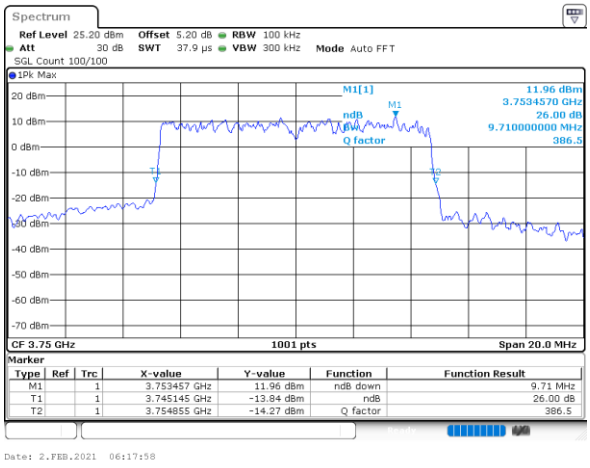
FR1 n78 / 10MHz / CP-OFDM

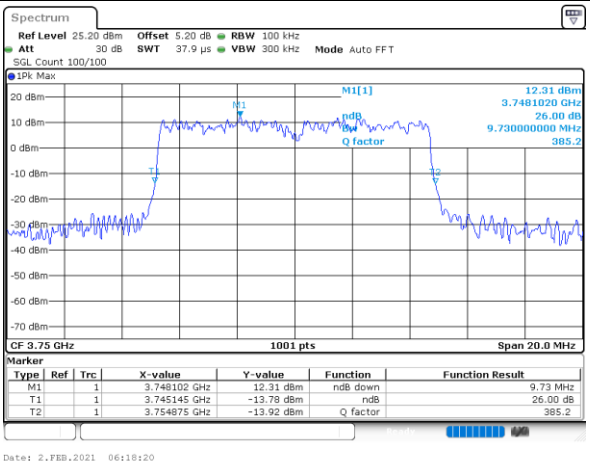
QPSK

Middle Channel



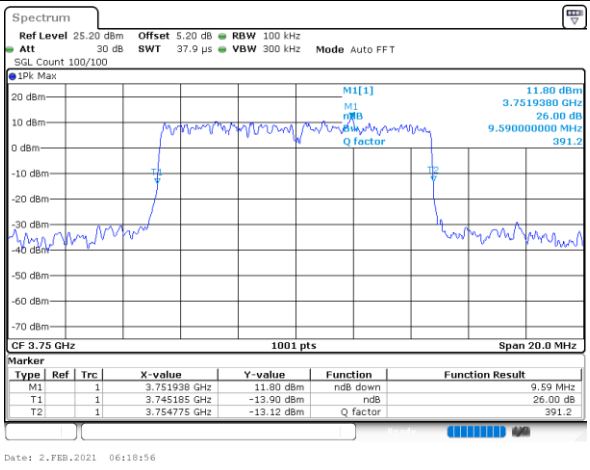
16QAM

Middle Channel



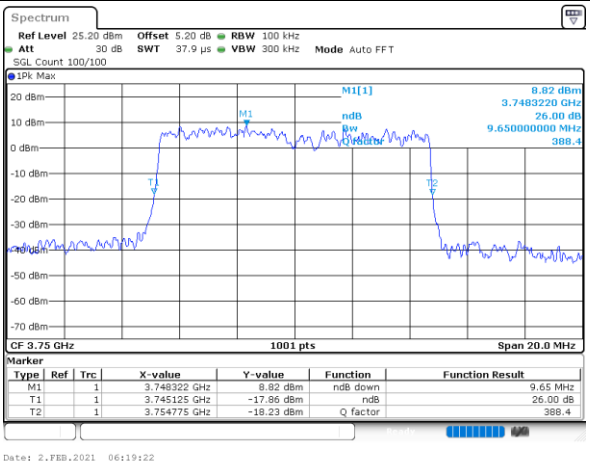
64QAM

Middle Channel



256QAM

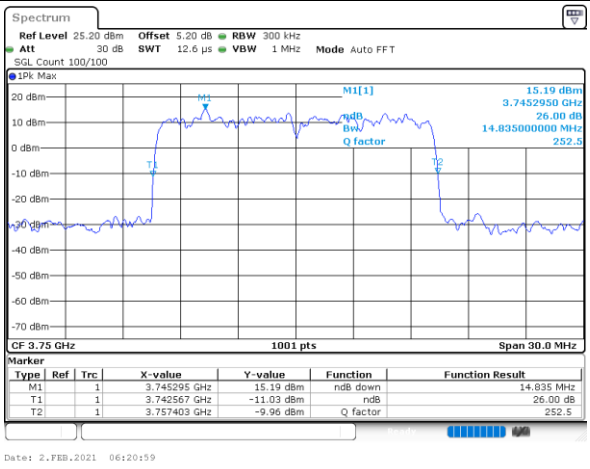
Middle Channel



FR1 n78 / 15MHz / CP-OFDM

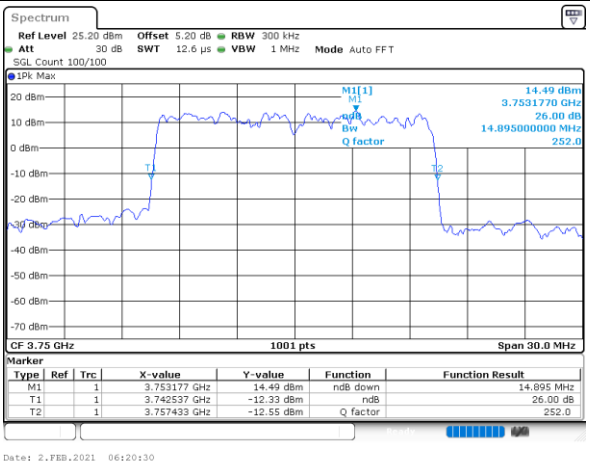
QPSK

Middle Channel



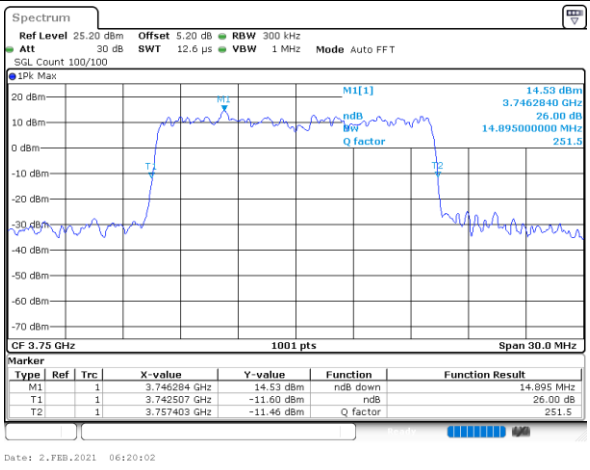
16QAM

Middle Channel



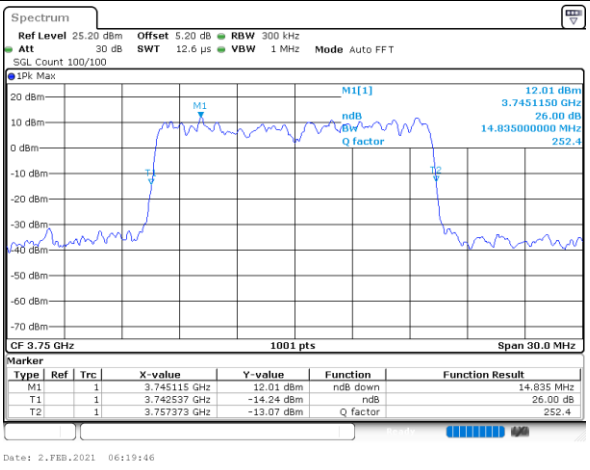
64QAM

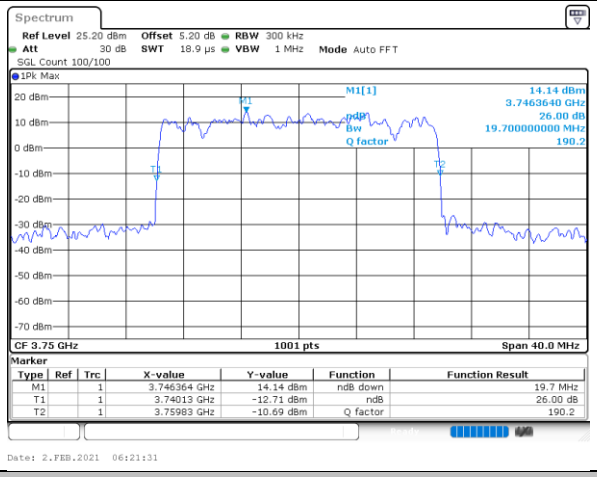
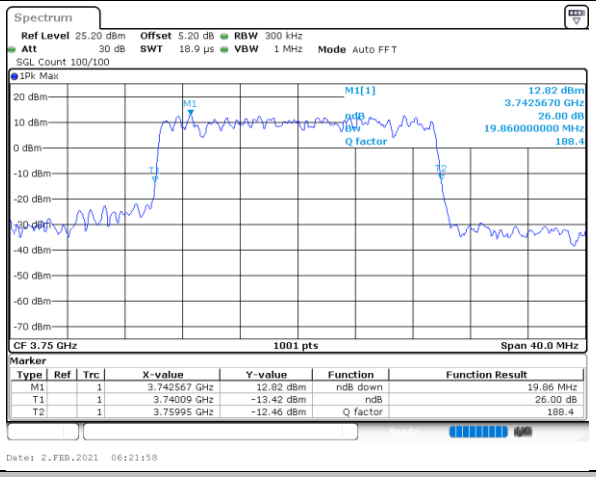
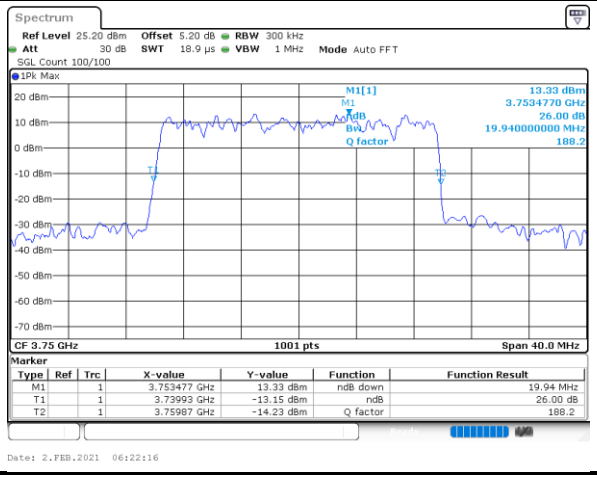
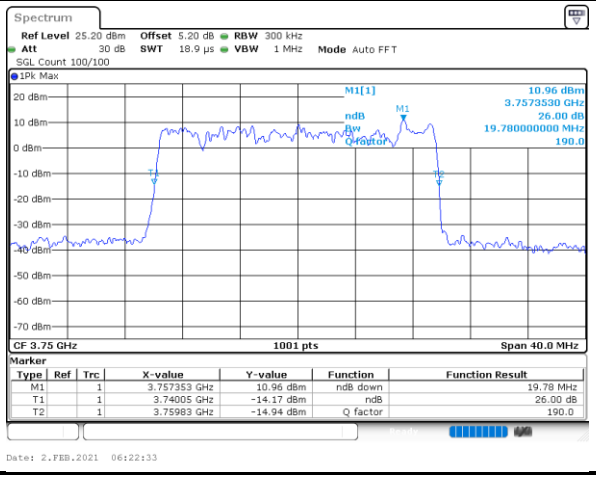
Middle Channel



256QAM

Middle Channel



FR1 n78 / 20MHz / CP-OFDM	
QPSK	**16QAM**
Middle Channel	**Middle Channel**
	
64QAM	**256QAM**
Middle Channel	**Middle Channel**
	

Occupied Bandwidth

Mode	FR1 n78 : OBW(MHz) / CP-OFDM							
BW	10MHz	10MHz	10MHz	10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	9.29	9.30	9.31	9.25				

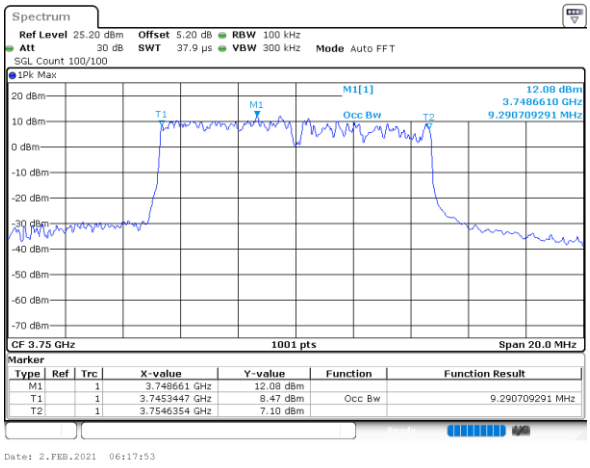
Mode	FR1 n78 : OBW(MHz) / CP-OFDM							
BW	15MHz	15MHz	15MHz	15MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	14.06	14.15	14.09	14.15				

Mode	FR1 n78 : OBW(MHz) / CP-OFDM							
BW	20MHz	20MHz	20MHz	20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	18.90	18.98	18.94	18.94				

FR1 n78 / 10MHz / CP-OFDM

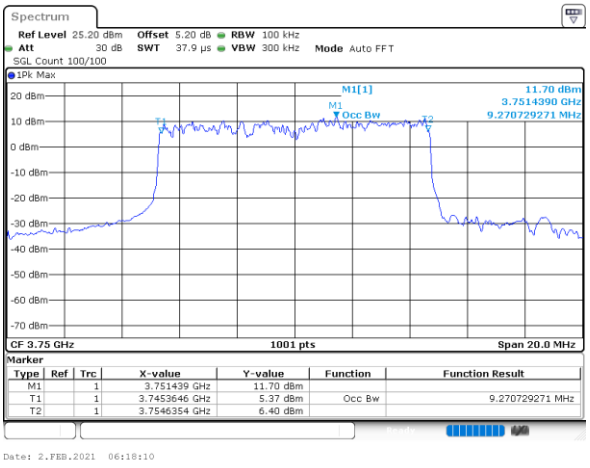
QPSK

Middle Channel



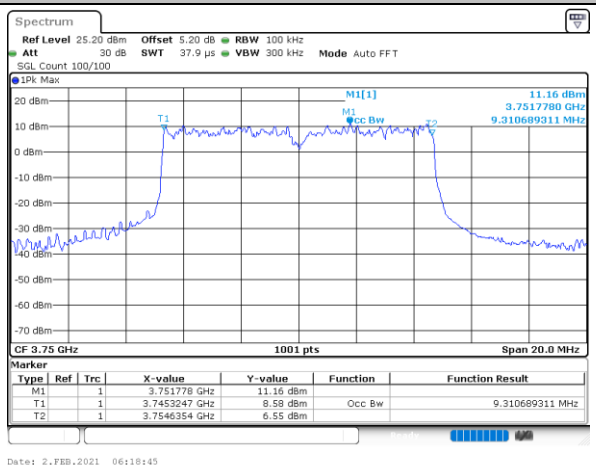
16QAM

Middle Channel



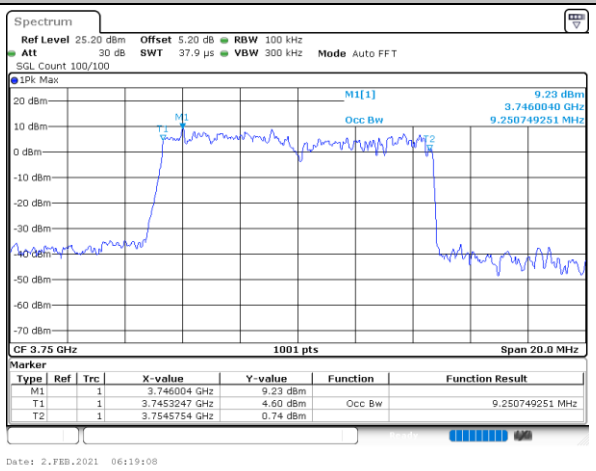
64QAM

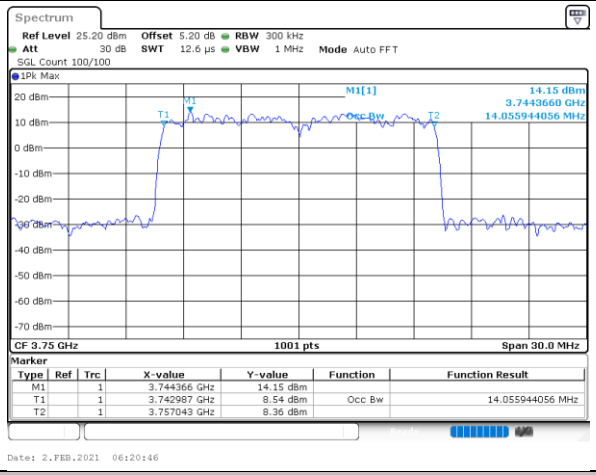
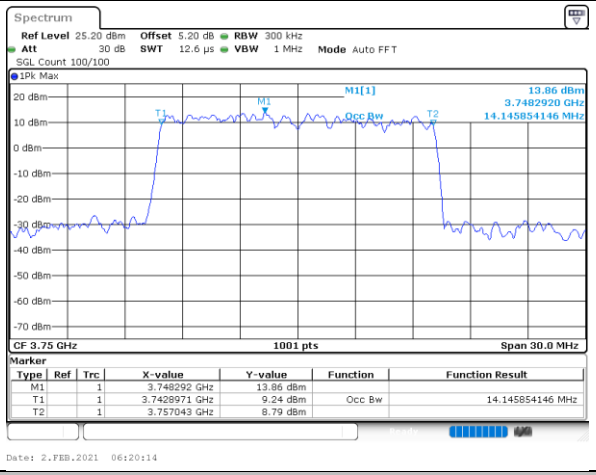
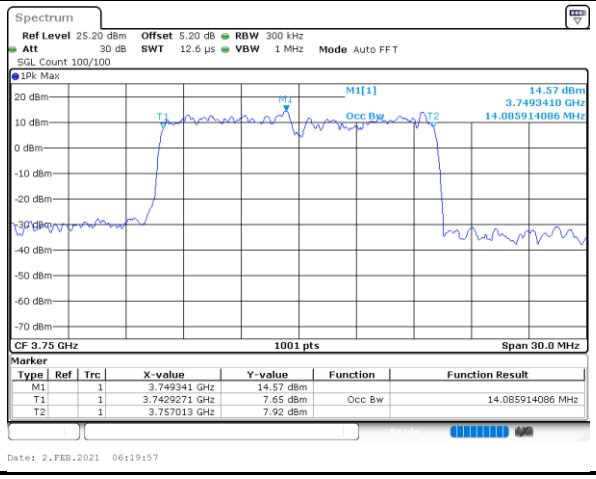
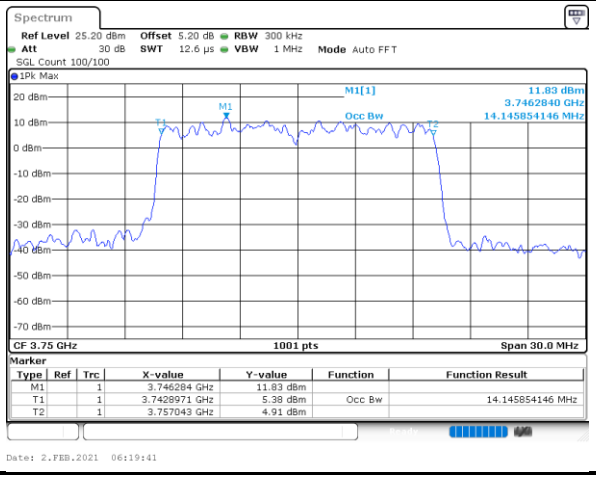
Middle Channel



256QAM

Middle Channel

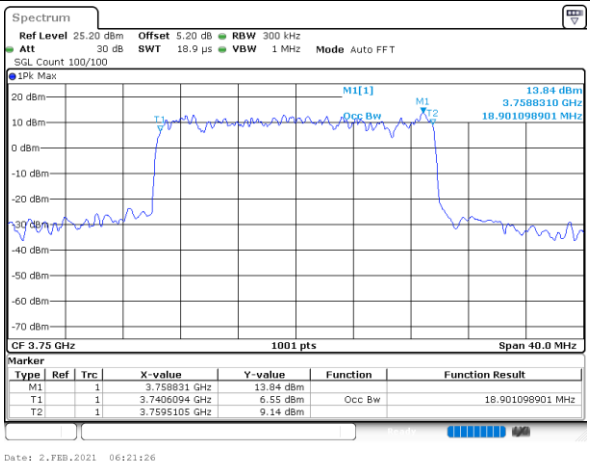


FR1 n78 / 15MHz / CP-OFDM	
QPSK	**16QAM**
Middle Channel	**Middle Channel**
	
64QAM	**256QAM**
Middle Channel	**Middle Channel**
	

FR1 n78 / 20MHz / CP-OFDM

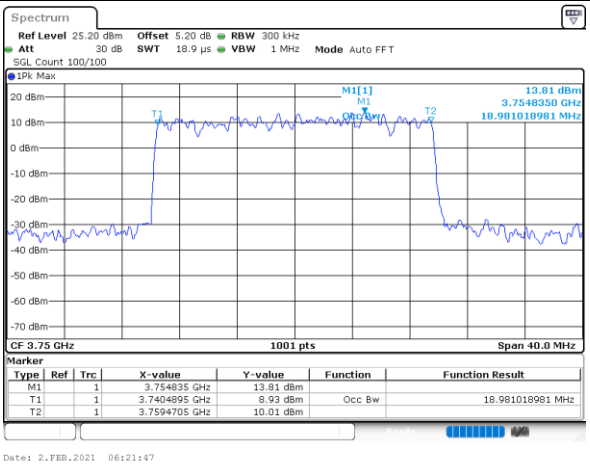
QPSK

Middle Channel



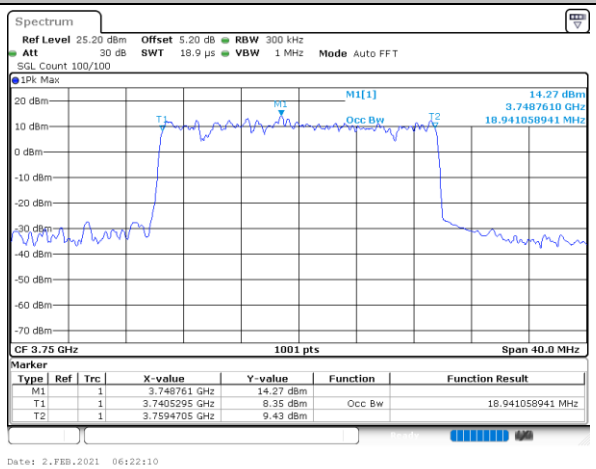
16QAM

Middle Channel



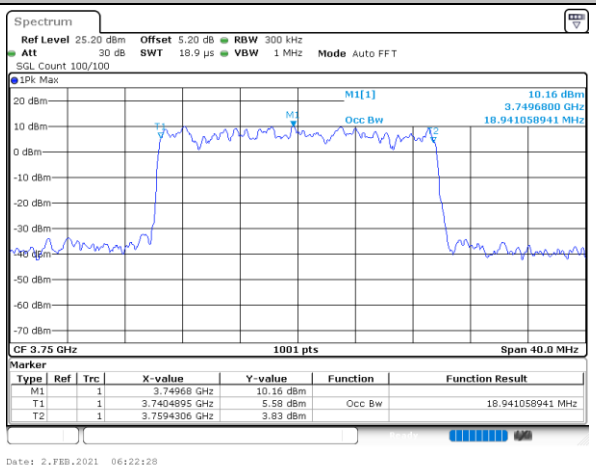
64QAM

Middle Channel

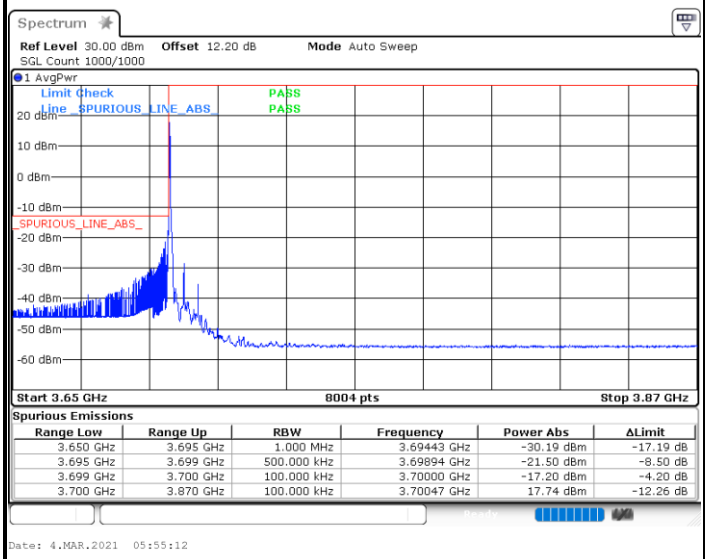
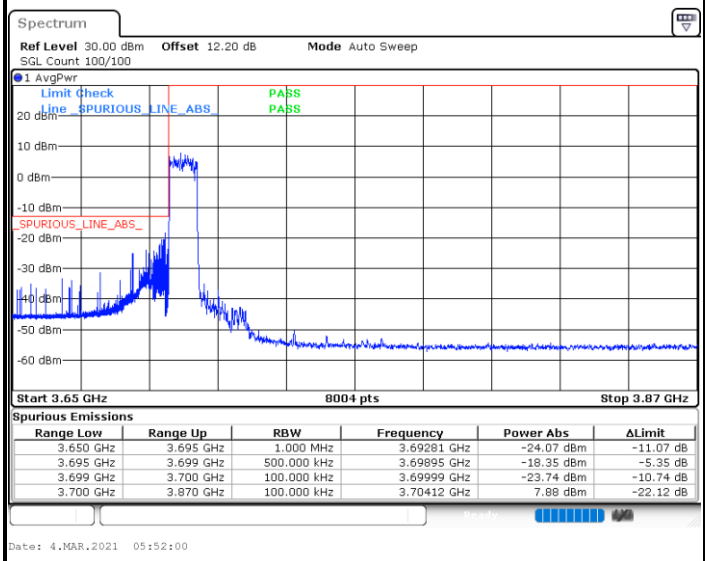


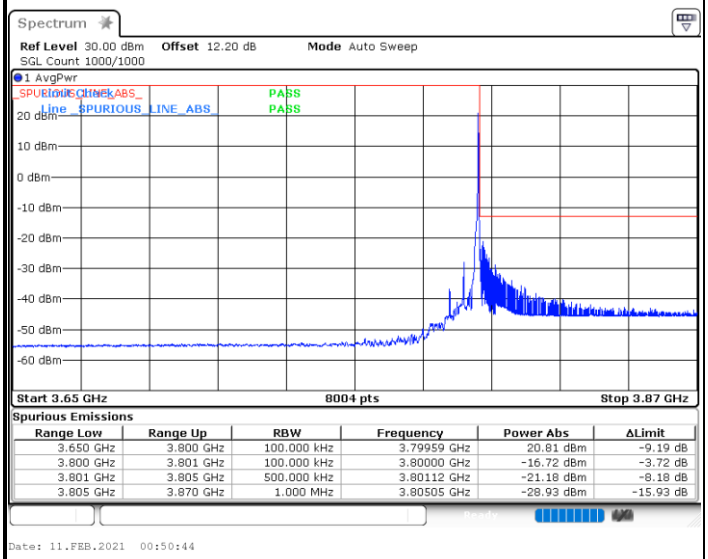
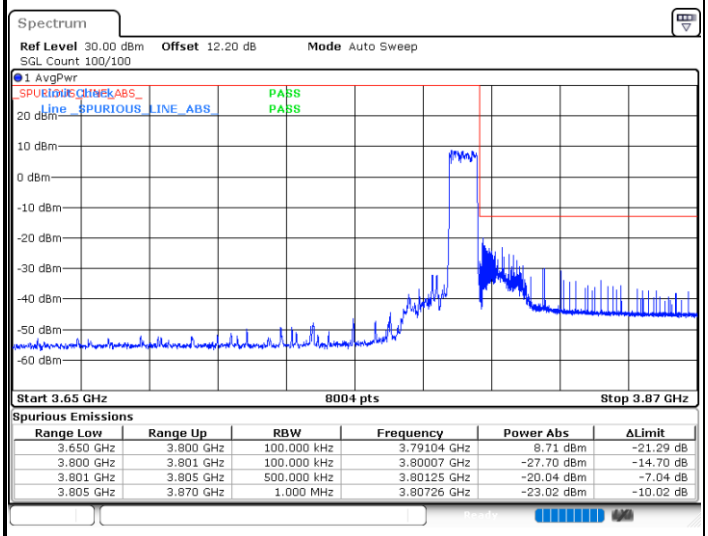
256QAM

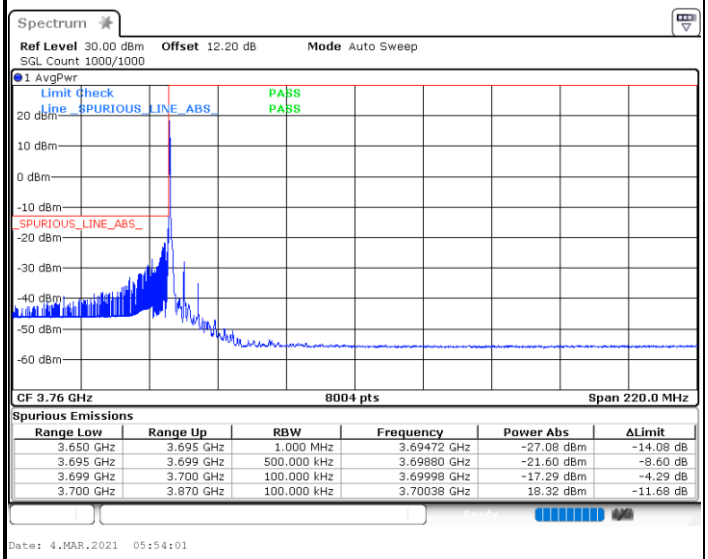
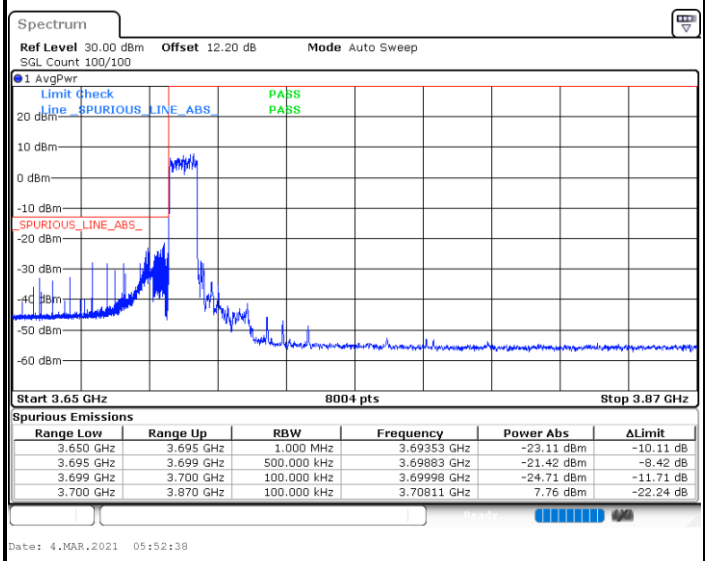
Middle Channel



Conducted Band Edge

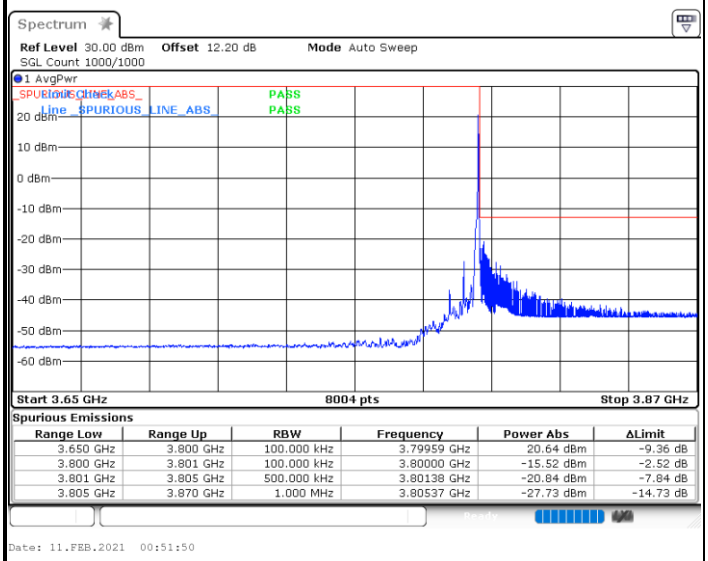
FR1 n78 / 10MHz / DFT-S OFDM BPSK	
Lowest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 3.650 GHz / 3.695 GHz / 1.000 MHz / 3.69443 GHz / -30.19 dBm / -17.19 dB 3.695 GHz / 3.699 GHz / 500.000 kHz / 3.69894 GHz / -21.50 dBm / -8.50 dB 3.699 GHz / 3.700 GHz / 100.000 kHz / 3.70000 GHz / -17.20 dBm / -4.20 dB 3.700 GHz / 3.870 GHz / 100.000 kHz / 3.70047 GHz / 17.74 dBm / -12.26 dB Date: 4.MAR.2021 05:55:12	/
Lowest Band Edge / Full RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 3.650 GHz / 3.695 GHz / 1.000 MHz / 3.69281 GHz / -24.07 dBm / -11.07 dB 3.695 GHz / 3.699 GHz / 500.000 kHz / 3.69895 GHz / -18.35 dBm / -5.35 dB 3.699 GHz / 3.700 GHz / 100.000 kHz / 3.69999 GHz / -23.74 dBm / -10.74 dB 3.700 GHz / 3.870 GHz / 100.000 kHz / 3.70412 GHz / 7.88 dBm / -22.12 dB Date: 4.MAR.2021 05:52:00	/

FR1 n78 / 10MHz / DFT-S OFDM BPSK	
Highest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 3.650 GHz / 3.800 GHz / 100.000 kHz / 3.79959 GHz / 20.81 dBm / -9.19 dB 3.800 GHz / 3.801 GHz / 100.000 kHz / 3.80000 GHz / -16.72 dBm / -3.72 dB 3.801 GHz / 3.805 GHz / 500.000 kHz / 3.80112 GHz / -21.18 dBm / -8.18 dB 3.805 GHz / 3.870 GHz / 1.000 MHz / 3.80505 GHz / -28.93 dBm / -15.93 dB Date: 11.FEB.2021 00:50:44	/
Highest Band Edge / Full RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 3.650 GHz / 3.800 GHz / 100.000 kHz / 3.79104 GHz / 8.71 dBm / -21.29 dB 3.800 GHz / 3.801 GHz / 100.000 kHz / 3.80007 GHz / -27.70 dBm / -14.70 dB 3.801 GHz / 3.805 GHz / 500.000 kHz / 3.80125 GHz / -20.04 dBm / -7.04 dB 3.805 GHz / 3.870 GHz / 1.000 MHz / 3.80726 GHz / -23.02 dBm / -10.02 dB Date: 11.FEB.2021 00:49:24	/

FR1 n78 / 10MHz / DFT-S OFDM QPSK	
Lowest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
	/
Lowest Band Edge / Full RB	**Channel Power < -13dBm Pass**
	/

FR1 n78 / 10MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

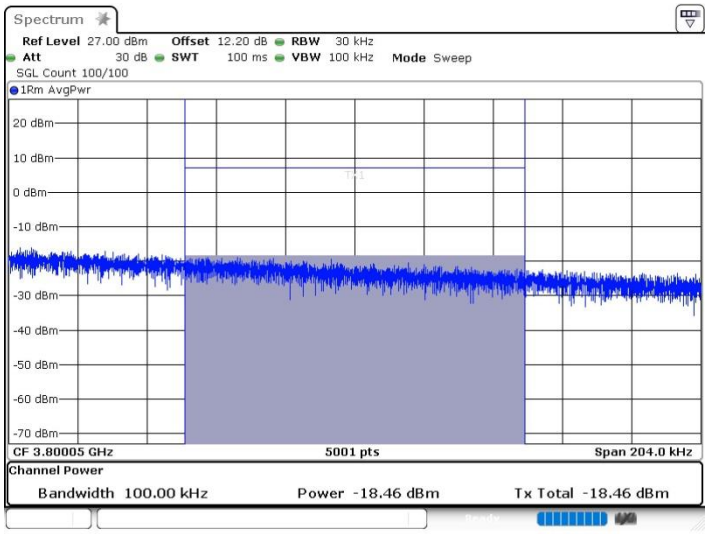


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.650 GHz	3.800 GHz	100.000 kHz	3.79959 GHz	20.64 dBm	-9.36 dB
3.800 GHz	3.801 GHz	100.000 kHz	3.80000 GHz	-15.52 dBm	-2.52 dB
3.801 GHz	3.805 GHz	500.000 kHz	3.80138 GHz	-20.84 dBm	-7.84 dB
3.805 GHz	3.870 GHz	1.000 MHz	3.80537 GHz	-27.73 dBm	-14.73 dB

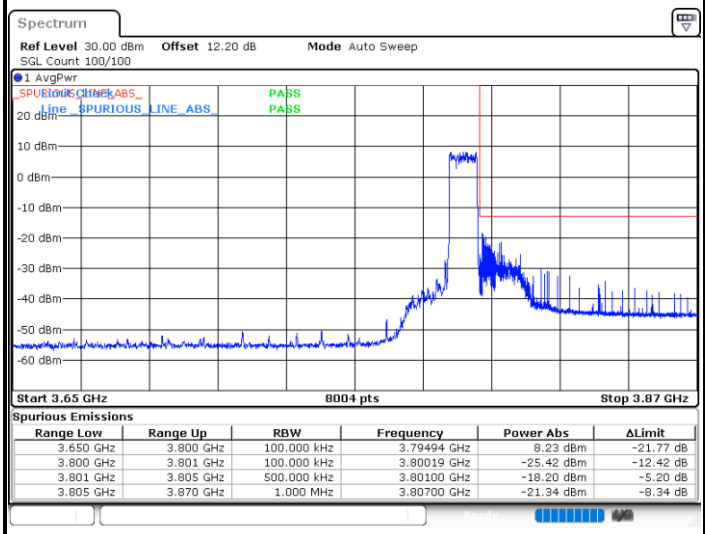
Date: 11.FEB.2021 00:51:50

Channel Power < -13dBm Pass



Date: 11.FEB.2021 00:53:08

Highest Band Edge / Full RB



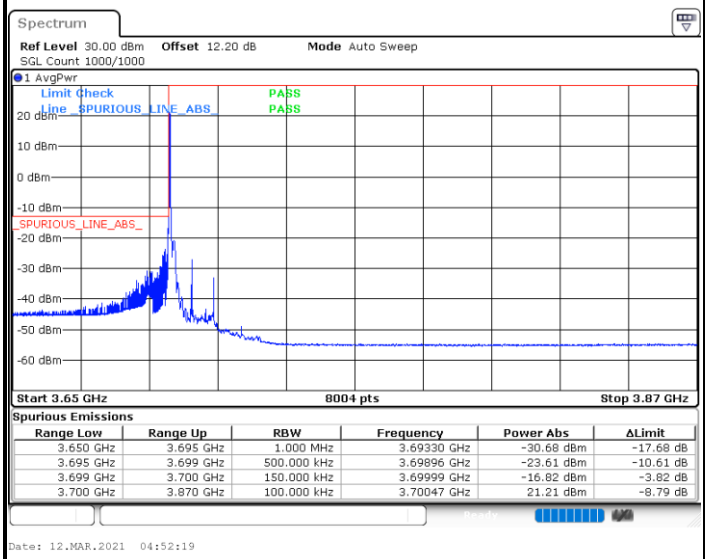
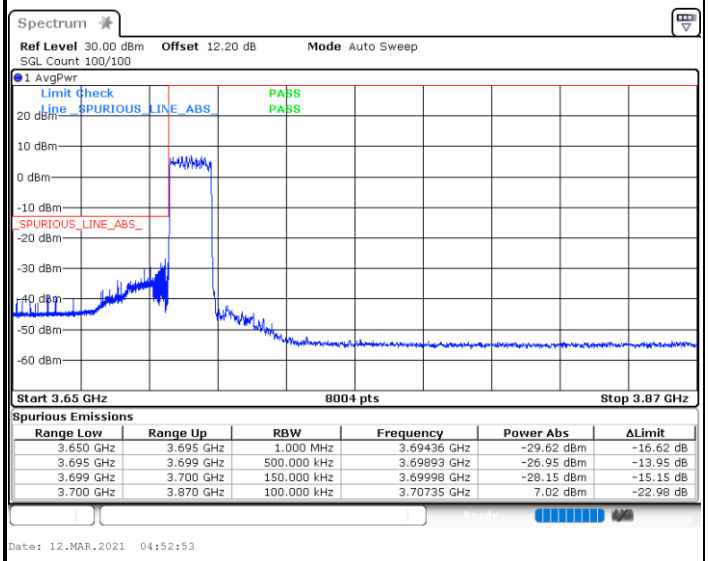
Spurious Emissions

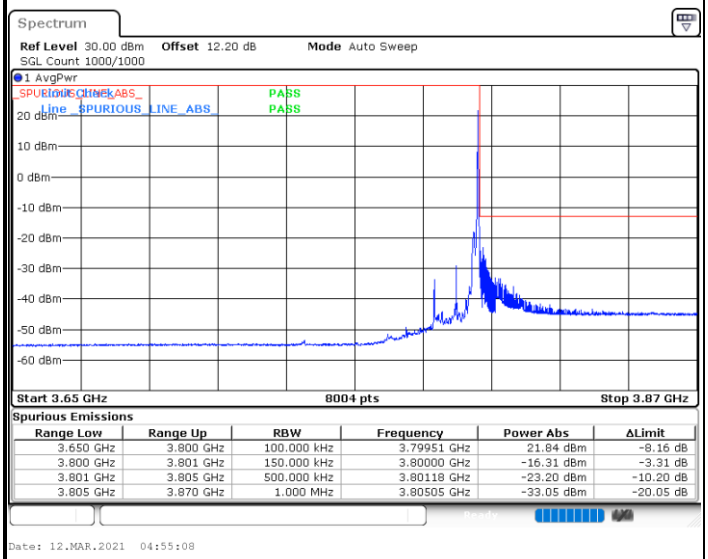
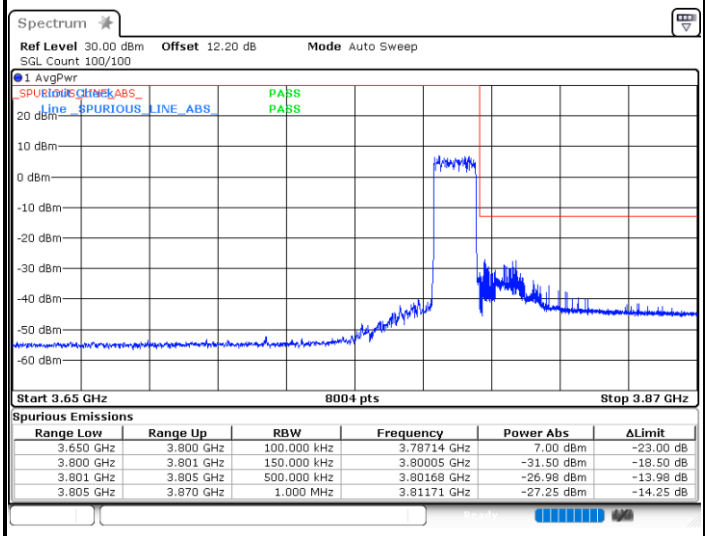
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.650 GHz	3.800 GHz	100.000 kHz	3.79494 GHz	8.23 dBm	-21.77 dB
3.800 GHz	3.801 GHz	100.000 kHz	3.80019 GHz	-25.42 dBm	-12.42 dB
3.801 GHz	3.805 GHz	500.000 kHz	3.80100 GHz	-18.20 dBm	-5.20 dB
3.805 GHz	3.870 GHz	1.000 MHz	3.80700 GHz	-21.34 dBm	-8.34 dB

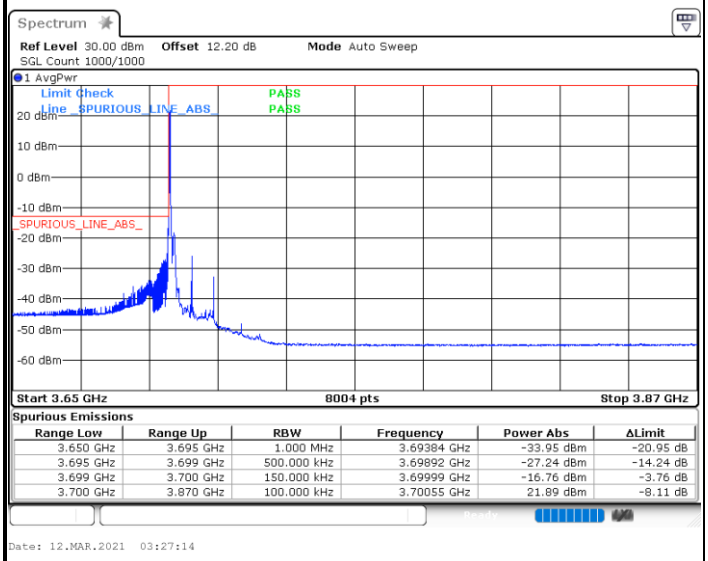
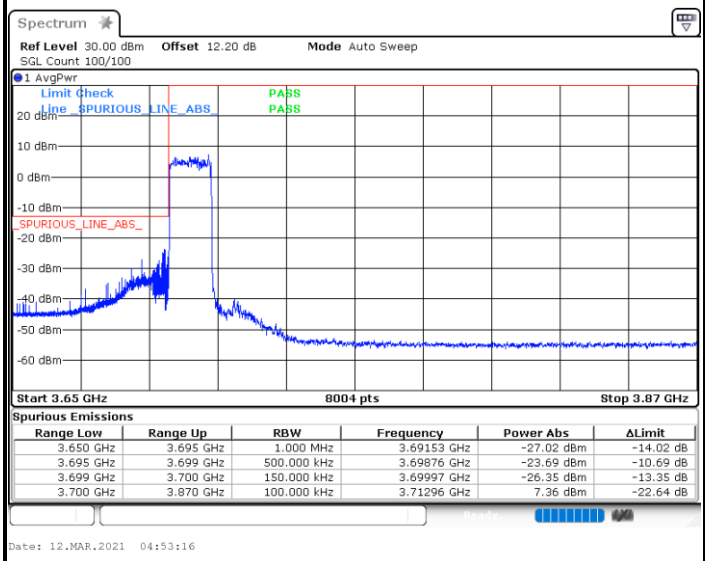
Date: 11.FEB.2021 00:48:11

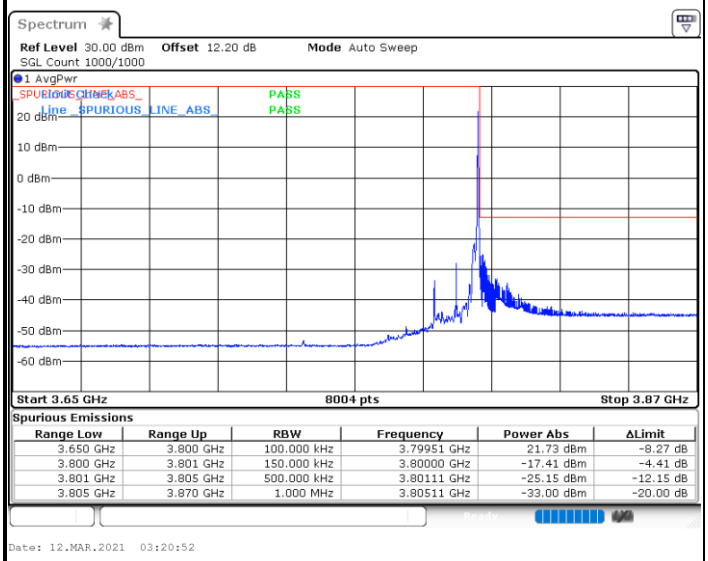
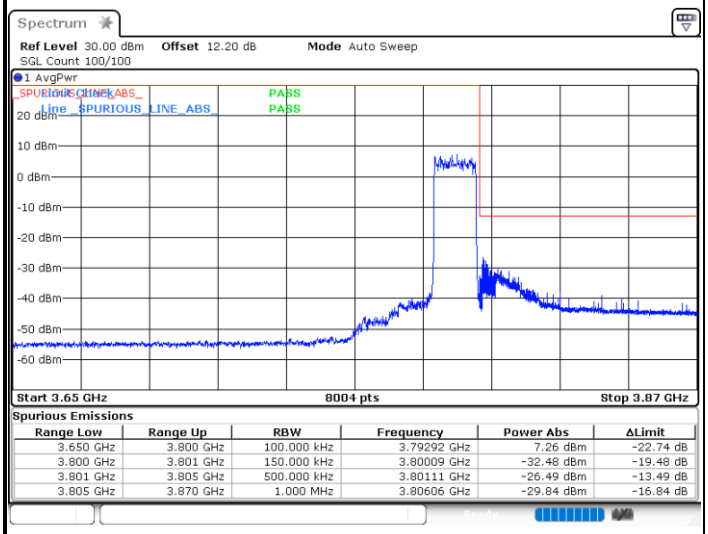
Channel Power < -13dBm Pass

/

FR1 n78 / 15MHz / DFT-S OFDM BPSK	
Lowest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
	/
Lowest Band Edge / Full RB	**Channel Power < -13dBm Pass**
	/

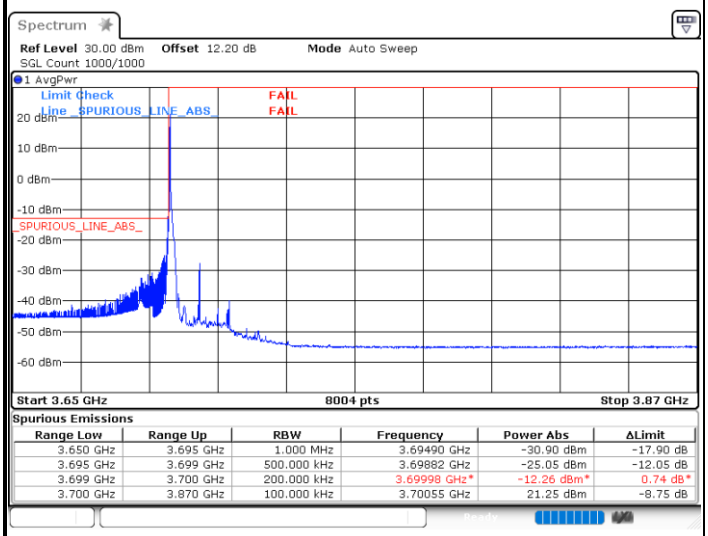
FR1 n78 / 15MHz / DFT-S OFDM BPSK	
Highest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 3.650 GHz / 3.800 GHz / 100.000 kHz / 3.79951 GHz / 21.84 dBm / -8.16 dB 3.800 GHz / 3.801 GHz / 150.000 kHz / 3.80000 GHz / -16.31 dBm / -3.31 dB 3.801 GHz / 3.805 GHz / 500.000 kHz / 3.80118 GHz / -23.20 dBm / -10.20 dB 3.805 GHz / 3.870 GHz / 1.000 MHz / 3.80505 GHz / -33.05 dBm / -20.05 dB Date: 12.MAR.2021 04:55:08	/
Highest Band Edge / Full RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 3.650 GHz / 3.800 GHz / 100.000 kHz / 3.78714 GHz / 7.00 dBm / -23.00 dB 3.800 GHz / 3.801 GHz / 150.000 kHz / 3.80005 GHz / -31.50 dBm / -18.50 dB 3.801 GHz / 3.805 GHz / 500.000 kHz / 3.80168 GHz / -26.98 dBm / -13.98 dB 3.805 GHz / 3.870 GHz / 1.000 MHz / 3.81171 GHz / -27.25 dBm / -14.25 dB Date: 12.MAR.2021 04:54:11	/

FR1 n78 / 15MHz / DFT-S OFDM QPSK	
Lowest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
	/
Lowest Band Edge / Full RB	**Channel Power < -13dBm Pass**
	/

FR1 n78 / 15MHz / DFT-S OFDM QPSK	
Highest Band Edge / 1 RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 3.650 GHz / 3.800 GHz / 100.000 kHz / 3.79951 GHz / 21.73 dBm / -8.27 dB 3.800 GHz / 3.801 GHz / 150.000 kHz / 3.80000 GHz / -17.41 dBm / -4.41 dB 3.801 GHz / 3.805 GHz / 500.000 kHz / 3.80111 GHz / -25.15 dBm / -12.15 dB 3.805 GHz / 3.870 GHz / 1.000 MHz / 3.80511 GHz / -33.00 dBm / -20.00 dB Date: 12.MAR.2021 03:20:52	/
Highest Band Edge / Full RB	**Channel Power < -13dBm Pass**
 Spurious Emissions Range Low / Range Up / RBW / Frequency / Power Abs / ΔLimit 3.650 GHz / 3.800 GHz / 100.000 kHz / 3.79292 GHz / 7.26 dBm / -22.74 dB 3.800 GHz / 3.801 GHz / 150.000 kHz / 3.80009 GHz / -32.48 dBm / -19.48 dB 3.801 GHz / 3.805 GHz / 500.000 kHz / 3.80111 GHz / -26.49 dBm / -13.49 dB 3.805 GHz / 3.870 GHz / 1.000 MHz / 3.80606 GHz / -29.84 dBm / -16.84 dB Date: 12.MAR.2021 04:53:48	/

FR1 n78 / 20MHz / DFT-S OFDM BPSK

Lowest Band Edge / 1 RB

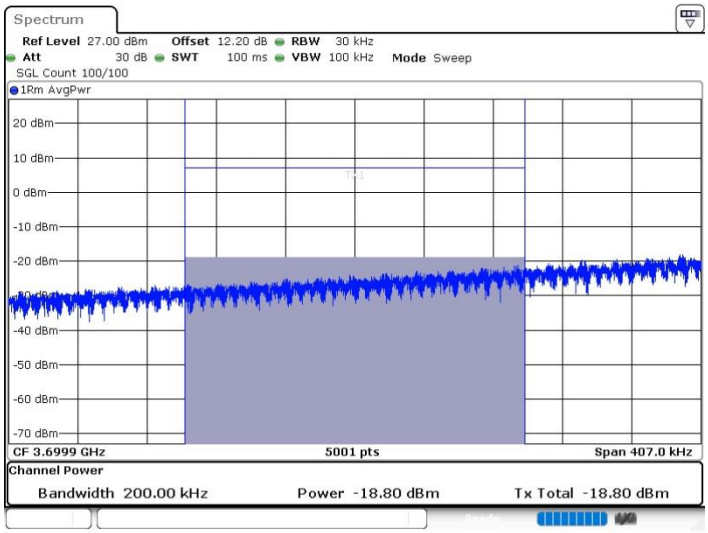


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.650 GHz	3.695 GHz	1.000 MHz	3.69490 GHz	-30.90 dBm	-17.90 dB
3.695 GHz	3.699 GHz	500.000 kHz	3.69882 GHz	-25.05 dBm	-12.05 dB
3.699 GHz	3.700 GHz	200.000 kHz	3.69998 GHz*	-12.26 dBm*	0.74 dB*
3.700 GHz	3.870 GHz	100.000 kHz	3.70055 GHz	21.25 dBm	-8.75 dB

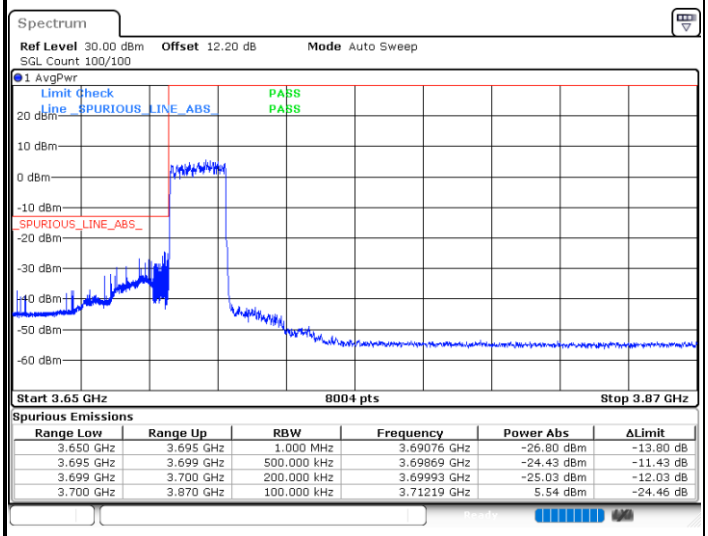
Date: 13.MAR.2021 07:19:30

Channel Power < -13dBm Pass



Date: 13.MAR.2021 08:35:35

Lowest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.650 GHz	3.695 GHz	1.000 MHz	3.69076 GHz	-26.80 dBm	-13.80 dB
3.695 GHz	3.699 GHz	500.000 kHz	3.69869 GHz	-24.43 dBm	-11.43 dB
3.699 GHz	3.700 GHz	200.000 kHz	3.69993 GHz	-25.03 dBm	-12.03 dB
3.700 GHz	3.870 GHz	100.000 kHz	3.71219 GHz	5.54 dBm	-24.46 dB

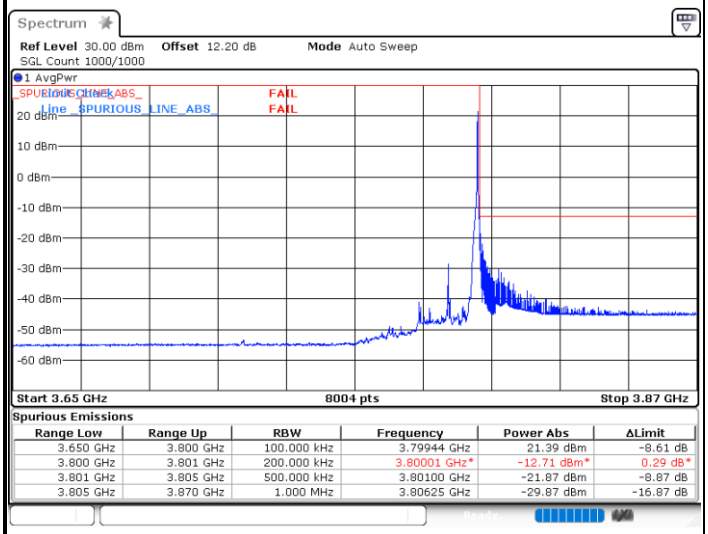
Date: 13.MAR.2021 07:26:29

Channel Power < -13dBm Pass

/

FR1 n78 / 20MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB

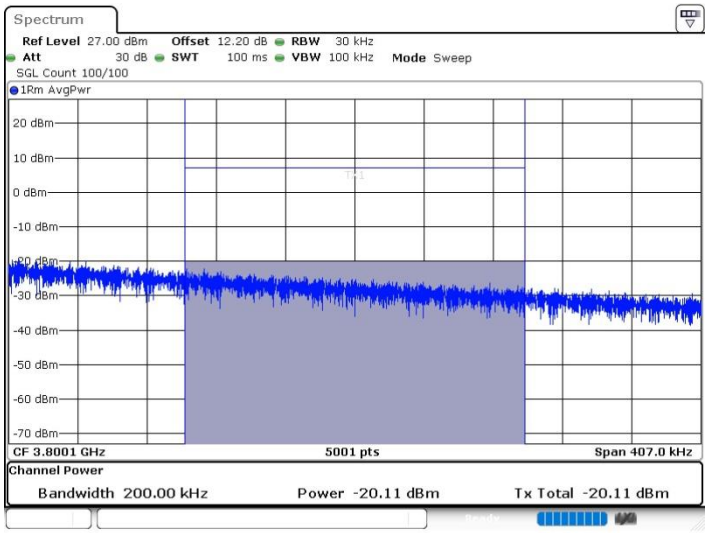


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.650 GHz	3.800 GHz	100.000 kHz	3.79944 GHz	21.39 dBm	-8.61 dB
3.800 GHz	3.801 GHz	200.000 kHz	3.80001 GHz*	-12.71 dBm*	0.29 dB*
3.801 GHz	3.805 GHz	500.000 kHz	3.80100 GHz	-21.87 dBm	-8.87 dB
3.805 GHz	3.870 GHz	1.000 MHz	3.80625 GHz	-29.87 dBm	-16.87 dB

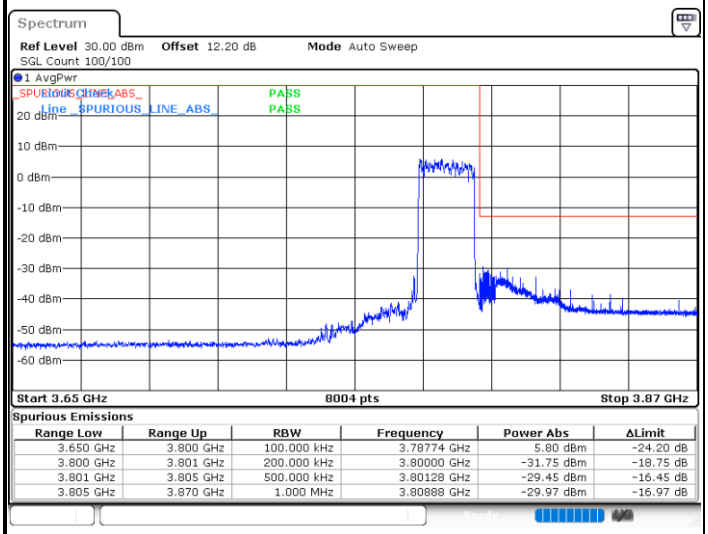
Date: 13.MAR.2021 07:33:21

Channel Power < -13dBm Pass



Date: 13.MAR.2021 08:37:15

Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.650 GHz	3.800 GHz	100.000 kHz	3.78774 GHz	5.80 dBm	-24.20 dB
3.800 GHz	3.801 GHz	200.000 kHz	3.80000 GHz	-31.75 dBm	-18.75 dB
3.801 GHz	3.805 GHz	500.000 kHz	3.80128 GHz	-29.45 dBm	-16.45 dB
3.805 GHz	3.870 GHz	1.000 MHz	3.80888 GHz	-29.97 dBm	-16.97 dB

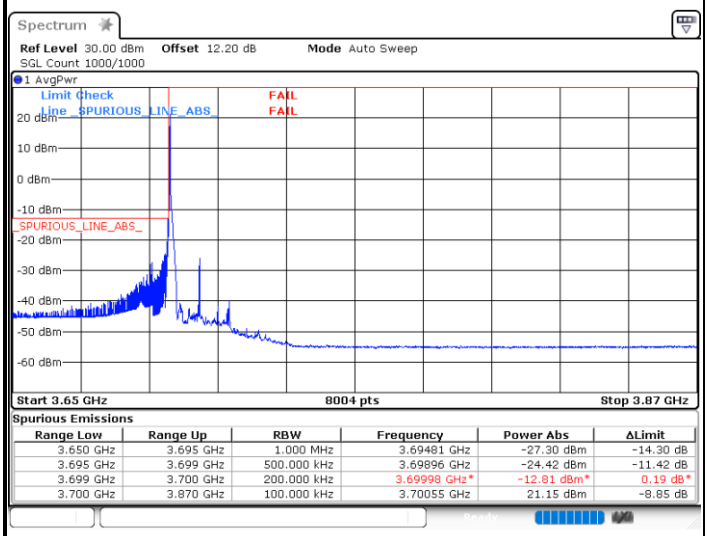
Date: 13.MAR.2021 07:40:21

Channel Power < -13dBm Pass

/

FR1 n78 / 20MHz / DFT-S OFDM QPSK

Lowest Band Edge / 1 RB

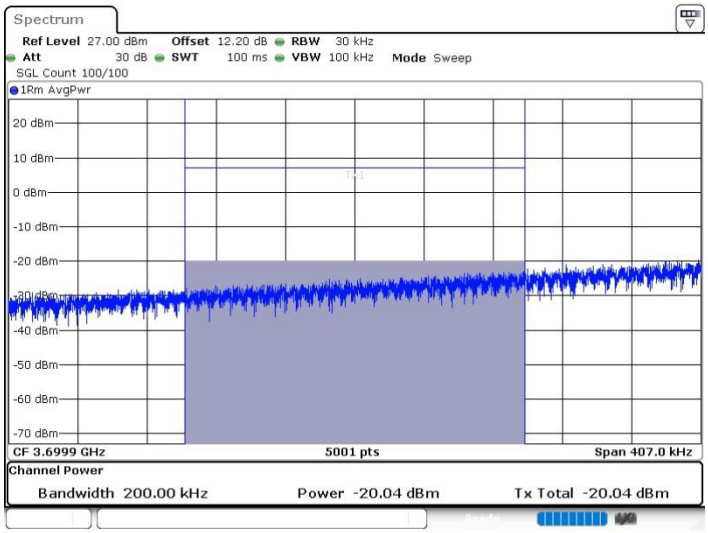


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.650 GHz	3.695 GHz	1.000 MHz	3.69481 GHz	-27.30 dBm	-14.30 dB
3.695 GHz	3.699 GHz	500.000 kHz	3.69896 GHz	-24.42 dBm	-11.42 dB
3.699 GHz	3.700 GHz	200.000 kHz	3.69998 GHz*	-12.81 dBm*	0.19 dB*
3.700 GHz	3.870 GHz	100.000 kHz	3.70055 GHz	21.15 dBm	-8.85 dB

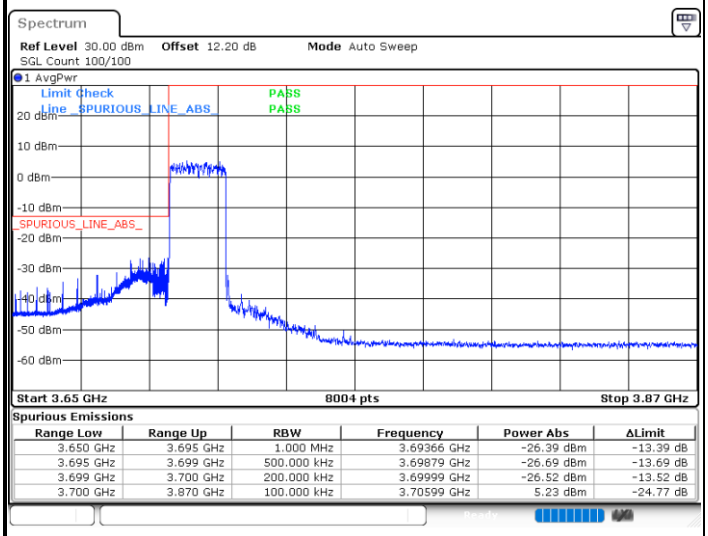
Date: 13.MAR.2021 07:23:07

Channel Power < -13dBm Pass



Date: 13.MAR.2021 08:35:52

Lowest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.650 GHz	3.695 GHz	1.000 MHz	3.69366 GHz	-26.39 dBm	-13.39 dB
3.695 GHz	3.699 GHz	500.000 kHz	3.69879 GHz	-26.69 dBm	-13.69 dB
3.699 GHz	3.700 GHz	200.000 kHz	3.69999 GHz	-26.52 dBm	-13.52 dB
3.700 GHz	3.870 GHz	100.000 kHz	3.70599 GHz	5.23 dBm	-24.77 dB

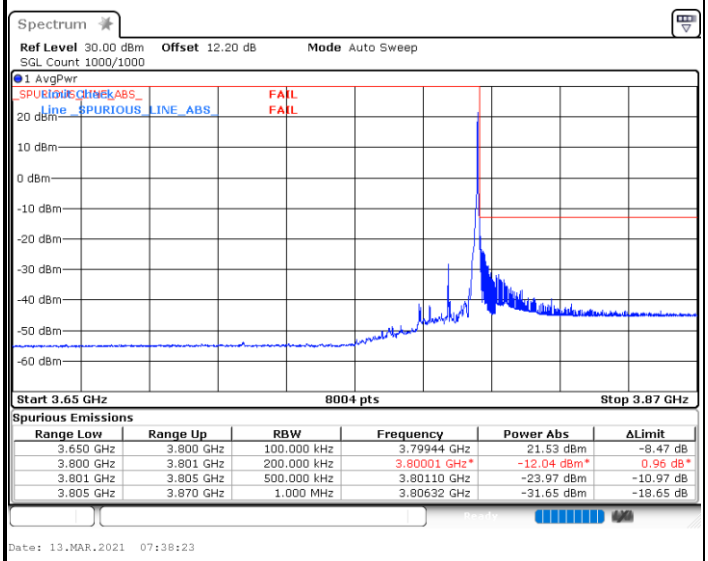
Date: 13.MAR.2021 07:25:06

Channel Power < -13dBm Pass

/

FR1 n78 / 20MHz / DFT-S OFDM QPSK

Highest Band Edge / 1 RB

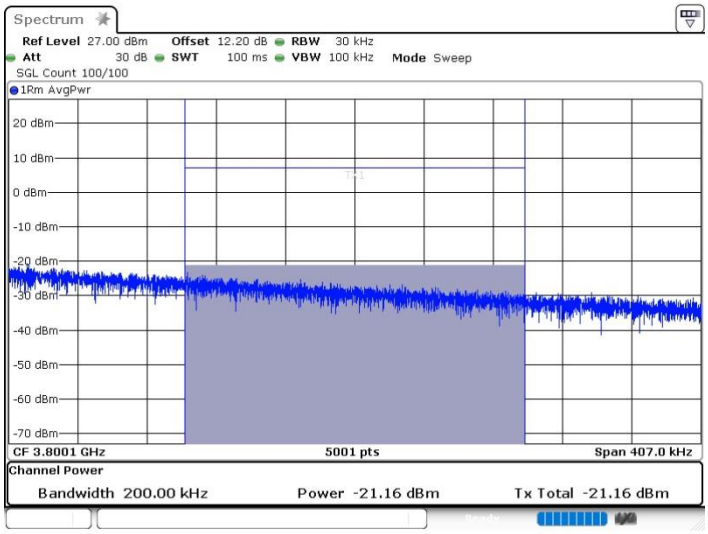


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.650 GHz	3.800 GHz	100.000 kHz	3.79944 GHz	21.53 dBm	-8.47 dB
3.800 GHz	3.801 GHz	200.000 kHz	3.80001 GHz*	-12.04 dBm*	0.96 dB*
3.801 GHz	3.805 GHz	500.000 kHz	3.80110 GHz	-23.97 dBm	-10.97 dB
3.805 GHz	3.870 GHz	1.000 MHz	3.80632 GHz	-31.65 dBm	-18.65 dB

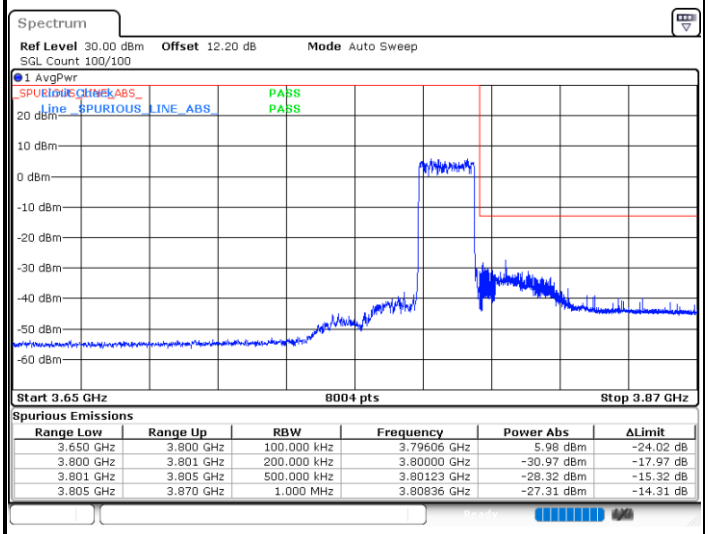
Date: 13.MAR.2021 07:38:23

Channel Power < -13dBm Pass



Date: 13.MAR.2021 08:36:51

Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.650 GHz	3.800 GHz	100.000 kHz	3.79606 GHz	5.98 dBm	-24.02 dB
3.800 GHz	3.801 GHz	200.000 kHz	3.80000 GHz	-30.97 dBm	-17.97 dB
3.801 GHz	3.805 GHz	500.000 kHz	3.80123 GHz	-28.32 dBm	-15.32 dB
3.805 GHz	3.870 GHz	1.000 MHz	3.80836 GHz	-27.31 dBm	-14.31 dB

Date: 13.MAR.2021 07:38:55

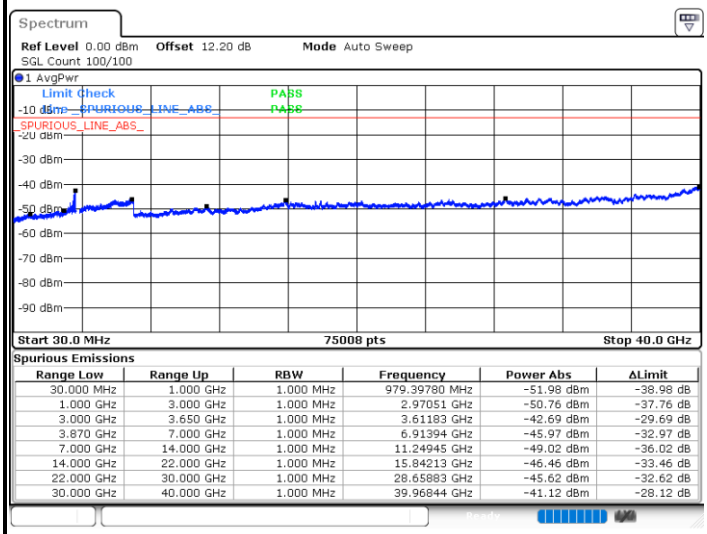
Channel Power < -13dBm Pass

/

Conducted Spurious Emission

FR1 n78 / 10MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

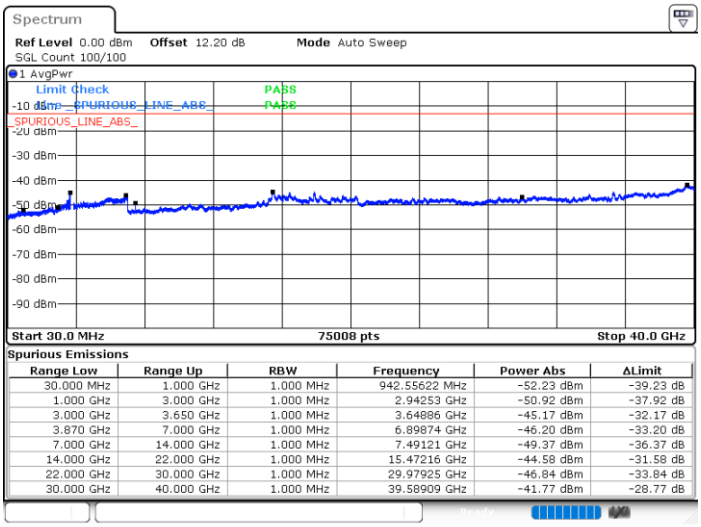


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	979.39780 MHz	-51.98 dBm	-38.98 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.97051 GHz	-50.76 dBm	-37.76 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.61183 GHz	-42.69 dBm	-29.69 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.91394 GHz	-45.97 dBm	-32.97 dB
7.000 GHz	14.000 GHz	1.000 MHz	11.24945 GHz	-49.02 dBm	-36.02 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.84213 GHz	-46.46 dBm	-33.46 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.65883 GHz	-45.62 dBm	-32.62 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.96844 GHz	-41.12 dBm	-28.12 dB

Date: 4.MAR.2021 05:56:26

Middle Channel / 1RB

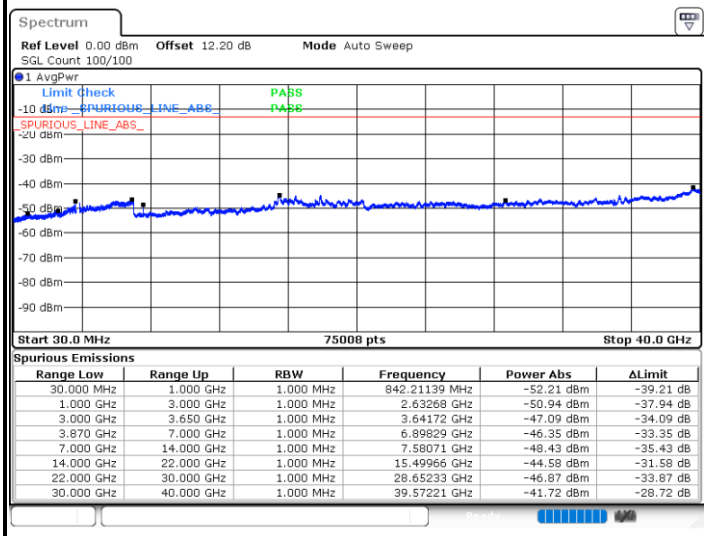


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	942.55622 MHz	-52.23 dBm	-39.23 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.94253 GHz	-50.92 dBm	-37.92 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.64886 GHz	-45.17 dBm	-32.17 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.89874 GHz	-46.20 dBm	-33.20 dB
7.000 GHz	14.000 GHz	1.000 MHz	7.49121 GHz	-49.37 dBm	-36.37 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.47216 GHz	-44.58 dBm	-31.58 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.97925 GHz	-46.84 dBm	-33.84 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.58909 GHz	-41.77 dBm	-28.77 dB

Date: 2.FEB.2021 06:06:40

Highest Channel / 1RB



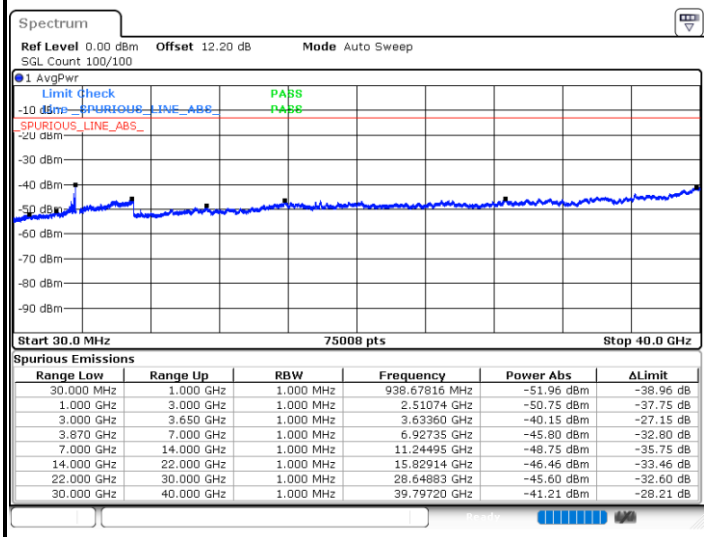
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	842.21139 MHz	-52.21 dBm	-39.21 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.63268 GHz	-50.94 dBm	-37.94 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.64172 GHz	-47.09 dBm	-34.09 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.89829 GHz	-46.35 dBm	-33.35 dB
7.000 GHz	14.000 GHz	1.000 MHz	7.58071 GHz	-48.43 dBm	-35.43 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.49966 GHz	-44.58 dBm	-31.58 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.65233 GHz	-46.87 dBm	-33.87 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.57221 GHz	-41.72 dBm	-28.72 dB

Date: 2.FEB.2021 06:15:34

FR1 n78 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

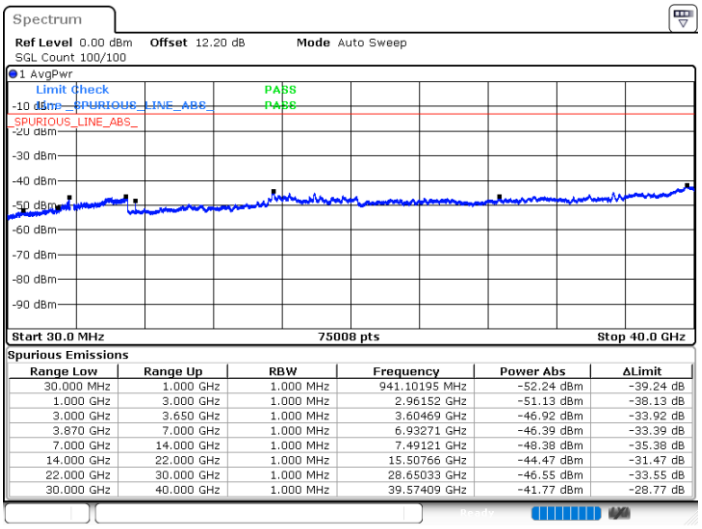


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	938.67816 MHz	-51.96 dBm	-38.96 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.51074 GHz	-50.75 dBm	-37.75 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.63360 GHz	-40.15 dBm	-27.15 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.92735 GHz	-45.80 dBm	-32.80 dB
7.000 GHz	14.000 GHz	1.000 MHz	11.24495 GHz	-48.75 dBm	-35.75 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.82914 GHz	-46.46 dBm	-33.46 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.64883 GHz	-45.60 dBm	-32.60 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.79720 GHz	-41.21 dBm	-28.21 dB

Date: 4.MAR.2021 05:57:44

Middle Channel / 1RB

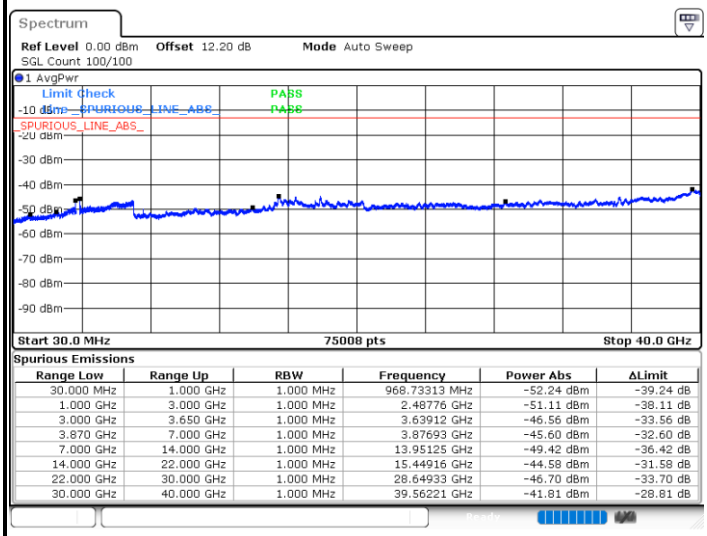


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	941.10195 MHz	-52.24 dBm	-39.24 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.96152 GHz	-51.13 dBm	-38.13 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.60469 GHz	-46.92 dBm	-33.92 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.93271 GHz	-46.39 dBm	-33.39 dB
7.000 GHz	14.000 GHz	1.000 MHz	7.49121 GHz	-48.38 dBm	-35.38 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.50766 GHz	-44.47 dBm	-31.47 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.65033 GHz	-46.55 dBm	-33.55 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.57409 GHz	-41.77 dBm	-28.77 dB

Date: 2.FEB.2021 06:05:06

Highest Channel / 1RB



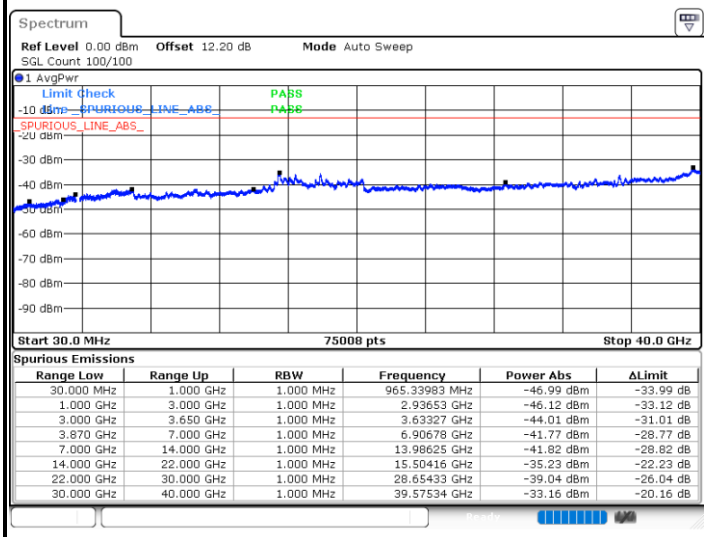
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	968.73313 MHz	-52.24 dBm	-39.24 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.48776 GHz	-51.11 dBm	-38.11 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.63912 GHz	-46.56 dBm	-33.56 dB
3.870 GHz	7.000 GHz	1.000 MHz	3.87693 GHz	-45.60 dBm	-32.60 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.95125 GHz	-49.42 dBm	-36.42 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.44916 GHz	-44.58 dBm	-31.58 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.64933 GHz	-46.70 dBm	-33.70 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.56221 GHz	-41.81 dBm	-28.81 dB

Date: 2.FEB.2021 06:14:25

FR1 n78 / 15MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

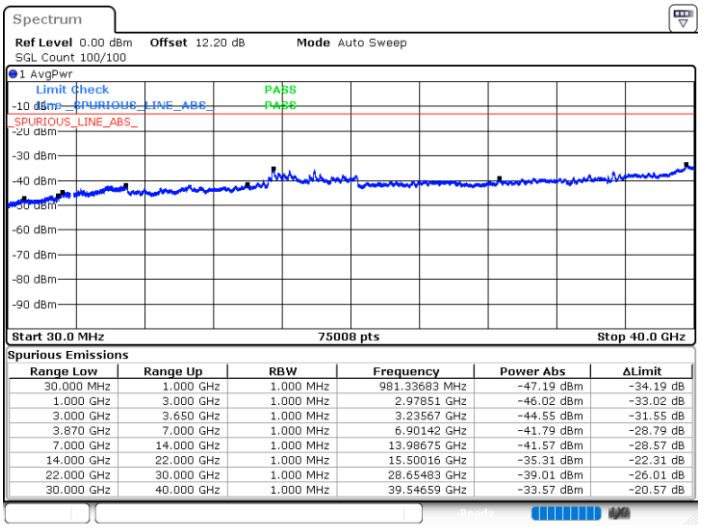


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	965.33983 MHz	-46.99 dBm	-33.99 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.93653 GHz	-46.12 dBm	-33.12 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.63327 GHz	-44.01 dBm	-31.01 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.90678 GHz	-41.77 dBm	-28.77 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.98625 GHz	-41.82 dBm	-28.82 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.50416 GHz	-35.23 dBm	-22.23 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.65433 GHz	-39.04 dBm	-26.04 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.57534 GHz	-33.16 dBm	-20.16 dB

Date: 2.FEB.2021 05:25:10

Middle Channel / 1RB

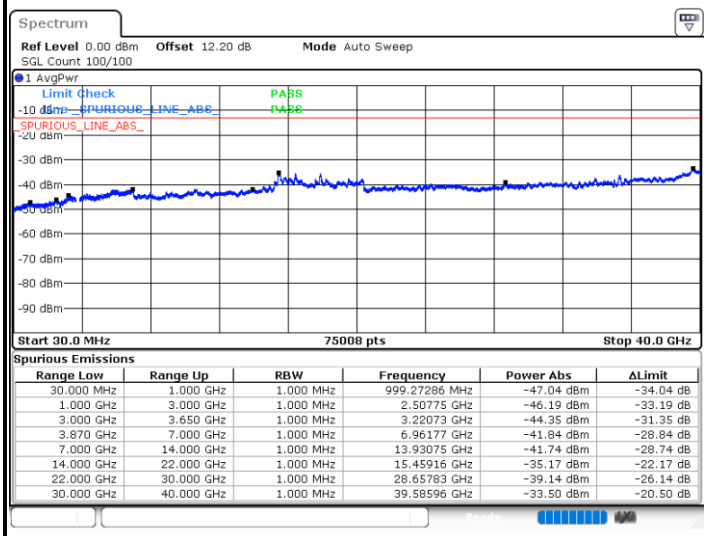


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	981.33683 MHz	-47.19 dBm	-34.19 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.97851 GHz	-46.02 dBm	-33.02 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.23567 GHz	-44.55 dBm	-31.55 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.90142 GHz	-41.79 dBm	-28.79 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.98675 GHz	-41.57 dBm	-28.57 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.50016 GHz	-35.31 dBm	-22.31 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.65483 GHz	-39.01 dBm	-26.01 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.54659 GHz	-33.57 dBm	-20.57 dB

Date: 2.FEB.2021 05:29:05

Highest Channel / 1RB



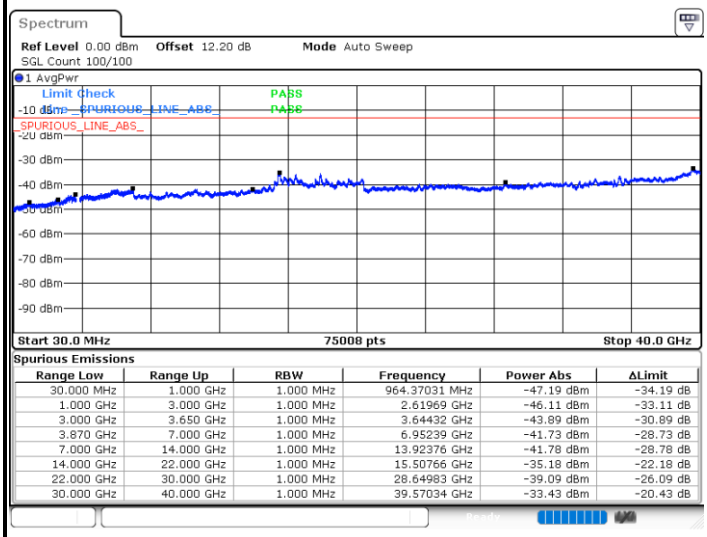
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	999.27286 MHz	-47.04 dBm	-34.04 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.50775 GHz	-46.19 dBm	-33.19 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.22073 GHz	-44.35 dBm	-31.35 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.96177 GHz	-41.84 dBm	-28.84 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.93075 GHz	-41.74 dBm	-28.74 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.45916 GHz	-35.17 dBm	-22.17 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.65783 GHz	-39.14 dBm	-26.14 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.58596 GHz	-33.50 dBm	-20.50 dB

Date: 2.FEB.2021 05:40:13

FR1 n78 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

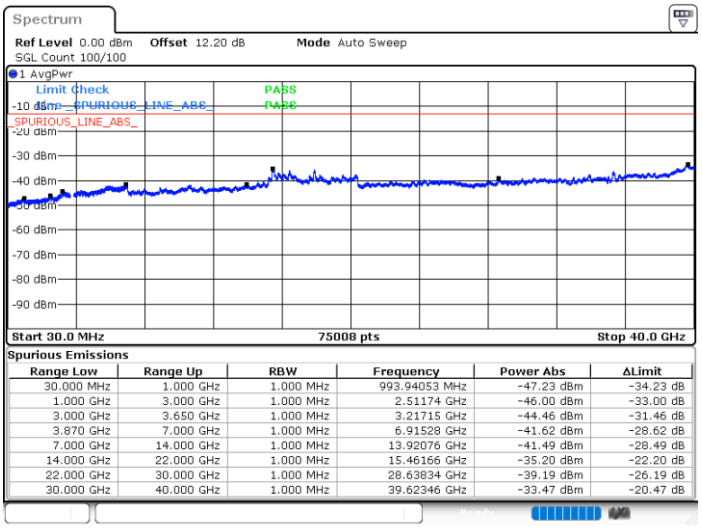


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	964.37031 MHz	-47.19 dBm	-34.19 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.61969 GHz	-46.11 dBm	-33.11 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.64432 GHz	-43.89 dBm	-30.89 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.95239 GHz	-41.73 dBm	-28.73 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.92376 GHz	-41.78 dBm	-28.78 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.50766 GHz	-35.18 dBm	-22.18 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.64983 GHz	-39.09 dBm	-26.09 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.57034 GHz	-33.43 dBm	-20.43 dB

Date: 2.FEB.2021 05:26:21

Middle Channel / 1RB

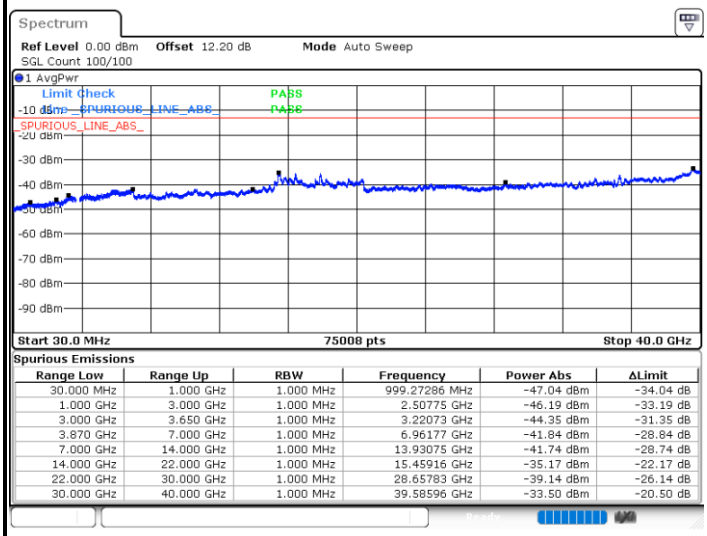


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	993.94053 MHz	-47.23 dBm	-34.23 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.51174 GHz	-46.00 dBm	-33.00 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.21715 GHz	-44.46 dBm	-31.46 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.91528 GHz	-41.62 dBm	-28.62 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.92076 GHz	-41.49 dBm	-28.49 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.46166 GHz	-35.20 dBm	-22.20 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.63834 GHz	-39.19 dBm	-26.19 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.62346 GHz	-33.47 dBm	-20.47 dB

Date: 2.FEB.2021 05:27:50

Highest Channel / 1RB



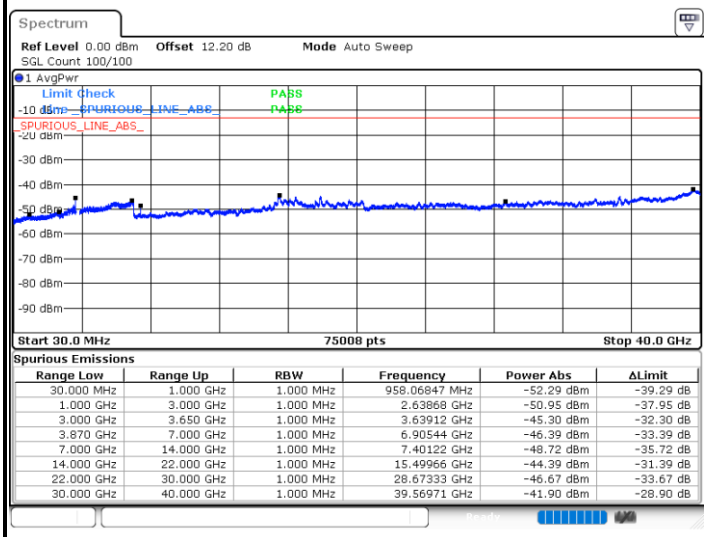
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	999.27286 MHz	-47.04 dBm	-34.04 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.50775 GHz	-46.19 dBm	-33.19 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.22073 GHz	-44.35 dBm	-31.35 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.96177 GHz	-41.84 dBm	-28.84 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.93075 GHz	-41.74 dBm	-28.74 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.45916 GHz	-35.17 dBm	-22.17 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.65783 GHz	-39.14 dBm	-26.14 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.58596 GHz	-33.50 dBm	-20.50 dB

Date: 2.FEB.2021 05:40:13

FR1 n78 / 20MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

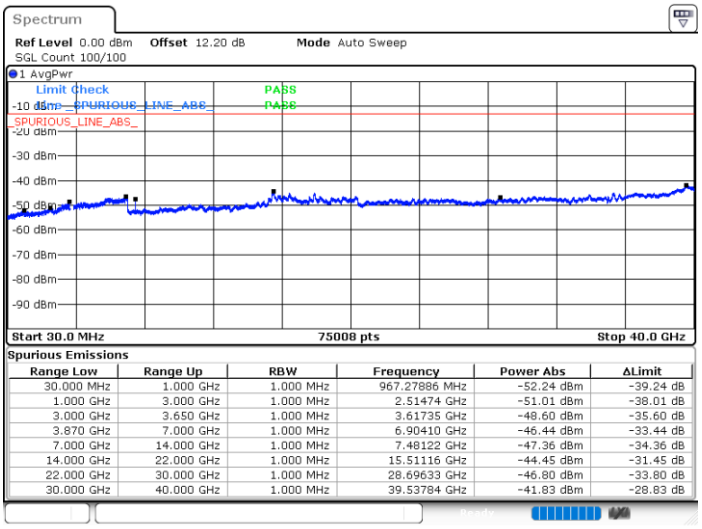


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	958.06847 MHz	-52.29 dBm	-39.29 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.63868 GHz	-50.95 dBm	-37.95 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.63912 GHz	-45.30 dBm	-32.30 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.90544 GHz	-46.39 dBm	-33.39 dB
7.000 GHz	14.000 GHz	1.000 MHz	7.40122 GHz	-48.72 dBm	-35.72 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.49966 GHz	-44.39 dBm	-31.39 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.67333 GHz	-46.67 dBm	-33.67 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.56971 GHz	-41.90 dBm	-28.90 dB

Date: 2.FEB.2021 04:52:52

Middle Channel / 1RB

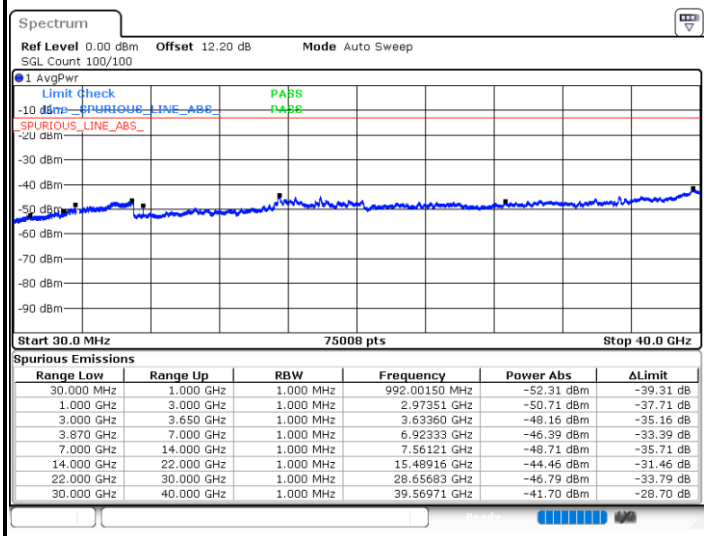


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	967.27886 MHz	-52.24 dBm	-39.24 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.51474 GHz	-51.01 dBm	-38.01 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.61735 GHz	-48.60 dBm	-35.60 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.90410 GHz	-46.44 dBm	-33.44 dB
7.000 GHz	14.000 GHz	1.000 MHz	7.48122 GHz	-47.36 dBm	-34.36 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.51116 GHz	-44.45 dBm	-31.45 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.69633 GHz	-46.80 dBm	-33.80 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.53784 GHz	-41.83 dBm	-28.83 dB

Date: 2.FEB.2021 05:03:59

Highest Channel / 1RB



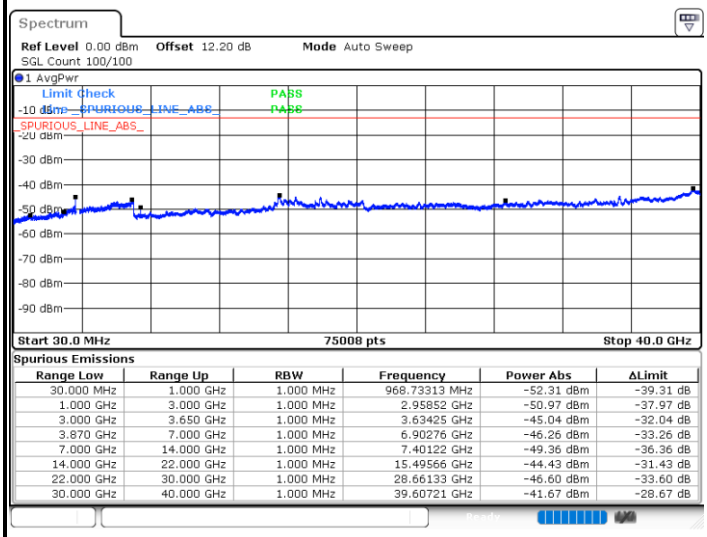
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	992.00150 MHz	-52.31 dBm	-39.31 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.97351 GHz	-50.71 dBm	-37.71 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.63360 GHz	-48.16 dBm	-35.16 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.92333 GHz	-46.39 dBm	-33.39 dB
7.000 GHz	14.000 GHz	1.000 MHz	7.56121 GHz	-48.71 dBm	-35.71 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.48916 GHz	-44.46 dBm	-31.46 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.65683 GHz	-46.79 dBm	-33.79 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.56971 GHz	-41.70 dBm	-28.70 dB

Date: 2.FEB.2021 05:07:42

FR1 n78 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

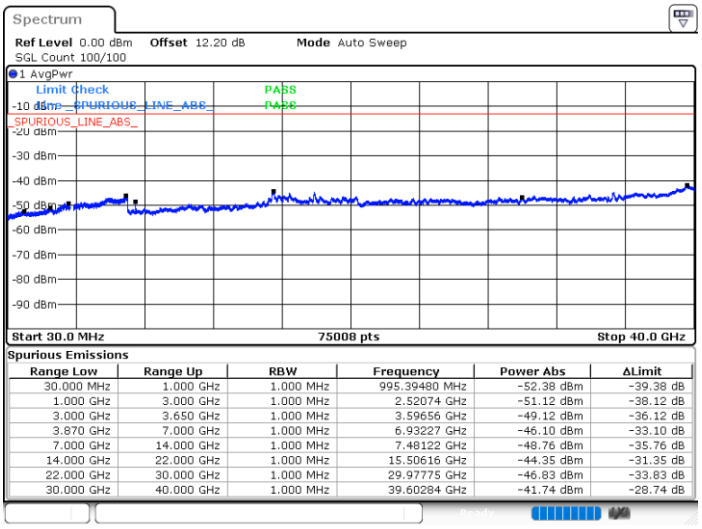


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	968.73313 MHz	-52.31 dBm	-39.31 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.95852 GHz	-50.97 dBm	-37.97 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.63425 GHz	-45.04 dBm	-32.04 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.90276 GHz	-46.26 dBm	-33.26 dB
7.000 GHz	14.000 GHz	1.000 MHz	7.40122 GHz	-49.36 dBm	-36.36 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.49566 GHz	-44.43 dBm	-31.43 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.66133 GHz	-46.60 dBm	-33.60 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.60721 GHz	-41.67 dBm	-28.67 dB

Date: 2.FEB.2021 04:50:25

Middle Channel / 1RB

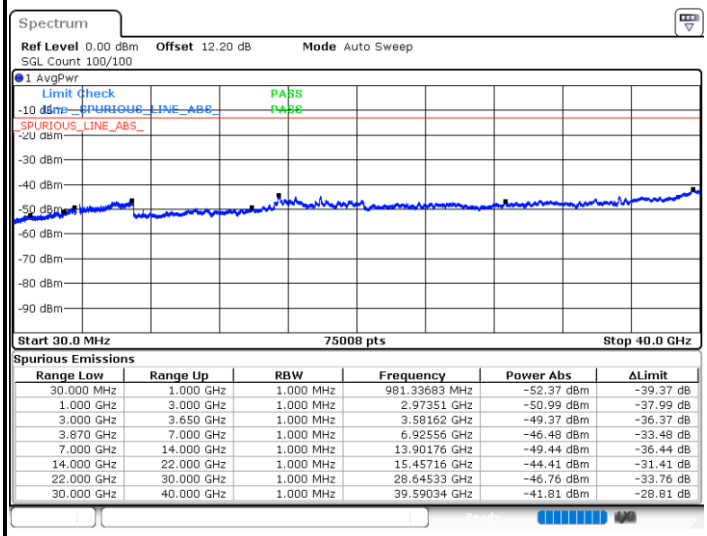


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	995.39480 MHz	-52.38 dBm	-39.38 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.52074 GHz	-51.12 dBm	-38.12 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.59656 GHz	-49.12 dBm	-36.12 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.93227 GHz	-46.10 dBm	-33.10 dB
7.000 GHz	14.000 GHz	1.000 MHz	7.48122 GHz	-48.76 dBm	-35.76 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.50616 GHz	-44.35 dBm	-31.35 dB
22.000 GHz	30.000 GHz	1.000 MHz	29.97775 GHz	-46.83 dBm	-33.83 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.60284 GHz	-41.74 dBm	-28.74 dB

Date: 2.FEB.2021 05:01:48

Highest Channel / 1RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	981.33683 MHz	-52.37 dBm	-39.37 dB
1.000 GHz	3.000 GHz	1.000 MHz	2.97351 GHz	-50.99 dBm	-37.99 dB
3.000 GHz	3.650 GHz	1.000 MHz	3.58162 GHz	-49.37 dBm	-36.37 dB
3.870 GHz	7.000 GHz	1.000 MHz	6.92556 GHz	-46.48 dBm	-33.48 dB
7.000 GHz	14.000 GHz	1.000 MHz	13.90176 GHz	-49.44 dBm	-36.44 dB
14.000 GHz	22.000 GHz	1.000 MHz	15.45716 GHz	-44.41 dBm	-31.41 dB
22.000 GHz	30.000 GHz	1.000 MHz	28.64533 GHz	-46.76 dBm	-33.76 dB
30.000 GHz	40.000 GHz	1.000 MHz	39.59034 GHz	-41.81 dBm	-28.81 dB

Date: 2.FEB.2021 05:09:09

Frequency Stability

Test Conditions		NR n78 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Within Band
		Deviation (ppm)	Result
50	Normal Voltage	0.0025	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0019	
20(Ref.)	Normal Voltage	0.0013	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0021	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0016	
20	Battery End Point	0.0029	

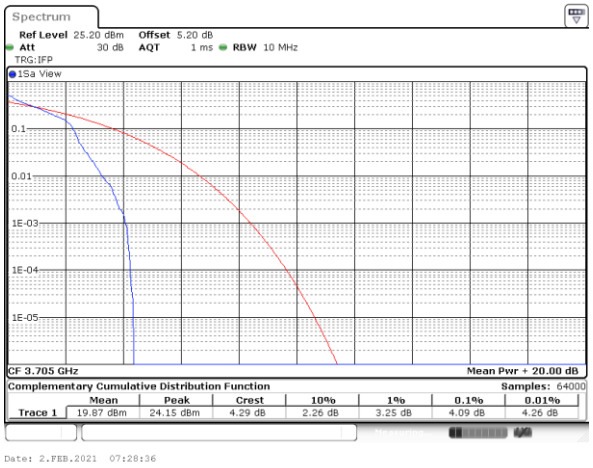
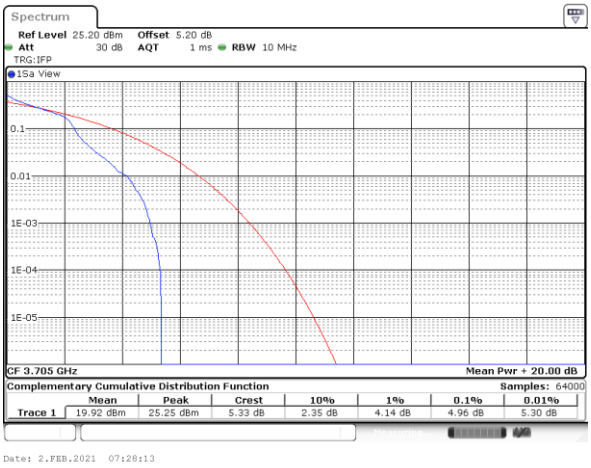
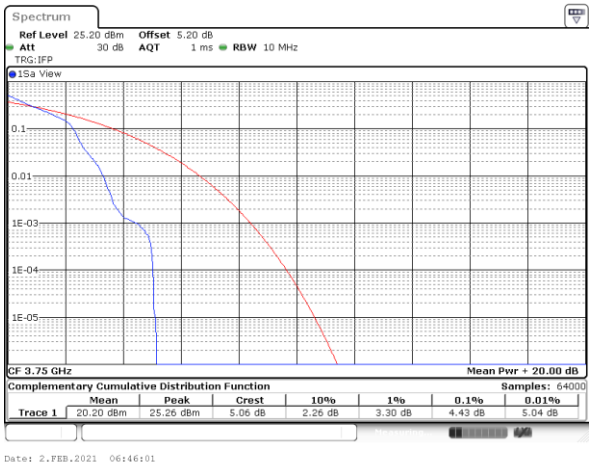
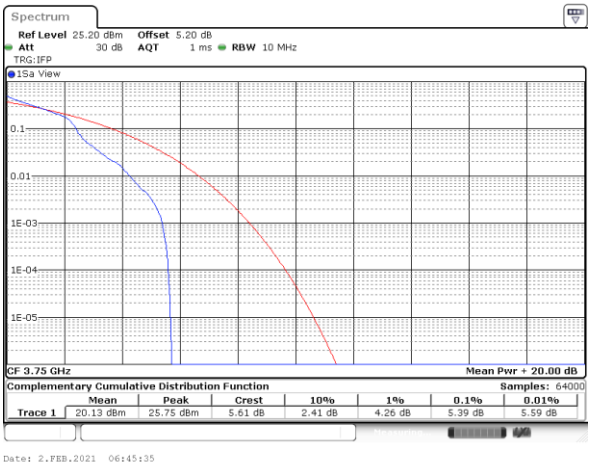
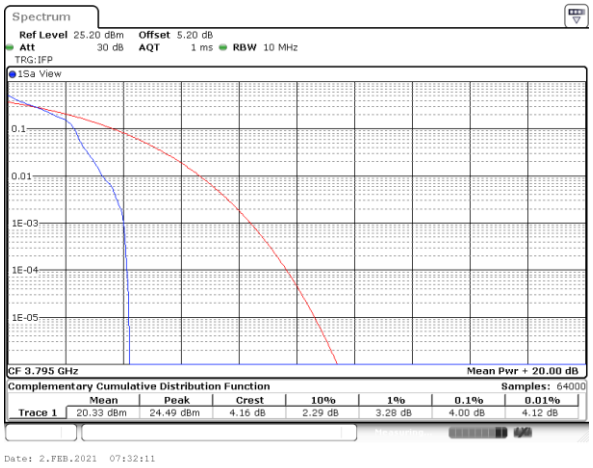
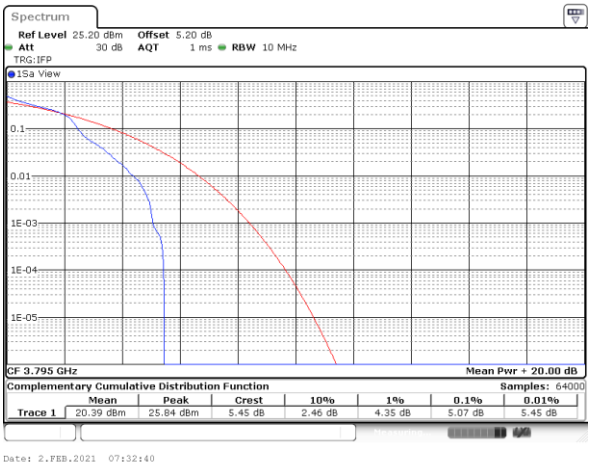
Note:

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.14 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

5G NR n78 NSA-SCS 30K

Peak-to-Average Ratio

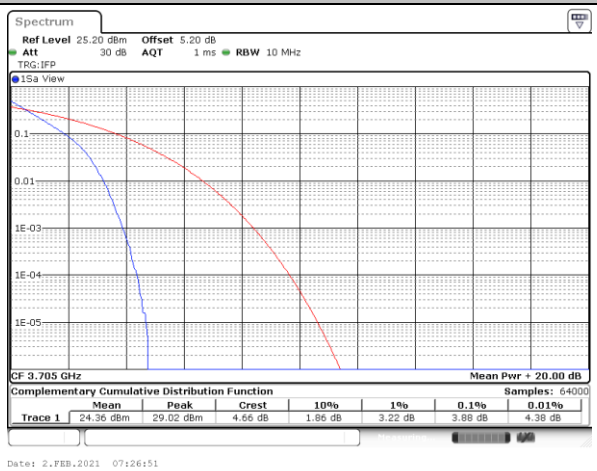
Mode	FR1 n78 / 10MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	PI/2 BPSK	QPSK	QPSK	Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.09	3.88	4.96	5.48	PASS
Middle CH	4.43	4.09	5.39	4.99	
Highest CH	4.00	3.83	5.07	4.99	

FR1 n78 / 10MHz / DFT-S OFDM	
PI/2 BPSK	**QPSK**
Lowest Channel / 1RB	**Lowest Channel / 1RB**
	
Middle Channel / 1 RB	**Middle Channel / 1 RB**
	
Highest Channel / 1 RB	**Highest Channel / 1 RB**
	

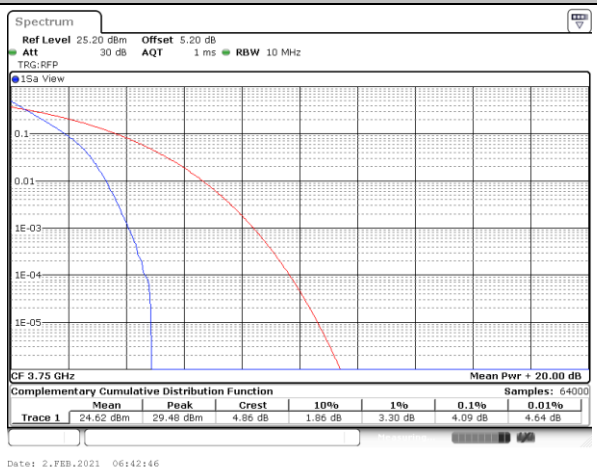
FR1 n78 / 10MHz / DFT-S OFDM

PI/2 BPSK

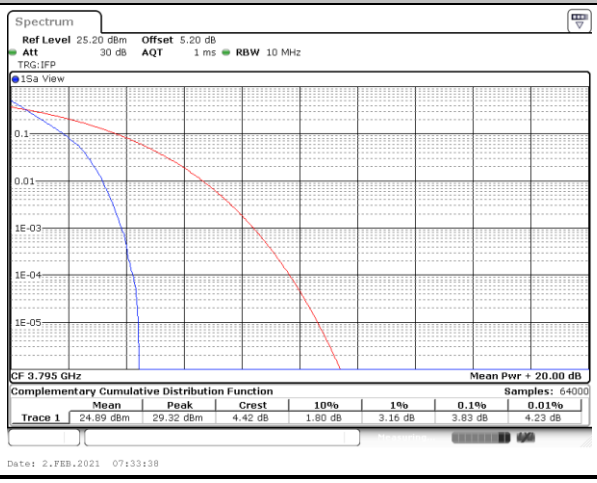
Lowest Channel / Full RB



Middle Channel / Full RB

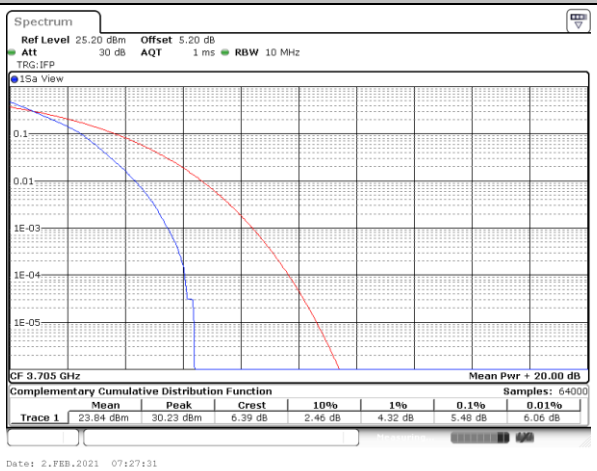


Highest Channel / Full RB

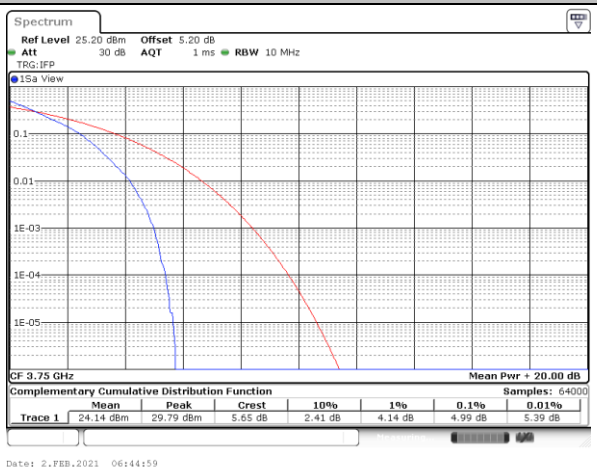


QPSK

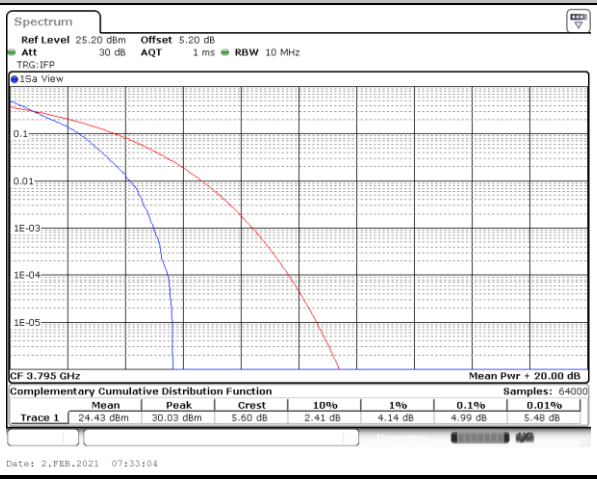
Lowest Channel / Full RB



Middle Channel / Full RB



Highest Channel / Full RB



26dB Bandwidth

Mode	FR1 n78 : 26dB BW(MHz) / CP-OFDM							
BW	10MHz	10MHz	10MHz	10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	9.37	9.13	9.27	8.99				

Mode	FR1 n78 : 26dB BW(MHz) / CP-OFDM							
BW	15MHz	15MHz	15MHz	15MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	14.42	14.54	14.42	14.45				

Mode	FR1 n78 : 26dB BW(MHz) / CP-OFDM							
BW	20MHz	20MHz	20MHz	20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	18.98	18.94	19.58	19.18				

Mode	FR1 n78 : 26dB BW(MHz) / CP-OFDM							
BW	40MHz	40MHz	40MHz	40MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	40.28	40.36	40.12	40.20				

Mode	FR1 n78 : 26dB BW(MHz) / CP-OFDM							
BW	50MHz	50MHz	50MHz	50MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	49.75	49.65	49.75	49.75				

Mode	FR1 n78 : 26dB BW(MHz) / CP-OFDM							
BW	60MHz	60MHz	60MHz	60MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	60.42	60.42	60.42	60.42				

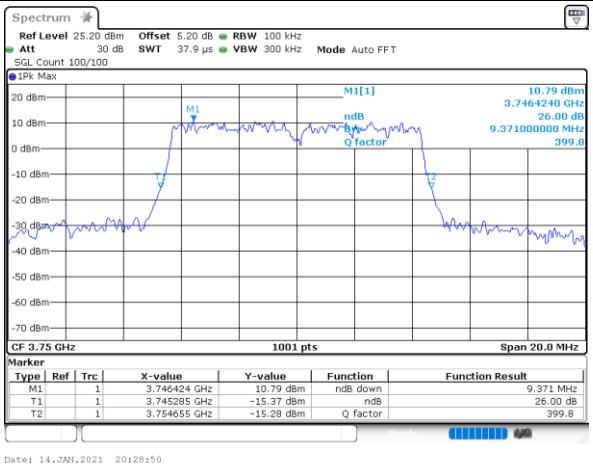
Mode	FR1 n78 : 26dB BW(MHz) / CP-OFDM							
BW	80MHz	80MHz	80MHz	80MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	79.92	79.92	79.92	79.92				

Mode	FR1 n78 : 26dB BW(MHz) / CP-OFDM							
BW	100MHz	100MHz	100MHz	100MHz				
Mod.	QPSK	16QAM	64QAM	256QAM				
Middle CH	100.30	100.30	100.50	100.70				

FR1 n78 / 10MHz / CP-OFDM

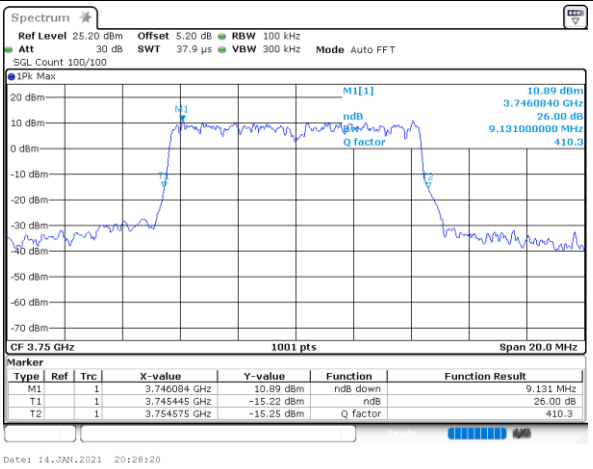
QPSK

Middle Channel



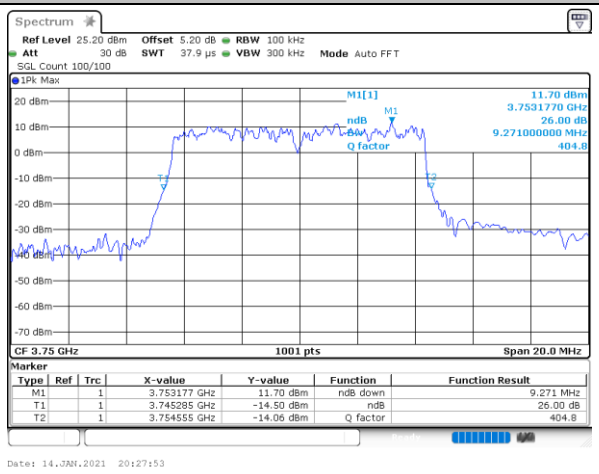
16QAM

Middle Channel



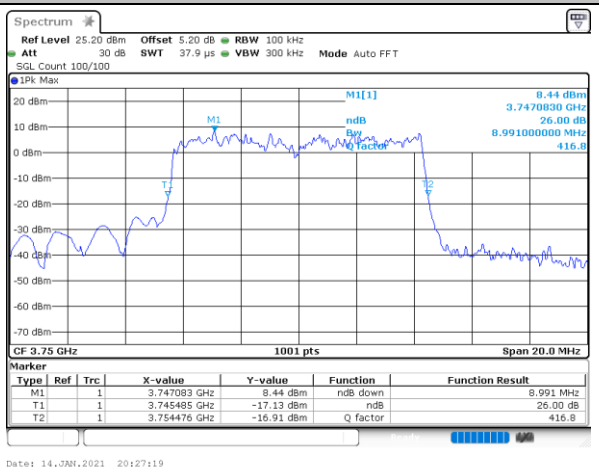
64QAM

Middle Channel



256QAM

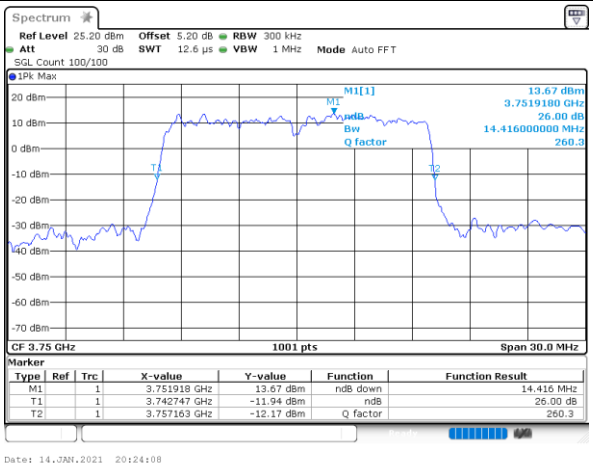
Middle Channel



FR1 n78 / 15MHz / CP-OFDM

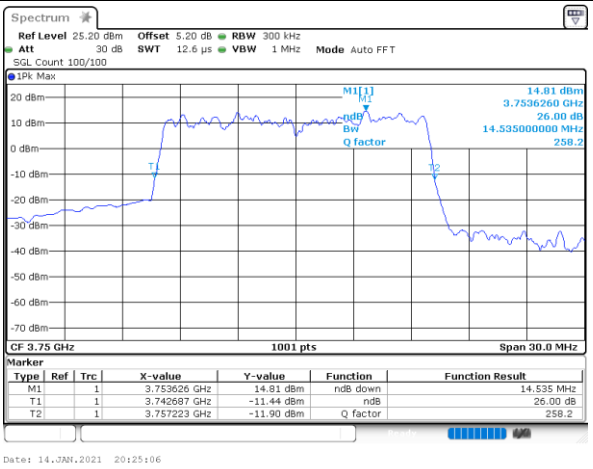
QPSK

Middle Channel



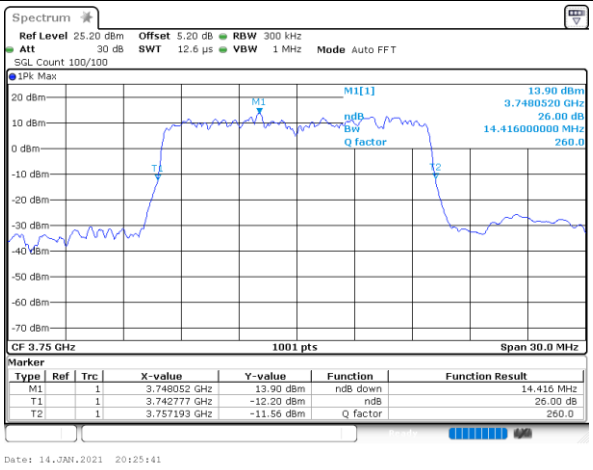
16QAM

Middle Channel



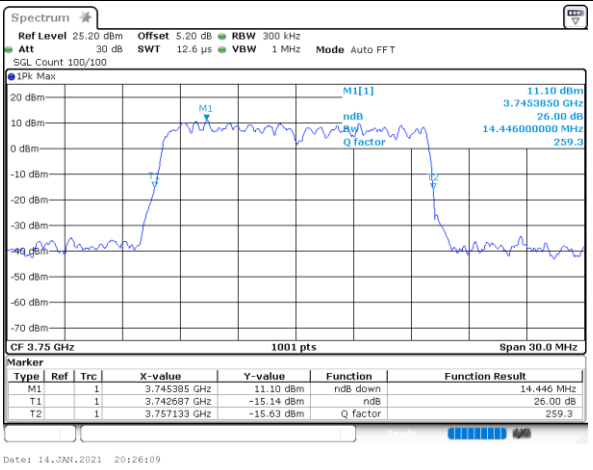
64QAM

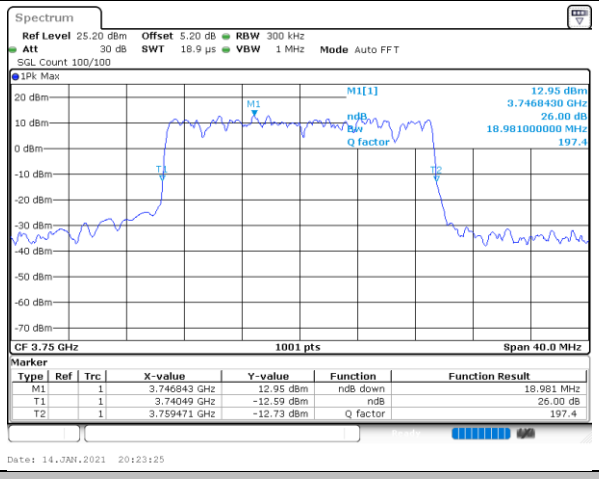
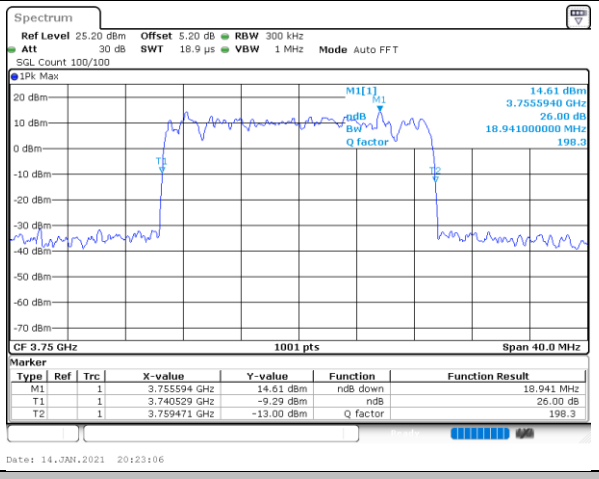
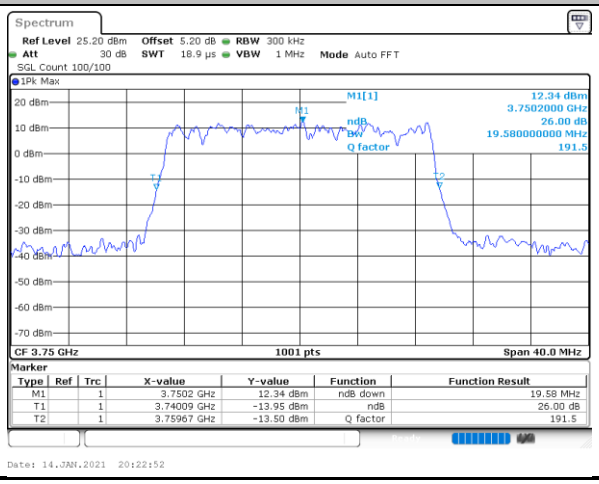
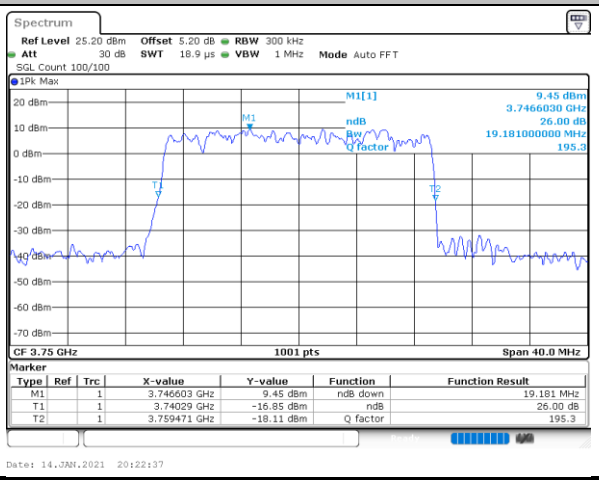
Middle Channel

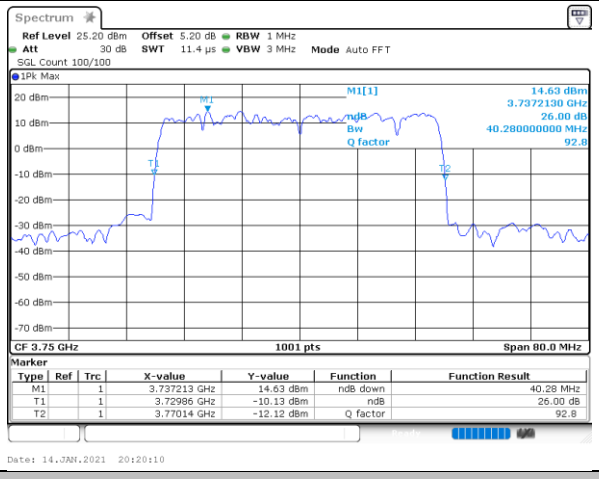
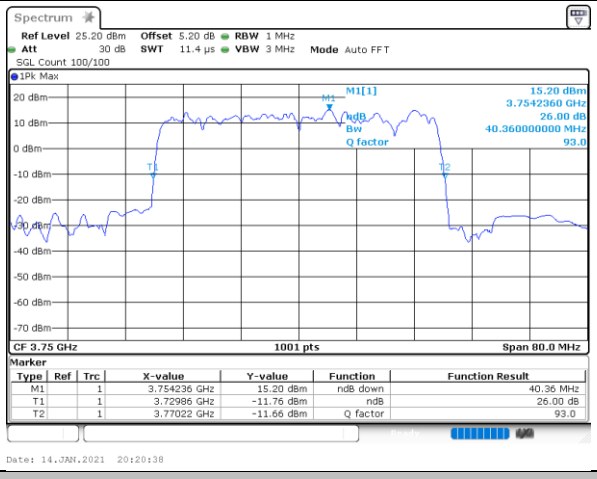
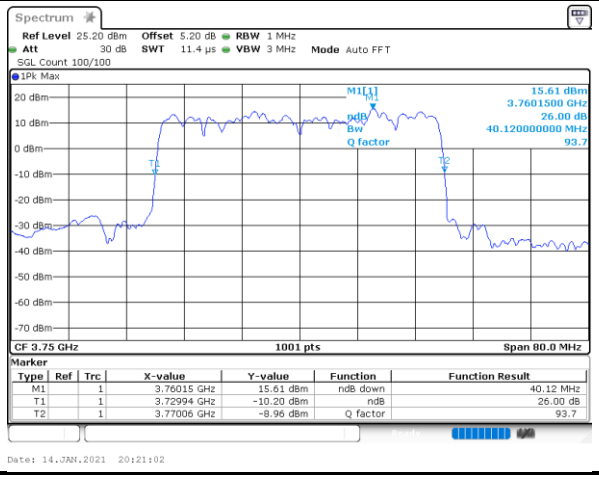
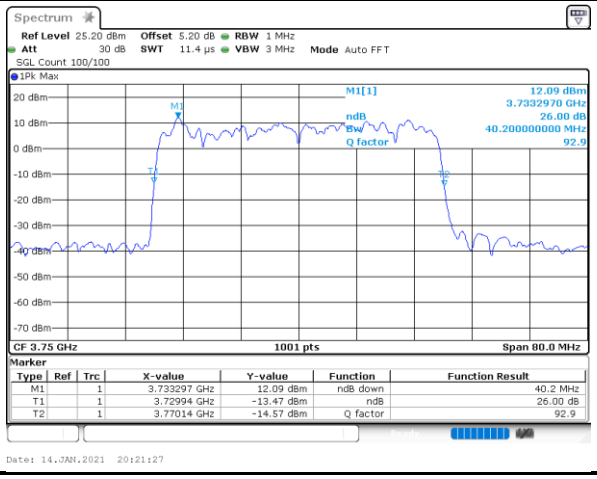


256QAM

Middle Channel



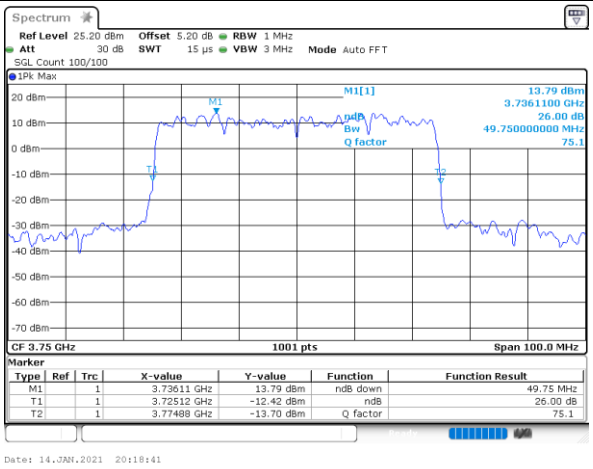
FR1 n78 / 20MHz / CP-OFDM	
QPSK	**16QAM**
Middle Channel	**Middle Channel**
	
64QAM	**256QAM**
Middle Channel	**Middle Channel**
	

FR1 n78 / 40MHz / CP-OFDM	
QPSK	**16QAM**
Middle Channel	**Middle Channel**
	
64QAM	**256QAM**
Middle Channel	**Middle Channel**
	

FR1 n78 / 50MHz / CP-OFDM

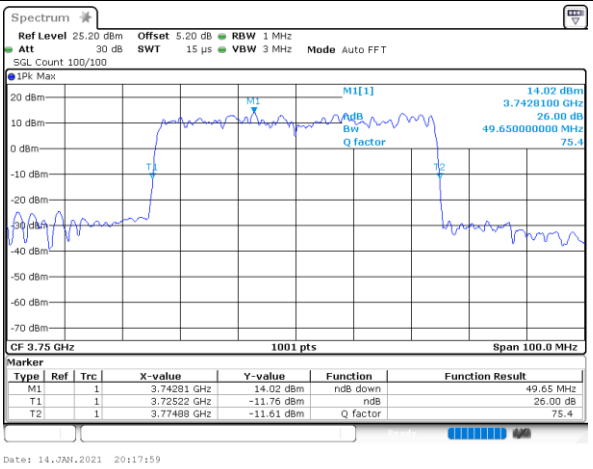
QPSK

Middle Channel



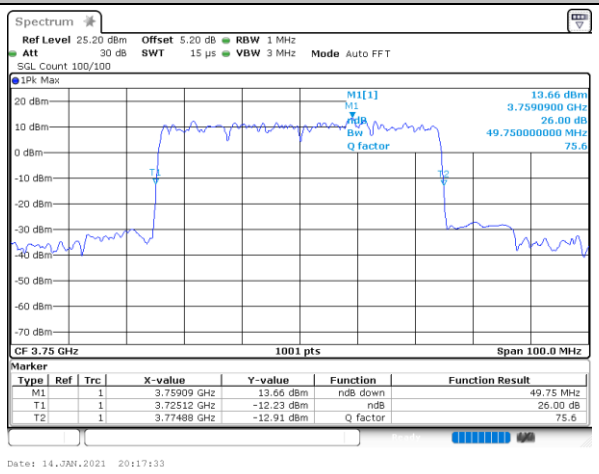
16QAM

Middle Channel



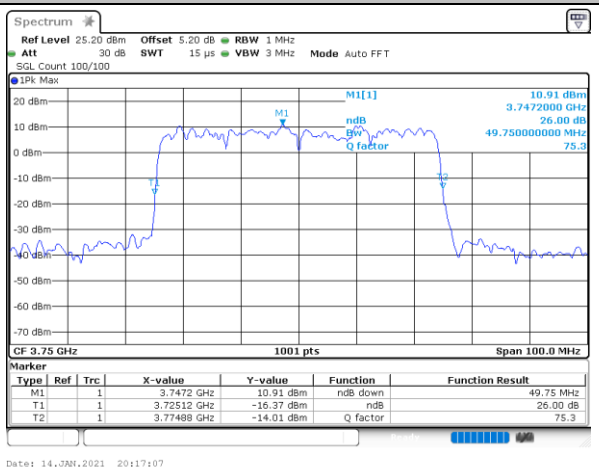
64QAM

Middle Channel



256QAM

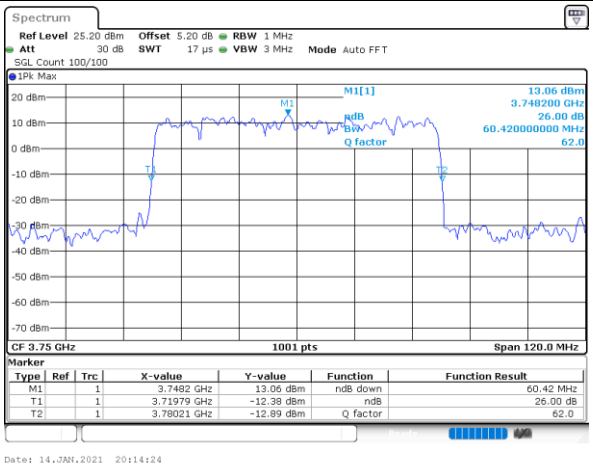
Middle Channel



FR1 n78 / 60MHz / CP-OFDM

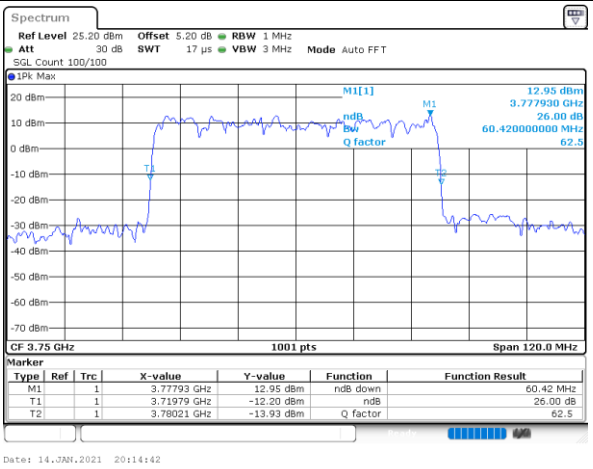
QPSK

Middle Channel



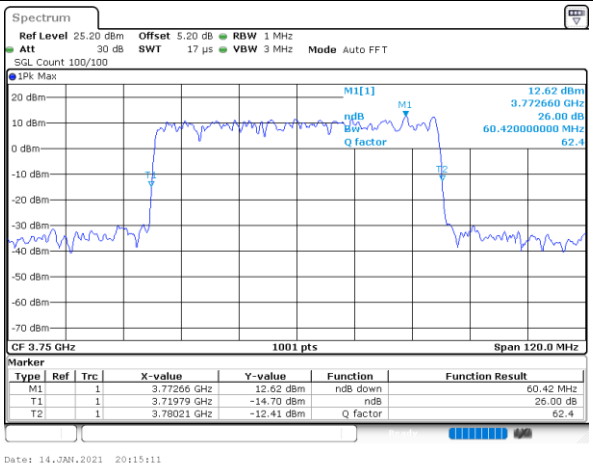
16QAM

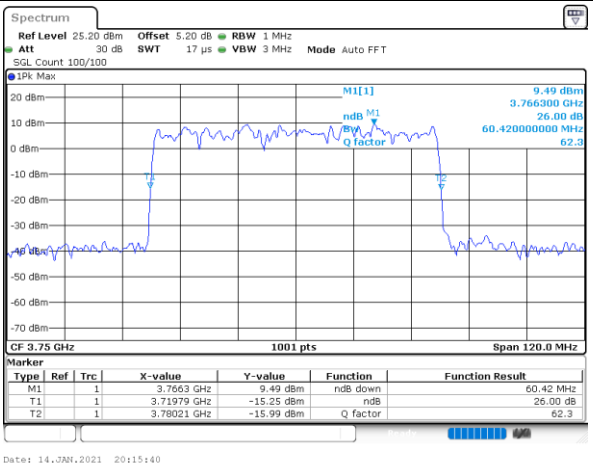
Middle Channel



64QAM

Middle Channel



256QAM

Middle Channel