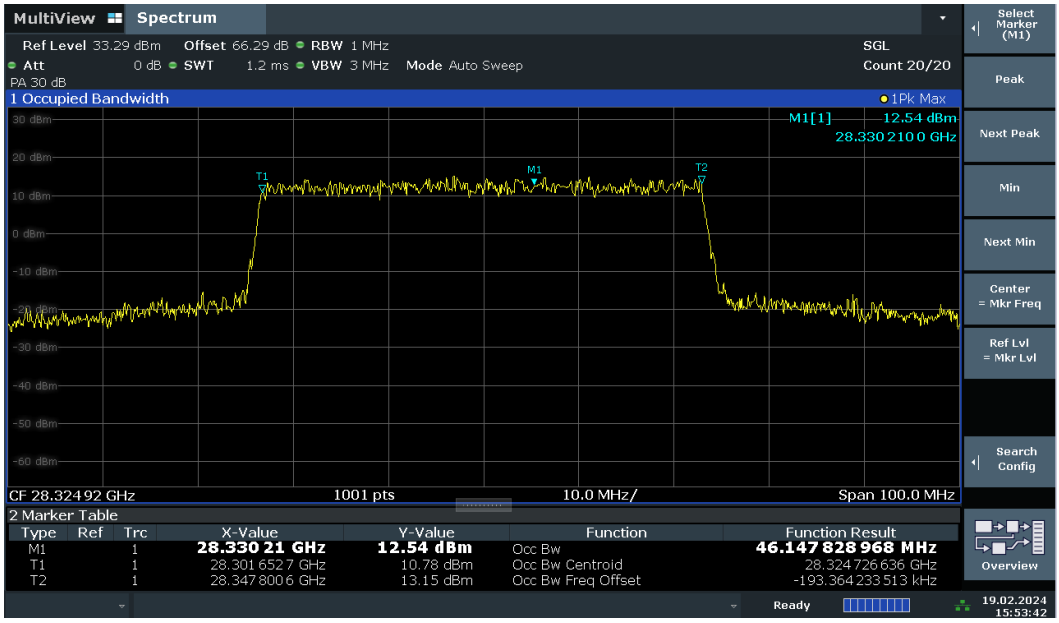
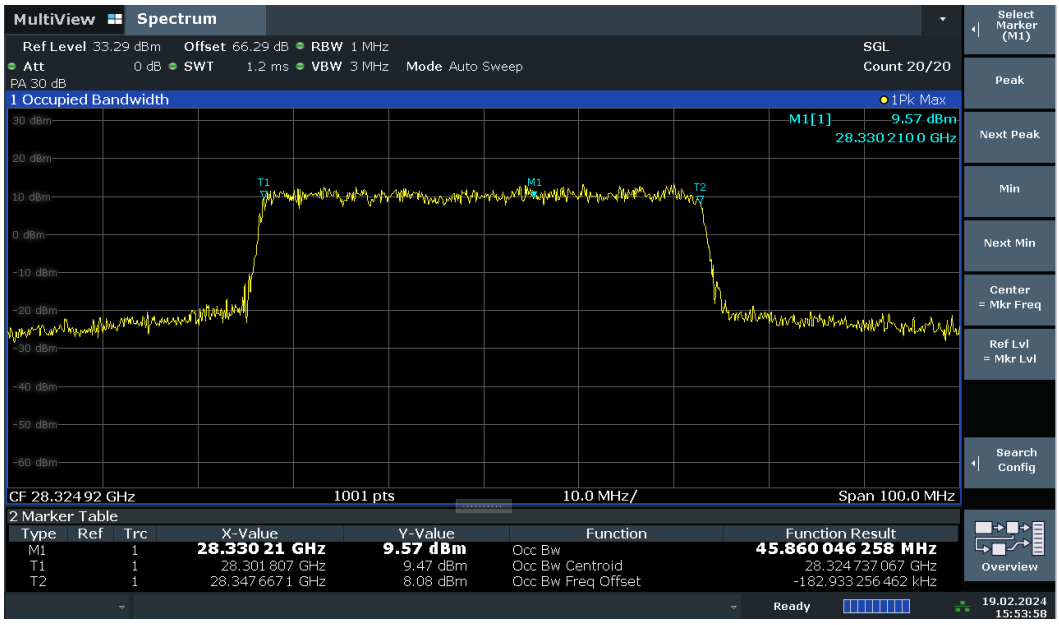
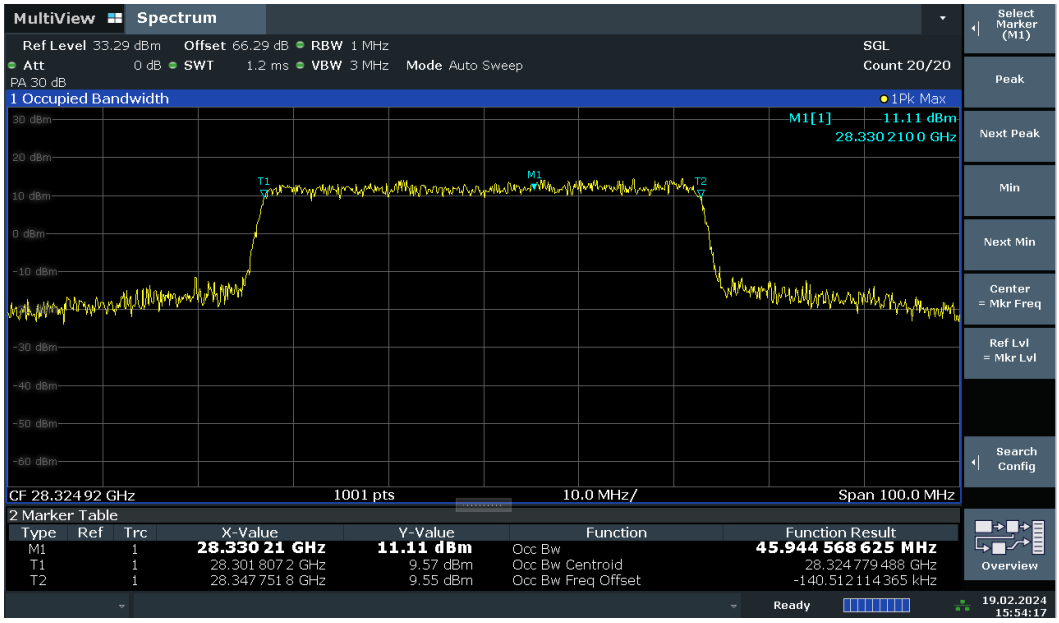
n261, Module 0, 50MHz, High CH, PUSCH DFT-s-OFDM 16QAM (99% BW)



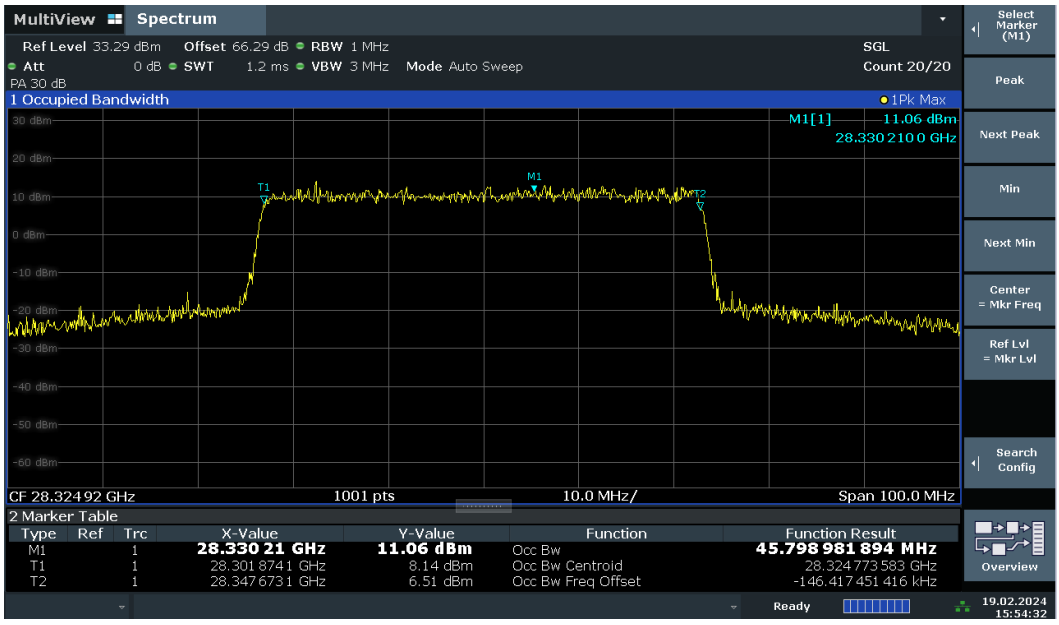
n261, Module 0, 50MHz, High CH, PUSCH DFT-s-OFDM 64QAM (99% BW)



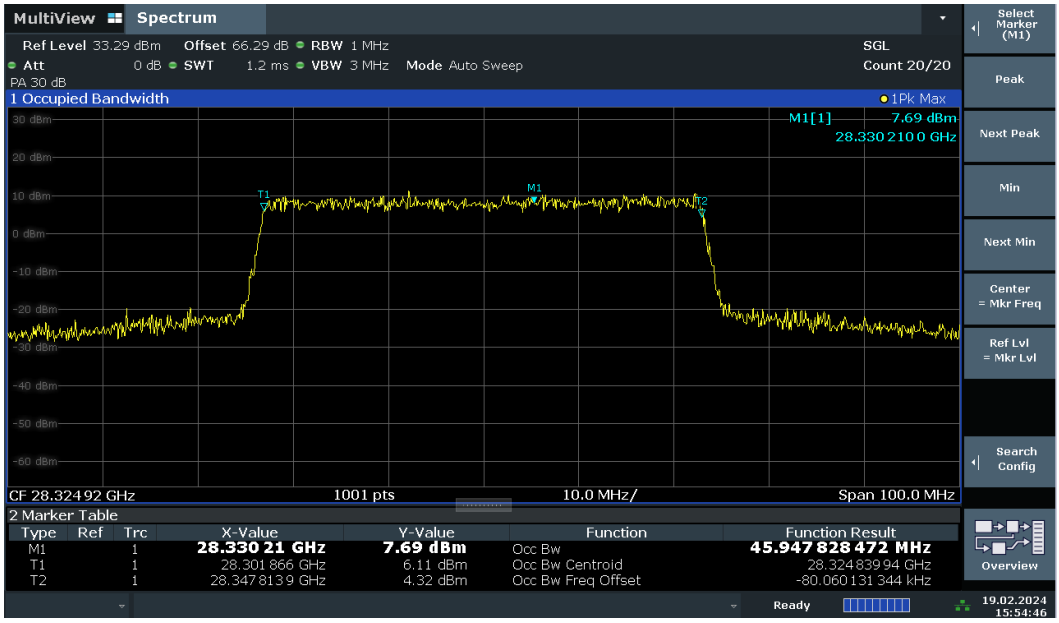
n261, Module 0, 50MHz, High CH, CP-OFDM QPSK (99% BW)



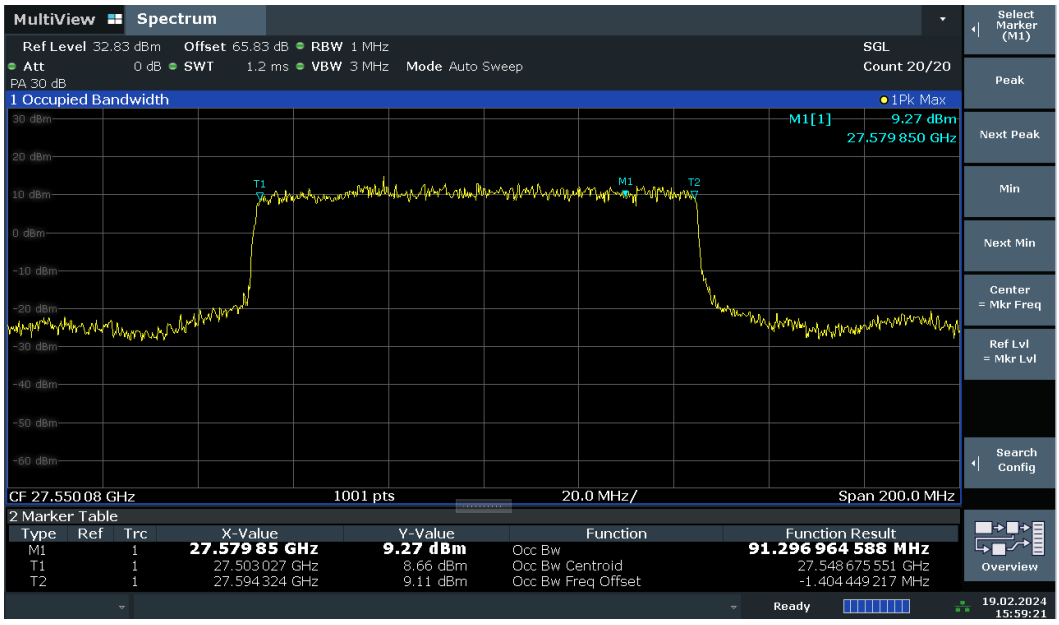
n261, Module 0, 50MHz, High CH, CP-OFDM 16QAM (99% BW)



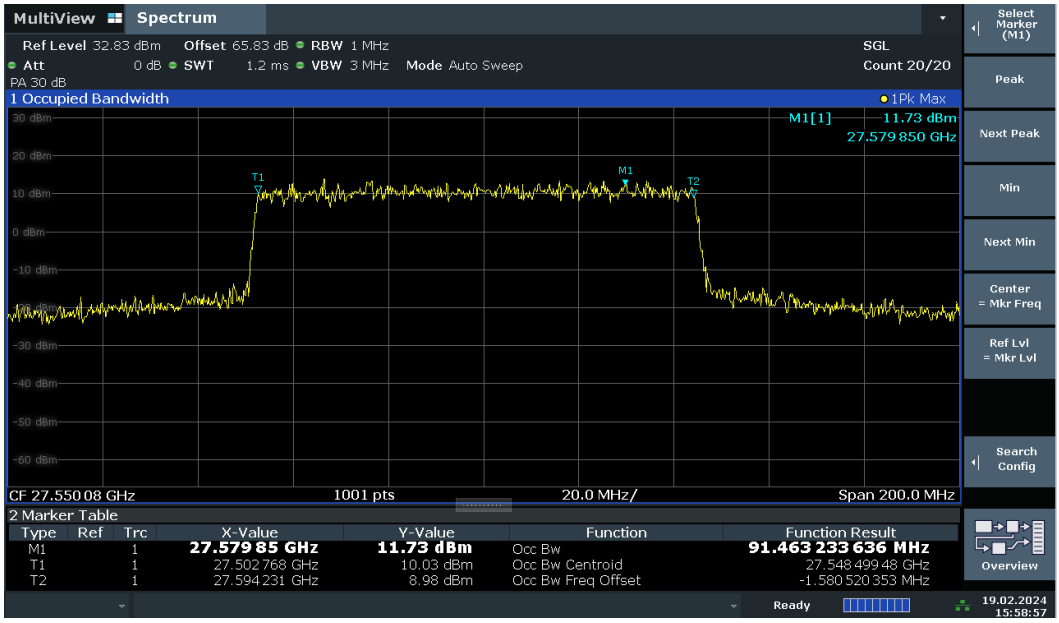
n261, Module 0, 50MHz, High CH, CP-OFDM 64QAM (99% BW)



n261, Module 0, 100MHz, Low CH, PUSCH DFT-s-OFDM BPSK (99% BW)

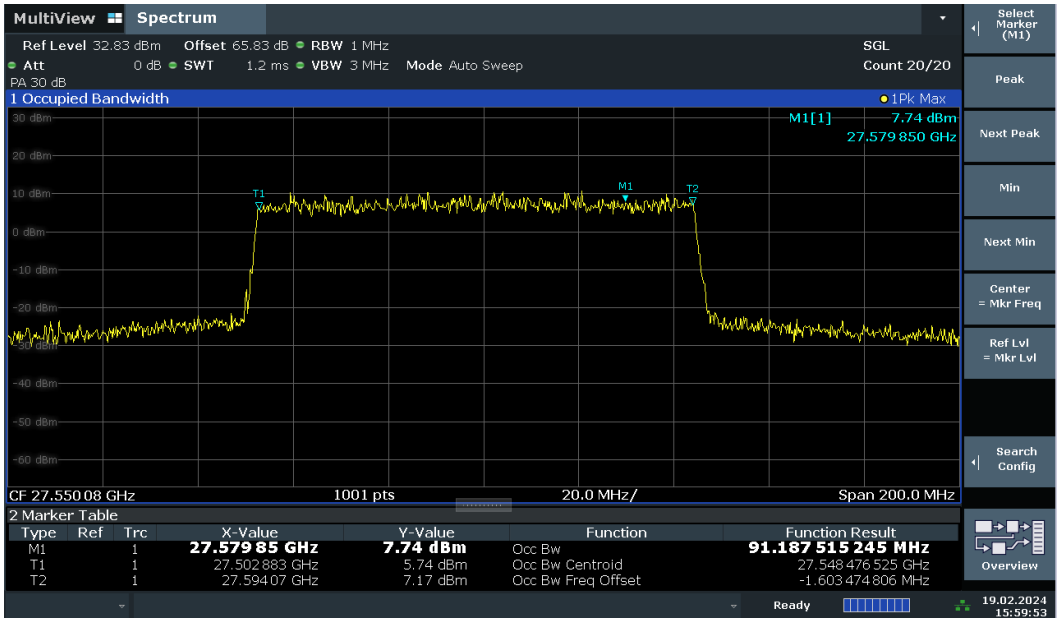


n261, Module 0, 100MHz, Low CH, PUSCH DFT-s-OFDM QPSK (99% BW)



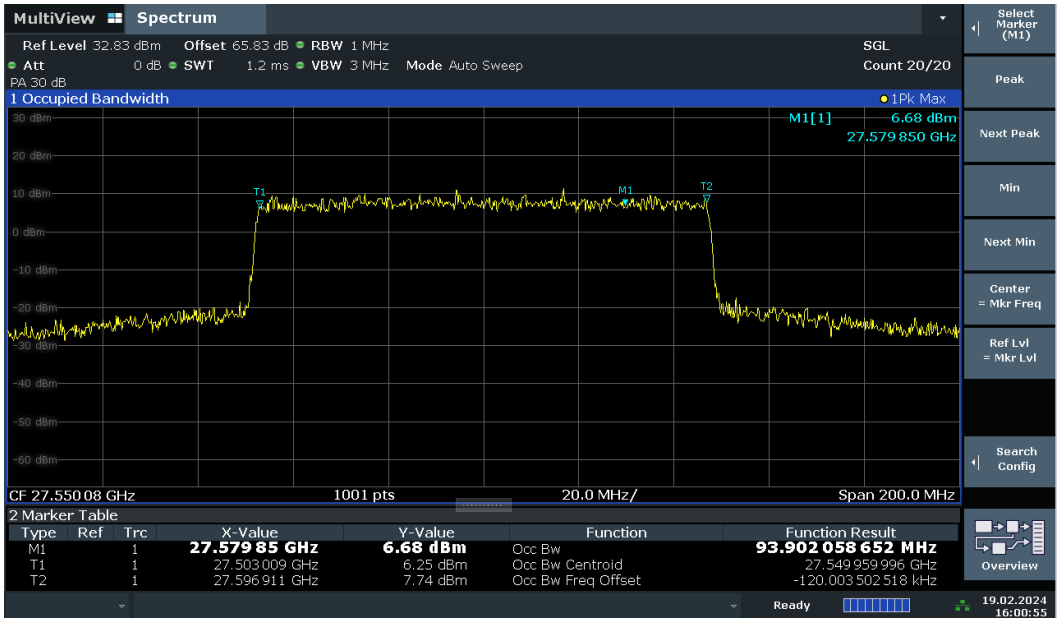
n261, Module 0, 100MHz, Low CH, PUSCH DFT-s-OFDM 16QAM (99% BW)

n261, Module 0, 100MHz, Low CH, PUSCH DFT-s-OFDM 64QAM (99% BW)



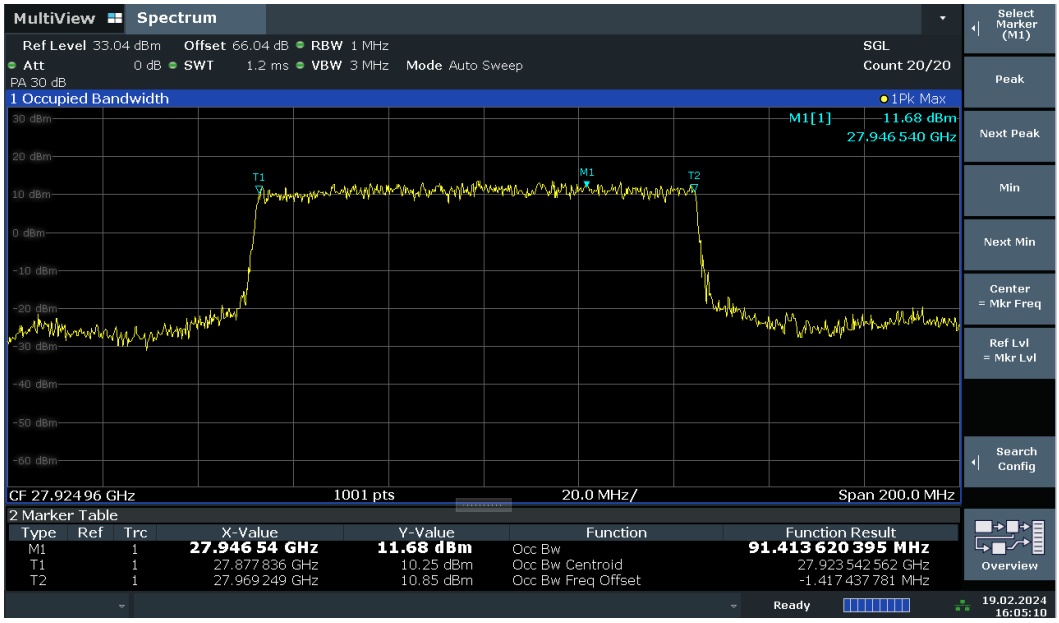
n261, Module 0, 100MHz, Low CH, CP-OFDM QPSK (99% BW)

n261, Module 0, 100MHz, Low CH, CP-OFDM 16QAM (99% BW)



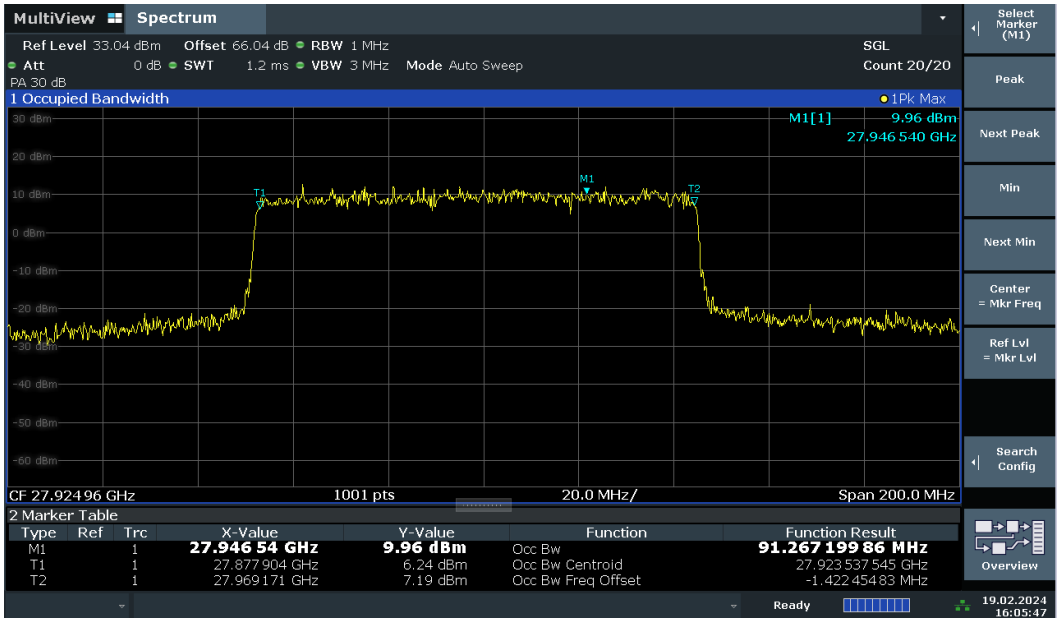
n261, Module 0, 100MHz, Low CH, CP-OFDM 64QAM (99% BW)

n261, Module 0, 100MHz, MID CH, PUSCH DFT-s-OFDM BPSK (99% BW)

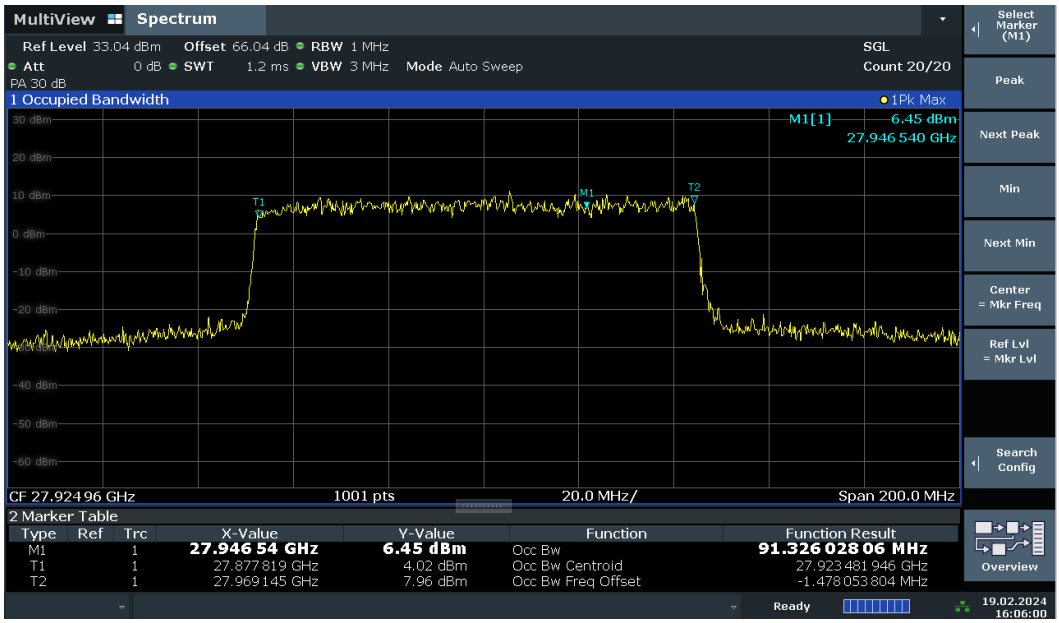


n261, Module 0, 100MHz, MID CH, PUSCH DFT-s-OFDM QPSK (99% BW)

n261, Module 0, 100MHz, MID CH, PUSCH DFT-s-OFDM 16QAM (99% BW)



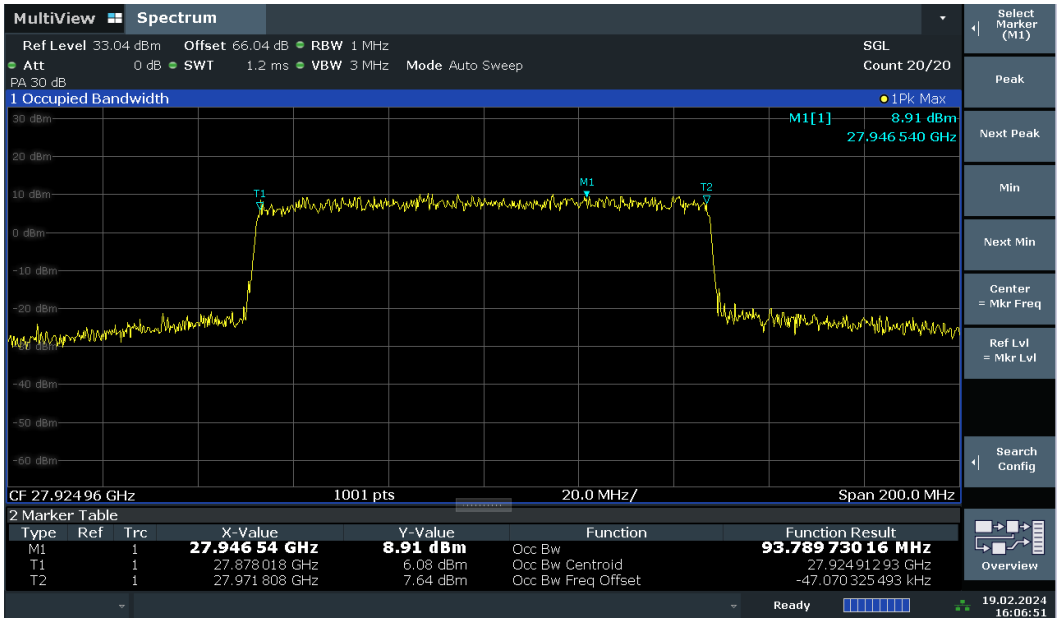
n261, Module 0, 100MHz, MID CH, PUSCH DFT-s-OFDM 64QAM (99% BW)



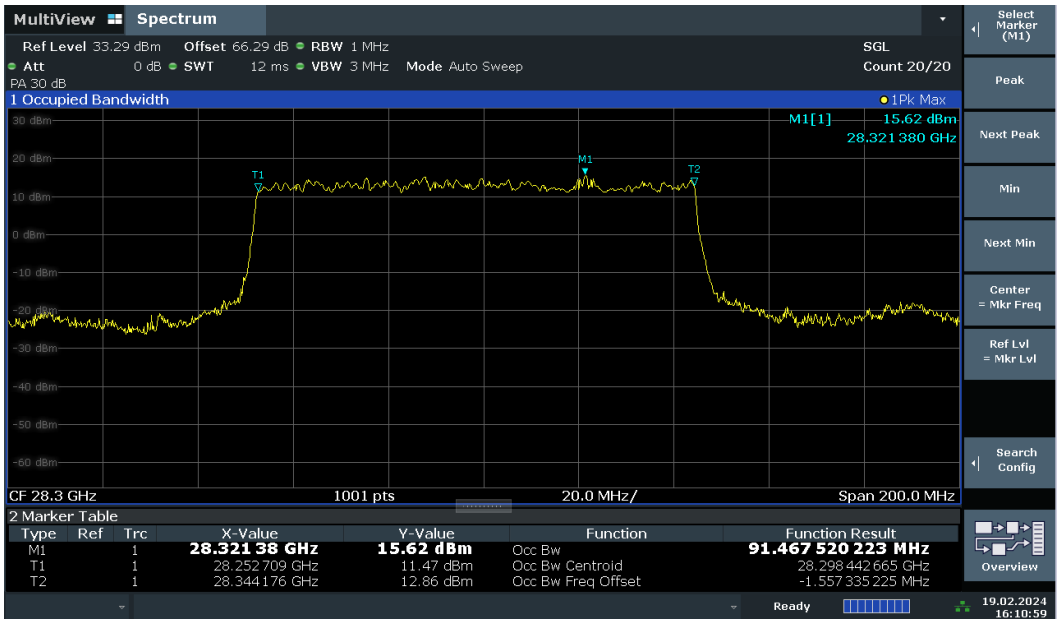
n261, Module 0, 100MHz, MID CH, CP-OFDM QPSK (99% BW)

n261, Module 0, 100MHz, MID CH, CP-OFDM 16QAM (99% BW)

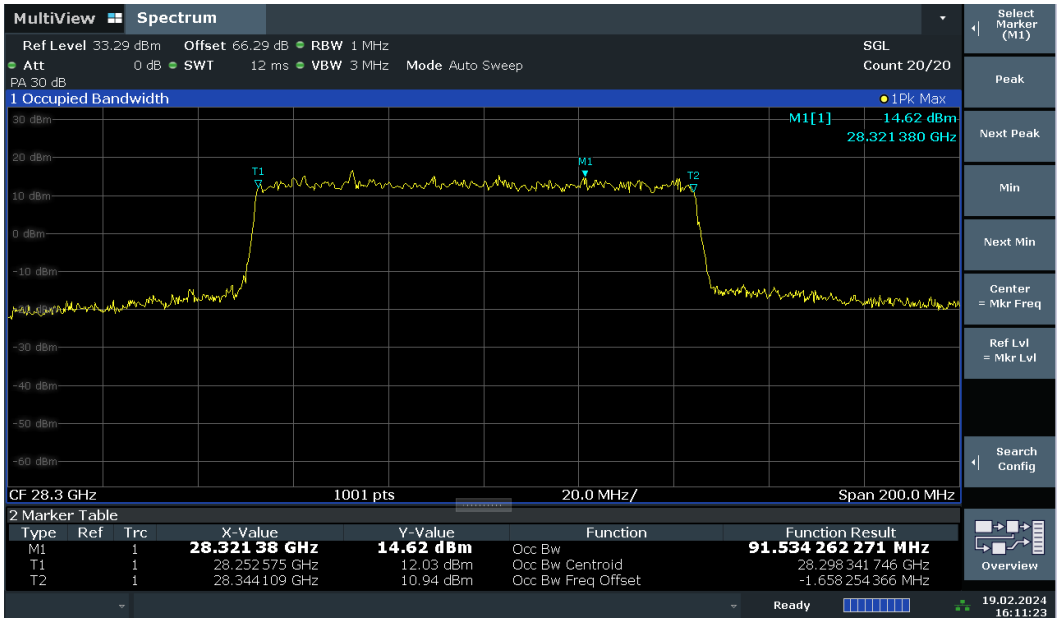
n261, Module 0, 100MHz, MID CH, CP-OFDM 64QAM (99% BW)



n261, Module 0, 100MHz, High CH, PUSCH DFT-s-OFDM BPSK (99% BW)

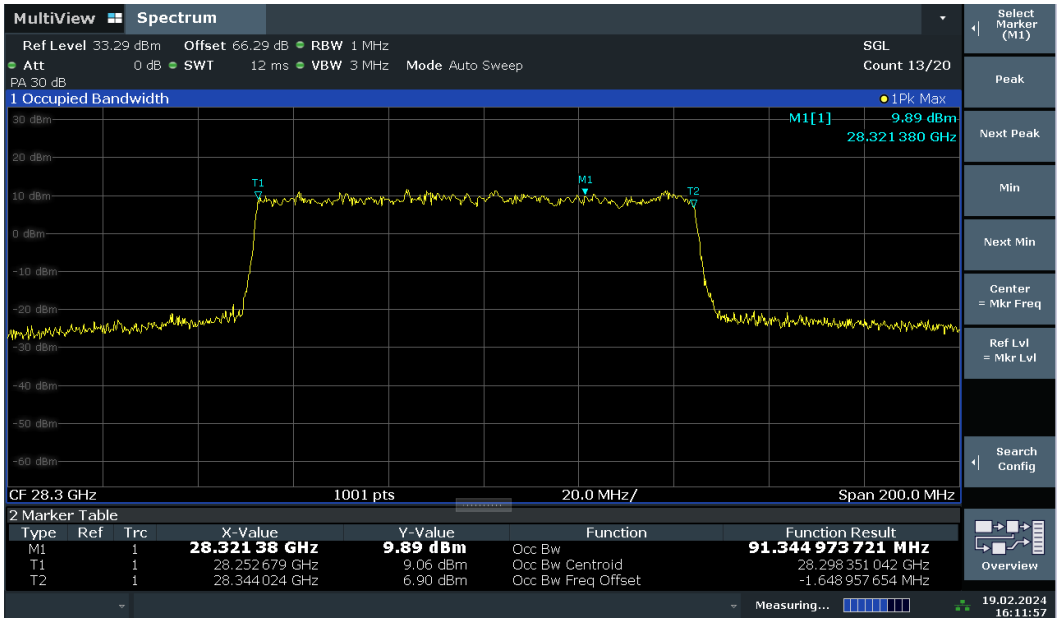


n261, Module 0, 100MHz, High CH, PUSCH DFT-s-OFDM QPSK (99% BW)

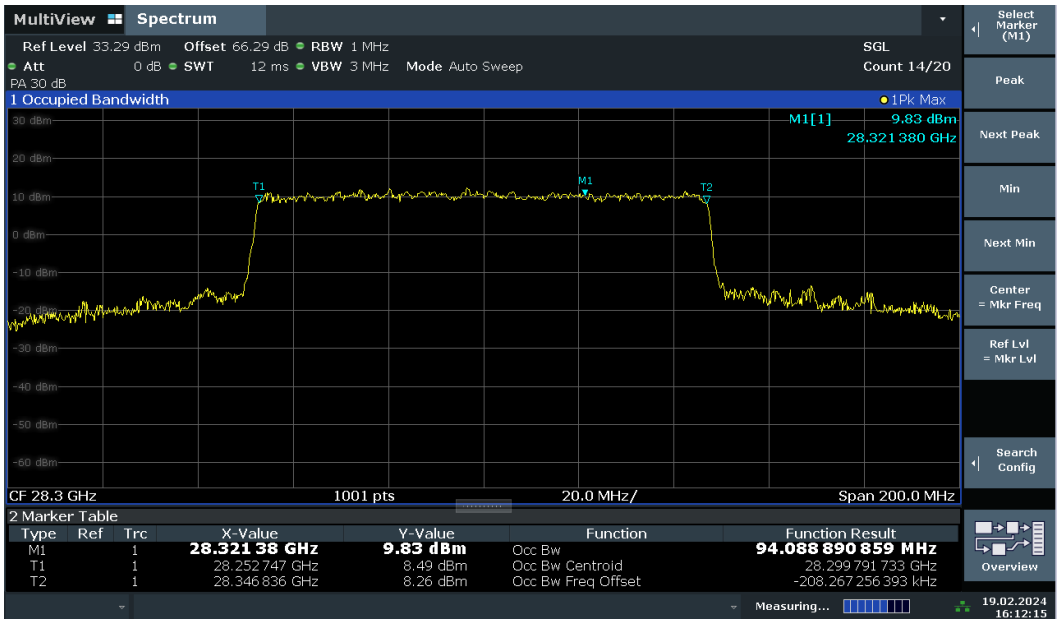


n261, Module 0, 100MHz, High CH, PUSCH DFT-s-OFDM 16QAM (99% BW)

n261, Module 0, 100MHz, High CH, PUSCH DFT-s-OFDM 64QAM (99% BW)

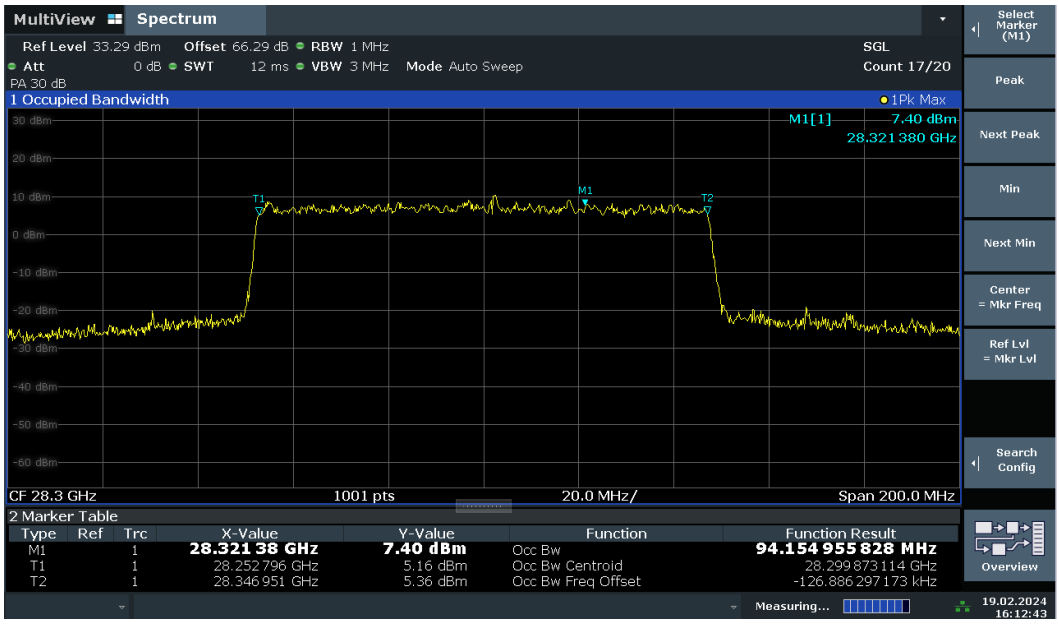


n261, Module 0, 100MHz, High CH, CP-OFDM QPSK (99% BW)



n261, Module 0, 100MHz, High CH, CP-OFDM 16QAM (99% BW)

n261, Module 0, 100MHz, High CH, CP-OFDM 64QAM (99% BW)



n261, Module 0, SCS=120kHz, Beam ID: 144+16							
BW (MHz)	RB allocation	Modulation	Frequency (MHz)	99% BW(MHz)			
				Pi/2 BPSK	QPSK	16QAM	64QAM
50	Full RB	DFT-s-OFDM	27525	44.70	44.76	44.71	44.83
			27924.96	44.35	44.56	44.42	44.34
			28324.92	45.52	45.56	45.67	45.07
		CP-OFDM	27525	/	45.02	44.82	45.02
			27924.96	/	44.49	44.41	44.57
			28324.92	/	45.59	45.40	45.46
100	Full RB	DFT-s-OFDM	27550.08	90.65	91.06	90.98	90.68
			27924.96	89.82	89.86	90.08	89.67
			28299.96	91.24	91.46	91.66	91.59
		CP-OFDM	27550.08	/	94.27	94.15	94.04
			27924.96	/	89.67	89.92	90.14
			28299.96	/	94.59	94.37	94.31

n261, Module 0, 50MHz, Low CH, PUSCH DFT-s-OFDM BPSK (99% BW)

n261, Module 0, 50MHz, Low CH, PUSCH DFT-s-OFDM QPSK (99% BW)

n261, Module 0, 50MHz, Low CH, PUSCH DFT-s-OFDM 16QAM (99% BW)

n261, Module 0, 50MHz, Low CH, PUSCH DFT-s-OFDM 64QAM (99% BW)

n261, Module 0, 50MHz, Low CH, CP-OFDM QPSK (99% BW)

n261, Module 0, 50MHz, Low CH, CP-OFDM 16QAM (99% BW)

n261, Module 0, 50MHz, Low CH, CP-OFDM 64QAM (99% BW)

n261, Module 0, 50MHz, MID CH, PUSCH DFT-s-OFDM BPSK (99% BW)

n261, Module 0, 50MHz, MID CH, PUSCH DFT-s-OFDM QPSK (99% BW)

n261, Module 0, 50MHz, MID CH, PUSCH DFT-s-OFDM 16QAM (99% BW)

n261, Module 0, 50MHz, MID CH, PUSCH DFT-s-OFDM 64QAM (99% BW)

n261, Module 0, 50MHz, MID CH, CP-OFDM QPSK (99% BW)

n261, Module 0, 50MHz, MID CH, CP-OFDM 16QAM (99% BW)

n261, Module 0, 50MHz, MID CH, CP-OFDM 64QAM (99% BW)

n261, Module 0, 50MHz, High CH, PUSCH DFT-s-OFDM BPSK (99% BW)

n261, Module 0, 50MHz, High CH, PUSCH DFT-s-OFDM QPSK (99% BW)

n261, Module 0, 50MHz, High CH, PUSCH DFT-s-OFDM 16QAM (99% BW)

n261, Module 0, 50MHz, High CH, PUSCH DFT-s-OFDM 64QAM (99% BW)

n261, Module 0, 50MHz, High CH, CP-OFDM QPSK (99% BW)

n261, Module 0, 50MHz, High CH, CP-OFDM 16QAM (99% BW)

n261, Module 0, 50MHz, High CH, CP-OFDM 64QAM (99% BW)

n261, Module 0, 100MHz, Low CH, PUSCH DFT-s-OFDM BPSK (99% BW)

n261, Module 0, 100MHz, Low CH, PUSCH DFT-s-OFDM QPSK (99% BW)

n261, Module 0, 100MHz, Low CH, PUSCH DFT-s-OFDM 16QAM (99% BW)

n261, Module 0, 100MHz, Low CH, PUSCH DFT-s-OFDM 64QAM (99% BW)

n261, Module 0, 100MHz, Low CH, CP-OFDM QPSK (99% BW)

n261, Module 0, 100MHz, Low CH, CP-OFDM 16QAM (99% BW)

n261, Module 0, 100MHz, Low CH, CP-OFDM 64QAM (99% BW)

n261, Module 0, 100MHz, MID CH, PUSCH DFT-s-OFDM BPSK (99% BW)

n261, Module 0, 100MHz, MID CH, PUSCH DFT-s-OFDM QPSK (99% BW)

n261, Module 0, 100MHz, MID CH, PUSCH DFT-s-OFDM 16QAM (99% BW)

n261, Module 0, 100MHz, MID CH, PUSCH DFT-s-OFDM 64QAM (99% BW)

n261, Module 0, 100MHz, MID CH, CP-OFDM QPSK (99% BW)

n261, Module 0, 100MHz, MID CH, CP-OFDM 16QAM (99% BW)

n261, Module 0, 100MHz, MID CH, CP-OFDM 64QAM (99% BW)

n261, Module 0, 100MHz, High CH, PUSCH DFT-s-OFDM BPSK (99% BW)

n261, Module 0, 100MHz, High CH, PUSCH DFT-s-OFDM QPSK (99% BW)

n261, Module 0, 100MHz, High CH, PUSCH DFT-s-OFDM 16QAM (99% BW)

n261, Module 0, 100MHz, High CH, PUSCH DFT-s-OFDM 64QAM (99% BW)

n261, Module 0, 100MHz, High CH, CP-OFDM QPSK (99% BW)

n261, Module 0, 100MHz, High CH, CP-OFDM 16QAM (99% BW)

n261, Module 0, 100MHz, High CH, CP-OFDM 64QAM (99% BW)

2.3. Frequency Stability

2.3.1. Requirement

According to FCC section 2.1055, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

(a) The temperature is varied from -30°C to +50°C at intervals of not more than 10°C.

(b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

Note: The operating temperature of EUT is from 0°C to 45°C, which are specified by the applicant.

2.3.2. Test setup

EUT uses a horn antenna connected to a spectrum analyzer for measurement. The EUT was placed in an environmental chamber using foam plugs to maintain temperature conditions inside. The horn antenna measures the frequency of the fundamental signal.

2.3.3. Test procedure

ANSI C63.26-2015 - Section 5.6

KDB 842590 D01 v01r02 Section 4.5

2.3.4. Test Result

The nominal, highest and lowest extreme voltages are separately 3.89VDC, 4.48VDC and 3.6VDC, which are specified by the applicant; the normal temperature here used is 20°C.

n260, SCS 120kHz, Frequency 38499.96MHz					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.89	+20	0	Reference	PASS
Normal		0	-9926	-0.258	
Normal		+10	-9640	-0.250	
Normal		+30	-15510	-0.403	
Normal		+40	-3758	-0.098	
Normal		+45	10080	0.262	
High	4.48	+20	-10398	-0.270	
BATT.ENDPOINT	3.6	+20	-12277	-0.319	

NR n261, SCS 120kHz, Frequency 27924.96MHz					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
Normal	3.89	+20	0	Reference	PASS
Normal		0	3053	0.109	
Normal		+10	-3264	-0.117	
Normal		+30	-2053	-0.074	
Normal		+40	-1355	-0.049	
Normal		+45	1685	0.060	
High	4.48	+20	6854	0.245	
BATT.ENDPOINT	3.6	+20	-20264	-0.726	

2.4. Radiated Spurious Emissions

2.4.1. Requirement

According to FCC section 30.203, The conductive power or the total radiated power of any emission outside a licensee's frequency block shall be −13 dBm/MHz or lower.

2.4.2. Test procedure

ANSI C63.26-2015 - Section 5.5.4
KDB 842590 D01 v01 Section 4.4.3

2.4.3. Test settings

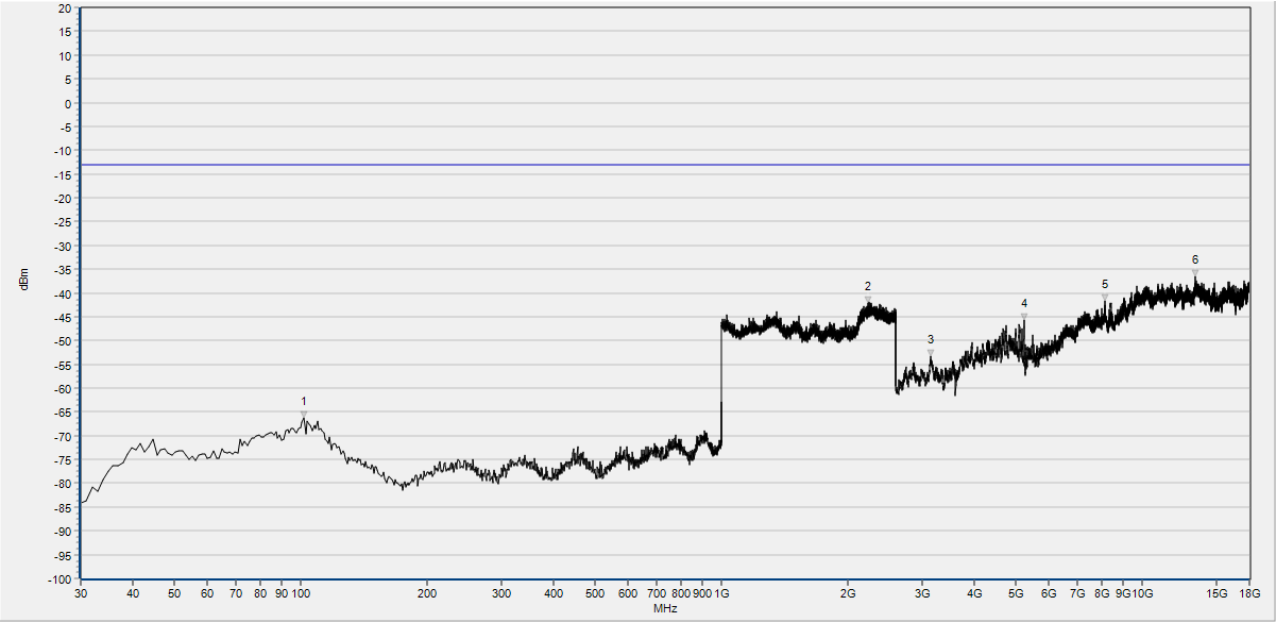
1. Set the EUT power to the maximum
2. Start frequency was set to 30MHz and stop frequency was set 200GHz for n261
3. Detector = RMS
4. Trace mode = Trace average
5. Sweep time = Auto
6. RBW = 1MHz, VBW = 3MHz
7. Number of sweep point ≧ 2*span / RBW

Note 1:
1) Perform maximum EIRP measurement as described in 5.5.4 of ANSI C63.26 (field strength method). Note: EIRP measurements are performed using linearly polarized antenna. Both horizontal and vertical polarizations are measured separately and not summed. The highest amplitude signal measured from horizontal or vertical polarization is used for determining compliance to the unwanted emission limit.
2) Compare the measured maximum EIRP at each frequency with the applicable TRP limit.
3) If the maximum EIRP is less than TRP limit then early exit condition is met, and no further measurements are required for that frequency.
4) Otherwise follow TRP measurement procedures using the Spherical Grid TRP Method. If the device does not meet the emission limit at one or some frequencies, then TRP measurements need be performed only those frequencies.
Note 2: The power of the EUT transmitting frequency should be ignored.
Note 3: All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.
Note 4: All bandwidth and modulation were considered and evaluated respectively by performing full test for each band, only the worst cases were recorded in this test report.
Note 5: Only the worst test results were recorded below 18 GHz.

Note 6: According to KDB 842590 D01 Upper Microwave Flexible Use Service.
Analyzer Offset (dB)= Corrected Loss (dB) + Path Loss (dB).
where:
Corrected Loss (dB)= Space Loss (dB) – Antenna Gain (dBi).
Path Loss (dB)= Converter Loss(dB) + Cable Loss (dB).
Note: For below 40GHz, since the test does not require the use of a mixer, so the test results do not require the calculation of Converter Loss.
The analyzer offset will be specified in the test results table.

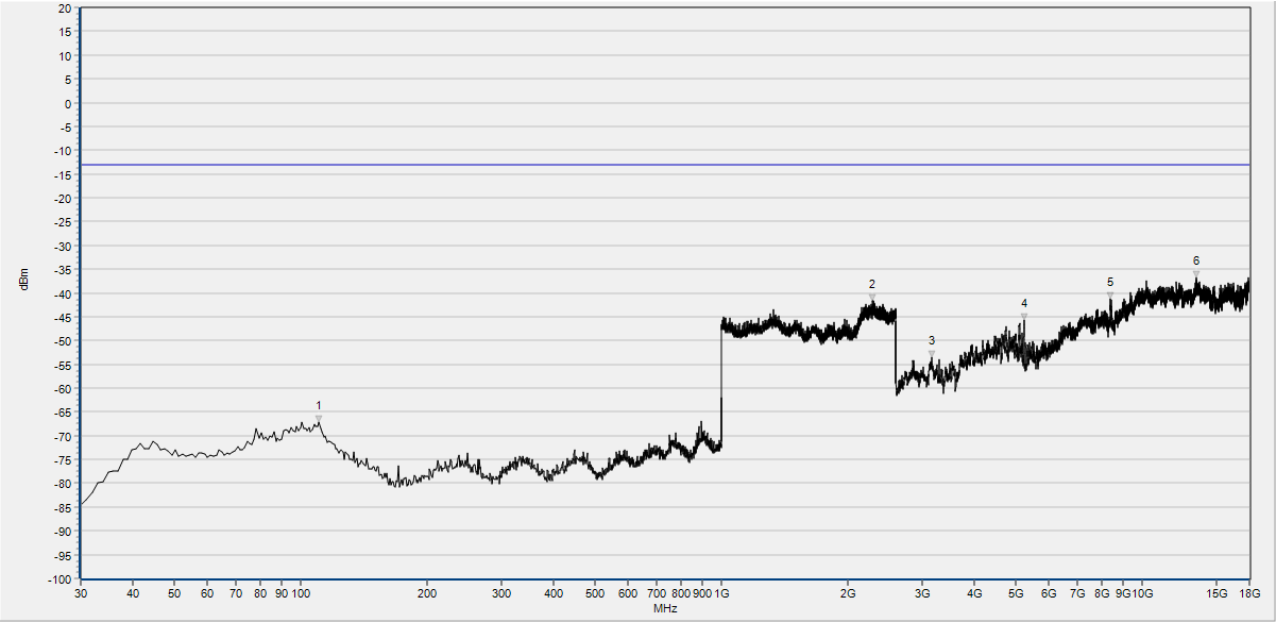
2.4.4. Test result

30 MHz – 18 GHz



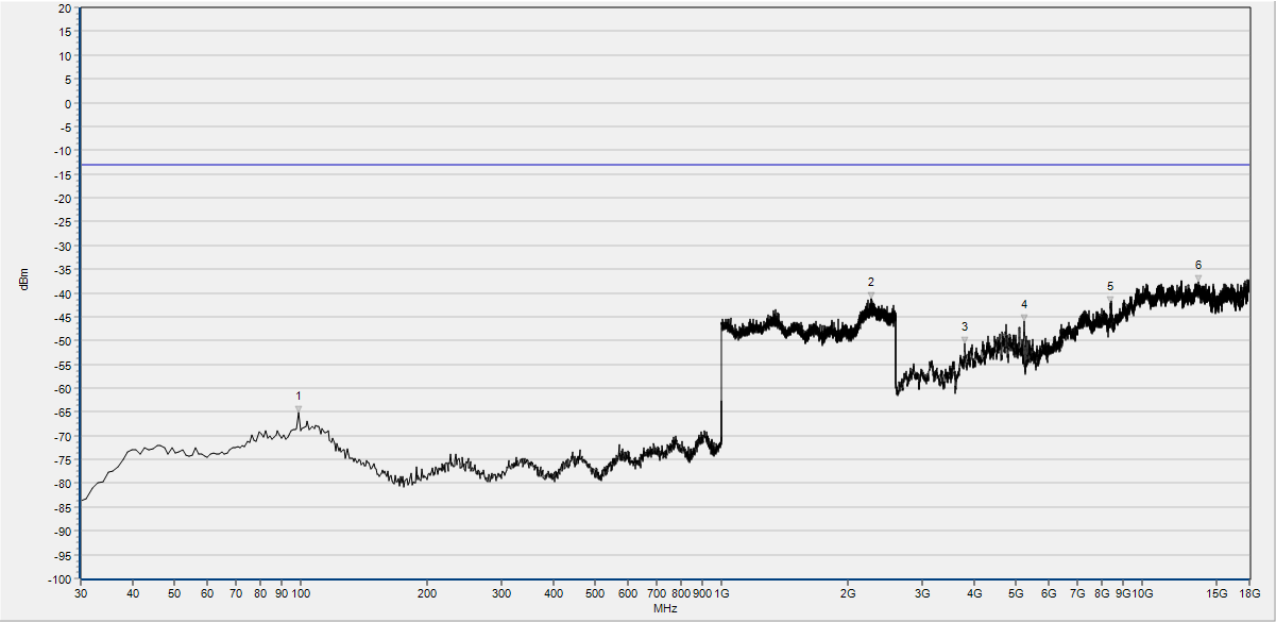
n260, Module 0, Beam ID 13, 100MHz, Low CH, DFT-s-OFDM QPSK Inner Full RB, YH

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Limit (dBm)	Verdict
1	101.780	-66.36	H	-13.00	PASS
2	2230.572	-42.23	H	-13.00	PASS
3	3148.900	-53.29	H	-13.00	PASS
4	5238.080	-45.71	H	-13.00	PASS
5	8156.210	-41.71	H	-13.00	PASS
6	13412.766	-36.57	H	-13.00	PASS



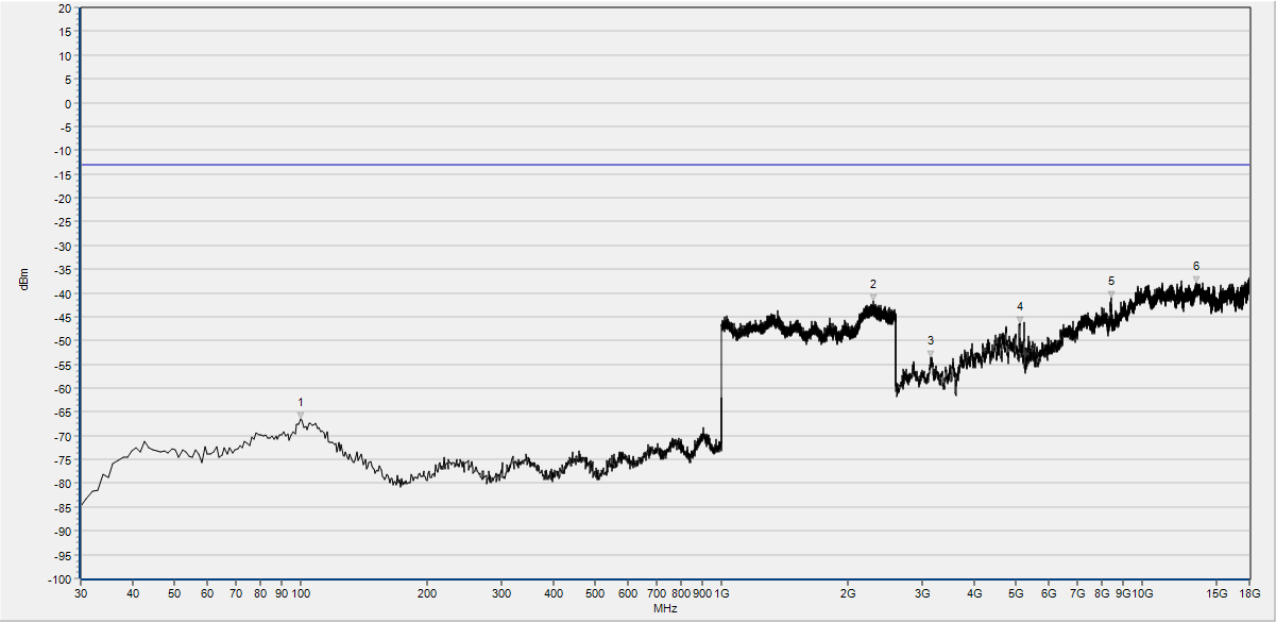
n260, Module 0, Beam ID 13, 100MHz, Low CH, DFT-s-OFDM QPSK Inner Full RB, ZV

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Limit (dBm)	Verdict
1	110.510	-67.16	V	-13.00	PASS
2	2290.116	-41.71	V	-13.00	PASS
3	3162.902	-53.49	V	-13.00	PASS
4	5238.080	-45.59	V	-13.00	PASS
5	8422.259	-41.13	V	-13.00	PASS
6	13468.776	-36.80	V	-13.00	PASS



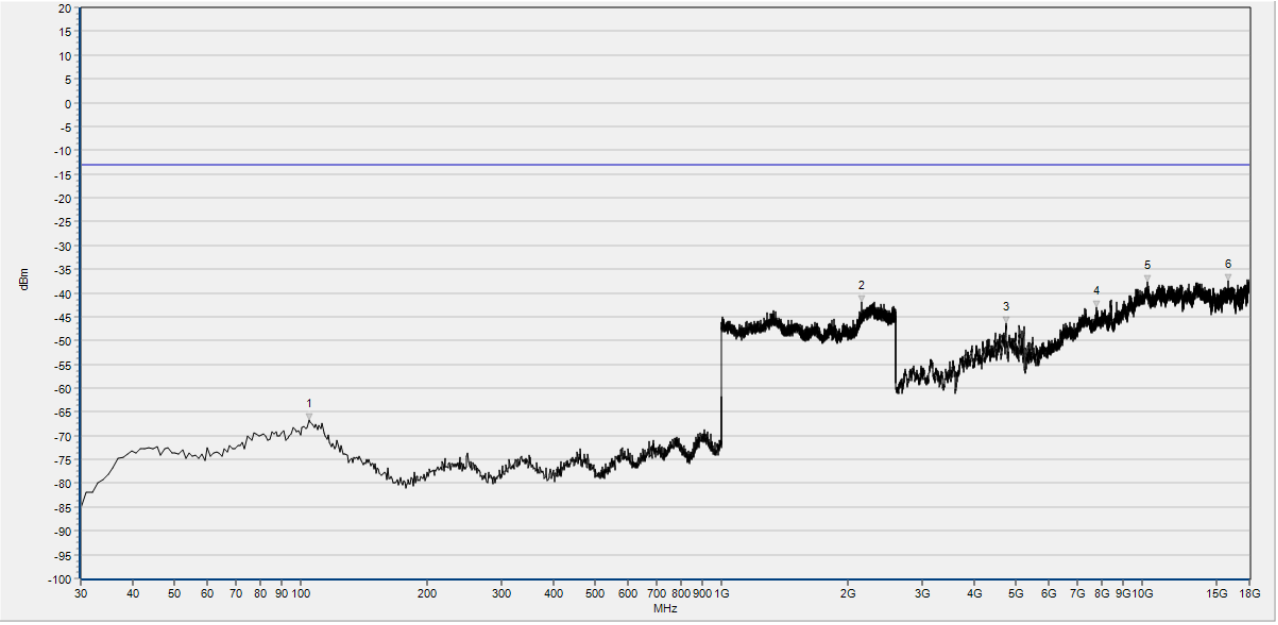
n260, Module 0, Beam ID 13+141, 100MHz, High CH, DFT-s-OFDM QPSK Inner 1RB left ZH

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Limit (dBm)	Verdict
1	98.870	-65.16	H	-13.00	PASS
2	2265.146	-41.29	H	-13.00	PASS
3	3795.817	-50.71	H	-13.00	PASS
4	5238.080	-46.01	H	-13.00	PASS
5	8419.458	-42.05	H	-13.00	PASS
6	13606.001	-37.66	H	-13.00	PASS



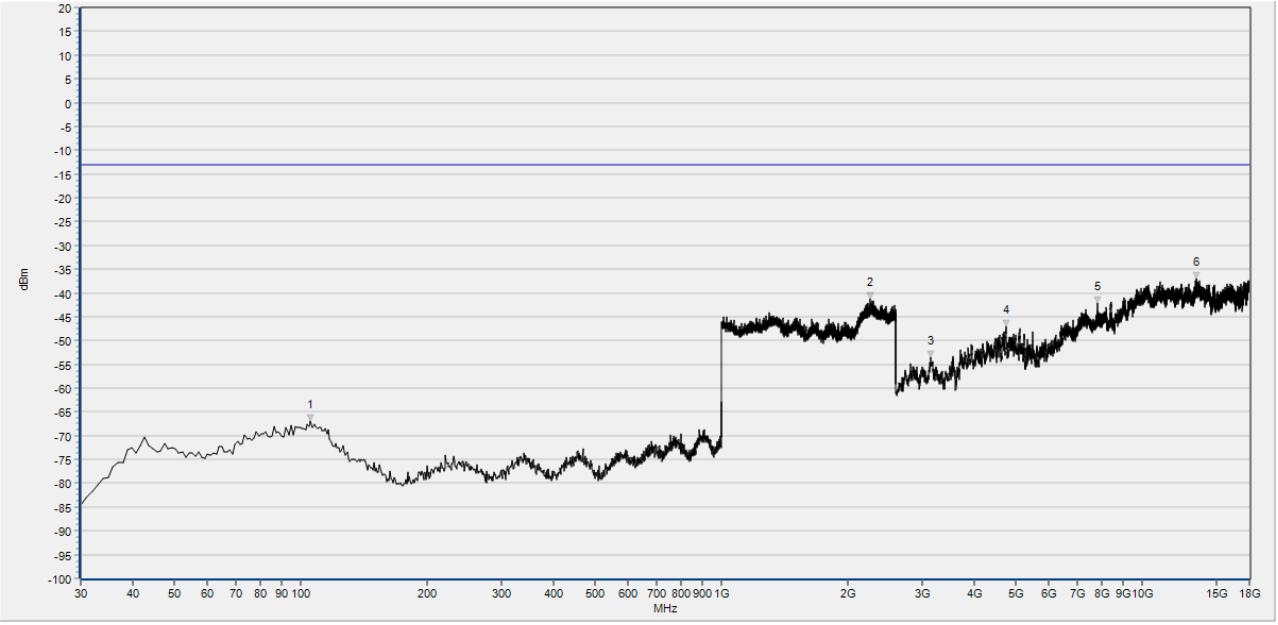
n260, Module 0, Beam ID 13+141, 100MHz, High CH, DFT-s-OFDM QPSK Inner 1RB left ZV

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Limit (dBm)	Verdict
1	99.840	-66.40	V	-13.00	PASS
2	2293.958	-41.63	V	-13.00	PASS
3	3148.900	-53.49	V	-13.00	PASS
4	5114.857	-46.32	V	-13.00	PASS
5	8427.860	-41.12	V	-13.00	PASS
6	13485.579	-37.83	V	-13.00	PASS



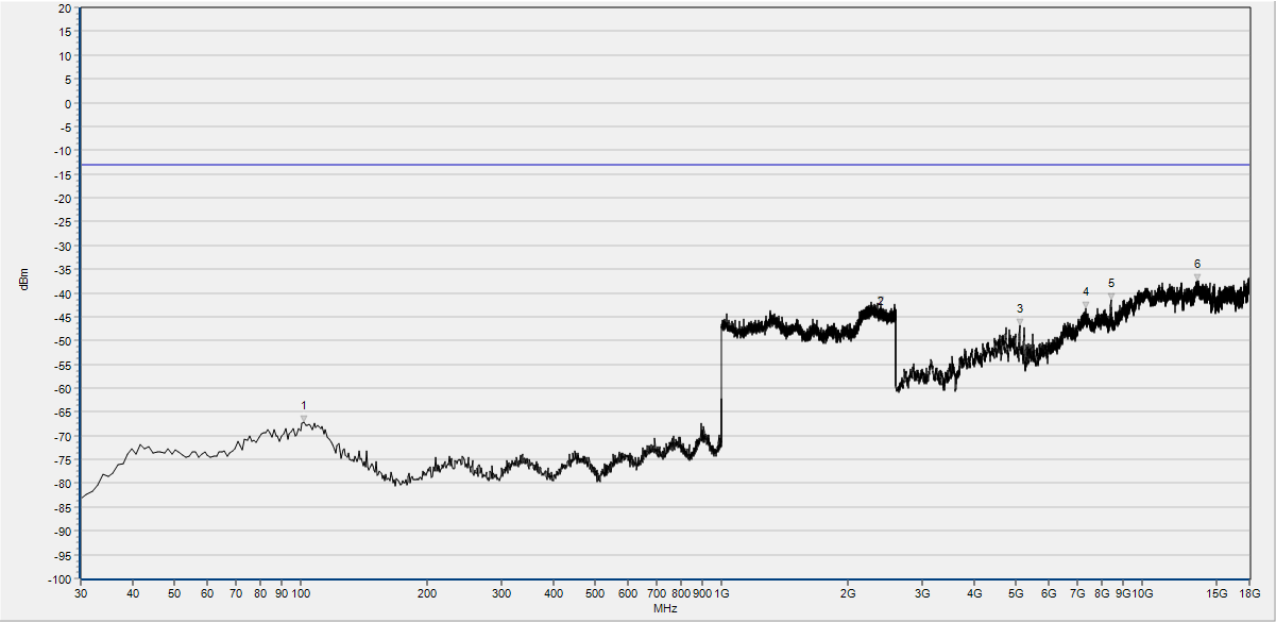
n261, Module 0, Beam ID 144, 100MHz, Mid CH, DFT-s-OFDM BPSK Inner Full RB, YH

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Limit (dBm)	Verdict
1	104.690	-66.71	H	-13.00	PASS
2	2155.662	-41.80	H	-13.00	PASS
3	4739.589	-46.38	H	-13.00	PASS
4	7806.147	-42.91	H	-13.00	PASS
5	10278.996	-37.73	H	-13.00	PASS
6	16025.641	-37.32	H	-13.00	PASS



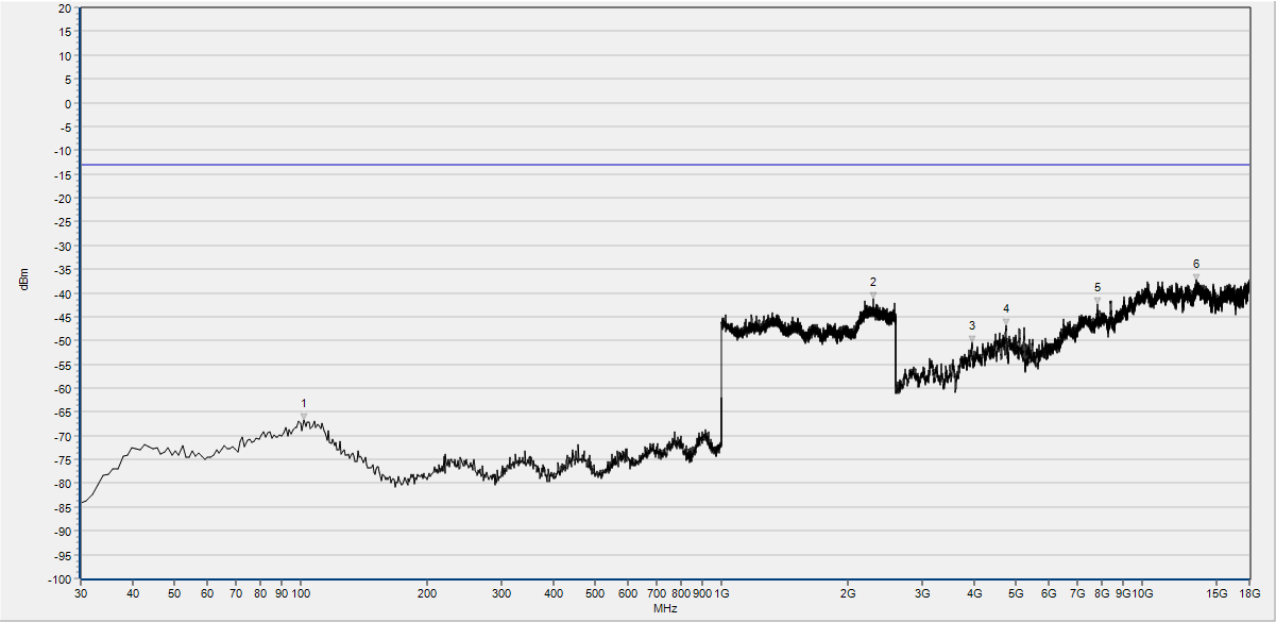
n261, Module 0, Beam ID 144, 100MHz, Mid CH, DFT-s-OFDM BPSK Inner Full RB, YV

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Limit (dBm)	Verdict
1	105.660	-67.00	V	-13.00	PASS
2	2252.981	-41.14	V	-13.00	PASS
3	3148.900	-53.62	V	-13.00	PASS
4	4745.190	-47.10	V	-13.00	PASS
5	7822.950	-42.03	V	-13.00	PASS
6	13496.781	-36.95	V	-13.00	PASS



n261, Module 0, Beam ID 144+16, 50MHz, Mid CH, DFT-s-OFDM BPSK Inner 1RB left YH

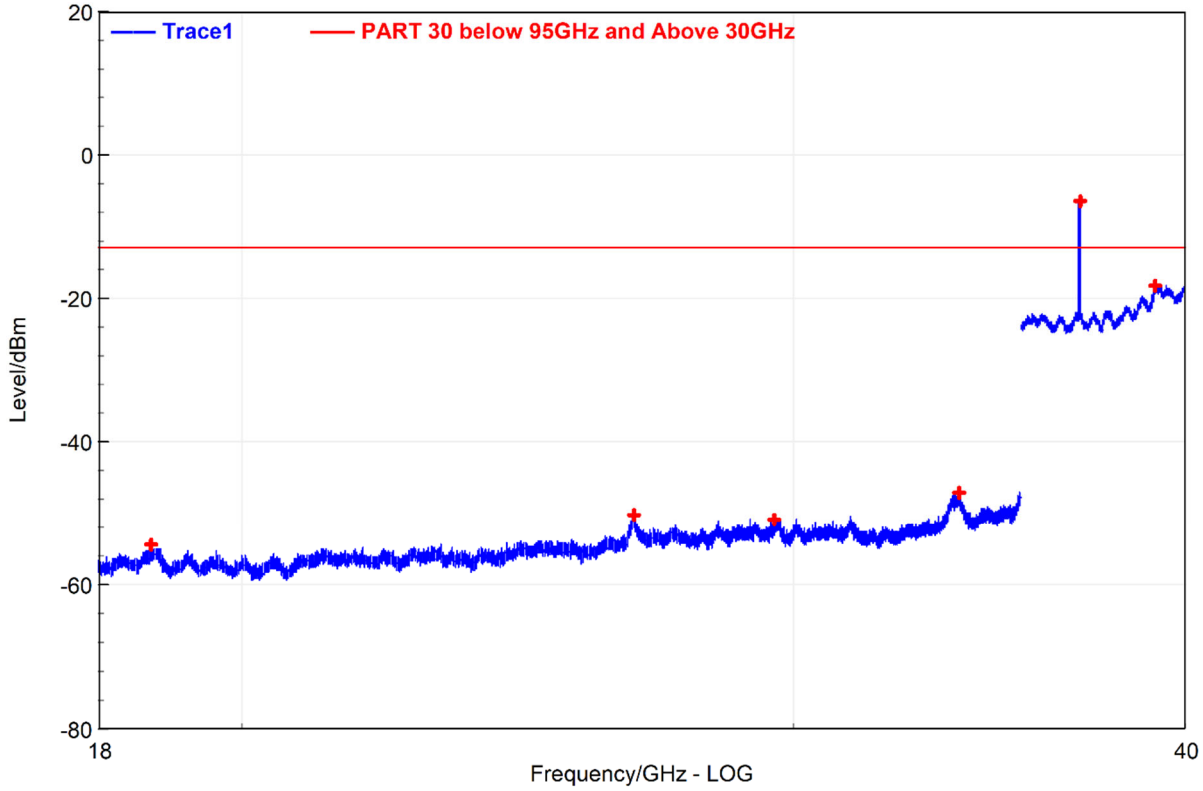
Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Limit (dBm)	Verdict
1	101.780	-67.25	V	-13.00	PASS
2	2386.795	-42.06	V	-13.00	PASS
3	5114.857	-46.75	V	-13.00	PASS
4	7335.661	-43.20	V	-13.00	PASS
5	8427.860	-41.35	V	-13.00	PASS
6	13502.382	-37.38	V	-13.00	PASS



n261, Module 0, Beam ID 144+16, 50MHz, Mid CH, DFT-s-OFDM BPSK Inner 1RB left YV

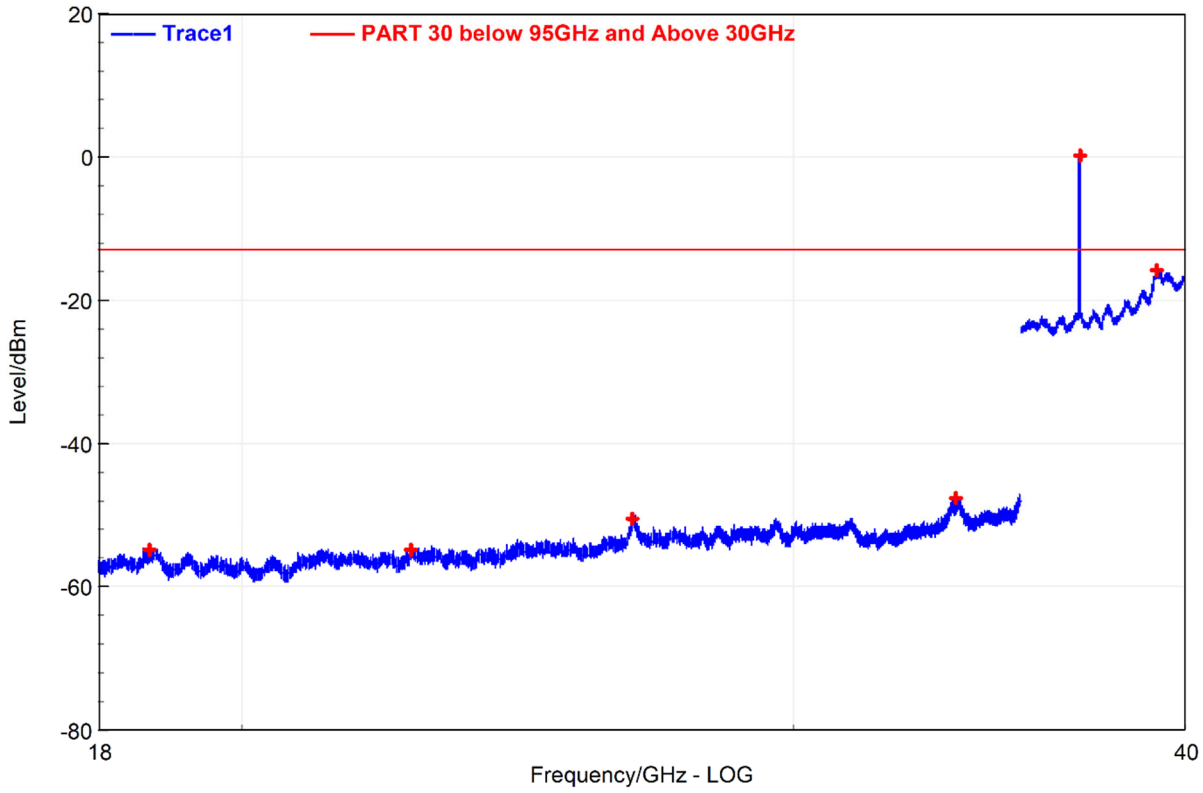
Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Limit (dBm)	Verdict
1	101.780	-66.65	V	-13.00	PASS
2	2296.519	-41.29	V	-13.00	PASS
3	3935.843	-50.41	V	-13.00	PASS
4	4742.390	-46.85	V	-13.00	PASS
5	7825.750	-42.42	V	-13.00	PASS
6	13471.577	-37.52	V	-13.00	PASS

18 GHz – 40 GHz



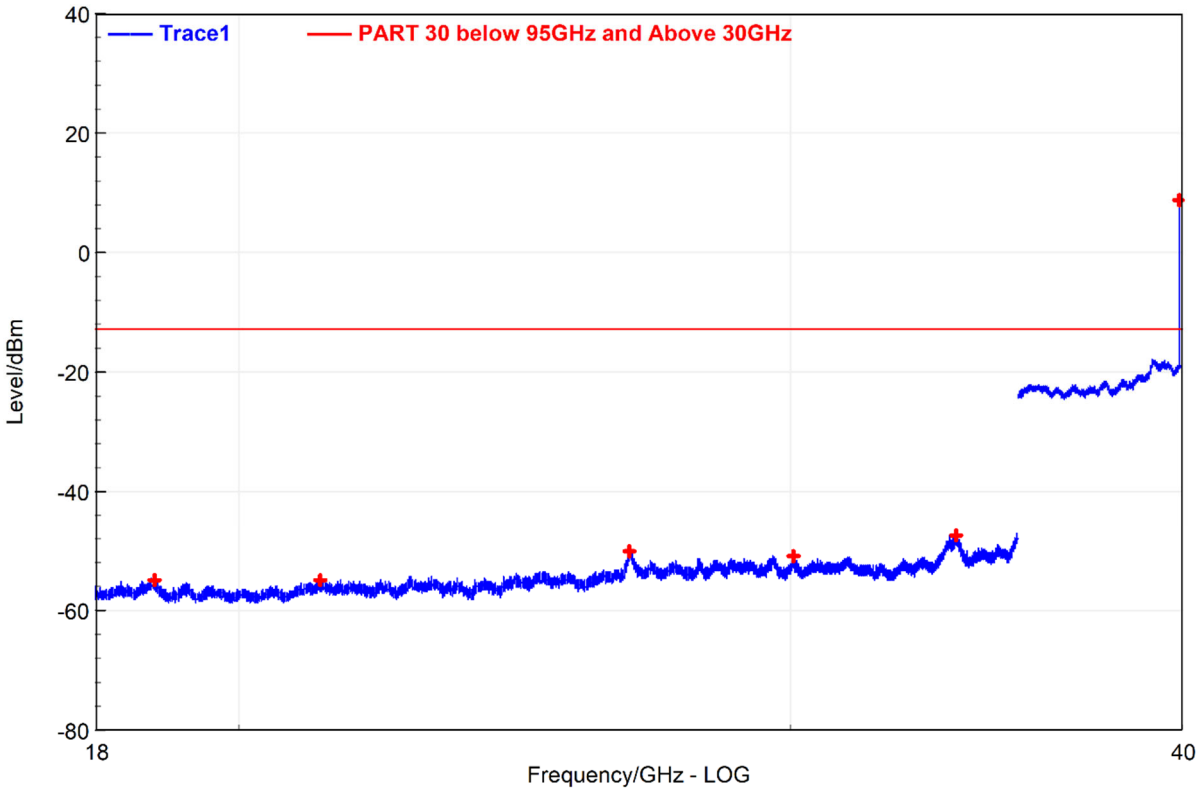
n260, Module 0, Beam ID 13, 100MHz, Low CH, DFT-s-OFDM QPSK Inner Full RB, YH

Order	Frequency (GHz)	Level (dBm)	Antenna Polar	Path Loss (dB)	Corrected Loss (dB)	Limit (dBm)	Margin (dB)
1	18.7265	-54.47	H	-45.27	50.11	-13	41.47
2	26.692	-50.28	H	-39.84	54.29	-13	37.28
3	29.6045	-51.01	H	-38.63	51.68	-13	38.01
4	33.9045	-47.17	H	-38.09	55.87	-13	34.17
5	37.051	-6.61	H	14.72	54.16	N/A	N/A
6	39.1795	-18.34	H	16.68	55.71	-13	5.34



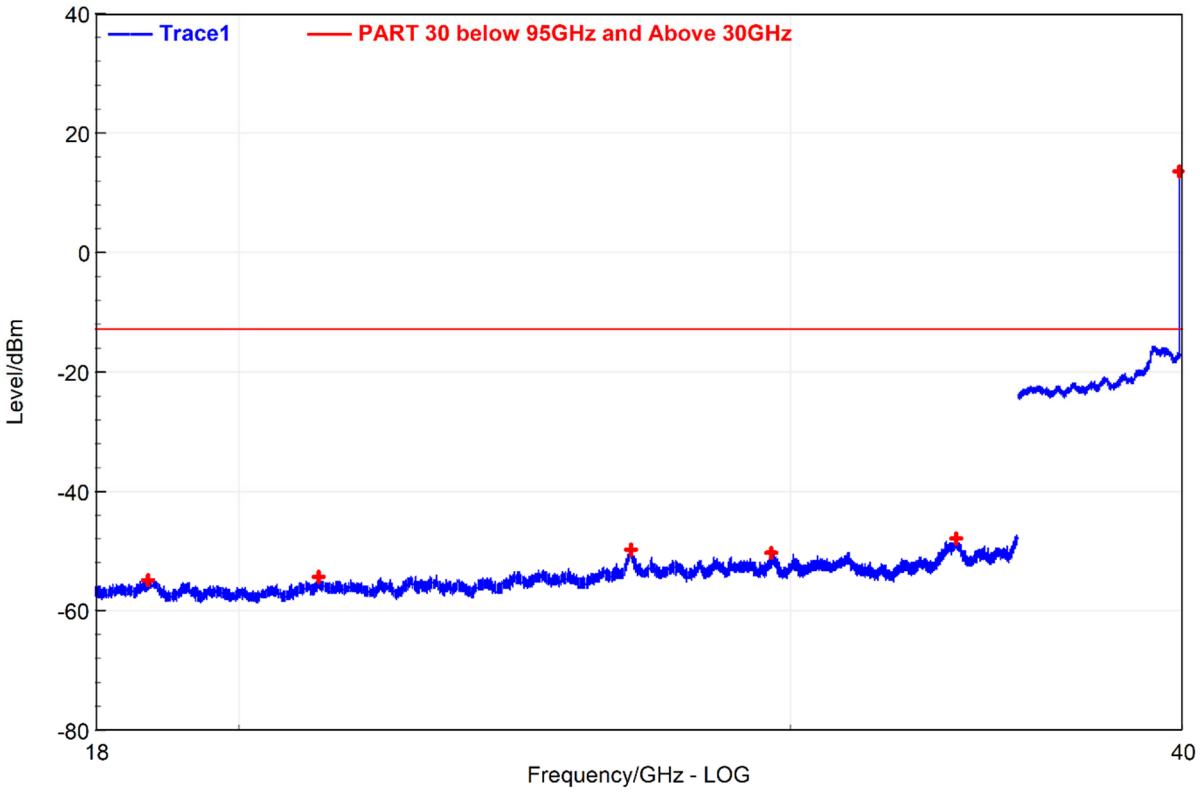
n260, Module 0, Beam ID 13, 100MHz, Low CH, DFT-s-OFDM QPSK Inner Full RB, ZV

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Path Loss (dB)	Corrected Loss (dB)	Limit (dBm)	Margin (dB)
1	18.71	-54.9	V	-45.32	50.42	-13	41.9
2	22.677	-54.98	V	-41.43	50.08	-13	41.98
3	26.684	-50.55	V	-39.9	54.32	-13	37.55
4	33.8455	-47.73	V	-38.36	55.33	-13	34.73
5	37.051	0.15	V	14.72	54.57	N/A	N/A
6	39.1955	-15.9	V	16.73	58.08	-13	2.9



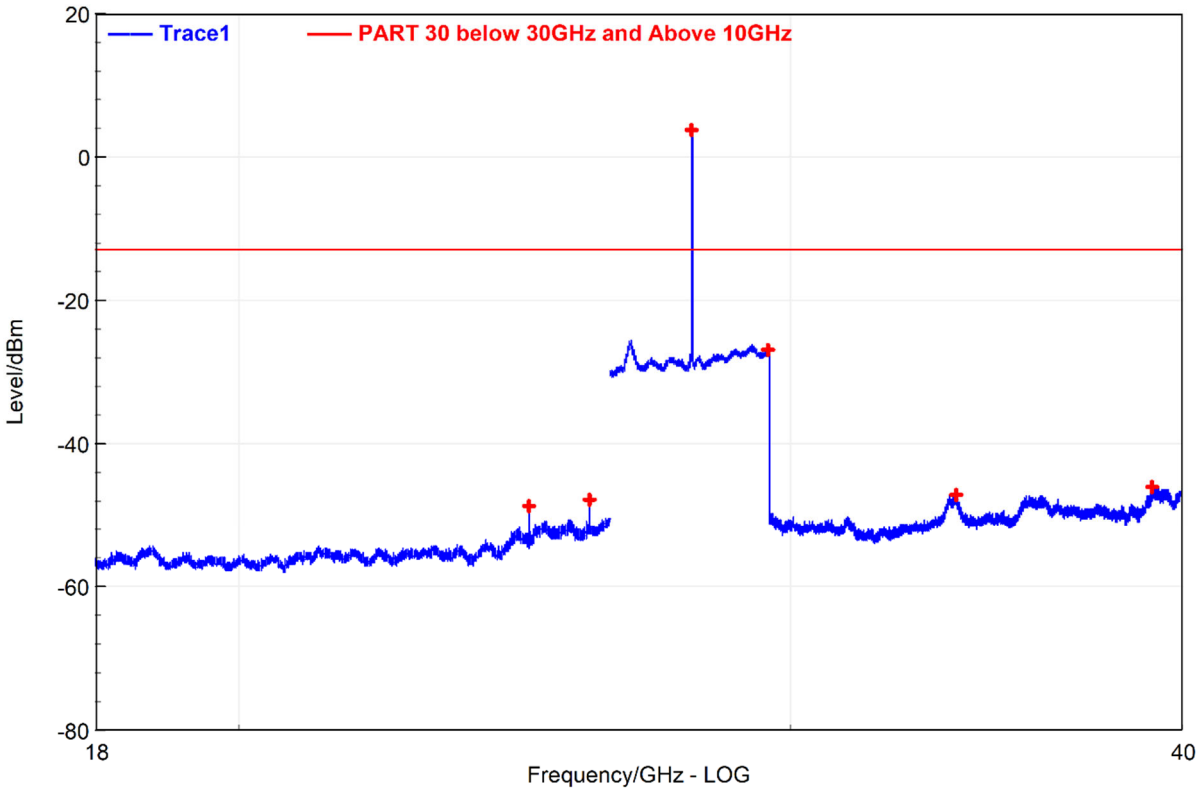
n260, Module 0, Beam ID 13+141, 100MHz, High CH, DFT-s-OFDM QPSK Inner 1RB left ZH

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Path Loss (dB)	Corrected Loss (dB)	Limit (dBm)	Margin (dB)
1	18.805	-55.04	H	-44.75	50.3	-13	42.04
2	21.253	-55.12	H	-42.76	50.04	-13	42.12
3	26.68	-50.14	H	-39.93	54.05	-13	37.14
4	30.095	-50.96	H	-38.78	51.9	-13	37.96
5	33.9075	-47.55	H	-38.07	55.87	-13	34.55
6	39.9345	8.77	H	15.71	55.9	N/A	N/A



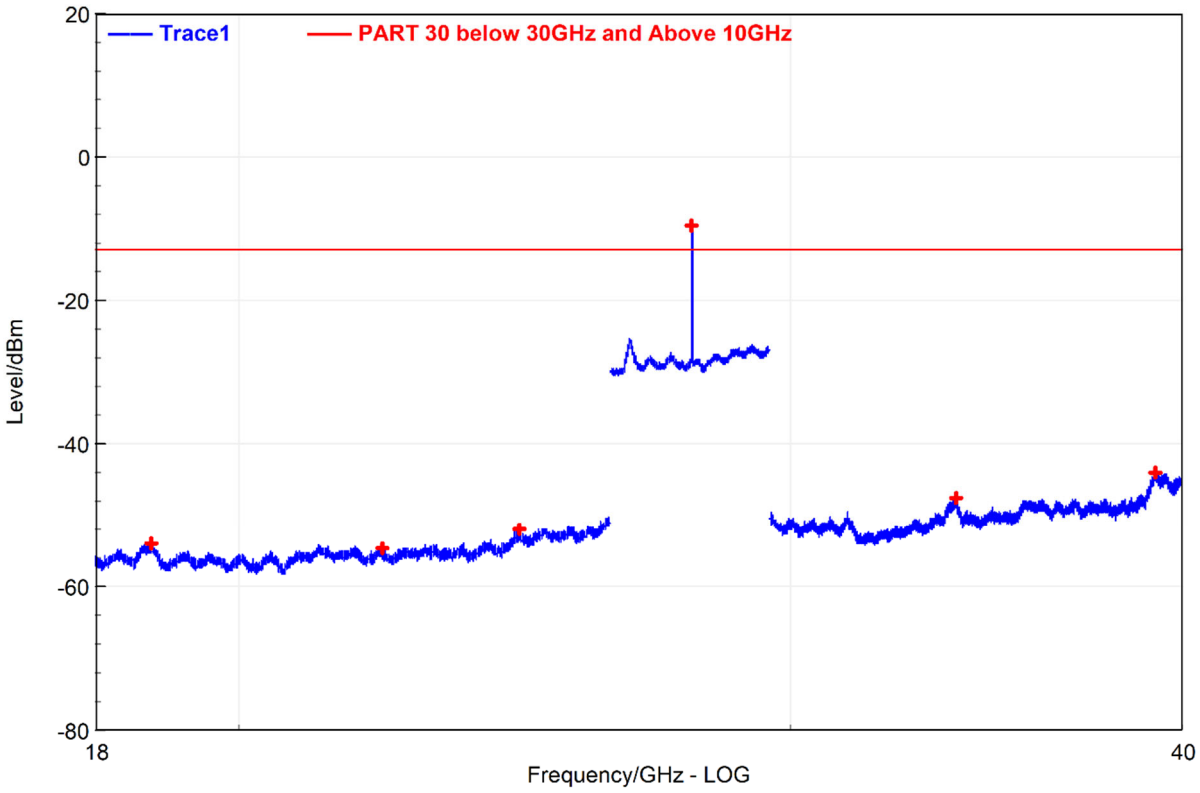
n260, Module 0, Beam ID 13+141, 100MHz, High CH, DFT-s-OFDM QPSK Inner 1RB left ZV

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Path Loss (dB)	Corrected Loss (dB)	Limit (dBm)	Margin (dB)
1	18.734	-55.13	V	-45.24	50.33	-13	42.13
2	21.231	-54.51	V	-42.8	50.25	-13	41.51
3	26.691	-49.99	V	-39.85	54.46	-13	36.99
4	29.6155	-50.53	V	-38.5	51.91	-13	37.53
5	33.9195	-48.11	V	-38.06	55.36	-13	35.11
6	39.935	13.59	V	15.71	57.79	N/A	N/A



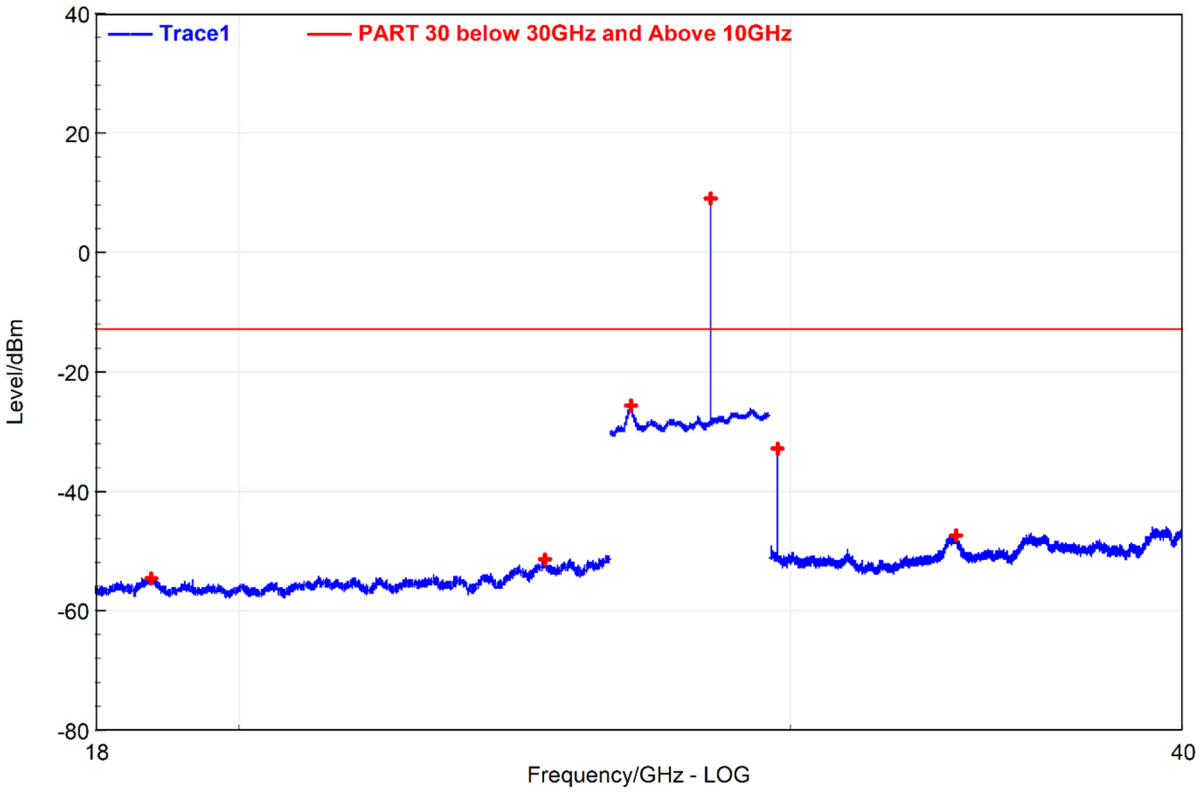
n261, Module 0, Beam ID 144, 100MHz, Mid CH, DFT-s-OFDM BPSK Inner Full RB, YH

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Path Loss (dB)	Corrected Loss (dB)	Limit (dBm)	Margin (dB)
1	18.7515	-54.53	H	-44.98	50.15	-13	41.53
2	20.5045	-55.1	H	-43.8	49.74	-13	42.1
3	24.5215	-53.15	H	-40.2	50.55	-13	40.15
4	27.927	-2.45	H	12.33	51.19	N/A	N/A
5	33.8455	-46.77	H	-39.02	55.82	-13	33.77
6	39.2155	-46.29	H	-38.06	55.81	-13	33.29



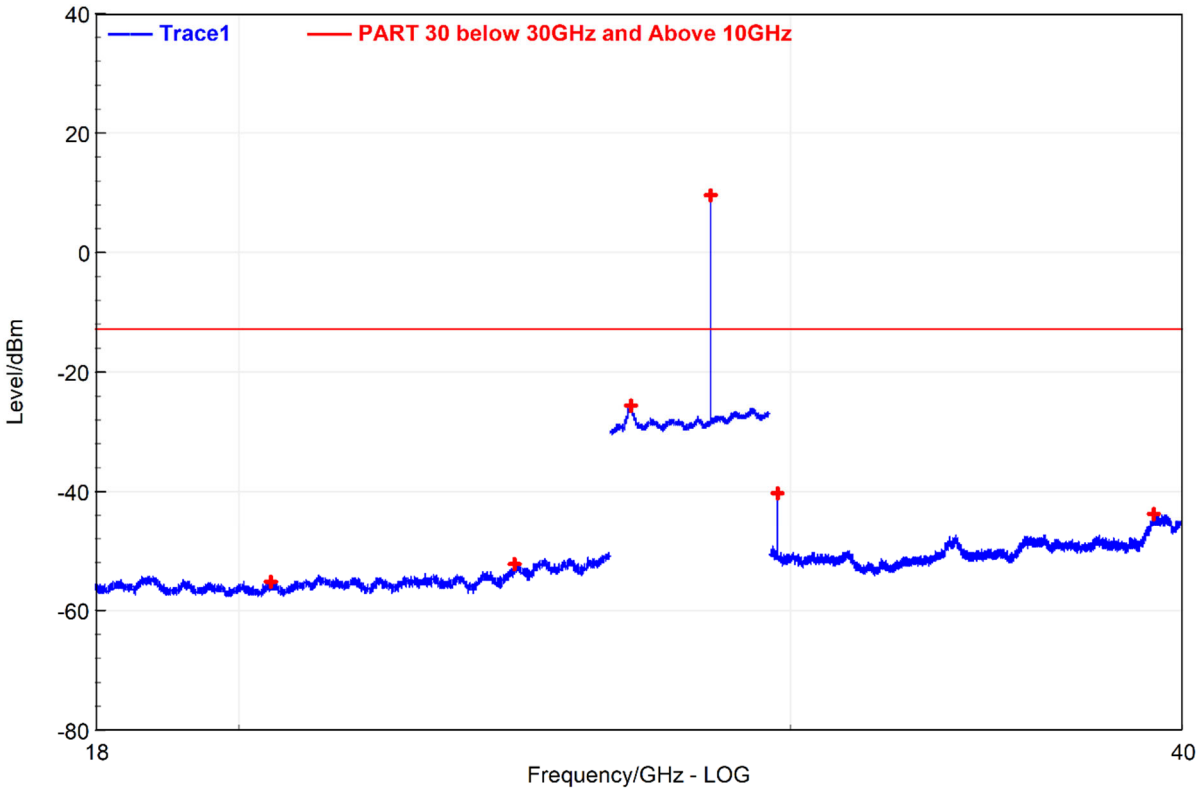
n261, Module 0, Beam ID 144, 100MHz, Mid CH, DFT-s-OFDM BPSK Inner Full RB, YV

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Path Loss (dB)	Corrected Loss (dB)	Limit (dBm)	Margin (dB)
1	18.775	-54.09	V	-44.92	50.42	-13	41.09
2	22.2385	-54.73	V	-42.04	49.91	-13	41.73
3	24.5935	-52.19	V	-40.2	50.85	-13	39.19
4	27.9105	-9.67	V	12.26	51.36	N/A	N/A
5	33.897	-47.58	V	-38.81	55.44	-13	34.58
6	39.2555	-44.09	V	-38.2	58.25	-13	31.09



n261, Module 0, Beam ID 144+16, 50MHz, Mid CH, DFT-s-OFDM BPSK Inner 1RB left YH

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Path Loss (dB)	Corrected Loss (dB)	Limit (dBm)	Margin (dB)
1	18.773	-54.72	H	-44.93	50.21	-13	41.72
2	25.0645	-51.52	H	-39.4	50.77	-13	38.52
3	26.693	-25.78	H	12.55	54.3	-13	12.78
4	28.3185	8.94	H	12.06	51.41	N/A	N/A
5	29.742	-32.85	H	-38.81	51.82	-13	19.85
6	33.9115	-47.53	H	-38.76	55.87	-13	34.53



n261, Module 0, Beam ID 144+16, 50MHz, Mid CH, DFT-s-OFDM BPSK Inner 1RB left YV

Order	Frequency (MHz)	Level (dBm)	Antenna Polar	Path Loss (dB)	Corrected Loss (dB)	Limit (dBm)	Margin (dB)
1	20.49	-55.23	V	-43.8	49.86	-13	42.23
2	24.5185	-52.32	V	-40.21	50.83	-13	39.32
3	26.693	-25.6	V	12.55	54.48	-13	12.6
4	28.318	9.52	V	12.06	51.47	N/A	N/A
5	29.742	-40.43	V	-38.81	52.09	-13	27.43
6	39.208	-43.9	V	-38.04	58.11	-13	30.9