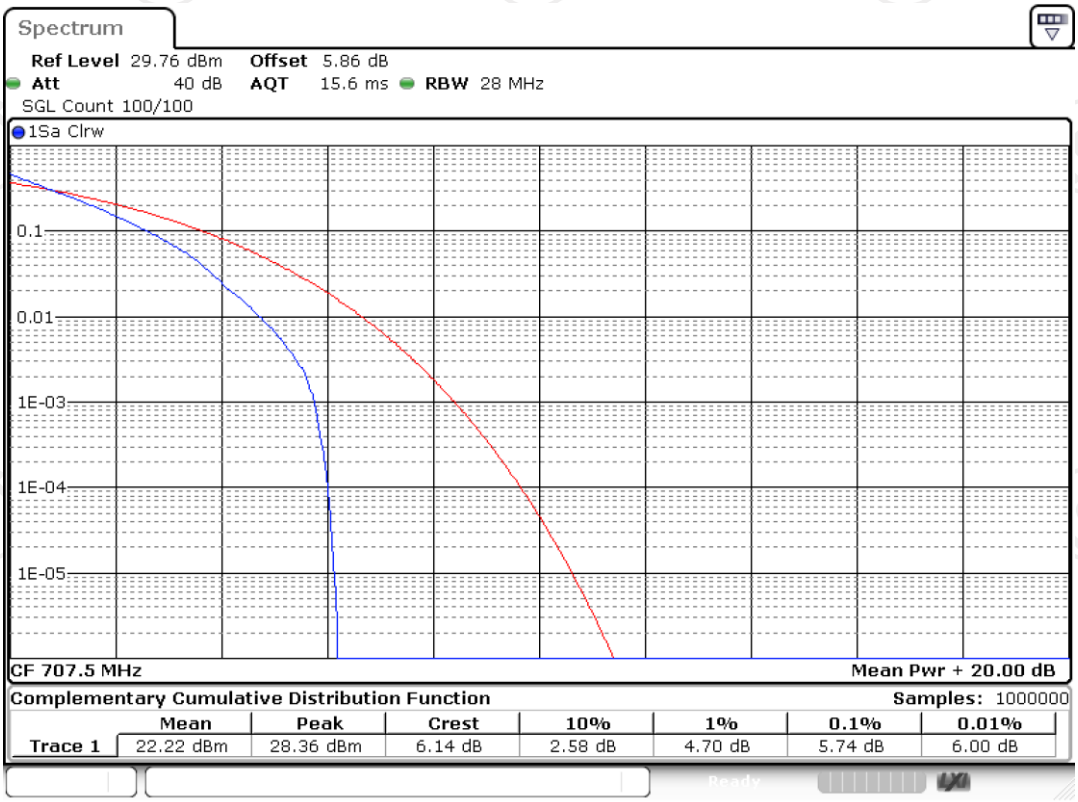
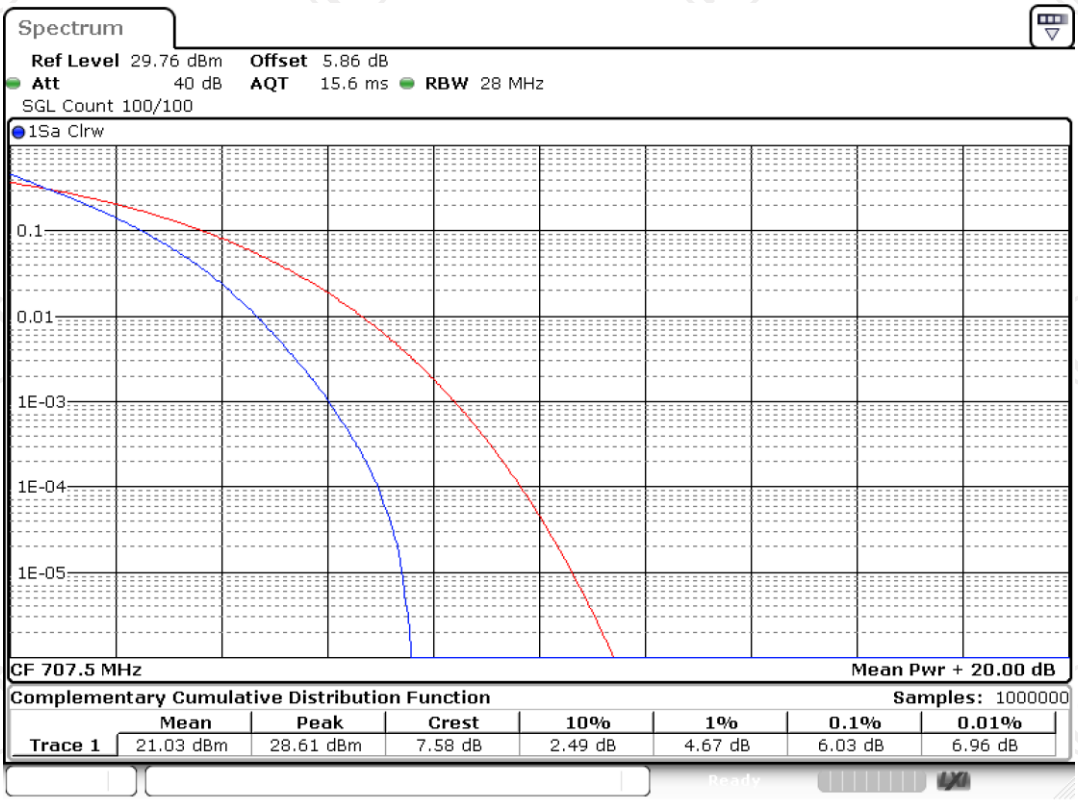
Band12 QPSK BW=5MHz Channel=23095 RB Size=1 Position=#0



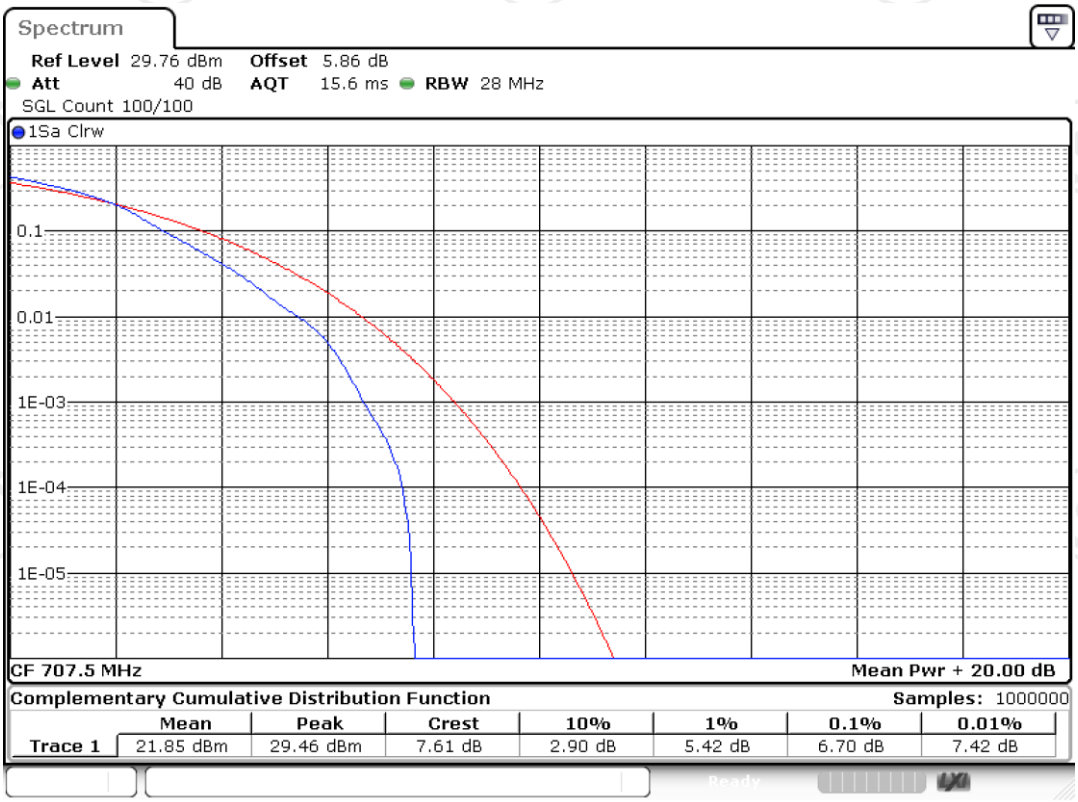
Date: 6.JUN.2023 12:16:40

Band12 QPSK BW=5MHz Channel=23095 RB Size=25 Position=#0



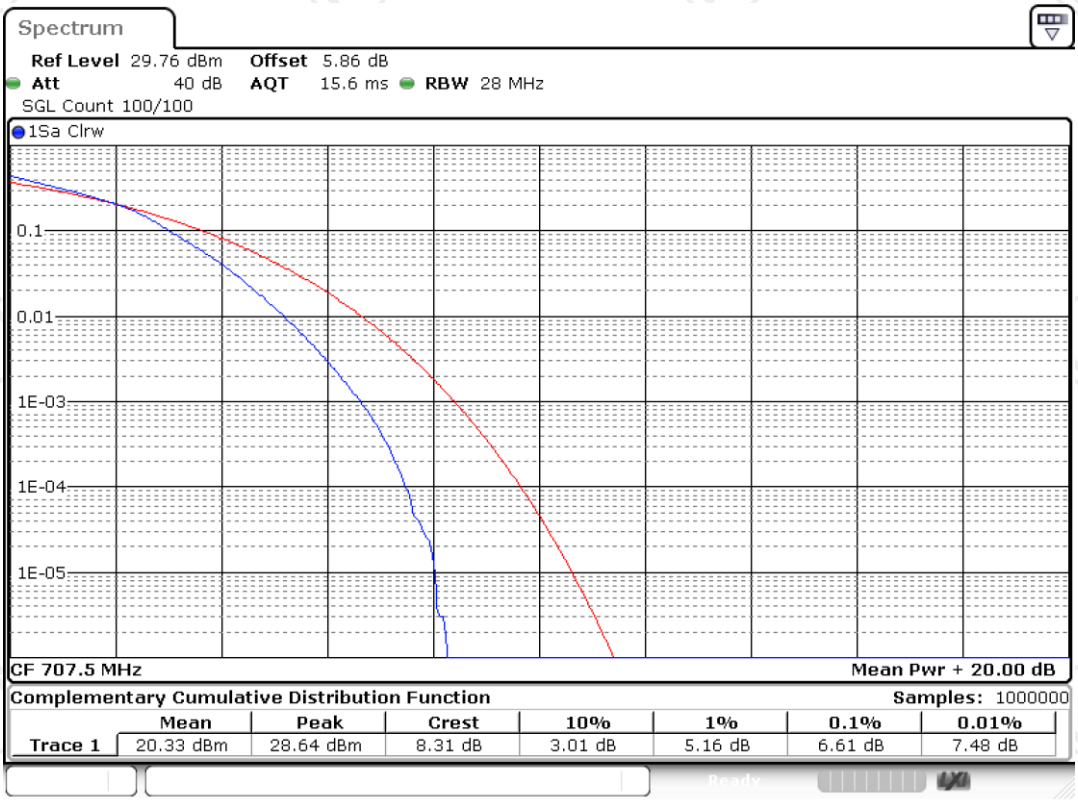
Date: 6.JUN.2023 12:16:47

Band12 16QAM BW=5MHz Channel=23095 RB Size=1 Position=#0



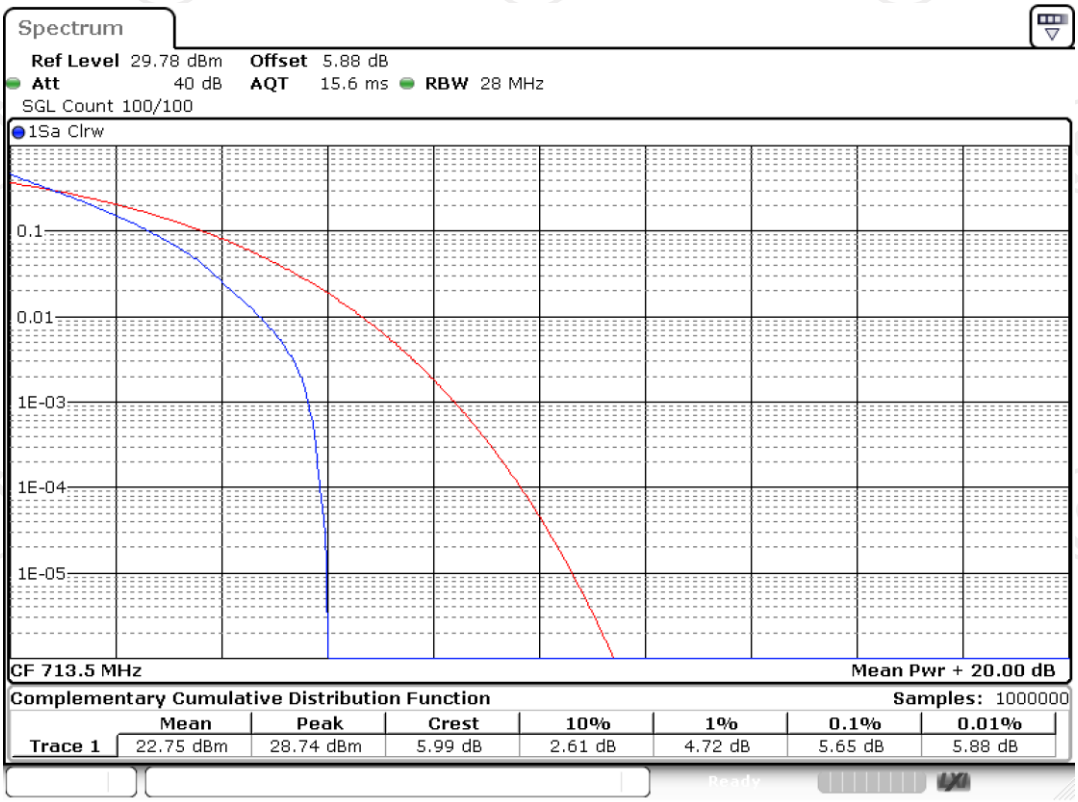
Date: 6.JUN.2023 12:16:54

Band12 16QAM BW=5MHz Channel=23095 RB Size=25 Position=#0



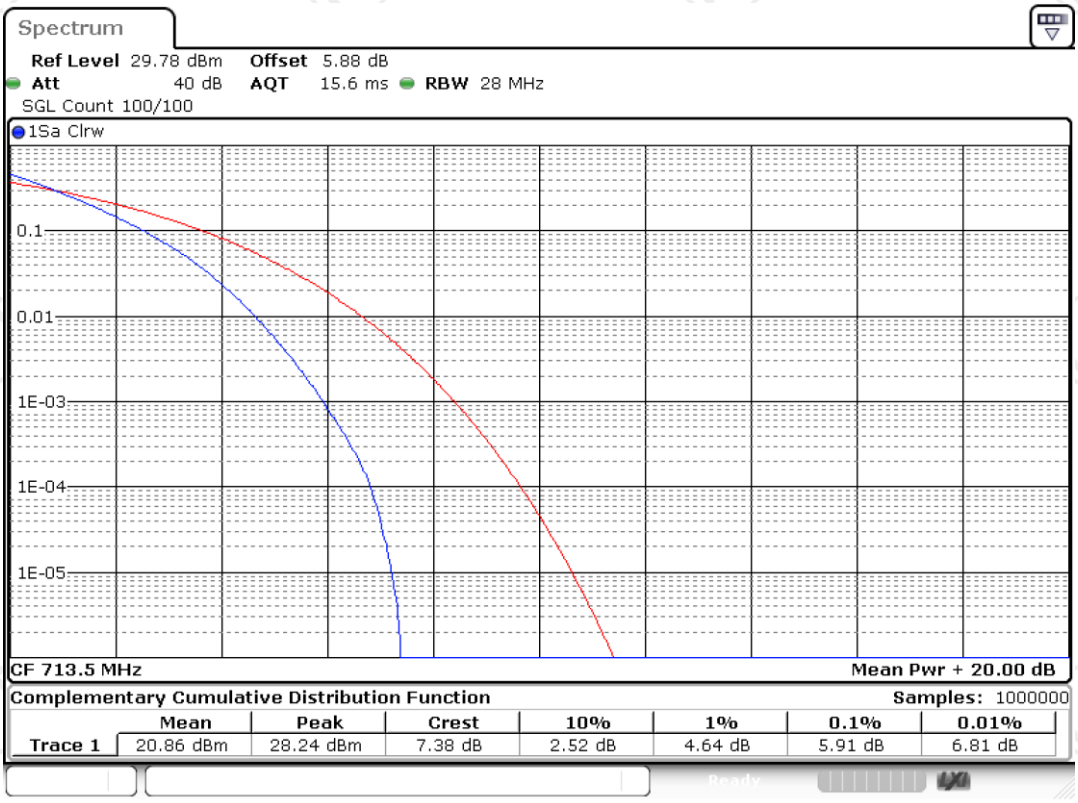
Date: 6.JUN.2023 12:17:00

Band12 QPSK BW=5MHz Channel=23155 RB Size=1 Position=#0



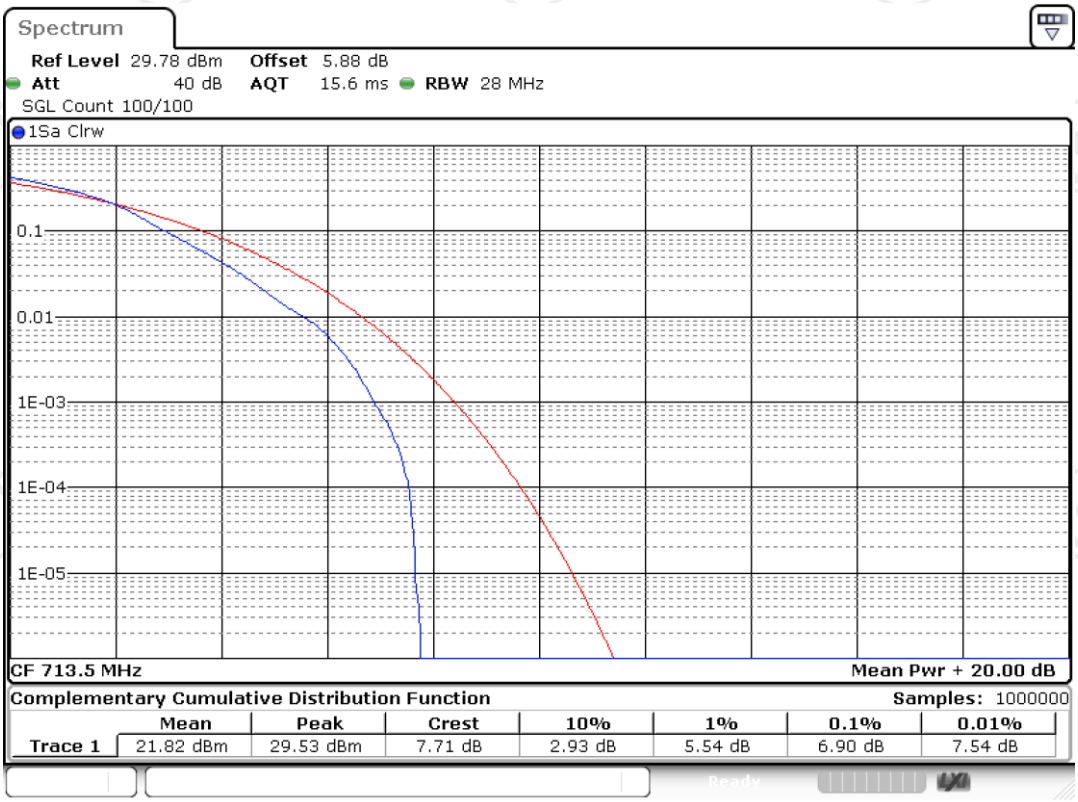
Date: 6.JUN.2023 12:17:07

Band12 QPSK BW=5MHz Channel=23155 RB Size=25 Position=#0



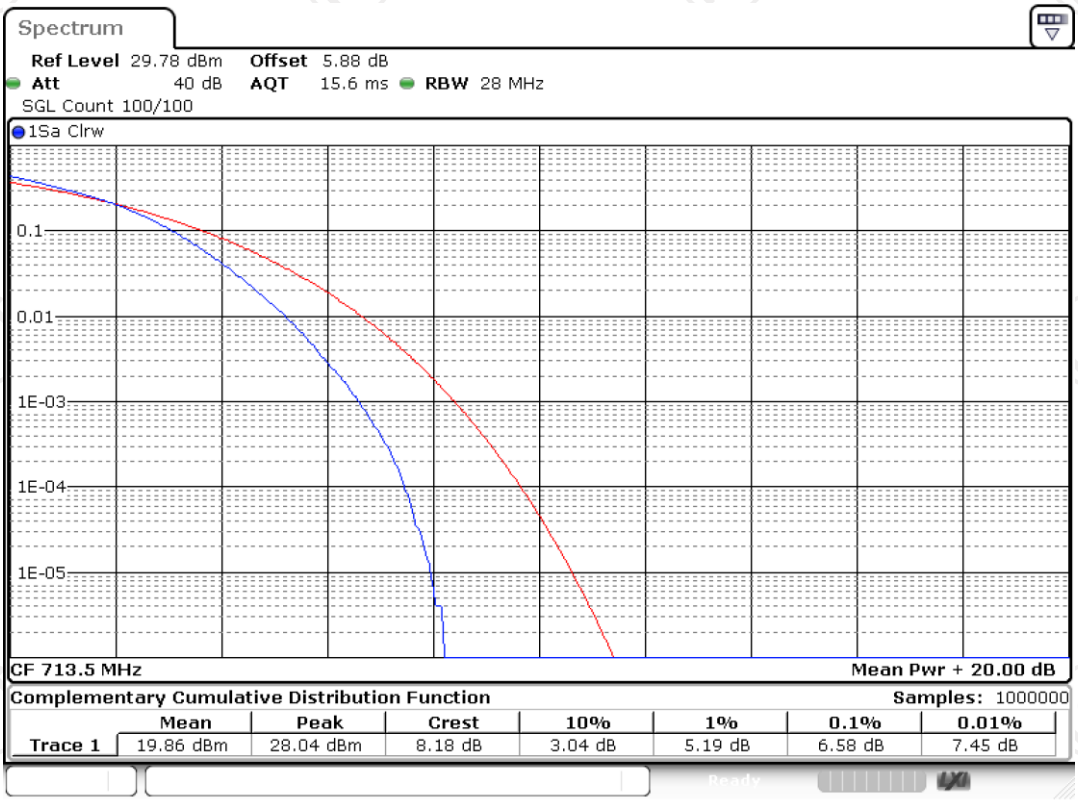
Date: 6.JUN.2023 12:17:14

Band12 16QAM BW=5MHz Channel=23155 RB Size=1 Position=#0



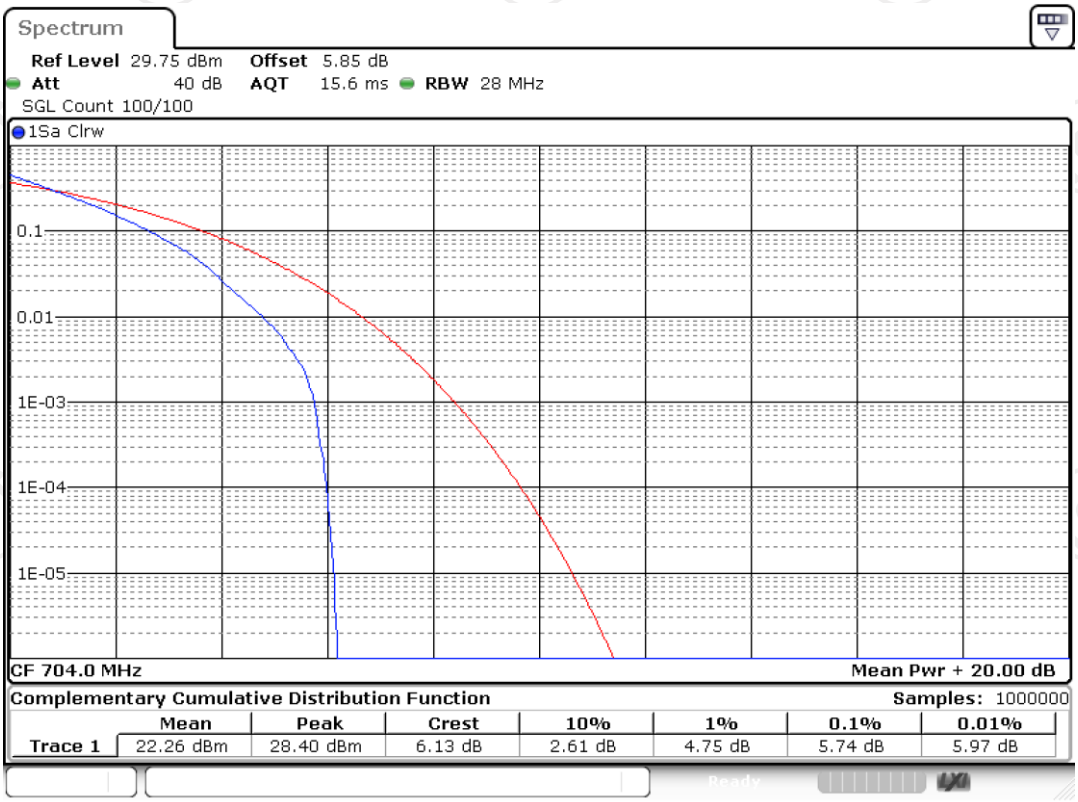
Date: 6.JUN.2023 12:17:21

Band12 16QAM BW=5MHz Channel=23155 RB Size=25 Position=#0



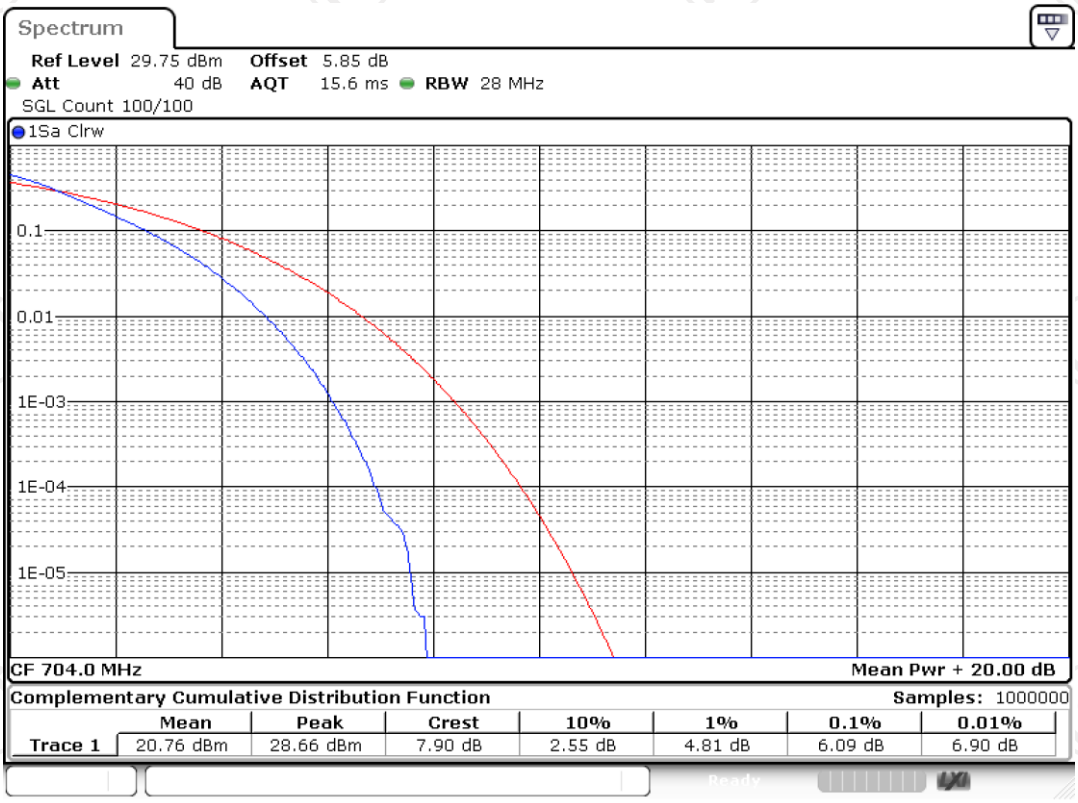
Date: 6.JUN.2023 12:17:28

Band12 QPSK BW=10MHz Channel=23060 RB Size=1 Position=#0



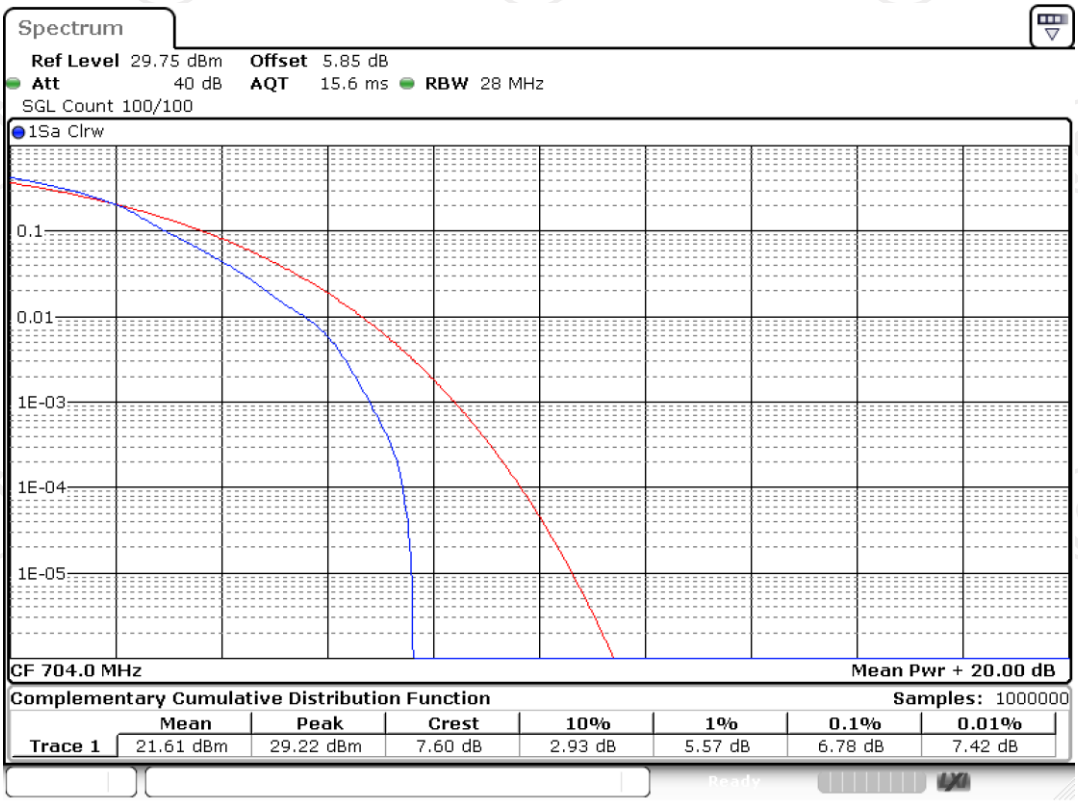
Date: 6.JUN.2023 12:17:35

Band12 QPSK BW=10MHz Channel=23060 RB Size=50 Position=#0



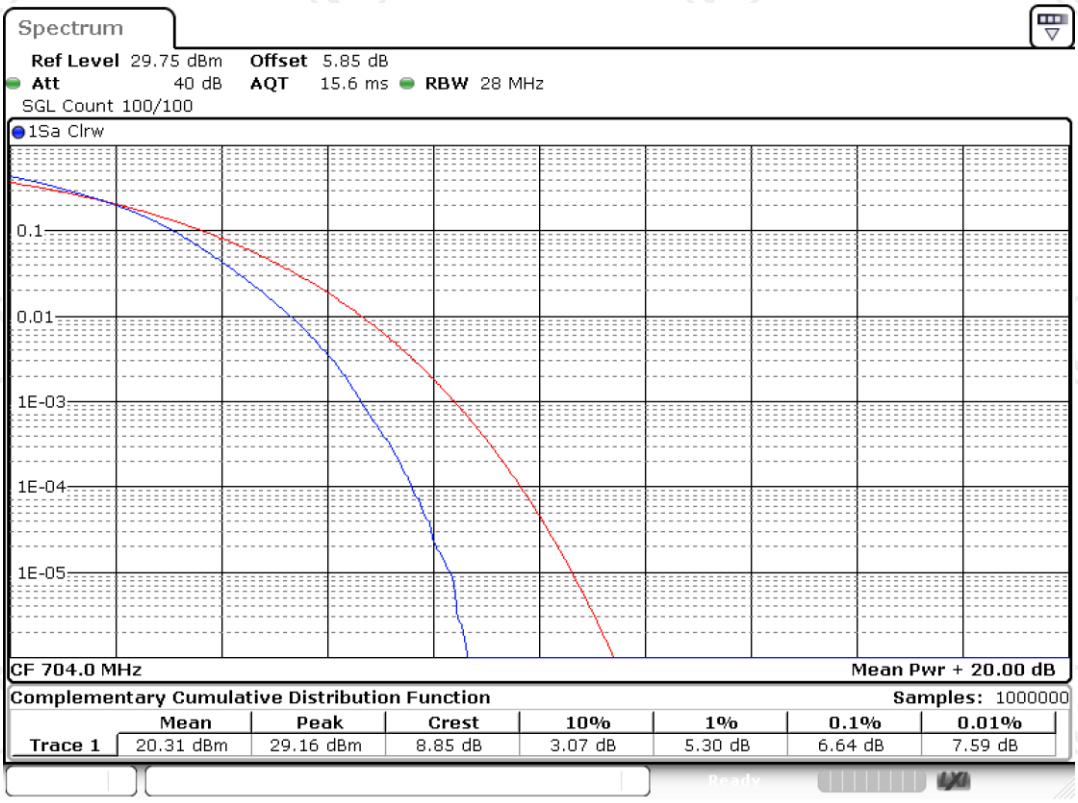
Date: 6.JUN.2023 12:17:42

Band12 16QAM BW=10MHz Channel=23060 RB Size=1 Position=#0



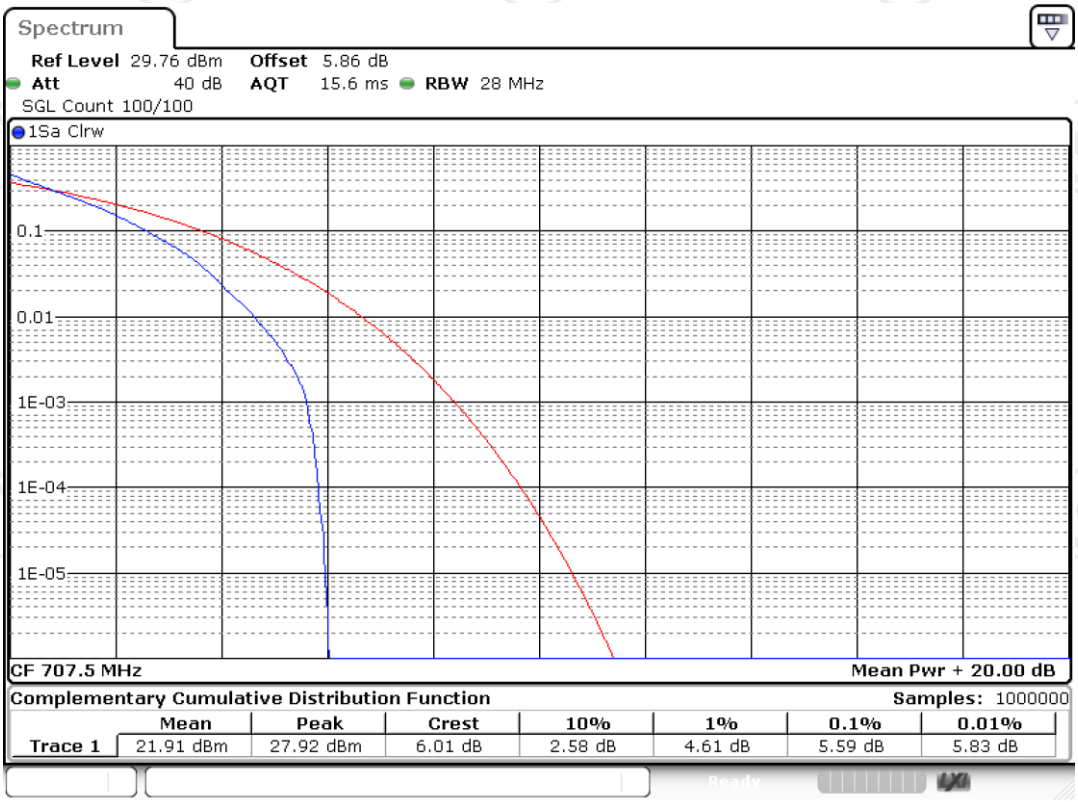
Date: 6.JUN.2023 12:17:49

Band12 16QAM BW=10MHz Channel=23060 RB Size=50 Position=#0



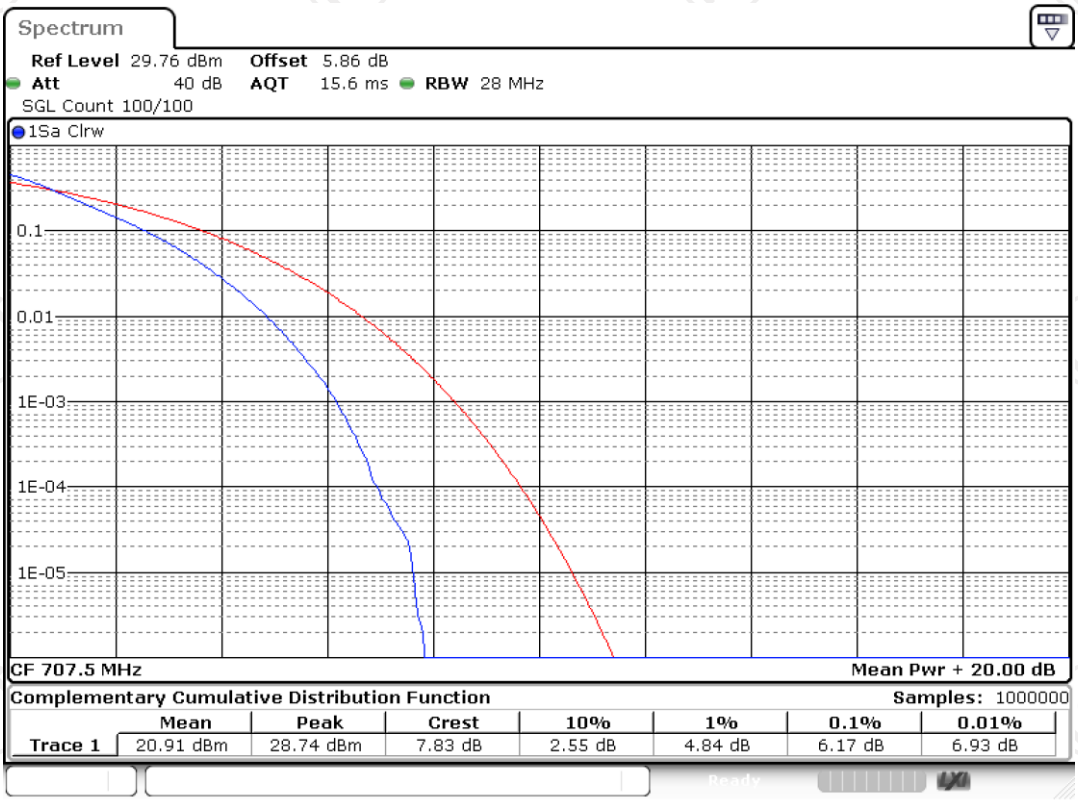
Date: 6.JUN.2023 12:17:56

Band12 QPSK BW=10MHz Channel=23095 RB Size=1 Position=#0



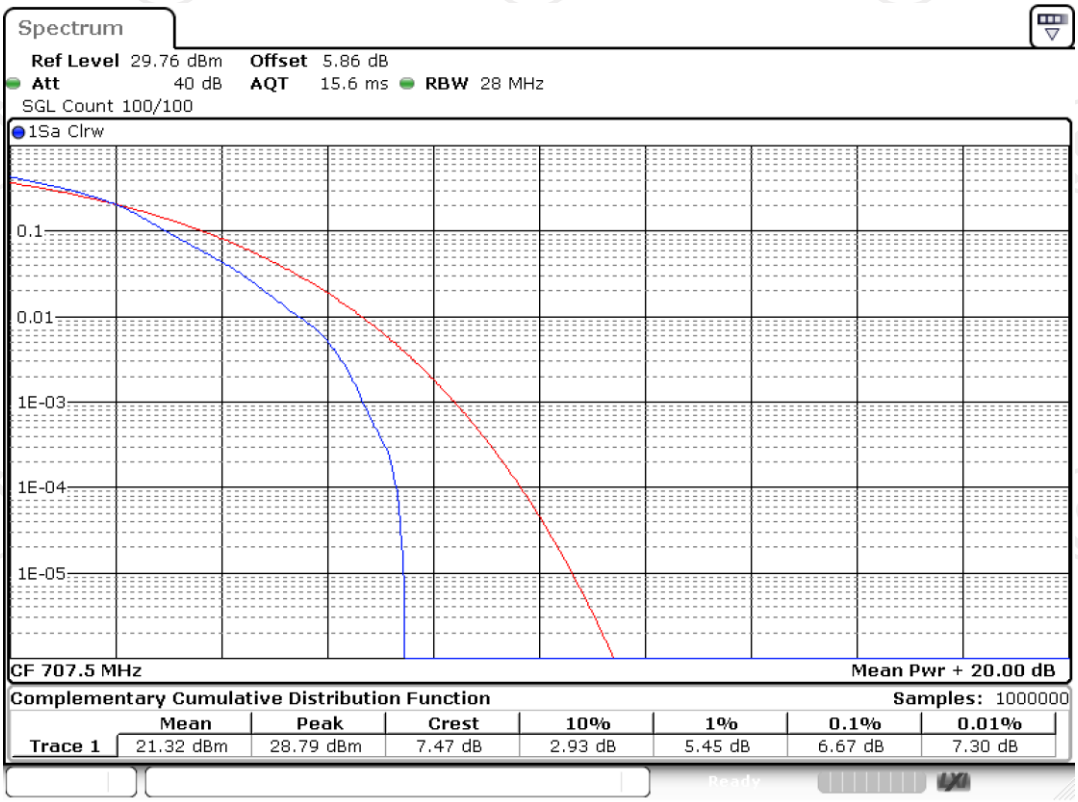
Date: 6.JUN.2023 12:18:03

Band12 QPSK BW=10MHz Channel=23095 RB Size=50 Position=#0



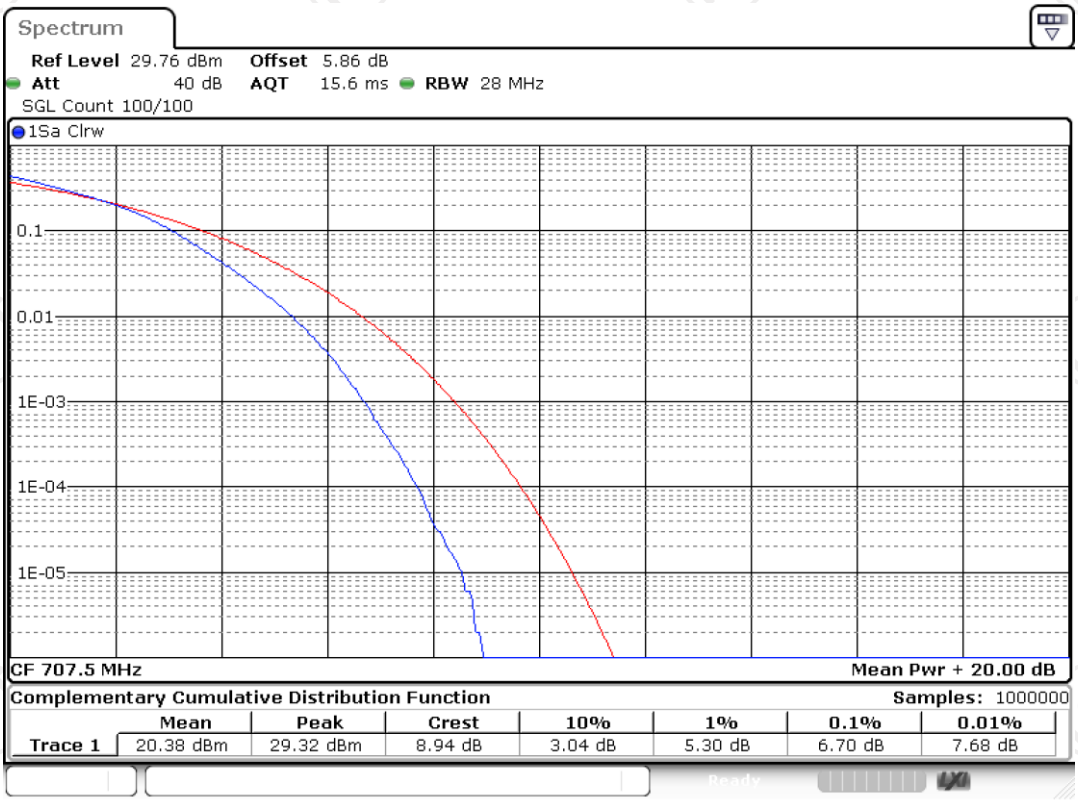
Date: 6.JUN.2023 12:18:09

Band12 16QAM BW=10MHz Channel=23095 RB Size=1 Position=#0



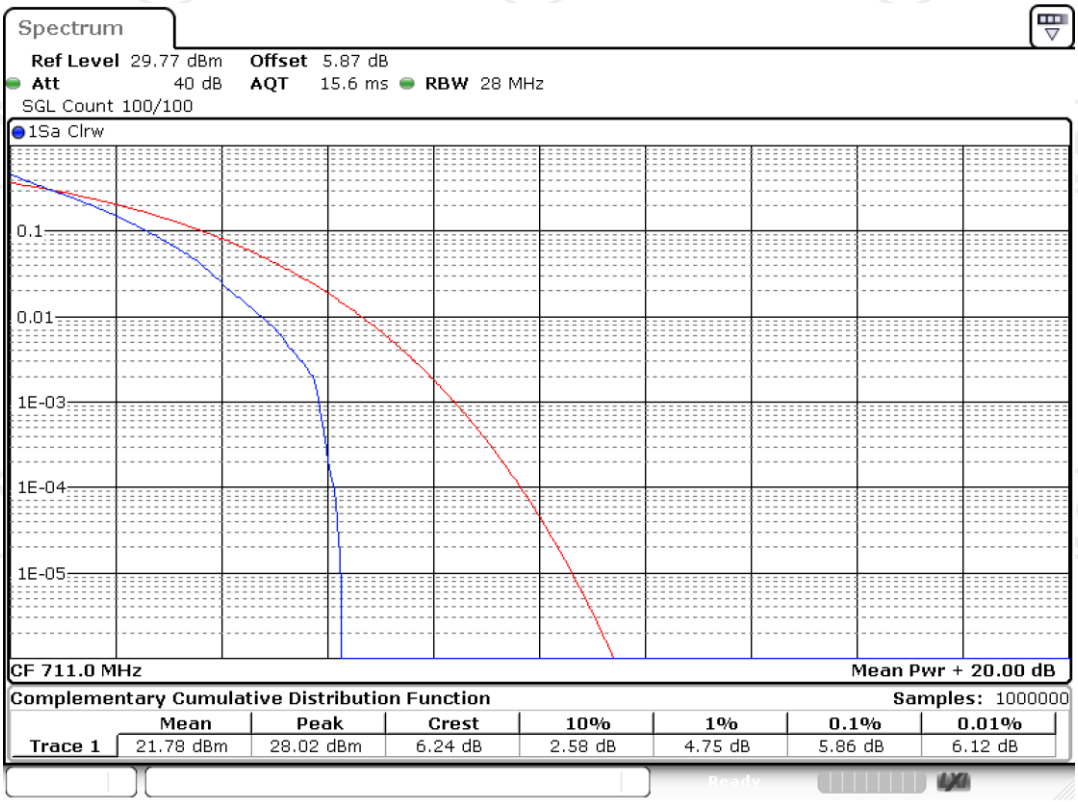
Date: 6.JUN.2023 12:18:16

Band12 16QAM BW=10MHz Channel=23095 RB Size=50 Position=#0



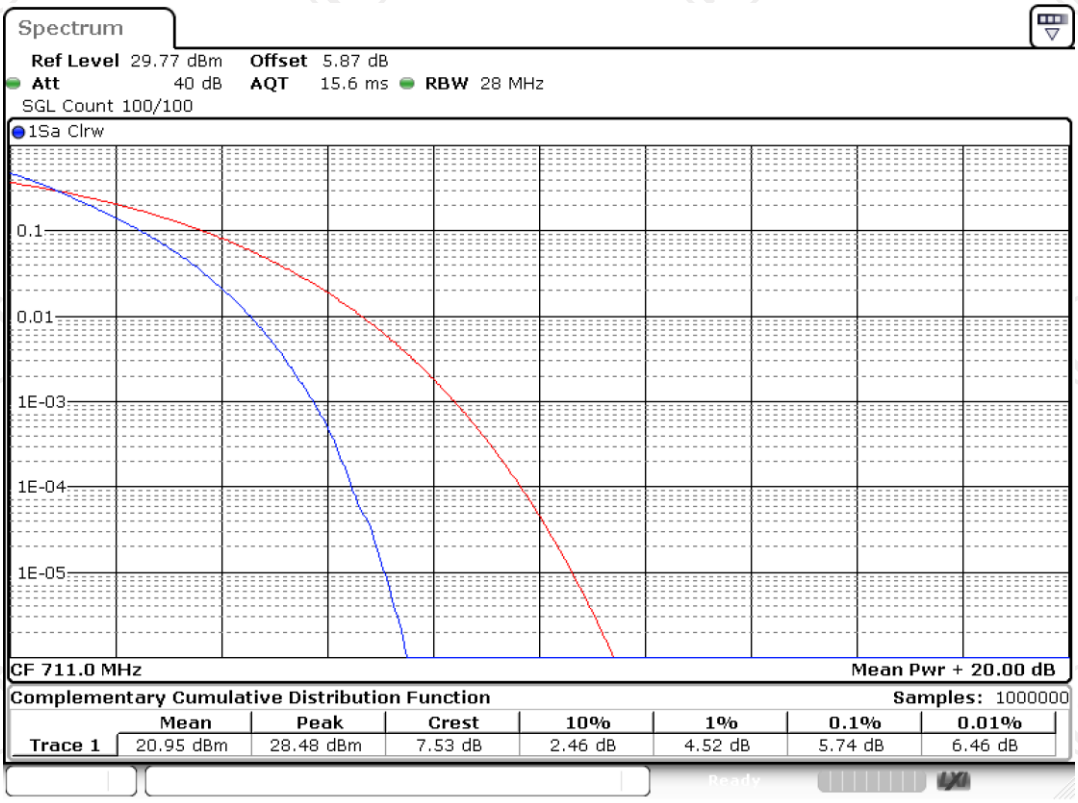
Date: 6.JUN.2023 12:18:23

Band12 QPSK BW=10MHz Channel=23130 RB Size=1 Position=#0



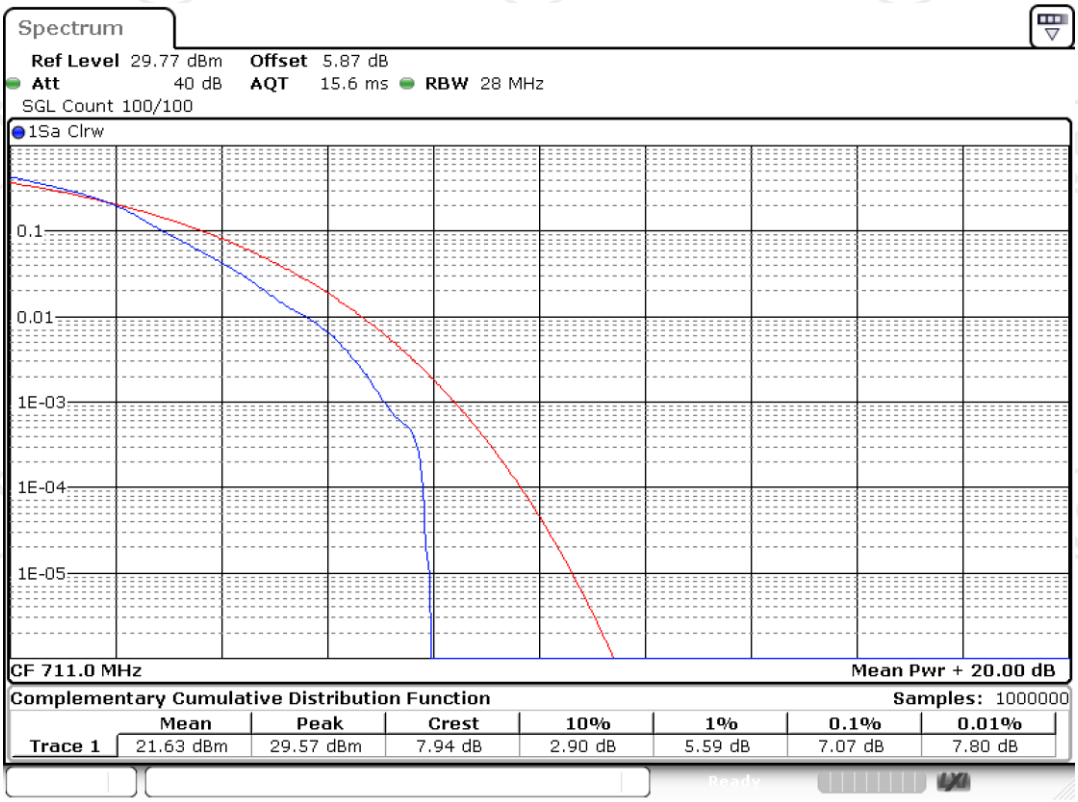
Date: 6.JUN.2023 12:18:30

Band12 QPSK BW=10MHz Channel=23130 RB Size=50 Position=#0



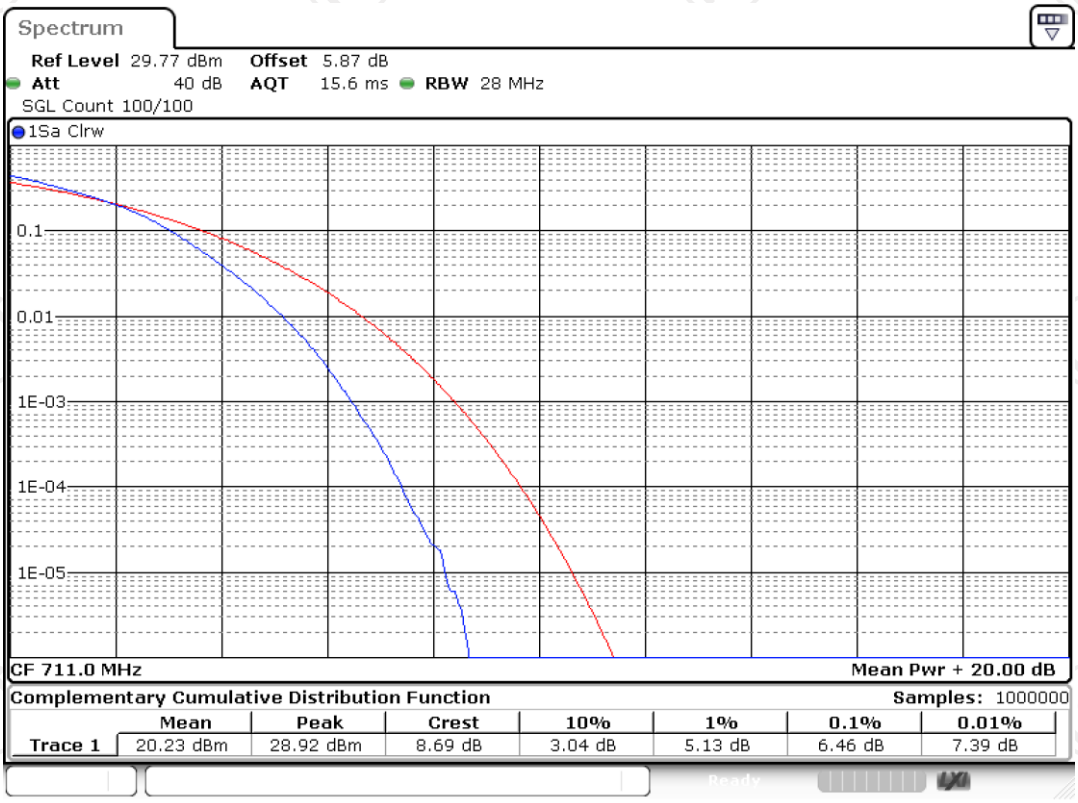
Date: 6.JUN.2023 12:18:37

Band12 16QAM BW=10MHz Channel=23130 RB Size=1 Position=#0



Date: 6.JUN.2023 12:18:44

Band12 16QAM BW=10MHz Channel=23130 RB Size=50 Position=#0

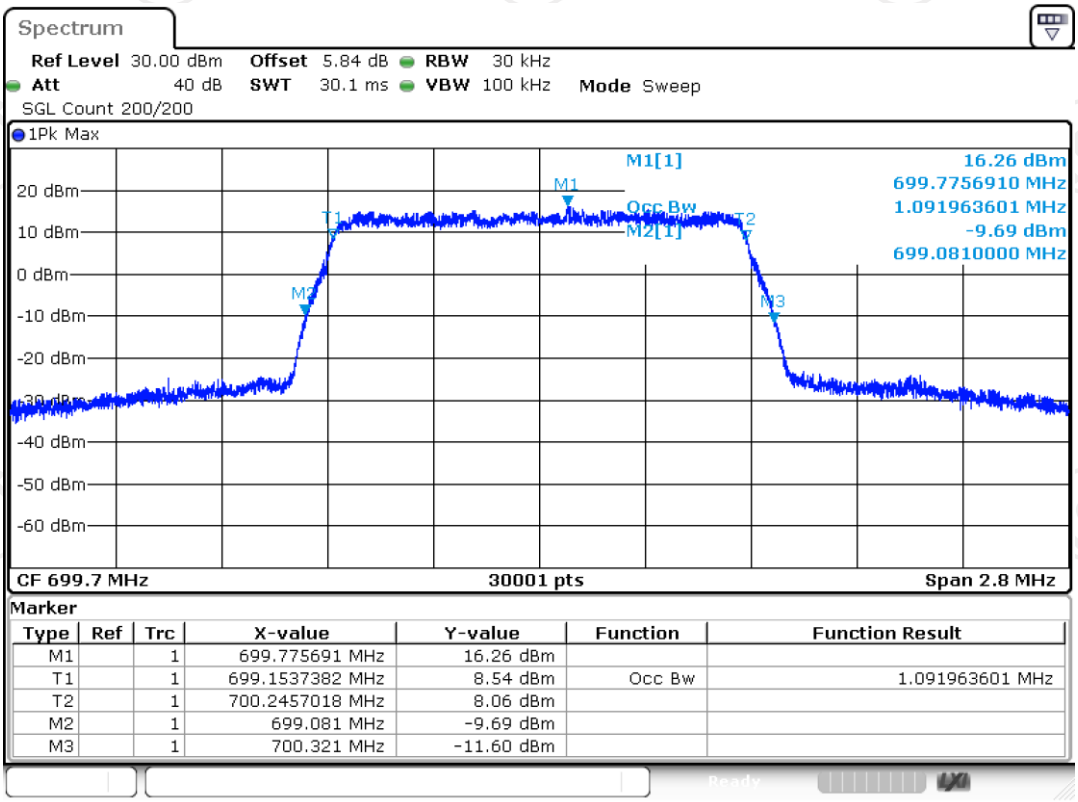


Date: 6.JUN.2023 12:18:50

4 Occupied bandwidth

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band12	1.4	23017	6	#0	QPSK	1.092	1.240	PASS
Band12	1.4	23017	6	#0	16QAM	1.093	1.246	PASS
Band12	1.4	23095	6	#0	QPSK	1.093	1.242	PASS
Band12	1.4	23095	6	#0	16QAM	1.094	1.243	PASS
Band12	1.4	23173	6	#0	QPSK	1.092	1.237	PASS
Band12	1.4	23173	6	#0	16QAM	1.094	1.247	PASS
Band12	3	23025	15	#0	QPSK	2.735	3.084	PASS
Band12	3	23025	15	#0	16QAM	2.726	3.089	PASS
Band12	3	23095	15	#0	QPSK	2.739	3.088	PASS
Band12	3	23095	15	#0	16QAM	2.735	3.099	PASS
Band12	3	23165	15	#0	QPSK	2.742	3.105	PASS
Band12	3	23165	15	#0	16QAM	2.736	3.100	PASS
Band12	5	23035	25	#0	QPSK	4.474	4.946	PASS
Band12	5	23035	25	#0	16QAM	4.474	4.952	PASS
Band12	5	23095	25	#0	QPSK	4.496	4.964	PASS
Band12	5	23095	25	#0	16QAM	4.492	4.972	PASS
Band12	5	23155	25	#0	QPSK	4.483	4.957	PASS
Band12	5	23155	25	#0	16QAM	4.481	4.944	PASS
Band12	10	23060	50	#0	QPSK	8.991	9.854	PASS
Band12	10	23060	50	#0	16QAM	8.972	9.854	PASS
Band12	10	23095	50	#0	QPSK	9.014	9.921	PASS
Band12	10	23095	50	#0	16QAM	8.985	9.853	PASS
Band12	10	23130	50	#0	QPSK	8.934	9.849	PASS
Band12	10	23130	50	#0	16QAM	8.924	9.767	PASS

Band12 QPSK BW=1.4MHz Channel=23017 RB Size=6 Position=#0

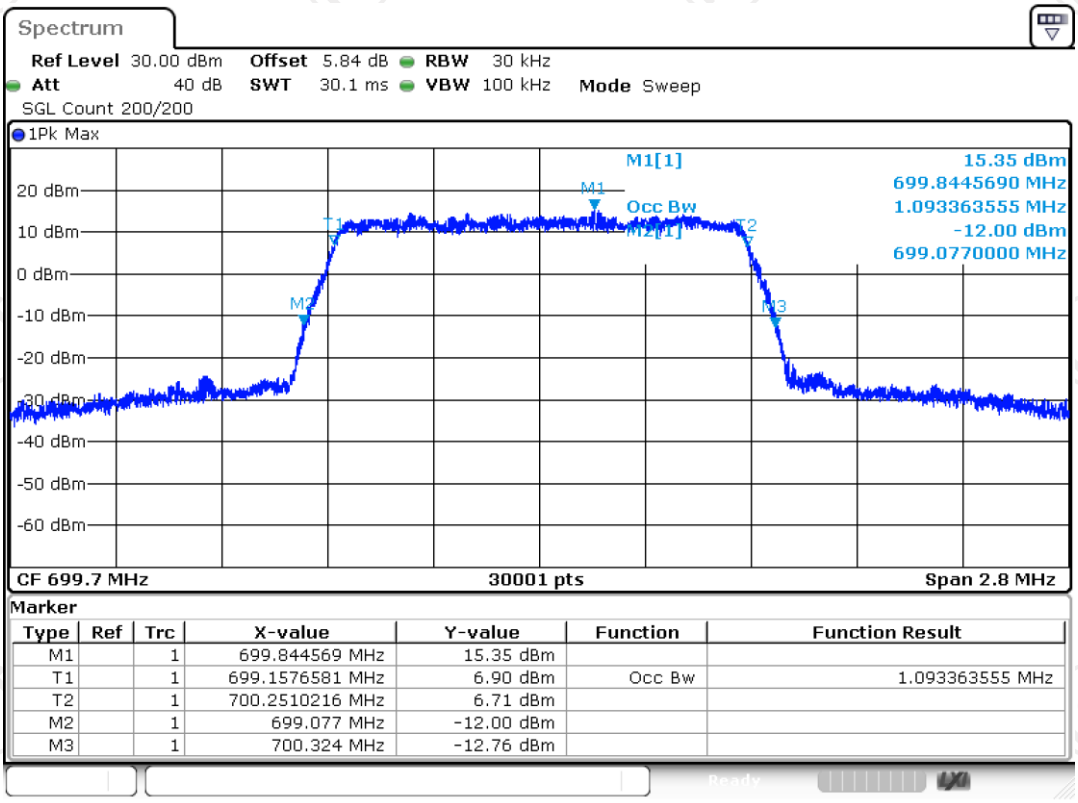


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	699.775691 MHz	16.26 dBm		
T1		1	699.1537382 MHz	8.54 dBm	Occ Bw	1.091963601 MHz
T2		1	700.2457018 MHz	8.06 dBm		
M2		1	699.081 MHz	-9.69 dBm		
M3		1	700.321 MHz	-11.60 dBm		

Date: 6.JUN.2023 12:19:11

Band12 16QAM BW=1.4MHz Channel=23017 RB Size=6 Position=#0

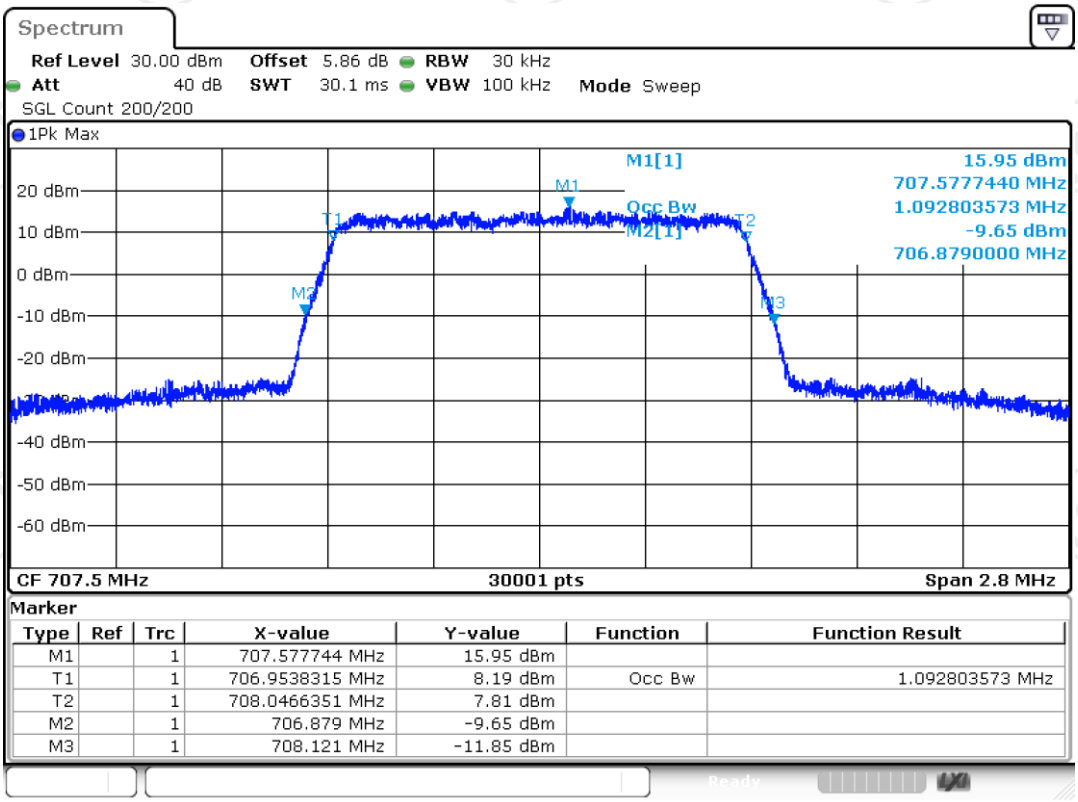


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	699.844569 MHz	15.35 dBm		
T1		1	699.1576581 MHz	6.90 dBm	Occ Bw	1.093363555 MHz
T2		1	700.2510216 MHz	6.71 dBm		
M2		1	699.077 MHz	-12.00 dBm		
M3		1	700.324 MHz	-12.76 dBm		

Date: 6.JUN.2023 12:19:29

Band12 QPSK BW=1.4MHz Channel=23095 RB Size=6 Position=#0

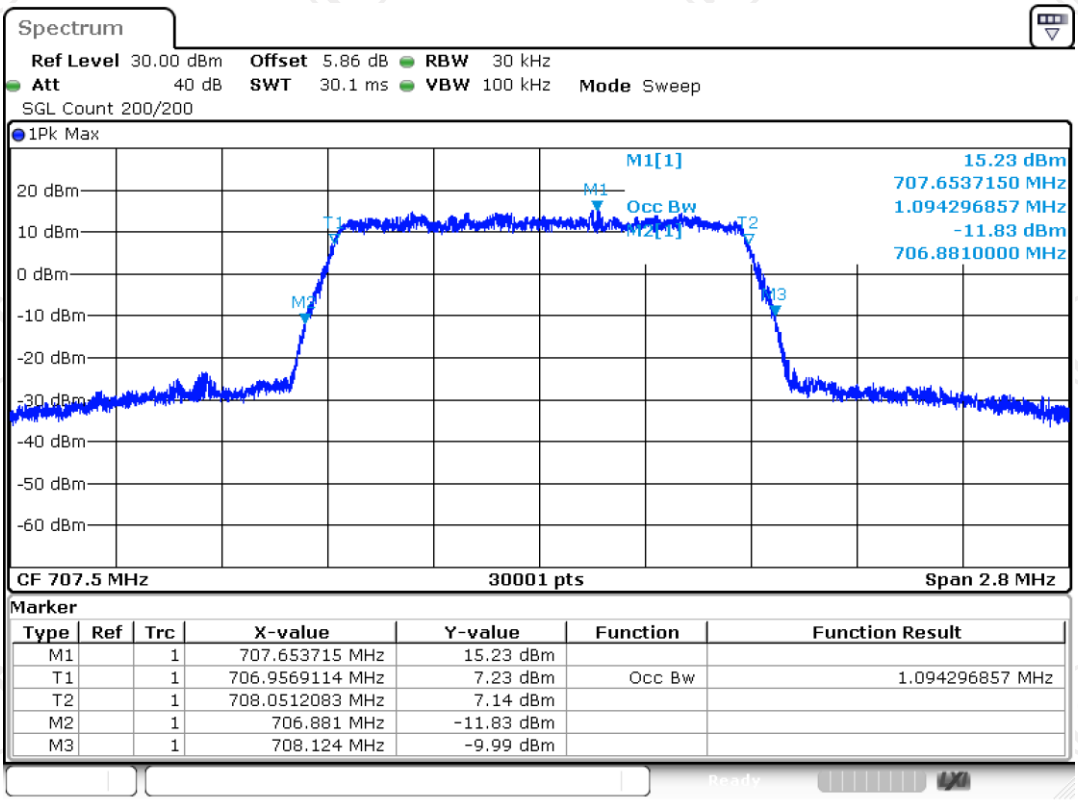


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	707.577744 MHz	15.95 dBm		
T1		1	706.9538315 MHz	8.19 dBm	Occ Bw	1.092803573 MHz
T2		1	708.0466351 MHz	7.81 dBm		
M2		1	706.879 MHz	-9.65 dBm		
M3		1	708.121 MHz	-11.85 dBm		

Date: 6.JUN.2023 12:19:48

Band12 16QAM BW=1.4MHz Channel=23095 RB Size=6 Position=#0

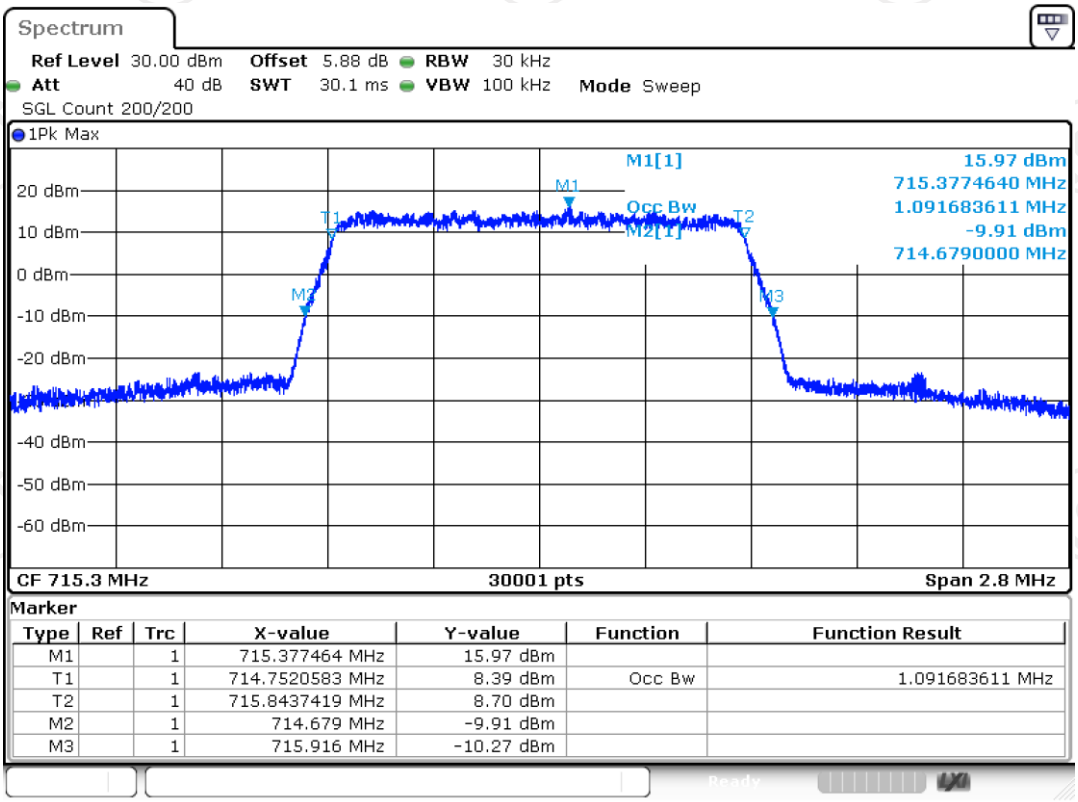


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	707.653715 MHz	15.23 dBm		
T1		1	706.9569114 MHz	7.23 dBm	Occ Bw	1.094296857 MHz
T2		1	708.0512083 MHz	7.14 dBm		
M2		1	706.881 MHz	-11.83 dBm		
M3		1	708.124 MHz	-9.99 dBm		

Date: 6.JUN.2023 12:20:07

Band12 QPSK BW=1.4MHz Channel=23173 RB Size=6 Position=#0

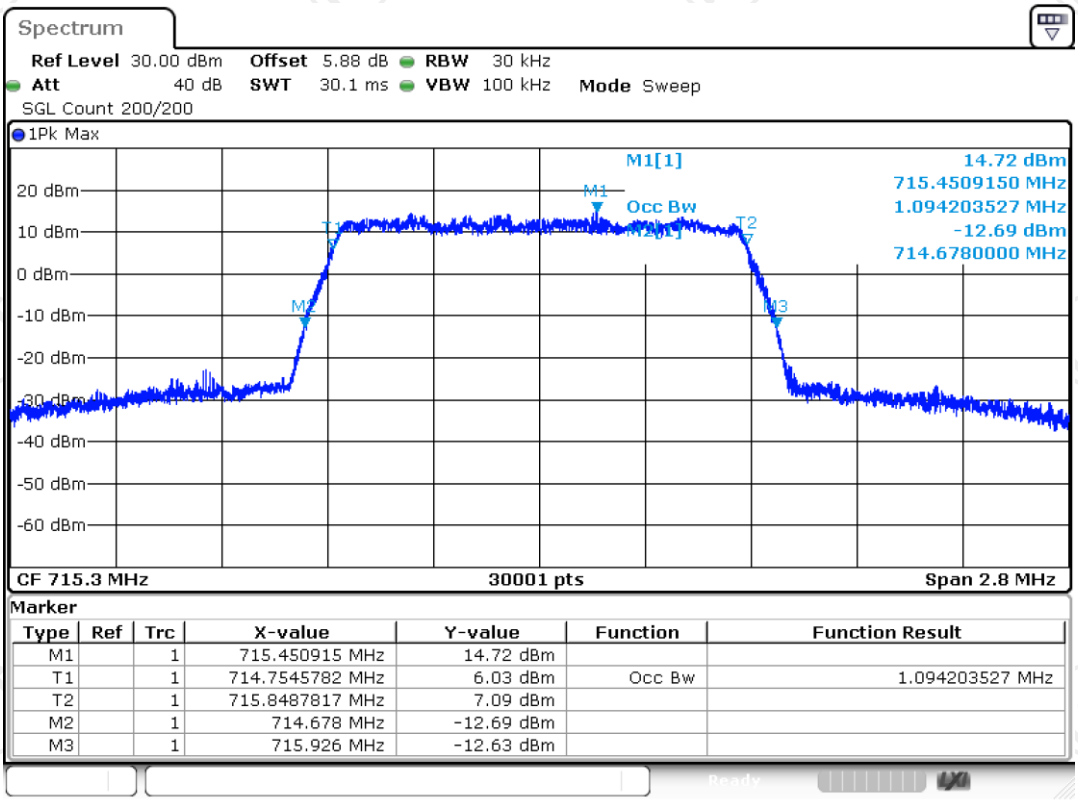


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	715.377464 MHz	15.97 dBm		
T1		1	714.7520583 MHz	8.39 dBm	Occ Bw	1.091683611 MHz
T2		1	715.8437419 MHz	8.70 dBm		
M2		1	714.679 MHz	-9.91 dBm		
M3		1	715.916 MHz	-10.27 dBm		

Date: 6.JUN.2023 12:20:25

Band12 16QAM BW=1.4MHz Channel=23173 RB Size=6 Position=#0

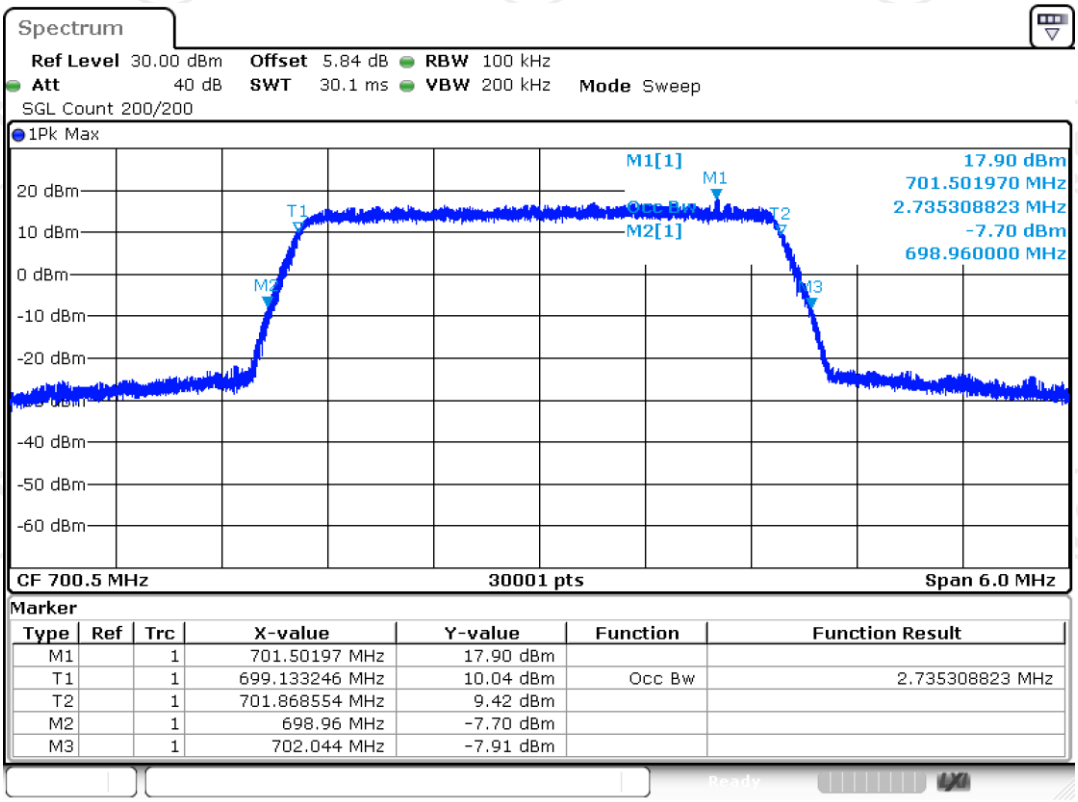


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	715.450915 MHz	14.72 dBm		
T1		1	714.7545782 MHz	6.03 dBm	Occ Bw	1.094203527 MHz
T2		1	715.8487817 MHz	7.09 dBm		
M2		1	714.678 MHz	-12.69 dBm		
M3		1	715.926 MHz	-12.63 dBm		

Date: 6.JUN.2023 12:20:43

Band12 QPSK BW=3MHz Channel=23025 RB Size=15 Position=#0

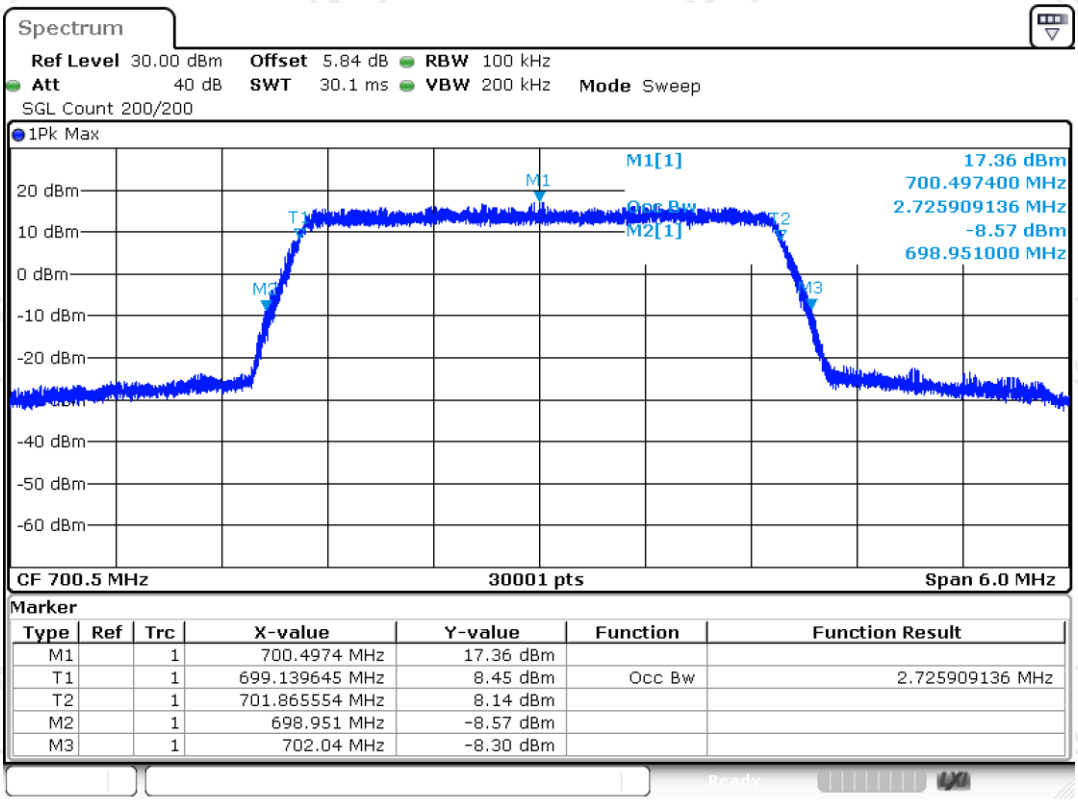


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	701.50197 MHz	17.90 dBm		
T1		1	699.133246 MHz	10.04 dBm	Occ Bw	2.735308823 MHz
T2		1	701.868554 MHz	9.42 dBm		
M2		1	698.96 MHz	-7.70 dBm		
M3		1	702.044 MHz	-7.91 dBm		

Date: 6.JUN.2023 12:21:01

Band12 16QAM BW=3MHz Channel=23025 RB Size=15 Position=#0

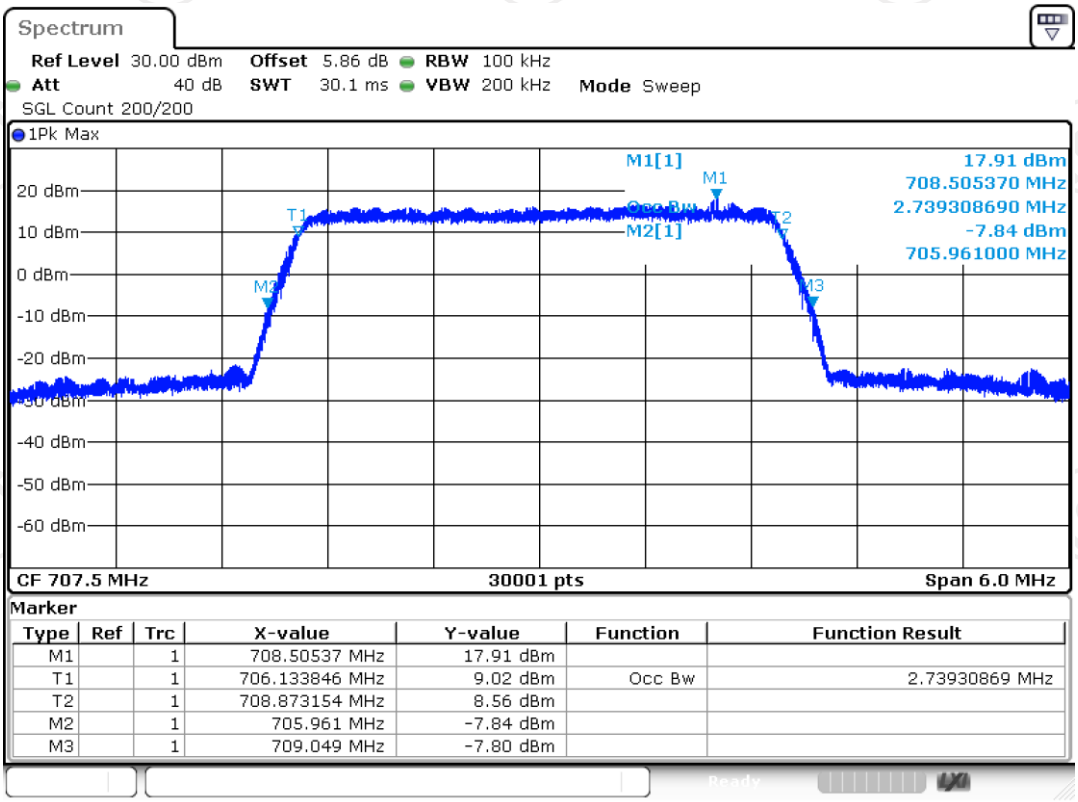


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	700.4974 MHz	17.36 dBm		
T1		1	699.139645 MHz	8.45 dBm	Occ Bw	2.725909136 MHz
T2		1	701.865554 MHz	8.14 dBm		
M2		1	698.951 MHz	-8.57 dBm		
M3		1	702.04 MHz	-8.30 dBm		

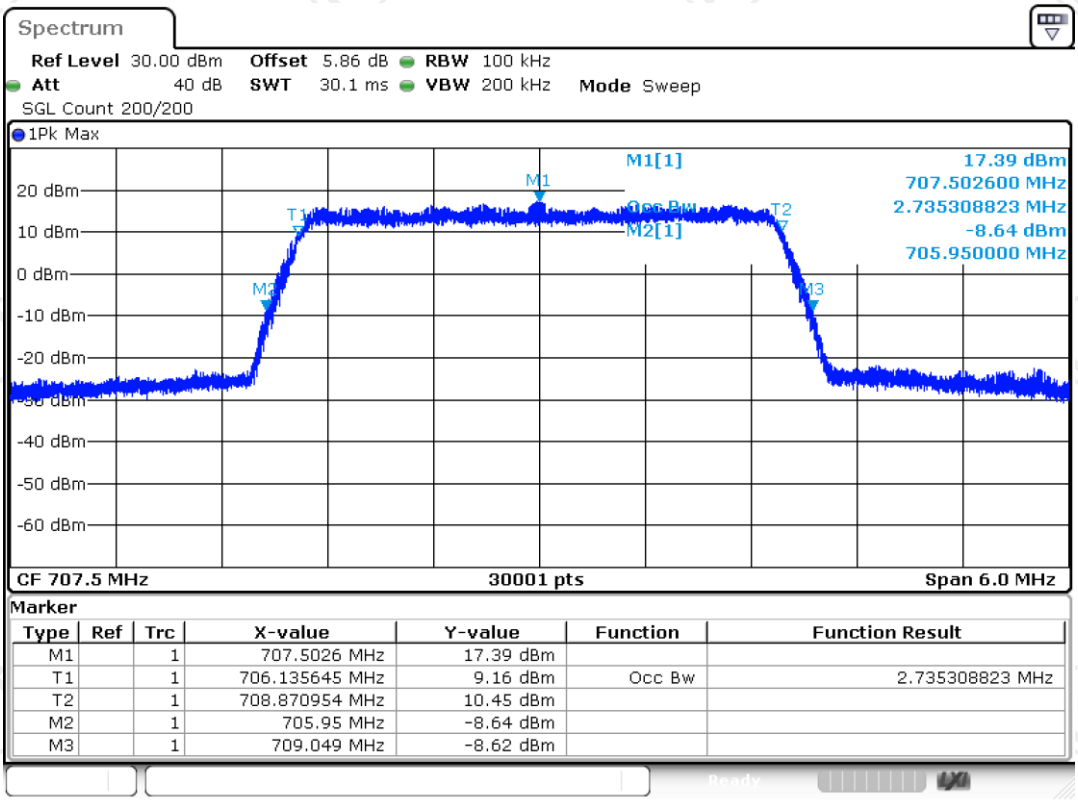
Date: 6.JUN.2023 12:21:19

Band12 QPSK BW=3MHz Channel=23095 RB Size=15 Position=#0



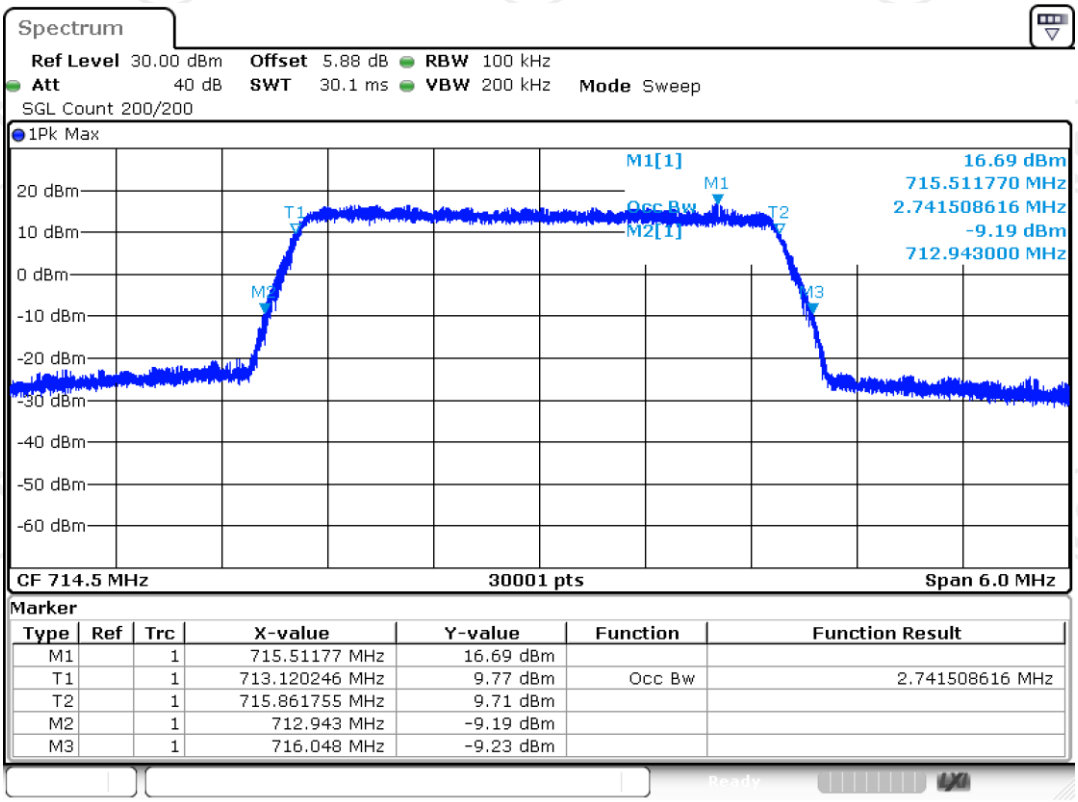
Date: 6.JUN.2023 12:21:37

Band12 16QAM BW=3MHz Channel=23095 RB Size=15 Position=#0



Date: 6.JUN.2023 12:21:54

Band12 QPSK BW=3MHz Channel=23165 RB Size=15 Position=#0

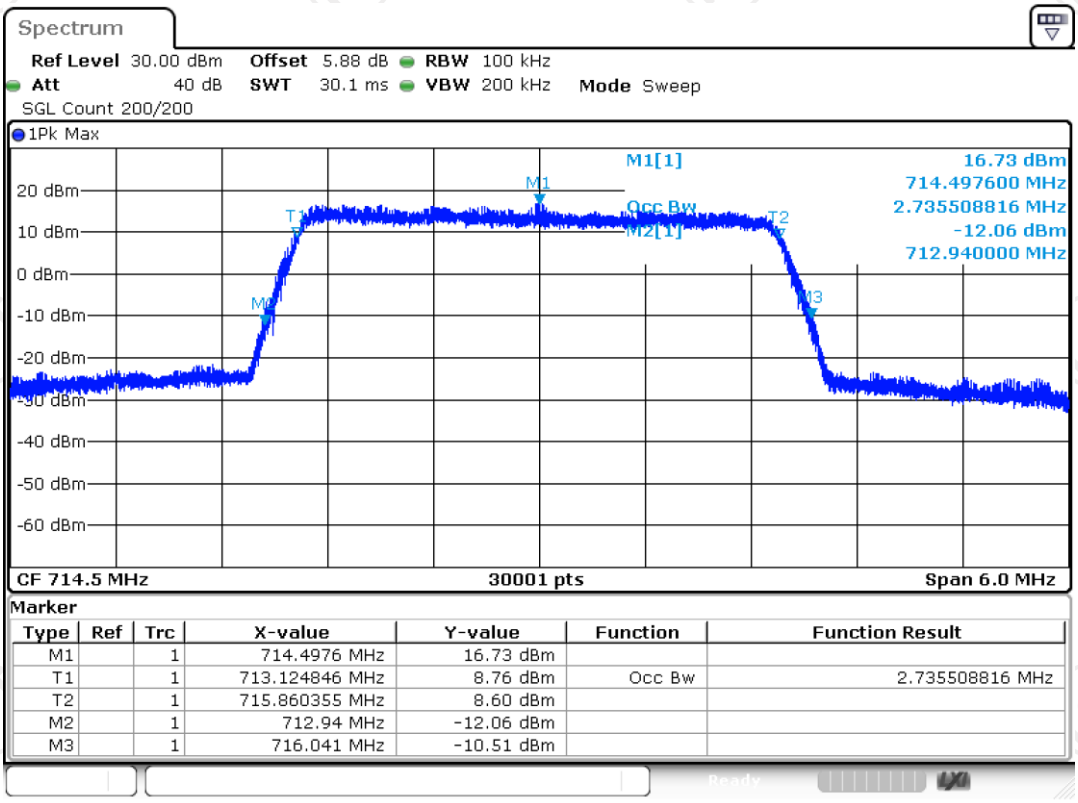


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	715.51177 MHz	16.69 dBm		
T1		1	713.120246 MHz	9.77 dBm	Occ Bw	2.741508616 MHz
T2		1	715.861755 MHz	9.71 dBm		
M2		1	712.943 MHz	-9.19 dBm		
M3		1	716.048 MHz	-9.23 dBm		

Date: 6.JUN.2023 12:22:12

Band12 16QAM BW=3MHz Channel=23165 RB Size=15 Position=#0

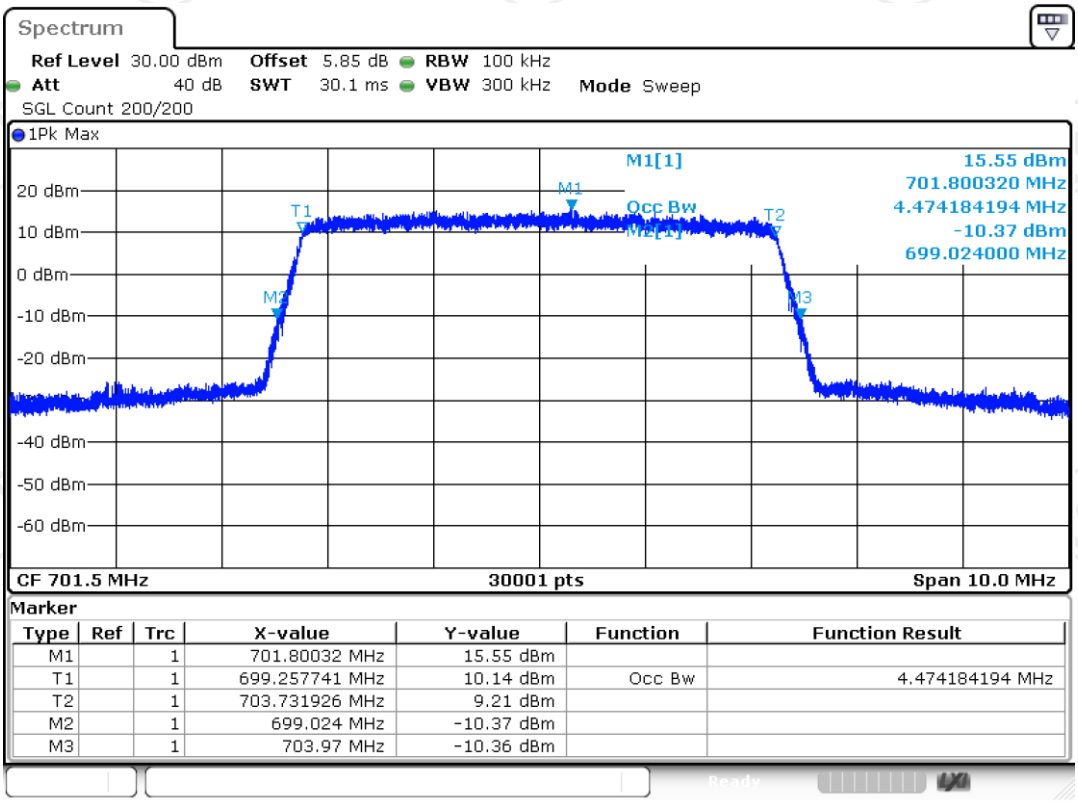


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	714.4976 MHz	16.73 dBm		
T1		1	713.124846 MHz	8.76 dBm	Occ Bw	2.735508816 MHz
T2		1	715.860355 MHz	8.60 dBm		
M2		1	712.94 MHz	-12.06 dBm		
M3		1	716.041 MHz	-10.51 dBm		

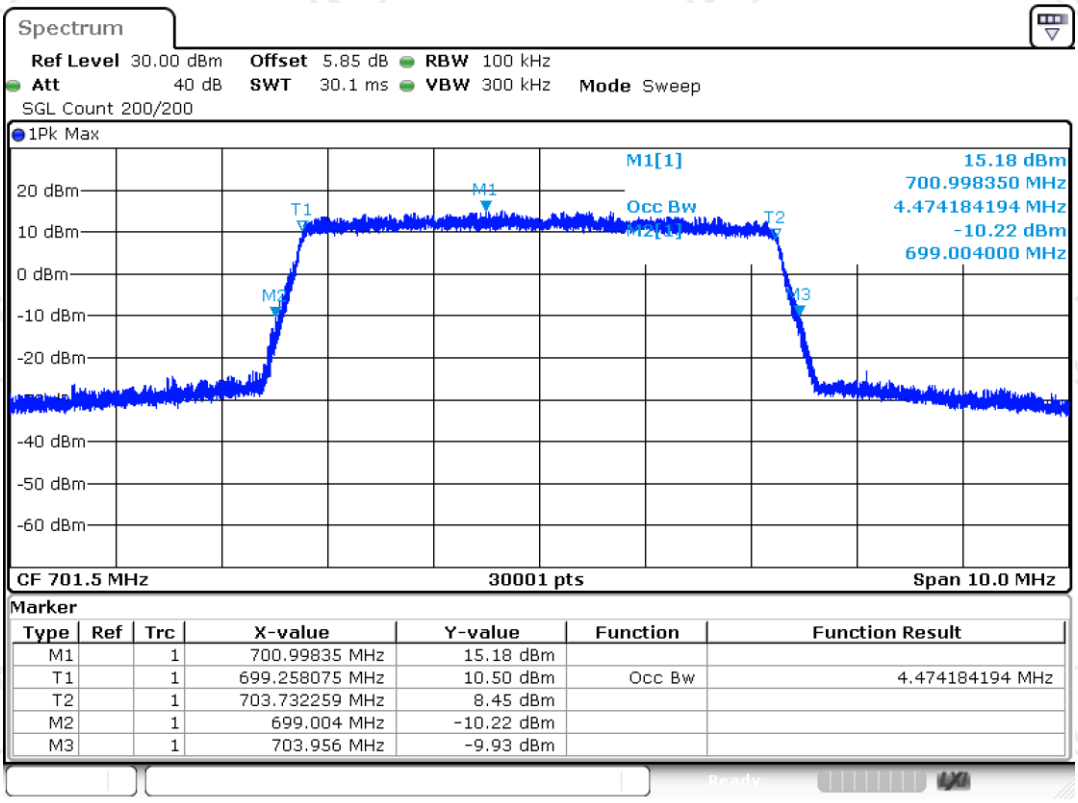
Date: 6.JUN.2023 12:22:29

Band12 QPSK BW=5MHz Channel=23035 RB Size=25 Position=#0



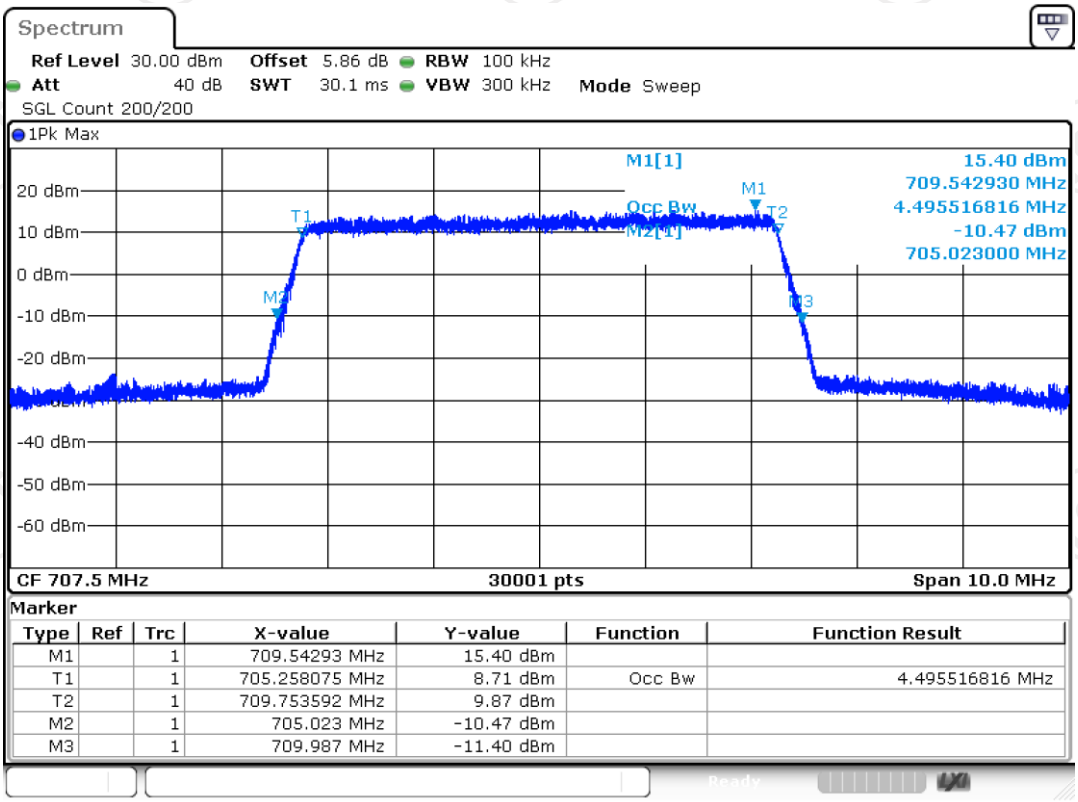
Date: 6.JUN.2023 12:22:48

Band12 16QAM BW=5MHz Channel=23035 RB Size=25 Position=#0



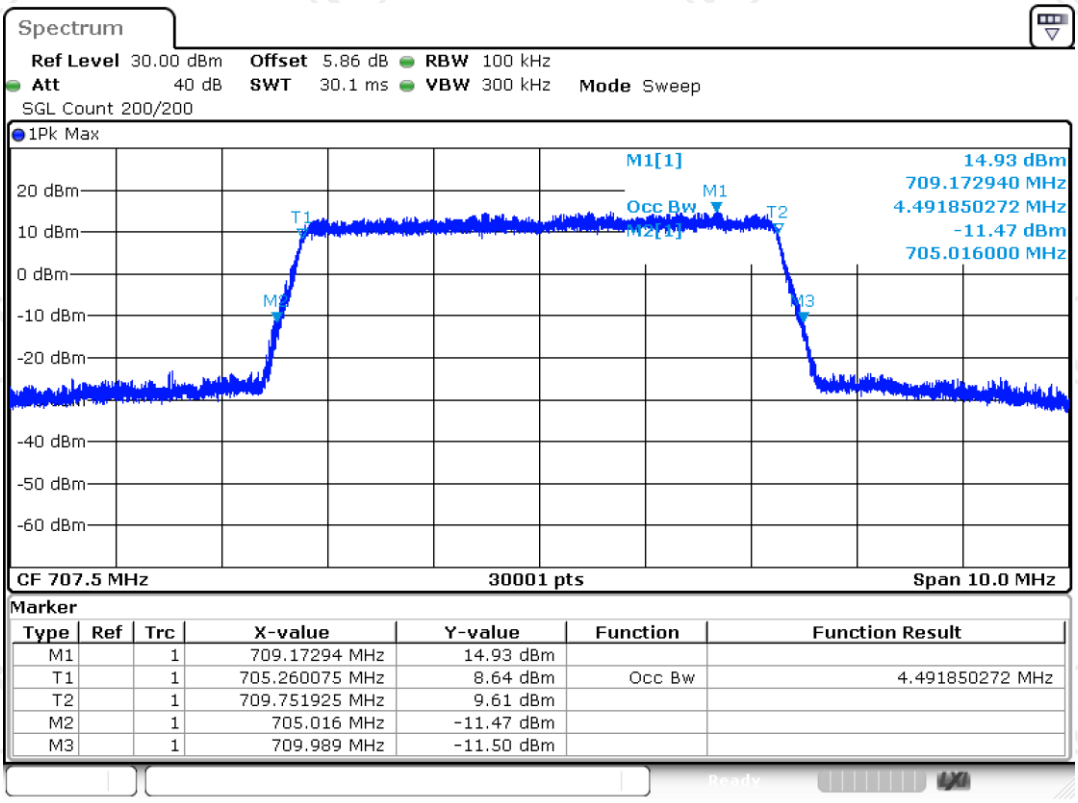
Date: 6.JUN.2023 12:23:06

Band12 QPSK BW=5MHz Channel=23095 RB Size=25 Position=#0



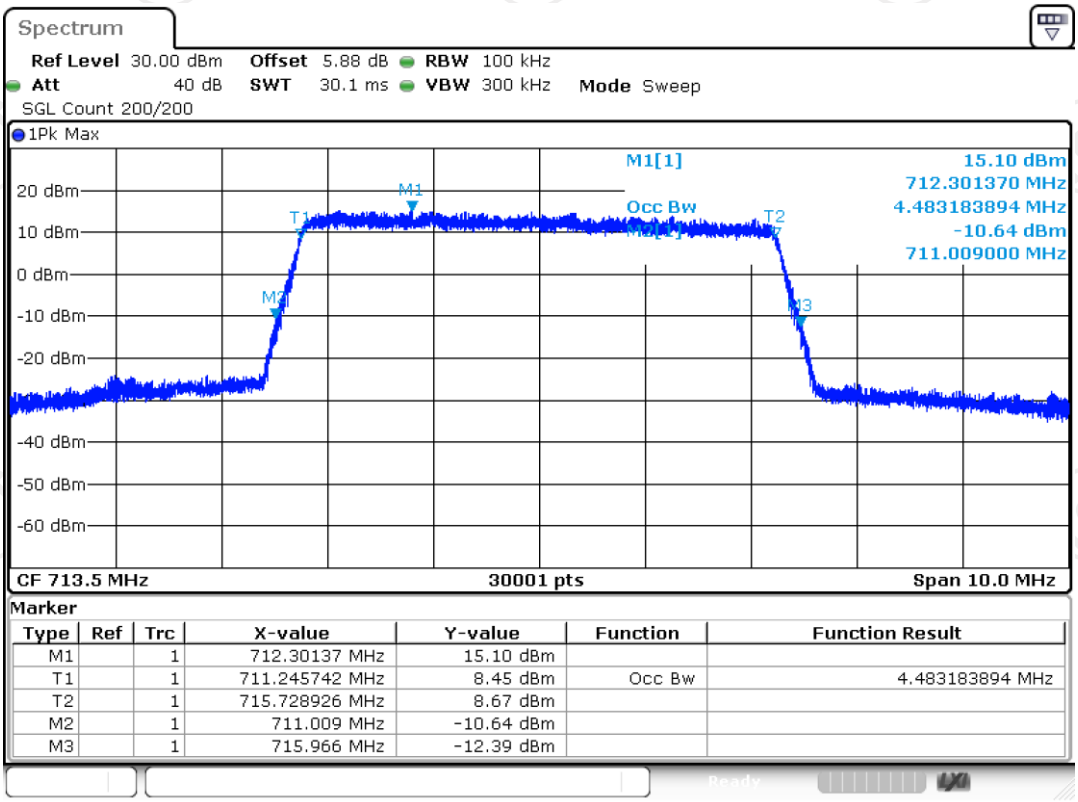
Date: 6.JUN.2023 12:23:23

Band12 16QAM BW=5MHz Channel=23095 RB Size=25 Position=#0



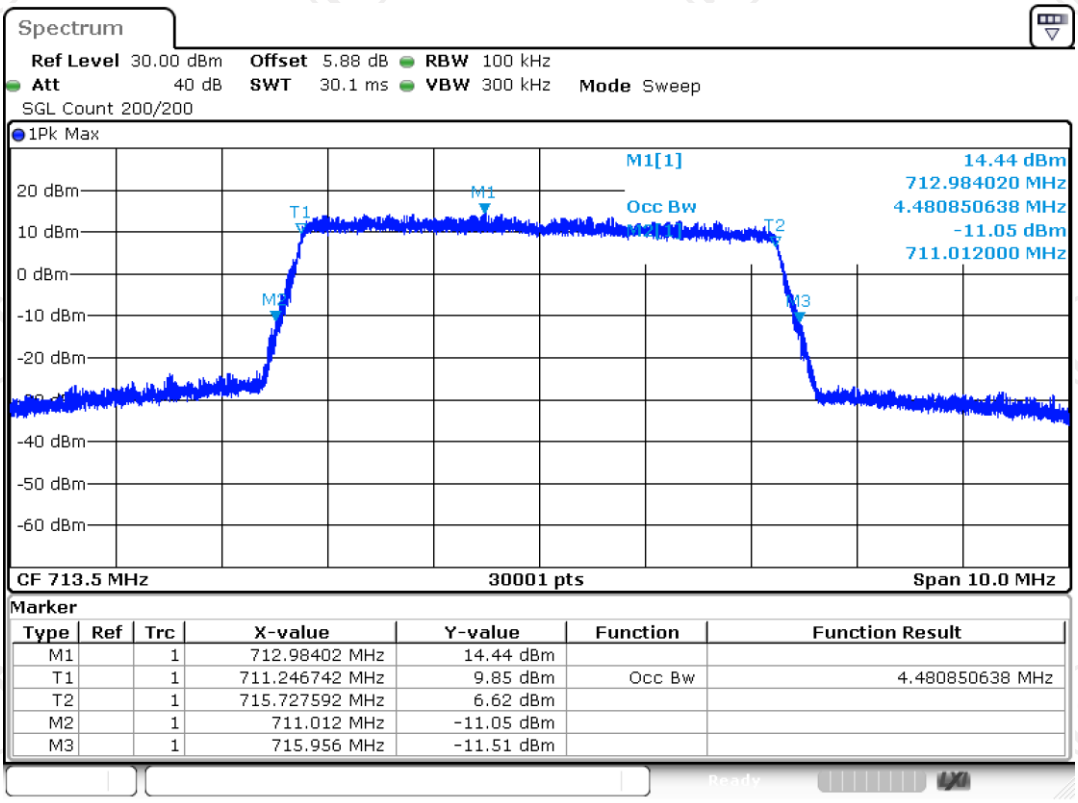
Date: 6.JUN.2023 12:23:41

Band12 QPSK BW=5MHz Channel=23155 RB Size=25 Position=#0



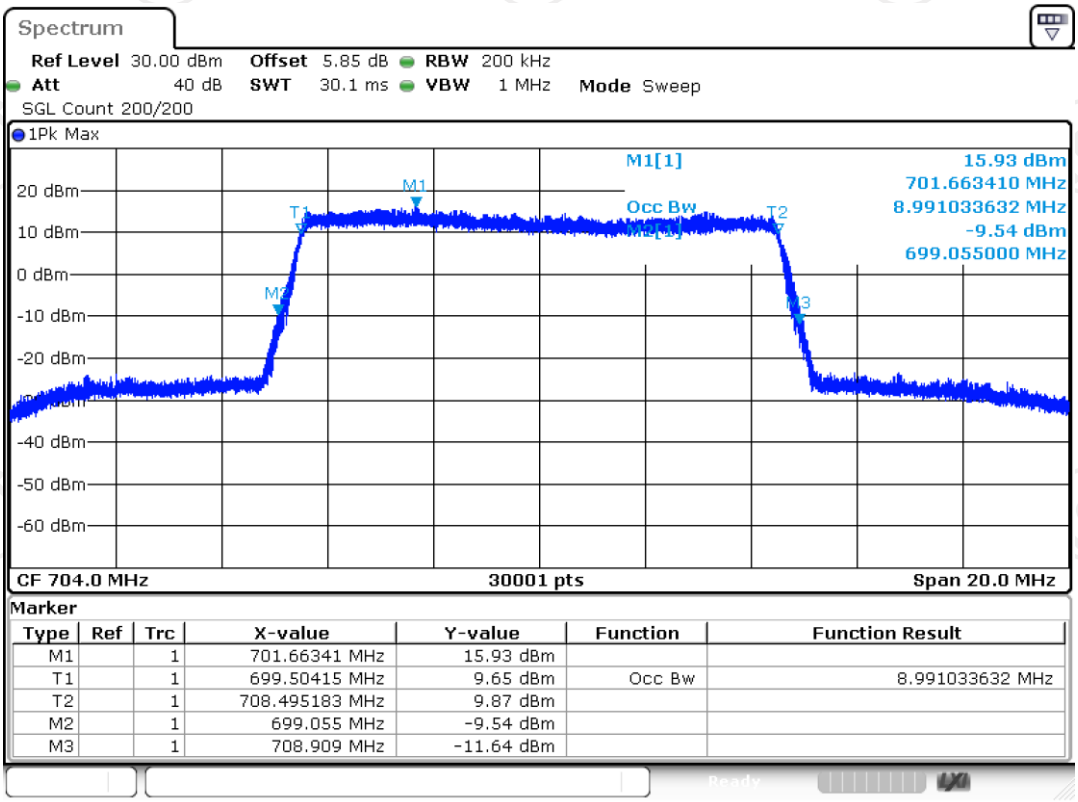
Date: 6.JUN.2023 12:23:58

Band12 16QAM BW=5MHz Channel=23155 RB Size=25 Position=#0



Date: 6.JUN.2023 12:24:15

Band12 QPSK BW=10MHz Channel=23060 RB Size=50 Position=#0

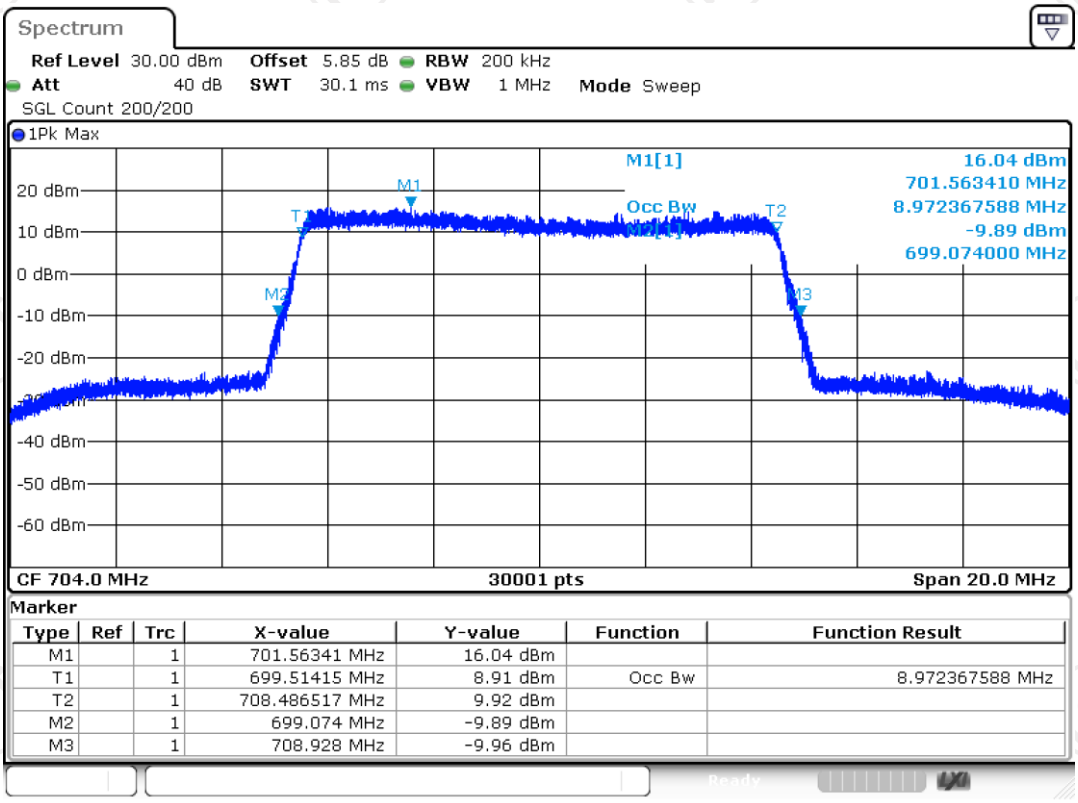


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	701.66341 MHz	15.93 dBm		
T1		1	699.50415 MHz	9.65 dBm	Occ Bw	8.991033632 MHz
T2		1	708.495183 MHz	9.87 dBm		
M2		1	699.055 MHz	-9.54 dBm		
M3		1	708.909 MHz	-11.64 dBm		

Date: 6.JUN.2023 12:24:35

Band12 16QAM BW=10MHz Channel=23060 RB Size=50 Position=#0

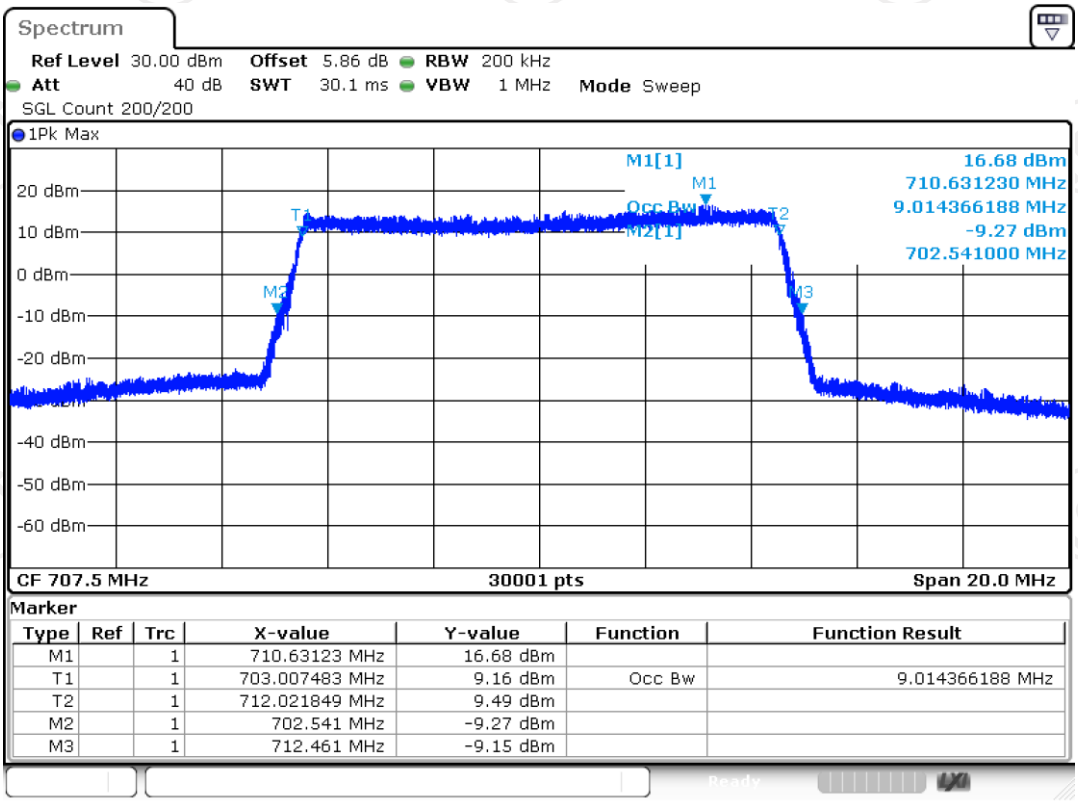


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	701.56341 MHz	16.04 dBm		
T1		1	699.51415 MHz	8.91 dBm	Occ Bw	8.972367588 MHz
T2		1	708.486517 MHz	9.92 dBm		
M2		1	699.074 MHz	-9.89 dBm		
M3		1	708.928 MHz	-9.96 dBm		

Date: 6.JUN.2023 12:24:54

Band12 QPSK BW=10MHz Channel=23095 RB Size=50 Position=#0

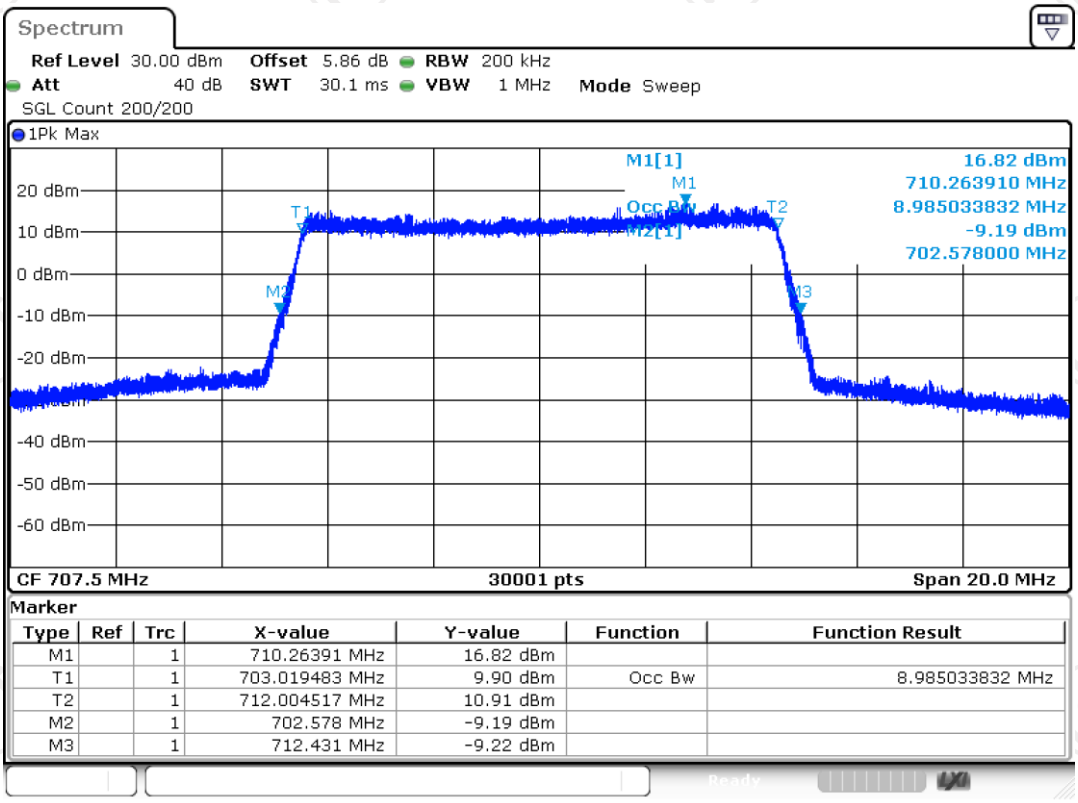


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	710.63123 MHz	16.68 dBm		
T1		1	703.007483 MHz	9.16 dBm	Occ Bw	9.014366188 MHz
T2		1	712.021849 MHz	9.49 dBm		
M2		1	702.541 MHz	-9.27 dBm		
M3		1	712.461 MHz	-9.15 dBm		

Date: 6.JUN.2023 12:25:13

Band12 16QAM BW=10MHz Channel=23095 RB Size=50 Position=#0

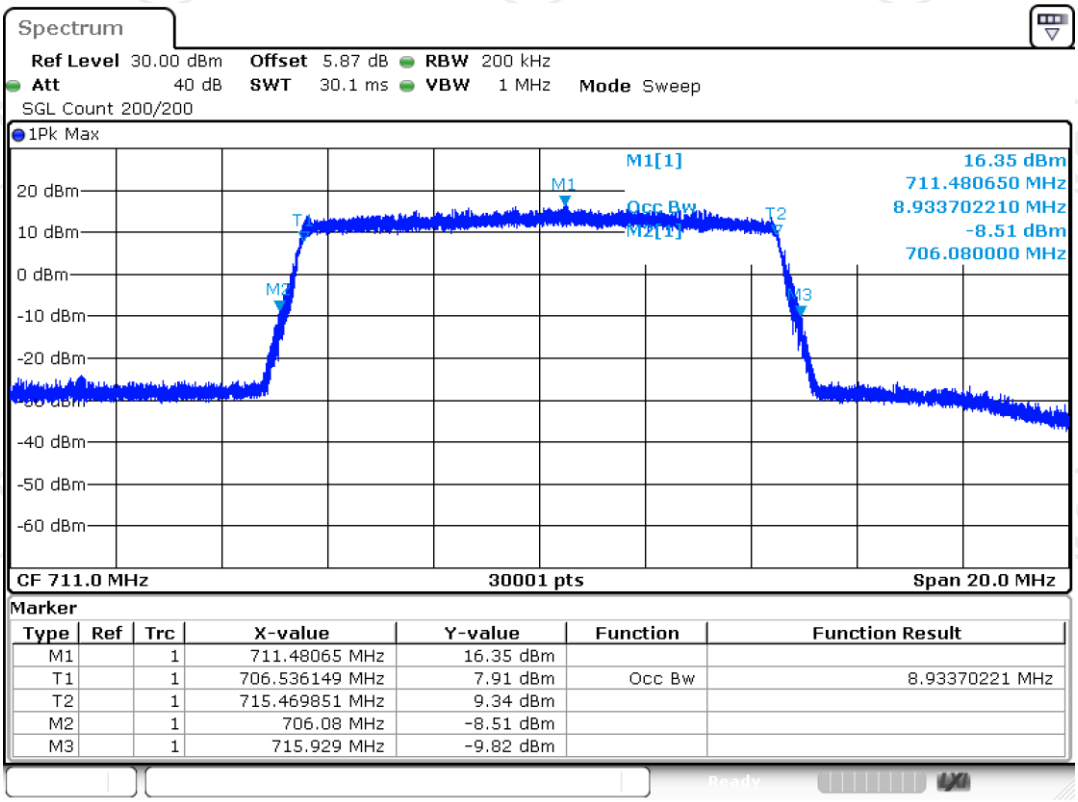


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	710.26391 MHz	16.82 dBm		
T1		1	703.019483 MHz	9.90 dBm	Occ Bw	8.985033832 MHz
T2		1	712.004517 MHz	10.91 dBm		
M2		1	702.578 MHz	-9.19 dBm		
M3		1	712.431 MHz	-9.22 dBm		

Date: 6.JUN.2023 12:25:32

Band12 QPSK BW=10MHz Channel=23130 RB Size=50 Position=#0

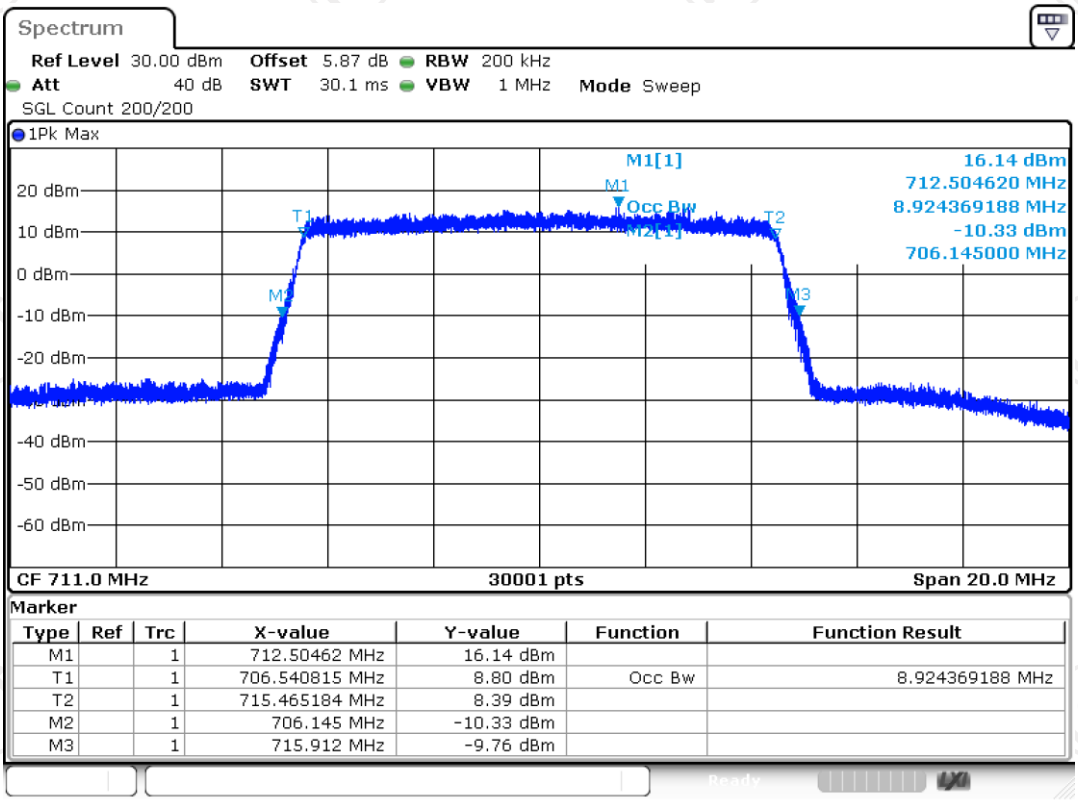


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	711.48065 MHz	16.35 dBm		
T1		1	706.536149 MHz	7.91 dBm	Occ Bw	8.93370221 MHz
T2		1	715.469851 MHz	9.34 dBm		
M2		1	706.08 MHz	-8.51 dBm		
M3		1	715.929 MHz	-9.82 dBm		

Date: 6.JUN.2023 12:25:51

Band12 16QAM BW=10MHz Channel=23130 RB Size=50 Position=#0



Marker

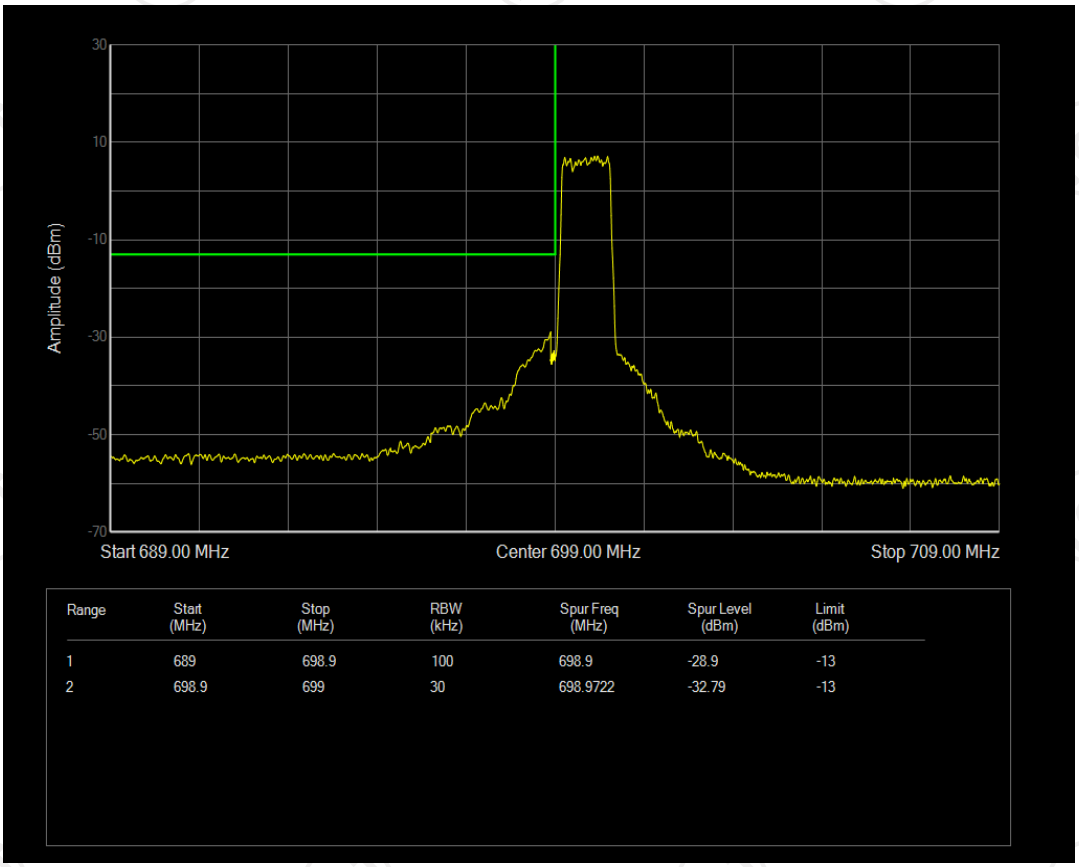
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	712.50462 MHz	16.14 dBm		
T1		1	706.540815 MHz	8.80 dBm	Occ Bw	8.924369188 MHz
T2		1	715.465184 MHz	8.39 dBm		
M2		1	706.145 MHz	-10.33 dBm		
M3		1	715.912 MHz	-9.76 dBm		

Date: 6.JUN.2023 12:26:09

5 Band edge

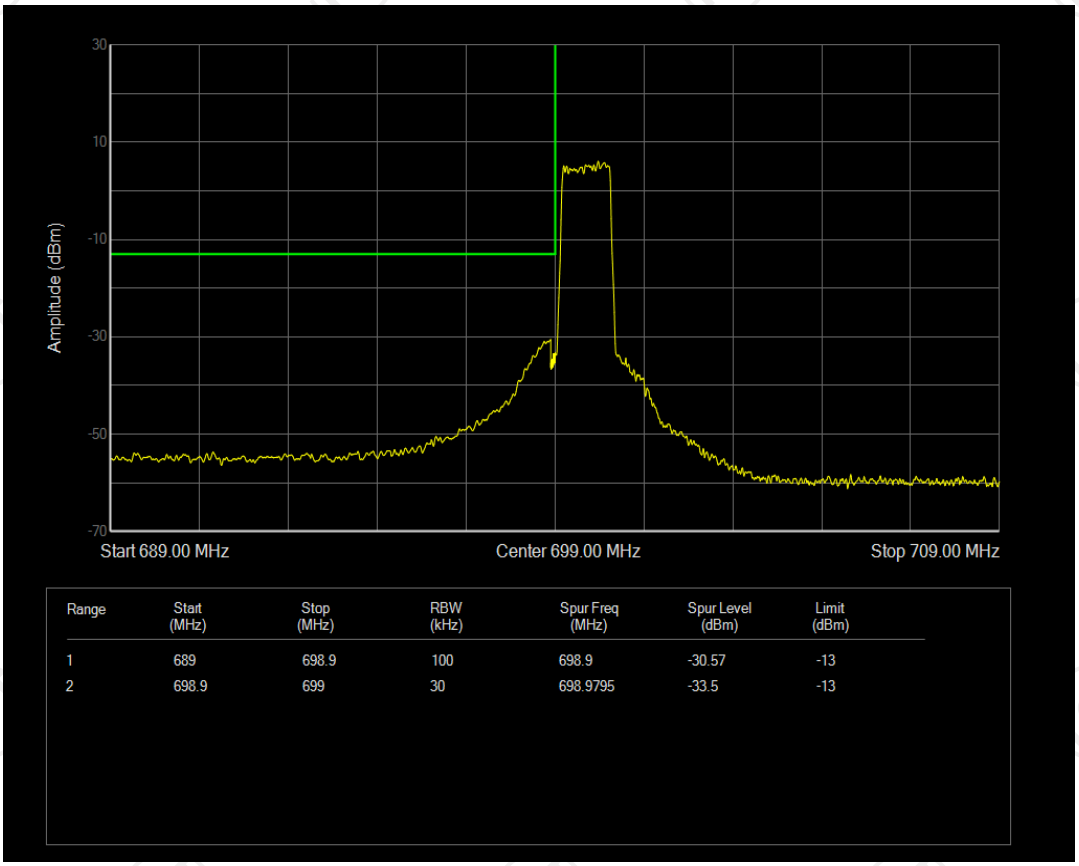
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band12	1.4	23017	6	#0	QPSK	698.90	-28.90	-13	PASS
Band12	1.4	23017	6	#0	16QAM	698.90	-30.57	-13	PASS
Band12	1.4	23173	6	#0	QPSK	716.11	-29.64	-13	PASS
Band12	1.4	23173	6	#0	16QAM	716.19	-31.89	-13	PASS
Band12	3	23025	15	#0	QPSK	699.00	-27.01	-13	PASS
Band12	3	23025	15	#0	16QAM	699.00	-28.35	-13	PASS
Band12	3	23165	15	#0	QPSK	716.01	-26.97	-13	PASS
Band12	3	23165	15	#0	16QAM	716.00	-27.88	-13	PASS
Band12	5	23035	25	#0	QPSK	698.90	-33.51	-13	PASS
Band12	5	23035	25	#0	16QAM	698.90	-33.92	-13	PASS
Band12	5	23155	25	#0	QPSK	716.11	-35.46	-13	PASS
Band12	5	23155	25	#0	16QAM	716.11	-36.11	-13	PASS
Band12	10	23060	50	#0	QPSK	698.86	-35.78	-13	PASS
Band12	10	23060	50	#0	16QAM	698.83	-35.91	-13	PASS
Band12	10	23130	50	#0	QPSK	716.12	-37.64	-13	PASS
Band12	10	23130	50	#0	16QAM	716.71	-39.05	-13	PASS

Band12 QPSK BW=1.4MHz Channel=23017 RB Size=6 Position=#0



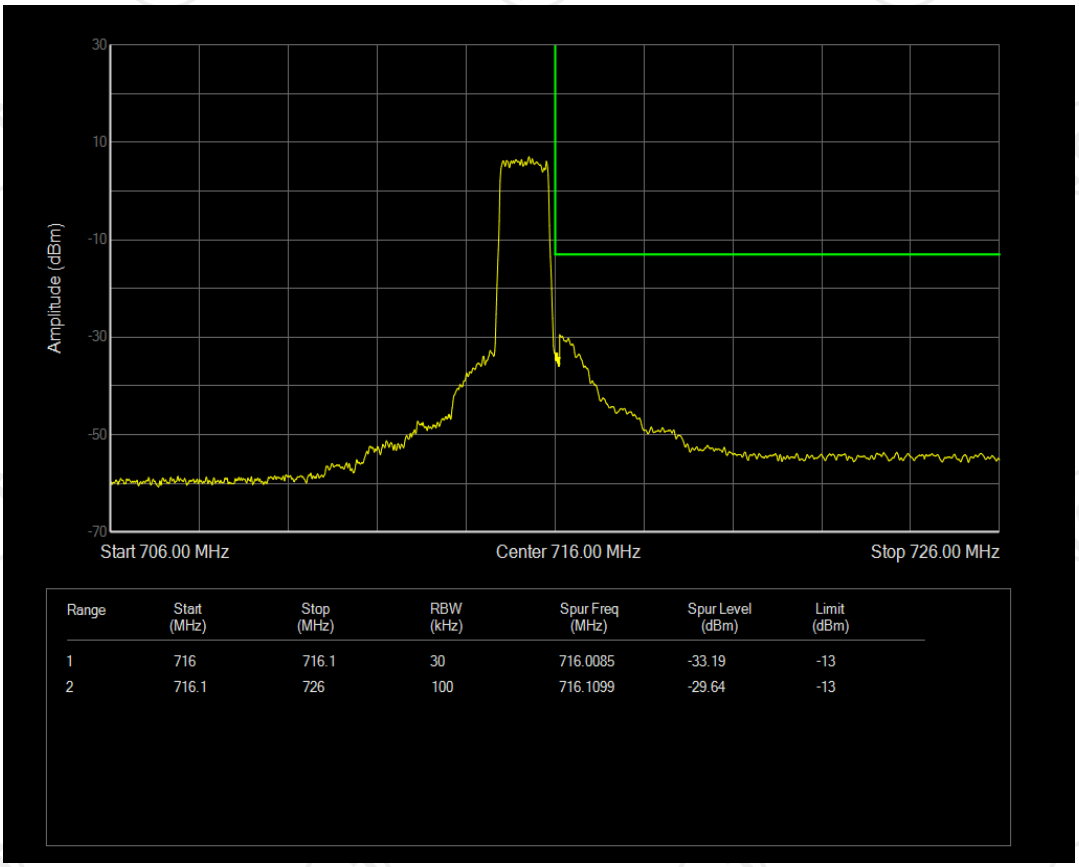
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	689	698.9	100	698.9	-28.9	-13
2	698.9	699	30	698.9722	-32.79	-13

Band12 16QAM BW=1.4MHz Channel=23017 RB Size=6 Position=#0



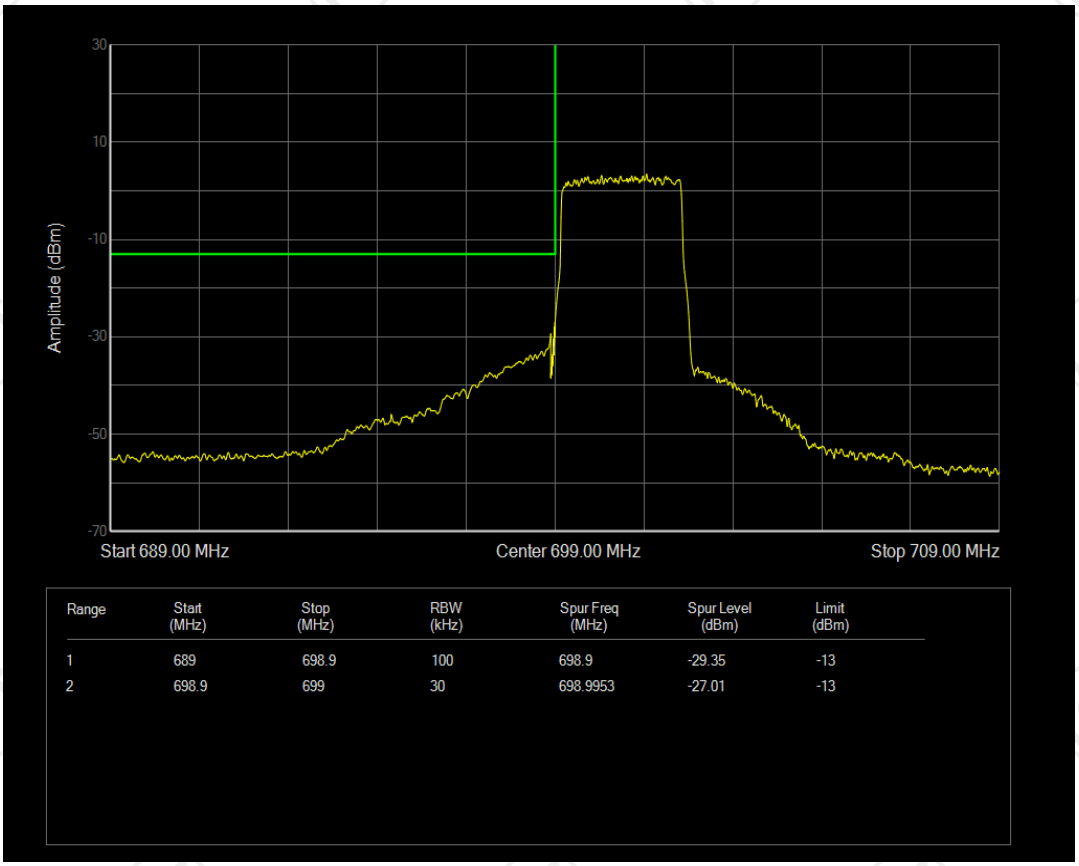
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	689	698.9	100	698.9	-30.57	-13
2	698.9	699	30	698.9795	-33.5	-13

Band12 QPSK BW=1.4MHz Channel=23173 RB Size=6 Position=#0



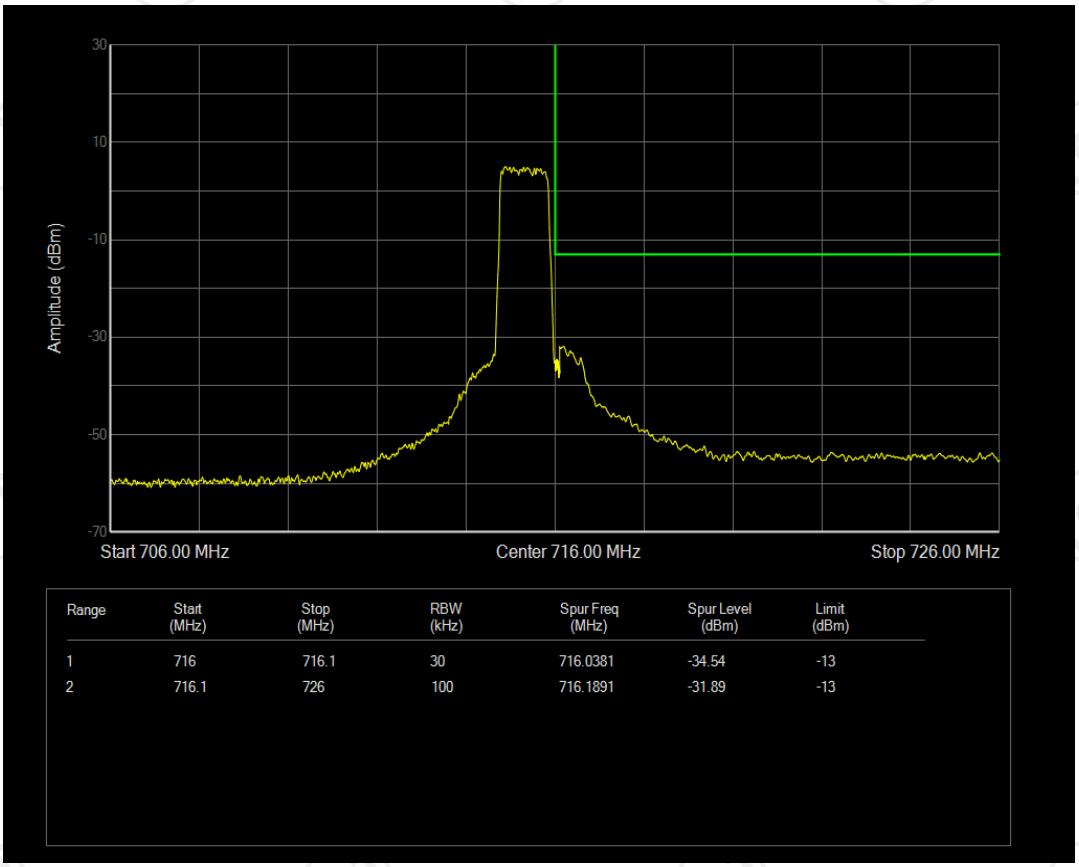
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	716	716.1	30	716.0085	-33.19	-13
2	716.1	726	100	716.1099	-29.64	-13

Band12 QPSK BW=3MHz Channel=23025 RB Size=15 Position=#0



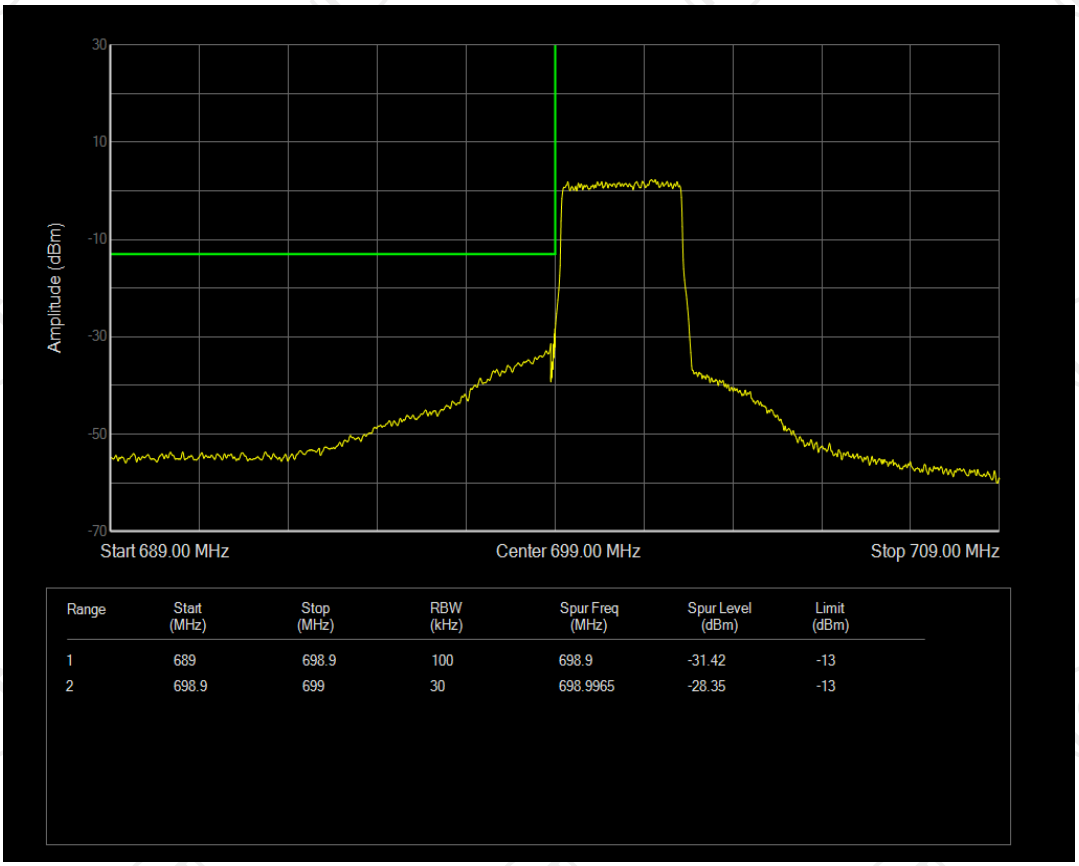
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	689	698.9	100	698.9	-29.35	-13
2	698.9	699	30	698.9953	-27.01	-13

Band12 16QAM BW=1.4MHz Channel=23173 RB Size=6 Position=#0



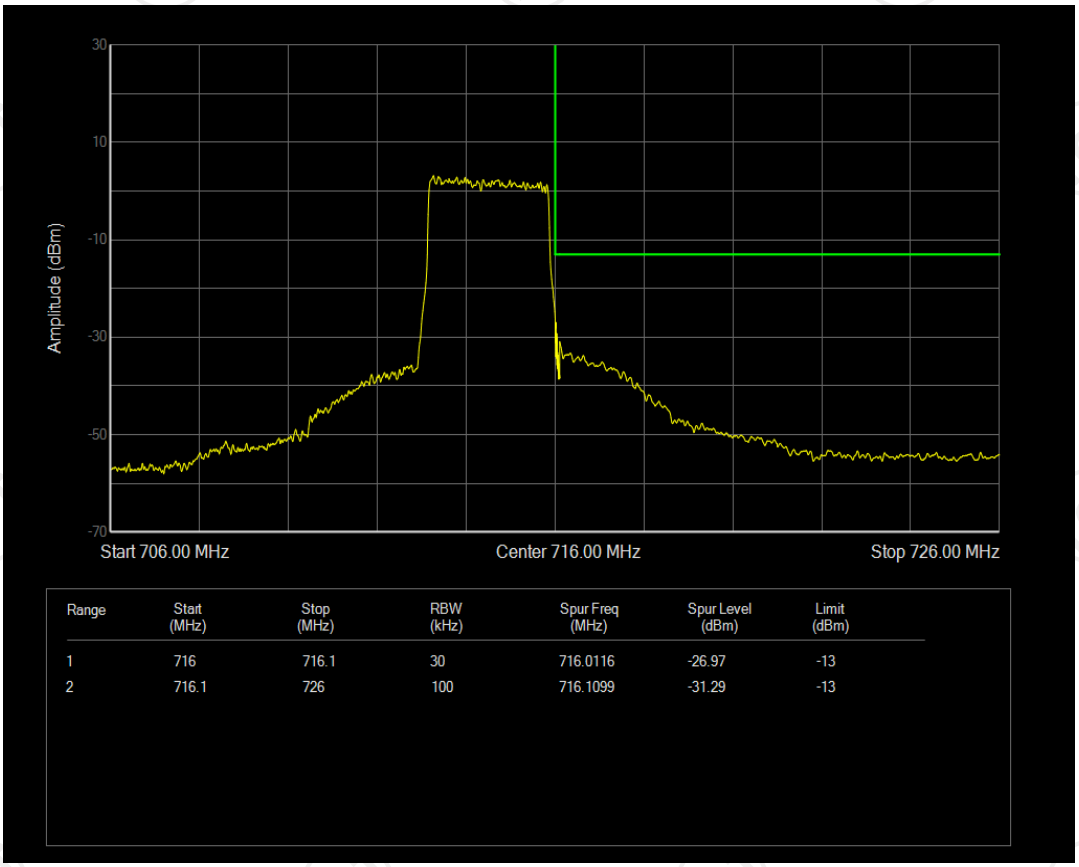
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	716	716.1	30	716.0381	-34.54	-13
2	716.1	726	100	716.1891	-31.89	-13

Band12 16QAM BW=3MHz Channel=23025 RB Size=15 Position=#0



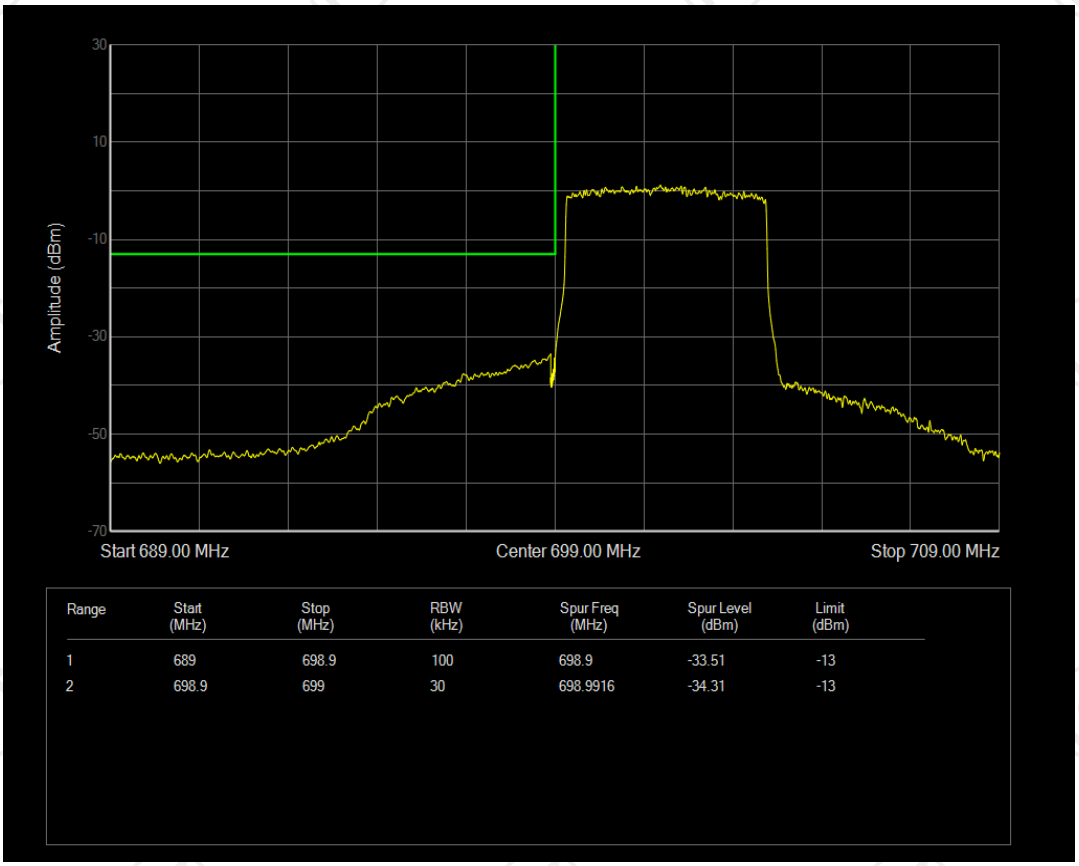
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	689	698.9	100	698.9	-31.42	-13
2	698.9	699	30	698.9965	-28.35	-13

Band12 QPSK BW=3MHz Channel=23165 RB Size=15 Position=#0



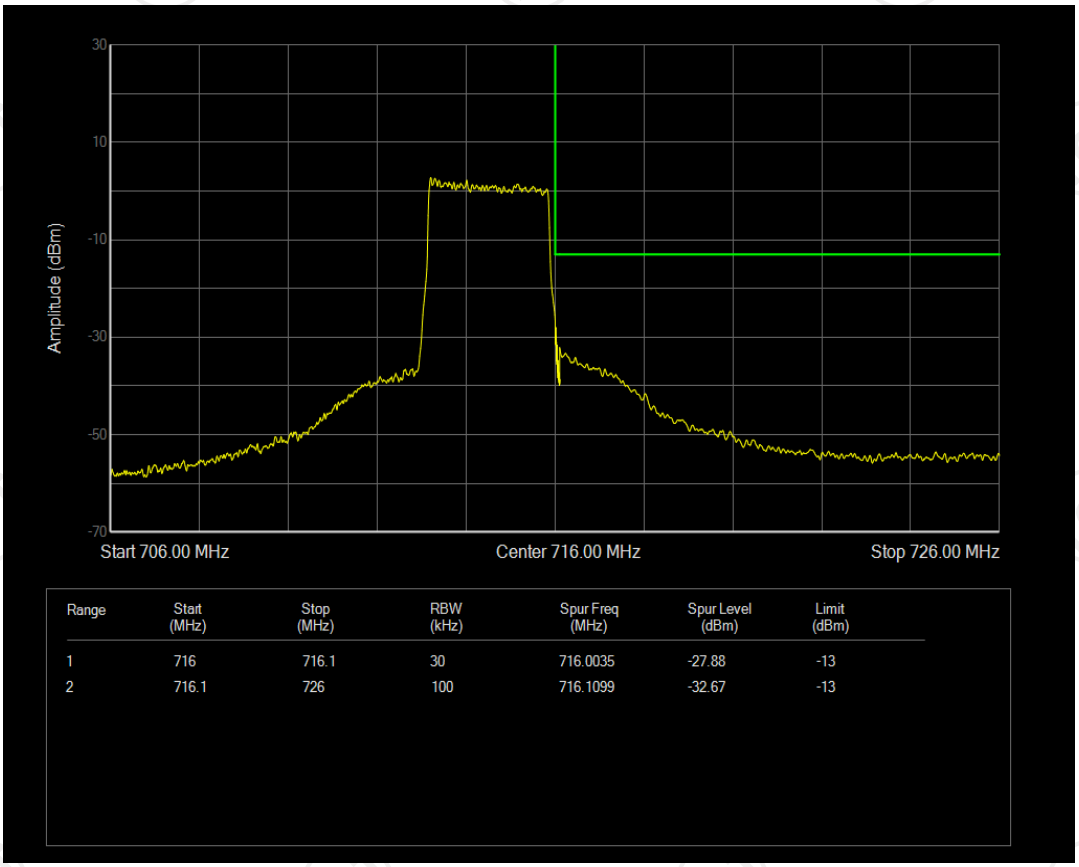
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	716	716.1	30	716.0116	-26.97	-13
2	716.1	726	100	716.1099	-31.29	-13

Band12 QPSK BW=5MHz Channel=23035 RB Size=25 Position=#0



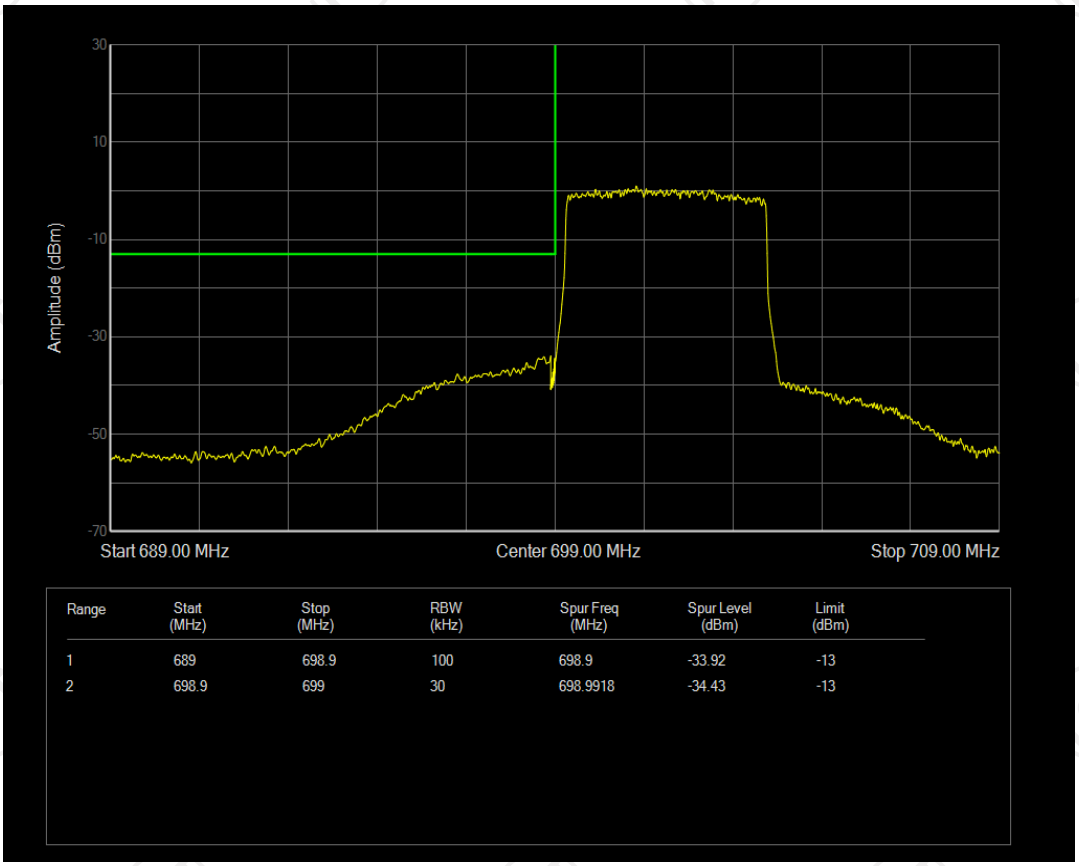
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	689	698.9	100	698.9	-33.51	-13
2	698.9	699	30	698.9916	-34.31	-13

Band12 16QAM BW=3MHz Channel=23165 RB Size=15 Position=#0



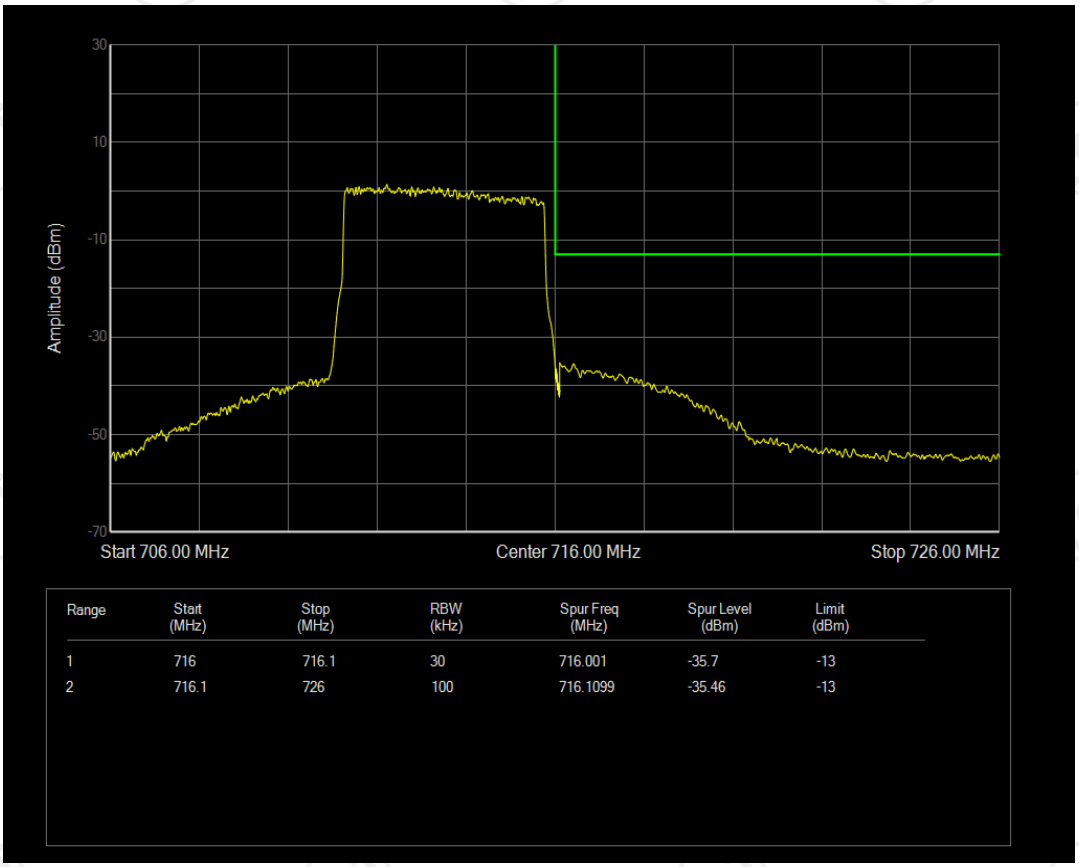
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	716	716.1	30	716.0035	-27.88	-13
2	716.1	726	100	716.1099	-32.67	-13

Band12 16QAM BW=5MHz Channel=23035 RB Size=25 Position=#0



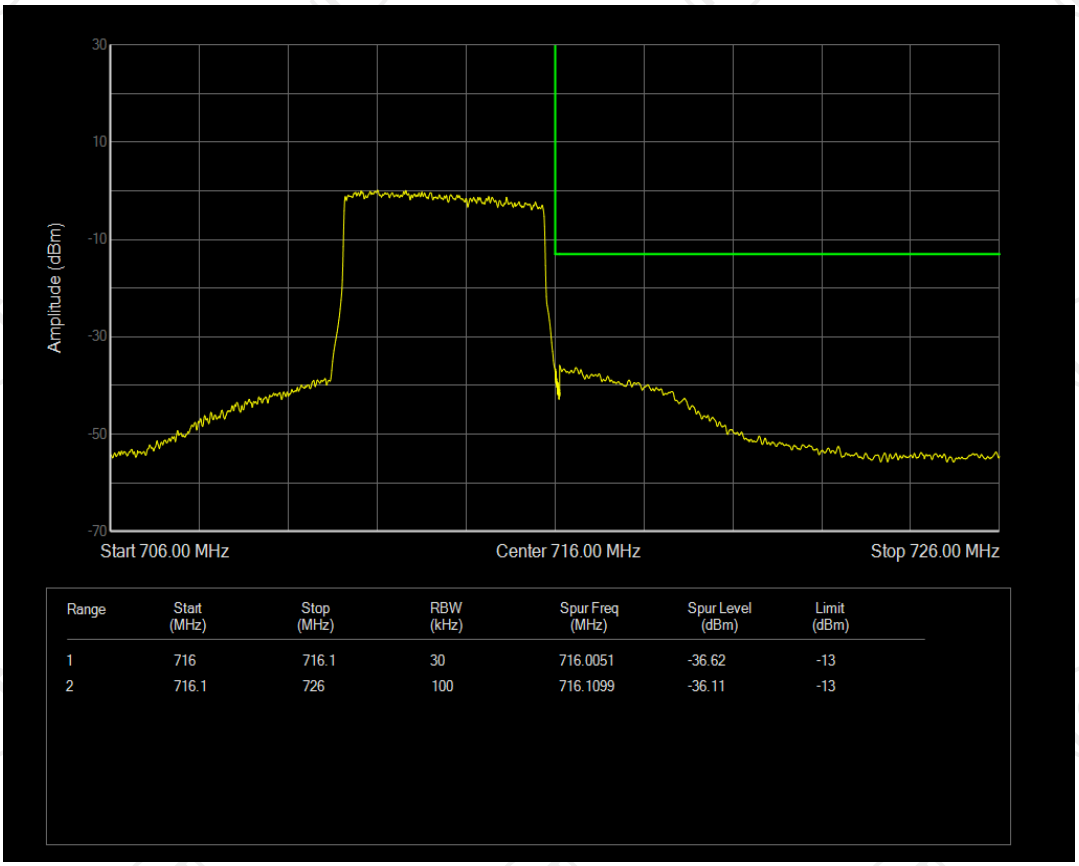
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	689	698.9	100	698.9	-33.92	-13
2	698.9	699	30	698.9918	-34.43	-13

Band12 QPSK BW=5MHz Channel=23155 RB Size=25 Position=#0



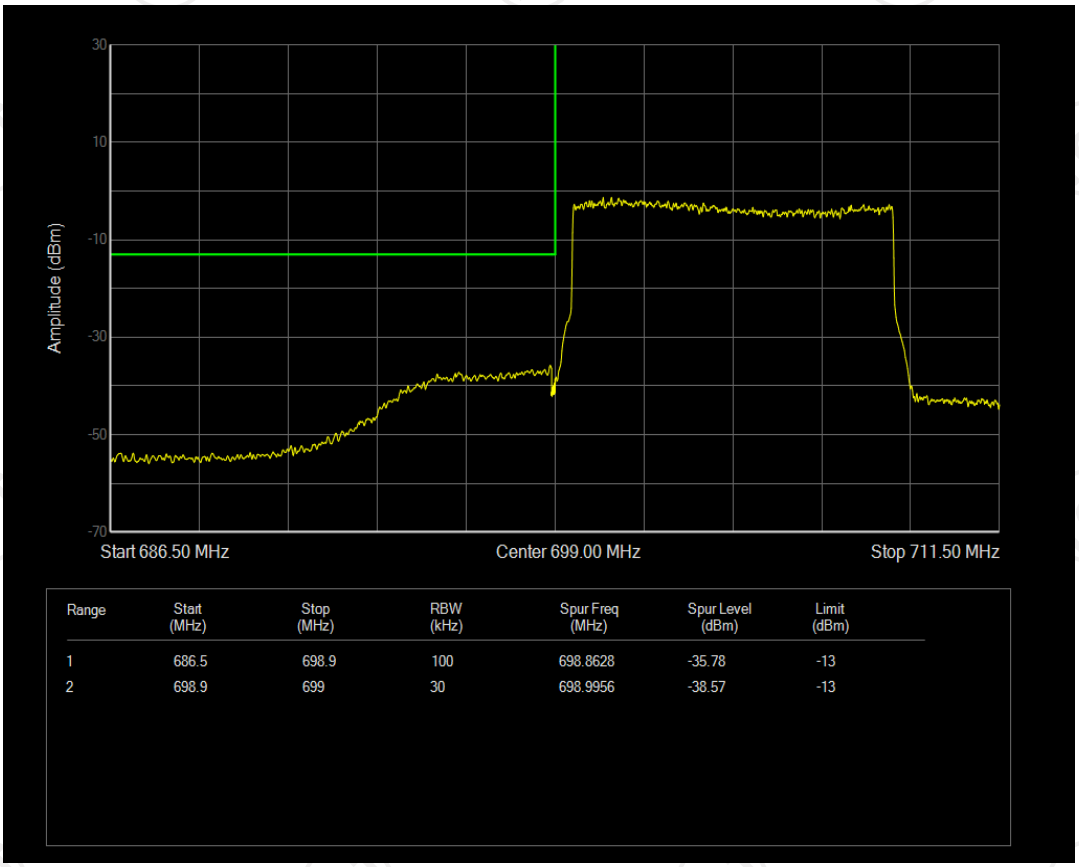
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	716	716.1	30	716.001	-35.7	-13
2	716.1	726	100	716.1099	-35.46	-13

Band12 16QAM BW=5MHz Channel=23155 RB Size=25 Position=#0



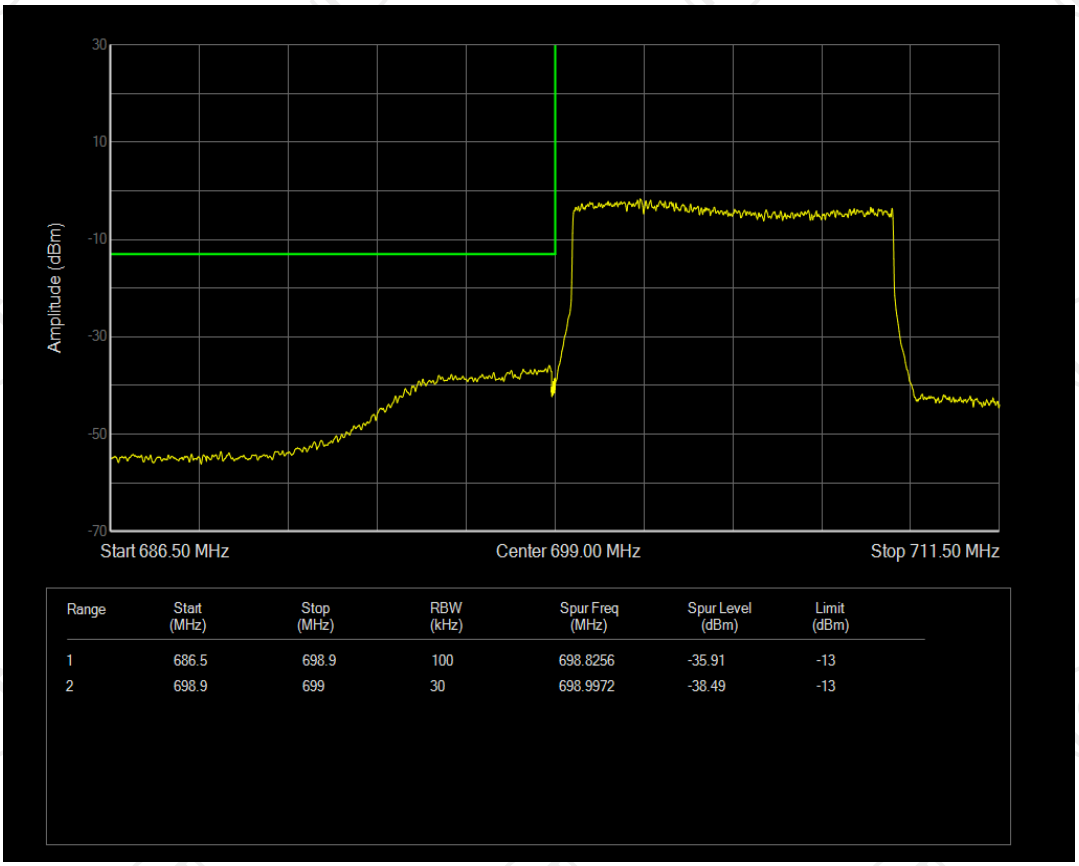
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	716	716.1	30	716.0051	-36.62	-13
2	716.1	726	100	716.1099	-36.11	-13

Band12 QPSK BW=10MHz Channel=23060 RB Size=50 Position=#0



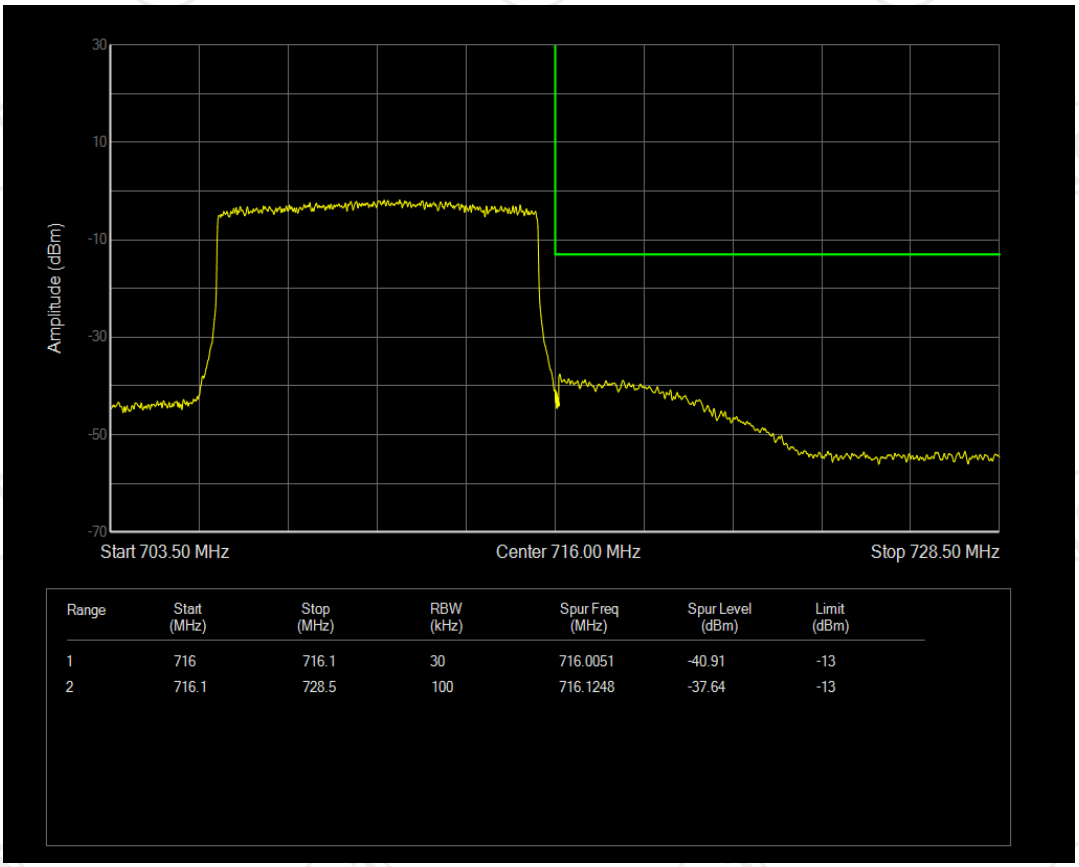
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	686.5	698.9	100	698.8628	-35.78	-13
2	698.9	699	30	698.9956	-38.57	-13

Band12 16QAM BW=10MHz Channel=23060 RB Size=50 Position=#0



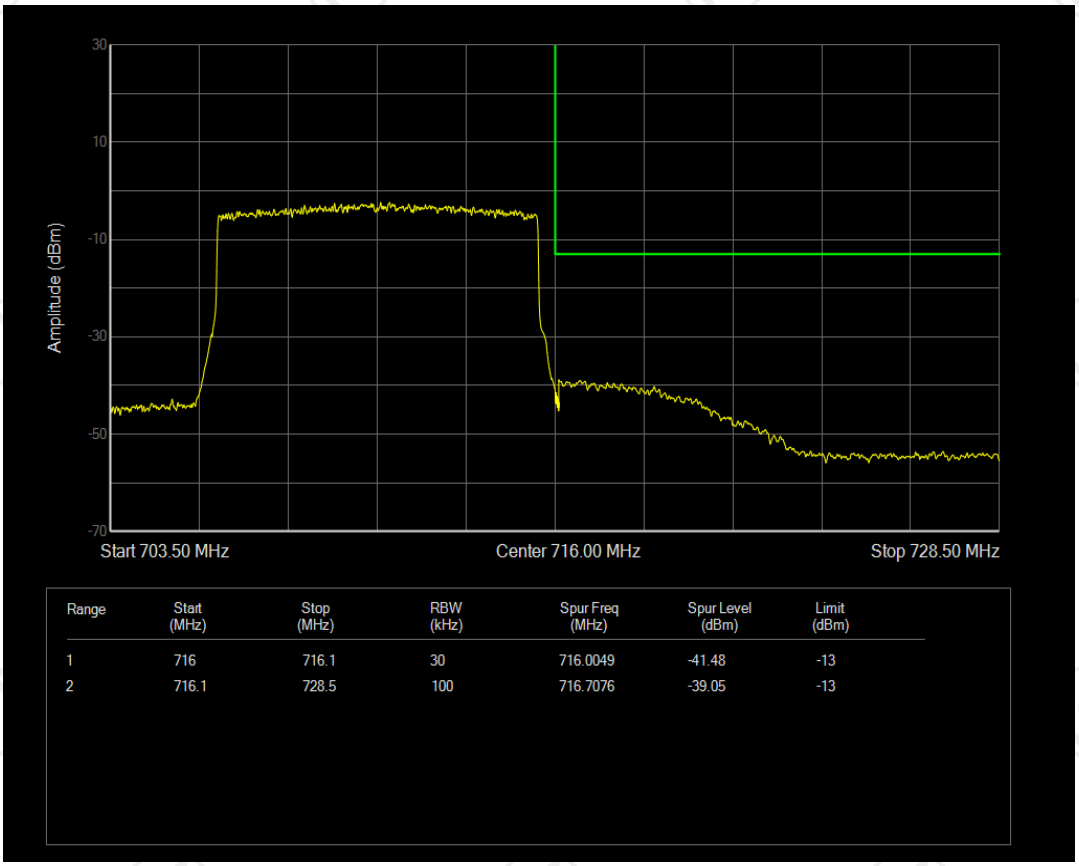
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	686.5	698.9	100	698.8256	-35.91	-13
2	698.9	699	30	698.9972	-38.49	-13

Band12 QPSK BW=10MHz Channel=23130 RB Size=50 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	716	716.1	30	716.0051	-40.91	-13
2	716.1	728.5	100	716.1248	-37.64	-13

Band12 16QAM BW=10MHz Channel=23130 RB Size=50 Position=#0

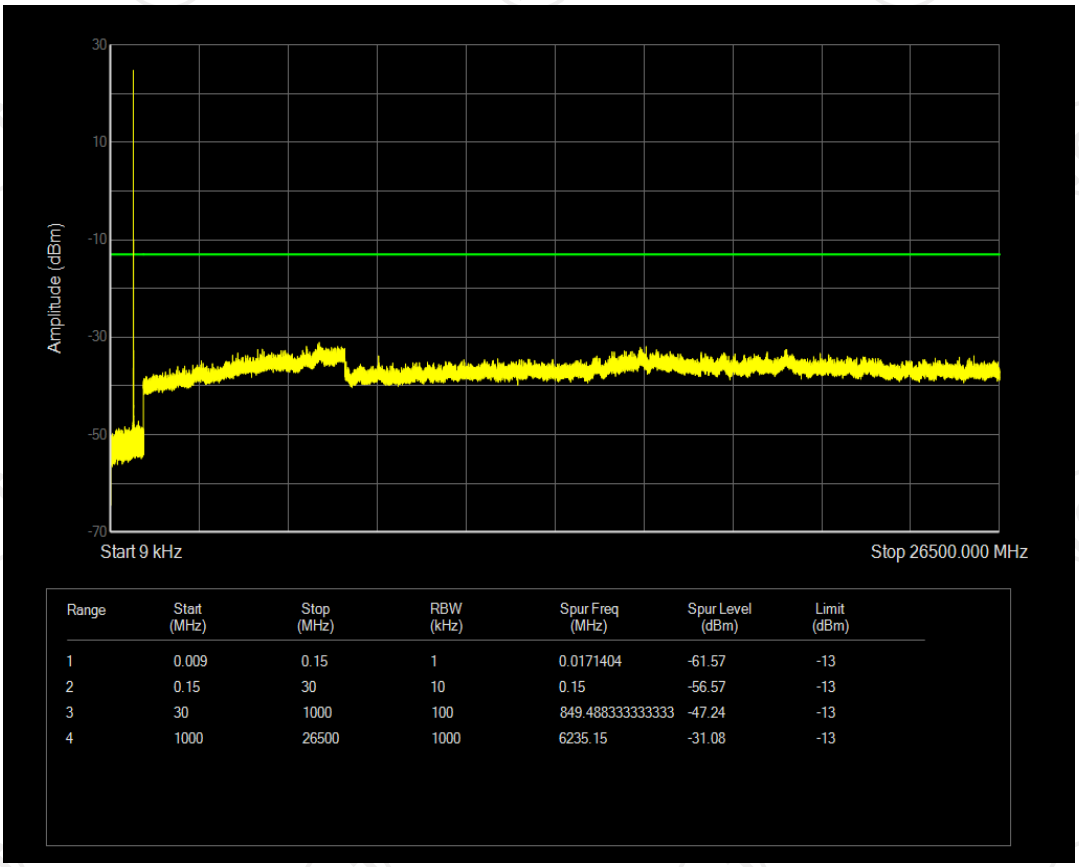


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	716	716.1	30	716.0049	-41.48	-13
2	716.1	728.5	100	716.7076	-39.05	-13

6 Out-of-band emissions

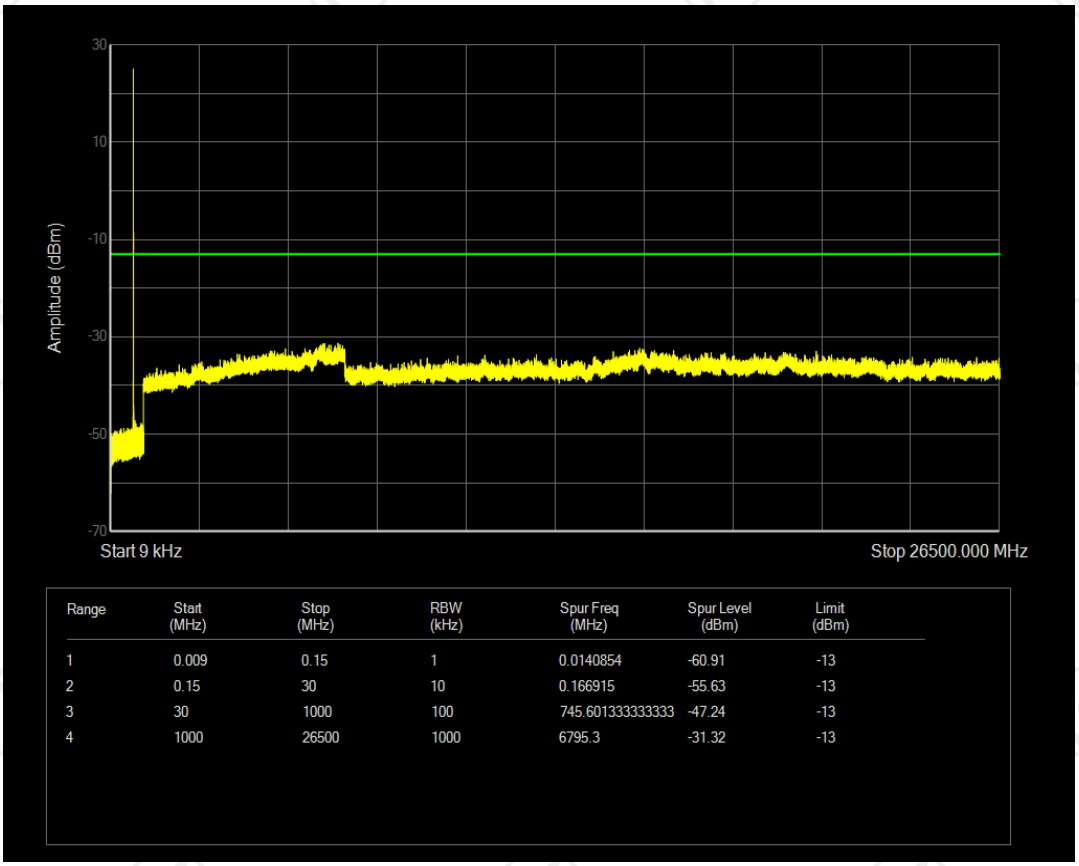
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band12	1.4	23017	1	#0	QPSK	6235.15	-31.08	-13	PASS
Band12	1.4	23017	1	#0	16QAM	6795.30	-31.32	-13	PASS
Band12	1.4	23095	1	#0	QPSK	6742.60	-31.35	-13	PASS
Band12	1.4	23095	1	#0	16QAM	6200.30	-31.29	-13	PASS
Band12	1.4	23173	1	#0	QPSK	6816.55	-30.83	-13	PASS
Band12	1.4	23173	1	#0	16QAM	6882.85	-30.83	-13	PASS
Band12	3	23025	1	#0	QPSK	6878.60	-30.43	-13	PASS
Band12	3	23025	1	#0	16QAM	6999.30	-31.38	-13	PASS
Band12	3	23095	1	#0	QPSK	6143.35	-31.01	-13	PASS
Band12	3	23095	1	#0	16QAM	6927.05	-31.11	-13	PASS
Band12	3	23165	1	#0	QPSK	6984.00	-30.29	-13	PASS
Band12	3	23165	1	#0	16QAM	6235.15	-30.18	-13	PASS
Band12	5	23035	1	#0	QPSK	6806.35	-30.27	-13	PASS
Band12	5	23035	1	#0	16QAM	6930.45	-30.78	-13	PASS
Band12	5	23095	1	#0	QPSK	6748.55	-31.07	-13	PASS
Band12	5	23095	1	#0	16QAM	6717.10	-30.47	-13	PASS
Band12	5	23155	1	#0	QPSK	6301.45	-31.04	-13	PASS
Band12	5	23155	1	#0	16QAM	6722.20	-30.79	-13	PASS
Band12	10	23060	1	#0	QPSK	6853.10	-31.35	-13	PASS
Band12	10	23060	1	#0	16QAM	6261.50	-30.67	-13	PASS
Band12	10	23095	1	#0	QPSK	6236.00	-31.38	-13	PASS
Band12	10	23095	1	#0	16QAM	6901.55	-30.55	-13	PASS
Band12	10	23130	1	#0	QPSK	6263.20	-31.17	-13	PASS
Band12	10	23130	1	#0	16QAM	6802.10	-30.45	-13	PASS

Band12 QPSK BW=1.4MHz Channel=23017 RB Size=1 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0171404	-61.57	-13
2	0.15	30	10	0.15	-56.57	-13
3	30	1000	100	849.488333333333	-47.24	-13
4	1000	26500	1000	6235.15	-31.08	-13

Band12 16QAM BW=1.4MHz Channel=23017 RB Size=1 Position=#0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0140854	-60.91	-13
2	0.15	30	10	0.166915	-55.63	-13
3	30	1000	100	745.601333333333	-47.24	-13
4	1000	26500	1000	6795.3	-31.32	-13