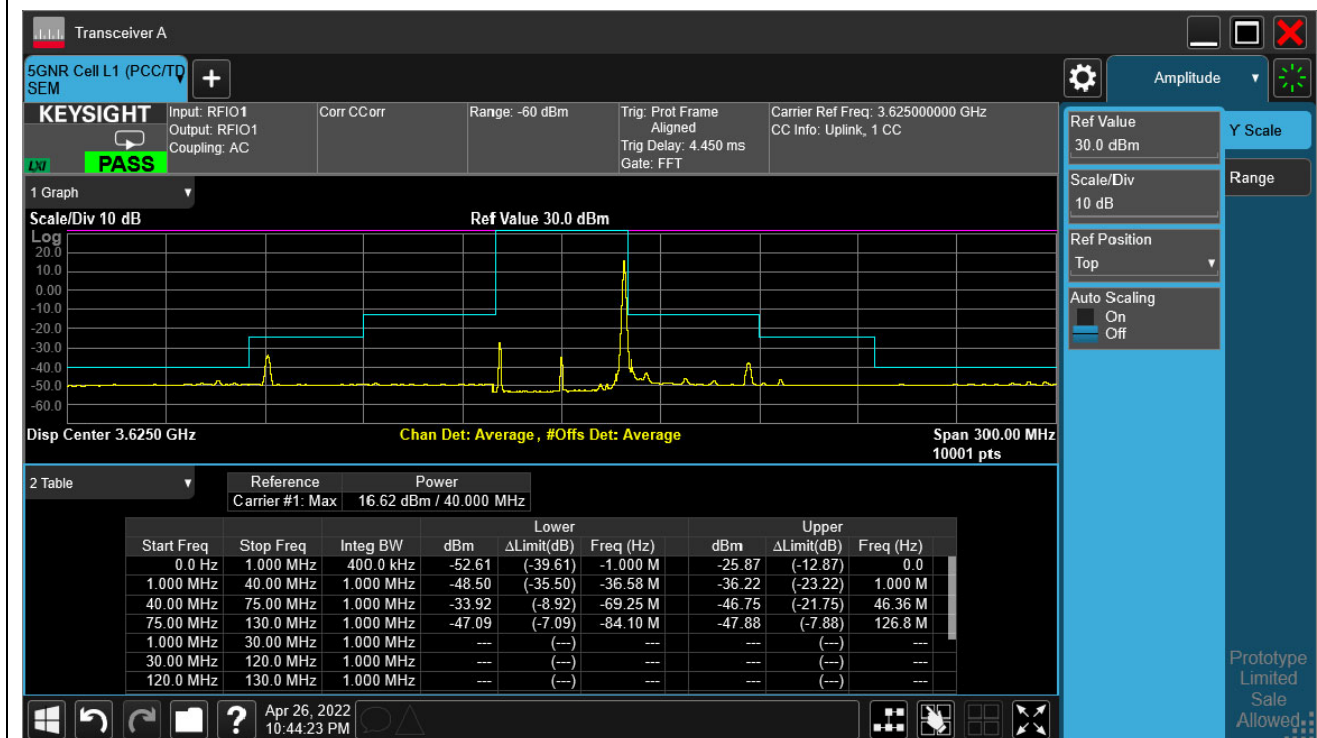
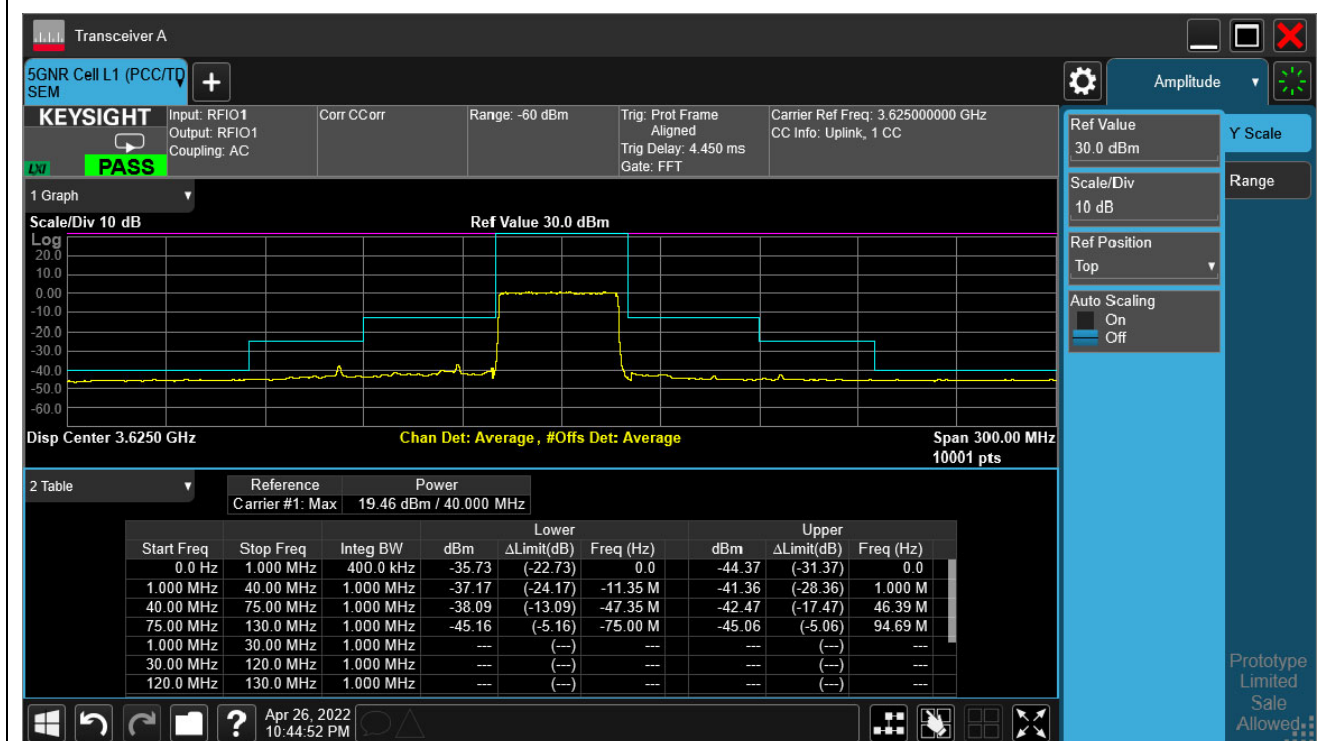


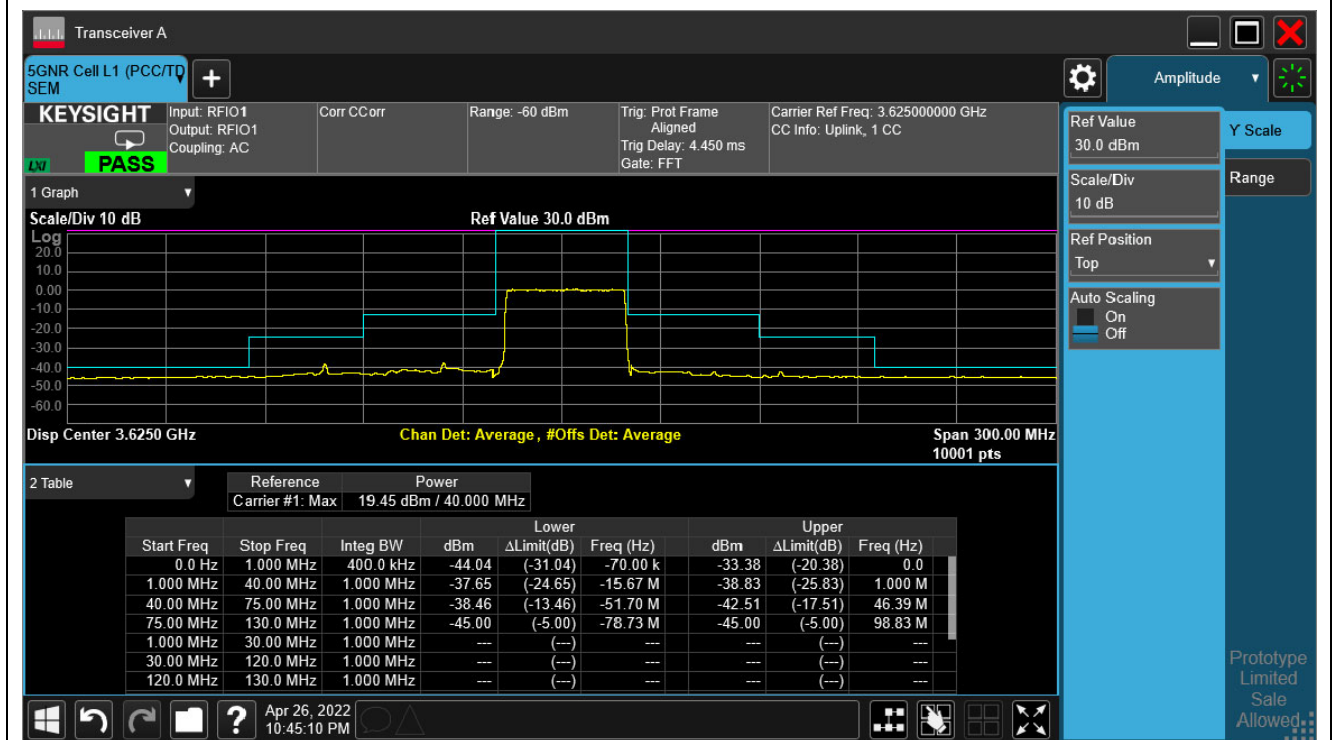
40 MHz / pi/2 BPSK / CH641666 / 1RB105



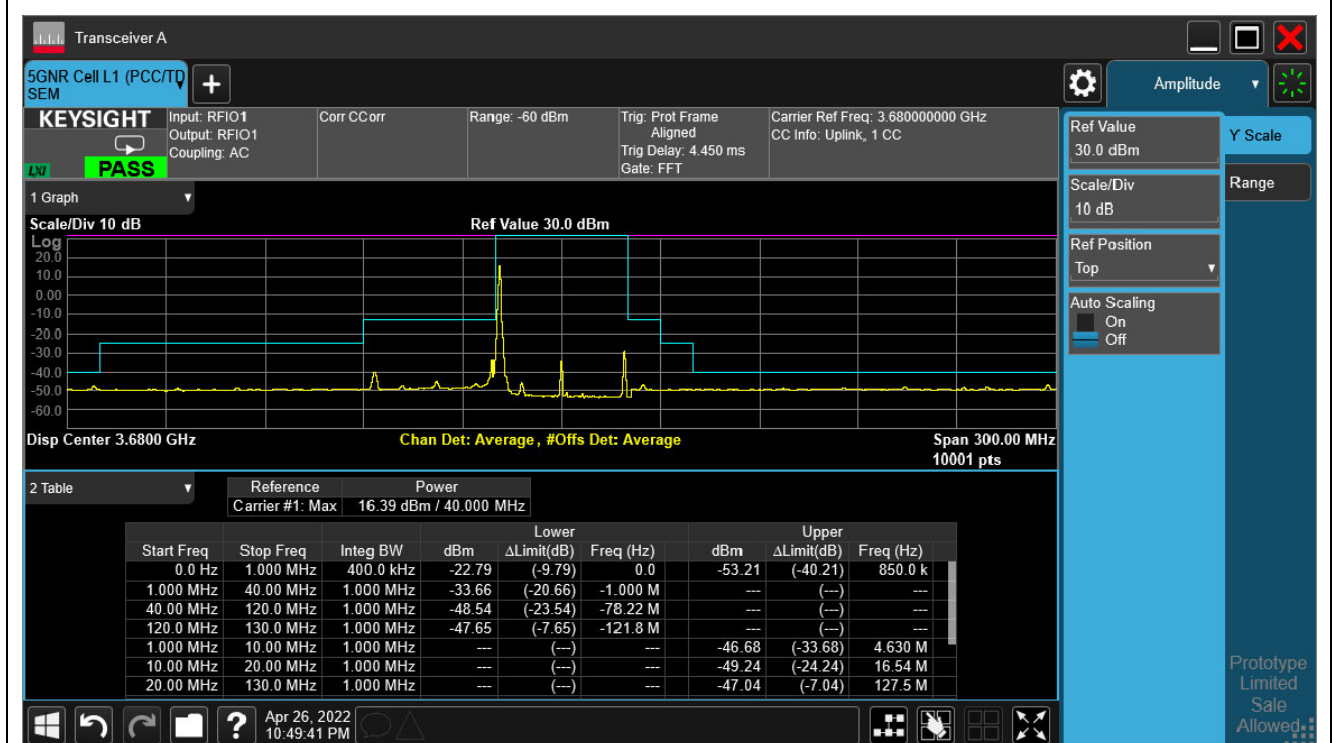
40 MHz / pi/2 BPSK / CH641666 / 100RB0



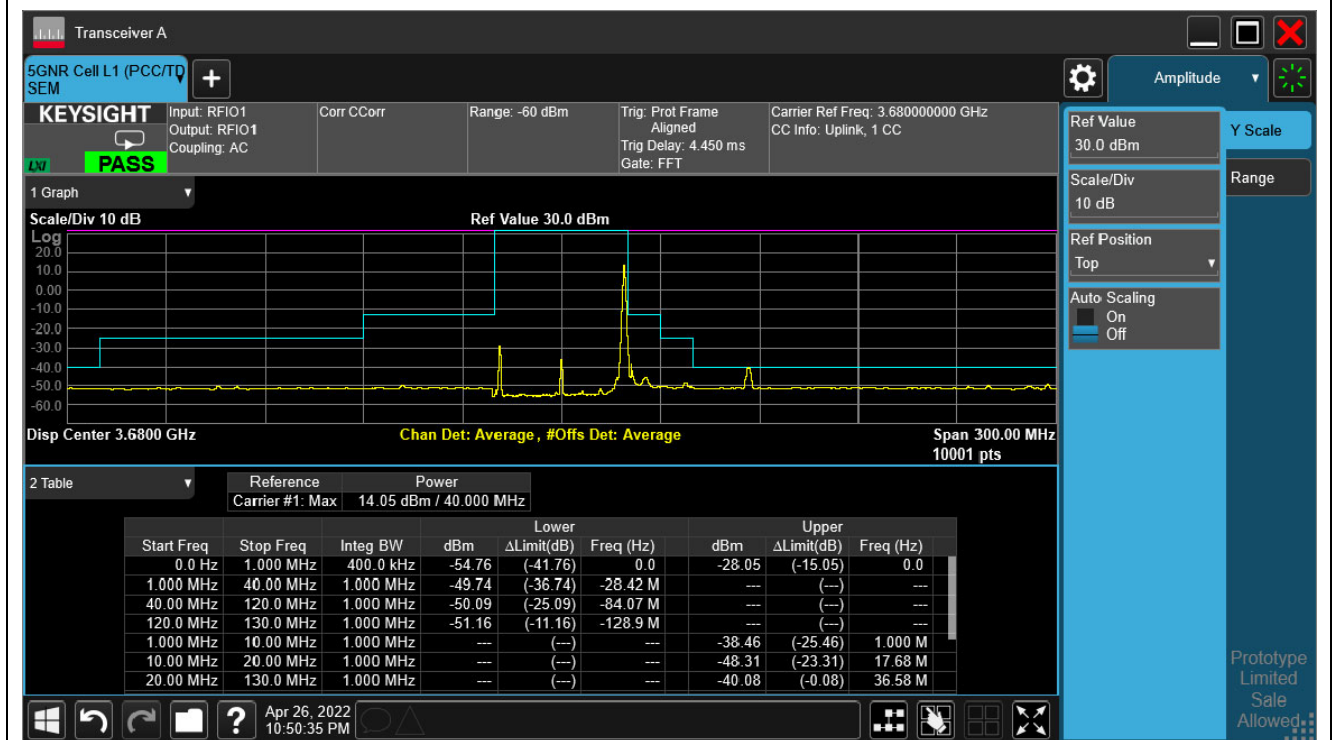
40 MHz / pi/2 BPSK / CH641666 / 100RB6



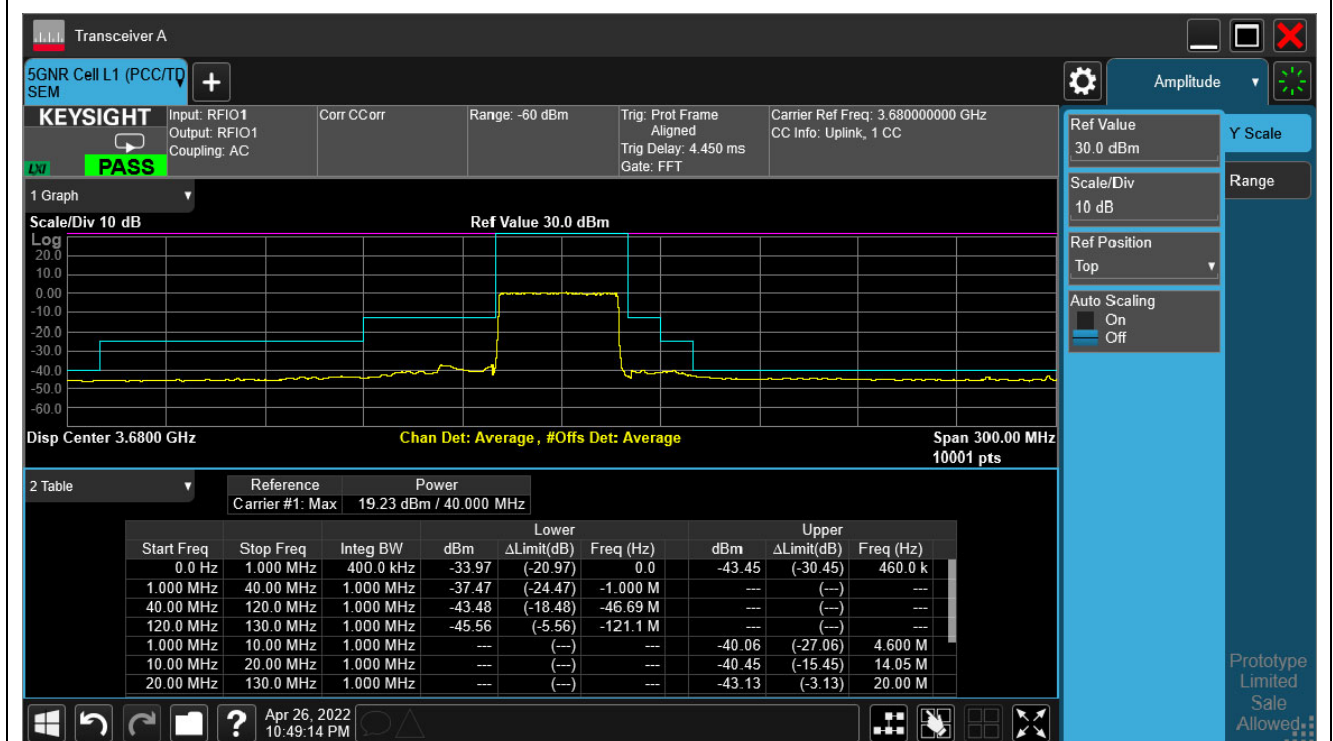
40 MHz / pi/2 BPSK / CH645332 / 1RB0



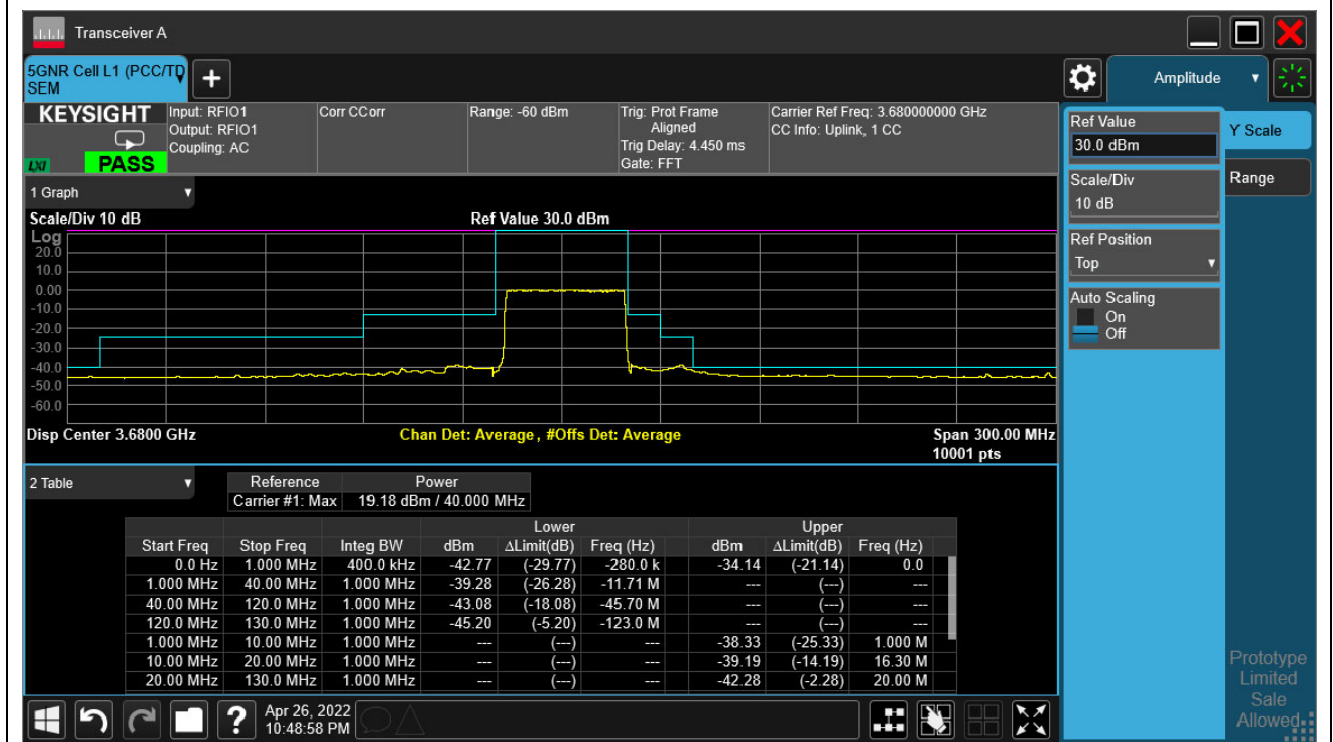
40 MHz / pi/2 BPSK / CH645332 / 1RB105



40 MHz / pi/2 BPSK / CH645332 / 100RB0



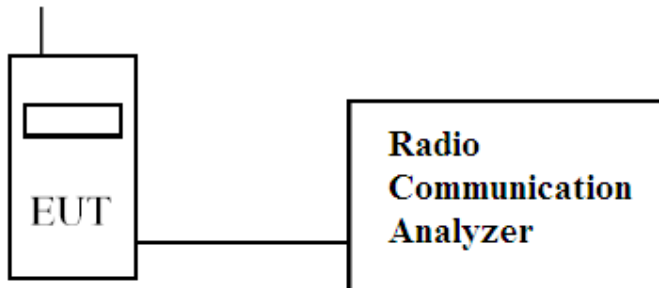
40 MHz / pi/2 BPSK / CH645332 / 100RB6



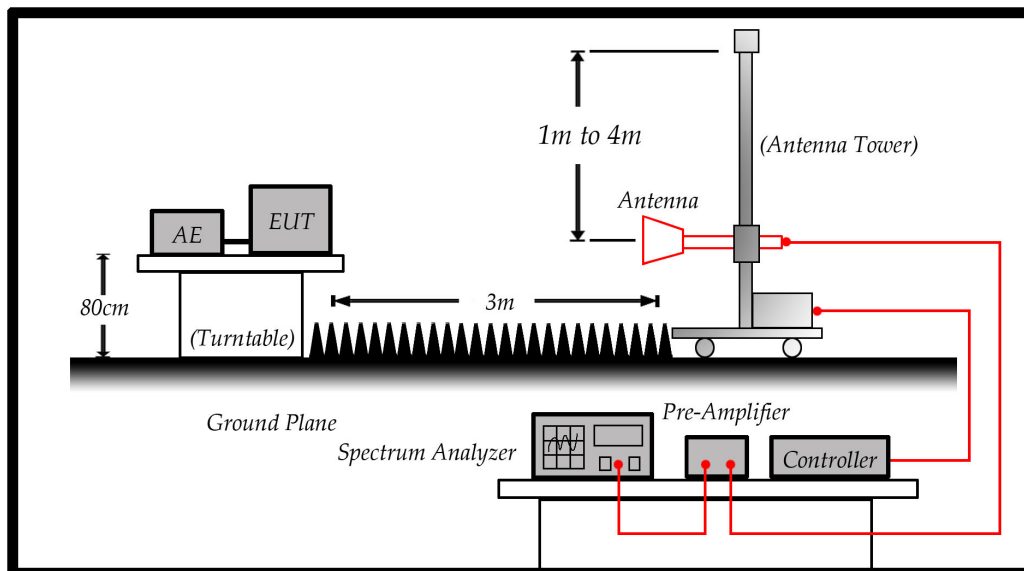
5. Spurious Emissions

5.1. Test Setup

Conducted Spurious Emission.



Radiated Spurious.



Note: The Worst case Mode is QPSK Mode for Radiated spurious emissions.

5.2. Test Limit

Limit: <-40 dBm

$43 + 10\log(P)$ down on the carrier where P is the power in Watts.

5.3. Test Procedure

In accordance with Part 2.1051, 96.41, the spurious emissions from the antenna terminal were measured. The transmitter output power was attenuated using a combination of filters and attenuators and the frequency spectrum investigated from 30MHz to 40GHz. The EUT was set to transmit on full power. The EUT was tested on Low, middle and High channels for both power levels. The resolution and video bandwidth was set to 1MHz/3MHz in accordance with Part 2.1051, 96.41. The spectrum analyzer detector was set to Max Hold. In addition, measurements were made up to the 10th harmonic of the fundamental. The device was then replaced with a substitution antenna, which input signal was adjusted until the received level matched that of the previously detected emission.

- (1) The EUT is tested with maximum rated TX power via the Base Station simulator.
- (2) The EUT is tested in three orthogonal planes, The worst case was showing in this report.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to TIA/EIA 603-E on radiated measurement.

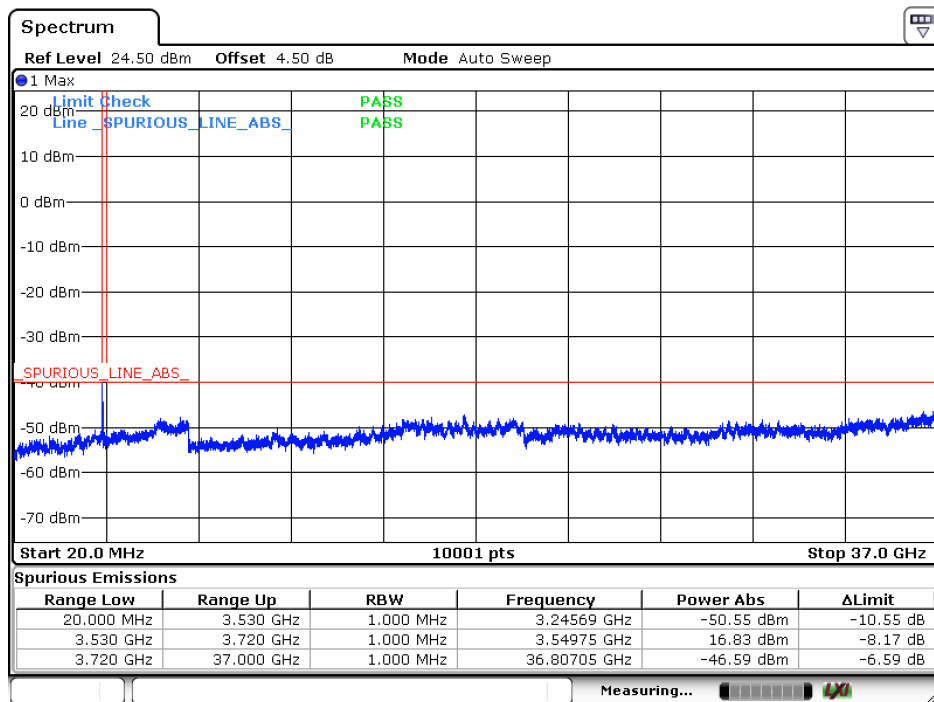
5.4. Test Specification

According to Part 2.1051, 96.41

5.5. Test Result of Conducted Spurious Emission

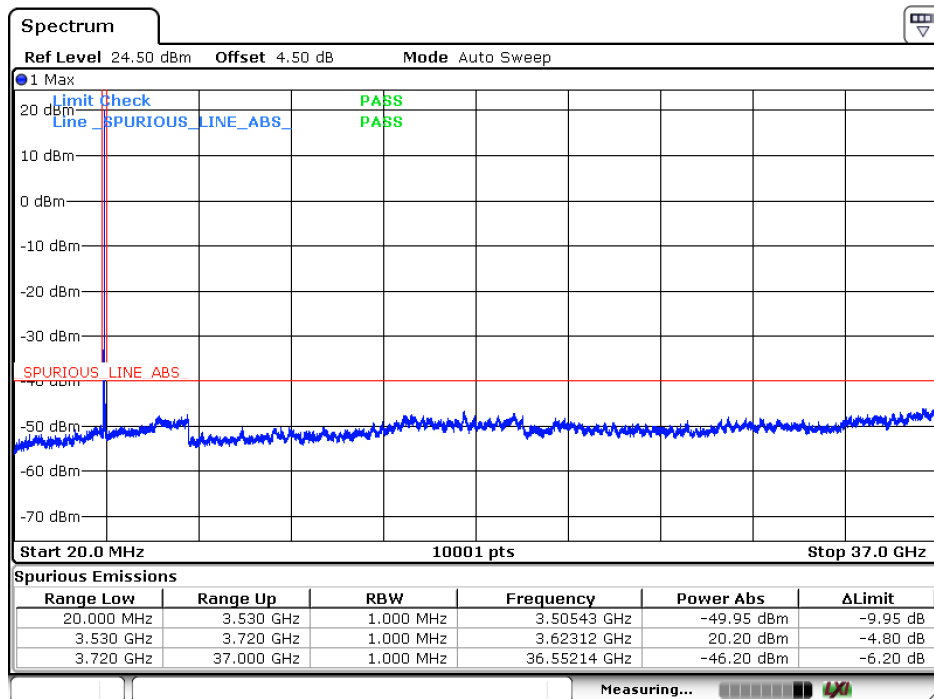
Mode 1: LTE Band 48

5 MHz / QPSK / CH55265 / 1RB



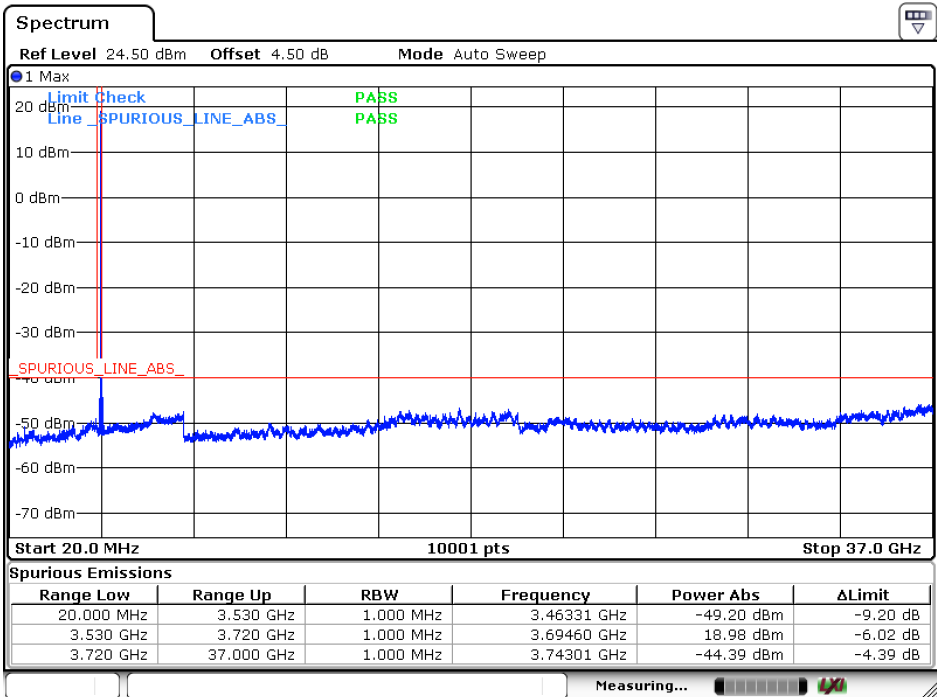
Date: 14.APR.2022 11:38:18

5 MHz / QPSK / CH55990 / 1RB



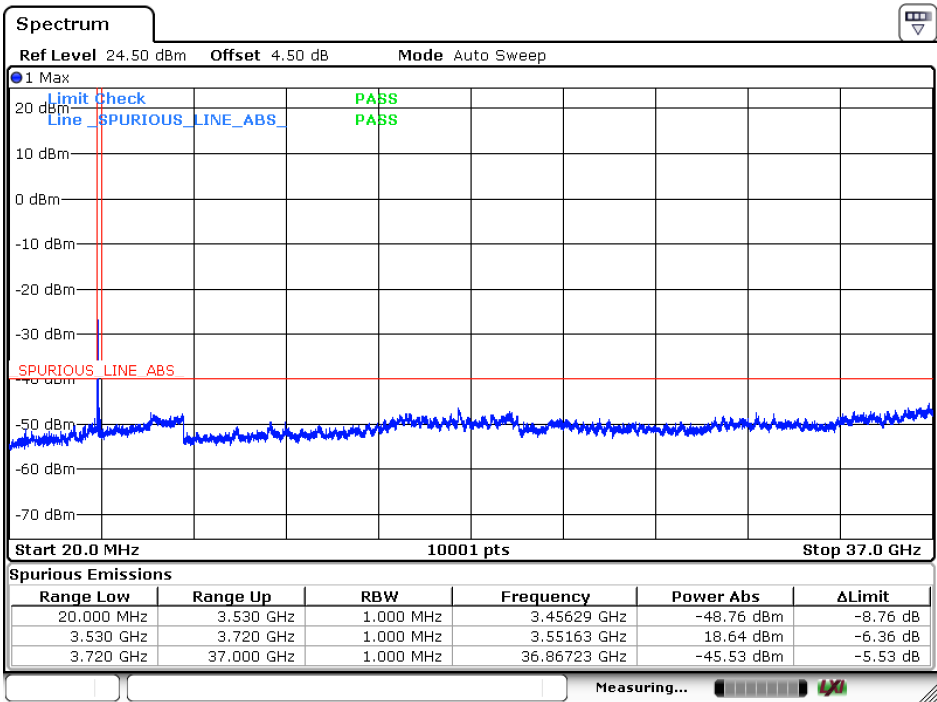
Date: 14.APR.2022 11:38:47

5 MHz / QPSK / CH56715 / 1RB



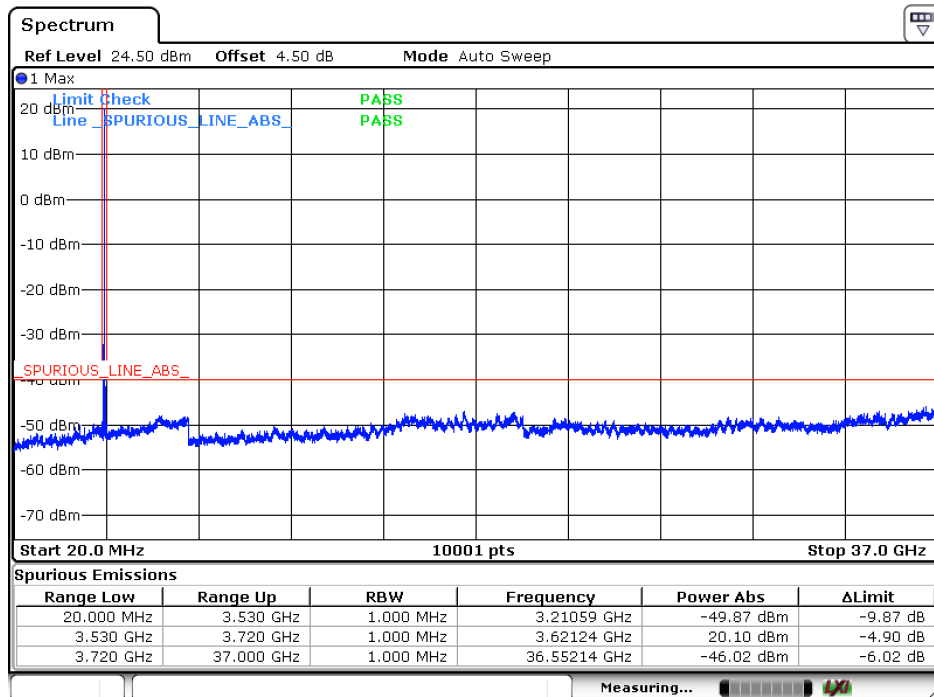
Date: 14.APR.2022 11:39:26

10 MHz / QPSK / CH55290 / 1RB



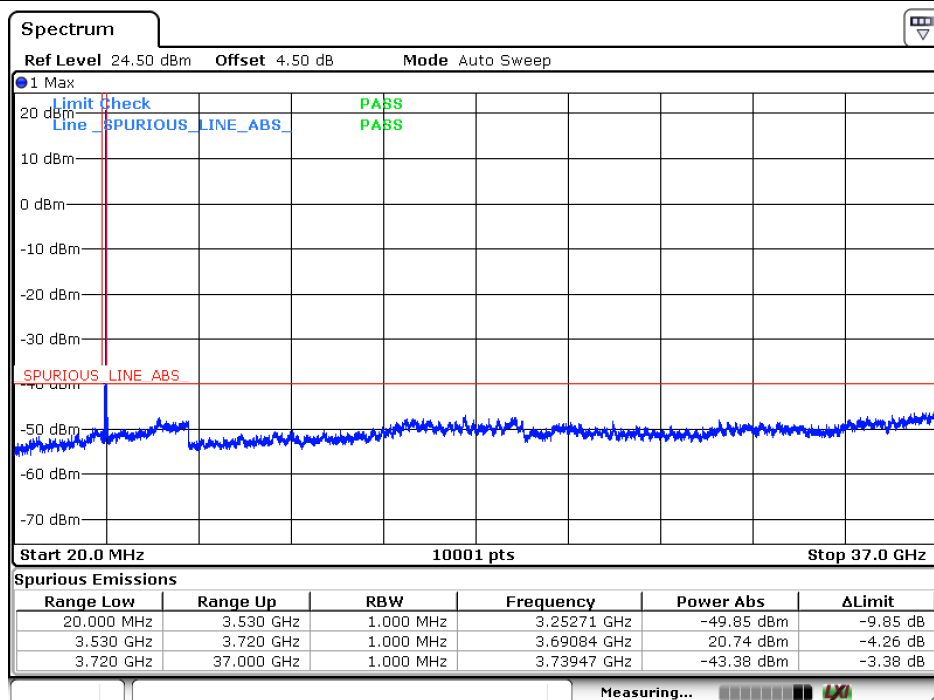
Date: 14.APR.2022 11:40:19

10 MHz / QPSK / CH55990 / 1RB



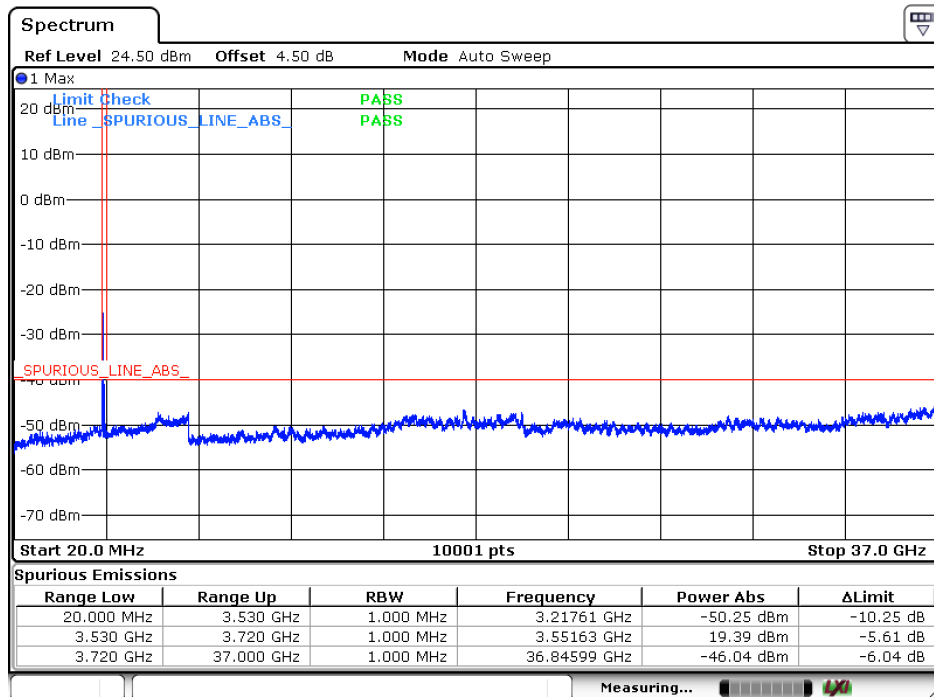
Date: 14.APR.2022 11:42:47

10 MHz / QPSK / CH56690 / 1RB



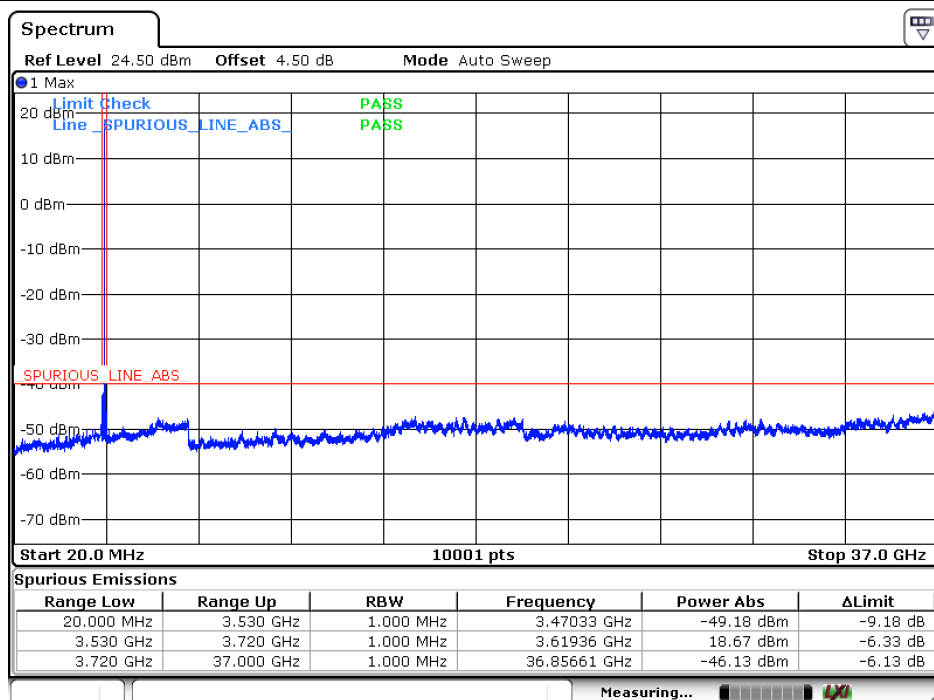
Date: 14.APR.2022 11:43:10

15 MHz / QPSK / CH55315 / 1RB



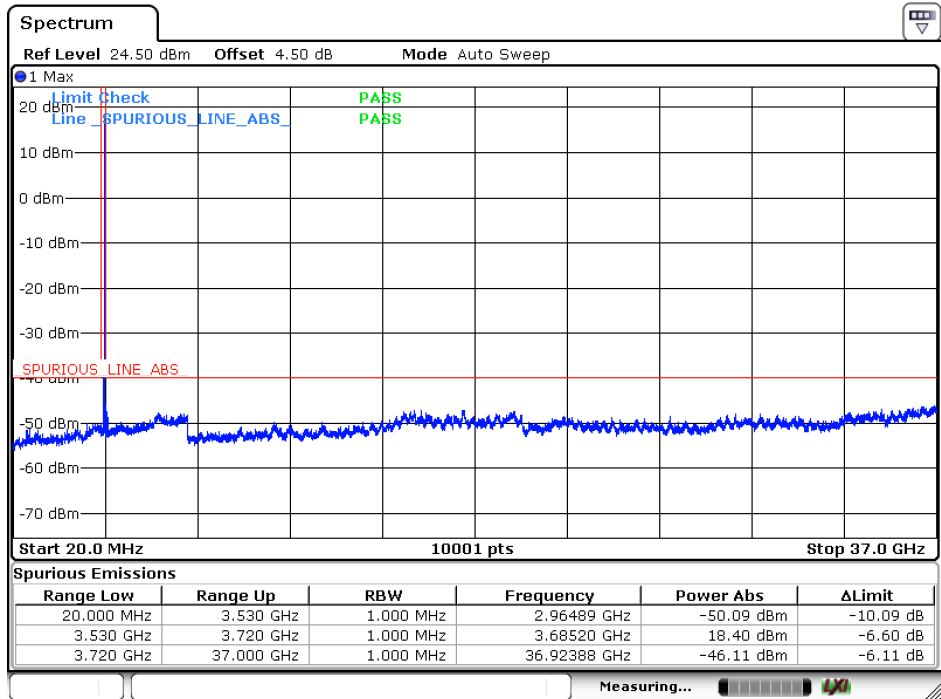
Date: 14.APR.2022 11:44:05

15 MHz / QPSK / CH55990 / 1RB



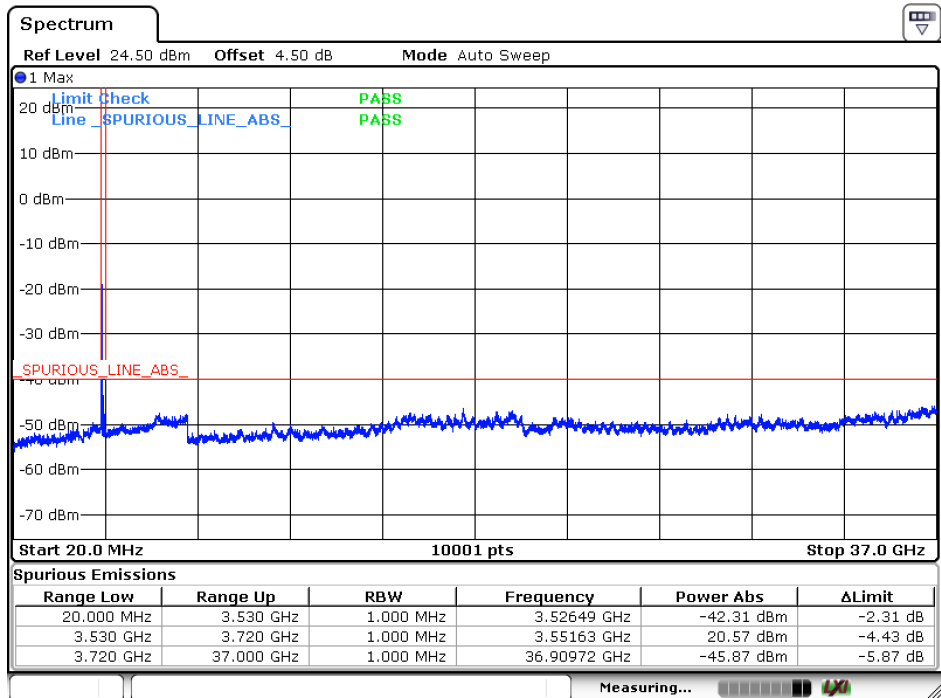
Date: 14.APR.2022 11:44:29

15 MHz / QPSK / CH56665 / 1RB



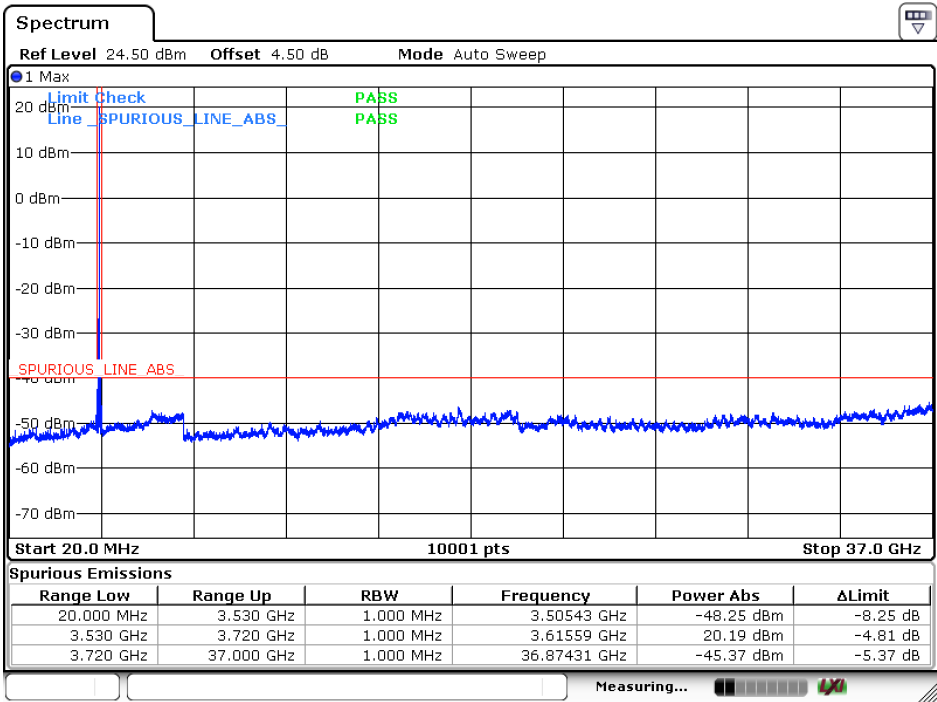
Date: 14.APR.2022 11:44:54

20 MHz / QPSK / CH55340 / 1RB



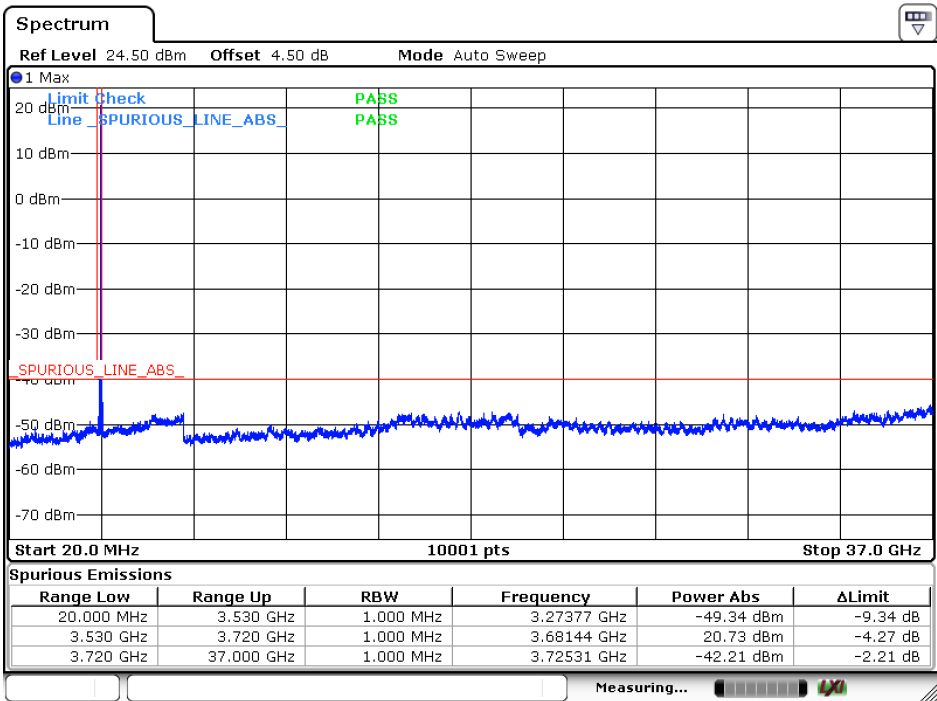
Date: 14.APR.2022 11:45:43

20 MHz / QPSK / CH55990 / 1RB



Date: 14.APR.2022 11:46:34

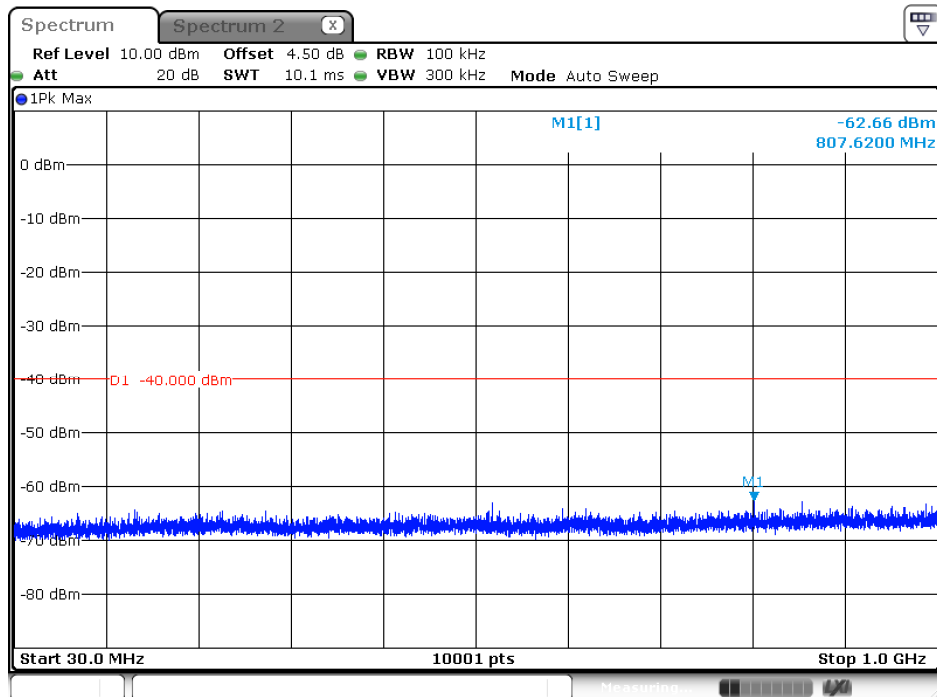
20 MHz / QPSK / CH56640 / 1RB



Date: 14.APR.2022 11:47:20

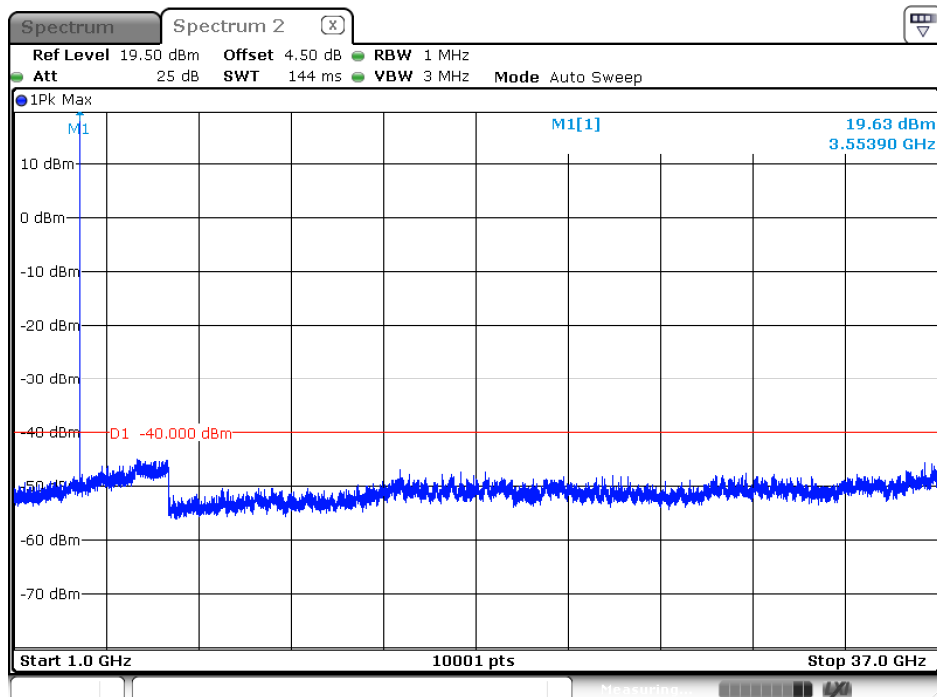
Mode 2: 5G NR n48

10 MHz / pi/2 BPSK / CH637000 / 1RB (Below 1GHz)



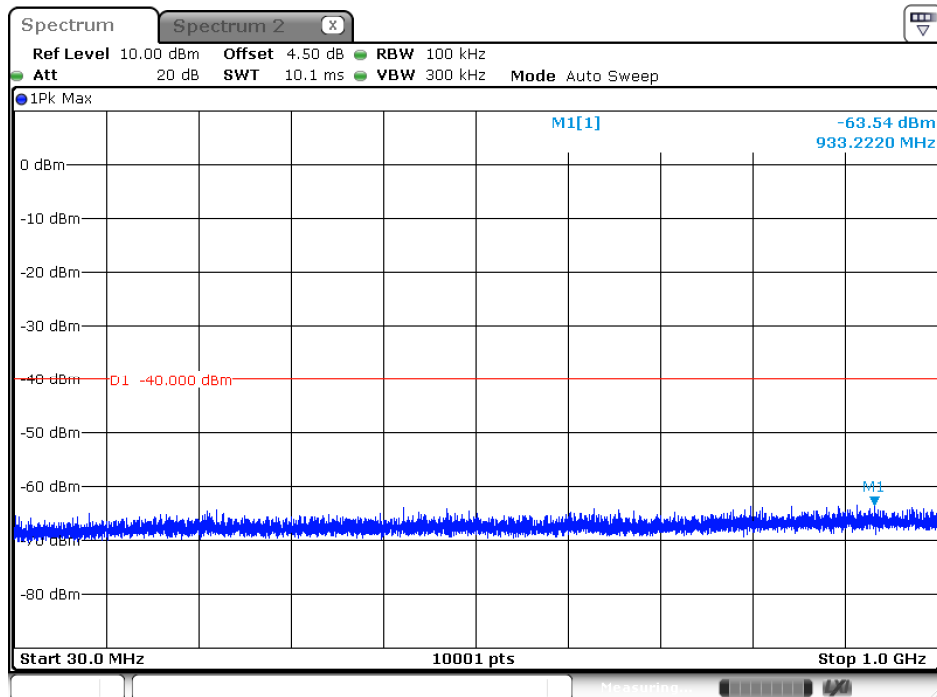
Date: 28.APR.2022 20:51:50

10 MHz / pi/2 BPSK / CH637000 / 1RB (Above 1GHz)



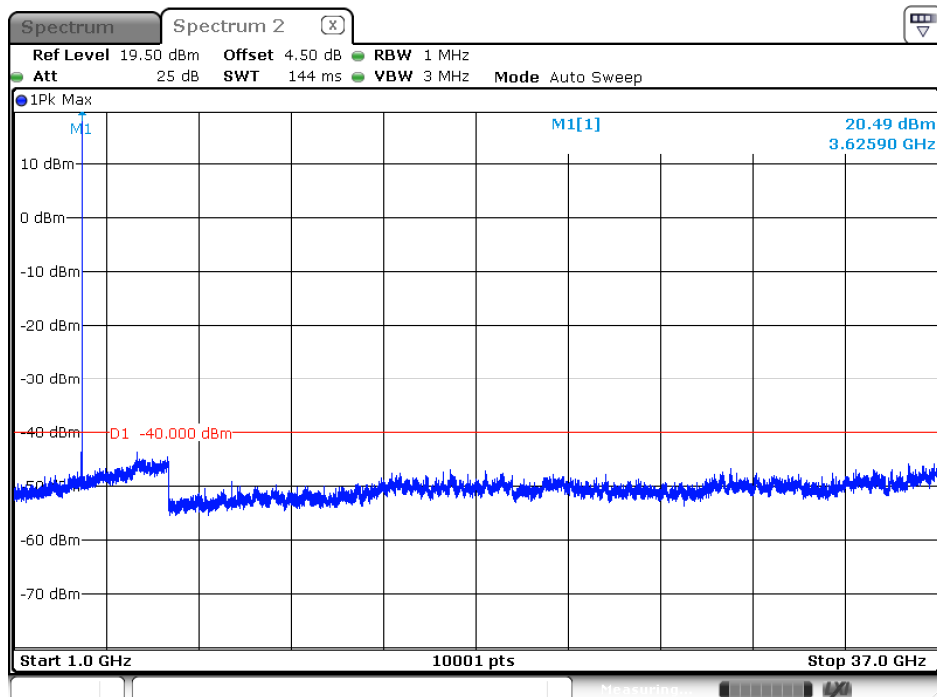
Date: 28.APR.2022 21:13:10

10 MHz / pi/2 BPSK / CH641666 / 1RB (Below 1GHz)



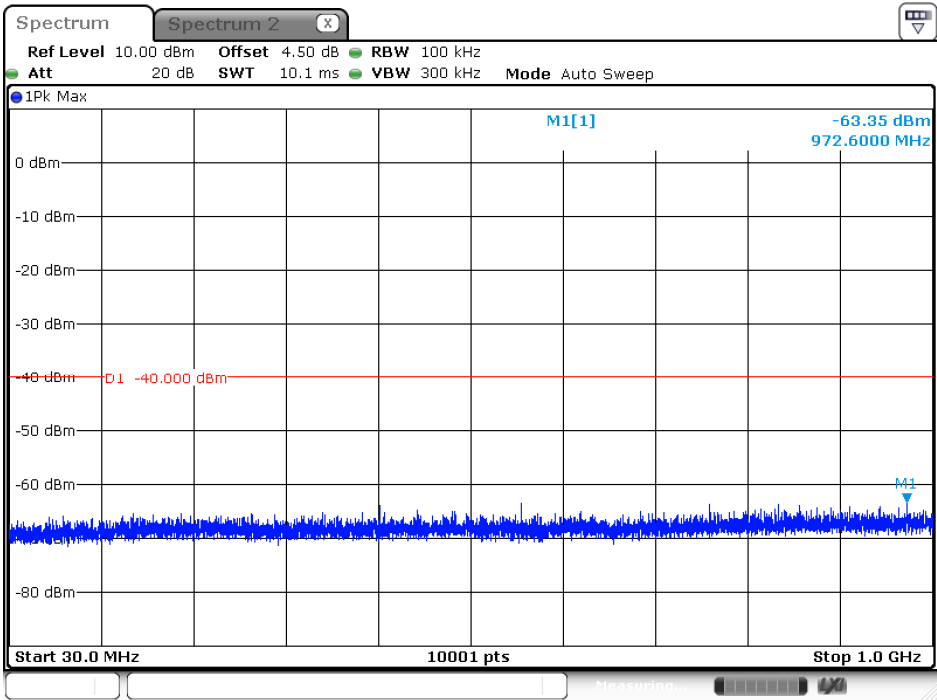
Date: 28.APR.2022 21:16:26

10 MHz / pi/2 BPSK / CH641666 / 1RB (Above 1GHz)



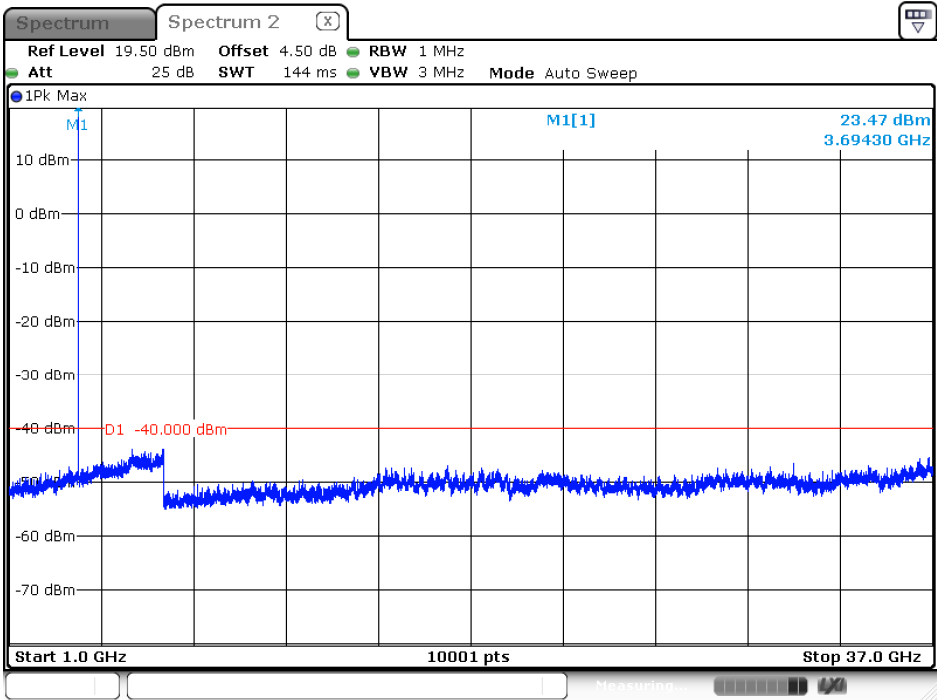
Date: 28.APR.2022 21:16:01

10 MHz / pi/2 BPSK / CH646332 / 1RB (Below 1GHz)



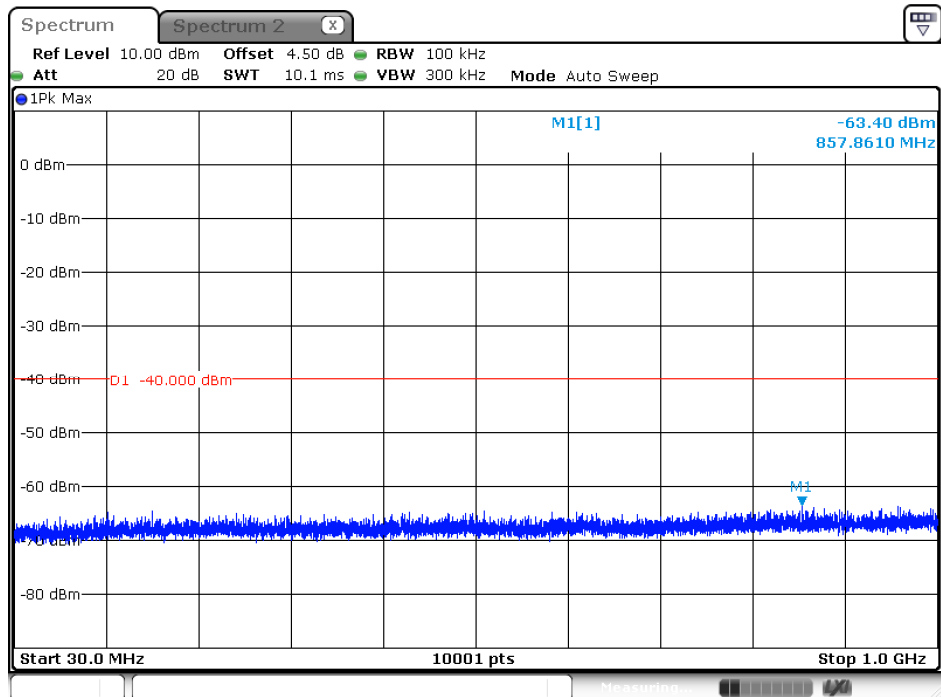
Date: 28.APR.2022 21:17:15

10 MHz / pi/2 BPSK / CH646332 / 1RB (Above 1GHz)



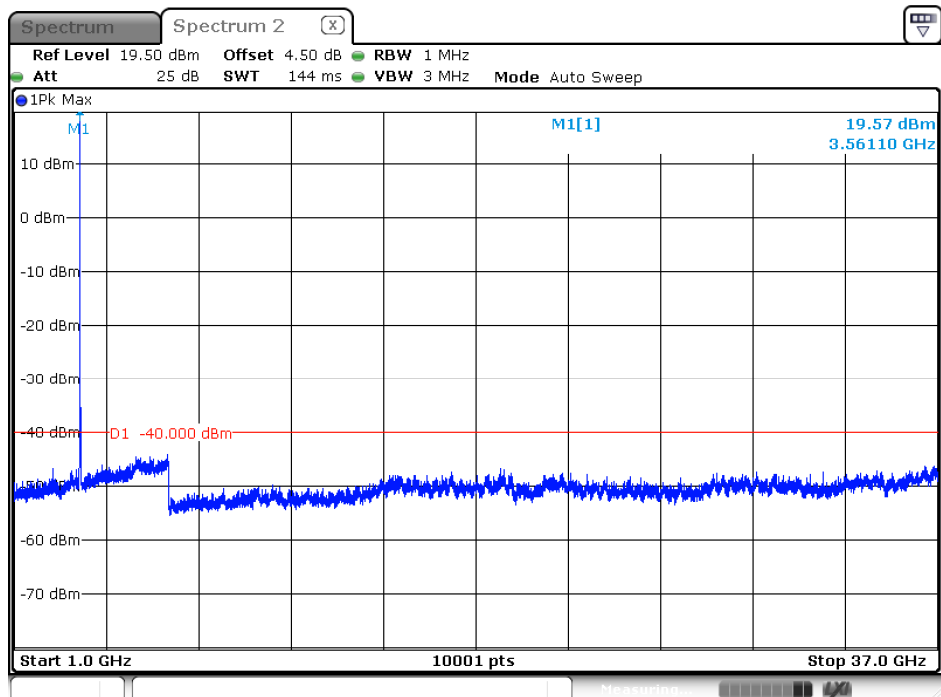
Date: 28.APR.2022 21:18:13

20 MHz / pi/2 BPSK / CH637334 / 1RB (Below 1GHz)



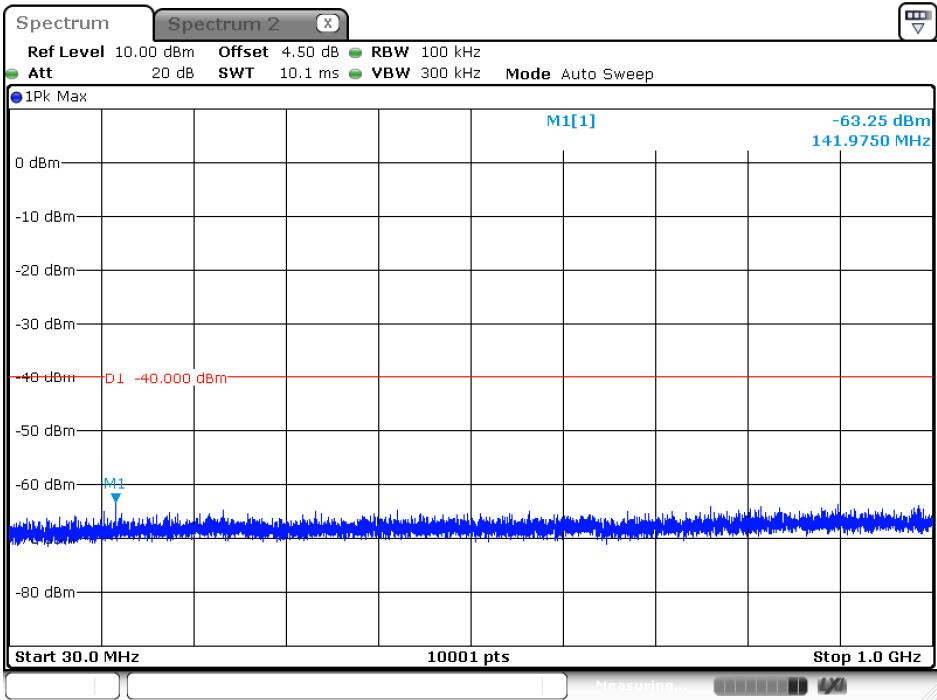
Date: 28.APR.2022 21:19:40

20 MHz / pi/2 BPSK / CH637334 / 1RB (Above 1GHz)



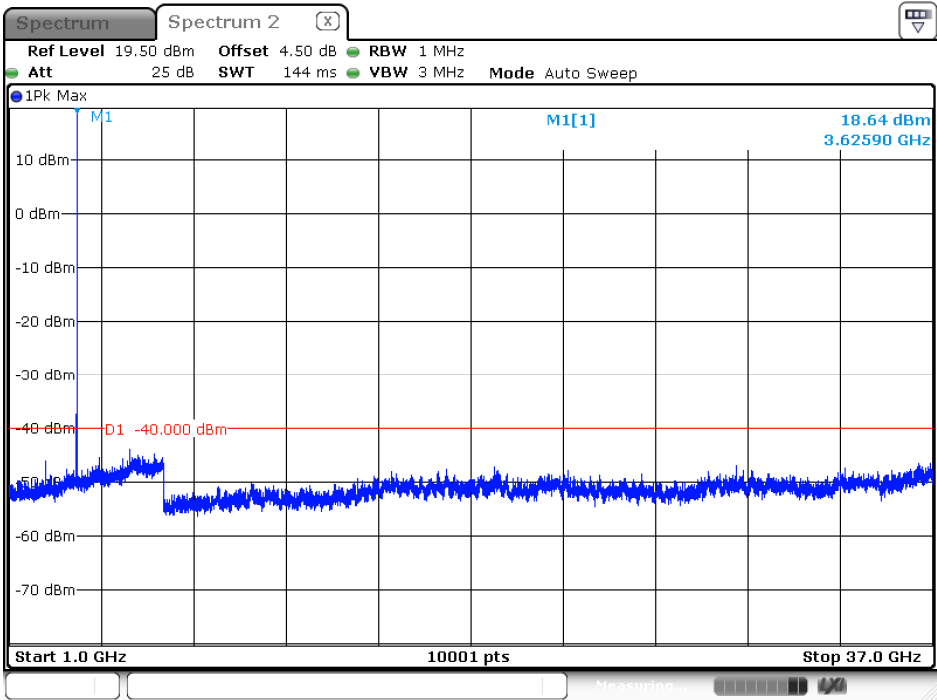
Date: 28.APR.2022 21:20:38

20 MHz / pi/2 BPSK / CH641666 / 1RB (Below 1GHz)



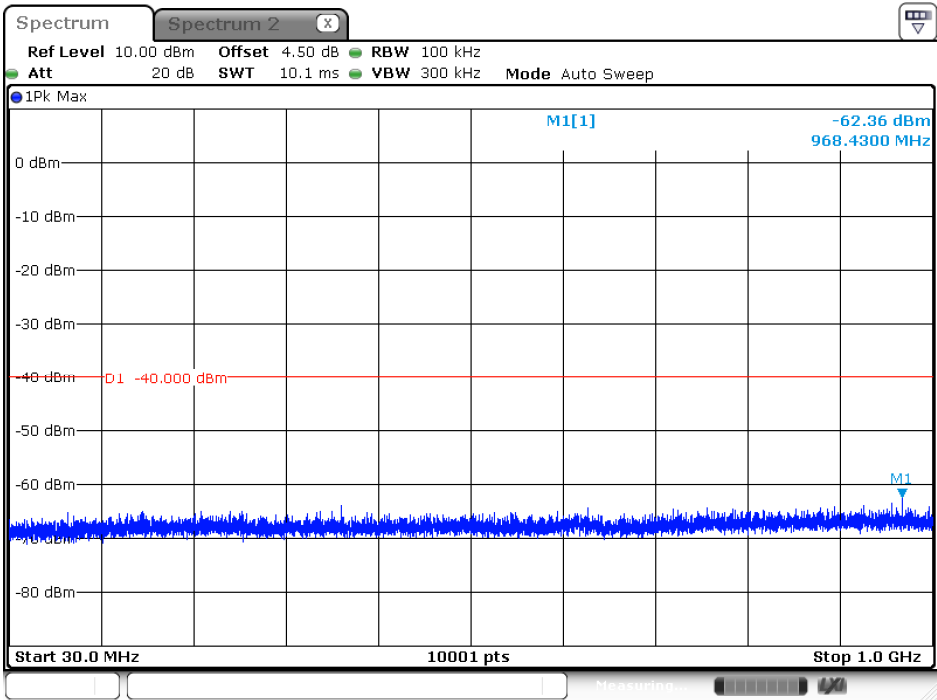
Date: 28.APR.2022 21:22:08

20 MHz / pi/2 BPSK / CH641666 / 1RB (Above 1GHz)



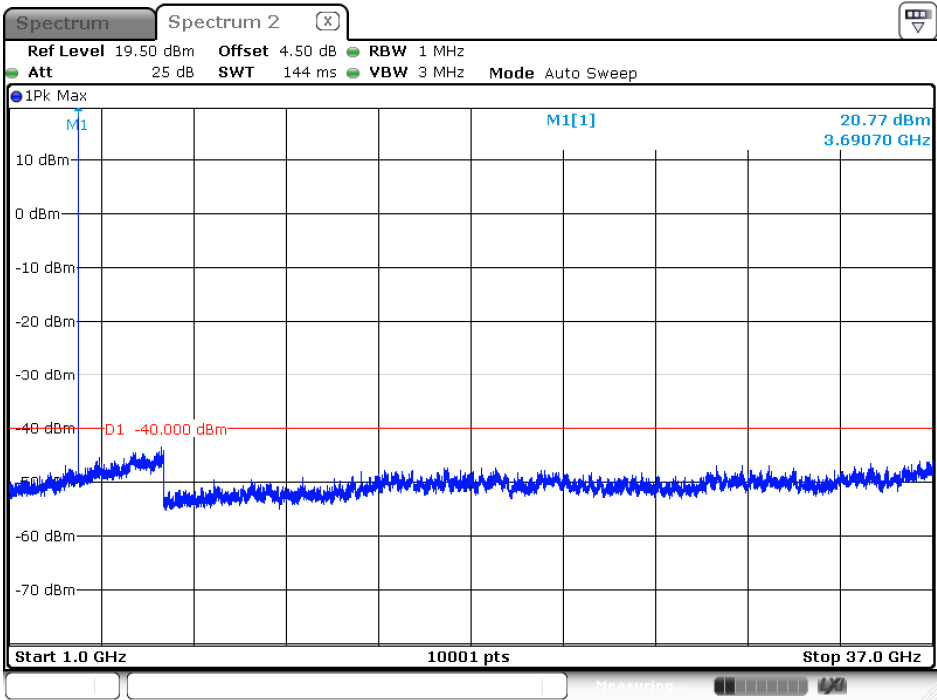
Date: 28.APR.2022 21:21:38

20 MHz / pi/2 BPSK / CH646000 / 1RB (Below 1GHz)



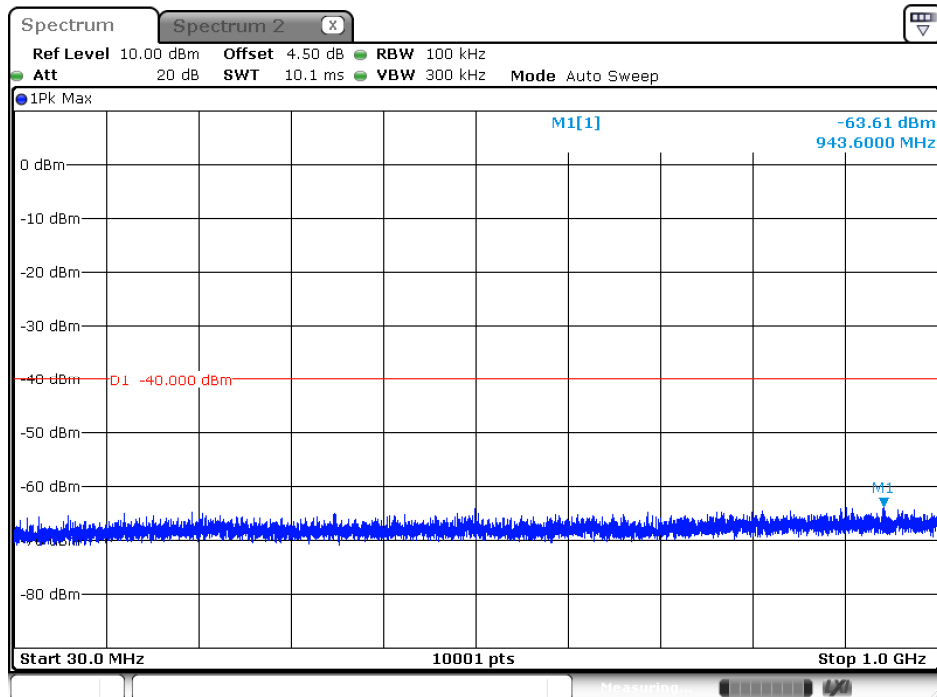
Date: 28.APR.2022 21:23:45

20 MHz / pi/2 BPSK / CH646000 / 1RB (Above 1GHz)



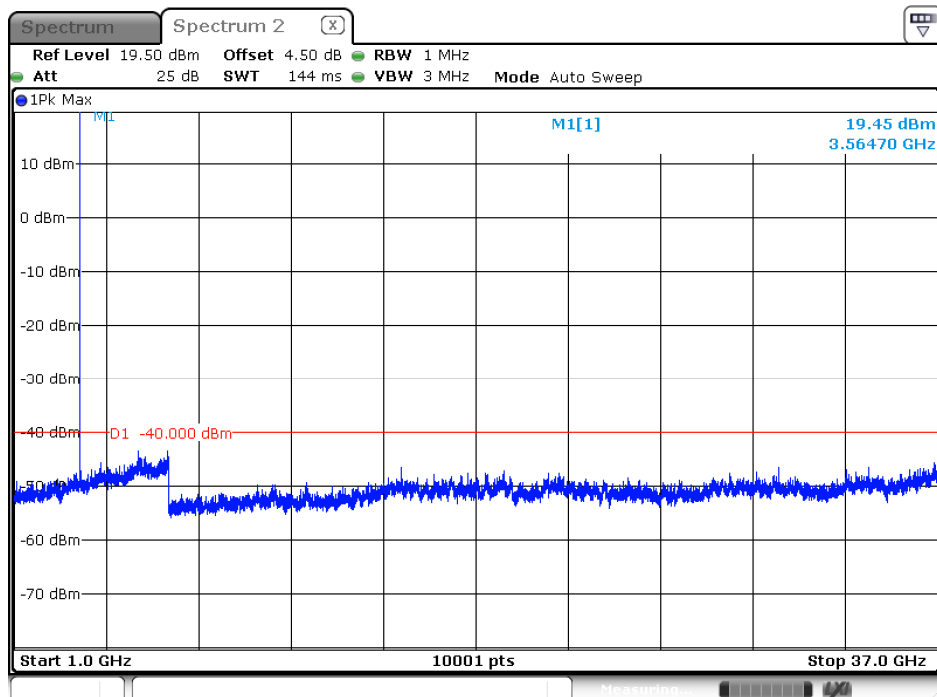
Date: 28.APR.2022 21:25:05

30 MHz / pi/2 BPSK / CH637668 / 1RB (Below 1GHz)



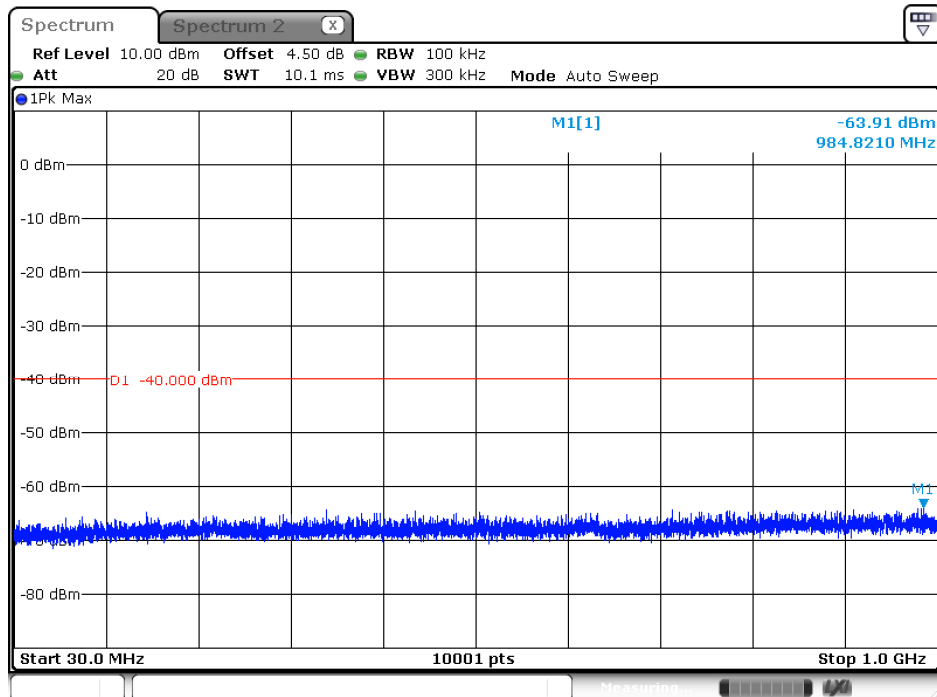
Date: 28.APR.2022 21:25:52

30 MHz / pi/2 BPSK / CH637668 / 1RB (Above 1GHz)



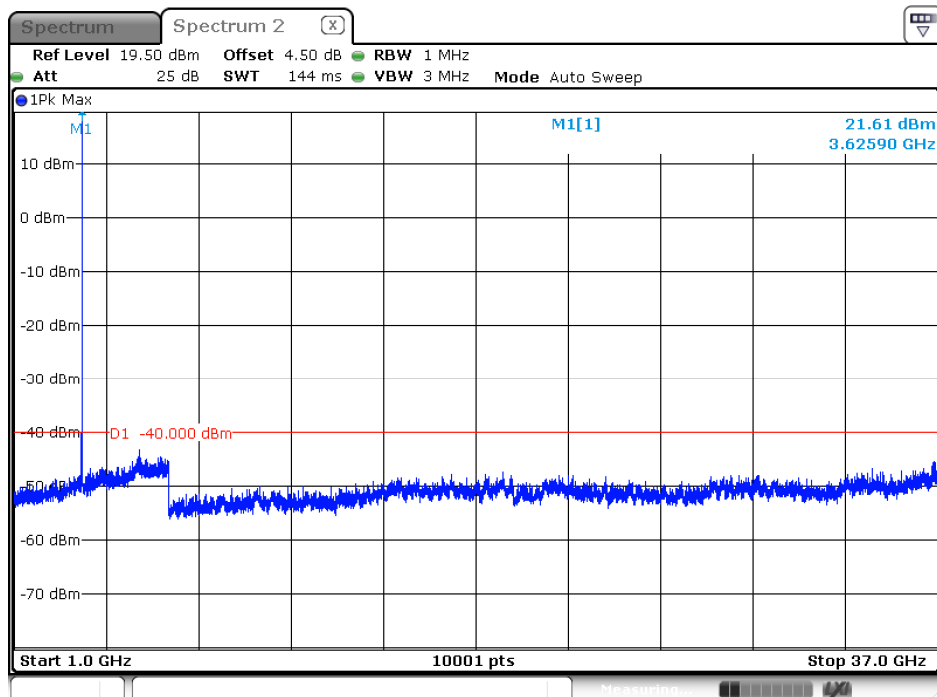
Date: 28.APR.2022 21:27:31

30 MHz / pi/2 BPSK / CH641666 / 1RB (Below 1GHz)



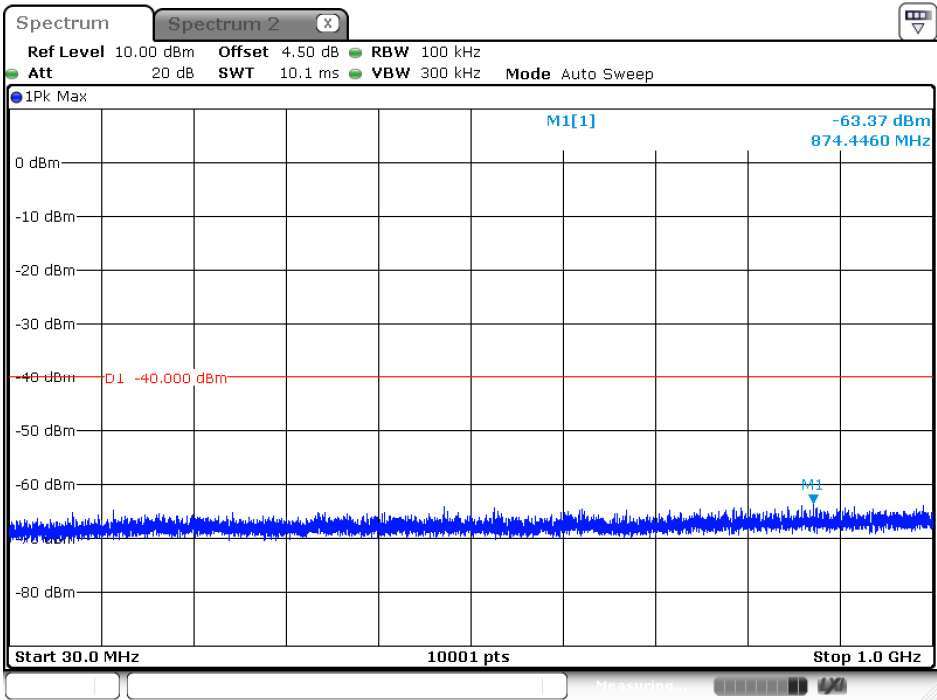
Date: 28.APR.2022 21:28:59

30 MHz / pi/2 BPSK / CH641666 / 1RB (Above 1GHz)



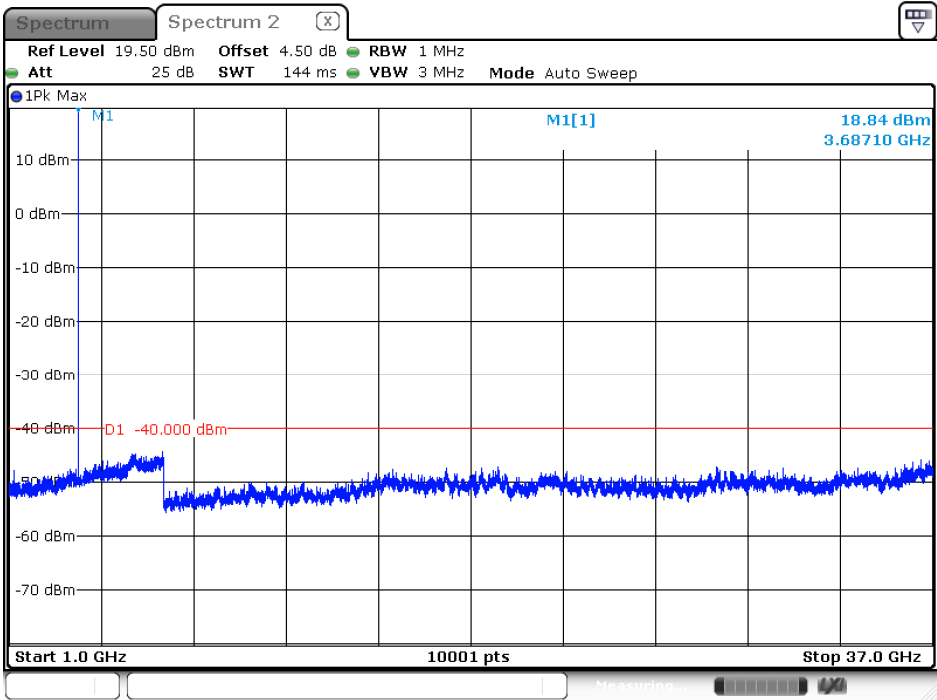
Date: 28.APR.2022 21:28:37

30 MHz / pi/2 BPSK / CH645666 / 1RB (Below 1GHz)



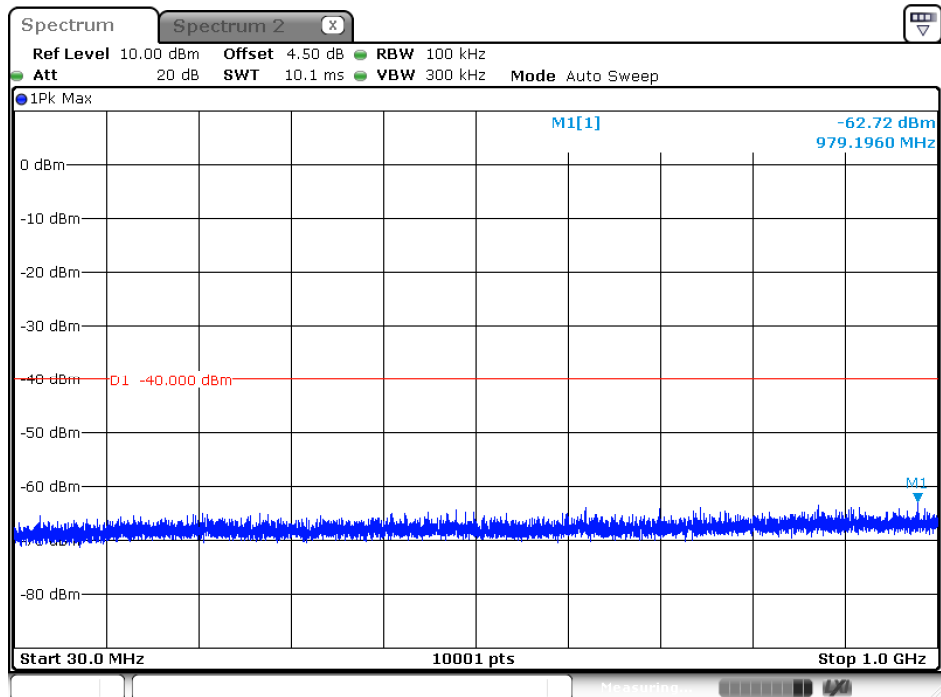
Date: 28.APR.2022 21:30:09

30 MHz / pi/2 BPSK / CH645666 / 1RB (Above 1GHz)



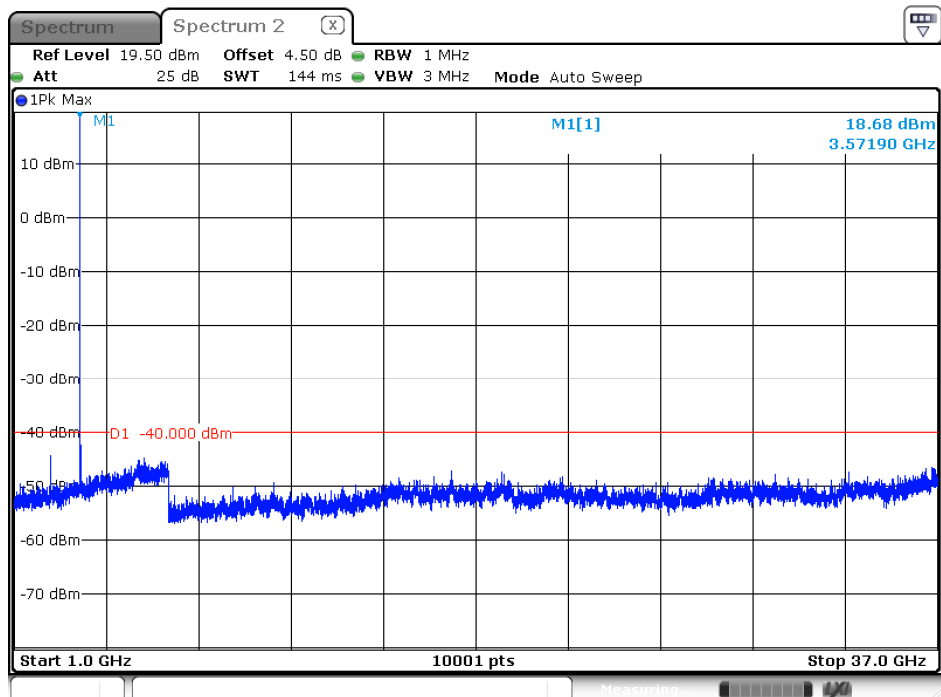
Date: 28.APR.2022 21:30:42

40 MHz / pi/2 BPSK / CH638000 / 1RB (Below 1GHz)



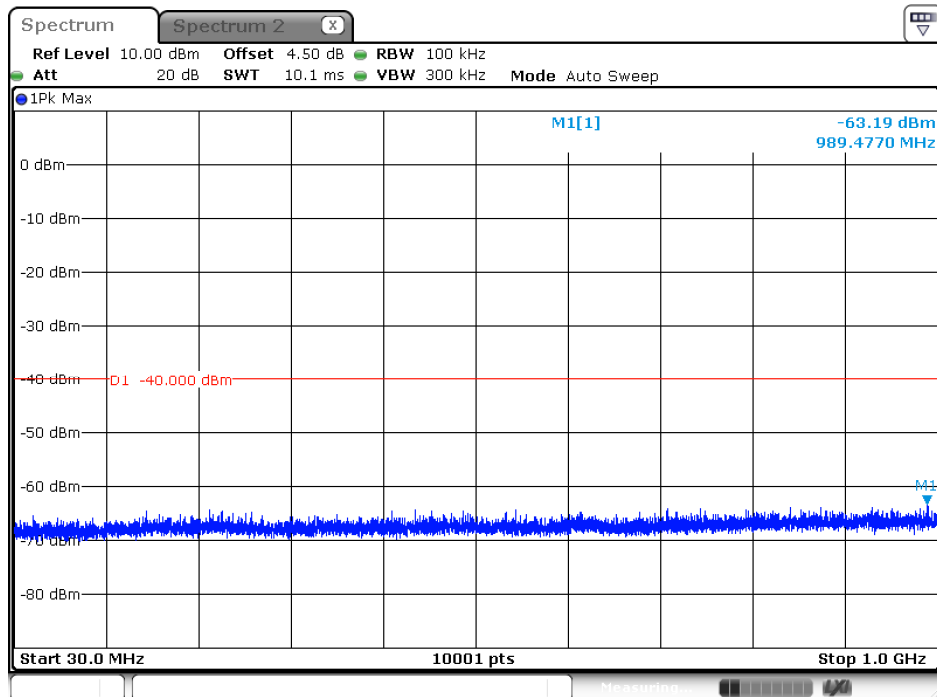
Date: 28.APR.2022 21:33:05

40 MHz / pi/2 BPSK / CH638000 / 1RB (Above 1GHz)



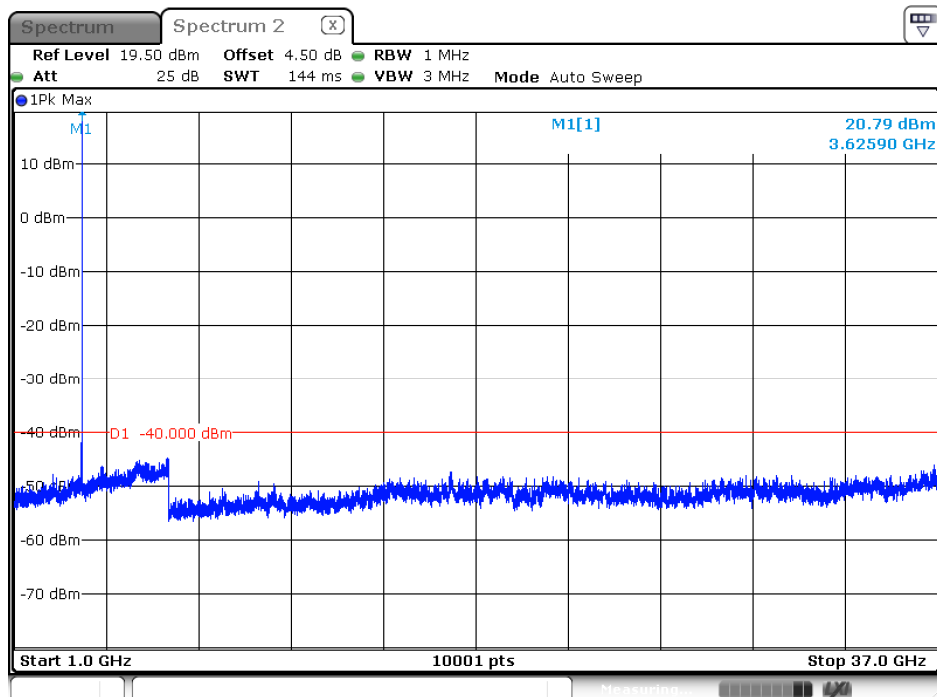
Date: 28.APR.2022 21:32:37

40 MHz / pi/2 BPSK / CH641666 / 1RB (Below 1GHz)



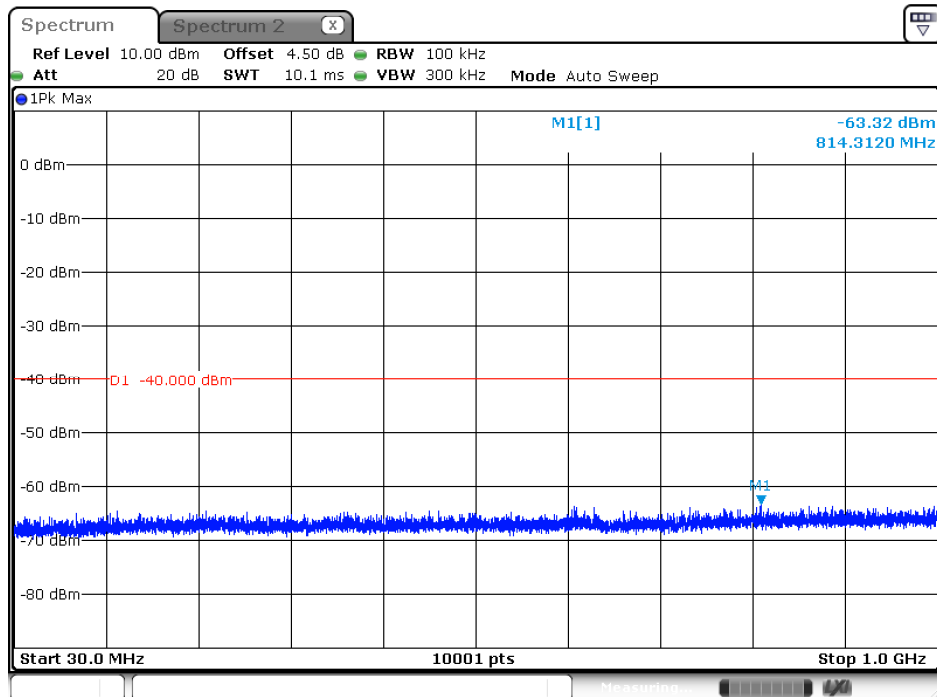
Date: 28.APR.2022 21:33:46

40 MHz / pi/2 BPSK / CH641666 / 1RB (Above 1GHz)



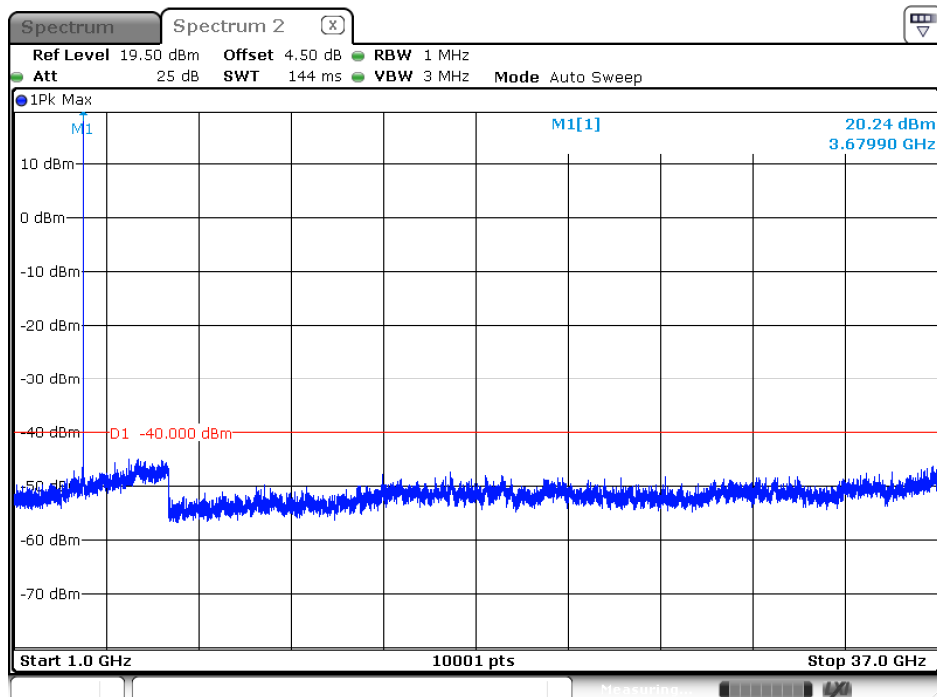
Date: 28.APR.2022 21:35:14

40 MHz / pi/2 BPSK / CH645332 / 1RB (Below 1GHz)



Date: 28.APR.2022 21:36:39

40 MHz / pi/2 BPSK / CH645332 / 1RB (Above 1GHz)

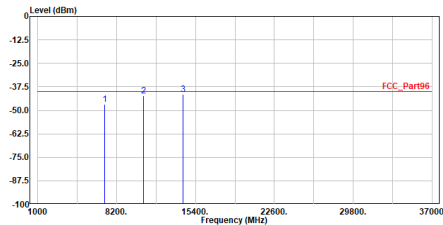


Date: 28.APR.2022 21:36:03

5.6. Test Result of Field Strength of Spurious Radiation

Mode 1: LTE Band 48

Site :HY-CB01
Condition :3m ,Horizontal
Mode :LTE_B48_20M_Ch55340
Test by :Daniel Wu

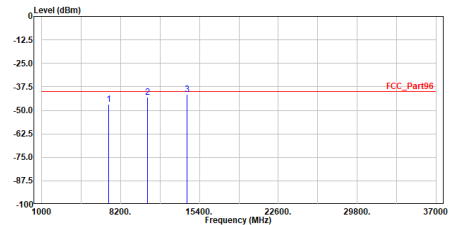


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBm	dBm	Limit	Level	dB	
1	7120.000	-46.63	-40.00	-6.63	-59.22	12.59	Peak
2	10680.000	-42.44	-40.00	-2.44	-57.13	14.69	Peak
3	14240.000	-41.38	-40.00	-1.38	-58.57	17.19	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
3. Over Limit = Level - Limit Line
4. Aux Factor = Convert E (dBuVm) to EIRP (dBm)
 $= 107 + 20\log(3) - 104.8 = 11.8 \text{ dB}$
5. The other emission levels were very low against the limit.
6. The emission under 1GHz was not included since the emission levels are very low against the limit.

Site :HY-CB01
Condition :3m ,Vertical
Mode :LTE_B48_20M_Ch55340
Test by :Daniel Wu

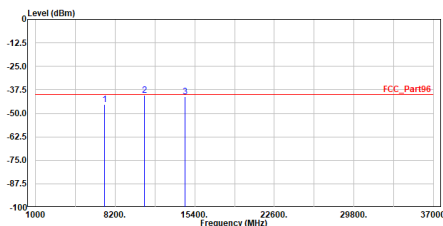


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBm	dBm	Limit	Level	dB	
1	7120.000	-46.73	-40.00	-6.73	-59.32	12.59	Peak
2	10680.000	-42.84	-40.00	-2.84	-57.53	14.69	Peak
3	14240.000	-41.50	-40.00	-1.50	-58.69	17.19	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
3. Over Limit = Level - Limit Line
4. Aux Factor = Convert E (dBuVm) to EIRP (dBm)
 $= 107 + 20\log(3) - 104.8 = 11.8 \text{ dB}$
5. The other emission levels were very low against the limit.
6. The emission under 1GHz was not included since the emission levels are very low against the limit.

Site :HY-CB01
Condition :3m ,Horizontal
Mode :LTE_B48_20M_Ch55990
Test by :Daniel Wu

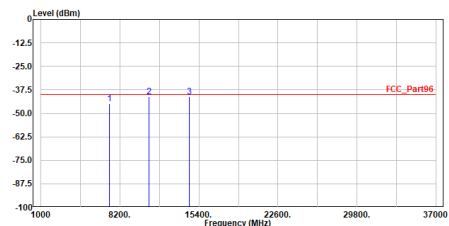


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBm	dBm	Limit	Level	dB	
1	7250.000	-45.34	-40.00	-5.34	-57.90	12.56	Peak
2	10875.000	-40.36	-40.00	-0.36	-55.36	15.00	Peak
3	14500.000	-41.25	-40.00	-1.25	-59.28	18.03	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
3. Over Limit = Level - Limit Line
4. Aux Factor = Convert E (dBuVm) to EIRP (dBm)
 $= 107 + 20\log(3) - 104.8 = 11.8 \text{ dB}$
5. The other emission levels were very low against the limit.
6. The emission under 1GHz was not included since the emission levels are very low against the limit.

Site :HY-CB01
Condition :3m ,Vertical
Mode :LTE_B48_20M_Ch55990
Test by :Daniel Wu

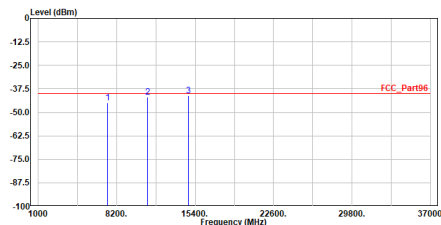


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBm	dBm	Limit	Level	dB	
1	7250.000	-44.99	-40.00	-4.99	-57.55	12.56	Peak
2	10875.000	-41.17	-40.00	-1.17	-56.17	15.00	Peak
3	14500.000	-40.98	-40.00	-0.98	-59.01	18.03	Peak

Note:

1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
3. Over Limit = Level - Limit Line
4. Aux Factor = Convert E (dBuVm) to EIRP (dBm)
 $= 107 + 20\log(3) - 104.8 = 11.8 \text{ dB}$
5. The other emission levels were very low against the limit.
6. The emission under 1GHz was not included since the emission levels are very low against the limit.

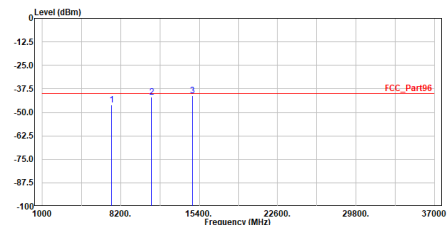
Site :HY-CB01
Condition :3m ,Horizontal
Mode :LTE_B48_20M_Ch56640
Test by :Daniel Wu



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBm	dBm	Limit	Level	dB	
1	7380.000	-44.85	-40.00	-4.85	-57.65	12.80	Peak
2	11070.000	-41.73	-40.00	-1.73	-57.23	15.50	Peak
3	14760.000	-41.31	-40.00	-1.31	-59.72	18.41	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
3. Over Limit = Level - Limit Line
4. Aux Factor = Convert E (dBuVm) to EIRP (dBm)
= 107 + 20log(3) - 104.8 = 11.8 dB
5.The other emission levels were very low against the limit.
6.The emission under 1GHz was not included since the emission levels are very low against the limit.

Site :HY-CB01
Condition :3m ,Vertical
Mode :LTE_B48_20M_Ch56640
Test by :Daniel Wu

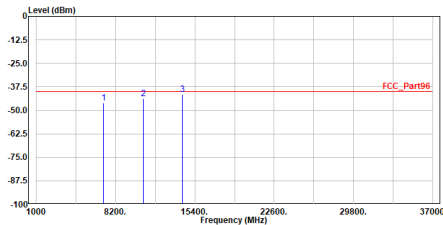


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBm	dBm	Limit	Level	dB	
1	7380.000	-45.95	-40.00	-5.95	-58.75	12.80	Peak
2	11070.000	-41.82	-40.00	-1.82	-57.32	15.50	Peak
3	14760.000	-41.22	-40.00	-1.22	-59.63	18.41	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
3. Over Limit = Level - Limit Line
4. Aux Factor = Convert E (dBuVm) to EIRP (dBm)
= 107 + 20log(3) - 104.8 = 11.8 dB
5.The other emission levels were very low against the limit.
6.The emission under 1GHz was not included since the emission levels are very low against the limit.

Mode 1: LTE Band 48

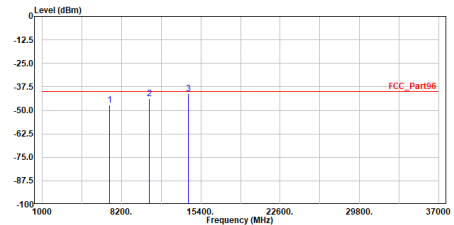
Site :HY-CB01
Condition :3m ,Horizontal
Mode :5G NR_N48_40M_Ch638000
Test by :Daniel Wu



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBm	dBm	Limit	Level	dB	
1	7140.000	-45.89	-40.00	-5.89	-58.41	12.52	Peak
2	10710.000	-43.82	-40.00	-3.82	-58.47	14.65	Peak
3	14280.000	-41.32	-40.00	-1.32	-58.57	17.25	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
3. Over Limit = Level - Limit Line
4. Aux Factor = Convert E (dBuV/m) to EIRP (dBm)
= $107 + 20\log(3) - 104.8 = 11.8$ dB
5. The other emission levels were very low against the limit.
6. The emission under 1GHz was not included since the emission levels are very low against the limit.

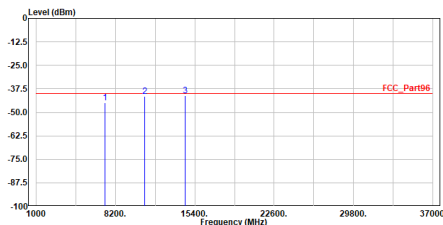
Site :HY-CB01
Condition :3m ,Vertical
Mode :5G NR_N48_40M_Ch638000
Test by :Daniel Wu



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBm	dBm	Limit	Level	dB	
1	7140.000	-47.29	-40.00	-7.29	-59.81	12.52	Peak
2	10710.000	-43.75	-40.00	-3.75	-58.40	14.65	Peak
3	14280.000	-41.12	-40.00	-1.12	-58.37	17.25	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
3. Over Limit = Level - Limit Line
4. Aux Factor = Convert E (dBuV/m) to EIRP (dBm)
= $107 + 20\log(3) - 104.8 = 11.8$ dB
5. The other emission levels were very low against the limit.
6. The emission under 1GHz was not included since the emission levels are very low against the limit.

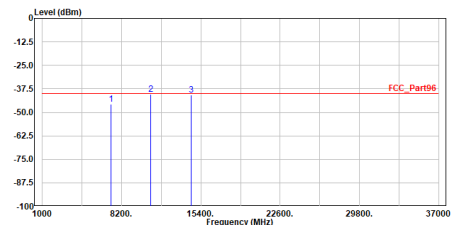
Site :HY-CB01
Condition :3m ,Horizontal
Mode :5G NR_N48_40M_Ch641666
Test by :Daniel Wu



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBm	dBm	Limit	Level	dB	
1	7250.000	-44.79	-40.00	-4.79	-57.35	12.56	Peak
2	10875.000	-41.48	-40.00	-1.48	-56.48	15.00	Peak
3	14500.000	-41.11	-40.00	-1.11	-59.14	18.03	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
3. Over Limit = Level - Limit Line
4. Aux Factor = Convert E (dBuV/m) to EIRP (dBm)
= $107 + 20\log(3) - 104.8 = 11.8$ dB
5. The other emission levels were very low against the limit.
6. The emission under 1GHz was not included since the emission levels are very low against the limit.

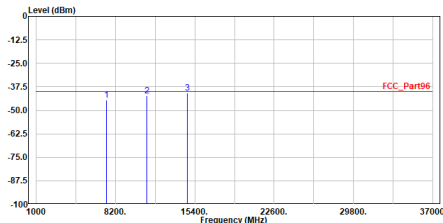
Site :HY-CB01
Condition :3m ,Vertical
Mode :5G NR_N48_40M_Ch641666
Test by :Daniel Wu



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBm	dBm	Limit	Level	dB	
1	7250.000	-45.78	-40.00	-5.78	-58.34	12.56	Peak
2	10875.000	-40.48	-40.00	-0.48	-55.48	15.00	Peak
3	14500.000	-40.69	-40.00	-0.69	-58.72	18.03	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
3. Over Limit = Level - Limit Line
4. Aux Factor = Convert E (dBuV/m) to EIRP (dBm)
= $107 + 20\log(3) - 104.8 = 11.8$ dB
5. The other emission levels were very low against the limit.
6. The emission under 1GHz was not included since the emission levels are very low against the limit.

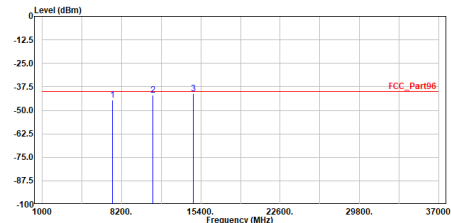
Site :HY-CB01
Condition :3m ,Horizontal
Mode :5G NR_N48_40M_Ch645332
Test by :Daniel Wu



No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBm	dBm	Limit	Level	dB	
1	7360.000	-44.56	-40.00	-4.56	-57.26	12.70	Peak
2	11040.000	-42.30	-40.00	-2.30	-57.99	15.69	Peak
3	14720.000	-40.91	-40.00	-0.91	-59.12	18.21	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
3. Over Limit = Level - Limit Line
4. Aux Factor = Convert E (dBuV/m) to EIRP (dBm)
= 107 + 20log(3) - 104.8 = 11.8 dB
5.The other emission levels were very low against the limit.
6.The emission under 1GHz was not included since the emission levels are very low against the limit.

Site :HY-CB01
Condition :3m ,Vertical
Mode :5G NR_N48_40M_Ch645332
Test by :Daniel Wu

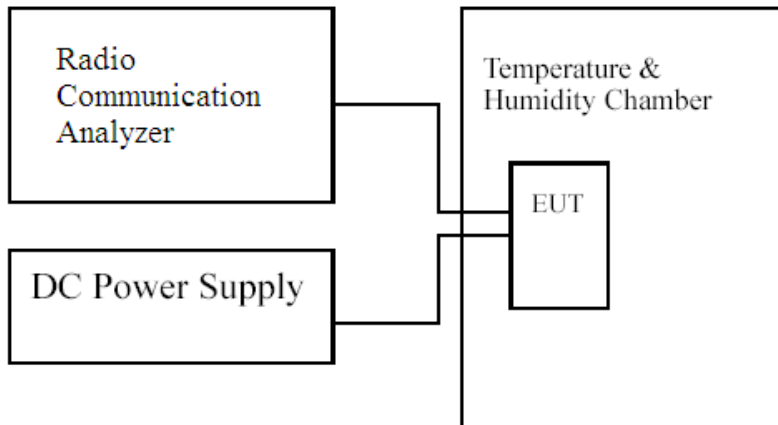


No.	Frequency	Level	Limit	Over	Read	Factor	Remark
	MHz	dBm	dBm	Limit	Level	dB	
1	7360.000	-44.34	-40.00	-4.34	-57.04	12.70	Peak
2	11040.000	-42.04	-40.00	-2.04	-57.73	15.69	Peak
3	14720.000	-41.09	-40.00	-1.09	-59.30	18.21	Peak

Note:
1. Level = Read Level + Factor
2. Factor = Antenna Factor + Cable Loss - Preamp Factor + Aux Factor
3. Over Limit = Level - Limit Line
4. Aux Factor = Convert E (dBuV/m) to EIRP (dBm)
= 107 + 20log(3) - 104.8 = 11.8 dB
5.The other emission levels were very low against the limit.
6.The emission under 1GHz was not included since the emission levels are very low against the limit.

6. Frequency Stability

6.1. Test Setup



6.2. Test Limit

Limit: $\leq \pm 2.5$ ppm

6.3. Test Procedure

The frequency stability of transmitter is measured by:

- (a) Temperature: The temperature is varied from -30°C to 50°C in 10°C increment using a standard temperature & Humidity chamber.
- (b) Primary Supply Voltage: The primary supply voltage is varied 85% to 115% of the nominal value for non hand-carried equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating endpoint which shall be specified by the manufacturer.

The EUT was connected via the base station simulator. Universal Radio Communication Tester, was used to measure The Frequency Error. The maximum result of measurements was recorded.

6.4. Test Specification

According to Part 2.1055

6.5. Test Result of Frequency Stability

Mode 1: LTE Band 48

5 MHz / CH55265

Voltage (VAC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	2.01	0.0006
120.00	2.44	0.0007
102.00	2.36	0.0007

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	1.89	0.0005
-20	2.82	0.0008
-10	1.51	0.0004
0	2.12	0.0006
10	0.80	0.0002
20	2.13	0.0006
30	1.45	0.0004
40	2.63	0.0007
50	2.07	0.0006

5 MHz / CH56715

Voltage (VAC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	2.49	0.0007
120.00	2.78	0.0008
102.00	2.32	0.0006

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	2.88	0.0008
-20	3.01	0.0008
-10	2.05	0.0006
0	2.29	0.0006
10	1.64	0.0004
20	2.14	0.0006
30	1.71	0.0005
40	2.21	0.0006
50	2.63	0.0007

10 MHz / CH55290

Voltage (VAC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	2.51	0.0007
120.00	2.99	0.0008
102.00	2.52	0.0007

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	2.71	0.0008
-20	3.25	0.0009
-10	2.37	0.0007
0	1.88	0.0005
10	2.98	0.0008
20	1.54	0.0004
30	1.96	0.0006
40	1.67	0.0005
50	3.22	0.0009

10 MHz / CH56690

Voltage (VAC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	3.34	0.0009
120.00	3.91	0.0011
102.00	2.35	0.0006

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	3.58	0.0010
-20	3.16	0.0009
-10	3.53	0.0010
0	3.95	0.0011
10	3.19	0.0009
20	3.44	0.0009
30	3.99	0.0011
40	3.03	0.0008
50	2.81	0.0008

15 MHz / CH55315

Voltage (VAC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	2.06	0.0006
120.00	2.37	0.0007
102.00	1.70	0.0005

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	1.25	0.0004
-20	1.71	0.0005
-10	1.22	0.0003
0	1.45	0.0004
10	1.30	0.0004
20	0.84	0.0002
30	1.34	0.0004
40	1.35	0.0004
50	1.18	0.0003

15 MHz / CH56665

Voltage (VAC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	2.35	0.0006
120.00	2.22	0.0006
102.00	1.82	0.0005

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	1.55	0.0004
-20	2.88	0.0008
-10	1.65	0.0004
0	1.29	0.0003
10	1.11	0.0003
20	1.44	0.0004
30	1.35	0.0004
40	2.28	0.0006
50	1.72	0.0005

20 MHz / CH55340

Voltage (VAC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	1.78	0.0005
120.00	3.33	0.0009
102.00	2.34	0.0007

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	3.65	0.0010
-20	3.15	0.0009
-10	2.49	0.0007
0	2.11	0.0006
10	2.91	0.0008
20	2.63	0.0007
30	2.63	0.0007
40	2.28	0.0006
50	2.39	0.0007

20 MHz / CH56640

Voltage (VAC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	2.04	0.0006
120.00	3.15	0.0009
102.00	2.16	0.0006

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	2.61	0.0007
-20	2.13	0.0006
-10	2.48	0.0007
0	2.25	0.0006
10	2.71	0.0007
20	3.24	0.0009
30	2.35	0.0006
40	2.93	0.0008
50	3.23	0.0009

Mode 2: 5G NR n48**10 MHz / CH641666**

Voltage (VDC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	1.65	0.0005
120.00	1.84	0.0005
102.00	0.97	0.0003

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	1.66	0.0005
-20	1.60	0.0004
-10	1.53	0.0004
0	1.47	0.0004
10	1.05	0.0003
20	1.46	0.0004
30	2.00	0.0006
40	1.96	0.0005
50	1.61	0.0004

10 MHz / CH646332

Voltage (VDC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	3.61	0.0010
120.00	3.77	0.0010
102.00	3.64	0.0010

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	3.24	0.0009
-20	3.59	0.0010
-10	3.41	0.0009
0	3.23	0.0009
10	3.45	0.0009
20	3.25	0.0009
30	2.66	0.0007
40	3.46	0.0009
50	3.56	0.0010

20 MHz / CH637334

Voltage (VDC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	2.83	0.0008
120.00	2.42	0.0007
102.00	1.50	0.0004

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	2.82	0.0008
-20	2.37	0.0007
-10	2.48	0.0007
0	1.81	0.0005
10	2.04	0.0006
20	2.85	0.0008
30	2.45	0.0007
40	2.27	0.0006
50	1.61	0.0005

20 MHz / CH646000

Voltage (VDC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	2.16	0.0006
120.00	2.37	0.0006
102.00	1.75	0.0005

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	2.10	0.0006
-20	1.80	0.0005
-10	1.28	0.0003
0	1.36	0.0004
10	1.87	0.0005
20	1.41	0.0004
30	1.48	0.0004
40	1.79	0.0005
50	1.93	0.0005

30 MHz / CH637668

Voltage (VDC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	0.98	0.0003
120.00	1.49	0.0004
102.00	1.08	0.0003

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	0.81	0.0002
-20	1.27	0.0004
-10	1.36	0.0004
0	1.42	0.0004
10	0.54	0.0002
20	0.74	0.0002
30	0.51	0.0001
40	0.85	0.0002
50	1.61	0.0005

30 MHz / CH645666

Voltage (VDC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	1.25	0.0003
120.00	1.68	0.0005
102.00	0.73	0.0002

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	1.81	0.0005
-20	1.26	0.0003
-10	1.30	0.0004
0	1.42	0.0004
10	1.51	0.0004
20	0.57	0.0002
30	1.64	0.0004
40	1.60	0.0004
50	1.38	0.0004

40 MHz / CH638000

Voltage (VDC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	2.86	0.0008
120.00	2.56	0.0007
102.00	1.83	0.0005

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	0.99	0.0003
-20	1.93	0.0005
-10	2.07	0.0006
0	2.49	0.0007
10	3.22	0.0009
20	2.88	0.0008
30	2.35	0.0007
40	1.50	0.0004
50	2.32	0.0006

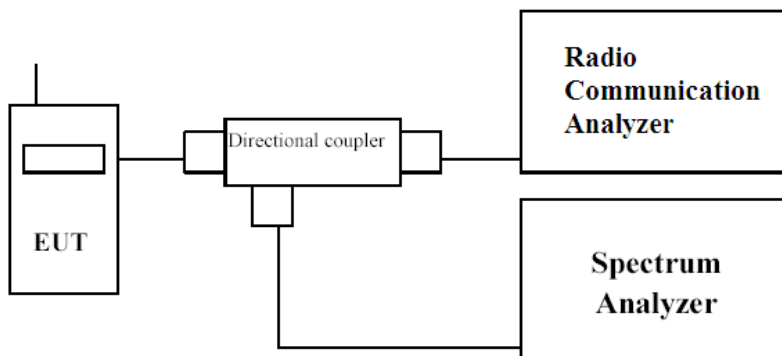
40 MHz / CH645332

Voltage (VDC)	Frequency Stability (Hz)	Frequency Stability (ppm)
138.00	-2.63	-0.0007
120.00	-1.99	-0.0005
102.00	-2.15	-0.0006

Temperature (°C)	Frequency Stability (Hz)	Frequency Stability (ppm)
-30	-1.50	-0.0004
-20	-1.84	-0.0005
-10	-3.09	-0.0008
0	-3.19	-0.0009
10	-2.12	-0.0006
20	-1.76	-0.0005
30	-3.36	-0.0009
40	-2.48	-0.0007
50	-2.89	-0.0008

7. Peak to Average Ratio

7.1. Test Setup



7.2. Test Limit

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure.

7.3. Test Procedure

- a) Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;
- b) Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth;
- c) Set the number of counts to a value that stabilizes the measured CCDF curve;
- d) Set the measurement interval as follows:
 - 1) for continuous transmissions, set to 1 ms,
 - 2) for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.
- e) Record the maximum PAPR level associated with a probability of 0.1%.

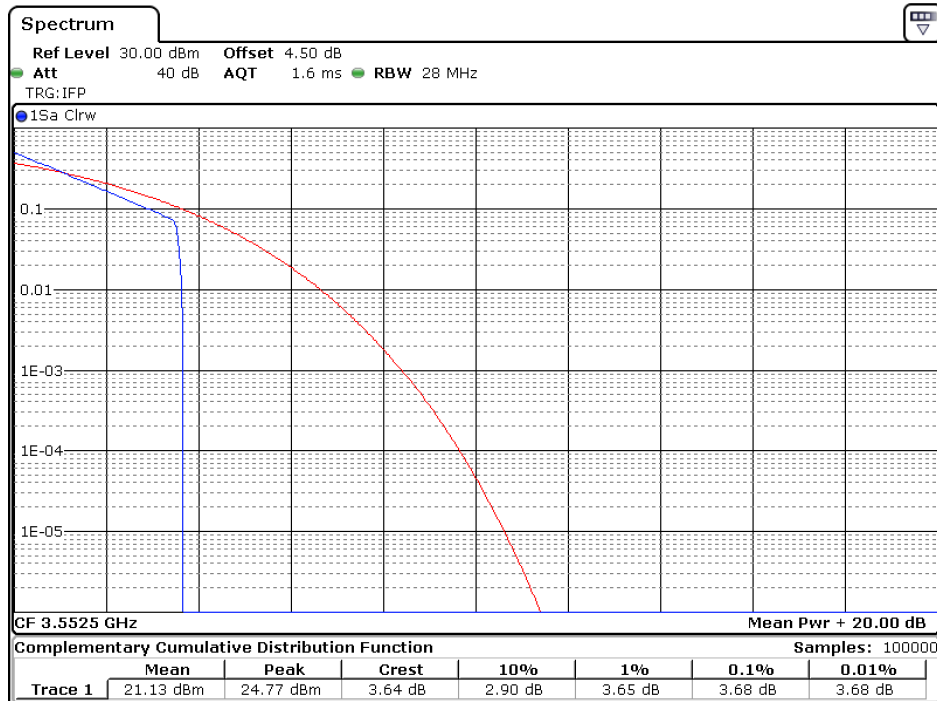
7.4. Test Specification

According to Part 96.41

7.5. Test Result of Peak to Average Ratio

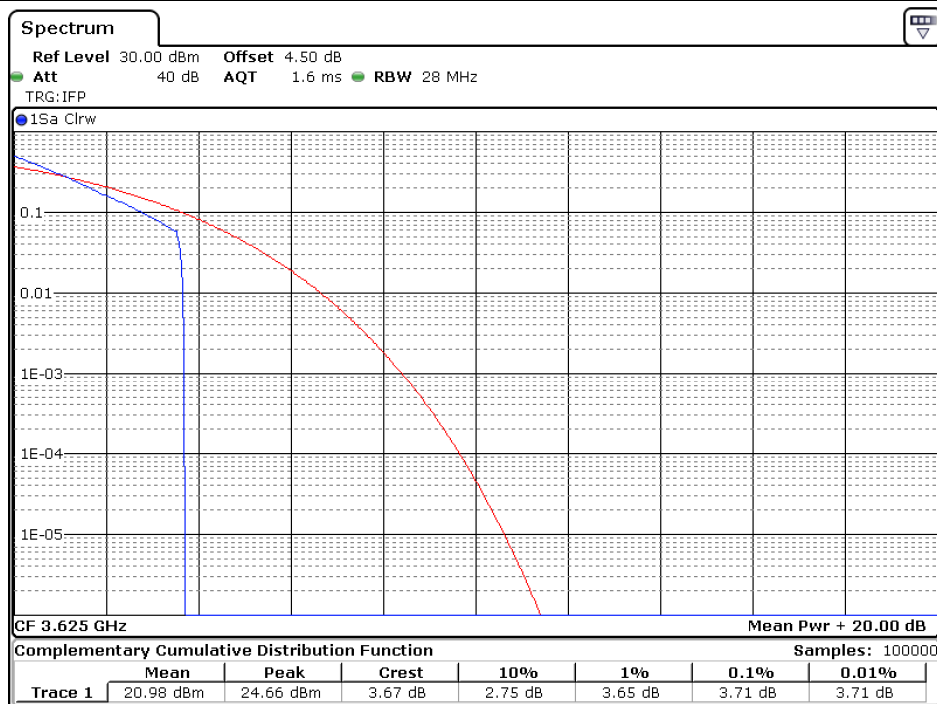
Mode 1: LTE Band 48

5 MHz / QPSK / CH55265 / 1RB



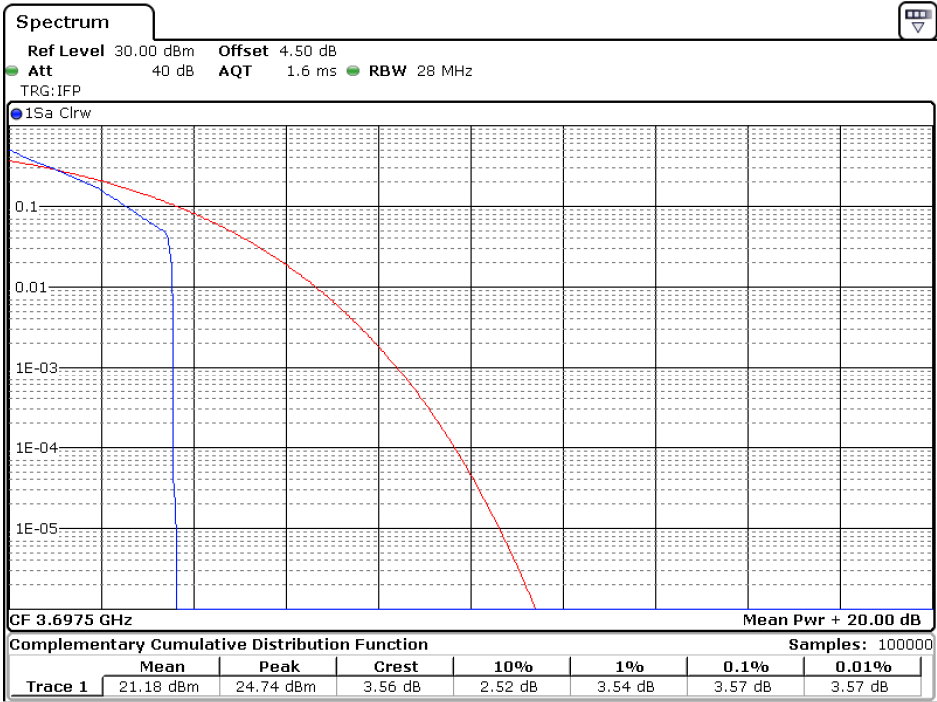
Date: 6.APR.2022 15:19:24

5 MHz / QPSK / CH55990 / 1RB



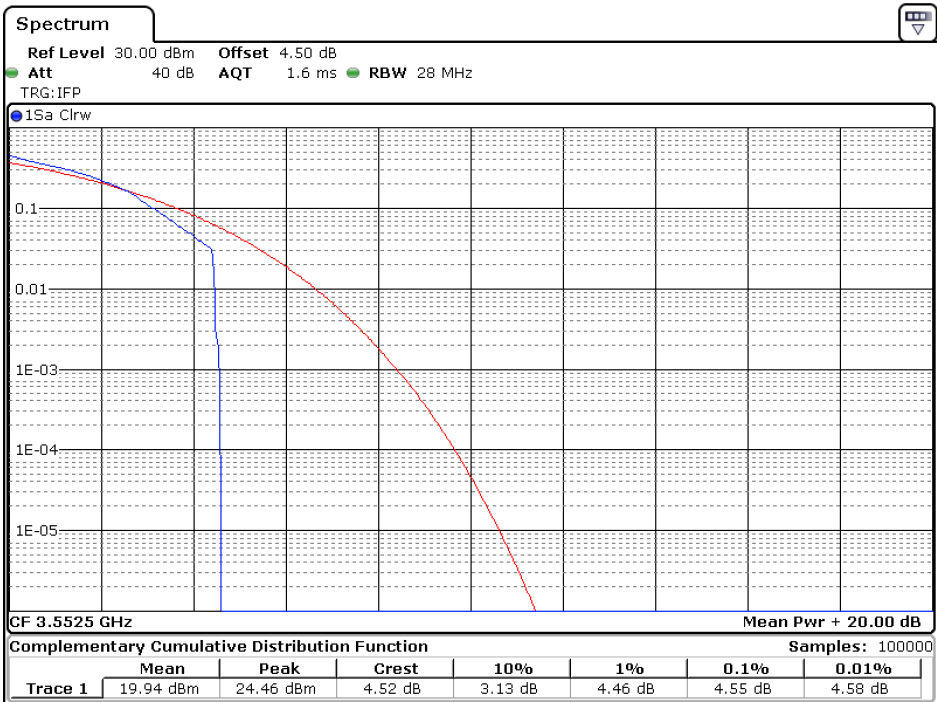
Date: 6.APR.2022 15:20:35

5 MHz / QPSK / CH56715 / 1RB



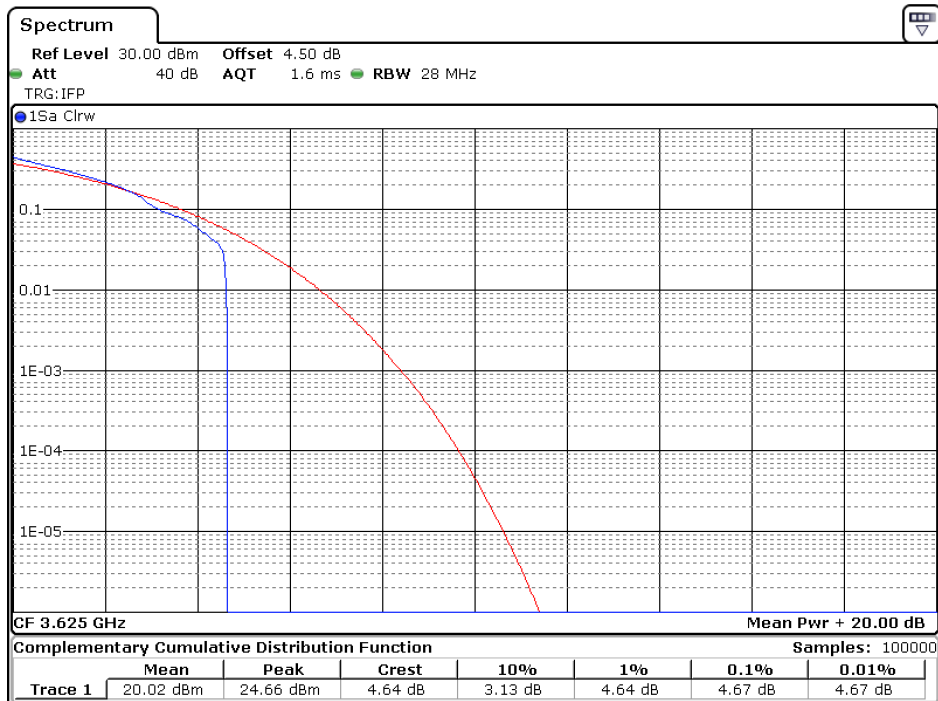
Date: 6.APR.2022 15:21:40

5 MHz / 16-QAM / CH55265 / 1RB



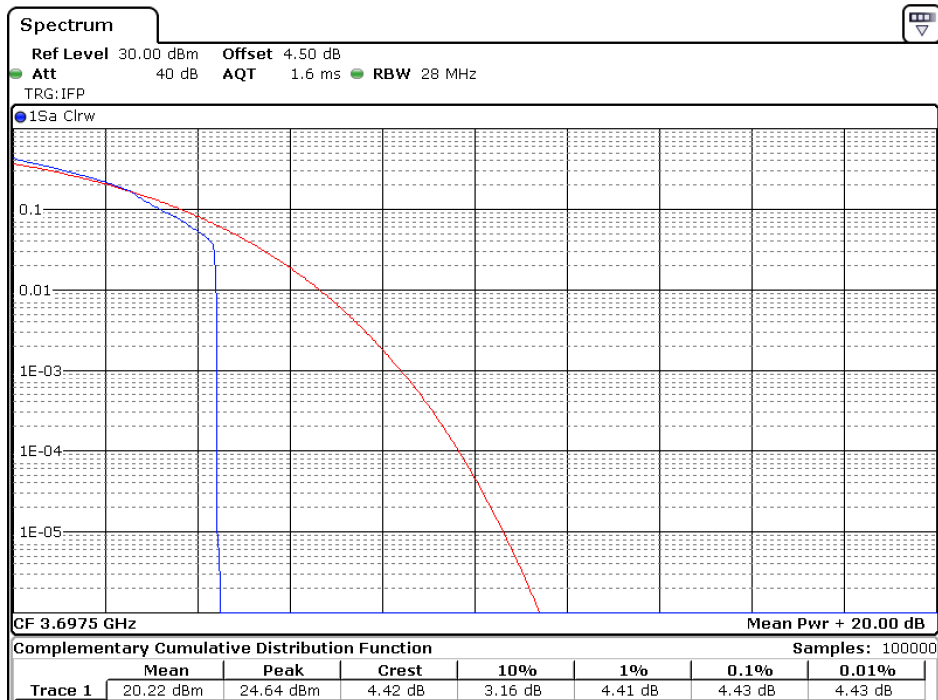
Date: 6.APR.2022 15:19:48

5 MHz / 16-QAM / CH55990 / 1RB



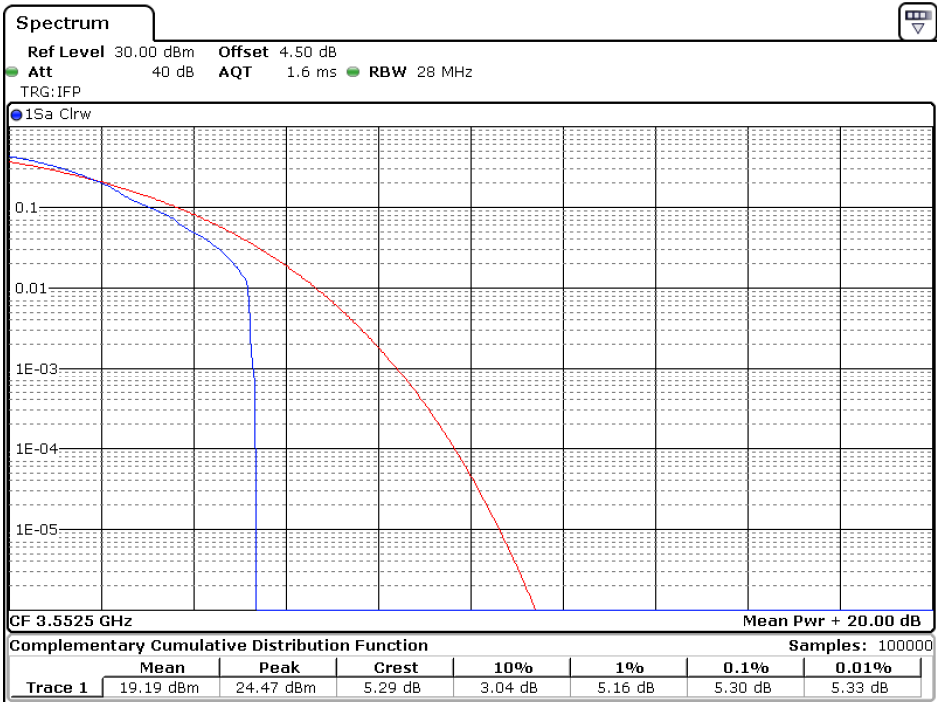
Date: 6.APR.2022 15:20:45

5 MHz / 16-QAM / CH56715 / 1RB



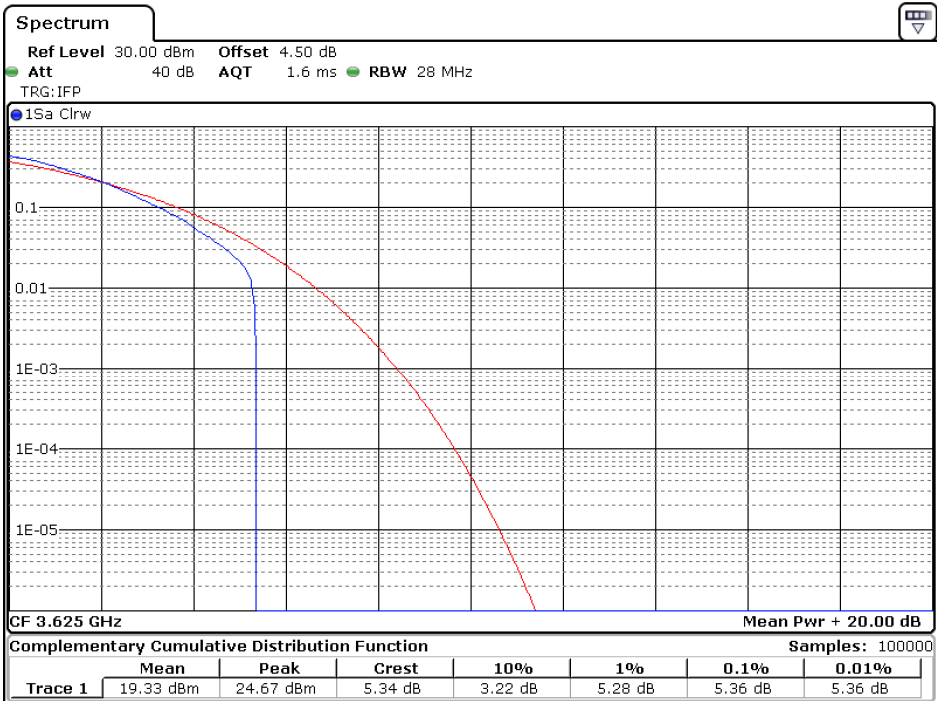
Date: 6.APR.2022 15:21:49

5 MHz / 64-QAM / CH55265 / 1RB



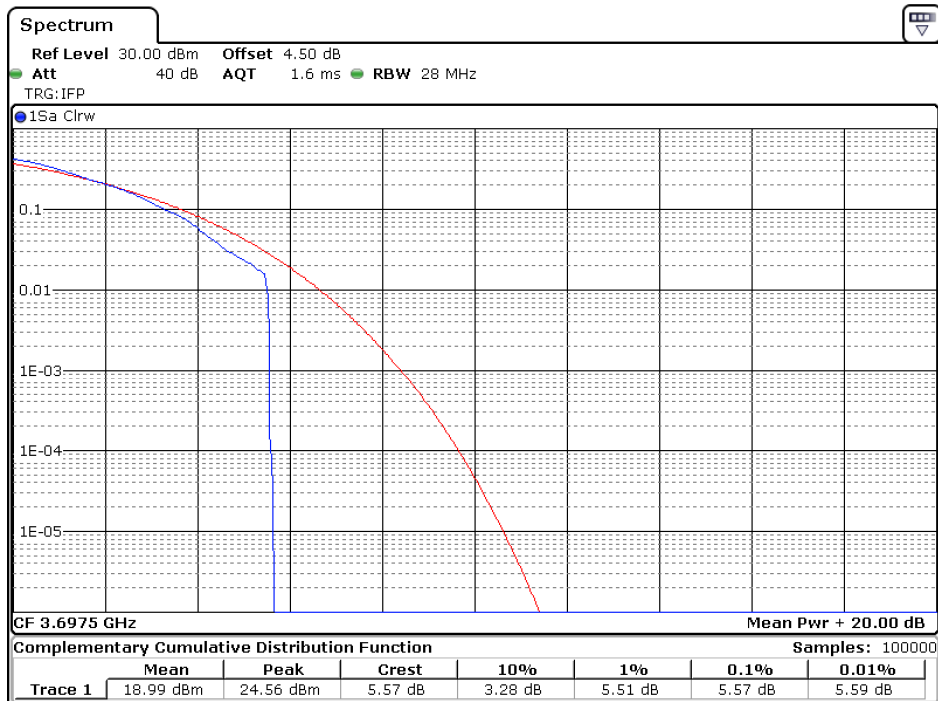
Date: 6.APR.2022 15:19:56

5 MHz / 64-QAM / CH55990 / 1RB



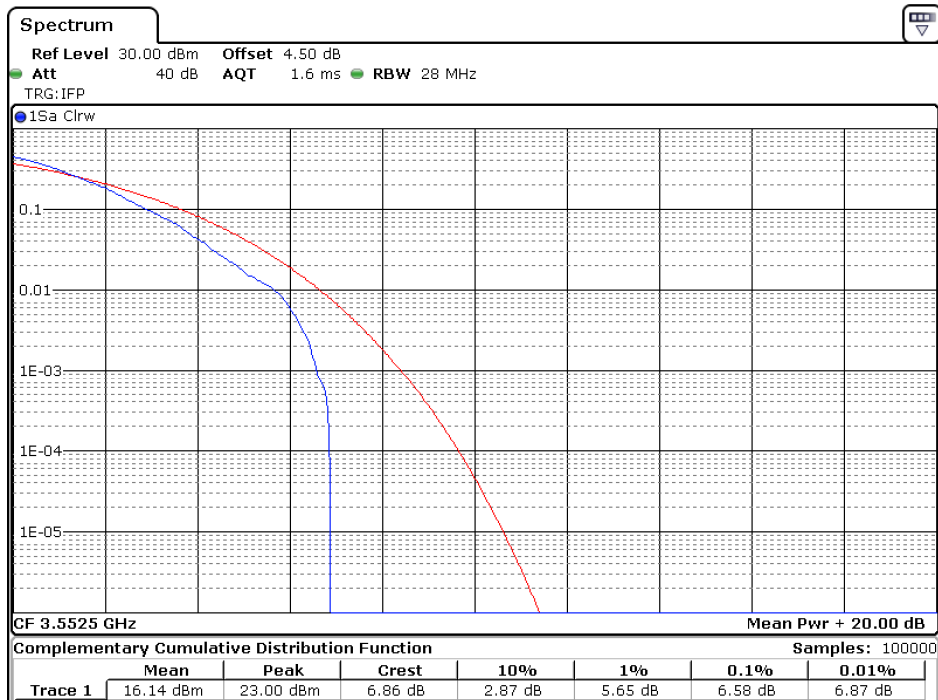
Date: 6.APR.2022 15:20:52

5 MHz / 64-QAM / CH56715 / 1RB



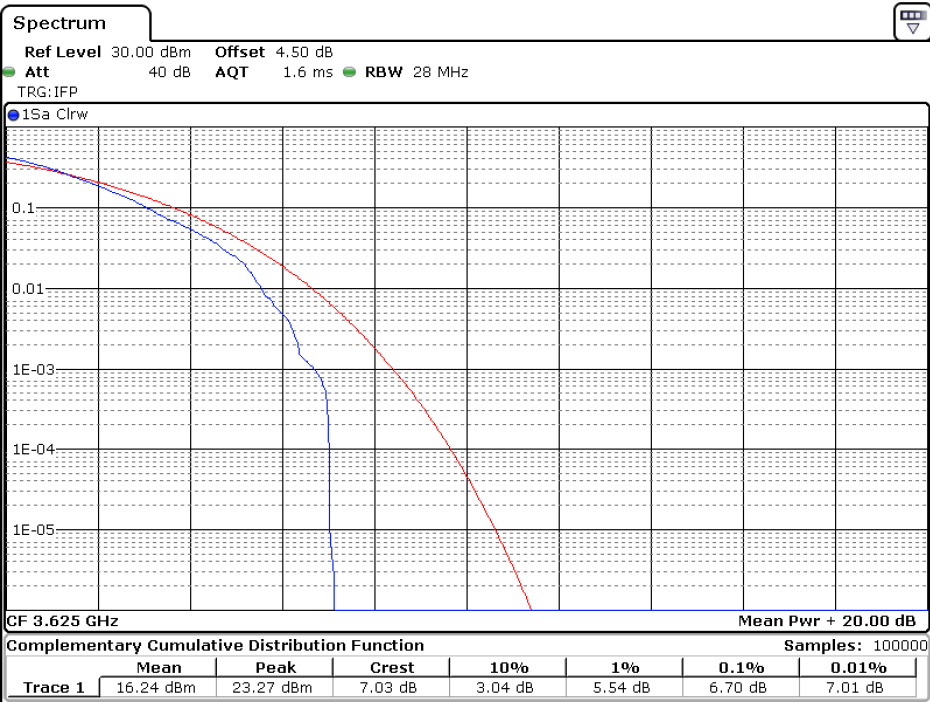
Date: 6.APR.2022 15:21:56

5 MHz / 256-QAM / CH55265 / 1RB



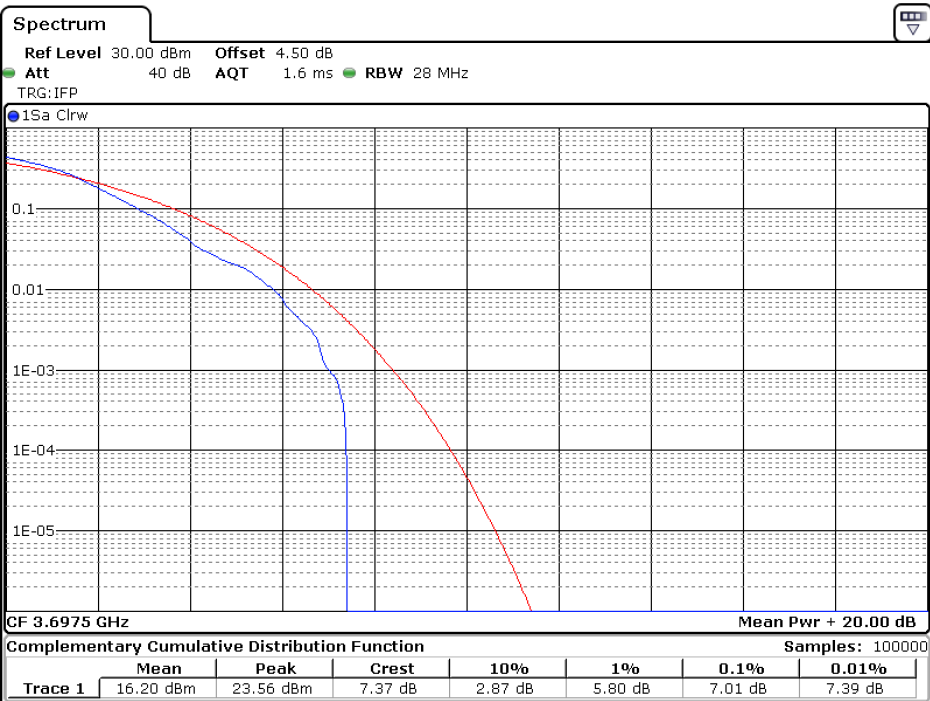
Date: 6.APR.2022 15:20:11

5 MHz / 256-QAM / CH55990 / 1RB



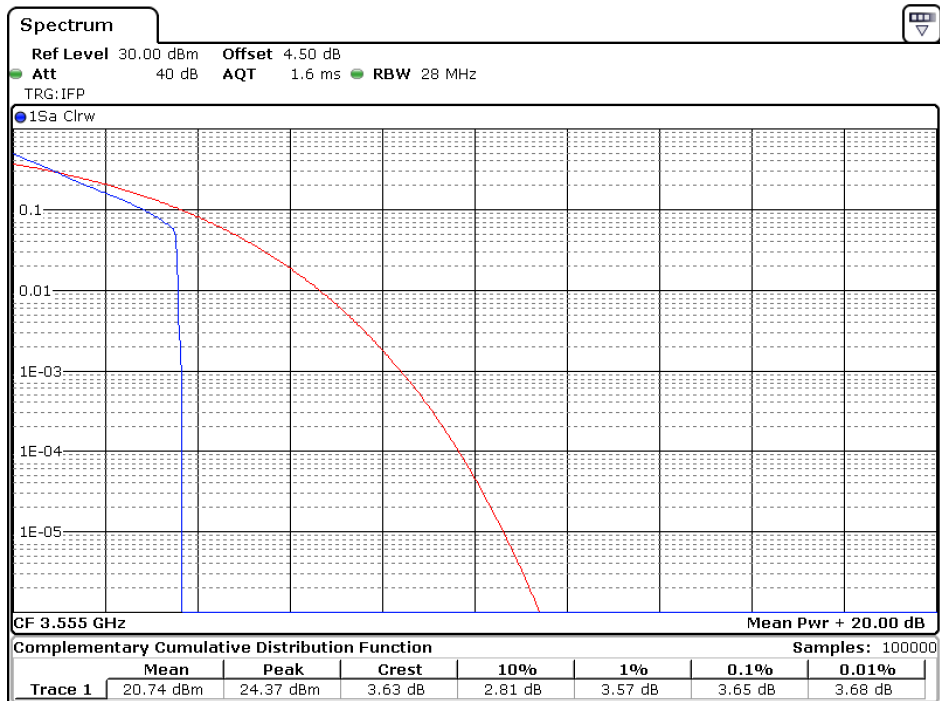
Date: 6.APR.2022 15:21:02

5 MHz / 256-QAM / CH56715 / 1RB



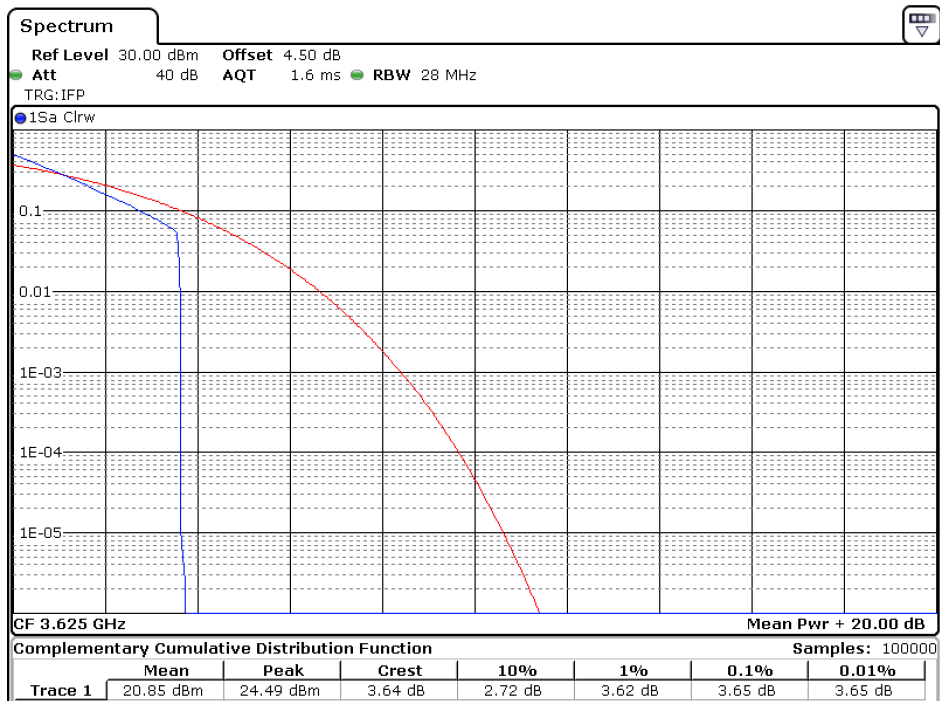
Date: 6.APR.2022 15:22:03

10 MHz / QPSK / CH55290 / 1RB



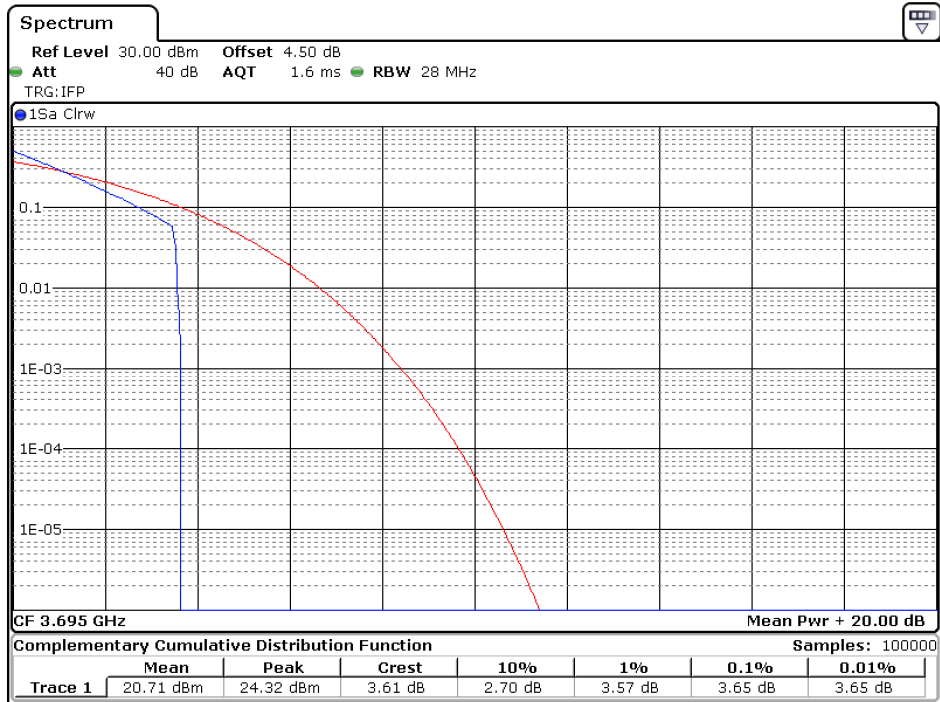
Date: 6.APR.2022 15:35:08

10 MHz / QPSK / CH55990 / 1RB



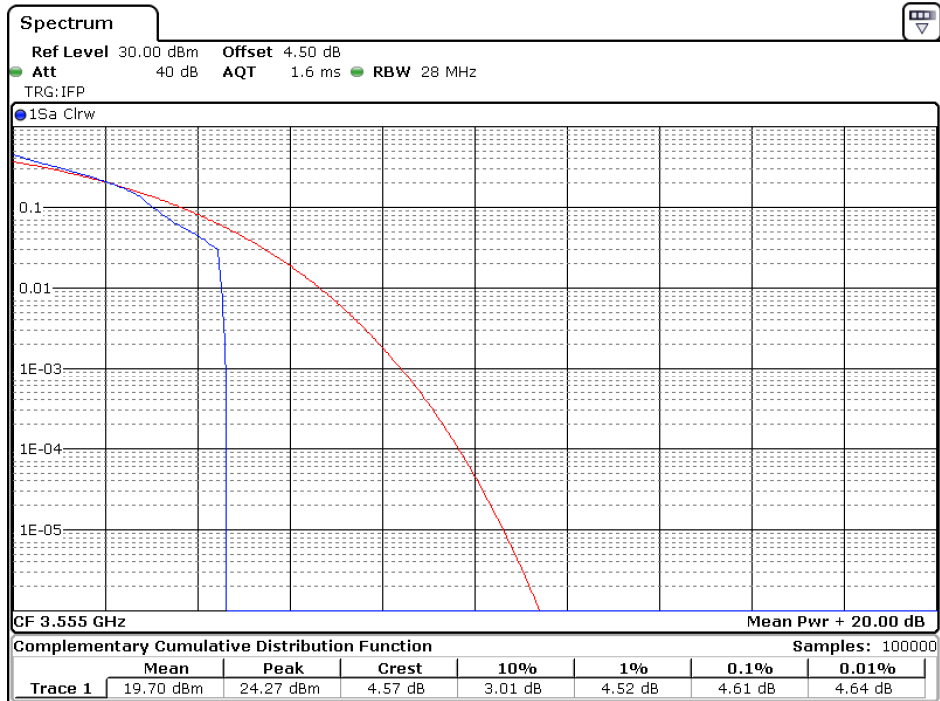
Date: 6.APR.2022 15:36:05

10 MHz / QPSK / CH56690 / 1RB



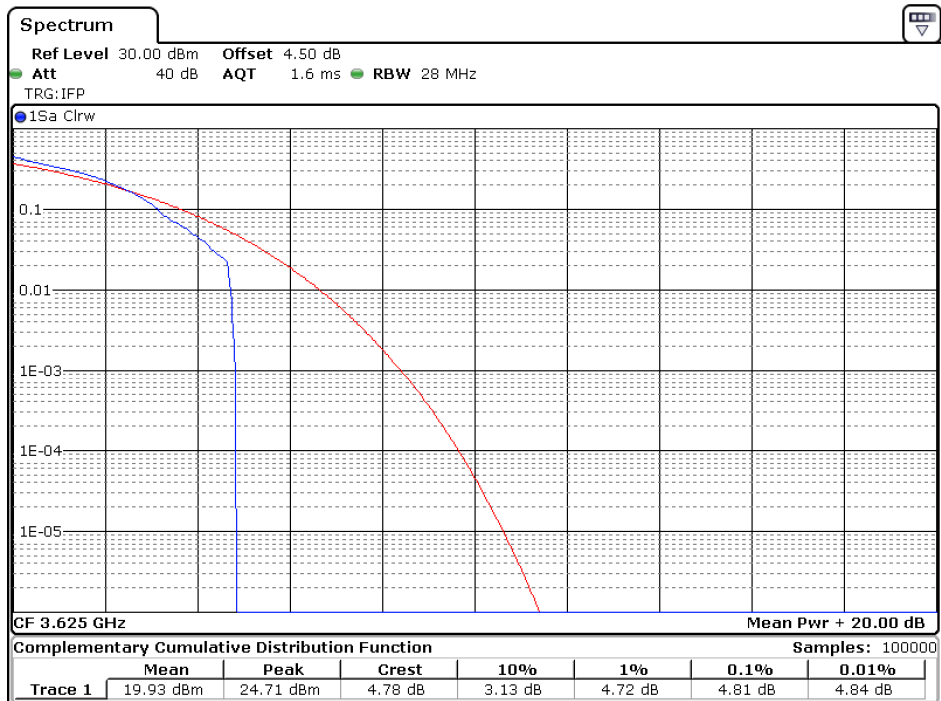
Date: 6.APR.2022 15:37:26

10 MHz / 16-QAM / CH55290 / 1RB



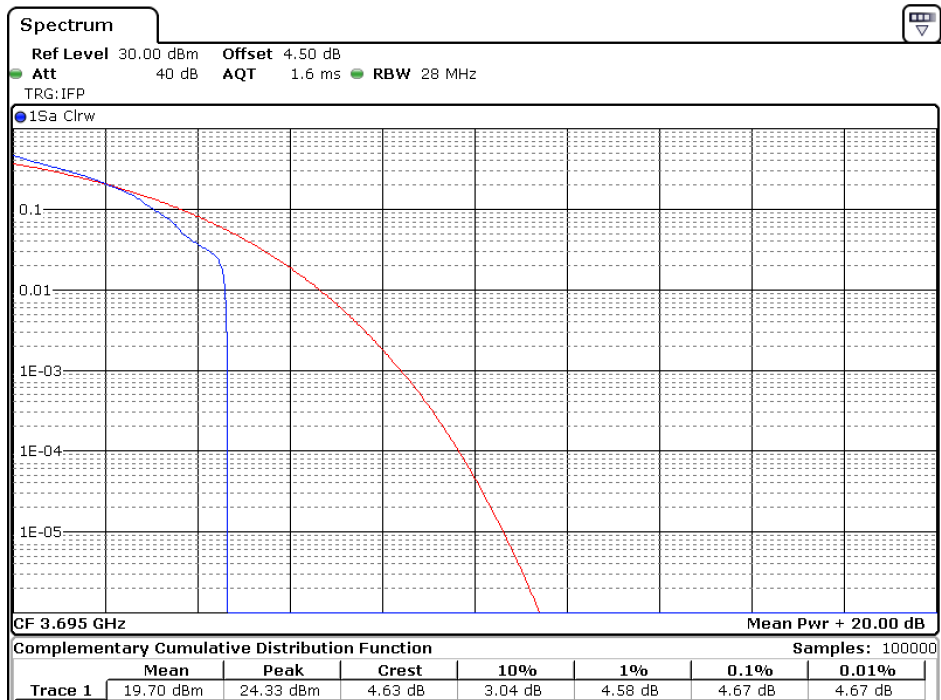
Date: 6.APR.2022 15:35:30

10 MHz / 16-QAM / CH55990 / 1RB



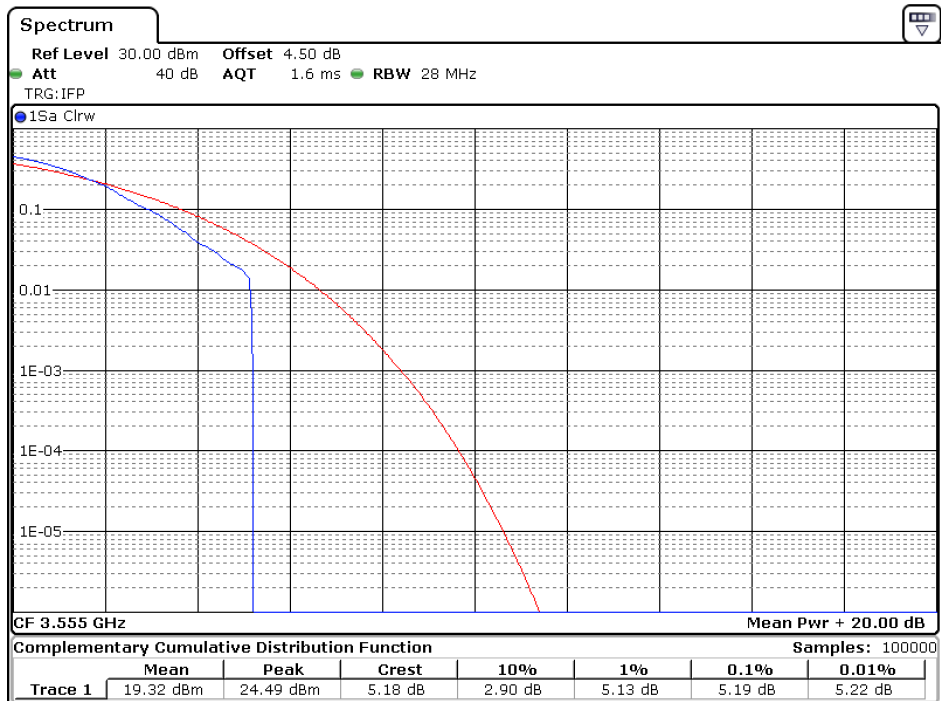
Date: 6.APR.2022 15:36:22

10 MHz / 16-QAM / CH56690 / 1RB



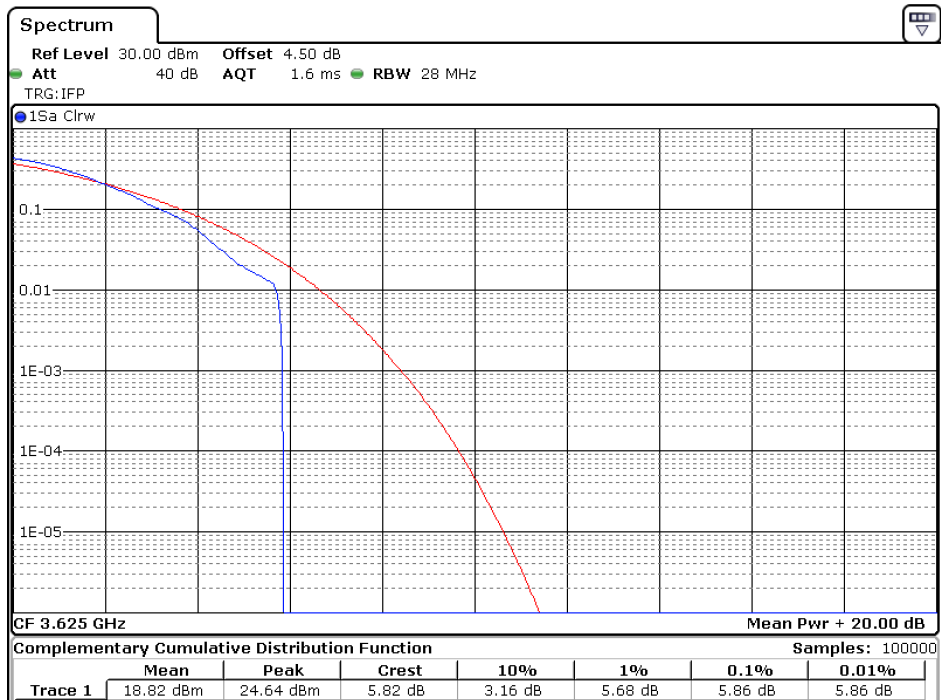
Date: 6.APR.2022 15:37:42

10 MHz / 64-QAM / CH55290 / 1RB



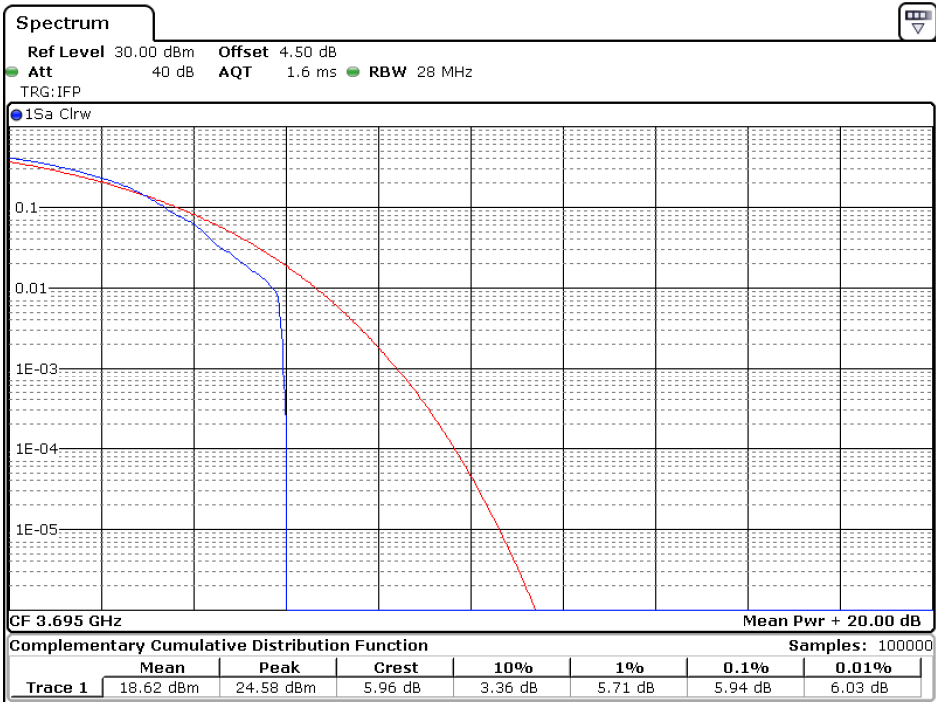
Date: 6.APR.2022 15:35:39

10 MHz / 64-QAM / CH55990 / 1RB



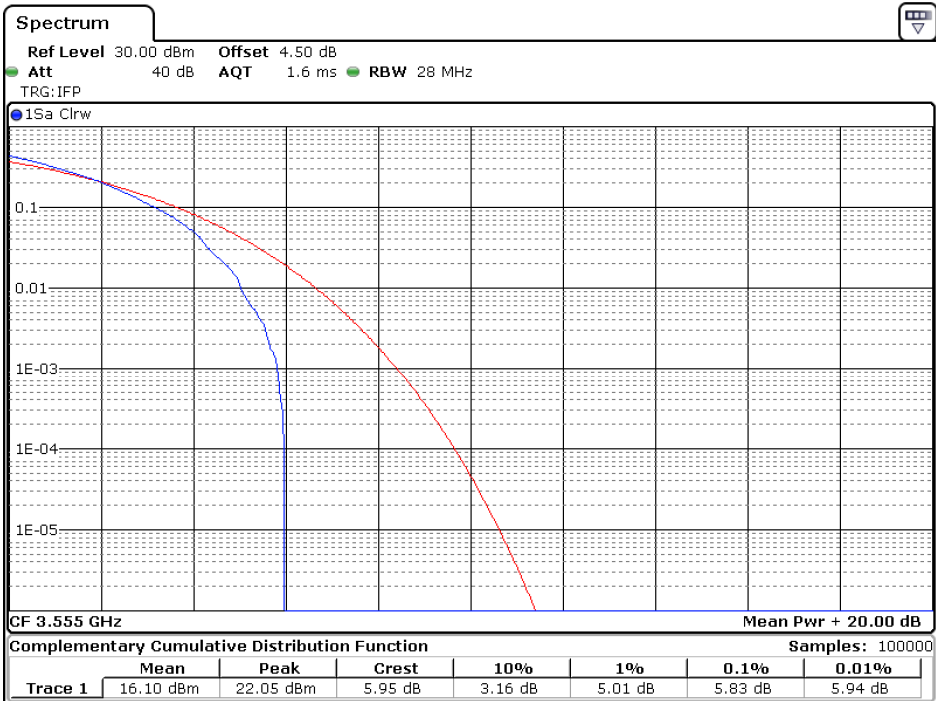
Date: 6.APR.2022 15:36:31

10 MHz / 64-QAM / CH56690 / 1RB



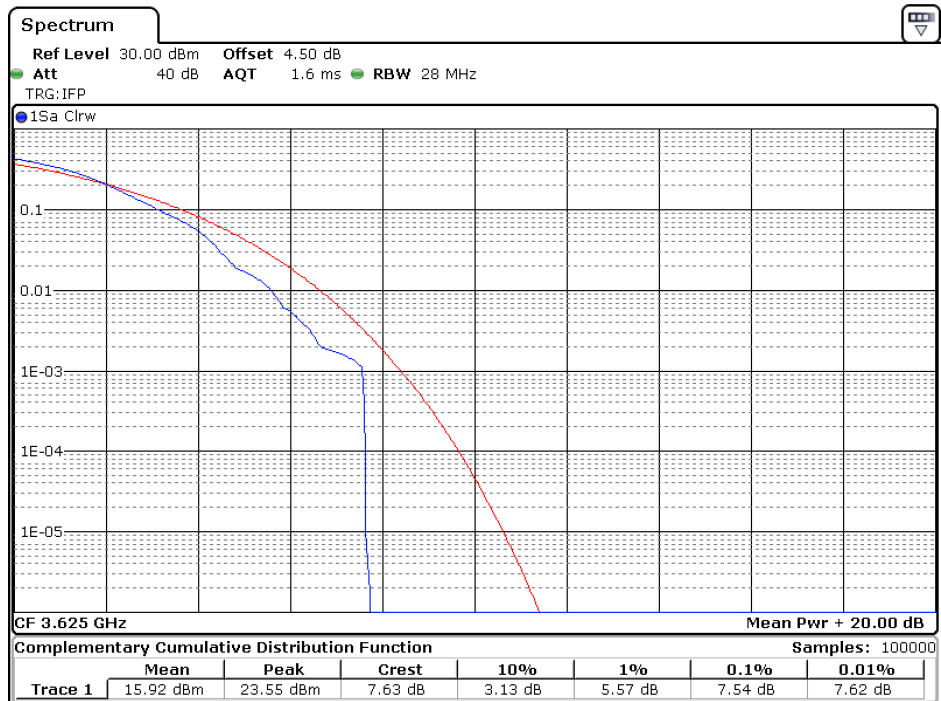
Date: 6.APR.2022 15:37:58

10 MHz / 256-QAM / CH55290 / 1RB



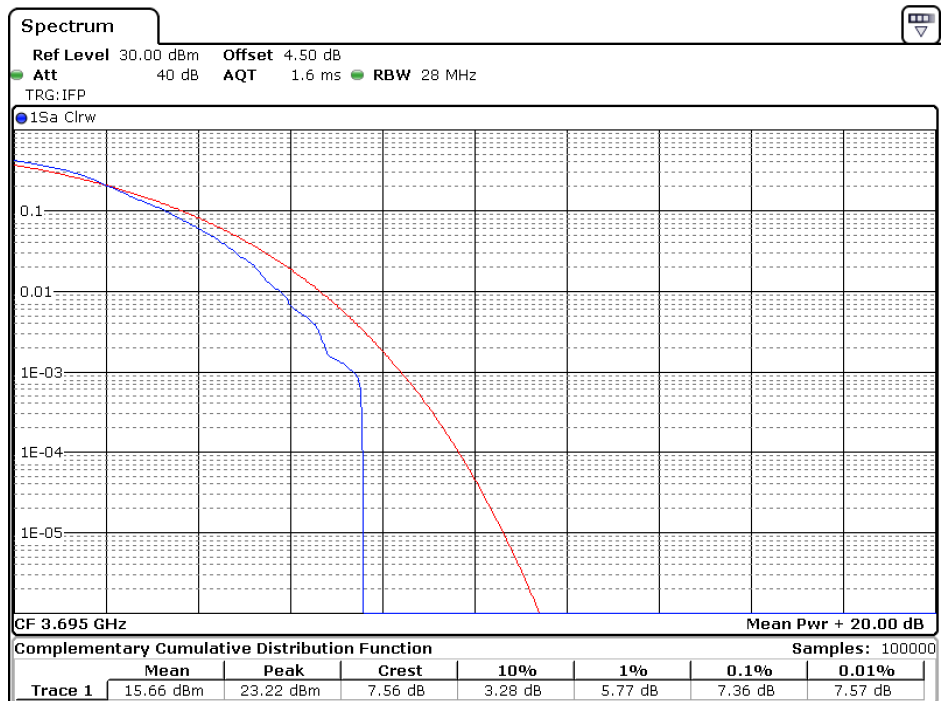
Date: 6.APR.2022 15:35:46

10 MHz / 256-QAM / CH55990 / 1RB



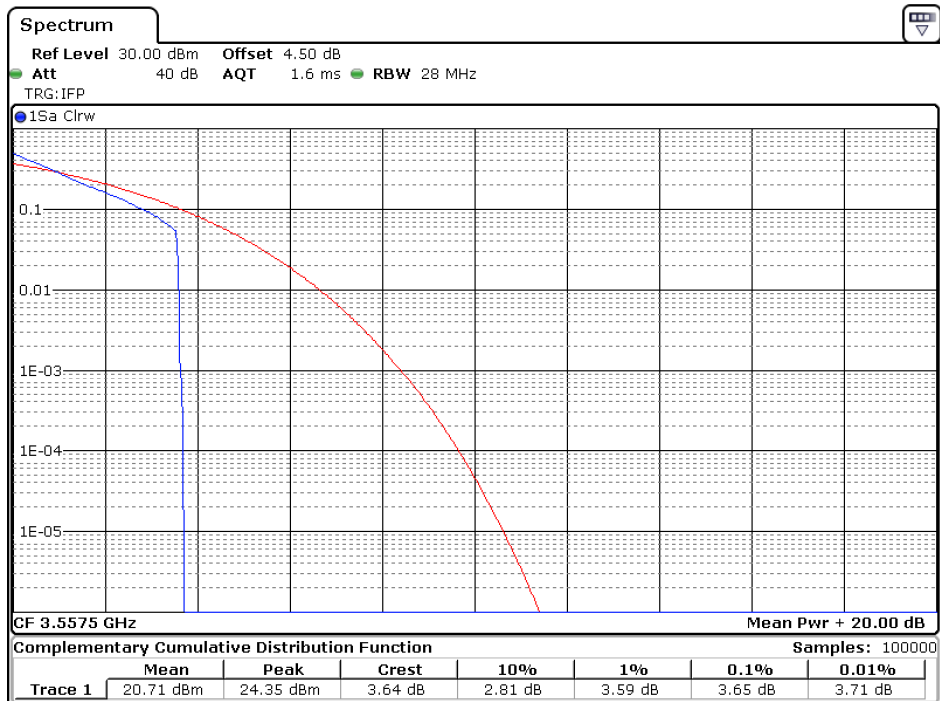
Date: 6.APR.2022 15:36:39

10 MHz / 256-QAM / CH56690 / 1RB



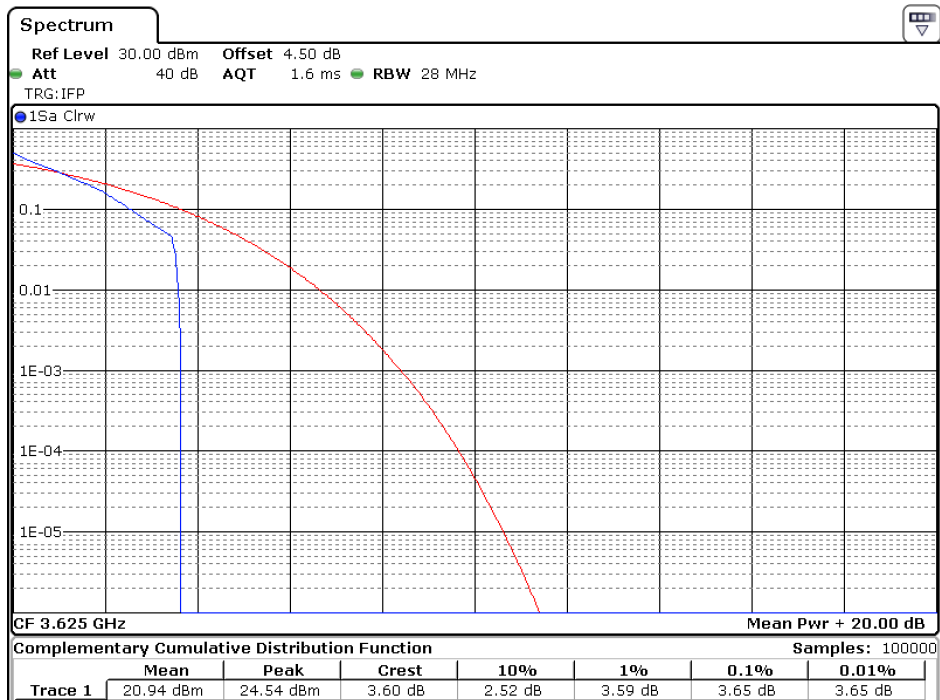
Date: 6.APR.2022 15:38:11

15 MHz / QPSK / CH55315 / 1RB



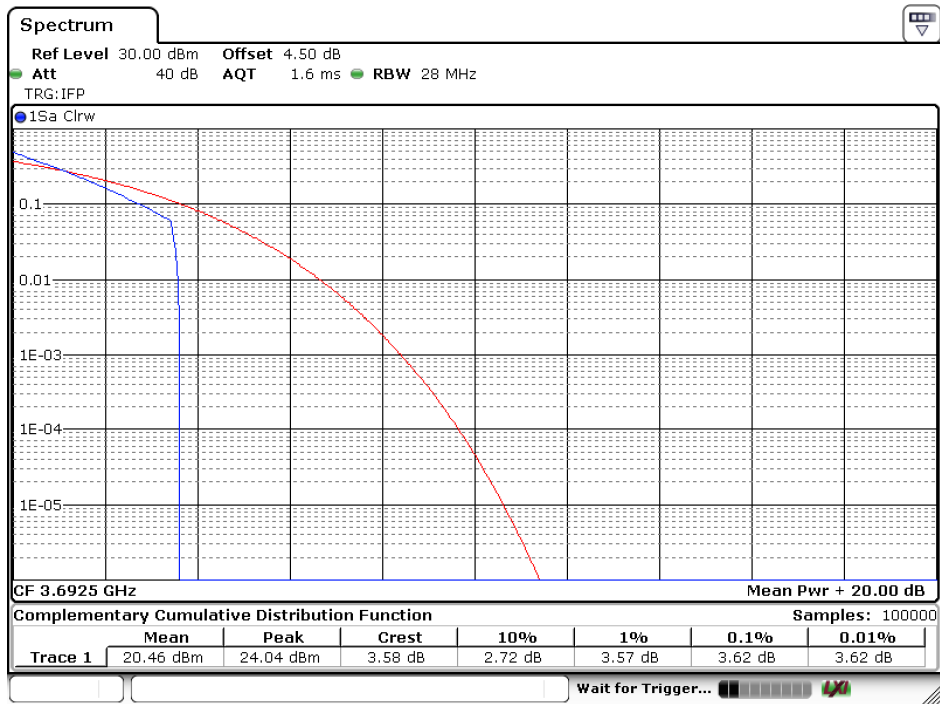
Date: 6.APR.2022 16:12:34

15 MHz / QPSK / CH55990 / 1RB



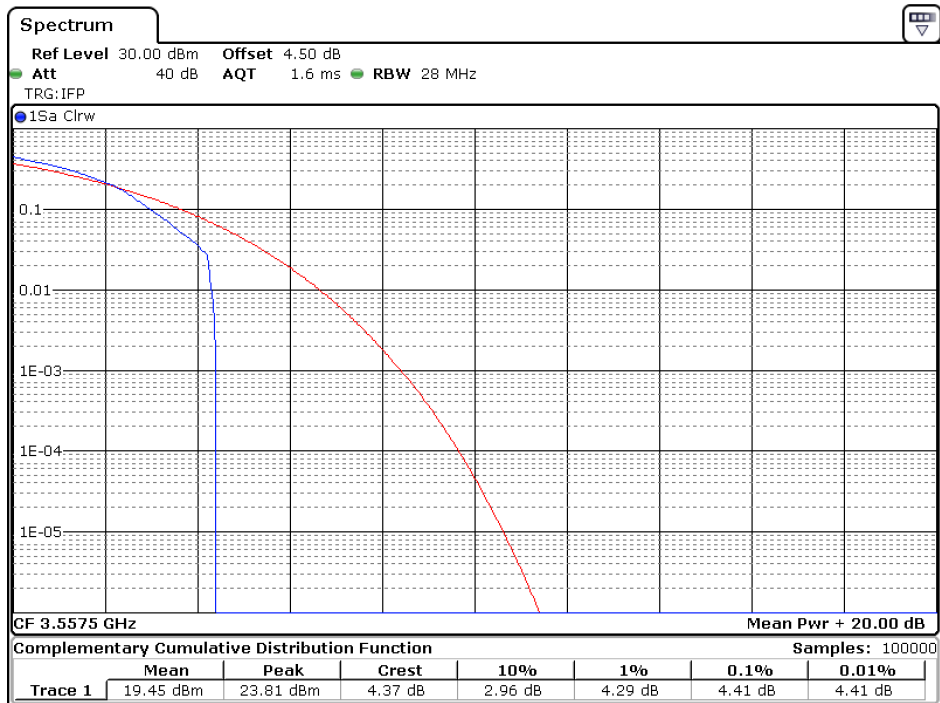
Date: 6.APR.2022 16:14:01

15 MHz / QPSK / CH56665 / 1RB



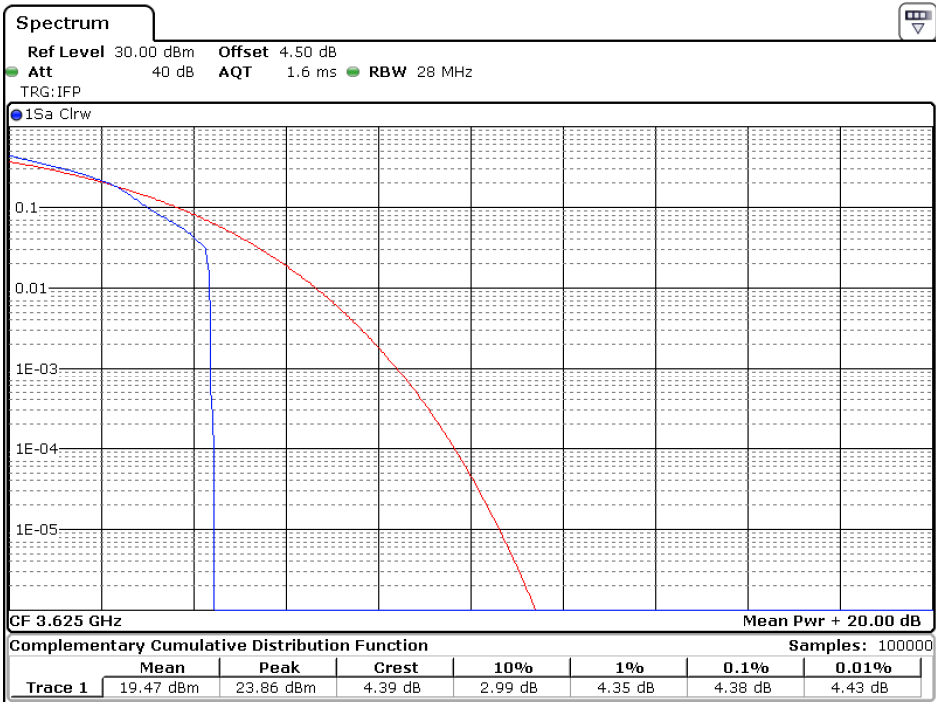
Date: 18.APR.2022 18:49:14

15 MHz / 16-QAM / CH55315 / 1RB



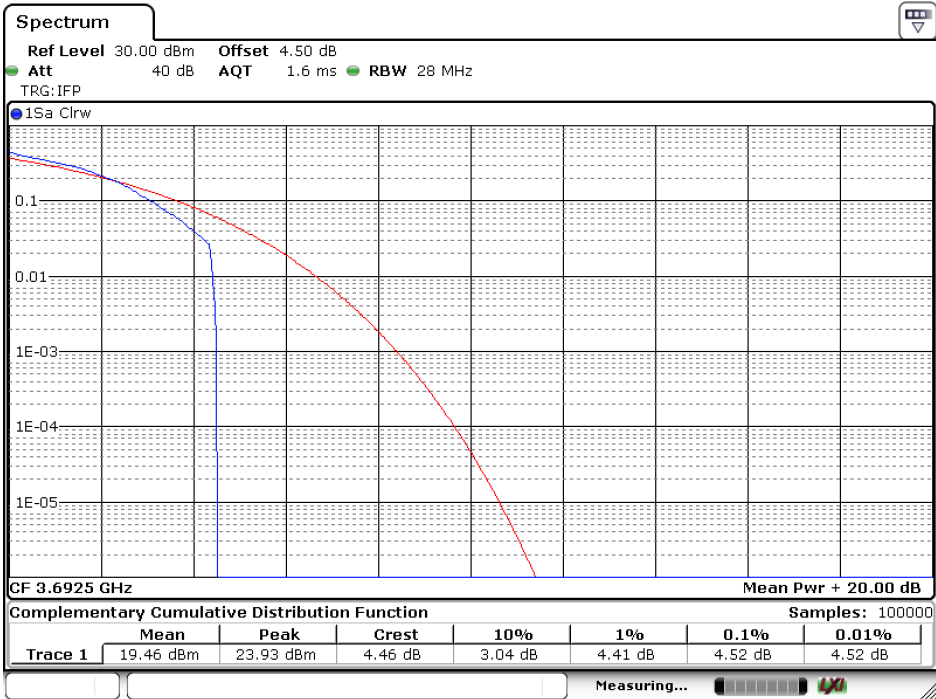
Date: 6.APR.2022 16:12:54

15 MHz / 16-QAM / CH55990 / 1RB



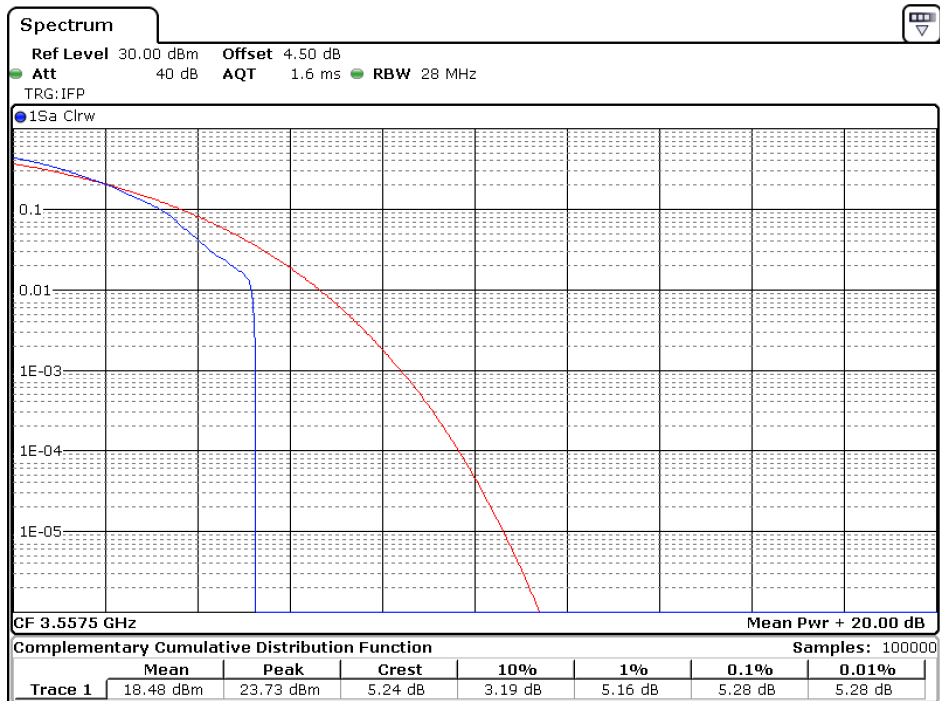
Date: 6.APR.2022 16:14:08

15 MHz / 16-QAM / CH56665 / 1RB



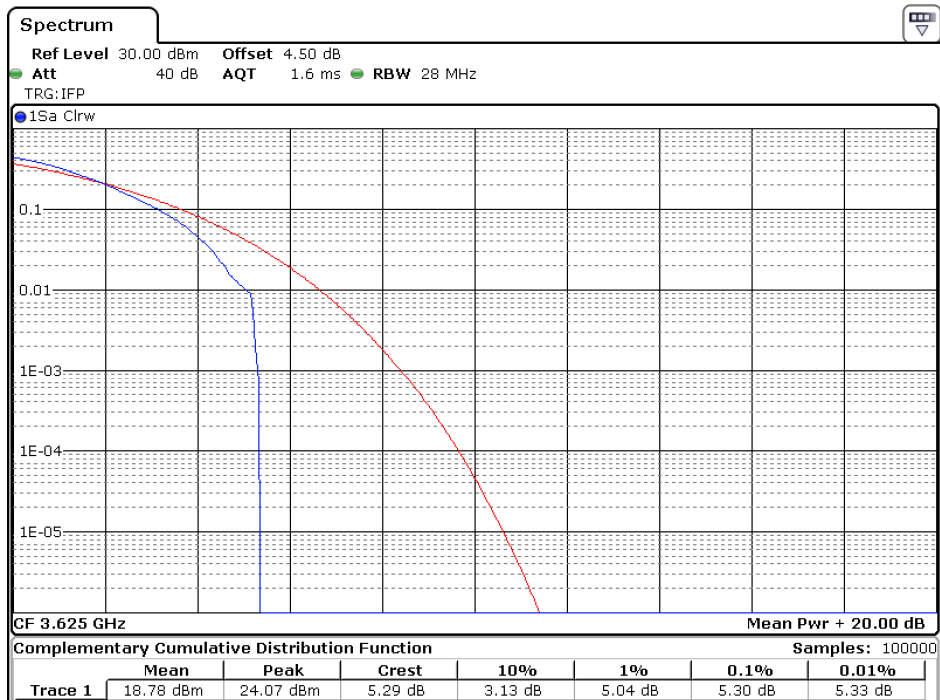
Date: 18.APR.2022 18:49:29

15 MHz / 64-QAM / CH55315 / 1RB



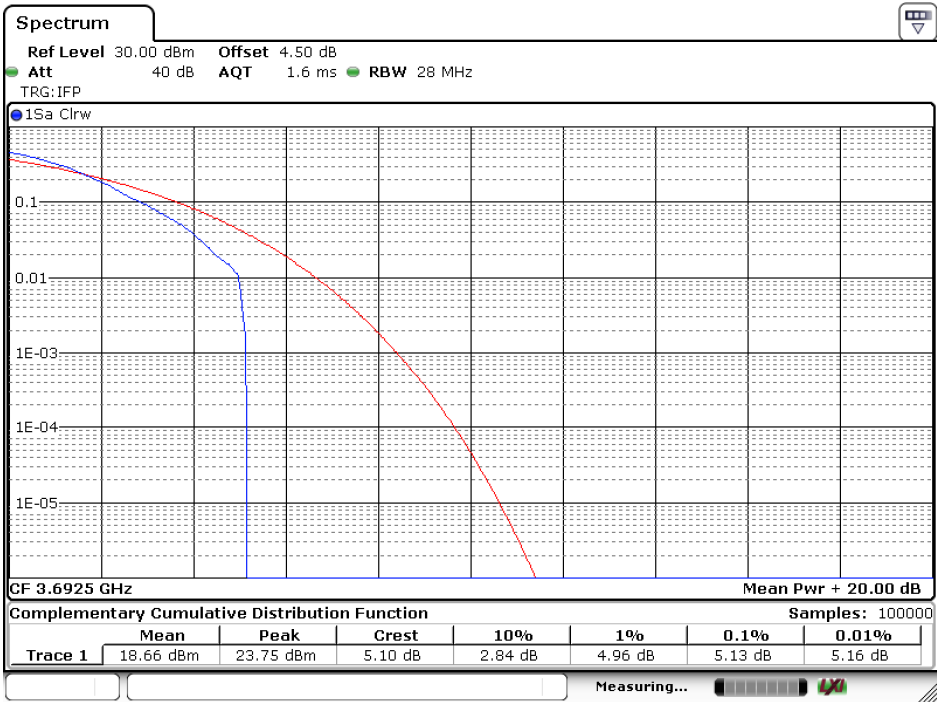
Date: 6.APR.2022 16:13:08

15 MHz / 64-QAM / CH55990 / 1RB



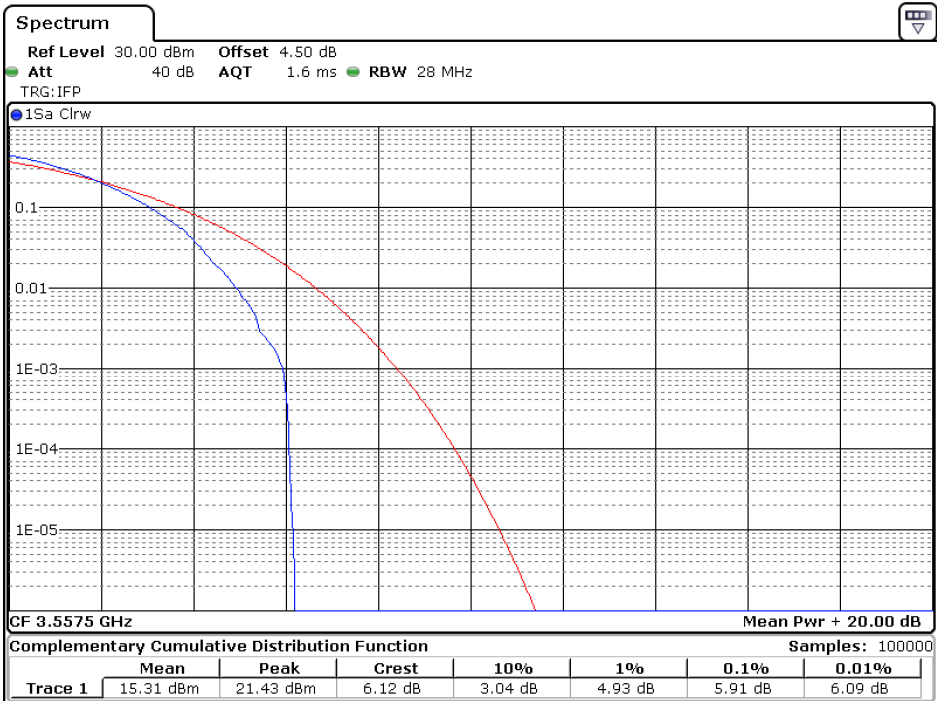
Date: 6.APR.2022 16:14:16

15 MHz / 64-QAM / CH56665 / 1RB



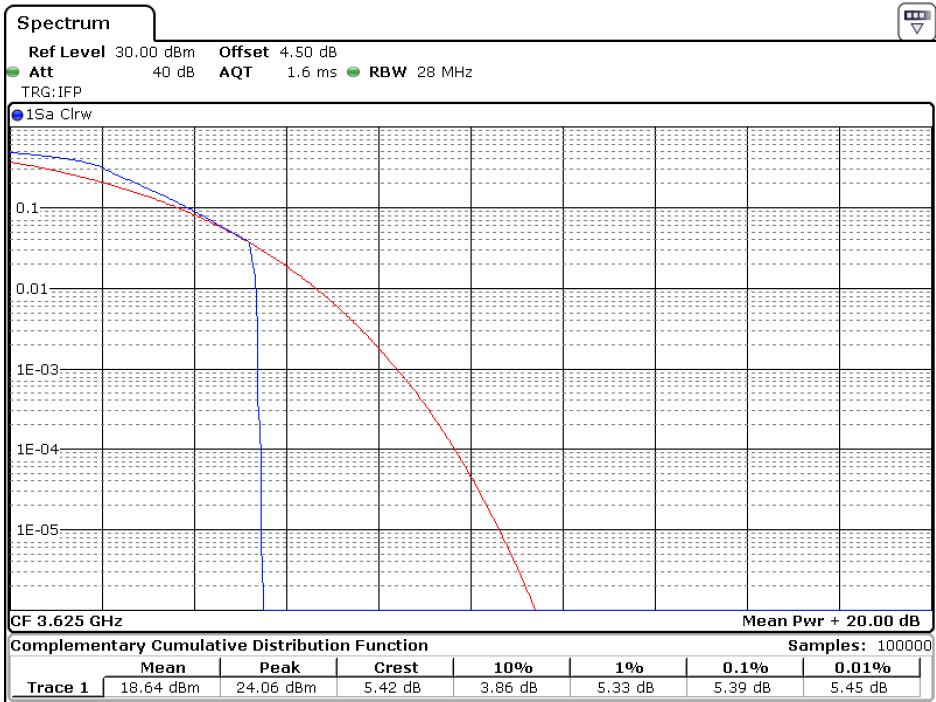
Date: 18.APR.2022 18:49:37

15 MHz / 256-QAM / CH55315 / 1RB



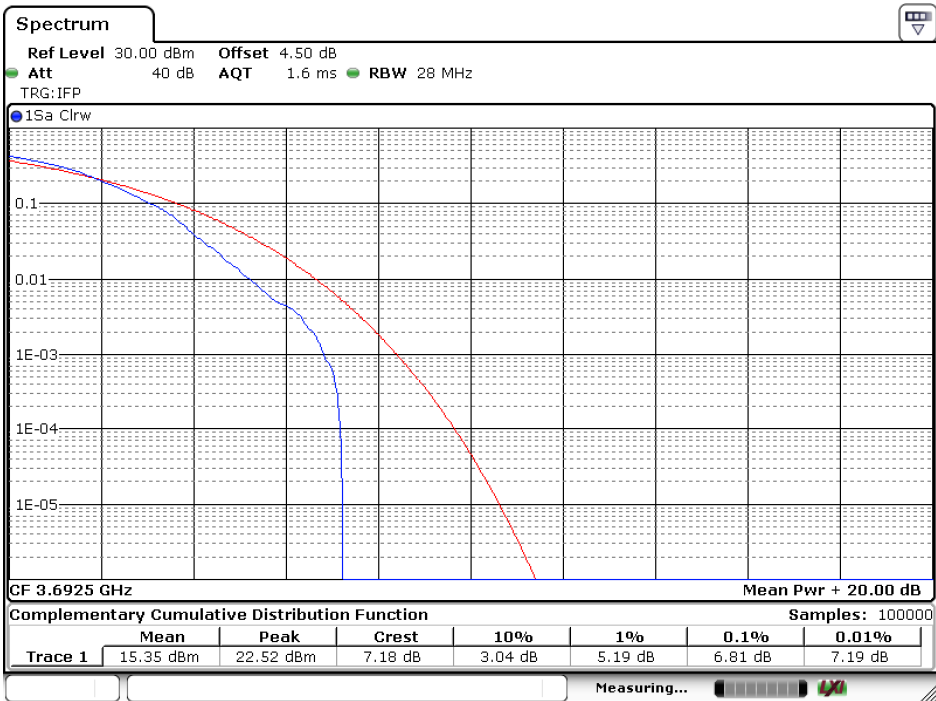
Date: 6.APR.2022 16:13:16

15 MHz / 256-QAM / CH55990 / 1RB



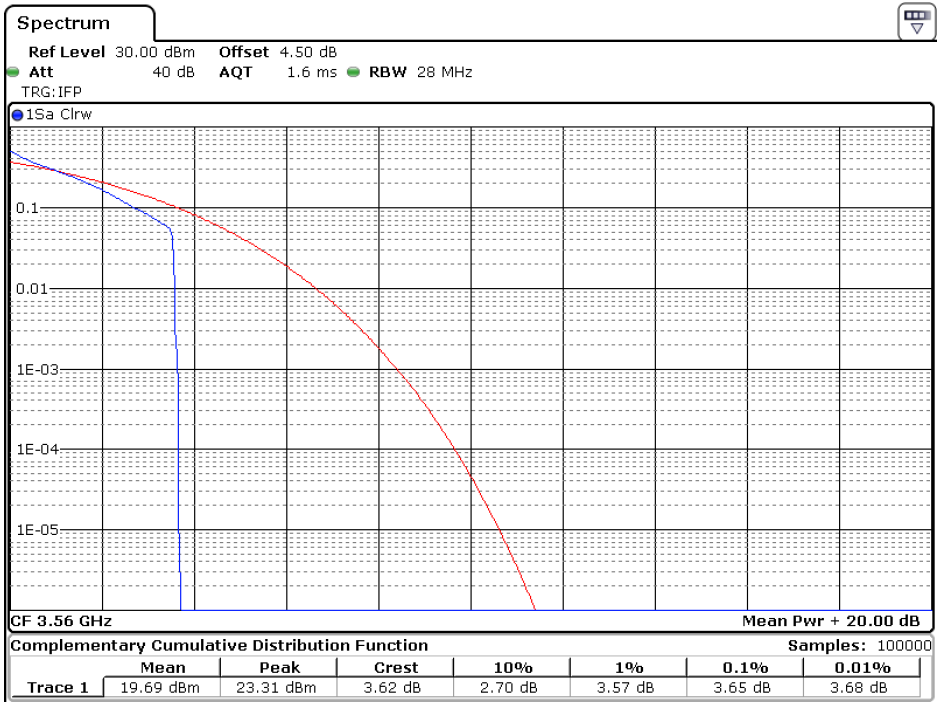
Date: 6.APR.2022 16:18:11

15 MHz / 256-QAM / CH56665 / 1RB



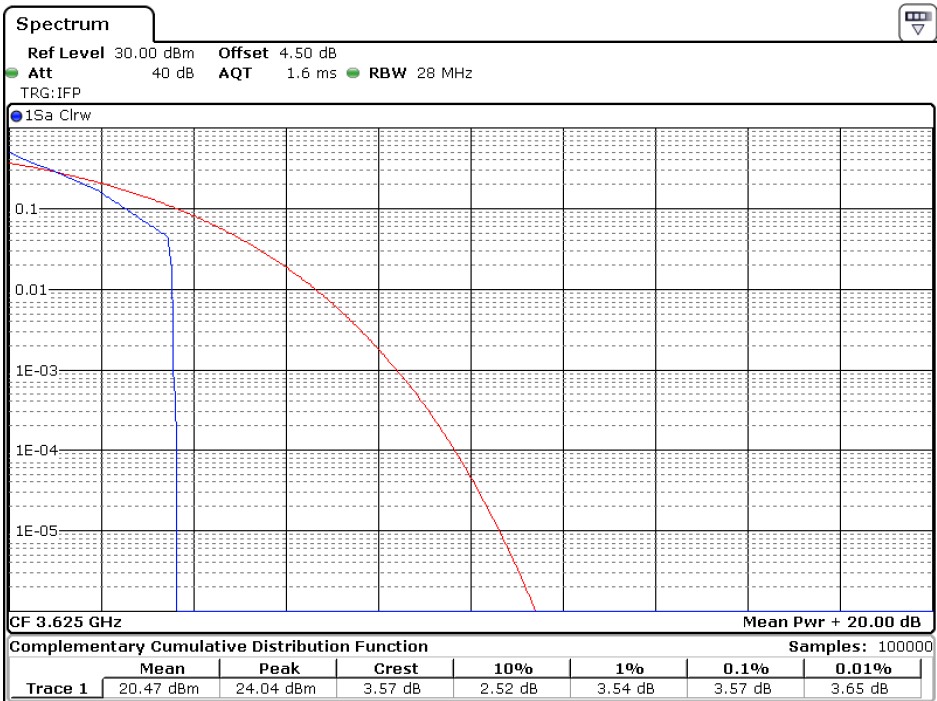
Date: 18.APR.2022 18:49:46

20 MHz / QPSK / CH55340 / 1RB



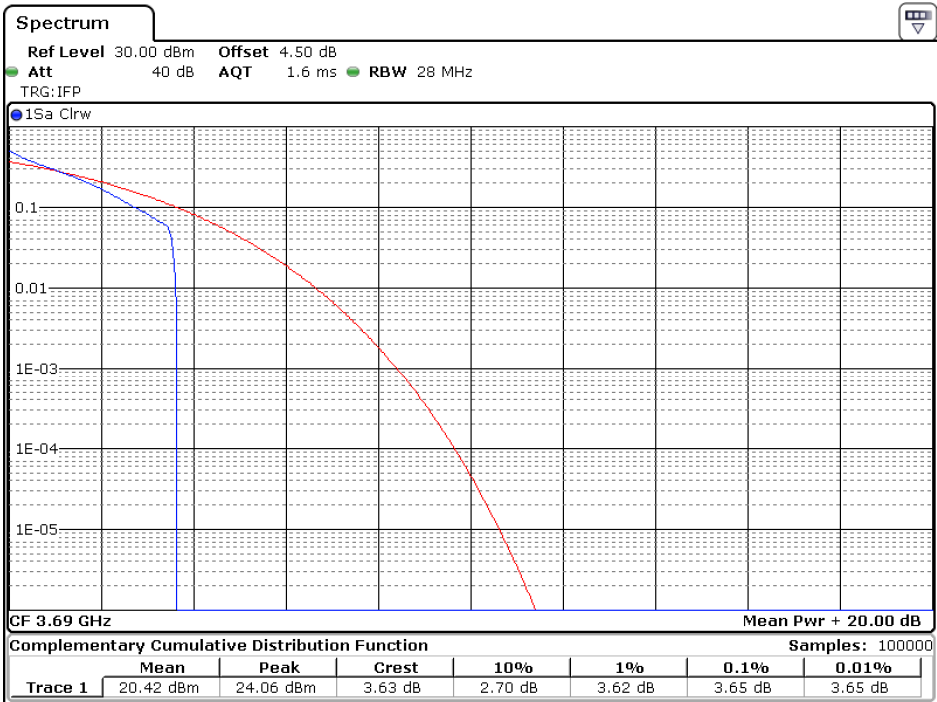
Date: 6.APR.2022 16:22:17

20 MHz / QPSK / CH55990 / 1RB



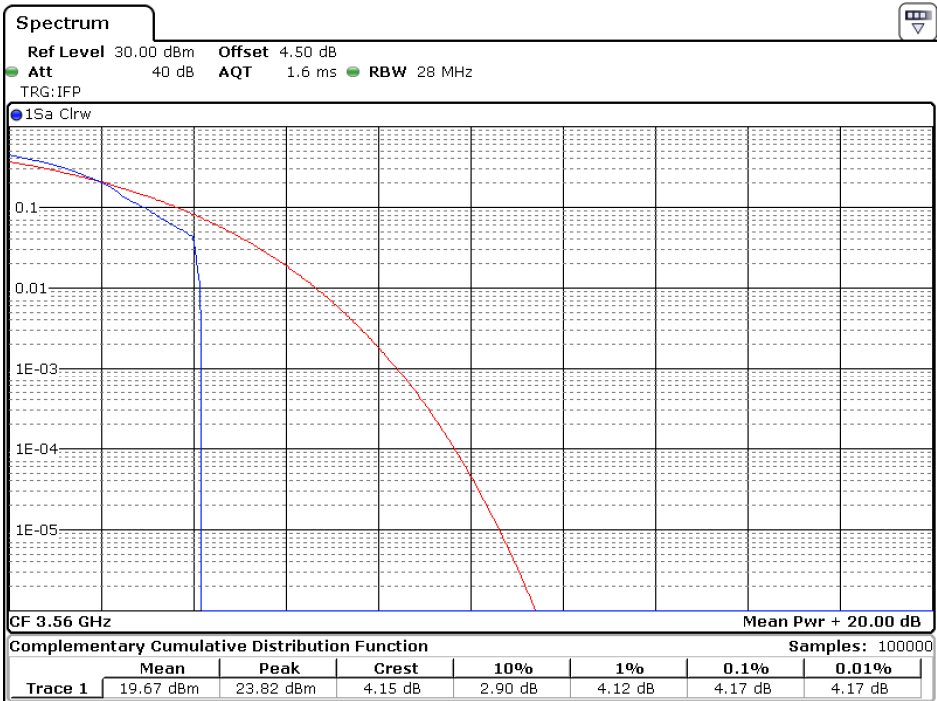
Date: 6.APR.2022 16:23:12

20 MHz / QPSK / CH56640 / 1RB



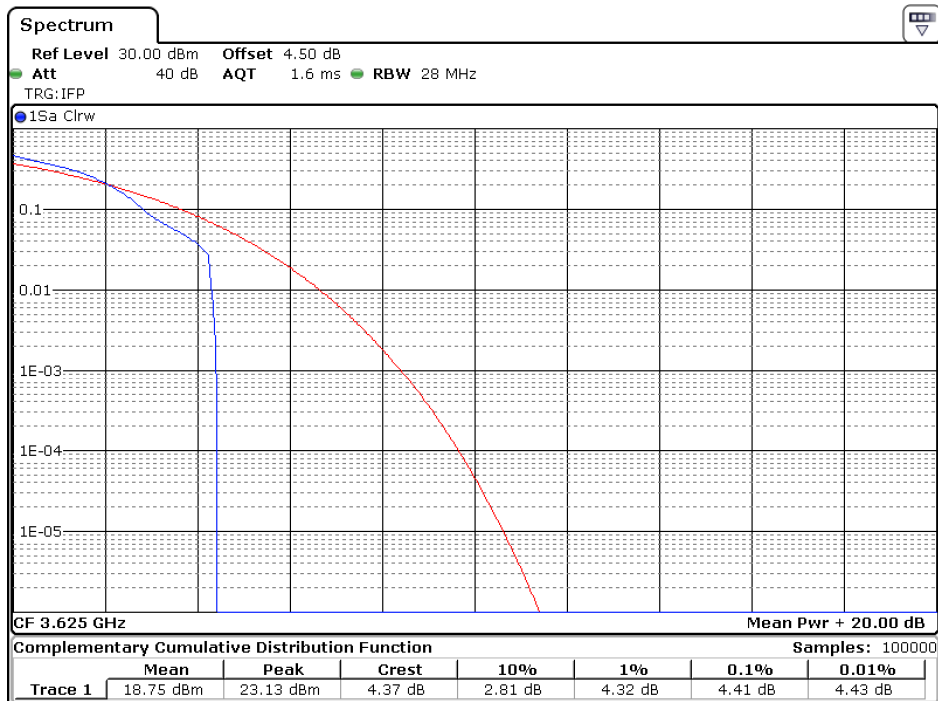
Date: 6.APR.2022 16:26:23

20 MHz / 16-QAM / CH55340 / 1RB



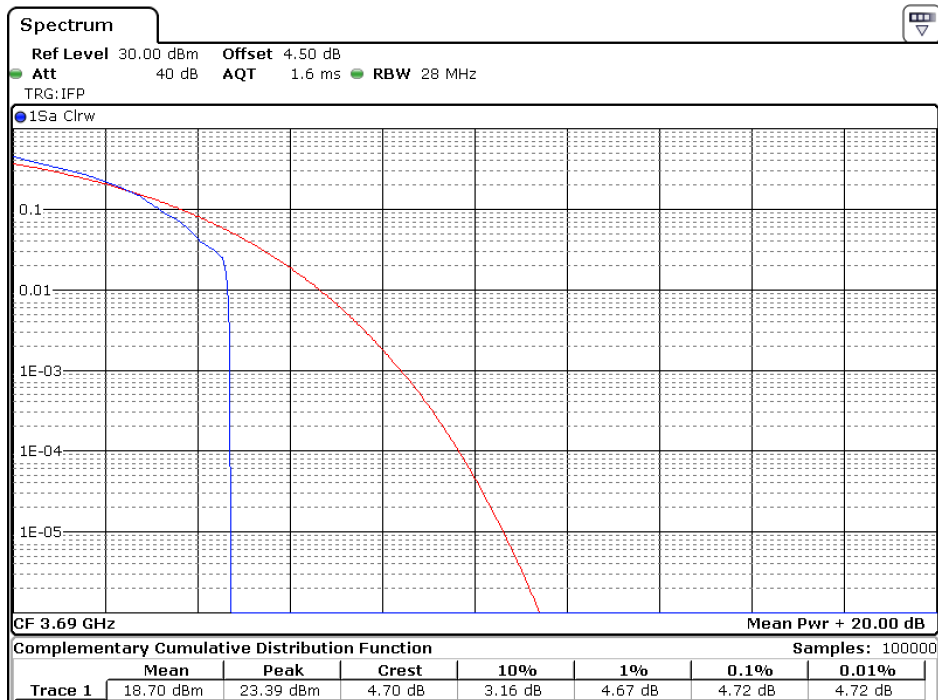
Date: 6.APR.2022 16:22:29

20 MHz / 16-QAM / CH55990 / 1RB



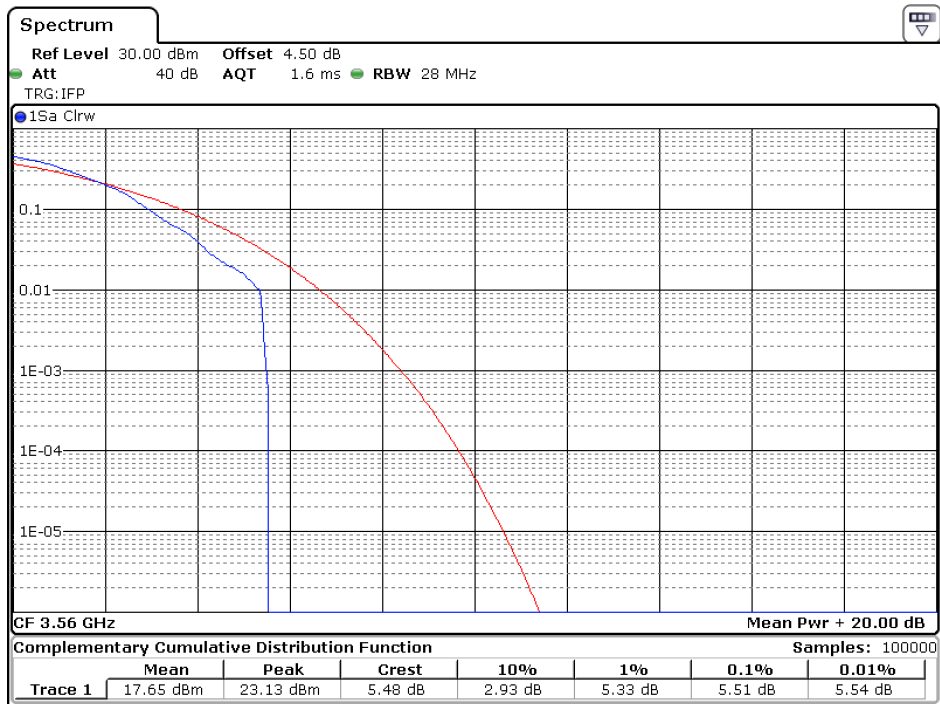
Date: 6.APR.2022 16:23:21

20 MHz / 16-QAM / CH56640 / 1RB



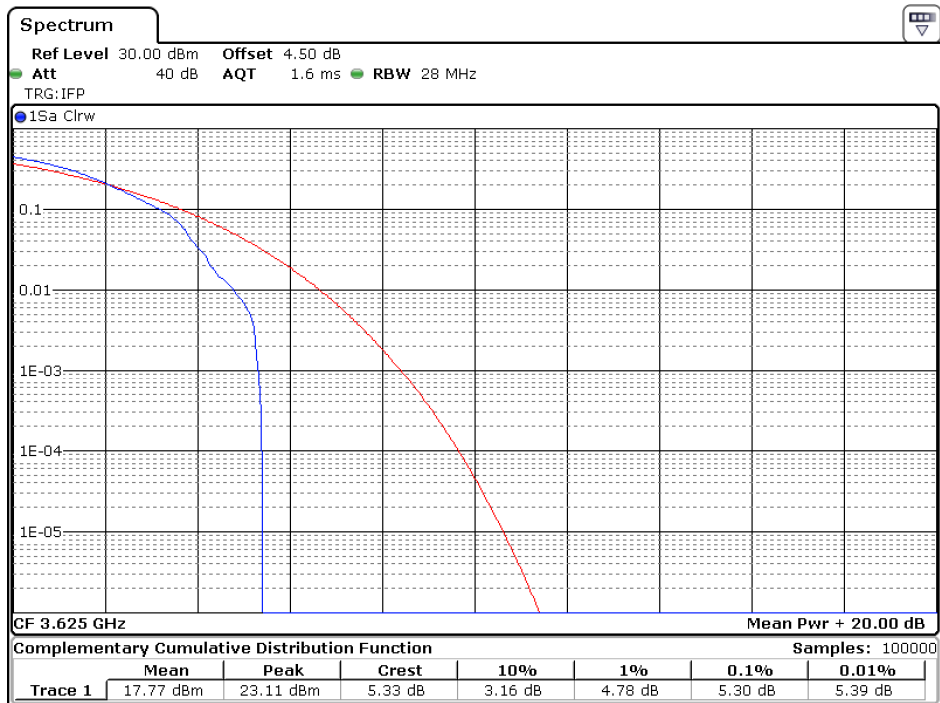
Date: 6.APR.2022 16:26:32

20 MHz / 64-QAM / CH55340 / 1RB



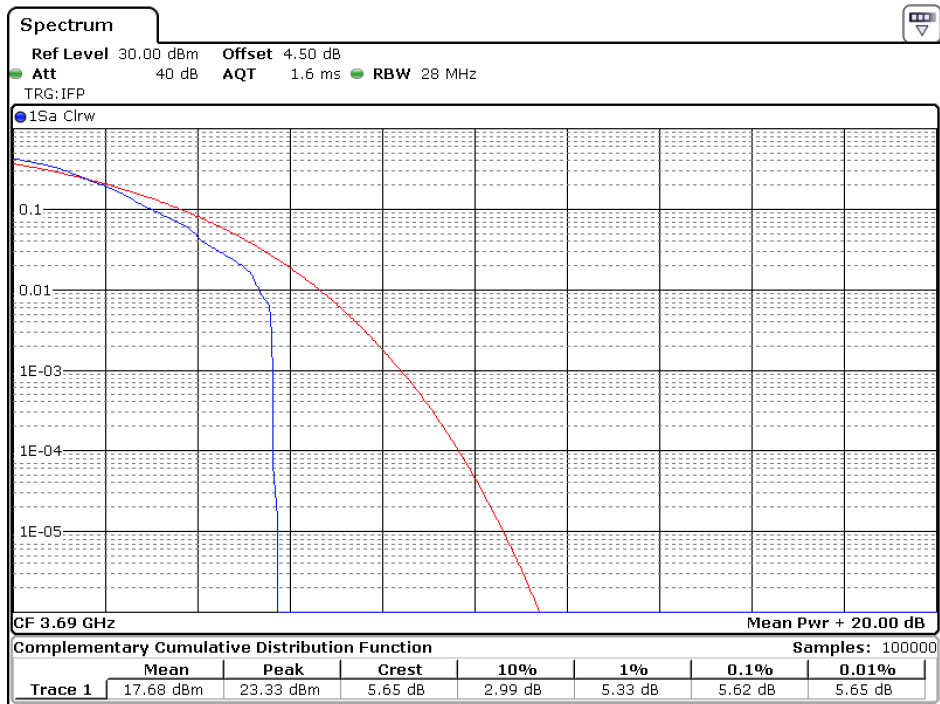
Date: 6.APR.2022 16:22:37

20 MHz / 64-QAM / CH55990 / 1RB



Date: 6.APR.2022 16:23:30

20 MHz / 64-QAM / CH56640 / 1RB



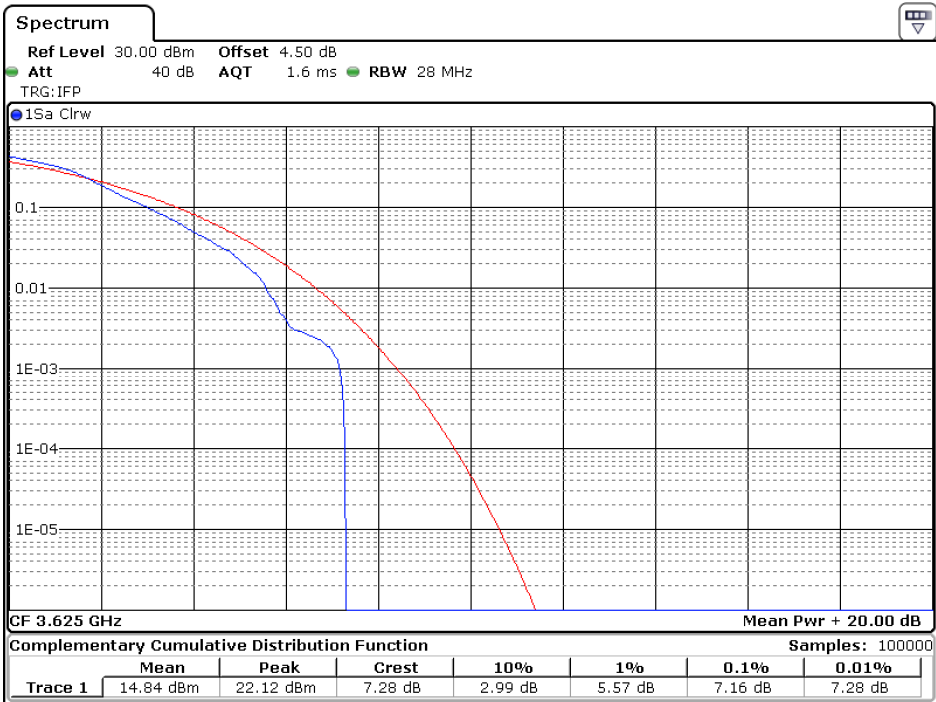
Date: 6.APR.2022 16:26:40

20 MHz / 256-QAM / CH55340 / 1RB



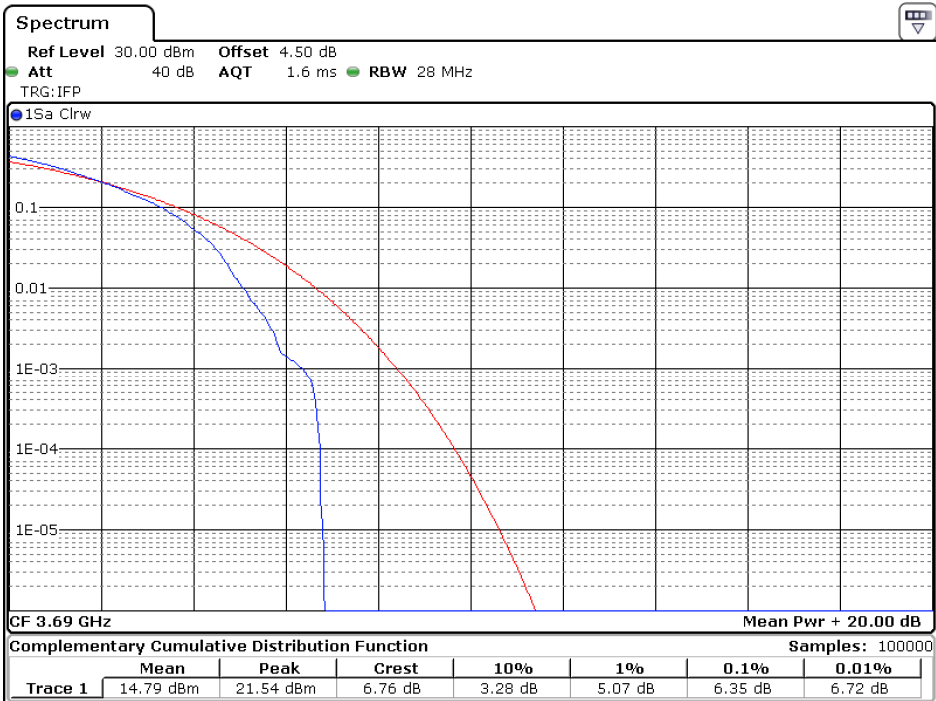
Date: 6.APR.2022 16:22:48

20 MHz / 256-QAM / CH55990 / 1RB



Date: 6.APR.2022 16:23:38

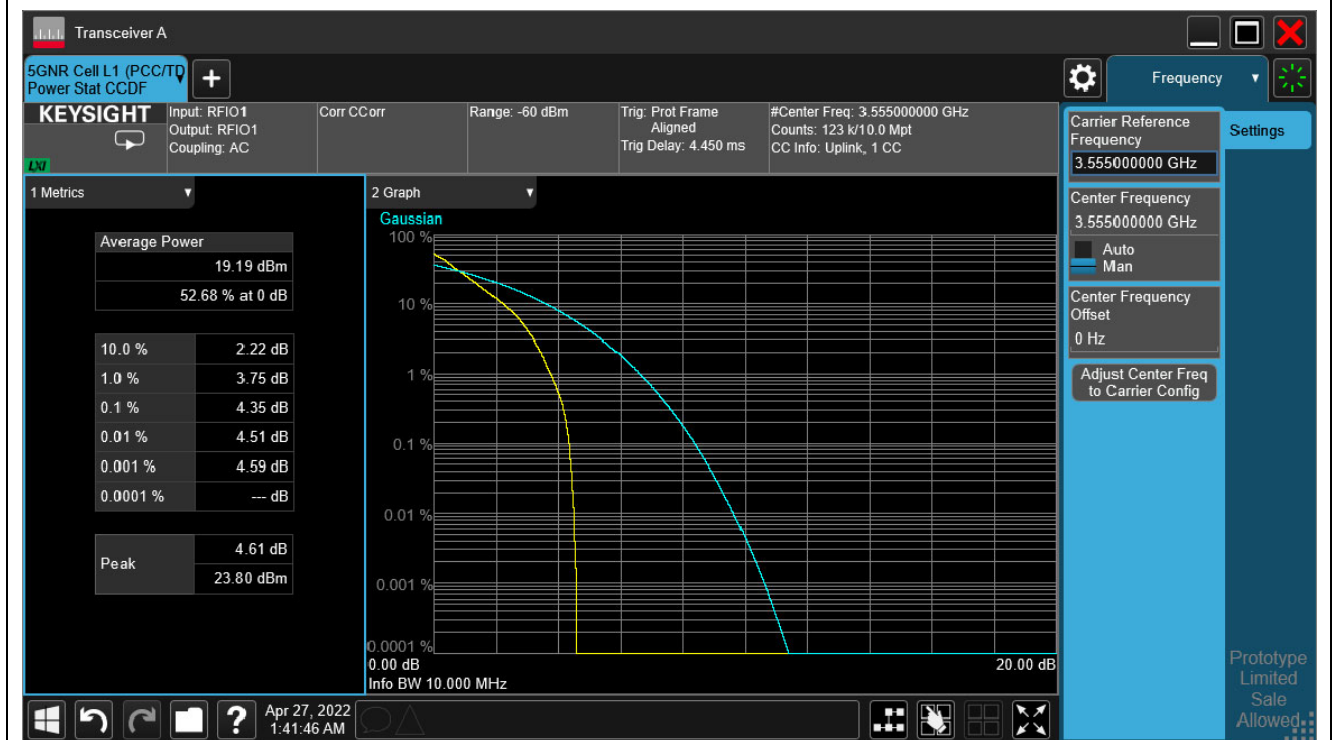
20 MHz / 256-QAM / CH56640 / 1RB



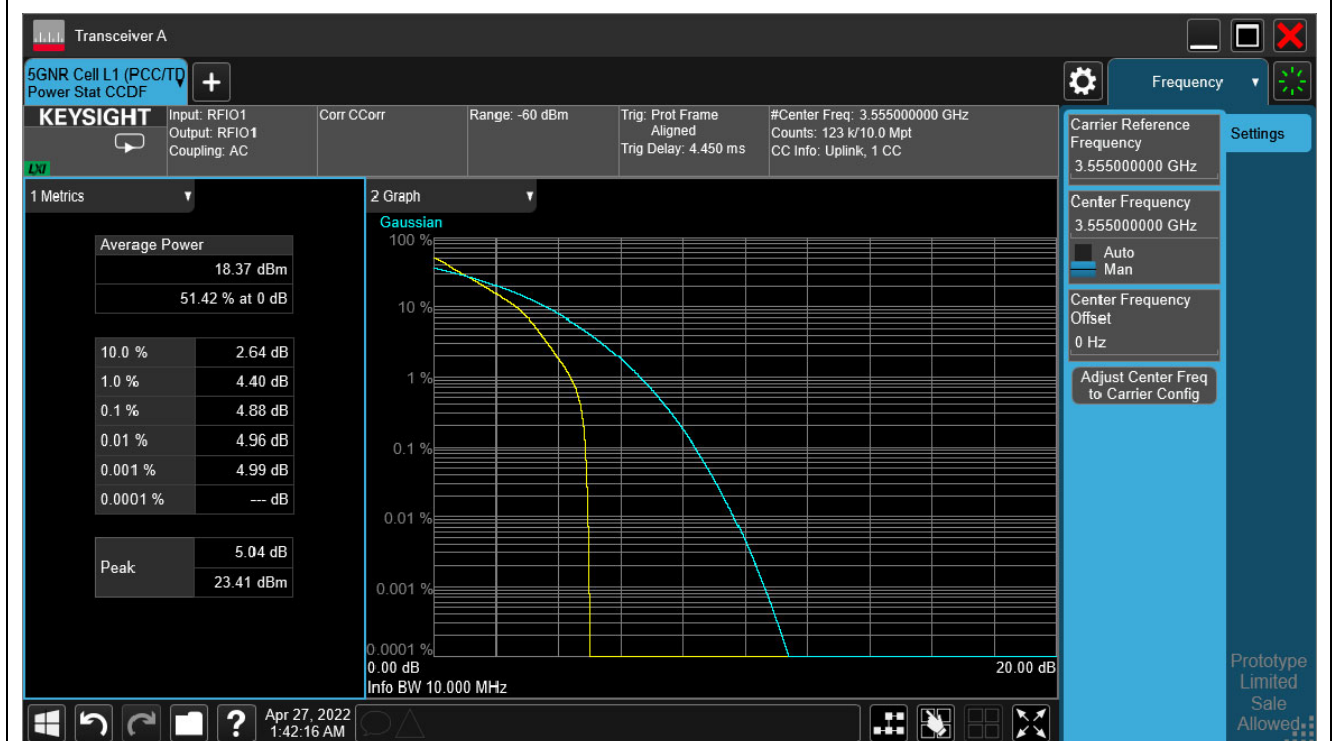
Date: 6.APR.2022 16:26:47

Mode 2: 5G NR n48

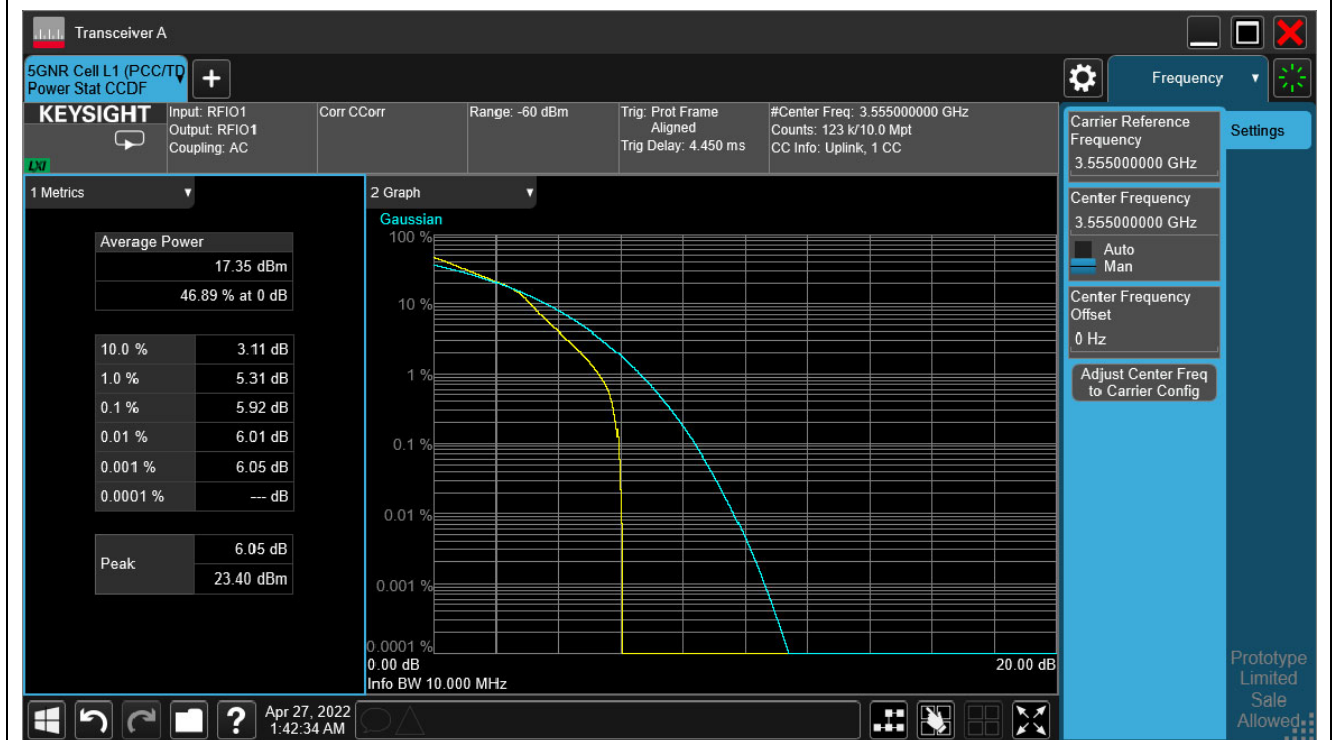
10 MHz / pi/2 BPSK / CH637000 / 1RB



10 MHz / QPSK / CH637000 / 1RB



10 MHz / 16-QAM / CH637000 / 1RB



10 MHz / pi/2 BPSK / CH641666 / 1RB

