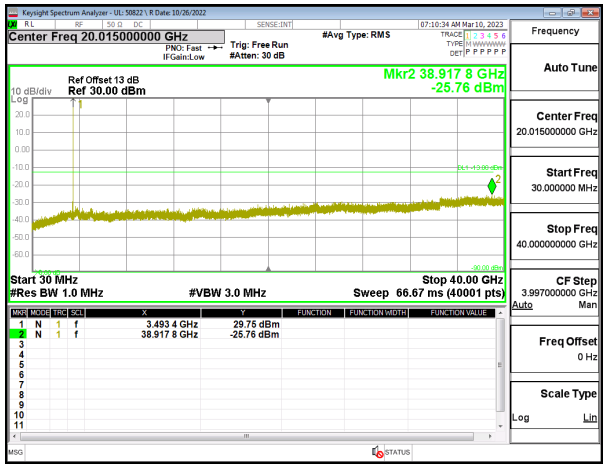
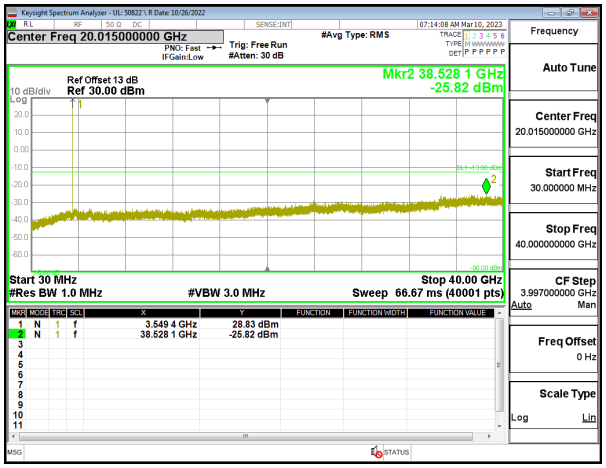
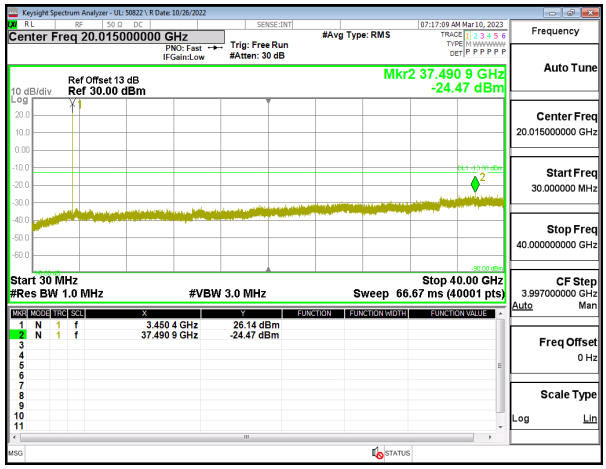


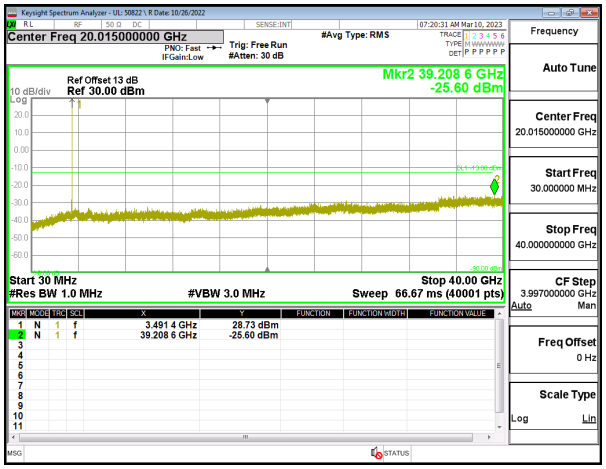
5G NR n77 15MHz BPSK Middle Channel RB1-1



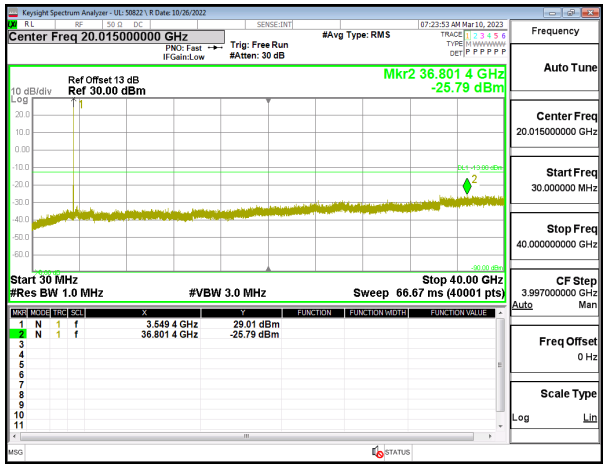
5G NR n77 15MHz BPSK High Channel RB1-37



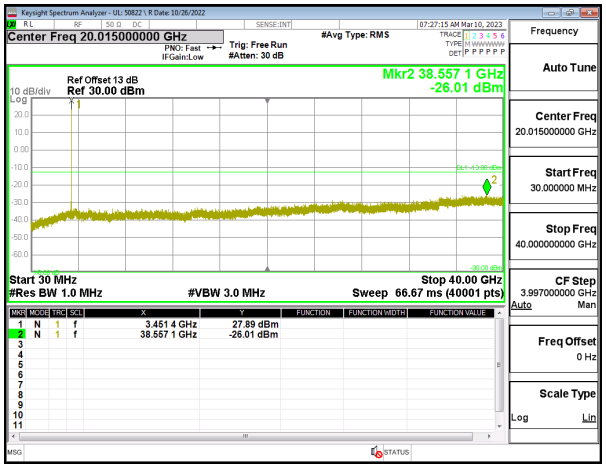
5G NR n77 20MHz BPSK Low Channel RB1-0



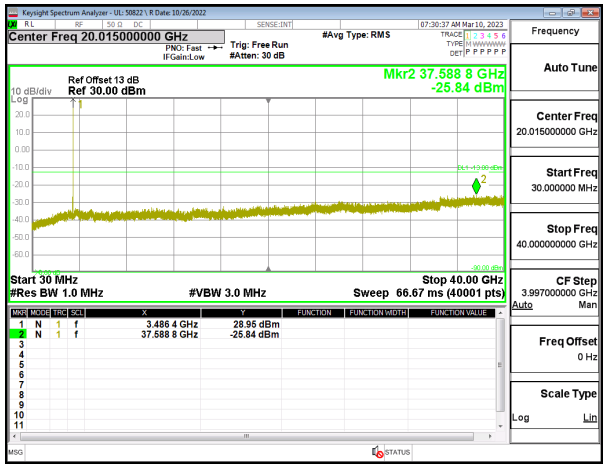
5G NR n77 20MHz BPSK Middle Channel RB1-1



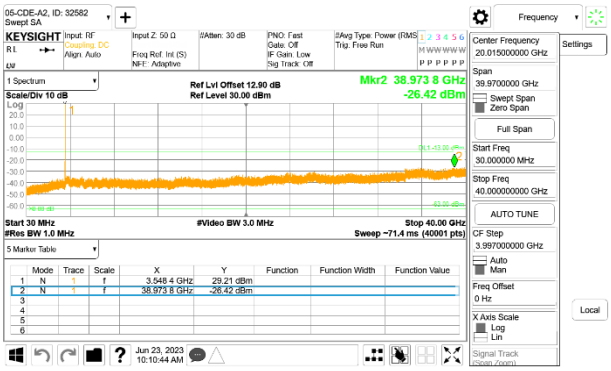
5G NR n77 20MHz BPSK High Channel RB1-50



5G NR n77 30MHz BPSK Low Channel RB1-0

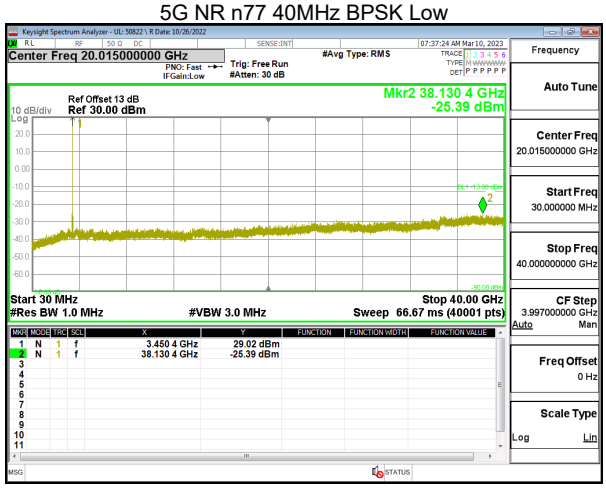


5G NR n77 30MHz BPSK Middle Channel RB1-1

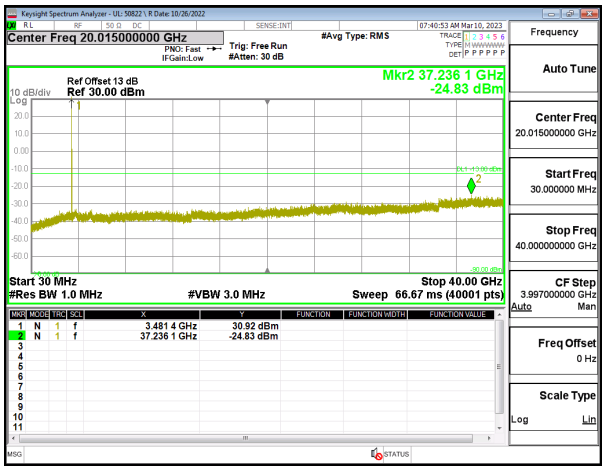


5G NR n77 30MHz BPSK High Channel RB1-77

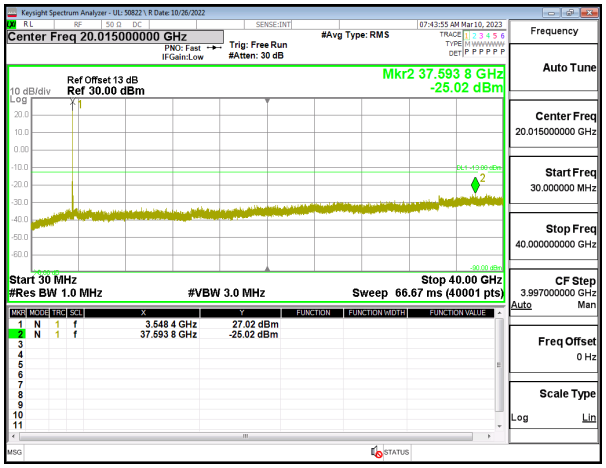
5G NR n77 40MHz BPSK Low



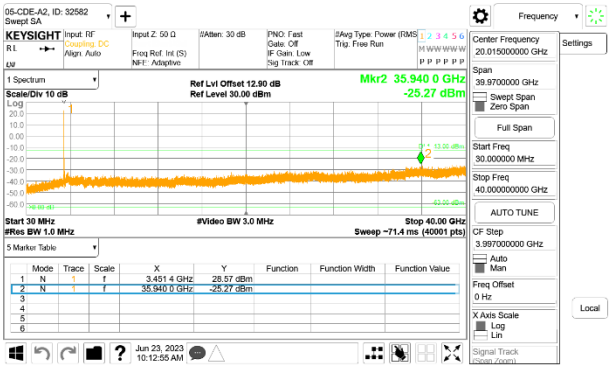
Channel RB1-0



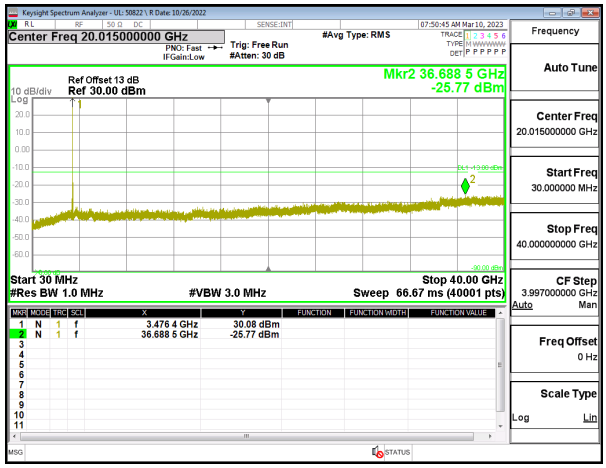
5G NR n77 40MHz BPSK Middle Channel RB1-1



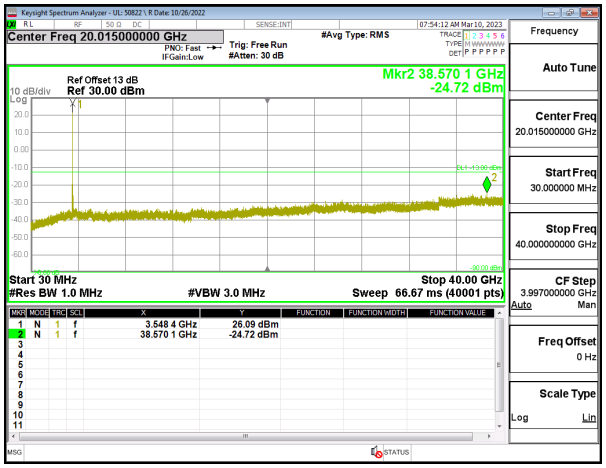
5G NR n77 40MHz BPSK High Channel RB1-105



5G NR n77 50MHz BPSK Low Channel RB1-0



5G NR n77 50MHz BPSK Middle Channel RB1-1



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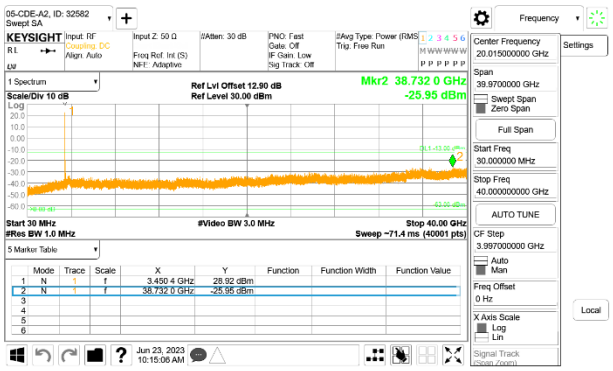

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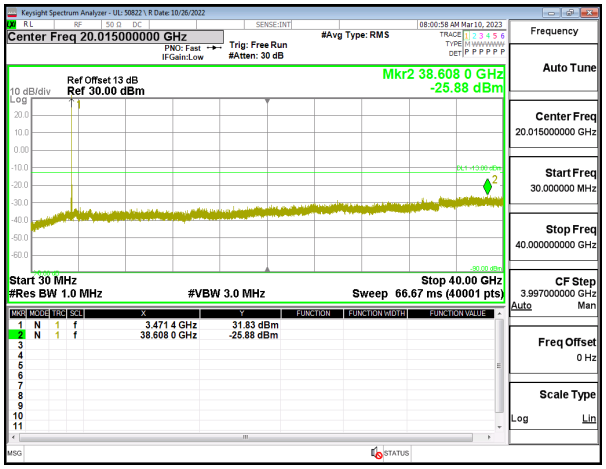
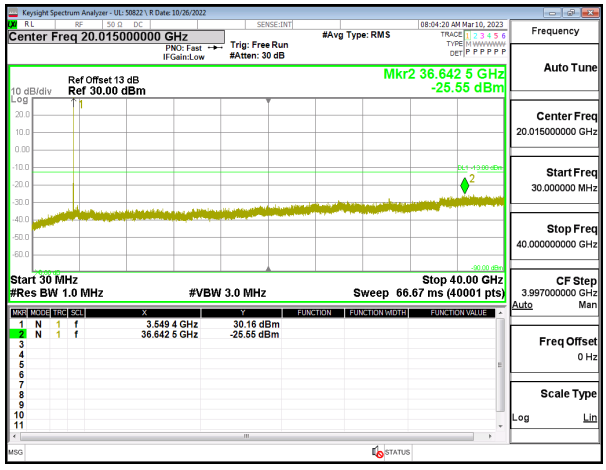
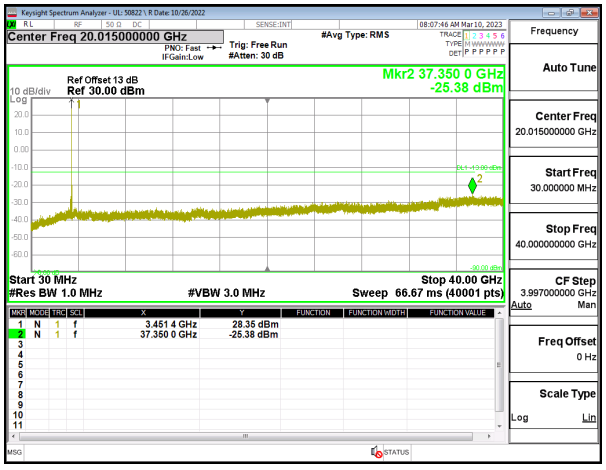


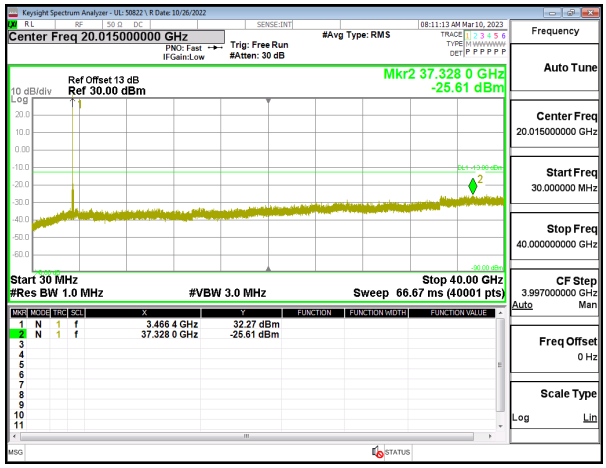
5G NR n77 60MHz BPSK Middle Channel RB1-1



5G NR n77 60MHz BPSK High Channel RB1-161



5G NR n77 70MHz BPSK Low Channel RB1-0



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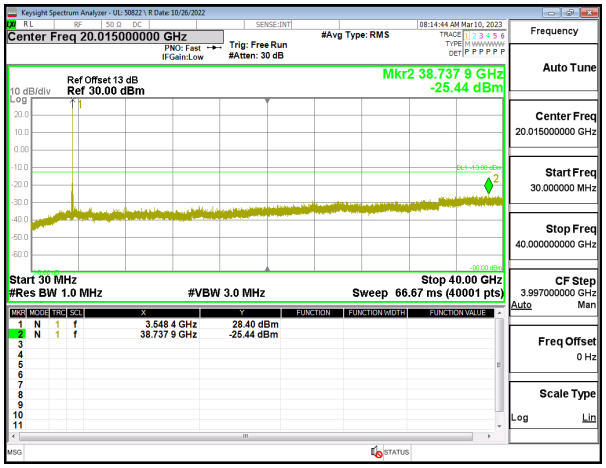

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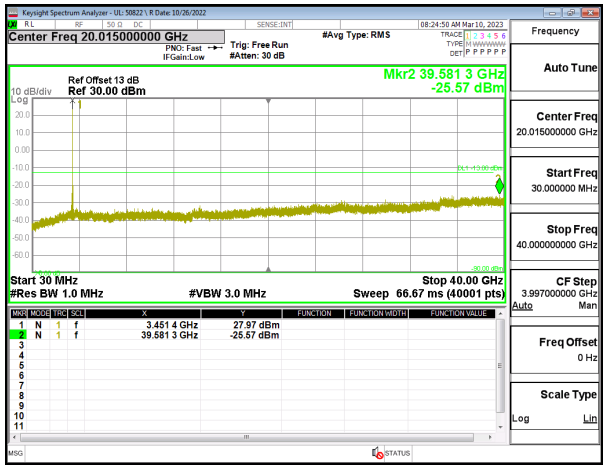
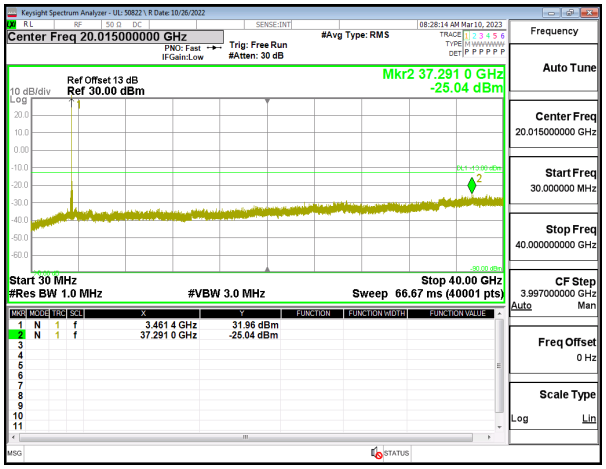
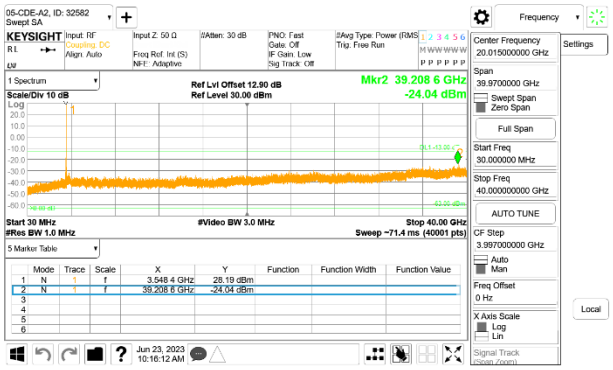


5G NR n77 80MHz BPSK Low Channel RB1-0



5G NR n77 80MHz BPSK Middle Channel RB1-1



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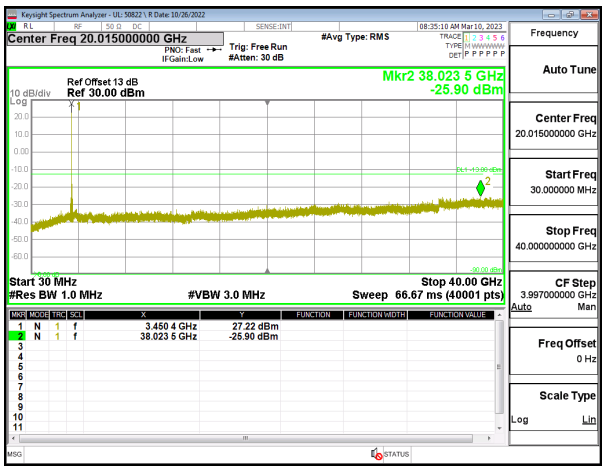
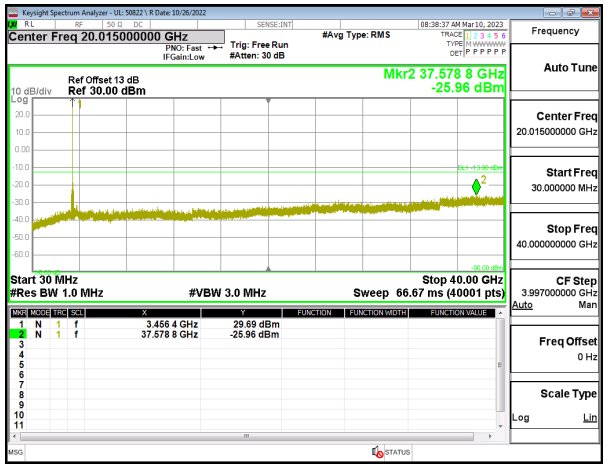
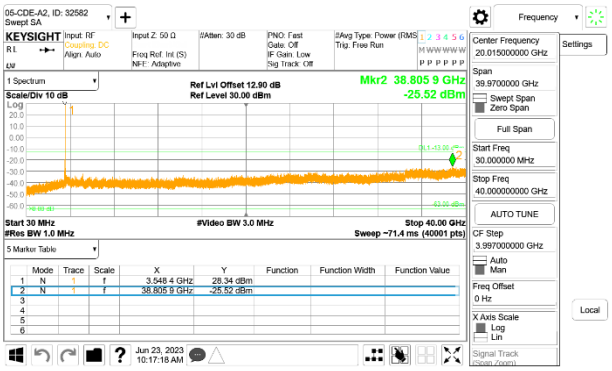


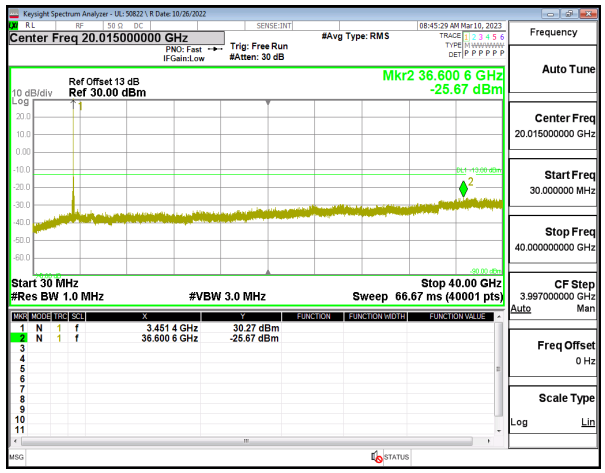
5G NR n77 90MHz BPSK Low Channel RB1-0



5G NR n77 90MHz BPSK Middle Channel RB1-1



5G NR n77 90MHz BPSK High Channel RB1-244



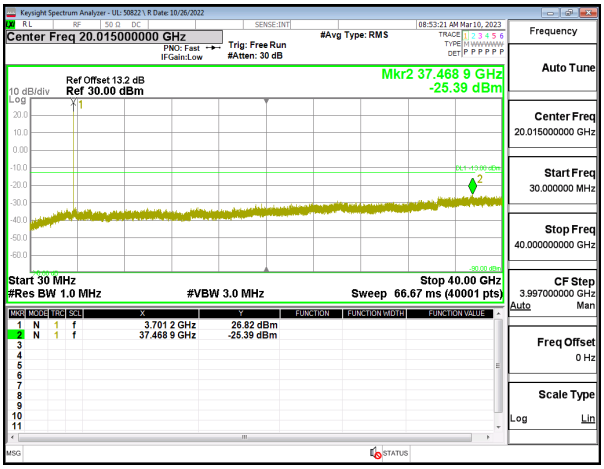
5G NR n77 100MHz BPSK Middle Channel RB1-1

Intentionally Blank

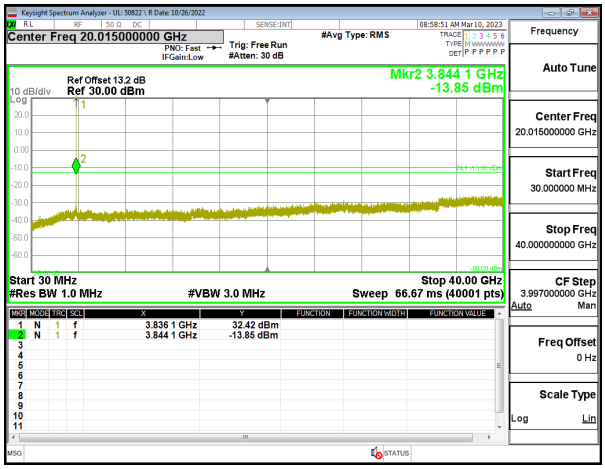
9.3.16. 5G NR n77 (Part 27 3700-3980MHz)

LIMITS

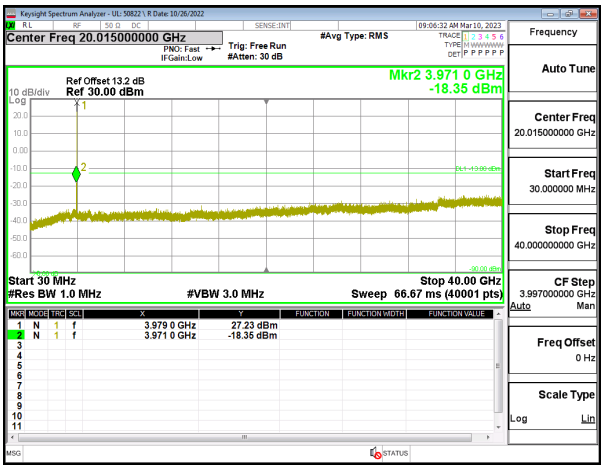
FCC: §27.53
Emission limits
(l) 3.7 GHz Service. The following emission limits apply to stations transmitting in the 3700-3980 MHz band:
(2) For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.



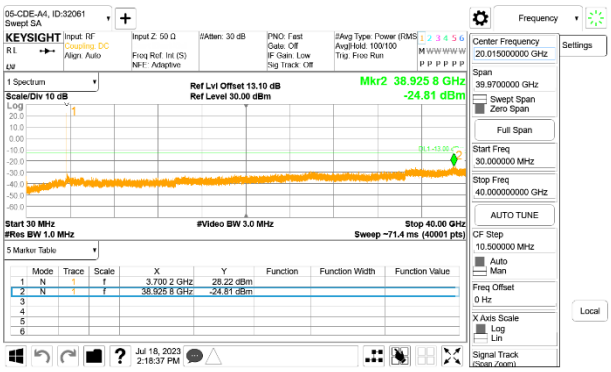
5G NR n77 10MHz BPSK Low Channel RB1-0



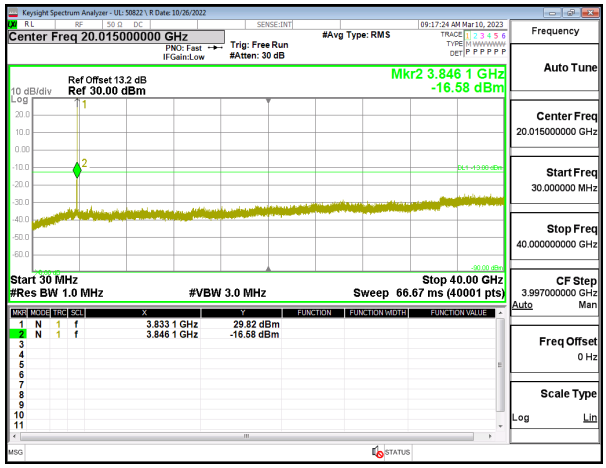
5G NR n77 10MHz BPSK Middle Channel RB1-1



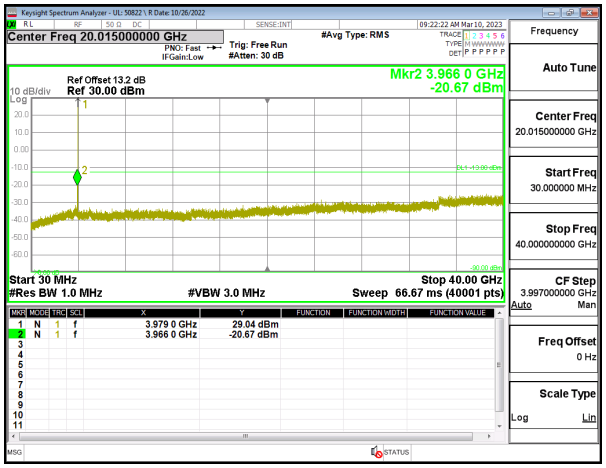
5G NR n77 10MHz BPSK High Channel RB1-23



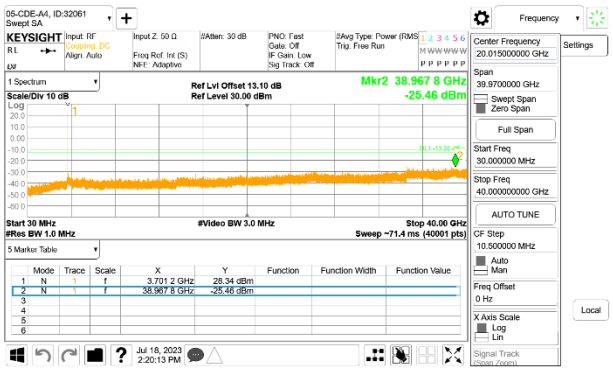
5G NR n77 15MHz BPSK Low Channel RB1-0



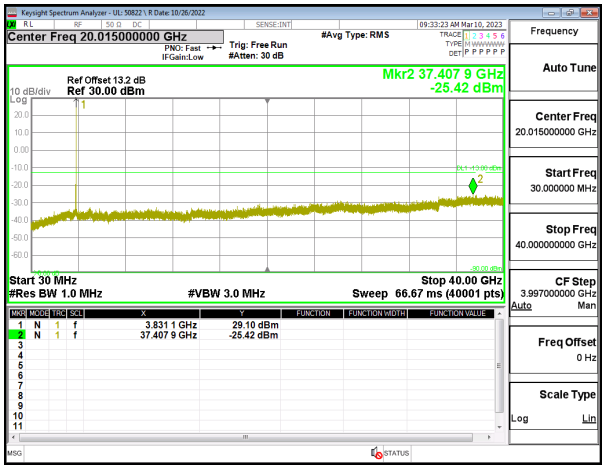
5G NR n77 15MHz BPSK Middle Channel RB1-1



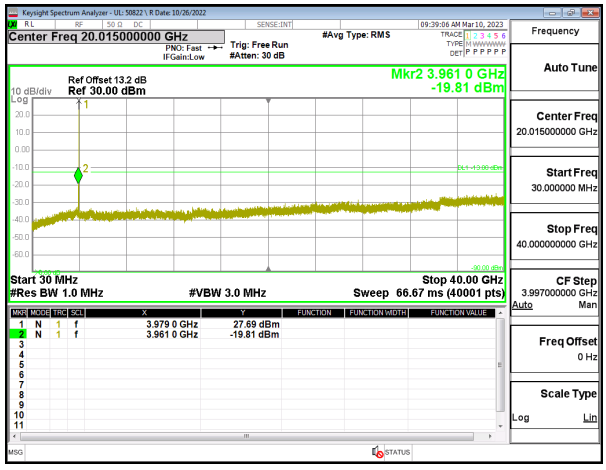
5G NR n77 15MHz BPSK High Channel RB1-37



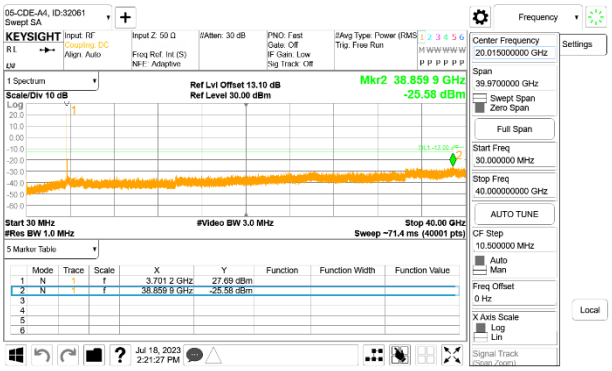
5G NR n77 20MHz BPSK Low Channel RB1-0



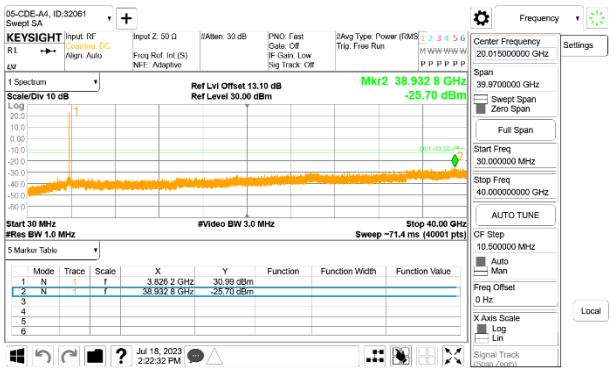
5G NR n77 20MHz BPSK Middle Channel RB1-1



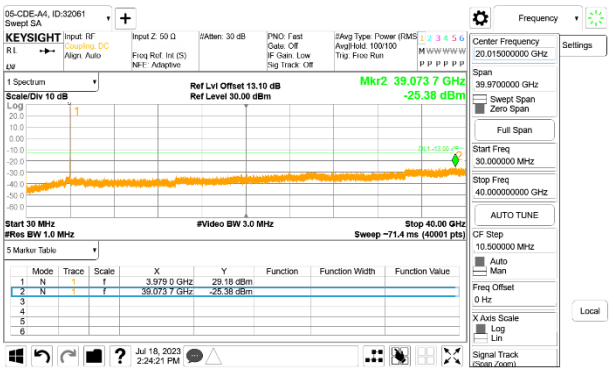
5G NR n77 20MHz BPSK High Channel RB1-50



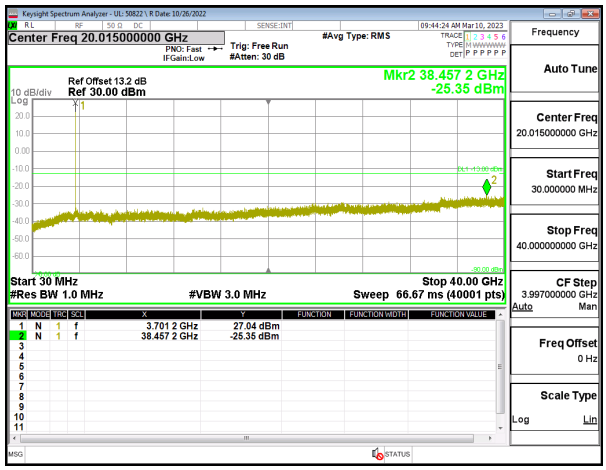
5G NR n77 30MHz BPSK Low Channel RB1-0



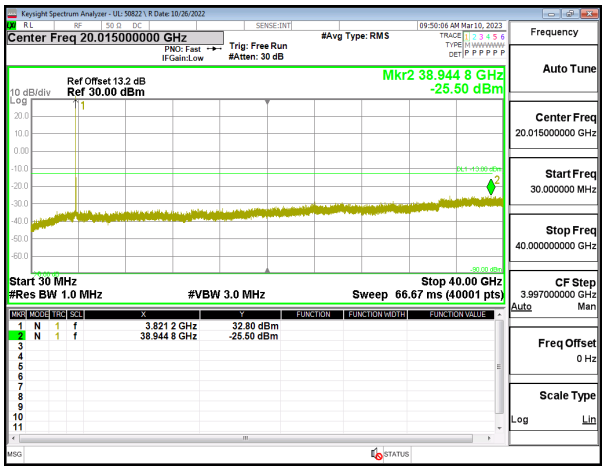
5G NR n77 30MHz BPSK Middle Channel RB1-1



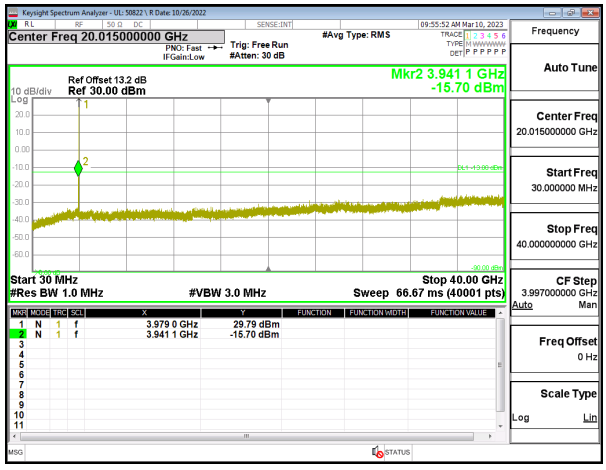
5G NR n77 30MHz BPSK High Channel RB1-77



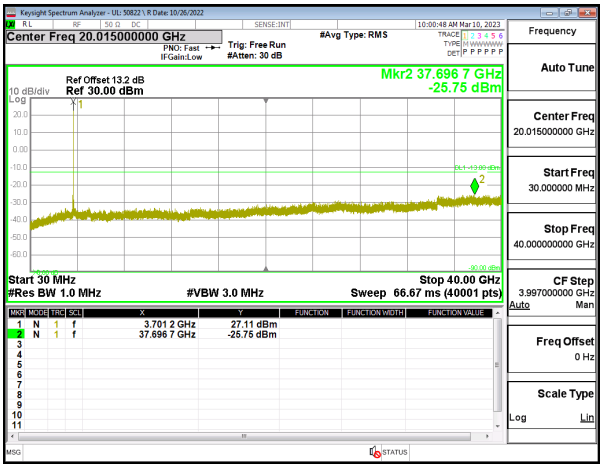
5G NR n77 40MHz BPSK Low Channel RB1-0



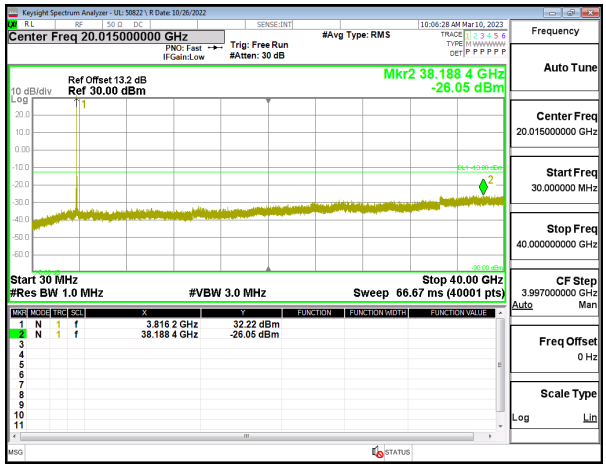
5G NR n77 40MHz BPSK Middle Channel RB1-1



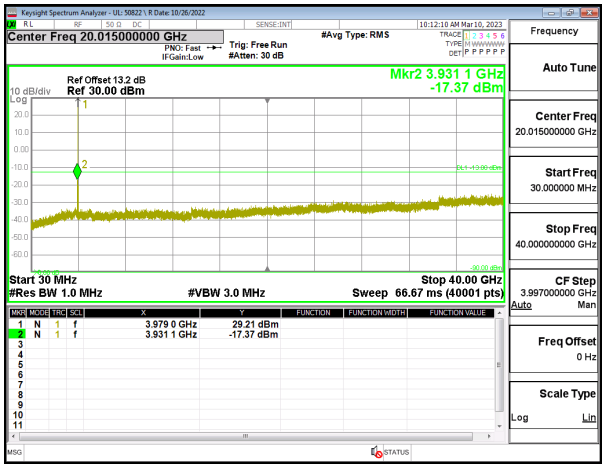
5G NR n77 40MHz BPSK High Channel RB1-105



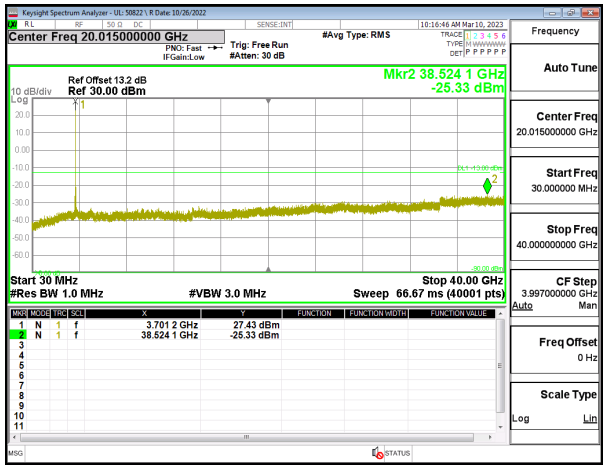
5G NR n77 50MHz BPSK Middle Channel RB1-0



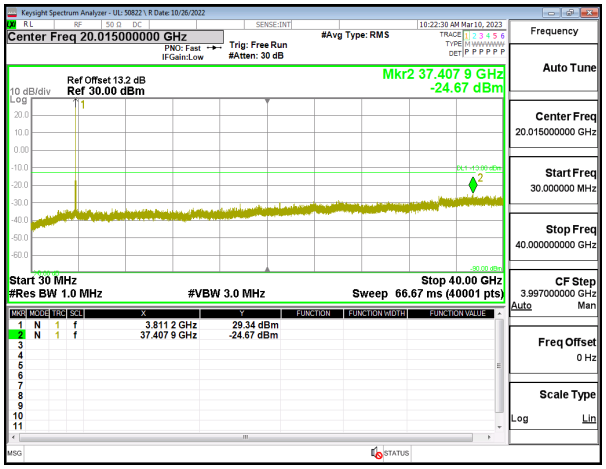
5G NR n77 50MHz BPSK Middle Channel RB1-1



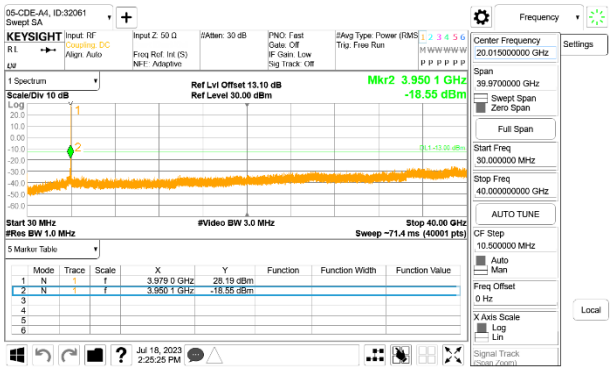
5G NR n77 50MHz BPSK High Channel RB1-132



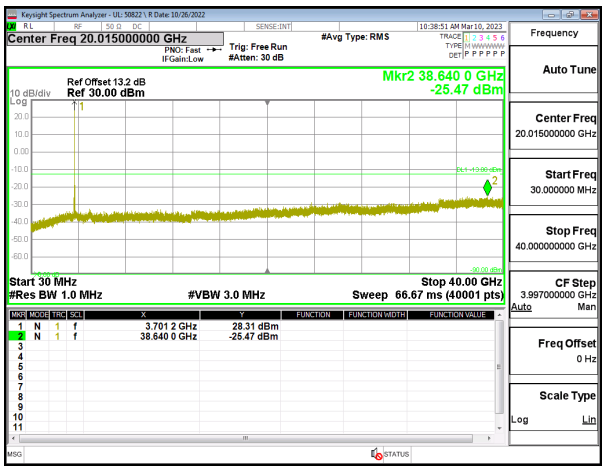
5G NR n77 60MHz BPSK Low Channel RB1-0



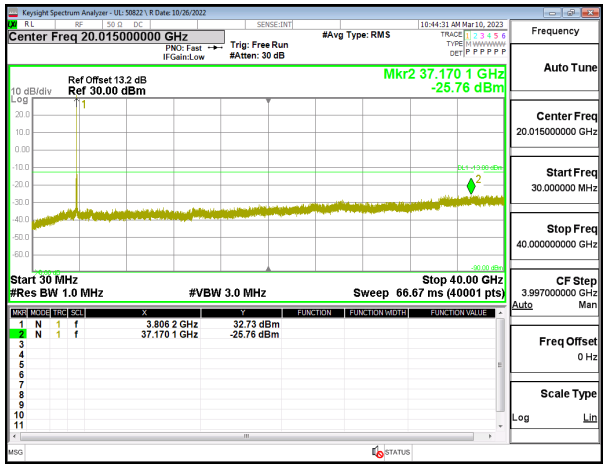
5G NR n77 60MHz BPSK Middle Channel RB1-1



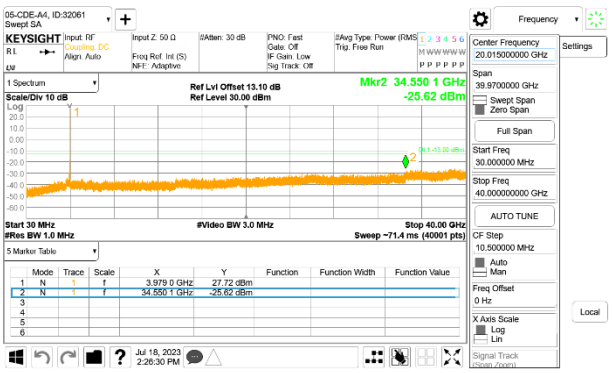
5G NR n77 60MHz BPSK High Channel RB1-161



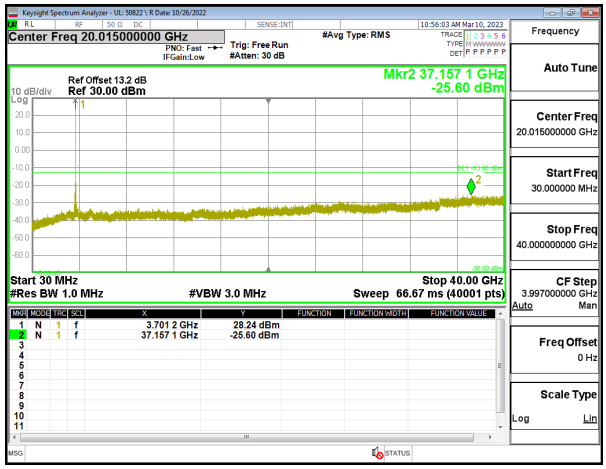
5G NR n77 70MHz BPSK Low Channel RB1-0



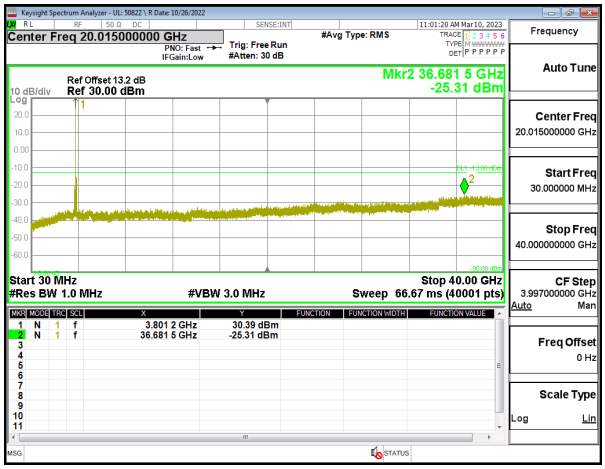
5G NR n77 70MHz BPSK Middle Channel RB1-1



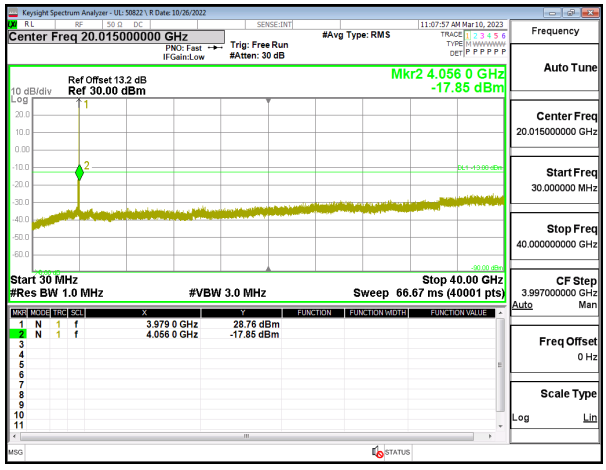
5G NR n77 70MHz BPSK High Channel RB1-188



5G NR n77 80MHz BPSK Low Channel RB1-0



5G NR n77 80MHz BPSK Middle Channel RB1-1



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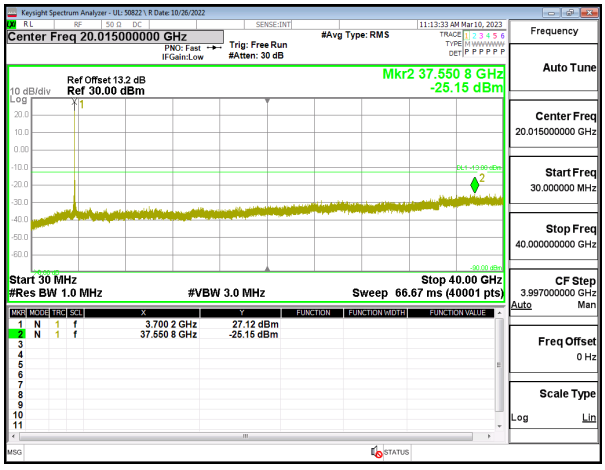
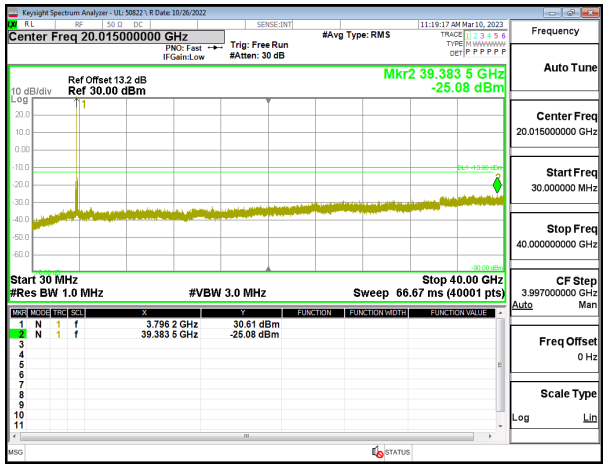
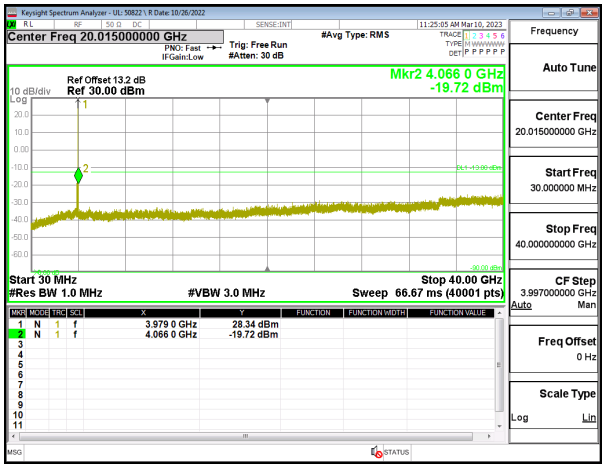


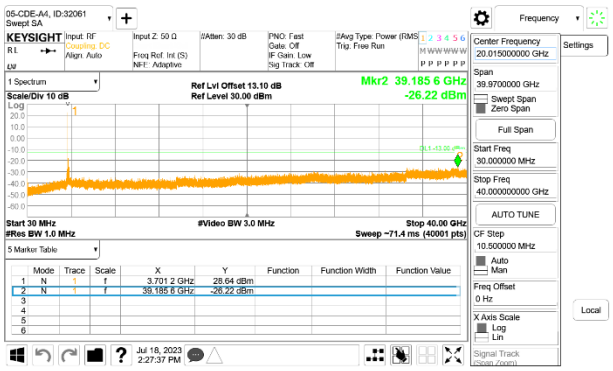
5G NR n77 90MHz BPSK Low Channel RB1-0



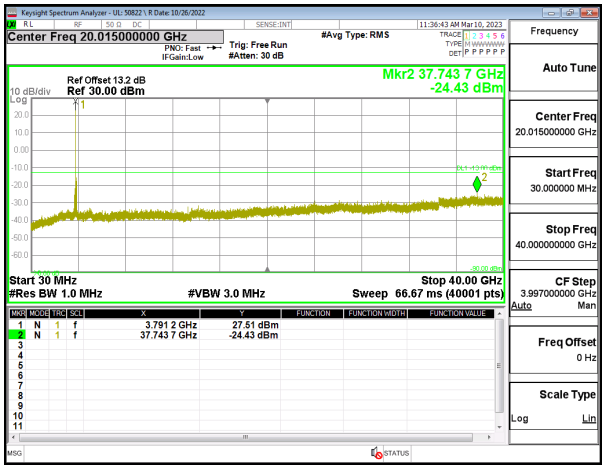
5G NR n77 90MHz BPSK Middle Channel RB1-1



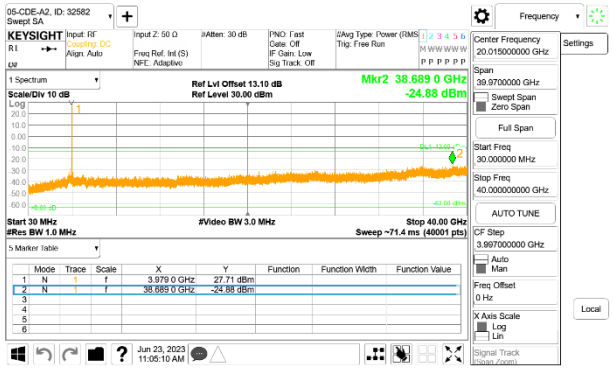
5G NR n77 90MHz BPSK High Channel RB1-244



5G NR n77 100MHz BPSK Low Channel RB1-0



5G NR n77 100MHz BPSK Middle Channel RB1-1



5G NR n77 100MHz BPSK High Channel RB1-272

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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 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:	28774	Test Date:	3/13/2023

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)		2500.7950	2569.3000			
Extreme (50°C)		2500.7950	2569.3000	5.0	0.002	Yes
Extreme (40°C)		2500.7950	2569.3000	-7.7	-0.003	Yes
Extreme (30°C)		2500.7950	2569.3000	-7.3	-0.003	Yes
Extreme (10°C)	Normal	2500.7950	2569.3000	5.6	0.002	Yes
Extreme (0°C)		2500.7950	2569.3000	-5.4	-0.002	Yes
Extreme (-10°C)		2500.7950	2569.3000	5.2	0.002	Yes
Extreme (-20°C)		2500.7950	2569.3000	-7.1	-0.003	Yes
Extreme (-30°C)		2500.7950	2569.3000	5.8	0.002	Yes
20°C	15%	2500.7950	2569.3000	-6.2	-0.002	Yes
	-15%	2500.7950	2569.3000	5.0	0.002	Yes
	End Point Voltage	2500.7950	2569.3000	-5.3	-0.002	Yes

5G NR n7 BPSK (40MHz 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	2500.6140	2569.3529			
Extreme (50°C)		2500.6140	2569.3529	-6.5	-0.003	Yes
Extreme (40°C)		2500.6140	2569.3529	-7.3	-0.003	Yes
Extreme (30°C)		2500.6140	2569.3529	-9.3	-0.004	Yes
Extreme (10°C)		2500.6140	2569.3529	-11.6	-0.005	Yes
Extreme (0°C)		2500.6140	2569.3529	-7.7	-0.003	Yes
Extreme (-10°C)		2500.6140	2569.3529	-7.5	-0.003	Yes
Extreme (-20°C)		2500.6140	2569.3529	-9.3	-0.004	Yes
Extreme (-30°C)		2500.6140	2569.3529	-11.2	-0.004	Yes
20°C	15%	2500.6140	2569.3529	-9.4	-0.004	Yes
	-15%	2500.6140	2569.3529	-8.1	-0.003	Yes
	End Point Voltage	2500.6140	2569.3529	-9.3	-0.004	Yes

9.4.2. 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:	28774	Test Date:	3/13/2023

LTE BAND 12 QPSK (10MHz 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	699.3250	715.6625			
Extreme (50°C)		699.3250	715.6625	-2.2	-0.003	Yes
Extreme (40°C)		699.3250	715.6625	-2.6	-0.004	Yes
Extreme (30°C)		699.3250	715.6625	3.4	0.005	Yes
Extreme (10°C)		699.3250	715.6625	3.1	0.004	Yes
Extreme (0°C)		699.3250	715.6625	4.0	0.006	Yes
Extreme (-10°C)		699.3250	715.6625	3.8	0.005	Yes
Extreme (-20°C)		699.3250	715.6625	3.7	0.005	Yes
Extreme (-30°C)		699.3250	715.6625	2.9	0.004	Yes
20°C	15%	699.3250	715.6625	2.0	0.003	Yes
	-15%	699.3250	715.6625	3.1	0.004	Yes
	End Point Voltage	699.3250	715.6625	-2.5	-0.004	Yes

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	699.4197	714.8408			
Extreme (50°C)		699.4197	714.8408	1.7	0.002	Yes
Extreme (40°C)		699.4197	714.8408	1.8	0.003	Yes
Extreme (30°C)		699.4197	714.8408	-1.3	-0.002	Yes
Extreme (10°C)		699.4197	714.8408	2.2	0.003	Yes
Extreme (0°C)		699.4197	714.8408	2.4	0.003	Yes
Extreme (-10°C)		699.4197	714.8408	2.0	0.003	Yes
Extreme (-20°C)		699.4197	714.8408	1.9	0.003	Yes
Extreme (-30°C)		699.4197	714.8408	1.7	0.002	Yes
20°C	15%	699.4197	714.8408	1.2	0.002	Yes
	-15%	699.4197	714.8408	1.2	0.002	Yes
	End Point Voltage	699.4197	714.8408	1.6	0.002	Yes

9.4.3. 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:	28774	Test Date:	3/13/2023

QPSK (10MHz BANDWIDTH)

Band	13	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		777	787			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	777.3300	786.6900			
Extreme (50°C)		777.3300	786.6900	3.2	0.004	Yes
Extreme (40°C)		777.3300	786.6900	2.7	0.003	Yes
Extreme (30°C)		777.3300	786.6900	-3.1	-0.004	Yes
Extreme (10°C)		777.3300	786.6900	3.4	0.004	Yes
Extreme (0°C)		777.3300	786.6900	4.1	0.005	Yes
Extreme (-10°C)		777.3300	786.6900	4.5	0.006	Yes
Extreme (-20°C)		777.3300	786.6900	5.4	0.007	Yes
Extreme (-30°C)		777.3300	786.6900	5.6	0.007	Yes
20°C	15%	777.3300	786.6900	-1.5	-0.002	Yes
	-15%	777.3300	786.6900	2.6	0.003	Yes
	End Point Voltage	777.3300	786.6900	-2.3	-0.003	Yes

9.4.4. 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:	32061	Test Date:	3/13/2023

LTE BAND 14 QPSK (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)		788.3325	797.6700			
Extreme (50°C)		788.3325	797.6700	4.0	0.005	Yes
Extreme (40°C)		788.3325	797.6700	2.7	0.003	Yes
Extreme (30°C)		788.3325	797.6700	2.7	0.003	Yes
Extreme (10°C)	Normal	788.3325	797.6700	4.4	0.006	Yes
Extreme (0°C)		788.3325	797.6700	2.8	0.004	Yes
Extreme (-10°C)		788.3325	797.6700	-2.1	-0.003	Yes
Extreme (-20°C)		788.3325	797.6700	2.8	0.003	Yes
Extreme (-30°C)		788.3325	797.6700	3.4	0.004	Yes
20°C	15%	788.3325	797.6700	-3.1	-0.004	Yes
	-15%	788.3325	797.6700	3.0	0.004	Yes
	End Point Voltage	788.3325	797.6700	2.3	0.003	Yes

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)	Normal	788.3485	797.2857			
Extreme (50°C)		788.3485	797.2857	1.6	0.002	Yes
Extreme (40°C)		788.3485	797.2857	1.6	0.002	Yes
Extreme (30°C)		788.3485	797.2857	2.0	0.002	Yes
Extreme (10°C)		788.3485	797.2857	1.7	0.002	Yes
Extreme (0°C)		788.3485	797.2857	2.2	0.003	Yes
Extreme (-10°C)		788.3485	797.2857	2.0	0.003	Yes
Extreme (-20°C)		788.3485	797.2857	1.5	0.002	Yes
Extreme (-30°C)		788.3485	797.2857	2.4	0.003	Yes
20°C	15%	788.3485	797.2857	2.1	0.003	Yes
	-15%	788.3485	797.2857	1.8	0.002	Yes
	End Point Voltage	788.3485	797.2857	1.1	0.001	Yes

9.4.5. 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:	28774	Test Date:	3/13/2023

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)		704.3550	715.6500			
Extreme (50°C)		704.3550	715.6500	-2.9	-0.004	Yes
Extreme (40°C)		704.3550	715.6500	-2.7	-0.004	Yes
Extreme (30°C)		704.3550	715.6500	3.4	0.005	Yes
Extreme (10°C)	Normal	704.3550	715.6500	2.4	0.003	Yes
Extreme (0°C)		704.3550	715.6500	3.0	0.004	Yes
Extreme (-10°C)		704.3550	715.6500	2.6	0.004	Yes
Extreme (-20°C)		704.3550	715.6500	3.7	0.005	Yes
Extreme (-30°C)		704.3550	715.6500	2.8	0.004	Yes
20°C	15%	704.3550	715.6500	2.7	0.004	Yes
	-15%	704.3550	715.6500	3.0	0.004	Yes
	End Point Voltage	704.3550	715.6500	3.3	0.005	Yes

9.4.6. 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:	28774	Test Date:	3/13/2023

LTE BAND 25 QPSK (20MHz 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	1850.7550	1914.3150			
Extreme (50°C)		1850.7550	1914.3150	-6.0	-0.003	Yes
Extreme (40°C)		1850.7550	1914.3150	-6.5	-0.003	Yes
Extreme (30°C)		1850.7550	1914.3150	-5.4	-0.003	Yes
Extreme (10°C)		1850.7550	1914.3150	-4.7	-0.002	Yes
Extreme (0°C)		1850.7550	1914.3150	-4.6	-0.002	Yes
Extreme (-10°C)		1850.7550	1914.3150	-4.2	-0.002	Yes
Extreme (-20°C)		1850.7550	1914.3150	-5.4	-0.003	Yes
Extreme (-30°C)		1850.7550	1914.3150	-4.8	-0.003	Yes
20°C	15%	1850.7550	1914.3150	-7.1	-0.004	Yes
	-15%	1850.7550	1914.3150	-5.5	-0.003	Yes
	End Point Voltage	1850.7550	1914.3150	-5.5	-0.003	Yes

5G NR n25 BPSK (40MHz 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	1850.6835	1914.3044			
Extreme (50°C)		1850.6835	1914.3044	-4.1	-0.002	Yes
Extreme (40°C)		1850.6835	1914.3044	-3.7	-0.002	Yes
Extreme (30°C)		1850.6835	1914.3044	-6.5	-0.003	Yes
Extreme (10°C)		1850.6835	1914.3044	-4.7	-0.002	Yes
Extreme (0°C)		1850.6835	1914.3044	-5.0	-0.003	Yes
Extreme (-10°C)		1850.6835	1914.3044	-6.2	-0.003	Yes
Extreme (-20°C)		1850.6835	1914.3044	-3.5	-0.002	Yes
Extreme (-30°C)		1850.6836	1914.3044	4.8	0.003	Yes
20°C	15%	1850.6835	1914.3044	-6.0	-0.003	Yes
	-15%	1850.6835	1914.3044	-4.7	-0.003	Yes
	End Point Voltage	1850.6835	1914.3044	-5.6	-0.003	Yes

9.4.7. LTE BAND 26 AND 5G NR n26 (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:	32061	Test Date:	3/13/2023

LTE BAND 26 QPSK (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	814.3750	823.6825			
Extreme (50°C)		814.3750	823.6825	-3.2	-0.004	Yes
Extreme (40°C)		814.3750	823.6825	2.5	0.003	Yes
Extreme (30°C)		814.3750	823.6825	2.6	0.003	Yes
Extreme (10°C)		814.3750	823.6825	5.9	0.007	Yes
Extreme (0°C)		814.3750	823.6825	6.7	0.008	Yes
Extreme (-10°C)		814.3750	823.6825	3.1	0.004	Yes
Extreme (-20°C)		814.3750	823.6825	6.5	0.008	Yes
Extreme (-30°C)		814.3750	823.6825	6.9	0.008	Yes
20°C	15%	814.3750	823.6825	3.4	0.004	Yes
	-15%	814.3750	823.6825	3.2	0.004	Yes
	End Point Voltage	814.3750	823.6825	4.3	0.005	Yes

5G NR n26 BPSK (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)		814.2787	823.5587			
Extreme (50°C)		814.2787	823.5587	-1.8	-0.002	Yes
Extreme (40°C)		814.2787	823.5587	-2.5	-0.003	Yes
Extreme (30°C)		814.2787	823.5587	2.0	0.002	Yes
Extreme (10°C)	Normal	814.2787	823.5587	-2.7	-0.003	Yes
Extreme (0°C)		814.2787	823.5587	-2.1	-0.003	Yes
Extreme (-10°C)		814.2787	823.5587	-1.8	-0.002	Yes
Extreme (-20°C)		814.2787	823.5587	-2.6	-0.003	Yes
Extreme (-30°C)		814.2787	823.5587	1.9	0.002	Yes
20°C	15%	814.2787	823.5587	1.8	0.002	Yes
	-15%	814.2787	823.5587	-2.2	-0.003	Yes
	End Point Voltage	814.2787	823.5587	-2.1	-0.003	Yes

9.4.8. LTE BAND 26 AND 5G NR n26 (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:	28774	Test Date:	3/13/2023

LTE BAND 26 QPSK (10MHz 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	824.5888	848.4600			
Extreme (50°C)		824.5887	848.4600	-4.0	-0.005	Yes
Extreme (40°C)		824.5887	848.4600	-3.1	-0.004	Yes
Extreme (30°C)		824.5887	848.4600	-4.3	-0.005	Yes
Extreme (10°C)		824.5887	848.4600	-2.5	-0.003	Yes
Extreme (0°C)		824.5888	848.4600	2.8	0.003	Yes
Extreme (-10°C)		824.5888	848.4600	3.4	0.004	Yes
Extreme (-20°C)		824.5887	848.4600	-3.2	-0.004	Yes
Extreme (-30°C)		824.5887	848.4600	-3.9	-0.005	Yes
20°C	15%	824.5887	848.4600	-4.3	-0.005	Yes
	-15%	824.5888	848.4600	3.7	0.004	Yes
	End Point Voltage	824.5887	848.4600	-3.3	-0.004	Yes

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	824.2480	848.4300			
Extreme (50°C)		824.2480	848.4300	2.9	0.003	Yes
Extreme (40°C)		824.2480	848.4300	2.4	0.003	Yes
Extreme (30°C)		824.2480	848.4300	-1.9	-0.002	Yes
Extreme (10°C)		824.2480	848.4300	-3.1	-0.004	Yes
Extreme (0°C)		824.2480	848.4300	2.0	0.002	Yes
Extreme (-10°C)		824.2480	848.4300	3.2	0.004	Yes
Extreme (-20°C)		824.2480	848.4300	1.7	0.002	Yes
Extreme (-30°C)		824.2480	848.4300	-2.0	-0.002	Yes
20°C	15%	824.2480	848.4300	2.5	0.003	Yes
	-15%	824.2480	848.4300	2.2	0.003	Yes
	End Point Voltage	824.2480	848.4300	-2.2	-0.003	Yes

9.4.9. 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:	32061	Test Date:	3/13/2023

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	2305.3050	2314.6975			
Extreme (50°C)		2305.3050	2314.6975	-5.4	-0.002	Yes
Extreme (40°C)		2305.3050	2314.6975	-4.3	-0.002	Yes
Extreme (30°C)		2305.3050	2314.6975	-5.2	-0.002	Yes
Extreme (10°C)		2305.3050	2314.6975	-4.9	-0.002	Yes
Extreme (0°C)		2305.3050	2314.6975	5.3	0.002	Yes
Extreme (-10°C)		2305.3050	2314.6975	4.7	0.002	Yes
Extreme (-20°C)		2305.3050	2314.6975	5.3	0.002	Yes
Extreme (-30°C)		2305.3050	2314.6975	-5.4	-0.002	Yes
20°C	15%	2305.3050	2314.6975	2.6	0.001	Yes
	-15%	2305.3050	2314.6975	-1.9	-0.001	Yes
	End Point Voltage	2305.3050	2314.6975	-4.1	-0.002	Yes

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	2305.2818	2314.4091			
Extreme (50°C)		2305.2817	2314.4091	-11.2	-0.005	Yes
Extreme (40°C)		2305.2817	2314.4091	-10.5	-0.005	Yes
Extreme (30°C)		2305.2817	2314.4091	-9.5	-0.004	Yes
Extreme (10°C)		2305.2817	2314.4091	-9.5	-0.004	Yes
Extreme (0°C)		2305.2817	2314.4091	-9.1	-0.004	Yes
Extreme (-10°C)		2305.2817	2314.4091	-8.6	-0.004	Yes
Extreme (-20°C)		2305.2817	2314.4091	-10.1	-0.004	Yes
Extreme (-30°C)		2305.2817	2314.4091	-9.3	-0.004	Yes
20°C	15%	2305.2817	2314.4091	-7.4	-0.003	Yes
	-15%	2305.2817	2314.4091	-11.2	-0.005	Yes
	End Point Voltage	2305.2817	2314.4091	-10.0	-0.004	Yes

9.4.10. LTE BAND 41 AND 5G NR n41

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:	28774	Test Date:	3/13/2023

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)		2496.8950	2689.2350			
Extreme (50°C)		2496.8950	2689.2350	-10.4	-0.004	Yes
Extreme (40°C)		2496.8950	2689.2350	-10.3	-0.004	Yes
Extreme (30°C)		2496.8950	2689.2350	-11.7	-0.005	Yes
Extreme (10°C)	Normal	2496.8950	2689.2350	-10.7	-0.004	Yes
Extreme (0°C)		2496.8950	2689.2350	-11.0	-0.004	Yes
Extreme (-10°C)		2496.8950	2689.2350	-11.9	-0.005	Yes
Extreme (-20°C)		2496.8950	2689.2350	-11.4	-0.004	Yes
Extreme (-30°C)		2496.8950	2689.2350	-12.1	-0.005	Yes
20°C	15%	2496.8950	2689.2350	-11.2	-0.004	Yes
	-15%	2496.8950	2689.2350	-10.5	-0.004	Yes
	End Point Voltage	2496.8950	2689.2350	-10.3	-0.004	Yes

5G NR n41 BPSK (100MHz BANDWIDTH)

Band	41	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		2496	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	2497.1665	2687.7569			
Extreme (50°C)		2497.1665	2687.7569	-15.7	-0.006	Yes
Extreme (40°C)		2497.1665	2687.7569	-19.4	-0.007	Yes
Extreme (30°C)		2497.1665	2687.7569	-14.0	-0.005	Yes
Extreme (10°C)		2497.1665	2687.7569	-13.6	-0.005	Yes
Extreme (0°C)		2497.1665	2687.7569	-19.1	-0.007	Yes
Extreme (-10°C)		2497.1665	2687.7569	-19.7	-0.008	Yes
Extreme (-20°C)		2497.1665	2687.7569	-20.7	-0.008	Yes
Extreme (-30°C)		2497.1665	2687.7569	-16.5	-0.006	Yes
20°C	15%	2497.1665	2687.7569	-16.0	-0.006	Yes
	-15%	2497.1665	2687.7569	-19.0	-0.007	Yes
	End Point Voltage	2497.1665	2687.7569	-16.4	-0.006	Yes

9.4.11. LTE BAND 48 AND 5G NR n48

Test Engineer ID:	28774	Test Date:	3/13/2023

LTE BAND 48 QPSK (20MHz BANDWIDTH)

Band	48	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		3550	3700			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)		3550.9100	3699.1750			
Extreme (50°C)		3550.9100	3699.1750	-6.7	-0.002	Yes
Extreme (40°C)		3550.9100	3699.1750	-6.6	-0.002	Yes
Extreme (30°C)		3550.9100	3699.1750	-8.5	-0.002	Yes
Extreme (10°C)	Normal	3550.9100	3699.1750	-7.1	-0.002	Yes
Extreme (0°C)		3550.9100	3699.1750	-8.4	-0.002	Yes
Extreme (-10°C)		3550.9100	3699.1750	-7.5	-0.002	Yes
Extreme (-20°C)		3550.9100	3699.1750	-8.3	-0.002	Yes
Extreme (-30°C)		3550.9100	3699.1750	-7.0	-0.002	Yes
20°C	15%	3550.9100	3699.1750	7.7	0.002	Yes
	-15%	3550.9100	3699.1750	6.2	0.002	Yes
	End Point Voltage	3550.9100	3699.1750	-8.0	-0.002	Yes

5G NR n48 BPSK (40MHz BANDWIDTH)

Band	48	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		3550	3700			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	3550.9529	3696.8233			
Extreme (50°C)		3550.9529	3696.8233	-17.7	-0.005	Yes
Extreme (40°C)		3550.9529	3696.8233	-13.2	-0.004	Yes
Extreme (30°C)		3550.9529	3696.8233	-13.8	-0.004	Yes
Extreme (10°C)		3550.9529	3696.8233	-12.4	-0.003	Yes
Extreme (0°C)		3550.9529	3696.8233	-13.8	-0.004	Yes
Extreme (-10°C)		3550.9529	3696.8233	-16.8	-0.005	Yes
Extreme (-20°C)		3550.9529	3696.8233	-12.1	-0.003	Yes
Extreme (-30°C)		3550.9529	3696.8233	-17.8	-0.005	Yes
20°C	15%	3550.9529	3696.8233	-18.1	-0.005	Yes
	-15%	3550.9529	3696.8233	-13.4	-0.004	Yes
	End Point Voltage	3550.9529	3696.8233	-17.7	-0.005	Yes

9.4.12. 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:	32061	Test Date:	3/13/2023

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)		1710.8150	1779.2450			
Extreme (50°C)		1710.8150	1779.2450	-3.2	-0.002	Yes
Extreme (40°C)		1710.8150	1779.2450	-3.7	-0.002	Yes
Extreme (30°C)		1710.8150	1779.2450	-3.6	-0.002	Yes
Extreme (10°C)	Normal	1710.8150	1779.2450	-4.1	-0.002	Yes
Extreme (0°C)		1710.8150	1779.2450	-3.7	-0.002	Yes
Extreme (-10°C)		1710.8150	1779.2450	-3.5	-0.002	Yes
Extreme (-20°C)		1710.8150	1779.2450	4.6	0.003	Yes
Extreme (-30°C)		1710.8150	1779.2450	-4.7	-0.003	Yes
20°C	15%	1710.8150	1779.2450	-5.6	-0.003	Yes
	-15%	1710.8150	1779.2450	-4.8	-0.003	Yes
	End Point Voltage	1710.8150	1779.2450	3.8	0.002	Yes

5G NR n66 BPSK (40MHz BANDWIDTH)

Band	66	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		1710	1780			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)		17110.5610	1779.3416			
Extreme (50°C)		17110.5610	1779.3416	-8.4	-0.005	Yes
Extreme (40°C)		17110.5610	1779.3416	-7.5	-0.004	Yes
Extreme (30°C)		17110.5610	1779.3416	-5.6	-0.003	Yes
Extreme (10°C)	Normal	17110.5610	1779.3416	-8.2	-0.005	Yes
Extreme (0°C)		17110.5610	1779.3416	-7.7	-0.004	Yes
Extreme (-10°C)		17110.5610	1779.3416	-7.7	-0.004	Yes
Extreme (-20°C)		17110.5610	1779.3416	-7.4	-0.004	Yes
Extreme (-30°C)		17110.5610	1779.3416	-8.0	-0.005	Yes
20°C	15%	17110.5610	1779.3416	-7.5	-0.004	Yes
	-15%	17110.5610	1779.3416	-6.8	-0.004	Yes
	End Point Voltage	17110.5610	1779.3416	-8.3	-0.005	Yes

9.4.13. 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:	32061	Test Date:	3/13/2023

5G NR n70 BPSK (15MHz BANDWIDTH)

Band	70	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		1695	1710			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)		1695.4119	1708.8068			
Extreme (50°C)		1695.4119	1708.8068	-6.1	-0.004	Yes
Extreme (40°C)		1695.4119	1708.8068	-7.4	-0.004	Yes
Extreme (30°C)		1695.4119	1708.8068	-7.4	-0.004	Yes
Extreme (10°C)	Normal	1695.4119	1708.8069	8.5	0.005	Yes
Extreme (0°C)		1695.4119	1708.8068	-6.6	-0.004	Yes
Extreme (-10°C)		1695.4119	1708.8068	-7.8	-0.005	Yes
Extreme (-20°C)		1695.4119	1708.8068	-8.0	-0.005	Yes
Extreme (-30°C)		1695.4119	1708.8068	-6.7	-0.004	Yes
20°C	15%	1695.4119	1708.8068	-7.6	-0.004	Yes
	-15%	1695.4119	1708.8068	-8.7	-0.005	Yes
	End Point Voltage	1695.4119	1708.8068	-6.8	-0.004	Yes

9.4.14. 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:	28774	Test Date:	3/13/2023

LTE BAND 71 QPSK (20MHz BANDWIDTH)

Band	71	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		663	698			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)		663.8300	697.2500			
Extreme (50°C)		663.8300	697.2500	2.4	0.003	Yes
Extreme (40°C)		663.8300	697.2500	-2.9	-0.004	Yes
Extreme (30°C)		663.8300	697.2500	-3.3	-0.005	Yes
Extreme (10°C)	Normal	663.8300	697.2500	2.8	0.004	Yes
Extreme (0°C)		663.8300	697.2500	3.5	0.005	Yes
Extreme (-10°C)		663.8300	697.2500	4.1	0.006	Yes
Extreme (-20°C)		663.8300	697.2500	4.0	0.006	Yes
Extreme (-30°C)		663.8300	697.2500	3.0	0.004	Yes
20°C	15%	663.8300	697.2500	-3.9	-0.006	Yes
	-15%	663.8300	697.2500	-3.5	-0.005	Yes
	End Point Voltage	663.8300	697.2500	-3.5	-0.005	Yes

5G NR n71 BPSK (20MHz BANDWIDTH)

Band	71	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		663	698			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)	Normal	663.1400	696.7600			
Extreme (50°C)		663.1400	696.7600	-5.3	-0.008	Yes
Extreme (40°C)		663.1400	696.7600	-6.8	-0.010	Yes
Extreme (30°C)		663.1400	696.7600	-5.9	-0.009	Yes
Extreme (10°C)		663.1400	696.7600	-5.3	-0.008	Yes
Extreme (0°C)		663.1400	696.7600	-5.7	-0.008	Yes
Extreme (-10°C)		663.1400	696.7600	-5.1	-0.008	Yes
Extreme (-20°C)		663.1400	696.7600	-8.8	-0.013	Yes
Extreme (-30°C)		663.1400	696.7600	-5.0	-0.007	Yes
20°C	15%	663.1400	696.7600	-5.9	-0.009	Yes
	-15%	663.1400	696.7600	-5.5	-0.008	Yes
	End Point Voltage	663.1400	696.7600	-5.0	-0.007	Yes

9.4.15. 5G NR n77 (Part 27 3450-3550MHz)

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:	32061	Test Date:	3/14/2023

5G NR n77 BPSK (100MHz BANDWIDTH)

Band	77	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		3450	3550			
		Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Temperature	Voltage					
Normal (20°C)		3451.0788	3547.7062			
Extreme (50°C)		3451.0788	3547.7062	-18.5	-0.005	Yes
Extreme (40°C)		3451.0788	3547.7062	-16.7	-0.005	Yes
Extreme (30°C)		3451.0788	3547.7062	-14.6	-0.004	Yes
Extreme (10°C)	Normal	3451.0788	3547.7062	-17.0	-0.005	Yes
Extreme (0°C)		3451.0788	3547.7062	-16.3	-0.005	Yes
Extreme (-10°C)		3451.0788	3547.7062	-16.4	-0.005	Yes
Extreme (-20°C)		3451.0788	3547.7062	-15.4	-0.004	Yes
Extreme (-30°C)		3451.0788	3547.7062	-18.6	-0.005	Yes
20°C	15%	3451.0788	3547.7062	-14.3	-0.004	Yes
	-15%	3451.0788	3547.7062	-15.8	-0.005	Yes
	End Point Voltage	3451.0788	3547.7062	-10.4	-0.003	Yes

9.4.16. 5G NR n77 (Part 27 3700-3980MHz)

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:	32061	Test Date:	3/14/2023

5G NR n77 BPSK (100MHz BANDWIDTH)

Condition		3700	3980	Frequency Error Reading (Hz)		
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	3701.1300	3977.7676			
Extreme (50°C)		3701.1300	3977.7676	-11.6	-0.003	Yes
Extreme (40°C)		3701.1300	3977.7675	-20.3	-0.005	Yes
Extreme (30°C)		3701.1300	3977.7675	-15.8	-0.004	Yes
Extreme (10°C)		3701.1300	3977.7675	-16.8	-0.004	Yes
Extreme (0°C)		3701.1300	3977.7675	-16.4	-0.004	Yes
Extreme (-10°C)		3701.1300	3977.7675	-15.0	-0.004	Yes
Extreme (-20°C)		3701.1300	3977.7675	-13.7	-0.004	Yes
Extreme (-30°C)		3701.1300	3977.7675	-17.8	-0.005	Yes
20°C	15%	3701.1300	3977.7675	-15.2	-0.004	Yes
	-15%	3701.1300	3977.7675	-17.3	-0.005	Yes
	End Point Voltage	3701.1300	3977.7675	-16.1	-0.004	Yes

9.5. PEAK-TO-AVERAGE POWER RATIO

LIMIT

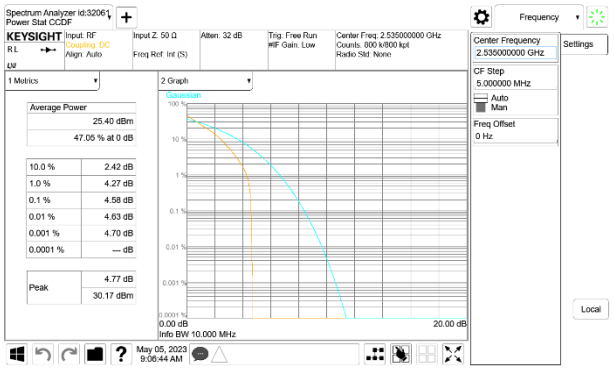
In addition, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

RESULT

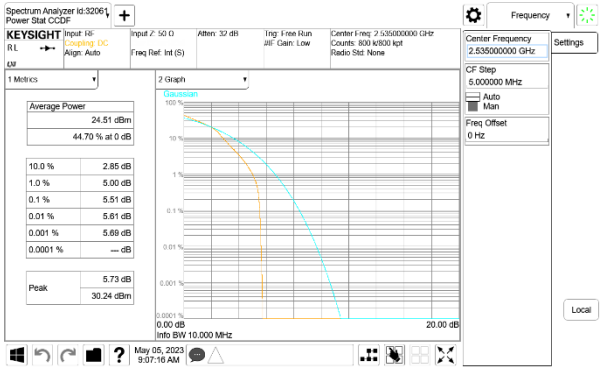
Antenna 1 was used to measure as the worst case; full resource block (FRB) for each bandwidth was used to measure as the worst case. The results from all CCDF measurements are passed with 13dB peak-to-average power ratio criteria.

9.5.1. LTE BAND 7 AND 5G NR n7

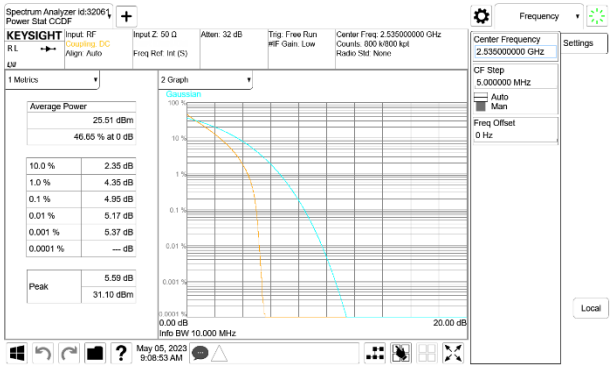
LTE BAND 7



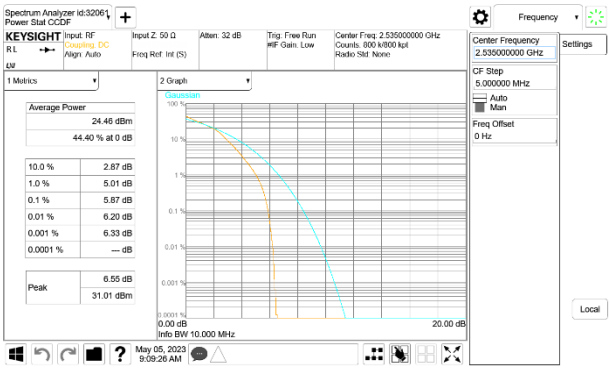
LTE B7 5MHz QPSK Middle Channel



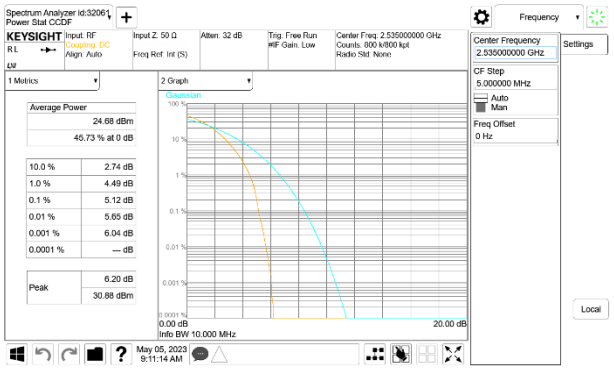
LTE B7 5MHz 16QAM Middle Channel



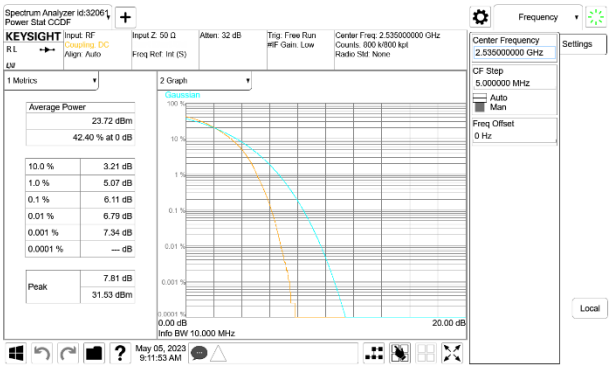
LTE B7 10MHz QPSK Middle Channel



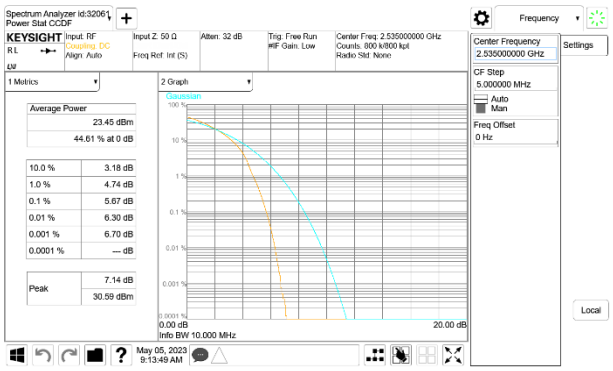
LTE B7 10MHz 16QAM Middle Channel



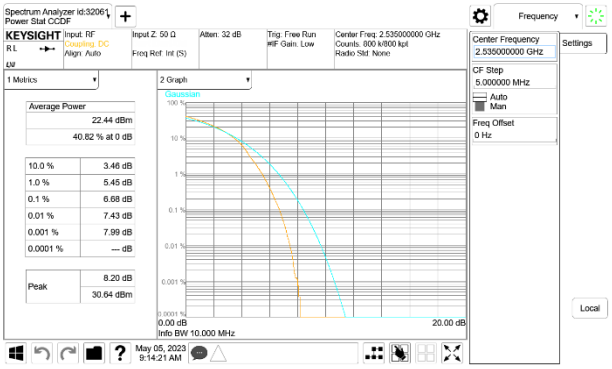
LTE B7 15MHz QPSK Middle Channel



LTE B7 15MHz 16QAM Middle Channel

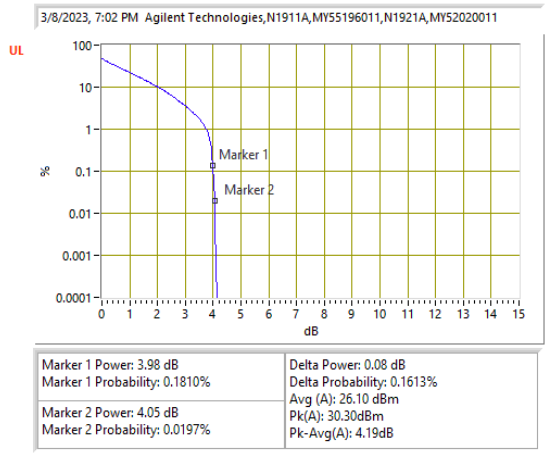


LTE B7 20MHz QPSK Middle Channel

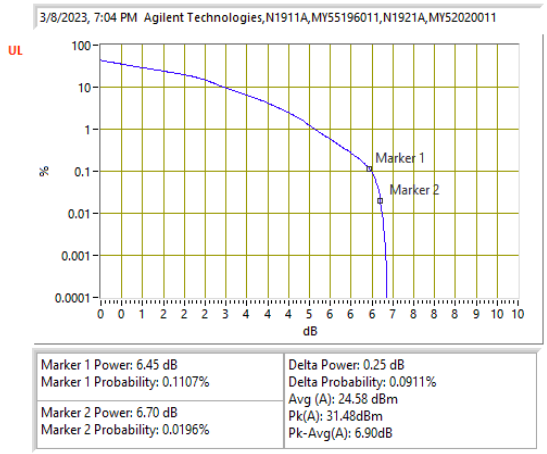


LTE B7 20MHz 16QAM Middle Channel

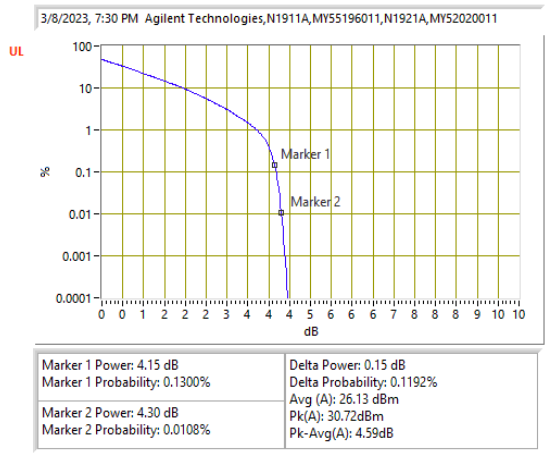
5G NR n7



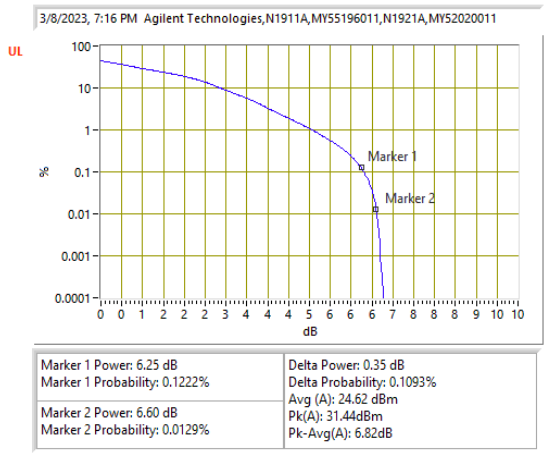
5G NR n7 5MHz BPSK Middle Channel, ID:50822



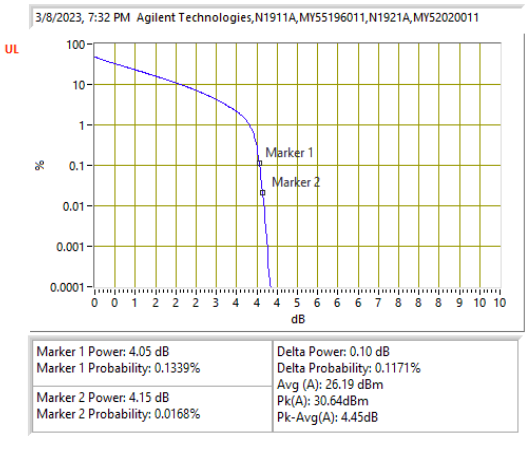
5G NR n7 5MHz 16QAM Middle Channel, ID:50822



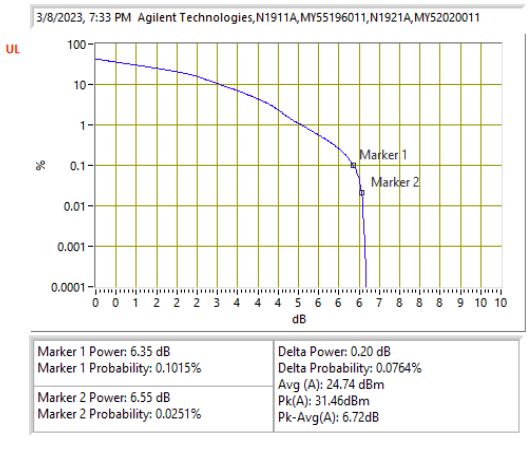
5G NR n7 10MHz BPSK Middle Channel, ID:50822



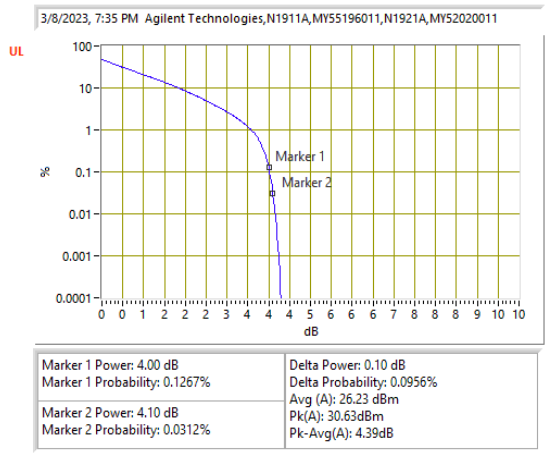
5G NR n7 10MHz 16QAM Middle Channel, ID:50822



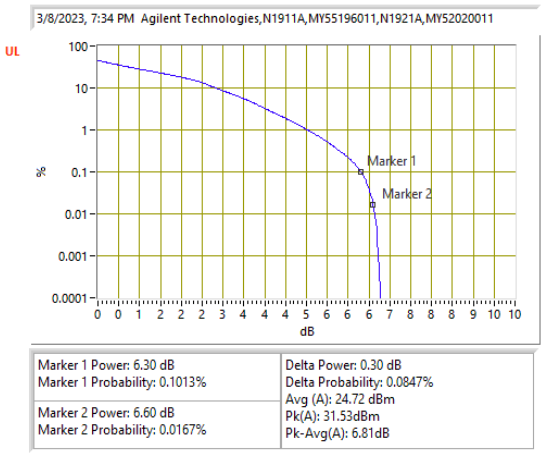
5G NR n7 15MHz BPSK Middle Channel, ID:50822



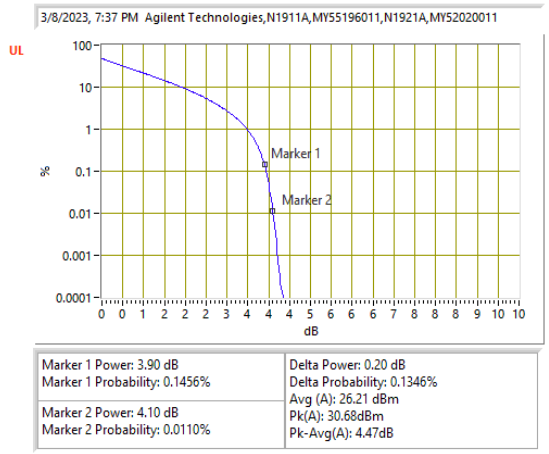
5G NR n7 15MHz 16QAM Middle Channel, ID:50822



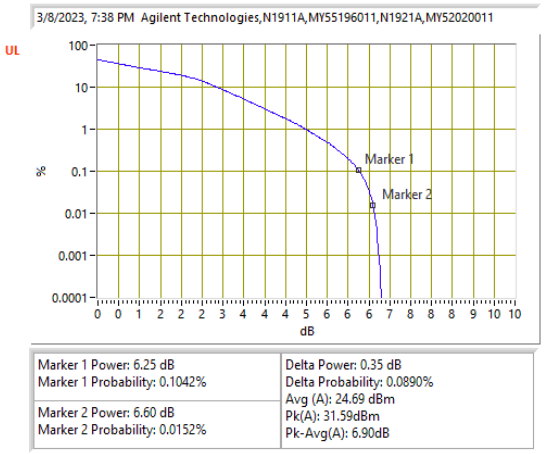
5G NR n7 20MHz BPSK Middle Channel, ID:50822



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



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



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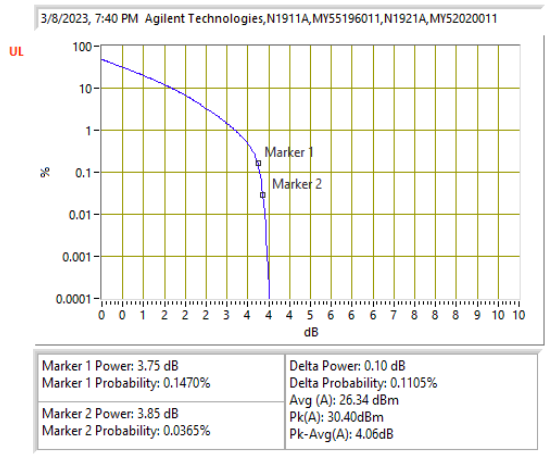
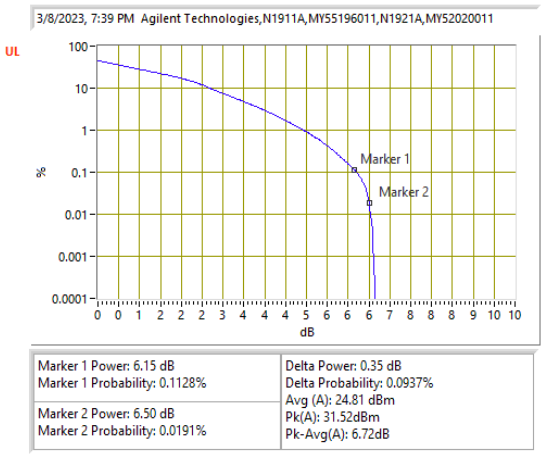


5G NR n7 30MHz BPSK Middle Channel, ID:50822



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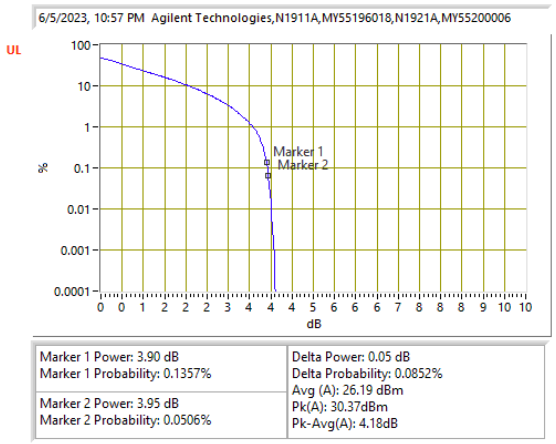
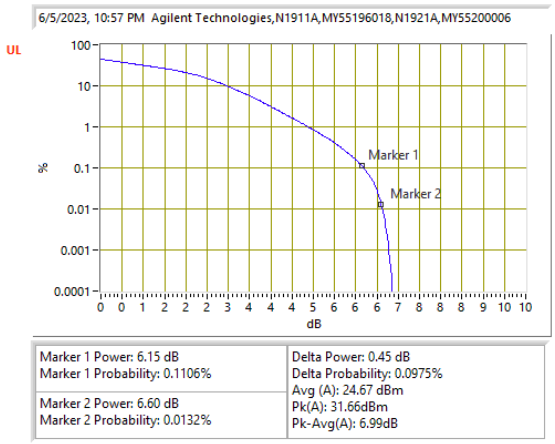
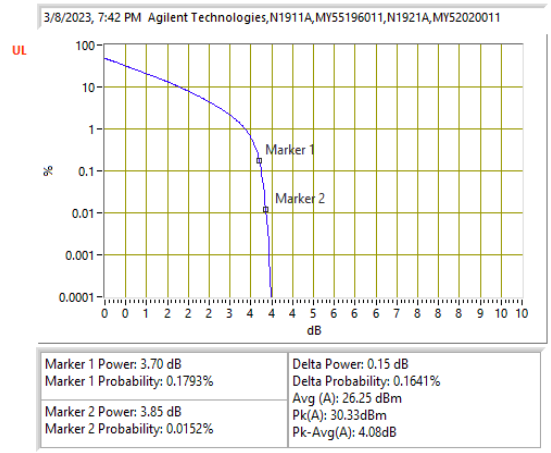


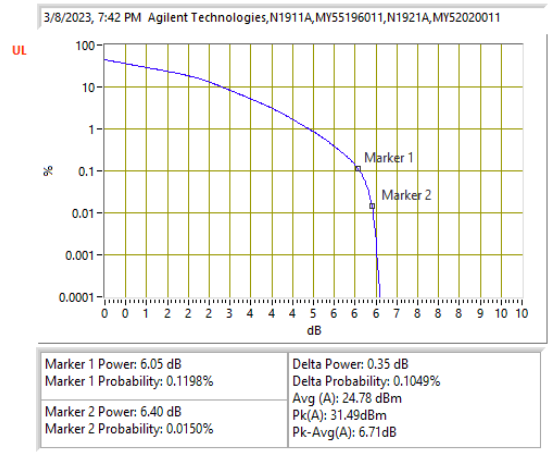
5G NR n7 35MHz BPSK Middle Channel, ID:50822



5G NR n7 35MHz 16QAM Middle Channel, ID:50822



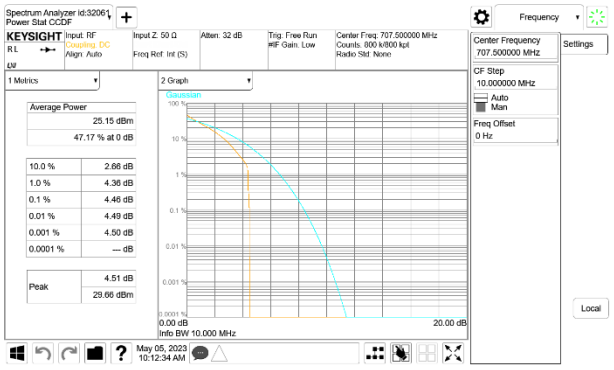
5G NR n7 40MHz BPSK Middle Channel, ID:50822



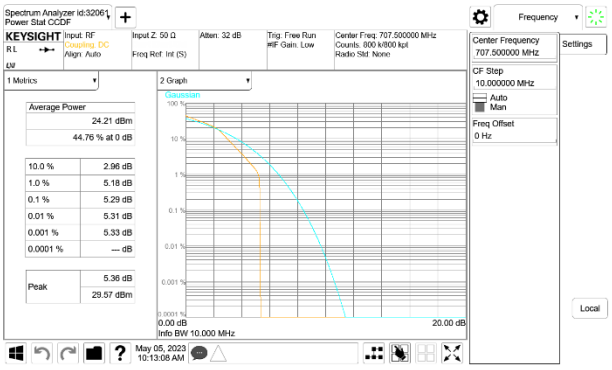
5G NR n7 40MHz 16QAM Middle Channel, ID:50822

9.5.2. LTE BAND 12 AND 5G NR n12

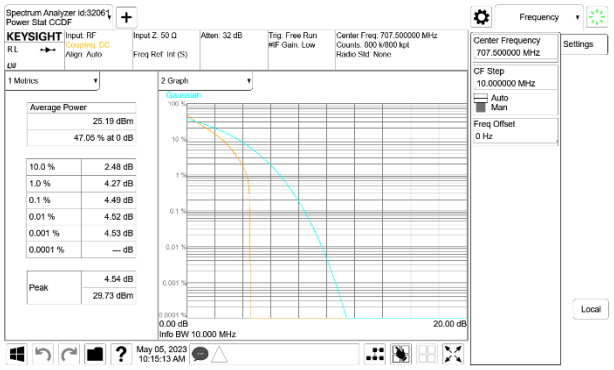
LTE BAND 12



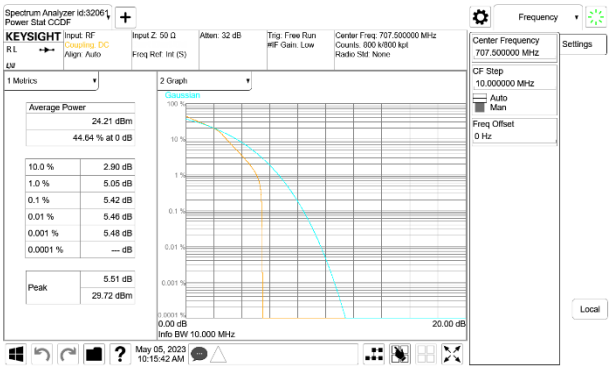
LTE B12 1.4MHz QPSK Middle Channel



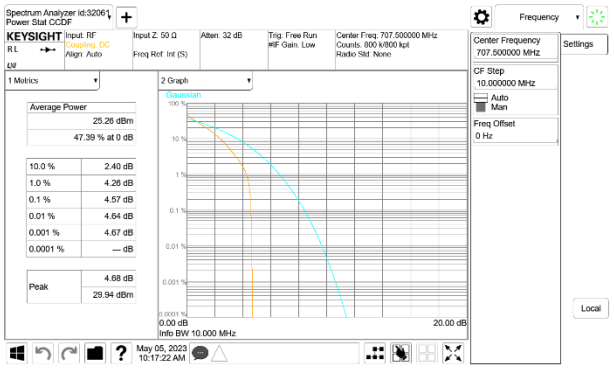
LTE B12 1.4MHz 16QAM Middle Channel



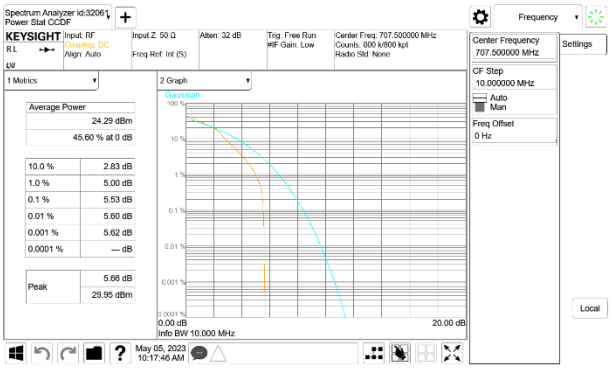
LTE B12 3MHz QPSK Middle Channel



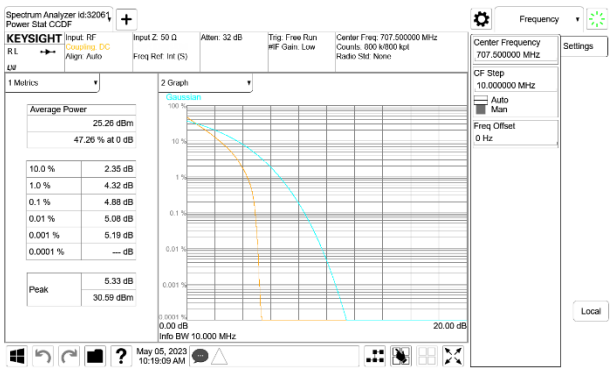
LTE B12 3MHz 16QAM Middle Channel



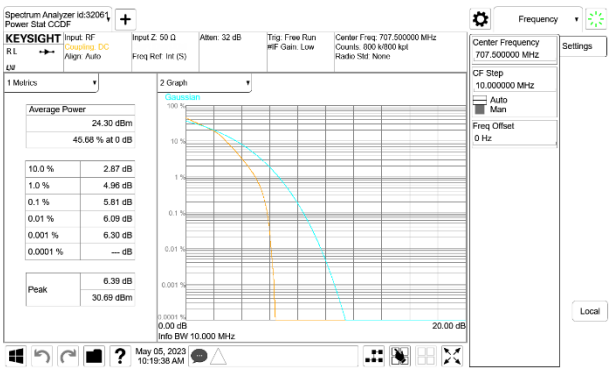
LTE B12 5MHz QPSK Middle Channel



LTE B12 5MHz 16QAM Middle Channel

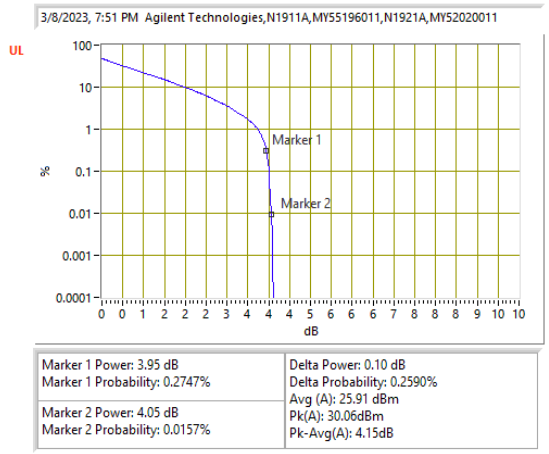


LTE B12 10MHz QPSK Middle Channel

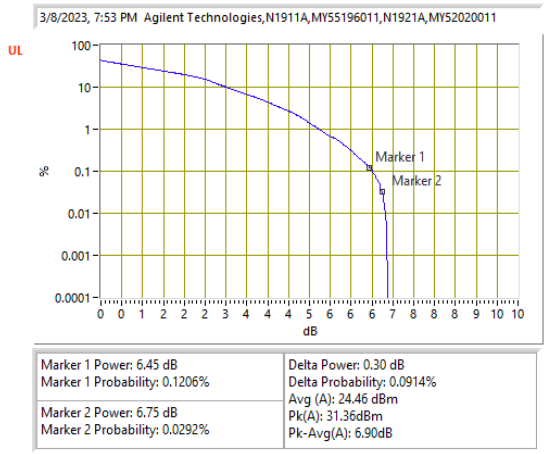


LTE B12 10MHz 16QAM Middle Channel

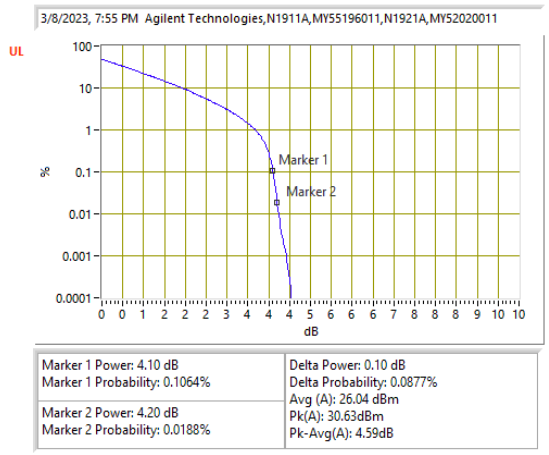
5G NR n12



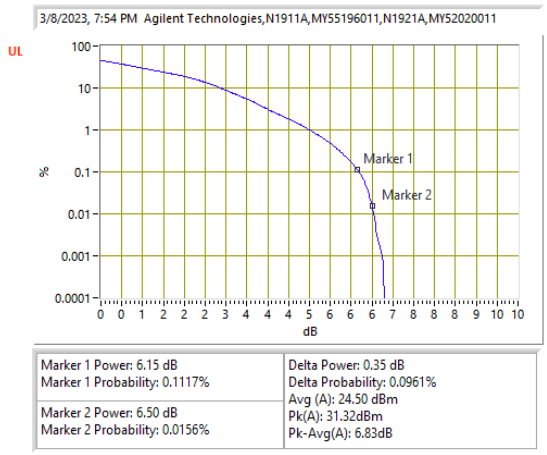
5G NR n12 5MHz BPSK Middle Channel, ID:50822



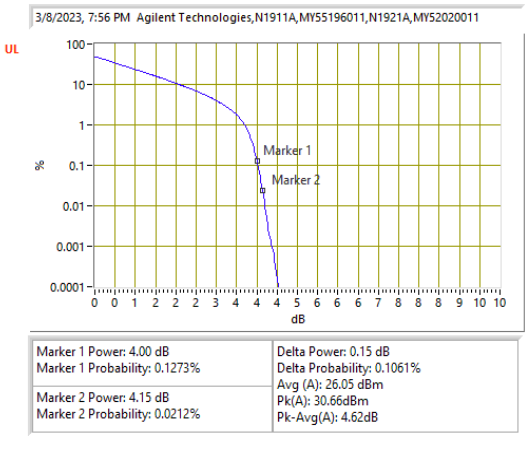
5G NR n12 5MHz 16QAM Middle Channel, ID:50822



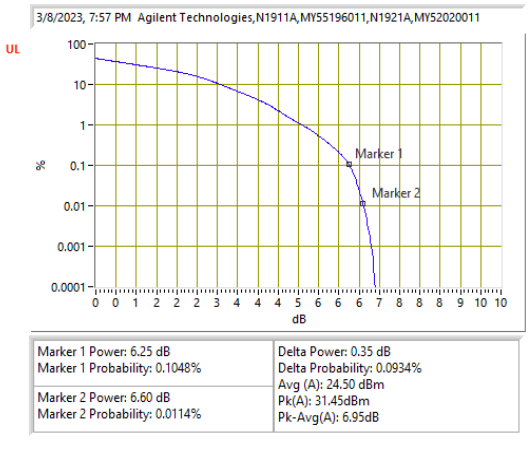
5G NR n12 10MHz BPSK Middle Channel, ID:50822



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

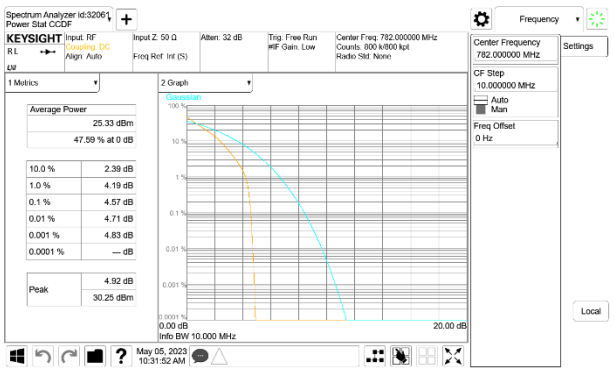


5G NR n12 15MHz BPSK Middle Channel, ID:50822

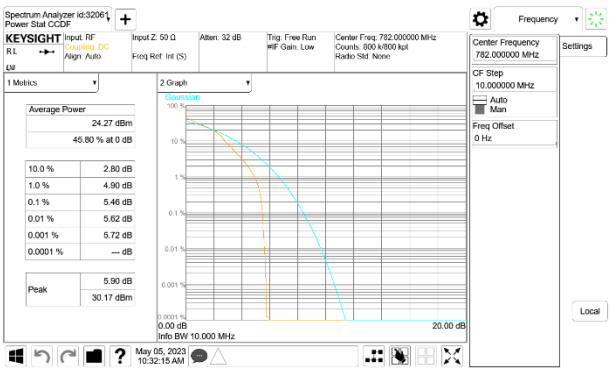


5G NR n12 15MHz 16QAM Middle Channel, ID:50822

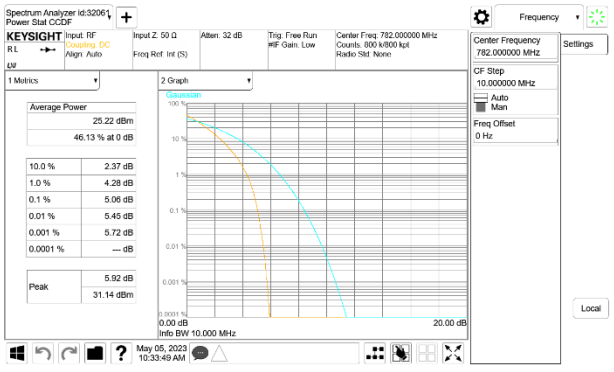
9.5.3. LTE BAND 13



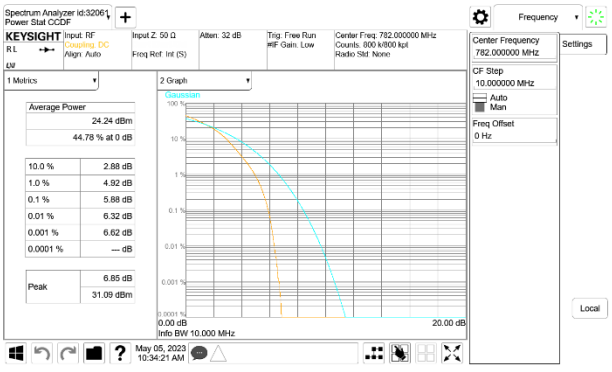
LTE B13 5MHz QPSK Middle Channel



LTE B13 5MHz 16QAM Middle Channel



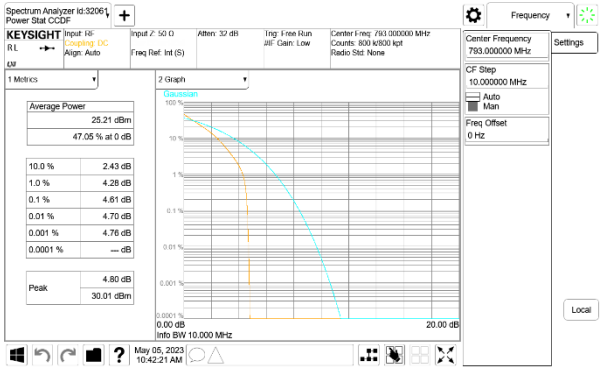
LTE B13 10MHz QPSK Middle Channel



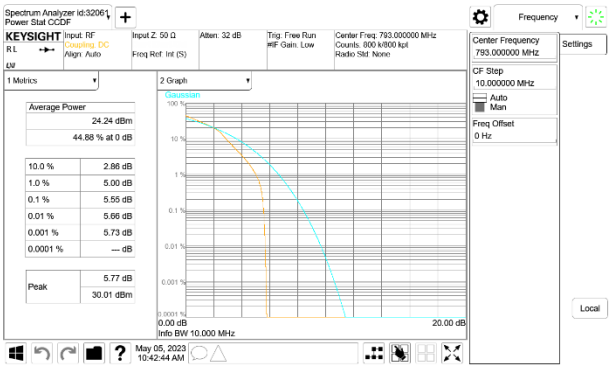
LTE B13 10MHz 16QAM Middle Channel

9.5.4. LTE BAND 14 AND 5G NR n14

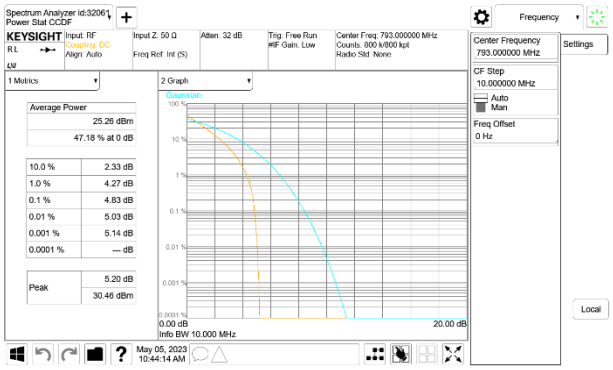
LTE BAND 14



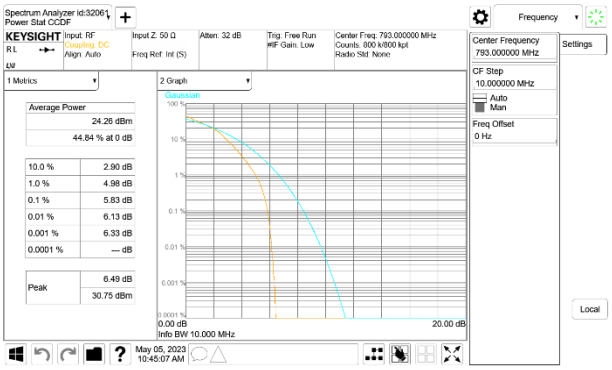
LTE B14 5MHz QPSK Middle Channel



LTE B14 5MHz 16QAM Middle Channel

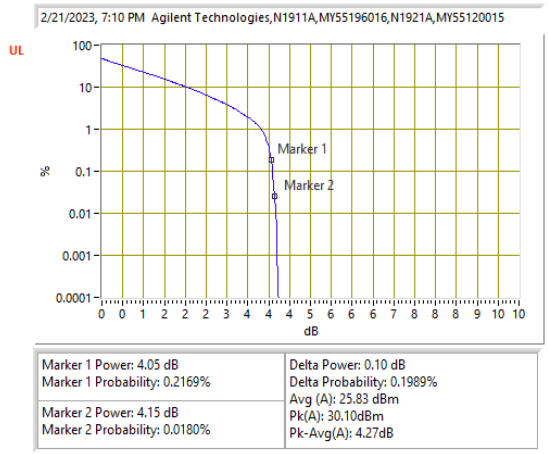


LTE B14 10MHz QPSK Middle Channel

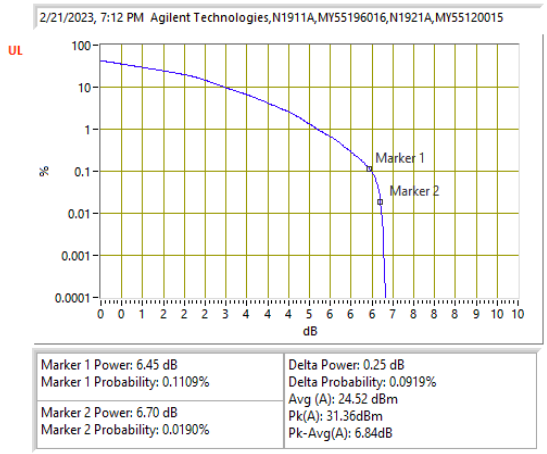


LTE B14 10MHz 16QAM Middle Channel

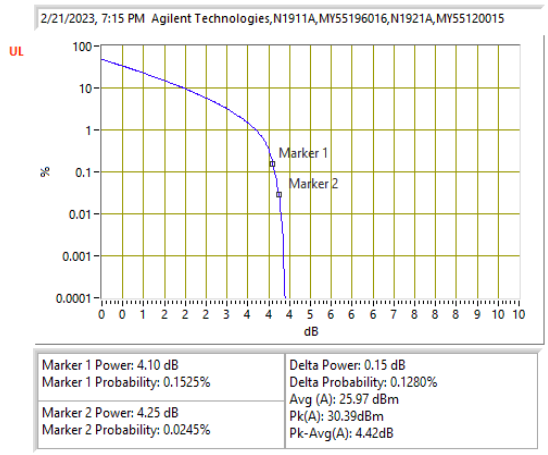
5G NR n14



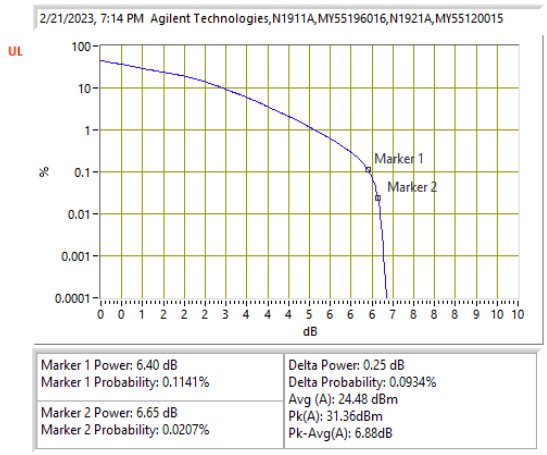
5G NR n14 5MHz BPSK Middle Channel, ID:50822



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

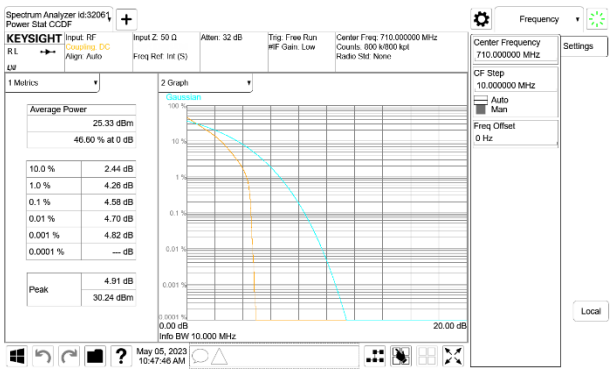


5G NR n14 10MHz BPSK Middle Channel, ID:50822

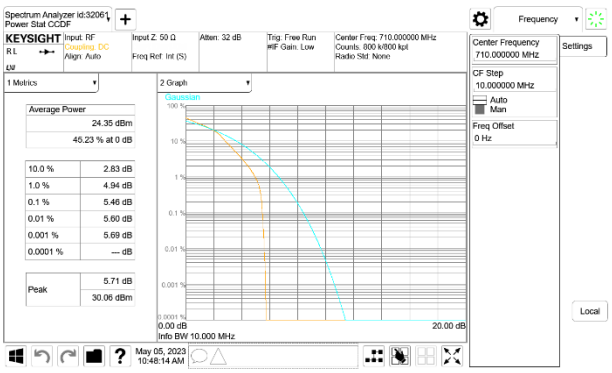


5G NR n14 10MHz 16QAM Middle Channel, ID:50822

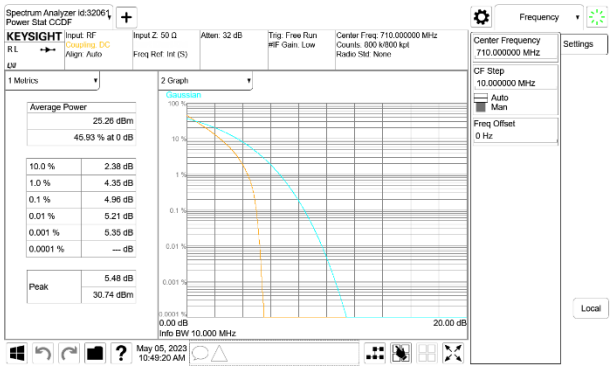
9.5.5. LTE BAND 17



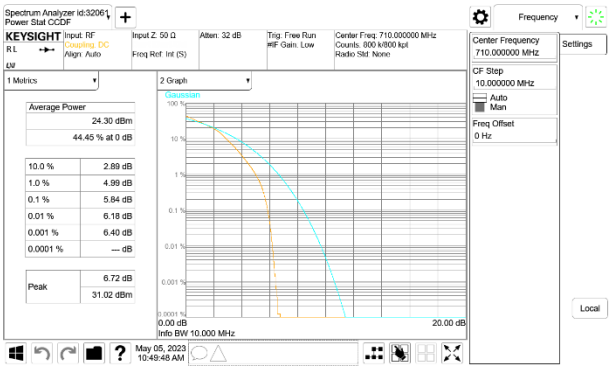
LTE B17 5MHz QPSK Middle Channel



LTE B17 5MHz 16QAM Middle Channel



LTE B17 10MHz QPSK Middle Channel



LTE B17 10MHz 16QAM Middle Channel