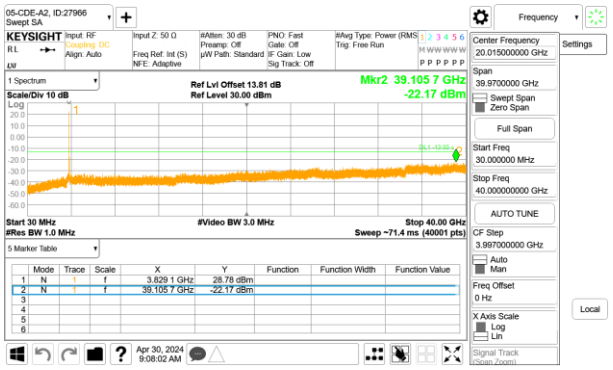
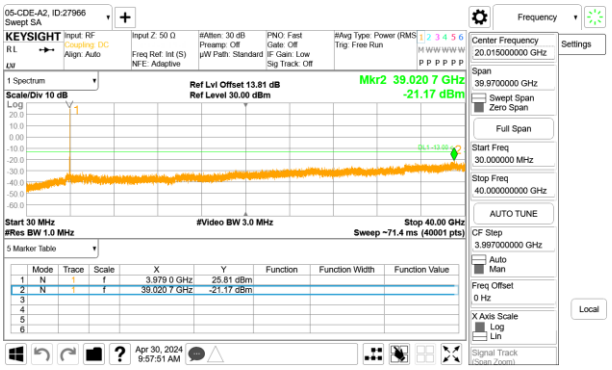
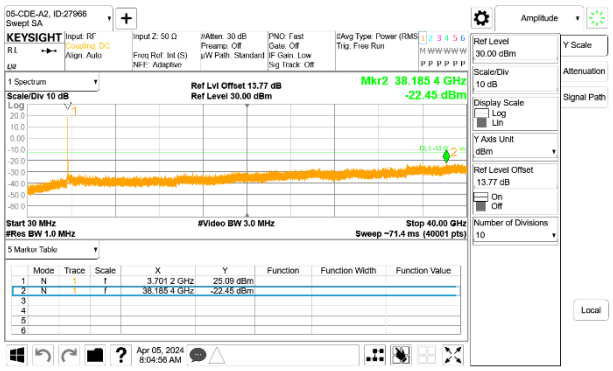


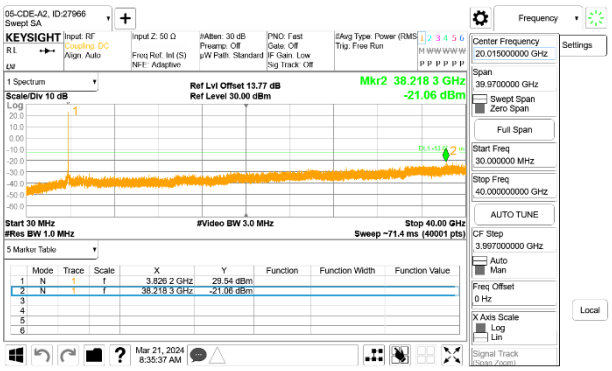
5G NR n77 25MHz BPSK Middle Channel RB1-1, ID:27966



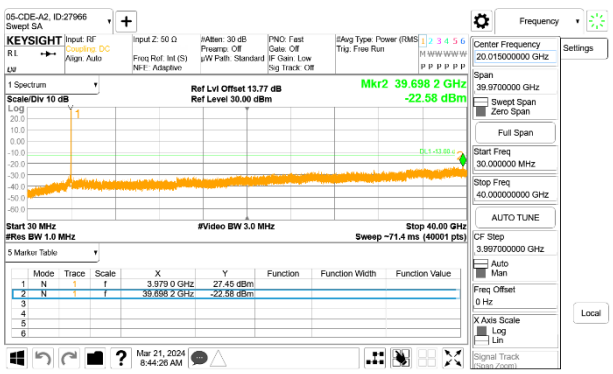
5G NR n77 25MHz BPSK High Channel RB1-64, ID:27966



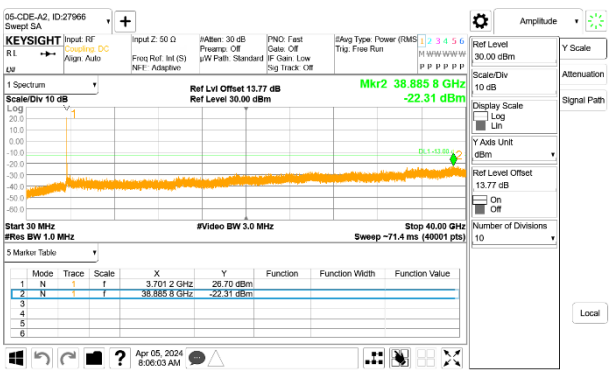
5G NR n77 30MHz BPSK Low Channel RB1-0 , ID:27966



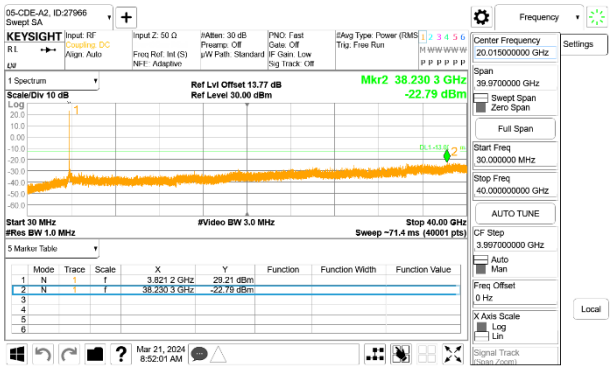
5G NR n77 30MHz BPSK Middle Channel RB1-1, ID:27966



5G NR n77 30MHz BPSK High Channel RB1-77, ID:27966



5G NR n77 40MHz BPSK Low Channel RB1-0, ID:27966



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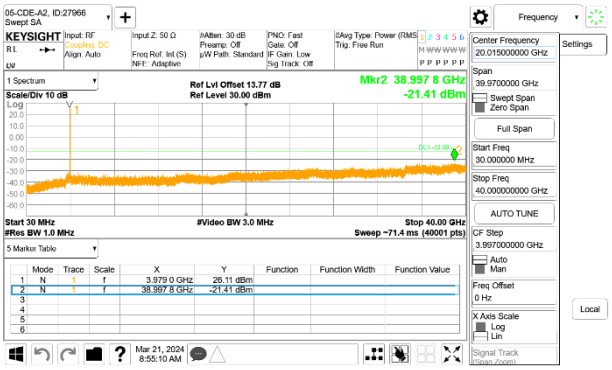

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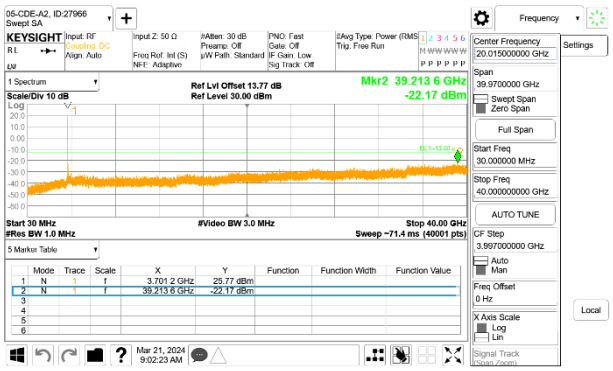
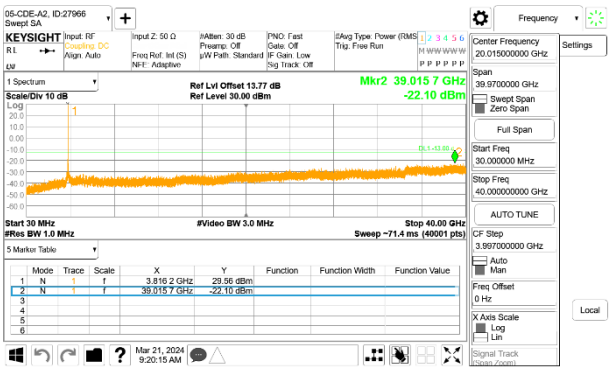
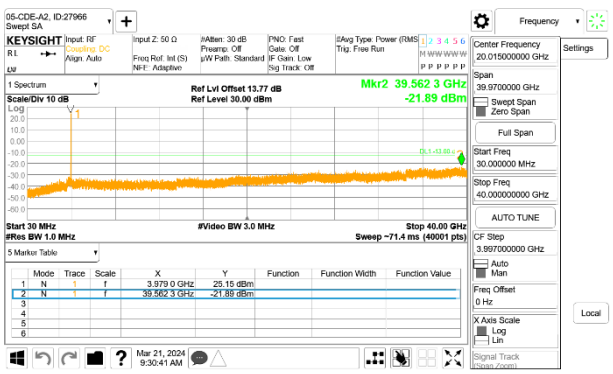


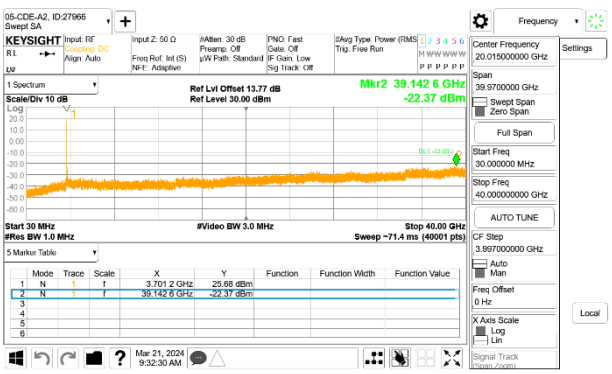
5G NR n77 50MHz BPSK Low Channel RB1-0, ID:27966



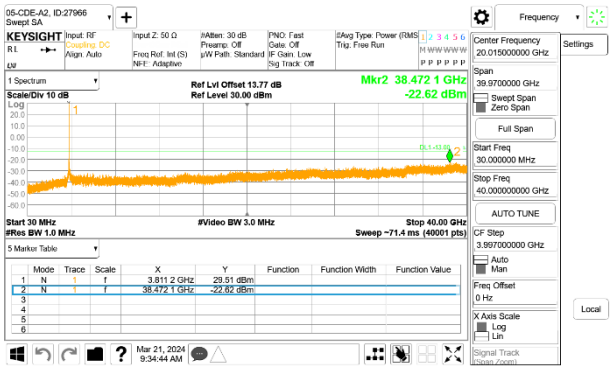
5G NR n77 50MHz BPSK Middle Channel RB1-1, ID:27966



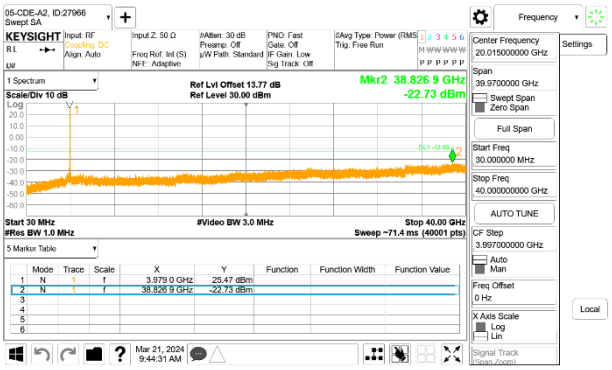
5G NR n77 50MHz BPSK High Channel RB1-132, ID:27966



5G NR n77 60MHz BPSK Low Channel RB1-0, ID:27966



5G NR n77 60MHz BPSK Middle Channel RB1-1, ID:27966



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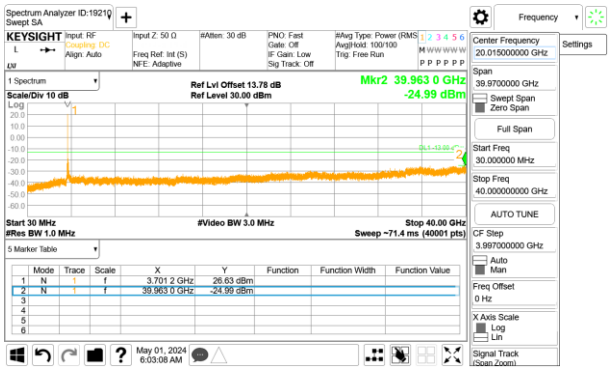
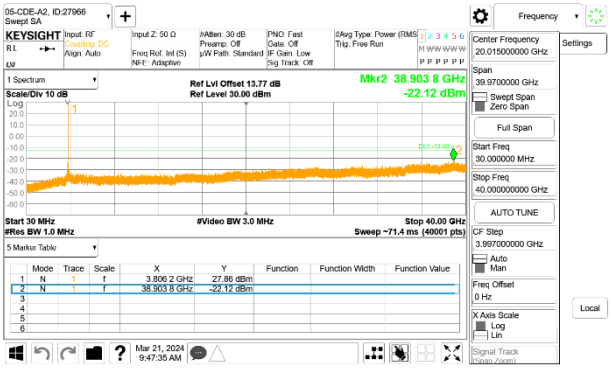
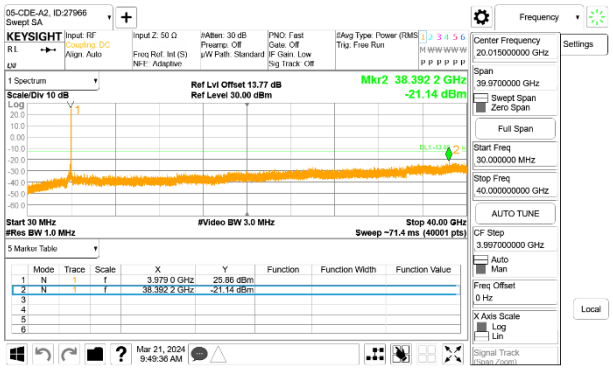


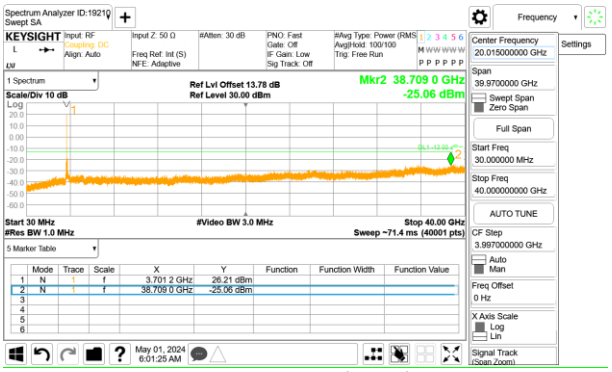
5G NR n77 70MHz BPSK Low Channel RB1-0, ID:19210



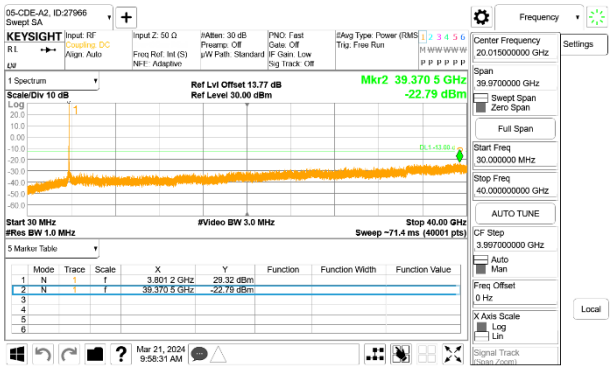
5G NR n77 70MHz BPSK Middle Channel RB1-1, ID:27966



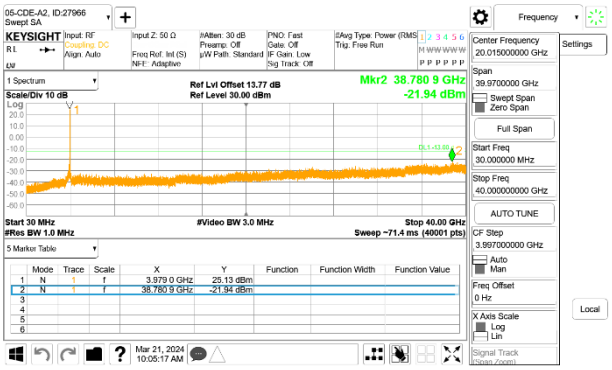
5G NR n77 70MHz BPSK High Channel RB1-188, ID:27966



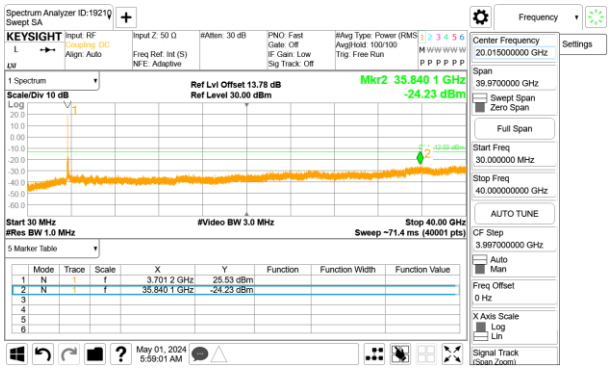
5G NR n77 80MHz BPSK Low Channel RB1-0, ID:19210



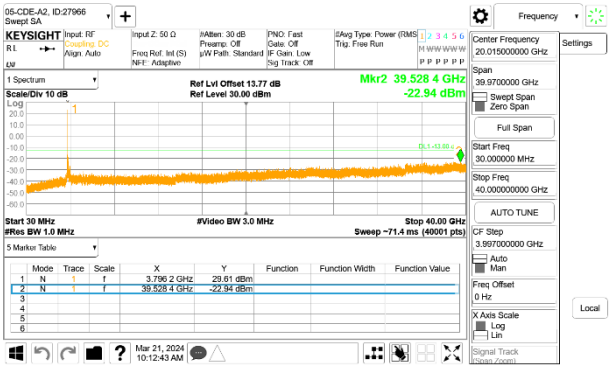
5G NR n77 80MHz BPSK Middle Channel RB1-1, ID:27966



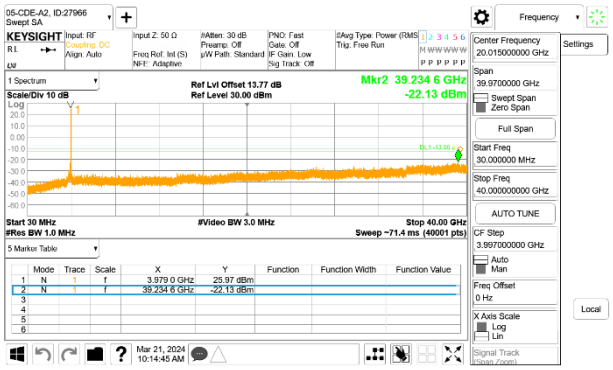
5G NR n77 80MHz BPSK High Channel RB1-216, ID:27966



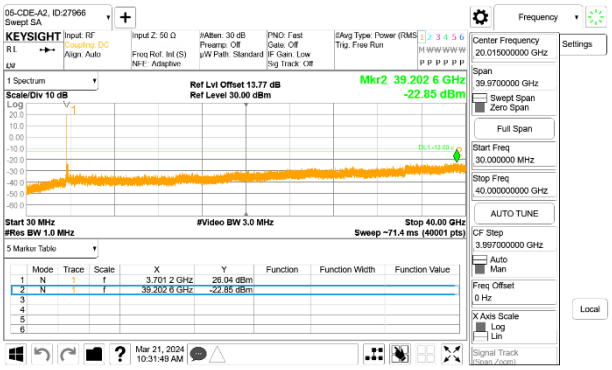
5G NR n77 90MHz BPSK Low Channel RB1-0, ID:19210



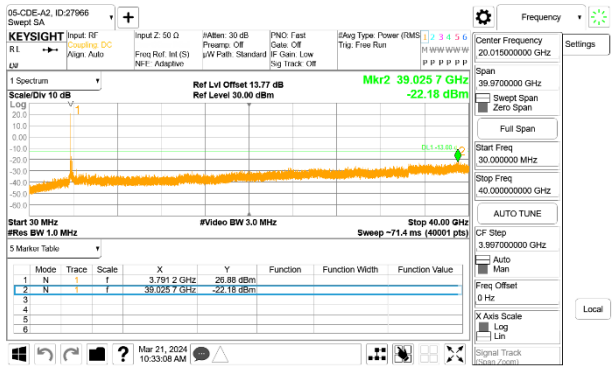
5G NR n77 90MHz BPSK Middle Channel RB1-1, ID:27966



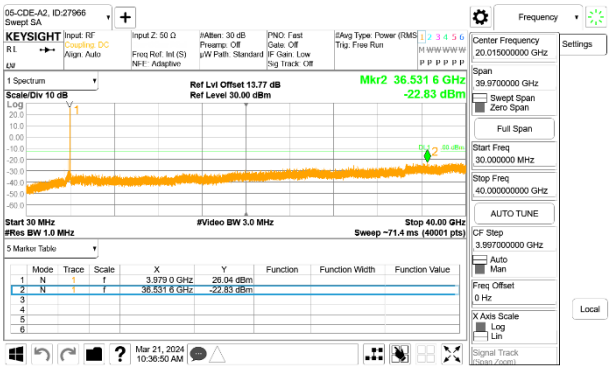
5G NR n77 90MHz BPSK High Channel RB1-244, ID:27966



5G NR n77 100MHz BPSK Low Channel RB1-0, ID:27966



5G NR n77 100MHz BPSK Middle Channel RB1-1, ID:27966



5G NR n77 100MHz BPSK High Channel RB1-272, ID:27966

9.4. FREQUENCY STABILITY

TEST PROCEDURE

Use CMW 500 with Frequency Error measurement capability.

- Temp. = −30°C to +50°C
- Voltage = (85% - 115%)

  Low voltage, 3.23VDC, Normal, 3.8VDC and High voltage, 4.37VDC.
  End Voltage, 2.85VDC.

Frequency Stability vs Temperature:
The EUT is place inside a temperature chamber. The temperature is set to 20ºC and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until +50ºC is reached.

Frequency Stability vs Voltage:
The peak frequency error is recorded (worst-case).

RESULTS

See the following pages.

9.4.1. LTE BAND 5 AND 5G NR n5

LIMITS

FCC: §22.355
The carrier frequency shall not depart from the reference frequency in excess of ±2.5 ppm for mobile stations.

Test Engineer ID:	25780MW	Test Date:	2024-03-18

LTE BAND 5 QPSK (10MHz BANDWIDTH)

Band	5	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		824	849		2.5	
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)		824.5215	848.4806			
Extreme (50°C)		824.5215	848.4806	3.5	0.004	Yes
Extreme (40°C)		824.5215	848.4806	2.7	0.003	Yes
Extreme (30°C)		824.5215	848.4806	-3.7	-0.004	Yes
Extreme (10°C)	Normal	824.5215	848.4806	-2.6	-0.003	Yes
Extreme (0°C)		824.5215	848.4806	-3.7	-0.004	Yes
Extreme (-10°C)		824.5215	848.4807	11.3	0.014	Yes
Extreme (-20°C)		824.5215	848.4806	-2.4	-0.003	Yes
Extreme (-30°C)		824.5215	848.4806	2.4	0.003	Yes
20°C	15%	824.5215	848.4806	1.9	0.002	Yes
	-15%	824.5215	848.4806	2.1	0.002	Yes
	End Point Voltage	824.5215	848.4806	2.2	0.003	Yes

Test Engineer ID:	32061WY	Test Date:	2024-03-24

5G NR n5 BPSK (20MHz BANDWIDTH)

Band	5	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		824	849		2.5	
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	824.4966	847.3665			
Extreme (50°C)		824.4966	847.3665	1.42	0.002	Yes
Extreme (40°C)		824.4966	847.3665	1.88	0.002	Yes
Extreme (30°C)		824.4966	847.3665	-1.5	-0.002	Yes
Extreme (10°C)		824.4966	847.3665	2.29	0.003	Yes
Extreme (0°C)		824.4966	847.3665	1.94	0.002	Yes
Extreme (-10°C)		824.4966	847.3665	-1.44	-0.002	Yes
Extreme (-20°C)		824.4966	847.3665	1.47	0.002	Yes
Extreme (-30°C)		824.4966	847.3665	2.34	0.003	Yes
20°C	15%	824.4966	847.3665	2.55	0.003	Yes
	-15%	824.4966	847.3665	2.97	0.004	Yes
	End Point Voltage	824.4966	847.3665	2.78	0.003	Yes

9.4.2. LTE BAND 7 AND 5G NR n7

LIMITS

FCC: §27.54
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	32061WY	Test Date:	2024-03-17

LTE BAND 7 QPSK (20MHz BANDWIDTH)

Band	7	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		2500	2570			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	2501.0769	2568.9487			
Extreme (50°C)		2501.0769	2568.9487	5.8	0.002	Yes
Extreme (40°C)		2501.0769	2568.9487	5.7	0.002	Yes
Extreme (30°C)		2501.0769	2568.9487	5.6	0.002	Yes
Extreme (10°C)		2501.0769	2568.9487	-5.4	-0.002	Yes
Extreme (0°C)		2501.0769	2568.9487	-5.1	-0.002	Yes
Extreme (-10°C)		2501.0769	2568.9487	-7.7	-0.003	Yes
Extreme (-20°C)		2501.0769	2568.9487	-5.3	-0.002	Yes
Extreme (-30°C)		2501.0769	2568.9487	5.9	0.002	Yes
20°C	15%	2501.0769	2568.9487	6.2	0.002	Yes
	-15%	2501.0769	2568.9487	-4.9	-0.002	Yes
	End Point Voltage	2501.0769	2568.9487	-7.1	-0.003	Yes

Test Engineer ID:	32061WY	Test Date:	2024-03-24

5G NR n7 BPSK (50MHz BANDWIDTH)

Band	7	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		2500	2570			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	2500.6942	2569.2971			
Extreme (50°C)		2500.6942	2569.2971	-5.34	-0.002	Yes
Extreme (40°C)		2500.6942	2569.2971	-6.1	-0.002	Yes
Extreme (30°C)		2500.6942	2569.2971	-6.04	-0.002	Yes
Extreme (10°C)		2500.6942	2569.2971	6.45	0.003	Yes
Extreme (0°C)		2500.6942	2569.2971	-5.61	-0.002	Yes
Extreme (-10°C)		2500.6942	2569.2971	-2.99	-0.001	Yes
Extreme (-20°C)		2500.6942	2569.2971	4.25	0.002	Yes
Extreme (-30°C)		2500.6942	2569.2971	-8.81	-0.003	Yes
20°C	15%	2500.6942	2569.2971	-6.63	-0.003	Yes
	-15%	2500.6942	2569.2971	-5.61	-0.002	Yes
	End Point Voltage	2500.6942	2569.2971	-6.85	-0.003	Yes

9.4.3. LTE BAND 12 AND 5G NR n12

LIMITS

FCC: §27.54
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	25780MW	Test Date:	2024-03-18

LTE BAND 12 QPSK (10MHz BANDWIDTH)

Band	12	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		699	716			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)		699.5286	715.4683			
Extreme (50°C)		699.5286	715.4683	3.0	0.004	Yes
Extreme (40°C)		699.5286	715.4683	2.0	0.003	Yes
Extreme (30°C)		699.5286	715.4683	2.8	0.004	Yes
Extreme (10°C)	Normal	699.5286	715.4683	-2.4	-0.003	Yes
Extreme (0°C)		699.5286	715.4683	-3.0	-0.004	Yes
Extreme (-10°C)		699.5286	715.4683	-2.5	-0.004	Yes
Extreme (-20°C)		699.5286	715.4683	-2.2	-0.003	Yes
Extreme (-30°C)		699.5286	715.4683	2.0	0.003	Yes
20°C	15%	699.5286	715.4683	-2.4	-0.003	Yes
	-15%	699.5286	715.4683	-2.1	-0.003	Yes
	End Point Voltage	699.5286	715.4683	-2.5	-0.004	Yes

Test Engineer ID:	32061WY	Test Date:	2024-03-24

5G NR n12 BPSK (15MHz BANDWIDTH)

Band	12	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		699	716			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	699.4436	714.8332			
Extreme (50°C)		699.4436	714.8331	-2.01	-0.003	Yes
Extreme (40°C)		699.4436	714.8331	-1.77	-0.003	Yes
Extreme (30°C)		699.4436	714.8332	1.48	0.002	Yes
Extreme (10°C)		699.4436	714.8332	1.42	0.002	Yes
Extreme (0°C)		699.4436	714.8332	1.24	0.002	Yes
Extreme (-10°C)		699.4436	714.8332	1.32	0.002	Yes
Extreme (-20°C)		699.4436	714.8332	1.75	0.002	Yes
Extreme (-30°C)		699.4436	714.8332	1.76	0.002	Yes
20°C	15%	699.4436	714.8331	-1.98	-0.003	Yes
	-15%	699.4436	714.8332	2.54	0.004	Yes
	End Point Voltage	699.4436	714.8332	2.8	0.004	Yes

9.4.4. LTE BAND 13

LIMITS

FCC: §27.54
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	25780MW	Test Date:	2024-03-18

QPSK (10MHz BANDWIDTH)

Band	13	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		777	787			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	777.5251	786.4738			
Extreme (50°C)		777.5251	786.4738	2.8	0.004	Yes
Extreme (40°C)		777.5251	786.4738	5.7	0.007	Yes
Extreme (30°C)		777.5251	786.4738	-4.7	-0.006	Yes
Extreme (10°C)		777.5251	786.4738	-3.4	-0.004	Yes
Extreme (0°C)		777.5251	786.4738	5.0	0.006	Yes
Extreme (-10°C)		777.5251	786.4738	-2.8	-0.004	Yes
Extreme (-20°C)		777.5251	786.4738	-3.1	-0.004	Yes
Extreme (-30°C)		777.5251	786.4738	2.3	0.003	Yes
20°C	15%	777.5251	786.4738	2.1	0.003	Yes
	-15%	777.5251	786.4738	-2.1	-0.003	Yes
	End Point Voltage	777.5251	786.4738	-1.9	-0.002	Yes

9.4.5. LTE BAND 14 AND 5G NR n14

LIMITS

FCC: §90.539
(e) The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 ppm or better when AFC is locked to a base station, and 5 ppm or better when AFC is not locked.

Test Engineer ID:	25780MW	Test Date:	2024-03-25

LTE BAND 14 QPSK (10MHz BANDWIDTH)

Band	14	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		788	798			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	788.5302	797.4778			
Extreme (50°C)		788.5302	797.4778	5.4	0.007	Yes
Extreme (40°C)		788.5302	797.4778	4.8	0.006	Yes
Extreme (30°C)		788.5302	797.4778	-4.0	-0.005	Yes
Extreme (10°C)		788.5302	797.4778	-3.5	-0.004	Yes
Extreme (0°C)		788.5301	797.4778	-7.5	-0.009	Yes
Extreme (-10°C)		788.5302	797.4778	2.8	0.003	Yes
Extreme (-20°C)		788.5302	797.4778	-2.6	-0.003	Yes
Extreme (-30°C)		788.5302	797.4778	2.7	0.003	Yes
20°C	15%	788.5302	797.4778	2.7	0.003	Yes
	-15%	788.5302	797.4778	4.3	0.005	Yes
	End Point Voltage	788.5302	797.4778	6.7	0.008	Yes

Test Engineer ID:	32061WY	Test Date:	2024-03-26

5G NR n14 BPSK (10MHz BANDWIDTH)

Band	14	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		788	798			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)		788.3512	797.2756			
Extreme (50°C)		788.3512	797.2756	-1.77	-0.002	Yes
Extreme (40°C)		788.3512	797.2756	1.73	0.002	Yes
Extreme (30°C)		788.3512	797.2756	-1.97	-0.002	Yes
Extreme (10°C)	Normal	788.3512	797.2756	2.22	0.003	Yes
Extreme (0°C)		788.3512	797.2756	-1.73	-0.002	Yes
Extreme (-10°C)		788.3512	797.2756	-2.3	-0.003	Yes
Extreme (-20°C)		788.3512	797.2756	-1.95	-0.002	Yes
Extreme (-30°C)		788.3512	797.2756	1.97	0.002	Yes
20°C	15%	788.3512	797.2756	1.42	0.002	Yes
	-15%	788.3512	797.2756	-1.7	-0.002	Yes
	End Point Voltage	788.3512	797.2756	2.04	0.003	Yes

9.4.6. LTE BAND 17

LIMITS

FCC: §27.54
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	25780MW	Test Date:	2024-03-25

QPSK (10MHz BANDWIDTH)

Band	17	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		704	716			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	704.5201	715.4684			
Extreme (50°C)		704.5201	715.4684	3.1	0.004	Yes
Extreme (40°C)		704.5201	715.4684	2.2	0.003	Yes
Extreme (30°C)		704.5201	715.4684	2.9	0.004	Yes
Extreme (10°C)		704.5201	715.4684	-2.7	-0.004	Yes
Extreme (0°C)		704.5201	715.4684	-3.7	-0.005	Yes
Extreme (-10°C)		704.5201	715.4684	-2.4	-0.003	Yes
Extreme (-20°C)		704.5201	715.4684	-2.5	-0.003	Yes
Extreme (-30°C)		704.5201	715.4684	2.5	0.004	Yes
20°C	15%	704.5201	715.4684	2.3	0.003	Yes
	-15%	704.5201	715.4684	2.1	0.003	Yes
	End Point Voltage	704.5201	715.4684	2.0	0.003	Yes

9.4.7. LTE BAND 25 AND 5G NR n25

LIMITS

FCC: §24.235
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	25780MW	Test Date:	2024-03-25

LTE BAND 25 QPSK (20MHz BANDWIDTH)

Band	25	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		1850	1915		2.5	
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	1851.0489	1913.9256			
Extreme (50°C)		1851.0489	1913.9256	22.1	0.012	Yes
Extreme (40°C)		1851.0489	1913.9256	22.9	0.012	Yes
Extreme (30°C)		1851.0489	1913.9256	16.0	0.008	Yes
Extreme (10°C)		1851.0488	1913.9256	-19.1	-0.010	Yes
Extreme (0°C)		1851.0488	1913.9256	-20.3	-0.011	Yes
Extreme (-10°C)		1851.0489	1913.9256	10.2	0.005	Yes
Extreme (-20°C)		1851.0489	1913.9256	18.2	0.010	Yes
Extreme (-30°C)		1851.0489	1913.9256	4.9	0.003	Yes
20°C	15%	1851.0489	1913.9256	4.4	0.002	Yes
	-15%	1851.0489	1913.9256	3.9	0.002	Yes
	End Point Voltage	1851.0489	1913.9256	11.3	0.006	Yes

Test Engineer ID:	32061WY	Test Date:	2024-03-26

5G NR n25 BPSK (40MHz BANDWIDTH)

Band	25	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		1850	1915		2.5	
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	1850.6762	1914.2925			
Extreme (50°C)		1850.6762	1914.2925	-7.08	-0.004	Yes
Extreme (40°C)		1850.6762	1914.2925	-7.24	-0.004	Yes
Extreme (30°C)		1850.6762	1914.2925	-8.33	-0.004	Yes
Extreme (10°C)		1850.6762	1914.2925	-6	-0.003	Yes
Extreme (0°C)		1850.6762	1914.2925	-6.31	-0.003	Yes
Extreme (-10°C)		1850.6762	1914.2925	-13.33	-0.007	Yes
Extreme (-20°C)		1850.6762	1914.2925	-9.2	-0.005	Yes
Extreme (-30°C)		1850.6762	1914.2925	-10.66	-0.006	Yes
20°C	15%	1850.6762	1914.2925	-5.73	-0.003	Yes
	-15%	1850.6762	1914.2925	-5.19	-0.003	Yes
	End Point Voltage	1850.6762	1914.2925	-6.41	-0.003	Yes

9.4.8. LTE BAND 26(PART 90S)

LIMITS

FCC: §90.213
The carrier frequency shall not depart from the reference frequency in excess of ±2.5 ppm for mobile stations.

Test Engineer ID:	25780MW	Test Date:	2024-03-25

LTE BAND 26 QPSK (10MHz BANDWIDTH)

Band	26	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		814	824		2.5	
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	814.5212	823.4739			
Extreme (50°C)		814.5212	823.4739	3.4	0.004	Yes
Extreme (40°C)		814.5212	823.4739	3.3	0.004	Yes
Extreme (30°C)		814.5212	823.4739	2.7	0.003	Yes
Extreme (10°C)		814.5212	823.4739	-3.1	-0.004	Yes
Extreme (0°C)		814.5212	823.4739	-3.8	-0.005	Yes
Extreme (-10°C)		814.5212	823.4739	-2.8	-0.003	Yes
Extreme (-20°C)		814.5212	823.4739	-3.4	-0.004	Yes
Extreme (-30°C)		814.5212	823.4739	2.1	0.003	Yes
20°C	15%	814.5212	823.4739	3.4	0.004	Yes
	-15%	814.5212	823.4739	2.3	0.003	Yes
	End Point Voltage	814.5212	823.4739	3.7	0.005	Yes

Test Engineer ID:	32061WY	Test Date:	2024-03-26

5G NR n26 BPSK (10MHz BANDWIDTH)

Band	26	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		814	824		2.5	
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	824.5275	823.2690			
Extreme (50°C)		824.5275	823.2690	2.01	0.002	Yes
Extreme (40°C)		824.5275	823.2690	2.84	0.003	Yes
Extreme (30°C)		824.5275	823.2690	-1.77	-0.002	Yes
Extreme (10°C)		824.5275	823.2690	3.34	0.004	Yes
Extreme (0°C)		824.5275	823.2690	-2.42	-0.003	Yes
Extreme (-10°C)		824.5275	823.2690	3.22	0.004	Yes
Extreme (-20°C)		824.5275	823.2690	2.54	0.003	Yes
Extreme (-30°C)		824.5275	823.2690	-1.36	-0.002	Yes
20°C	15%	824.5275	823.2690	2.34	0.003	Yes
	-15%	824.5275	823.2690	1.91	0.002	Yes
	End Point Voltage	824.5275	823.2690	2.24	0.003	Yes

9.4.9. LTE BAND 26(PART 22)

LIMITS

FCC: §22.355
The carrier frequency shall not depart from the reference frequency in excess of ±2.5 ppm for mobile stations.

Test Engineer ID:	25780MW	Test Date:	2024-03-25

LTE BAND 26 QPSK (15MHz BANDWIDTH)

Band	26	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		824	849		2.5	
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	824.5313	848.4647			
Extreme (50°C)		824.5313	848.4647	-6.0	-0.007	Yes
Extreme (40°C)		824.5313	848.4647	2.8	0.003	Yes
Extreme (30°C)		824.5313	848.4647	-3.6	-0.004	Yes
Extreme (10°C)		824.5313	848.4647	-3.0	-0.004	Yes
Extreme (0°C)		824.5313	848.4647	2.7	0.003	Yes
Extreme (-10°C)		824.5313	848.4647	-3.1	-0.004	Yes
Extreme (-20°C)		824.5313	848.4647	-2.4	-0.003	Yes
Extreme (-30°C)		824.5313	848.4647	-2.6	-0.003	Yes
20°C	15%	824.5313	848.4647	5.1	0.006	Yes
	-15%	824.5313	848.4647	2.3	0.003	Yes
	End Point Voltage	824.5313	848.4647	-1.8	-0.002	Yes

Test Engineer ID:	32061WY	Test Date:	2024-03-26

5G NR n26 BPSK (20MHz BANDWIDTH)

Band	26	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		824	849		2.5	
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	824.5275	847.3699			
Extreme (50°C)		824.5275	847.3699	-2.4	-0.003	Yes
Extreme (40°C)		824.5275	847.3699	-1.8	-0.002	Yes
Extreme (30°C)		824.5275	847.3699	1.5	0.002	Yes
Extreme (10°C)		824.5275	847.3699	1.8	0.002	Yes
Extreme (0°C)		824.5275	847.3699	1.5	0.002	Yes
Extreme (-10°C)		824.5275	847.3699	-1.8	-0.002	Yes
Extreme (-20°C)		824.5275	847.3699	1.6	0.002	Yes
Extreme (-30°C)		824.5275	847.3699	-2.2	-0.003	Yes
20°C	15%	824.5275	847.3699	1.4	0.002	Yes
	-15%	824.5275	847.3699	1.4	0.002	Yes
	End Point Voltage	824.5275	847.3699	1.6	0.002	Yes

9.4.10. LTE BAND 30 AND 5G NR n30

LIMITS

FCC: §27.54
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	32061WY	Test Date:	2024-03-24

LTE BAND 30 QPSK (10MHz BANDWIDTH)

Band	30	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		2305	2315			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	2305.5376	2314.4614			
Extreme (50°C)		2305.5376	2314.4614	6.3	0.003	Yes
Extreme (40°C)		2305.5376	2314.4614	5.0	0.002	Yes
Extreme (30°C)		2305.5376	2314.4614	3.7	0.002	Yes
Extreme (10°C)		2305.5376	2314.4614	-4.7	-0.002	Yes
Extreme (0°C)		2305.5376	2314.4614	-5.2	-0.002	Yes
Extreme (-10°C)		2305.5376	2314.4614	-5.1	-0.002	Yes
Extreme (-20°C)		2305.5376	2314.4614	-5.4	-0.002	Yes
Extreme (-30°C)		2305.5376	2314.4614	-4.3	-0.002	Yes
20°C	15%	2305.5376	2314.4614	-14.1	-0.006	Yes
	-15%	2305.5376	2314.4614	-6.7	-0.003	Yes
	End Point Voltage	2305.5376	2314.4614	-5.4	-0.002	Yes

Test Engineer ID:	32061WY	Test Date:	2024-03-26

5G NR n30 BPSK (10MHz BANDWIDTH)

Band	30	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		2305	2315			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	2305.3445	2314.2839			
Extreme (50°C)		2305.3445	2314.2839	-4.62	-0.002	Yes
Extreme (40°C)		2305.3445	2314.2839	-7.81	-0.003	Yes
Extreme (30°C)		2305.3445	2314.2839	-7.24	-0.003	Yes
Extreme (10°C)		2305.3445	2314.2839	-7.99	-0.003	Yes
Extreme (0°C)		2305.3445	2314.2839	-7.23	-0.003	Yes
Extreme (-10°C)		2305.3445	2314.2839	-5.36	-0.002	Yes
Extreme (-20°C)		2305.3445	2314.2839	-4.32	-0.002	Yes
Extreme (-30°C)		2305.3445	2314.2839	-8.77	-0.004	Yes
20°C	15%	2305.3445	2314.2839	-6.62	-0.003	Yes
	-15%	2305.3445	2314.2839	-6.85	-0.003	Yes
	End Point Voltage	2305.3445	2314.2839	-8.58	-0.004	Yes

9.4.11. LTE BAND 41 AND 5G NR n41 HPUE

LIMITS

FCC: §27.54
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	32061WY	Test Date:	2024-03-17

LTE BAND 41 QPSK (20MHz BANDWIDTH)

Band	41	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		2496	2690		0	
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	2497.0088	2689.0366			
Extreme (50°C)		2497.0087	2689.0366	-6.0	-0.002	Yes
Extreme (40°C)		2497.0087	2689.0366	-7.4	-0.003	Yes
Extreme (30°C)		2497.0087	2689.0366	-5.5	-0.002	Yes
Extreme (10°C)		2497.0087	2689.0366	-7.8	-0.003	Yes
Extreme (0°C)		2497.0087	2689.0366	-11.7	-0.005	Yes
Extreme (-10°C)		2497.0087	2689.0366	-11.4	-0.004	Yes
Extreme (-20°C)		2497.0087	2689.0366	-13.3	-0.005	Yes
Extreme (-30°C)		2497.0087	2689.0366	-12.9	-0.005	Yes
20°C	15%	2497.0087	2689.0366	-10.5	-0.004	Yes
	-15%	2497.0087	2689.0366	-9.3	-0.004	Yes
	End Point Voltage	2497.0087	2689.0366	-12.1	-0.005	Yes

Test Engineer ID:	32061WY	Test Date:	2024-03-27

5G NR n41 BPSK (100MHz BANDWIDTH)

Band	41	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		2496.01	2690		0	
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	2496.7715	2688.1240			
Extreme (50°C)		2496.7715	2688.1240	-18.14	-0.007	Yes
Extreme (40°C)		2496.7715	2688.1240	-14.25	-0.005	Yes
Extreme (30°C)		2496.7715	2688.1240	-13.5	-0.005	Yes
Extreme (10°C)		2496.7715	2688.1240	-13.92	-0.005	Yes
Extreme (0°C)		2496.7715	2688.1240	-9.99	-0.004	Yes
Extreme (-10°C)		2496.7715	2688.1240	-15.99	-0.006	Yes
Extreme (-20°C)		2496.7715	2688.1240	-15.84	-0.006	Yes
Extreme (-30°C)		2496.7715	2688.1240	-17.14	-0.007	Yes
20°C	15%	2496.7715	2688.1240	-16.4	-0.006	Yes
	-15%	2496.7715	2688.1240	-13.1	-0.005	Yes
	End Point Voltage	2496.7715	2688.1240	-17.36	-0.007	Yes

9.4.12. LTE BAND 48 AND 5G NR n48

Test Engineer ID:	32061WY	Test Date:	2024-03-17

LTE BAND 48 QPSK (20MHz BANDWIDTH)

Band	48	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		3550	3700			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	3550.9332	3699.0471			
Extreme (50°C)		3550.9332	3699.0471	18.7	0.005	Yes
Extreme (40°C)		3550.9332	3699.0471	15.1	0.004	Yes
Extreme (30°C)		3550.9332	3699.0471	14.9	0.004	Yes
Extreme (10°C)		3550.9332	3699.0471	13.5	0.004	Yes
Extreme (0°C)		3550.9332	3699.0471	10.7	0.003	Yes
Extreme (-10°C)		3550.9332	3699.0471	14.5	0.004	Yes
Extreme (-20°C)		3550.9332	3699.0471	11.4	0.003	Yes
Extreme (-30°C)		3550.9332	3699.0471	13.9	0.004	Yes
20°C	15%	3550.9332	3699.0471	10.7	0.003	Yes
	-15%	3550.9332	3699.0471	10.0	0.003	Yes
	End Point Voltage	3550.9332	3699.0471	16.7	0.005	Yes

Test Engineer ID:	32061WY	Test Date:	2024-03-27

5G NR n48 BPSK (40MHz BANDWIDTH)

Band	48	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		3550	3700			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	3550.0863	3697.6327			
Extreme (50°C)		3550.0863	3697.6327	-4.14	-0.001	Yes
Extreme (40°C)		3550.0863	3697.6327	-8.53	-0.002	Yes
Extreme (30°C)		3550.0863	3697.6327	-4.03	-0.001	Yes
Extreme (10°C)		3550.0863	3697.6327	-4.91	-0.001	Yes
Extreme (0°C)		3550.0863	3697.6327	6.4	0.002	Yes
Extreme (-10°C)		3550.0863	3697.6327	6.83	0.002	Yes
Extreme (-20°C)		3550.0863	3697.6327	3.86	0.001	Yes
Extreme (-30°C)		3550.0863	3697.6327	-9.39	-0.003	Yes
20°C	15%	3550.0863	3697.6327	6.77	0.002	Yes
	-15%	3550.0863	3697.6327	10.03	0.003	Yes
	End Point Voltage	3550.0863	3697.6327	5.93	0.002	Yes

9.4.13. LTE BAND 66 AND 5G NR n66

LIMITS

FCC: §27.54
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	25780MW	Test Date:	2024-03-26

LTE BAND 66 QPSK (20MHz BANDWIDTH)

Band	66	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		1710	1780			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	1711.0668	1778.9233			
Extreme (50°C)		1711.0669	1778.9234	35.7	0.020	Yes
Extreme (40°C)		1711.0669	1778.9233	33.8	0.019	Yes
Extreme (30°C)		1711.0669	1778.9234	36.3	0.021	Yes
Extreme (10°C)		1711.0669	1778.9233	18.2	0.010	Yes
Extreme (0°C)		1711.0668	1778.9233	-42.2	-0.024	Yes
Extreme (-10°C)		1711.0668	1778.9233	-27.5	-0.016	Yes
Extreme (-20°C)		1711.0669	1778.9233	32.2	0.018	Yes
Extreme (-30°C)		1711.0668	1778.9233	-4.5	-0.003	Yes
20°C	15%	1711.0669	1778.9233	4.5	0.003	Yes
	-15%	1711.0669	1778.9233	4.9	0.003	Yes
	End Point Voltage	1711.0669	1778.9233	9.2	0.005	Yes

Test Engineer ID:	32061WY	Test Date:	2024-03-27

5G NR n66 BPSK (40MHz BANDWIDTH)

Band	66	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		1710	1780			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	1710.6853	1779.2866			
Extreme (50°C)		1710.6853	1779.2866	-5.05	-0.003	Yes
Extreme (40°C)		1710.6853	1779.2866	-5.6	-0.003	Yes
Extreme (30°C)		1710.6853	1779.2866	-4.66	-0.003	Yes
Extreme (10°C)		1710.6853	1779.2866	-5.95	-0.003	Yes
Extreme (0°C)		1710.6853	1779.2866	-5.27	-0.003	Yes
Extreme (-10°C)		1710.6853	1779.2866	-5.13	-0.003	Yes
Extreme (-20°C)		1710.6853	1779.2866	-4.39	-0.003	Yes
Extreme (-30°C)		1710.6853	1779.2866	-6.49	-0.004	Yes
20°C	15%	1710.6853	1779.2866	-3.6	-0.002	Yes
	-15%	1710.6853	1779.2866	2.7	0.002	Yes
	End Point Voltage	1710.6853	1779.2866	-3.08	-0.002	Yes

9.4.14. 5G NR n70

LIMITS

FCC: §27.54
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	32061WY	Test Date:	2024-03-26

5G NR n70 BPSK (15MHz BANDWIDTH)

Band	70	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		1695	1710			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)		1695.4357	1708.8296			
Extreme (50°C)		1695.4357	1708.8296	-7.42	-0.004	Yes
Extreme (40°C)		1695.4357	1708.8296	-5.39	-0.003	Yes
Extreme (30°C)		1695.4357	1708.8296	-6.37	-0.004	Yes
Extreme (10°C)	Normal	1695.4357	1708.8296	-6.6	-0.004	Yes
Extreme (0°C)		1695.4357	1708.8296	-5.43	-0.003	Yes
Extreme (-10°C)		1695.4357	1708.8296	-7.38	-0.004	Yes
Extreme (-20°C)		1695.4357	1708.8296	-6.37	-0.004	Yes
Extreme (-30°C)		1695.4357	1708.8296	-7.74	-0.005	Yes
20°C	15%	1695.4357	1708.8296	-5.54	-0.003	Yes
	-15%	1695.4357	1708.8296	-7.39	-0.004	Yes
	End Point Voltage	1695.4357	1708.8296	-7.07	-0.004	Yes

9.4.15. LTE BAND 71 AND 5G NR n71

LIMITS

FCC: §27.54
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	25780MW	Test Date:	2024-03-26

LTE BAND 71 QPSK (20MHz BANDWIDTH)

Band	71	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		663	698			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	664.0713	696.9242			
Extreme (50°C)		664.0713	696.9242	2.4	0.004	Yes
Extreme (40°C)		664.0713	696.9242	2.4	0.004	Yes
Extreme (30°C)		664.0713	696.9242	2.4	0.003	Yes
Extreme (10°C)		664.0713	696.9242	3.2	0.005	Yes
Extreme (0°C)		664.0713	696.9242	-3.2	-0.005	Yes
Extreme (-10°C)		664.0713	696.9242	-2.5	-0.004	Yes
Extreme (-20°C)		664.0713	696.9242	-2.6	-0.004	Yes
Extreme (-30°C)		664.0713	696.9242	2.8	0.004	Yes
20°C	15%	664.0713	696.9242	2.6	0.004	Yes
	-15%	664.0713	696.9242	3.1	0.005	Yes
	End Point Voltage	664.0713	696.9242	-2.2	-0.003	Yes

Test Engineer ID:	32061WY	Test Date:	2024-03-27

5G NR n71 BPSK (20MHz BANDWIDTH)

Band	71	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		663	698			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	663.5207	696.3622			
Extreme (50°C)		663.5207	696.3622	-4.19	-0.006	Yes
Extreme (40°C)		663.5207	696.3622	-3.52	-0.005	Yes
Extreme (30°C)		663.5207	696.3622	-3.55	-0.005	Yes
Extreme (10°C)		663.5207	696.3622	-4.18	-0.006	Yes
Extreme (0°C)		663.5207	696.3622	-3.99	-0.006	Yes
Extreme (-10°C)		663.5207	696.3622	-3.76	-0.006	Yes
Extreme (-20°C)		663.5207	696.3622	-4.87	-0.007	Yes
Extreme (-30°C)		663.5207	696.3622	-4.23	-0.006	Yes
20°C	15%	663.5207	696.3622	-3.61	-0.005	Yes
	-15%	663.5207	696.3622	-3.41	-0.005	Yes
	End Point Voltage	663.5207	696.3622	-4.41	-0.006	Yes

9.4.16. 5G NR n77 (Part 27 3450-3550MHz) HPUE

LIMITS

FCC: §27.54
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	32061WY	Test Date:	2024-03-28

5G NR n77 BPSK (100MHz BANDWIDTH)

Band	77	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		3450.01	3549.98			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	3450.7009	3548.6357			
Extreme (50°C)		3450.7009	3548.6357	6.89	0.002	Yes
Extreme (40°C)		3450.7009	3548.6357	5.65	0.002	Yes
Extreme (30°C)		3450.7009	3548.6357	3.96	0.001	Yes
Extreme (10°C)		3450.7009	3548.6357	5.11	0.001	Yes
Extreme (0°C)		3450.7009	3548.6357	6.53	0.002	Yes
Extreme (-10°C)		3450.7009	3548.6357	5.96	0.002	Yes
Extreme (-20°C)		3450.7009	3548.6357	4.48	0.001	Yes
Extreme (-30°C)		3450.7009	3548.6357	4.62	0.001	Yes
20°C	15%	3450.7009	3548.6357	6.74	0.002	Yes
	-15%	3450.7009	3548.6357	7.38	0.002	Yes
	End Point Voltage	3450.7009	3548.6357	7.1	0.002	Yes

9.4.17. 5G NR n77 (Part 27 3700-3980MHz) HPUE

LIMITS

FCC: §27.54
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Engineer ID:	32061WY	Test Date:	2024-03-28

5G NR n77 BPSK (100MHz BANDWIDTH)

Band	77	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		3700	3980			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	3700.5253	3977.9280			
Extreme (50°C)		3700.5253	3977.9280	-4.63	-0.001	Yes
Extreme (40°C)		3700.5253	3977.9280	-5.26	-0.001	Yes
Extreme (30°C)		3700.5253	3977.9280	-7.74	-0.002	Yes
Extreme (10°C)		3700.5253	3977.9280	-5.81	-0.002	Yes
Extreme (0°C)		3700.5253	3977.9280	5.5	0.001	Yes
Extreme (-10°C)		3700.5253	3977.9280	4.59	0.001	Yes
Extreme (-20°C)		3700.5253	3977.9280	8.77	0.002	Yes
Extreme (-30°C)		3700.5253	3977.9280	7.51	0.002	Yes
20°C	15%	3700.5253	3977.9280	-9.31	-0.002	Yes
	-15%	3700.5253	3977.9280	7.29	0.002	Yes
	End Point Voltage	3700.5253	3977.9280	9.96	0.003	Yes

9.5. PEAK-TO-AVERAGE POWER RATIO

LIMIT

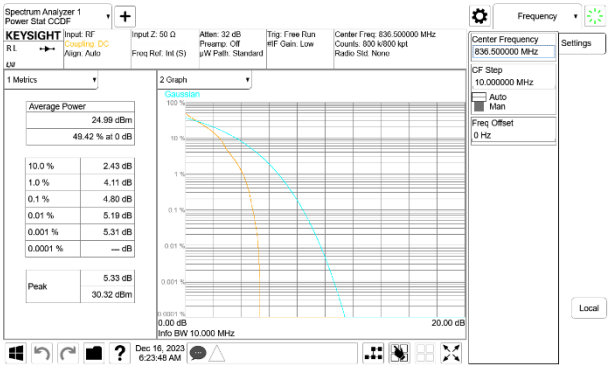
In addition, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

RESULT

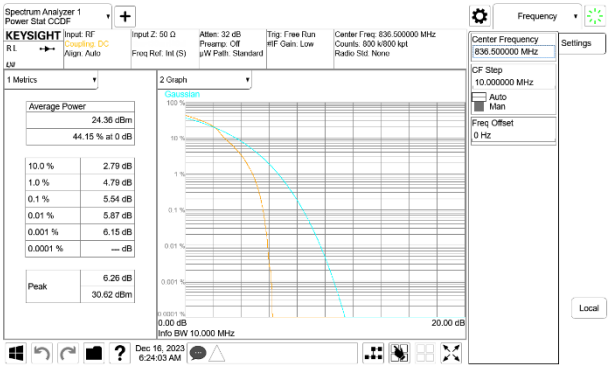
Antenna 1 was used to measure as the worst case; full resource block (FRB) for each bandwidth was used to measure as the worst case. The results from all CCDF measurements are passed with 13dB peak-to-average power ratio criteria.

9.5.1. LTE BAND 5 AND 5G NR n5

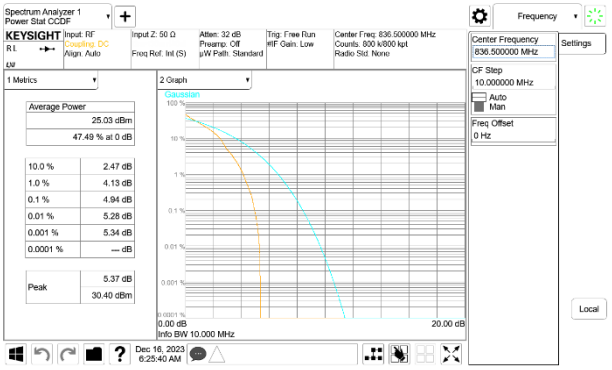
LTE BAND 5



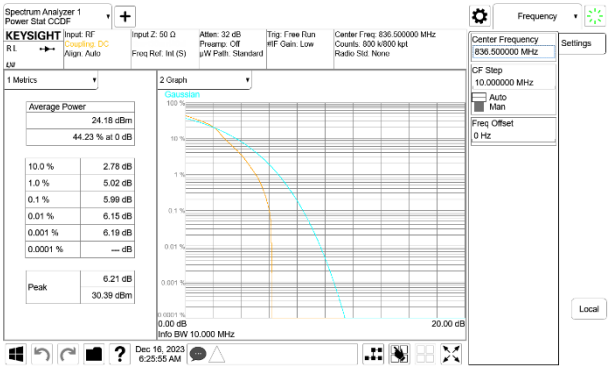
LTE B5 1.4MHz QPSK Middle Channel, ID:19210



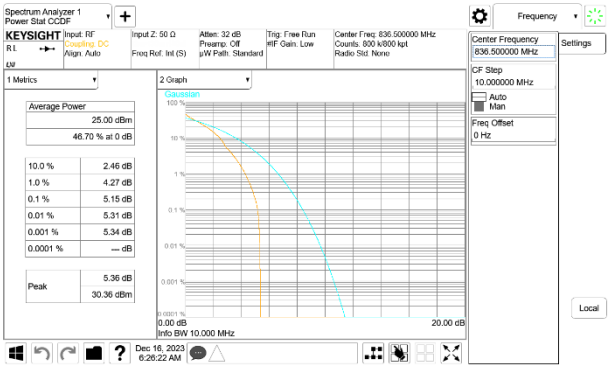
LTE B5 1.4MHz 16QAM Middle Channel, ID:19210



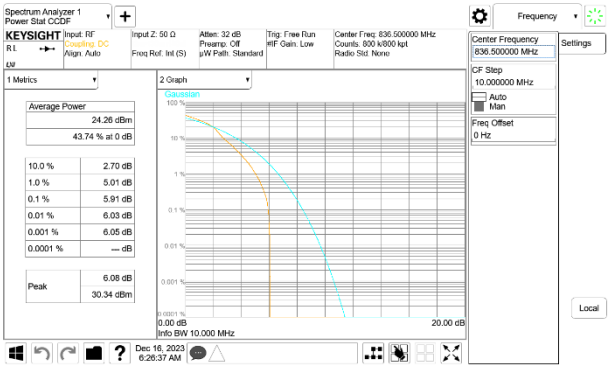
LTE B5 3MHz QPSK Middle Channel, ID:19210



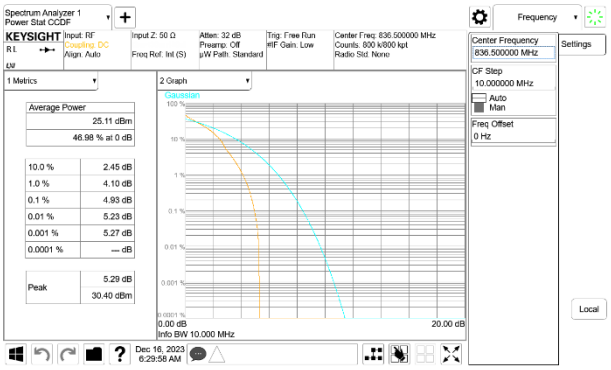
LTE B5 3MHz 16QAM Middle Channel, ID:19210



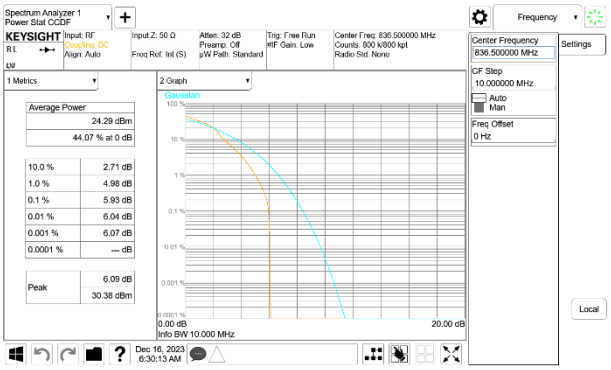
LTE B5 5MHz QPSK Middle Channel, ID:19210



LTE B5 5MHz 16QAM Middle Channel, ID:19210

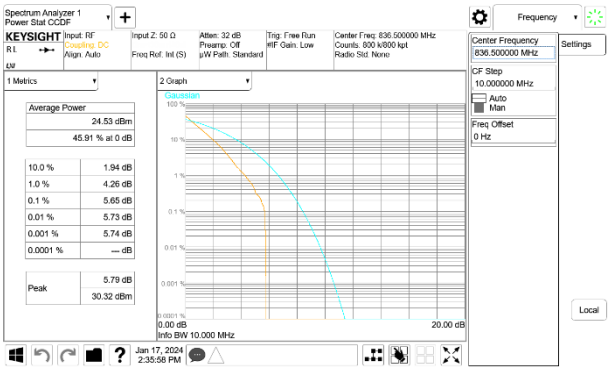


LTE B5 10MHz QPSK Middle Channel, ID:19210

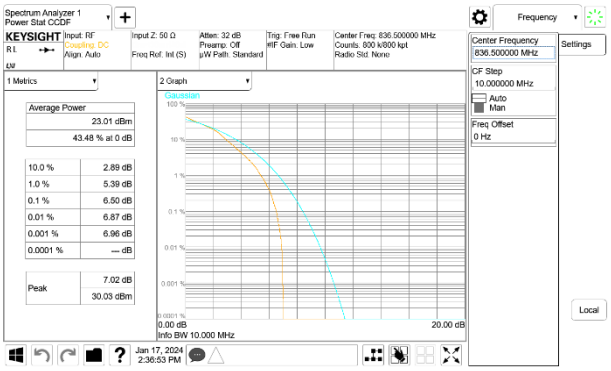


LTE B5 10MHz 16QAM Middle Channel, ID:19210

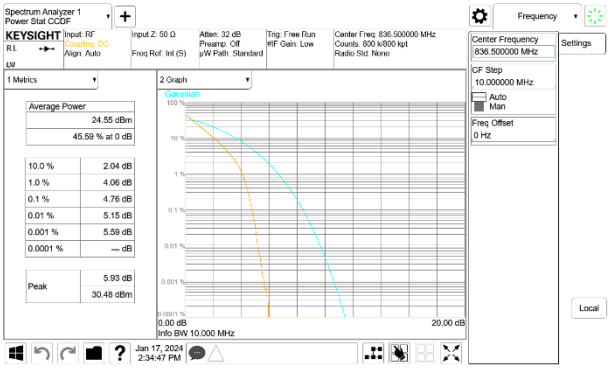
5G NR n5



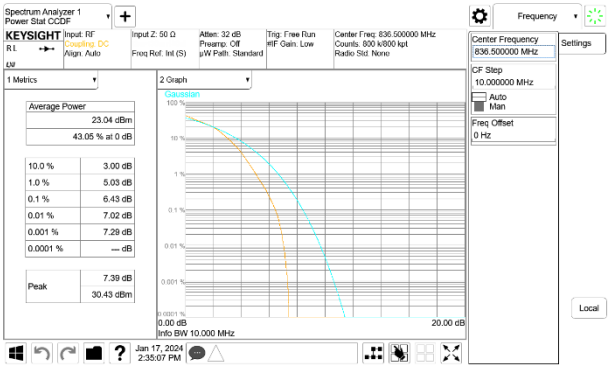
5G NR n5 5MHz BPSK Middle Channel, ID:50822



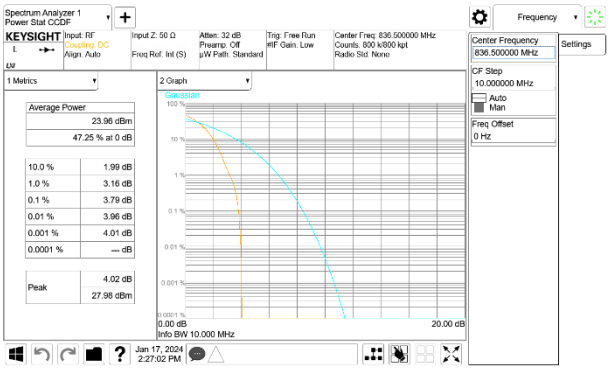
5G NR n5 5MHz 16QAM Middle Channel, ID:50822



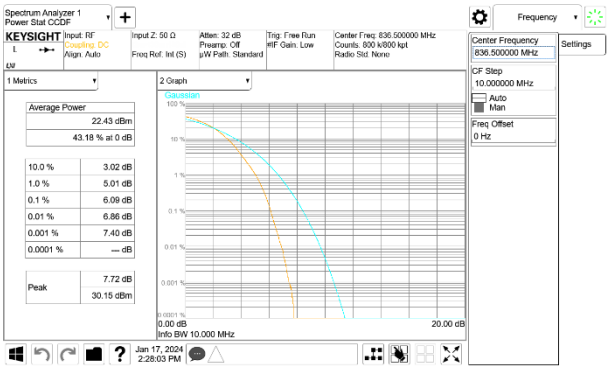
5G NR n5 10MHz BPSK Middle Channel, ID:50822



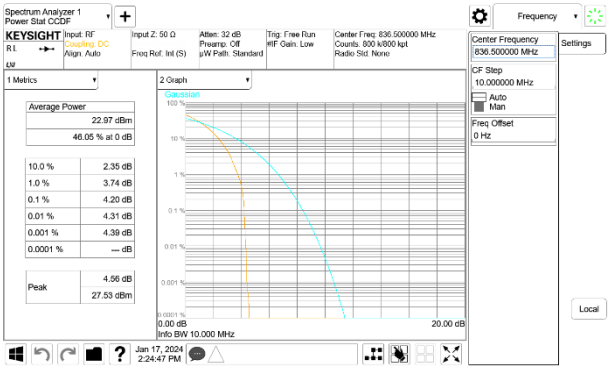
5G NR n5 10MHz 16QAM Middle Channel, ID:50822



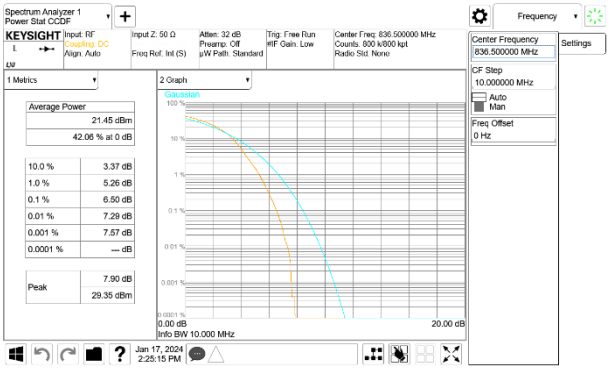
5G NR n5 15MHz BPSK Middle Channel, ID:50822



5G NR n5 15MHz 16QAM Middle Channel, ID:50822



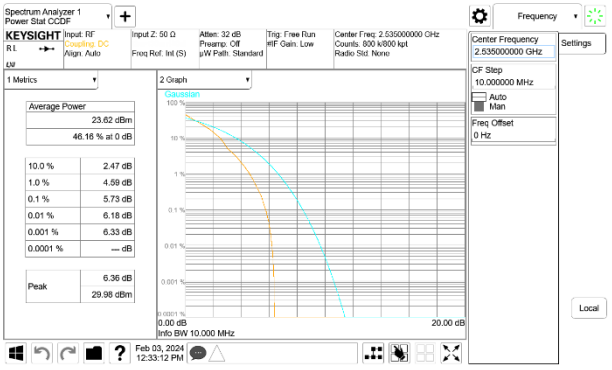
5G NR n5 20MHz BPSK Middle Channel, ID:50822



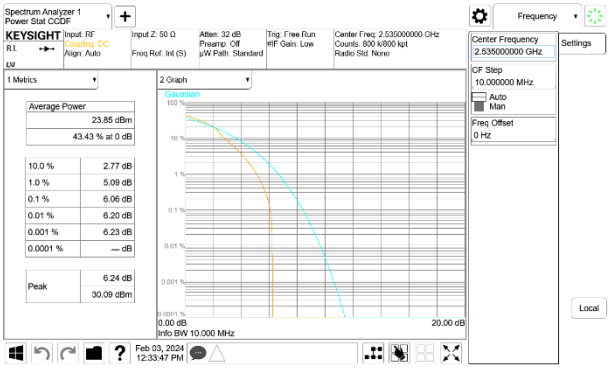
5G NR n5 20MHz 16QAM Middle Channel, ID:50822

9.5.2. LTE BAND 7 AND 5G NR n7

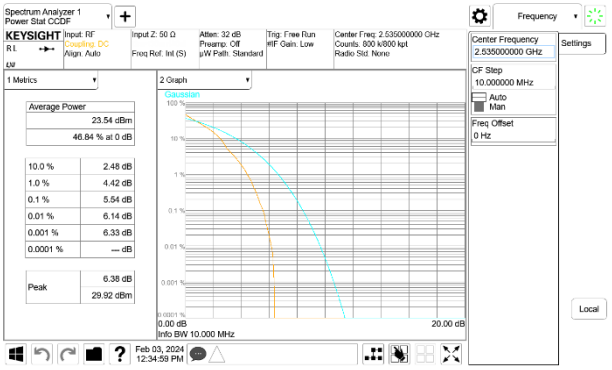
LTE BAND 7



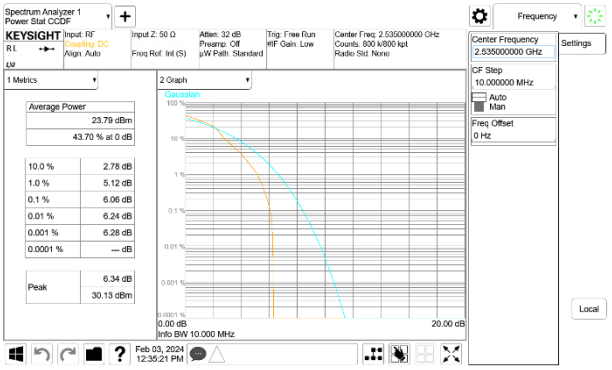
LTE B7 5MHz QPSK Middle Channel, ID:39005



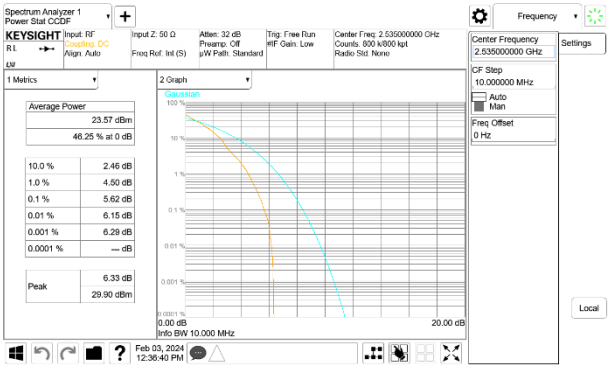
LTE B7 5MHz 16QAM Middle Channel, ID:39005



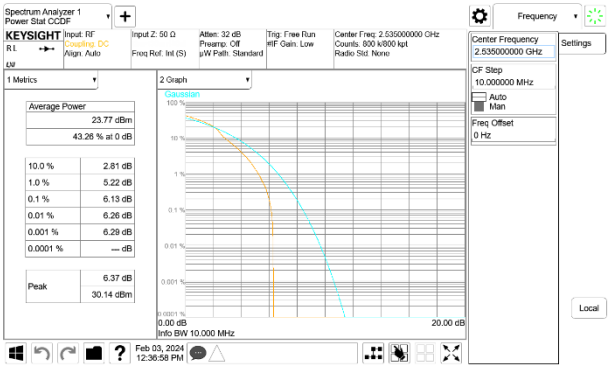
LTE B7 10MHz QPSK Middle Channel, ID:39005



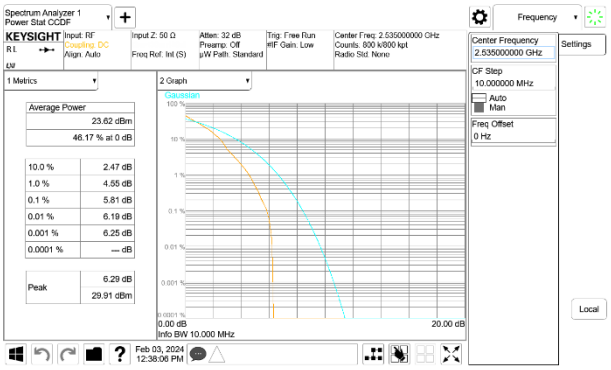
LTE B7 10MHz 16QAM Middle Channel, ID:39005



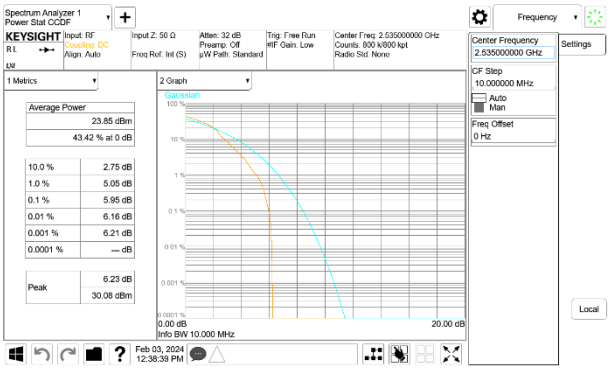
LTE B7 15MHz QPSK Middle Channel, ID:39005



LTE B7 15MHz 16QAM Middle Channel, ID:39005

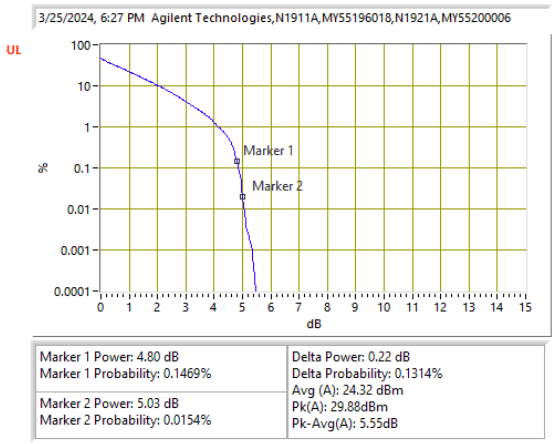


LTE B7 20MHz QPSK Middle Channel, ID:39005

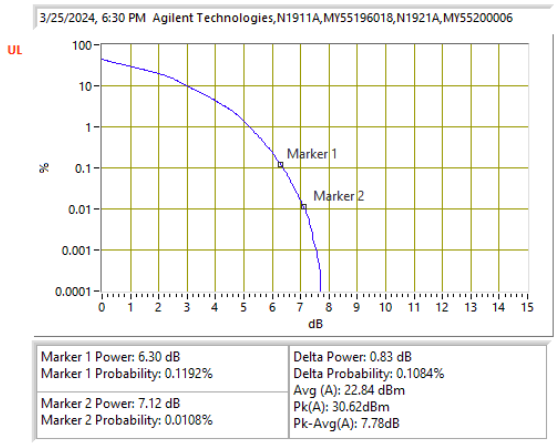


LTE B7 20MHz 16QAM Middle Channel, ID:39005

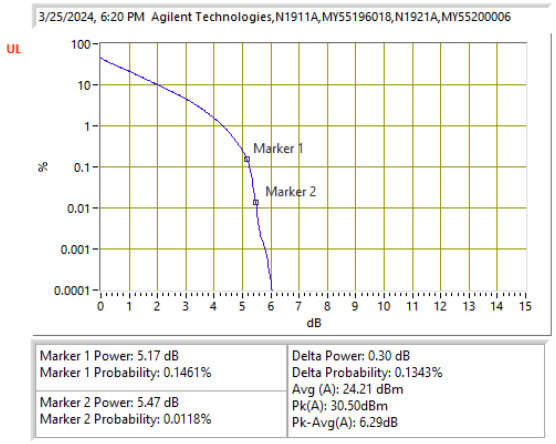
5G NR n7



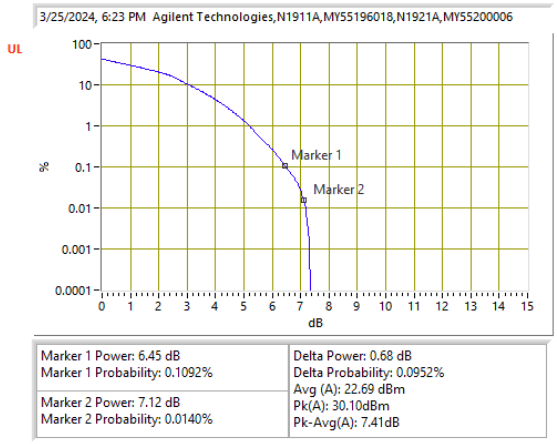
5G NR n7 5MHz BPSK Middle Channel, ID:50822



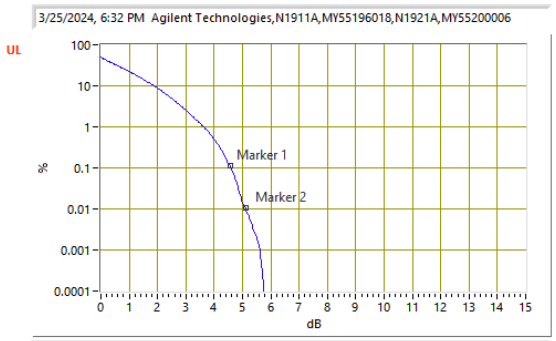
5G NR n7 5MHz 16QAM Middle Channel, ID:50822



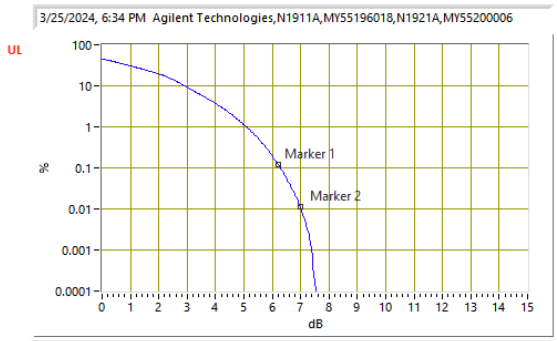
5G NR n7 10MHz BPSK Middle Channel, ID:50822



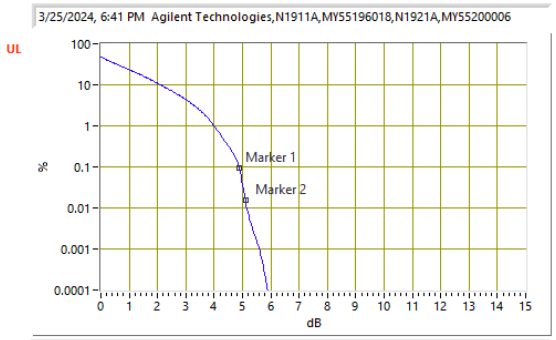
5G NR n7 10MHz 16QAM Middle Channel, ID:50822



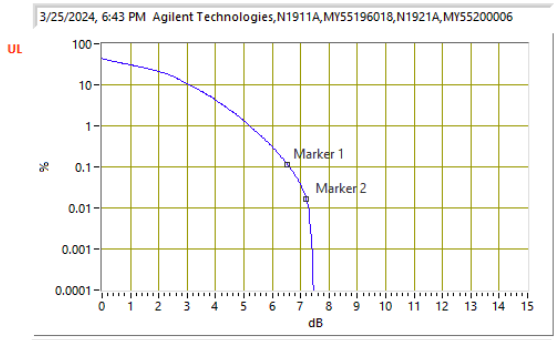
5G NR n7 15MHz BPSK Middle Channel, ID:50822



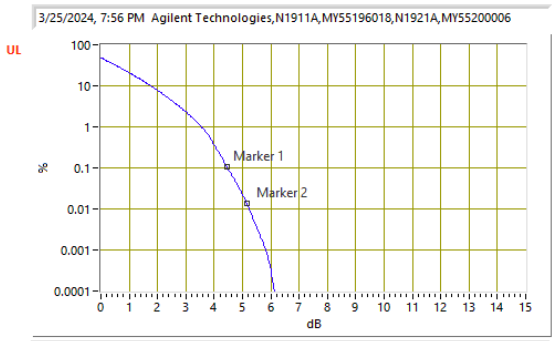
5G NR n7 15MHz 16QAM Middle Channel, ID:50822



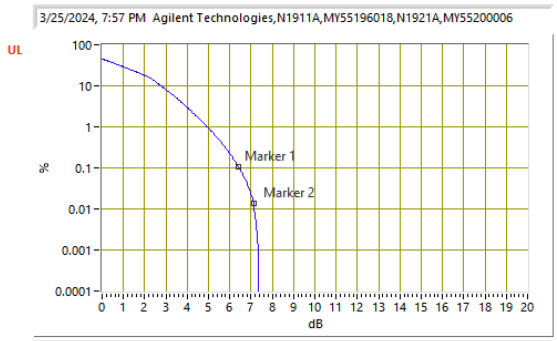
5G NR n7 20MHz BPSK Middle Channel, ID:50822



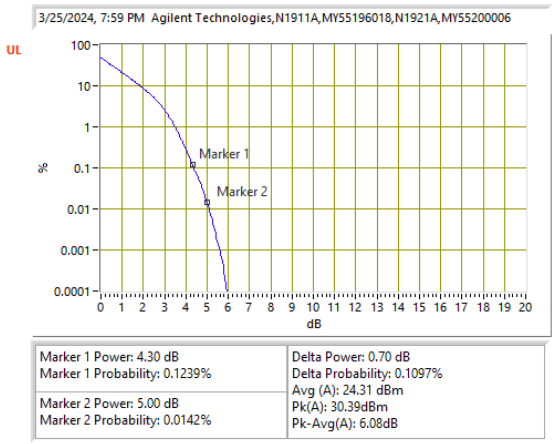
5G NR n7 20MHz 16QAM Middle Channel, ID:50822



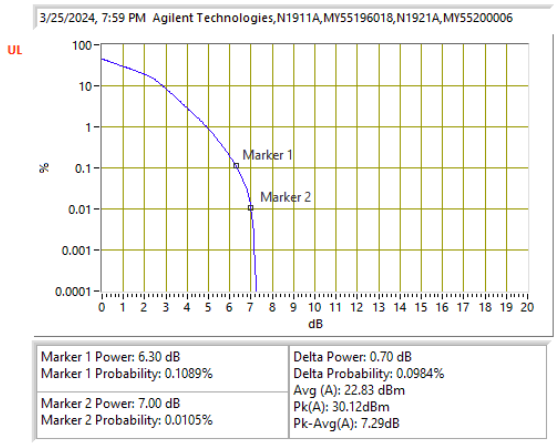
5G NR n7 25MHz BPSK Middle Channel, ID:50822



5G NR n7 25MHz 16QAM Middle Channel, ID:50822



5G NR n7 30MHz BPSK Middle Channel, ID:50822



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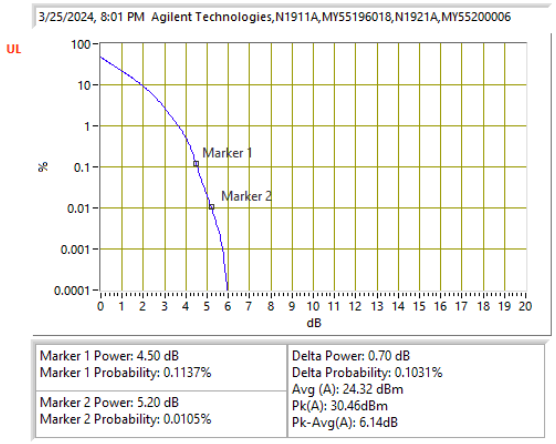

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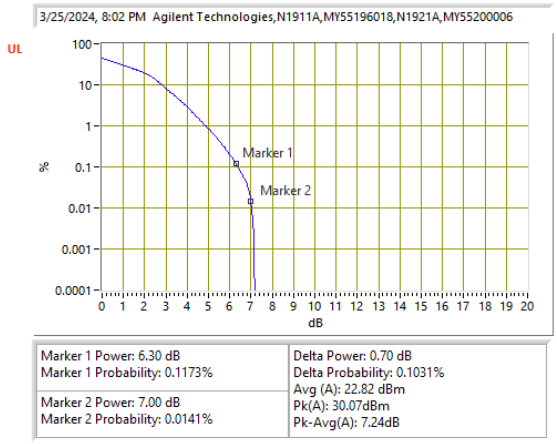

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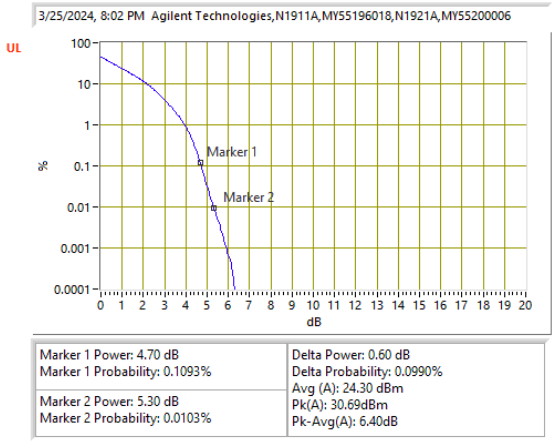
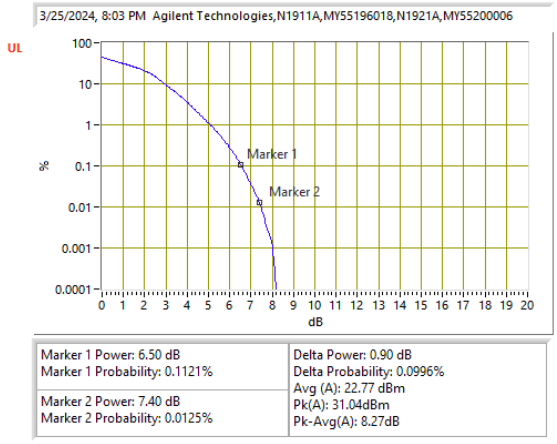
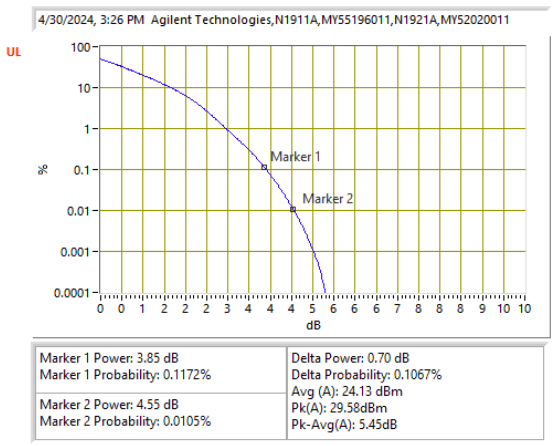


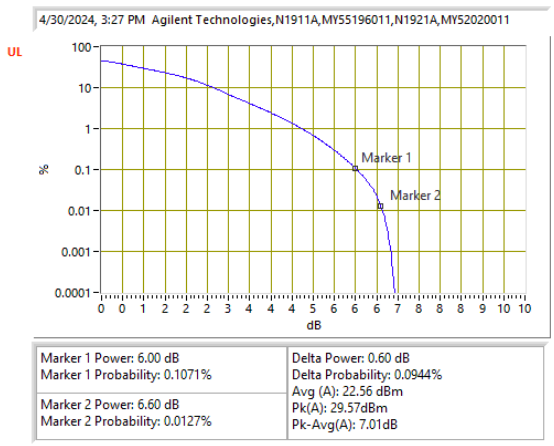
5G NR n7 40MHz BPSK Middle Channel, ID:50822



5G NR n7 40MHz 16QAM Middle Channel, ID:50822



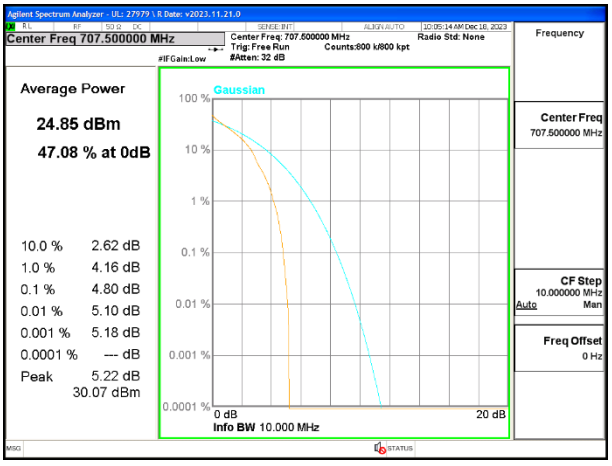
5G NR n7 50MHz BPSK Middle Channel, ID:28498



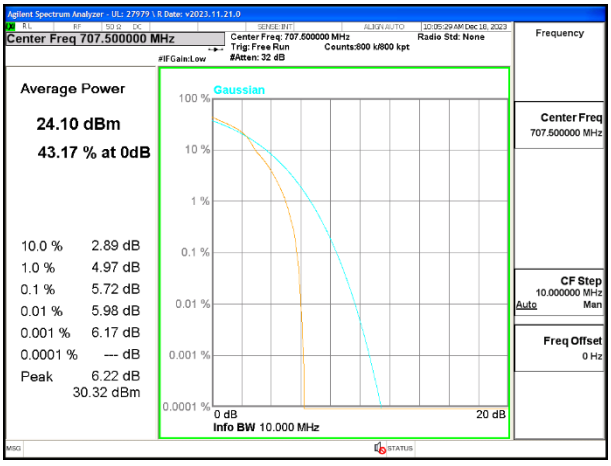
5G NR n7 50MHz 16QAM Middle Channel, ID:28498

9.5.3. LTE BAND 12 AND 5G NR n12

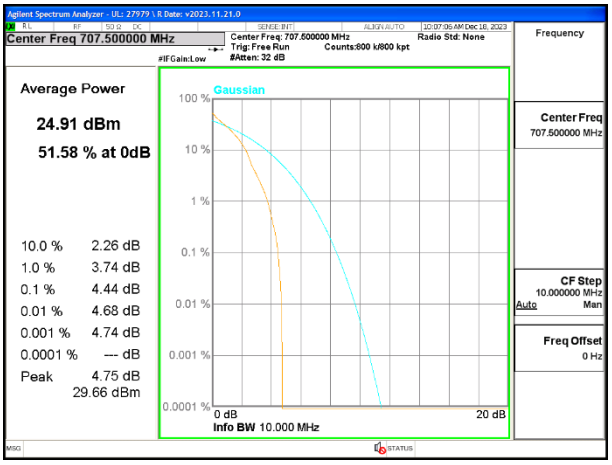
LTE BAND 12



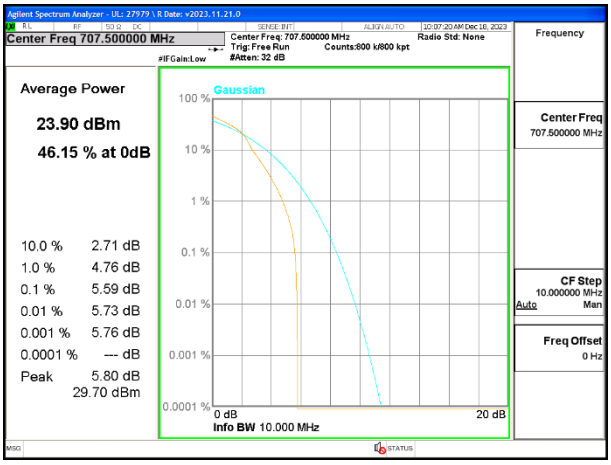
LTE B12 1.4MHz QPSK Middle Channel



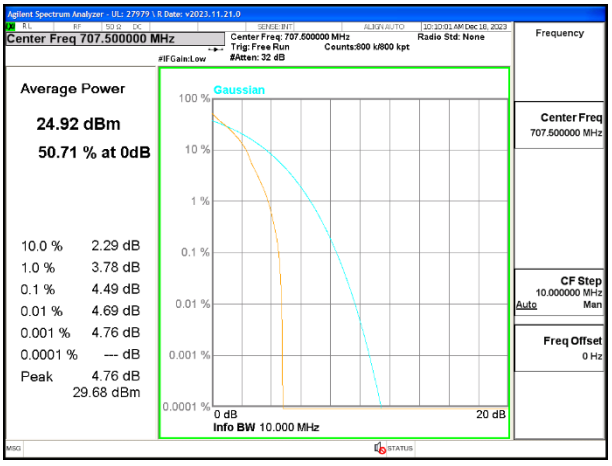
LTE B12 1.4MHz 16QAM Middle Channel



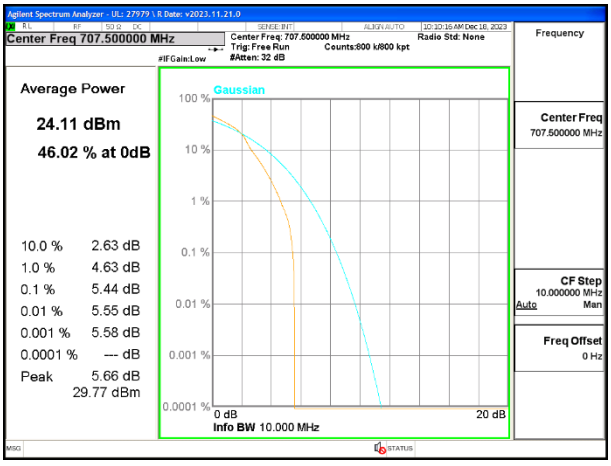
LTE B12 3MHz QPSK Middle Channel



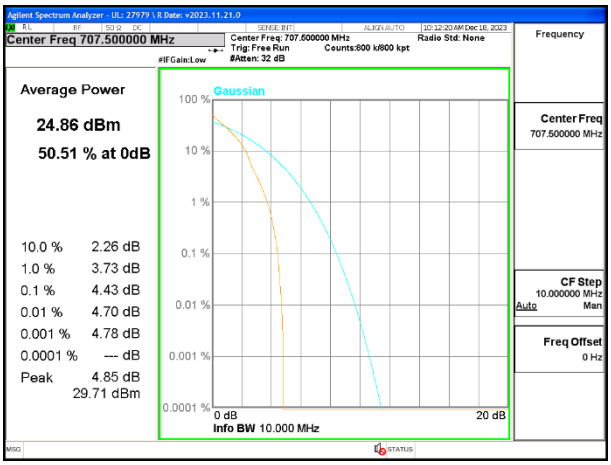
LTE B12 3MHz 16QAM Middle Channel



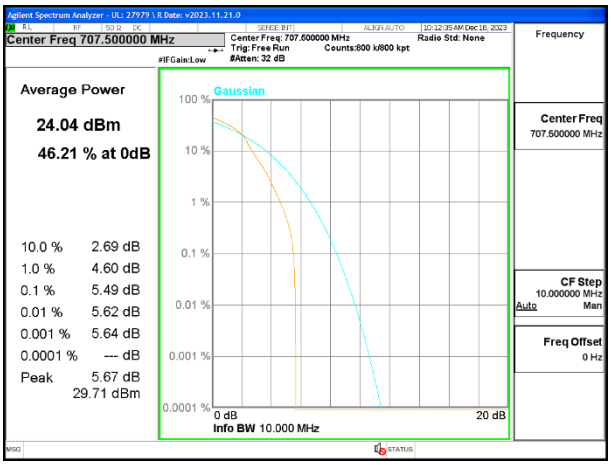
LTE B12 5MHz QPSK Middle Channel



LTE B12 5MHz 16QAM Middle Channel

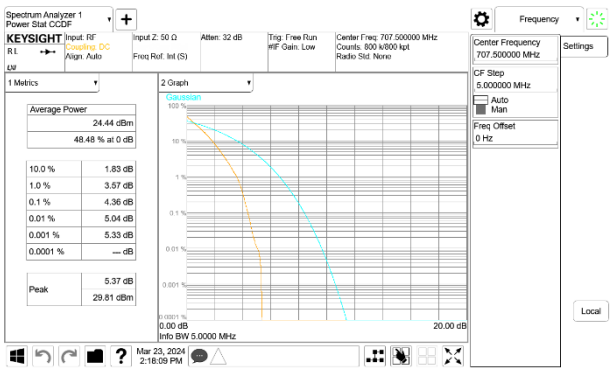


LTE B12 10MHz QPSK Middle Channel

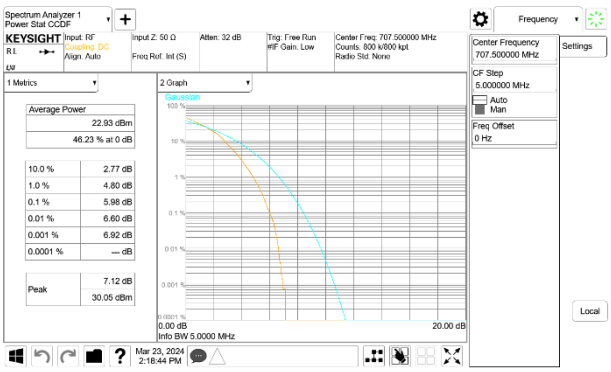


LTE B12 10MHz 16QAM Middle Channel

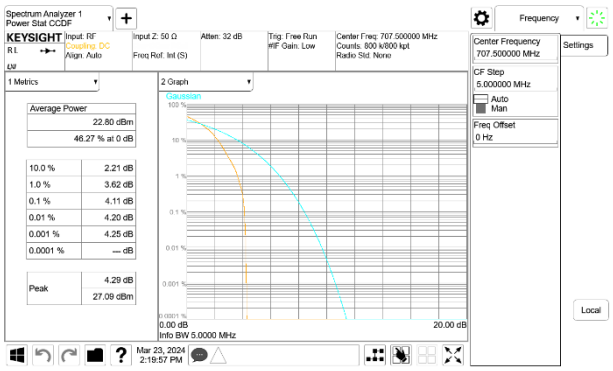
5G NR n12



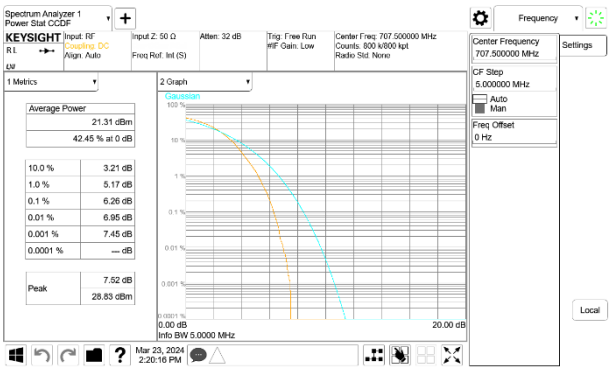
5G NR n12 5MHz BPSK Middle Channel, ID:50822



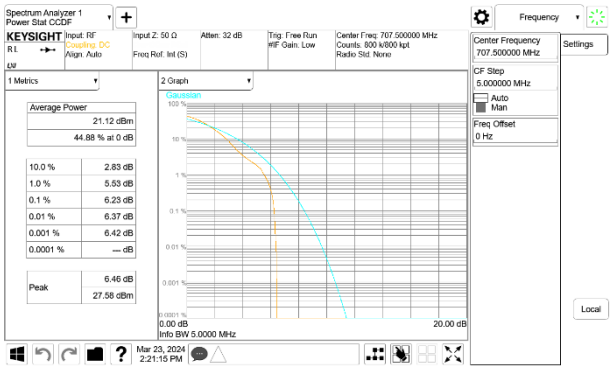
5G NR n12 5MHz 16QAM Middle Channel, ID:50822



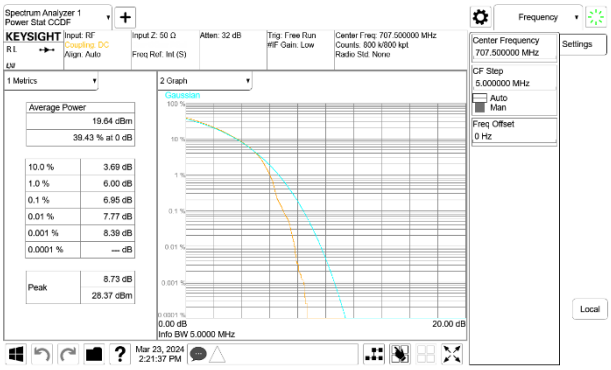
5G NR n12 10MHz BPSK Middle Channel, ID:50822



5G NR n12 10MHz 16QAM Middle Channel, ID:50822

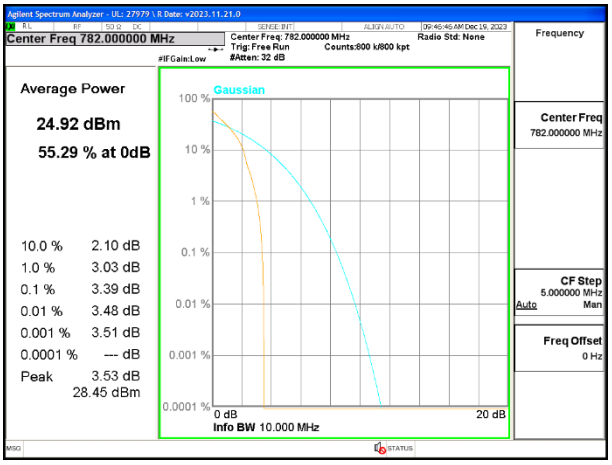


5G NR n12 15MHz BPSK Middle Channel, ID:50822

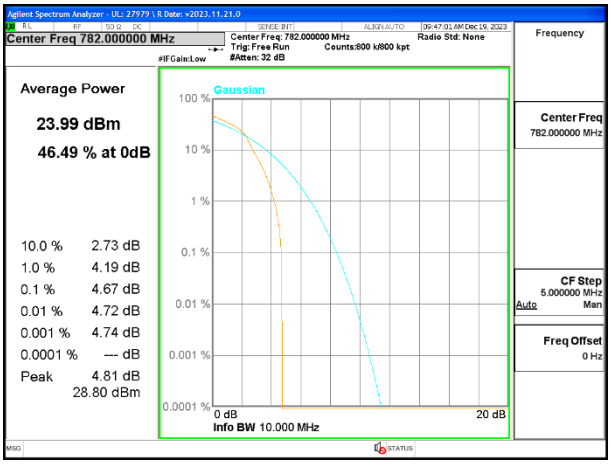


5G NR n12 15MHz 16QAM Middle Channel, ID:50822

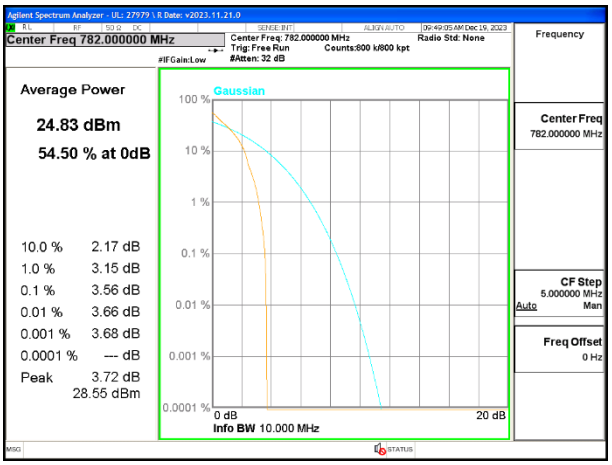
9.5.4. LTE BAND 13



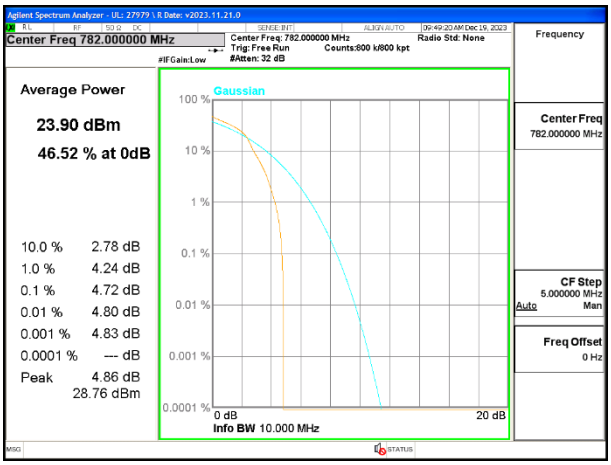
LTE B13 5MHz QPSK Middle Channel



LTE B13 5MHz 16QAM Middle Channel



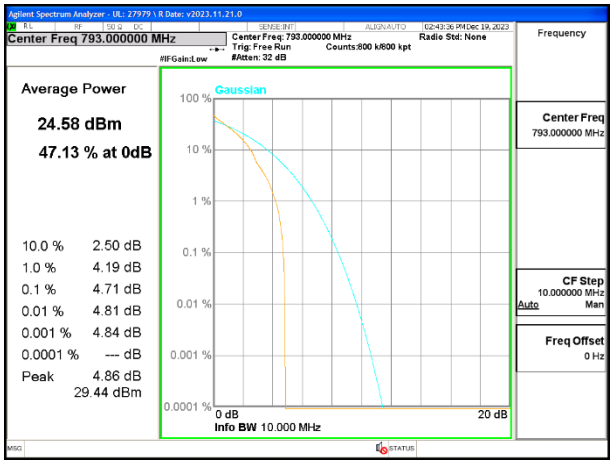
LTE B13 10MHz QPSK Middle Channel



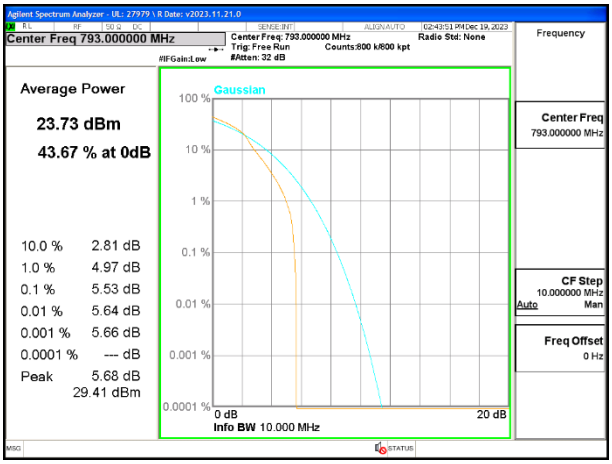
LTE B13 10MHz 16QAM Middle Channel

9.5.5. LTE BAND 14 AND 5G NR n14

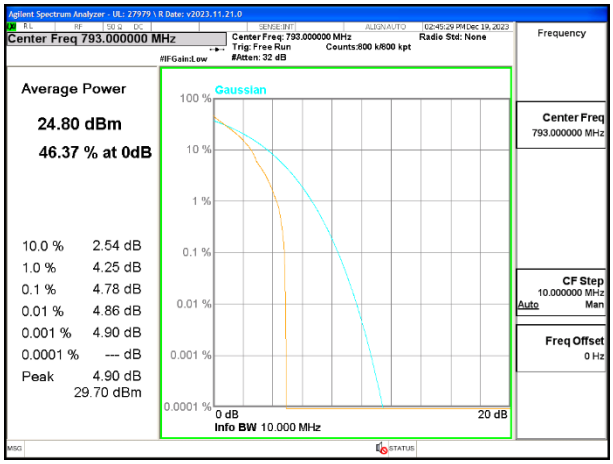
LTE BAND 14



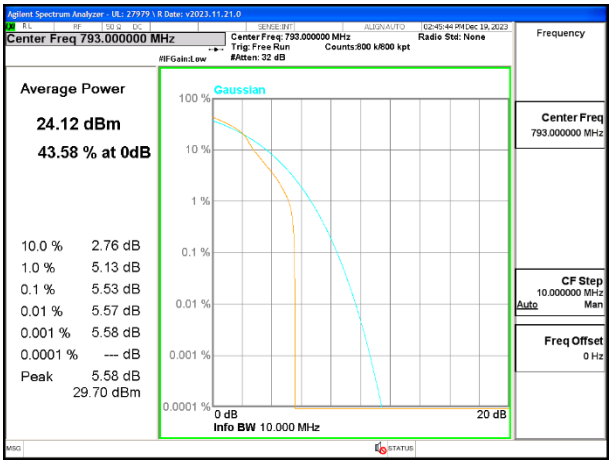
LTE B14 5MHz QPSK Middle Channel



LTE B14 5MHz 16QAM Middle Channel

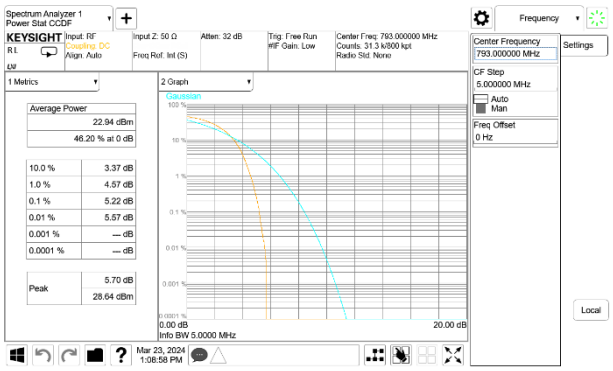


LTE B14 10MHz QPSK Middle Channel

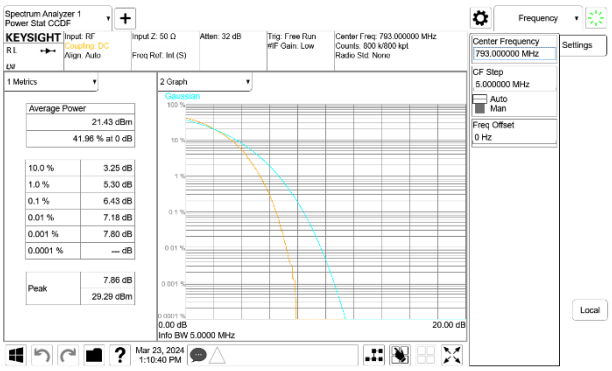


LTE B14 10MHz 16QAM Middle Channel

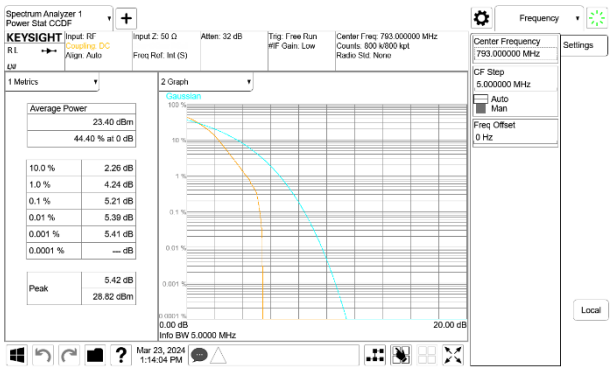
5G NR n14



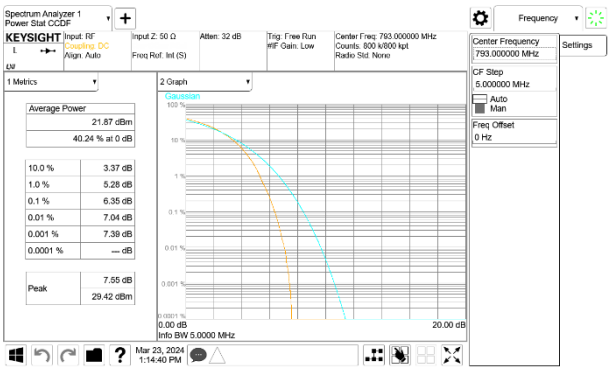
5G NR n14 5MHz BPSK Middle Channel, ID:50822



5G NR n14 5MHz 16QAM Middle Channel, ID:50822

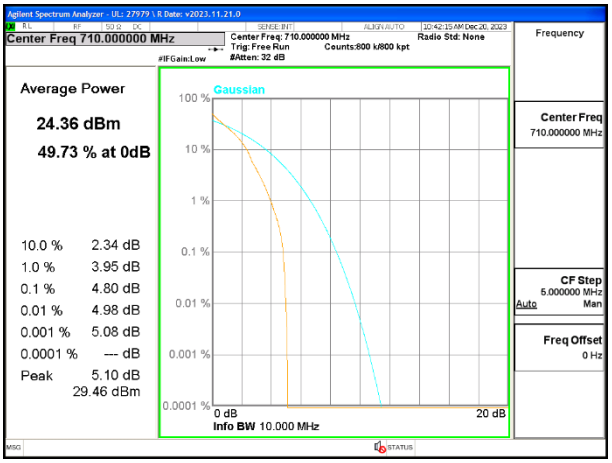


5G NR n14 10MHz BPSK Middle Channel, ID:50822

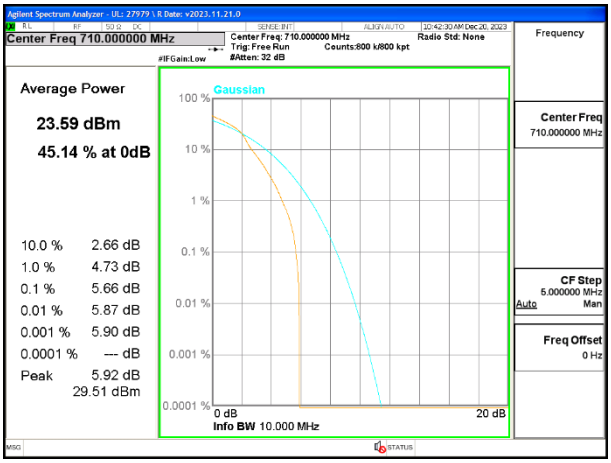


5G NR n14 10MHz 16QAM Middle Channel, ID:50822

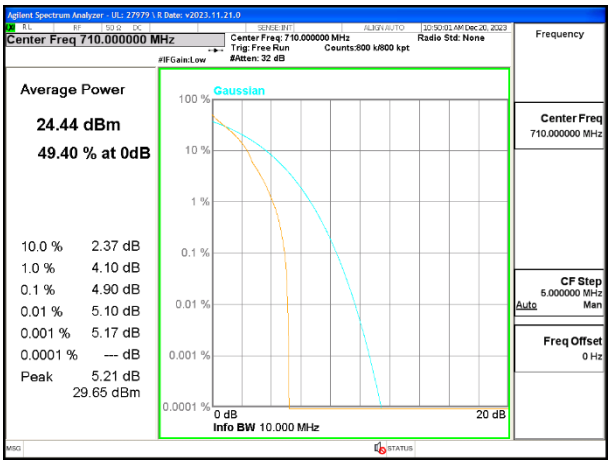
9.5.6. LTE BAND 17



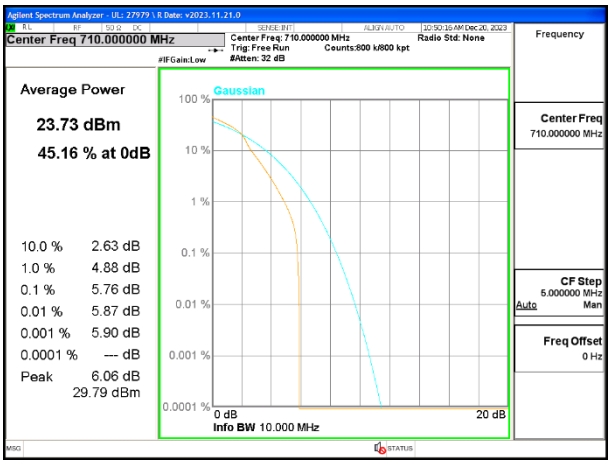
LTE B17 5MHz QPSK Middle Channel



LTE B17 5MHz 16QAM Middle Channel



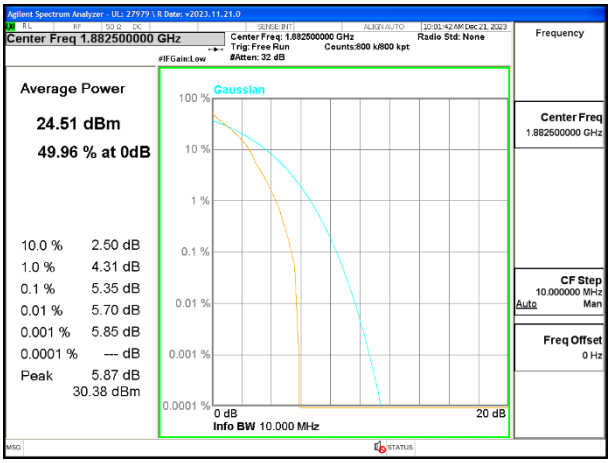
LTE B17 10MHz QPSK Middle Channel



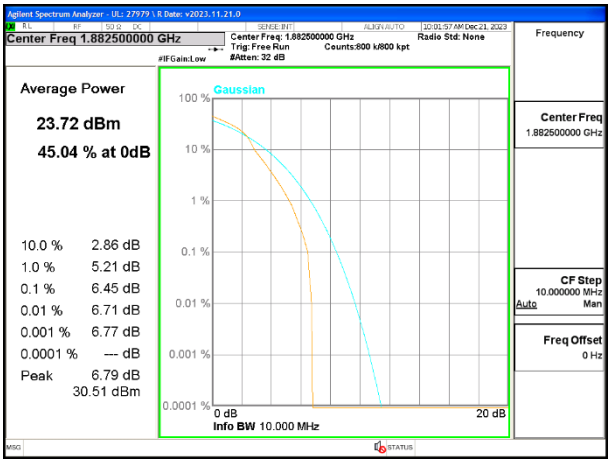
LTE B17 10MHz 16QAM Middle Channel

9.5.7. LTE BAND 25 AND 5G NR n25

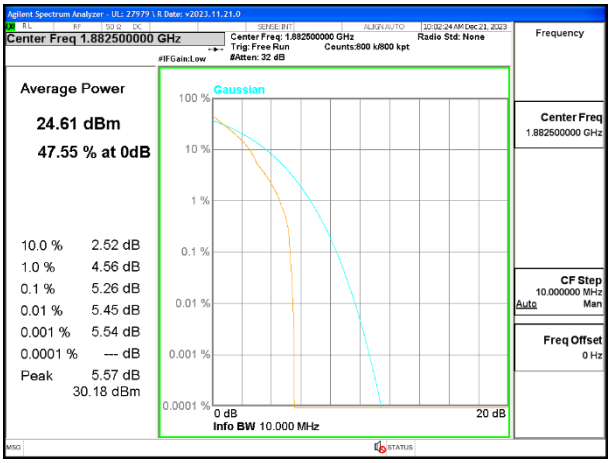
LTE BAND 25



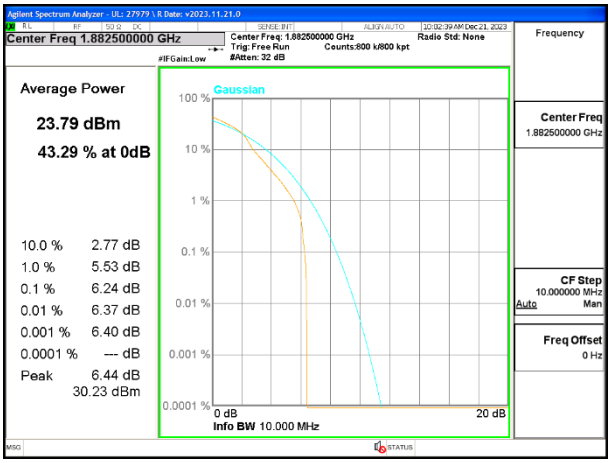
LTE B25 1.4MHz QPSK Middle Channel



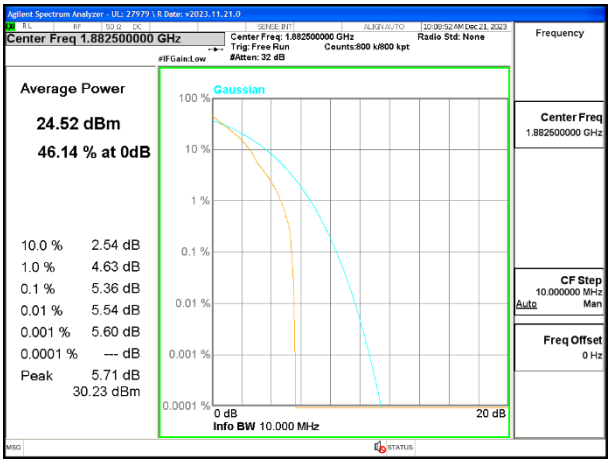
LTE B25 1.4MHz 16QAM Middle Channel



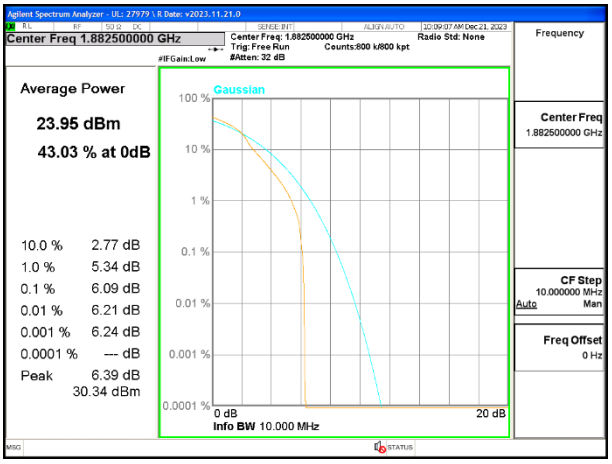
LTE B25 3MHz QPSK Middle Channel



LTE B25 3MHz 16QAM Middle Channel



LTE B2 5MHz QPSK Middle Channel



LTE B2 5MHz 16QAM Middle Channel