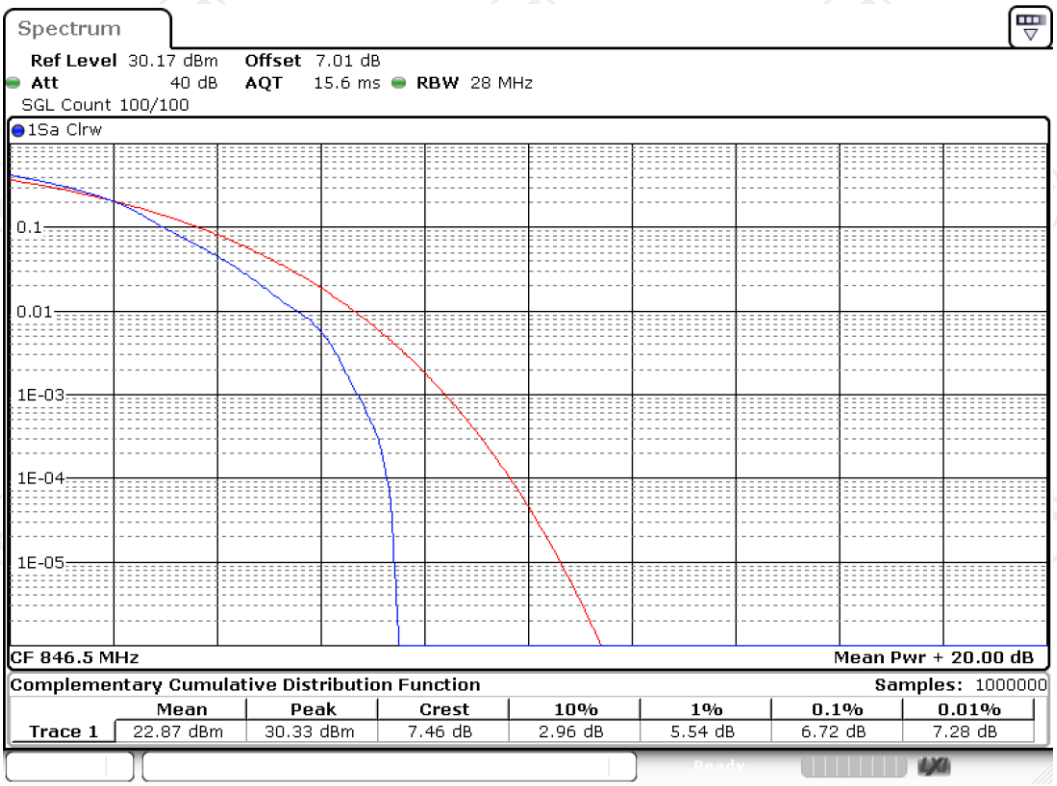
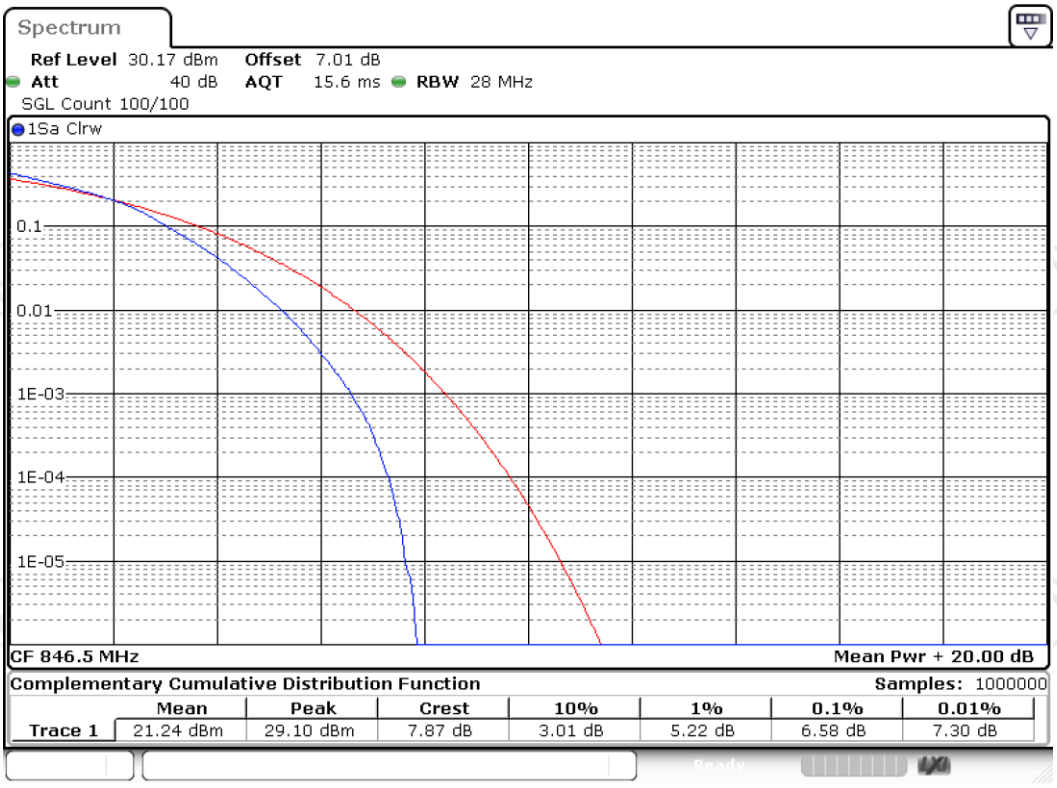
Band5 16QAM BW=5MHz Channel=20625 RB Size=1 Position=#0



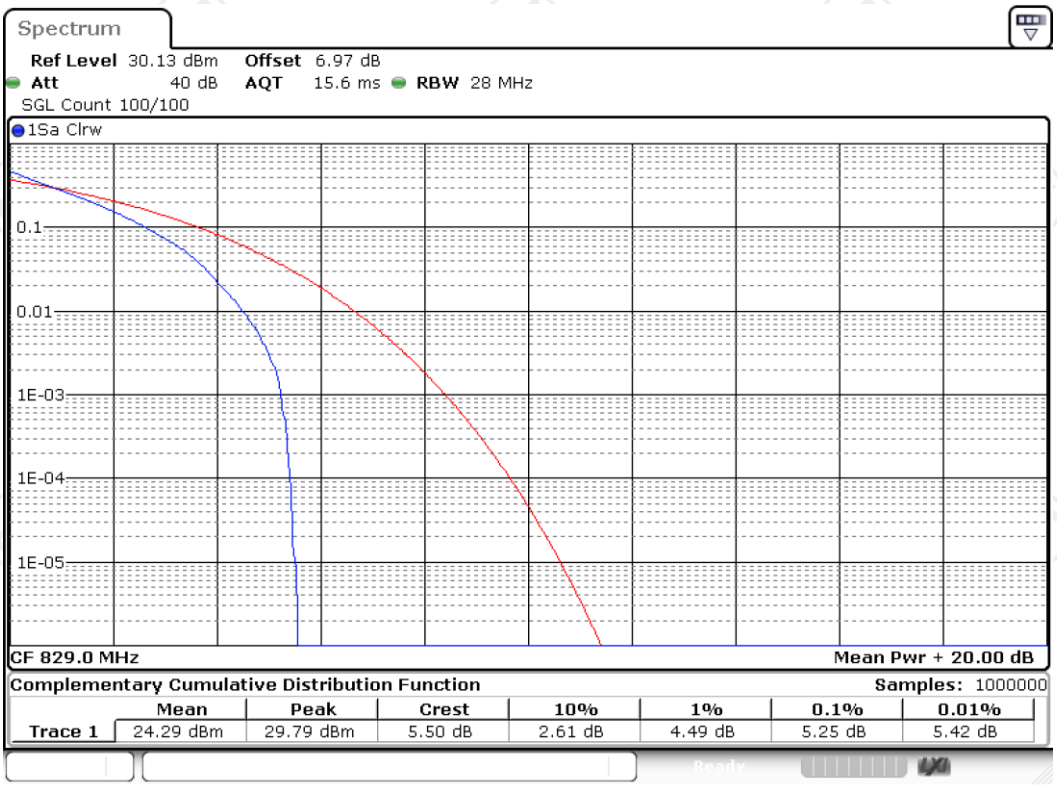
Date: 28.NOV.2023 12:36:33

Band5 16QAM BW=5MHz Channel=20625 RB Size=25 Position=#0



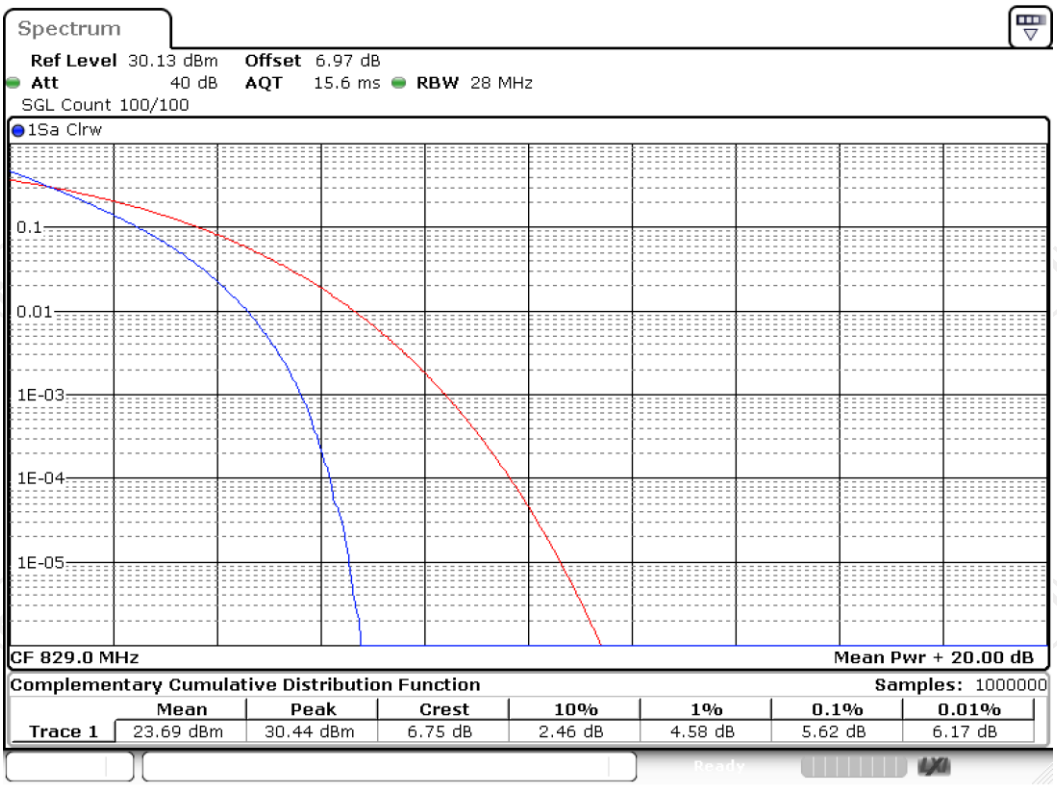
Date: 28.NOV.2023 12:36:40

Band5 QPSK BW=10MHz Channel=20450 RB Size=1 Position=#0



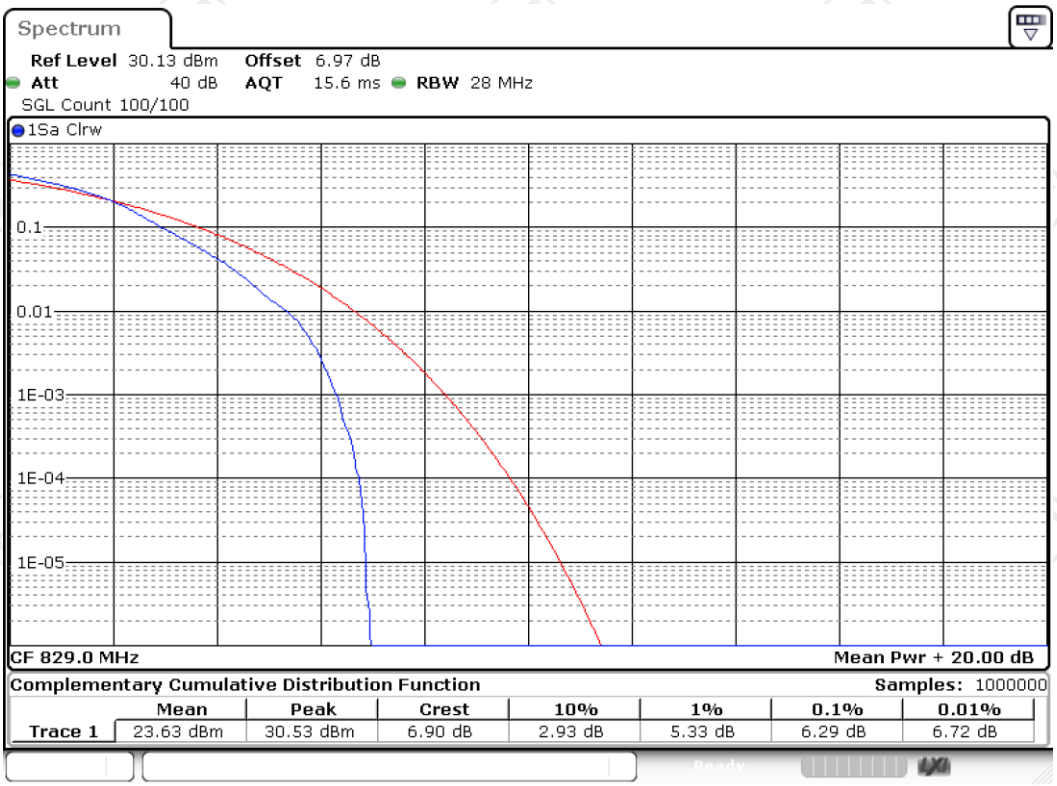
Date: 28.NOV.2023 12:36:48

Band5 QPSK BW=10MHz Channel=20450 RB Size=50 Position=#0



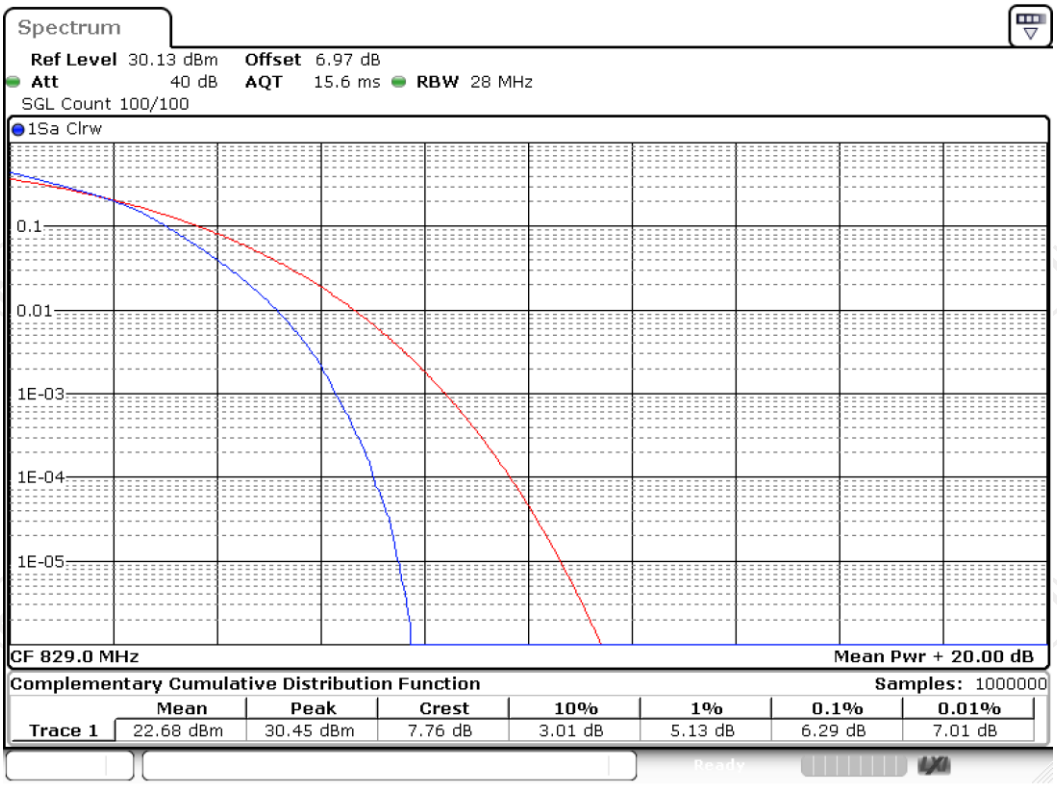
Date: 28.NOV.2023 12:36:55

Band5 16QAM BW=10MHz Channel=20450 RB Size=1 Position=#0



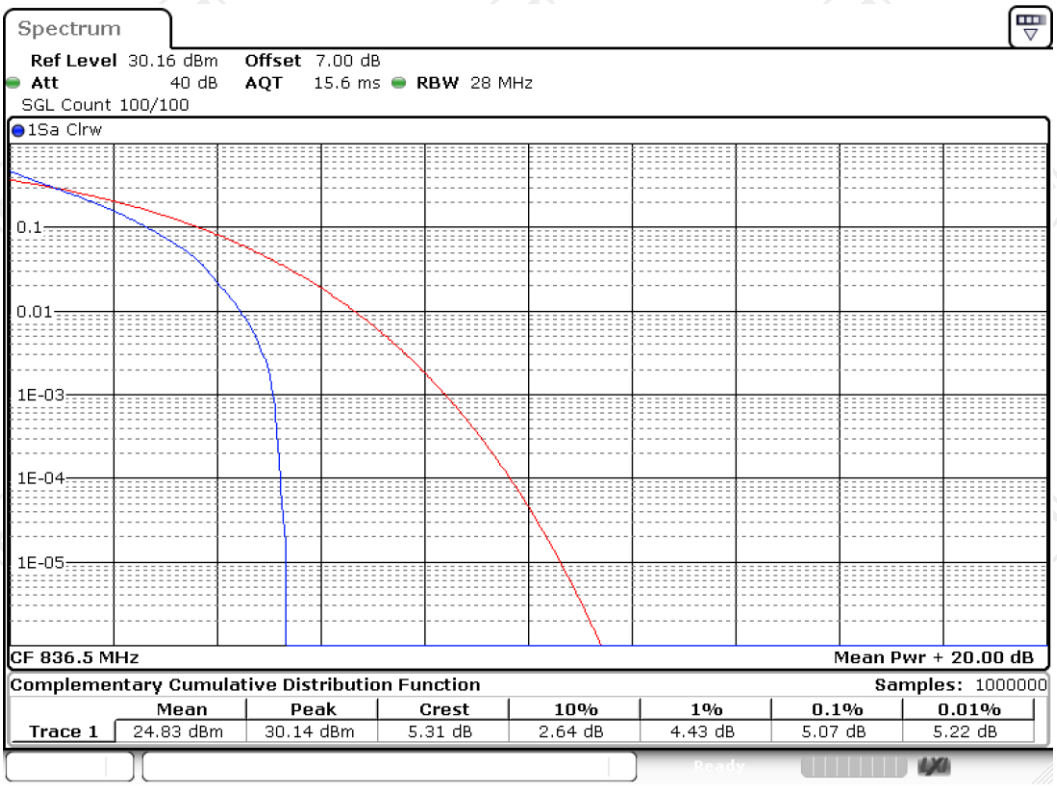
Date: 28.NOV.2023 12:37:02

Band5 16QAM BW=10MHz Channel=20450 RB Size=50 Position=#0



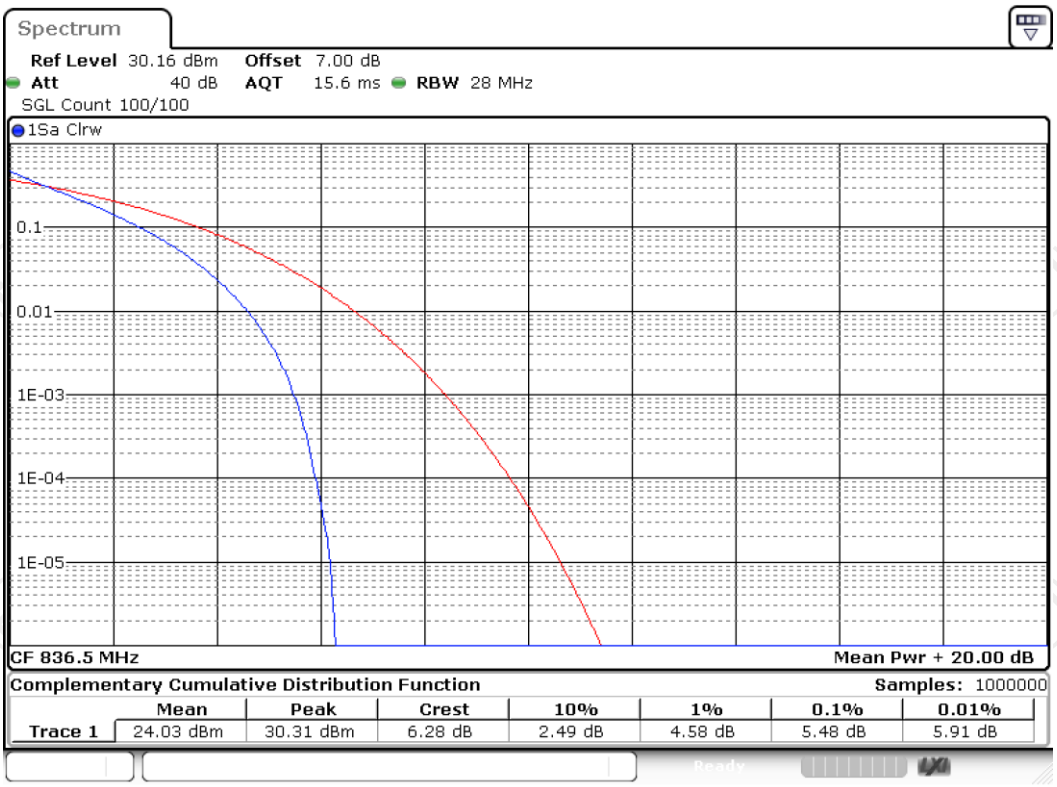
Date: 28.NOV.2023 12:37:08

Band5 QPSK BW=10MHz Channel=20525 RB Size=1 Position=#0



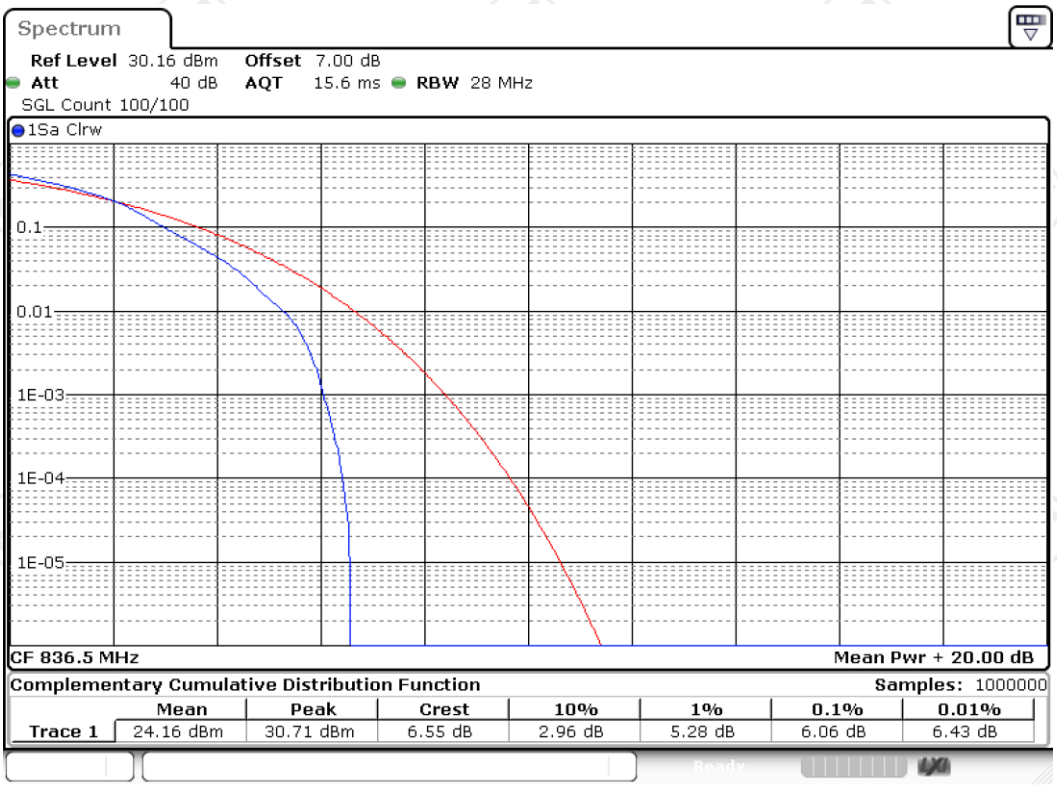
Date: 28.NOV.2023 12:37:15

Band5 QPSK BW=10MHz Channel=20525 RB Size=50 Position=#0



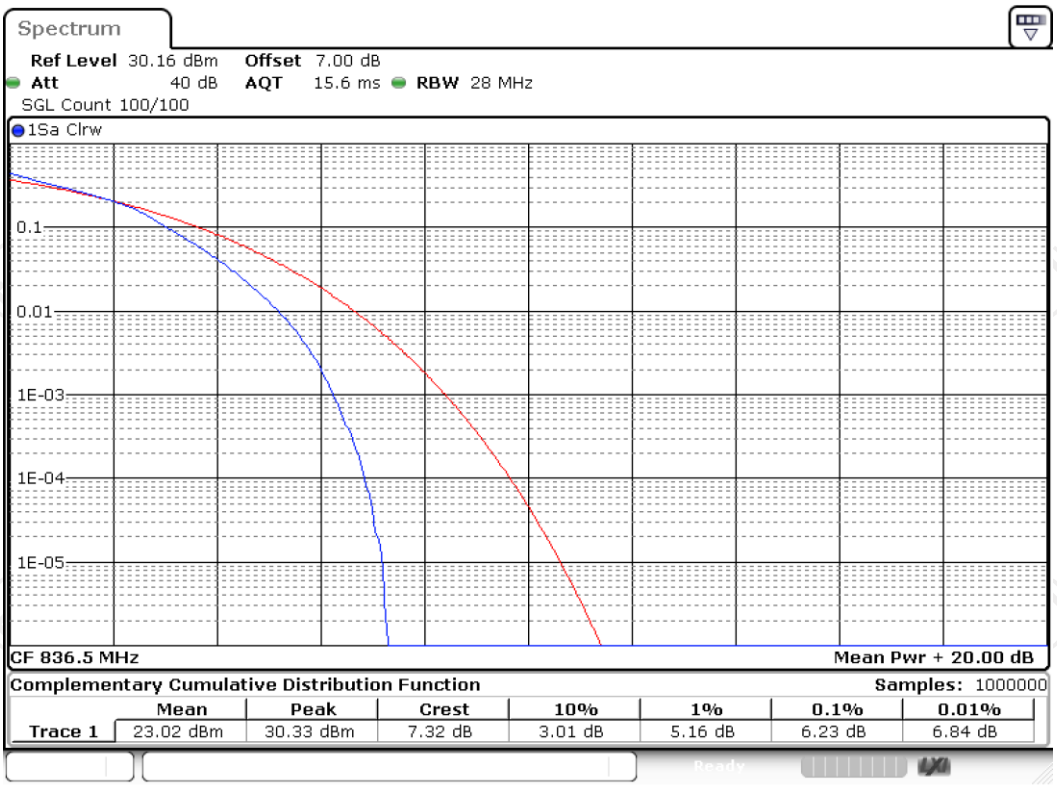
Date: 28.NOV.2023 12:37:22

Band5 16QAM BW=10MHz Channel=20525 RB Size=1 Position=#0



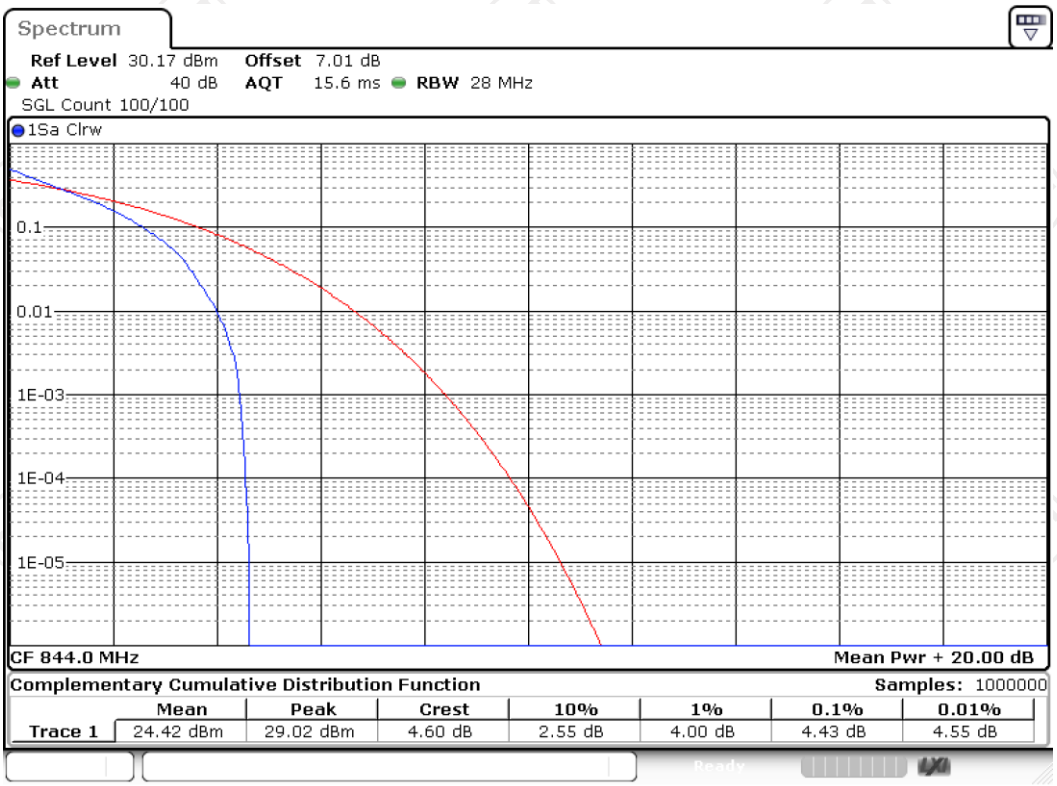
Date: 28.NOV.2023 12:37:29

Band5 16QAM BW=10MHz Channel=20525 RB Size=50 Position=#0



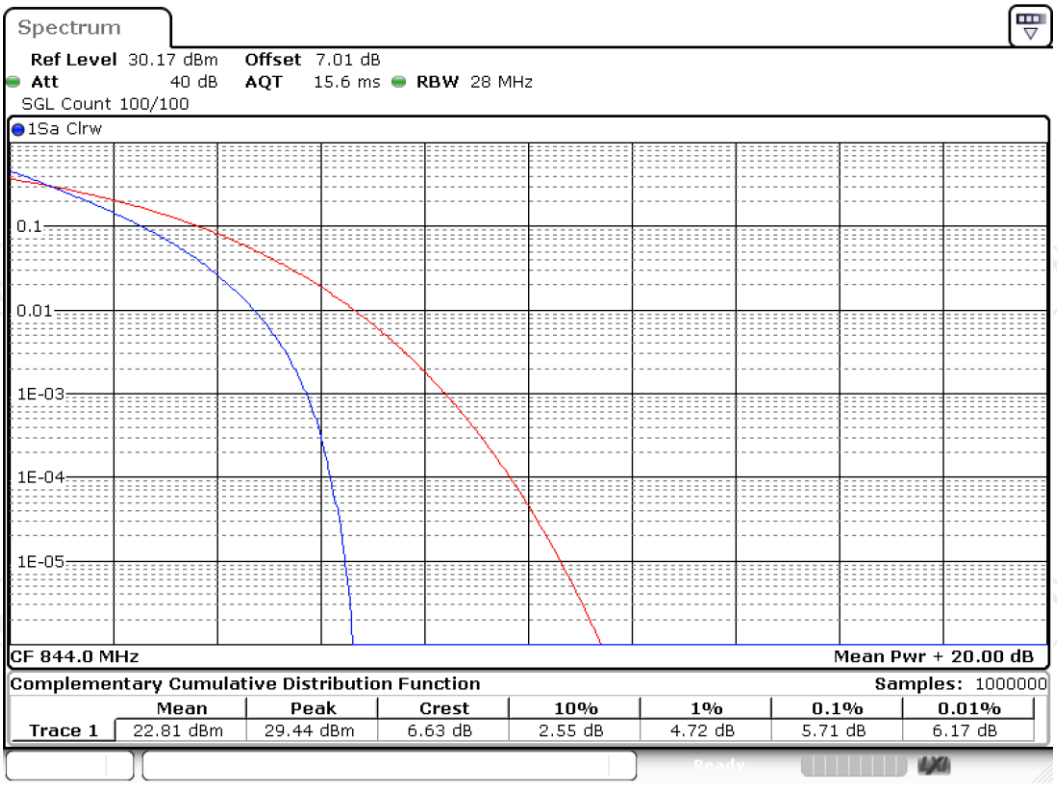
Date: 28.NOV.2023 12:37:36

Band5 QPSK BW=10MHz Channel=20600 RB Size=1 Position=#0



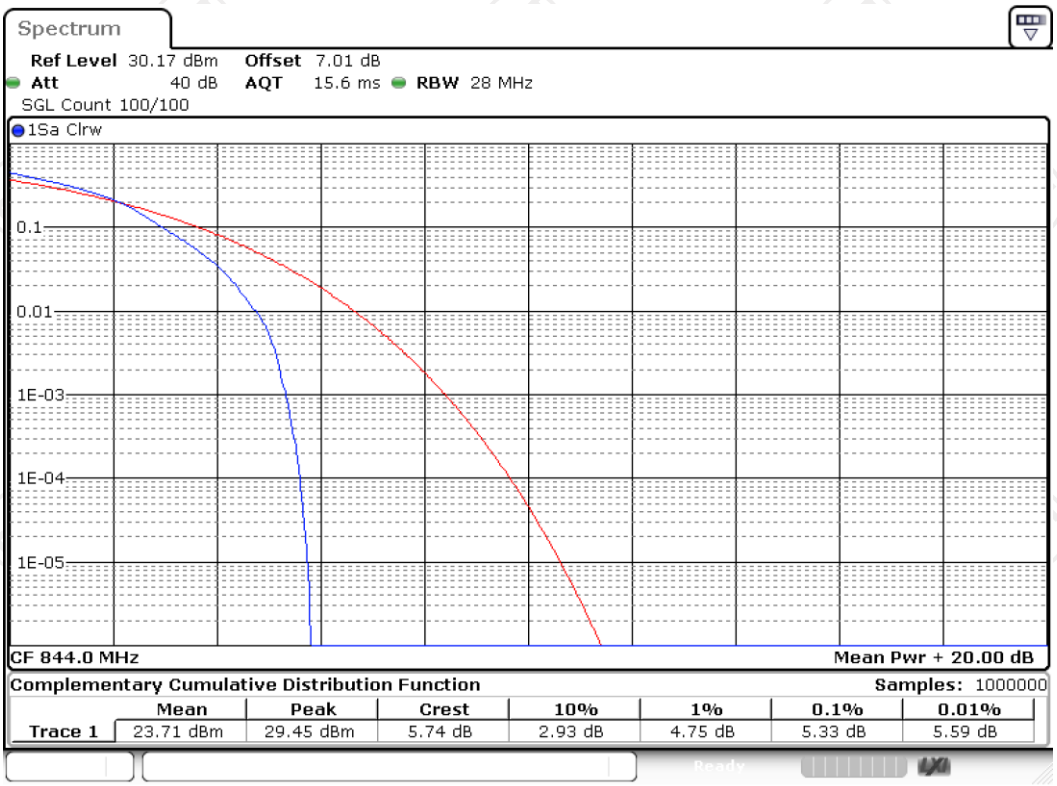
Date: 28.NOV.2023 12:37:43

Band5 QPSK BW=10MHz Channel=20600 RB Size=50 Position=#0



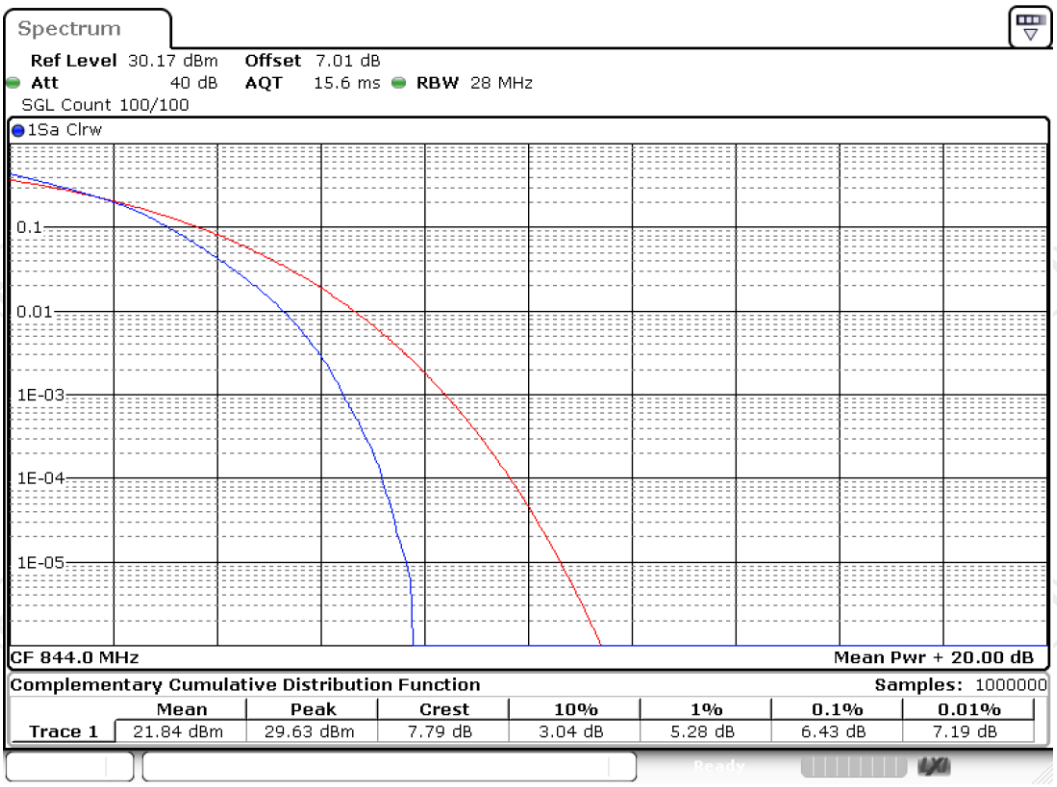
Date: 28.NOV.2023 12:37:50

Band5 16QAM BW=10MHz Channel=20600 RB Size=1 Position=#0



Date: 28.NOV.2023 12:37:56

Band5 16QAM BW=10MHz Channel=20600 RB Size=50 Position=#0

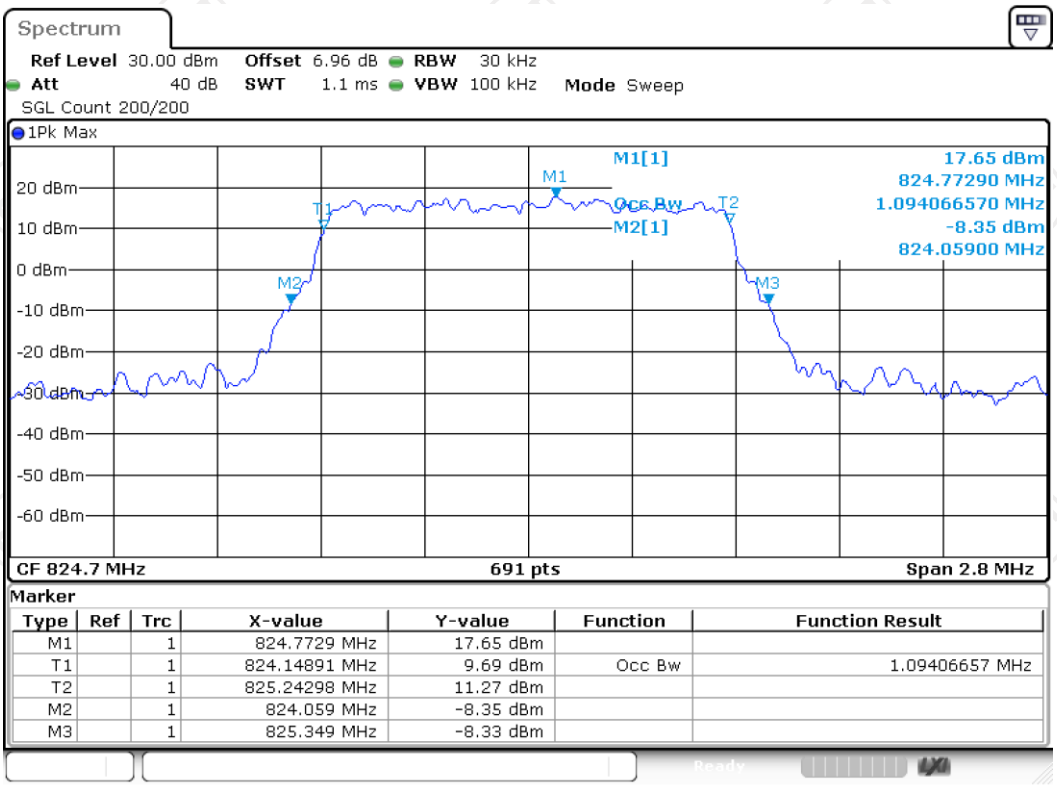


Date: 28.NOV.2023 12:38:03

4 Occupied bandwidth

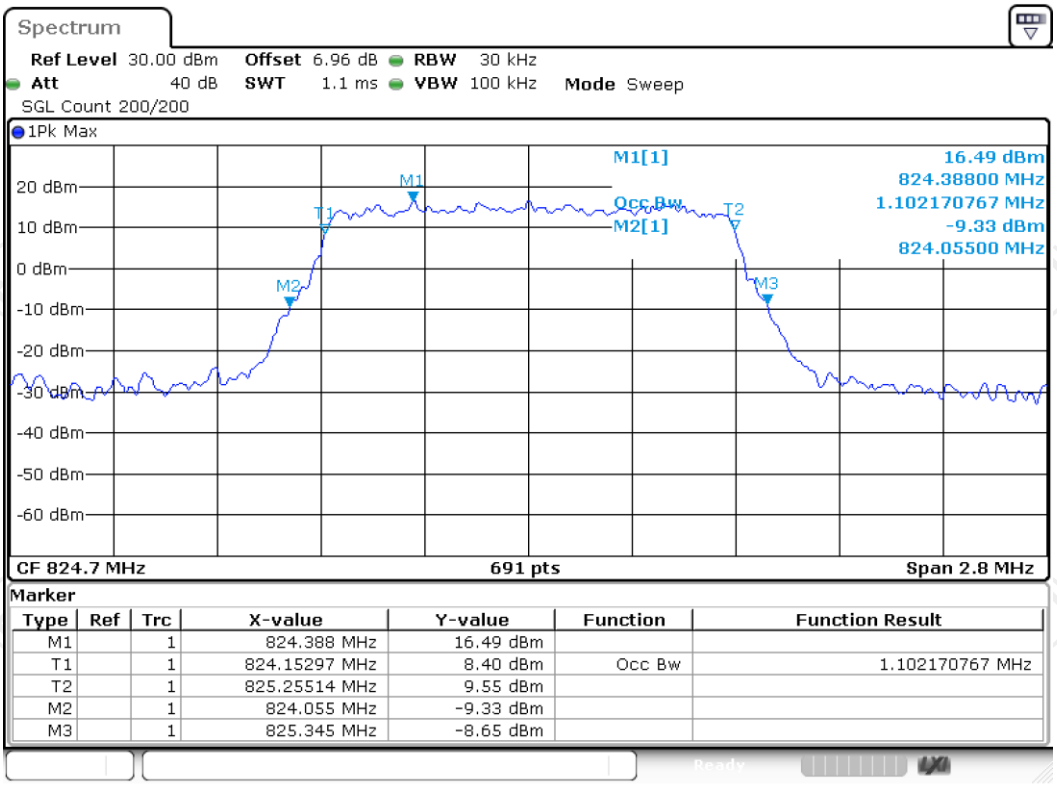
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band5	1.4	20407	6	#0	QPSK	1.094	1.290	PASS
Band5	1.4	20407	6	#0	16QAM	1.102	1.290	PASS
Band5	1.4	20525	6	#0	QPSK	1.094	1.278	PASS
Band5	1.4	20525	6	#0	16QAM	1.094	1.278	PASS
Band5	1.4	20643	6	#0	QPSK	1.090	1.290	PASS
Band5	1.4	20643	6	#0	16QAM	1.094	1.290	PASS
Band5	3	20415	15	#0	QPSK	2.709	2.965	PASS
Band5	3	20415	15	#0	16QAM	2.709	2.948	PASS
Band5	3	20525	15	#0	QPSK	2.709	2.965	PASS
Band5	3	20525	15	#0	16QAM	2.726	2.974	PASS
Band5	3	20635	15	#0	QPSK	2.718	2.974	PASS
Band5	3	20635	15	#0	16QAM	2.718	3.000	PASS
Band5	5	20425	25	#0	QPSK	4.486	4.812	PASS
Band5	5	20425	25	#0	16QAM	4.486	4.870	PASS
Band5	5	20525	25	#0	QPSK	4.486	4.870	PASS
Band5	5	20525	25	#0	16QAM	4.501	4.855	PASS
Band5	5	20625	25	#0	QPSK	4.486	4.826	PASS
Band5	5	20625	25	#0	16QAM	4.501	4.870	PASS
Band5	10	20450	50	#0	QPSK	8.973	9.623	PASS
Band5	10	20450	50	#0	16QAM	8.944	9.623	PASS
Band5	10	20525	50	#0	QPSK	8.973	9.710	PASS
Band5	10	20525	50	#0	16QAM	9.001	9.681	PASS
Band5	10	20600	50	#0	QPSK	8.973	9.652	PASS
Band5	10	20600	50	#0	16QAM	8.944	9.652	PASS

Band5 QPSK BW=1.4MHz Channel=20407 RB Size=6 Position=#0



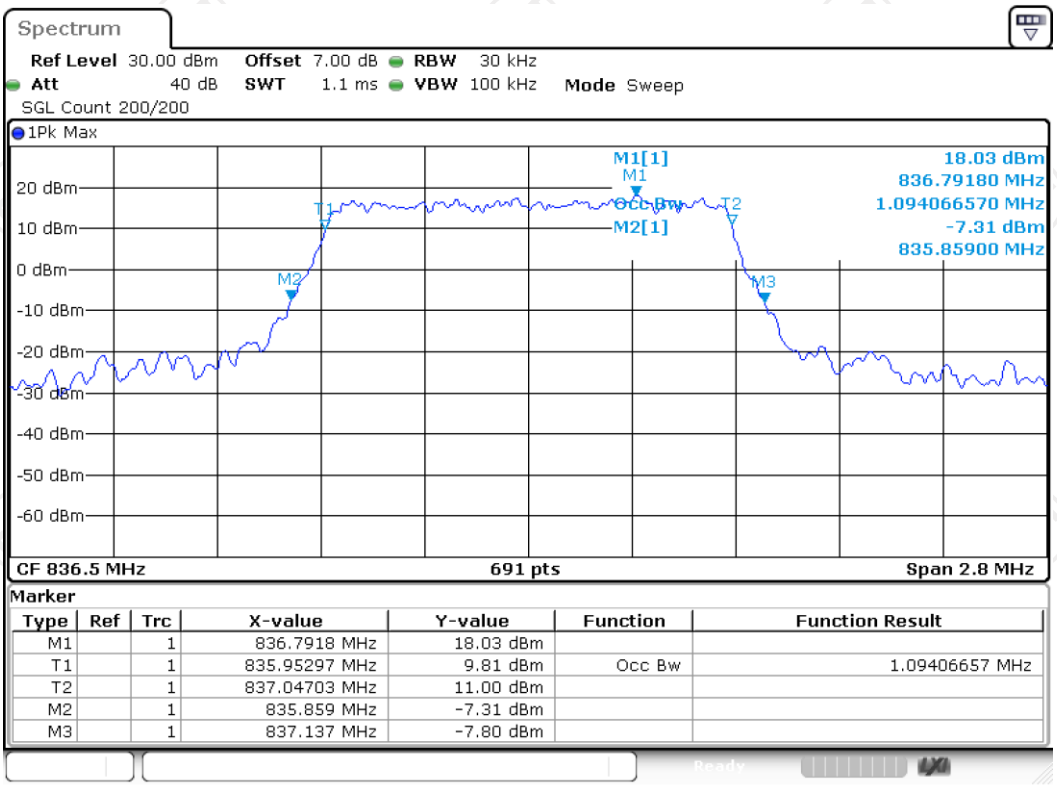
Date: 27.OCT.2023 10:04:47

Band5 16QAM BW=1.4MHz Channel=20407 RB Size=6 Position=#0



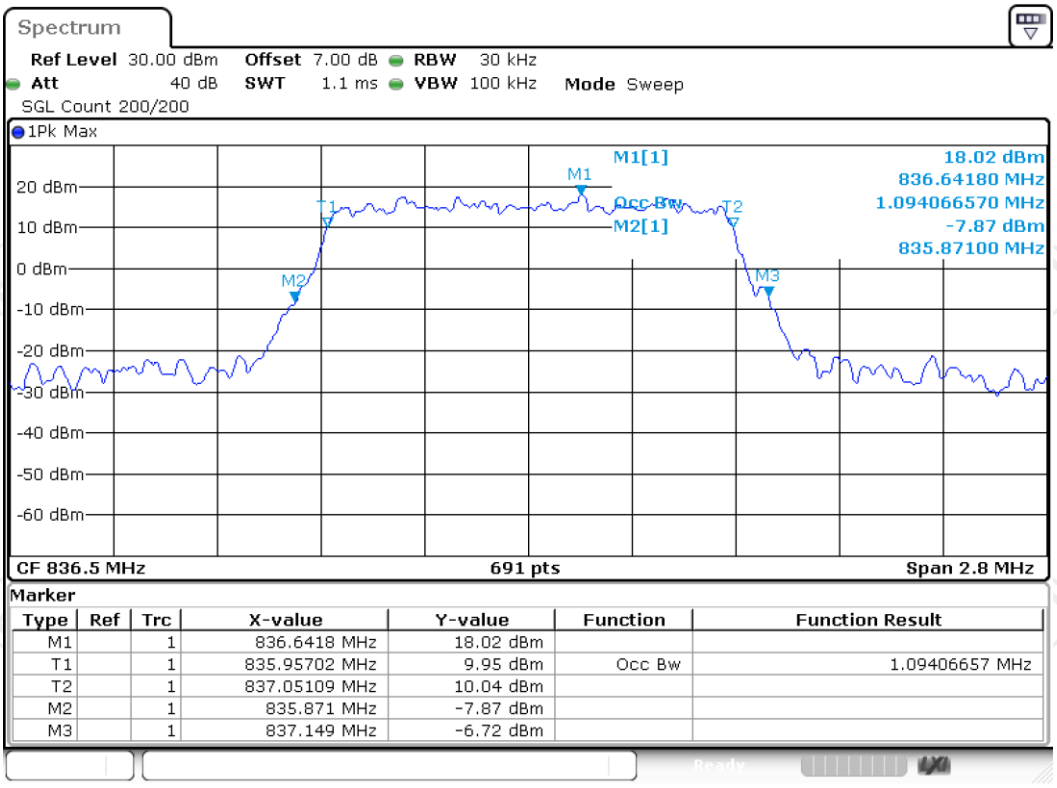
Date: 27.OCT.2023 10:04:52

Band5 QPSK BW=1.4MHz Channel=20525 RB Size=6 Position=#0



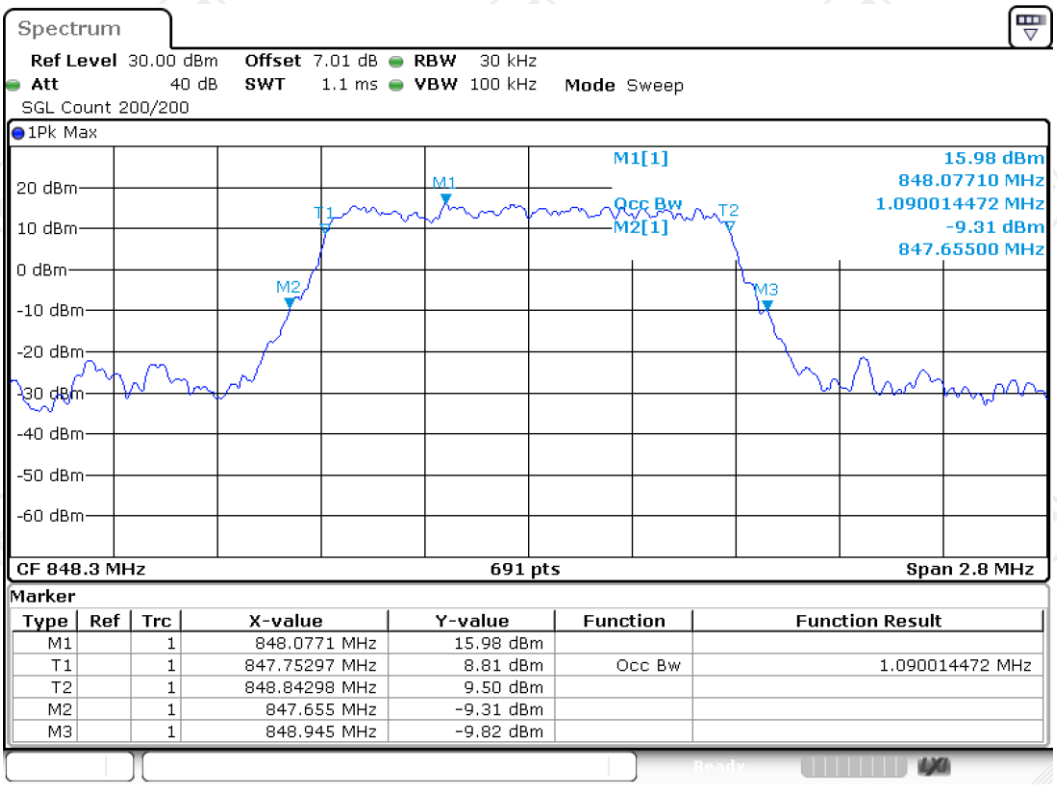
Date: 27.OCT.2023 10:04:57

Band5 16QAM BW=1.4MHz Channel=20525 RB Size=6 Position=#0



Date: 27.OCT.2023 10:05:02

Band5 QPSK BW=1.4MHz Channel=20643 RB Size=6 Position=#0

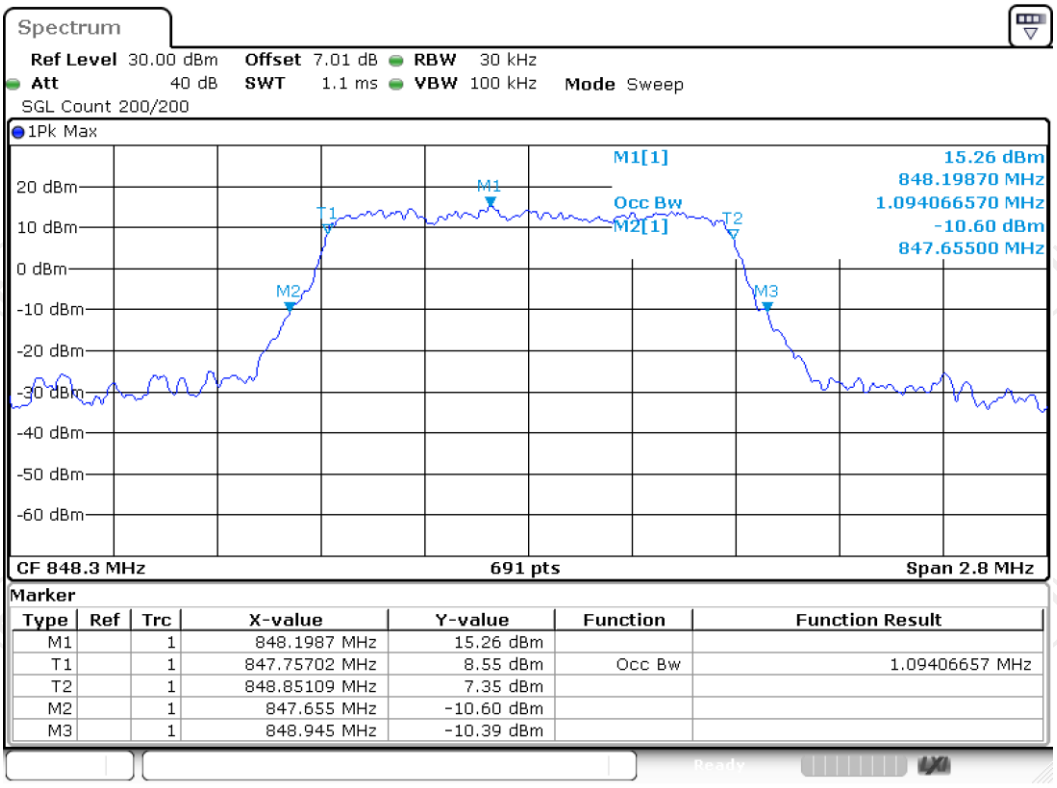


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	848.0771 MHz	15.98 dBm		
T1		1	847.75297 MHz	8.81 dBm	Occ Bw	1.090014472 MHz
T2		1	848.84298 MHz	9.50 dBm		
M2		1	847.655 MHz	-9.31 dBm		
M3		1	848.945 MHz	-9.82 dBm		

Date: 27.OCT.2023 10:05:07

Band5 16QAM BW=1.4MHz Channel=20643 RB Size=6 Position=#0

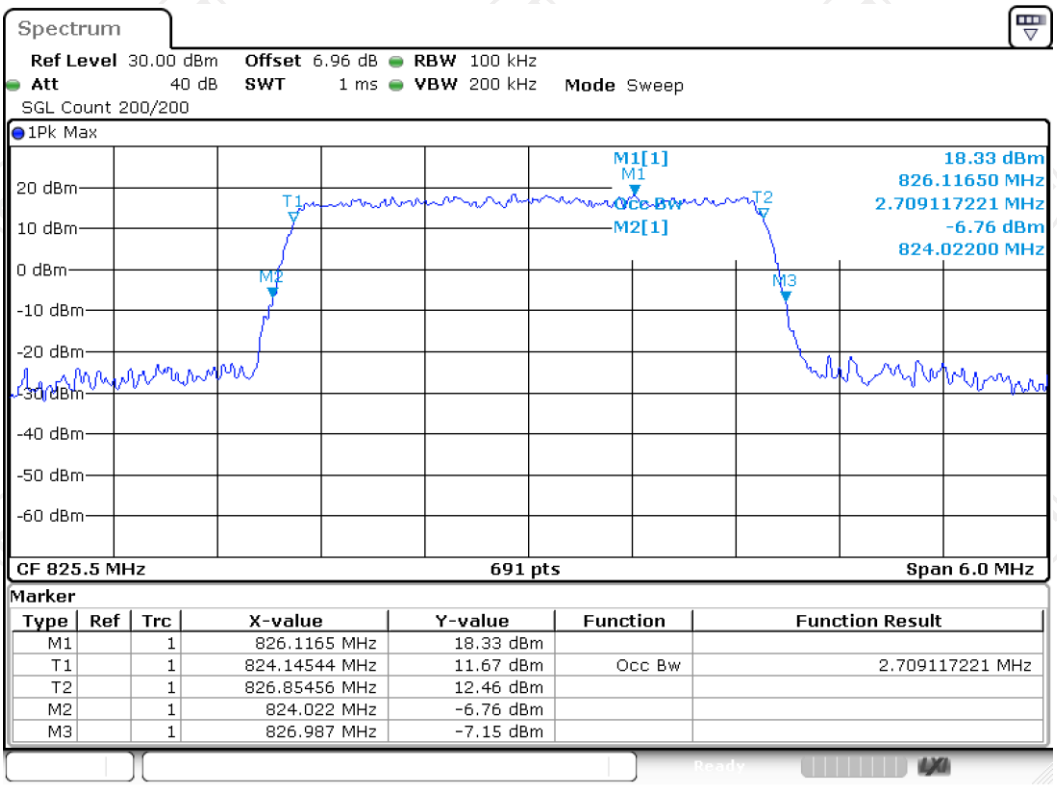


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	848.1987 MHz	15.26 dBm		
T1		1	847.75702 MHz	8.55 dBm	Occ Bw	1.09406657 MHz
T2		1	848.85109 MHz	7.35 dBm		
M2		1	847.655 MHz	-10.60 dBm		
M3		1	848.945 MHz	-10.39 dBm		

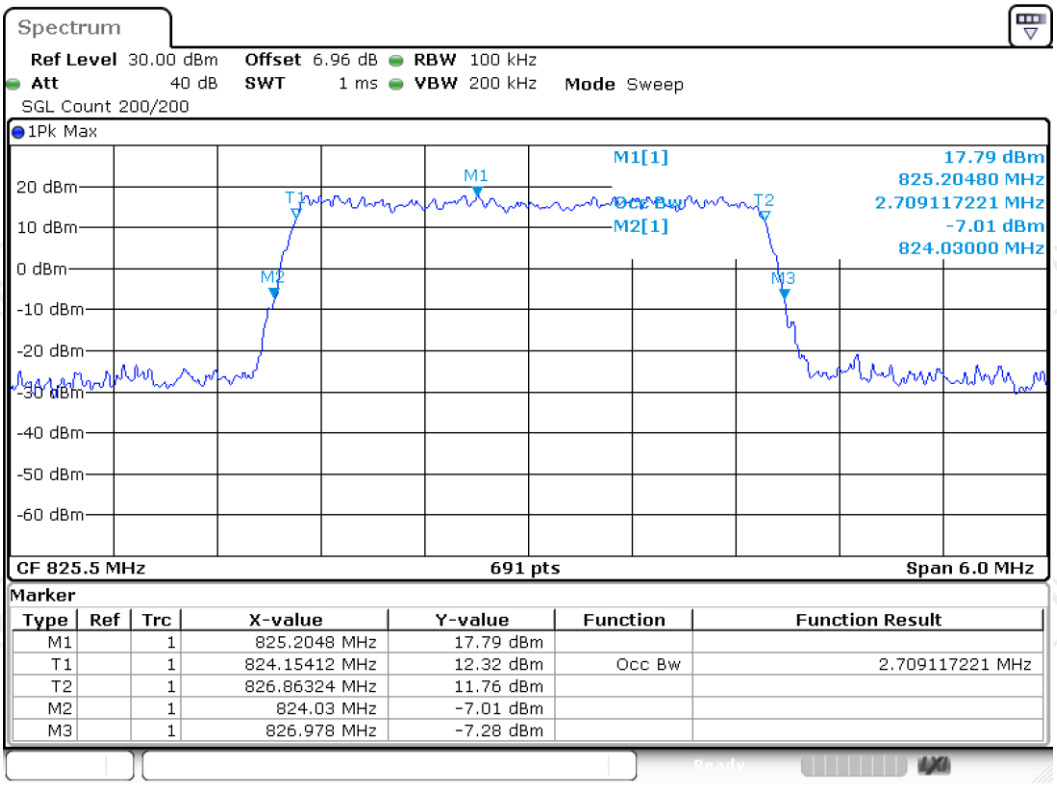
Date: 27.OCT.2023 10:05:12

Band5 QPSK BW=3MHz Channel=20415 RB Size=15 Position=#0



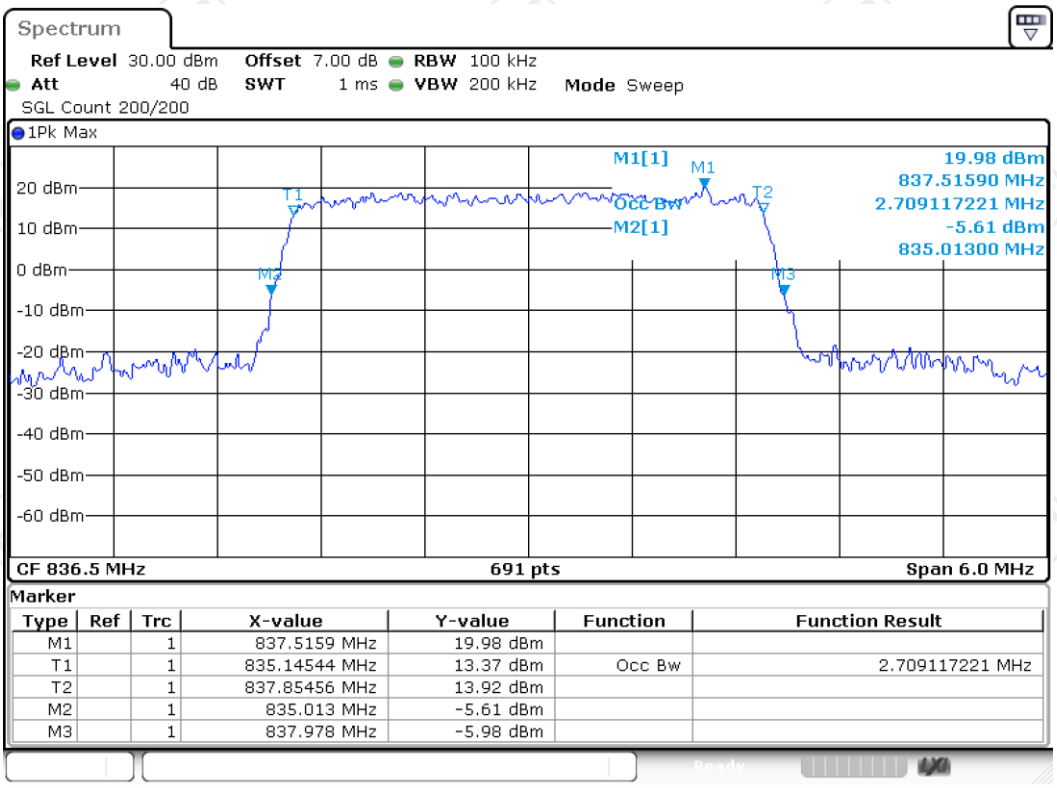
Date: 27.OCT.2023 10:05:19

Band5 16QAM BW=3MHz Channel=20415 RB Size=15 Position=#0

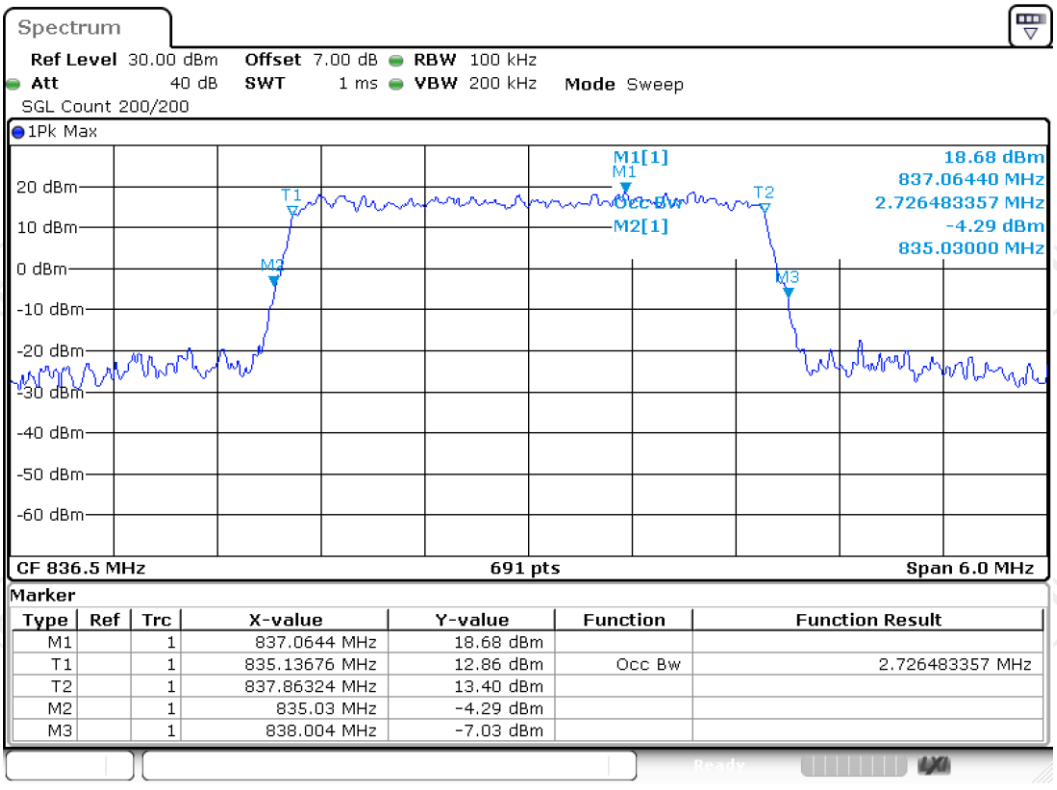


Date: 27.OCT.2023 10:05:25

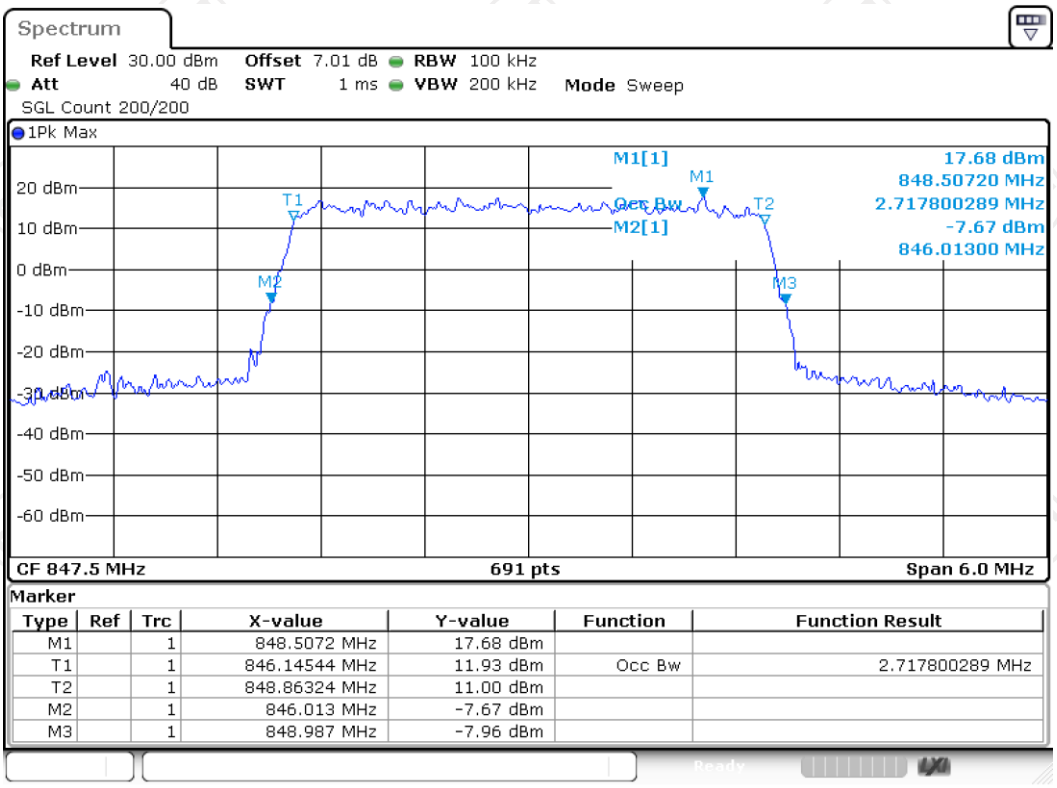
Band5 QPSK BW=3MHz Channel=20525 RB Size=15 Position=#0



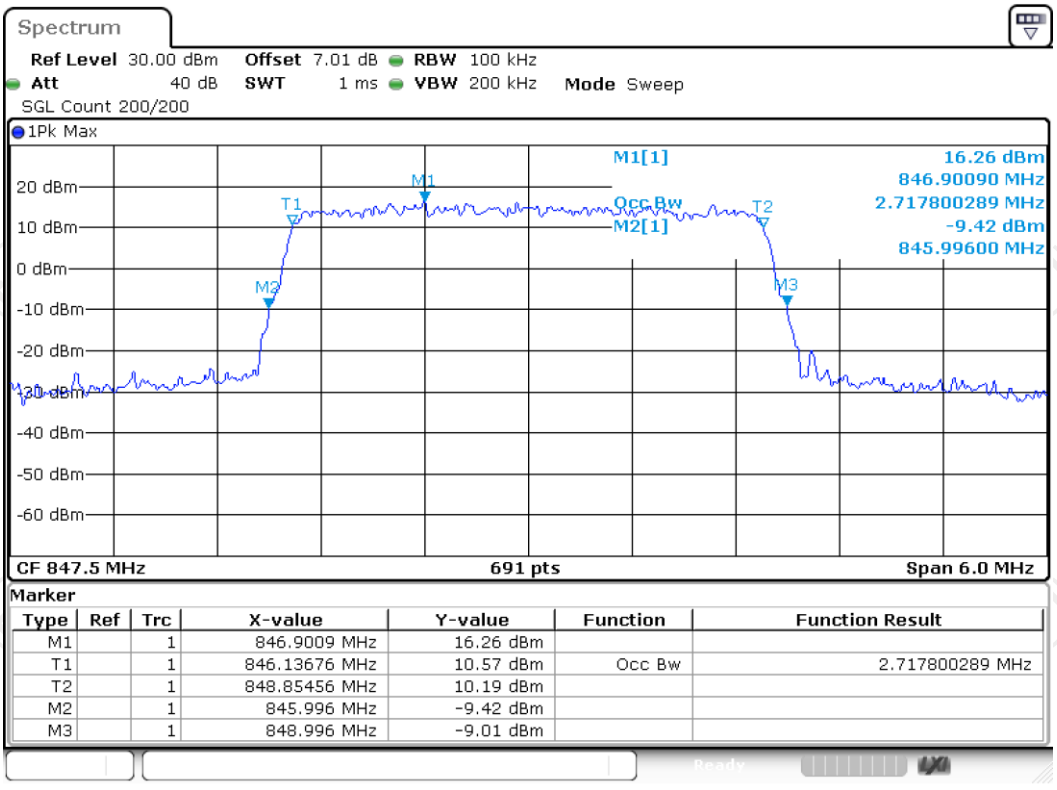
Band5 16QAM BW=3MHz Channel=20525 RB Size=15 Position=#0



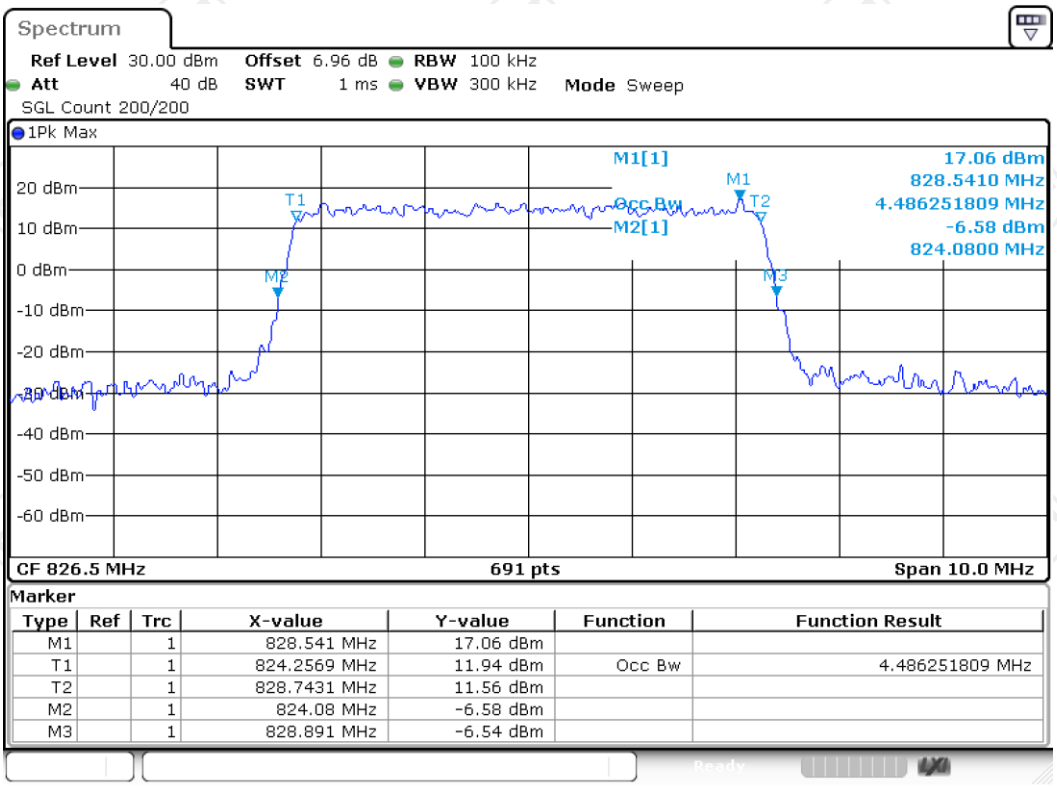
Band5 QPSK BW=3MHz Channel=20635 RB Size=15 Position=#0



Band5 16QAM BW=3MHz Channel=20635 RB Size=15 Position=#0

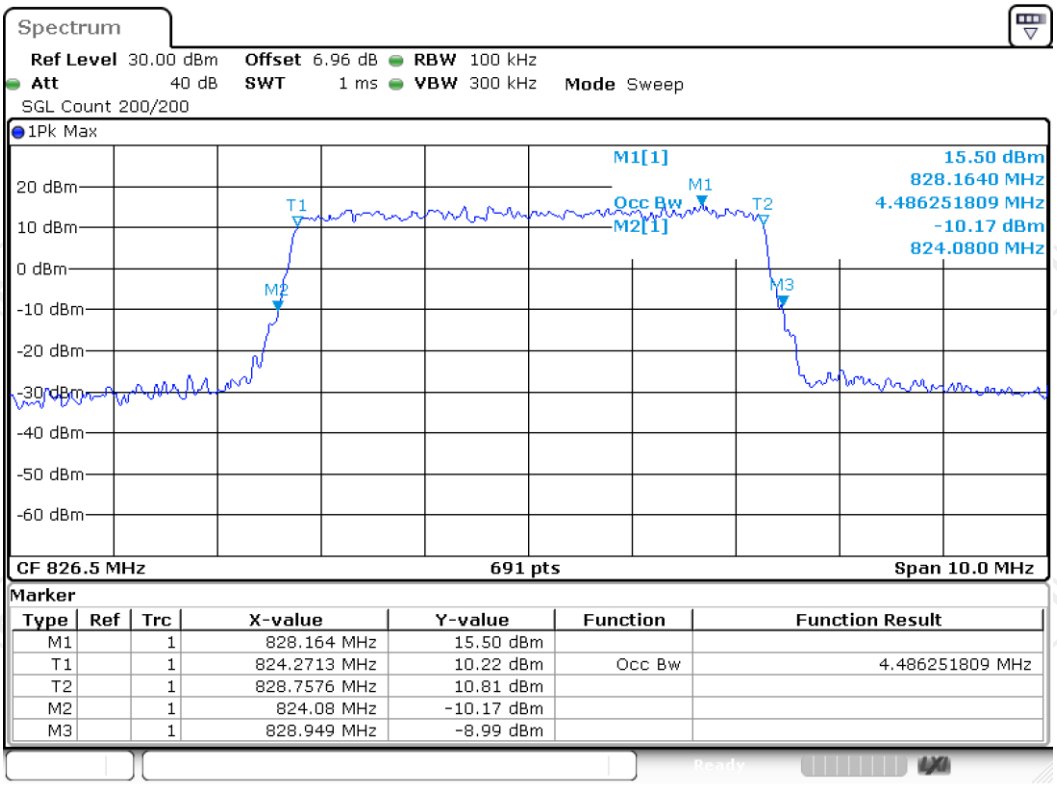


Band5 QPSK BW=5MHz Channel=20425 RB Size=25 Position=#0



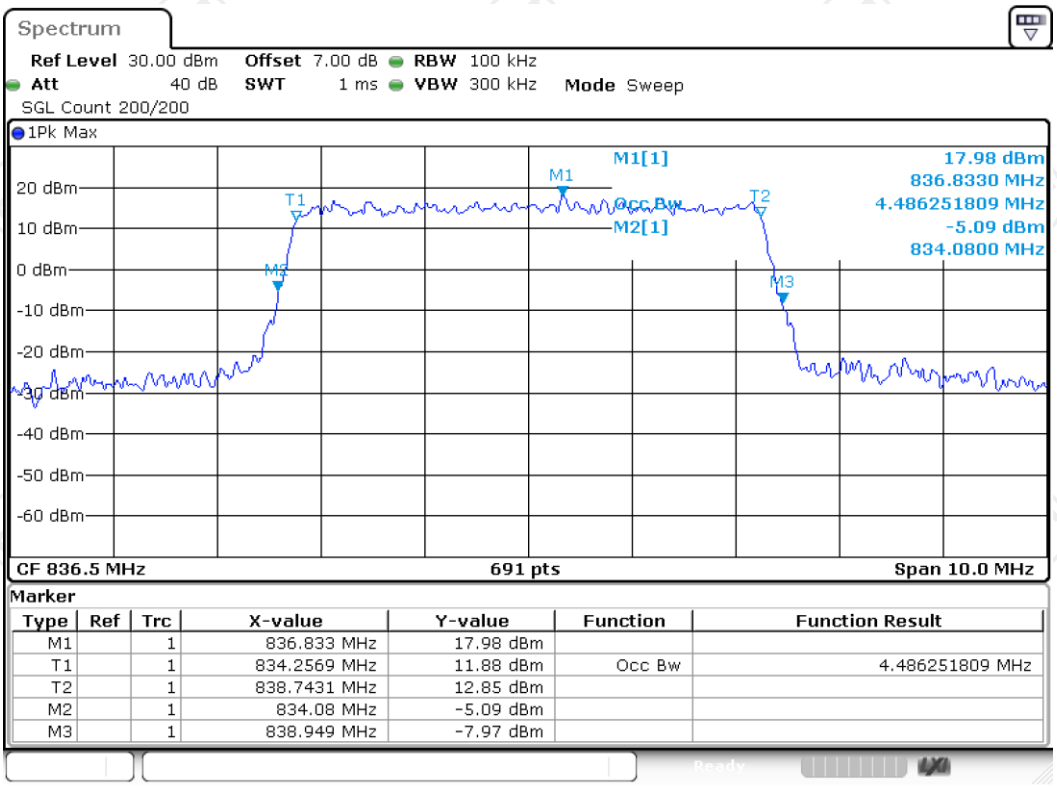
Date: 27.OCT.2023 10:05:53

Band5 16QAM BW=5MHz Channel=20425 RB Size=25 Position=#0



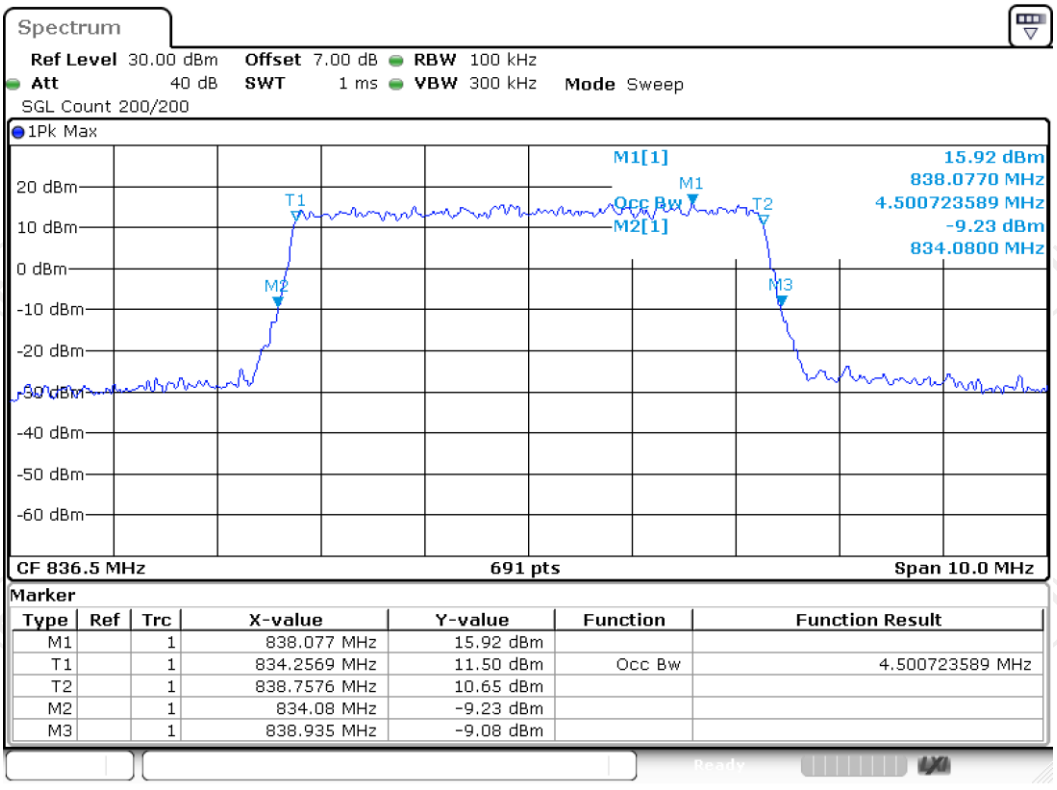
Date: 27.OCT.2023 10:05:59

Band5 QPSK BW=5MHz Channel=20525 RB Size=25 Position=#0



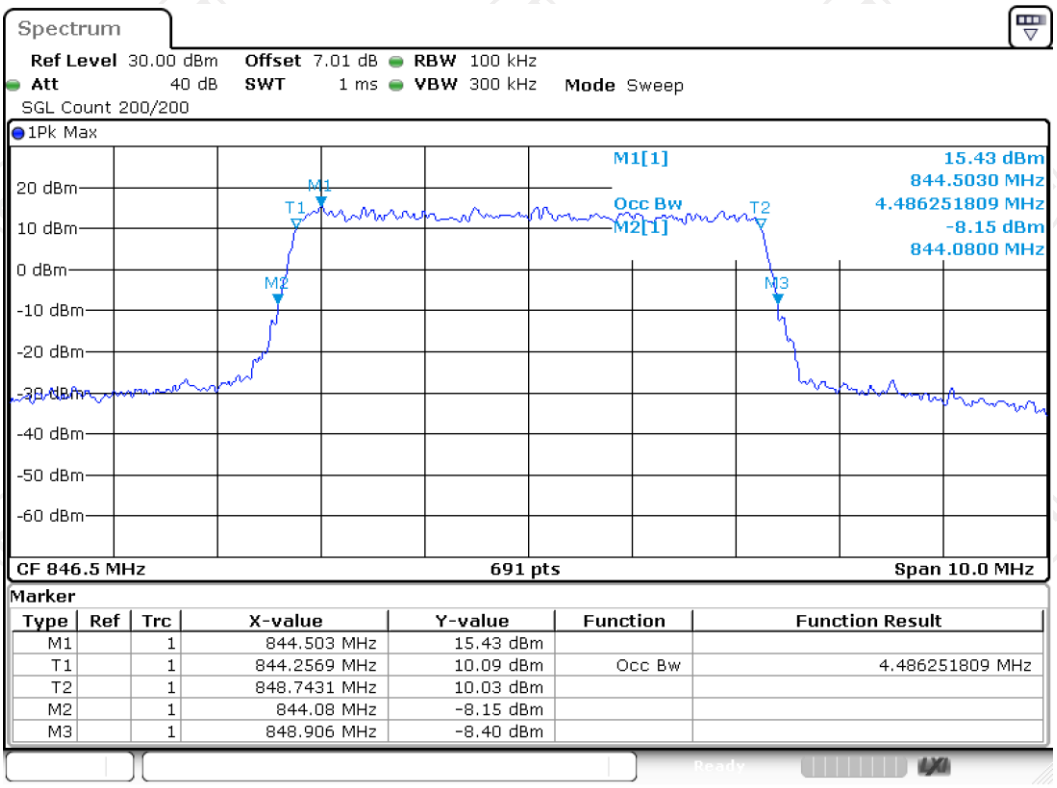
Date: 27.OCT.2023 10:06:04

Band5 16QAM BW=5MHz Channel=20525 RB Size=25 Position=#0



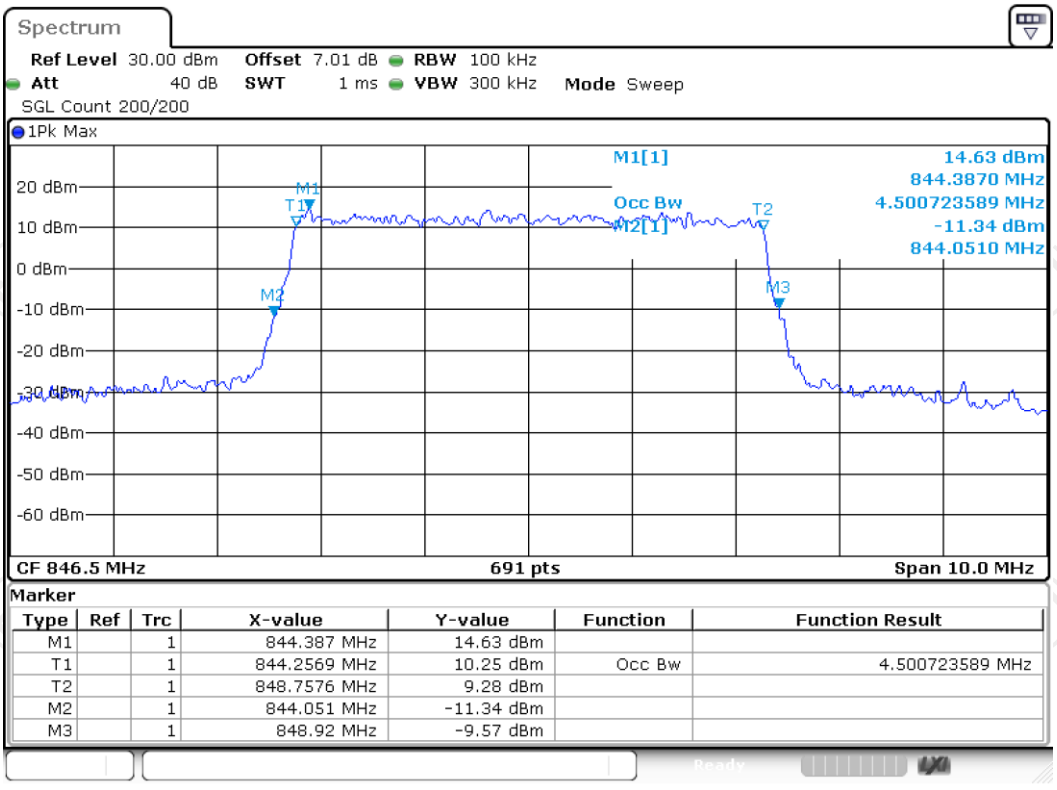
Date: 27.OCT.2023 10:06:09

Band5 QPSK BW=5MHz Channel=20625 RB Size=25 Position=#0



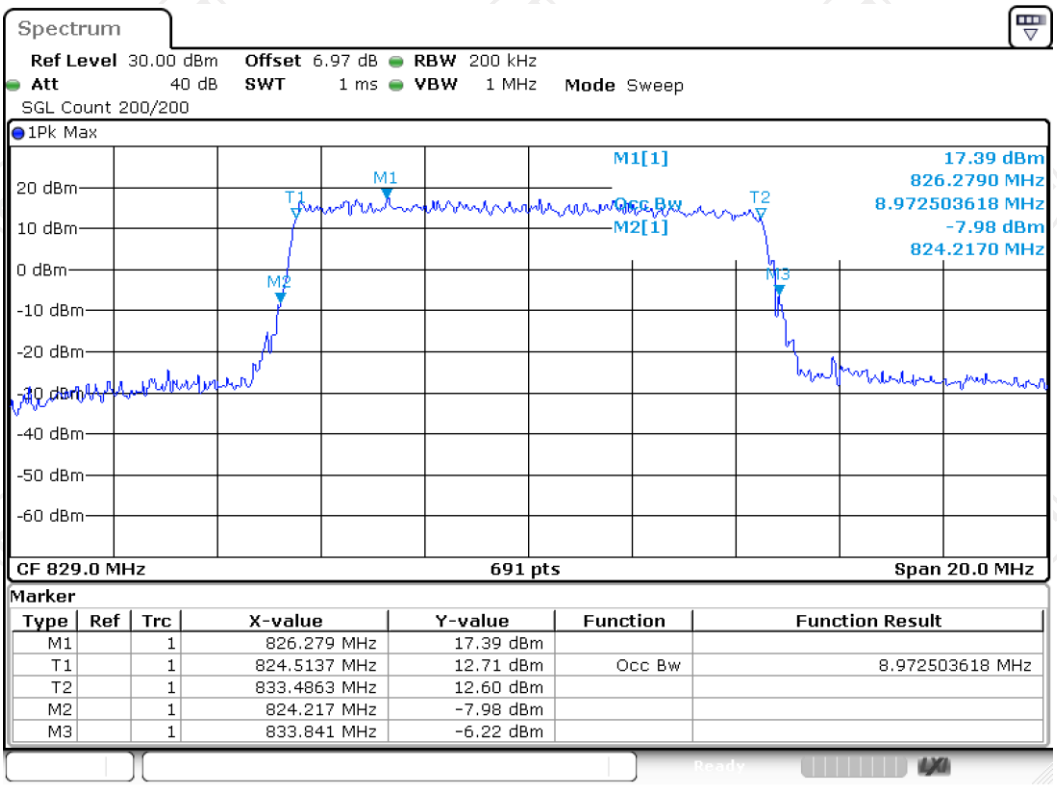
Date: 27.OCT.2023 10:06:15

Band5 16QAM BW=5MHz Channel=20625 RB Size=25 Position=#0



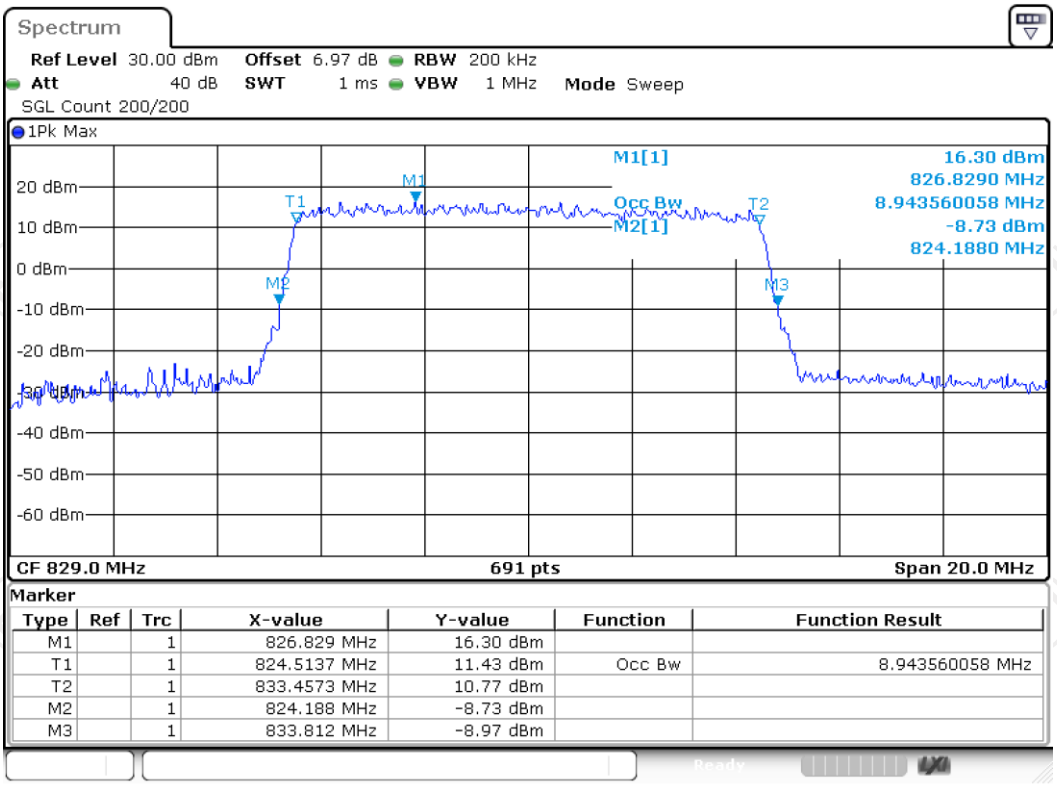
Date: 27.OCT.2023 10:06:20

Band5 QPSK BW=10MHz Channel=20450 RB Size=50 Position=#0



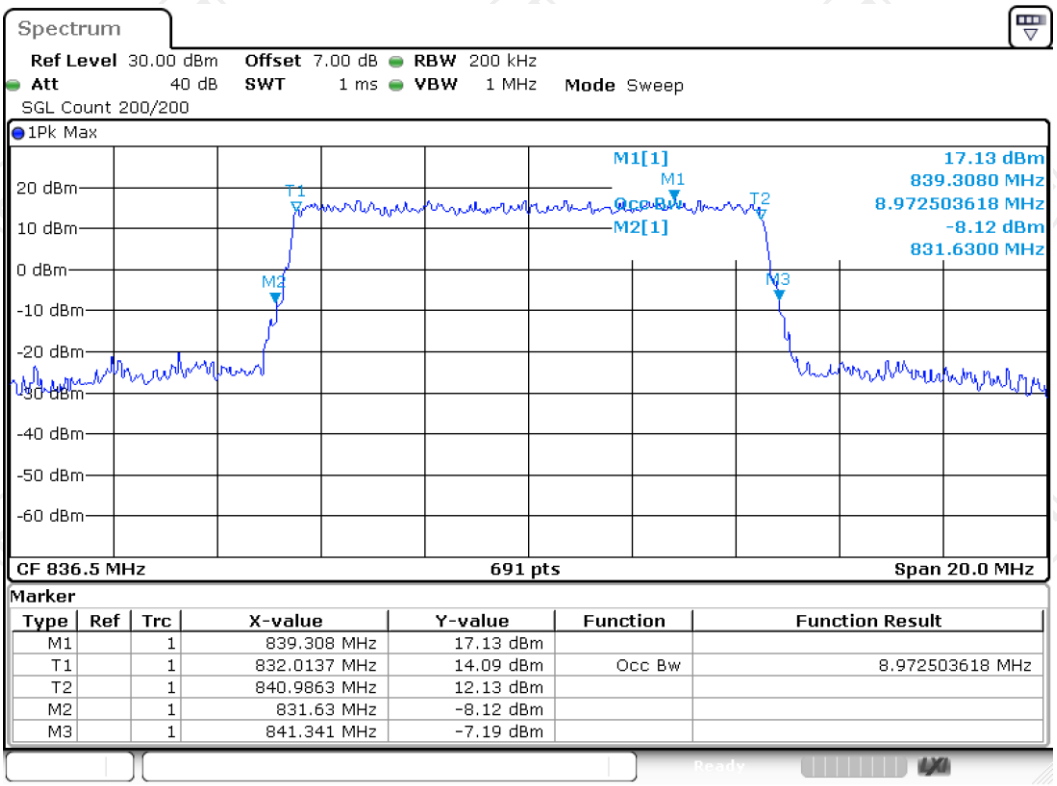
Date: 27.OCT.2023 10:06:27

Band5 16QAM BW=10MHz Channel=20450 RB Size=50 Position=#0



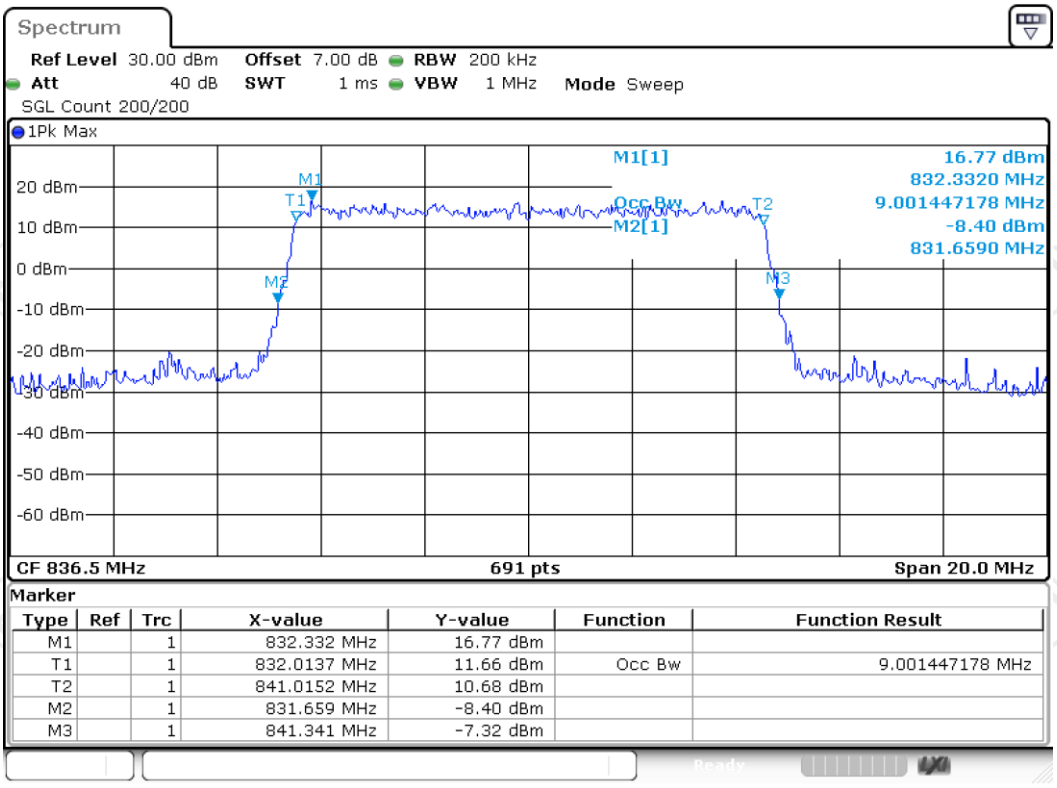
Date: 27.OCT.2023 10:06:34

Band5 QPSK BW=10MHz Channel=20525 RB Size=50 Position=#0



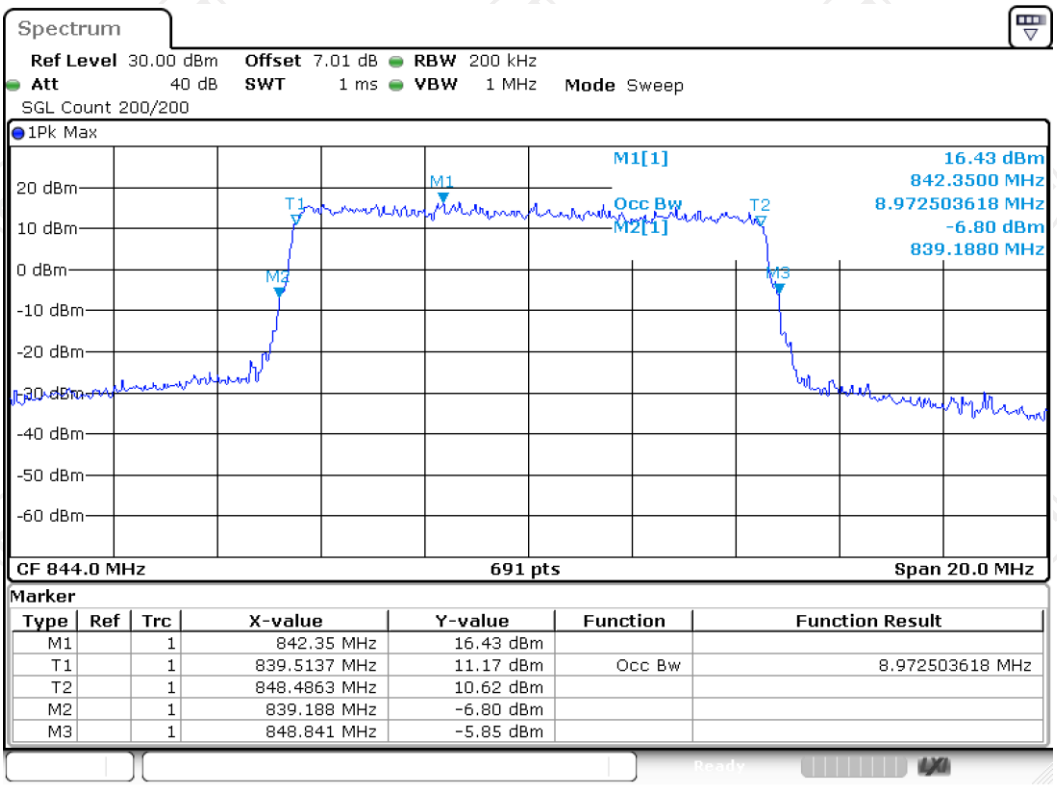
Date: 27.OCT.2023 10:06:40

Band5 16QAM BW=10MHz Channel=20525 RB Size=50 Position=#0



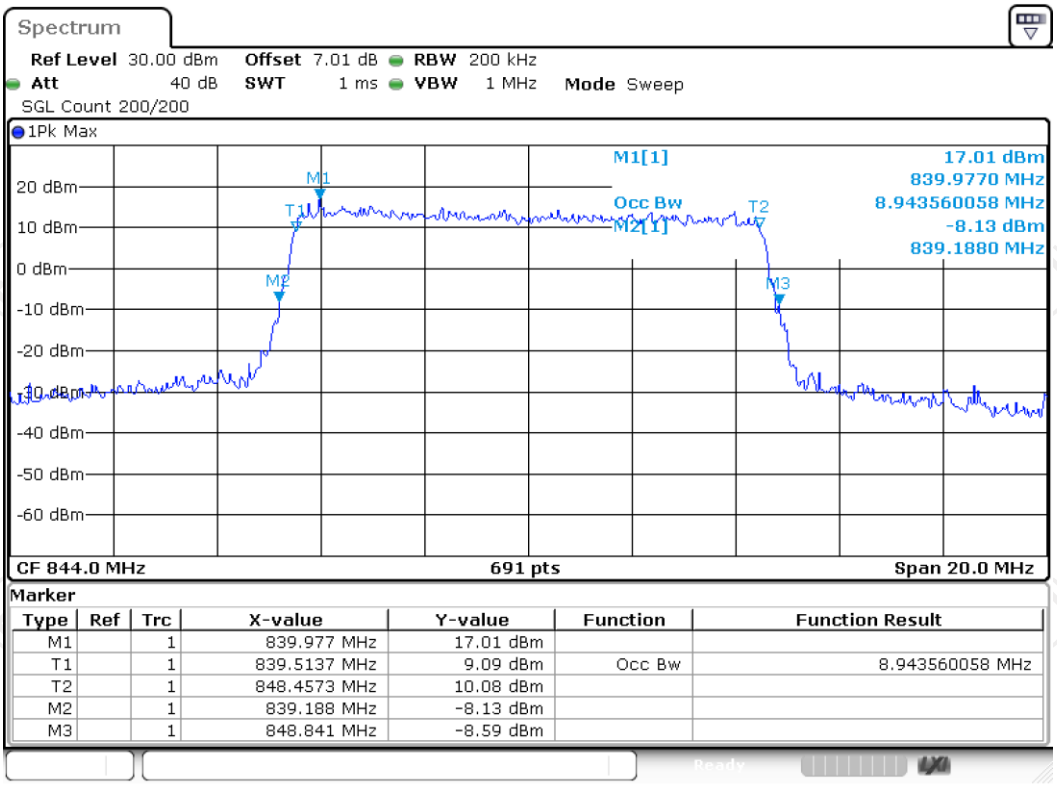
Date: 27.OCT.2023 10:06:45

Band5 QPSK BW=10MHz Channel=20600 RB Size=50 Position=#0



Date: 27.OCT.2023 10:06:52

Band5 16QAM BW=10MHz Channel=20600 RB Size=50 Position=#0

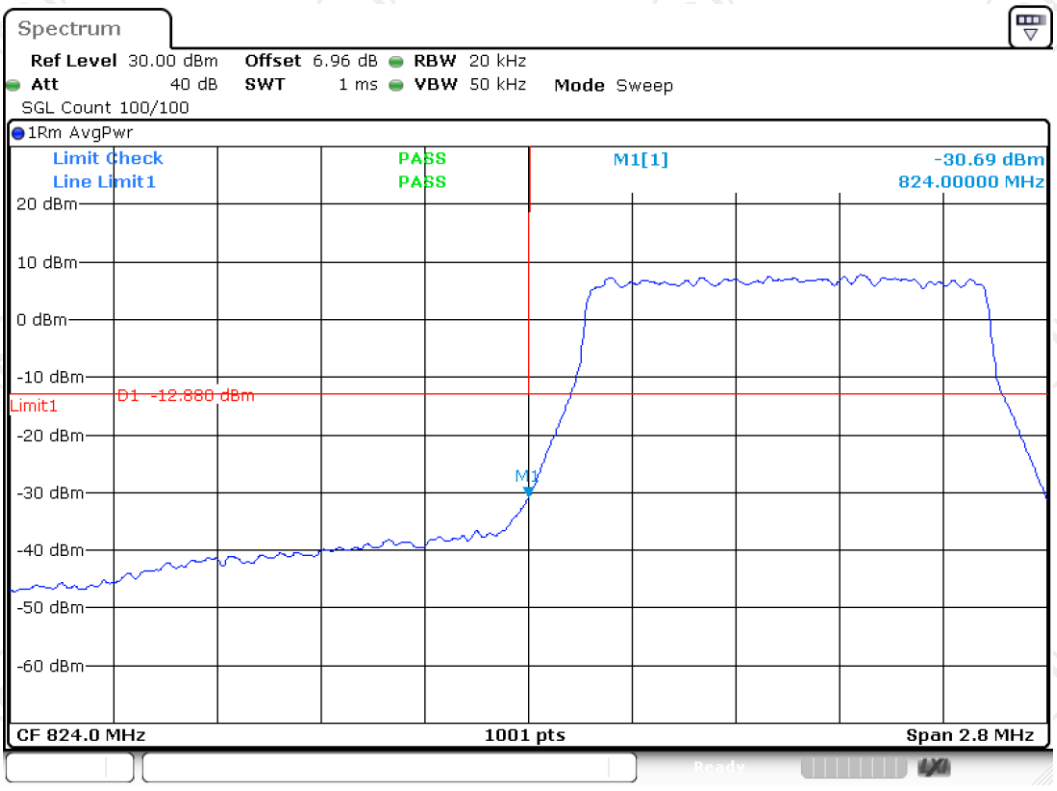


Date: 27.OCT.2023 10:06:57

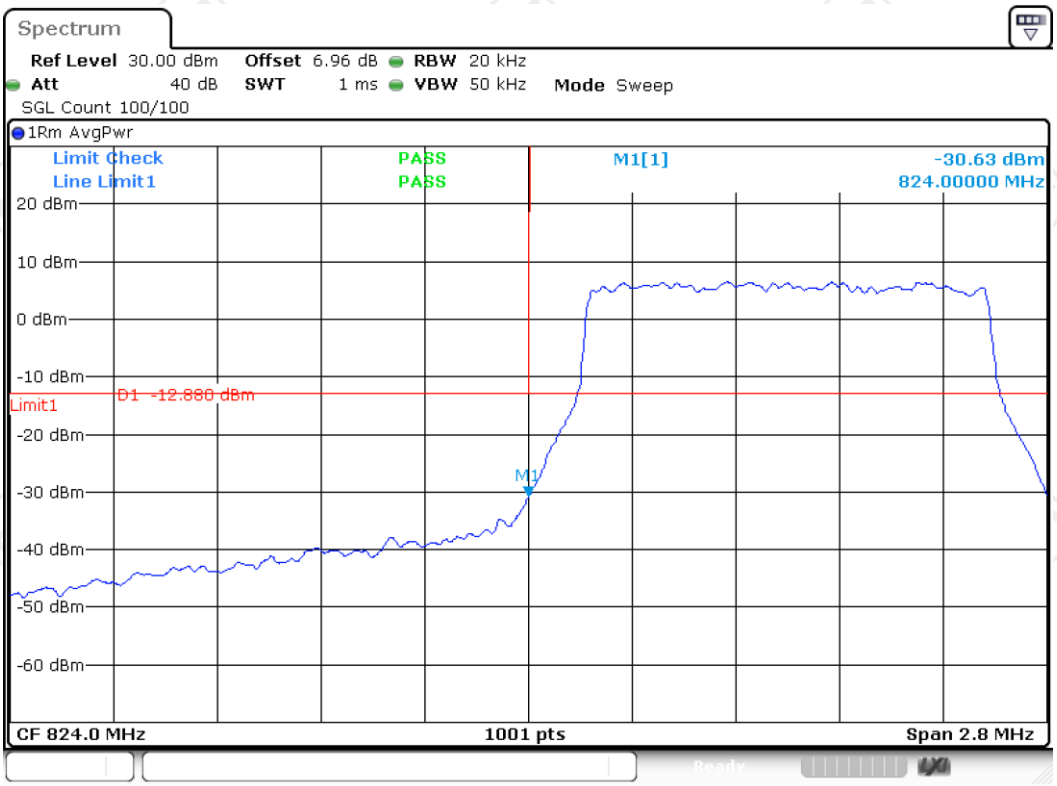
5 Band edge

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band5	1.4	20407	6	#0	QPSK	824.00	-30.69	-13	PASS
Band5	1.4	20407	6	#0	16QAM	824.00	-30.62	-13	PASS
Band5	1.4	20643	6	#0	QPSK	849.00	-31.37	-13	PASS
Band5	1.4	20643	6	#0	16QAM	849.00	-32.03	-13	PASS
Band5	3	20415	15	#0	QPSK	824.00	-32.99	-13	PASS
Band5	3	20415	15	#0	16QAM	824.00	-34.33	-13	PASS
Band5	3	20635	15	#0	QPSK	849.00	-35.31	-13	PASS
Band5	3	20635	15	#0	16QAM	849.00	-35.04	-13	PASS
Band5	5	20425	25	#0	QPSK	824.00	-33.85	-13	PASS
Band5	5	20425	25	#0	16QAM	824.00	-31.09	-13	PASS
Band5	5	20625	25	#0	QPSK	849.00	-33.61	-13	PASS
Band5	5	20625	25	#0	16QAM	849.00	-35.43	-13	PASS
Band5	10	20450	50	#0	QPSK	823.98	-35.15	-13	PASS
Band5	10	20450	50	#0	16QAM	824.00	-33.96	-13	PASS
Band5	10	20600	50	#0	QPSK	849.00	-35.02	-13	PASS
Band5	10	20600	50	#0	16QAM	849.00	-36.62	-13	PASS

Band5 QPSK BW=1.4MHz Channel=20407 RB Size=6 Position=#0

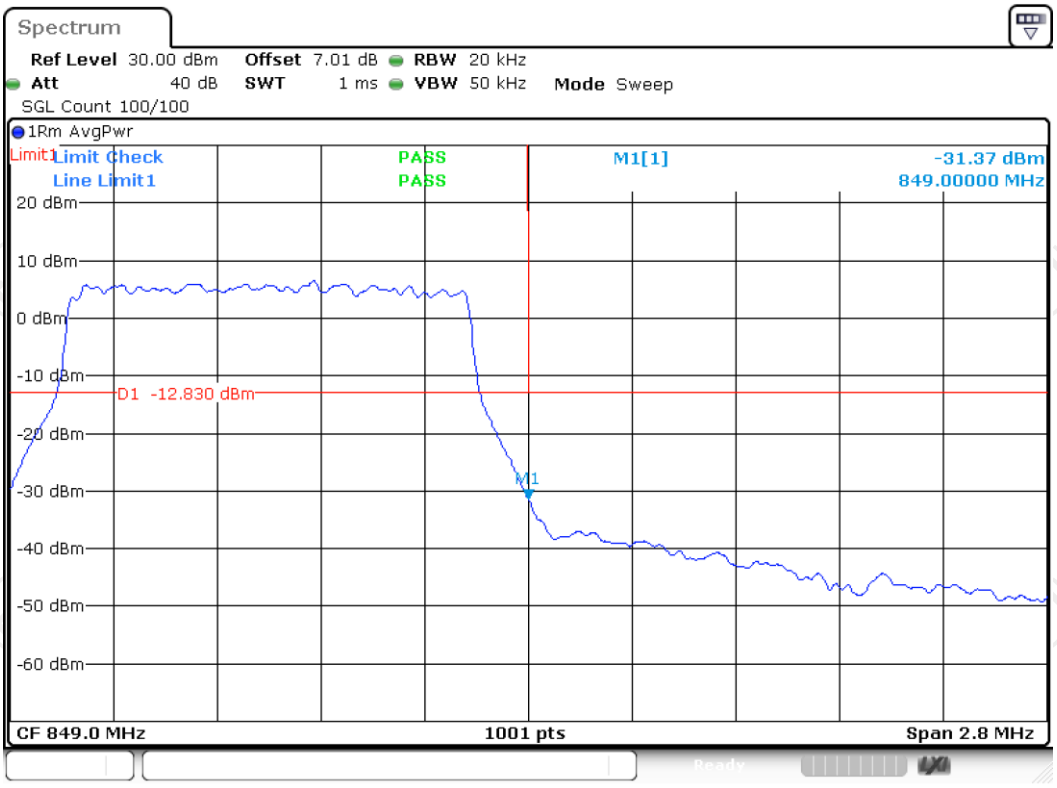


Band5 16QAM BW=1.4MHz Channel=20407 RB Size=6 Position=#0



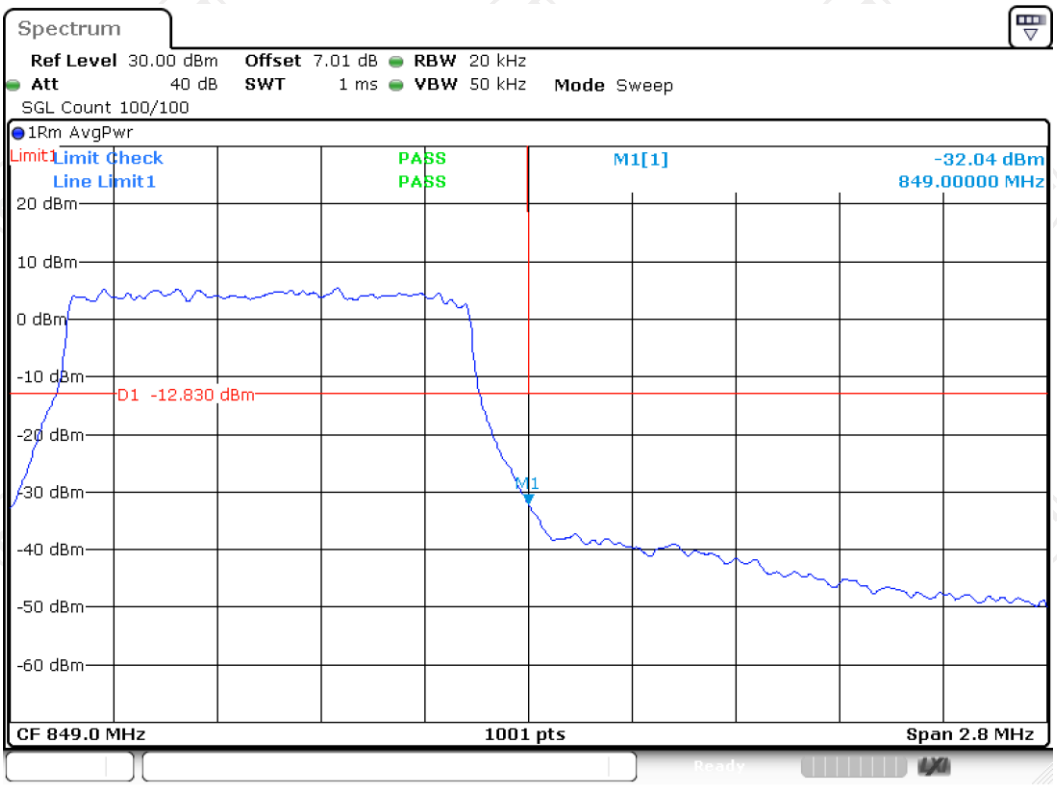
Date: 28.NOV.2023 12:38:26

Band5 QPSK BW=1.4MHz Channel=20643 RB Size=6 Position=#0



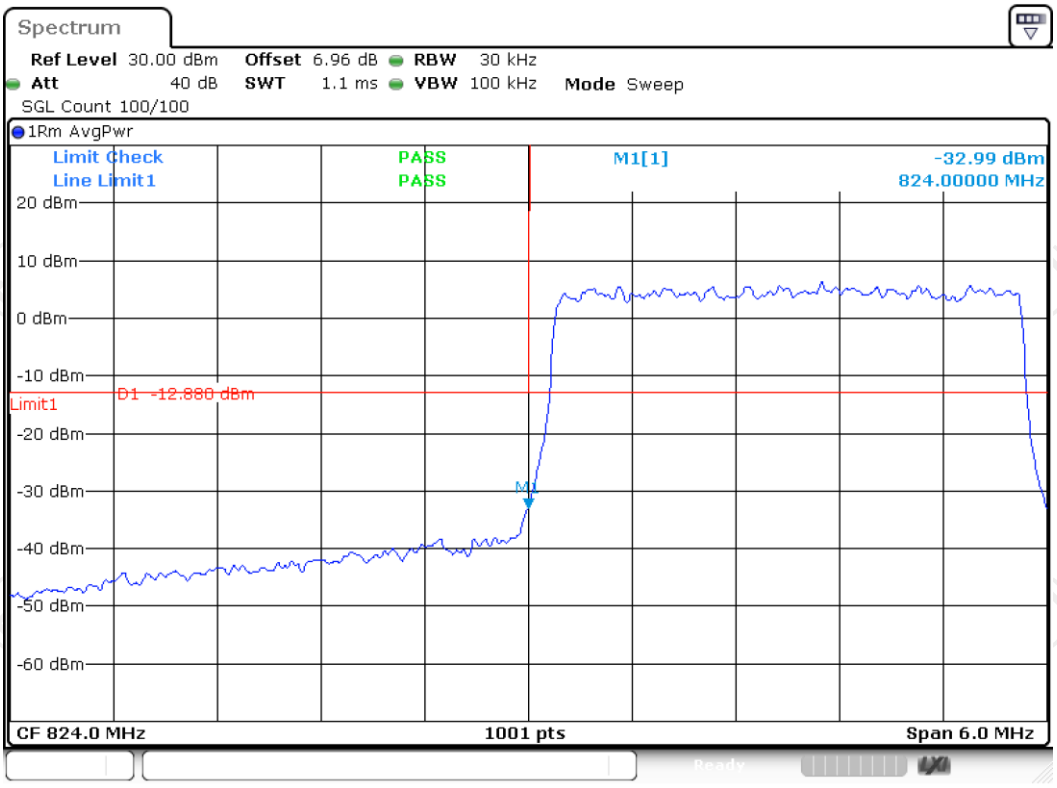
Date: 28.NOV.2023 12:38:31

Band5 16QAM BW=1.4MHz Channel=20643 RB Size=6 Position=#0



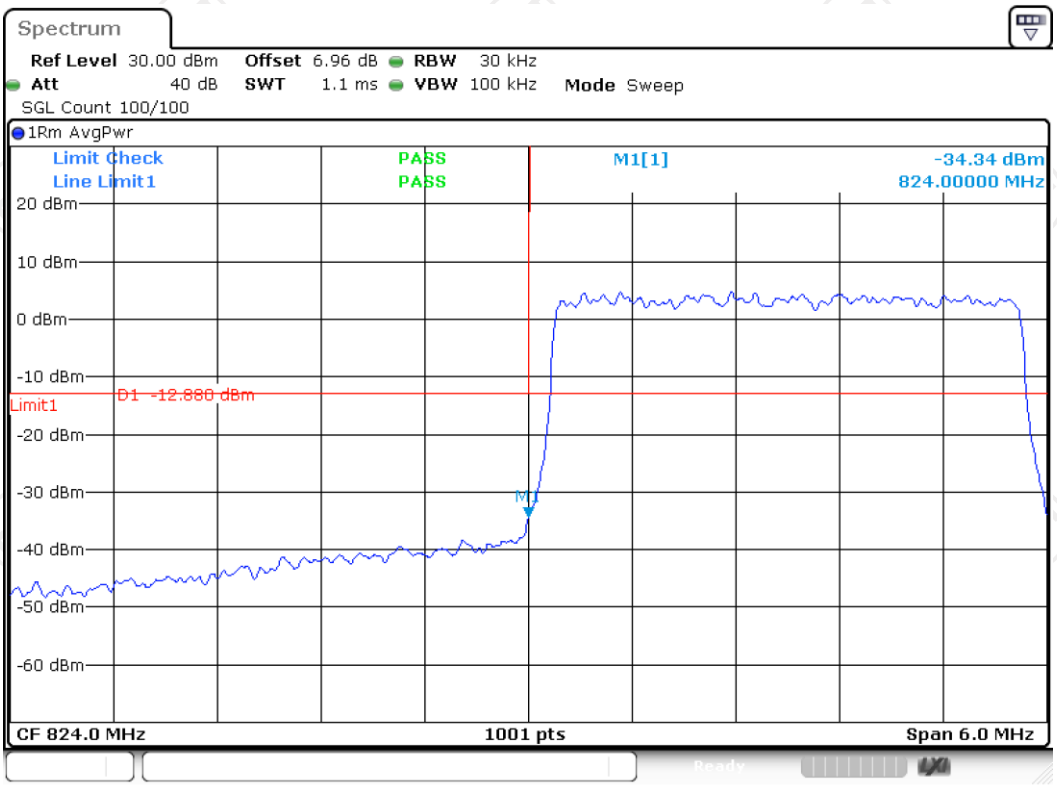
Date: 28.NOV.2023 12:38:35

Band5 QPSK BW=3MHz Channel=20415 RB Size=15 Position=#0



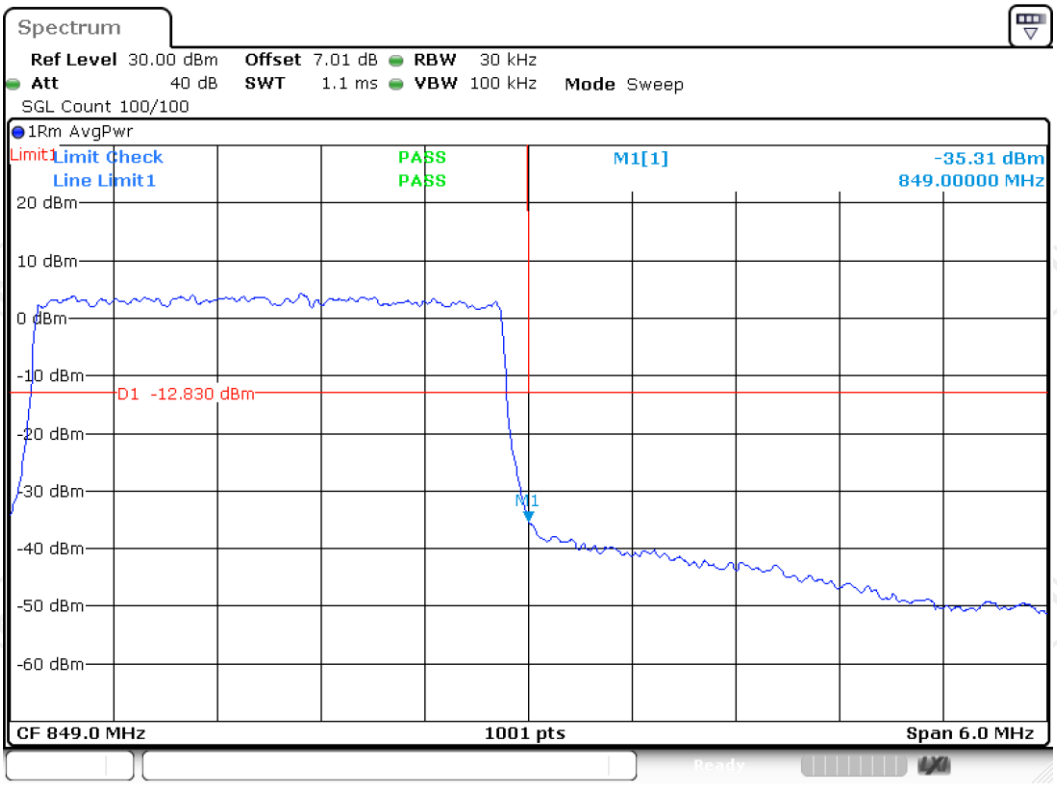
Date: 28.NOV.2023 12:38:41

Band5 16QAM BW=3MHz Channel=20415 RB Size=15 Position=#0



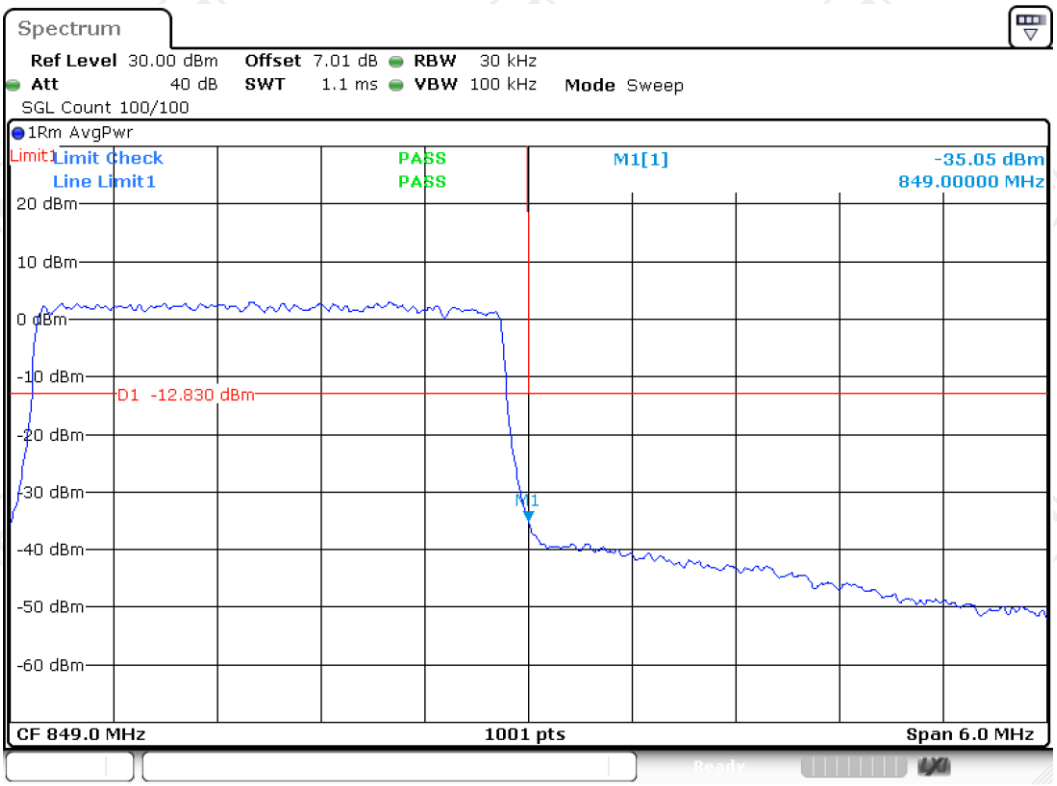
Date: 28.NOV.2023 12:38:45

Band5 QPSK BW=3MHz Channel=20635 RB Size=15 Position=#0



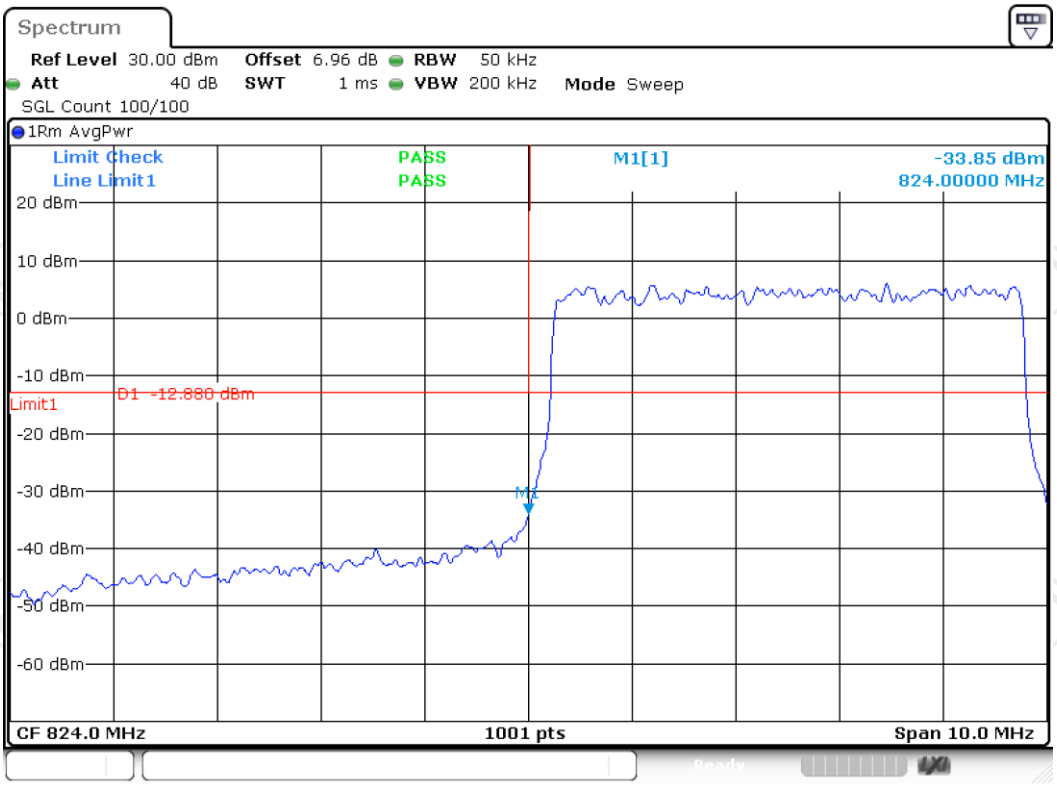
Date: 28.NOV.2023 12:38:50

Band5 16QAM BW=3MHz Channel=20635 RB Size=15 Position=#0



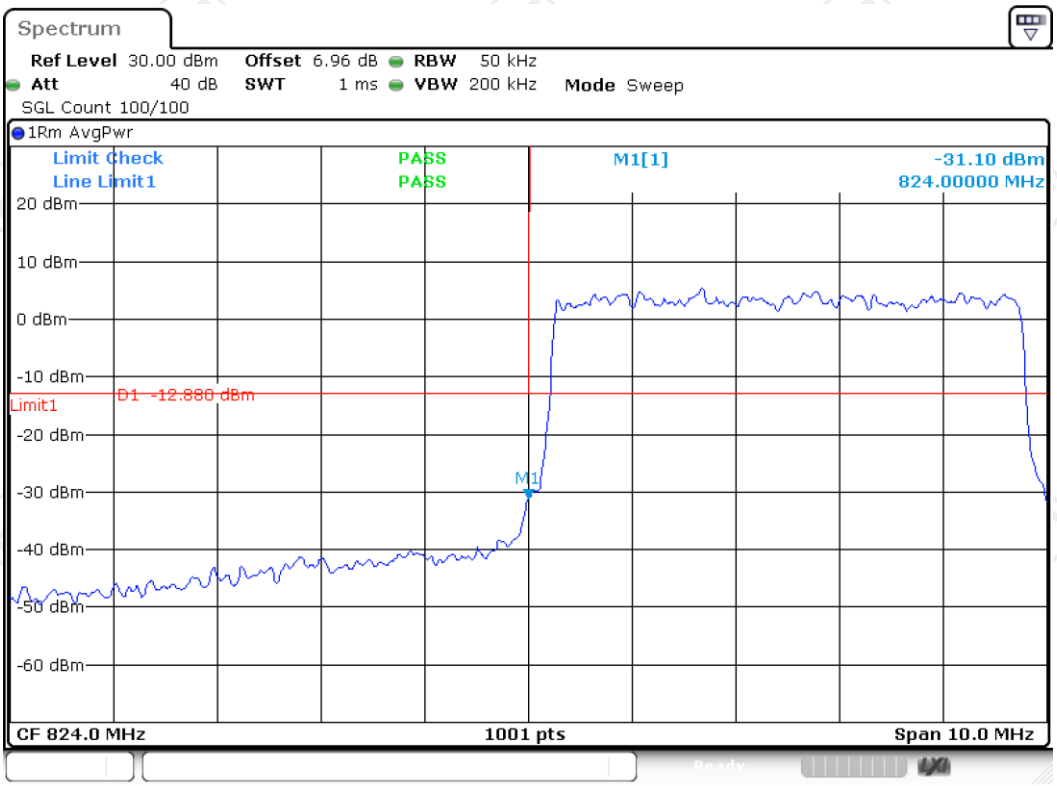
Date: 28.NOV.2023 12:38:55

Band5 QPSK BW=5MHz Channel=20425 RB Size=25 Position=#0



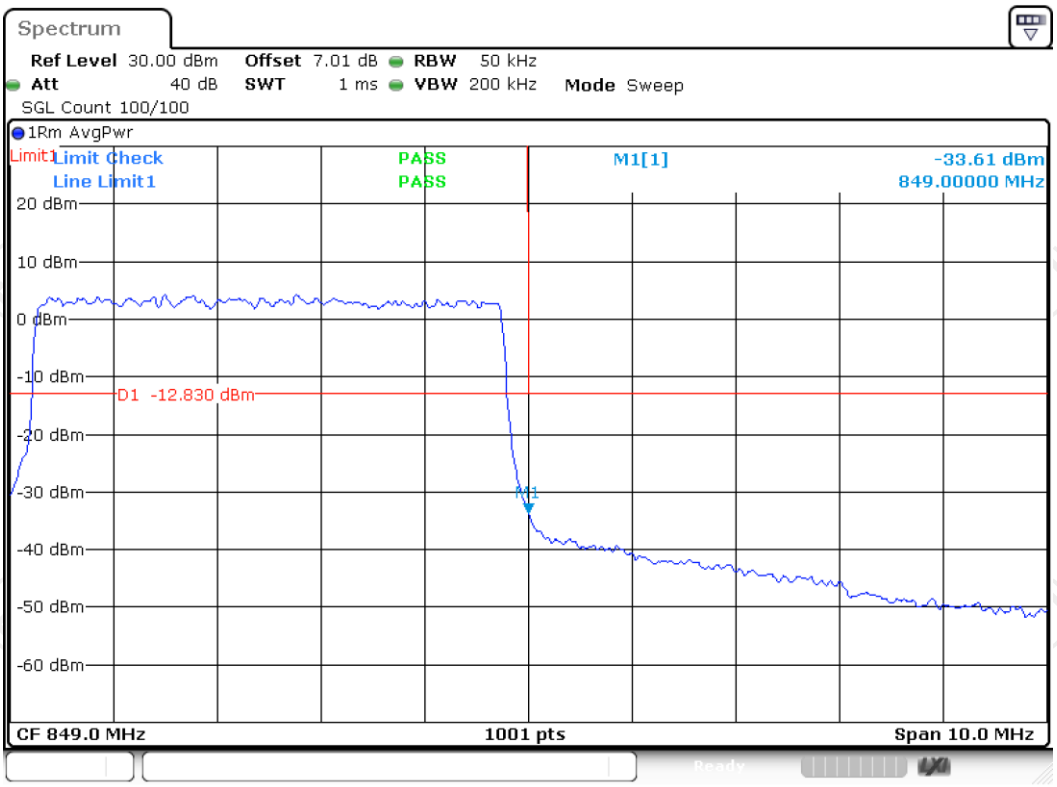
Date: 28.NOV.2023 12:39:00

Band5 16QAM BW=5MHz Channel=20425 RB Size=25 Position=#0



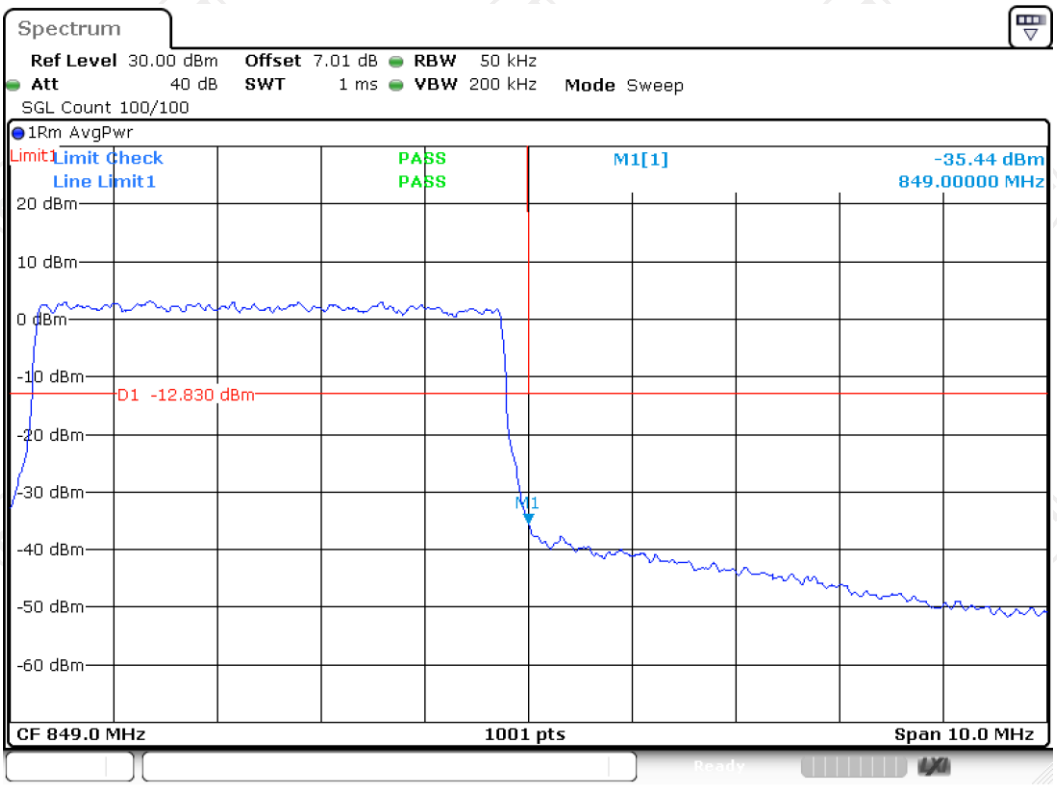
Date: 28.NOV.2023 12:39:05

Band5 QPSK BW=5MHz Channel=20625 RB Size=25 Position=#0



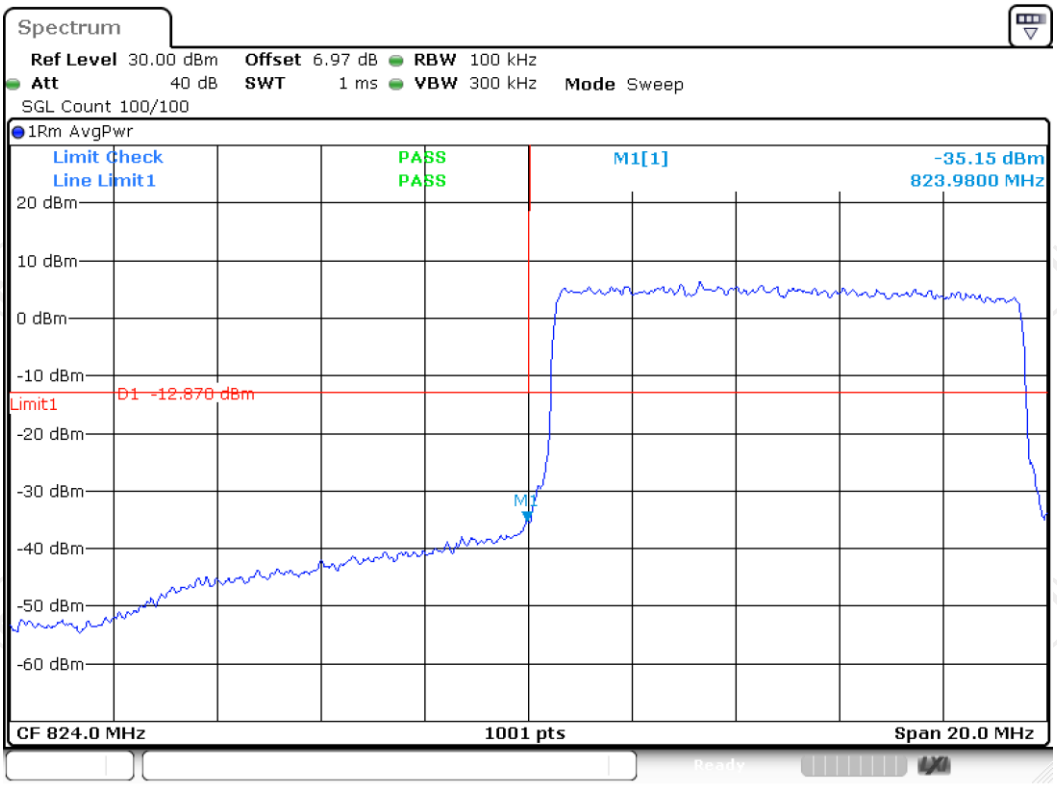
Date: 28.NOV.2023 12:39:09

Band5 16QAM BW=5MHz Channel=20625 RB Size=25 Position=#0



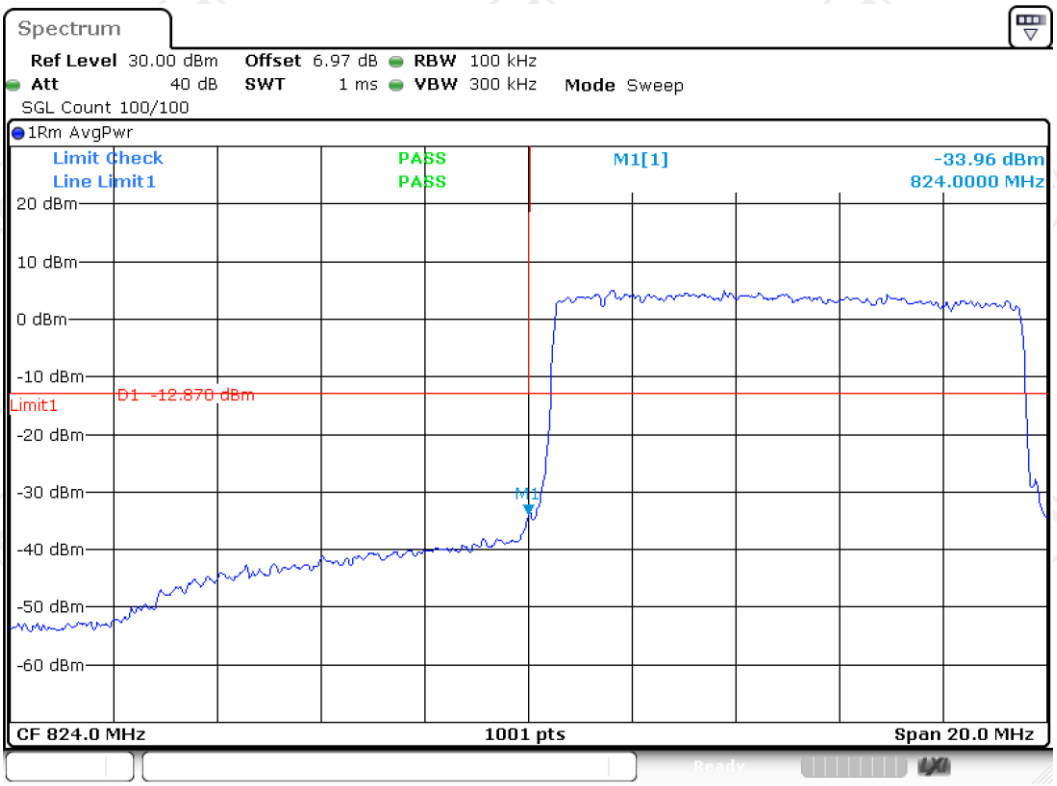
Date: 28.NOV.2023 12:39:14

Band5 QPSK BW=10MHz Channel=20450 RB Size=50 Position=#0



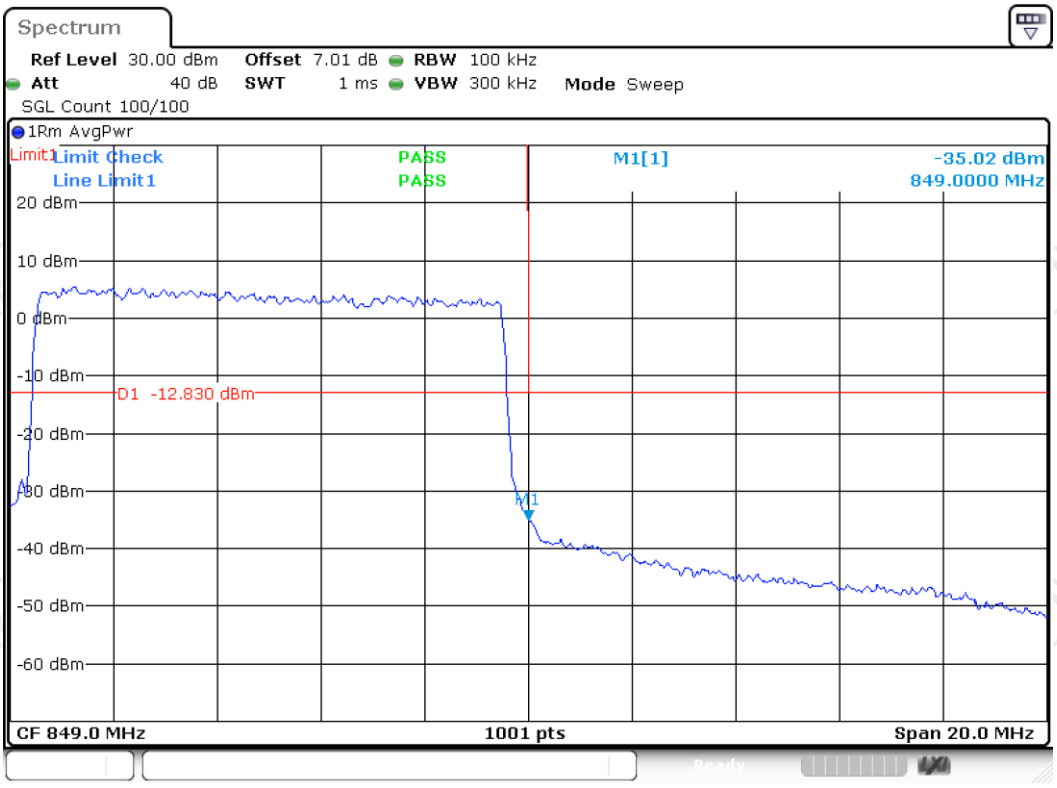
Date: 28.NOV.2023 12:39:20

Band5 16QAM BW=10MHz Channel=20450 RB Size=50 Position=#0



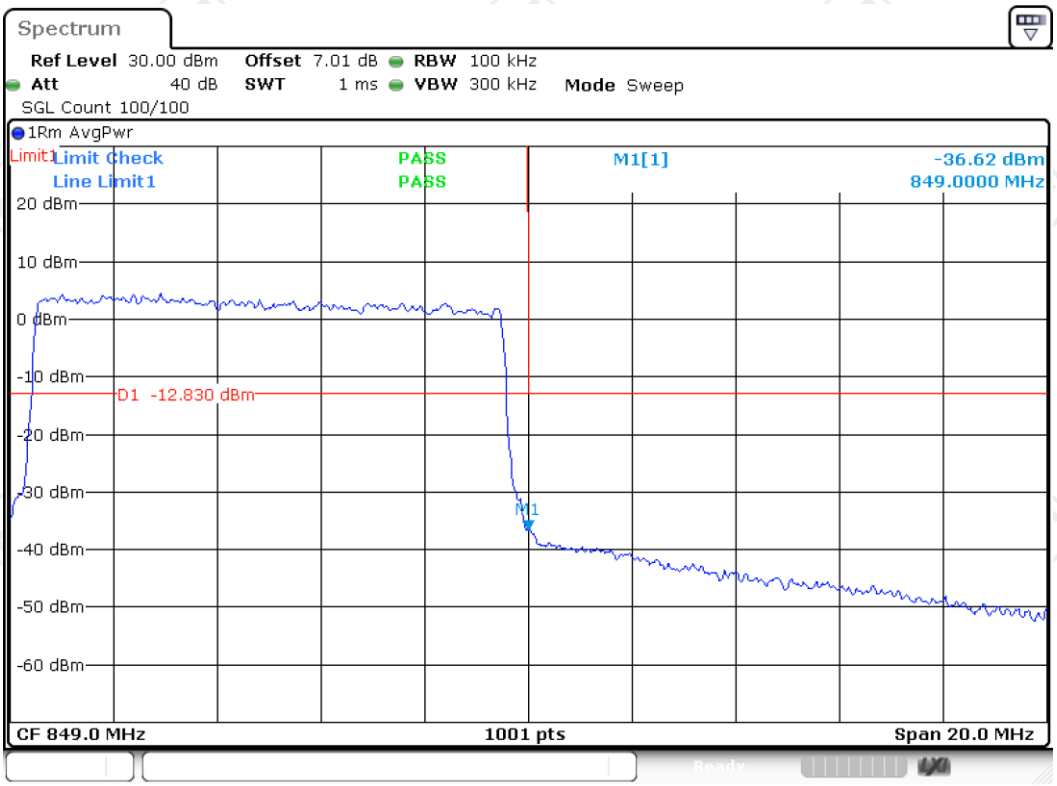
Date: 28.NOV.2023 12:39:25

Band5 QPSK BW=10MHz Channel=20600 RB Size=50 Position=#0



Date: 28.NOV.2023 12:39:30

Band5 16QAM BW=10MHz Channel=20600 RB Size=50 Position=#0



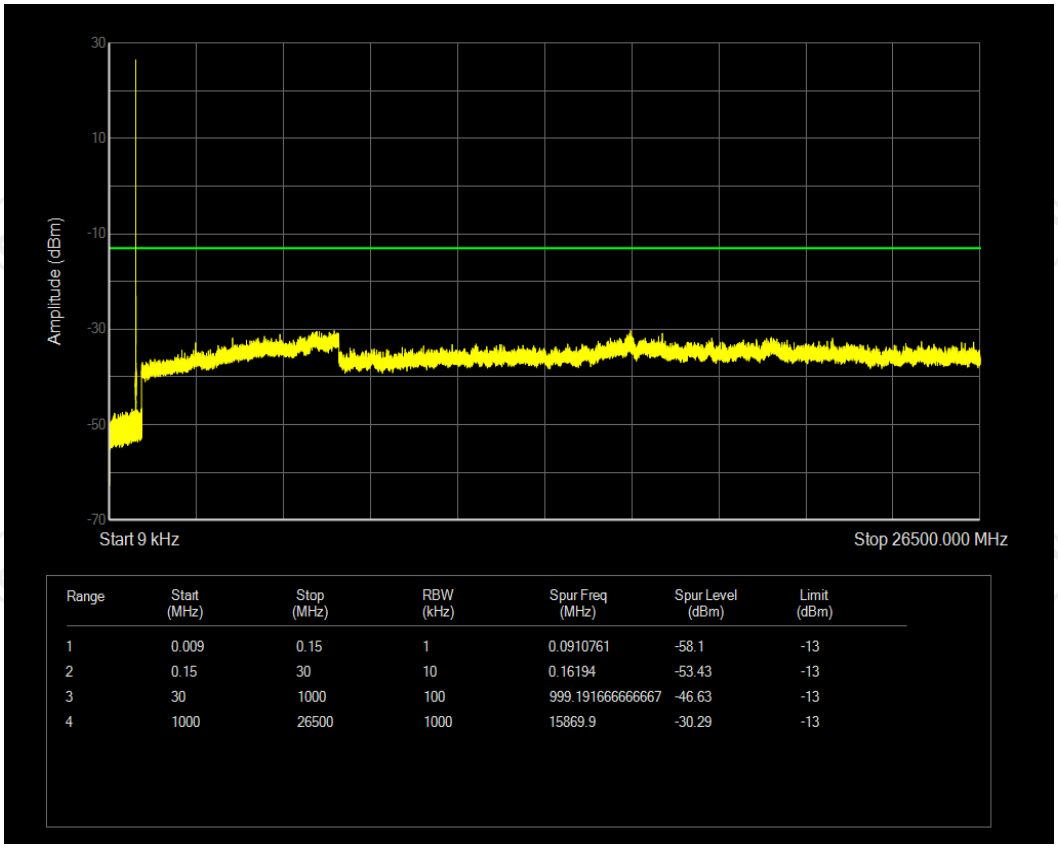
Date: 28.NOV.2023 12:39:35

6 Out-of-band emissions

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band5	1.4	20407	1	#0	QPSK	15869.90	-30.29	-13	PASS
Band5	1.4	20407	1	#0	16QAM	6283.60	-29.72	-13	PASS
Band5	1.4	20525	1	#0	QPSK	6279.35	-29.11	-13	PASS
Band5	1.4	20525	1	#0	16QAM	5148.00	-29.31	-13	PASS
Band5	1.4	20643	1	#0	QPSK	6809.75	-29.66	-13	PASS
Band5	1.4	20643	1	#0	16QAM	6684.80	-29.66	-13	PASS
Band5	3	20415	1	#0	QPSK	6797.85	-30.25	-13	PASS
Band5	3	20415	1	#0	16QAM	6278.50	-29.84	-13	PASS
Band5	3	20525	1	#0	QPSK	6852.25	-29.57	-13	PASS
Band5	3	20525	1	#0	16QAM	6268.30	-29.62	-13	PASS
Band5	3	20635	1	#0	QPSK	6819.10	-29.61	-13	PASS
Band5	3	20635	1	#0	16QAM	15869.05	-30.25	-13	PASS
Band5	5	20425	1	#0	QPSK	6845.45	-29.70	-13	PASS
Band5	5	20425	1	#0	16QAM	6839.50	-30.04	-13	PASS
Band5	5	20525	1	#0	QPSK	6217.30	-30.50	-13	PASS
Band5	5	20525	1	#0	16QAM	6205.40	-29.68	-13	PASS
Band5	5	20625	1	#0	QPSK	6919.40	-30.05	-13	PASS
Band5	5	20625	1	#0	16QAM	6864.15	-29.38	-13	PASS

Band5	10	20450	1	#0	QPSK	6575.15	-30.08	-13	PASS
Band5	10	20450	1	#0	16QAM	6751.95	-29.60	-13	PASS
Band5	10	20525	1	#0	QPSK	6839.50	-29.14	-13	PASS
Band5	10	20525	1	#0	16QAM	6916.00	-29.64	-13	PASS
Band5	10	20600	1	#0	QPSK	6922.80	-30.21	-13	PASS
Band5	10	20600	1	#0	16QAM	6256.40	-30.05	-13	PASS

Band5 QPSK BW=1.4MHz Channel=20407 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	0.0910761	-58.1	-13
2	0.15	30	10	0.16194	-53.43	-13
3	30	1000	100	999.191666666667	-46.63	-13
4	1000	26500	1000	15869.9	-30.29	-13

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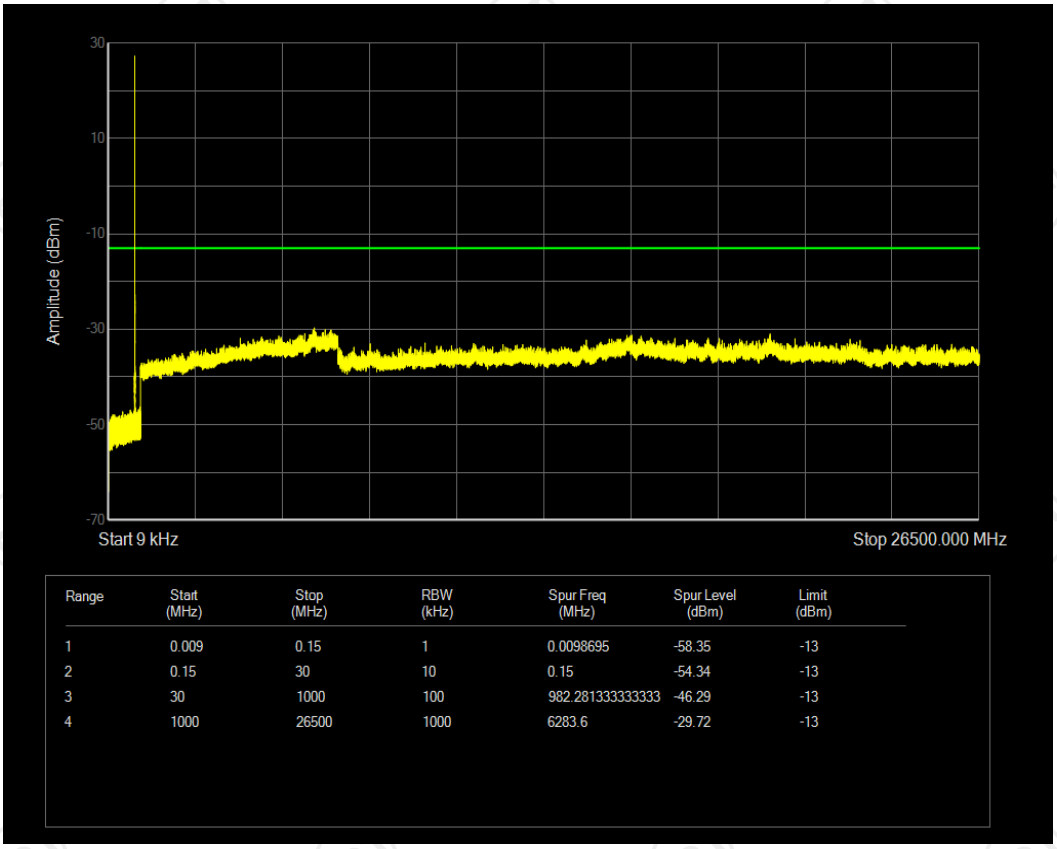
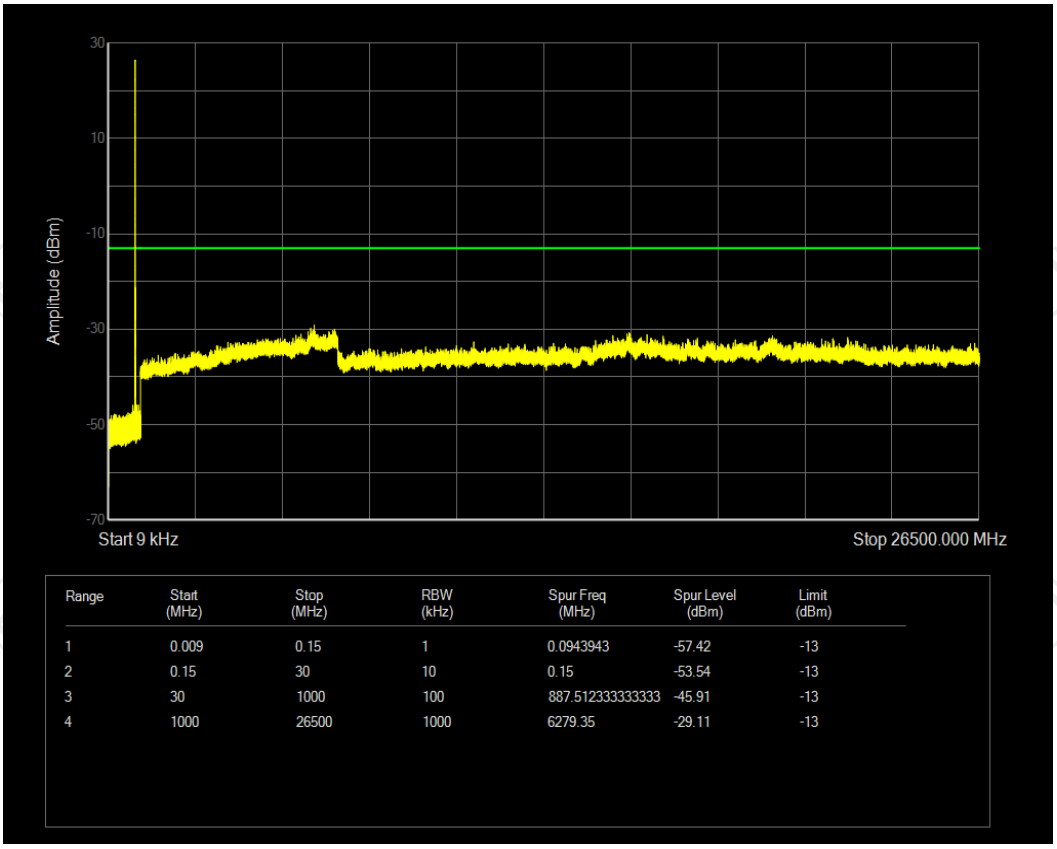
Band5 16QAM BW=1.4MHz Channel=20407 RB Size=1 Position=#0



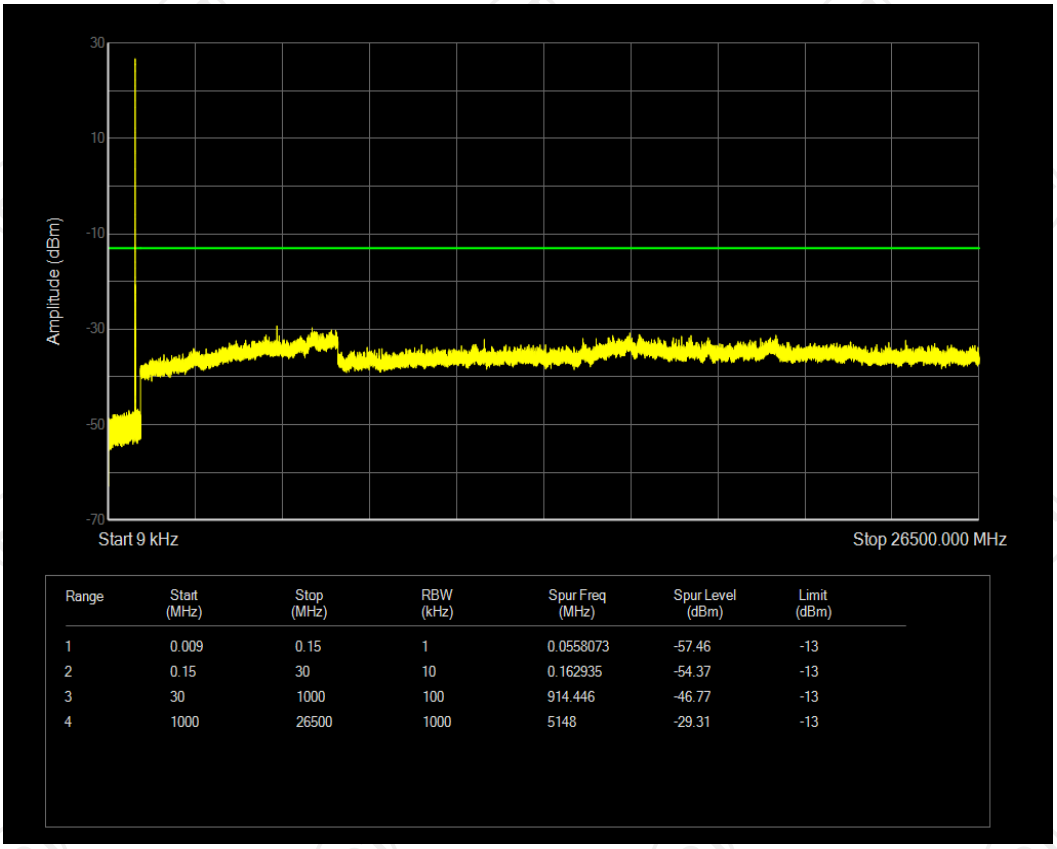
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0098695	-58.35	-13
2	0.15	30	10	0.15	-54.34	-13
3	30	1000	100	982.281333333333	-46.29	-13
4	1000	26500	1000	6283.6	-29.72	-13

Band5 QPSK BW=1.4MHz Channel=20525 RB Size=1 Position=#0



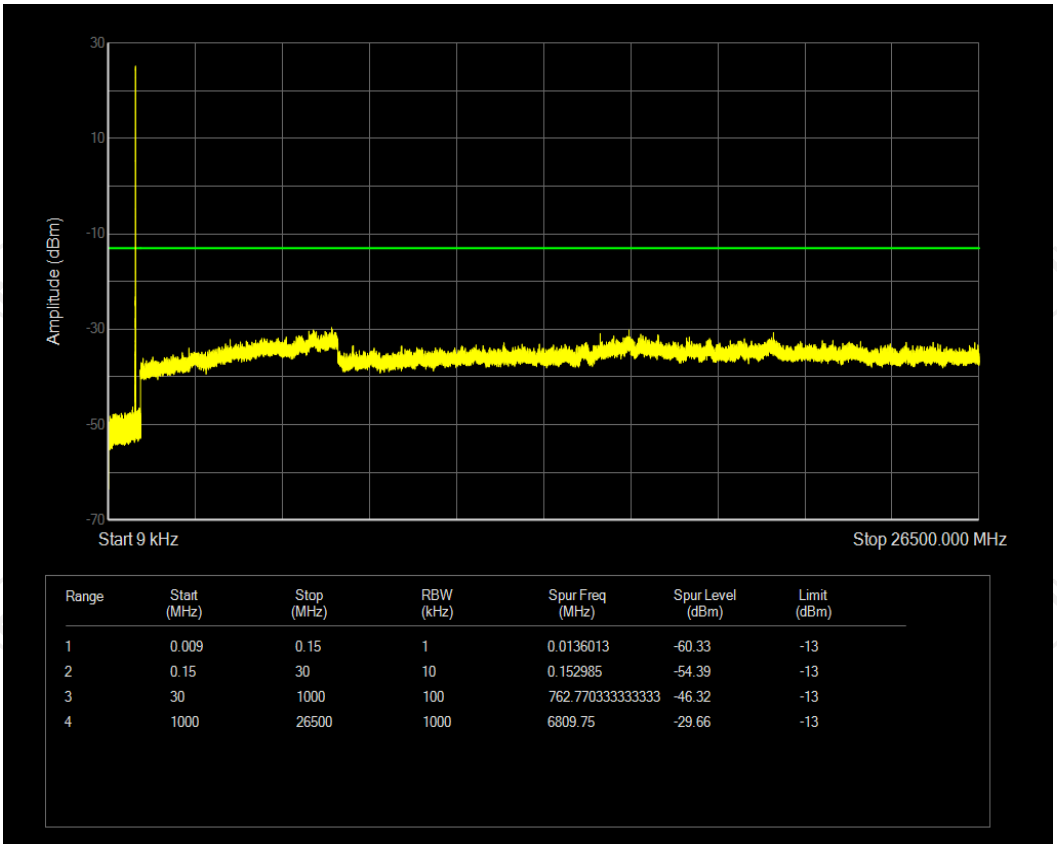
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0943943	-57.42	-13
2	0.15	30	10	0.15	-53.54	-13
3	30	1000	100	887.512333333333	-45.91	-13
4	1000	26500	1000	6279.35	-29.11	-13

Band5 16QAM BW=1.4MHz Channel=20525 RB Size=1 Position=#0



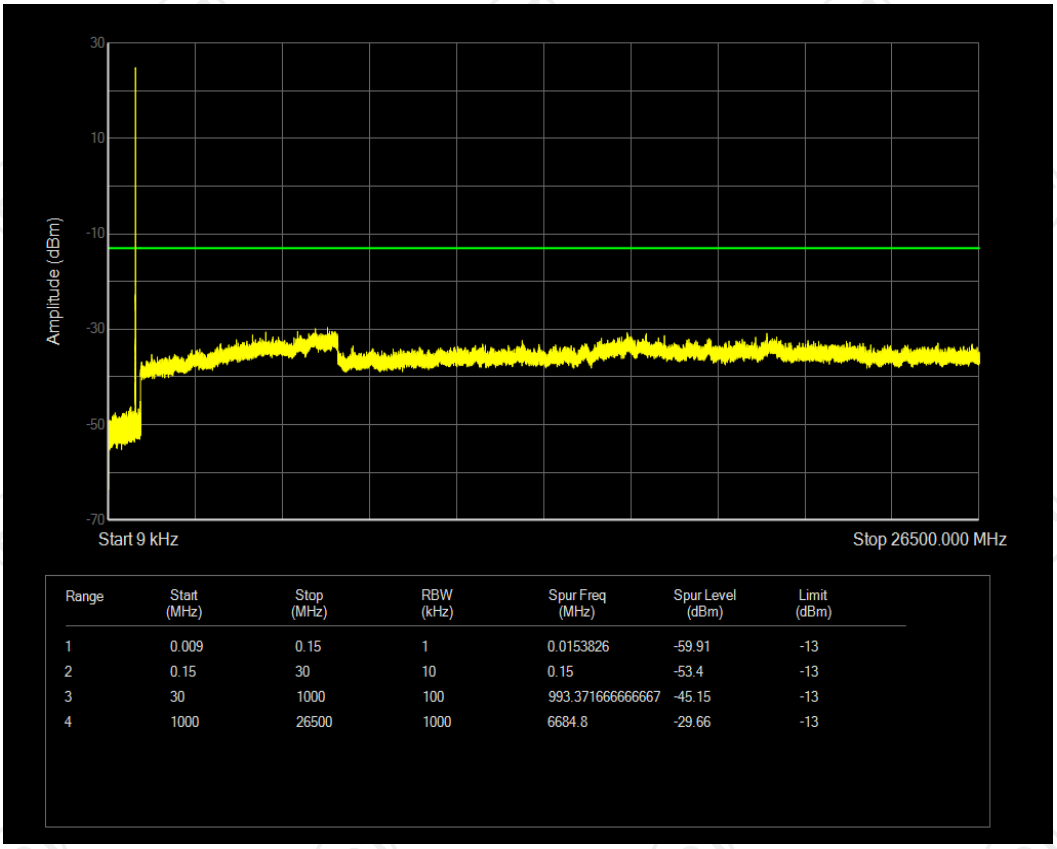
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0558073	-57.46	-13
2	0.15	30	10	0.162935	-54.37	-13
3	30	1000	100	914.446	-46.77	-13
4	1000	26500	1000	5148	-29.31	-13

Band5 QPSK BW=1.4MHz Channel=20643 RB Size=1 Position=#0



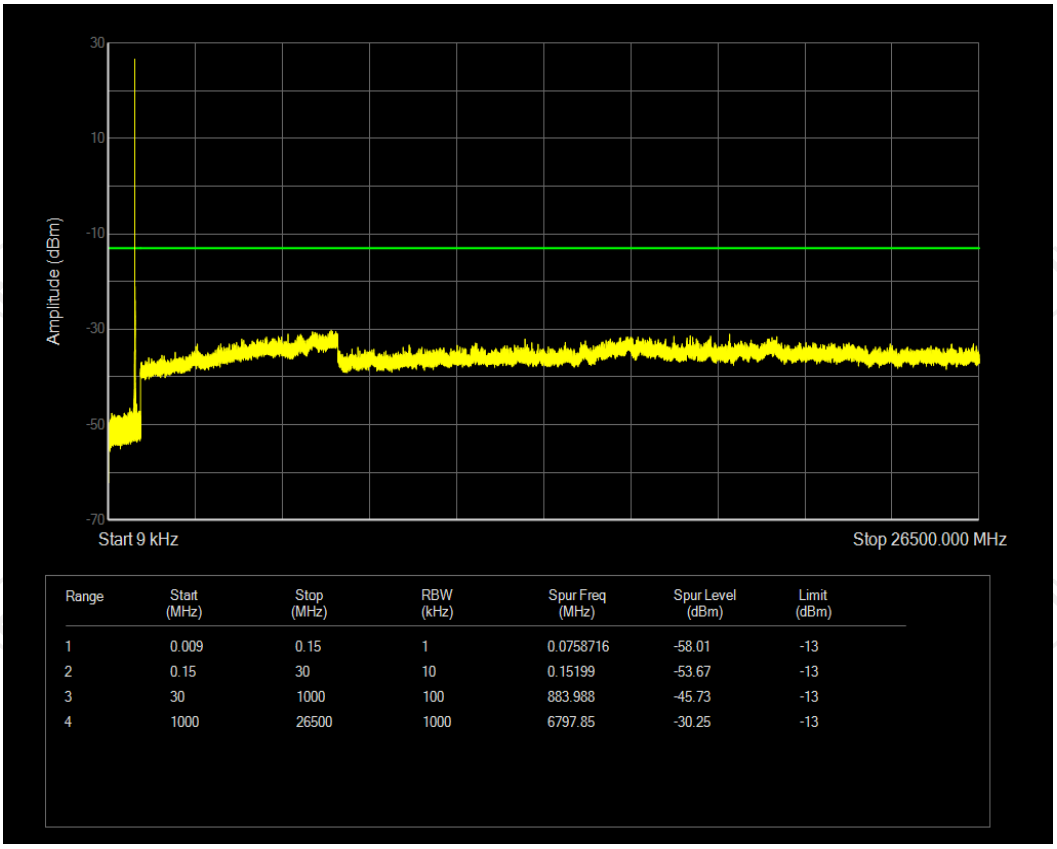
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0136013	-60.33	-13
2	0.15	30	10	0.152985	-54.39	-13
3	30	1000	100	762.770333333333	-46.32	-13
4	1000	26500	1000	6809.75	-29.66	-13

Band5 16QAM BW=1.4MHz Channel=20643 RB Size=1 Position=#0



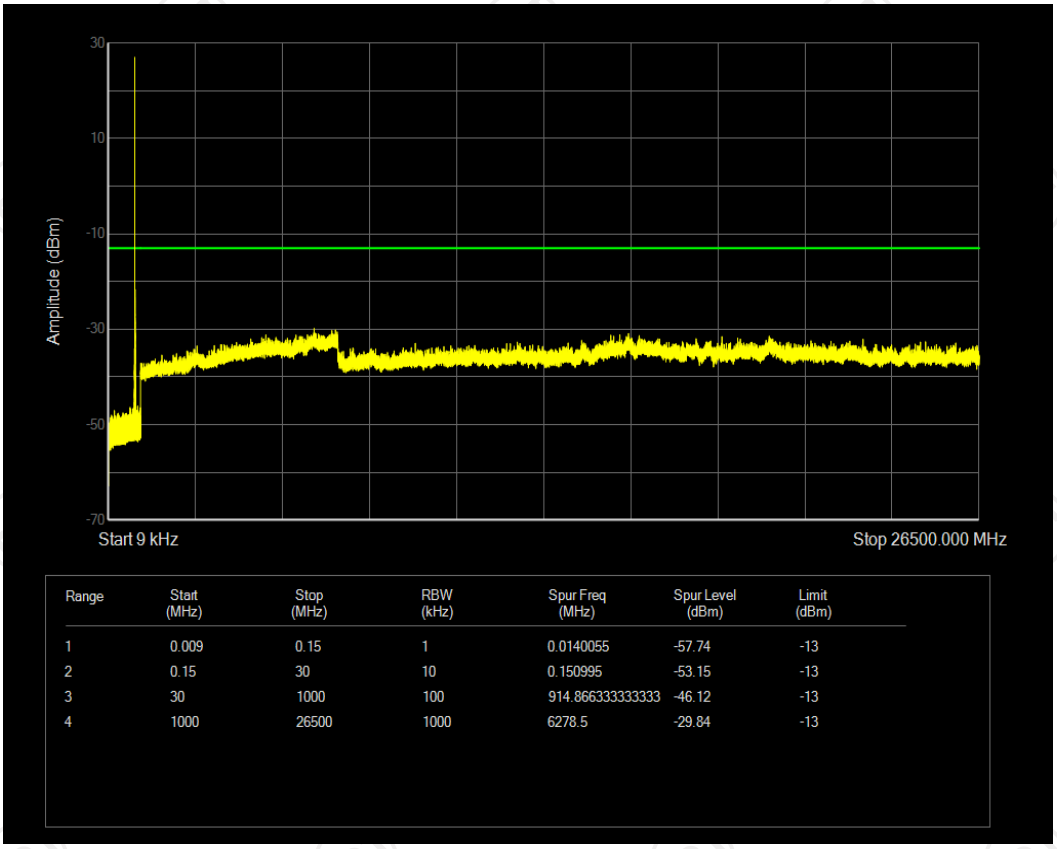
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0153826	-59.91	-13
2	0.15	30	10	0.15	-53.4	-13
3	30	1000	100	993.371666666667	-45.15	-13
4	1000	26500	1000	6684.8	-29.66	-13

Band5 QPSK BW=3MHz Channel=20415 RB Size=1 Position=#0



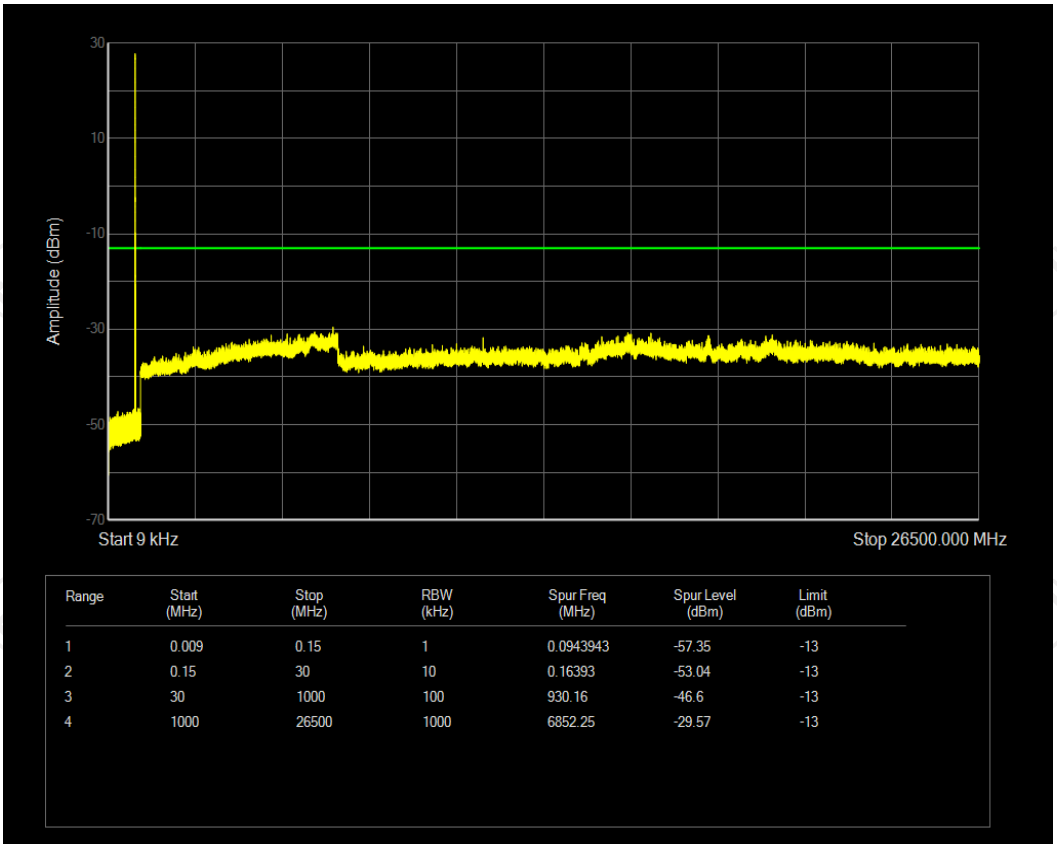
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0758716	-58.01	-13
2	0.15	30	10	0.15199	-53.67	-13
3	30	1000	100	883.988	-45.73	-13
4	1000	26500	1000	6797.85	-30.25	-13

Band5 16QAM BW=3MHz Channel=20415 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	0.0140055	-57.74	-13
2	0.15	30	10	0.150995	-53.15	-13
3	30	1000	100	914.866333333333	-46.12	-13
4	1000	26500	1000	6278.5	-29.84	-13

Band5 QPSK BW=3MHz Channel=20525 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	0.0943943	-57.35	-13
2	0.15	30	10	0.16393	-53.04	-13
3	30	1000	100	930.16	-46.6	-13
4	1000	26500	1000	6852.25	-29.57	-13