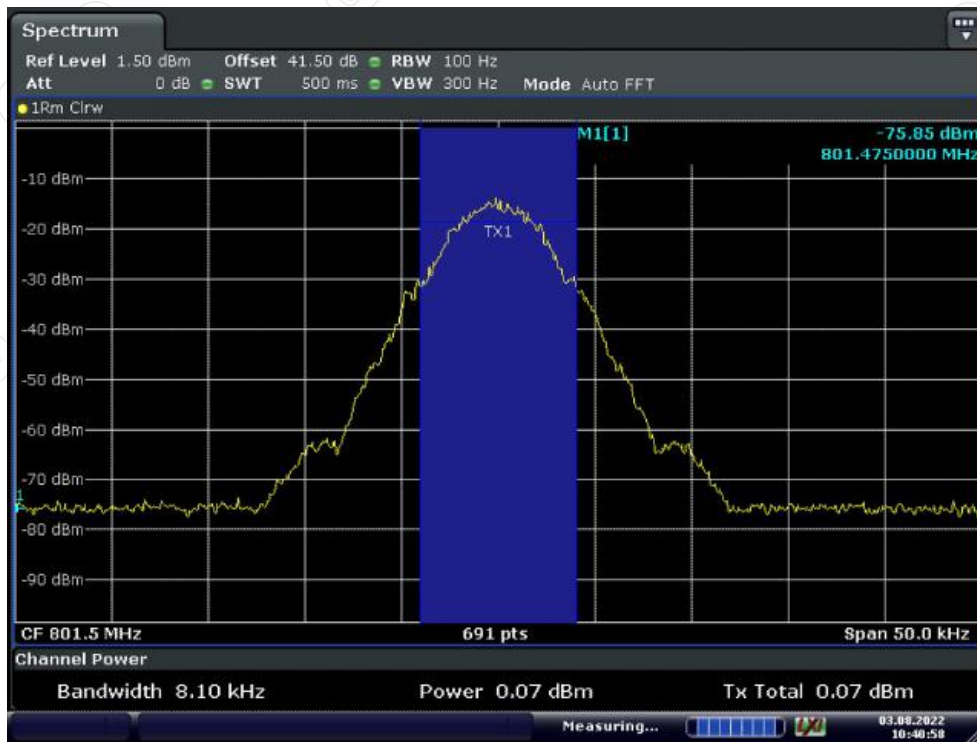
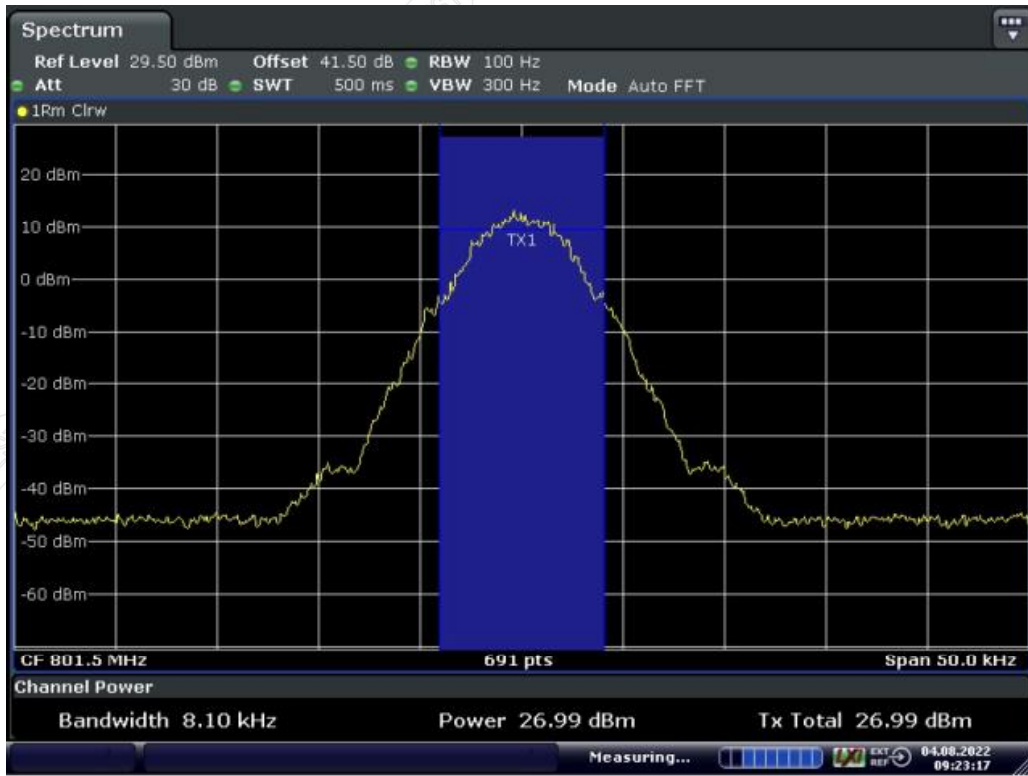


Middle Frequency: 771.5MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.15.2.3.1.3.2. Uplink

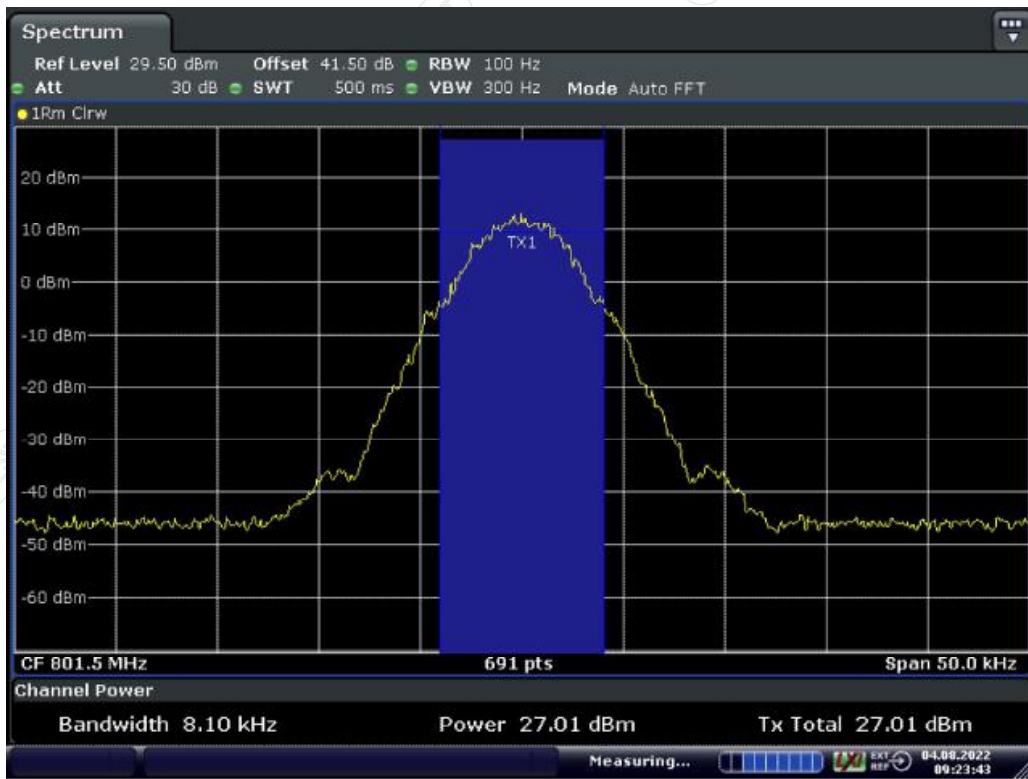


Middle Frequency: 801.5MHz MHz, Input occupied BW



Date: 4.AUG.2022 09:23:17

Middle Frequency: 801.5MHz, Output occupied BW(AGC)

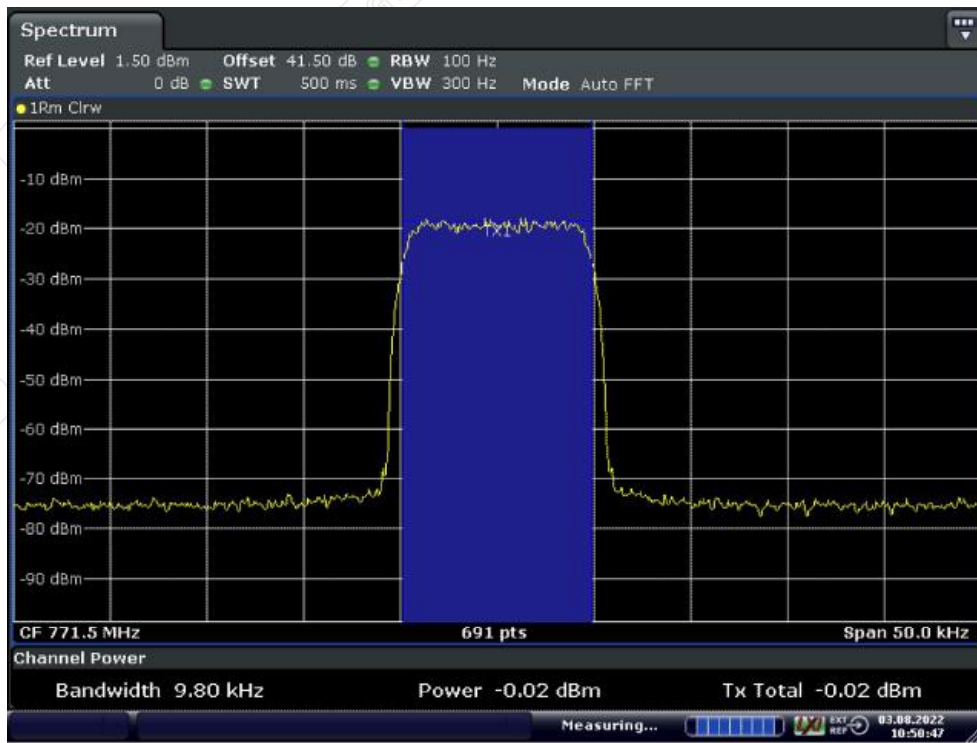


Date: 4.AUG.2022 09:23:43

Middle Frequency: 801.5MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

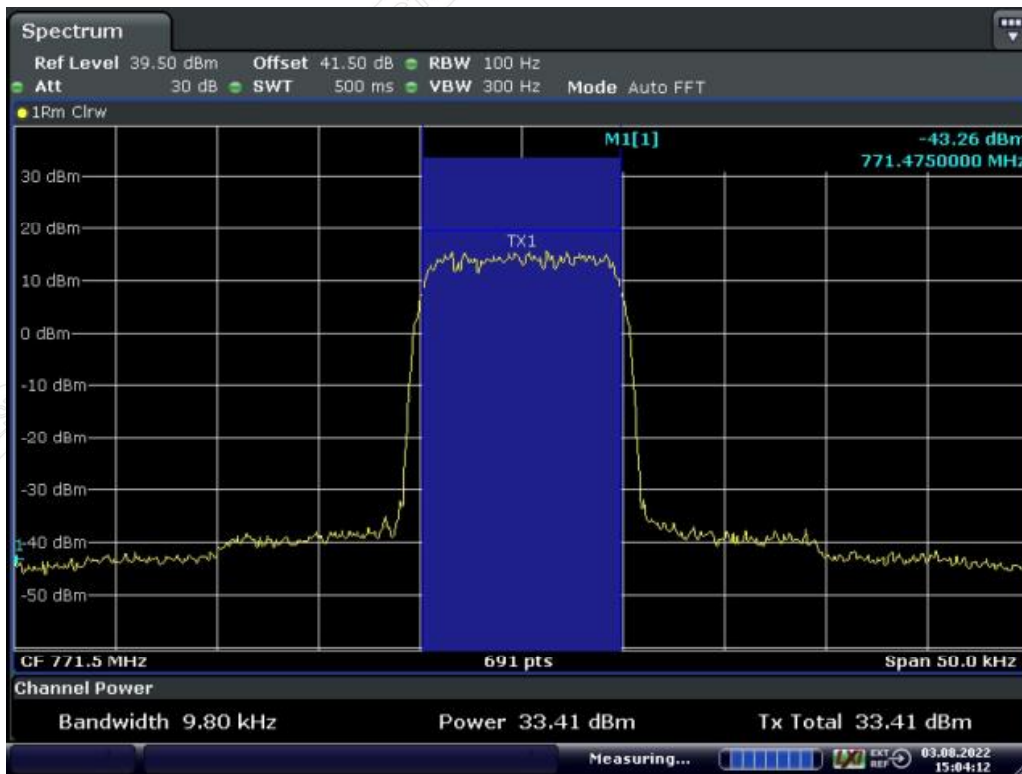
12.15.2.3.1.4. P25 Phase II(H-DQPSK)

12.15.2.3.1.4.1. Downlink



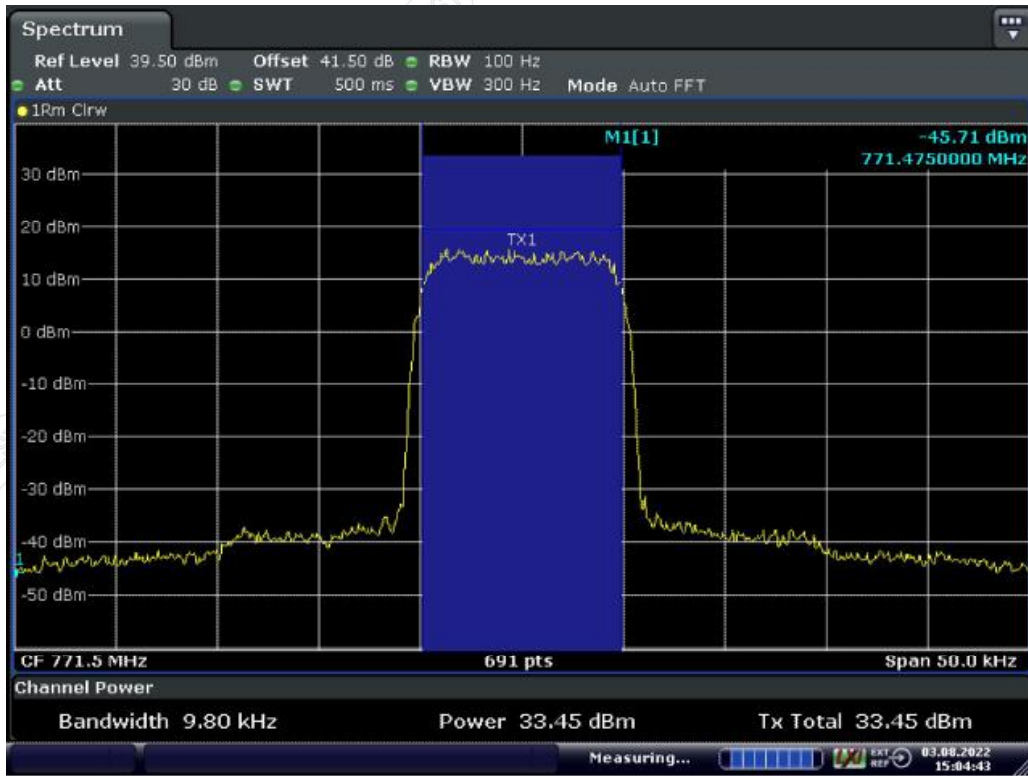
Date: 3.AUG.2022 10:50:48

Middle Frequency: 771.5MHz, Input occupied BW



Date: 3.AUG.2022 15:04:12

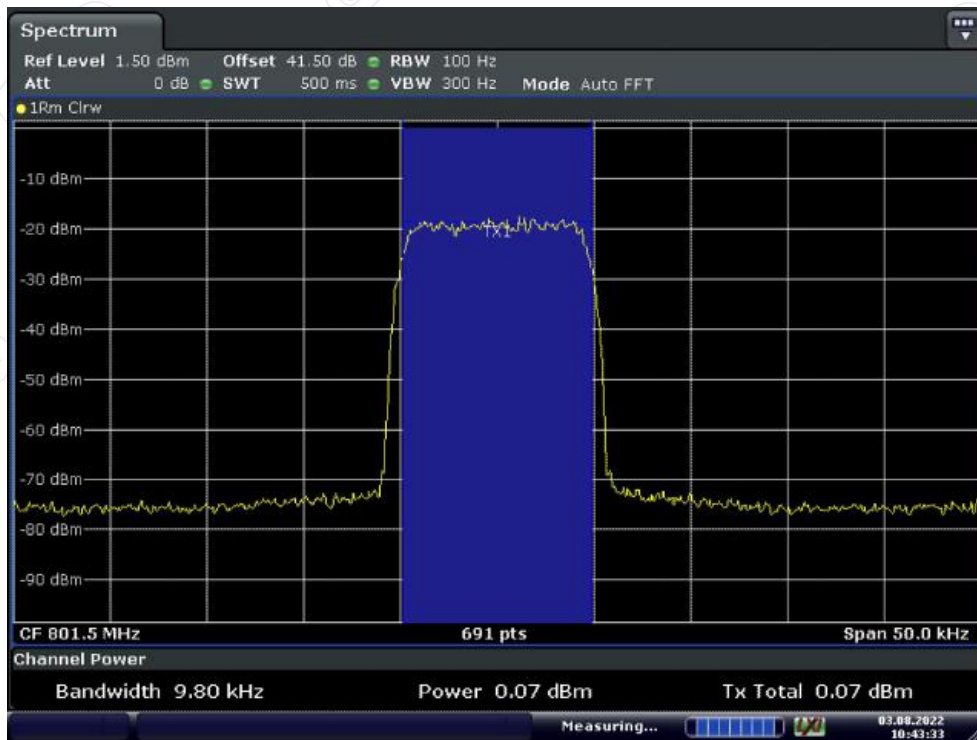
Middle Frequency: 771.5MHz, Output occupied BW(AGC)



Date: 3.AUG.2022 15:04:43

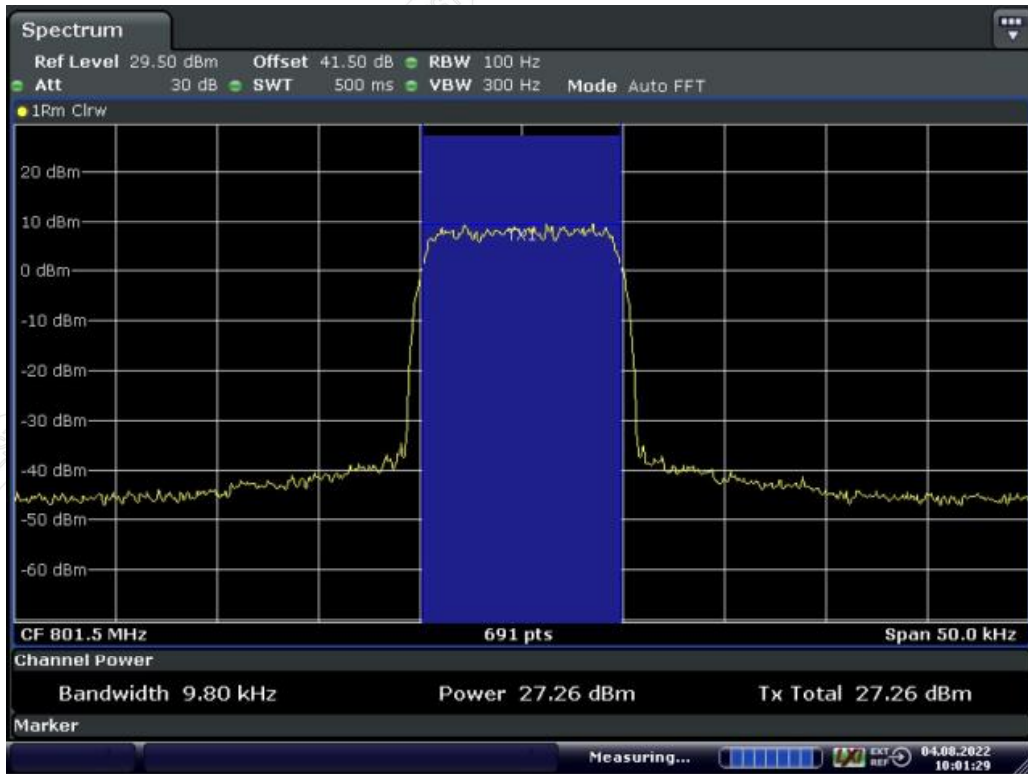
Middle Frequency: 771.5MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.15.2.3.1.4.2. Uplink



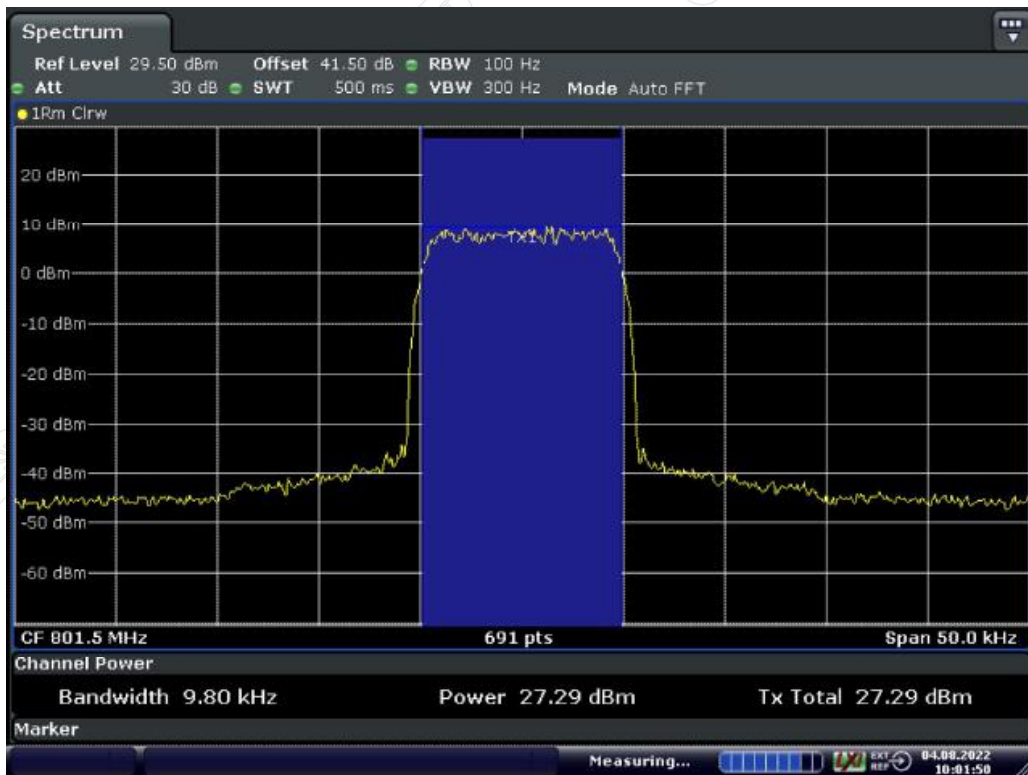
Date: 3.AUG.2022 10:43:33

Middle Frequency: 801.5MHz MHz, Input occupied BW



Date: 4.AUG.2022 10:01:30

Middle Frequency: 801.5MHz, Output occupied BW(AGC)

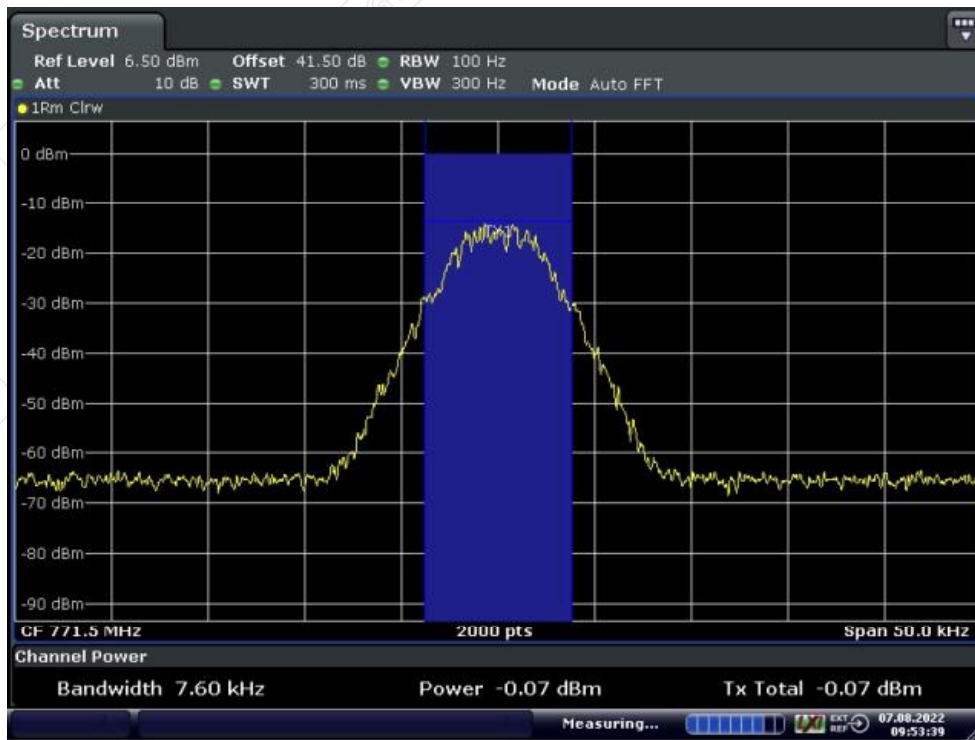


Date: 4.AUG.2022 10:01:50

Middle Frequency: 801.5MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

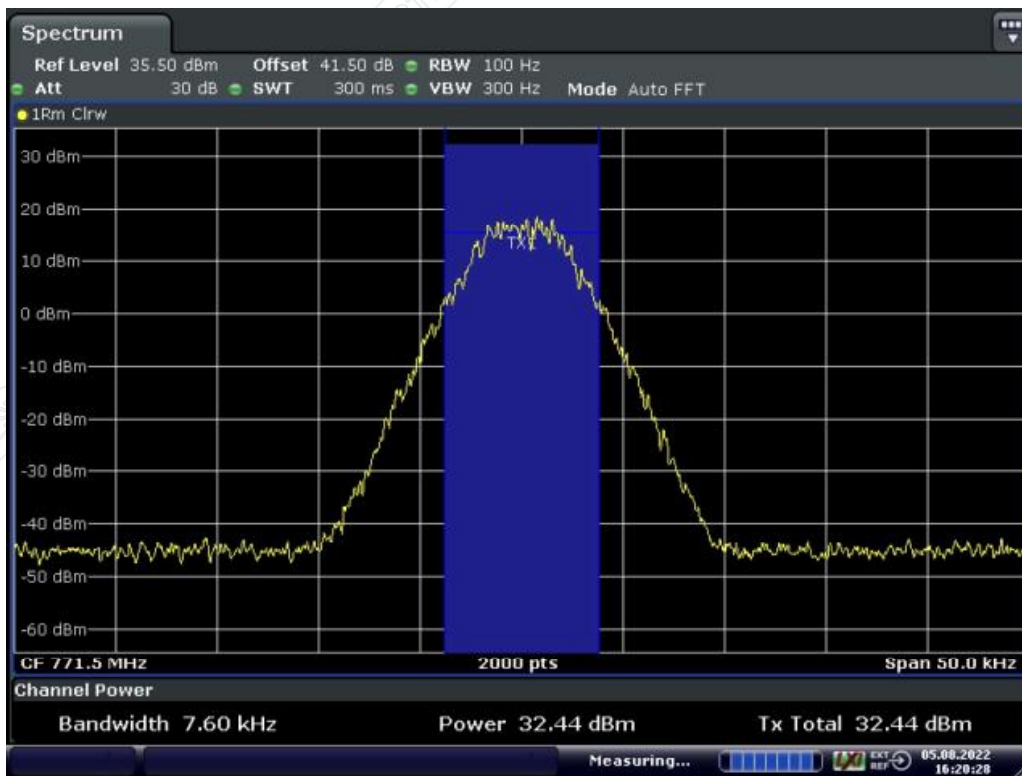
12.15.2.3.1.5. DMR

12.15.2.3.1.5.1. Downlink



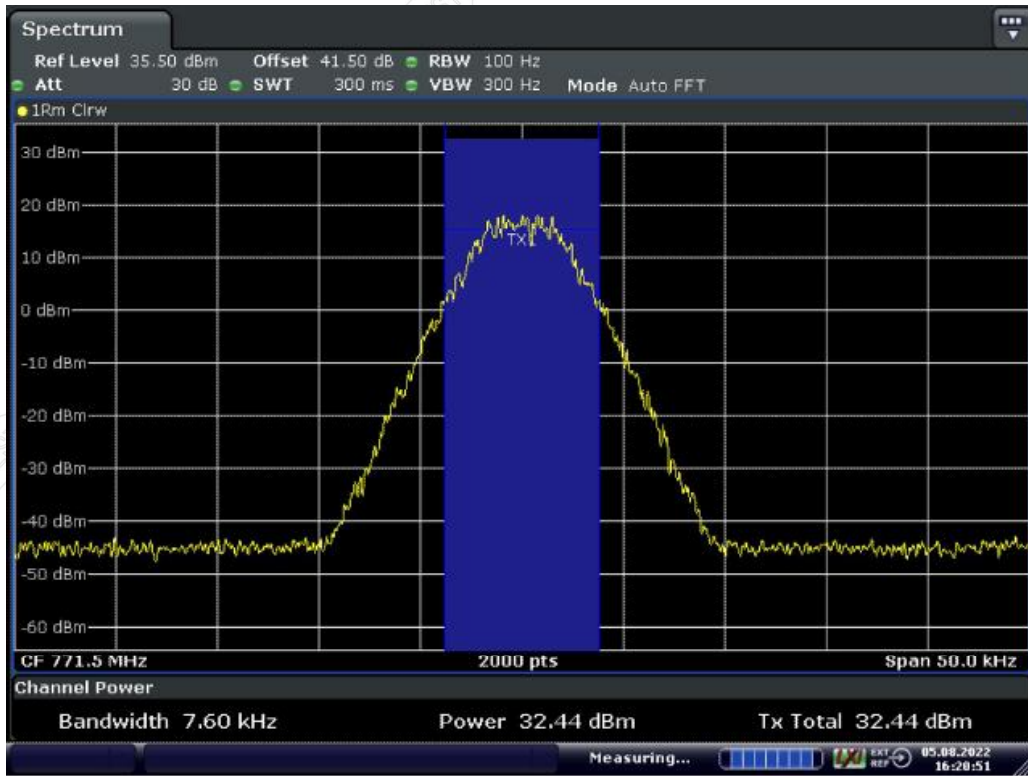
Date: 7.AUG.2022 09:53:40

Middle Frequency: 771.5MHz, Input occupied BW



Date: 5.AUG.2022 16:20:28

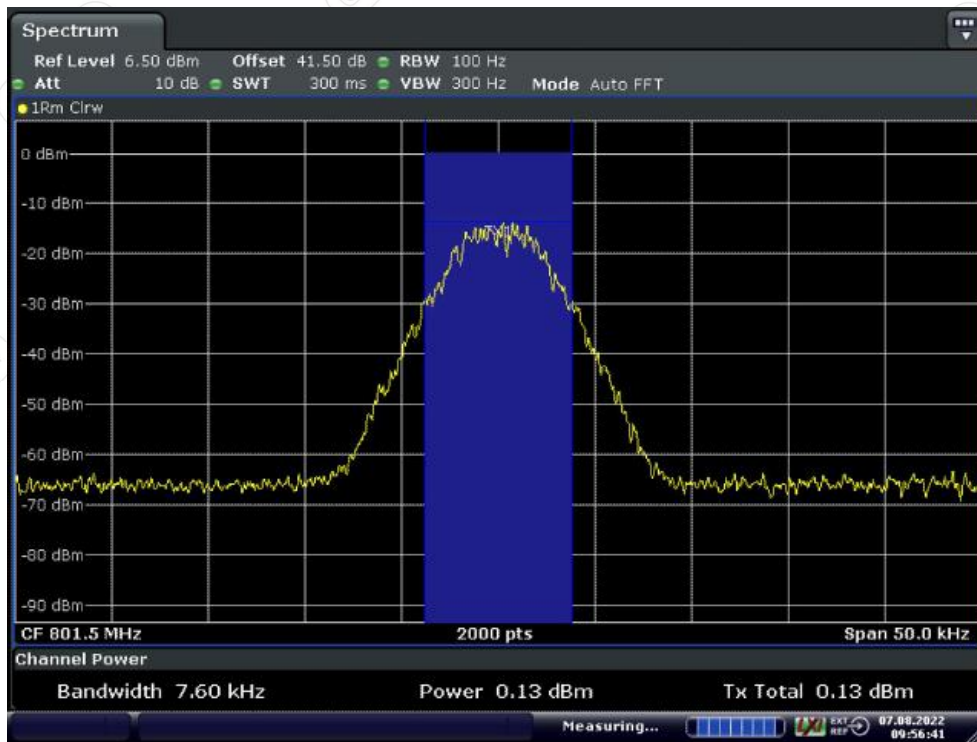
Middle Frequency: 771.5MHz, Output occupied BW(AGC)



Date: 5.AUG.2022 16:20:51

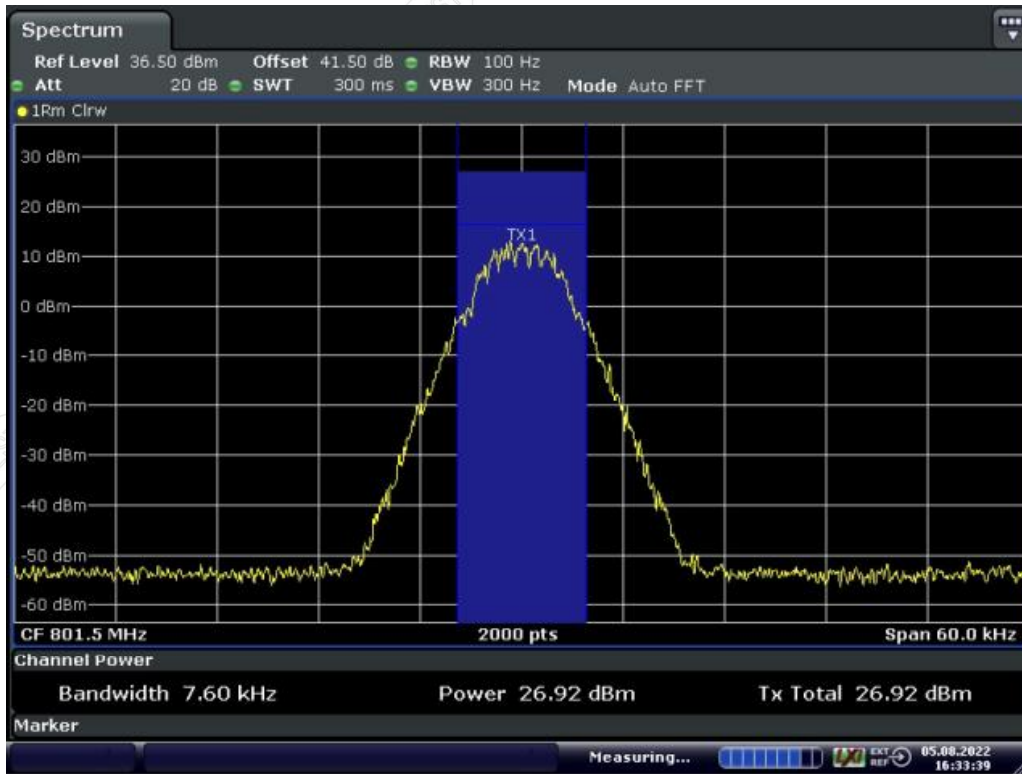
Middle Frequency: 771.5MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.15.2.3.1.5.2. Uplink



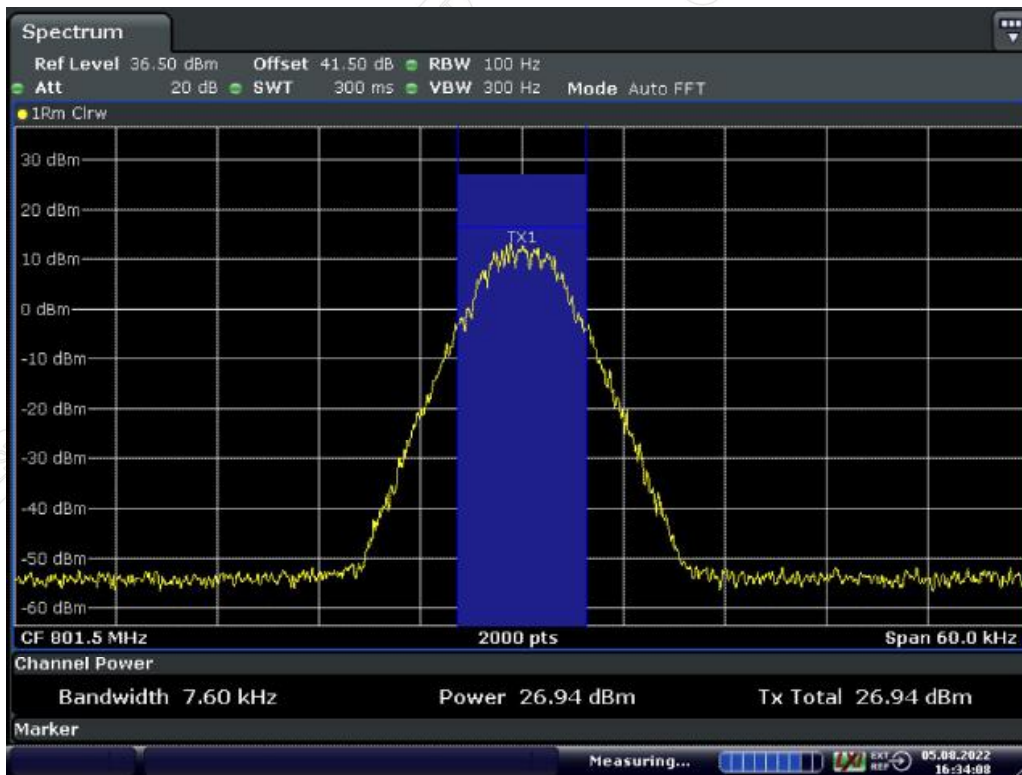
Date: 7.AUG.2022 09:56:41

Middle Frequency: 801.5MHz MHz, Input occupied BW



Date: 5.AUG.2022 16:33:39

Middle Frequency: 801.5MHz, Output occupied BW(AGC)

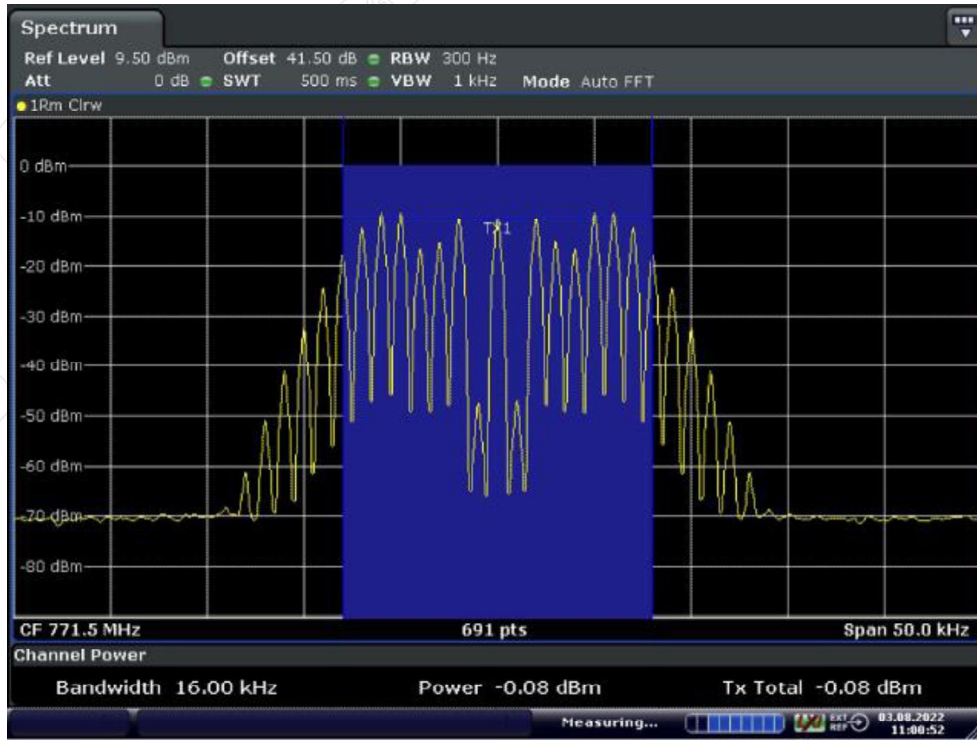


Date: 5.AUG.2022 16:34:08

Middle Frequency: 801.5MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

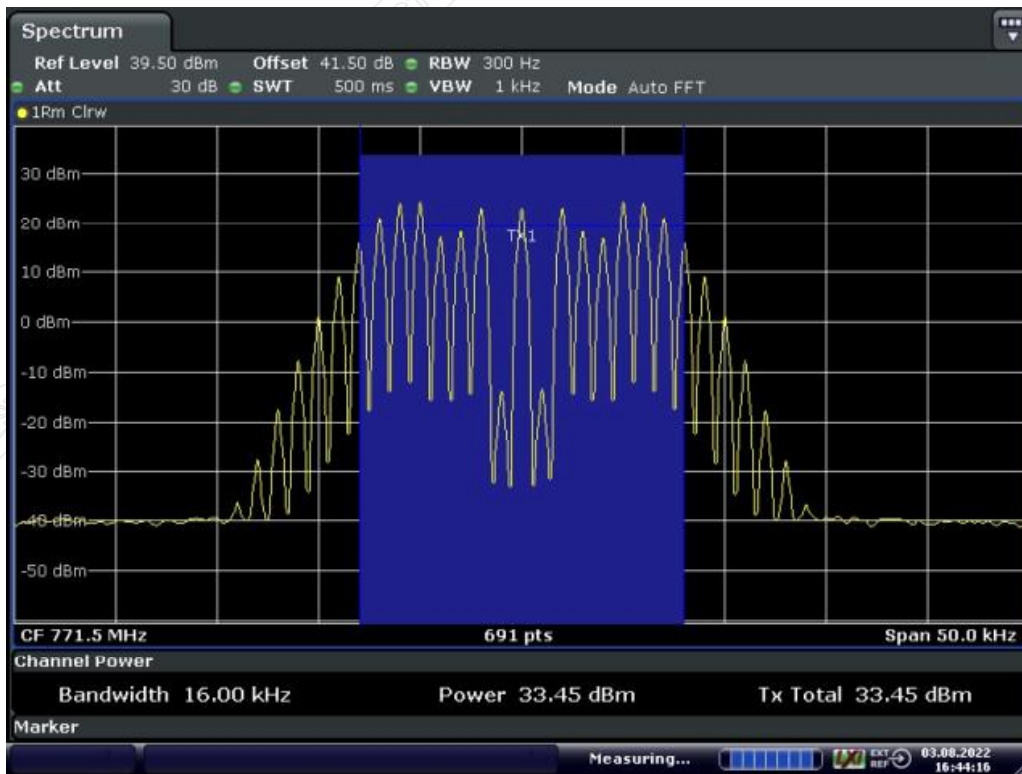
12.15.2.3.1.6. Analog FM

12.15.2.3.1.6.1. Downlink



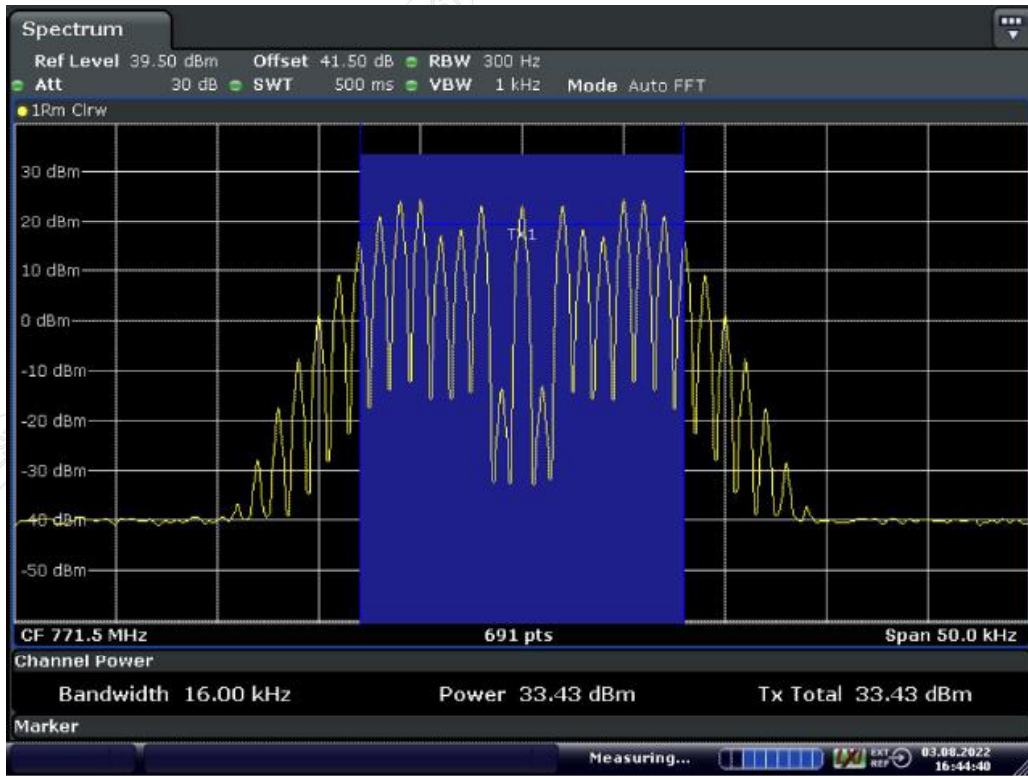
Date: 3.AUG.2022 11:00:52

Middle Frequency: 771.5MHz, Input occupied BW



Date: 3.AUG.2022 16:44:16

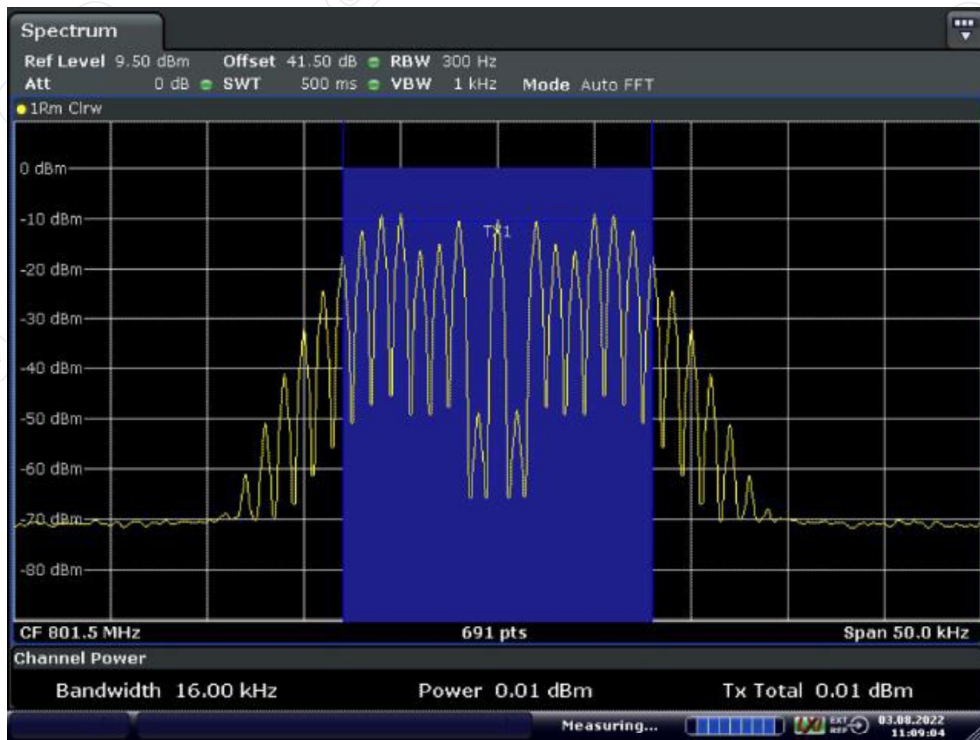
Middle Frequency: 771.5MHz, Output occupied BW(AGC)



Date: 3.AUG.2022 16:44:40

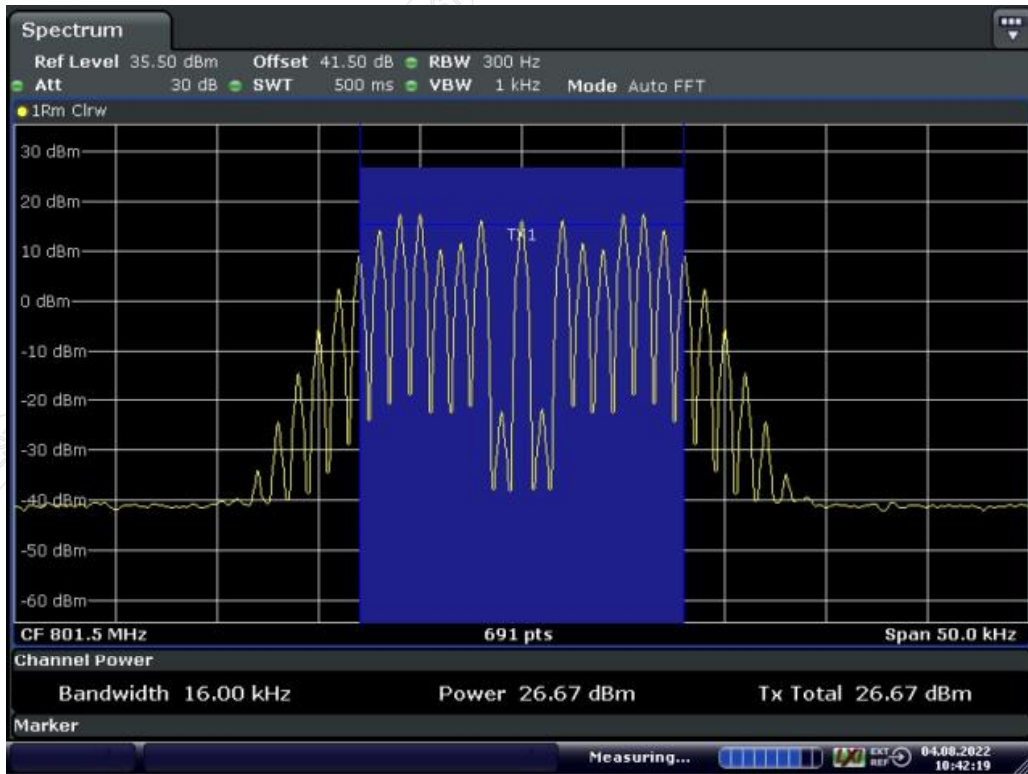
Middle Frequency: 771.5MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.15.2.3.1.6.2. Uplink



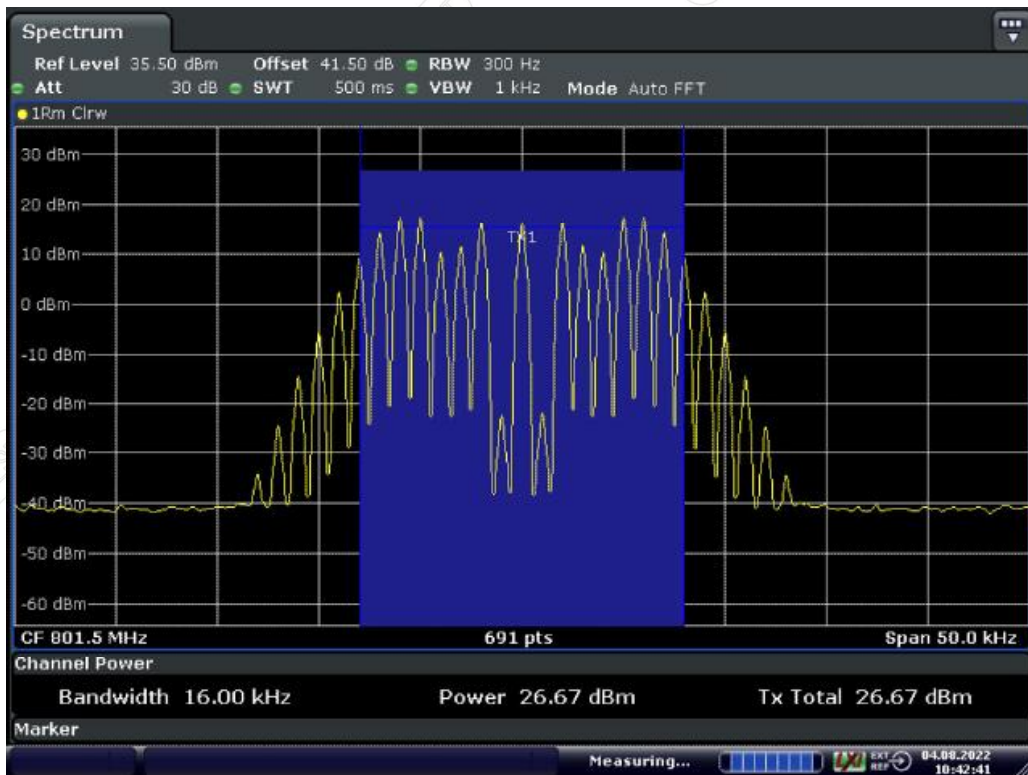
Date: 3.AUG.2022 11:09:04

Middle Frequency: 801.5MHz MHz, Input occupied BW



Date: 4.AUG.2022 10:42:19

Middle Frequency: 801.5MHz, Output occupied BW(AGC)

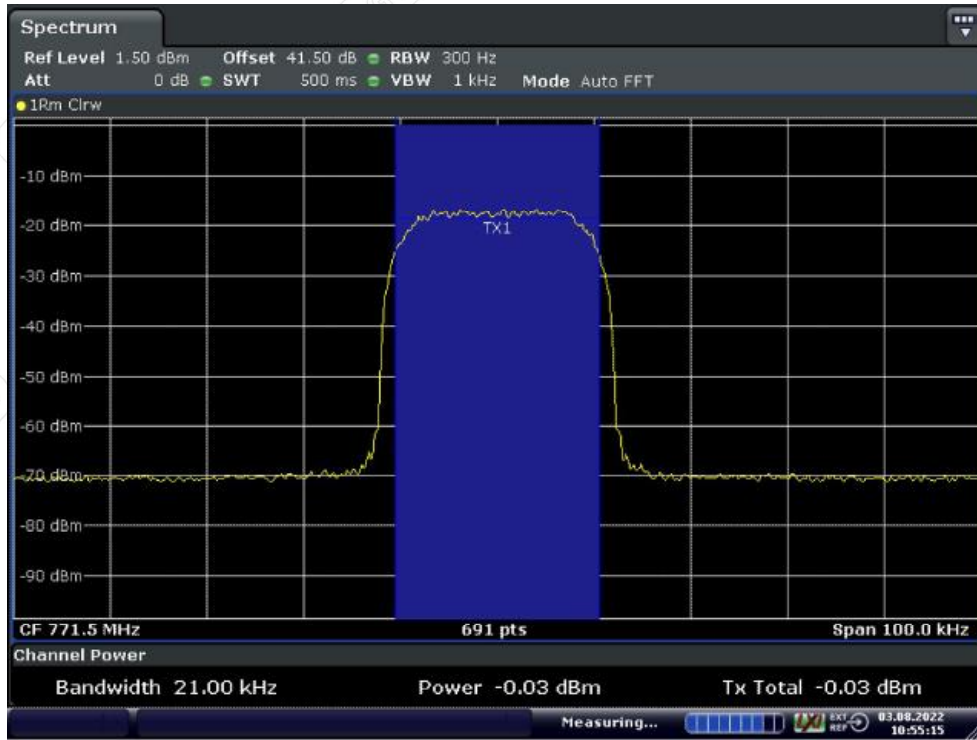


Date: 4.AUG.2022 10:42:42

Middle Frequency: 801.5MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

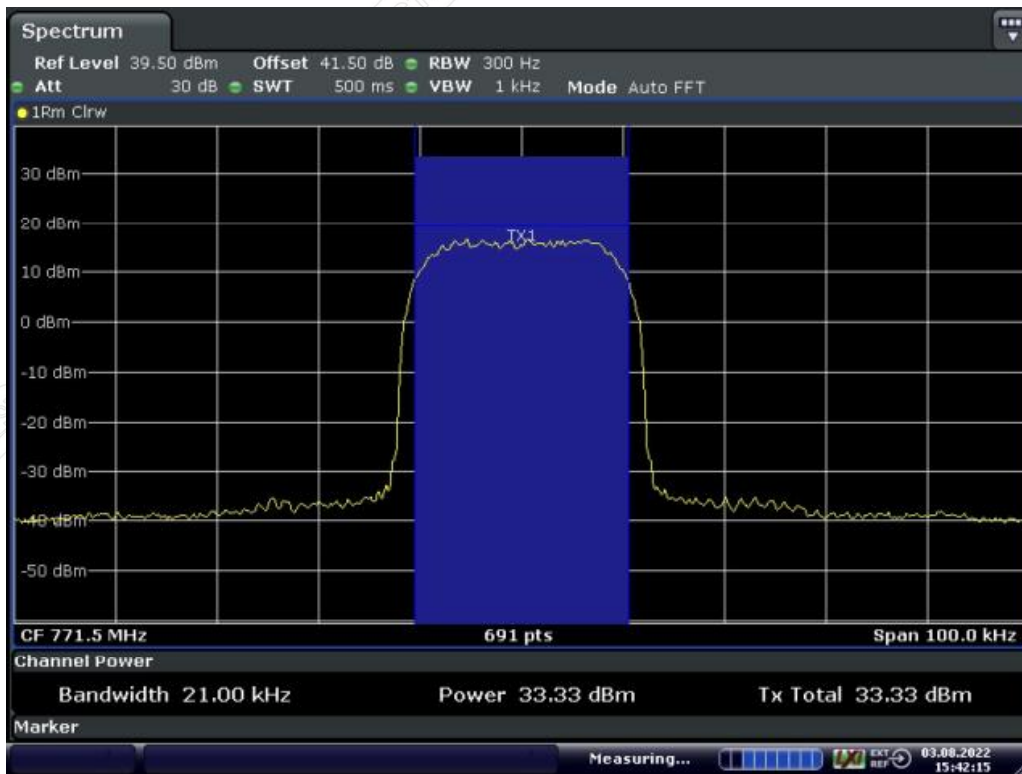
12.15.2.3.1.7. Tetra

12.15.2.3.1.7.1. Downlink



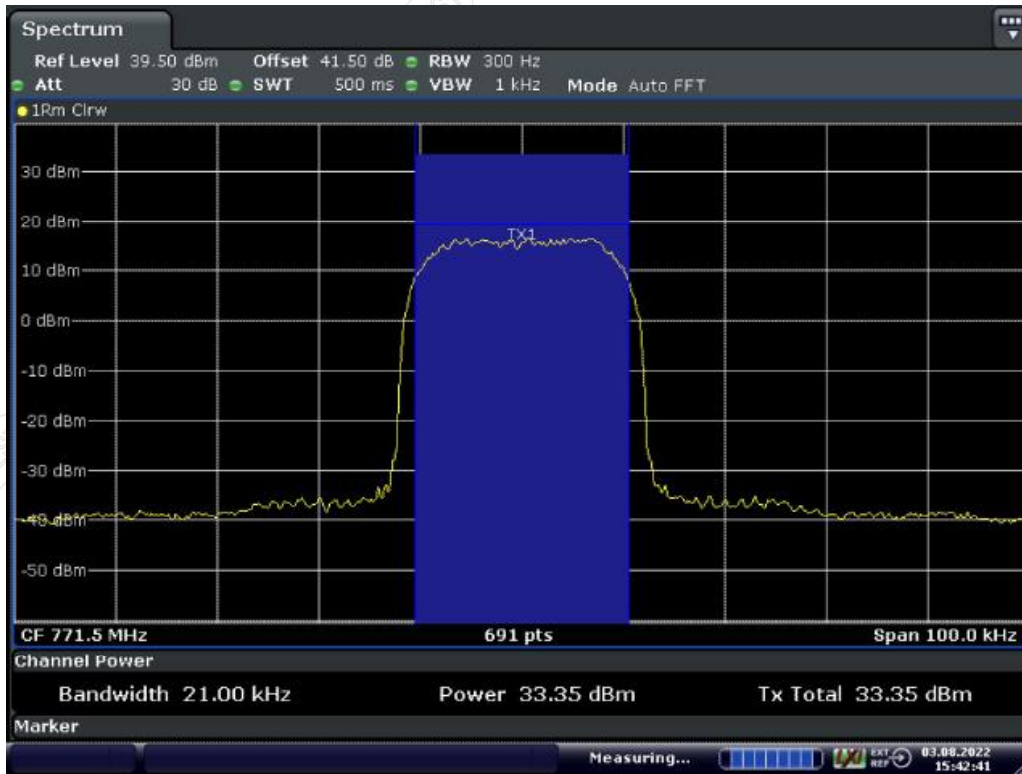
Date: 3.AUG.2022 10:55:16

Middle Frequency: 771.5MHz, Input occupied BW



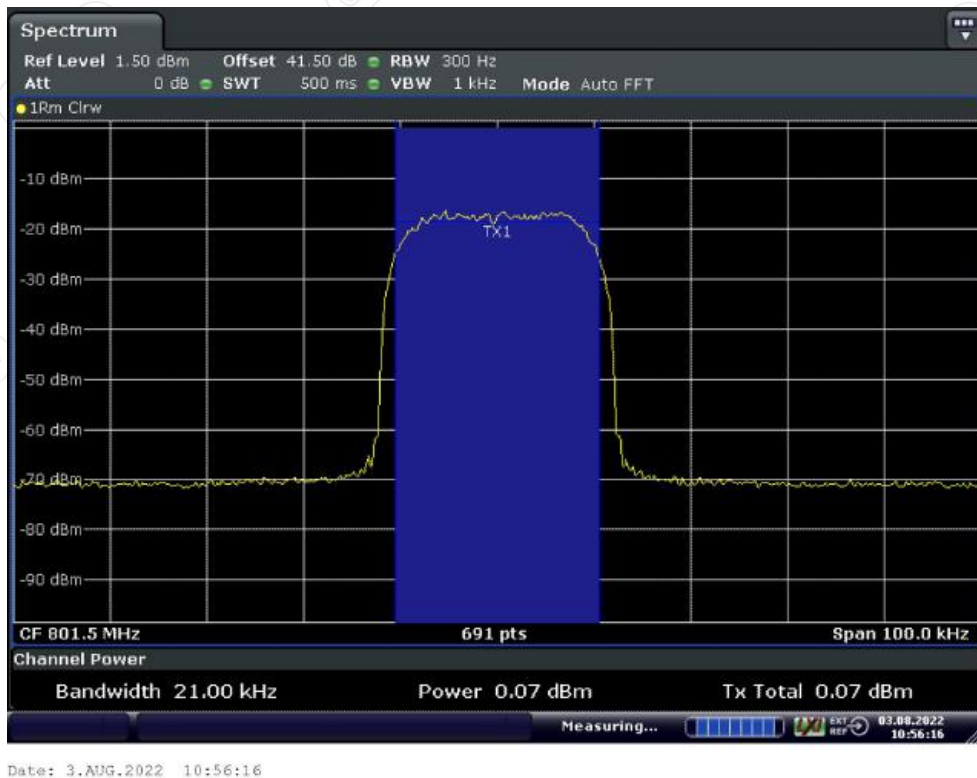
Date: 3.AUG.2022 15:42:14

Middle Frequency: 771.5MHz, Output occupied BW(AGC)

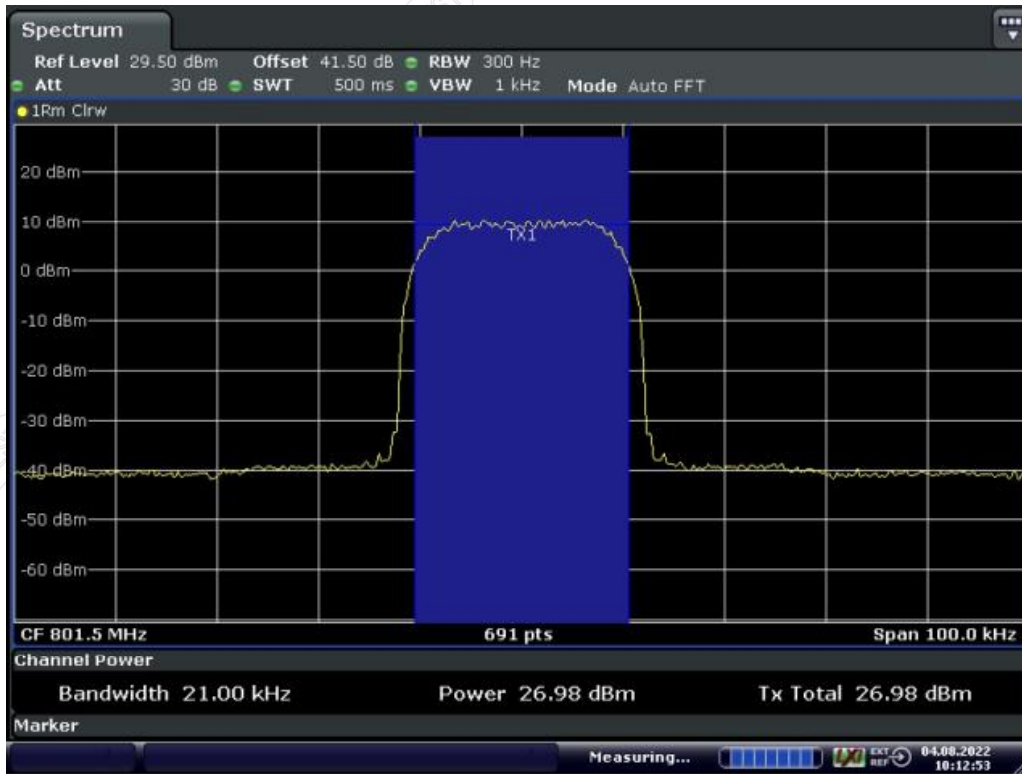


Middle Frequency: 771.5MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.15.2.3.1.7.2. Uplink

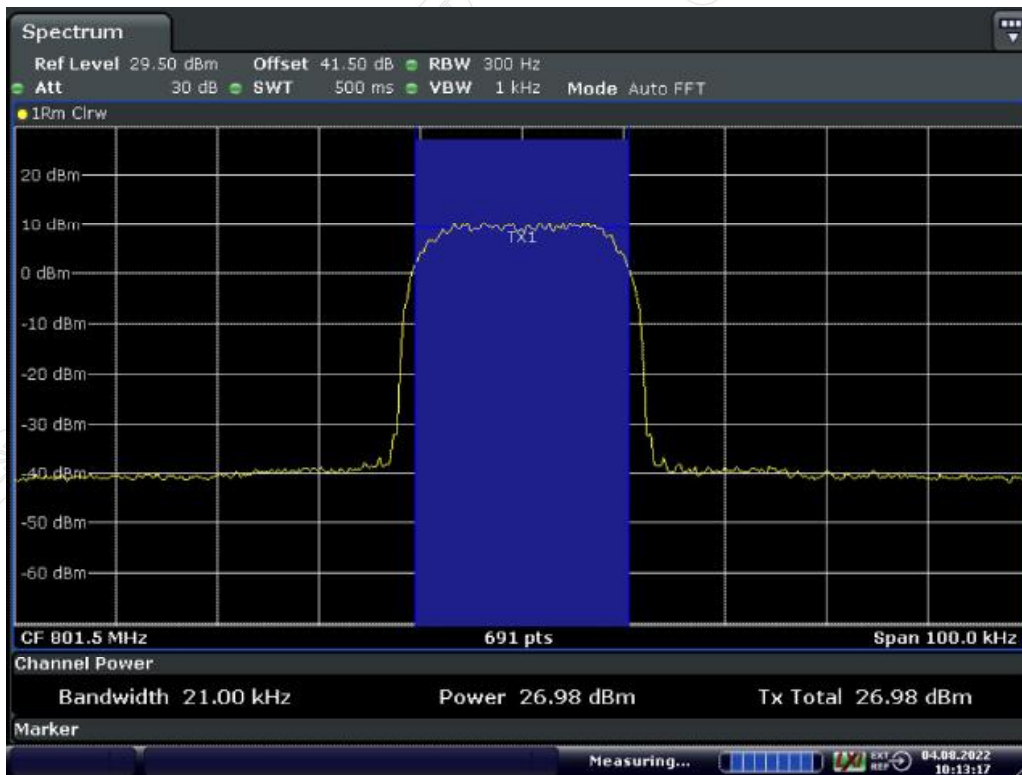


Middle Frequency: 801.5MHz MHz, Input occupied BW



Date: 4.AUG.2022 10:12:53

Middle Frequency: 801.5MHz, Output occupied BW(AGC)



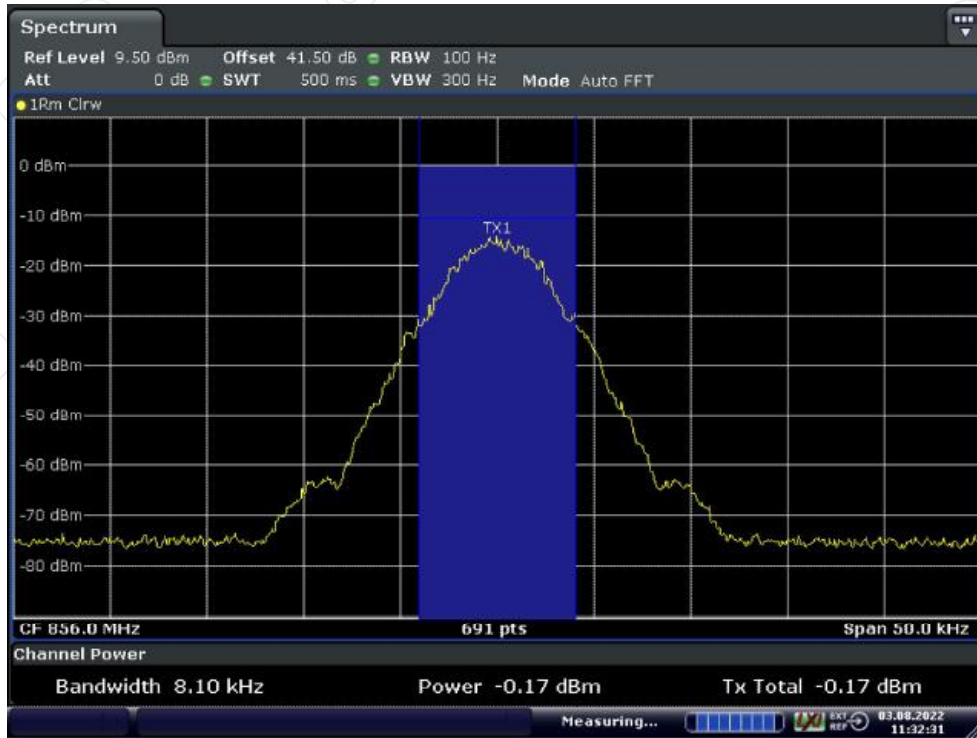
Date: 4.AUG.2022 10:13:17

Middle Frequency: 801.5MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.15.2.3.2. 800MHz Band

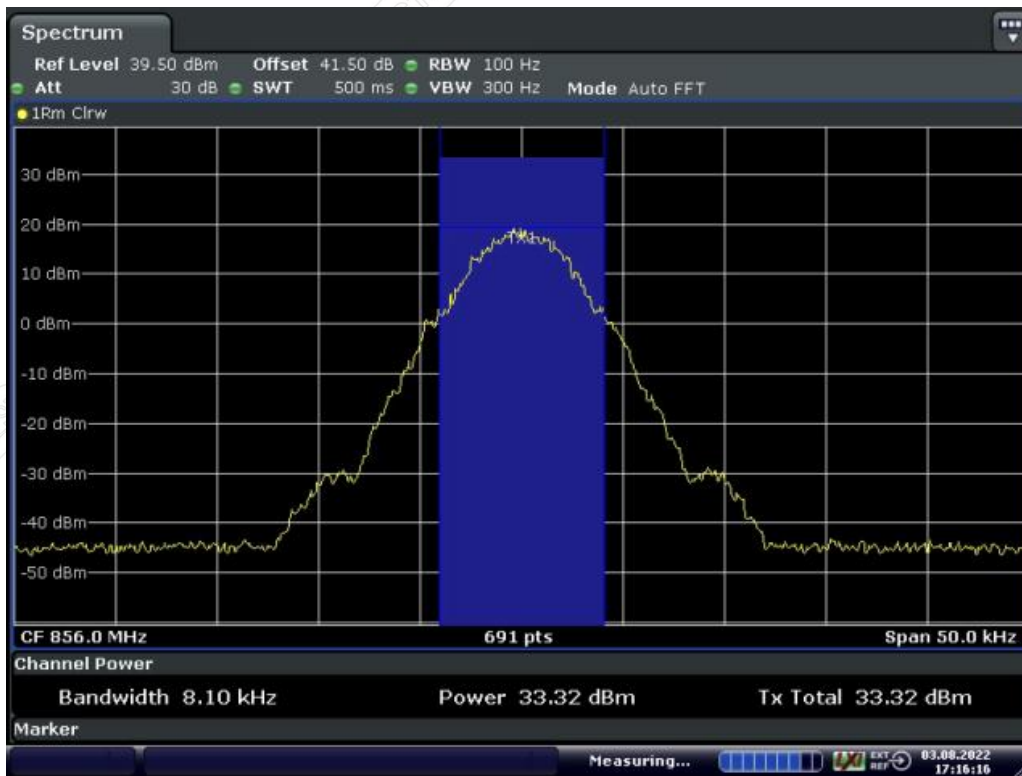
12.15.2.3.2.1. P25 Phase I(C4FM)

12.15.2.3.2.1.1. Downlink



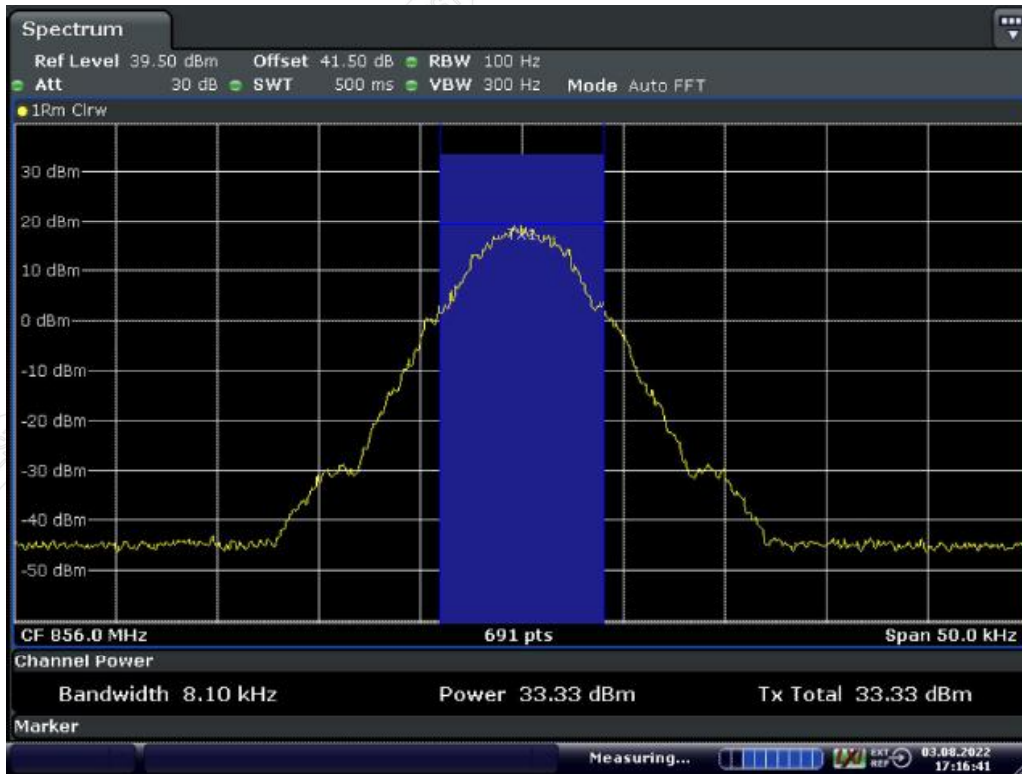
Date: 3.AUG.2022 11:32:31

Middle Frequency: 856.0MHz, Input occupied BW



Date: 3.AUG.2022 17:16:16

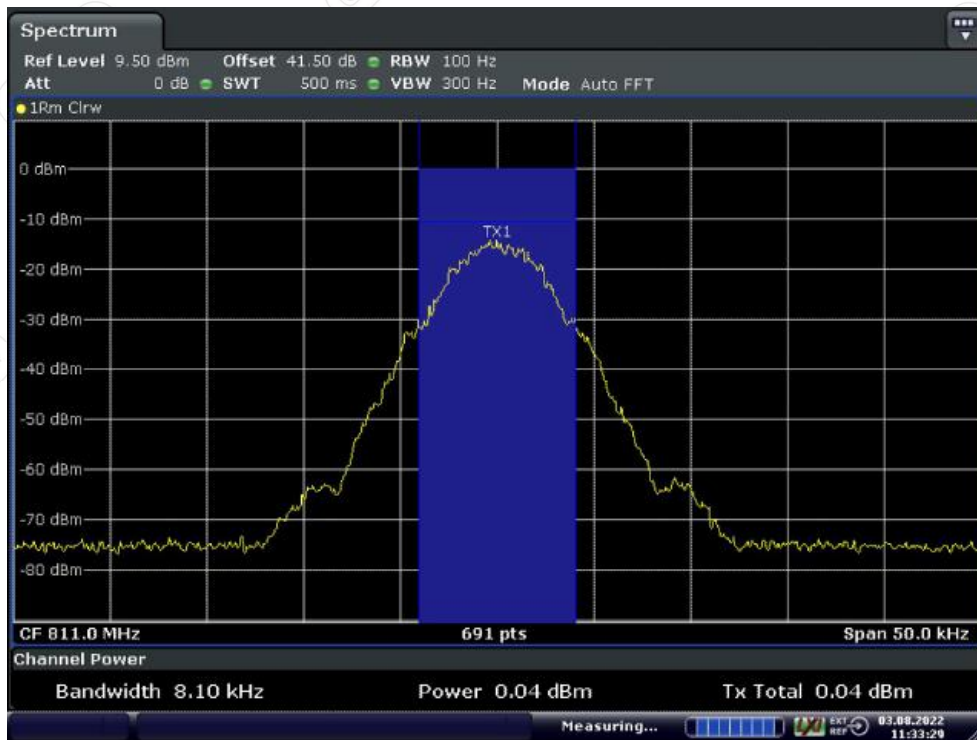
Middle Frequency: 856.0MHz, Output occupied BW(AGC)



Date: 3.AUG.2022 17:16:41

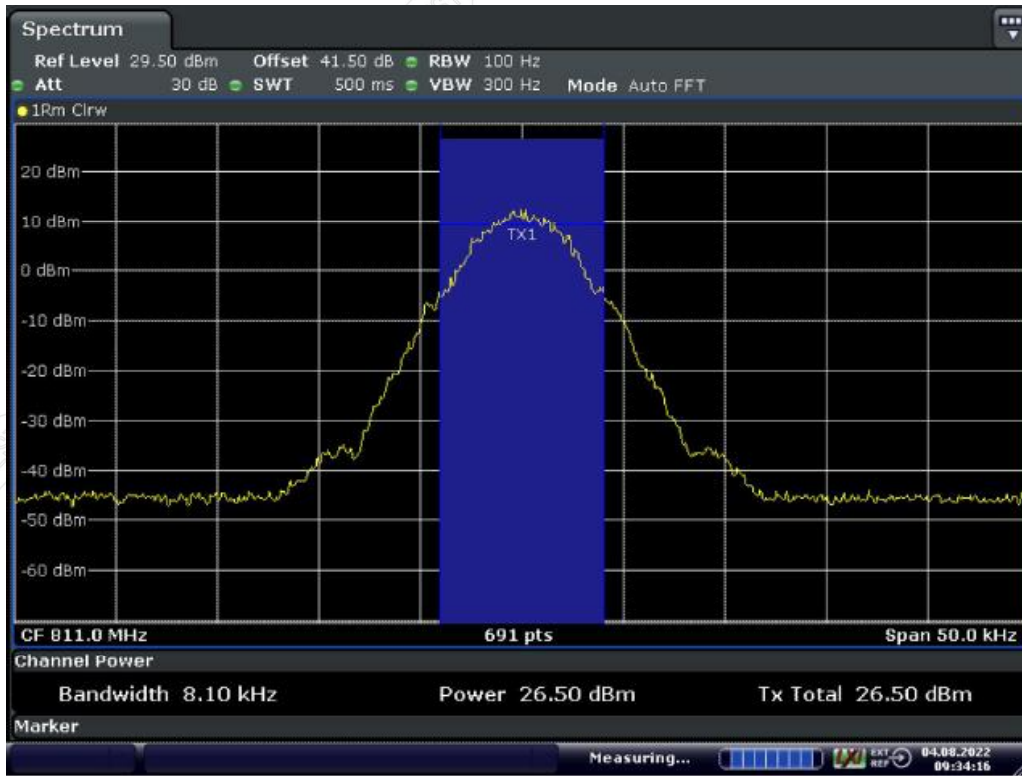
Middle Frequency: 856.0MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.15.2.3.2.1.2. Uplink



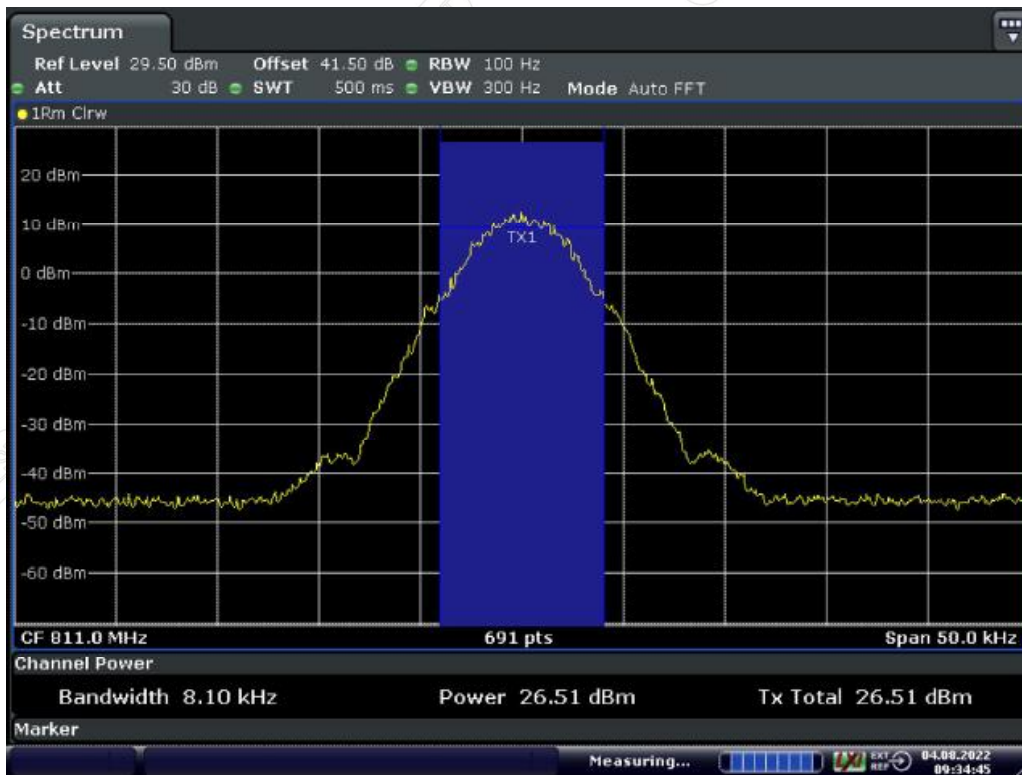
Date: 3.AUG.2022 11:33:29

Middle Frequency: 811.0MHz MHz, Input occupied BW



Date: 4.AUG.2022 09:34:16

Middle Frequency: 811.0MHz, Output occupied BW(AGC)

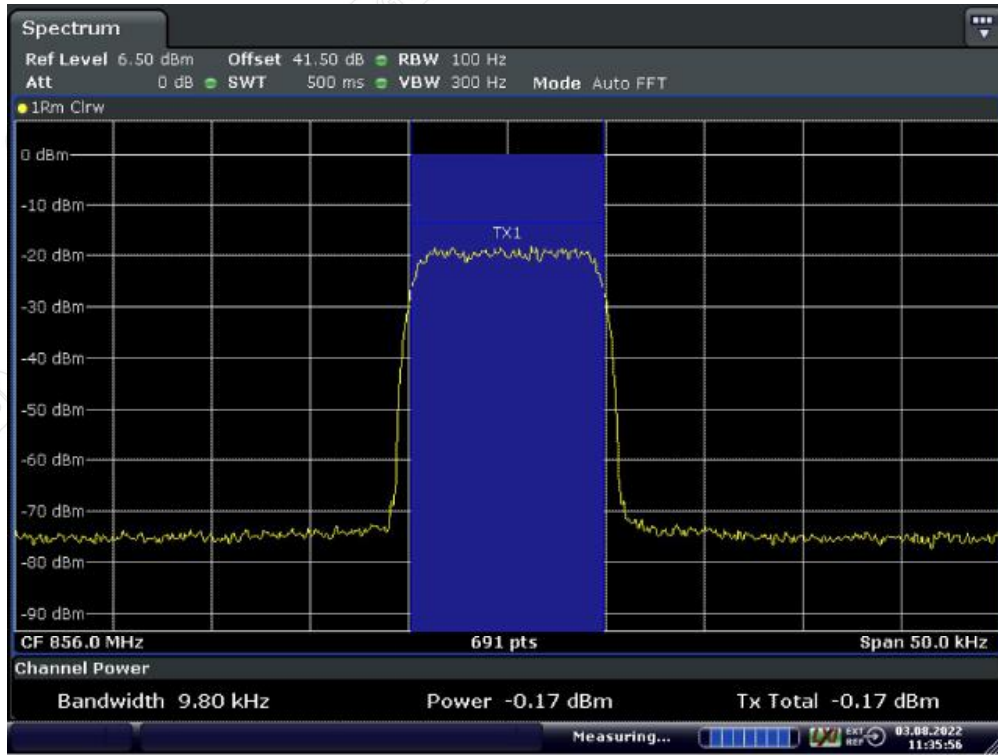


Date: 4.AUG.2022 09:34:45

Middle Frequency: 811.0MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

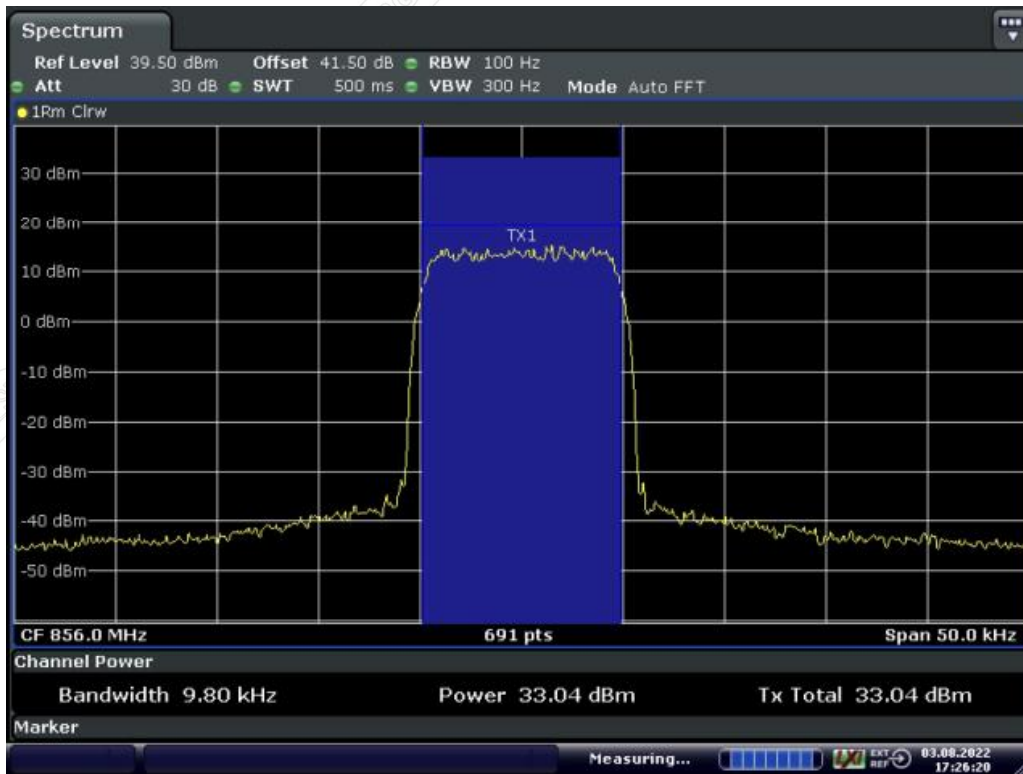
12.15.2.3.2.2. P25 Phase II(H-DQPSK)

12.15.2.3.2.2.1. Downlink



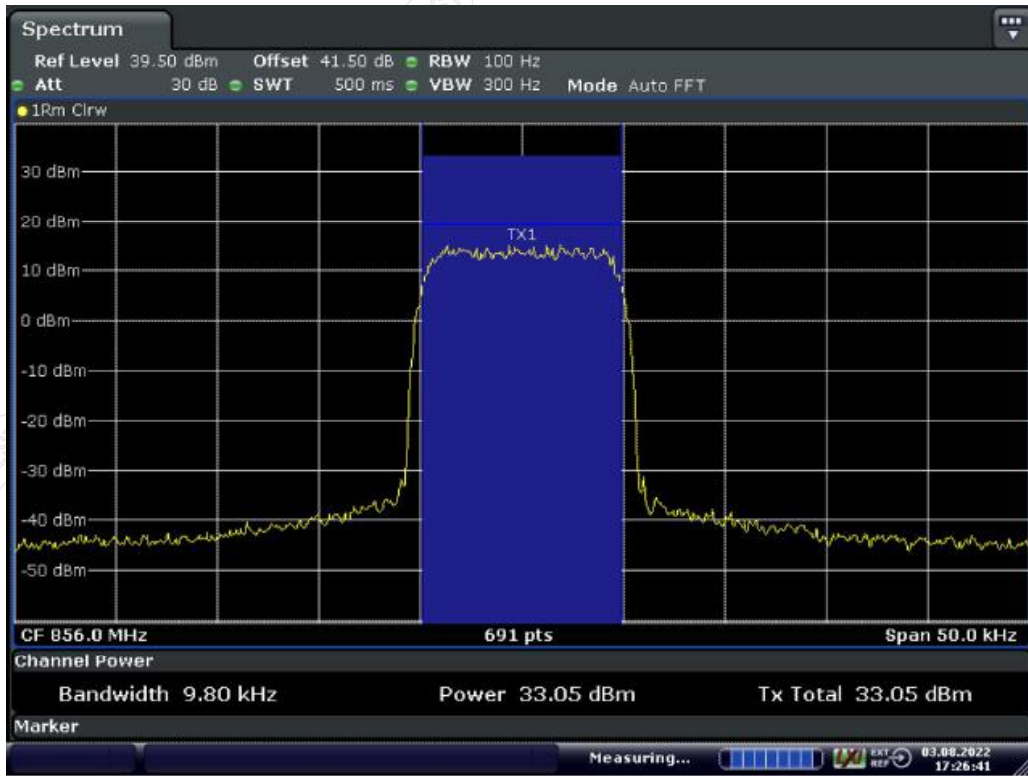
Date: 3.AUG.2022 11:35:56

Middle Frequency: 856.0MHz, Input occupied BW



Date: 3.AUG.2022 17:26:20

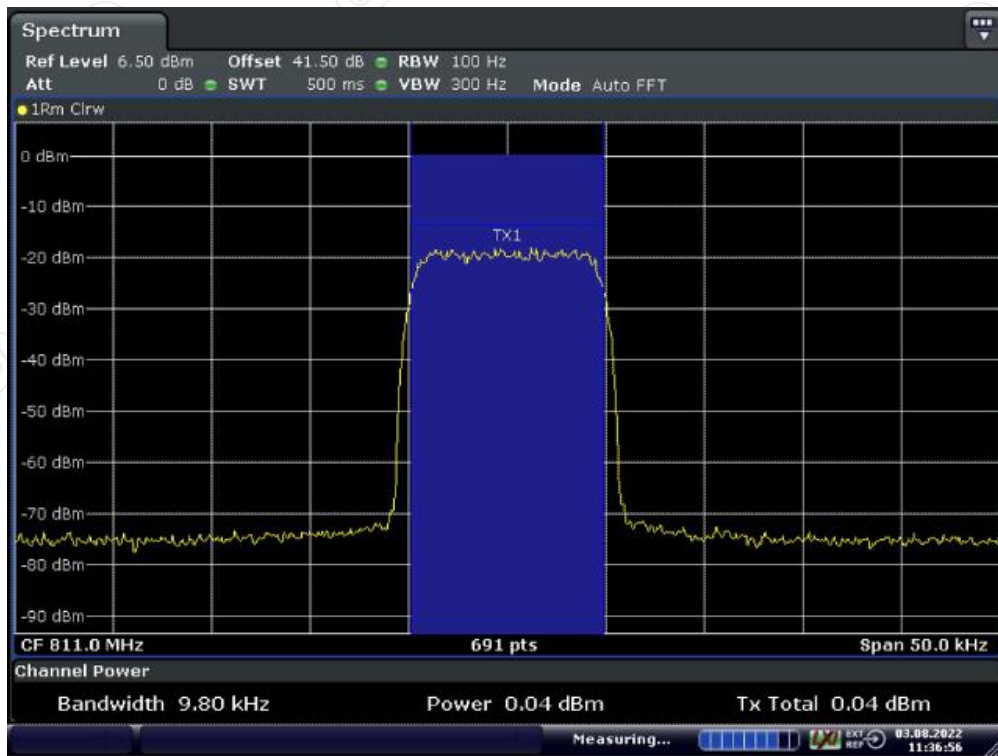
Middle Frequency: 856.0MHz, Output occupied BW(AGC)



Date: 3.AUG.2022 17:26:40

Middle Frequency: 856.0MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.15.2.3.2.2.2. Uplink



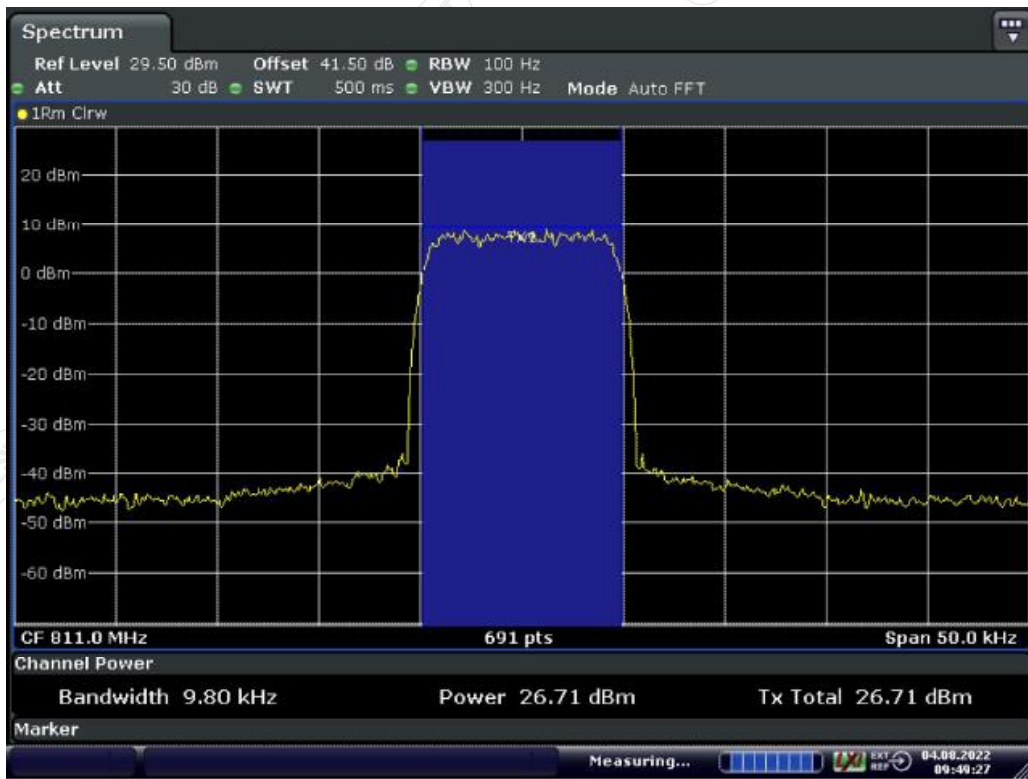
Date: 3.AUG.2022 11:36:56

Middle Frequency: 811.0MHz MHz, Input occupied BW



Date: 4.AUG.2022 09:49:01

Middle Frequency: 811.0MHz, Output occupied BW(AGC)

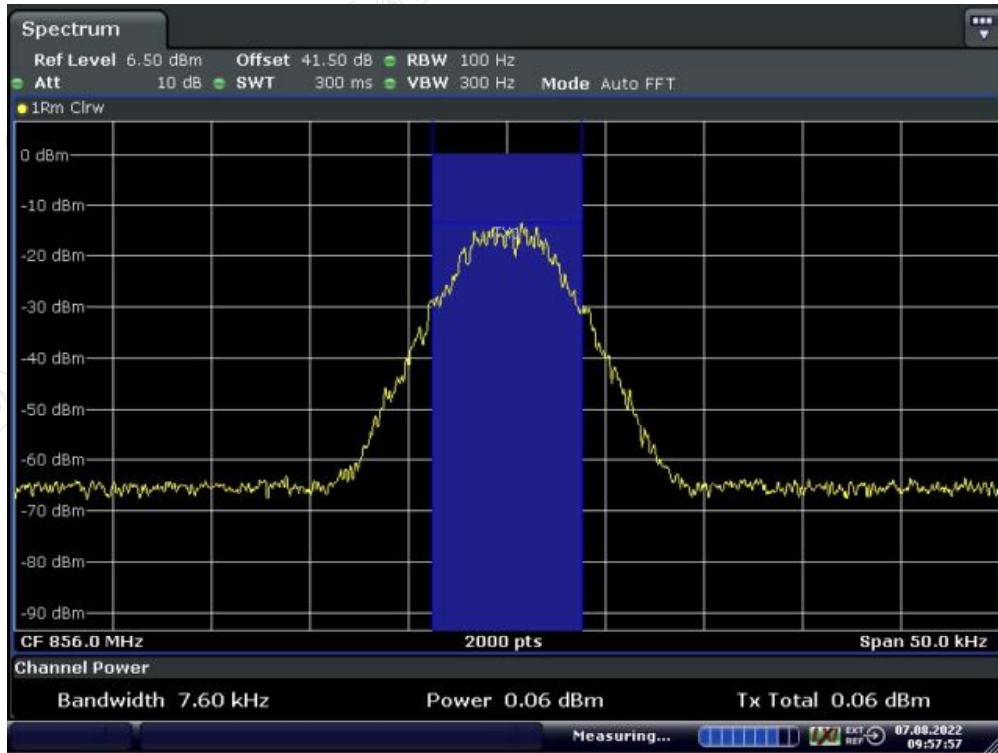


Date: 4.AUG.2022 09:49:27

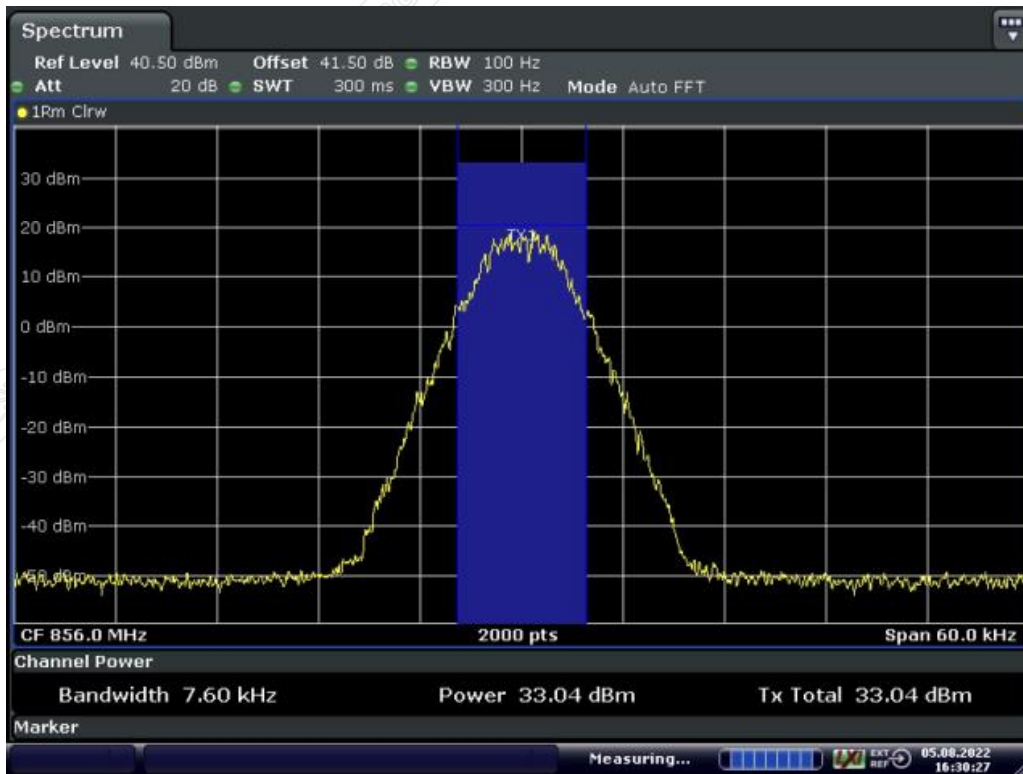
Middle Frequency: 811.0MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.15.2.3.2.3. DMR

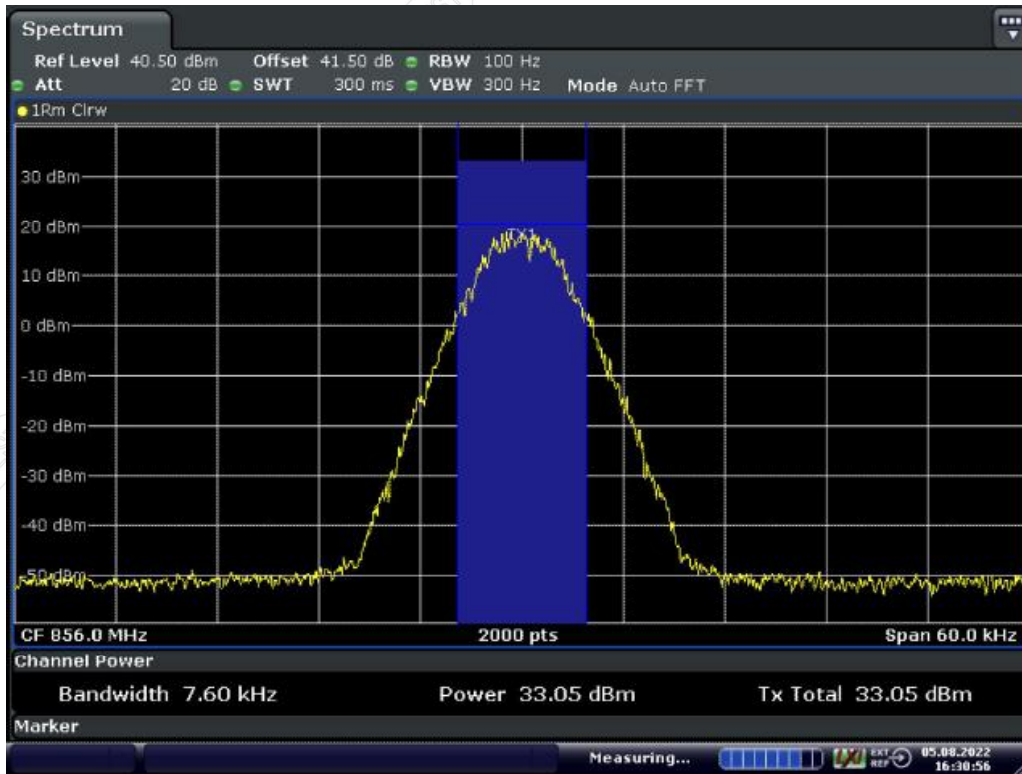
12.15.2.3.2.3.1. Downlink



Middle Frequency: 856.0MHz, Input occupied BW



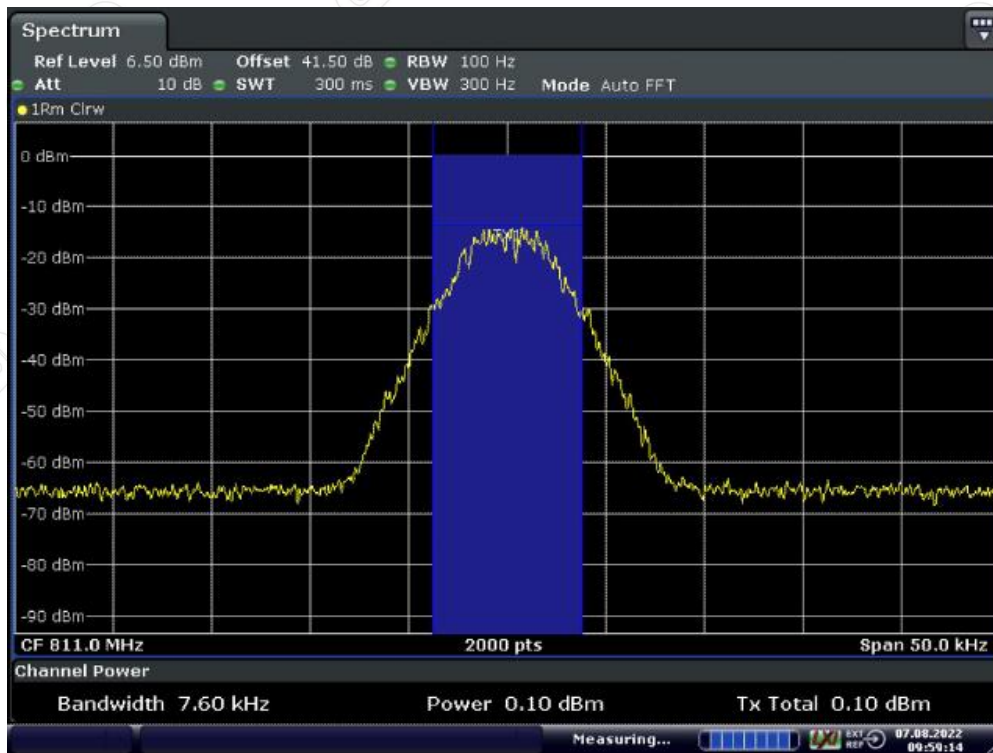
Middle Frequency: 856.0MHz, Output occupied BW(AGC)



Date: 5.AUG.2022 16:30:57

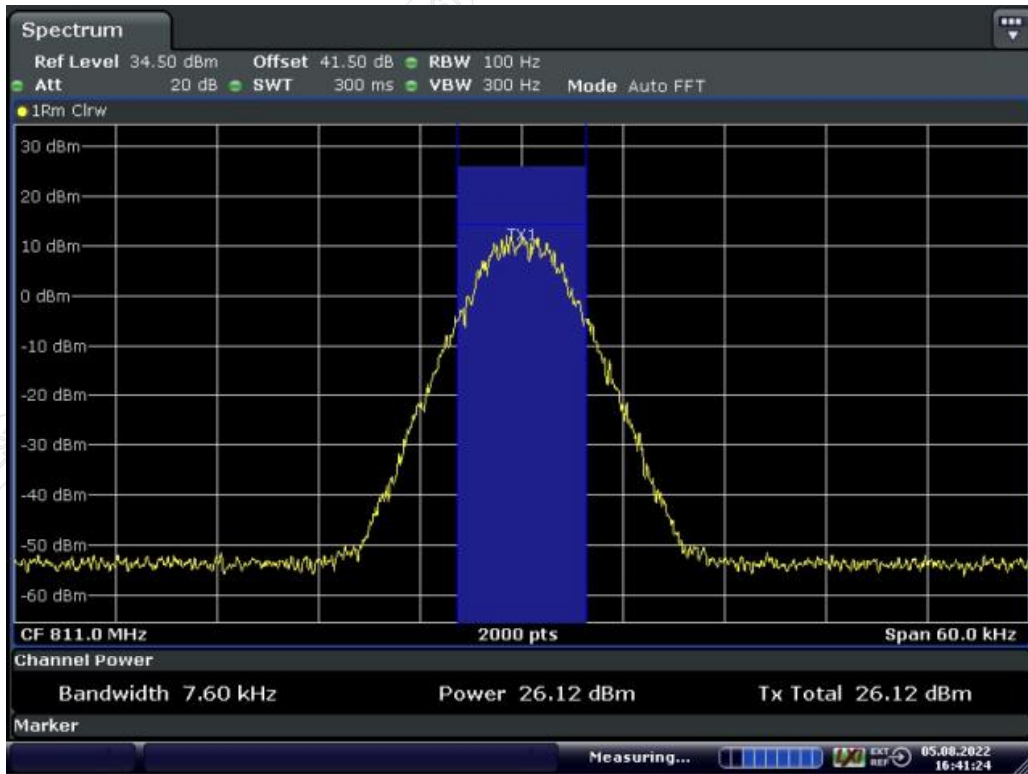
Middle Frequency: 856.0MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.15.2.3.2.3.2. Uplink



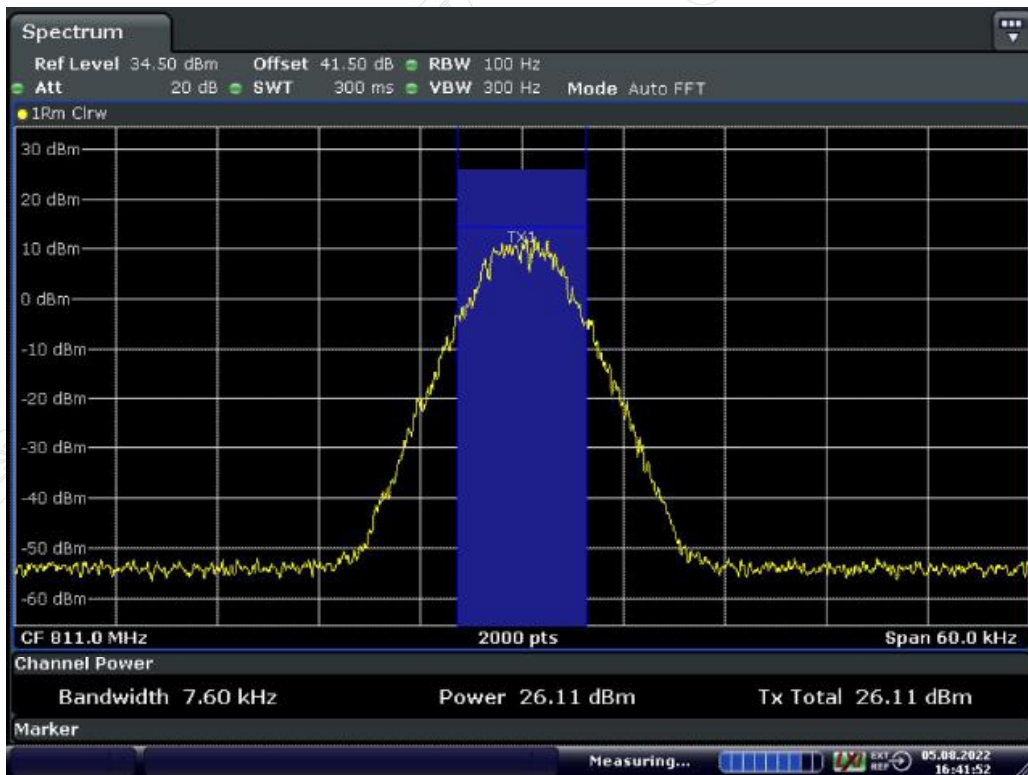
Date: 7.AUG.2022 09:59:15

Middle Frequency: 811.0MHz MHz, Input occupied BW



Date: 5.AUG.2022 16:41:25

Middle Frequency: 811.0MHz, Output occupied BW(AGC)

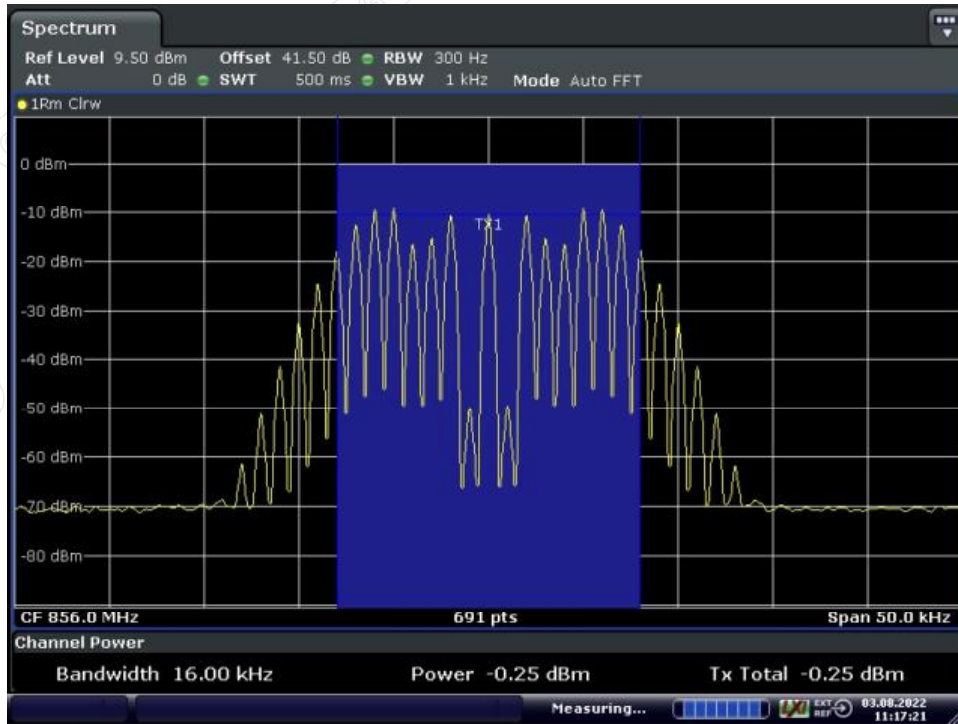


Date: 5.AUG.2022 16:41:53

Middle Frequency: 811.0MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

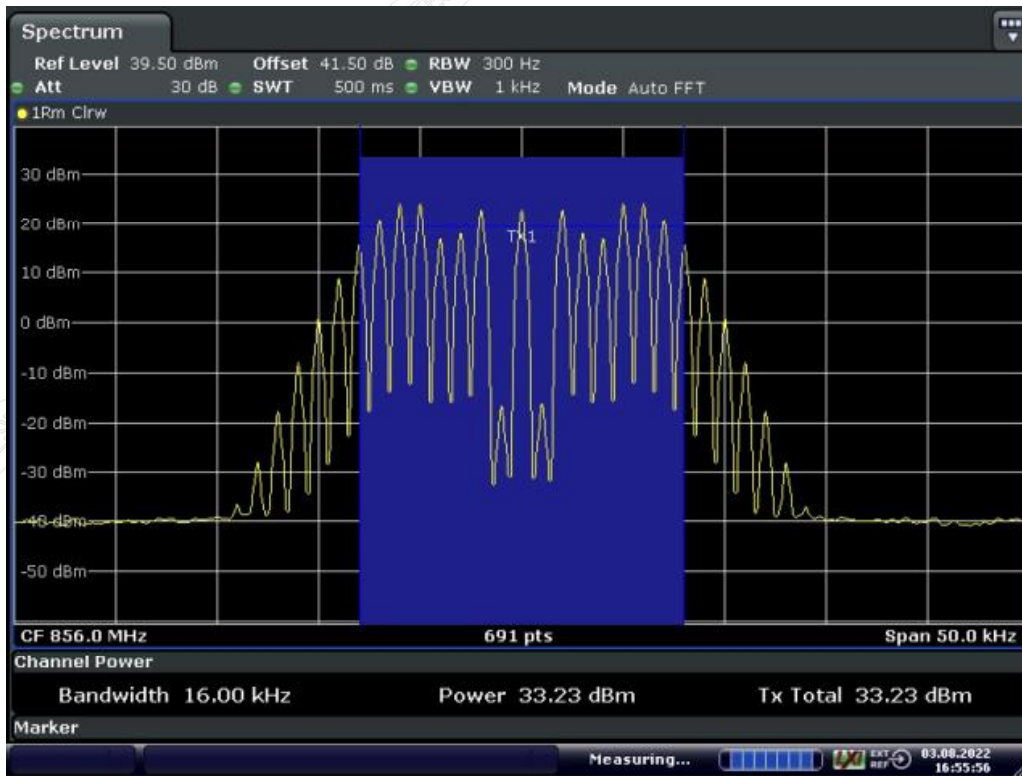
12.15.2.3.2.4. Analog FM

12.15.2.3.2.4.1. Downlink



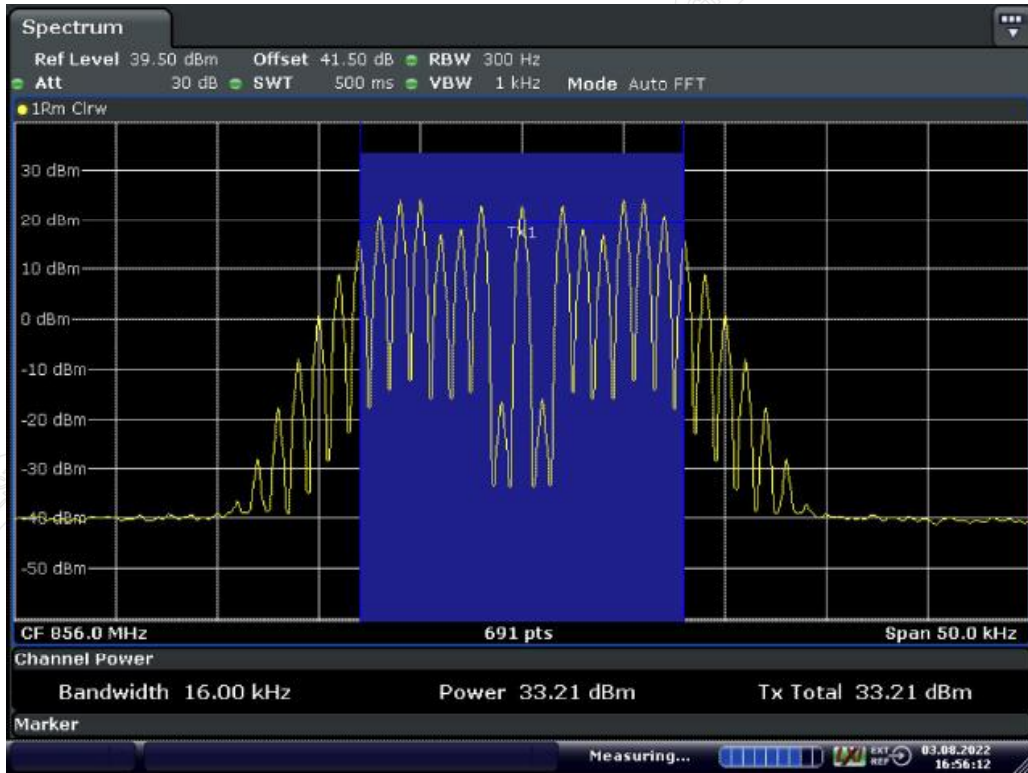
Date: 3.AUG.2022 11:17:21

Middle Frequency: 856.0MHz, Input occupied BW



Date: 3.AUG.2022 16:55:56

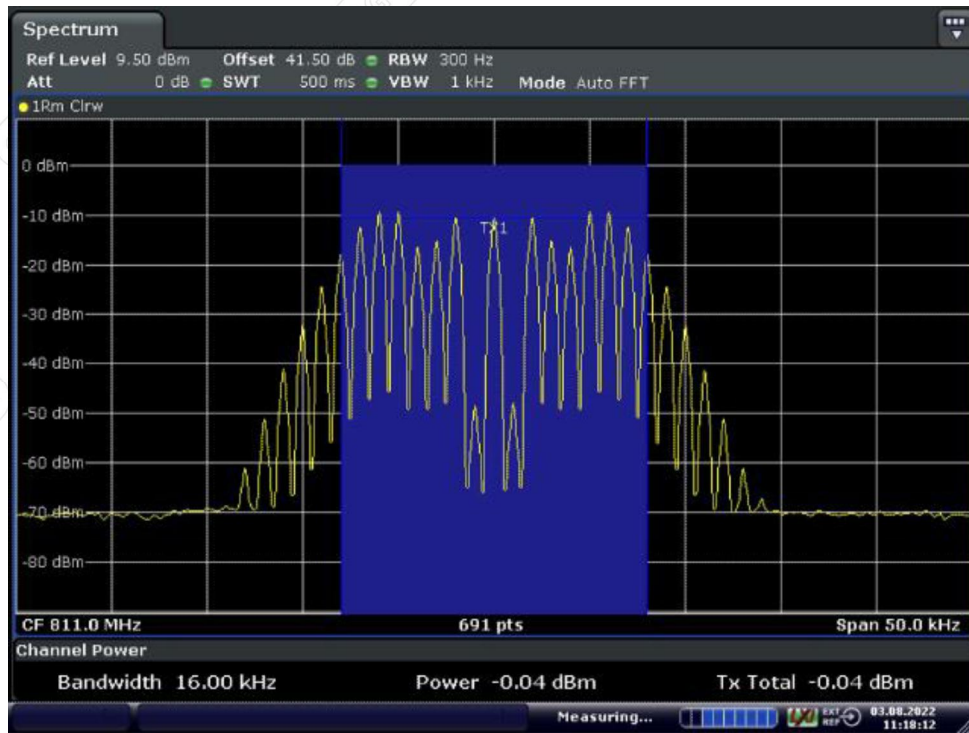
Middle Frequency: 856.0MHz, Output occupied BW(AGC)



Date: 3.AUG.2022 16:56:12

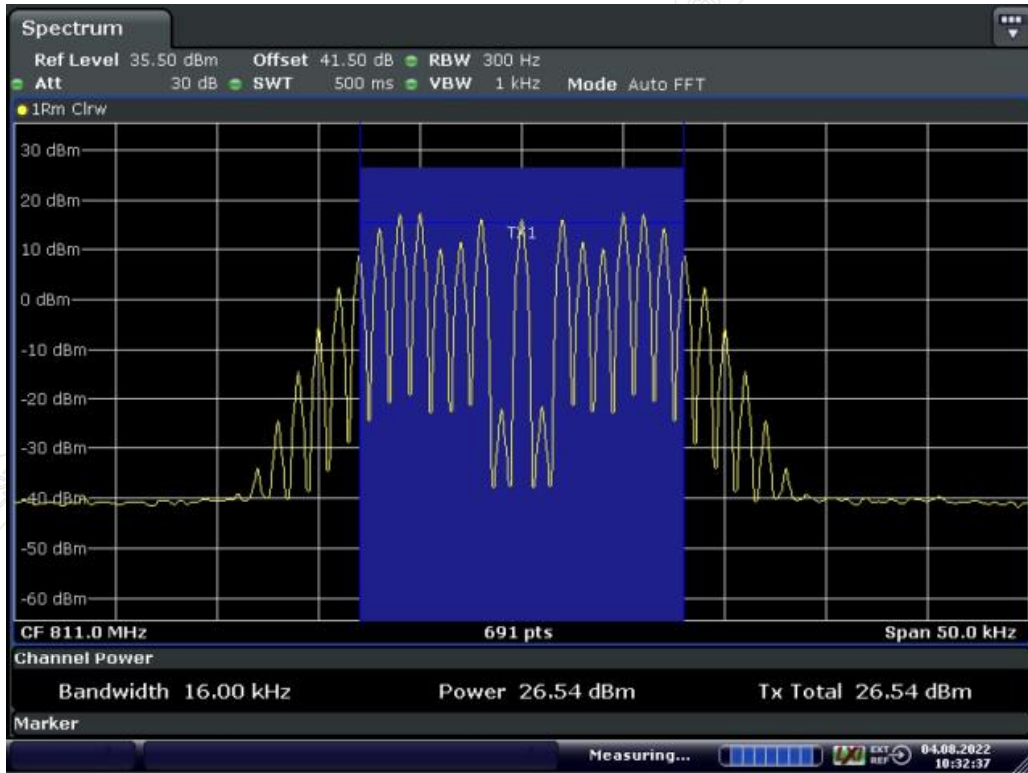
Middle Frequency: 856.0MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.15.2.3.2.4.2. Uplink



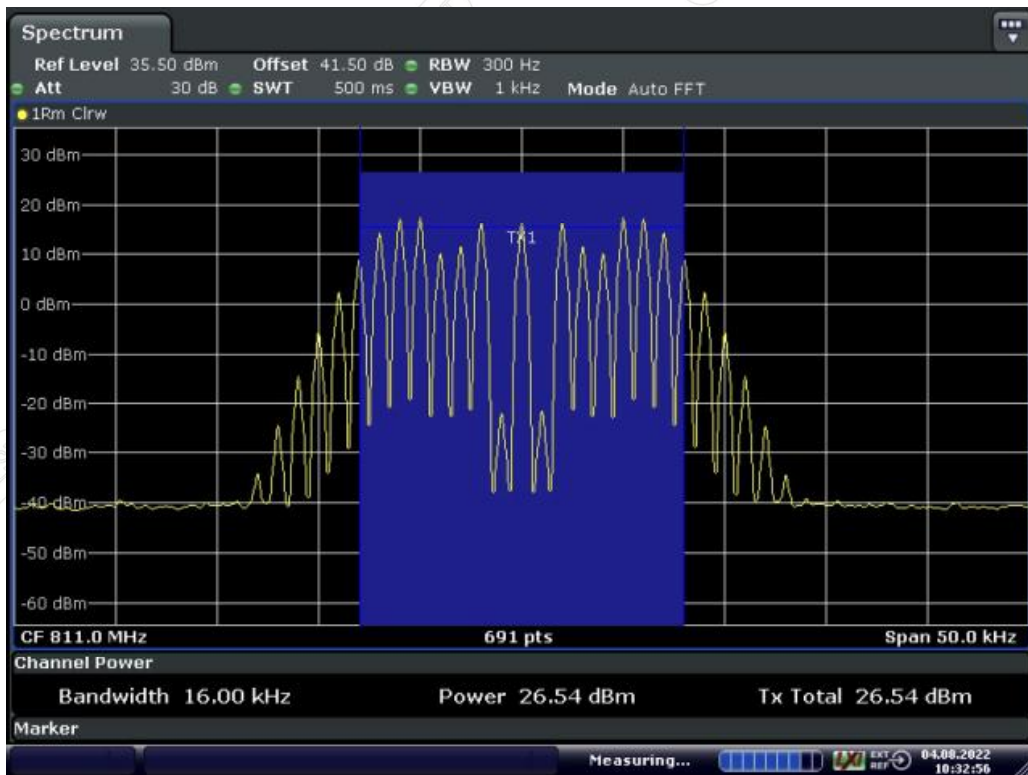
Date: 3.AUG.2022 11:18:13

Middle Frequency: 811.0MHz MHz, Input occupied BW



Date: 4.AUG.2022 10:32:37

Middle Frequency: 811.0MHz, Output occupied BW(AGC)

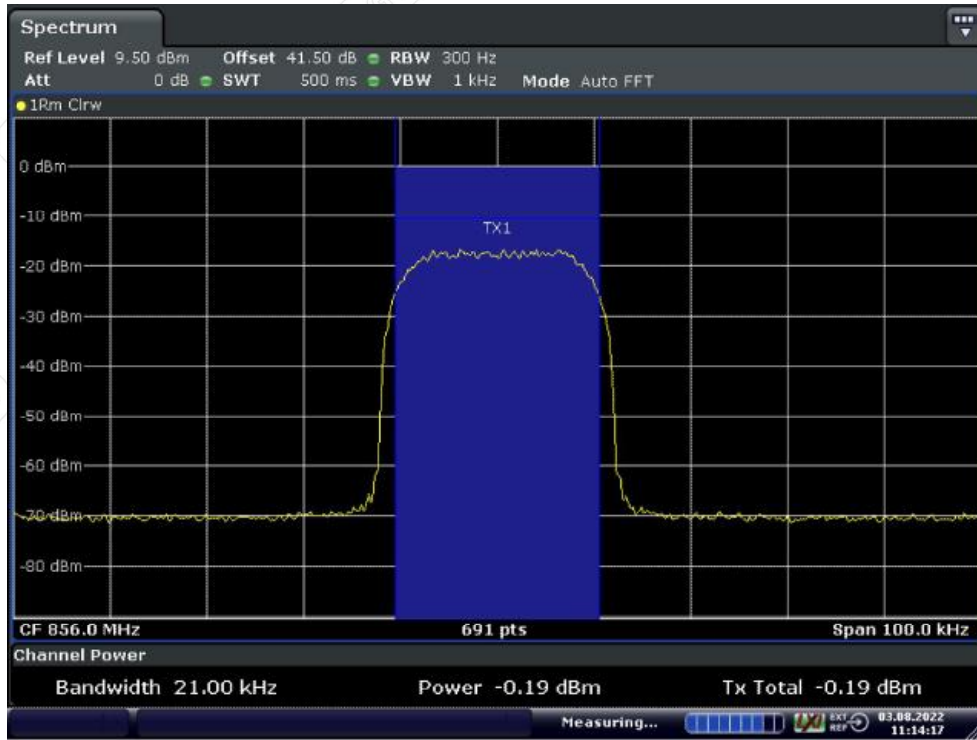


Date: 4.AUG.2022 10:32:56

Middle Frequency: 811.0MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

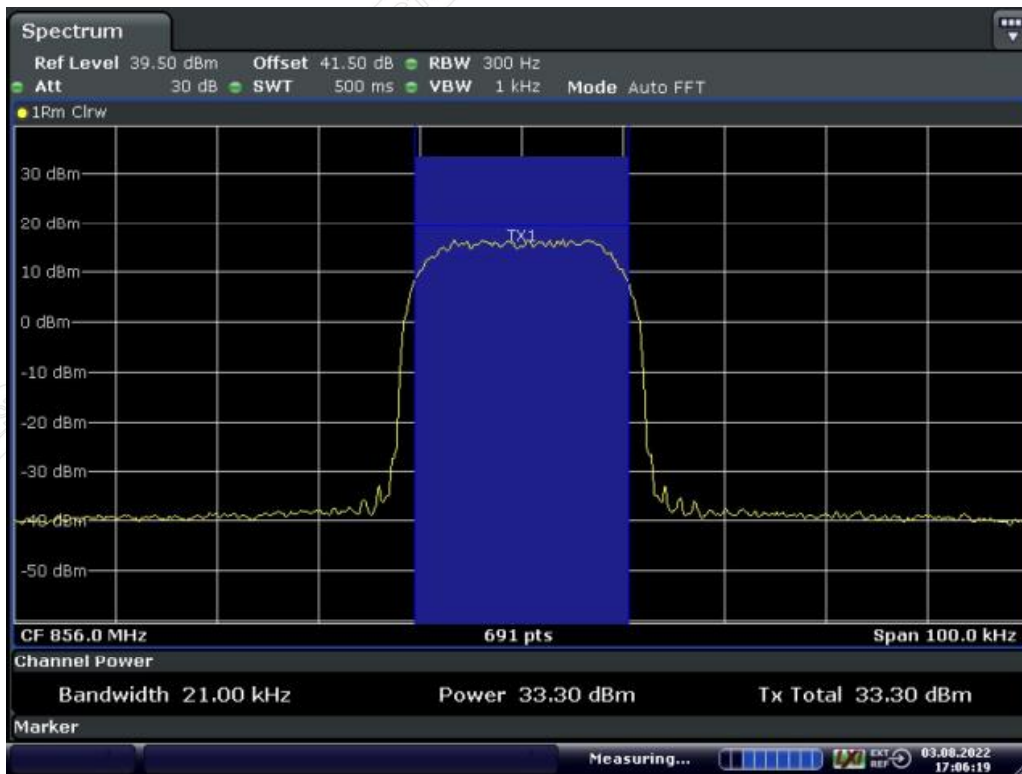
12.15.2.3.2.5. Tetra

12.15.2.3.2.5.1. Downlink



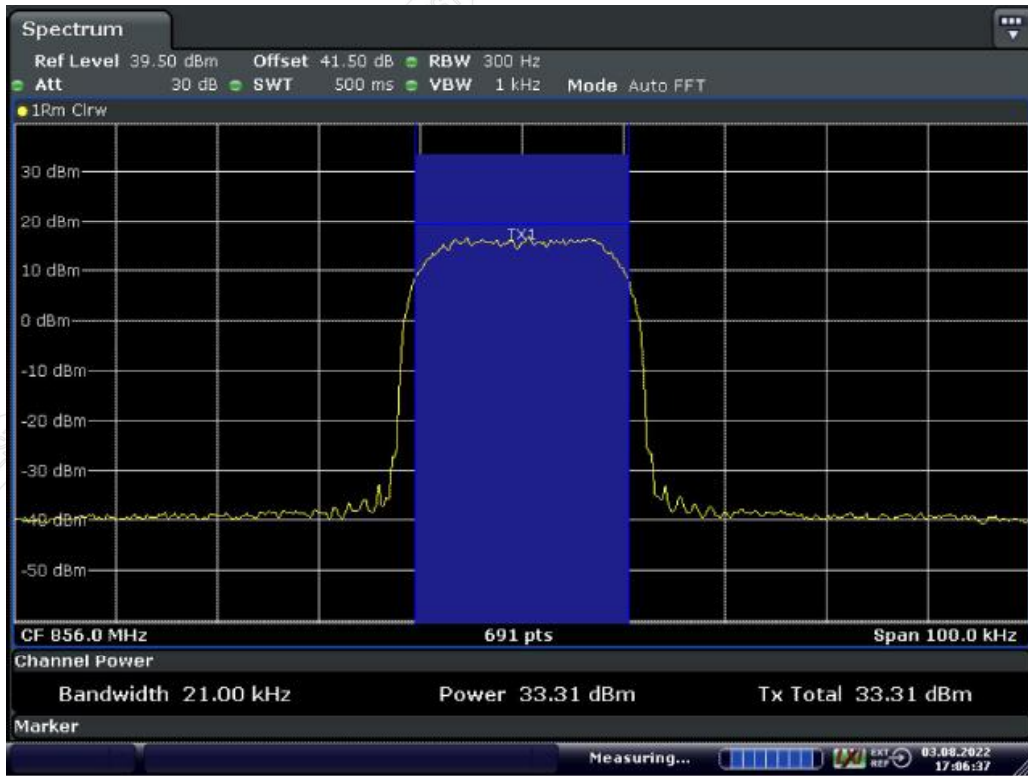
Date: 3.AUG.2022 11:14:17

Middle Frequency: 856.0MHz, Input occupied BW



Date: 3.AUG.2022 17:06:19

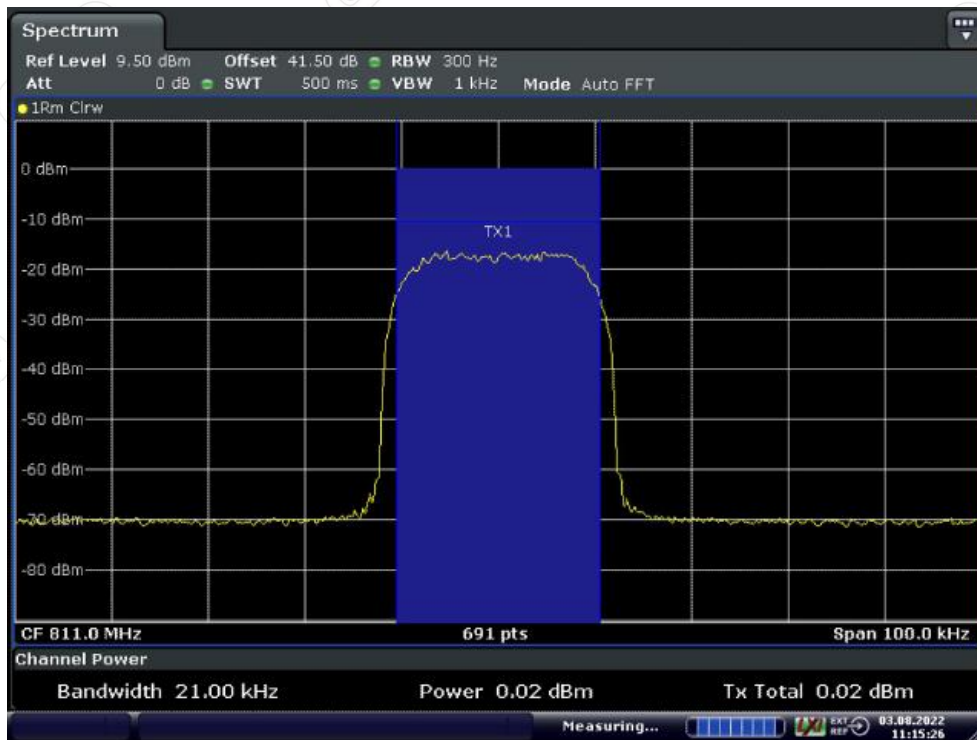
Middle Frequency: 856.0MHz, Output occupied BW(AGC)



Date: 3.AUG.2022 17:06:37

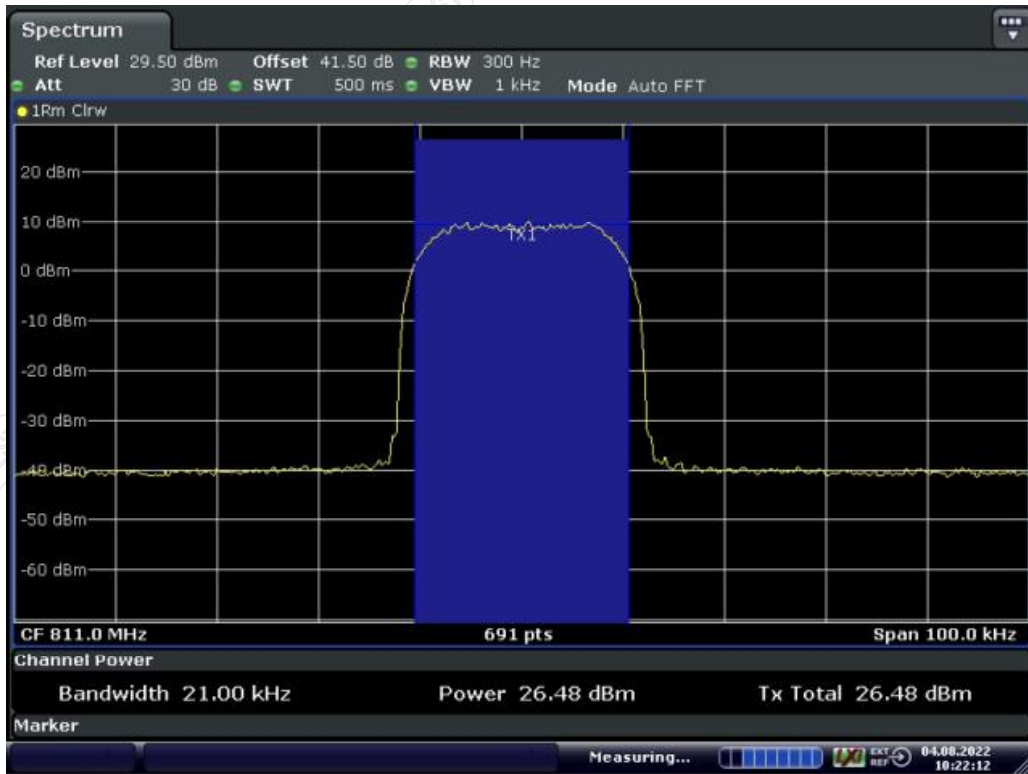
Middle Frequency: 856.0MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.15.2.3.2.5.2. Uplink



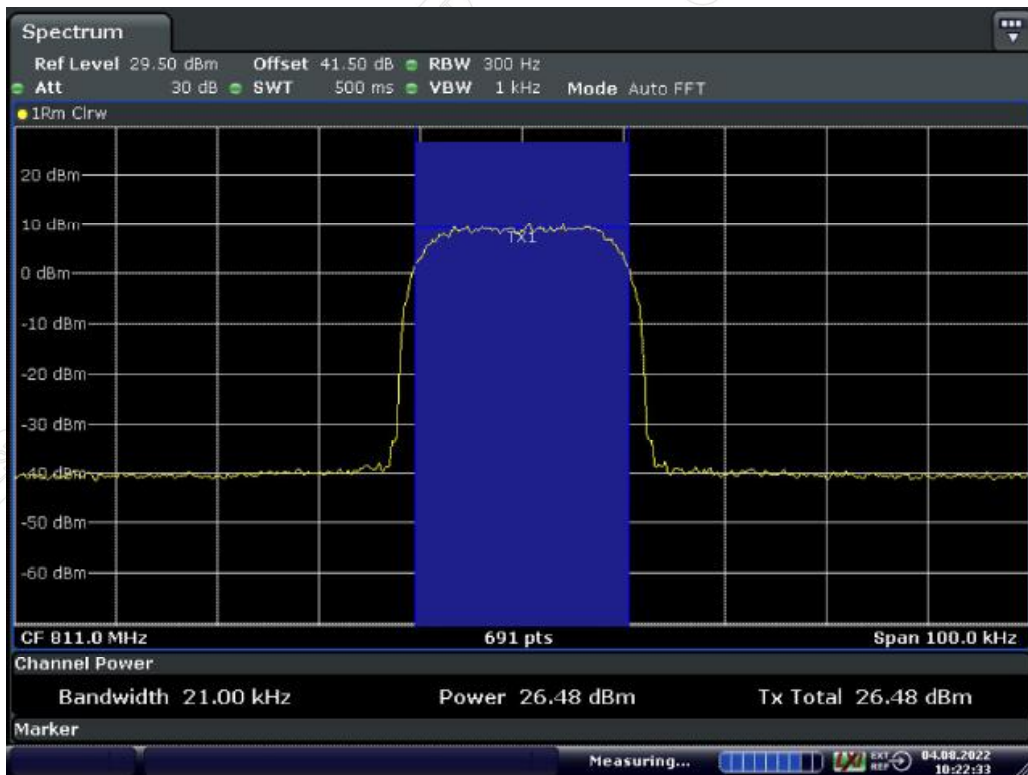
Date: 3.AUG.2022 11:15:26

Middle Frequency: 811.0MHz MHz, Input occupied BW



Date: 4.AUG.2022 10:22:13

Middle Frequency: 811.0MHz, Output occupied BW(AGC)



Date: 4.AUG.2022 10:22:34

Middle Frequency: 811.0MHz, Output occupied BW (with the input signal amplitude set 3 dB above the AGC threshold)

12.16. Mean power and amplifier/booster gain

12.16.1. Test results

Test Date (yy-mm-dd): 2022-08-03~2022-08-05

Normal condition: Temp:26.6~27.1°C, Humid: 50~52%, Atmospheric Pressure:101kpa

Supply Voltage: AC 110V, 50Hz

12.16.1.1. Mean power and gain

12.16.1.1.1. 700MHz Band

12.16.1.1.1.1. Downlink

Test link	Frequency (MHz)	Sig output power (dBm)	Input Cable Loss (dB)	Peak power (dBm)	Output Atten +Output Cable Loss(dB)	Output power (dBm)	Output power (W)	Gain (dB)
1. LTE 5MHz								
Down ⁽¹⁾	760.5	-56.7	0.7	-9.1	41.5	32.4	1.74	88.4
Down ⁽²⁾	760.5	-53.7	0.7	-9.1	41.5	32.4	1.74	85.4
Down ⁽¹⁾	763.0	-57.1	0.7	-7.7	41.5	33.8	2.40	90.2
Down ⁽²⁾	763.0	-54.1	0.7	-7.7	41.5	33.8	2.40	87.2
Down ⁽¹⁾	765.5	-58.0	0.7	-8.0	41.5	33.5	2.24	90.8
Down ⁽²⁾	765.5	-55.0	0.7	-8.0	41.5	33.5	2.24	87.8
2. LTE 10MHz								
Down ⁽¹⁾	763.0	-57.3	0.7	-8.2	41.5	33.3	2.14	89.9
Down ⁽²⁾	763.0	-54.3	0.7	-8.2	41.5	33.3	2.14	86.9
3. P25 Phase I(C4FM)								
Down ⁽¹⁾	768.00625	-55.8	0.7	-7.9	41.5	33.6	2.29	88.7
Down ⁽²⁾	768.00625	-52.8	0.7	-7.9	41.5	33.6	2.29	85.7
Down ⁽¹⁾	771.5	-56.8	0.7	-8.4	41.5	33.1	2.04	89.2
Down ⁽²⁾	771.5	-53.8	0.7	-8.4	41.5	33.1	2.04	86.2
Down ⁽¹⁾	774.99375	-56.8	0.7	-8.1	41.5	33.4	2.19	89.5
Down ⁽²⁾	774.99375	-53.8	0.7	-8.1	41.5	33.4	2.19	86.5
4. P25 Phase II(H-DQPSK)								
Down ⁽¹⁾	768.00625	-55.6	0.7	-7.7	41.5	33.8	2.40	88.7
Down ⁽²⁾	768.00625	-52.6	0.7	-7.7	41.5	33.8	2.40	85.7
Down ⁽¹⁾	771.5	-56.4	0.7	-8.1	41.5	33.4	2.19	89.1
Down ⁽²⁾	771.5	-53.4	0.7	-8.1	41.5	33.4	2.19	86.1

Down ⁽¹⁾	774.99375	-56.8	0.7	-8.0	41.5	33.5	2.24	89.6
Down ⁽²⁾	774.99375	-53.8	0.7	-8.0	41.5	33.5	2.24	86.6
5. DMR								
Down ⁽¹⁾	768.00625	-56.1	0.7	-8.9	41.5	32.6	1.82	88.0
Down ⁽²⁾	768.00625	-53.1	0.7	-8.9	41.5	32.6	1.82	85.0
Down ⁽¹⁾	771.5	-57.1	0.7	-9.1	41.5	32.4	1.74	88.8
Down ⁽²⁾	771.5	-54.1	0.7	-9.1	41.5	32.4	1.74	85.8
Down ⁽¹⁾	774.99375	-57.1	0.7	-9.1	41.5	32.4	1.74	88.8
Down ⁽²⁾	774.99375	-54.1	0.7	-9.1	41.5	32.4	1.74	85.8
6. Analog FM								
Down ⁽¹⁾	768.0125	-56.0	0.7	-8.0	41.5	33.5	2.24	88.8
Down ⁽²⁾	768.0125	-53.0	0.7	-8.0	41.5	33.5	2.24	85.8
Down ⁽¹⁾	771.5	-56.5	0.7	-8.1	41.5	33.4	2.19	89.2
Down ⁽²⁾	771.5	-53.5	0.7	-8.1	41.5	33.4	2.19	86.2
Down ⁽¹⁾	774.9875	-57.0	0.7	-8.3	41.5	33.2	2.09	89.5
Down ⁽²⁾	774.9875	-54.0	0.7	-8.3	41.5	33.2	2.09	86.5
7. Tetra								
Down ⁽¹⁾	768.0125	-55.6	0.7	-7.6	41.5	33.9	2.45	88.8
Down ⁽²⁾	768.0125	-52.6	0.7	-7.6	41.5	33.9	2.45	85.8
Down ⁽¹⁾	771.5	-56.6	0.7	-8.2	41.5	33.3	2.14	89.2
Down ⁽²⁾	771.5	-53.6	0.7	-8.2	41.5	33.3	2.14	86.2
Down ⁽¹⁾	774.9875	-56.5	0.7	-8.3	41.5	33.2	2.09	89.0
Down ⁽²⁾	774.9875	-53.5	0.7	-8.3	41.5	33.2	2.09	86.0

NOTE: ⁽¹⁾ Level is 0.5 dB below AGC threshold; ⁽²⁾ Level is 3dB above AGC threshold.

12.16.1.1.1.2. Uplink

Test link	Frequency (MHz)	Sig output power (dBm)	Input Cable Loss (dB)	Peak power (dBm)	Output Atten +Output Cable Loss(dB)	Output power (dBm)	Output power (W)	Gain (dB)
1. LTE 5MHz								
Up ⁽¹⁾	790.5	-62.4	0.7	-14.1	41.5	27.4	0.55	89.1
Up ⁽²⁾	790.5	-59.4	0.7	-14.1	41.5	27.4	0.55	86.1