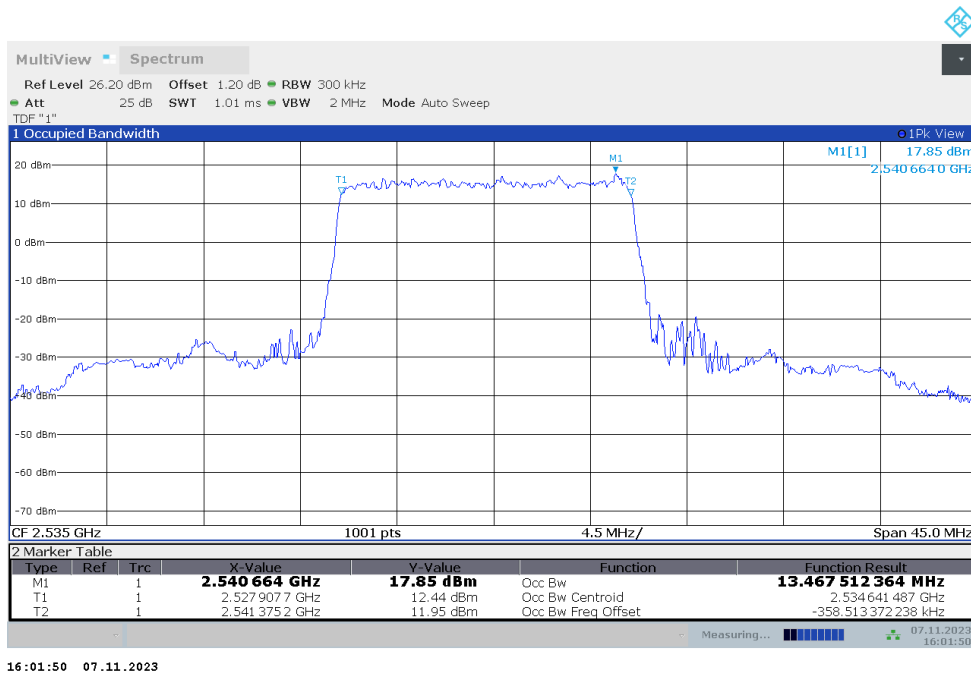


16:01:10 07.11.2023

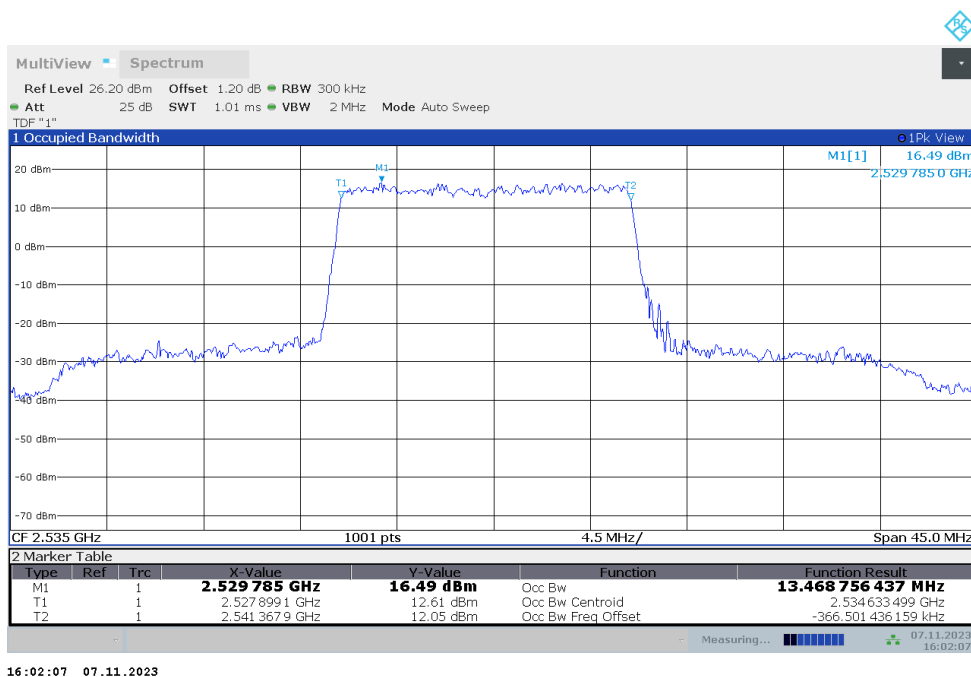
n7  
n7,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2535	13.468	13.469

n7,15MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



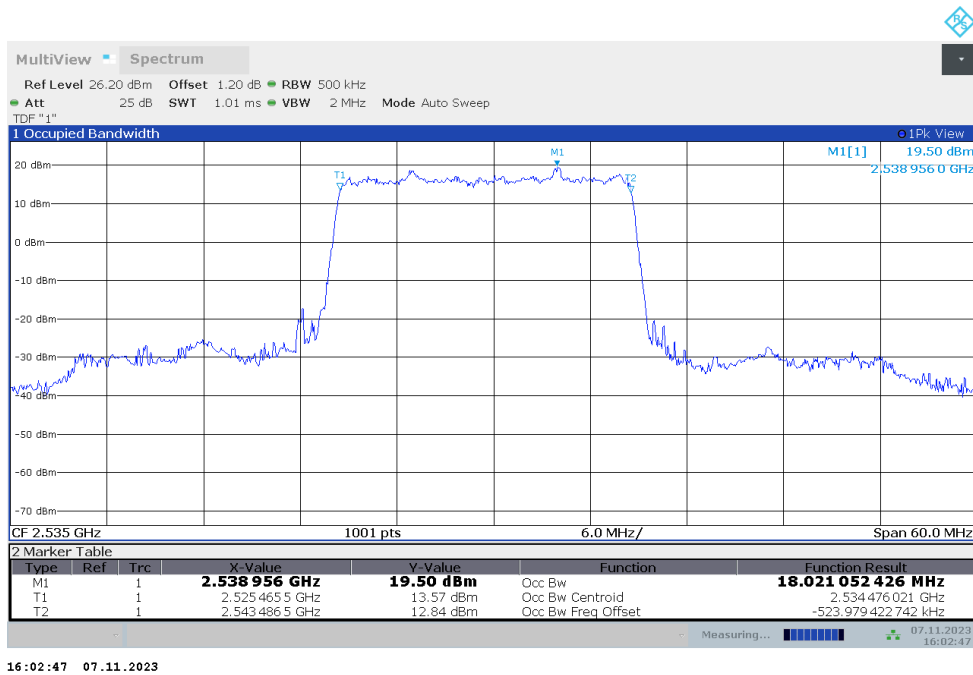
n7,15MHz Bandwidth,DFT-s-QPSK (99% BW)



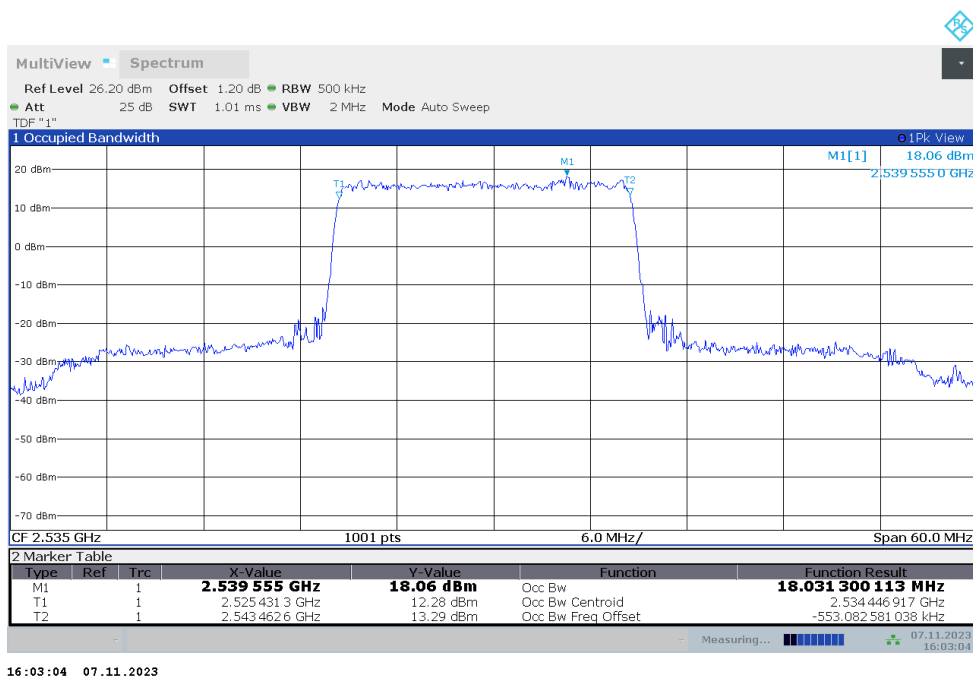
n7  
n7,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2535	18.021	18.031

n7,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



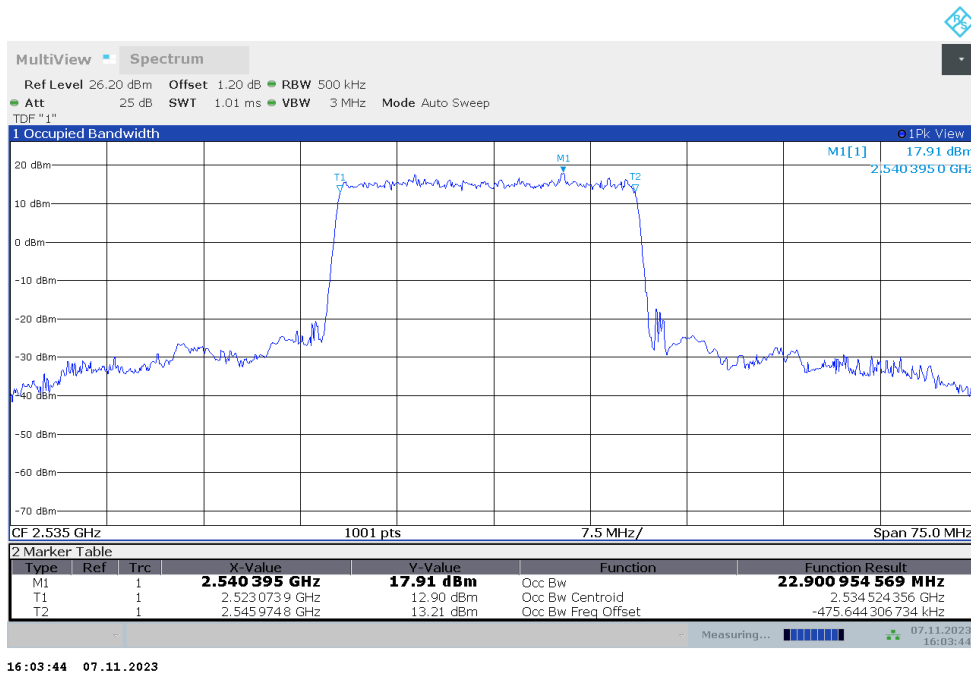
n7,20MHz Bandwidth,DFT-s-QPSK (99% BW)



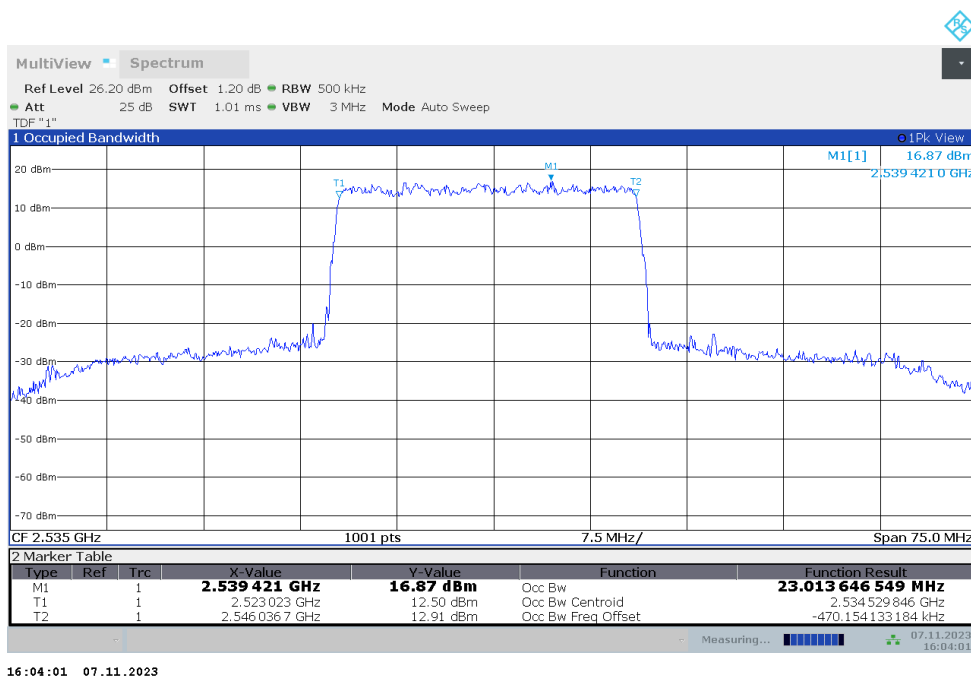
n7  
n7,25MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2535	22.901	23.014

n7,25MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



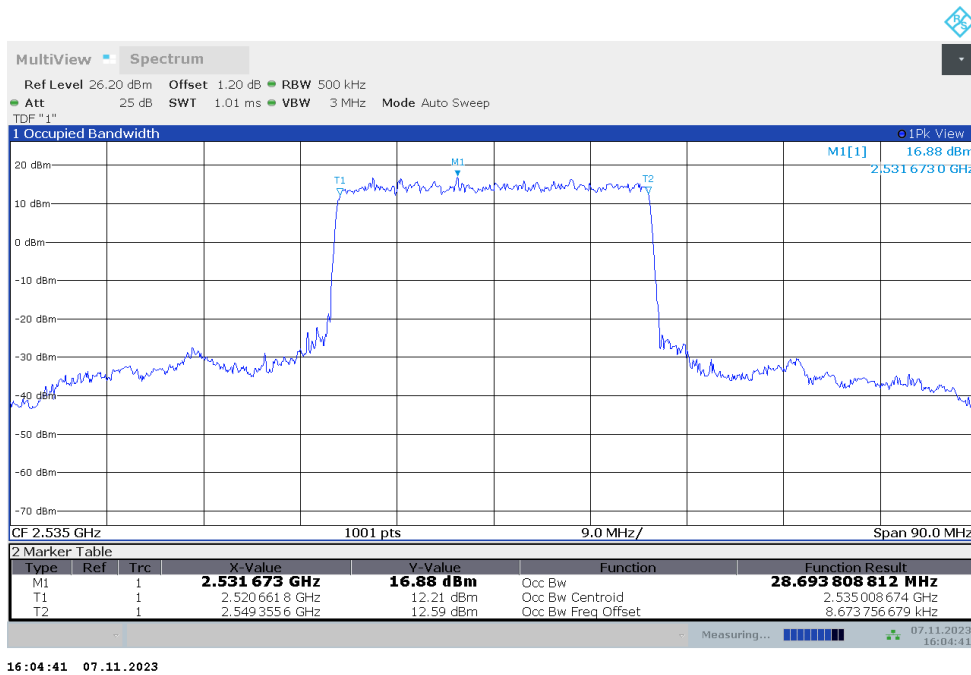
n7,25MHz Bandwidth,DFT-s-QPSK (99% BW)



n7  
n7,30MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2535	28.694	28.655

n7,30MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



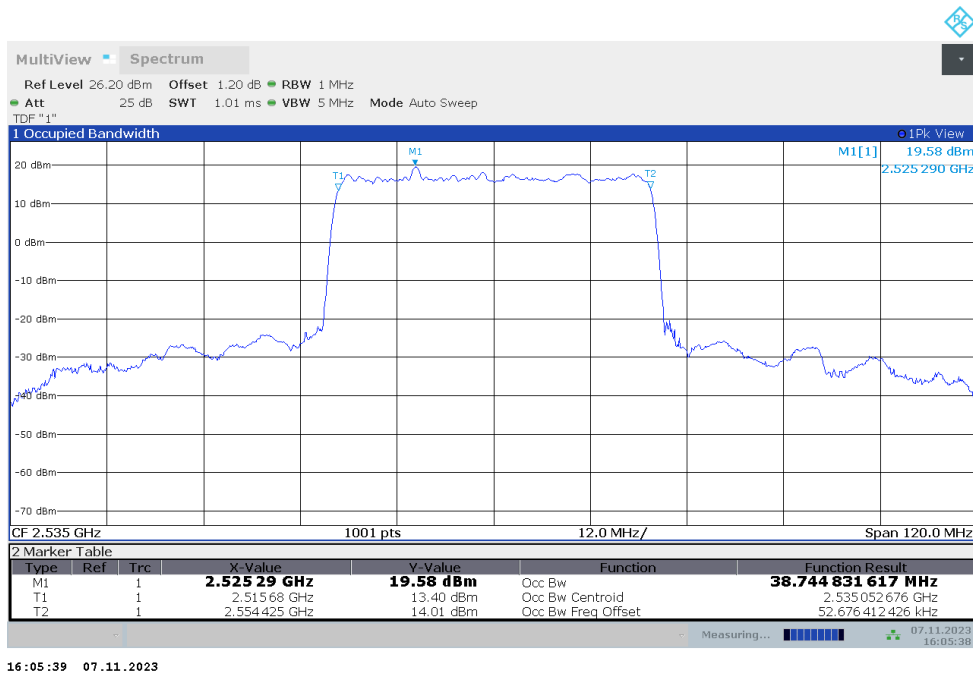
n7,30MHz Bandwidth,DFT-s-QPSK (99% BW)



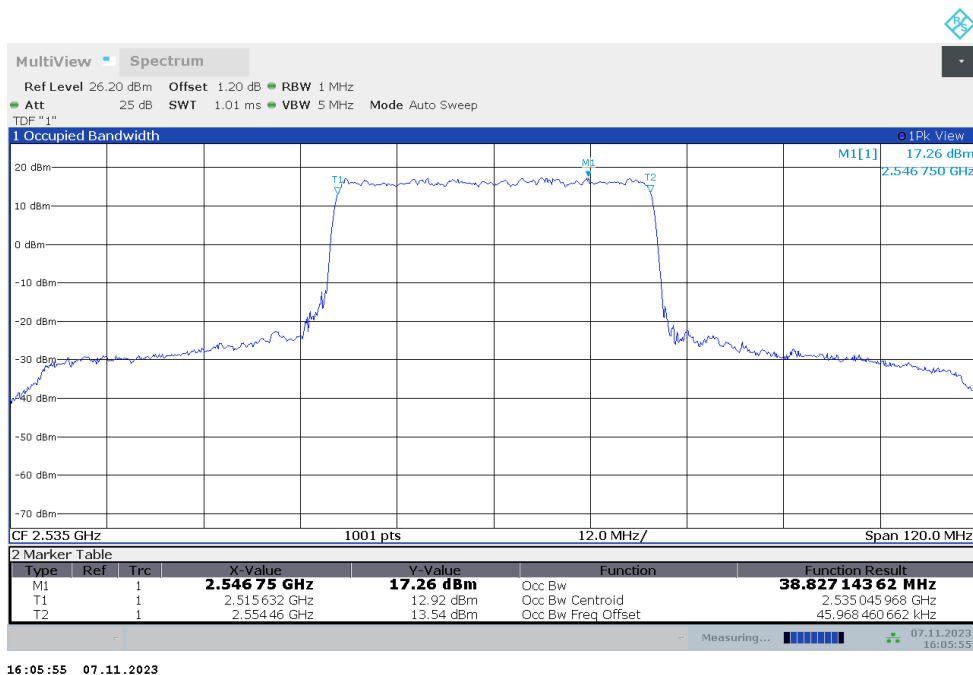
n7  
n7,40MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2535	38.745	38.827

n7,40MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n7,40MHz Bandwidth,DFT-s-QPSK (99% BW)

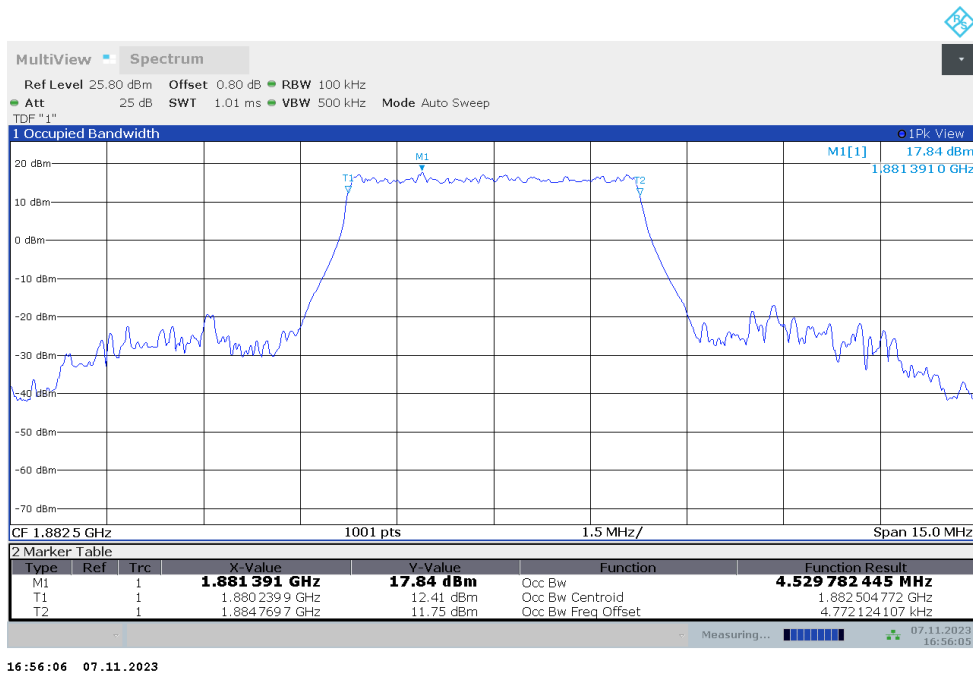




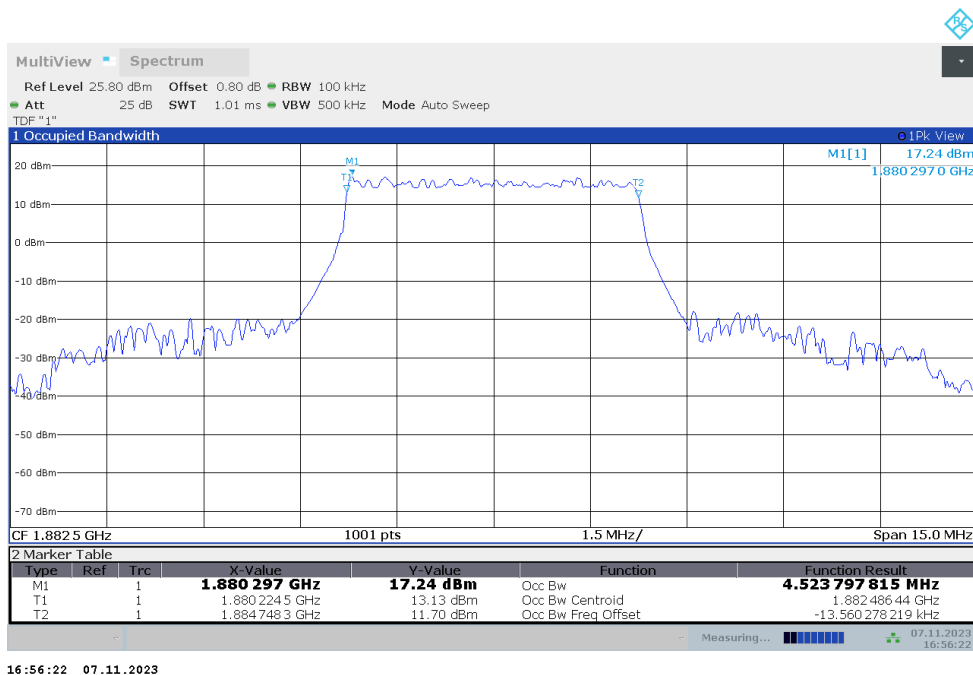
n25  
n25,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1882.5	4.530	4.524

n25,5MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n25,5MHz Bandwidth,DFT-s-QPSK (99% BW)

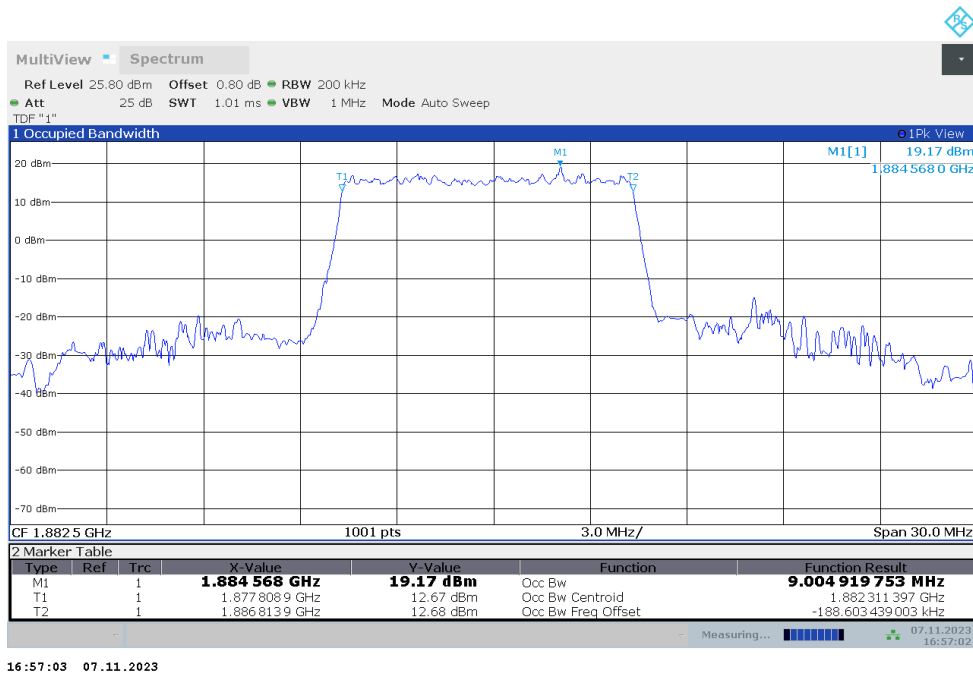


n25

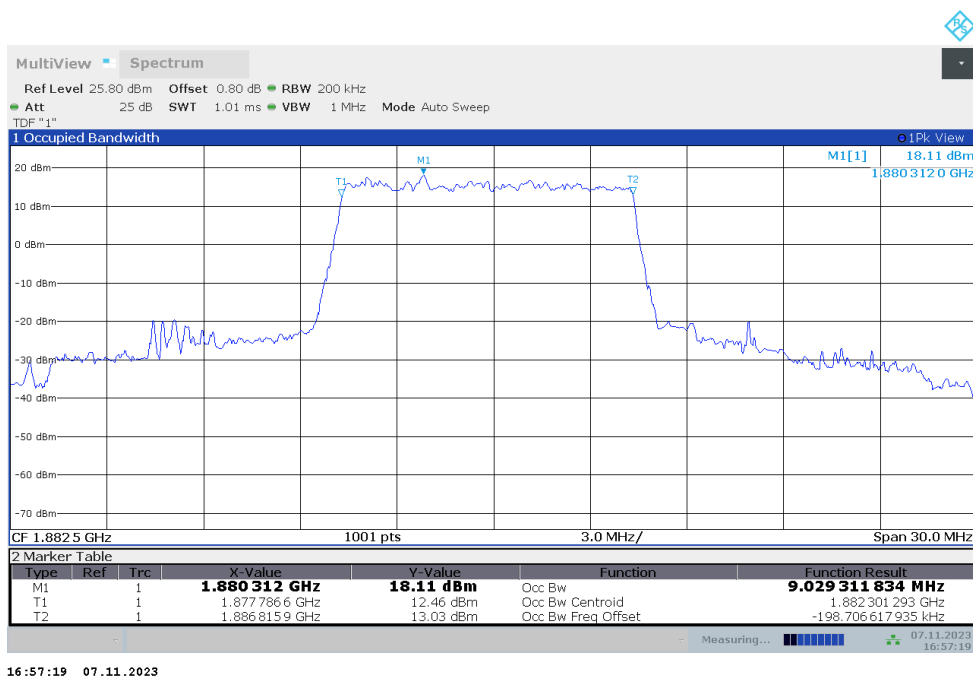
n25,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1882.5	9.005	9.029

n25,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n25,10MHz Bandwidth,DFT-s-QPSK (99% BW)

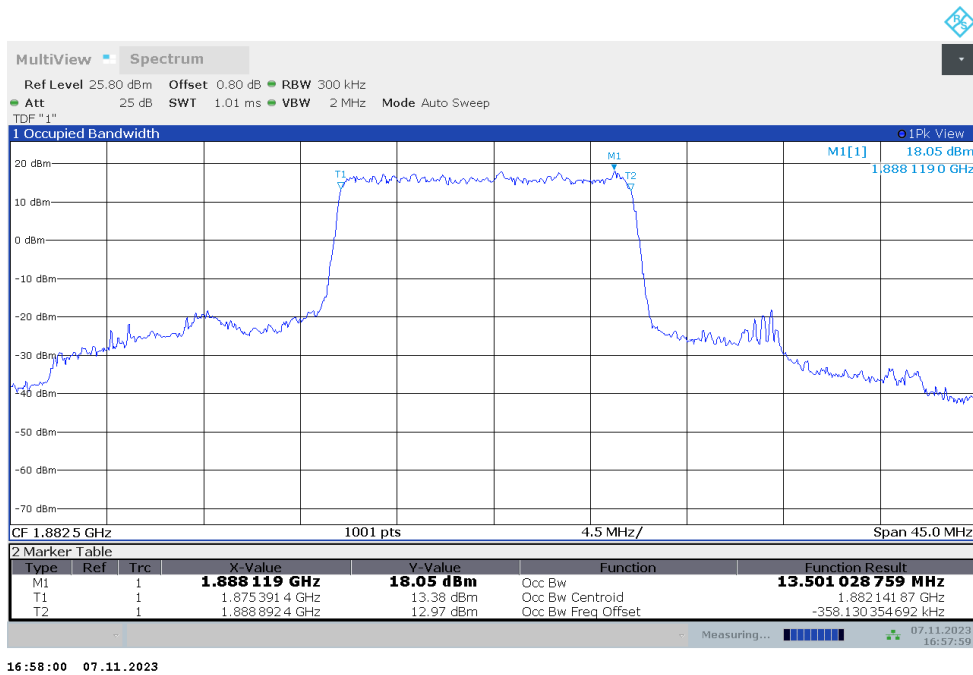


n25

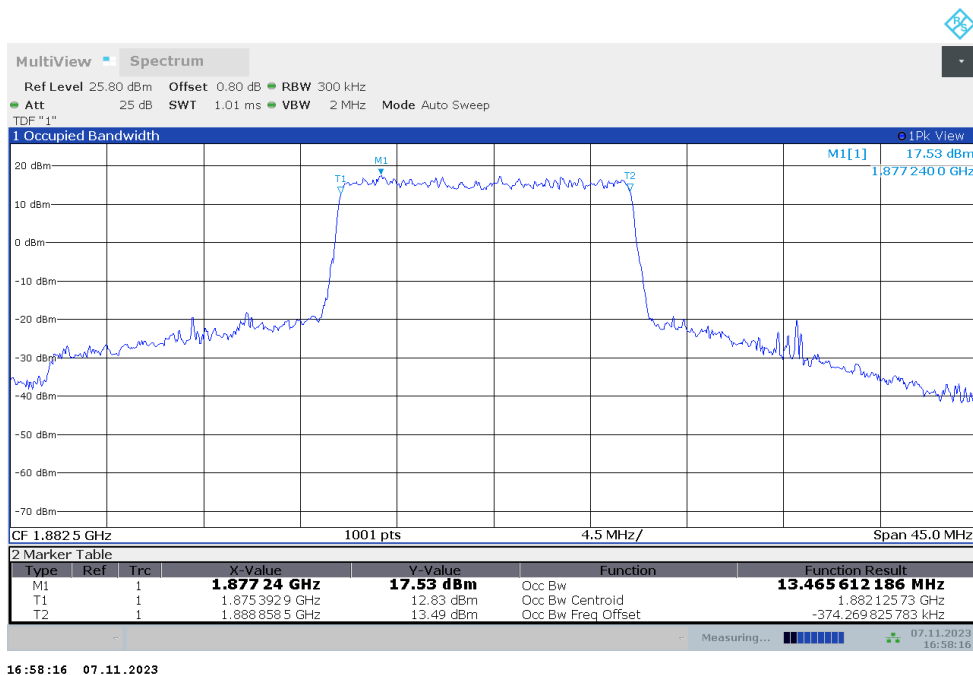
n25,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1882.5	13.501	13.466

n25,15MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n25,15MHz Bandwidth,DFT-s-QPSK (99% BW)

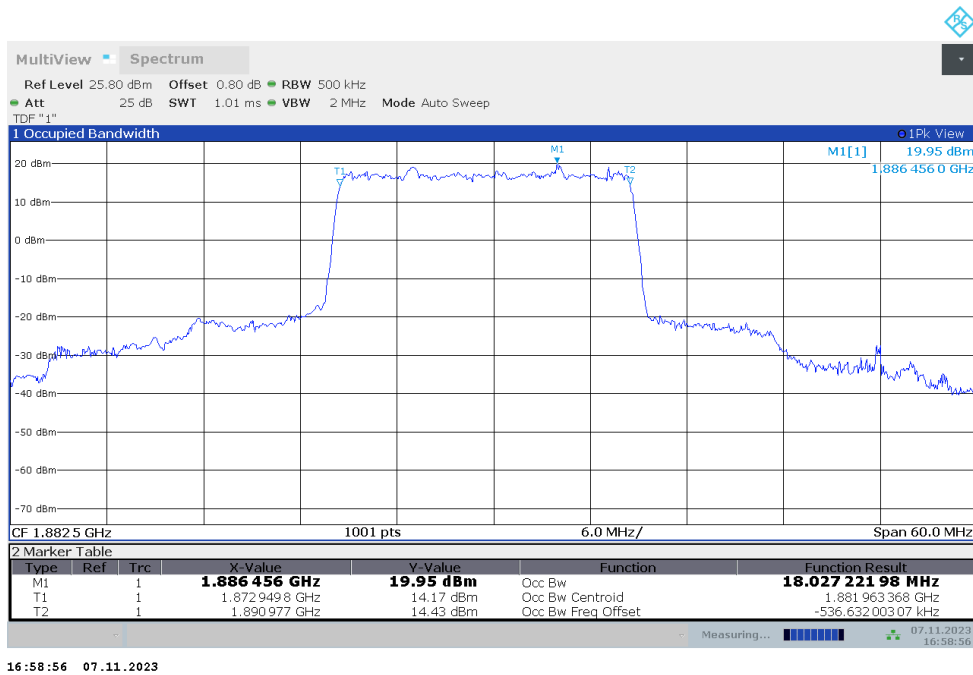


n25

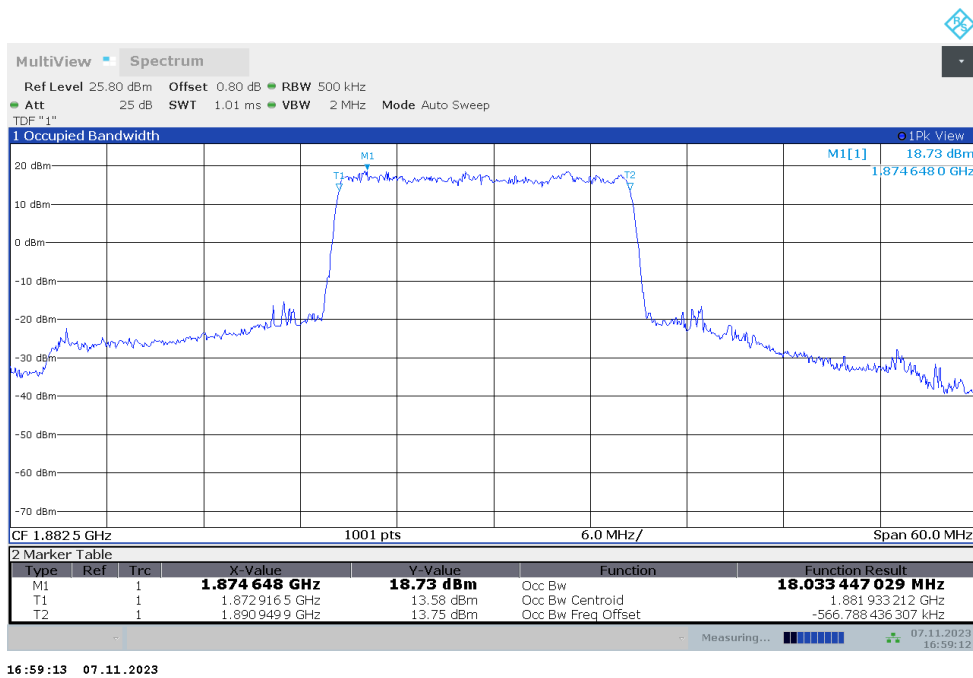
n25,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1882.5	18.027	18.033

n25,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n25,20MHz Bandwidth,DFT-s-QPSK (99% BW)

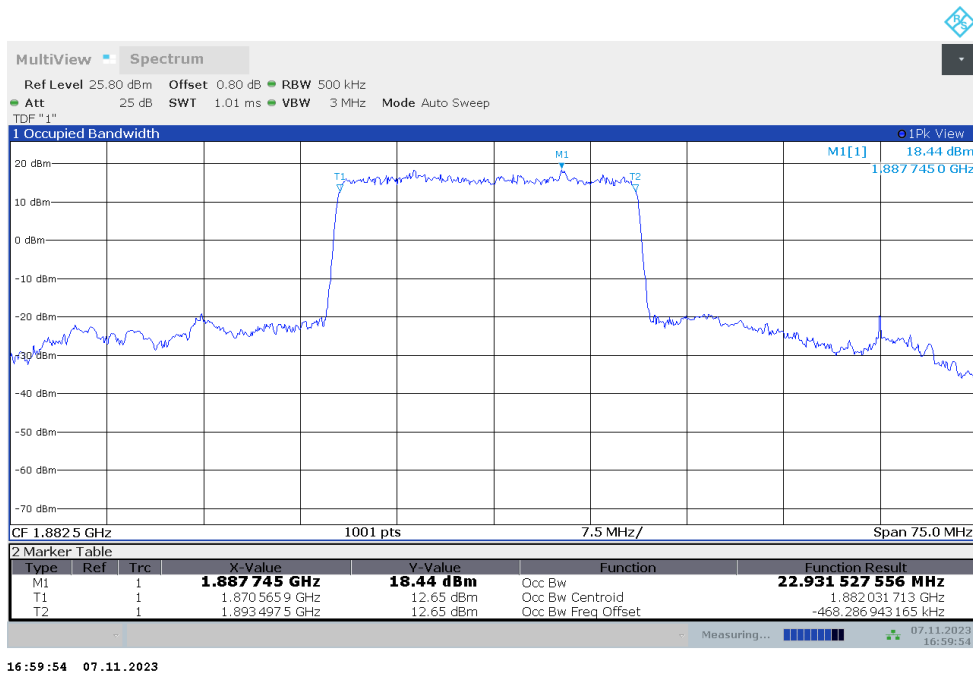


n25

n25,25MHz(99%)

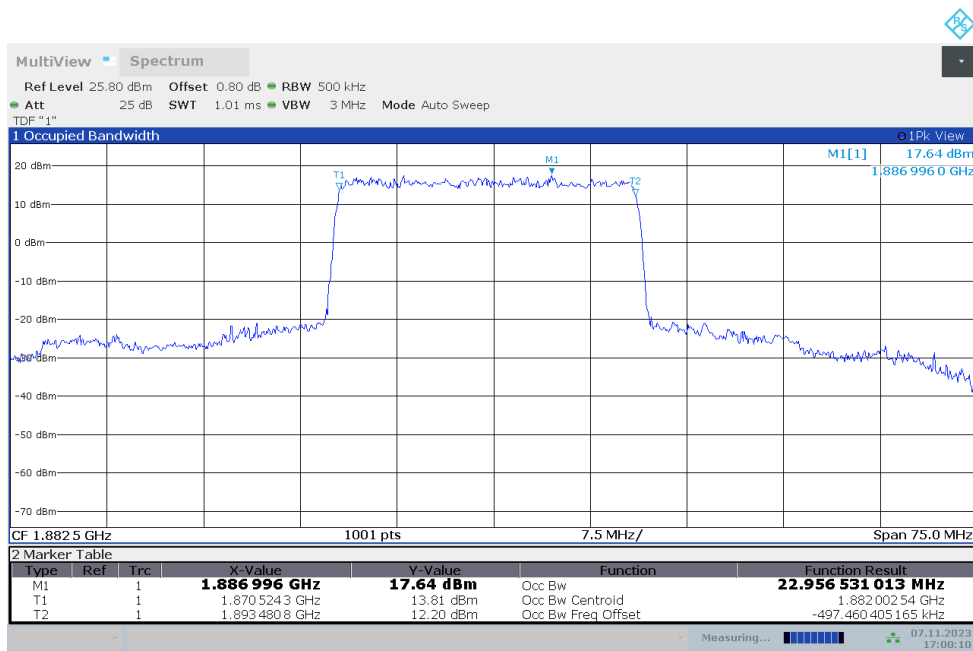
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1882.5	22.932	22.957

n25,25MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



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n25,25MHz Bandwidth,DFT-s-QPSK (99% BW)



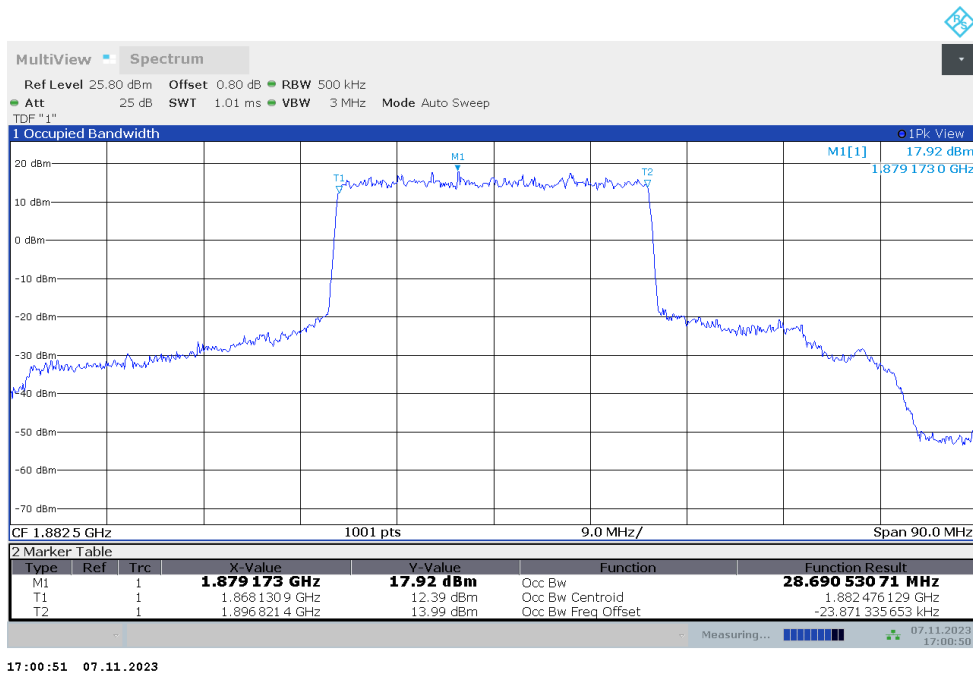
17:00:10 07.11.2023

n25

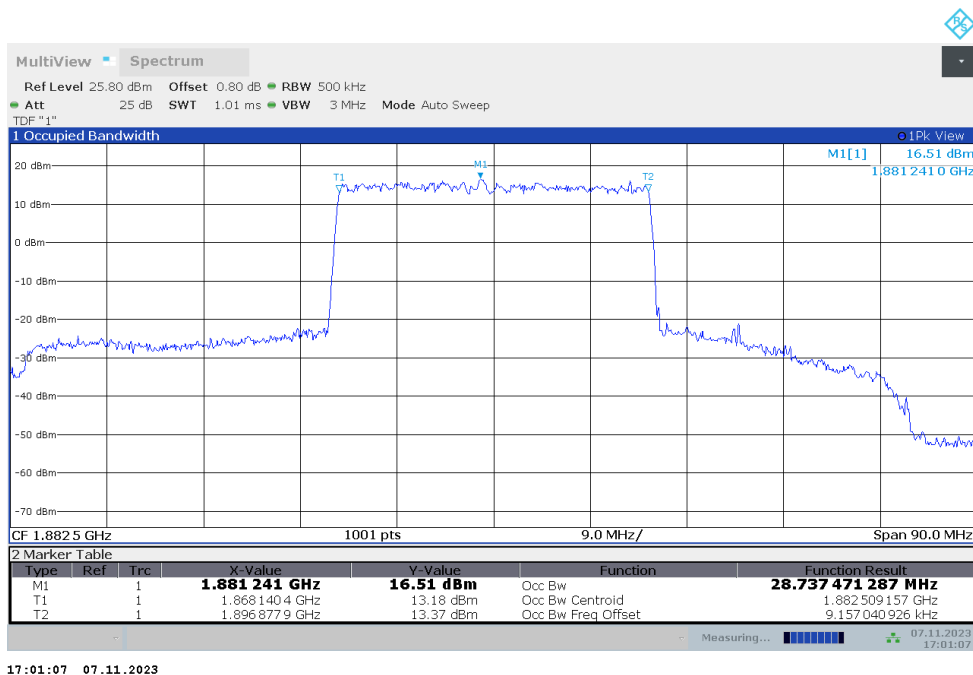
n25,30MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1882.5	28.691	28.737

n25,30MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n25,30MHz Bandwidth,DFT-s-QPSK (99% BW)

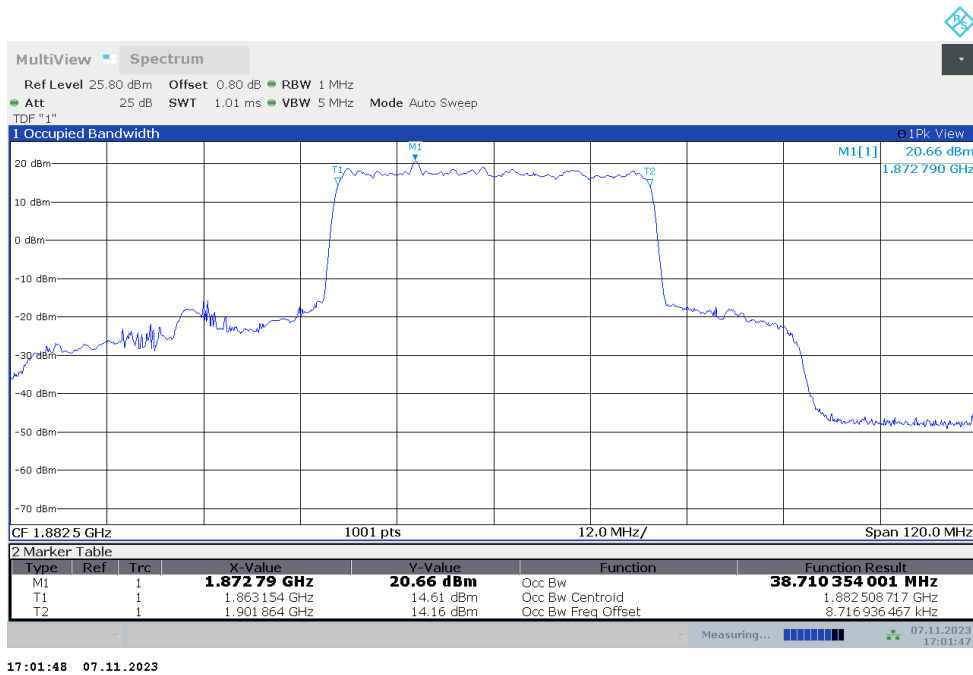


n25

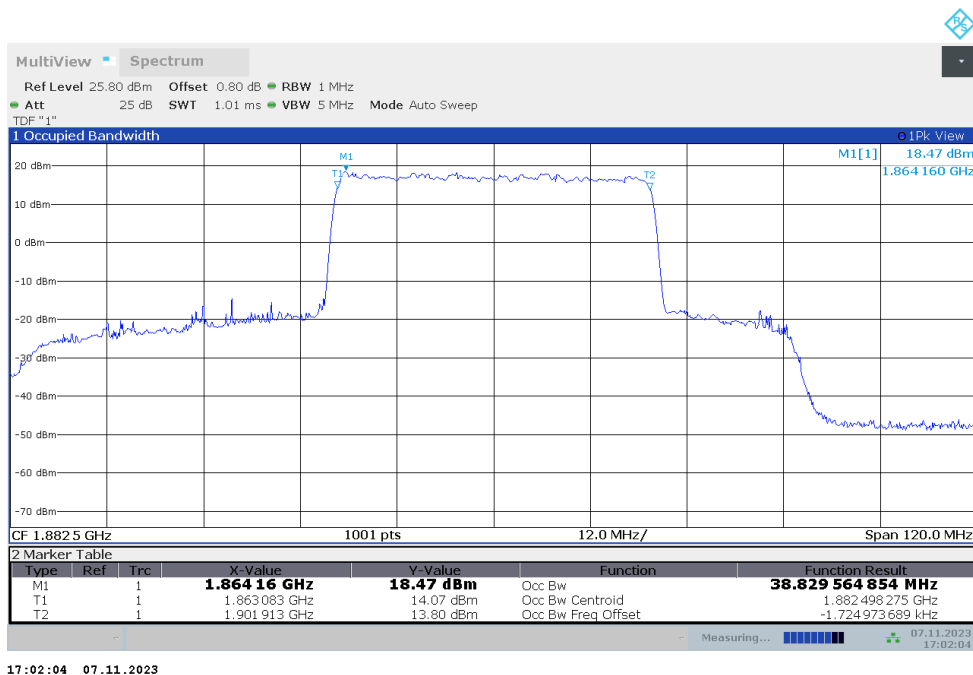
n25,40MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1882.5	38.710	38.830

n25,40MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n25,40MHz Bandwidth,DFT-s-QPSK (99% BW)

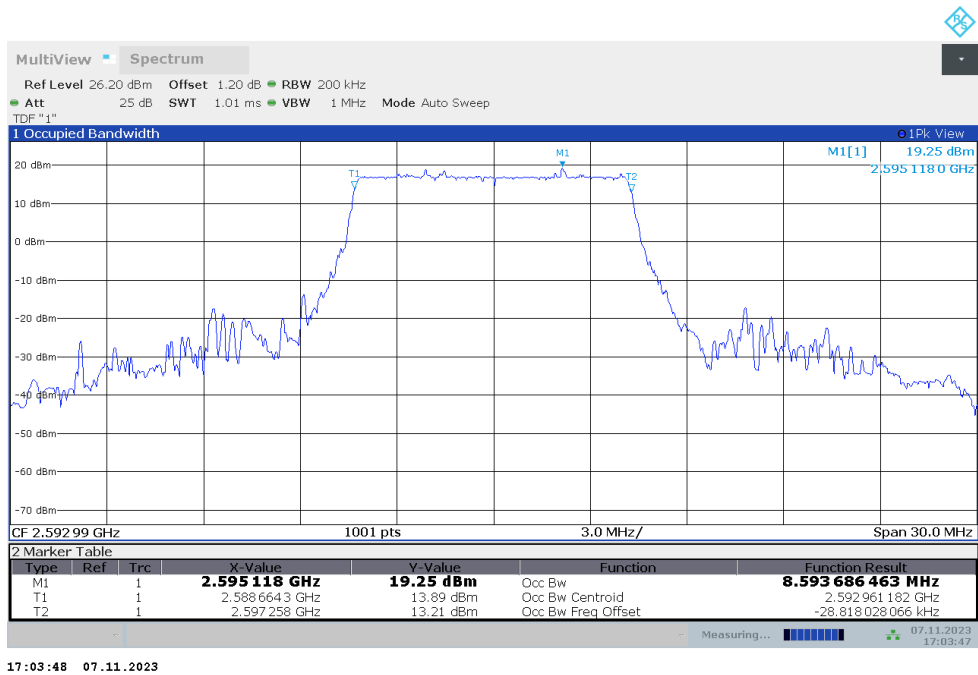


n41

n41,10MHz(99%)

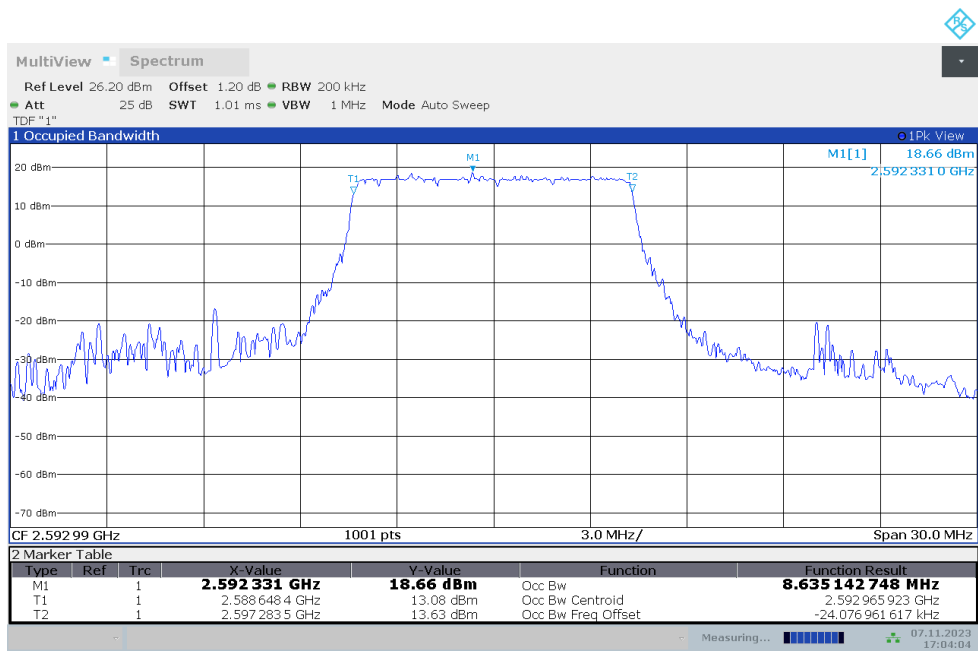
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	8.594	8.635

n41,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



17:03:48 07.11.2023

n41,10MHz Bandwidth,DFT-s-QPSK (99% BW)



17:04:05 07.11.2023

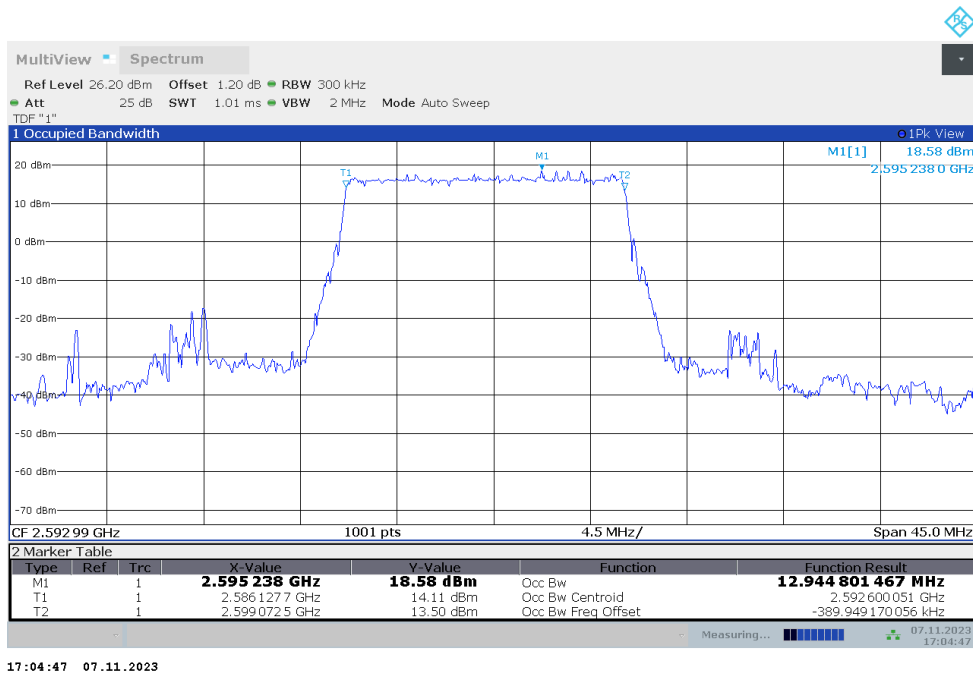


n41

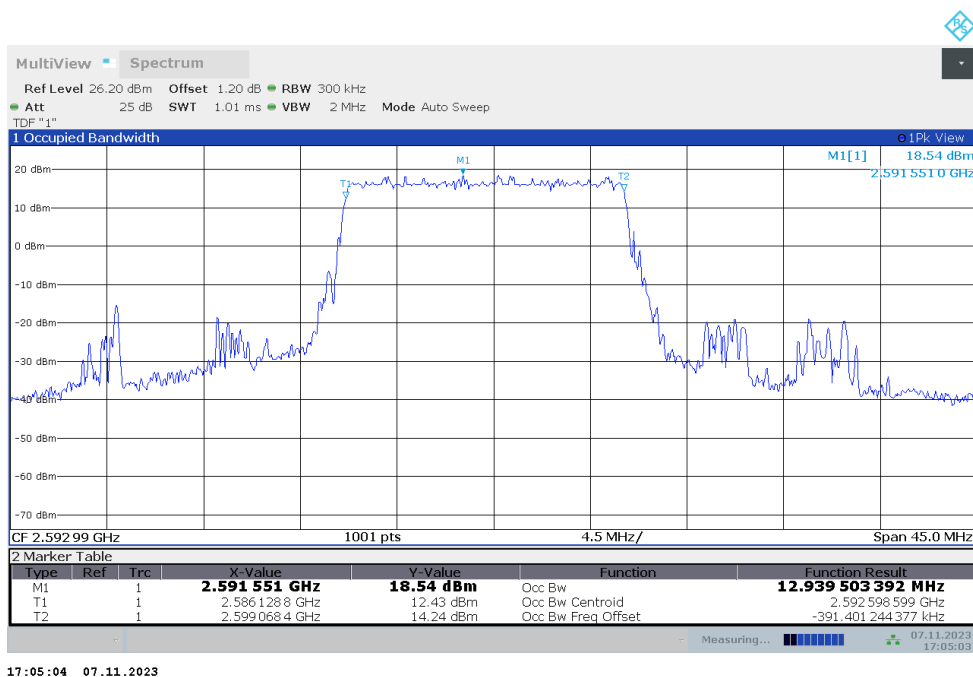
n41,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	12.945	12.940

n41,15MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n41,15MHz Bandwidth,DFT-s-QPSK (99% BW)

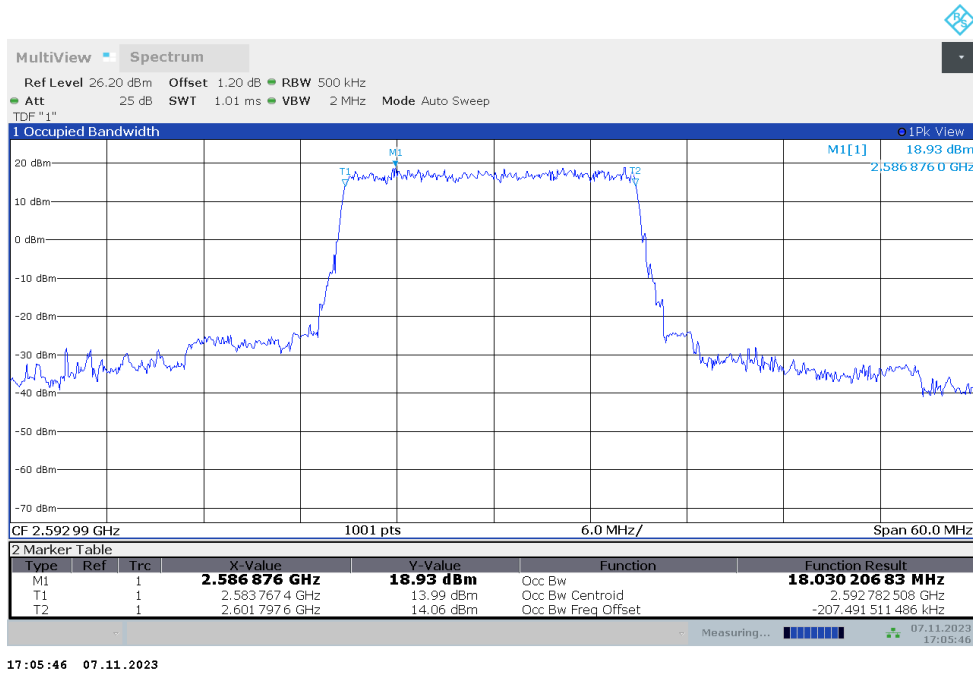


n41

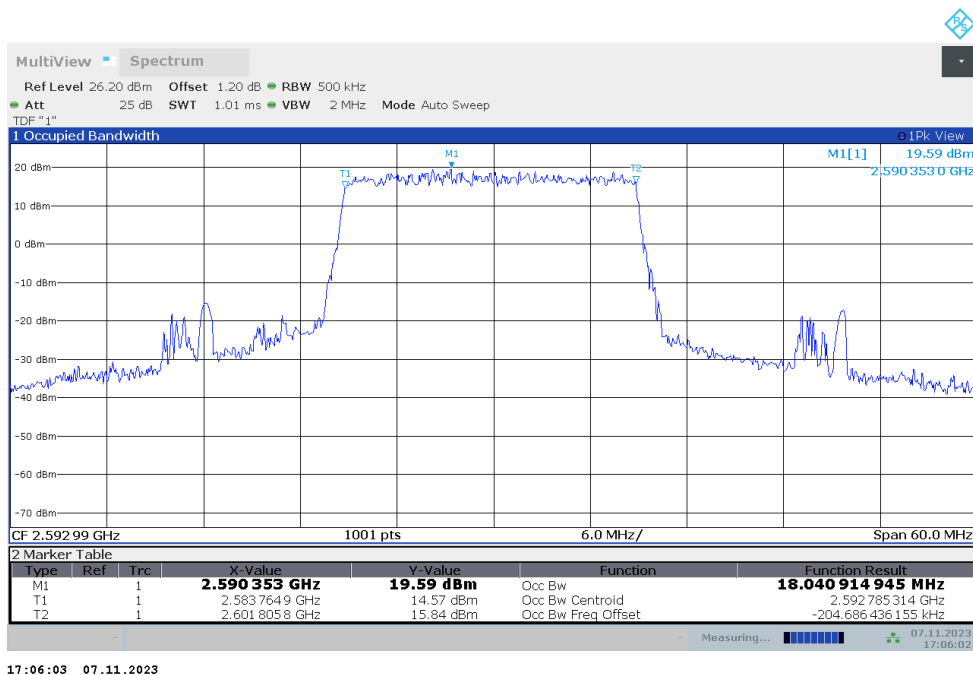
n41,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	18.030	18.041

n41,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n41,20MHz Bandwidth,DFT-s-QPSK (99% BW)

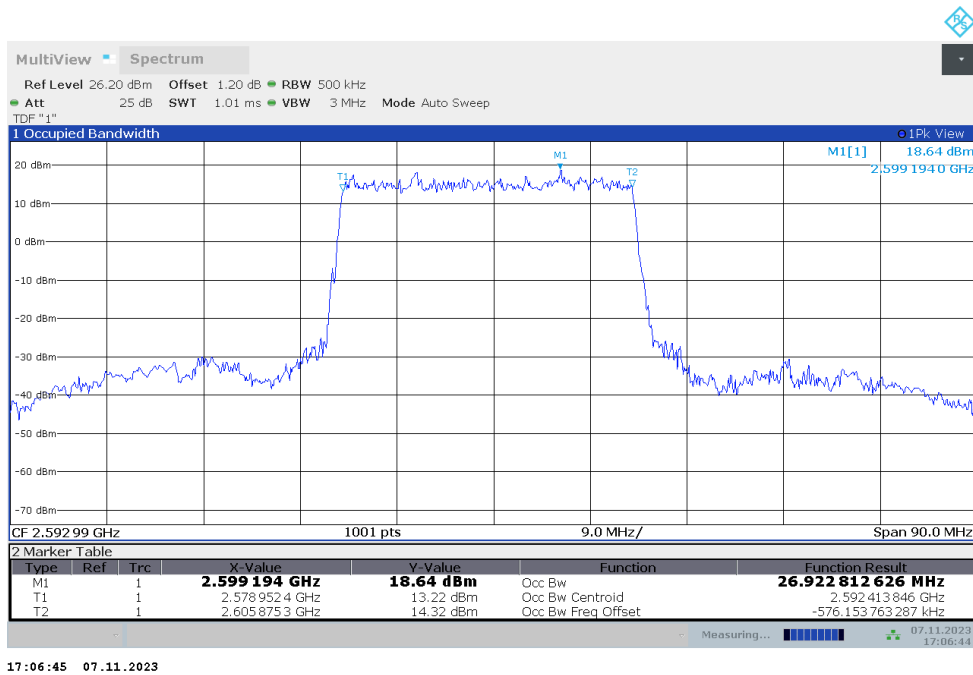


n41

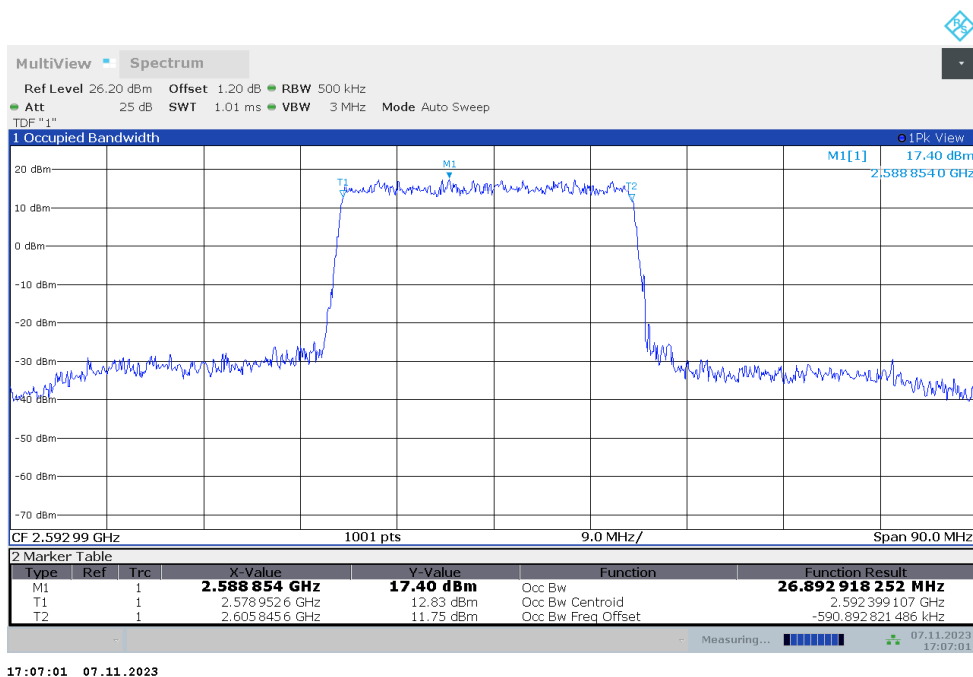
n41,30MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	26.923	26.893

n41,30MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n41,30MHz Bandwidth,DFT-s-QPSK (99% BW)

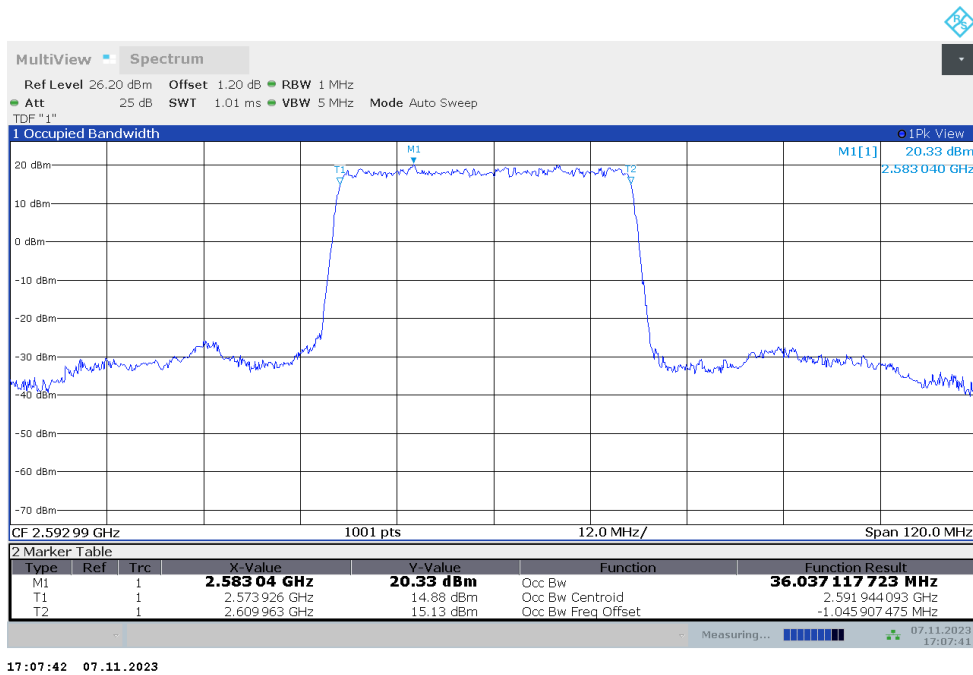


n41

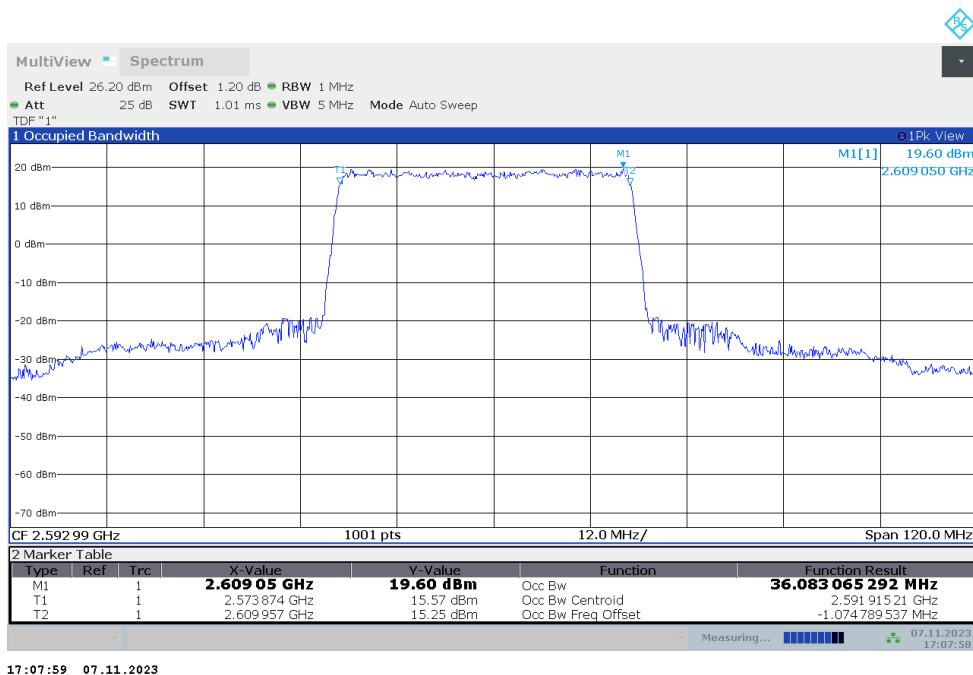
n41,40MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	36.037	36.083

n41,40MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n41,40MHz Bandwidth,DFT-s-QPSK (99% BW)

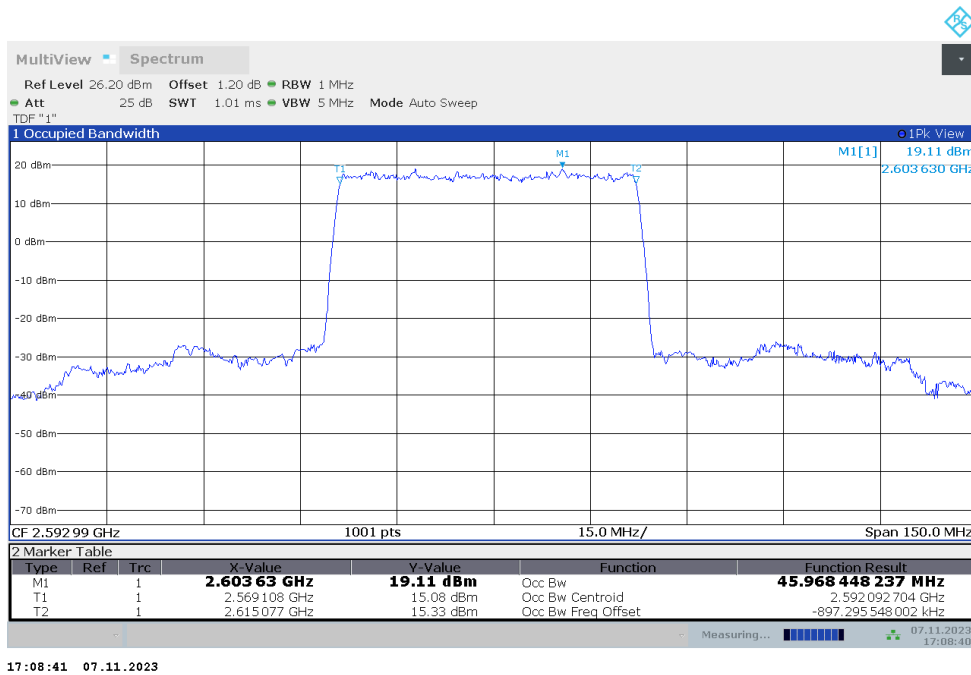


n41

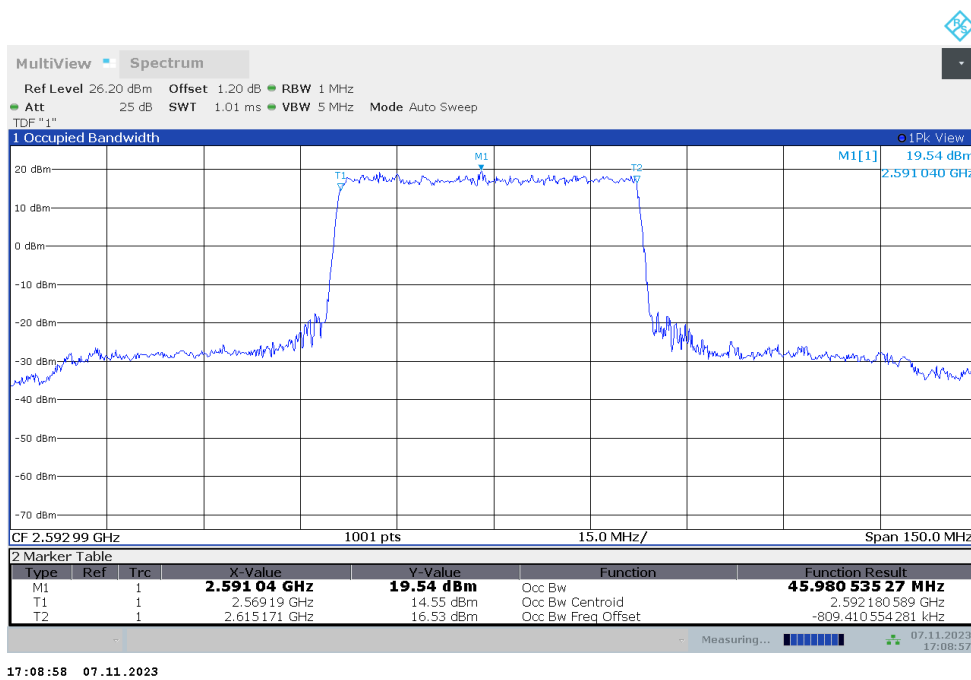
n41,50MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	45.968	45.981

n41,50MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n41,50MHz Bandwidth,DFT-s-QPSK (99% BW)

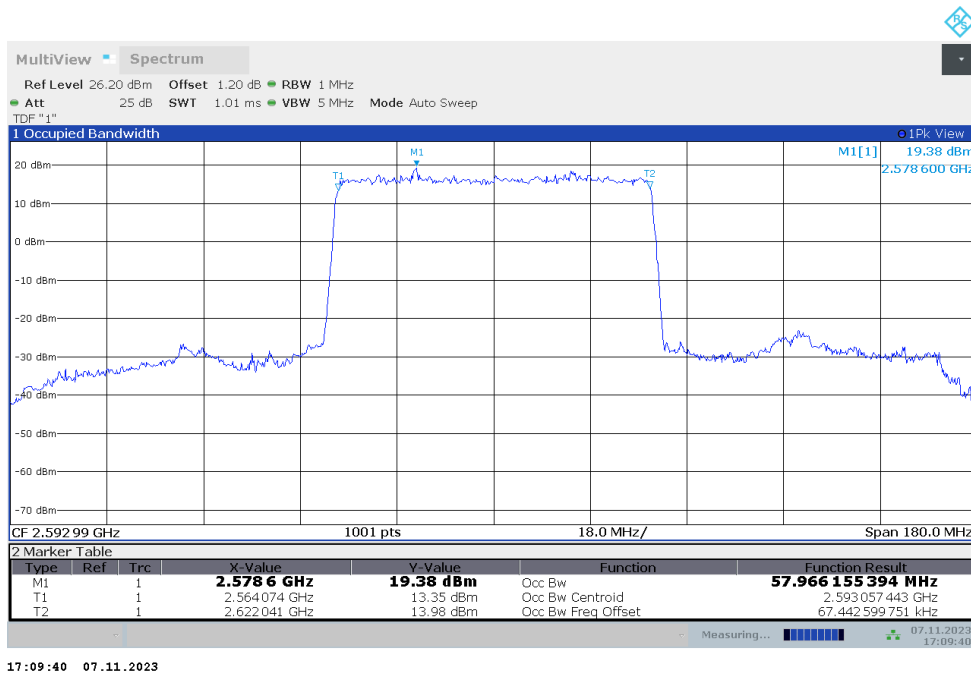


n41

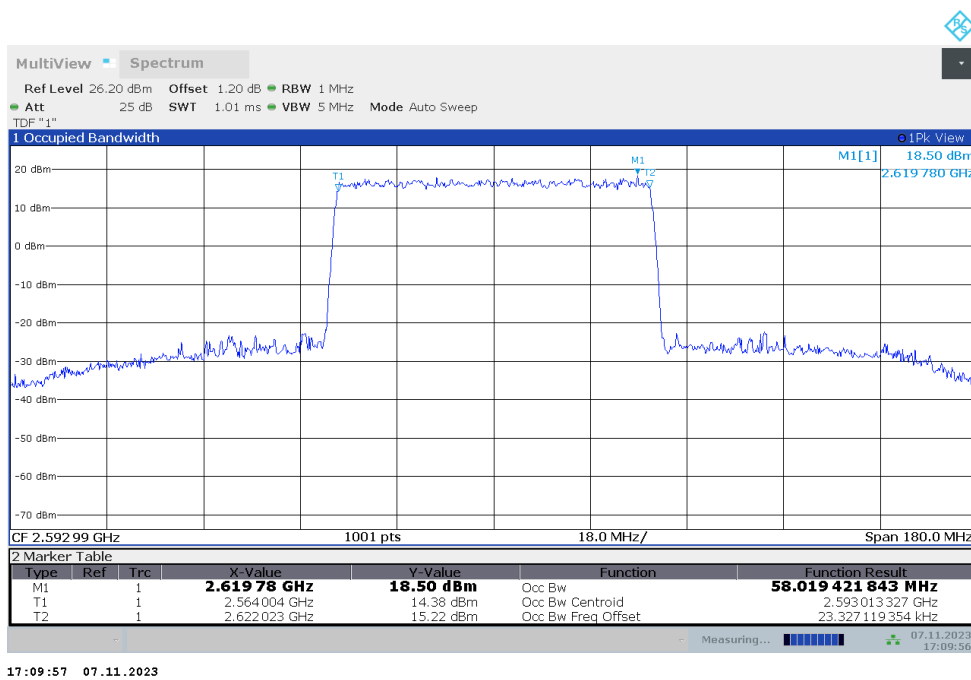
n41,60MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	57.966	58.019

n41,60MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n41,60MHz Bandwidth,DFT-s-QPSK (99% BW)

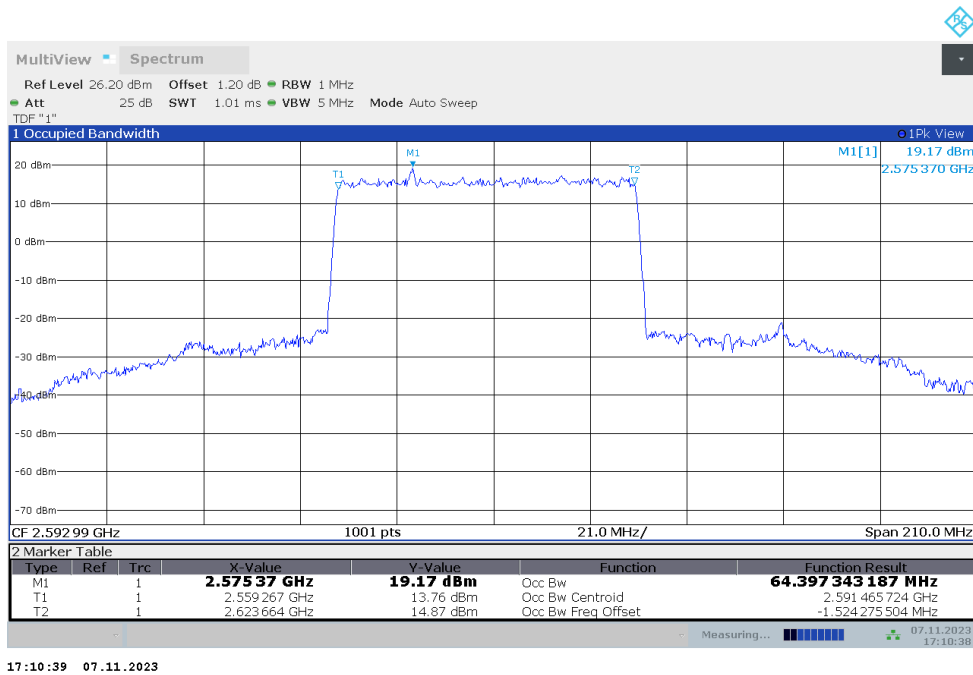


n41

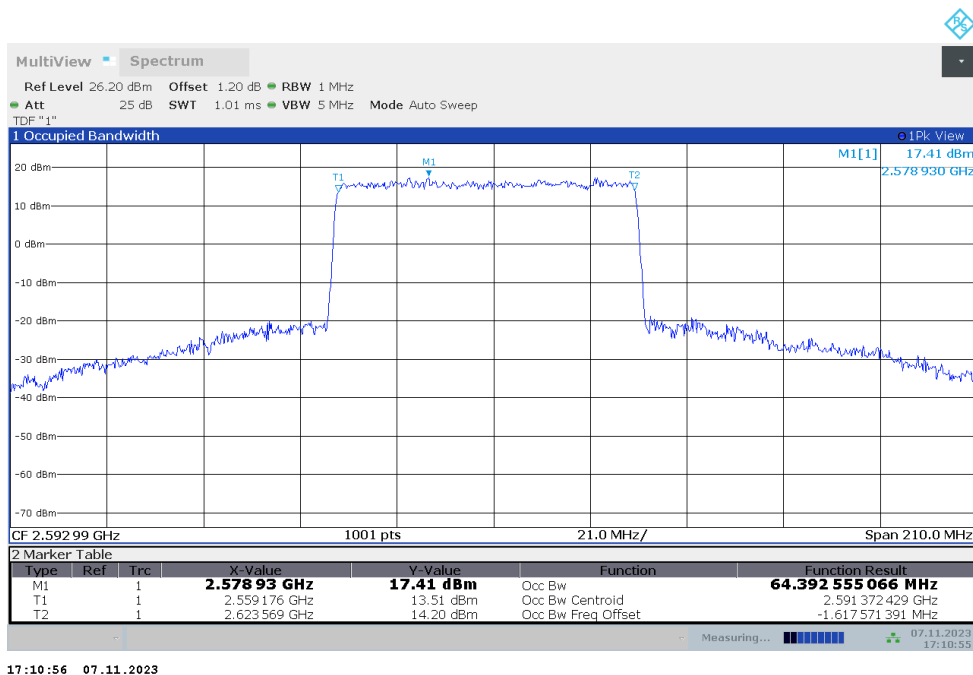
n41,70MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	64.397	64.393

n41,70MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n41,70MHz Bandwidth,DFT-s-QPSK (99% BW)

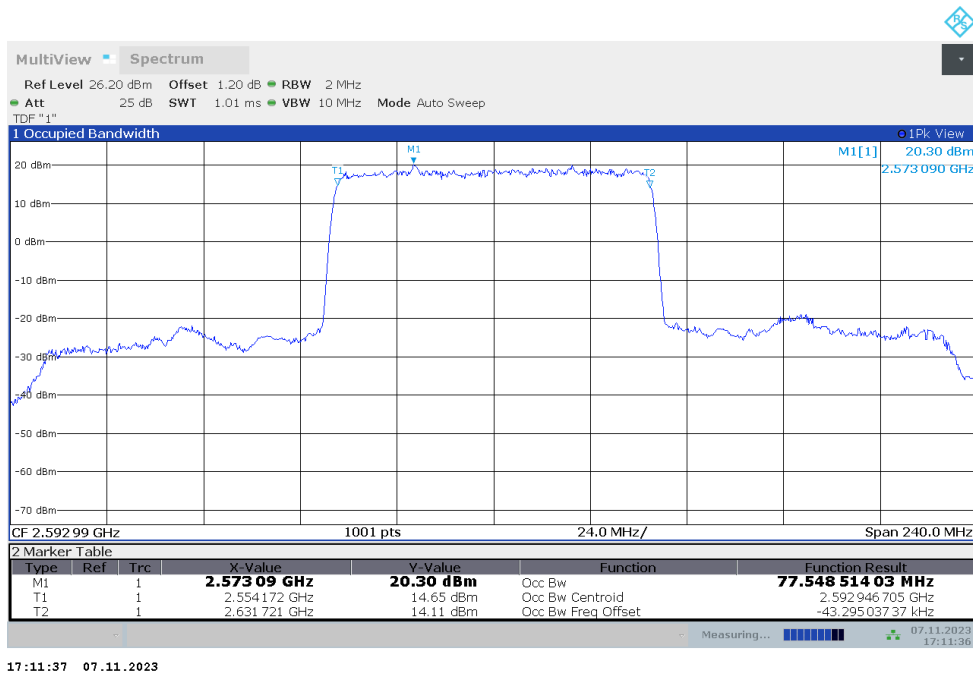


n41

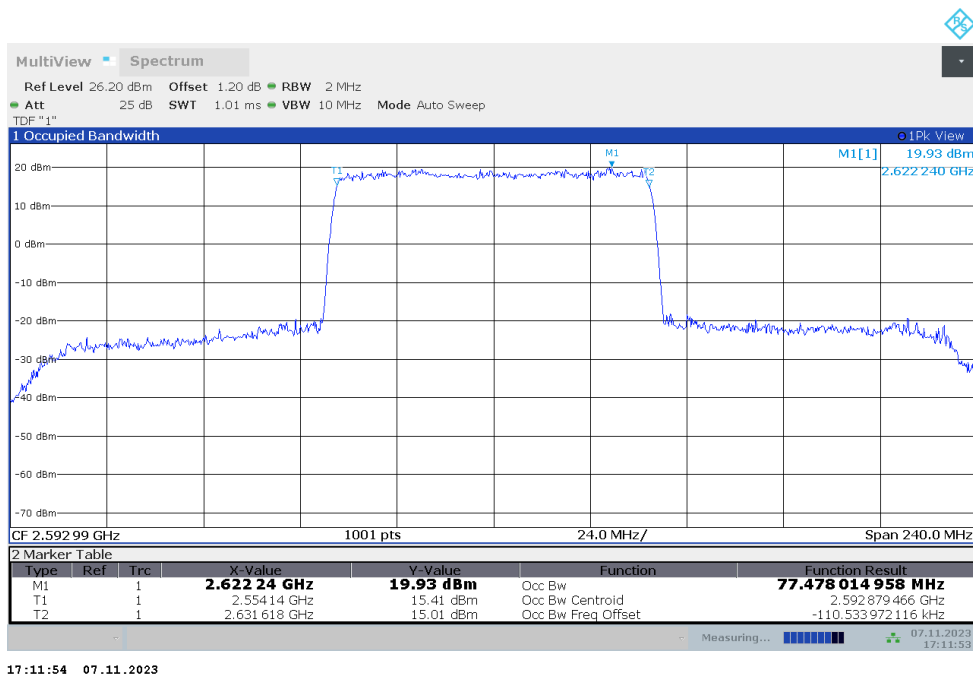
n41,80MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	77.549	77.478

n41,80MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n41,80MHz Bandwidth,DFT-s-QPSK (99% BW)



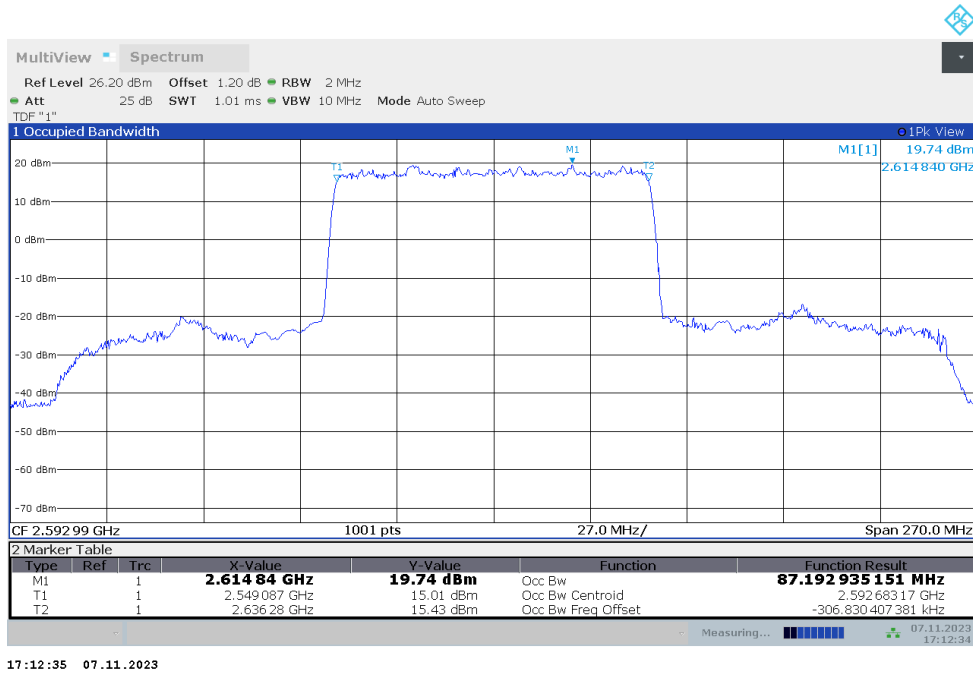


n41

n41,90MHz(99%)

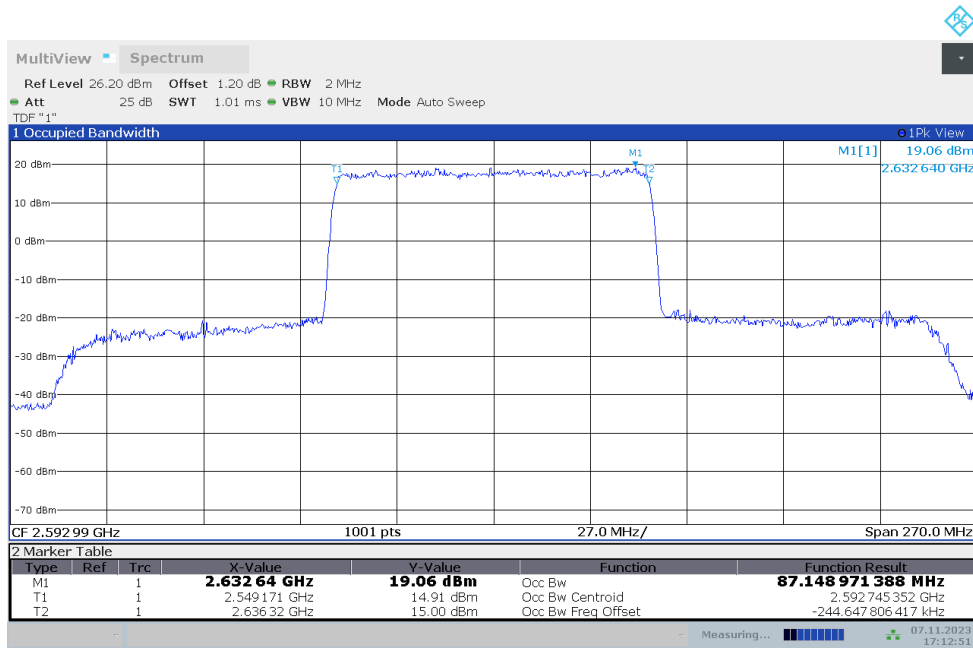
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	87.193	87.149

n41,90MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



17:12:35 07.11.2023

n41,90MHz Bandwidth,DFT-s-QPSK (99% BW)



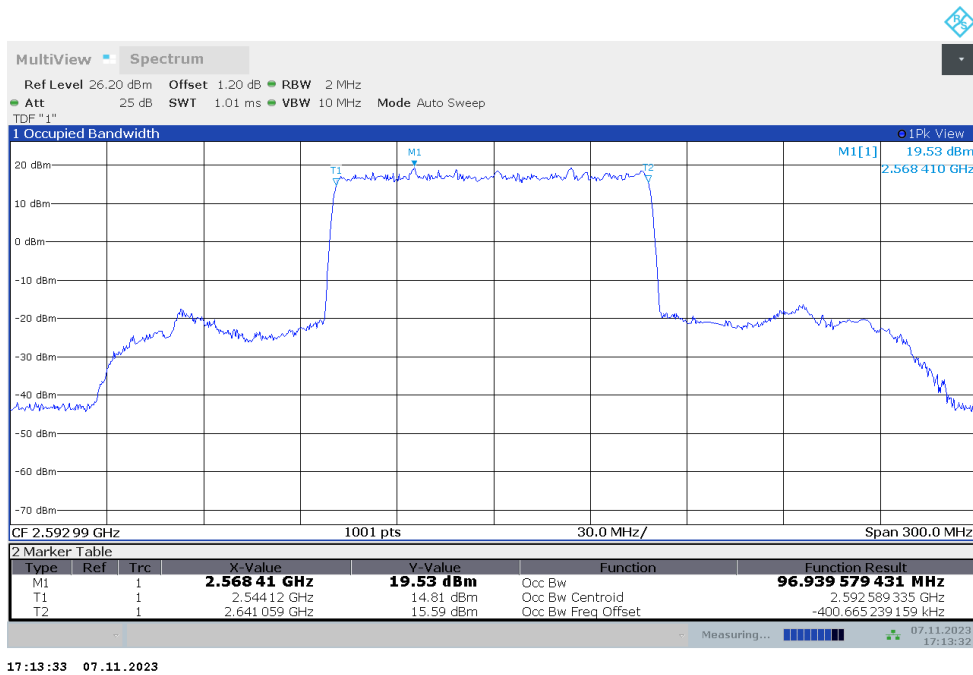
17:12:52 07.11.2023

n41

n41,100MHz(99%)

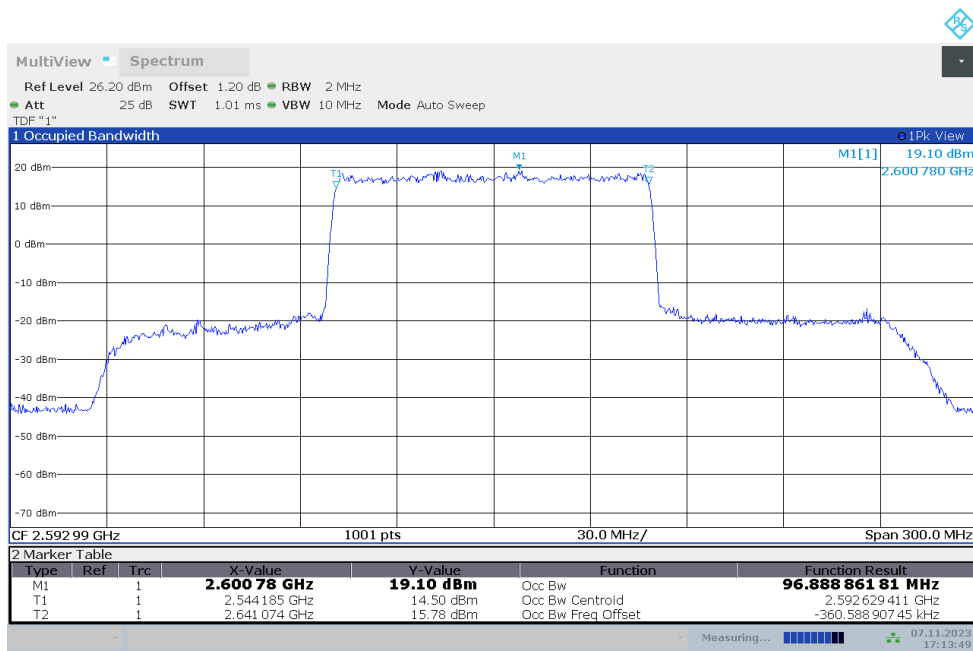
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	96.940	96.889

n41,100MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



17:13:33 07.11.2023

n41,100MHz Bandwidth,DFT-s-QPSK (99% BW)



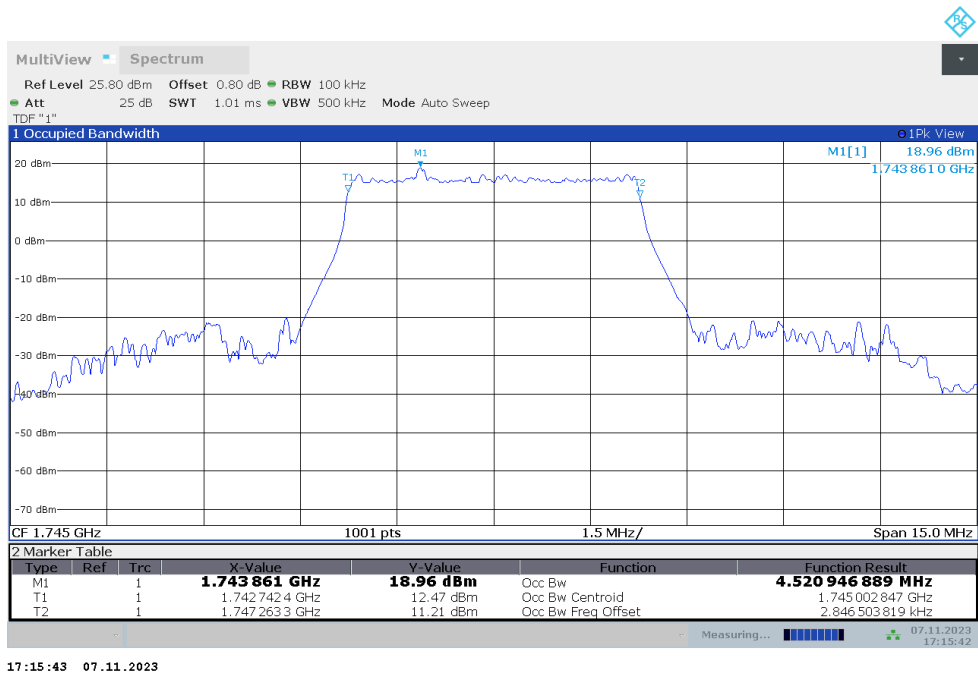
17:13:50 07.11.2023

n66

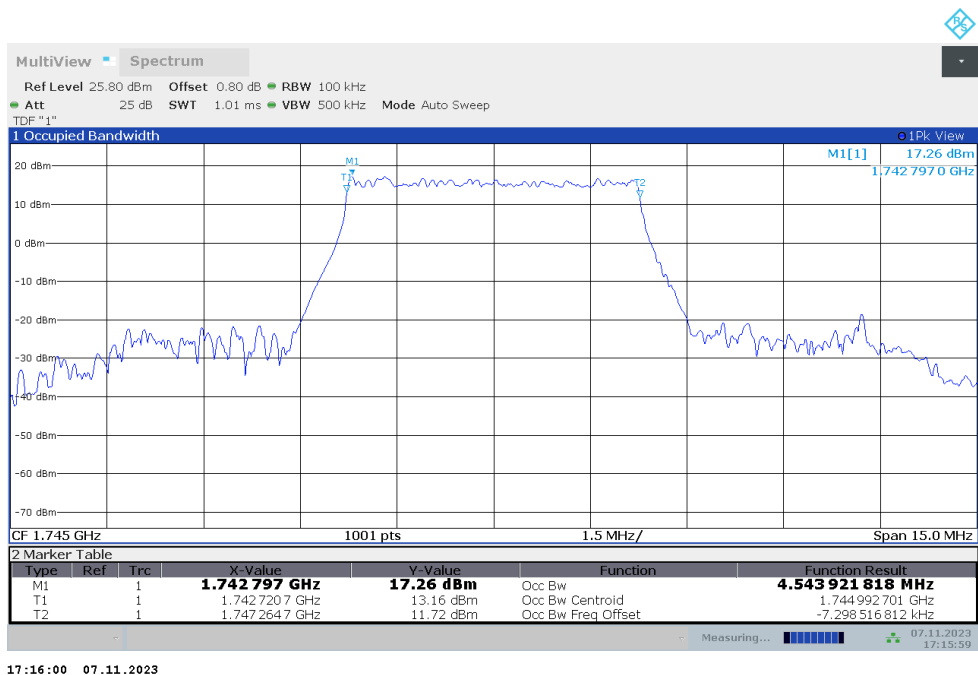
n66,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	4.521	4.544

n66,5MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n66,5MHz Bandwidth,DFT-s-QPSK (99% BW)

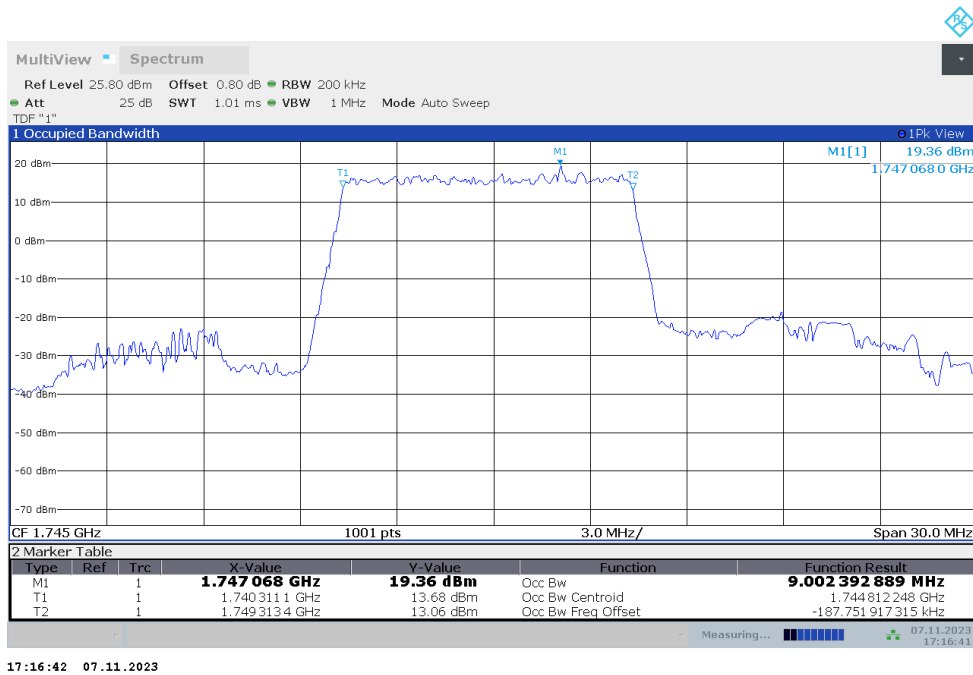


n66

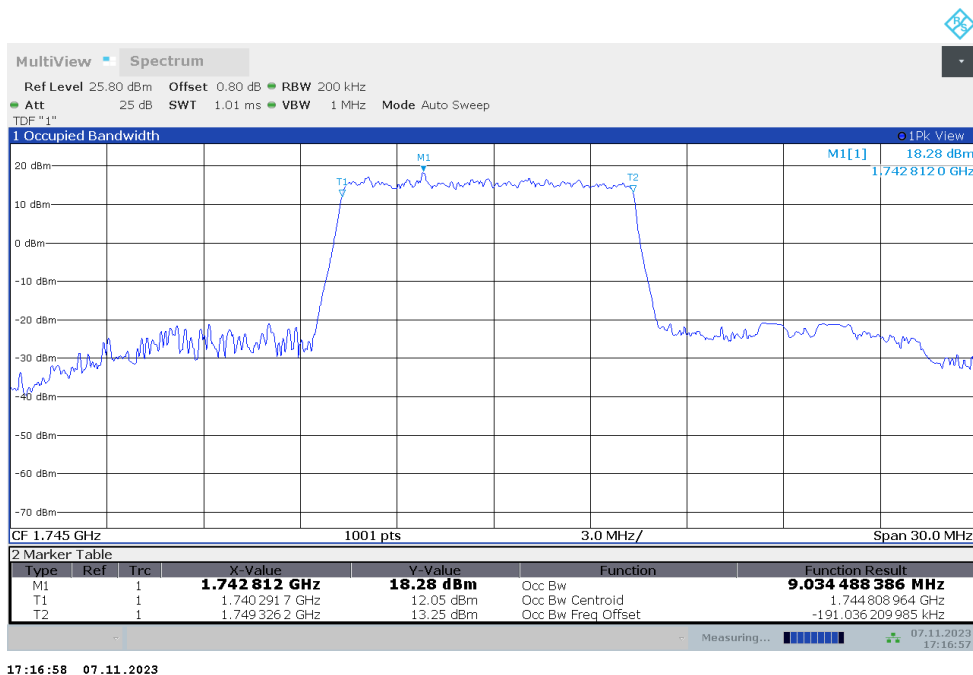
n66,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	9.002	9.034

n66,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n66,10MHz Bandwidth,DFT-s-QPSK (99% BW)

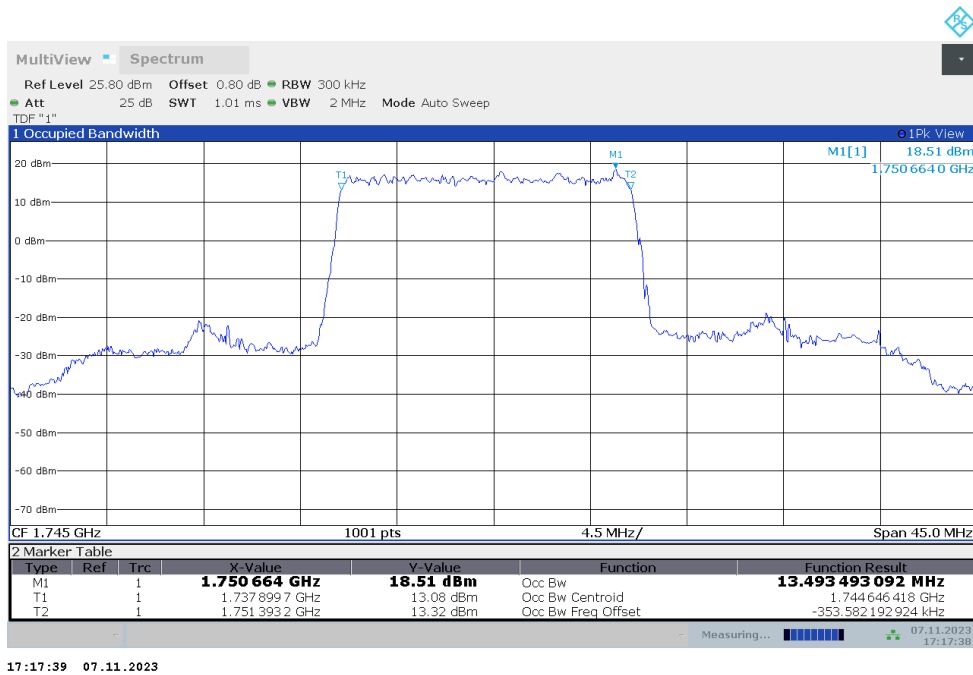


n66

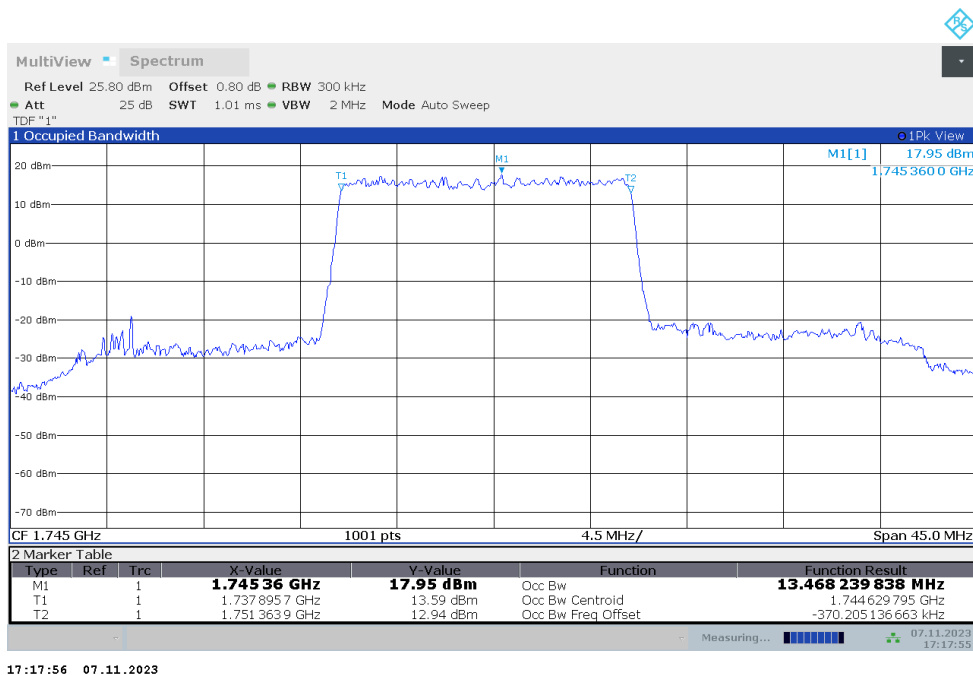
n66,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	13.493	13.468

n66,15MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n66,15MHz Bandwidth,DFT-s-QPSK (99% BW)

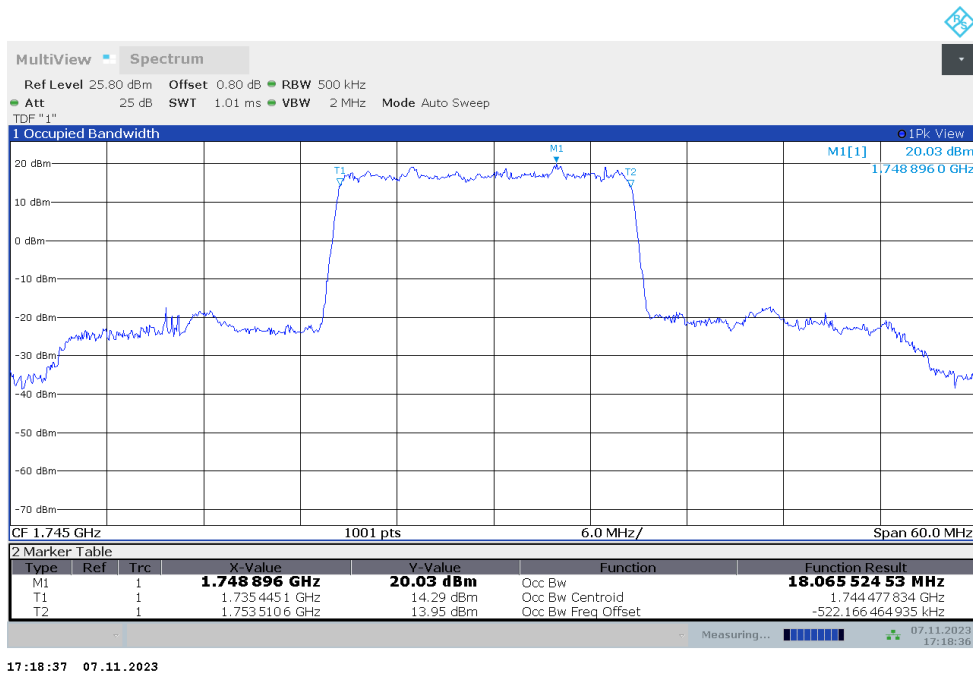


n66

n66,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	18.066	18.037

n66,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n66,20MHz Bandwidth,DFT-s-QPSK (99% BW)

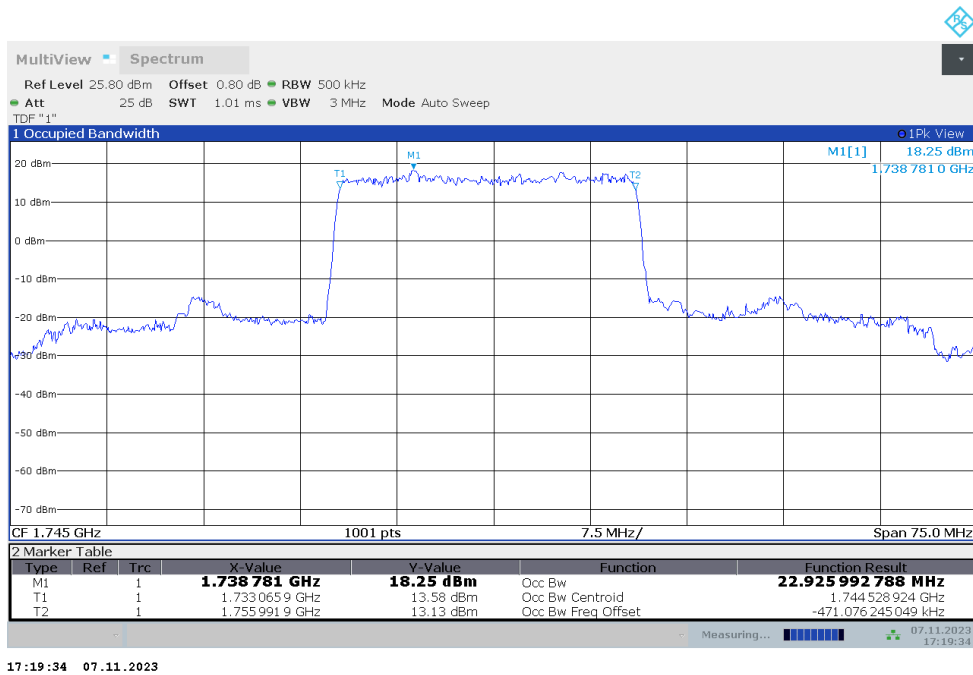


n66

n66,25MHz(99%)

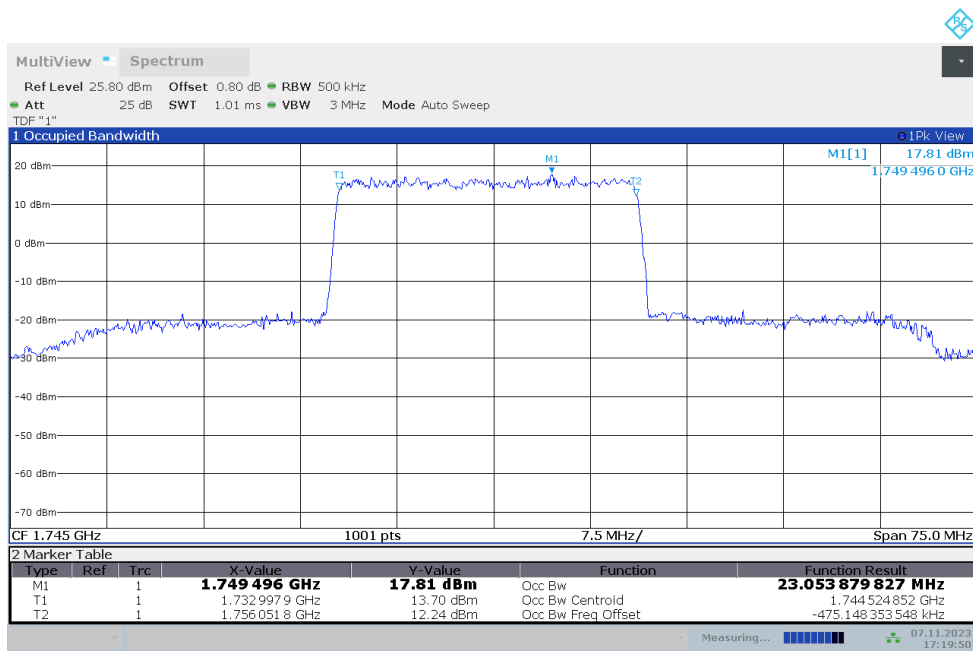
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	22.926	23.054

n66,25MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



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n66,25MHz Bandwidth,DFT-s-QPSK (99% BW)



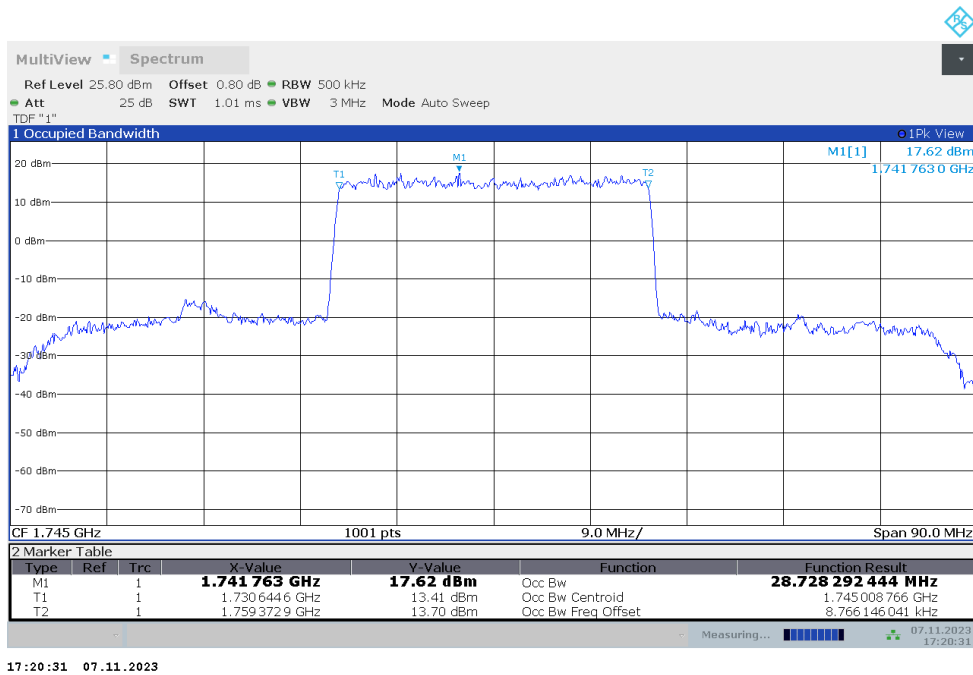
17:19:50 07.11.2023

n66

n66,30MHz(99%)

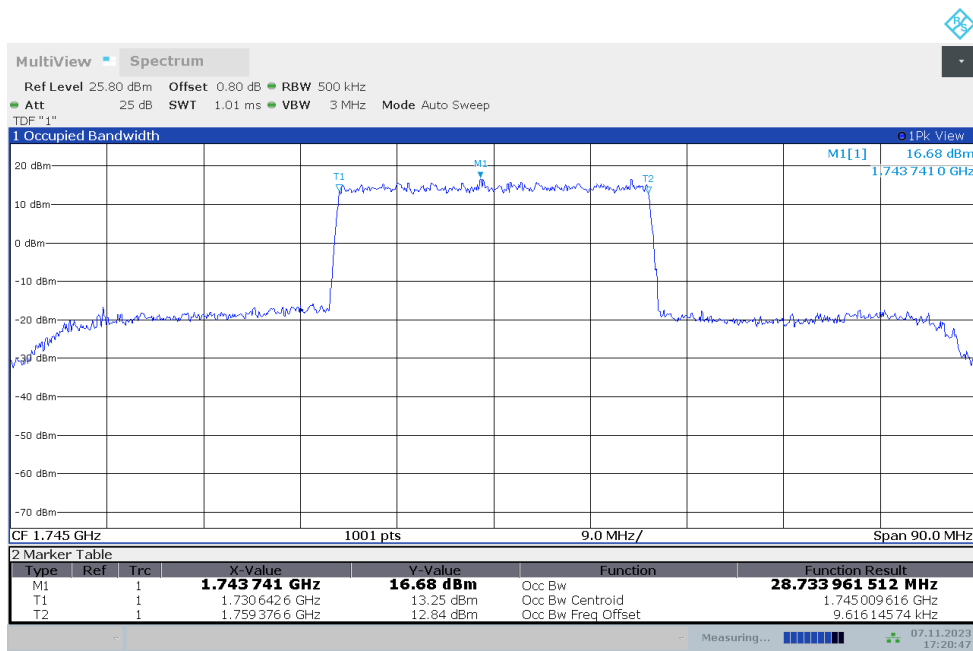
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	28.728	28.734

n66,30MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



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n66,30MHz Bandwidth,DFT-s-QPSK (99% BW)



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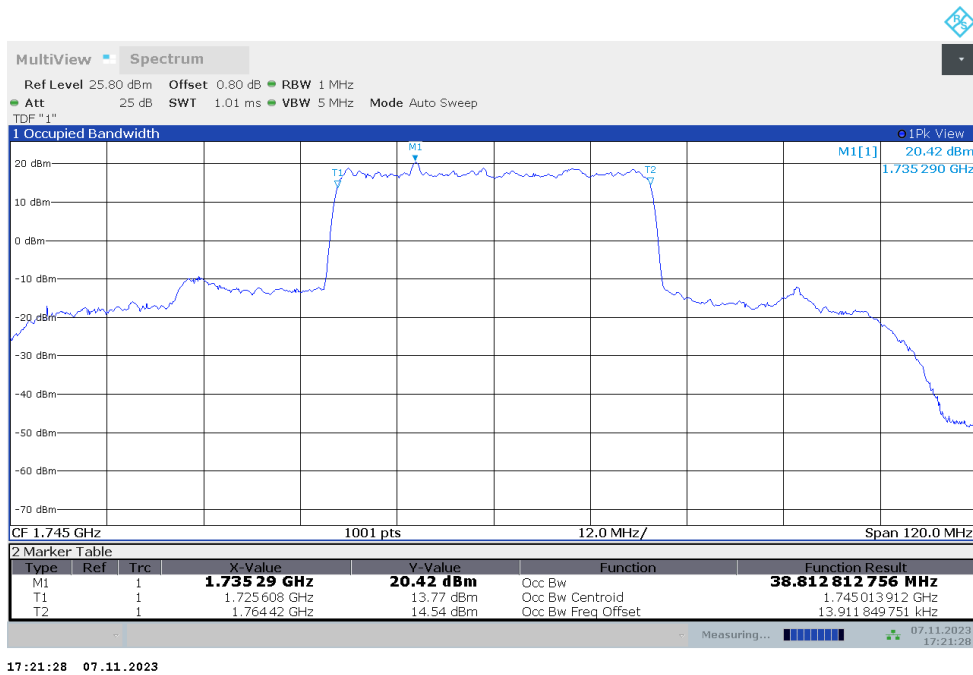


n66

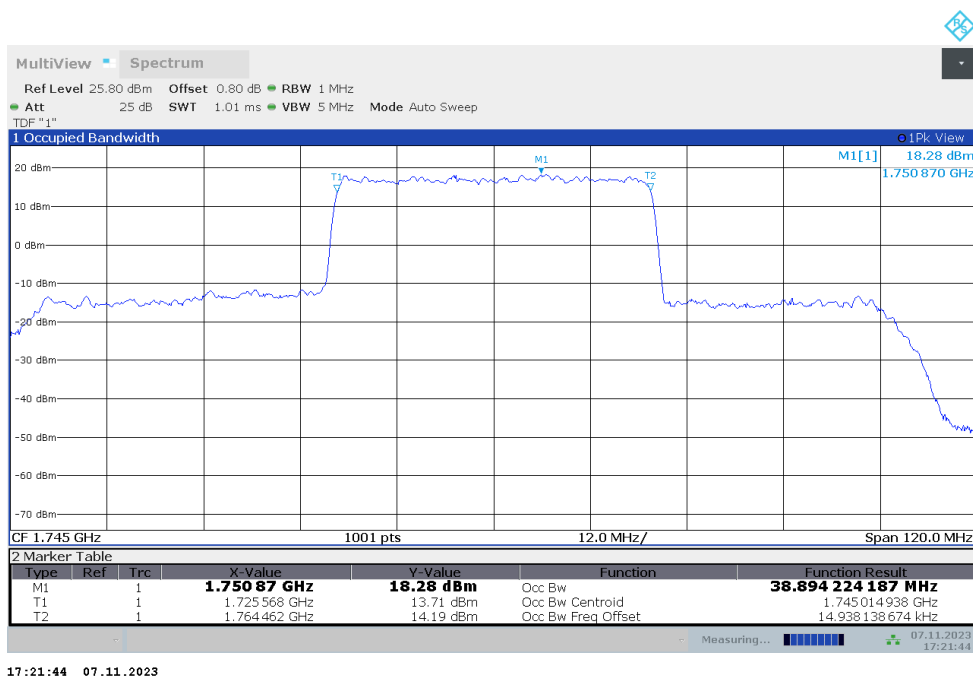
n66,40MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	38.813	38.894

n66,40MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



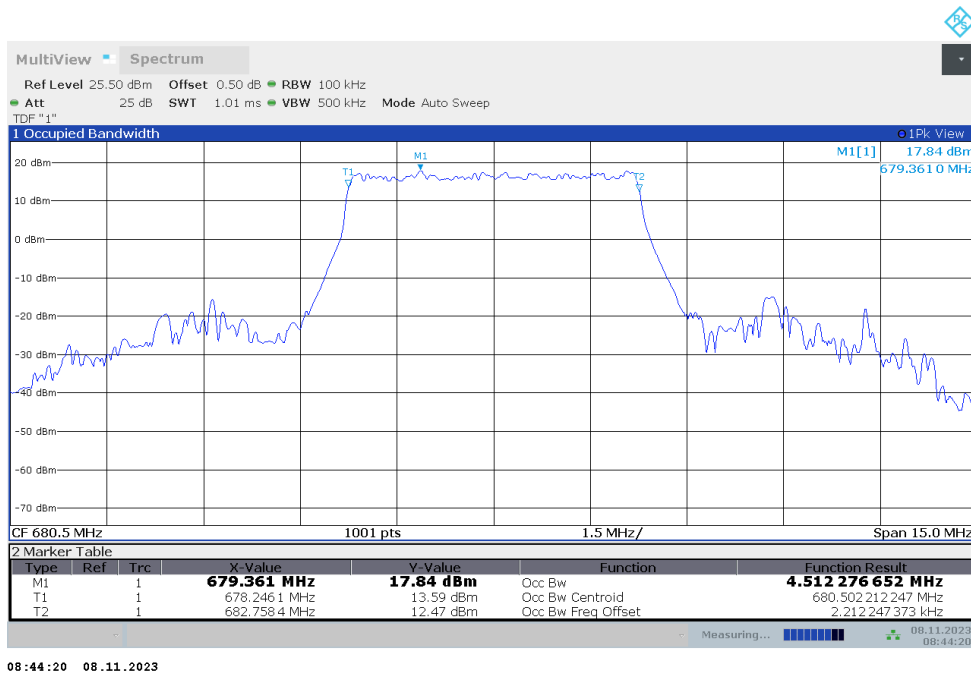
n66,40MHz Bandwidth,DFT-s-QPSK (99% BW)



n71  
 n71,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
680.5	4.512	4.525

n71,5MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



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n71,5MHz Bandwidth,DFT-s-QPSK (99% BW)



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n71

n71,10MHz(99%)

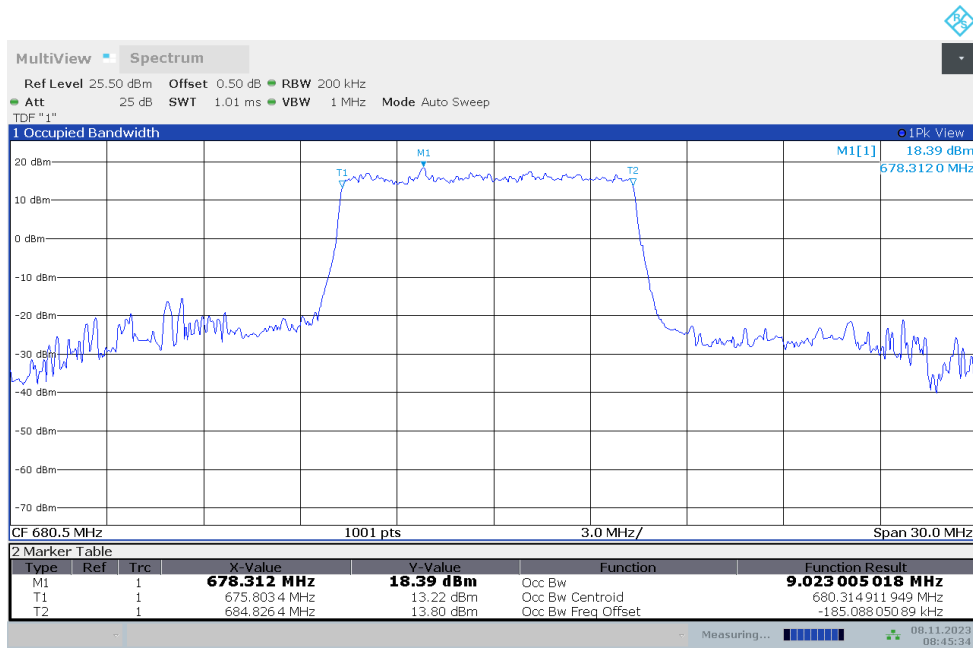
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
680.5	8.990	9.023

n71,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



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n71,10MHz Bandwidth,DFT-s-QPSK (99% BW)



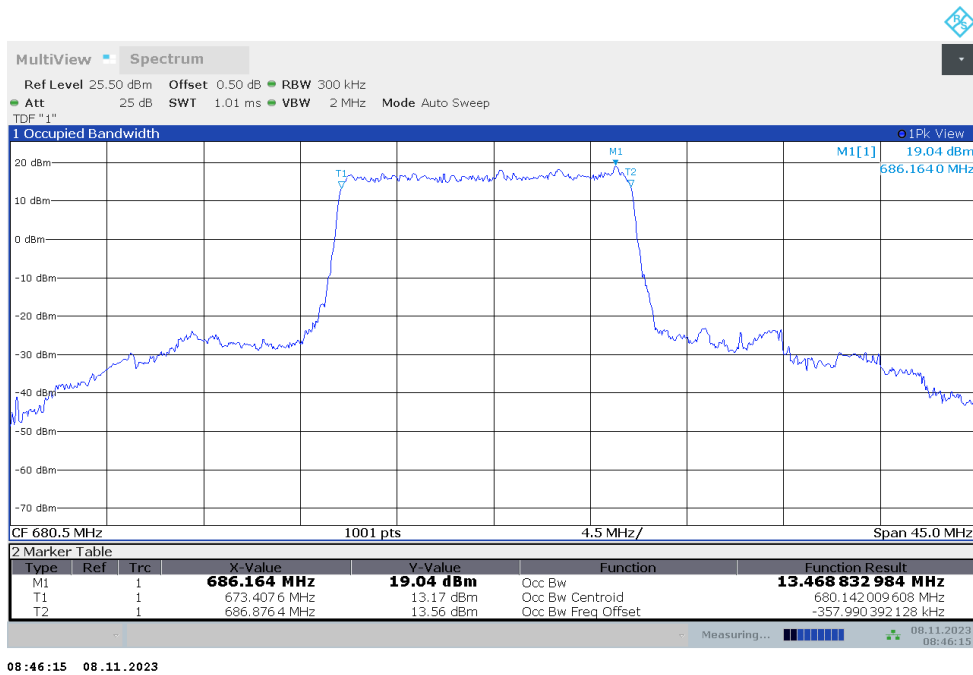
08:45:34 08.11.2023

n71

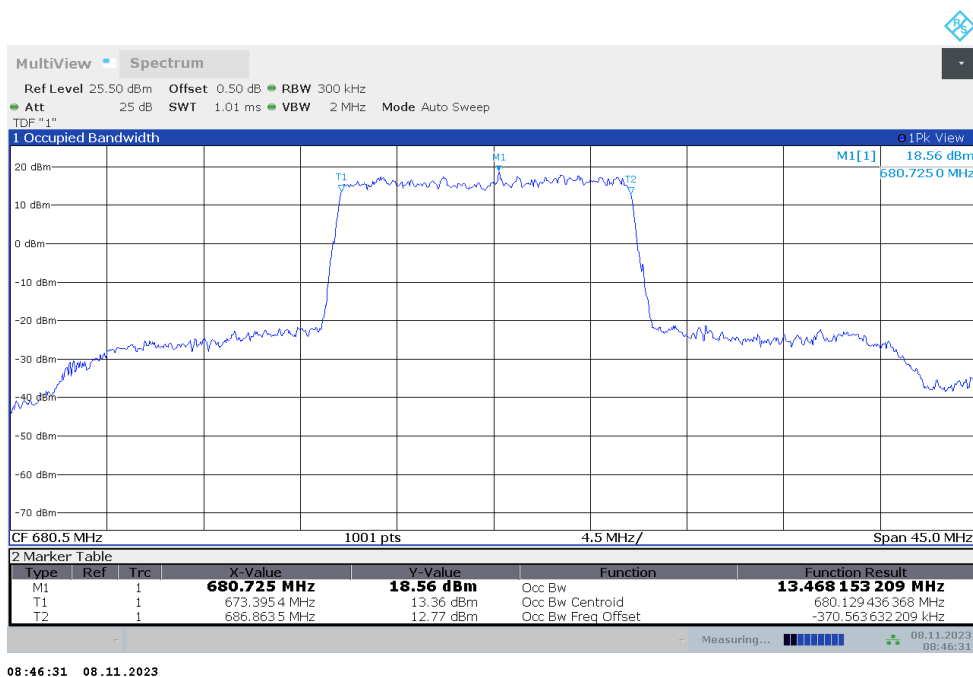
n71,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
680.5	13.469	13.468

n71,15MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n71,15MHz Bandwidth,DFT-s-QPSK (99% BW)

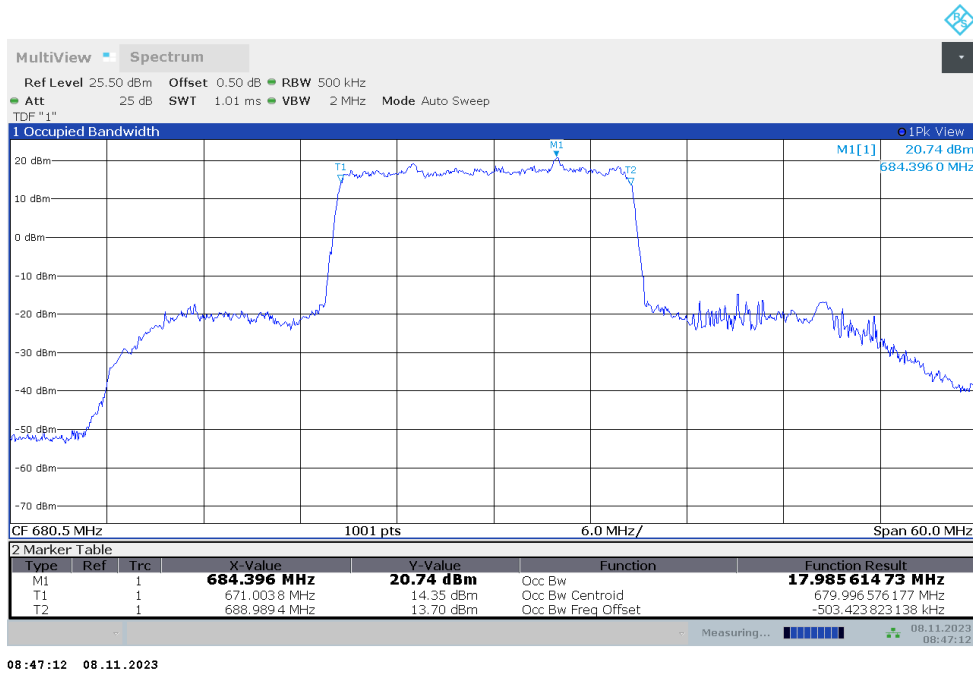


n71

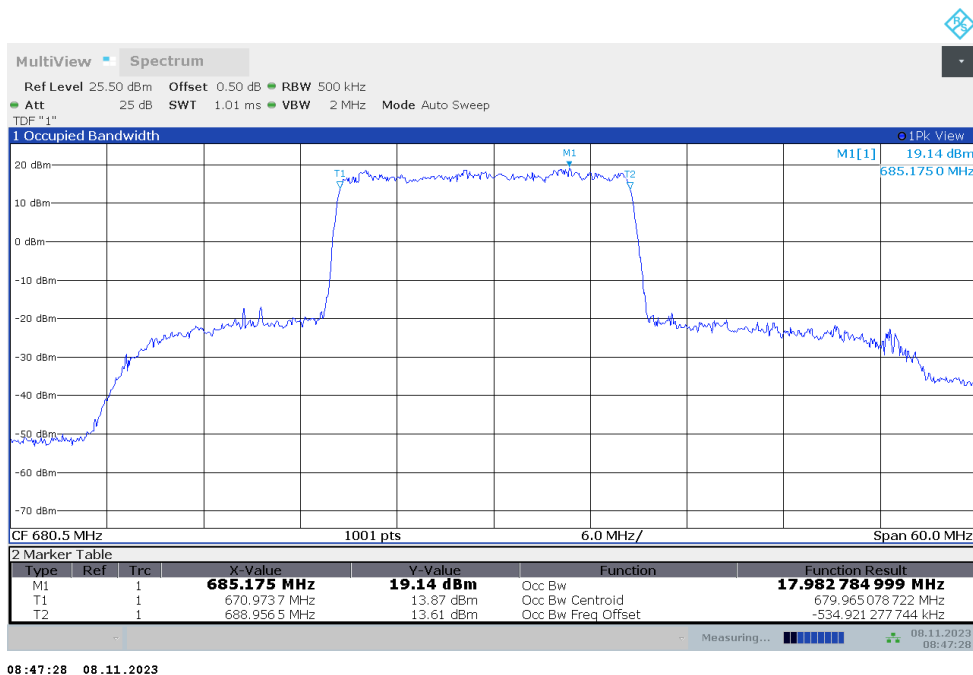
n71,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
680.5	17.986	17.983

n71,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n71,20MHz Bandwidth,DFT-s-QPSK (99% BW)

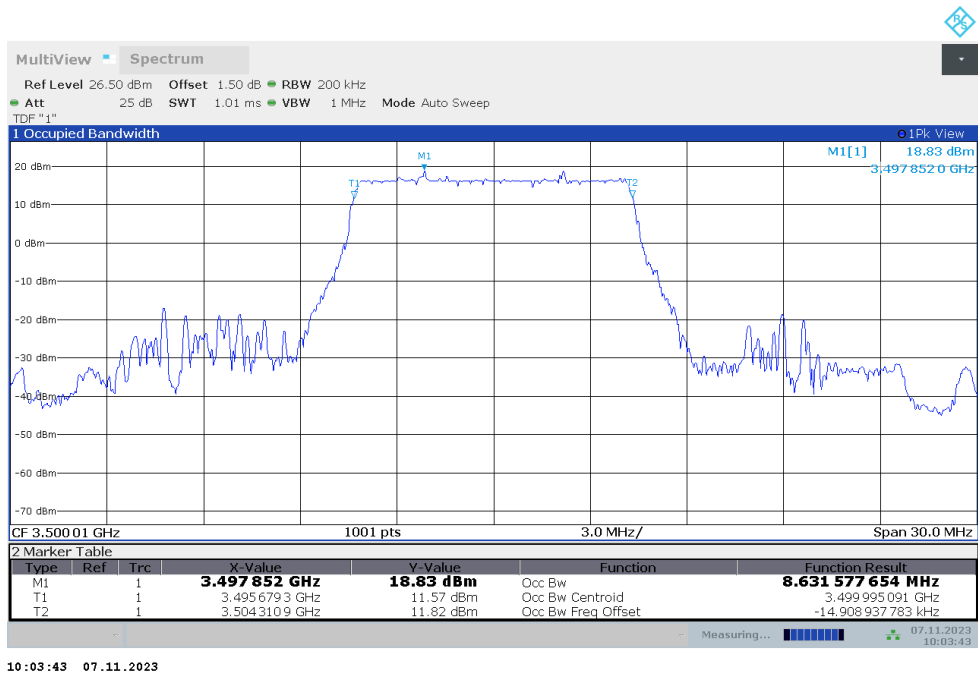


n77L

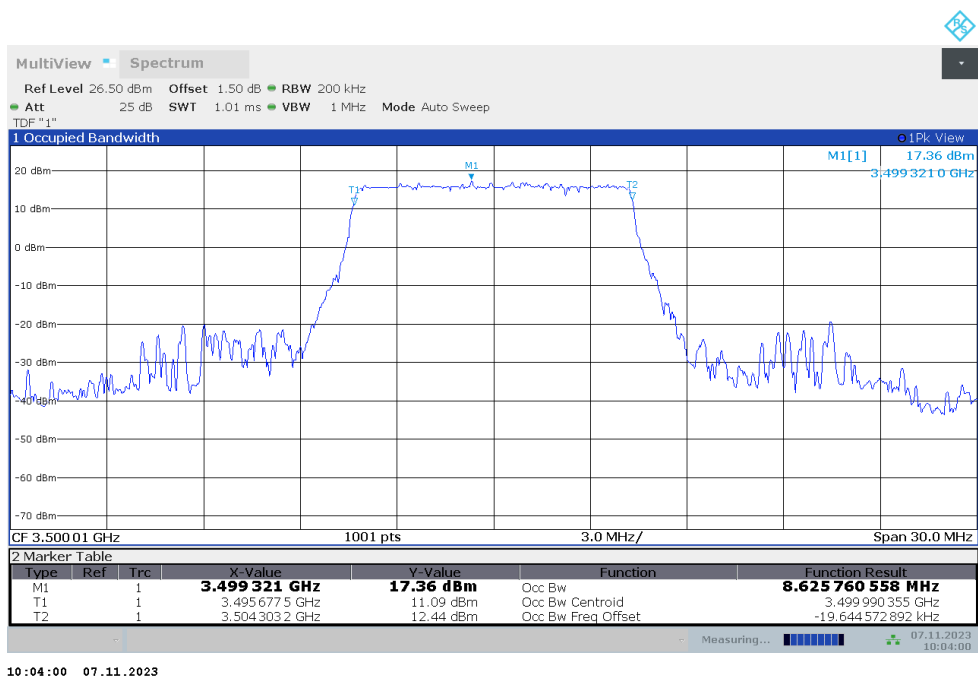
n77L,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	8.632	8.626

n77L,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n77L,10MHz Bandwidth,DFT-s-QPSK (99% BW)

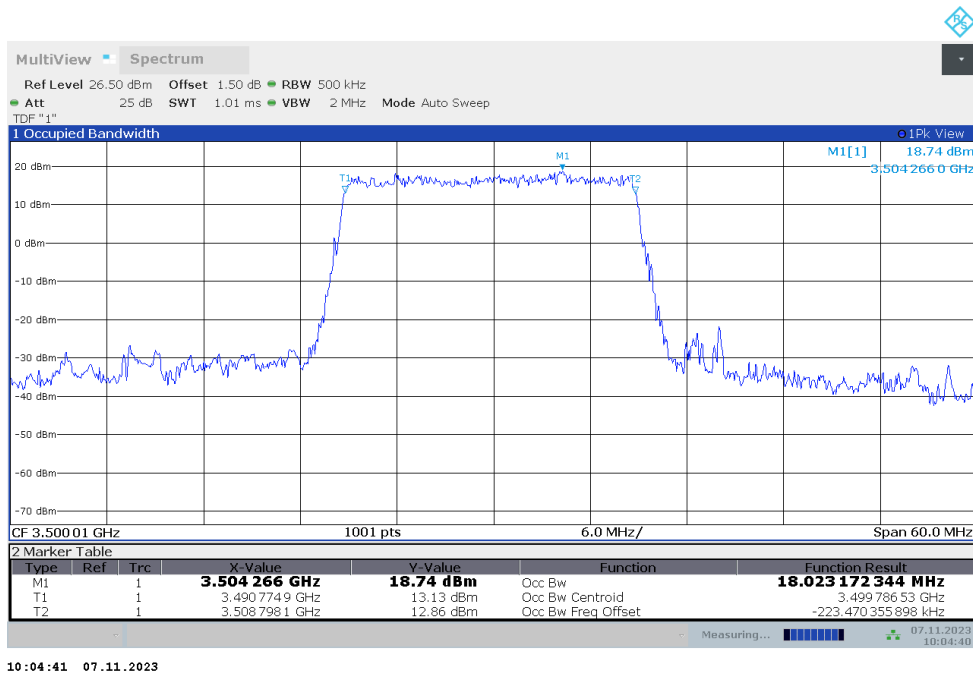


n77L

n77L,20MHz(99%)

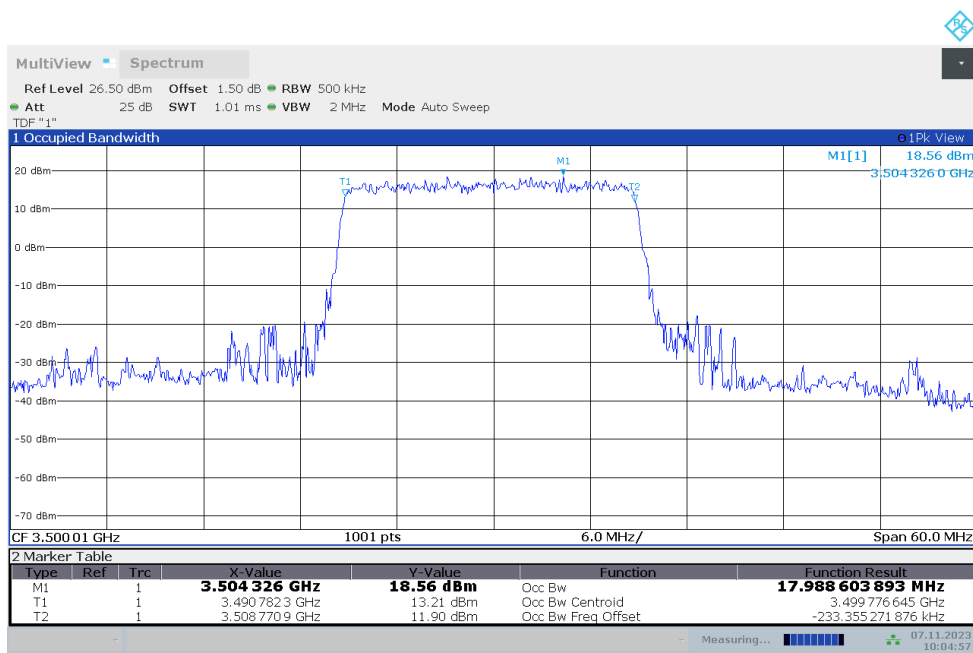
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	18.023	17.989

n77L,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



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n77L,20MHz Bandwidth,DFT-s-QPSK (99% BW)



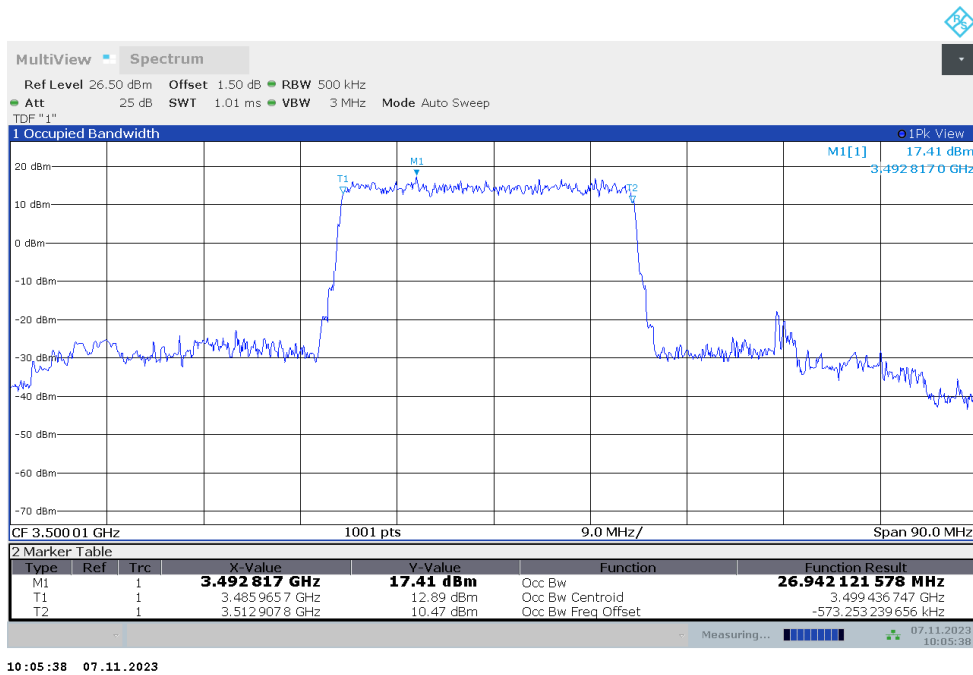
10:04:58 07.11.2023

n77L

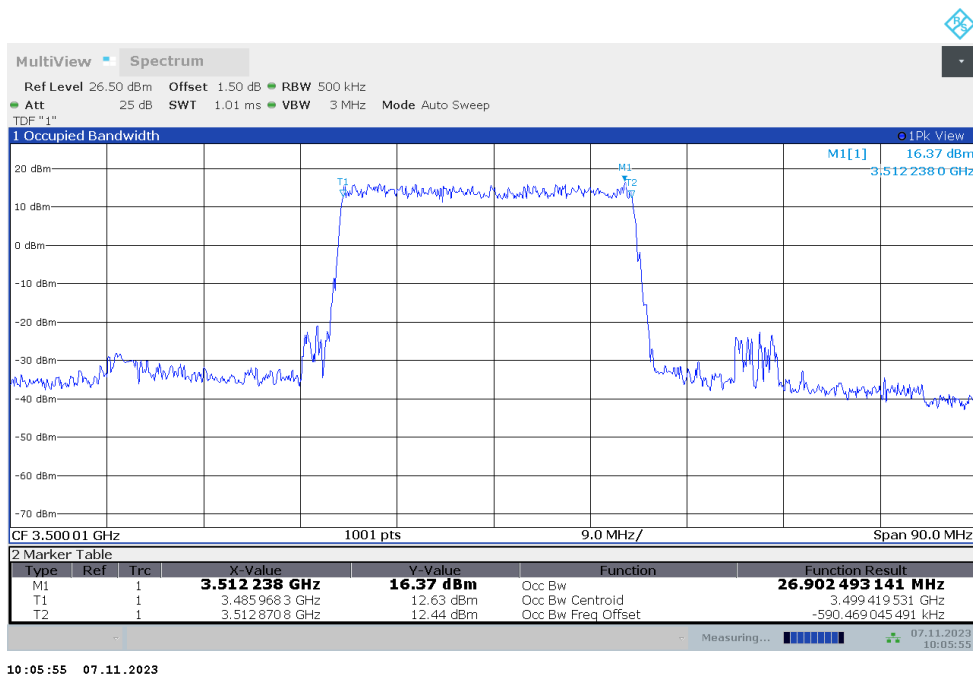
n77L,30MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	26.942	26.902

n77L,30MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n77L,30MHz Bandwidth,DFT-s-QPSK (99% BW)

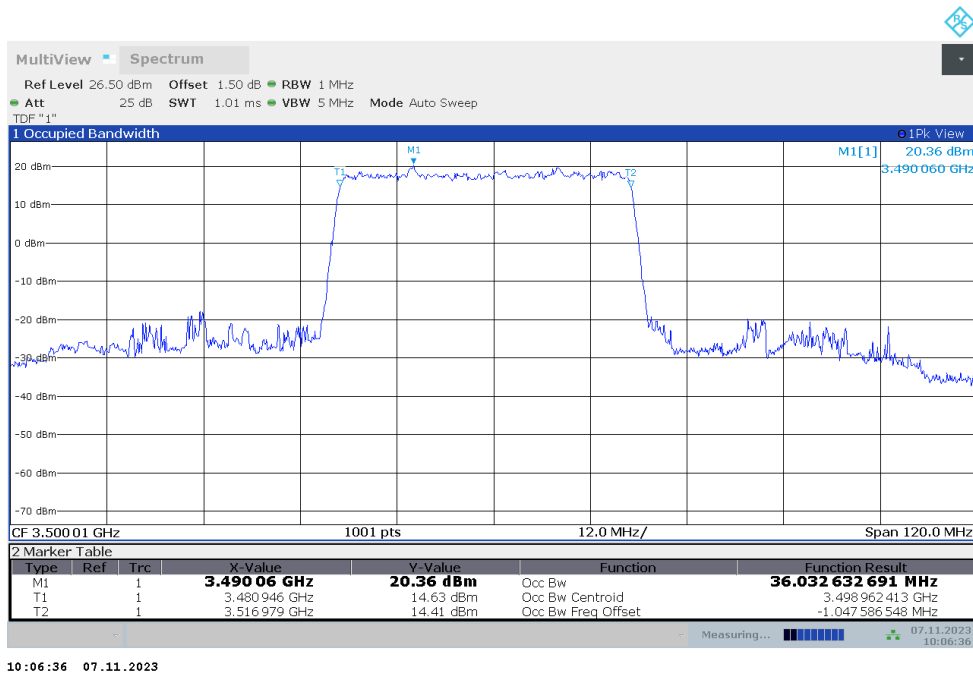




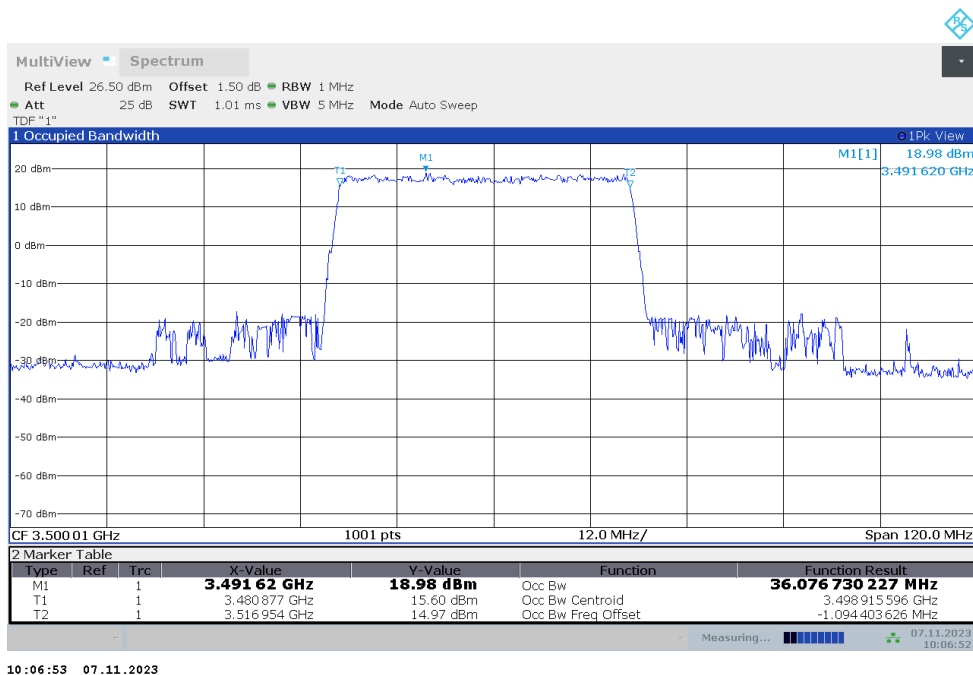
n77L  
n77L,40MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	36.033	36.077

n77L,40MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n77L,40MHz Bandwidth,DFT-s-QPSK (99% BW)

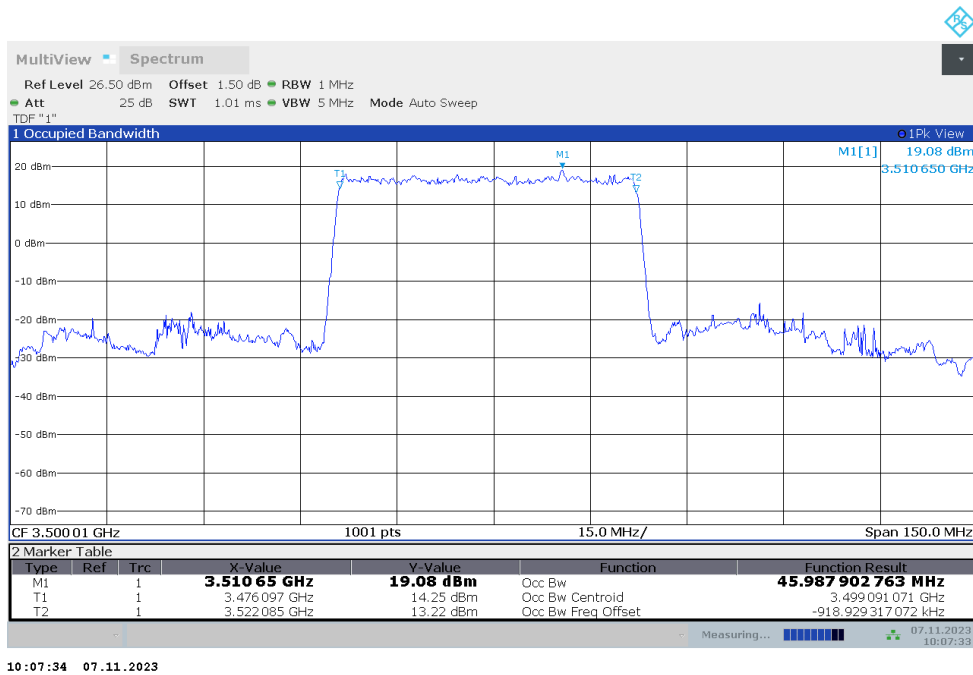


n77L

n77L,50MHz(99%)

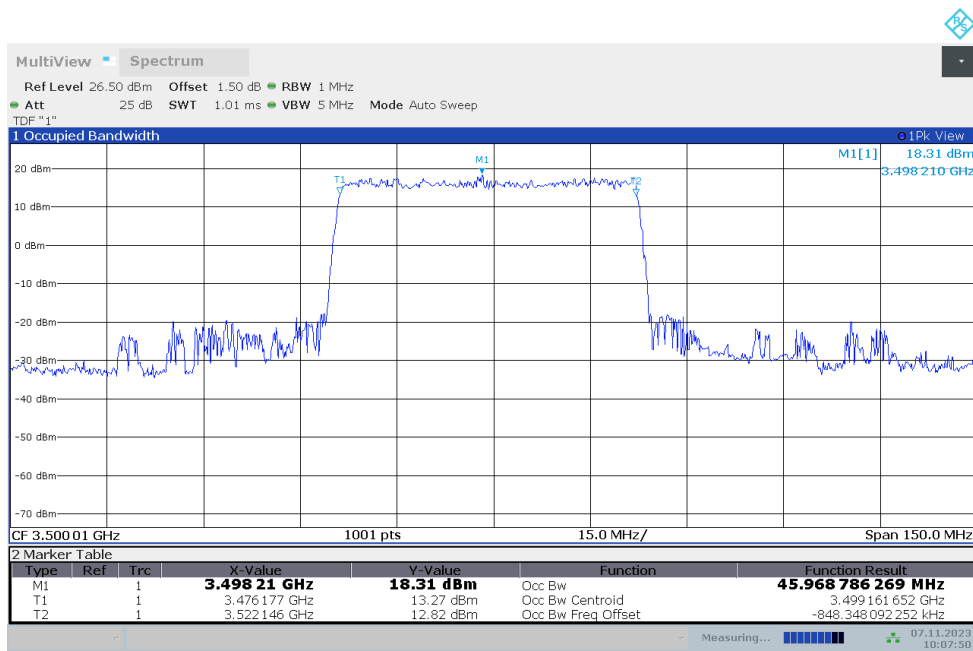
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	45.988	45.969

n77L,50MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



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n77L,50MHz Bandwidth,DFT-s-QPSK (99% BW)



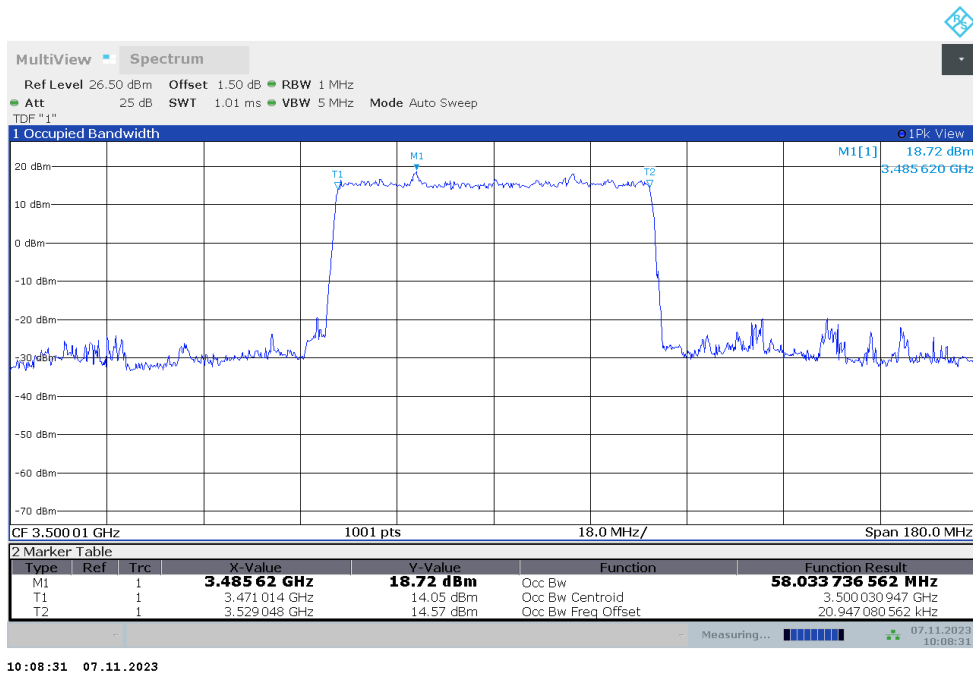
10:07:50 07.11.2023

n77L

n77L,60MHz(99%)

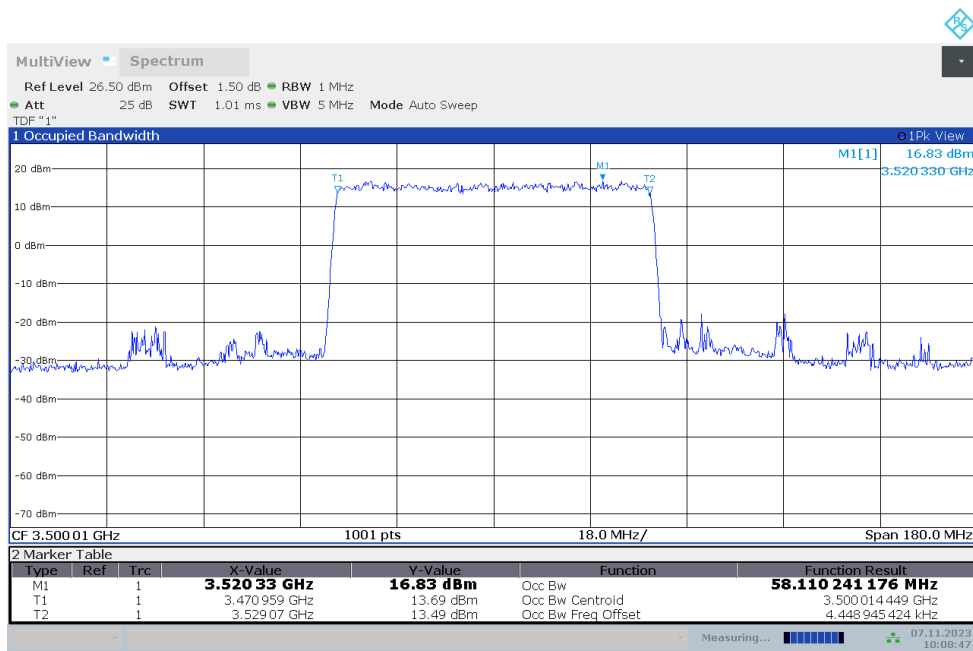
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	58.034	58.110

n77L,60MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



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n77L,60MHz Bandwidth,DFT-s-QPSK (99% BW)



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