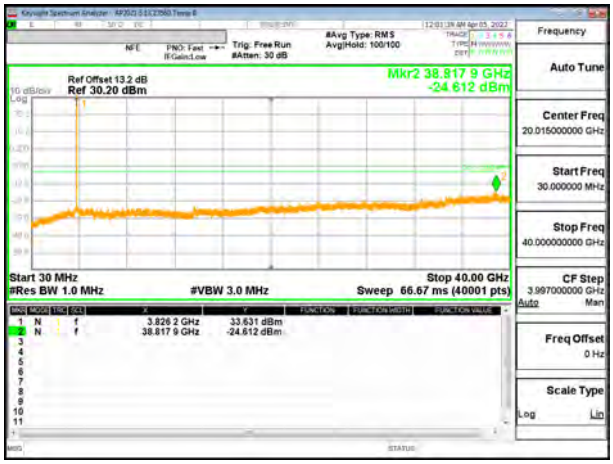
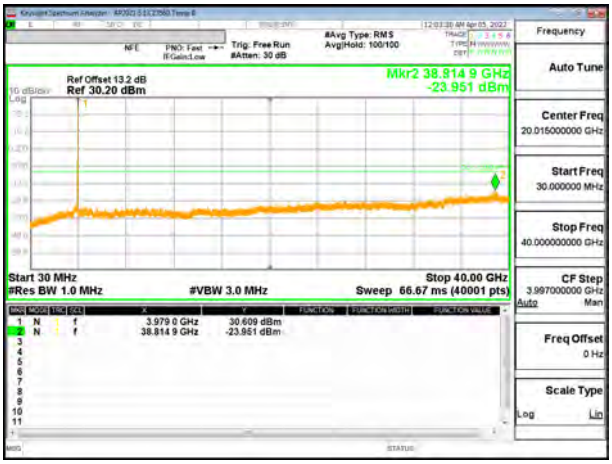
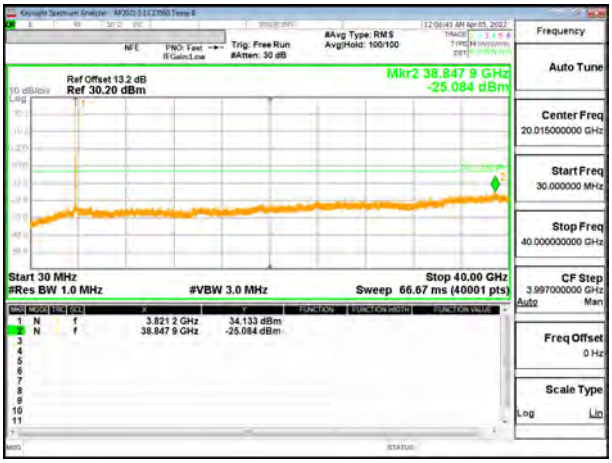


5G NR n77 30MHz BPSK Middle Channel RB1-1

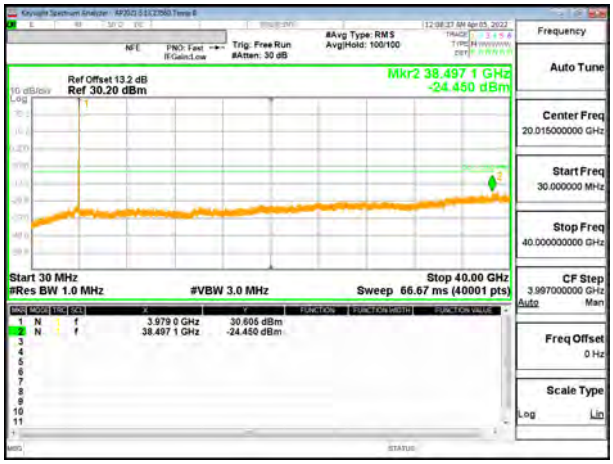


5G NR n77 30MHz BPSK High Channel RB1-77

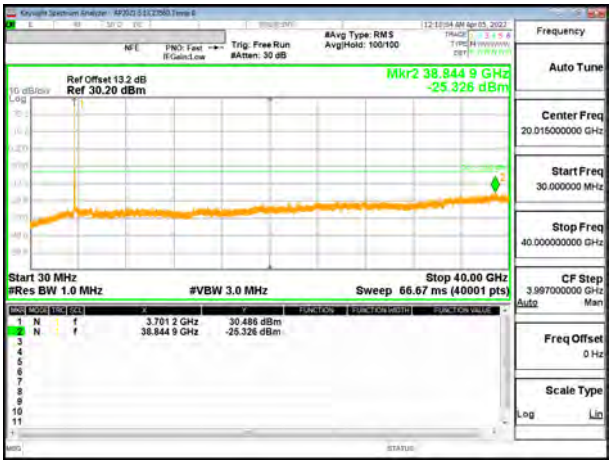
5G NR n77 40MHz BPSK Low Channel RB1-0



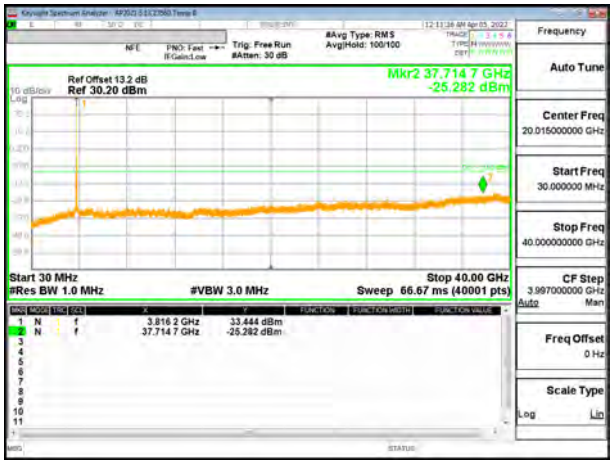
5G NR n77 40MHz BPSK Middle Channel RB1-1



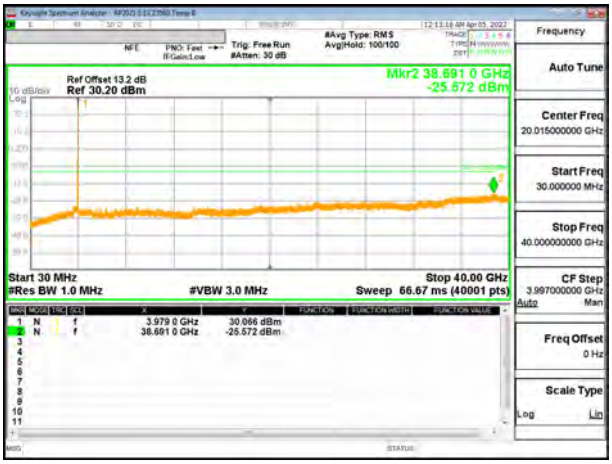
5G NR n77 40MHz BPSK High Channel RB1-105



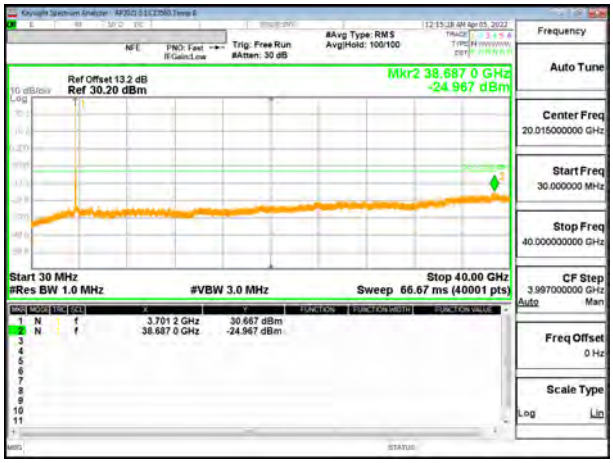
5G NR n77 50MHz BPSK Middle Channel RB1-0



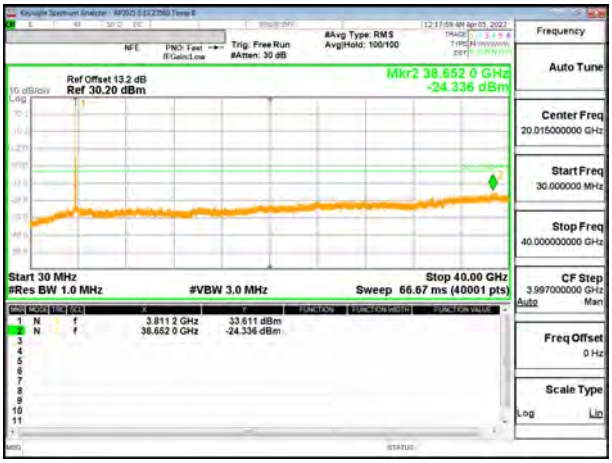
5G NR n77 50MHz BPSK Middle Channel RB1-1



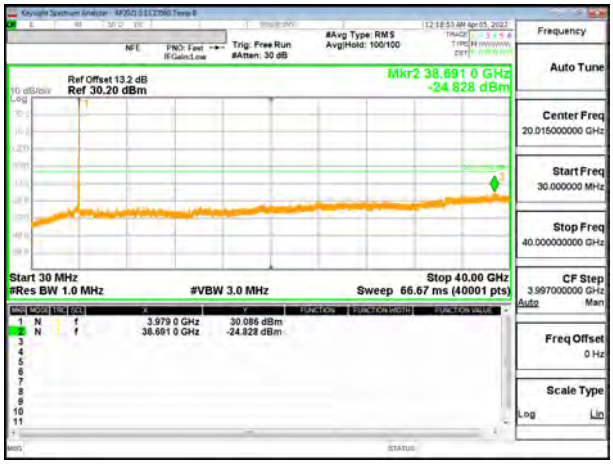
5G NR n77 50MHz BPSK High Channel RB1-132



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

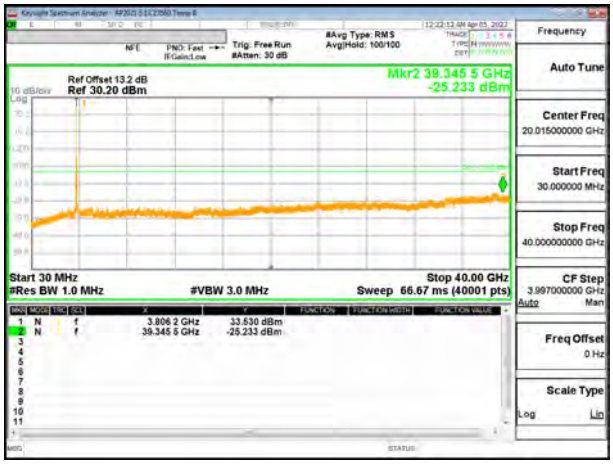


5G NR n77 60MHz BPSK Middle Channel RB1-1

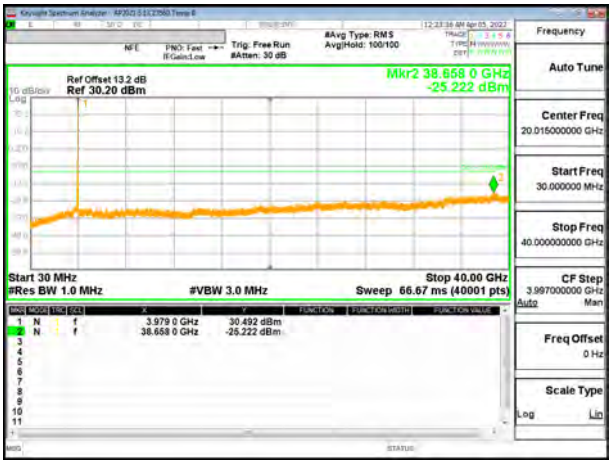


5G NR n77 60MHz BPSK High Channel RB1-161

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



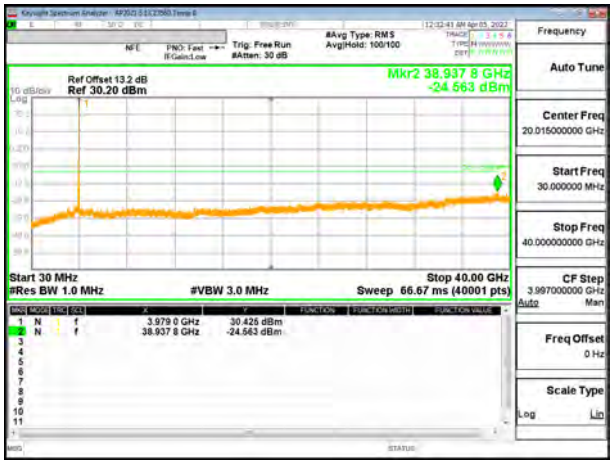
5G NR n77 70MHz BPSK Middle Channel RB1-1



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

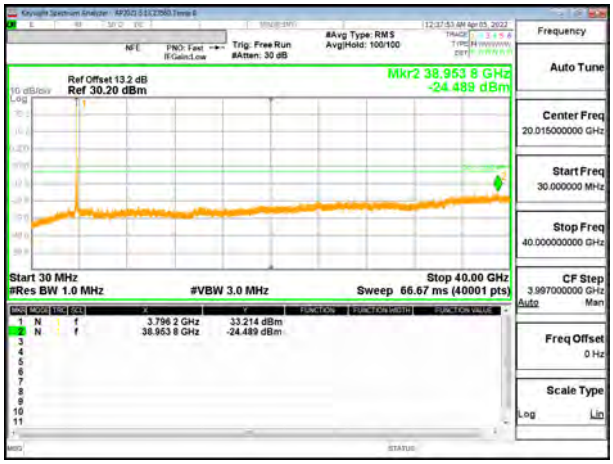
5G NR n77 80MHz BPSK Low Channel RB1-0

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

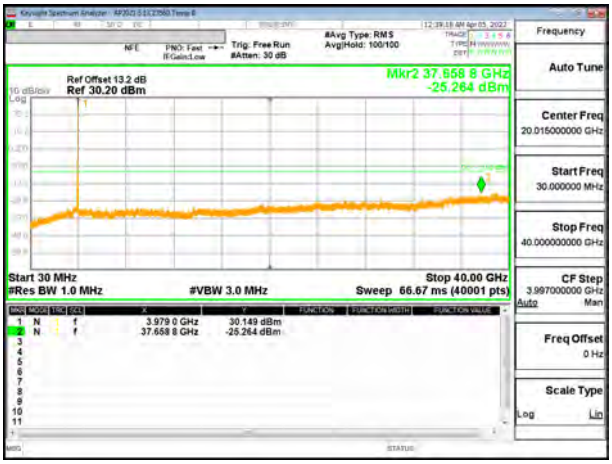


5G NR n77 80MHz BPSK High Channel RB1-216

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



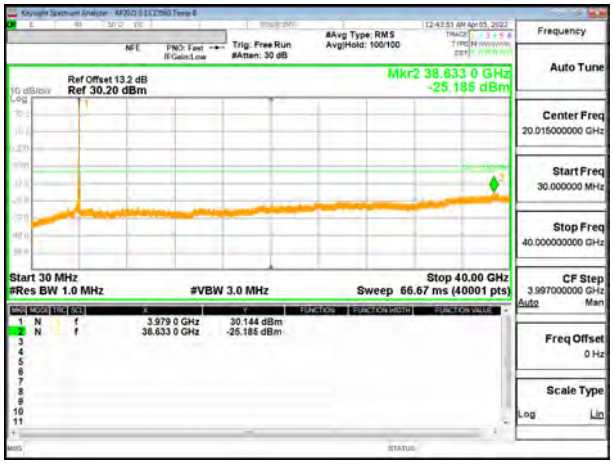
5G NR n77 90MHz BPSK Middle Channel RB1-1



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

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

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



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

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, 3.2VDC.

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.

LTE BAND 5 QPSK (10MHz BANDWIDTH)

Test Engineer ID:	25602	Test Date:	5/7/2022

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)		824.7990	848.2304			
Extreme (50°C)		824.7990	848.2304	-0.6	-0.001	Yes
Extreme (40°C)		824.7990	848.2304	-0.7	-0.001	Yes
Extreme (30°C)		824.7990	848.2304	-0.4	0.000	Yes
Extreme (10°C)	Normal	824.7990	848.2304	-0.7	-0.001	Yes
Extreme (0°C)		824.7990	848.2304	0.9	0.001	Yes
Extreme (-10°C)		824.7990	848.2304	1.0	0.001	Yes
Extreme (-20°C)		824.7990	848.2304	1.1	0.001	Yes
Extreme (-30°C)		824.7990	848.2304	1.3	0.002	Yes
20°C	15%	824.7990	848.2304	0.5	0.001	Yes
	-15%	824.7990	848.2304	0.4	0.001	Yes
	End Point Voltage	824.7990	848.2304	0.8	0.001	Yes

5G NR n5 BPSK (20MHz BANDWIDTH)

Test Engineer ID:	25602	Test Date:	5/4/2022

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)	Normal	824.3504	848.2698			
Extreme (50°C)		824.3504	848.2698	-0.6	-0.001	Yes
Extreme (40°C)		824.3504	848.2698	-0.7	-0.001	Yes
Extreme (30°C)		824.3504	848.2698	-0.4	0.000	Yes
Extreme (10°C)		824.3504	848.2698	-0.7	-0.001	Yes
Extreme (0°C)		824.3504	848.2698	0.9	0.001	Yes
Extreme (-10°C)		824.3504	848.2698	1.0	0.001	Yes
Extreme (-20°C)		824.3504	848.2698	1.1	0.001	Yes
Extreme (-30°C)		824.3504	848.2698	1.3	0.002	Yes
20°C	15%	824.3504	848.2698	0.5	0.001	Yes
	-15%	824.3504	848.2698	0.4	0.001	Yes
	End Point Voltage	824.3504	848.2698	0.8	0.001	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.

LTE BAND 7 QPSK (20MHz BANDWIDTH)

Test Engineer ID:	25602	Test Date:	5/6/2022

Band	7	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		2500	2570			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	2501.0738	2568.9586			
Extreme (50°C)		2501.0738	2568.9586	-0.6	0.000	Yes
Extreme (40°C)		2501.0738	2568.9586	-0.7	0.000	Yes
Extreme (30°C)		2501.0738	2568.9586	-0.4	0.000	Yes
Extreme (10°C)		2501.0738	2568.9586	-0.7	0.000	Yes
Extreme (0°C)		2501.0738	2568.9586	0.9	0.000	Yes
Extreme (-10°C)		2501.0738	2568.9586	1.0	0.000	Yes
Extreme (-20°C)		2501.0738	2568.9586	1.1	0.000	Yes
Extreme (-30°C)		2501.0738	2568.9586	1.3	0.001	Yes
20°C	15%	2501.0738	2568.9586	0.5	0.000	Yes
	-15%	2501.0738	2568.9586	0.4	0.000	Yes
	End Point Voltage	2501.0738	2568.9586	0.8	0.000	Yes

5G NR n7 BPSK (40MHz BANDWIDTH)

Test Engineer ID:	25602	Test Date:	5/3/2022

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	2500.1902	2569.4947			
Extreme (50°C)		2500.1902	2569.4947	-0.6	0.000	Yes
Extreme (40°C)		2500.1902	2569.4947	-0.7	0.000	Yes
Extreme (30°C)		2500.1902	2569.4947	-0.4	0.000	Yes
Extreme (10°C)		2500.1902	2569.4947	-0.7	0.000	Yes
Extreme (0°C)		2500.1902	2569.4947	0.9	0.000	Yes
Extreme (-10°C)		2500.1902	2569.4947	1.0	0.000	Yes
Extreme (-20°C)		2500.1902	2569.4947	1.1	0.000	Yes
Extreme (-30°C)		2500.1902	2569.4947	1.3	0.001	Yes
20°C	15%	2500.1902	2569.4947	0.5	0.000	Yes
	-15%	2500.1902	2569.4947	0.4	0.000	Yes
	End Point Voltage	2500.1902	2569.4947	0.8	0.000	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:	25602	Test Date:	5/3/2022

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)	Normal	669.5236	715.4754			
Extreme (50°C)		669.5236	715.4754	-0.6	-0.001	Yes
Extreme (40°C)		669.5236	715.4754	-0.7	-0.001	Yes
Extreme (30°C)		669.5236	715.4754	-0.4	-0.001	Yes
Extreme (10°C)		669.5236	715.4754	-0.7	-0.001	Yes
Extreme (0°C)		669.5236	715.4754	0.9	0.001	Yes
Extreme (-10°C)		669.5236	715.4754	1.0	0.001	Yes
Extreme (-20°C)		669.5236	715.4754	1.1	0.002	Yes
Extreme (-30°C)		669.5236	715.4754	1.3	0.002	Yes
20°C	15%	669.5236	715.4754	0.5	0.001	Yes
	-15%	669.5236	715.4754	0.4	0.001	Yes
	End Point Voltage	669.5236	715.4754	0.8	0.001	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	699.4224	714.8474			
Extreme (50°C)		699.4224	714.8474	1.1	0.001	Yes
Extreme (40°C)		699.4224	714.8474	1.0	0.001	Yes
Extreme (30°C)		699.4224	714.8474	1.1	0.001	Yes
Extreme (10°C)		699.4224	714.8474	1.8	0.003	Yes
Extreme (0°C)		699.4224	714.8474	1.6	0.002	Yes
Extreme (-10°C)		699.4224	714.8474	1.1	0.002	Yes
Extreme (-20°C)		699.4224	714.8474	1.5	0.002	Yes
Extreme (-30°C)		699.4224	714.8474	1.5	0.002	Yes
20°C	15%	699.4224	714.8474	1.2	0.002	Yes
	-15%	699.4224	714.8474	1.5	0.002	Yes
	End Point Voltage	699.4224	714.8474	1.1	0.002	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:	25602	Test Date:	5/6/2022

LTE BAND 13 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	777.5415	786.4793			
Extreme (50°C)		777.5415	786.4793	1.6	0.002	Yes
Extreme (40°C)		777.5415	786.4793	1.2	0.002	Yes
Extreme (30°C)		777.5415	786.4793	0.6	0.001	Yes
Extreme (10°C)		777.5415	786.4793	0.7	0.001	Yes
Extreme (0°C)		777.5415	786.4793	1.2	0.002	Yes
Extreme (-10°C)		777.5415	786.4793	1.7	0.002	Yes
Extreme (-20°C)		777.5415	786.4793	1.8	0.002	Yes
Extreme (-30°C)		777.5415	786.4793	2.4	0.003	Yes
20°C	15%	777.5415	786.4793	1.5	0.002	Yes
	-15%	777.5415	786.4793	0.5	0.001	Yes
	End Point Voltage	777.5415	786.4793	1.1	0.001	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:	25602	Test Date:	5/6/2022

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)		788.5384	797.4843			
Extreme (50°C)		788.5384	797.4843	-0.5	-0.001	Yes
Extreme (40°C)		788.5384	797.4843	-0.3	0.000	Yes
Extreme (30°C)		788.5384	797.4843	-0.7	-0.001	Yes
Extreme (10°C)	Normal	788.5384	797.4843	-0.7	-0.001	Yes
Extreme (0°C)		788.5384	797.4843	-0.6	-0.001	Yes
Extreme (-10°C)		788.5384	797.4843	0.6	0.001	Yes
Extreme (-20°C)		788.5384	797.4843	0.7	0.001	Yes
Extreme (-30°C)		788.5384	797.4843	0.5	0.001	Yes
20°C	15%	788.5384	797.4843	-0.5	-0.001	Yes
	-15%	788.5384	797.4843	-0.9	-0.001	Yes
	End Point Voltage	788.5384	797.4843	0.7	0.001	Yes

5G NR n14 BPSK (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	788.3576	797.2927			
Extreme (50°C)		788.3575	797.2927	-0.5	-0.001	Yes
Extreme (40°C)		788.3575	797.2927	-0.3	0.000	Yes
Extreme (30°C)		788.3575	797.2927	-0.7	-0.001	Yes
Extreme (10°C)		788.3575	797.2927	-0.7	-0.001	Yes
Extreme (0°C)		788.3575	797.2927	-0.6	-0.001	Yes
Extreme (-10°C)		788.3575	797.2927	0.6	0.001	Yes
Extreme (-20°C)		788.3575	797.2927	0.7	0.001	Yes
Extreme (-30°C)		788.3576	797.2927	0.5	0.001	Yes
20°C	15%	788.3575	797.2927	-0.5	-0.001	Yes
	-15%	788.3575	797.2927	-0.9	-0.001	Yes
	End Point Voltage	788.3575	797.2927	0.7	0.001	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:	25602	Test Date:	5/6/2022

LTE BAND 17 QPSK (10MHz BANDWIDTH)

Band	17	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		704	716			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	704.5266	715.4823			
Extreme (50°C)		704.5266	715.4823	0.8	0.001	Yes
Extreme (40°C)		704.5266	715.4823	-0.6	-0.001	Yes
Extreme (30°C)		704.5266	715.4823	0.3	0.000	Yes
Extreme (10°C)		704.5266	715.4823	-0.8	-0.001	Yes
Extreme (0°C)		704.5266	715.4823	0.4	0.001	Yes
Extreme (-10°C)		704.5266	715.4823	0.6	0.001	Yes
Extreme (-20°C)		704.5266	715.4823	1.0	0.001	Yes
Extreme (-30°C)		704.5266	715.4823	0.9	0.001	Yes
20°C	15%	704.5266	715.4823	0.8	0.001	Yes
	-15%	704.5266	715.4823	-0.5	-0.001	Yes
	End Point Voltage	704.5266	715.4823	1.1	0.002	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:	25602	Test Date:	5/7/2022

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	1851.0902	1913.9490			
Extreme (50°C)		1851.0902	1913.9490	-2.3	-0.001	Yes
Extreme (40°C)		1851.0902	1913.9490	-2.6	-0.001	Yes
Extreme (30°C)		1851.0902	1913.9490	-2.8	-0.001	Yes
Extreme (10°C)		1851.0902	1913.9490	-1.8	-0.001	Yes
Extreme (0°C)		1851.0902	1913.9490	-1.5	-0.001	Yes
Extreme (-10°C)		1851.0902	1913.9490	-2.0	-0.001	Yes
Extreme (-20°C)		1851.0902	1913.9490	-1.3	-0.001	Yes
Extreme (-30°C)		1851.0902	1913.9490	-1.0	-0.001	Yes
20°C	15%	1851.0902	1913.9490	-2.1	-0.001	Yes
	-15%	1851.0902	1913.9490	-1.8	-0.001	Yes
	End Point Voltage	1851.0902	1913.9490	-1.3	-0.001	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	1850.2838	1914.6457			
Extreme (50°C)		1850.2838	1914.6457	-1.8	-0.001	Yes
Extreme (40°C)		1850.2838	1914.6457	-1.9	-0.001	Yes
Extreme (30°C)		1850.2838	1914.6457	2.6	0.001	Yes
Extreme (10°C)		1850.2838	1914.6457	-1.1	-0.001	Yes
Extreme (0°C)		1850.2838	1914.6457	-1.7	-0.001	Yes
Extreme (-10°C)		1850.2838	1914.6457	-1.1	-0.001	Yes
Extreme (-20°C)		1850.2838	1914.6457	-1.8	-0.001	Yes
Extreme (-30°C)		1850.2838	1914.6457	-1.1	-0.001	Yes
20°C	15%	1850.2838	1914.6457	-1.6	-0.001	Yes
	-15%	1850.2838	1914.6457	-1.8	-0.001	Yes
	End Point Voltage	1850.2838	1914.6457	-2.4	-0.001	Yes

9.4.8. LTE BAND 26 AND 5G NR n26 (FCC 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:	25602	Test Date:	5/7/2022

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	814.5335	823.4769			
Extreme (50°C)		814.5335	823.4769	1.4	0.002	Yes
Extreme (40°C)		814.5335	823.4769	0.8	0.001	Yes
Extreme (30°C)		814.5335	823.4769	1.3	0.002	Yes
Extreme (10°C)		814.5335	823.4769	1.1	0.001	Yes
Extreme (0°C)		814.5335	823.4769	1.3	0.002	Yes
Extreme (-10°C)		814.5335	823.4769	1.0	0.001	Yes
Extreme (-20°C)		814.5335	823.4769	1.3	0.002	Yes
Extreme (-30°C)		814.5335	823.4769	1.1	0.001	Yes
20°C	15%	814.5335	823.4769	1.4	0.002	Yes
	-15%	814.5335	823.4769	0.8	0.001	Yes
	End Point Voltage	814.5335	823.4769	1.5	0.002	Yes

5G NR n26 Part 90sBPSK (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)		814.3156	823.2552			
Extreme (50°C)		814.3156	823.2552	-4.2	-0.005	Yes
Extreme (40°C)		814.3156	823.2552	-1.8	-0.002	Yes
Extreme (30°C)		814.3156	823.2552	-3.0	-0.004	Yes
Extreme (10°C)	Normal	814.3156	823.2552	-4.5	-0.005	Yes
Extreme (0°C)		814.3156	823.2552	-4.2	-0.005	Yes
Extreme (-10°C)		814.3156	823.2552	-3.4	-0.004	Yes
Extreme (-20°C)		814.3156	823.2552	-2.8	-0.003	Yes
Extreme (-30°C)		814.3156	823.2552	-2.3	-0.003	Yes
20°C	15%	814.3156	823.2552	-3.6	-0.004	Yes
	-15%	814.3156	823.2552	-1.1	-0.001	Yes
	End Point Voltage	814.3156	823.2552	-3.0	-0.004	Yes

9.4.9. LTE BAND 30

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:	25602	Test Date:	5/7/2022

QPSK (10MHz BANDWIDTH)

Band	30	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		2305	2315			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	2305.5401	2314.4816			
Extreme (50°C)		2305.5401	2314.4816	-2.2	-0.001	Yes
Extreme (40°C)		2305.5401	2314.4816	-2.7	-0.001	Yes
Extreme (30°C)		2305.5401	2314.4816	-2.3	-0.001	Yes
Extreme (10°C)		2305.5401	2314.4816	-3.9	-0.002	Yes
Extreme (0°C)		2305.5401	2314.4816	1.5	0.001	Yes
Extreme (-10°C)		2305.5401	2314.4816	-2.7	-0.001	Yes
Extreme (-20°C)		2305.5401	2314.4816	-2.4	-0.001	Yes
Extreme (-30°C)		2305.5401	2314.4816	-4.1	-0.002	Yes
20°C	15%	2305.5401	2314.4816	1.9	0.001	Yes
	-15%	2305.5401	2314.4816	-2.5	-0.001	Yes
	End Point Voltage	2305.5401	2314.4816	4.4	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	2305.3233	2314.2795			
Extreme (50°C)		2305.3233	2314.2795	-3.8	-0.002	Yes
Extreme (40°C)		2305.3233	2314.2795	-5.0	-0.002	Yes
Extreme (30°C)		2305.3233	2314.2795	-3.0	-0.001	Yes
Extreme (10°C)		2305.3233	2314.2795	-3.4	-0.001	Yes
Extreme (0°C)		2305.3233	2314.2795	-2.7	-0.001	Yes
Extreme (-10°C)		2305.3233	2314.2795	-4.2	-0.002	Yes
Extreme (-20°C)		2305.3233	2314.2795	-2.8	-0.001	Yes
Extreme (-30°C)		2305.3233	2314.2795	1.1	0.000	Yes
20°C	15%	2305.3233	2314.2795	-3.0	-0.001	Yes
	-15%	2305.3233	2314.2795	-1.5	-0.001	Yes
	End Point Voltage	2305.3233	2314.2795	-2.6	-0.001	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:	25602	Test Date:	5/8/2022

LTE BAND 41 QPSK (20MHz 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)		2496.8391	2688.9243			
Extreme (50°C)		2496.8391	2688.9243	-3.5	-0.001	Yes
Extreme (40°C)		2496.8391	2688.9243	-1.9	-0.001	Yes
Extreme (30°C)		2496.8391	2688.9243	-3.2	-0.001	Yes
Extreme (10°C)	Normal	2496.8391	2688.9243	-2.5	-0.001	Yes
Extreme (0°C)		2496.8391	2688.9243	-3.0	-0.001	Yes
Extreme (-10°C)		2496.8391	2688.9243	-3.8	-0.001	Yes
Extreme (-20°C)		2496.8391	2688.9243	-4.9	-0.002	Yes
Extreme (-30°C)		2496.8391	2688.9243	-5.1	-0.002	Yes
20°C	15%	2496.8391	2688.9243	-3.7	-0.001	Yes
	-15%	2496.8391	2688.9243	-3.3	-0.001	Yes
	End Point Voltage	2496.8391	2688.9243	-5.3	-0.002	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	2497.1338	2687.7326			
Extreme (50°C)		2497.1338	2687.7326	-1.8	-0.001	Yes
Extreme (40°C)		2497.1338	2687.7326	-3.8	-0.001	Yes
Extreme (30°C)		2497.1338	2687.7326	-3.2	-0.001	Yes
Extreme (10°C)		2497.1338	2687.7326	-3.9	-0.001	Yes
Extreme (0°C)		2497.1338	2687.7326	-5.1	-0.002	Yes
Extreme (-10°C)		2497.1338	2687.7326	-8.5	-0.003	Yes
Extreme (-20°C)		2497.1338	2687.7326	-6.3	-0.002	Yes
Extreme (-30°C)		2497.1338	2687.7326	-2.1	-0.001	Yes
20°C	15%	2497.1338	2687.7326	-8.8	-0.003	Yes
	-15%	2497.1338	2687.7326	-6.3	-0.002	Yes
	End Point Voltage	2497.1338	2687.7326	-1.9	-0.001	Yes

9.4.11. LTE BAND 48

Test Engineer ID:	25602	Test Date:	5/8/2022

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)	Normal	3551.0988	3698.9893			
Extreme (50°C)		3551.0988	3698.9893	1.6	0.000	Yes
Extreme (40°C)		3551.0988	3698.9893	1.3	0.000	Yes
Extreme (30°C)		3551.0988	3698.9893	1.5	0.000	Yes
Extreme (10°C)		3551.0988	3698.9893	-1.1	0.000	Yes
Extreme (0°C)		3551.0988	3698.9893	-1.7	0.000	Yes
Extreme (-10°C)		3551.0988	3698.9893	-2.1	-0.001	Yes
Extreme (-20°C)		3551.0988	3698.9893	-1.6	0.000	Yes
Extreme (-30°C)		3551.0988	3698.9893	-1.5	0.000	Yes
20°C	15%	3551.0988	3698.9893	1.5	0.000	Yes
	-15%	3551.0988	3698.9893	-1.1	0.000	Yes
	End Point Voltage	3551.0988	3698.9893	-2.3	-0.001	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:	25602	Test Date:	5/7/2022

LTE BAND 66 QPSK (20MHz 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)	Normal	1711.0989	1778.9800			
Extreme (50°C)		1711.0989	1778.9800	-2.1	-0.001	Yes
Extreme (40°C)		1711.0989	1778.9800	1.0	0.001	Yes
Extreme (30°C)		1711.0989	1778.9800	-3.7	-0.002	Yes
Extreme (10°C)		1711.0989	1778.9800	-2.1	-0.001	Yes
Extreme (0°C)		1711.0989	1778.9800	-1.6	-0.001	Yes
Extreme (-10°C)		1711.0989	1778.9800	-1.9	-0.001	Yes
Extreme (-20°C)		1711.0989	1778.9800	-2.0	-0.001	Yes
Extreme (-30°C)		1711.0989	1778.9800	1.6	0.001	Yes
20°C	15%	1711.0989	1778.9800	-1.5	-0.001	Yes
	-15%	1711.0989	1778.9800	-1.1	-0.001	Yes
	End Point Voltage	1711.0989	1778.9800	2.0	0.001	Yes

5G NR n66 QPSK (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	1710.2285	1779.3571			
Extreme (50°C)		1710.2285	1779.3571	-2.5	-0.001	Yes
Extreme (40°C)		1710.2285	1779.3571	-4.2	-0.002	Yes
Extreme (30°C)		1710.2285	1779.3571	-4.3	-0.002	Yes
Extreme (10°C)		1710.2285	1779.3571	-1.9	-0.001	Yes
Extreme (0°C)		1710.2285	1779.3571	-3.6	-0.002	Yes
Extreme (-10°C)		1710.2285	1779.3571	-2.1	-0.001	Yes
Extreme (-20°C)		1710.2285	1779.3571	-1.8	-0.001	Yes
Extreme (-30°C)		1710.2285	1779.3571	-1.2	-0.001	Yes
20°C	15%	1710.2285	1779.3571	-4.7	-0.003	Yes
	-15%	1710.2285	1779.3571	-2.1	-0.001	Yes
	End Point Voltage	1710.2285	1779.3571	-1.2	-0.001	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:	25602	Test Date:	5/4/2022

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)	Normal	1695.4218	1708.8420			
Extreme (50°C)		1695.4218	1708.8420	-4.3	-0.003	Yes
Extreme (40°C)		1695.4218	1708.8420	-5.7	-0.003	Yes
Extreme (30°C)		1695.4218	1708.8420	-3.2	-0.002	Yes
Extreme (10°C)		1695.4218	1708.8420	-4.9	-0.003	Yes
Extreme (0°C)		1695.4218	1708.8420	-7.6	-0.004	Yes
Extreme (-10°C)		1695.4218	1708.8420	-2.7	-0.002	Yes
Extreme (-20°C)		1695.4218	1708.8420	-4.2	-0.002	Yes
Extreme (-30°C)		1695.4218	1708.8420	-5.3	-0.003	Yes
20°C	15%	1695.4218	1708.8420	-5.1	-0.003	Yes
	-15%	1695.4218	1708.8420	-8.3	-0.005	Yes
	End Point Voltage	1695.4218	1708.8420	-4.5	-0.003	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:	25602	Test Date:	5/7/2022

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	664.0845	696.9502			
Extreme (50°C)		664.0845	696.9502	-0.5	-0.001	Yes
Extreme (40°C)		664.0845	696.9502	-0.6	-0.001	Yes
Extreme (30°C)		664.0845	696.9502	-0.7	-0.001	Yes
Extreme (10°C)		664.0845	696.9502	0.4	0.001	Yes
Extreme (0°C)		664.0845	696.9502	0.5	0.001	Yes
Extreme (-10°C)		664.0845	696.9502	0.7	0.001	Yes
Extreme (-20°C)		664.0845	696.9502	0.5	0.001	Yes
Extreme (-30°C)		664.0845	696.9502	0.4	0.001	Yes
20°C	15%	664.0845	696.9502	-0.6	-0.001	Yes
	-15%	664.0845	696.9502	-0.7	-0.001	Yes
	End Point Voltage	664.0845	696.9502	0.6	0.001	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	663.5214	696.3924			
Extreme (50°C)		663.5214	696.3924	-4.6	-0.007	Yes
Extreme (40°C)		663.5214	696.3924	-4.4	-0.006	Yes
Extreme (30°C)		663.5214	696.3924	-4.1	-0.006	Yes
Extreme (10°C)		663.5214	696.3924	-2.9	-0.004	Yes
Extreme (0°C)		663.5214	696.3924	-3.6	-0.005	Yes
Extreme (-10°C)		663.5214	696.3924	-5.0	-0.007	Yes
Extreme (-20°C)		663.5214	696.3924	-4.2	-0.006	Yes
Extreme (-30°C)		663.5214	696.3924	-4.2	-0.006	Yes
20°C	15%	663.5214	696.3924	-2.4	-0.003	Yes
	-15%	663.5214	696.3924	-3.4	-0.005	Yes
	End Point Voltage	663.5214	696.3924	-3.9	-0.006	Yes

9.4.15. 5G NR n77 (FCC 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:	25602	Test Date:	5/23/2022

5G NR n77 BPSK (100MHz BANDWIDTH)

Band	77	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		3450	3550			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	3451.0958	2547.0958			
Extreme (50°C)		3451.0958	2547.0958	-2.9	-0.001	Yes
Extreme (40°C)		3451.0958	2547.0958	-3.9	-0.001	Yes
Extreme (30°C)		3451.0958	2547.0958	-2.8	-0.001	Yes
Extreme (10°C)		3451.0958	2547.0958	-6.0	-0.002	Yes
Extreme (0°C)		3451.0958	2547.0958	2.7	0.001	Yes
Extreme (-10°C)		3451.0958	2547.0958	2.5	0.001	Yes
Extreme (-20°C)		3451.0958	2547.0958	-2.3	-0.001	Yes
Extreme (-30°C)		3451.0958	2547.0958	-5.6	-0.002	Yes
20°C	15%	3451.0958	2547.0958	-4.7	-0.001	Yes
	-15%	3451.0958	2547.0958	-3.2	-0.001	Yes
	End Point Voltage	3451.0958	2547.0958	-2.1	-0.001	Yes

9.4.16. 5G NR n77 (FCC 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:	25602	Test Date:	5/23/2022

5G NR n77 BPSK (100MHz BANDWIDTH)

Band	77	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		3700	3980			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	3701.0000	3977.7591			
Extreme (50°C)		3701.0000	3977.7591	-4.1	-0.001	Yes
Extreme (40°C)		3701.0000	3977.7591	-4.1	-0.001	Yes
Extreme (30°C)		3701.0000	3977.7591	-6.0	-0.002	Yes
Extreme (10°C)		3701.0000	3977.7591	-4.3	-0.001	Yes
Extreme (0°C)		3701.0000	3977.7591	3.1	0.001	Yes
Extreme (-10°C)		3701.0000	3977.7591	-2.9	-0.001	Yes
Extreme (-20°C)		3701.0000	3977.7591	-5.9	-0.002	Yes
Extreme (-30°C)		3701.0000	3977.7591	-6.1	-0.002	Yes
20°C	15%	3701.0000	3977.7591	-2.9	-0.001	Yes
	-15%	3701.0000	3977.7591	-6.1	-0.002	Yes
	End Point Voltage	3701.0000	3977.7591	-4.2	-0.001	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.

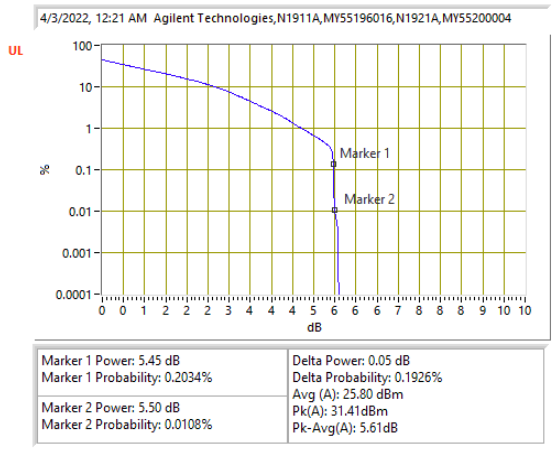
RESULT

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.

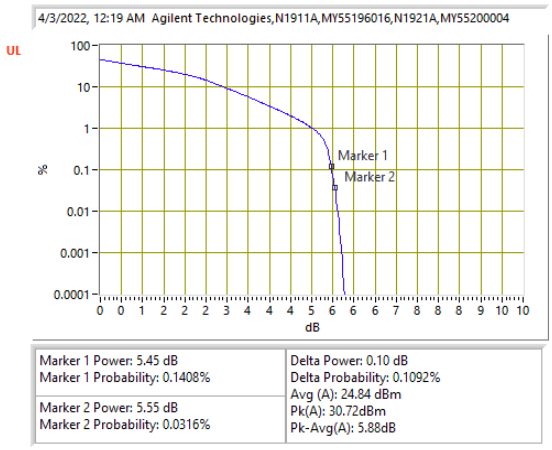
9.5.1. LTE BAND 5 AND 5G NR n5

LTE BAND 5

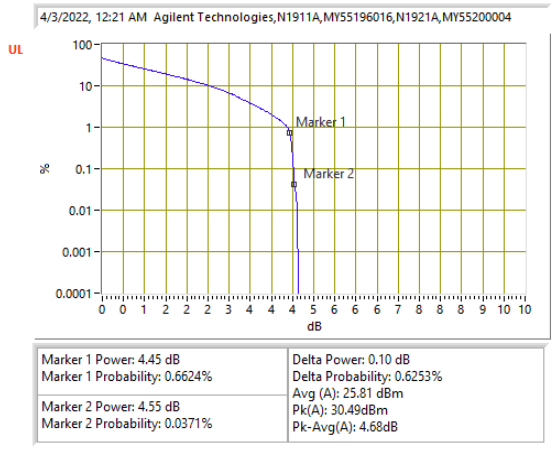
Test Engineer ID:	25602	Test Date:	4/3/2022



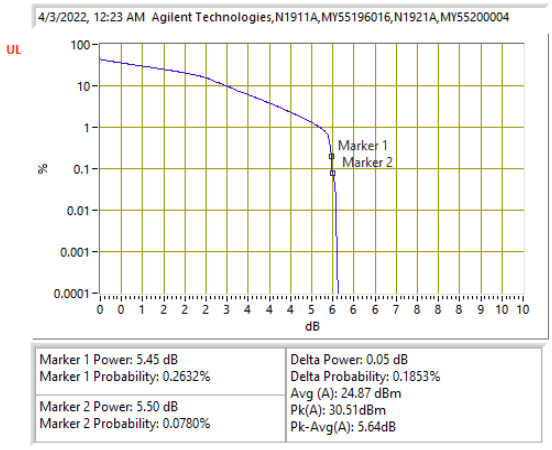
LTE B5 1.4MHz QPSK Middle Channel



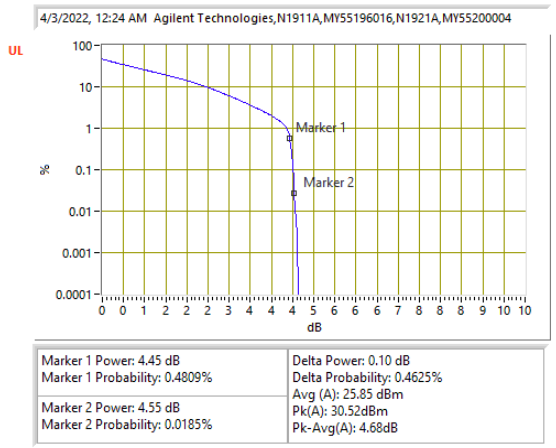
LTE B5 1.4MHz 16QAM Middle Channel



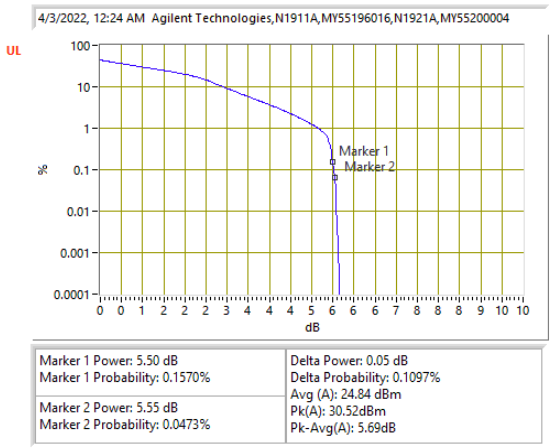
LTE B5 3MHz QPSK Middle Channel



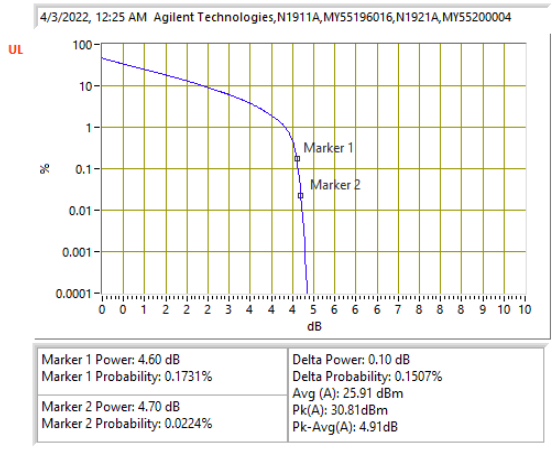
LTE B5 3MHz 16QAM Middle Channel



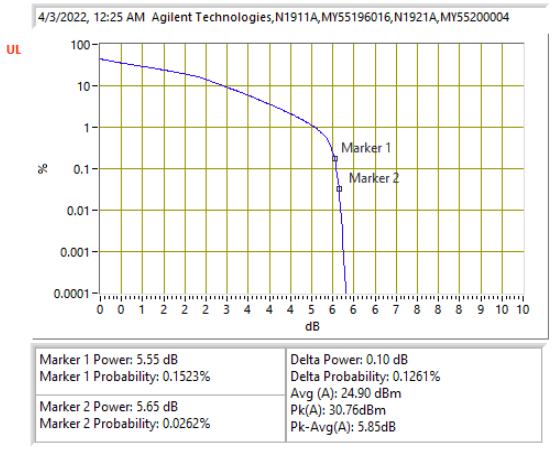
LTE B5 5MHz QPSK Middle Channel



LTE B5 5MHz 16QAM Middle Channel



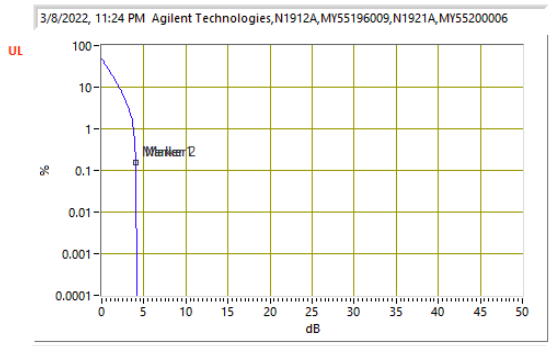
LTE B5 10MHz QPSK Middle Channel



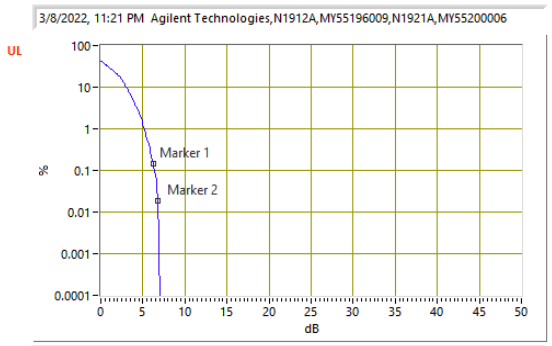
LTE B5 10MHz 16QAM Middle Channel

5G NR n5

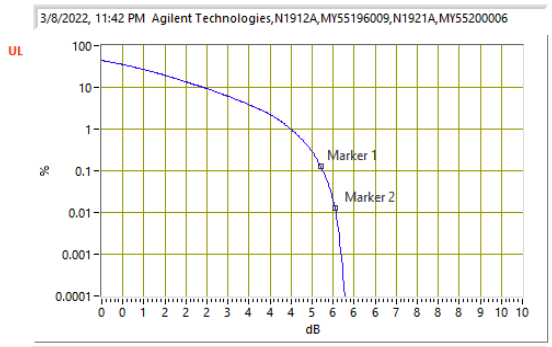
Test Engineer ID:	50822	Test Date:	3/8/2022



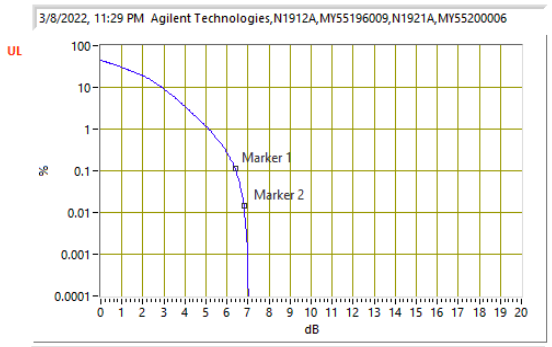
5G NR n26 5MHz BPSK Middle Channel



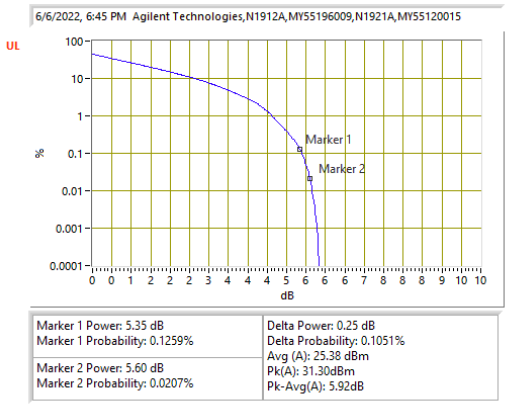
5G NR n26 5MHz 16QAM Middle Channel



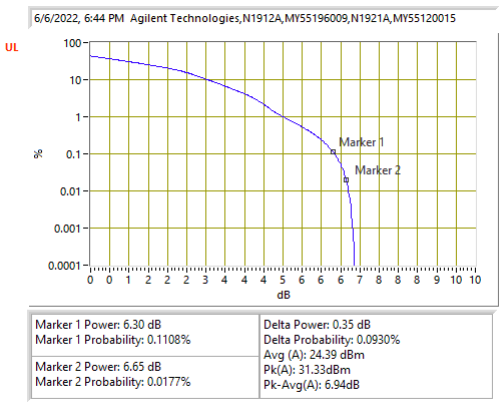
5G NR n26 10MHz BPSK Middle Channel



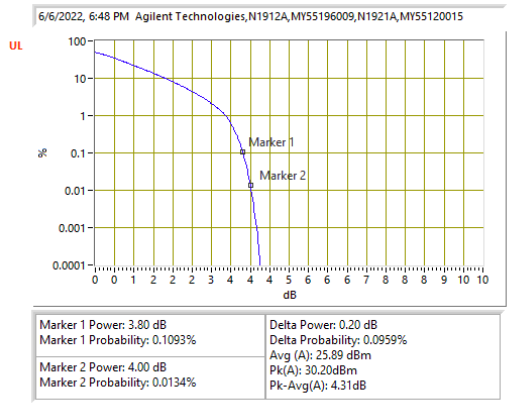
5G NR n26 10MHz 16QAM Middle Channel



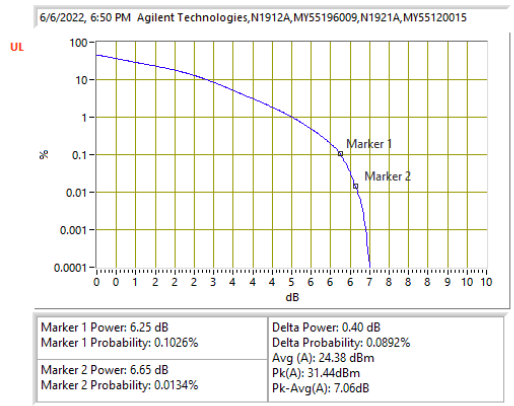
5G NR n5 15MHz BPSK Middle Channel



5G NR n5 15MHz 16QAM Middle Channel



5G NR n5 20MHz BPSK Middle Channel

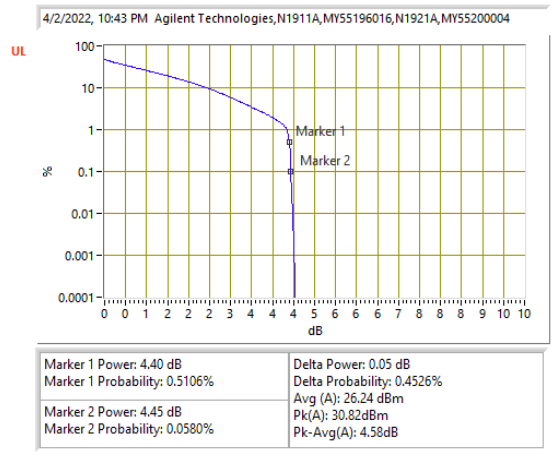


5G NR n5 20MHz 16QAM Middle Channel

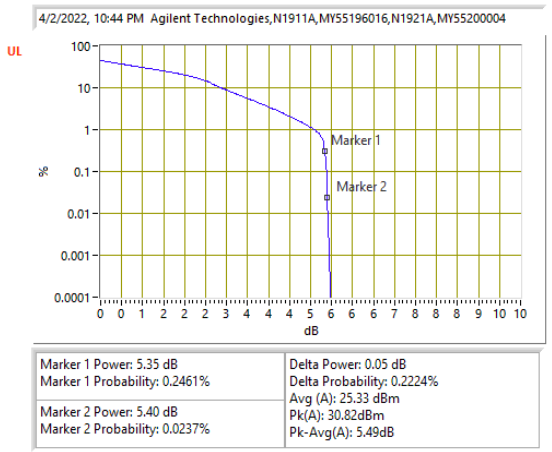
9.5.2. LTE BAND 7 AND 5G NR n7

LTE BAND 7

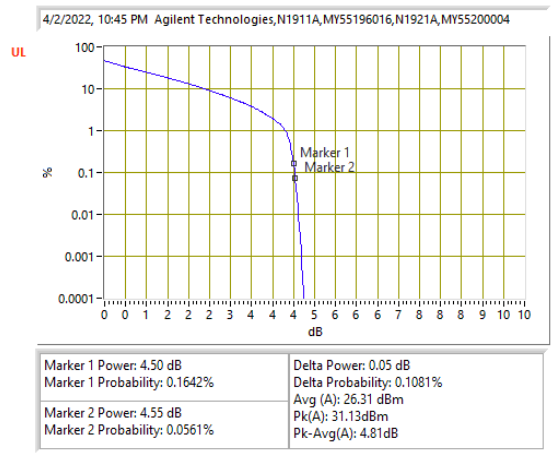
Test Engineer ID:	25602	Test Date:	4/2/2022



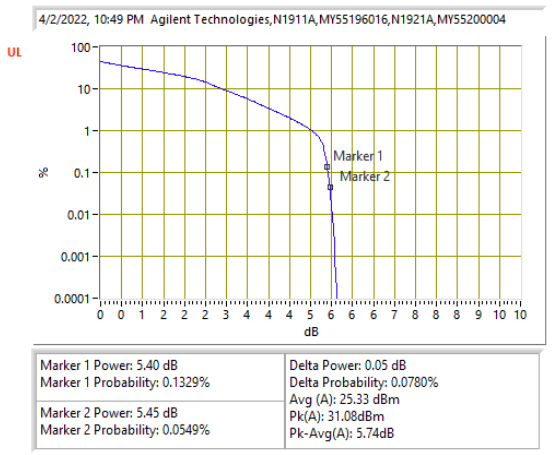
LTE B7 5MHz QPSK Middle Channel



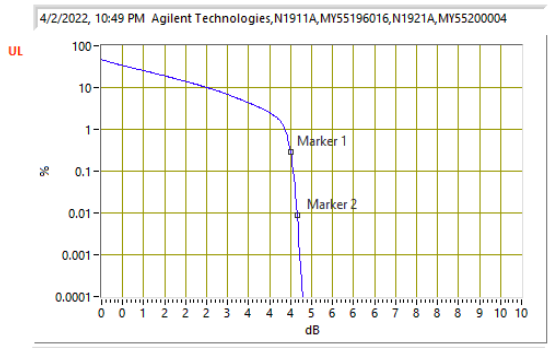
LTE B7 5MHz 16QAM Middle Channel



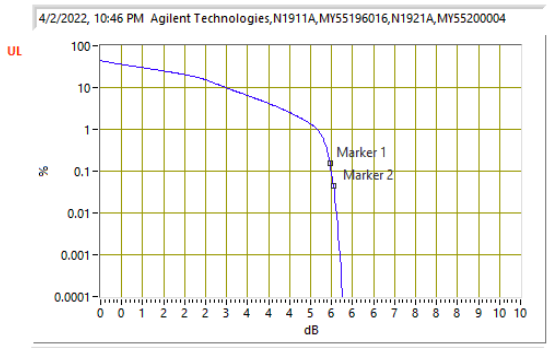
LTE B7 10MHz QPSK Middle Channel



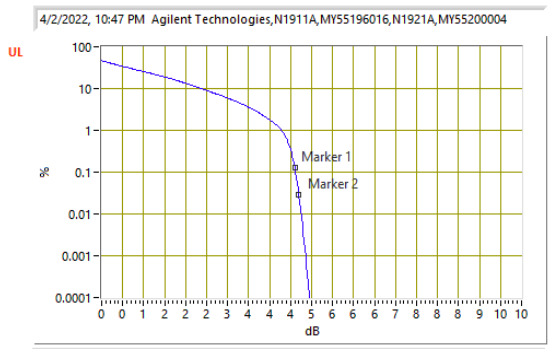
LTE B7 10MHz 16QAM Middle Channel



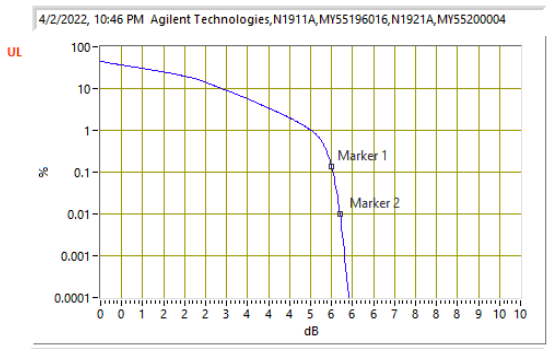
LTE B7 15MHz QPSK Middle Channel



LTE B7 15MHz 16QAM Middle Channel



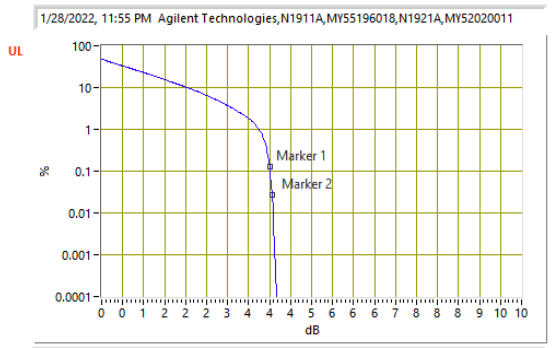
LTE B7 20MHz QPSK Middle Channel



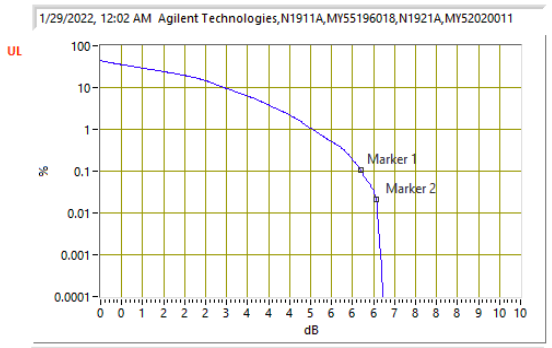
LTE B7 20MHz 16QAM Middle Channel

5G NR n7

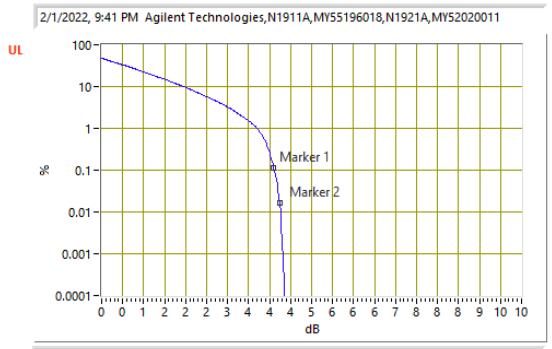
Test Engineer ID:	50822	Test Date:	1/29/2022



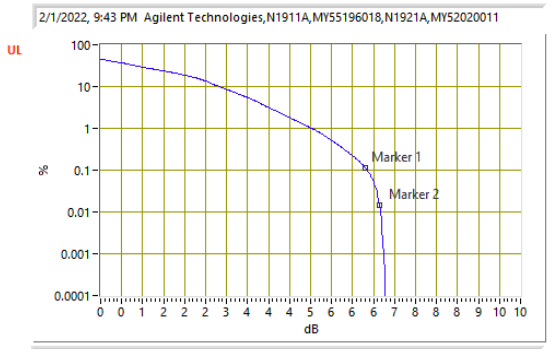
5G NR n7 5MHz BPSK Middle Channel



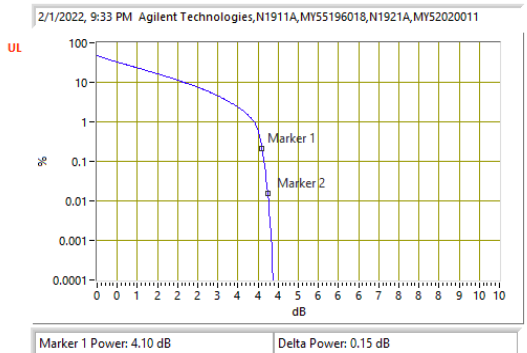
5G NR n7 5MHz 16QAM Middle Channel



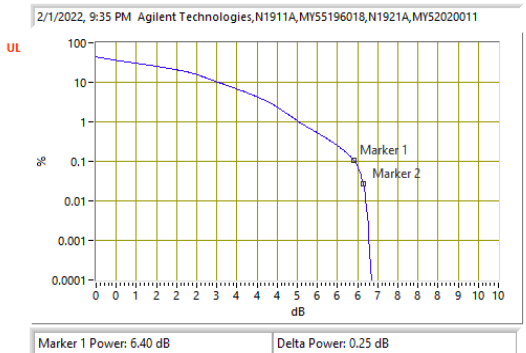
5G NR n7 10MHz BPSK Middle Channel



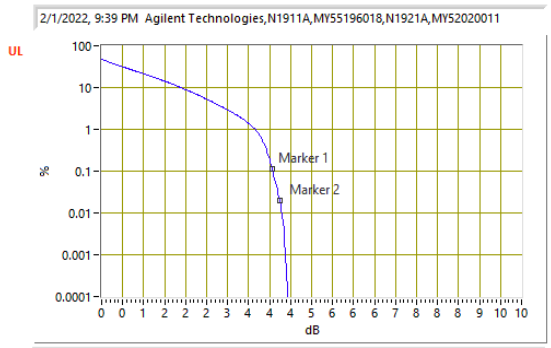
5G NR n7 10MHz 16QAM Middle Channel



5G NR n7 15MHz BPSK Middle Channel

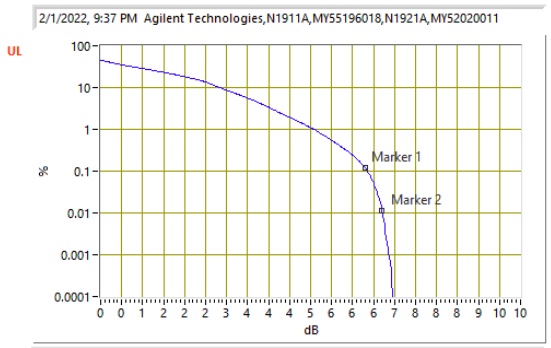


5G NR n7 15MHz 16QAM Middle Channel



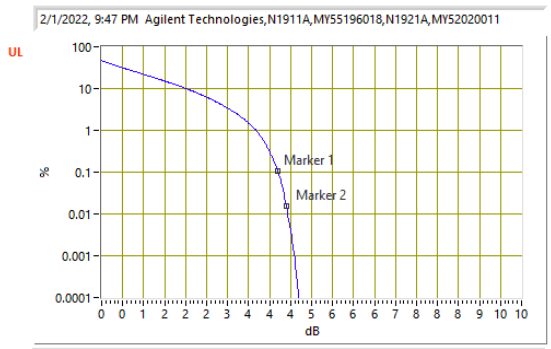
Marker 1 Power: 4.05 dB Marker 1 Probability: 0.1232%	Delta Power: 0.20 dB Delta Probability: 0.1062% Avg (A): 24.92 dBm Pk(A): 29.37dBm Pk-Avg(A): 4.45dB
Marker 2 Power: 4.25 dB Marker 2 Probability: 0.0171%	

5G NR n7 20MHz BPSK Middle Channel



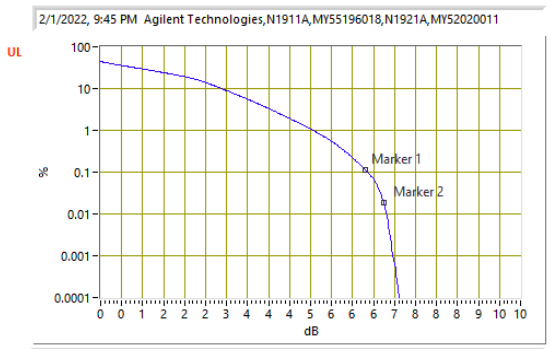
Marker 1 Power: 6.30 dB Marker 1 Probability: 0.1180%	Delta Power: 0.40 dB Delta Probability: 0.1065% Avg (A): 23.37 dBm Pk(A): 30.41dBm Pk-Avg(A): 7.04dB
Marker 2 Power: 6.70 dB Marker 2 Probability: 0.0114%	

5G NR n7 20MHz 16QAM Middle Channel



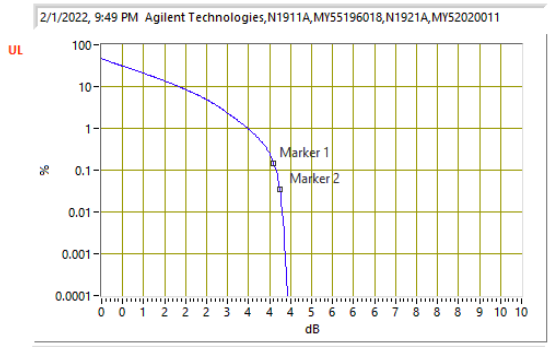
Marker 1 Power: 4.20 dB Marker 1 Probability: 0.1036%	Delta Power: 0.20 dB Delta Probability: 0.0879% Avg (A): 25.01 dBm Pk(A): 29.80dBm Pk-Avg(A): 4.79dB
Marker 2 Power: 4.40 dB Marker 2 Probability: 0.0157%	

5G NR n7 25MHz BPSK Middle Channel



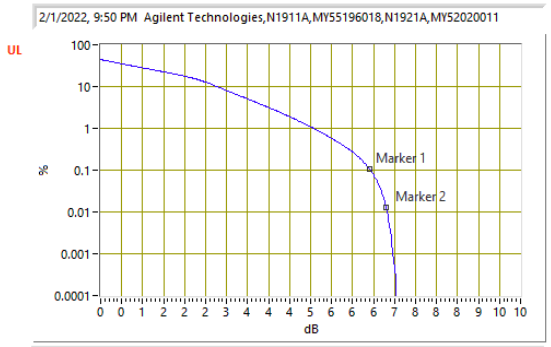
Marker 1 Power: 6.30 dB Marker 1 Probability: 0.1132%	Delta Power: 0.45 dB Delta Probability: 0.0954% Avg (A): 23.47 dBm Pk(A): 30.73dBm Pk-Avg(A): 7.25dB
Marker 2 Power: 6.75 dB Marker 2 Probability: 0.0177%	

5G NR n7 25MHz 16QAM Middle Channel



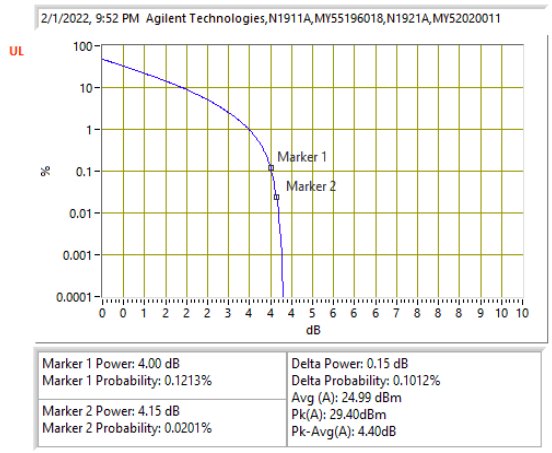
Marker 1 Power: 4.10 dB Marker 1 Probability: 0.1497%	Delta Power: 0.15 dB Delta Probability: 0.1194% Avg (A): 25.04 dBm Pk(A): 29.53dBm Pk-Avg(A): 4.49dB
Marker 2 Power: 4.25 dB Marker 2 Probability: 0.0302%	

5G NR n7 30MHz BPSK Middle Channel

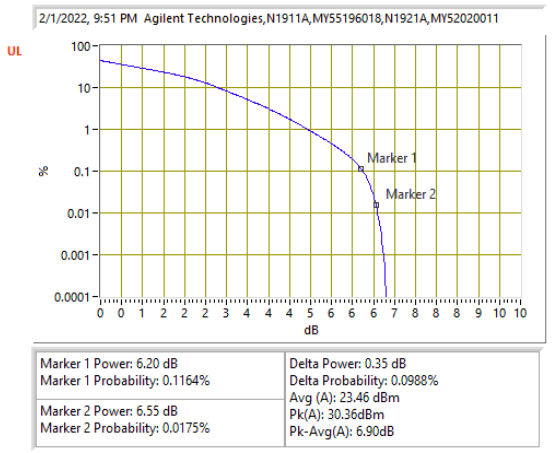


Marker 1 Power: 6.40 dB Marker 1 Probability: 0.1062%	Delta Power: 0.40 dB Delta Probability: 0.0935% Avg (A): 23.47 dBm Pk(A): 30.58dBm Pk-Avg(A): 7.11dB
Marker 2 Power: 6.80 dB Marker 2 Probability: 0.0127%	

5G NR n7 30MHz 16QAM Middle Channel



5G NR n7 40MHz BPSK Middle Channel

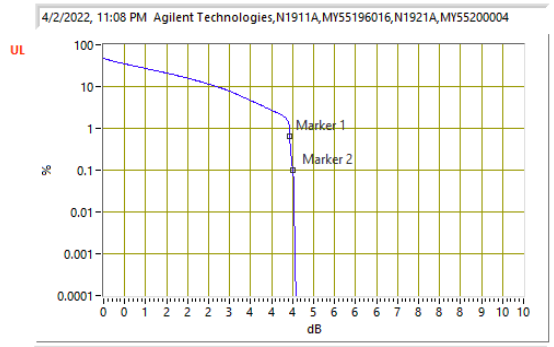


5G NR n7 40MHz 16QAM Middle Channel

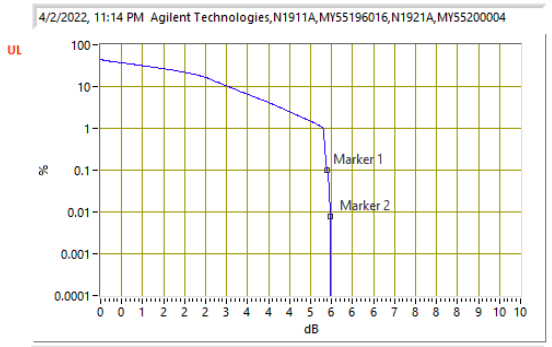
9.5.3. LTE BAND 12 AND 5G NR n12

LTE BAND 12

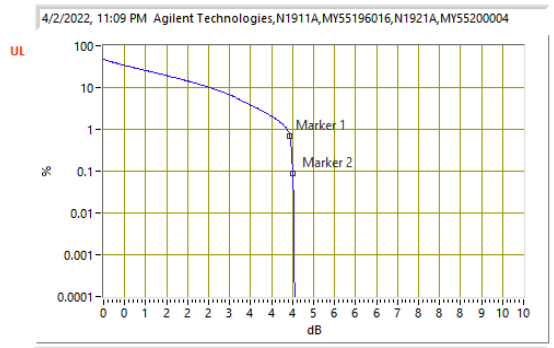
Test Engineer ID:	2560	Test Date:	4/3/2022



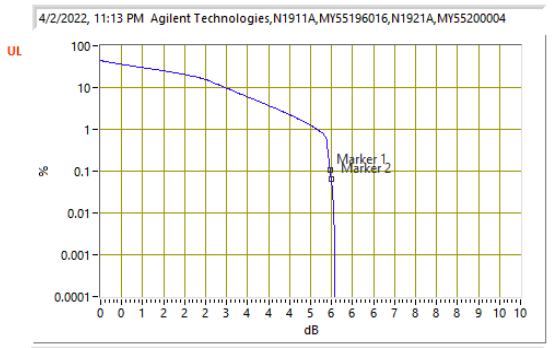
LTE B12 1.4MHz QPSK Middle Channel



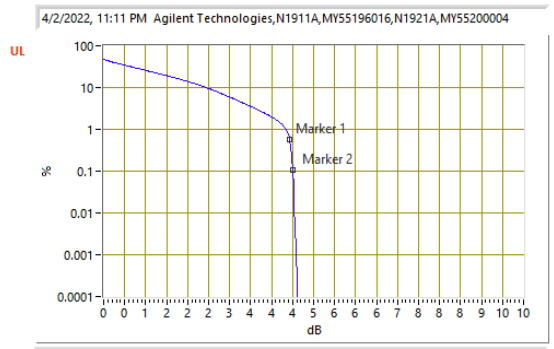
LTE B12 1.4MHz 16QAM Middle Channel



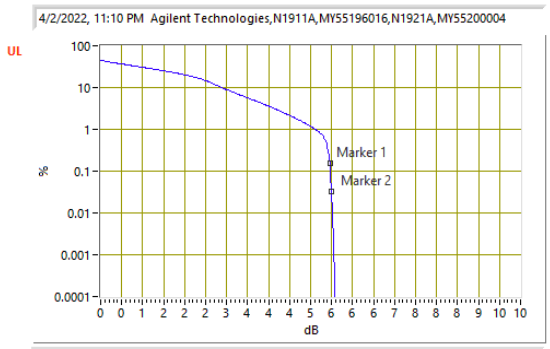
LTE B12 3MHz QPSK Middle Channel



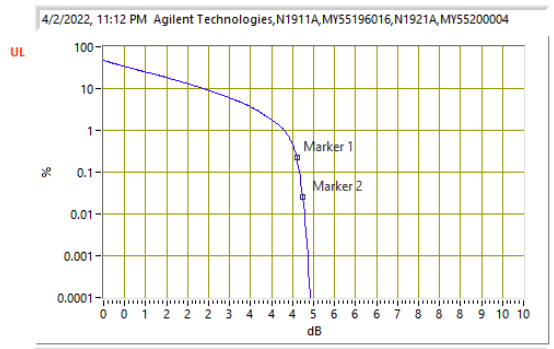
LTE B12 3MHz 16QAM Middle Channel



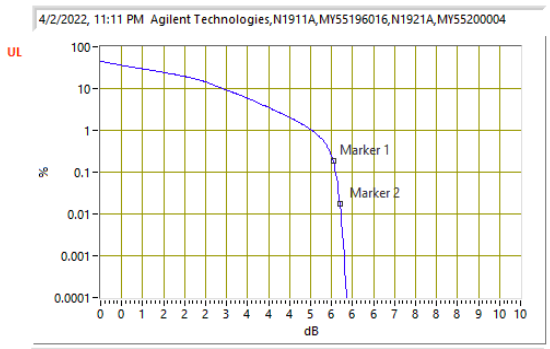
LTE B12 5MHz QPSK Middle Channel



LTE B12 5MHz 16QAM Middle Channel



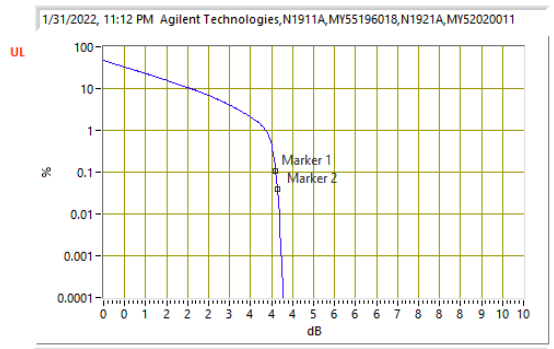
LTE B12 10MHz QPSK Middle Channel



LTE B12 10MHz 16QAM Middle Channel

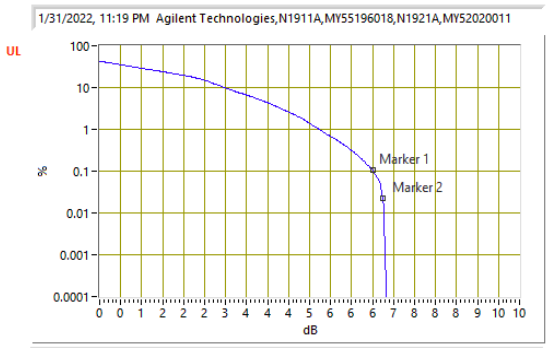
5G NR n12

Test Engineer ID:	50822	Test Date:	1/31/2022



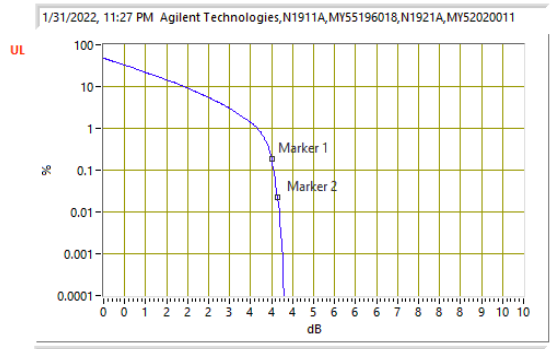
Marker 1 Power: 4.10 dB Marker 1 Probability: 0.1037%	Delta Power: 0.05 dB Delta Probability: 0.0752%
Marker 2 Power: 4.15 dB Marker 2 Probability: 0.0285%	Avg (A): 25.49 dBm Pk(A): 29.79dBm Pk-Avg(A): 4.30dB

5G NR n12 5MHz BPSK Middle Channel



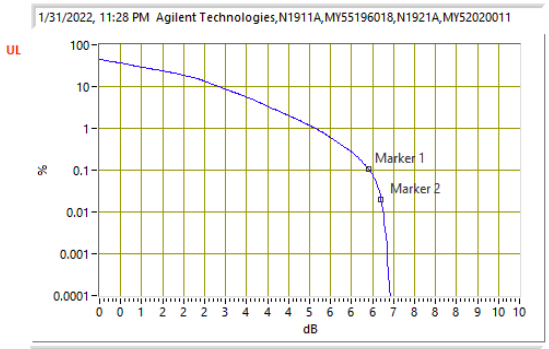
Marker 1 Power: 6.50 dB Marker 1 Probability: 0.1041%	Delta Power: 0.25 dB Delta Probability: 0.0856%
Marker 2 Power: 6.75 dB Marker 2 Probability: 0.0184%	Avg (A): 23.96 dBm Pk(A): 30.79dBm Pk-Avg(A): 6.83dB

5G NR n12 5MHz 16QAM Middle Channel



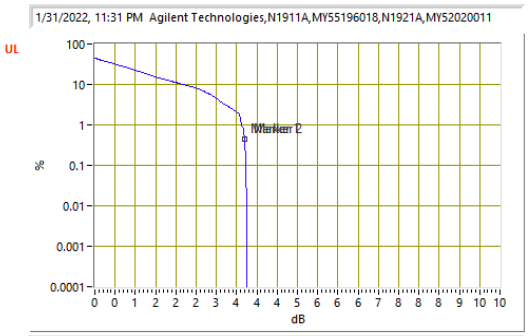
Marker 1 Power: 4.00 dB Marker 1 Probability: 0.1826%	Delta Power: 0.15 dB Delta Probability: 0.1640%
Marker 2 Power: 4.15 dB Marker 2 Probability: 0.0187%	Avg (A): 25.51 dBm Pk(A): 29.92dBm Pk-Avg(A): 4.41dB

5G NR n12 10MHz BPSK Middle Channel



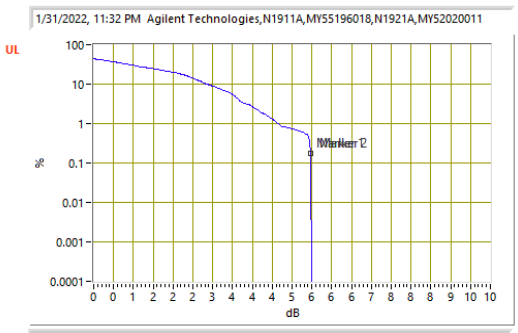
Marker 1 Power: 6.40 dB Marker 1 Probability: 0.1070%	Delta Power: 0.30 dB Delta Probability: 0.0869%
Marker 2 Power: 6.70 dB Marker 2 Probability: 0.0201%	Avg (A): 24.04 dBm Pk(A): 31.00dBm Pk-Avg(A): 6.95dB

5G NR n12 10MHz 16QAM Middle Channel



Marker 1 Power: 3.70 dB Marker 1 Probability: 0.4547%	Delta Power: 0.00 dB Delta Probability: 0.0000%
Marker 2 Power: 3.70 dB Marker 2 Probability: 0.4547%	Avg (A): 25.89 dBm Pk(A): 29.66dBm Pk-Avg(A): 3.76dB

5G NR n12 15MHz BPSK Middle Channel

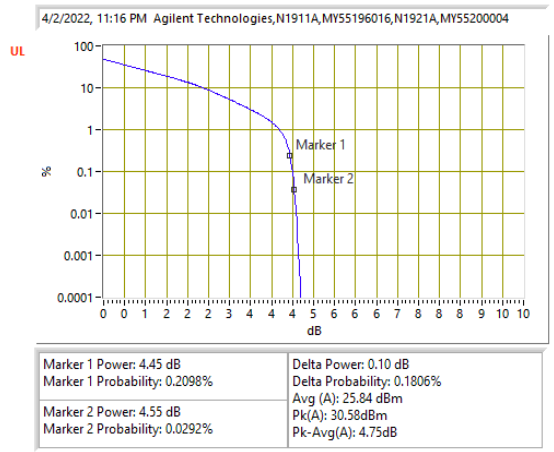


Marker 1 Power: 5.45 dB Marker 1 Probability: 0.2774%	Delta Power: 0.00 dB Delta Probability: 0.0000%
Marker 2 Power: 5.45 dB Marker 2 Probability: 0.2774%	Avg (A): 25.48 dBm Pk(A): 30.98dBm Pk-Avg(A): 5.50dB

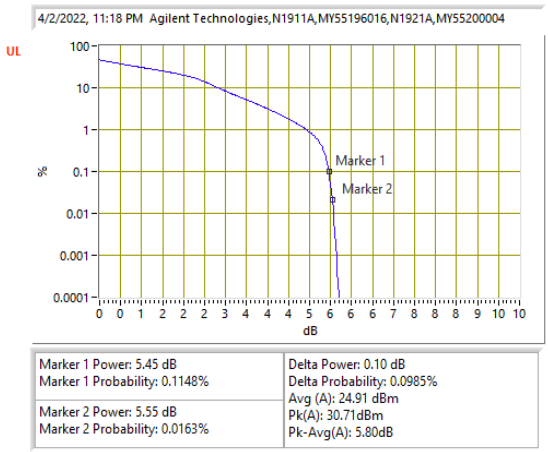
5G NR n12 15MHz 16QAM Middle Channel

9.5.4. LTE BAND 13

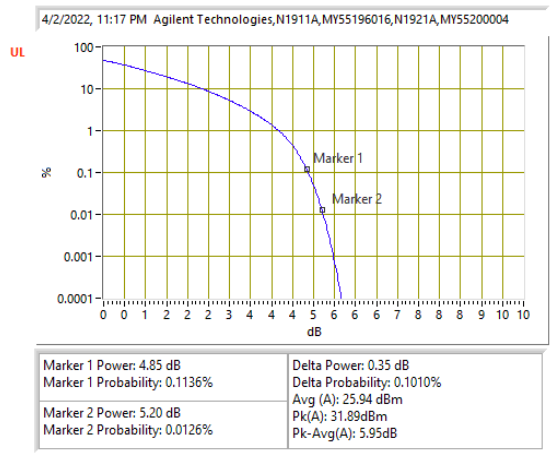
Test Engineer ID:	25602	Test Date:	4/2/2022



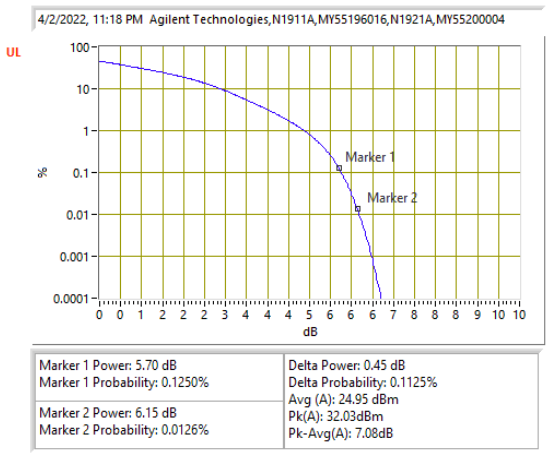
LTE B13 5MHz QPSK Middle Channel



LTE B13 5MHz 16QAM Middle Channel



LTE B13 10MHz QPSK Middle Channel

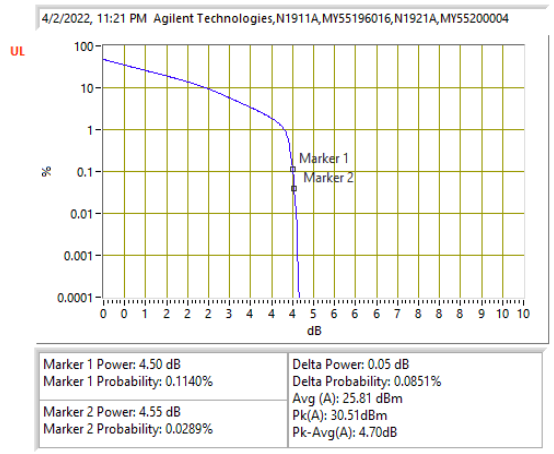


LTE B13 10MHz 16QAM Middle Channel

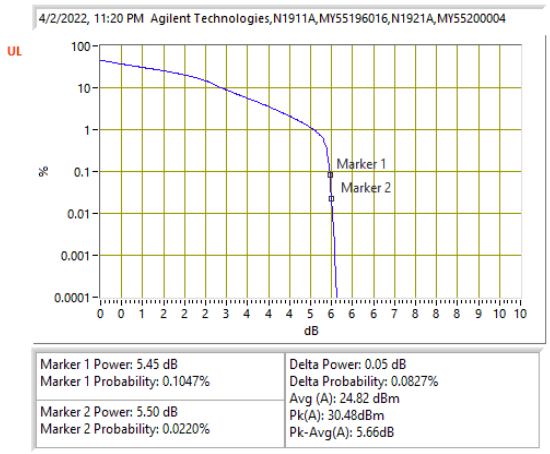
9.5.5. LTE BAND 14 AND 5G NR n14

LTE BAND 14

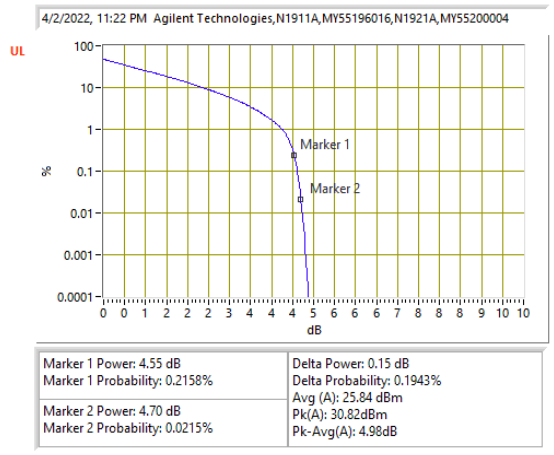
Test Engineer ID:	25602	Test Date:	4/2/2022



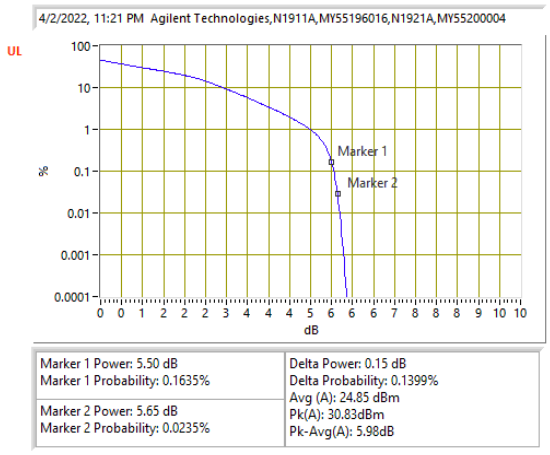
LTE B14 5MHz QPSK Middle Channel



LTE B14 5MHz 16QAM Middle Channel



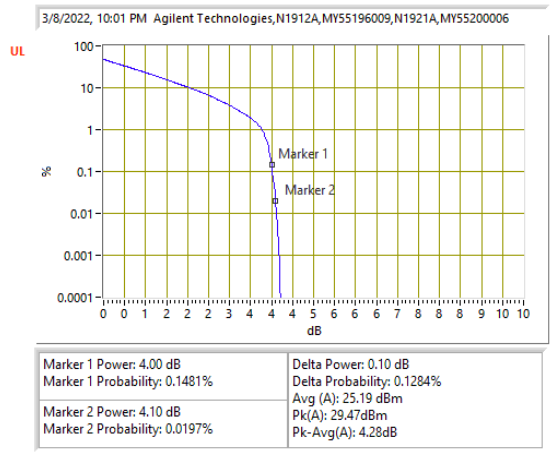
LTE B14 10MHz QPSK Middle Channel



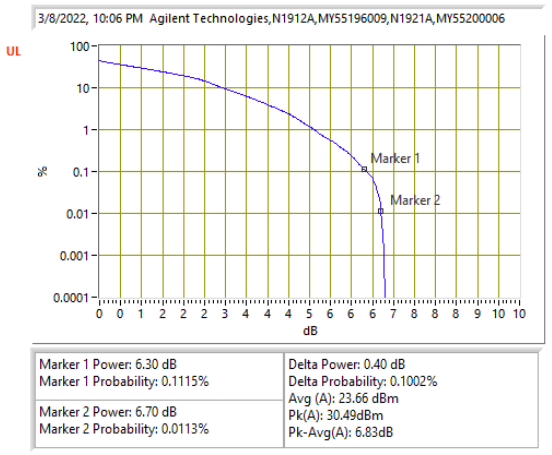
LTE B14 10MHz 16QAM Middle Channel

5G NR n14

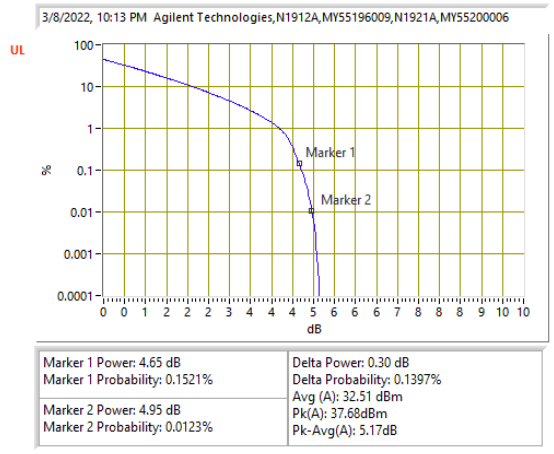
Test Engineer ID:	50822	Test Date:	4/5/2022



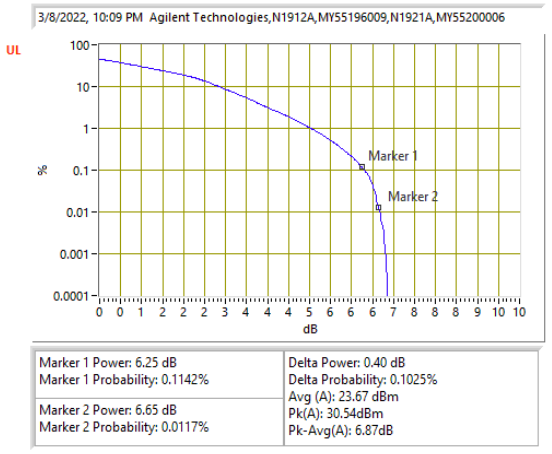
5G NR n14 5MHz BPSK Middle Channel



5G NR n14 5MHz 16QAM Middle Channel



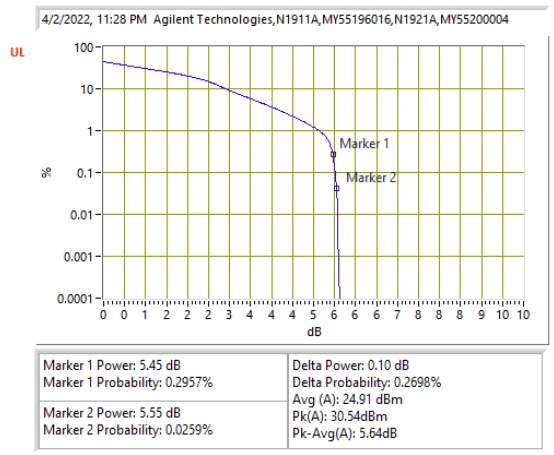
5G NR n14 10MHz BPSK Middle Channel



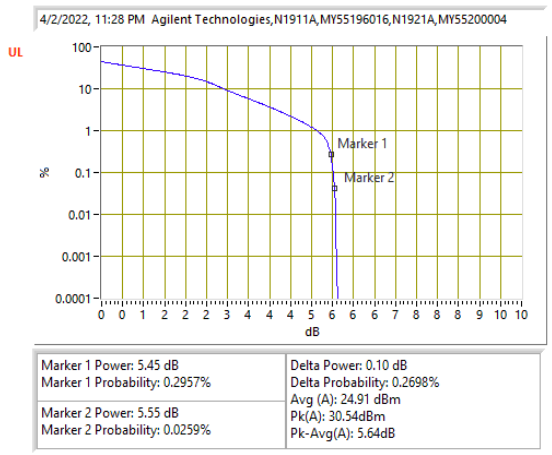
5G NR n14 10MHz 16QAM Middle Channel

9.5.6. LTE BAND 17

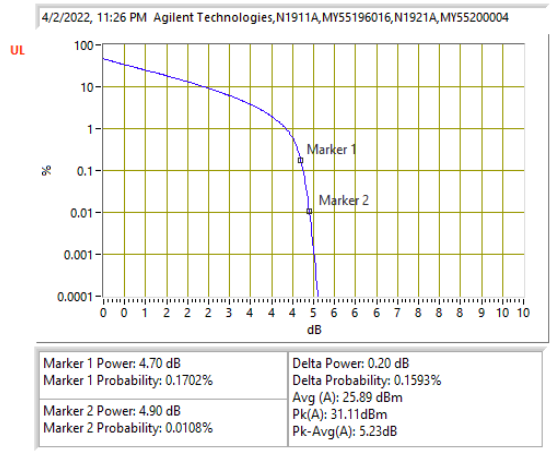
Test Engineer ID:	25602	Test Date:	4/2/2022



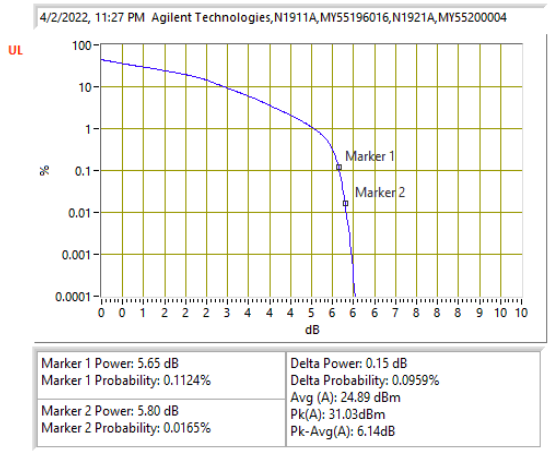
LTE B17 5MHz QPSK Middle Channel



LTE B17 5MHz 16QAM Middle Channel



LTE B17 10MHz QPSK Middle Channel

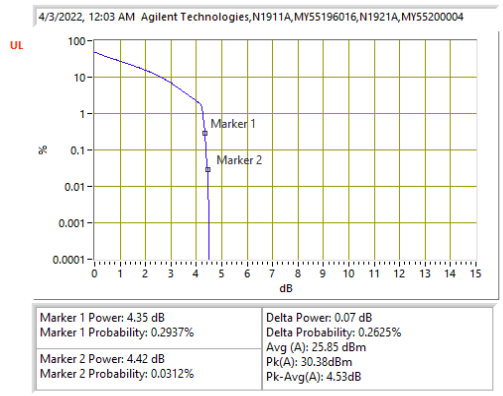


LTE B17 10MHz 16QAM Middle Channel

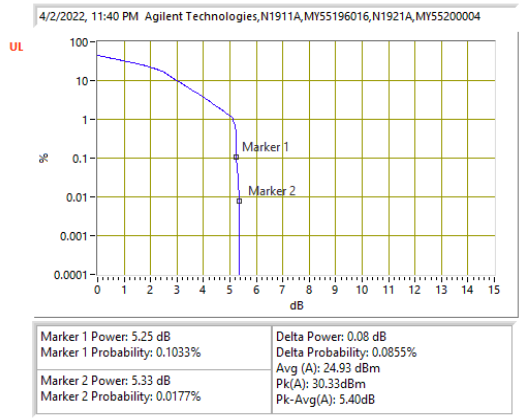
9.5.7. LTE BAND 25 AND 5G NR n25

LTE BAND 25

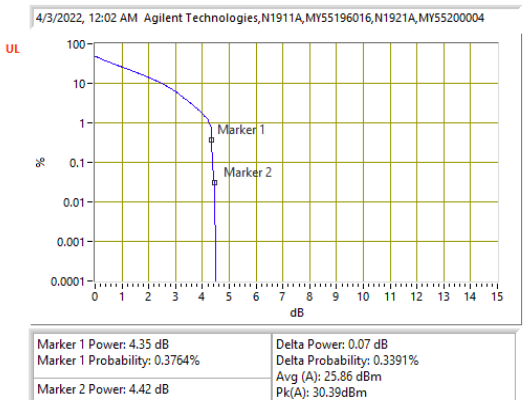
Test Engineer ID:	50822	Test Date:	4/3/2022



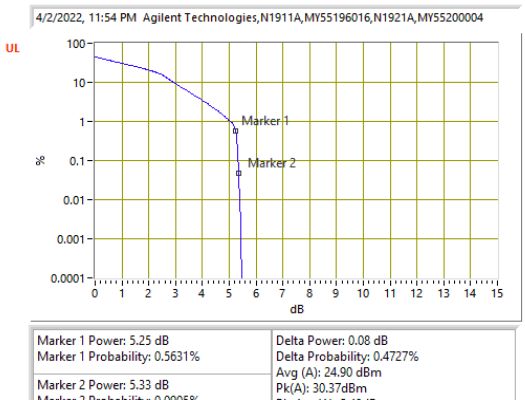
LTE B25 1.4MHz QPSK Middle Channel



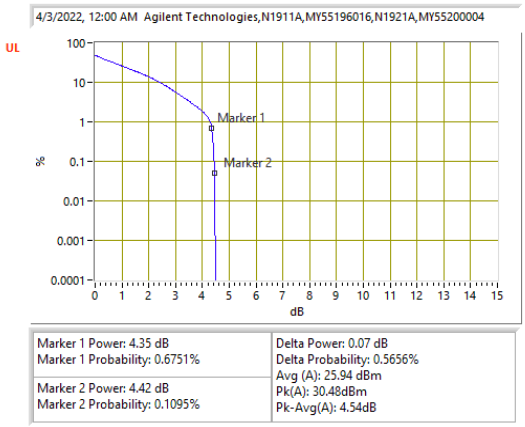
LTE B25 1.4MHz 16QAM Middle Channel

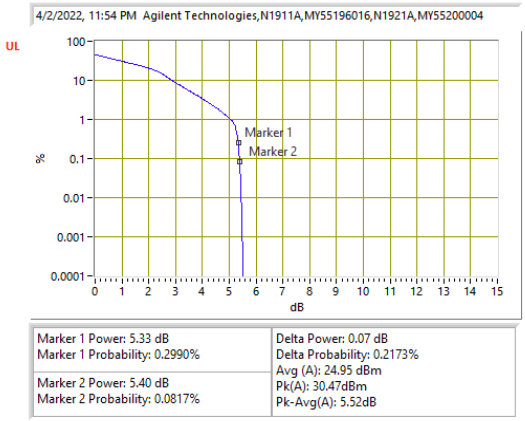


LTE B25 3MHz QPSK Middle Channel



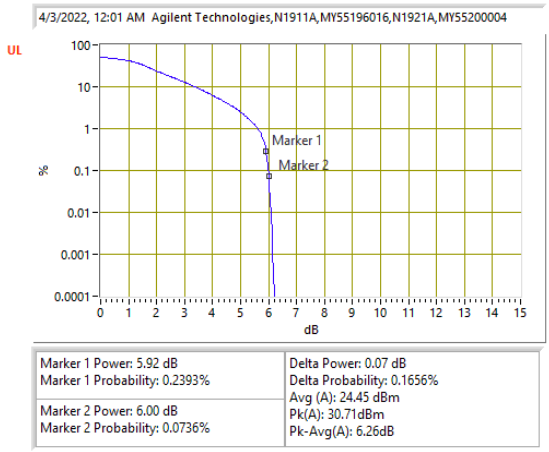
LTE B25 3MHz 16QAM Middle Channel



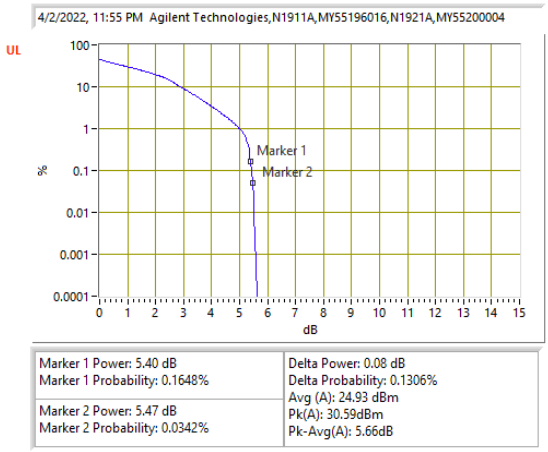


LTE B2 5MHz 16QAM Middle Channel

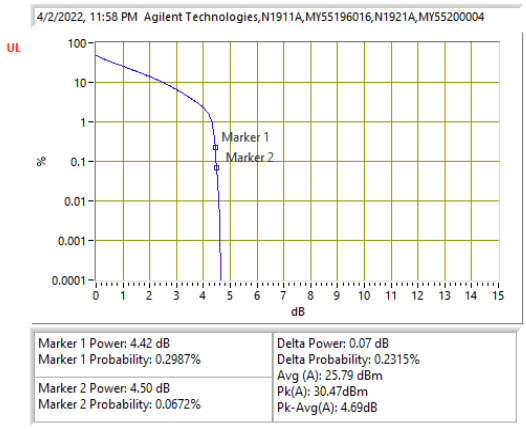
LTE B2 5MHz QPSK Middle Channel



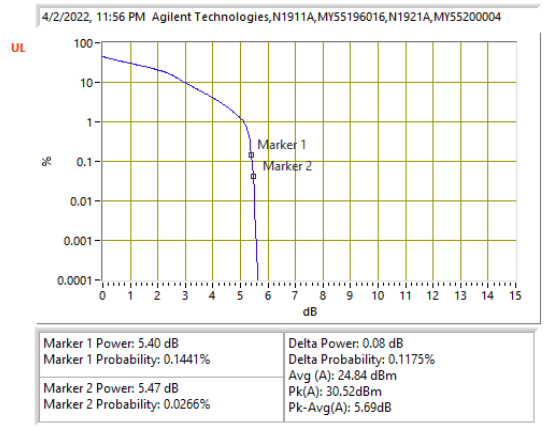
LTE B25 10MHz QPSK Middle Channel



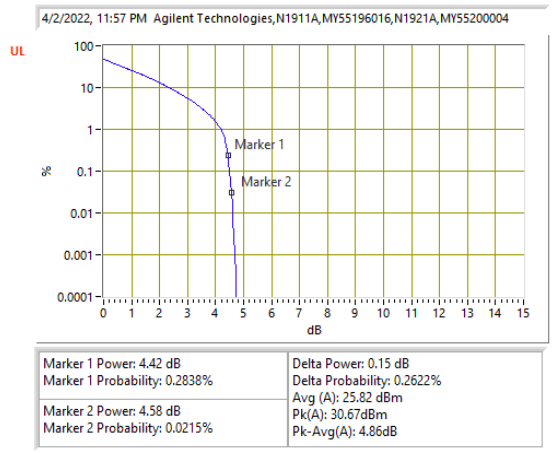
LTE B25 10MHz 16QAM Middle Channel



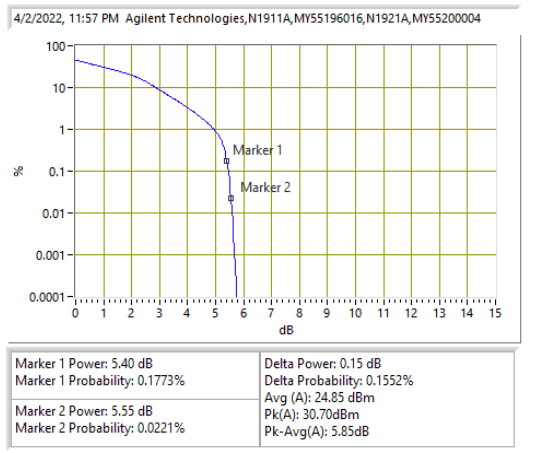
LTE B25 15MHz QPSK Middle Channel



LTE B25 15MHz 16QAM Middle Channel



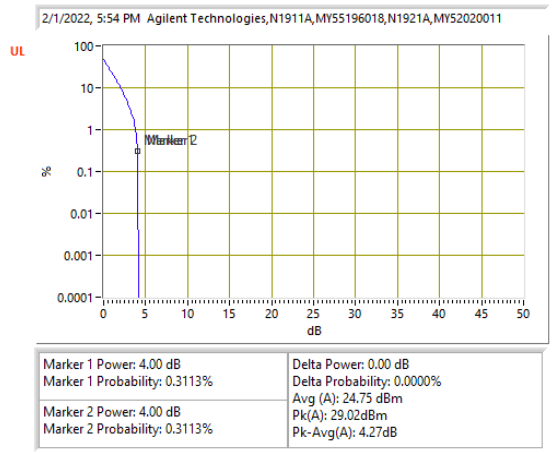
LTE B25 20MHz QPSK Middle Channel



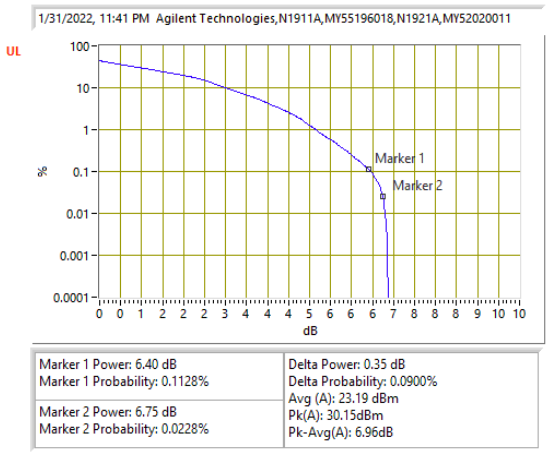
LTE B25 20MHz 16QAM Middle Channel

5G NR n25

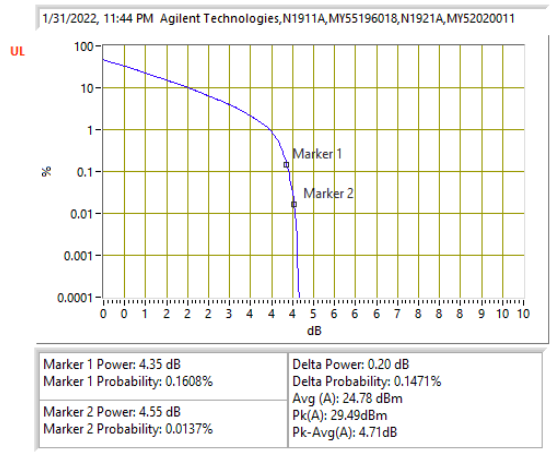
Test Engineer ID:	50822	Test Date:	2/1/2022



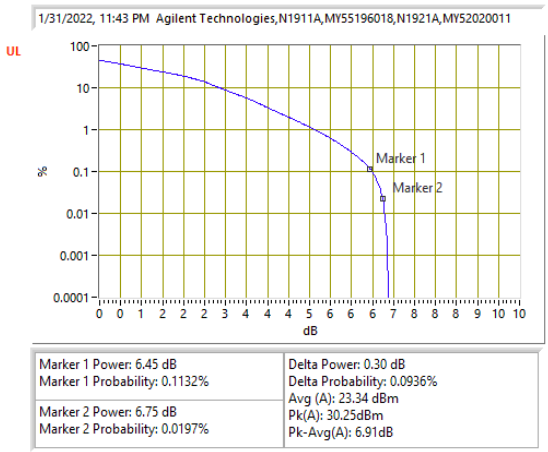
5G NR n25 5MHz BPSK Middle Channel



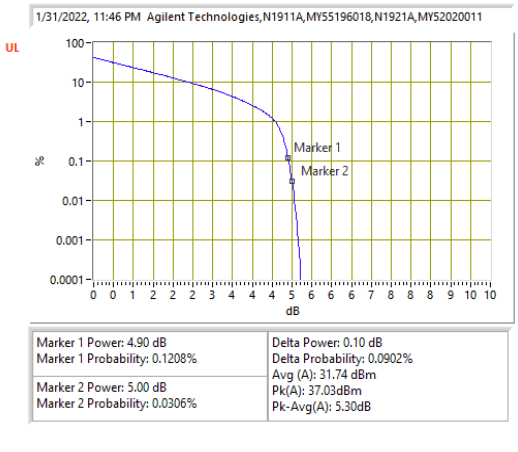
5G NR n25 5MHz 16QAM Middle Channel



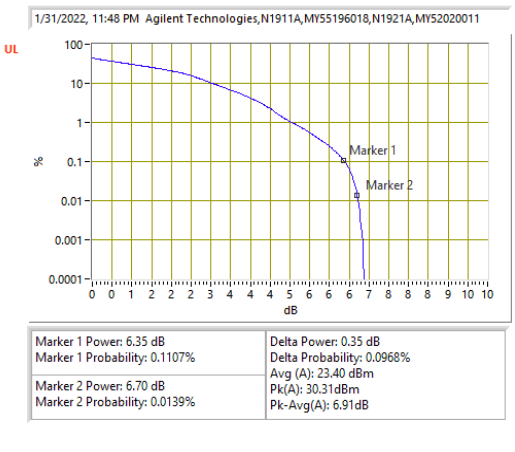
5G NR n25 10MHz BPSK Middle Channel



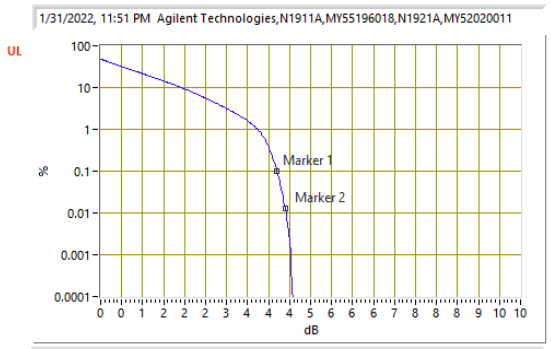
5G NR n25 10MHz 16QAM Middle Channel



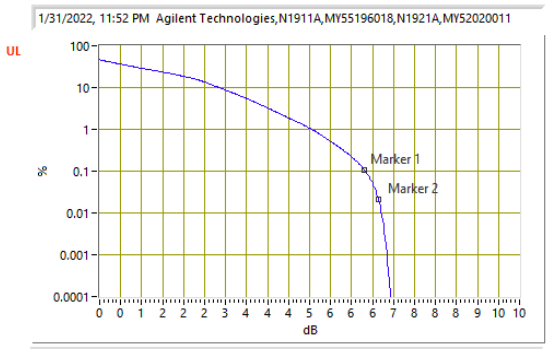
5G NR n25 15MHz BPSK Middle Channel



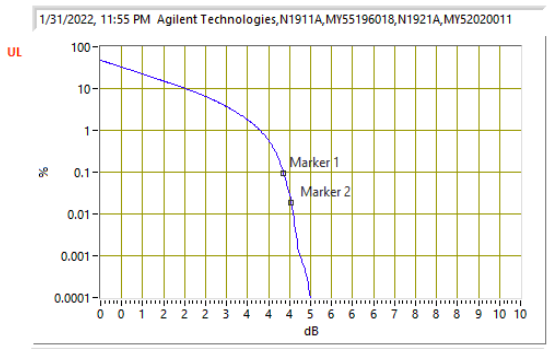
5G NR n25 15MHz 16QAM Middle Channel



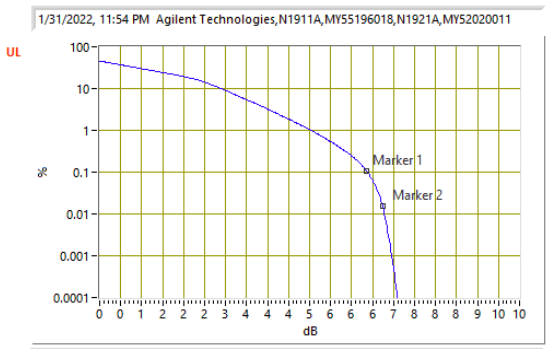
5G NR n25 20MHz BPSK Middle Channel



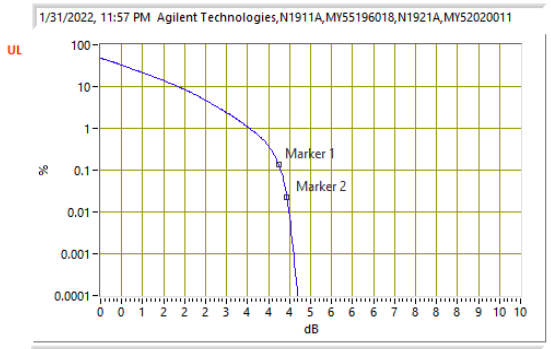
5G NR n25 20MHz 16QAM Middle Channel



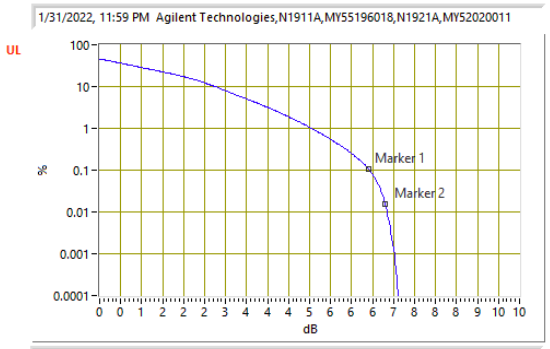
5G NR n25 25MHz BPSK Middle Channel



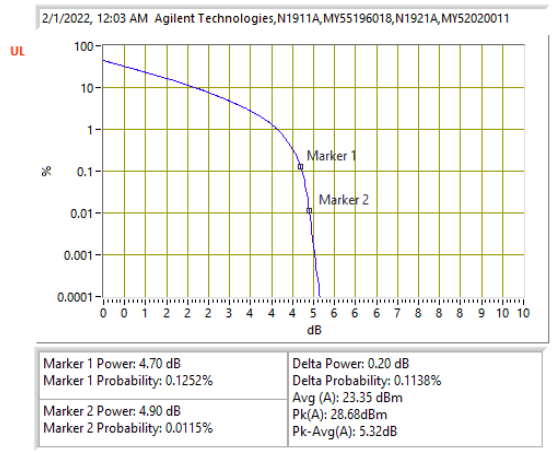
5G NR n25 25MHz 16QAM Middle Channel



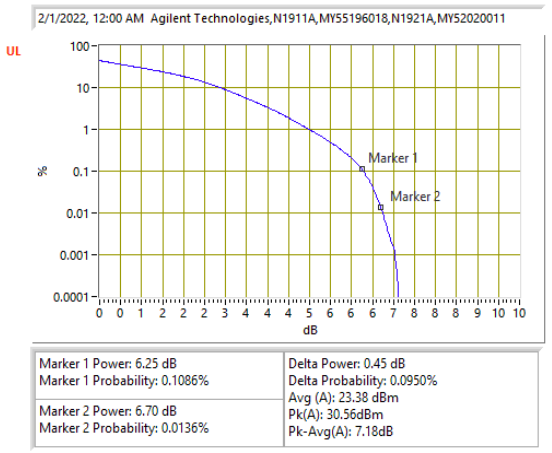
5G NR n25 30MHz BPSK Middle Channel



5G NR n25 30MHz 16QAM Middle Channel



5G NR n25 40MHz BPSK Middle Channel

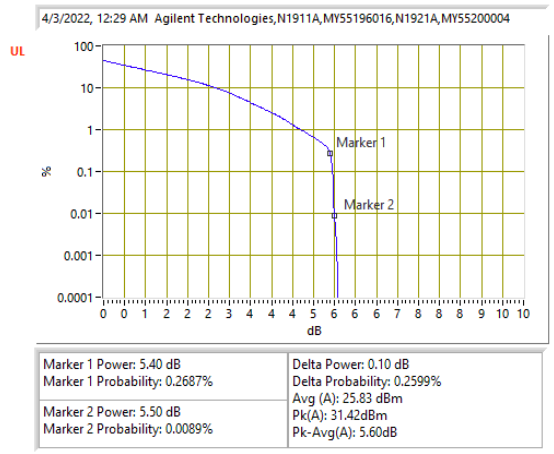


5G NR n25 40MHz 16QAM Middle Channel

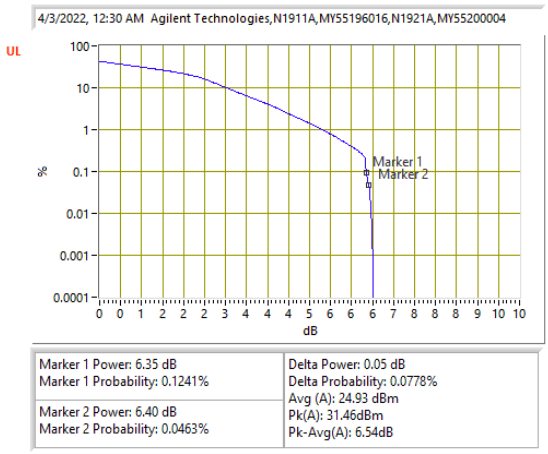
9.5.8. LTE BAND 26 AND 5G NR n26 (FCC PART 90S)

LTE BAND 26

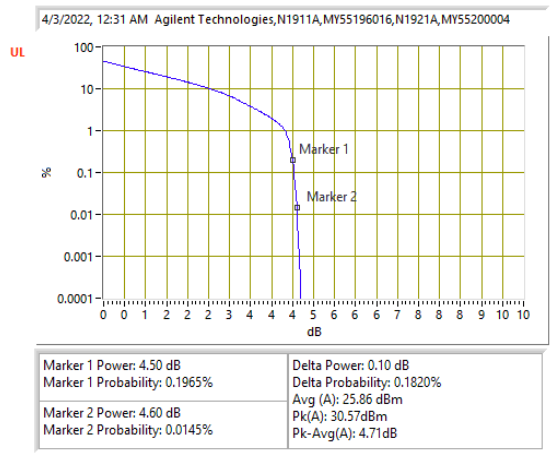
Test Engineer ID:	25602	Test Date:	4/3/2022



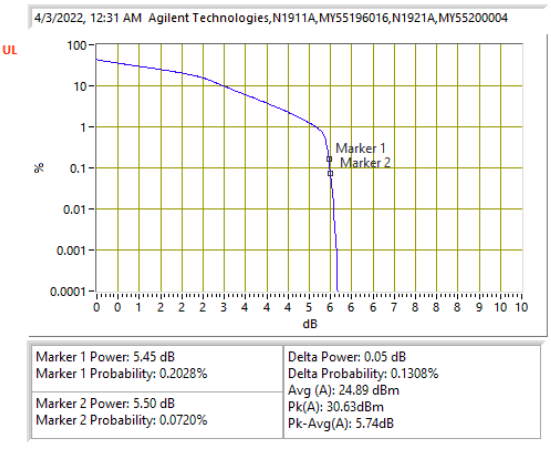
LTE B26 1.4MHz QPSK Middle Channel



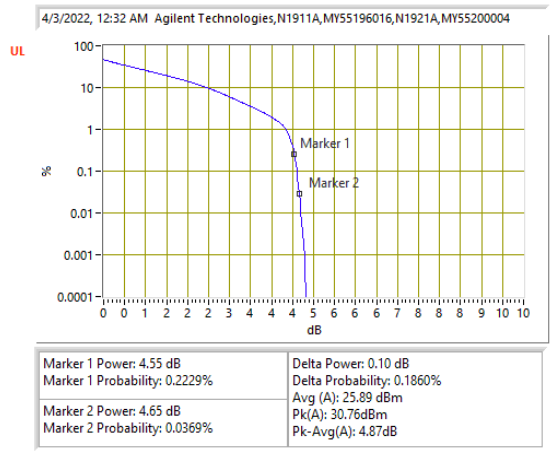
LTE B26 1.4MHz 16QAM Middle Channel



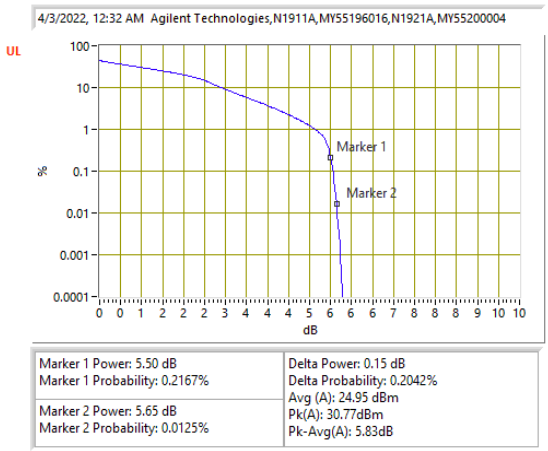
LTE B26 3MHz QPSK Middle Channel



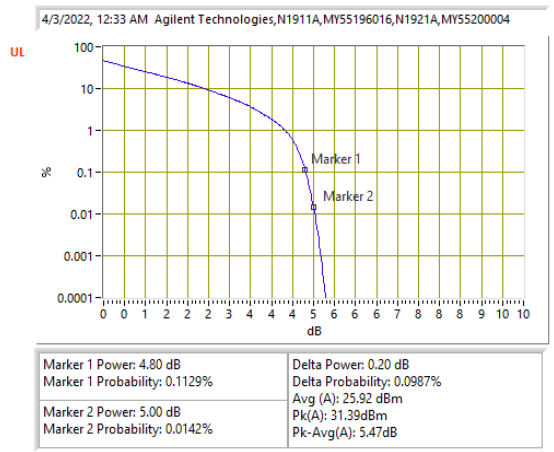
LTE B26 3MHz 16QAM Middle Channel



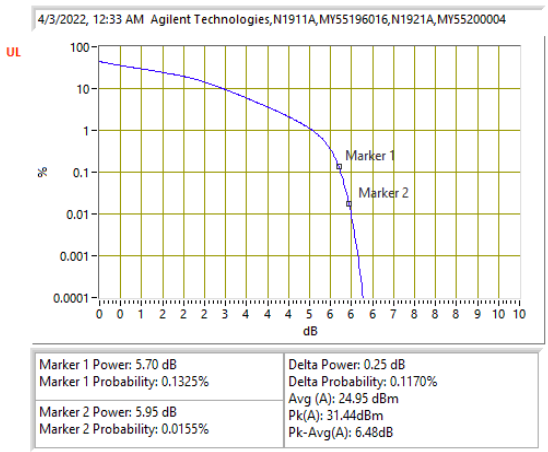
LTE B26 5MHz QPSK Middle Channel



LTE B26 5MHz 16QAM Middle Channel



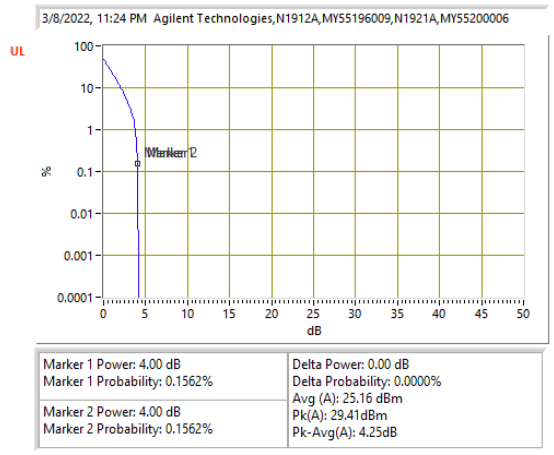
LTE B26 10MHz QPSK Middle Channel



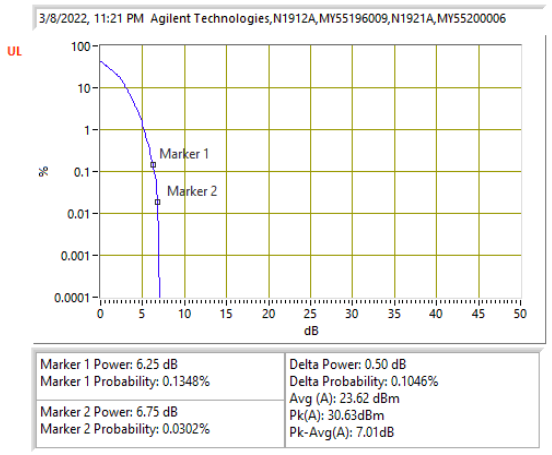
LTE B26 10MHz 16QAM Middle Channel

5G NR n26

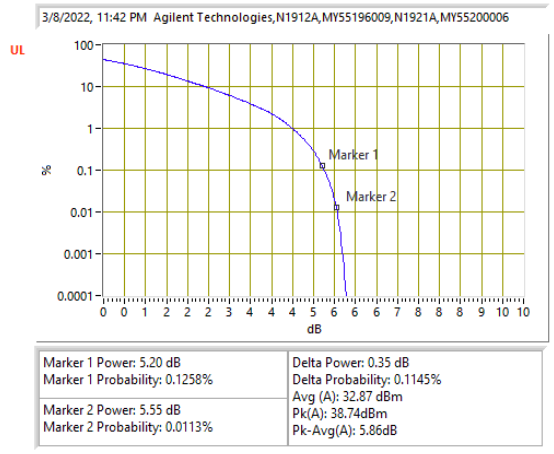
Test Engineer ID:	50822	Test Date:	3/8/2022



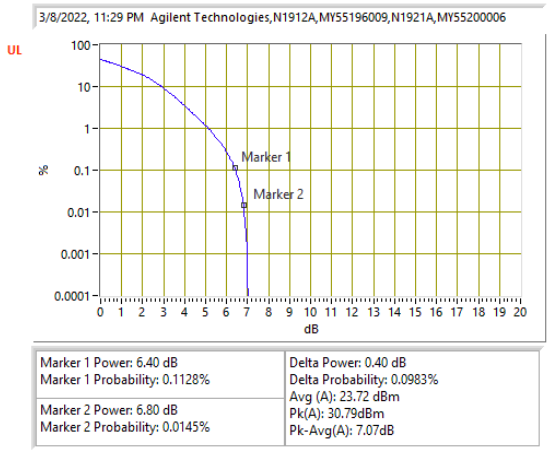
5G NR n26 5MHz BPSK Middle Channel



5G NR n26 5MHz 16QAM Middle Channel



5G NR n26 10MHz BPSK Middle Channel

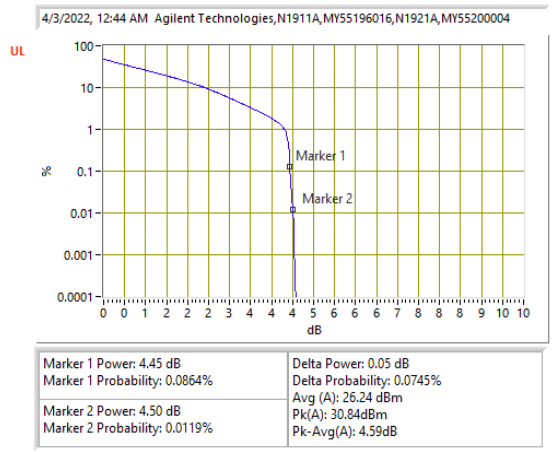


5G NR n26 10MHz 16QAM Middle Channel

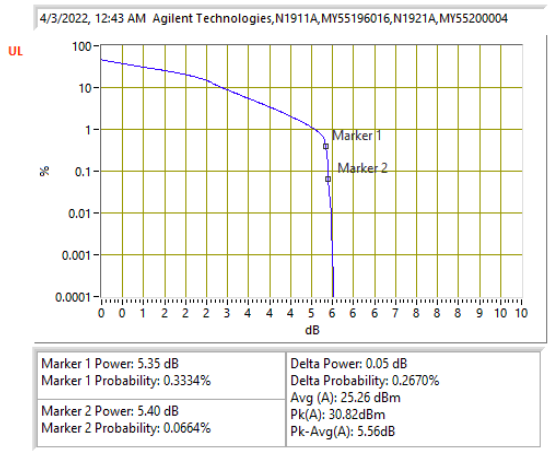
9.5.9. LTE BAND 30

LTE BAND 30

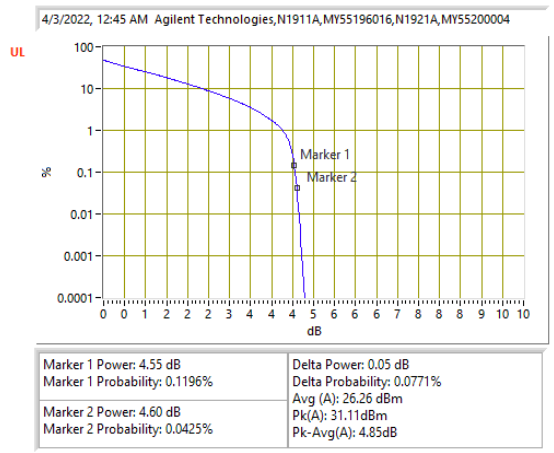
Test Engineer ID:	25602	Test Date:	4/3/2022



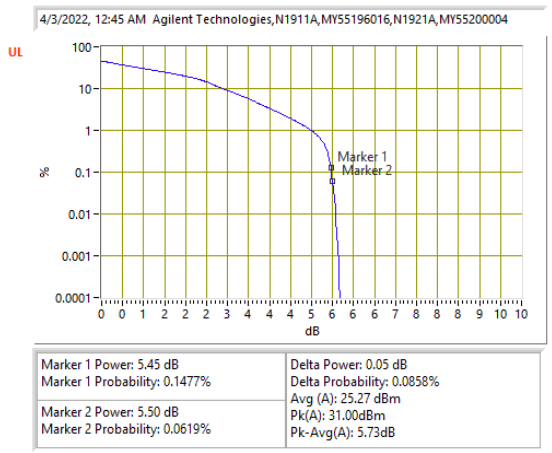
LTE B30 5MHz QPSK Middle Channel



LTE B30 5MHz 16QAM Middle Channel



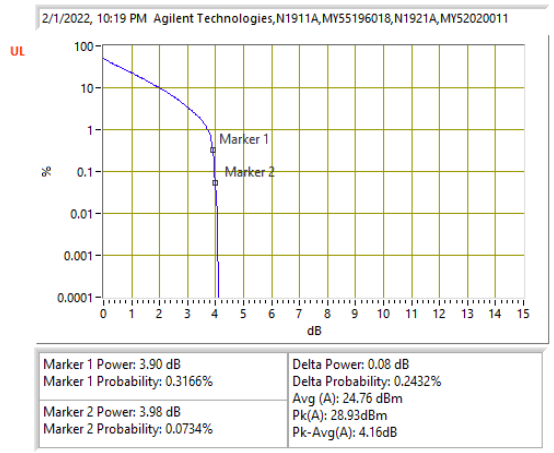
LTE B30 10MHz QPSK Middle Channel



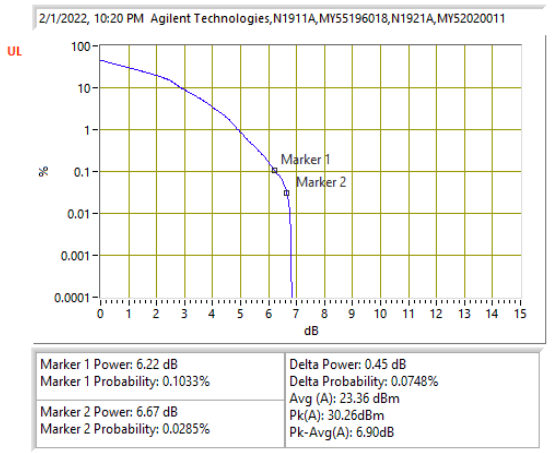
LTE B30 10MHz 16QAM Middle Channel

5G NR n30

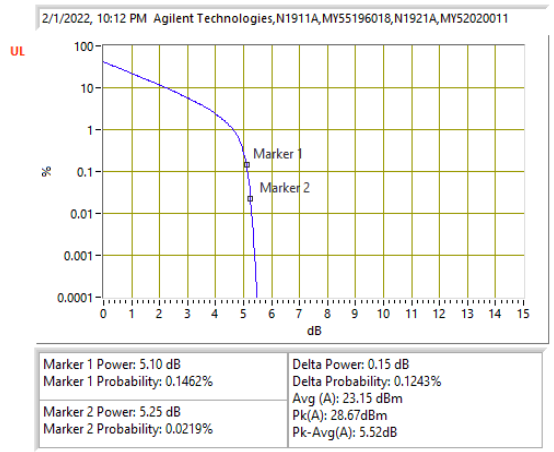
Test Engineer ID:	50822	Test Date:	2/1/2022



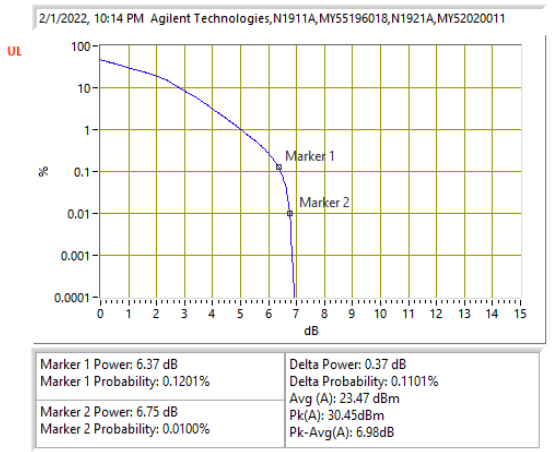
5G NR n30 5MHz BPSK Middle Channel



5G NR n30 5MHz 16QAM Middle Channel



5G NR n30 10MHz BPSK Middle Channel



5G NR n30 10MHz 16QAM Middle Channel

9.5.10. LTE BAND 41 AND 5G NR n41

Test Engineer ID:	25602	Test Date:	4/4/2022

Band	Bandwidth (MHz)	Frequency (MHz)	RB Allocation	RB OffSet	Modulation	Conducted Power (dBm)		Peak-to-Average Power Ratio (dB)
						Peak	Average	
LTE Band 41	5MHz	2593.0	25	0	QPSK	33.77	22.02	*4.79
					16QAM	33.80	21.08	*5.88
	10MHz		50	0	QPSK	33.95	22.04	*4.88
					16QAM	33.91	21.07	*5.69
	15MHz		75	0	QPSK	33.75	21.91	*4.89
					16QAM	33.79	20.92	*5.99
	20MHz		100	0	QPSK	33.90	21.91	*4.96
					16QAM	33.86	20.94	*4.18
5G NR n41	20MHz		50	0	BPSK	32.11	27.66	4.45
					16QAM	32.58	26.25	6.33
	30MHz		75	0	BPSK	31.80	27.73	4.07
					16QAM	32.65	26.33	6.32
	40MHz		100	0	BPSK	32.06	27.69	4.37
					16QAM	32.27	26.32	5.95
	50MHz		128	0	BPSK	31.61	27.75	3.86
					16QAM	32.40	26.14	6.26
	60MHz		162	0	BPSK	31.93	27.55	4.38
					16QAM	32.13	26.08	6.05
	70MHz		180	0	BPSK	32.94	29.1	3.84
					16QAM	32.15	26.14	6.01
	80MHz		216	0	BPSK	31.45	27.37	4.08
					16QAM	31.84	25.89	5.95
	90MHz		243	0	BPSK	31.25	27.4331	3.82
					16QAM	31.51	25.79	5.72
	100MHz		270	0	BPSK	31.13	27.41	3.72
					16QAM	32.64	25.51	7.13
*Duty Cycle Correction Factor (dB) =			6.99					
Peak-to-Average Power Ratio= Peak Reading - Average Reading - Duty Cycle Correction Factor								

9.5.11. LTE BAND 48

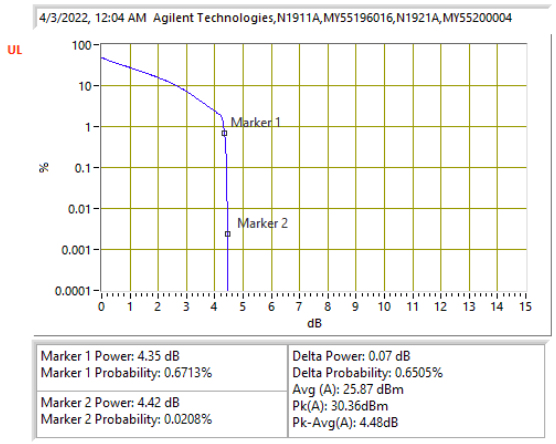
Test Engineer ID:	25602	Test Date:	4/2/2022

Band	Bandwidth (MHz)	Frequency (MHz)	RB Allocation	RB OffSet	Modulation	Conducted Power (dBm)		Peak-to-Average Power Ratio (dB)
						Peak	Average	
LTE Band 48	5MHz	3625.0	25	0	QPSK	30.68	19.10	*4.59
					16QAM	30.62	18.09	*5.54
	10MHz		50	0	QPSK	30.80	19.11	*4.7
					16QAM	30.77	18.15	*5.63
	15MHz		75	0	QPSK	30.60	18.93	*4.68
					16QAM	30.53	17.99	*5.55
	20MHz		100	0	QPSK	30.62	19	*4.63
					16QAM	30.60	17.98	*5.63
*Duty Cycle Correction Factor (dB) =			6.99					
Peak-to-Average Power Ratio= Peak Reading - Average Reading - Duty Cycle Correction Factor								

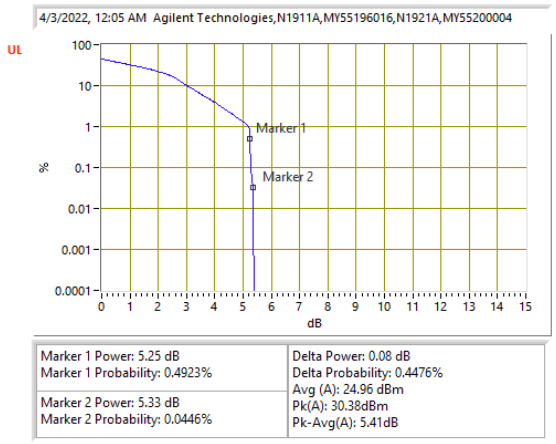
9.5.12. LTE BAND 66 AND 5G NR n66

LTE BAND 66

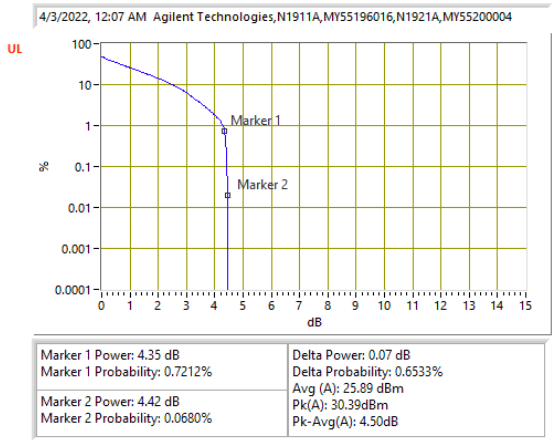
Test Engineer ID:	25602	Test Date:	4/3/2022



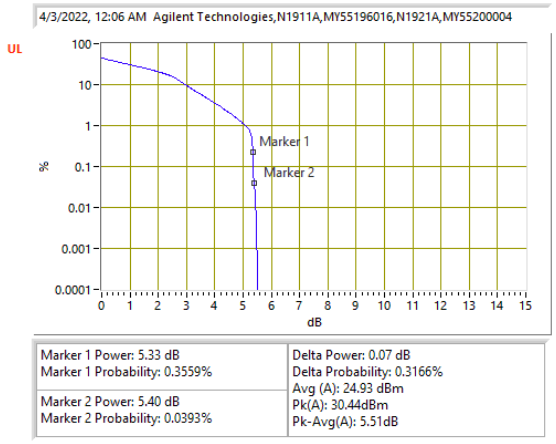
LTE B66 1.4MHz QPSK Middle Channel



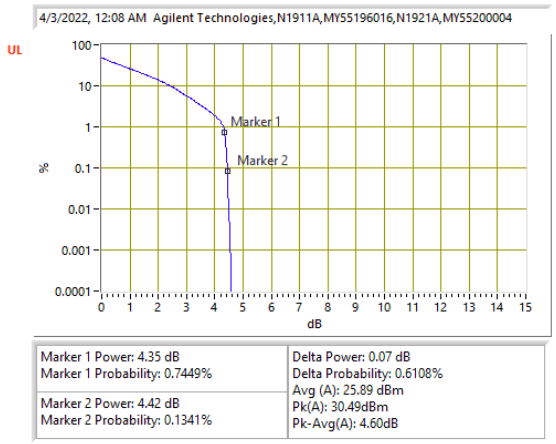
LTE B66 1.4MHz 16QAM Middle Channel



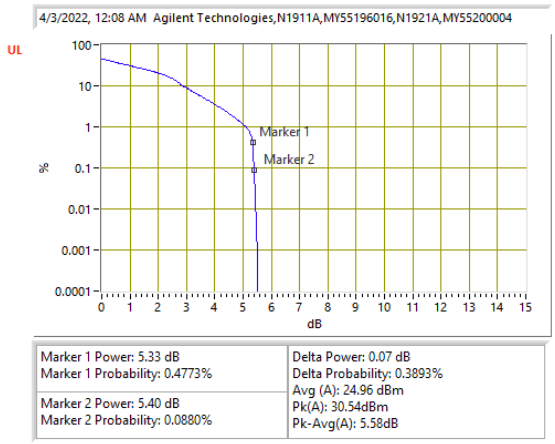
LTE B66 3MHz QPSK Middle Channel



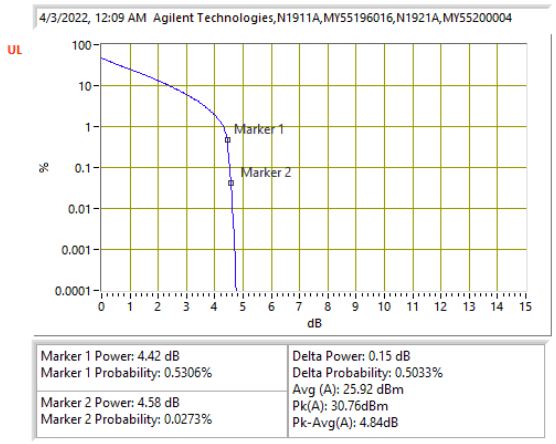
LTE B66 3MHz 16QAM Middle Channel



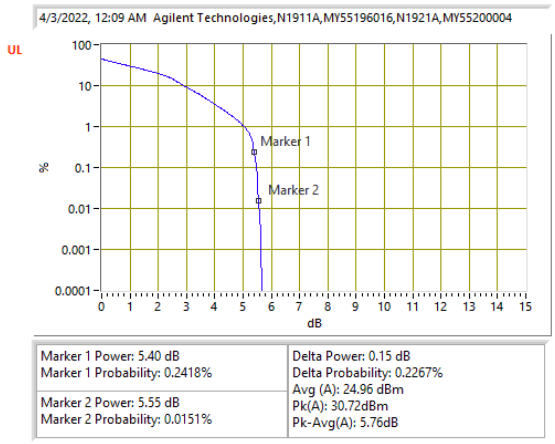
LTE B66 5MHz QPSK Middle Channel



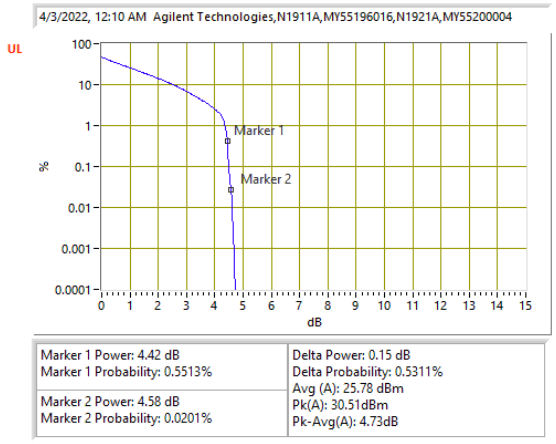
LTE B66 5MHz 16QAM Middle Channel



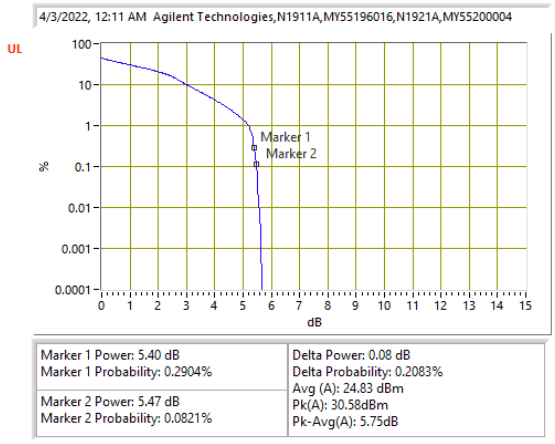
LTE B66 10MHz QPSK Middle Channel



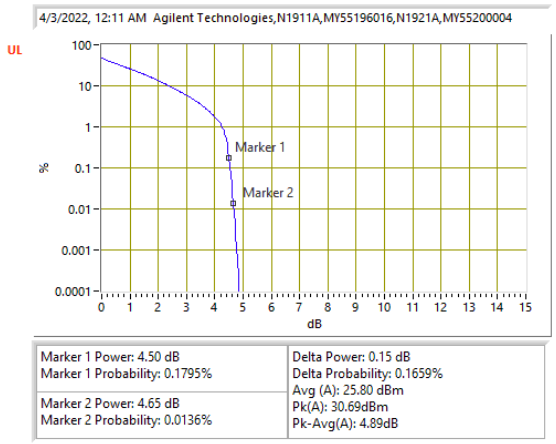
LTE B66 10MHz 16QAM Middle Channel



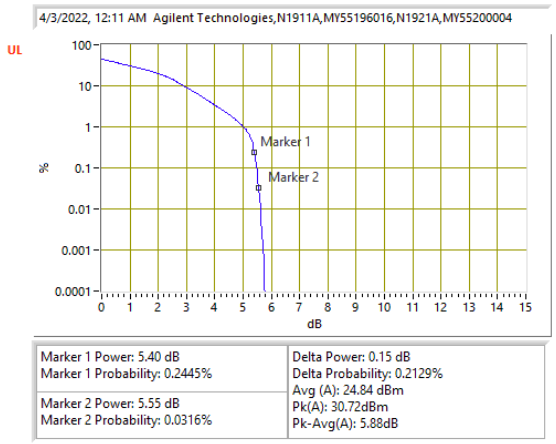
LTE B66 15MHz QPSK Middle Channel



LTE B66 15MHz 16QAM Middle Channel



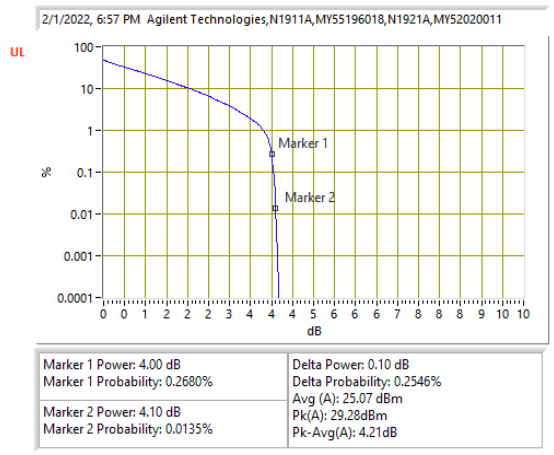
LTE B66 20MHz QPSK Middle Channel



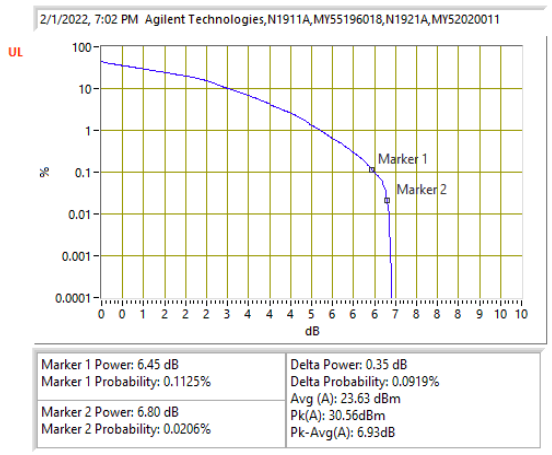
LTE B66 20MHz 16QAM Middle Channel

5G NR n66

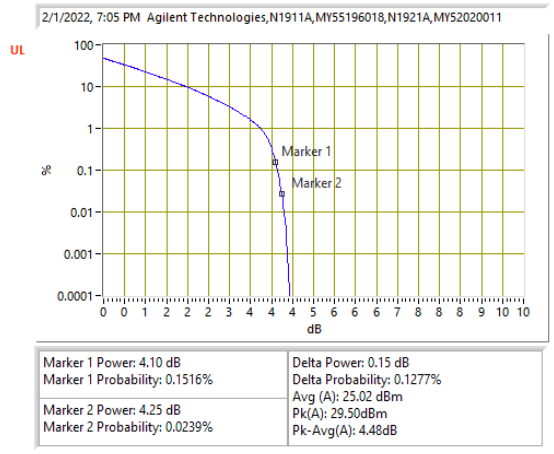
Test Engineer ID:	50822	Test Date:	2/1/2022



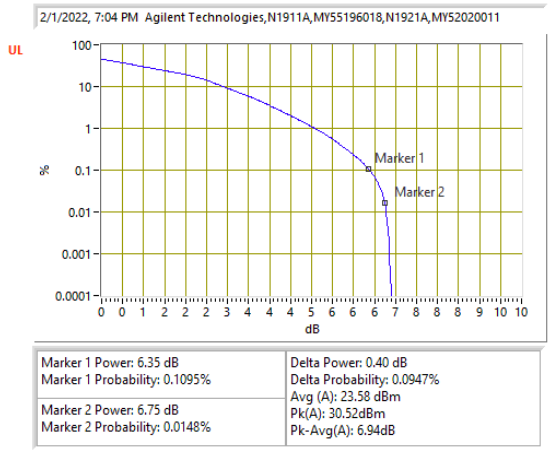
5G NR n66 5MHz BPSK Middle Channel



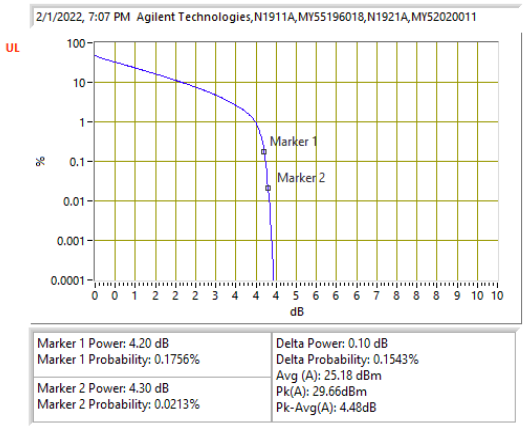
5G NR n66 5MHz 16QAM Middle Channel



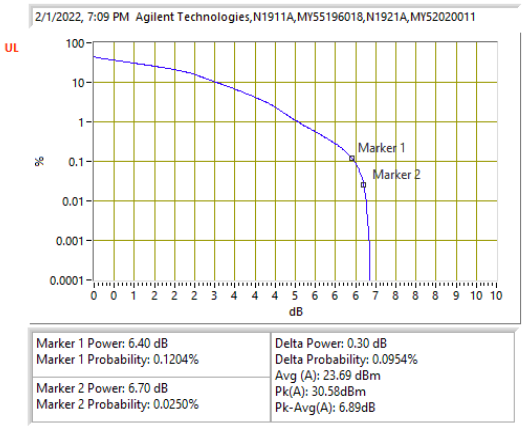
5G NR n66 10MHz BPSK Middle Channel



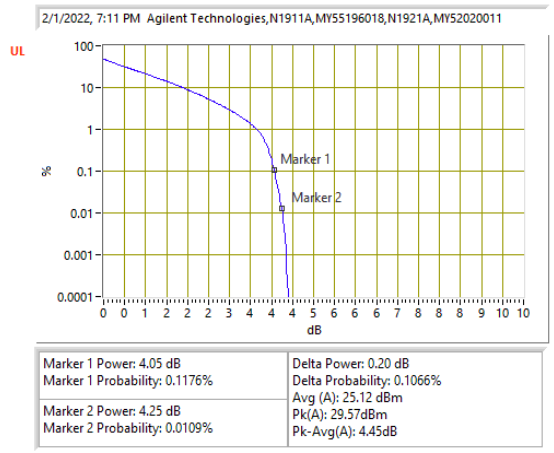
5G NR n66 10MHz 16QAM Middle Channel



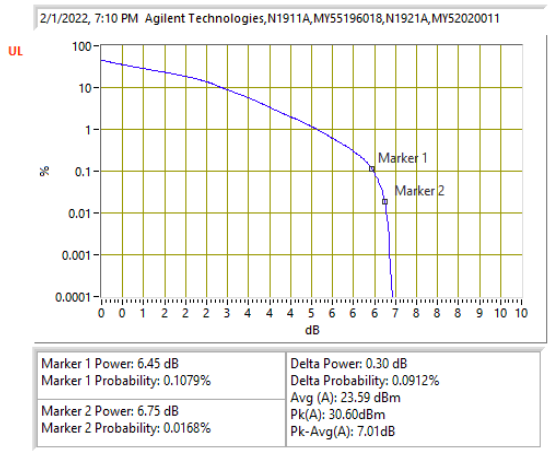
5G NR n66 15MHz BPSK Middle Channel



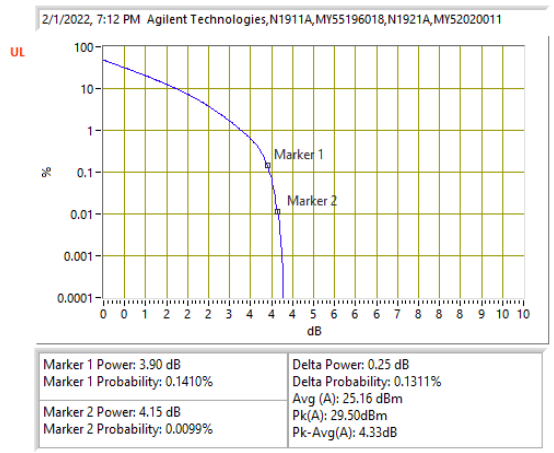
5G NR n66 15MHz 16QAM Middle Channel



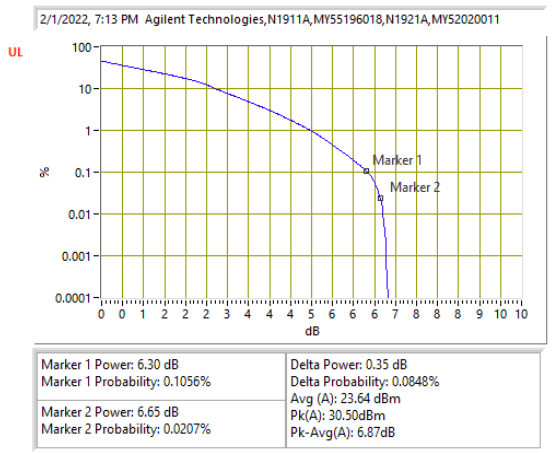
5G NR n66 20MHz BPSK Middle Channel



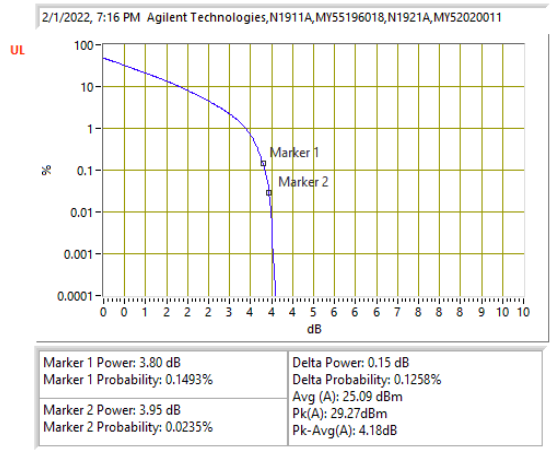
5G NR n66 20MHz 16QAM Middle Channel



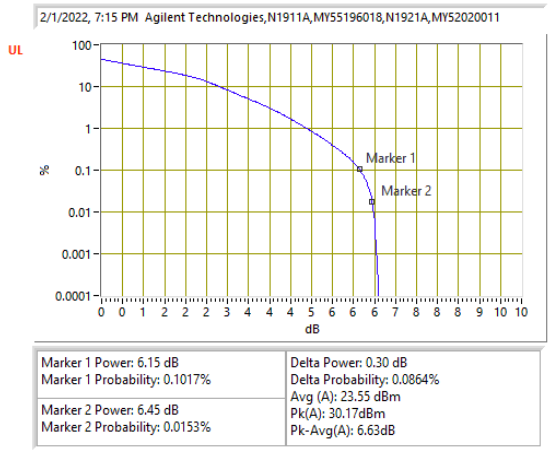
5G NR n66 30MHz BPSK Middle Channel



5G NR n66 30MHz 16QAM Middle Channel



5G NR n66 40MHz BPSK Middle Channel

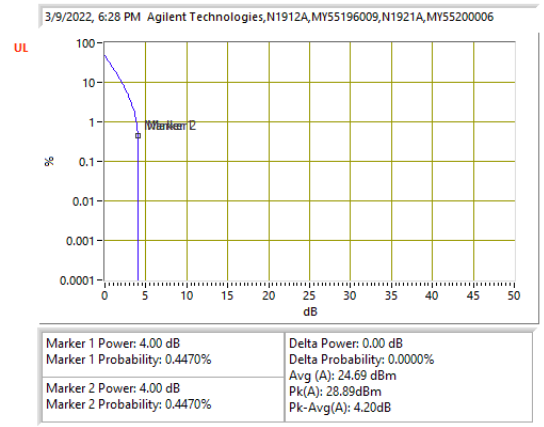


5G NR n66 40MHz 16QAM Middle Channel

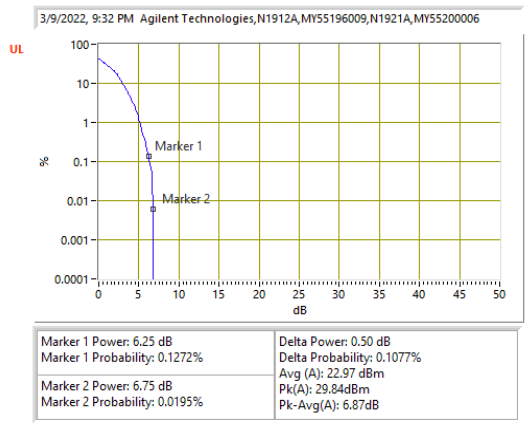
9.5.13. 5G NR n70

5G NR n70

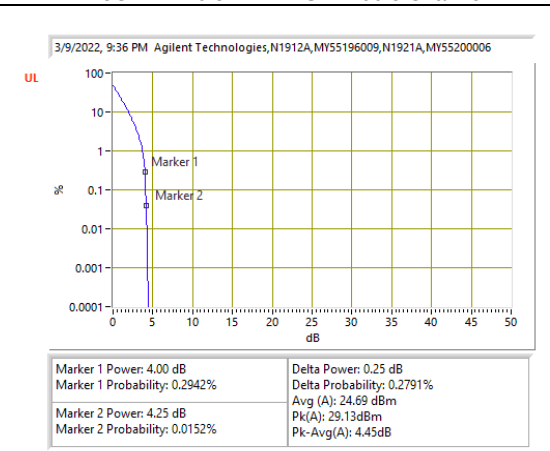
Test Engineer ID:	50822	Test Date:	3/9/2022



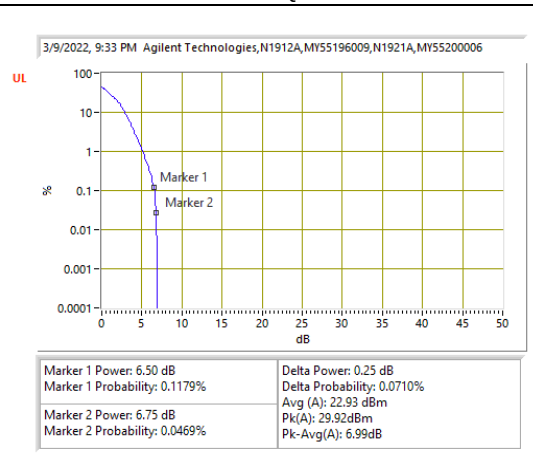
5G NR n70 5MHz BPSK Middle Channel



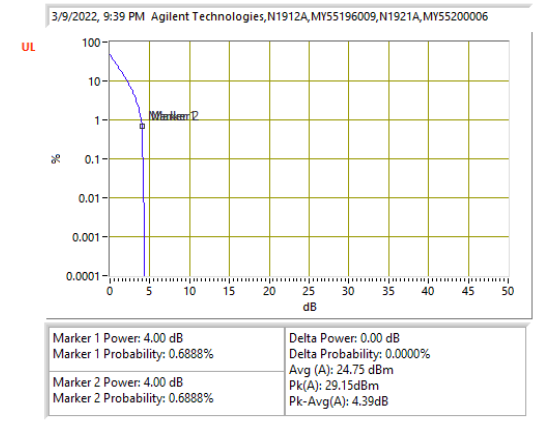
5G NR n70 5MHz 16QAM Middle Channel



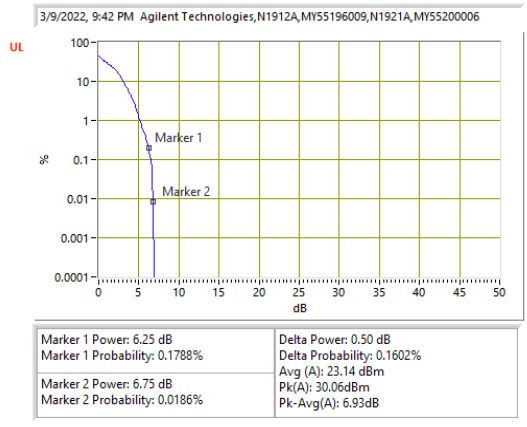
5G NR n70 10MHz BPSK Middle Channel



5G NR n70 10MHz 16QAM Middle Channel



5G NR n70 15MHz BPSK Middle Channel

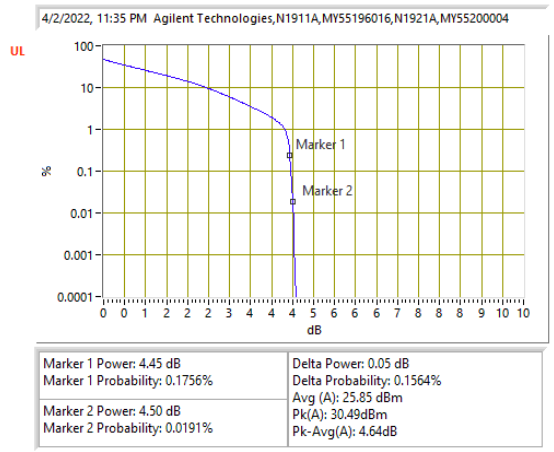


5G NR n70 15MHz 16QAM Middle Channel

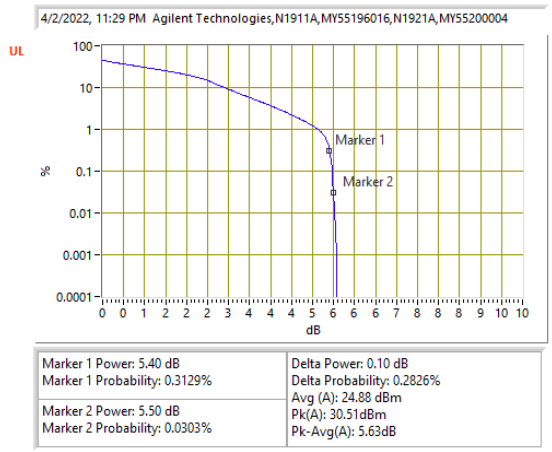
9.5.14. LTE BAND 71 AND 5G NR n71

LTE BAND 71

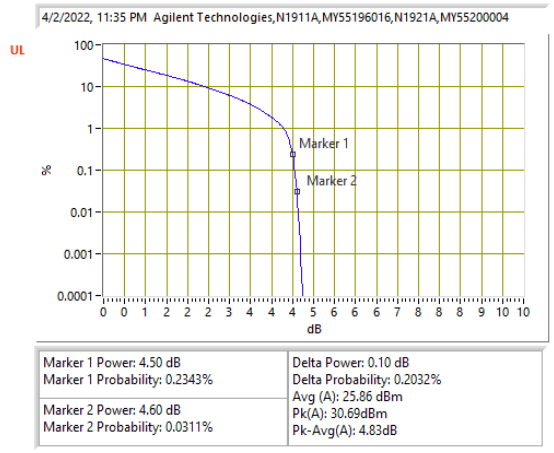
Test Engineer ID:	50822	Test Date:	2/1/2022



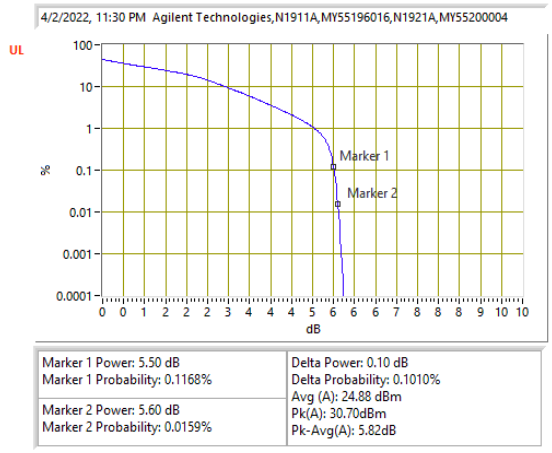
LTE B71 5MHz QPSK Middle Channel



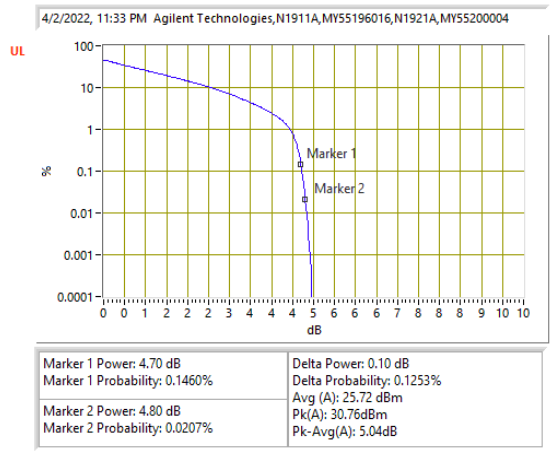
LTE B71 5MHz 16QAM Middle Channel



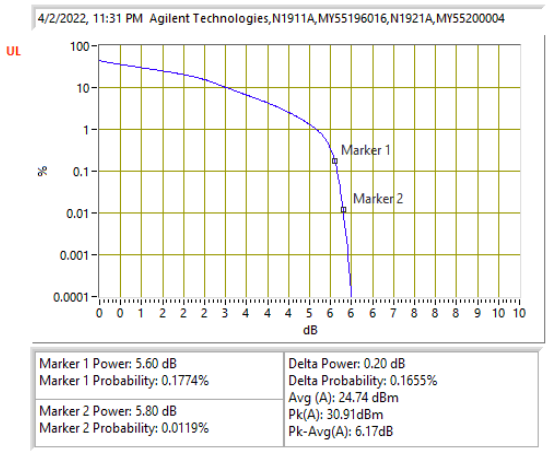
LTE B71 10MHz QPSK Middle Channel



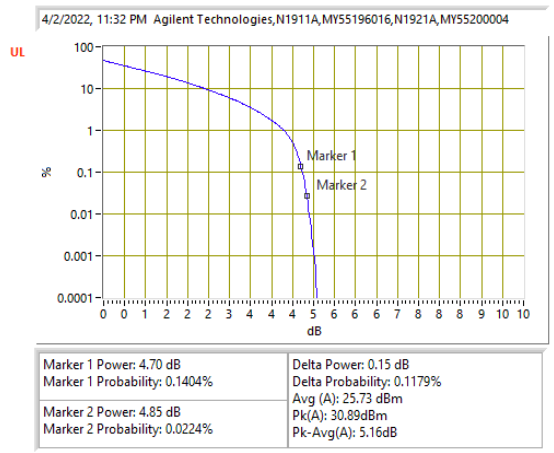
LTE B71 10MHz 16QAM Middle Channel



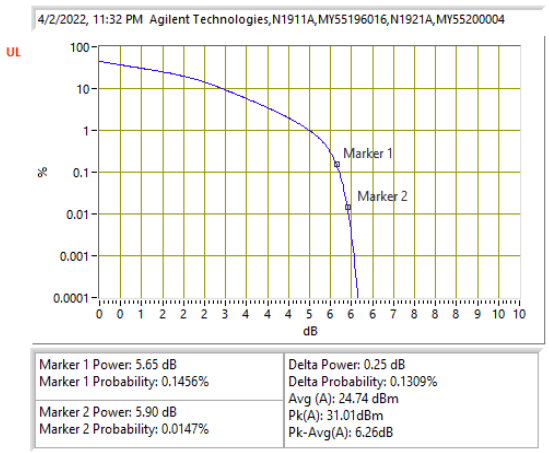
LTE B71 15MHz QPSK Middle Channel



LTE B71 15MHz 16QAM Middle Channel



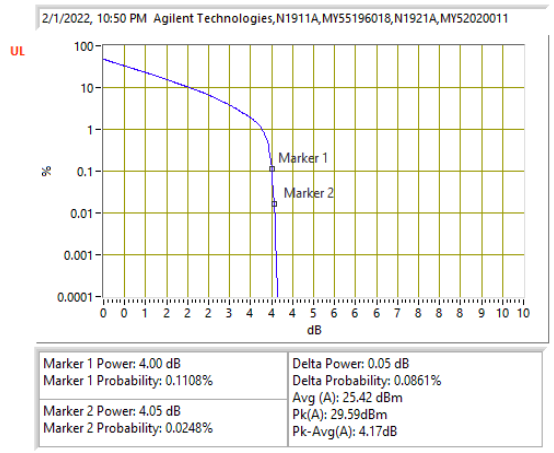
LTE B71 20MHz QPSK Middle Channel



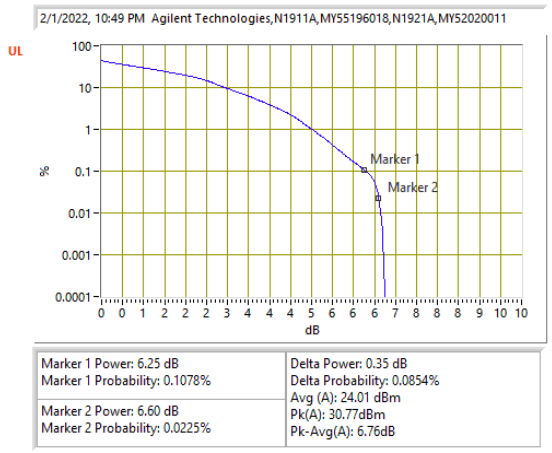
LTE B71 20MHz 16QAM Middle Channel

5G NR n71

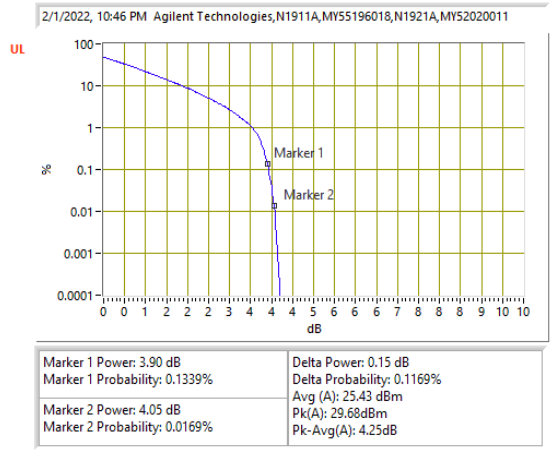
Test Engineer ID:	50822	Test Date:	2/1/2022



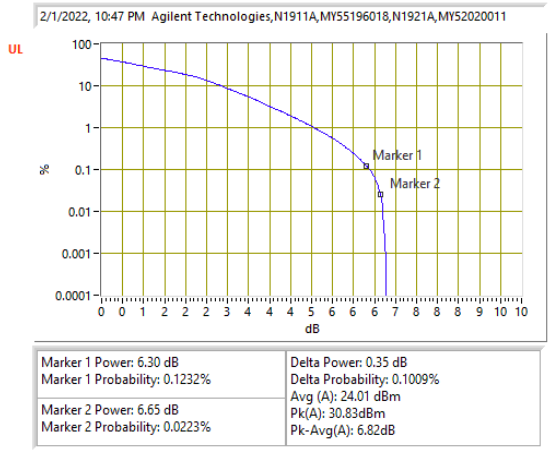
5G NR n71 5MHz BPSK Middle Channel



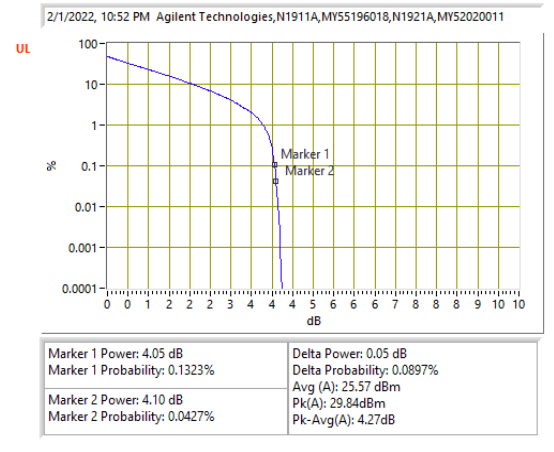
5G NR n71 5MHz 16QAM Middle Channel



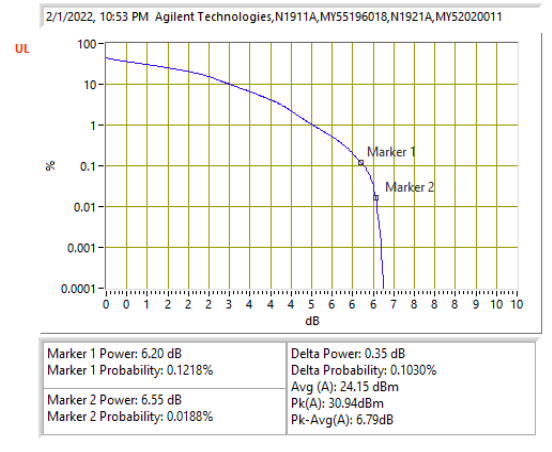
5G NR n71 10MHz BPSK Middle Channel



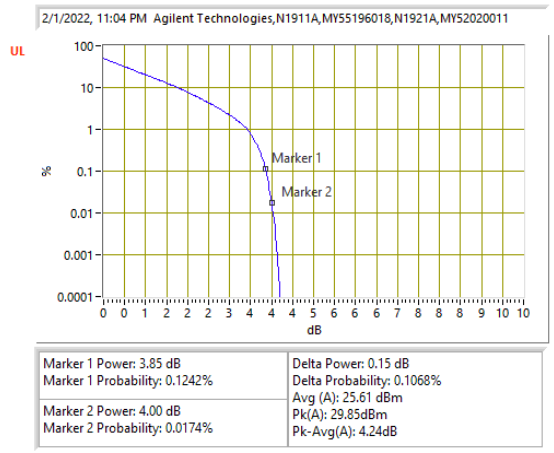
5G NR n71 10MHz 16QAM Middle Channel



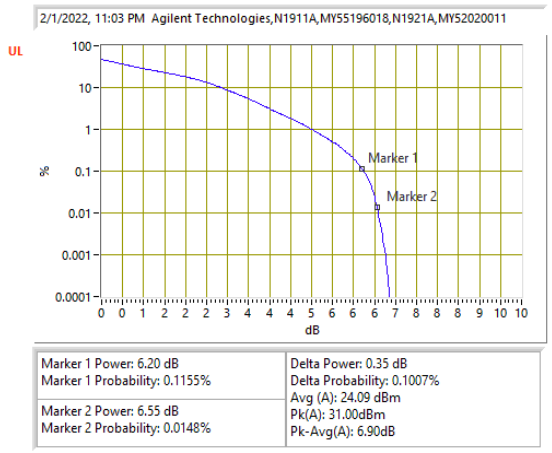
5G NR n71 15MHz BPSK Middle Channel



5G NR n71 15MHz 16QAM Middle Channel



5G NR n71 20MHz BPSK Middle Channel



5G NR n71 20MHz 16QAM Middle Channel

9.5.15. 5G NR n77 (FCC Part 27 3450-3550MHz)

Test Engineer ID:	50822	Test Date:	5/12/2022

Band	Bandwidth (MHz)	Frequency (MHz)	RB Allocation	RB OffSet	Modulation	Conducted Power (dBm)		Peak-to-Average Power Ratio (dB)
						Peak	Average	
Band n77	10MHz	3500.0	24	0	BPSK	33.18	29.04	4.14
					16QAM	34.25	27.6	6.65
	15MHz		36	0	BPSK	33.25	29.18	4.07
					16QAM	34.24	27.56	6.68
	20MHz		50	0	BPSK	31.19	27.2	3.99
					16QAM	32.49	25.77	6.72
	30MHz		75	0	BPSK	31.32	27.34	3.98
					16QAM	32.55	25.76	6.79
	40MHz		100	0	BPSK	31.26	27.35	3.91
					16QAM	32.25	25.49	6.76
	50MHz		128	0	BPSK	30.87	27.04	3.83
					16QAM	31.95	25.54	6.41
	60MHz		162	0	BPSK	30.92	27.16	3.76
					16QAM	32.05	25.58	6.47
	70MHz		180	0	BPSK	30.87	26.92	3.95
					16QAM	31.84	25.27	6.57
	80MHz		216	0	BPSK	30.25	26.89	3.36
					16QAM	31.29	25.3	5.99
	90MHz		243	0	BPSK	38.40	34.4	4.00
					16QAM	31.11	25.18	5.93
	100MHz		270	0	BPSK	30.03	26.89	3.14
					16QAM	30.88	25.16	5.72

Duty Cycle Correction Factor (dB) =	0.00

Peak-to-Average Power Ratio= Peak Reading - Average Reading - Duty Cycle Correction Factor

9.5.16. 5G NR n77 (FCC Part 27 3700-3980MHz)

Test Engineer ID:	50822	Test Date:	5/12/2022

Band	Bandwidth (MHz)	Frequency (MHz)	RB Allocation	RB OffSet	Modulation	Conducted Power (dBm)		Peak-to-Average Power Ratio (dB)
						Peak	Average	
Band n77	10MHz	3840.0	24	0	BPSK	33.93	29.66	4.27
					16QAM	34.64	27.98	6.66
	15MHz		36	0	BPSK	34.18	29.89	4.29
					16QAM	34.60	27.91	6.69
	20MHz		50	0	BPSK	31.07	26.92	4.15
					16QAM	32.00	25.35	6.65
	30MHz		75	0	BPSK	30.95	26.97	3.98
					16QAM	32.24	25.44	6.80
	40MHz		100	0	BPSK	30.95	26.88	4.07
					16QAM	32.04	25.39	6.65
	50MHz		128	0	BPSK	30.64	26.71	3.93
					16QAM	31.59	25.21	6.38
	60MHz		162	0	BPSK	30.67	26.7	3.97
					16QAM	31.55	25.12	6.43
	70MHz		180	0	BPSK	31.35	21.24	10.11
					16QAM	30.79	25.89	4.90
	80MHz		216	0	BPSK	30.79	25.88	4.91
					16QAM	30.94	24.92	6.02
	90MHz		243	0	BPSK	29.85	26.42	3.43
					16QAM	29.95	26.56	3.39
	100MHz		270	0	BPSK	29.82	26.56	3.26
					16QAM	30.26	25.91	4.35
Duty Cycle Correction Factor (dB) =			0.00					
Peak-to-Average Power Ratio= Peak Reading - Average Reading - Duty Cycle Correction Factor								

10. RADIATED TEST RESULTS

Using the test configuration shown in Figure 6 below, We measure the radiated emissions directly from the EUT and convert the measured field strength or received power to ERP or EIRP, as required, for comparison to the applicable limits. As stated in 5.5.1 of ANSI C63.26-2015, the field strength measurement method using a test site validated to the requirements of ANSI C63.4 is an alternative to the substitution measurement method.

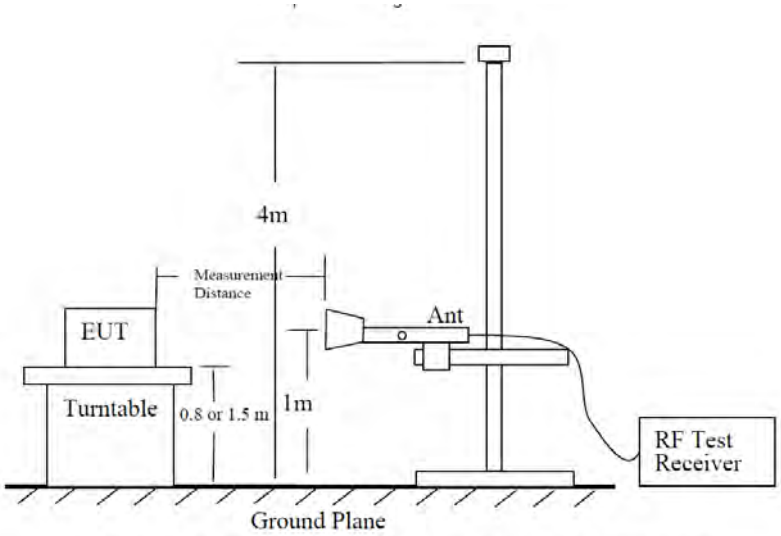


Figure 6—Test site-up for radiated ERP and/or EIRP measurements

Radiated Power Measurement Calculation According to ANSI C63.26-2015

a) E (dBμV/m) = Measured amplitude level (dBμV) + Cable Loss (dB) + Antenna Factor (dB/m).

b) E (dBμV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m).

c) E (dBμV/m) = EIRP (dBm) − 20log(D) + 104.8; where D is the measurement distance (in the far field region) in m.

d) EIRP (dBm) = E (dBμV/m) + 20log(D) − 104.8; where D is the measurement distance (in the far field region) in m.

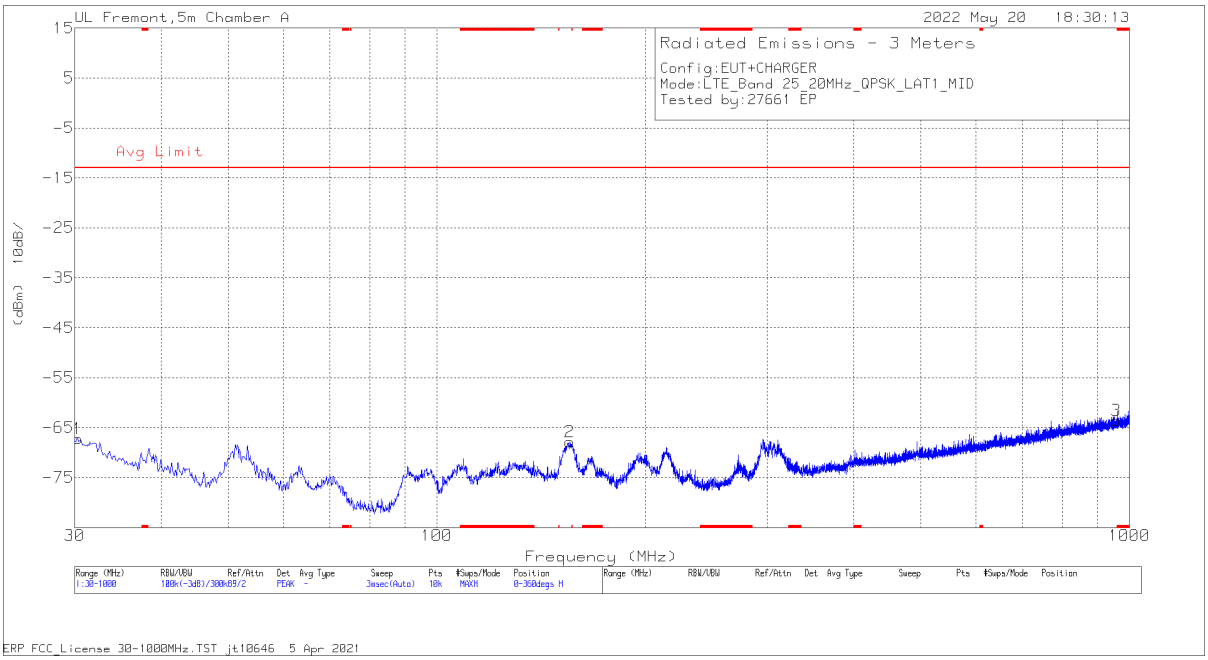
So, from d)

The measuring distance is usually at 3m, then 20*Log(3)=9.5424

Then, EIRP (dBm) = E (dBμV/m) + 9.5424 − 104.8 = E (dBμV/m) – 95.2576

Note: Confidence check of each chamber is performed daily to see if any degradation from expected/normal reading reference data. Ambient check of each chamber is performed monthly.

Example Plot Below 1GHz



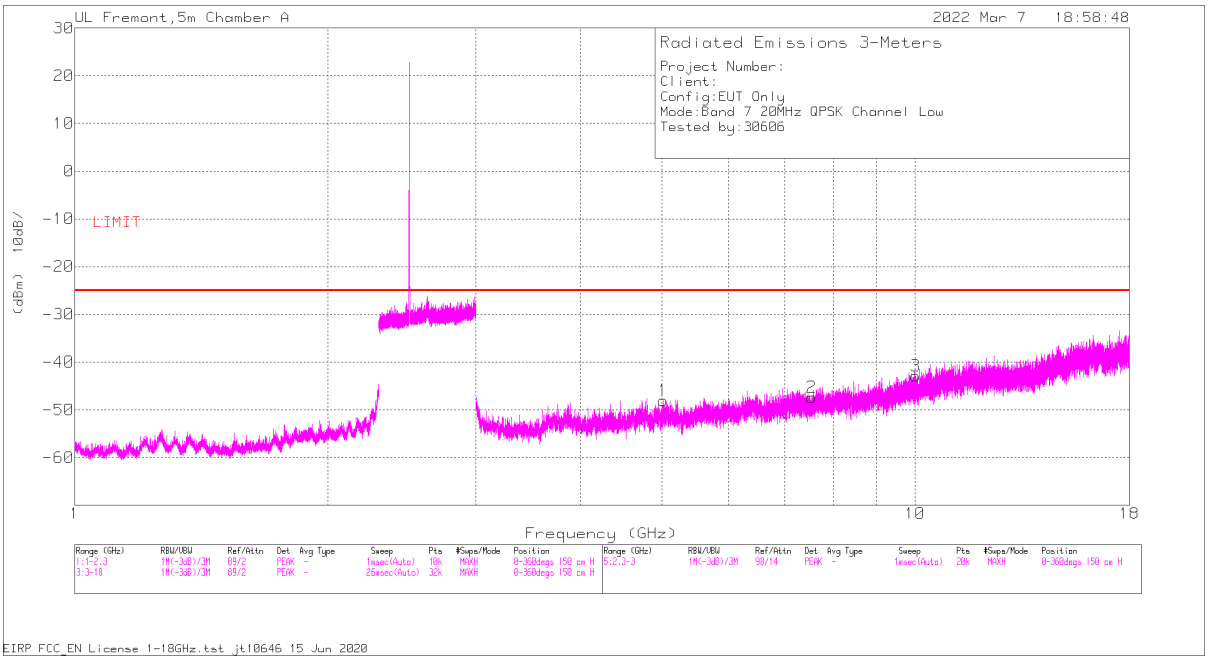
Horizontal Polarity

Vertical Polarity

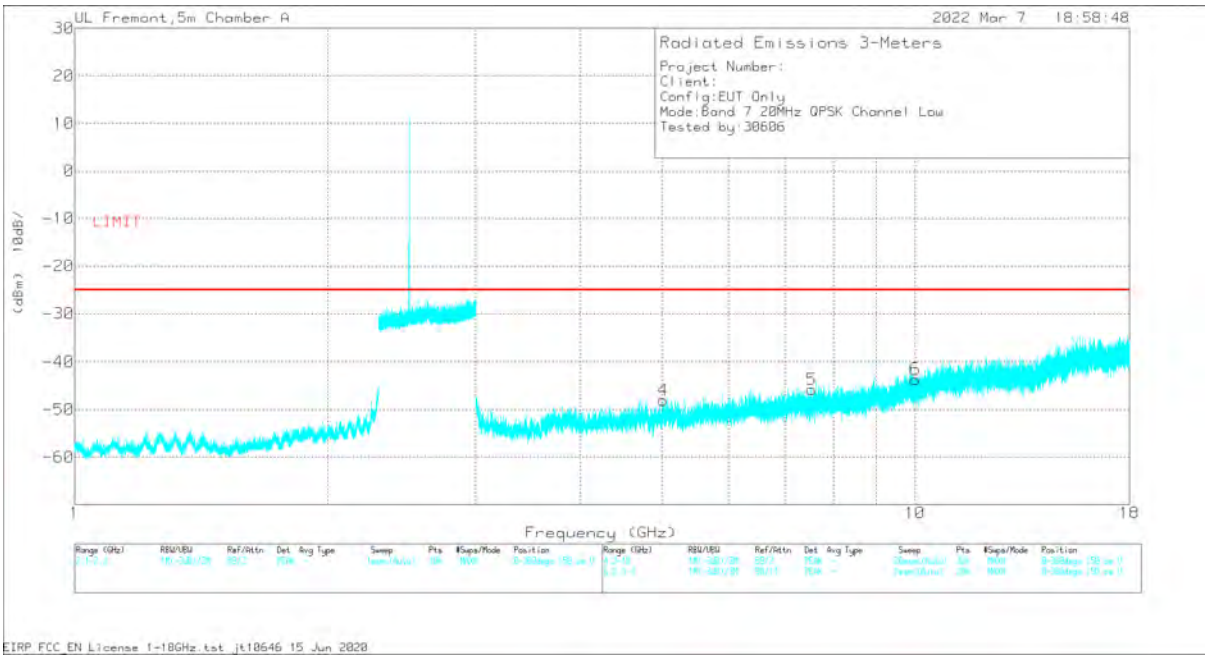
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T122 (dB/m)	Amp/Cbl (dB/m)	EIRP CF	Corrected Reading (dBm)	Avg Limit	Margin (dB)	Polarity
6	960.909	26.23	Pk	29.1	-22.3	-95.2	-62.17	-13	-49.17	V
1	30.291	27.6	Pk	27.7	-27.3	-95.2	-67.2	-13	-54.2	H
4	40.476	38.46	Pk	20	-27.1	-95.2	-63.84	-13	-50.84	V
5	51.534	46.09	Pk	14.1	-26.9	-95.2	-61.91	-13	-48.91	V
2	155.712	34.41	Pk	18.6	-25.7	-95.2	-67.89	-13	-54.89	H
3	957.805	24.74	Pk	29.1	-22.2	-95.2	-63.56	-13	-50.56	H

Example Plot Above 1GHz



Horizontal Polarity



Vertical Polarity

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF 80402 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
4	5.016094	36.36	Pk	34.3	-24.3	.8	-95.2	-48.04	-25	-23.04	V
1	5.019375	36.35	Pk	34.2	-24.2	.8	-95.2	-48.05	-25	-23.05	H
2	7.530469	32.12	Pk	35.6	-20.2	.3	-95.2	-47.38	-25	-22.38	H
5	7.5375	33.8	Pk	35.6	-20.3	.3	-95.2	-45.8	-25	-20.8	V
6	10.012031	31.38	Pk	37.2	-17.6	.6	-95.2	-43.62	-25	-18.62	V
3	10.01625	32.08	Pk	37.2	-17.6	.6	-95.2	-42.92	-25	-17.92	H

10.1. FIELD STRENGTH OF SPURIOUS RADIATION, ANT 1

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r01

All tests above 1GHz were done with a Resolution Bandwidth of 1MHz, and a Video Bandwidth of 3MHz

RESULTS

10.1.1. LTE BAND 5 AND 5G NR n5

LIMITS

FCC: §22.917(a)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 5 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	30606
Configuration:	EUT only
Mode	LTE5 QPSK 10MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF 80402 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 829MHz										
1.6589	49.34	Pk	28.3	-34.9	.7	-95.2	-51.76	-13	-38.76	V
1.6593	49.59	Pk	28.2	-34.9	.7	-95.2	-51.61	-13	-38.61	H
2.4936	43.3	Pk	32.8	-34.7	.5	-95.2	-53.3	-13	-40.3	V
2.5396	42.41	Pk	32.6	-34.7	.6	-95.2	-54.29	-13	-41.29	H
3.3213	42.85	Pk	32.6	-33.8	.5	-95.2	-53.05	-13	-40.05	V
3.3858	42.28	Pk	32.6	-33.5	.5	-95.2	-53.32	-13	-40.32	H
Mid Channel, 836.5MHz										
1.6640	49.72	Pk	28.3	-34.9	.7	-95.2	-51.38	-13	-38.38	H
1.6642	49.84	Pk	28.3	-34.9	.7	-95.2	-51.26	-13	-38.26	V
2.5264	43.04	Pk	32.7	-34.7	.5	-95.2	-53.66	-13	-40.66	H
2.5532	43.26	Pk	32.4	-34.7	.7	-95.2	-53.54	-13	-40.54	V
3.3145	41.92	Pk	32.6	-33.8	.5	-95.2	-53.98	-13	-40.98	V
3.3159	42.55	Pk	32.6	-33.8	.5	-95.2	-53.35	-13	-40.35	H
High Channel, 844MHz										
1.6691	49.35	Pk	28.3	-34.9	.7	-95.2	-51.75	-13	-38.75	V
1.6694	49.47	Pk	28.3	-34.9	.7	-95.2	-51.63	-13	-38.63	H
2.530756	42.65	Pk	32.6	-34.7	.5	-95.2	-54.15	-13	-41.15	H
2.556667	44.43	Pk	32.3	-34.7	.7	-95.2	-52.47	-13	-39.47	V
3.130134	43.21	Pk	32.9	-34.1	.5	-95.2	-52.69	-13	-39.69	V
3.240134	42.06	Pk	32.9	-33.9	.4	-95.2	-53.74	-13	-40.74	H
1.669333	46.45	Pk	28.3	-34.9	.7	-95.2	-54.65	-13	-41.65	H

BPSK 5G NR n5 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	2/23/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	n5 BPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345(dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 834MHz										
1.6806	39.33	Pk	28.4	-29.3	.7	-95.2	-56.07	-13	-43.07	H
1.6820	38.97	Pk	28.4	-29.2	.7	-95.2	-56.33	-13	-43.33	V
2.5298	37.38	Pk	32.4	-28	.8	-95.2	-52.62	-13	-39.62	H
2.5298	37.6	Pk	32.4	-28	.8	-95.2	-52.4	-13	-39.4	V
3.3604	35.78	Pk	32.8	-26.6	.6	-95.2	-52.62	-13	-39.62	H
3.3643	36.94	Pk	32.8	-26.6	.6	-95.2	-51.46	-13	-38.46	V
Mid Channel, 836.5MHz										
1.6640	42.05	Pk	28.5	-29.4	.8	-95.2	-53.25	-13	-40.25	H
1.664	42.45	Pk	28.5	-29.4	.8	-95.2	-52.85	-13	-39.85	V
2.5075	39.34	Pk	32.3	-28.1	.7	-95.2	-50.96	-13	-37.96	V
2.5119	40.64	Pk	32.4	-28.1	.7	-95.2	-49.56	-13	-36.56	H
3.3530	38.81	Pk	32.7	-26.5	.6	-95.2	-49.59	-13	-36.59	V
3.3571	38.12	Pk	32.8	-26.6	.6	-95.2	-50.28	-13	-37.28	H
High Channel, 839MHz										
1.6792	44.76	Pk	28.4	-29.3	.7	-95.2	-50.64	-13	-37.64	V
1.6792	44.2	Pk	28.4	-29.3	.7	-95.2	-51.2	-13	-38.2	H
2.522028	39.14	Pk	32.4	-28.1	.8	-95.2	-50.96	-13	-37.96	V
2.5300	38.43	Pk	32.4	-28	.8	-95.2	-51.57	-13	-38.57	H
3.3809	37.34	Pk	32.8	-26.5	.6	-95.2	-50.96	-13	-37.96	H
3.3827	37.94	Pk	32.8	-26.5	.6	-95.2	-50.36	-13	-37.36	V

10.1.2. LTE BAND 7 AND 5G NR n7

LIMITS

FCC: §27.53 (m)
At least 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section.

QPSK LTE BAND 7 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/7/2022
Test Engineer:	30606
Configuration:	EUT only
Mode	LTE7 QPSK 20MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF 80402 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2510MHz										
5.0161	36.36	Pk	34.3	-24.3	.8	-95.2	-48.04	-25	-23.04	V
5.0194	36.35	Pk	34.2	-24.2	.8	-95.2	-48.05	-25	-23.05	H
7.5305	32.12	Pk	35.6	-20.2	.3	-95.2	-47.38	-25	-22.38	H
7.5375	33.8	Pk	35.6	-20.3	.3	-95.2	-45.8	-25	-20.8	V
10.01203	31.38	Pk	37.2	-17.6	.6	-95.2	-43.62	-25	-18.62	V
10.01625	32.08	Pk	37.2	-17.6	.6	-95.2	-42.92	-25	-17.92	H
Mid Channel, 2535MHz										
5.0747	34.51	Pk	34.4	-23.7	.7	-95.2	-49.29	-25	-24.29	V
5.0756	35.09	Pk	34.4	-23.7	.7	-95.2	-48.71	-25	-23.71	H
7.5956	32.09	Pk	35.7	-20	.5	-95.2	-46.91	-25	-21.91	V
7.6013	32.56	Pk	35.7	-20.1	.4	-95.2	-46.64	-25	-21.64	H
10.1667	32.49	Pk	37.3	-17.6	.5	-95.2	-42.51	-25	-17.51	H
10.1794	31.69	Pk	37.4	-17.5	.6	-95.2	-43.01	-25	-18.01	V
High Channel, 2560MHz										
5.1309	36.23	Pk	34.4	-23.9	.8	-95.2	-47.67	-25	-22.67	V
5.1431	34.9	Pk	34.3	-23.9	.8	-95.2	-49.1	-25	-24.1	H
7.6992	33.06	Pk	35.7	-19.5	.5	-95.2	-45.44	-25	-20.44	H
7.7044	33.14	Pk	35.7	-19.5	.5	-95.2	-45.36	-25	-20.36	V
10.2169	31.98	Pk	37.3	-17.5	.9	-95.2	-42.52	-25	-17.52	H
10.2277	32.04	Pk	37.3	-17.4	.8	-95.2	-42.46	-25	-17.46	V

BPSK 5G NR n7 (40.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/23/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	n7 BPSK 40MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2525MHz										
5.0288	38.55	Pk	34.1	-30.7	.7	-95.2	-52.55	-25	-27.55	V
5.0405	39.51	Pk	34.0	-30.7	.6	-95.2	-51.79	-25	-26.79	H
7.5469	35.29	Pk	35.7	-26.9	.3	-95.2	-50.81	-25	-25.81	V
7.5483	36.32	Pk	35.7	-26.9	.3	-95.2	-49.78	-25	-24.78	H
10.0777	35.66	Pk	37.2	-24.9	.7	-95.2	-46.54	-25	-21.54	V
10.1058	34.76	Pk	37.2	-24.9	.7	-95.2	-47.44	-25	-22.44	H
Mid Channel, 2535MHz										
5.0508	39.45	Pk	34.1	-30.7	.6	-95.2	-51.75	-25	-26.75	V
5.0550	39.16	Pk	34.1	-30.6	.6	-95.2	-51.94	-25	-26.94	H
7.6017	35.75	Pk	35.8	-27	.4	-95.2	-50.25	-25	-25.25	V
7.6163	35.65	Pk	35.8	-26.9	.4	-95.2	-50.25	-25	-25.25	H
10.1452	35.67	Pk	37.2	-24.8	.6	-95.2	-46.53	-25	-21.53	H
10.1508	34.52	Pk	37.2	-24.8	.6	-95.2	-47.68	-25	-22.68	V
High Channel, 2545MHz										
5.1014	39.36	Pk	34.1	-30.5	.8	-95.2	-51.44	-25	-26.44	H
5.1014	40	Pk	34.1	-30.5	.8	-95.2	-50.8	-25	-25.8	V
7.5966	35.35	Pk	35.8	-27.0	.4	-95.2	-50.65	-25	-25.65	V
7.6078	36.37	Pk	35.9	-27.0	.4	-95.2	-49.53	-25	-24.53	H
10.2014	34.3	Pk	37.3	-24.9	.8	-95.2	-47.70	-25	-22.70	V
10.2056	35.15	Pk	37.3	-24.8	.8	-95.2	-46.75	-25	-21.75	H

10.1.3. LTE BAND 12 AND 5G NR n12

LIMITS

FCC: §27.53 (g)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 12 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	30606
Configuration:	EUT only
Mode	LTE12 QPSK 10MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF 80402 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 704MHz										
1.4037	41.44	Pk	29	-29.8	.9	-95.2	-53.66	-13	-40.66	H
1.4100	42.11	Pk	28.8	-29.9	.9	-95.2	-53.29	-13	-40.29	V
2.1183	39.86	Pk	31.4	-28.7	.5	-95.2	-52.14	-13	-39.14	V
2.1214	39.7	Pk	31.5	-28.6	.5	-95.2	-52.1	-13	-39.1	H
2.8322	38.48	Pk	32.2	-27.3	.7	-95.2	-51.12	-13	-38.12	H
2.8344	38.8	Pk	32.3	-27.3	.7	-95.2	-50.7	-13	-37.7	V
Mid Channel, 707.5MHz										
1.4108	41.29	Pk	28.8	-29.9	.9	-95.2	-54.11	-13	-41.11	V
1.4176	41.32	Pk	28.8	-29.8	.9	-95.2	-53.98	-13	-40.98	H
2.1245	39.5	Pk	31.5	-28.6	.5	-95.2	-52.3	-13	-39.3	V
2.1358	39.53	Pk	31.6	-28.3	.5	-95.2	-51.87	-13	-38.87	H
2.8325	38.61	Pk	32.3	-27.3	.7	-95.2	-50.89	-13	-37.89	H
2.8379	38.54	Pk	32.2	-27.2	.7	-95.2	-50.96	-13	-37.96	V
High Channel, 711MHz										
1.4134	41.49	Pk	28.8	-29.9	.9	-95.2	-53.91	-13	-40.91	V
1.4206	41.66	Pk	28.7	-29.8	.9	-95.2	-53.74	-13	-40.74	H
2.1280	39.62	Pk	31.6	-28.5	.5	-95.2	-51.98	-13	-38.98	V
2.1357	39.7	Pk	31.6	-28.3	.5	-95.2	-51.7	-13	-38.7	H
2.8435	38.18	Pk	32.2	-27.2	.7	-95.2	-51.32	-13	-38.32	V
2.8445	38.91	Pk	32.2	-27.2	.7	-95.2	-50.59	-13	-37.59	H

BPSK 5G NR n12 (15.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/23/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N12 BPSK 15MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)		EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 706.5MHz										
1.4073	42.61	Pk	28.8	-34.9	1	-95.2	-57.69	-13	-44.69	V
1.4112	43.73	Pk	28.8	-34.9	1	-95.2	-56.57	-13	-43.57	H
2.1176	43.35	Pk	31.2	-34.8	.5	-95.2	-54.95	-13	-41.95	V
2.1206	43.07	Pk	31.2	-34.8	.5	-95.2	-55.23	-13	-42.23	H
2.7263	42.15	Pk	32.4	-34.6	.5	-95.2	-54.75	-13	-41.75	V
2.7380	43.21	Pk	32.5	-34.6	.5	-95.2	-53.59	-13	-40.59	H
Mid Channel, 707.5MHz										
1.4092	42.72	Pk	28.8	-34.9	1	-95.2	-57.58	-13	-44.58	H
1.4171	43.09	Pk	29	-34.9	.9	-95.2	-57.11	-13	-44.11	V
2.0986	43.56	Pk	31.2	-34.9	.6	-95.2	-54.74	-13	-41.74	V
2.1308	43.17	Pk	31.2	-34.9	.5	-95.2	-55.23	-13	-42.23	H
2.7151	43.14	Pk	32.5	-34.6	.6	-95.2	-53.56	-13	-40.56	H
2.7776	43.31	Pk	32.3	-34.5	.5	-95.2	-53.59	-13	-40.59	V
High Channel, 708.5MHz										
1.4117	43.49	Pk	28.8	-34.9	1	-95.2	-56.81	-13	-43.81	H
1.4146	41.89	Pk	28.9	-34.9	.9	-95.2	-58.41	-13	-45.41	V
2.1113	42.51	Pk	31.2	-34.8	.6	-95.2	-55.69	-13	-42.69	V
2.1333	42.44	Pk	31.2	-34.9	.5	-95.2	-55.96	-13	-42.96	H
2.7292	43.47	Pk	32.4	-34.6	.5	-95.2	-53.43	-13	-40.43	H
2.7957	42.92	Pk	32.3	-34.5	.5	-95.2	-53.98	-13	-40.98	V

10.1.4. LTE BAND 13

LIMITS

FCC: §27.53
(c) The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.
(f) Emissions in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

QPSK LTE BAND 13 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	30606
Configuration:	EUT only
Mode	LTE13 QPSK 10MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF 80402 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 782MHz										
1.5475	41.69	Pk	28.1	-29.6	.8	-95.2	-54.21	-40	-14.21	H
1.5521	41.72	Pk	28.2	-29.6	.8	-95.2	-54.08	-40	-14.08	V
2.3308	38.52	Pk	31.7	-28.1	.6	-95.2	-52.48	-13	-39.48	H
2.3412	39.04	Pk	31.8	-28.2	.5	-95.2	-52.06	-13	-39.06	V
3.1127	37.88	Pk	33.1	-26.6	.7	-95.2	-50.12	-13	-37.12	H
3.1231	37.75	Pk	33.2	-26.6	.6	-95.2	-50.25	-13	-37.25	V

10.1.5. LTE BAND 14 AND 5G NR n14

LIMITS

FCC: §90.543 Emission Limitations. (Band 14)
(e) For operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:
(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

(f) For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation

QPSK LTE BAND 14 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	30606
Configuration:	EUT only
Mode	LTE14 QPSK 10MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF 80402 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 793MHz										
1.5685	39.8	Pk	28.2	-29.5	.9	-95.2	-55.8	-40	-15.80	V
1.5836	39.53	Pk	28	-29.6	.8	-95.2	-56.47	-40	-16.47	H
2.3657	39.09	Pk	32	-28.0	.5	-95.2	-51.61	-13	-38.61	H
2.3708	38.64	Pk	32	-28.0	.5	-95.2	-52.06	-13	-39.06	V
3.1718	37.9	Pk	32.8	-26.6	.5	-95.2	-50.60	-13	-37.60	H
3.1899	37.72	Pk	32.9	-26.6	.6	-95.2	-50.58	-13	-37.58	V

BPSK 5G NR n14 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/23/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N14 BPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 793MHz										
1.5232	43.58	Pk	27.9	-34.9	.8	-95.2	-57.82	-40	-17.82	H
1.5706	43.69	Pk	27.7	-34.9	.8	-95.2	-57.91	-40	-17.91	V
2.3802	43.31	Pk	31.9	-34.8	.6	-95.2	-54.19	-13	-41.19	H
2.3885	42.08	Pk	31.9	-34.8	.6	-95.2	-55.42	-13	-42.42	V
3.0558	42.37	Pk	33	-34.2	.4	-95.2	-53.63	-13	-40.63	V
3.0685	43.45	Pk	33	-34.2	.5	-95.2	-52.45	-13	-39.45	H

10.1.6. LTE BAND 17

LIMITS

FCC: §27.53 (g)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 17 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	30606
Configuration:	EUT only
Mode	LTE17 QPSK 10MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF 80402 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 709MHz										
1.4122	40.81	Pk	28.8	-29.9	.9	-95.2	-54.59	-13	-41.59	V
1.4123	41.65	Pk	28.8	-29.9	.9	-95.2	-53.75	-13	-40.75	H
2.1398	40.44	Pk	31.6	-28.3	.5	-95.2	-50.96	-13	-37.96	H
2.1404	40.19	Pk	31.6	-28.3	.5	-95.2	-51.21	-13	-38.21	V
2.8412	38.13	Pk	32.2	-27.2	.7	-95.2	-51.37	-13	-38.37	H
2.8414	38.35	Pk	32.2	-27.2	.7	-95.2	-51.15	-13	-38.15	V
Mid Channel, 710MHz										
1.4215	41.56	Pk	28.7	-29.8	.9	-95.2	-53.84	-13	-40.84	H
1.4225	41.67	Pk	28.7	-29.8	.9	-95.2	-53.73	-13	-40.73	V
2.1344	39.21	Pk	31.6	-28.4	.5	-95.2	-52.29	-13	-39.29	H
2.1412	39.3	Pk	31.6	-28.4	.5	-95.2	-52.2	-13	-39.20	V
2.8596	38.39	Pk	32.4	-27.1	.6	-95.2	-50.91	-13	-37.91	V
2.8630	39.1	Pk	32.4	-27.1	.5	-95.2	-50.3	-13	-37.30	H
High Channel, 711MHz										
1.4216	40.26	Pk	28.7	-29.8	.9	-95.2	-55.14	-13	-42.14	V
1.4225	41.47	Pk	28.7	-29.8	.9	-95.2	-53.93	-13	-40.93	H
2.1303	39.41	Pk	31.6	-28.5	.5	-95.2	-52.19	-13	-39.19	V
2.1343	39.71	Pk	31.6	-28.4	.5	-95.2	-51.79	-13	-38.79	H
2.8596	37.61	Pk	32.4	-27.1	.6	-95.2	-51.69	-13	-38.69	H
2.8606	38.25	Pk	32.4	-27.1	.5	-95.2	-51.15	-13	-38.15	V

10.1.7. LTE BAND 25 AND 5G NR n25

LIMITS

FCC: §24.238(a)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 25 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/7/2022
Test Engineer:	30606
Configuration:	EUT only
Mode	LTE 25 QPSK 20MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF 80402 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1860MHz									
3.6666	37.55	Pk	33.1	-25.6	-95.2	-50.15	-13	-37.15	V
3.671	37.98	Pk	33.1	-25.6	-95.2	-49.72	-13	-36.72	H
5.5865	35.81	Pk	34.8	-22.1	-95.2	-46.69	-13	-33.69	H
5.5971	34.63	Pk	34.8	-21.7	-95.2	-47.47	-13	-34.47	V
7.4578	33.37	Pk	35.6	-20.1	-95.2	-46.33	-13	-33.33	H
7.4913	32.96	Pk	35.6	-20.0	-95.2	-46.64	-13	-33.64	V
Mid Channel, 1882.5MHz									
3.7627	38.54	Pk	33.4	-24.8	-95.2	-48.06	-13	-35.06	V
3.7733	37.42	Pk	33.3	-24.8	-95.2	-49.28	-13	-36.28	H
5.6282	34.90	Pk	34.9	-22.1	-95.2	-47.5	-13	-34.50	V
5.6297	35.08	Pk	34.9	-22.1	-95.2	-47.32	-13	-34.32	H
7.5299	35.39	Pk	35.6	-19.6	-95.2	-43.81	-13	-30.81	H
7.5447	29.94	Pk	35.6	-19.3	-95.2	-48.96	-13	-35.96	V
High Channel, 1905MHz									
3.7928	37.37	Pk	33.3	-25.2	-95.2	-49.73	-13	-36.73	V
3.7944	38.05	Pk	33.3	-25.2	-95.2	-49.05	-13	-36.05	H
5.7148	35.41	Pk	35.0	-23.1	-95.2	-47.89	-13	-34.89	V
5.7189	35.5	Pk	34.9	-23.1	-95.2	-47.90	-13	-34.90	H
7.5922	33.43	Pk	35.7	-18.7	-95.2	-44.77	-13	-31.77	H
7.6005	32.15	Pk	35.7	-18.7	-95.2	-46.05	-13	-33.05	V

BPSK 5G NR n25 (40.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/23/2022
Test Engineer:	27661
Configuration:	EUT only
Mode	N25 BPSK 40MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1870MHz									
3.7303	40.8	Pk	33.4	-32.2	-95.2	-53.20	-13	-40.20	H
3.7322	41.03	Pk	33.5	-32.2	-95.2	-52.87	-13	-39.87	V
5.6198	39.13	Pk	35.0	-29.9	-95.2	-50.97	-13	-37.97	V
5.6283	38.81	Pk	35.1	-30.0	-95.2	-51.29	-13	-38.29	H
7.4597	35.5	Pk	35.8	-26.2	-95.2	-50.10	-13	-37.10	V
7.4775	35.46	Pk	35.7	-26.2	-95.2	-50.24	-13	-37.24	H
Mid Channel, 1882.5MHz									
3.7448	40.96	Pk	33.5	-32.1	-95.2	-52.84	-13	-39.84	H
3.7448	40.64	Pk	33.5	-32.1	-95.2	-53.16	-13	-40.16	V
5.6067	38.64	Pk	35.0	-29.7	-95.2	-51.26	-13	-38.26	V
5.6198	39.32	Pk	35.0	-29.9	-95.2	-50.78	-13	-37.78	H
7.5403	35.9	Pk	35.8	-26.1	-95.2	-49.6	-13	-36.60	V
7.5478	36.95	Pk	35.7	-26.2	-95.2	-48.75	-13	-35.75	H
High Channel, 1895MHz									
3.7927	41.03	Pk	33.6	-31.9	-95.2	-52.47	-13	-39.47	H
3.7969	41.29	Pk	33.6	-31.9	-95.2	-52.21	-13	-39.21	V
5.6967	38.24	Pk	34.9	-29.5	-95.2	-51.56	-13	-38.56	V
5.7089	38.49	Pk	34.8	-29.2	-95.2	-51.11	-13	-38.11	H
7.5628	35.44	Pk	35.8	-26.3	-95.2	-50.26	-13	-37.26	V
7.5703	37.49	Pk	35.8	-26.3	-95.2	-48.21	-13	-35.21	H

10.1.8. LTE BAND 26 AND 5G NR n26 (FCC PART 90S)

LIMITS

FCC: §90.691
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 26 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/3/2022
Test Engineer:	30606
Configuration:	EUT only
Mode	LTE 26 QPSK 10MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF 80402 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 819MHz										
1.6289	44.61	Pk	28.5	-29.4	.7	-95.2	-50.79	-13	-37.79	V
1.6292	45.65	Pk	28.5	-29.4	.7	-95.2	-49.75	-13	-36.75	H
2.4543	38.84	Pk	32.0	-28.2	.5	-95.2	-52.06	-13	-39.06	H
2.4603	39.29	Pk	32.0	-28.2	.5	-95.2	-51.61	-13	-38.61	V
3.2750	37.38	Pk	32.6	-26.3	.8	-95.2	-50.72	-13	-37.72	H
3.2755	37.26	Pk	32.6	-26.3	.8	-95.2	-50.84	-13	-37.84	V

BPSK 5G NR n26 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	2/29/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N26 BPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 819MHz										
1.6290	50.75	Pk	28.4	-34.9	.7	-95.2	-50.25	-13	-37.25	V
1.6292	51.07	Pk	28.4	-34.9	.7	-95.2	-49.93	-13	-36.93	H
2.5112	43.03	Pk	32.7	-34.7	.5	-95.2	-53.67	-13	-40.67	V
2.5209	43.02	Pk	32.7	-34.7	.5	-95.2	-53.68	-13	-40.68	H
3.7452	42.67	Pk	33.5	-32.7	.4	-95.2	-51.33	-13	-38.33	V
3.8835	42.16	Pk	33.7	-32.2	.4	-95.2	-51.14	-13	-38.14	H

10.1.9. LTE BAND 30 AND 5G NR n30

LIMITS

FCC: §27.53 (a)
For mobile and portable stations operating in the 2305-2315 MHz: by a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.

QPSK LTE BAND 30 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/9/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE 30 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.61625	36.45	RMS	34.2	-29.1	-95.2	-53.65	-40	-13.65	V
4.62	36.6	RMS	34.2	-29.1	-95.2	-53.5	-40	-13.5	H
6.906563	33.65	RMS	35.9	-26.4	-95.2	-52.05	-40	-12.05	V
6.930938	33.81	RMS	35.8	-26	-95.2	-51.59	-40	-11.59	H
9.244219	31.98	RMS	36.4	-23.7	-95.2	-50.52	-40	-10.52	H
9.254063	31.81	RMS	36.4	-23.6	-95.2	-50.59	-40	-10.59	V

BPSK 5G NR n30 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/28/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N30 BPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.596563	36.44	RMS	34.1	-29.3	-95.2	-53.96	-40	-13.96	V
4.607344	36.09	RMS	34.2	-29.1	-95.2	-54.01	-40	-14.01	H
6.912188	33.28	RMS	35.8	-26.3	-95.2	-52.42	-40	-12.42	V
6.917344	33.64	RMS	35.8	-26.2	-95.2	-51.96	-40	-11.96	H
9.320156	31.9	RMS	36.7	-23.7	-95.2	-50.3	-40	-10.3	V
9.329531	32.66	RMS	36.7	-23.7	-95.2	-49.54	-40	-9.54	H

10.1.10. LTE BAND 41 AND 5G NR n41 (FCC)

LIMITS

FCC: §27.53 (m)
At least 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section.

QPSK LTE BAND 41 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/7/2022
Test Engineer:	30606
Configuration:	EUT only
Mode	LTE 41 QPSK 20MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2506MHz										
5.0317	36.05	Pk	34.4	-24.2	.7	-95.2	-48.25	-25	-23.25	H
5.0328	36.33	Pk	34.3	-24.2	.7	-95.2	-48.07	-25	-23.07	V
7.5093	33.17	Pk	35.6	-20.1	.3	-95.2	-46.23	-25	-21.23	V
7.5123	32.77	Pk	35.6	-20.1	.3	-95.2	-46.63	-25	-21.63	H
10.0539	31.31	Pk	37.2	-17.8	.7	-95.2	-43.79	-25	-18.79	H
10.0553	31.78	Pk	37.2	-17.8	.7	-95.2	-43.32	-25	-18.32	V
Mid Channel, 2593MHz										
5.1962	36.00	Pk	34.4	-23.5	.8	-95.2	-47.5	-25	-22.50	V
5.2094	36.03	Pk	34.4	-23.7	1	-95.2	-47.47	-25	-22.47	H
7.7503	33.39	Pk	35.7	-19.6	.3	-95.2	-45.41	-25	-20.41	V
7.7719	32.40	Pk	35.7	-19.9	.3	-95.2	-46.7	-25	-21.70	H
10.3614	31.35	Pk	37.5	-16.9	.8	-95.2	-42.45	-25	-17.45	V
10.3879	33.19	Pk	37.5	-17.1	.8	-95.2	-40.81	-25	-15.81	H
High Channel, 2680MHz										
5.3092	35.75	Pk	34.5	-24.2	.7	-95.2	-48.45	-25	-23.45	H
5.3096	35.18	Pk	34.5	-24.2	.7	-95.2	-49.02	-25	-24.02	V
8.0336	33.15	Pk	35.7	-19.2	.4	-95.2	-45.15	-25	-20.15	V
8.0577	33.67	Pk	35.7	-19.6	.4	-95.2	-45.03	-25	-20.03	H
10.6401	31.95	Pk	37.8	-16.8	.5	-95.2	-41.75	-25	-16.75	V
10.6544	32.41	Pk	37.9	-16.9	.5	-95.2	-41.29	-25	-16.29	H

BPSK LTE BAND n41 (100.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/23/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N41 BPSK 100MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2546MHz										
5.0747	39.01	Pk	34.1	-30.6	.7	-95.2	-51.99	-25	-26.99	H
5.0916	37.67	Pk	34.2	-30.5	.8	-95.2	-53.03	-25	-28.03	V
7.6388	35.55	Pk	35.9	-26.9	.4	-95.2	-50.25	-25	-25.25	V
7.6425	35.38	Pk	35.9	-26.9	.4	-95.2	-50.42	-25	-25.42	H
10.2112	35.35	Pk	37.3	-24.8	.9	-95.2	-46.45	-25	-21.45	V
10.2155	35.39	Pk	37.3	-24.8	.9	-95.2	-46.41	-25	-21.41	H
Mid Channel, 2593MHz										
5.1642	39.3	Pk	34.2	-30.5	.7	-95.2	-51.5	-25	-26.5	V
5.1881	38.63	Pk	34.2	-30.7	.8	-95.2	-52.27	-25	-27.27	H
7.7672	35.77	Pk	35.8	-26.9	.3	-95.2	-50.23	-25	-25.23	V
7.7775	37.29	Pk	35.9	-26.9	.3	-95.2	-48.61	-25	-23.61	H
10.3064	35.06	Pk	37.4	-25.1	.6	-95.2	-47.24	-25	-22.24	V
10.3495	34.56	Pk	37.6	-24.8	.7	-95.2	-47.14	-25	-22.14	H
High Channel, 2640MHz										
5.3002	38.86	Pk	34.3	-30.4	.5	-95.2	-51.94	-25	-26.94	H
5.3039	37.40	Pk	34.3	-30.3	.6	-95.2	-53.20	-25	-28.20	V
7.8938	36.01	Pk	35.9	-26.5	.5	-95.2	-49.29	-25	-24.29	V
7.9238	35.18	Pk	35.9	-26.5	.2	-95.2	-50.42	-25	-25.42	H
10.5759	33.75	Pk	37.9	-24.4	.9	-95.2	-47.05	-25	-22.05	H
10.5773	34.31	Pk	37.9	-24.3	.9	-95.2	-46.39	-25	-21.39	V

10.1.11. LTE BAND 66 AND 5G NR n66

LIMITS

FCC: §27.53 (h)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 66 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/3/2022
Test Engineer:	26120
Configuration:	EUT only
Mode	LTE 66 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1720MHz									
3.4402	38.02	Pk	32.7	-33.0	-95.2	-57.48	-13	-44.48	H
3.4402	38.02	Pk	32.7	-33.0	-95.2	-57.48	-13	-44.48	V
5.1600	36.11	Pk	34.2	-29.6	-95.2	-54.49	-13	-41.49	H
5.1600	35.27	Pk	34.2	-29.6	-95.2	-55.33	-13	-42.33	V
6.8798	32.72	Pk	35.9	-26.6	-95.2	-53.18	-13	-40.18	H
6.8798	32.88	Pk	35.9	-26.6	-95.2	-53.02	-13	-40.02	V
Mid Channel, 1745MHz									
3.4903	36.98	Pk	32.9	-32.9	-95.2	-58.22	-13	-45.22	H
3.4903	40.41	Pk	32.9	-32.9	-95.2	-54.79	-13	-41.79	V
5.2350	35.65	Pk	34.2	-28.8	-95.2	-54.15	-13	-41.15	H
5.2350	36.96	Pk	34.2	-28.8	-95.2	-52.84	-13	-39.84	V
6.9802	35.08	Pk	35.8	-26.3	-95.2	-50.62	-13	-37.62	H
6.9802	32.09	Pk	35.8	-26.3	-95.2	-53.61	-13	-40.61	V
High Channel, 1770MHz									
3.4650	40.49	Pk	32.8	-33	-95.2	-54.91	-13	-41.91	V
3.4678	41.02	Pk	32.8	-32.9	-95.2	-54.28	-13	-41.28	H
5.2106	37.9	Pk	34.2	-29.2	-95.2	-52.30	-13	-39.3	V
5.2242	37.41	Pk	34.2	-29	-95.2	-52.59	-13	-39.59	H
6.9089	35.84	Pk	35.8	-26.4	-95.2	-49.96	-13	-36.96	H
6.9206	34.99	Pk	35.8	-26.2	-95.2	-50.61	-13	-37.61	V

BPSK 5G NR n66 (40.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/23/2022
Test Engineer:	27661
Configuration:	EUT only
Mode	N66 BPSK 40MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1730MHz									
3.4706	41.04	Pk	32.8	-32.9	-95.2	-54.26	-13	-41.26	V
3.4734	41.32	Pk	32.9	-32.9	-95.2	-53.88	-13	-40.88	H
5.1886	38.05	Pk	34.2	-29.2	-95.2	-52.15	-13	-39.15	V
5.2041	39.26	Pk	34.2	-29.1	-95.2	-50.84	-13	-37.84	H
6.9165	35.84	Pk	35.8	-26.3	-95.2	-49.86	-13	-36.86	H
6.9309	35.69	Pk	35.8	-26.0	-95.2	-49.71	-13	-36.71	V
Mid Channel, 1745MHz									
3.4650	40.49	Pk	32.8	-33.0	-95.2	-54.91	-13	-41.91	V
3.4678	41.02	Pk	32.8	-32.9	-95.2	-54.28	-13	-41.28	H
5.2106	37.9	Pk	34.2	-29.2	-95.2	-52.3	-13	-39.3	V
5.2242	37.41	Pk	34.2	-29.0	-95.2	-52.59	-13	-39.59	H
6.9089	35.84	Pk	35.8	-26.4	-95.2	-49.96	-13	-36.96	H
6.9206	34.99	Pk	35.8	-26.2	-95.2	-50.61	-13	-37.61	V
High Channel, 1760MHz									
3.5278	40.07	Pk	33.1	-32.8	-95.2	-54.83	-13	-41.83	V
3.5428	41.3	Pk	33.1	-32.7	-95.2	-53.50	-13	-40.50	H
5.2866	36.84	Pk	34.2	-29.3	-95.2	-53.46	-13	-40.46	V
5.3002	37.65	Pk	34.3	-29.5	-95.2	-52.75	-13	-39.75	H
7.0298	36.23	Pk	35.7	-26.8	-95.2	-50.07	-13	-37.07	V
7.0519	36.29	Pk	35.7	-26.7	-95.2	-49.91	-13	-36.91	H

10.1.12. 5G NR n70

LIMITS

FCC: §27.53 (h)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

BPSK 5G NR n70 (15.0MHZ BANDWIDTH based on 5G NR n70 maximum frequency range)

Project #:	14040863
Date:	3/2/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N70 BPSK 15MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 1702.5MHz									
3.4753	41.06	Pk	32.9	-32.9	-95.2	-54.14	-13	-41.14	H
3.5006	41.41	Pk	33.0	-32.9	-95.2	-53.69	-13	-40.69	V
5.1183	40.42	Pk	34.2	-30.2	-95.2	-50.78	-13	-37.78	H
5.1253	39.46	Pk	34.2	-30.1	-95.2	-51.64	-13	-38.64	V
6.8011	37.4	Pk	35.7	-27.0	-95.2	-49.10	-13	-36.10	H
6.8353	36.81	Pk	35.8	-26.8	-95.2	-49.39	-13	-36.39	V

10.1.13. LTE BAND 71 AND 5G NR n71

LIMITS

FCC: §27.53 (g)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 71 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/3/2022
Test Engineer:	30606
Configuration:	EUT only
Mode	LTE 71 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 673MHz										
1.3682	42.13	Pk	29.5	-30.0	1	-95.2	-52.57	-13	-39.57	H
1.3706	41.72	Pk	29.4	-30.0	1	-95.2	-53.08	-13	-40.08	V
2.0274	39.84	Pk	30.8	-28.7	.5	-95.2	-52.76	-13	-39.76	H
2.0327	40.58	Pk	30.8	-28.7	.5	-95.2	-52.02	-13	-39.02	V
2.7281	38.39	Pk	32.1	-27.4	.5	-95.2	-51.61	-13	-38.61	H
2.7322	38.91	Pk	32.1	-27.4	.5	-95.2	-51.09	-13	-38.09	V
Mid Channel, 680.5MHz										
1.3671	41.91	Pk	29.5	-30.1	1	-95.2	-52.89	-13	-39.89	V
1.3671	41.31	Pk	29.5	-30.1	1	-95.2	-53.49	-13	-40.49	H
2.0331	39.94	Pk	30.8	-28.7	.5	-95.2	-52.66	-13	-39.66	V
2.0334	40.33	Pk	30.8	-28.7	.5	-95.2	-52.27	-13	-39.27	H
2.7308	38.59	Pk	32.1	-27.4	.5	-95.2	-51.41	-13	-38.41	H
2.7362	38.36	Pk	32.0	-27.3	.5	-95.2	-51.64	-13	-38.64	V
High Channel, 688MHz										
1.3636	42.12	Pk	29.5	-30.1	1	-95.2	-52.68	-13	-39.68	V
1.3688	41.63	Pk	29.5	-30.0	1	-95.2	-53.07	-13	-40.07	H
2.0721	40.14	Pk	31.2	-28.7	.5	-95.2	-52.06	-13	-39.06	V
2.0796	40.24	Pk	31.2	-28.6	.5	-95.2	-51.86	-13	-38.86	H
2.7420	34.04	Pk	32	-27.3	.5	-95.2	-55.96	-13	-42.96	V
2.7564	37.64	Pk	32	-27.3	.5	-95.2	-52.36	-13	-39.36	H

BPSK 5G NR n71 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/22/2022
Test Engineer:	27661
Configuration:	EUT only
Mode	N71 BPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 673MHz										
1.3261	42.35	Pk	28.9	-34.7	1.3	-95.2	-57.35	-13	-44.35	V
1.3271	42.79	Pk	28.9	-34.7	1.3	-95.2	-56.91	-13	-43.91	H
2.0248	42.66	Pk	31.3	-34.8	.6	-95.2	-55.44	-13	-42.44	V
2.0292	42.47	Pk	31.3	-34.8	.6	-95.2	-55.63	-13	-42.63	H
2.6769	43.16	Pk	32.3	-34.7	.5	-95.2	-53.94	-13	-40.94	V
2.6833	43.58	Pk	32.4	-34.7	.5	-95.2	-53.42	-13	-40.42	H
Mid Channel, 680.5MHz										
1.3574	41.93	Pk	29.1	-34.8	1.1	-95.2	-57.87	-13	-44.87	V
1.3628	42.75	Pk	29.1	-34.9	1.1	-95.2	-57.15	-13	-44.15	H
2.0272	42.31	Pk	31.3	-34.8	.6	-95.2	-55.79	-13	-42.79	H
2.0340	41.84	Pk	31.4	-34.8	.6	-95.2	-56.16	-13	-43.16	V
2.7234	43.33	Pk	32.4	-34.6	.5	-95.2	-53.57	-13	-40.57	H
2.7273	42.25	Pk	32.4	-34.6	.5	-95.2	-54.65	-13	-41.65	V
High Channel, 688MHz										
1.3589	41.69	Pk	29.1	-34.8	1.1	-95.2	-58.11	-13	-45.11	V
1.3672	42.94	Pk	29.1	-34.9	1	-95.2	-57.06	-13	-44.06	H
2.0761	42.64	Pk	31.3	-34.8	.6	-95.2	-55.46	-13	-42.46	H
2.0776	41.68	Pk	31.3	-34.8	.6	-95.2	-56.42	-13	-43.42	V
2.7317	42.06	Pk	32.4	-34.6	.5	-95.2	-54.84	-13	-41.84	V
2.7405	41.65	Pk	32.5	-34.6	.6	-95.2	-55.05	-13	-42.05	H

10.2. FIELD STRENGTH OF SPURIOUS RADIATION, ANT 2

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r01

All tests below 1GHz were done with a Resolution Bandwidth of 100kHz, and a Video Bandwidth of 300kHz.

RESULTS

10.2.1. LTE BAND 5 AND 5G NR n5

LIMITS

FCC: §22.917(a)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 5 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/2/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE5 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 829MHz										
1.7148	42.11	Pk	29.3	-34.9	.7	-95.2	-57.99	-13	-44.99	V
1.7153	42.56	Pk	29.3	-34.9	.7	-95.2	-57.54	-13	-44.54	H
2.4638	42.91	Pk	32.5	-34.8	.5	-95.2	-54.09	-13	-41.09	V
2.4765	43.69	Pk	32.5	-34.8	.5	-95.2	-53.31	-13	-40.31	H
3.3848	43.12	Pk	32.5	-33.6	.5	-95.2	-52.68	-13	-39.68	V
3.4000	42.59	Pk	32.5	-33.5	.5	-95.2	-53.11	-13	-40.11	H
Mid Channel, 836.5MHz										
1.6278	42.48	Pk	28.4	-34.9	.7	-95.2	-58.52	-13	-45.52	V
1.6434	42.96	Pk	28.4	-34.9	.7	-95.2	-58.04	-13	-45.04	H
2.4780	44.27	Pk	32.5	-34.8	.5	-95.2	-52.73	-13	-39.73	H
2.4980	42.4	Pk	32.8	-34.8	.5	-95.2	-54.3	-13	-41.3	V
3.2577	42.73	Pk	32.8	-33.9	.4	-95.2	-53.17	-13	-40.17	H
3.2641	42.41	Pk	32.8	-33.8	.4	-95.2	-53.39	-13	-40.39	V
High Channel, 844MHz										
1.6278	42.48	Pk	28.4	-34.9	.7	-95.2	-58.52	-13	-45.52	V
1.6434	42.96	Pk	28.4	-34.9	.7	-95.2	-58.04	-13	-45.04	H
2.4780	44.27	Pk	32.5	-34.8	.5	-95.2	-52.73	-13	-39.73	H
2.4980	42.4	Pk	32.8	-34.8	.5	-95.2	-54.3	-13	-41.3	V
3.2577	42.73	Pk	32.8	-33.9	.4	-95.2	-53.17	-13	-40.17	H
3.2641	42.41	Pk	32.8	-33.8	.4	-95.2	-53.39	-13	-40.39	V

BPSK 5G NR n5 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	2/23/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	n5 BPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 834MHz										
1.6351	42.76	Pk	28.4	-34.9	.7	-95.2	-58.24	-13	-45.24	V
1.6376	42.15	Pk	28.4	-34.9	.7	-95.2	-58.85	-13	-45.85	H
2.4985	43.26	Pk	32.8	-34.8	.5	-95.2	-53.44	-13	-40.44	H
2.5420	43.28	Pk	32.5	-34.7	.6	-95.2	-53.52	-13	-40.52	V
3.3692	42.46	Pk	32.6	-33.7	.5	-95.2	-53.34	-13	-40.34	H
3.3780	41.11	Pk	32.6	-33.6	.5	-95.2	-54.59	-13	-41.59	V
Mid Channel, 836.5MHz										
1.680578	43.31	Pk	28.6	-34.9	.7	-95.2	-57.49	-13	-44.49	H
1.693778	42.99	Pk	28.8	-34.9	.6	-95.2	-57.71	-13	-44.71	V
2.458889	43.08	Pk	32.4	-34.8	.5	-95.2	-54.02	-13	-41.02	V
2.4936	42.13	Pk	32.8	-34.7	.5	-95.2	-54.47	-13	-41.47	H
3.326667	41.94	Pk	32.6	-33.7	.5	-95.2	-53.86	-13	-40.86	H
3.394623	41.96	Pk	32.6	-33.5	.5	-95.2	-53.64	-13	-40.64	V
High Channel, 839MHz										
1.6869	43.59	Pk	28.7	-34.9	.7	-95.2	-57.11	-13	-44.11	H
1.6948	43.92	Pk	28.8	-34.9	.6	-95.2	-56.78	-13	-43.78	V
2.5430	42.76	Pk	32.5	-34.7	.6	-95.2	-54.04	-13	-41.04	H
2.5601	43.09	Pk	32.3	-34.7	.7	-95.2	-53.81	-13	-40.81	V
3.3663	42.22	Pk	32.5	-33.7	.5	-95.2	-53.68	-13	-40.68	H
3.3697	42.2	Pk	32.6	-33.7	.5	-95.2	-53.6	-13	-40.00	V

10.2.2. LTE BAND 7 AND 5G NR n7

LIMITS

FCC: §27.53 (m)
At least 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section.

QPSK LTE BAND 7 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/3/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE7 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2510MHz										
5.1075	40.11	Pk	34.1	-30.5	.8	-95.2	-50.69	-25	-25.69	V
5.1961	40.00	Pk	34.2	-30.6	.8	-95.2	-50.8	-25	-25.8	H
7.7025	36.62	Pk	35.8	-26.7	.5	-95.2	-48.98	-25	-23.98	H
7.8225	36.52	Pk	35.9	-26.7	.4	-95.2	-49.08	-25	-24.08	V
10.2661	36.68	Pk	37.3	-24.9	.7	-95.2	-45.42	-25	-20.42	V
10.3631	35.36	Pk	37.6	-24.9	.8	-95.2	-46.34	-25	-21.34	H
Mid Channel, 2535MHz										
4.9842	39.76	Pk	34.1	-30.8	.6	-95.2	-51.54	-25	-26.54	V
5.0353	39.37	Pk	34	-30.6	.7	-95.2	-51.73	-25	-26.73	H
7.8019	36	Pk	35.9	-26.7	.4	-95.2	-49.6	-25	-24.6	V
7.8230	36.37	Pk	35.9	-26.7	.4	-95.2	-49.23	-25	-24.23	H
10.0823	36.06	Pk	37.2	-24.9	.6	-95.2	-46.24	-25	-21.24	V
10.1128	35.24	Pk	37.2	-25.0	.7	-95.2	-47.06	-25	-22.06	H
High Channel, 2560MHz										
5.157188	38.97	Pk	34.3	-30.5	.8	-95.2	-51.63	-25	-26.63	H
5.228906	39.64	Pk	34.2	-30.5	.9	-95.2	-50.96	-25	-25.96	V
7.466719	37.47	Pk	35.7	-26.8	.4	-95.2	-48.43	-25	-23.43	H
7.550625	36.69	Pk	35.7	-26.9	.3	-95.2	-49.41	-25	-24.41	V
10.133906	35.55	Pk	37.2	-24.9	.7	-95.2	-46.65	-25	-21.65	H
10.220625	35.51	Pk	37.3	-24.8	.9	-95.2	-46.29	-25	-21.29	V

BPSK 5G NR n7 (40.0MHZ BANDWIDTH)

Project #:	14040863
Date:	2/25/2022
Test Engineer:	20737
Configuration:	EUT only
Mode	n7 BPSK 40MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2525MHz										
5.1009	38.44	Pk	34.1	-30.5	.8	-95.2	-52.36	-25	-27.36	V
5.1131	38.31	Pk	34.2	-30.6	.8	-95.2	-52.49	-25	-27.49	H
7.4859	35.63	Pk	35.7	-26.8	.3	-95.2	-50.37	-25	-25.37	V
7.5309	36.65	Pk	35.8	-27	.3	-95.2	-49.45	-25	-24.45	H
10.0303	34.48	Pk	37.1	-24.8	.7	-95.2	-47.72	-25	-22.72	H
10.0467	35.22	Pk	37.1	-24.9	.7	-95.2	-47.08	-25	-22.08	V
Mid Channel, 2535MHz										
5.0873	39.04	Pk	34.2	-30.5	.8	-95.2	-51.66	-25	-26.66	H
5.1652	39.87	Pk	34.2	-30.5	.7	-95.2	-50.93	-25	-25.93	V
7.527656	36.42	Pk	35.8	-27	.3	-95.2	-49.68	-25	-24.68	H
7.5295	36.51	Pk	35.8	-27	.3	-95.2	-49.59	-25	-24.59	V
10.1630	35	Pk	37.2	-24.9	.5	-95.2	-47.4	-25	-22.4	H
10.2047	37.02	Pk	37.3	-24.8	.8	-95.2	-44.88	-25	-19.88	V
High Channel, 2545MHz										
5.0925	38.37	Pk	34.2	-30.5	.8	-95.2	-52.33	-25	-27.33	V
5.1070	38.94	Pk	34.1	-30.5	.8	-95.2	-51.86	-25	-26.86	H
7.7048	36.92	Pk	35.8	-26.8	.5	-95.2	-48.78	-25	-23.78	V
7.8680	37.34	Pk	35.9	-26.3	.4	-95.2	-47.86	-25	-22.86	H
10.2141	35.32	Pk	37.3	-24.8	.9	-95.2	-46.48	-25	-21.48	V
10.2216	35.54	Pk	37.3	-24.8	.9	-95.2	-46.26	-25	-21.26	H

10.2.3. LTE BAND 12 AND 5G NR n12

LIMITS

FCC: §27.53 (g)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 12 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/2/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE12 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 704MHz										
1.4224	42.85	Pk	29.0	-34.9	.9	-95.2	-57.35	-13	-44.35	H
1.4317	42.99	Pk	29.0	-34.9	.9	-95.2	-57.21	-13	-44.21	V
2.0922	43.1	Pk	31.2	-34.8	.6	-95.2	-55.10	-13	-42.10	H
2.1201	43.12	Pk	31.2	-34.8	.5	-95.2	-55.18	-13	-42.18	V
2.8348	42.66	Pk	32.3	-34.4	.5	-95.2	-54.14	-13	-41.14	V
2.8700	43.52	Pk	32.3	-34.5	.5	-95.2	-53.38	-13	-40.38	H
Mid Channel, 707.5MHz										
1.3721	42.75	Pk	28.9	-34.8	1	-95.2	-57.35	-13	-44.35	V
1.4092	42.63	Pk	28.8	-34.9	1	-95.2	-57.67	-13	-44.67	H
2.0854	43.31	Pk	31.3	-34.8	.6	-95.2	-54.79	-13	-41.79	V
2.1524	43.24	Pk	31.2	-34.9	.5	-95.2	-55.16	-13	-42.16	H
2.7962	43.52	Pk	32.2	-34.5	.5	-95.2	-53.48	-13	-40.48	H
2.8427	43.29	Pk	32.2	-34.4	.6	-95.2	-53.51	-13	-40.51	V
High Channel, 711MHz										
1.3496	42.23	Pk	29.2	-34.9	1.2	-95.2	-57.47	-13	-44.47	V
1.3692	43.8	Pk	29.0	-34.9	1	-95.2	-56.3	-13	-43.30	H
2.1827	43.73	Pk	31.3	-34.9	.6	-95.2	-54.47	-13	-41.47	V
2.2008	43.21	Pk	31.5	-34.9	.6	-95.2	-54.79	-13	-41.79	H
2.7112	42.96	Pk	32.5	-34.6	.6	-95.2	-53.74	-13	-40.74	H
2.8373	42.36	Pk	32.2	-34.4	.5	-95.2	-54.54	-13	-41.54	V

BPSK 5G NR n12 (15.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/23/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N12 BPSK 15MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)		EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 706.5MHz										
1.4405	42.46	Pk	28.9	-34.9	.9	-95.2	-57.84	-13	-44.84	V
1.4440	42.68	Pk	28.8	-34.9	.9	-95.2	-57.72	-13	-44.72	H
2.1377	44.02	Pk	31.2	-34.8	.5	-95.2	-54.28	-13	-41.28	H
2.1460	43.03	Pk	31.3	-34.9	.5	-95.2	-55.27	-13	-42.27	V
2.8295	41.95	Pk	32.3	-34.4	.5	-95.2	-54.85	-13	-41.85	H
2.8661	42.99	Pk	32.3	-34.5	.5	-95.2	-53.91	-13	-40.91	V
Mid Channel, 707.5MHz										
1.3985	42.88	Pk	28.7	-34.9	1	-95.2	-57.52	-13	-44.52	V
1.4195	42.37	Pk	29.0	-34.9	.9	-95.2	-57.83	-13	-44.83	H
2.1572	42.8	Pk	31.2	-34.9	.5	-95.2	-55.6	-13	-42.6	V
2.1641	43.03	Pk	31.2	-34.9	.6	-95.2	-55.27	-13	-42.27	H
2.7811	42.92	Pk	32.3	-34.5	.5	-95.2	-53.98	-13	-40.98	H
2.8011	42.49	Pk	32.3	-34.5	.5	-95.2	-54.41	-13	-41.41	V
High Channel, 708.5MHz										
1.4479	43.07	Pk	28.8	-35	.9	-95.2	-57.43	-13	-44.43	H
1.4532	42.39	Pk	28.7	-34.9	.9	-95.2	-58.11	-13	-45.11	V
2.1372	42.7	Pk	31.2	-34.9	.5	-95.2	-55.7	-13	-42.70	V
2.1455	43.56	Pk	31.3	-34.9	.5	-95.2	-54.74	-13	-41.74	H
2.793	42.88	Pk	32.2	-34.5	.5	-95.2	-54.12	-13	-41.12	H
2.7977	42.61	Pk	32.3	-34.5	.5	-95.2	-54.29	-13	-41.29	V

10.2.4. LTE BAND 13

LIMITS

FCC: §27.53
(c) The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.
(f) Emissions in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

QPSK LTE BAND 13 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/2/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE13 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 782MHz										
1.5901	42.37	Pk	27.8	-34.9	.8	-95.2	-59.13	-40	-19.13	H
1.6107	43.46	Pk	28.3	-34.9	.7	-95.2	-57.64	-40	-17.64	V
2.3543	42.84	Pk	31.8	-34.8	.5	-95.2	-54.86	-13	-41.86	V
2.3895	43.29	Pk	31.9	-34.8	.6	-95.2	-54.21	-13	-41.21	H
3.1443	42.58	Pk	32.8	-34	.5	-95.2	-53.32	-13	-40.32	V
3.1795	41.9	Pk	32.8	-34	.5	-95.2	-54.0	-13	-41.0	H

10.2.5. LTE BAND 14 AND 5G NR n14

LIMITS

FCC: §90.543 Emission Limitations. (Band 14)
(e) For operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:
(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

(f) For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation

QPSK LTE BAND 14 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/2/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE14 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 793MHz										
1.6004	42.93	Pk	28.0	-34.9	.7	-95.2	-58.47	-40	-18.47	V
1.6468	43.3	Pk	28.5	-34.9	.7	-95.2	-57.60	-40	-17.60	H
2.3259	43.11	Pk	31.8	-34.8	.6	-95.2	-54.49	-13	-41.49	V
2.4374	43.74	Pk	32.2	-34.8	.6	-95.2	-53.46	-13	-40.46	H
3.1355	42.10	Pk	32.9	-34.1	.5	-95.2	-53.80	-13	-40.80	V
3.1565	42.11	Pk	32.8	-34	.4	-95.2	-53.89	-13	-40.89	H

BPSK 5G NR n14 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/23/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N14 BPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 793MHz										
1.5725	42.46	Pk	27.7	-34.9	.8	-95.2	-59.14	-40	-19.14	V
1.6063	44.38	Pk	28.2	-34.9	.7	-95.2	-56.82	-40	-16.82	H
2.2848	43.9	Pk	31.7	-34.8	.5	-95.2	-53.90	-13	-40.9	V
2.3386	44.15	Pk	31.9	-34.8	.6	-95.2	-53.35	-13	-40.35	H
3.1223	42.71	Pk	32.9	-34.1	.5	-95.2	-53.19	-13	-40.19	V
3.2563	43.44	Pk	32.9	-33.9	.4	-95.2	-52.36	-13	-39.36	H

10.2.6. LTE BAND 17

LIMITS

FCC: §27.53 (g)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 17 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/3/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE17 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 709MHz										
1.3985	43.09	Pk	28.7	-34.9	1	-95.2	-57.31	-13	-44.31	V
1.4083	43.51	Pk	28.8	-34.9	1	-95.2	-56.79	-13	-43.79	H
2.1993	42.54	Pk	31.5	-34.9	.6	-95.2	-55.46	-13	-42.46	H
2.2184	42.43	Pk	31.6	-34.9	.6	-95.2	-55.47	-13	-42.47	V
2.7244	43.45	Pk	32.4	-34.6	.5	-95.2	-53.45	-13	-40.45	H
2.9708	43.07	Pk	33.0	-34.3	.4	-95.2	-53.03	-13	-40.03	V
Mid Channel, 710MHz										
1.3506	42.52	Pk	29.2	-34.9	1.2	-95.2	-57.18	-13	-44.18	V
1.3990	42.61	Pk	28.7	-34.9	1	-95.2	-57.79	-13	-44.79	H
2.0927	42.51	Pk	31.2	-34.8	.6	-95.2	-55.69	-13	-42.69	V
2.0971	43.95	Pk	31.2	-34.9	.6	-95.2	-54.35	-13	-41.35	H
2.8270	42.81	Pk	32.3	-34.4	.5	-95.2	-53.99	-13	-40.99	V
2.8568	42.65	Pk	32.3	-34.4	.6	-95.2	-54.05	-13	-41.05	H
High Channel, 711MHz										
1.4508	43.35	Pk	28.7	-34.9	.9	-95.2	-57.15	-13	-44.15	H
1.4748	43.84	Pk	28.2	-34.9	.8	-95.2	-57.26	-13	-44.26	V
2.1084	42.71	Pk	31.2	-34.8	.6	-95.2	-55.49	-13	-42.49	H
2.1822	43.04	Pk	31.3	-34.9	.6	-95.2	-55.16	-13	-42.16	V
2.7845	43.11	Pk	32.3	-34.5	.5	-95.2	-53.79	-13	-40.79	H
2.8529	42.9	Pk	32.2	-34.4	.6	-95.2	-53.9	-13	-40.90	V

10.2.7. LTE BAND 25 AND 5G NR n25

LIMITS

FCC: §24.238(a)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 25 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/3/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE 25 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1860MHz									
3.7760	41.94	Pk	33.5	-32.0	-95.2	-51.76	-13	-38.76	H
3.8100	41.16	Pk	33.7	-31.8	-95.2	-52.14	-13	-39.14	V
5.5388	39.44	Pk	34.9	-29.6	-95.2	-50.46	-13	-37.46	H
5.5439	39.75	Pk	34.9	-29.7	-95.2	-50.25	-13	-37.25	V
7.3083	36.36	Pk	35.6	-26.1	-95.2	-49.34	-13	-36.34	H
7.4977	36.87	Pk	35.8	-26.3	-95.2	-48.83	-13	-35.83	V
Mid Channel, 1882.5MHz									
3.7491	40.67	Pk	33.5	-32.1	-95.2	-53.13	-13	-40.13	H
3.7866	41.47	Pk	33.6	-31.9	-95.2	-52.03	-13	-39.03	V
5.6827	38.93	Pk	34.9	-29.7	-95.2	-51.07	-13	-38.07	H
5.8036	38.96	Pk	35.0	-28.3	-95.2	-49.54	-13	-36.54	V
7.5698	36.59	Pk	35.8	-26.3	-95.2	-49.11	-13	-36.11	H
7.6472	36.94	Pk	35.8	-26.5	-95.2	-48.96	-13	-35.96	V
High Channel, 1905MHz									
3.7903	41.28	Pk	33.6	-31.9	-95.2	-52.22	-13	-39.22	V
3.8606	40.6	Pk	33.6	-31.8	-95.2	-52.8	-13	-39.80	H
5.7267	39.51	Pk	34.8	-29	-95.2	-49.89	-13	-36.89	V
5.8008	38.01	Pk	34.9	-28.4	-95.2	-50.69	-13	-37.69	H
7.5961	36.82	Pk	35.8	-26.2	-95.2	-48.78	-13	-35.78	V
7.7442	37.06	Pk	35.9	-25.8	-95.2	-48.04	-13	-35.04	H

BPSK 5G NR n25 (40.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/24/2022
Test Engineer:	27661
Configuration:	EUT only
Mode	N25 BPSK 40MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1870MHz									
3.7659	40.64	Pk	33.6	-32.0	-95.2	-52.96	-13	-39.96	V
3.7702	40.15	Pk	33.5	-32.0	-95.2	-53.55	-13	-40.55	H
5.6325	39.00	Pk	35.1	-30.0	-95.2	-51.10	-13	-38.10	V
5.6470	38.58	Pk	35.0	-30.1	-95.2	-51.72	-13	-38.72	H
7.4423	36.96	Pk	35.7	-26.3	-95.2	-48.84	-13	-35.84	H
7.4644	34.41	Pk	35.8	-26.1	-95.2	-51.09	-13	-38.09	V
Mid Channel, 1882.5MHz									
3.7538	40.35	Pk	33.5	-32.1	-95.2	-53.45	-13	-40.45	V
3.7556	41.3	Pk	33.5	-32.1	-95.2	-52.5	-13	-39.50	H
5.6428	38.23	Pk	35.0	-30.1	-95.2	-52.07	-13	-39.07	V
5.6517	39.33	Pk	3.05	-30.0	-95.2	-50.87	-13	-37.87	H
7.4695	35.73	Pk	35.7	-26.1	-95.2	-49.87	-13	-36.87	V
7.5286	35.63	Pk	35.8	-26.1	-95.2	-49.87	-13	-36.87	H
High Channel, 1895MHz									
3.7772	40.61	Pk	33.5	-32.0	-95.2	-53.09	-13	-40.09	V
3.7884	40.88	Pk	33.6	-31.9	-95.2	-52.62	-13	-39.62	H
5.6531	38.48	Pk	34.9	-30.0	-95.2	-51.82	-13	-38.82	V
5.6672	39.45	Pk	35.0	-30.0	-95.2	-50.75	-13	-37.75	H
7.5445	35.27	Pk	35.8	-26.2	-95.2	-50.33	-13	-37.33	V
7.5553	36.50	Pk	35.8	-26.3	-95.2	-49.2	-13	-36.20	H

10.2.8. LTE BAND 26 AND 5G NR n26 (FCC PART 90S)

LIMITS

FCC: §90.691
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 26 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/2/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE 26 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 819MHz										
1.6346	43.47	Pk	28.4	-34.9	.7	-95.2	-57.53	-13	-44.53	V
1.6449	42.73	Pk	28.4	-34.9	.7	-95.2	-58.27	-13	-45.27	H
2.4520	42.41	Pk	32.4	-34.8	.6	-95.2	-54.59	-13	-41.59	V
2.4677	43.00	Pk	32.6	-34.8	.5	-95.2	-53.9	-13	-40.90	H
3.1805	42.84	Pk	32.8	-34.0	.5	-95.2	-53.06	-13	-40.06	H
3.2719	42.97	Pk	32.8	-33.8	.5	-95.2	-52.73	-13	-39.73	V

BPSK 5G NR n26 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	2/29/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N26 BPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 819MHz										
1.6327	43.15	Pk	28.4	-34.9	.7	-95.2	-57.85	-13	-44.85	V
1.6376	43.76	Pk	28.4	-34.9	.7	-95.2	-57.24	-13	-44.24	H
2.3904	43.77	Pk	31.9	-34.8	.6	-95.2	-53.73	-13	-40.73	V
2.4335	43.64	Pk	32.2	-34.8	.6	-95.2	-53.56	-13	-40.56	H
3.1766	42.98	Pk	32.7	-34	.5	-95.2	-53.02	-13	-40.02	V
3.1976	42.10	Pk	32.8	-33.9	.5	-95.2	-53.70	-13	-40.70	H

10.2.9. LTE BAND 30 AND 5G NR n30

LIMITS

FCC: §27.53 (a)
For mobile and portable stations operating in the 2305-2315 MHz: by a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.

QPSK LTE BAND 30 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/9/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE 30 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.609219	36.87	RMS	34.2	-29.2	-95.2	-53.33	-40	-13.33	V
4.613438	36.34	RMS	34.2	-29.2	-95.2	-53.86	-40	-13.86	H
6.900938	34.12	RMS	35.9	-26.5	-95.2	-51.68	-40	-11.68	V
6.903281	33.79	RMS	35.9	-26.5	-95.2	-52.01	-40	-12.01	H
9.192188	32.27	RMS	36.3	-23.7	-95.2	-50.33	-40	-10.33	V
9.216563	33.96	RMS	36.3	-23.5	-95.2	-48.44	-40	-8.44	H

BPSK 5G NR n30 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/28/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N30 BPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.606406	35.87	RMS	34.2	-29.1	-95.2	-54.23	-40	-14.23	H
4.606406	35.88	RMS	34.2	-29.1	-95.2	-54.22	-40	-14.22	V
6.899063	34.72	RMS	35.9	-26.5	-95.2	-51.08	-40	-11.08	V
6.904219	34.66	RMS	35.9	-26.5	-95.2	-51.14	-40	-11.14	H
9.234375	31.52	RMS	36.4	-23.6	-95.2	-50.88	-40	-10.88	V
9.256406	33.3	RMS	36.5	-23.6	-95.2	-49	-40	-9	H

10.2.10. LTE BAND 41 AND 5G NR n41

LIMITS

FCC: §27.53 (m)
At least 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section.

QPSK LTE BAND 41 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/4/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE 41 QPSK 20MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2506MHz										
5.3241	35.24	Pk	34.5	-24.2	.8	-95.2	-48.86	-25	-23.86	H
5.3278	34.84	Pk	34.5	-24.3	.8	-95.2	-49.36	-25	-24.36	V
8.0494	33.71	Pk	35.7	-19.4	.4	-95.2	-44.79	-25	-19.79	H
8.0606	33.28	Pk	35.7	-19.6	.4	-95.2	-45.42	-25	-20.42	V
10.6880	34.23	Pk	37.9	-17.1	.5	-95.2	-39.67	-25	-14.67	H
10.9406	33.48	Pk	37.8	-17.0	.9	-95.2	-40.02	-25	-15.02	V
Mid Channel, 2593MHz										
5.0827	36.45	Pk	34.4	-23.7	.8	-95.2	-47.25	-25	-22.25	H
5.0878	35.45	Pk	34.4	-23.8	.8	-95.2	-48.35	-25	-23.35	V
7.7058	33.76	Pk	35.7	-19.6	.5	-95.2	-44.84	-25	-19.84	V
7.7545	34.11	Pk	35.7	-19.7	.3	-95.2	-44.79	-25	-19.79	H
10.3247	34.47	Pk	37.4	-17.2	.6	-95.2	-39.93	-25	-14.93	H
10.3373	33.23	Pk	37.4	-17.2	.6	-95.2	-41.17	-25	-16.17	V
High Channel, 2680MHz										
5.1609	36.28	Pk	34.3	-24.1	.8	-95.2	-47.92	-25	-22.92	V
5.3133	35.85	Pk	34.5	-24.2	.8	-95.2	-48.25	-25	-23.25	H
8.3152	33.04	Pk	35.7	-19.2	.3	-95.2	-45.36	-25	-20.36	H
8.3180	33.36	Pk	35.7	-19.1	.3	-95.2	-44.94	-25	-19.94	V
10.7302	33.34	Pk	37.9	-17.1	.7	-95.2	-40.36	-25	-15.36	H
10.7695	32.3	Pk	38.0	-16.6	.9	-95.2	-40.60	-25	-15.60	V

BPSK LTE BAND n41 (100.0MHZ BANDWIDTH)

Project #:	14040863
Date:	2/24/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N41 BPSK 100MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2546MHz										
5.0372	40.27	Pk	33.9	-30.7	.6	-95.2	-51.13	-25	-26.13	H
5.0494	39.92	Pk	34.1	-30.7	.6	-95.2	-51.28	-25	-26.28	V
7.2427	36.54	Pk	35.6	-26.7	.4	-95.2	-49.36	-25	-24.36	V
7.2497	36.84	Pk	35.6	-26.8	.4	-95.2	-49.16	-25	-24.16	H
10.2164	36.16	Pk	37.3	-24.8	.9	-95.2	-45.64	-25	-20.64	V
10.2923	37.62	Pk	37.4	-25	.7	-95.2	-44.48	-25	-19.48	H
Mid Channel, 2593MHz										
5.1652	40.01	Pk	34.2	-30.5	.7	-95.2	-50.79	-25	-25.79	V
5.1684	39.23	Pk	34.2	-30.6	.7	-95.2	-51.67	-25	-26.67	H
7.7128	37.25	Pk	35.9	-26.9	.4	-95.2	-48.55	-25	-23.55	V
7.8234	37.03	Pk	35.9	-26.7	.4	-95.2	-48.57	-25	-23.57	H
10.2277	35.56	Pk	37.3	-24.9	.8	-95.2	-46.44	-25	-21.44	V
10.4011	34.27	Pk	37.6	-24.5	.8	-95.2	-47.03	-25	-22.03	H
High Channel, 2640MHz										
5.2102	38.34	Pk	34.2	-30.5	1	-95.2	-52.16	-25	-27.16	V
5.2233	39.35	Pk	34.2	-30.4	1	-95.2	-51.05	-25	-26.05	H
7.8984	35.97	Pk	35.9	-26.5	.5	-95.2	-49.33	-25	-24.33	H
8.0072	36.99	Pk	35.9	-26.5	.3	-95.2	-48.51	-25	-23.51	V
10.4358	35.03	Pk	37.6	-24.7	.8	-95.2	-46.47	-25	-21.47	V
10.5370	36.39	Pk	37.8	-24.4	.5	-95.2	-44.91	-25	-19.91	H

10.2.11. LTE BAND 66 AND 5G NR n66

LIMITS

FCC: §27.53 (h)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 66 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/3/2022
Test Engineer:	26120
Configuration:	EUT only
Mode	LTE 66 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1720MHz									
3.4402	39.84	Pk	32.7	-33.0	-95.2	-55.66	-13	-42.66	H
3.4402	37.31	Pk	32.7	-33.0	-95.2	-58.19	-13	-45.19	V
5.1600	35.51	Pk	34.2	-29.6	-95.2	-55.09	-13	-42.09	H
5.1600	36.67	Pk	34.2	-29.6	-95.2	-53.93	-13	-40.93	V
6.8798	34.13	Pk	35.9	-26.6	-95.2	-51.77	-13	-38.77	H
6.8798	35.14	Pk	35.9	-26.6	-95.2	-50.76	-13	-37.76	V
Mid Channel, 1745MHz									
3.489844	38.9	Pk	32.9	-32.9	-95.2	-56.3	-13	-43.30	H
3.489844	38.84	Pk	32.9	-32.9	-95.2	-56.36	-13	-43.36	V
5.235469	36.26	Pk	34.2	-28.9	-95.2	-53.64	-13	-40.64	H
5.235469	36.09	Pk	34.2	-28.9	-95.2	-53.81	-13	-40.81	V
6.980156	34.02	Pk	35.8	-26.3	-95.2	-51.68	-13	-38.68	H
6.980156	35.32	Pk	35.8	-26.3	-95.2	-50.38	-13	-37.38	V
High Channel, 1770MHz									
3.5400	39.32	Pk	33.1	-32.8	-95.2	-55.58	-13	-42.58	H
3.5400	38.98	Pk	33.1	-32.8	-95.2	-55.92	-13	-42.92	V
5.3105	34.12	Pk	34.4	-29.7	-95.2	-56.38	-13	-43.38	H
5.3105	34.5	Pk	34.4	-29.7	-95.2	-56.00	-13	-43.00	V
7.0800	32.79	Pk	35.7	-26.7	-95.2	-53.41	-13	-40.41	H
7.0800	34.55	Pk	35.7	-26.7	-95.2	-51.65	-13	-38.65	V

BPSK 5G NR n66 (40.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/24/2022
Test Engineer:	27661
Configuration:	EUT only
Mode	N66 BPSK 40MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1730MHz									
3.4655	41.67	Pk	32.8	-33.0	-95.2	-53.73	-13	-40.73	H
3.4739	41.66	Pk	32.9	-32.9	-95.2	-53.54	-13	-40.54	V
5.1830	38.35	Pk	34.2	-29.2	-95.2	-51.85	-13	-38.85	H
5.1877	37.70	Pk	34.2	-29.2	-95.2	-52.50	-13	-39.50	V
6.9216	35.91	Pk	35.8	-26.2	-95.2	-49.69	-13	-36.69	V
6.9356	35.46	Pk	35.8	-26.0	-95.2	-49.94	-13	-36.94	H
Mid Channel, 1745MHz									
3.5030	40.87	Pk	33.0	-32.9	-95.2	-54.23	-13	-41.23	V
3.5123	40.58	Pk	33.1	-32.9	-95.2	-54.42	-13	-41.42	H
5.2547	38.23	Pk	34.2	-28.9	-95.2	-51.67	-13	-38.67	H
5.2552	37.29	Pk	34.2	-28.9	-95.2	-52.61	-13	-39.61	V
6.9342	35.04	Pk	35.8	-26.0	-95.2	-50.36	-13	-37.36	V
6.9497	35.78	Pk	35.8	-26.2	-95.2	-49.82	-13	-36.82	H
High Channel, 1760MHz									
3.5227	40.44	Pk	33.1	-32.8	-95.2	-54.46	-13	-41.46	V
3.5320	40.45	Pk	33.1	-32.8	-95.2	-54.45	-13	-41.45	H
5.246	38.00	Pk	34.1	-28.9	-95.2	-52.00	-13	-39.00	V
5.2533	37.31	Pk	34.1	-28.8	-95.2	-52.59	-13	-39.59	H
7.0669	35.74	Pk	35.7	-26.6	-95.2	-50.36	-13	-37.36	H
7.0692	35.22	Pk	35.7	-26.6	-95.2	-50.88	-13	-37.88	V

10.2.12. 5G NR n70

LIMITS

FCC: §27.53 (h)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

BPSK 5G NR n70 (15.0MHZ BANDWIDTH based on 5G NR n70 maximum frequency range)

Project #:	14040863
Date:	3/2/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N70 BPSK 15MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 1702.5MHz									
3.4688	41.87	Pk	32.8	-32.9	-95.2	-53.43	-13	-40.43	H
3.4791	40.98	Pk	32.9	-32.9	-95.2	-54.22	-13	-41.22	V
5.1384	40.15	Pk	34.2	-29.9	-95.2	-50.75	-13	-37.75	H
5.1581	39.53	Pk	34.3	-29.7	-95.2	-51.07	-13	-38.07	V
6.6450	37.49	Pk	35.7	-26.0	-95.2	-48.01	-13	-35.01	H
6.8109	36.88	Pk	35.7	-26.9	-95.2	-49.52	-13	-36.52	V

10.2.13. LTE BAND 71 AND 5G NR n71

LIMITS

FCC: §27.53 (g)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 71 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/4/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE 71 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 673MHz										
1.3672	41.82	Pk	29.5	-30.1	1	-95.2	-52.98	-13	-39.98	V
1.3716	41.26	Pk	29.4	-30.0	1	-95.2	-53.54	-13	-40.54	H
2.0350	39.72	Pk	30.8	-28.8	.5	-95.2	-52.98	-13	-39.98	V
2.0428	40.76	Pk	30.8	-28.8	.5	-95.2	-51.94	-13	-38.94	H
2.6867	39.24	Pk	32.2	-27.7	.6	-95.2	-50.86	-13	-37.86	H
2.7361	39.16	Pk	32.0	-27.3	.5	-95.2	-50.84	-13	-37.84	V
Mid Channel, 680.5MHz										
1.3633	41.04	Pk	29.5	-30.1	1	-95.2	-53.76	-13	-40.76	V
1.3745	40.52	Pk	29.3	-29.9	1	-95.2	-54.28	-13	-41.28	H
2.0868	39.44	Pk	31.3	-28.7	.5	-95.2	-52.66	-13	-39.66	V
2.0942	39.61	Pk	31.3	-28.8	.5	-95.2	-52.59	-13	-39.59	H
2.6989	37.78	Pk	32.2	-27.7	.5	-95.2	-52.42	-13	-39.42	V
2.7439	38.09	Pk	32.0	-27.3	.5	-95.2	-51.91	-13	-38.91	H
High Channel, 688MHz										
1.3633	41.09	Pk	29.5	-30.1	1	-95.2	-53.71	-13	-40.71	V
1.3731	40.59	Pk	29.3	-30.0	1	-95.2	-54.31	-13	-41.31	H
2.0722	39.77	Pk	31.1	-28.7	.5	-95.2	-52.53	-13	-39.53	H
2.0868	39.32	Pk	31.3	-28.7	.5	-95.2	-52.78	-13	-39.78	V
2.7952	37.19	Pk	32.3	-27.2	.5	-95.2	-52.41	-13	-39.41	V
2.7962	38.04	Pk	32.3	-27.2	.5	-95.2	-51.56	-13	-38.56	H

BPSK 5G NR n71 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/25/2022
Test Engineer:	27661
Configuration:	EUT only
Mode	N71 BPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	HPF 1.2GHz T1737 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 673MHz										
1.3486	42.66	Pk	29.2	-34.8	1.2	-95.2	-56.94	-13	-43.94	V
1.3511	42.29	Pk	29.2	-34.9	1.2	-95.2	-57.41	-13	-44.41	H
2.0194	42.43	Pk	31.3	-34.8	.6	-95.2	-55.67	-13	-42.67	V
2.0267	42.38	Pk	31.3	-34.8	.6	-95.2	-55.72	-13	-42.72	H
2.6980	41.58	Pk	32.4	-34.6	.6	-95.2	-55.22	-13	-42.22	H
2.7131	41.97	Pk	32.5	-34.6	.6	-95.2	-54.73	-13	-41.73	V
Mid Channel, 680.5MHz										
1.3633	41.04	Pk	29.5	-30.1	1	-95.2	-53.76	-13	-40.76	V
1.3745	40.52	Pk	29.3	-29.9	1	-95.2	-54.28	-13	-41.28	H
2.0868	39.44	Pk	31.3	-28.7	.5	-95.2	-52.66	-13	-39.66	V
2.0942	39.61	Pk	31.3	-28.8	.5	-95.2	-52.59	-13	-39.59	H
2.6989	37.78	Pk	32.2	-27.7	.5	-95.2	-52.42	-13	-39.42	V
2.7439	38.09	Pk	32.0	-27.3	.5	-95.2	-51.91	-13	-38.91	H
High Channel, 688MHz										
1.3633	42.31	Pk	29.1	-34.9	1.1	-95.2	-57.59	-13	-44.59	V
1.3643	42.11	Pk	29.1	-34.9	1	-95.2	-57.89	-13	-44.89	H
2.0624	42.57	Pk	31.4	-34.8	.6	-95.2	-55.43	-13	-42.43	H
2.0688	42.14	Pk	31.3	-34.8	.6	-95.2	-55.96	-13	-42.96	V
2.7664	41.18	Pk	32.4	-34.5	.5	-95.2	-55.62	-13	-42.62	V
2.7703	43.30	Pk	32.4	-34.5	.5	-95.2	-53.50	-13	-40.50	H

10.3. FIELD STRENGTH OF SPURIOUS RADIATION, ANT 3

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r01

All tests above 1GHz were done with a Resolution Bandwidth of 1MHz, and a Video Bandwidth of 3MHz.

RESULTS

10.3.1. LTE BAND 7 AND 5G NR n7

LIMITS

FCC: §27.53 (m)
At least 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section.

QPSK LTE BAND 7 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/8/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE7 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2510MHz										
5.1028	39.48	Pk	34.1	-30.5	.8	-95.2	-51.32	-25	-26.32	H
5.1061	39.46	Pk	34.1	-30.5	.8	-95.2	-51.34	-25	-26.34	V
7.5666	36.34	Pk	35.8	-27.0	.4	-95.2	-49.66	-25	-24.66	H
7.6205	37.46	Pk	35.8	-26.9	.4	-95.2	-48.44	-25	-23.44	V
9.9731	37.00	Pk	37.1	-24.9	.5	-95.2	-45.50	-25	-20.50	V
10.1138	35.55	Pk	37.2	-25.0	.7	-95.2	-46.75	-25	-21.75	H
Mid Channel, 2535MHz										
5.0461	40.08	Pk	34.1	-30.7	.6	-95.2	-51.12	-25	-26.12	H
5.1061	40.36	Pk	34.1	-30.5	.8	-95.2	-50.44	-25	-25.44	V
7.6027	36.48	Pk	35.8	-27.0	.4	-95.2	-49.52	-25	-24.52	H
7.7152	37.21	Pk	35.9	-26.9	.4	-95.2	-48.59	-25	-23.59	V
10.1016	35.75	Pk	37.2	-24.9	.7	-95.2	-46.45	-25	-21.45	H
10.2661	36.3	Pk	37.3	-24.9	.7	-95.2	-45.8	-25	-20.80	V
High Channel, 2560MHz										
5.0977	39.82	Pk	34.2	-30.4	.8	-95.2	-50.78	-25	-25.78	V
5.1638	39.44	Pk	34.2	-30.5	.7	-95.2	-51.36	-25	-26.36	H
7.6130	36.67	Pk	35.8	-26.9	.4	-95.2	-49.23	-25	-24.23	V
7.6589	36.8	Pk	35.8	-26.9	.3	-95.2	-49.2	-25	-24.2	H
10.1025	36.33	Pk	37.2	-24.9	.7	-95.2	-45.87	-25	-20.87	V
10.3734	35.82	Pk	37.6	-24.9	.8	-95.2	-45.88	-25	-20.88	H

BPSK 5G NR 7 (40.0MHZ BANDWIDTH)

Project #:	14040863
Date:	2/25/2022
Test Engineer:	20737
Configuration:	EUT only
Mode	n7 BPSK 40MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2525MHz										
5.1033	38.95	Pk	34.1	-30.5	.8	-95.2	-51.85	-25	-26.85	H
5.1834	40.01	Pk	34.2	-30.6	.7	-95.2	-50.89	-25	-25.89	V
7.8534	36.97	Pk	35.8	-26.6	.3	-95.2	-48.73	-25	-23.73	V
7.8811	36.41	Pk	35.9	-26.4	.5	-95.2	-48.79	-25	-23.79	H
10.0720	35.52	Pk	37.2	-25.0	.7	-95.2	-46.78	-25	-21.78	V
10.2623	37.04	Pk	37.4	-24.9	.7	-95.2	-44.96	-25	-19.96	H
Mid Channel, 2535MHz										
5.1005	39.69	Pk	34.1	-30.5	.8	-95.2	-51.11	-25	-26.11	V
5.1019	38.84	Pk	34.1	-30.5	.8	-95.2	-51.96	-25	-26.96	H
7.5844	37.42	Pk	35.8	-27.1	.5	-95.2	-48.58	-25	-23.58	H
7.7560	37.42	Pk	35.8	-26.9	.3	-95.2	-48.58	-25	-23.58	V
10.2928	35.72	Pk	37.4	-25.0	.7	-95.2	-46.38	-25	-21.38	V
11.1708	35.16	Pk	37.9	-23.0	.6	-95.2	-44.54	-25	-19.54	H
High Channel, 2545MHz										
5.1080	40.32	Pk	34.1	-30.5	.8	-95.2	-50.48	-25	-25.48	V
5.2280	40.46	Pk	34.2	-30.5	.9	-95.2	-50.14	-25	-25.14	H
7.6519	36.62	Pk	35.8	-27	.3	-95.2	-49.48	-25	-24.48	H
7.6753	36.46	Pk	35.9	-26.7	.4	-95.2	-49.14	-25	-24.14	V
10.2530	36.00	Pk	37.3	-25.0	.7	-95.2	-46.20	-25	-21.20	V
10.4044	36.15	Pk	37.6	-24.5	.8	-95.2	-45.15	-25	-20.15	H

10.3.2. LTE BAND 25 AND 5G NR n25

LIMITS

FCC: §24.238(a)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 25 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/8/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE25 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1860MHz									
3.8163	41.72	Pk	33.7	-31.8	-95.2	-51.58	-13	-38.58	H
3.8859	42.04	Pk	33.7	-31.8	-95.2	-51.26	-13	-38.26	V
5.5059	39.13	Pk	34.8	-29.5	-95.2	-50.77	-13	-37.77	H
5.5833	40.30	Pk	34.8	-29.6	-95.2	-49.70	-13	-36.70	V
7.4559	36.19	Pk	35.8	-26.1	-95.2	-49.31	-13	-36.31	H
7.5469	37.53	Pk	35.7	-26.2	-95.2	-48.17	-13	-35.17	V
Mid Channel, 1882.5MHz									
3.7767	40.99	Pk	33.5	-32	-95.2	-52.71	-13	-39.71	H
3.7945	41.10	Pk	33.6	-31.9	-95.2	-52.4	-13	-39.40	V
5.539	39.46	Pk	34.9	-29.6	-95.2	-50.44	-13	-37.44	H
5.561	38.34	Pk	34.9	-29.7	-95.2	-51.66	-13	-38.66	V
7.3969	36.52	Pk	35.7	-26.3	-95.2	-49.28	-13	-36.28	V
7.4902	36.65	Pk	35.7	-26.3	-95.2	-49.15	-13	-36.15	H
High Channel, 1905MHz									
3.7444	42.78	Pk	33.5	-32.1	-95.2	-51.02	-13	-38.02	V
3.7842	41.14	Pk	33.6	-31.9	-95.2	-52.36	-13	-39.36	H
5.6494	39.95	Pk	35.0	-30.1	-95.2	-50.35	-13	-37.35	V
5.6939	39.67	Pk	34.9	-29.5	-95.2	-50.13	-13	-37.13	H
7.6922	36.69	Pk	35.8	-26.2	-95.2	-48.91	-13	-35.91	H
7.6959	36.66	Pk	35.8	-26.1	-95.2	-48.84	-13	-35.84	V

BPSK 5G NR 25 (40.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/24/2022
Test Engineer:	27661
Configuration:	EUT only
Mode	n25 BPSK 40MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1870MHz									
3.7556	41.21	Pk	33.5	-32.1	-95.2	-52.59	-13	-39.59	H
3.7655	40.36	Pk	33.6	-32.0	-95.2	-53.24	-13	-40.24	V
5.5955	39.33	Pk	35.0	-29.6	-95.2	-50.47	-13	-37.47	H
5.5955	38.96	Pk	35.0	-29.6	-95.2	-50.84	-13	-37.84	V
7.4761	35.81	Pk	35.7	-26.2	-95.2	-49.89	-13	-36.89	V
7.4883	35.49	Pk	35.7	-26.3	-95.2	-50.31	-13	-37.31	H
Mid Channel, 1882.5MHz									
3.7523	40.00	Pk	33.5	-32.1	-95.2	-53.8	-13	-40.80	V
3.7538	42.44	Pk	33.5	-32.1	-95.2	-51.36	-13	-38.36	H
5.6475	38.96	Pk	35	-30.1	-95.2	-51.34	-13	-38.34	V
5.6634	38.37	Pk	35	-30.0	-95.2	-51.83	-13	-38.83	H
7.5061	35.93	Pk	35.7	-26.2	-95.2	-49.77	-13	-36.77	V
7.5272	37.35	Pk	35.8	-26.1	-95.2	-48.15	-13	-35.15	H
High Channel, 1895MHz									
3.7936	40.19	Pk	33.6	-31.9	-95.2	-53.31	-13	-40.31	V
3.8020	41.53	Pk	33.6	-31.8	-95.2	-51.87	-13	-38.87	H
5.6039	39.00	Pk	34.9	-29.7	-95.2	-51.00	-13	-38.00	H
5.6100	38.50	Pk	35	-29.7	-95.2	-51.40	-13	-38.40	V
7.5820	35.46	Pk	35.8	-26.2	-95.2	-50.14	-13	-37.14	V
7.6059	36.29	Pk	35.8	-26.3	-95.2	-49.41	-13	-36.41	H

10.3.3. LTE BAND 30 AND 5G NR n30

FCC: §27.53 (a)
For mobile and portable stations operating in the 2305-2315 MHz: by a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.

QPSK LTE BAND 30 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/8/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE30 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.604531	36.05	RMS	34.2	-29.2	-95.2	-54.15	-40	-14.15	V
4.624688	36.44	RMS	34.2	-29.1	-95.2	-53.66	-40	-13.66	H
6.914531	33.2	RMS	35.8	-26.3	-95.2	-52.5	-40	-12.5	V
6.922031	33.91	RMS	35.8	-26.2	-95.2	-51.69	-40	-11.69	H
9.229688	32.11	RMS	36.3	-23.5	-95.2	-50.29	-40	-10.29	H
9.249844	32.39	RMS	36.3	-23.7	-95.2	-50.21	-40	-10.21	V

BPSK 5G NR 30 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	2/28/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	n30 BPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.603125	37.68	RMS	34.2	-29.2	-95.2	-52.52	-40	-12.52	H
4.606875	35.76	RMS	34.2	-29.1	-95.2	-54.34	-40	-14.34	V
6.913594	34.69	RMS	35.8	-26.3	-95.2	-51.01	-40	-11.01	V
6.916406	33.48	RMS	35.8	-26.3	-95.2	-52.22	-40	-12.22	H
9.229688	32.52	RMS	36.4	-23.5	-95.2	-49.78	-40	-9.78	V
9.26625	32.83	RMS	36.5	-23.6	-95.2	-49.47	-40	-9.47	H

10.3.4. LTE BAND 41 AND 5G NR n41

LIMITS

FCC: §27.53 (m)

At least 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section.

QPSK LTE BAND 41 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/8/2022
Test Engineer:	26120
Configuration:	EUT only
Mode	LTE41 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2506MHz										
5.0119	37.56	Pk	34.1	-30.8	.8	-95.2	-53.54	-25	-28.54	H
5.0119	36.54	Pk	34.1	-30.8	.8	-95.2	-54.56	-25	-29.56	V
7.5305	35.67	Pk	35.8	-27	.3	-95.2	-50.43	-25	-25.43	H
7.5305	34.38	Pk	35.8	-27	.3	-95.2	-51.72	-25	-26.72	V
10.0402	35.08	Pk	37.1	-24.9	.7	-95.2	-47.22	-25	-22.22	H
10.0402	33.23	Pk	37.1	-24.9	.7	-95.2	-49.07	-25	-24.07	V
Mid Channel, 2593MHz										
5.1863	35.88	Pk	34.2	-30.7	.8	-95.2	-55.02	-25	-30.02	H
5.1863	36.33	Pk	34.2	-30.7	.8	-95.2	-54.57	-25	-29.57	V
7.7794	33.42	Pk	35.9	-26.9	.3	-95.2	-52.48	-25	-27.48	H
7.7794	32.97	Pk	35.9	-26.9	.3	-95.2	-52.93	-25	-27.93	V
10.3720	32.17	Pk	37.6	-24.9	.8	-95.2	-49.53	-25	-24.53	V
10.3725	33.49	Pk	37.6	-24.9	.8	-95.2	-48.21	-25	-23.21	H
High Channel, 2680MHz										
5.3602	36.06	Pk	34.5	-30.1	.5	-95.2	-54.24	-25	-29.24	H
5.3602	35.29	Pk	34.5	-30.1	.5	-95.2	-55.01	-25	-30.01	V
8.0400	33.46	Pk	35.9	-26.3	.4	-95.2	-51.74	-25	-26.74	H
8.0400	33.58	Pk	35.9	-26.3	.4	-95.2	-51.62	-25	-26.62	V
10.7203	31.24	Pk	38	-24	.6	-95.2	-49.36	-25	-24.36	H
10.7203	34.24	Pk	38	-24	.6	-95.2	-46.36	-25	-21.36	V

BPSK LTE BAND 41 (100.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/24/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	n41 BPSK 100MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2546MHz										
5.1033	40.35	Pk	34.1	-30.5	.8	-95.2	-50.45	-25	-25.45	V
5.1042	39.91	Pk	34.1	-30.5	.8	-95.2	-50.89	-25	-25.89	H
7.6223	35.76	Pk	35.8	-26.9	.4	-95.2	-50.14	-25	-25.14	V
7.6692	37.65	Pk	35.8	-26.8	.3	-95.2	-48.25	-25	-23.25	H
10.0580	36.01	Pk	37.1	-25.0	.7	-95.2	-46.39	-25	-21.39	V
10.1086	36.51	Pk	37.2	-25.0	.7	-95.2	-45.79	-25	-20.79	H
Mid Channel, 2593MHz										
5.1155	40.46	Pk	34.2	-30.7	.8	-95.2	-50.44	-25	-25.44	H
5.1516	39.27	Pk	34.3	-30.5	.8	-95.2	-51.33	-25	-26.33	V
7.6331	38.30	Pk	35.9	-26.9	.4	-95.2	-47.50	-25	-22.50	V
7.7138	37.13	Pk	35.8	-26.9	.4	-95.2	-48.77	-25	-23.77	H
10.4794	35.59	Pk	37.8	-24.4	.7	-95.2	-45.51	-25	-20.51	H
10.4850	35.16	Pk	37.8	-24.5	.7	-95.2	-46.04	-25	-21.04	V
High Channel, 2640MHz										
5.1802	39.23	Pk	34.2	-30.6	.7	-95.2	-51.67	-25	-26.67	V
5.2322	38.63	Pk	34.2	-30.4	.8	-95.2	-51.97	-25	-26.97	H
7.7498	37.51	Pk	35.9	-26.9	.3	-95.2	-48.39	-25	-23.39	H
7.7813	36.08	Pk	35.9	-26.9	.3	-95.2	-49.82	-25	-24.82	V
10.0838	37.61	Pk	37.1	-24.9	.6	-95.2	-44.79	-25	-19.79	V
10.2192	36.26	Pk	37.3	-24.8	.9	-95.2	-45.54	-25	-20.54	H

10.3.5. LTE BAND 66 AND 5G NR n66

LIMITS

FCC: §27.53 (h)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 66 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/8/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE66 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1720MHz									
3.4083	41.79	Pk	32.5	-33.0	-95.2	-53.91	-13	-40.91	V
3.4195	41.22	Pk	32.6	-33.0	-95.2	-54.38	-13	-41.38	H
5.1408	39.93	Pk	34.2	-29.9	-95.2	-50.97	-13	-37.97	V
5.1825	38.99	Pk	34.2	-29.2	-95.2	-51.21	-13	-38.21	H
6.8255	38.67	Pk	35.7	-26.8	-95.2	-47.63	-13	-34.63	V
6.9802	37.36	Pk	35.8	-26.3	-95.2	-48.34	-13	-35.34	H
Mid Channel, 1745MHz									
3.426563	42.32	Pk	32.6	-33.0	-95.2	-53.28	-13	-40.28	H
3.533906	42.37	Pk	33.1	-32.8	-95.2	-52.53	-13	-39.53	V
5.189531	39.09	Pk	34.2	-29.1	-95.2	-51.01	-13	-38.01	V
5.234531	38.67	Pk	34.2	-28.8	-95.2	-51.13	-13	-38.13	H
6.951094	36.04	Pk	35.7	-26.2	-95.2	-49.66	-13	-36.66	V
6.991875	36.79	Pk	35.7	-26.3	-95.2	-49.01	-13	-36.01	H
High Channel, 1770MHz									
3.5227	41.95	Pk	33.1	-32.8	-95.2	-52.95	-13	-39.95	H
3.6380	42.41	Pk	33.1	-32.6	-95.2	-52.29	-13	-39.29	V
5.1886	39.90	Pk	34.2	-29.2	-95.2	-50.30	-13	-37.30	V
5.3302	39.61	Pk	34.4	-30.3	-95.2	-51.49	-13	-38.49	H
6.9933	36.76	Pk	35.7	-26.3	-95.2	-49.04	-13	-36.04	V
7.0997	36.61	Pk	35.6	-26.5	-95.2	-49.49	-13	-36.49	H

BPSK 5G NR n66 (40.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	26210
Configuration:	EUT only
Mode	n66 BPSK 40MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1720MHz									
3.4598	38.53	Pk	32.8	-33.0	-95.2	-56.87	-13	-43.87	V
3.4603	38.91	Pk	32.8	-33.0	-95.2	-56.49	-13	-43.49	H
5.1900	35.06	Pk	34.2	-29.1	-95.2	-55.04	-13	-42.04	H
5.1900	34.81	Pk	34.2	-29.1	-95.2	-55.29	-13	-42.29	V
6.9202	32.44	Pk	35.8	-26.2	-95.2	-53.16	-13	-40.16	H
6.9202	33.43	Pk	35.8	-26.2	-95.2	-52.17	-13	-39.17	V
Mid Channel, 1745MHz									
3.4903	38.48	Pk	32.9	-32.9	-95.2	-56.72	-13	-43.72	H
3.4903	37.86	Pk	32.9	-32.9	-95.2	-57.34	-13	-44.34	V
5.2350	36.72	Pk	34.2	-28.8	-95.2	-53.08	-13	-40.08	H
5.2350	36.6	Pk	34.2	-28.8	-95.2	-53.20	-13	-40.20	V
6.9806	32.46	Pk	35.8	-26.3	-95.2	-53.24	-13	-40.24	H
6.9806	33.85	Pk	35.8	-26.3	-95.2	-51.85	-13	-38.85	V
High Channel, 1760MHz									
3.5198	39.97	Pk	33.1	-32.8	-95.2	-54.93	-13	-41.93	H
3.5198	38.33	Pk	33.1	-32.8	-95.2	-56.57	-13	-43.57	V
5.2805	36.91	Pk	34.3	-29.3	-95.2	-53.29	-13	-40.29	H
5.2805	35.36	Pk	34.3	-29.3	-95.2	-54.84	-13	-41.84	V
7.0402	33.51	Pk	35.7	-26.8	-95.2	-52.79	-13	-39.79	H
7.0402	33.46	Pk	35.7	-26.8	-95.2	-52.84	-13	-39.84	V

10.3.6. 5G NR n70

LIMITS

FCC: §27.53 (h)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

BPSK 5G NR n70 (15.0MHZ BANDWIDTH based on 5G NR n70 maximum frequency range)

Project #:	14040863
Date:	3/28/2022
Test Engineer:	27660
Configuration:	EUT only
Mode	N70 BPSK 15MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 1702.5MHz									
3.4008	41.72	Pk	32.5	-33.0	-95.2	-53.98	-13	-40.98	V
3.4083	41.20	Pk	32.5	-33.0	-95.2	-54.50	-13	-41.50	H
5.1009	39.92	Pk	34.1	-30.3	-95.2	-51.48	-13	-38.48	H
5.1052	39.83	Pk	34.1	-30.3	-95.2	-51.57	-13	-38.57	V
6.8348	35.47	Pk	35.8	-26.8	-95.2	-50.73	-13	-37.73	H
6.8348	35.54	Pk	35.8	-26.8	-95.2	-50.66	-13	-37.66	V

10.4. FIELD STRENGTH OF SPURIOUS RADIATION, ANT 4

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r01

All tests above 1GHz were done with a Resolution Bandwidth of 1MHz, and a Video Bandwidth of 3MHz.

RESULTS

10.4.1. LTE BAND 7 AND 5G NR n7

LIMITS

FCC: §27.53 (m)
At least 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section.

QPSK LTE BAND 7 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/8/2022
Test Engineer:	30606
Configuration:	EUT only
Mode	LTE7 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2510MHz										
5.0330	40.22	Pk	34.0	-30.7	.7	-95.2	-50.98	-25	-25.98	H
5.0447	39.71	Pk	34.0	-30.7	.6	-95.2	-51.59	-25	-26.59	V
7.4259	37.01	Pk	35.8	-26.8	.3	-95.2	-48.89	-25	-23.89	V
7.5042	36.86	Pk	35.8	-26.9	.3	-95.2	-49.14	-25	-24.14	H
9.9867	36.1	Pk	37.1	-25	.5	-95.2	-46.5	-25	-21.50	V
10.0228	36.23	Pk	37.1	-24.8	.6	-95.2	-46.07	-25	-21.07	H
Mid Channel, 2535MHz										
5.0773	36.83	Pk	34.4	-23.7	.7	-95.2	-46.97	-25	-21.97	V
5.0804	36.83	Pk	34.4	-23.7	.7	-95.2	-46.97	-25	-21.97	H
7.6094	32.09	Pk	35.7	-20.0	.4	-95.2	-47.01	-25	-22.01	V
7.6253	33.17	Pk	35.7	-19.7	.4	-95.2	-45.63	-25	-20.63	H
10.1186	32.38	Pk	37.2	-17.8	.7	-95.2	-42.72	-25	-17.72	H
10.1263	32.05	Pk	37.2	-17.7	.7	-95.2	-42.95	-25	-17.95	V
High Channel, 2560MHz										
5.0114	36.60	Pk	34.3	-24.4	.8	-95.2	-47.90	-25	-22.90	H
5.0118	36.78	Pk	34.3	-24.3	.8	-95.2	-47.62	-25	-22.62	V
7.6737	32.89	Pk	35.7	-19.6	.4	-95.2	-45.81	-25	-20.81	V
7.6882	34.16	Pk	35.7	-19.5	.5	-95.2	-44.34	-25	-19.34	H
10.2516	31.75	Pk	37.4	-17.3	.7	-95.2	-42.65	-25	-17.65	H
10.2578	32.24	Pk	37.3	-17.3	.7	-95.2	-42.26	-25	-17.26	V

BPSK 5G NR 7 (40.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/28/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	n7 BPSK 40MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2525MHz										
5.1562	39.78	Pk	34.3	-30.5	.8	-95.2	-50.82	-25	-25.82	V
5.1567	39.31	Pk	34.3	-30.5	.8	-95.2	-51.29	-25	-26.29	H
7.8150	36.47	Pk	35.8	-26.7	.4	-95.2	-49.23	-25	-24.23	V
7.8881	37.88	Pk	35.9	-26.5	.5	-95.2	-47.42	-25	-22.42	H
10.1302	35.42	Pk	37.2	-24.9	.7	-95.2	-46.78	-25	-21.78	V
10.4648	36.46	Pk	37.7	-24.4	.7	-95.2	-44.74	-25	-19.74	H
Mid Channel, 2535MHz										
5.0545	39.72	Pk	34.1	-30.6	.6	-95.2	-51.38	-25	-26.38	V
5.1023	39.81	Pk	34.1	-30.5	.8	-95.2	-50.99	-25	-25.99	H
7.6448	36.09	Pk	35.8	-26.9	.4	-95.2	-49.81	-25	-24.81	H
7.6823	37.13	Pk	35.8	-26.7	.5	-95.2	-48.47	-25	-23.47	V
10.3913	35.87	Pk	37.6	-24.6	.8	-95.2	-45.53	-25	-20.53	H
10.3983	35.36	Pk	37.6	-24.5	.8	-95.2	-45.94	-25	-20.94	V
High Channel, 2545MHz										
5.1605	39.9	Pk	34.2	-30.5	.8	-95.2	-50.80	-25	-25.80	H
5.2303	39.53	Pk	34.2	-30.4	.9	-95.2	-50.97	-25	-25.97	V
7.7123	37.34	Pk	35.9	-26.9	.4	-95.2	-48.46	-25	-23.46	H
7.7231	37.27	Pk	35.8	-26.8	.3	-95.2	-48.63	-25	-23.63	V
10.1475	35.35	Pk	37.2	-24.7	.6	-95.2	-46.75	-25	-21.75	H
10.2173	36.24	Pk	37.3	-24.8	.9	-95.2	-45.56	-25	-20.56	V

10.4.2. LTE BAND 25 AND 5G NR n25

LIMITS

FCC: §24.238(a)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 25 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/8/2022
Test Engineer:	30606
Configuration:	EUT only
Mode	LTE25 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1860MHz									
3.7098	37.82	Pk	33.4	-25.0	-95.2	-48.98	-13	-35.98	H
3.7100	37.86	Pk	33.4	-25.0	-95.2	-48.94	-13	-35.94	V
5.5920	35.33	Pk	34.8	-21.9	-95.2	-46.97	-13	-33.97	H
5.5930	34.93	Pk	34.8	-21.8	-95.2	-47.27	-13	-34.27	V
7.4010	33.83	Pk	35.5	-19.7	-95.2	-45.57	-13	-32.57	V
7.4221	34.40	Pk	35.6	-19.9	-95.2	-45.1	-13	-32.10	H
Mid Channel, 1882.5MHz									
3.7794	38.68	Pk	33.3	-24.9	-95.2	-48.12	-13	-35.12	H
3.7812	37.52	Pk	33.4	-24.9	-95.2	-49.18	-13	-36.18	V
5.6307	36.22	Pk	34.8	-22.1	-95.2	-46.28	-13	-33.28	V
5.6507	35.41	Pk	34.8	-21.8	-95.2	-46.79	-13	-33.79	H
7.5481	32.69	Pk	35.6	-19.2	-95.2	-46.11	-13	-33.11	H
7.5556	32.46	Pk	35.6	-18.9	-95.2	-46.04	-13	-33.04	V
High Channel, 1905MHz									
3.8092	37.57	Pk	33.3	-25.3	-95.2	-49.63	-13	-36.63	V
3.8172	38.34	Pk	33.3	-25.2	-95.2	-48.76	-13	-35.76	H
5.7321	35.83	Pk	35.0	-23.3	-95.2	-47.67	-13	-34.67	V
5.7397	35.99	Pk	35.0	-23.4	-95.2	-47.61	-13	-34.61	H
7.6431	32.94	Pk	35.7	-18.4	-95.2	-44.96	-13	-31.96	H
7.6458	32.93	Pk	35.7	-18.5	-95.2	-45.07	-13	-32.07	V

BPSK 5G NR 25 (40.0MHZ BANDWIDTH)

Project #:	14040863
Date:	2/25/2022
Test Engineer:	26120
Configuration:	EUT only
Mode	n25 BPSK 40MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1870MHz									
3.7402	38.29	Pk	33.5	-32.2	-95.2	-55.61	-13	-42.61	H
3.7402	38.37	Pk	33.5	-32.2	-95.2	-55.53	-13	-42.53	V
5.6109	36.81	Pk	35.0	-29.7	-95.2	-53.09	-13	-40.09	H
5.6109	35.74	Pk	35.0	-29.7	-95.2	-54.16	-13	-41.16	V
7.4808	33.66	Pk	35.7	-26.2	-95.2	-52.04	-13	-39.04	H
7.4808	34.42	Pk	35.7	-26.2	-95.2	-51.28	-13	-38.28	V
Mid Channel, 1882.5MHz									
3.7650	37.99	Pk	33.5	-32	-95.2	-55.71	-13	-42.71	H
3.7650	39.49	Pk	33.5	-32	-95.2	-54.21	-13	-41.21	V
5.6475	38.15	Pk	35.0	-30.1	-95.2	-52.15	-13	-39.15	H
5.6475	37.32	Pk	35.0	-30.1	-95.2	-52.98	-13	-39.98	V
7.5300	33.34	Pk	35.8	-26.1	-95.2	-52.16	-13	-39.16	H
7.5300	33.25	Pk	35.8	-26.1	-95.2	-52.25	-13	-39.25	V
High Channel, 1995MHz									
3.7898	37.36	Pk	33.6	-31.9	-95.2	-56.14	-13	-43.14	H
3.7898	39.62	Pk	33.6	-31.9	-95.2	-53.88	-13	-40.88	V
5.6850	36.98	Pk	34.9	-29.7	-95.2	-53.02	-13	-40.02	H
5.6850	36.40	Pk	34.9	-29.7	-95.2	-53.60	-13	-40.60	V
7.5806	33.27	Pk	35.8	-26.2	-95.2	-52.33	-13	-39.33	H
7.5806	33.07	Pk	35.8	-26.2	-95.2	-52.53	-13	-39.53	V

10.4.3. LTE BAND 30 AND 5G NR n30

LIMITS

FCC: §27.53 (a)
For mobile and portable stations operating in the 2305-2315 MHz: by a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.

QPSK LTE BAND 30 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/8/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE30 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.628438	36.02	RMS	34.2	-29.1	-95.2	-54.08	-40	-14.08	H
4.632188	36.68	RMS	34.2	-29	-95.2	-53.32	-40	-13.32	V
6.951094	33.73	RMS	35.7	-26.2	-95.2	-51.97	-40	-11.97	V
6.955313	33.74	RMS	35.7	-26.2	-95.2	-51.96	-40	-11.96	H
9.21375	32.49	RMS	36.3	-23.5	-95.2	-49.91	-40	-9.91	V
9.228281	32.63	RMS	36.3	-23.5	-95.2	-49.77	-40	-9.77	H

BPSK 5G NR 30 (10.0MHZ BANDWIDTH)

Project #:	14040863
Date:	2/28/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	n30 BPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.602188	35.82	RMS	34.2	-29.2	-95.2	-54.38	-40	-14.38	V
4.608281	36.1	RMS	34.2	-29.2	-95.2	-54.1	-40	-14.1	H
6.9075	34.21	RMS	35.9	-26.4	-95.2	-51.49	-40	-11.49	V
6.914063	34.81	RMS	35.8	-26.3	-95.2	-50.89	-40	-10.89	H
9.246094	34.52	RMS	36.5	-23.7	-95.2	-47.88	-40	-7.88	H
9.257813	32.43	RMS	36.5	-23.6	-95.2	-49.87	-40	-9.87	V

10.4.4. LTE BAND 41 AND 5G NR n41

LIMITS

FCC: §27.53 (m)
At least 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section.

QPSK LTE BAND 41 (20MHZ BANDWIDTH)

Project #:	14040863
Date:	3/8/2022
Test Engineer:	26120
Configuration:	EUT only
Mode	LTE41 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2506MHz										
5.0119	37.50	Pk	34.1	-30.8	.8	-95.2	-53.60	-25	-28.60	H
5.0119	36.27	Pk	34.1	-30.8	.8	-95.2	-54.83	-25	-29.83	V
7.5183	33.56	Pk	35.7	-27	.3	-95.2	-52.64	-25	-27.64	H
7.5183	34.45	Pk	35.7	-27	.3	-95.2	-51.75	-25	-26.75	V
10.0242	33.37	Pk	37.2	-24.8	.6	-95.2	-48.83	-25	-23.83	H
10.0242	31.93	Pk	37.2	-24.8	.6	-95.2	-50.27	-25	-25.27	V
Mid Channel, 2593MHz										
5.1863	35.88	Pk	34.2	-30.7	.8	-95.2	-55.02	-25	-30.02	H
5.1863	36.21	Pk	34.2	-30.7	.8	-95.2	-54.69	-25	-29.69	V
7.7789	33.64	Pk	35.9	-26.9	.3	-95.2	-52.26	-25	-27.26	H
7.7789	33.53	Pk	35.9	-26.9	.3	-95.2	-52.37	-25	-27.37	V
10.3720	32.87	Pk	37.6	-24.9	.8	-95.2	-48.83	-25	-23.83	H
10.3720	31.40	Pk	37.6	-24.9	.8	-95.2	-50.30	-25	-25.30	V
High Channel, 2680MHz										
5.2603	36.26	Pk	34.2	-30.5	.3	-95.2	-54.94	-25	-29.94	H
5.2603	36.08	Pk	34.2	-30.5	.3	-95.2	-55.12	-25	-30.12	V
8.0405	32.60	Pk	35.9	-26.3	.4	-95.2	-52.60	-25	-27.60	H
8.0405	33.00	Pk	35.9	-26.3	.4	-95.2	-52.20	-25	-27.20	V
11.5838	36.65	Pk	38.3	-22.3	1	-95.2	-41.55	-25	-16.55	V
11.5842	31.66	Pk	38.3	-22.3	1	-95.2	-46.54	-25	-21.54	H

BPSK 5G NR n41 (100.0MHZ BANDWIDTH)

Project #:	14040863
Date:	2/24/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	n41 BPSK 100MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2546MHz										
5.0756	38.88	Pk	34.1	-30.6	.7	-95.2	-52.12	-25	-27.12	V
5.0934	39.93	Pk	34.2	-30.4	.8	-95.2	-50.67	-25	-25.67	H
7.6833	37.44	Pk	35.8	-26.7	.5	-95.2	-48.16	-25	-23.16	H
7.7433	35.62	Pk	35.9	-26.8	.3	-95.2	-50.18	-25	-25.18	V
10.2183	34.60	Pk	37.3	-24.8	.9	-95.2	-47.20	-25	-22.20	H
10.2230	34.87	Pk	37.3	-24.8	.9	-95.2	-46.93	-25	-21.93	V
Mid Channel, 2593MHz										
5.1750	39.18	Pk	34.2	-30.6	.7	-95.2	-51.72	-25	-26.72	H
5.1895	39.37	Pk	34.2	-30.7	.8	-95.2	-51.53	-25	-26.53	V
7.8783	36.05	Pk	35.9	-26.4	.5	-95.2	-49.15	-25	-24.15	H
7.9458	37.35	Pk	35.9	-26.5	.2	-95.2	-48.25	-25	-23.25	V
10.3195	36.16	Pk	37.5	-25	.6	-95.2	-45.94	-25	-20.94	V
10.4667	36.01	Pk	37.7	-24.4	.7	-95.2	-45.19	-25	-20.19	H
High Channel, 2640MHz										
5.1638	39.71	Pk	34.2	-30.5	.7	-95.2	-51.09	-25	-26.09	H
5.1652	39.79	Pk	34.2	-30.5	.7	-95.2	-51.01	-25	-26.01	V
7.8066	36.57	Pk	35.8	-26.7	.4	-95.2	-49.13	-25	-24.13	V
7.8319	36.16	Pk	35.9	-26.7	.3	-95.2	-49.54	-25	-24.54	H
10.5956	35.25	Pk	37.9	-24.2	.9	-95.2	-45.35	-25	-20.35	V
10.7873	35.45	Pk	38.0	-23.7	.8	-95.2	-44.65	-25	-19.65	H

10.4.5. LTE BAND 48

LIMITS

FCC: §96.41
(e) 3.5 GHz Emissions and Interference Limits—
(2) Additional protection levels. Notwithstanding paragraph (d)(1) of this section, the conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed −40dBm/MHz.

QPSK LTE BAND 48 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	5/26/2022
Test Engineer:	27661
Configuration:	EUT only
Mode	LTE48 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	T1792 3400-3800MHz BRF	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 3560MHz										
7.1144	33.22	RMS	35.6	-26.8	.5	-95.2	-52.68	-40	-12.68	H
7.1174	32.9	RMS	35.6	-26.8	.5	-95.2	-53.00	-40	-13.00	V
10.6715	32.93	RMS	37.9	-24.1	.6	-95.2	-47.87	-40	-7.87	H
10.6944	31.36	RMS	37.9	-24.3	.5	-95.2	-49.74	-40	-9.74	V
14.2397	30.49	RMS	38.9	-20.2	.8	-95.2	-45.21	-40	-5.21	H
14.2432	30.25	RMS	39.0	-20.2	.8	-95.2	-45.35	-40	-5.35	V
Mid Channel, 3625MHz										
7.212619	33.75	RMS	35.6	-26.9	.6	-95.2	-52.15	-40	-12.15	V
7.224956	32.85	RMS	35.6	-26.8	.5	-95.2	-53.05	-40	-13.05	H
10.876416	33.28	RMS	37.9	-24	.5	-95.2	-47.52	-40	-7.52	H
10.879941	32.01	RMS	38	-24	.5	-95.2	-48.69	-40	-8.69	V
14.324747	30.31	RMS	39.1	-19.7	.7	-95.2	-44.79	-40	-4.79	V
14.516859	30.27	RMS	39.6	-19.8	.8	-95.2	-44.33	-40	-4.33	H
High Channel, 3690MHz										
7.112597	33.32	RMS	35.6	-26.8	.5	-95.2	-52.58	-40	-12.58	V
7.126256	34.09	RMS	35.6	-26.9	.5	-95.2	-51.91	-40	-11.91	H
10.672406	32.17	RMS	37.9	-24.1	.6	-95.2	-48.63	-40	-8.63	H
10.690031	33.32	RMS	38	-24.3	.6	-95.2	-47.58	-40	-7.58	V
14.230013	30.32	RMS	38.9	-20.1	.8	-95.2	-45.28	-40	-5.28	H
14.234859	29.73	RMS	38.9	-20.2	.8	-95.2	-45.97	-40	-5.97	V

10.4.6. LTE BAND 66 AND 5G NR n66

LIMITS

FCC: §27.53 (h)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

QPSK LTE BAND 66 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/9/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	LTE66 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1720MHz									
3.4191	42.15	Pk	32.6	-33.0	-95.2	-53.45	-13	-40.45	V
3.4266	41.57	Pk	32.6	-33.0	-95.2	-54.03	-13	-41.03	H
5.0981	40.02	Pk	34.2	-30.3	-95.2	-51.28	-13	-38.28	H
5.1848	39.63	Pk	34.2	-29.2	-95.2	-50.57	-13	-37.57	V
6.8405	37.31	Pk	35.8	-26.8	-95.2	-48.89	-13	-35.89	H
6.8686	37.03	Pk	35.8	-26.6	-95.2	-48.97	-13	-35.97	V
Mid Channel, 1745MHz									
3.4289	42.41	Pk	32.6	-33	-95.2	-53.19	-13	-40.19	V
3.5133	43.3	Pk	33.1	-32.9	-95.2	-51.7	-13	-38.7	H
5.1778	38.7	Pk	34.2	-29.2	-95.2	-51.5	-13	-38.5	V
5.1825	39.77	Pk	34.2	-29.2	-95.2	-50.43	-13	-37.43	H
6.9769	37.61	Pk	35.8	-26.3	-95.2	-48.09	-13	-35.09	H
6.9802	36.36	Pk	35.8	-26.3	-95.2	-49.34	-13	-36.34	V
High Channel, 1770MHz									
3.5348	41.38	Pk	33.1	-32.8	-95.2	-53.52	-13	-40.52	H
3.5513	42.03	Pk	33.1	-32.7	-95.2	-52.77	-13	-39.77	V
5.4656	39.48	Pk	34.7	-29.2	-95.2	-50.22	-13	-37.22	H
5.5355	39.52	Pk	34.8	-29.6	-95.2	-50.48	-13	-37.48	V
7.7498	36.37	Pk	35.9	-25.7	-95.2	-48.63	-13	-35.63	V
7.7747	36.35	Pk	35.8	-25.6	-95.2	-48.65	-13	-35.65	H

BPSK 5G NR n66 (40.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	26120
Configuration:	EUT only
Mode	n66 BPSK 40MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1730MHz									
3.4598	38.34	Pk	32.8	-33.0	-95.2	-57.06	-13	-44.06	H
3.4598	40.21	Pk	32.8	-33.0	-95.2	-55.19	-13	-42.19	V
5.1900	36.56	Pk	34.2	-29.1	-95.2	-53.54	-13	-40.54	H
5.1900	35.51	Pk	34.2	-29.1	-95.2	-54.59	-13	-41.59	V
6.9202	32.97	Pk	35.8	-26.2	-95.2	-52.63	-13	-39.63	H
6.9202	34.61	Pk	35.8	-26.2	-95.2	-50.99	-13	-37.99	V
Mid Channel, 1745MHz									
3.4898	39.99	Pk	32.9	-32.9	-95.2	-55.21	-13	-42.21	H
3.4898	39.69	Pk	32.9	-32.9	-95.2	-55.51	-13	-42.51	V
5.2350	35.25	Pk	34.2	-28.8	-95.2	-54.55	-13	-41.55	H
5.2350	35.35	Pk	34.2	-28.8	-95.2	-54.45	-13	-41.45	V
6.9802	33.38	Pk	35.8	-26.3	-95.2	-52.32	-13	-39.32	H
6.9802	33.71	Pk	35.8	-26.3	-95.2	-51.99	-13	-38.99	V
High Channel, 1760MHz									
3.5198	39.11	Pk	33.1	-32.8	-95.2	-55.79	-13	-42.79	H
3.5198	39.63	Pk	33.1	-32.8	-95.2	-55.27	-13	-42.27	V
5.2800	34.94	Pk	34.3	-29.3	-95.2	-55.26	-13	-42.26	H
5.2800	35.16	Pk	34.3	-29.3	-95.2	-55.04	-13	-42.04	V
7.0402	33.36	Pk	35.7	-26.8	-95.2	-52.94	-13	-39.94	H
7.0402	33.36	Pk	35.7	-26.8	-95.2	-52.94	-13	-39.94	V

10.4.7. 5G NR n70

LIMITS

FCC: §27.53 (h)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

BPSK 5G NR n70 (15.0MHZ BANDWIDTH based on 5G NR n70 maximum frequency range)

Project #:	14040863
Date:	3/2/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N70 BPSK 15MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 1702.5MHz									
3.3905	40.81	Pk	32.6	-33.1	-95.2	-54.89	-13	-41.89	V
3.4158	41.08	Pk	32.6	-33.0	-95.2	-54.52	-13	-41.52	H
5.1230	40.06	Pk	34.1	-30.1	-95.2	-51.14	-13	-38.14	H
5.1488	39.53	Pk	34.2	-29.8	-95.2	-51.27	-13	-38.27	V
6.7856	35.6	Pk	35.7	-26.9	-95.2	-50.8	-13	-37.80	V
6.7983	36.83	Pk	35.8	-27.0	-95.2	-49.57	-13	-36.57	H

10.4.8. 5G NR n77 (FCC Part 27 3450-3550MHz)

LIMITS

FCC: §27.53
Emission limits
(n) 3.45 GHz Service. The following emission limits apply to stations transmitting in the 3450-3550 MHz band:
(2) For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.

BPSK 5G NR n77 (100.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	n77 BPSK 100MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB	208398 3400-3800MHz BRF	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 3500MHz										
6.9027	31.01	RMS	35.9	-27.0	.6	-95.2	-54.69	-13	-41.69	H
6.9027	34.33	RMS	35.9	-27.0	.6	-95.2	-51.37	-13	-38.37	V
10.4058	25.85	RMS	37.6	-24.5	.6	-95.2	-55.65	-13	-42.65	V
10.4239	26.20	RMS	37.7	-24.5	.6	-95.2	-55.20	-13	-42.20	H
13.8912	22.94	RMS	38.5	-19.2	.7	-95.2	-52.26	-13	-39.26	V
13.9467	24.28	RMS	38.5	-19.3	.8	-95.2	-50.92	-13	-37.92	H

10.4.9. 5G NR n77 (FCC Part 27 3700-3980MHz)

LIMITS

FCC: §27.53
(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.

BPSK 5G NR n77 (100.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/2/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	n77 BPSK 100MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 3750MHz									
7.5380	35.73	Pk	35.8	-26.6	-95.2	-50.27	-13	-37.27	V
7.5400	36.18	Pk	35.8	-26.6	-95.2	-49.82	-13	-36.82	H
12.3750	33.18	Pk	38.9	-20.8	-95.2	-43.92	-13	-30.92	V
12.4155	34.12	Pk	38.9	-21.4	-95.2	-43.58	-13	-30.58	H
15.4938	33.32	Pk	40.6	-17.9	-95.2	-39.18	-13	-26.18	V
15.5365	33.6	Pk	40.6	-17.7	-95.2	-38.70	-13	-25.70	H
Mid Channel, 3840MHz									
7.5825	38.09	Pk	35.8	-26.2	-95.2	-47.51	-13	-34.51	H
7.5825	38.26	Pk	35.8	-26.2	-95.2	-47.34	-13	-34.34	V
11.5655	33.49	Pk	38.3	-21.8	-95.2	-45.21	-13	-32.21	H
11.603	33.78	Pk	38.3	-22.0	-95.2	-45.12	-13	-32.12	V
15.5335	32.37	Pk	40.6	-17.6	-95.2	-39.83	-13	-26.83	V
15.5405	33.59	Pk	40.5	-17.8	-95.2	-38.91	-13	-25.91	H
High Channel, 3930MHz									
7.8720	35.34	Pk	35.9	-26.2	-95.2	-50.16	-13	-37.16	V
7.8950	36.41	Pk	35.9	-26.2	-95.2	-49.09	-13	-36.09	H
11.7190	33.76	Pk	38.4	-21.3	-95.2	-44.34	-13	-31.34	V
11.7215	34.17	Pk	38.4	-21.3	-95.2	-43.93	-13	-30.93	H
15.4975	33.13	Pk	40.5	-17.8	-95.2	-39.37	-13	-26.37	V
15.5245	32.21	Pk	40.5	-17.5	-95.2	-39.99	-13	-26.99	H

10.5. FIELD STRENGTH OF SPURIOUS RADIATION, ANT 7

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r01

All tests above 1GHz were done with a Resolution Bandwidth of 1MHz, and a Video Bandwidth of 3MHz.

RESULTS

10.5.1. LTE BAND 48

LIMITS

FCC: §96.41
(e) 3.5 GHz Emissions and Interference Limits—
(2) Additional protection levels. Notwithstanding paragraph (d)(1) of this section, the conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed −40dBm/MHz

SK LTE BAND 48 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	5/26/2022
Test Engineer:	27661
Configuration:	EUT only
Mode	LTE 48 QPSK 20MHz
Chamber #:	Chamber B

QP Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	208398 3400-3800MHz BRF	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 3570MHz										
7.138594	33.75	RMS	36	-27	.6	-95.2	-51.85	-40	-11.85	V
7.149169	32.37	RMS	36	-27	.6	-95.2	-53.23	-40	-13.23	H
10.732772	33.26	RMS	37.8	-24.1	.6	-95.2	-47.64	-40	-7.64	H
10.739381	31.84	RMS	37.7	-24.1	.6	-95.2	-49.16	-40	-9.16	V
14.272753	30.5	RMS	39.5	-19.9	.7	-95.2	-44.4	-40	-4.4	V
14.290819	30.4	RMS	39.5	-20.1	.7	-95.2	-44.7	-40	-4.7	H
Mid Channel, 3625MHz										
7.263291	33.8	RMS	35.7	-26.8	.6	-95.2	-51.9	-40	-11.9	V
7.267697	34.16	RMS	35.7	-26.7	.6	-95.2	-51.44	-40	-11.44	H
10.874213	32.93	RMS	37.9	-24	.5	-95.2	-47.87	-40	-7.87	V
10.888753	32.51	RMS	37.9	-23.9	.6	-95.2	-48.09	-40	-8.09	H
14.341491	30.08	RMS	39.5	-19.7	.8	-95.2	-44.52	-40	-4.52	V
14.467509	29.71	RMS	39.7	-19.3	.7	-95.2	-44.39	-40	-4.39	H
High Channel, 3680MHz										
7.330266	34.05	RMS	35.6	-26.8	.5	-95.2	-51.85	-40	-11.85	V
7.336875	33.78	RMS	35.7	-26.8	.5	-95.2	-52.02	-40	-12.02	H
11.041209	31.77	RMS	37.8	-23.2	.6	-95.2	-48.23	-40	-8.23	H
11.049141	31.86	RMS	37.8	-23.3	.6	-95.2	-48.24	-40	-8.24	V
14.675484	29.84	RMS	39.7	-19.5	.9	-95.2	-44.26	-40	-4.26	V
14.710294	29.96	RMS	39.8	-19.7	.9	-95.2	-44.24	-40	-4.24	H

10.5.2. 5G NR n77 (FCC Part 27 3450-3550MHz)

LIMITS

FCC: §27.53
Emission limits
(n) 3.45 GHz Service. The following emission limits apply to stations transmitting in the 3450-3550 MHz band:
(2) For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.

BPSK 5G NR n77 (100.0MHZ BANDWIDTH)

Project #:	14040863
Date:	2/28/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N77 BPSK 100MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	208398 3400-3800MHz BRF	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 3500MHz										
6.9027	31.49	RMS	35.9	-27.0	.6	-95.2	-54.21	-13	-41.21	V
6.9028	30.51	RMS	35.9	-27.0	.6	-95.2	-55.19	-13	-42.19	H
10.6618	26.2	RMS	37.9	-24.0	.6	-95.2	-54.50	-13	-41.50	V
10.6623	27.06	RMS	37.9	-24.0	.6	-95.2	-53.64	-13	-40.64	H
14.6495	24.99	RMS	39.8	-19.0	.9	-95.2	-48.51	-13	-35.51	H
14.6667	24.73	RMS	39.8	-19.2	.9	-95.2	-48.97	-13	-35.97	V

10.5.3. 5G NR n77 (FCC Part 27 3700-3980MHz)

LIMITS

FCC: §27.53
(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.

BPSK 5G NR n77 (100.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N77 BPSK 100MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 3750MHz									
7.3605	36.87	Pk	35.7	-25.5	-95.2	-48.13	-13	-35.13	V
7.3675	37.03	Pk	35.7	-25.5	-95.2	-47.97	-13	-34.97	H
11.2335	33.48	Pk	38.0	-22.7	-95.2	-46.42	-13	-33.42	V
11.2725	33.87	Pk	38.0	-22.3	-95.2	-45.63	-13	-32.63	H
14.6175	32.94	Pk	39.7	-18.7	-95.2	-41.26	-13	-28.26	V
14.6705	32.97	Pk	39.8	-18.5	-95.2	-40.93	-13	-27.93	H
Mid Channel, 3840MHz									
7.5360	37.48	Pk	35.8	-26.6	-95.2	-48.52	-13	-35.52	H
7.6450	36.67	Pk	35.8	-26.3	-95.2	-49.03	-13	-36.03	V
11.4275	34.71	Pk	38.2	-22.3	-95.2	-44.59	-13	-31.59	H
11.5245	34.79	Pk	38.3	-22.2	-95.2	-44.31	-13	-31.31	V
14.1380	34.29	Pk	38.7	-18.0	-95.2	-40.21	-13	-27.21	H
14.3640	33.17	Pk	39.2	-18.9	-95.2	-41.73	-13	-28.73	V
High Channel, 3930MHz									
7.7775	36.96	Pk	35.9	-26.6	-95.2	-48.94	-13	-35.94	H
7.7775	36.6	Pk	35.9	-26.6	-95.2	-49.3	-13	-36.30	V
11.493	34.38	Pk	38.2	-21.8	-95.2	-44.42	-13	-31.42	H
11.5335	34.21	Pk	38.3	-22.1	-95.2	-44.79	-13	-31.79	V
15.467	34.43	Pk	40.4	-18.4	-95.2	-38.77	-13	-25.77	V
15.5095	33.41	Pk	40.4	-17.5	-95.2	-38.89	-13	-25.89	H

10.6. FIELD STRENGTH OF SPURIOUS RADIATION, ANT 8

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r01

All tests above 1GHz were done with a Resolution Bandwidth of 1MHz, and a Video Bandwidth of 3MHz.

RESULTS

10.6.1. LTE BAND 48

LIMITS

FCC: §96.41
(e) 3.5 GHz Emissions and Interference Limits—
(2) Additional protection levels. Notwithstanding paragraph (d)(1) of this section, the conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed −40dBm/MHz.

QPSK LTE BAND 48 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	5/26/2022
Test Engineer:	27661
Configuration:	EUT only
Mode	LTE 48 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	T1792 3400-3800MHz BRF	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 3560MHz										
7.1417	33.74	RMS	35.6	-27.0	.6	-95.2	-52.26	-40	-12.26	V
7.1456	33.3	RMS	35.6	-27.0	.6	-95.2	-52.7	-40	-12.7	H
10.661	32.5	RMS	37.9	-24.0	.6	-95.2	-48.2	-40	-8.20	V
10.6724	32.16	RMS	37.9	-24.1	.6	-95.2	-48.64	-40	-8.64	H
14.2049	30.55	RMS	38.9	-19.9	.7	-95.2	-44.95	-40	-4.95	V
14.2252	30.16	RMS	38.8	-19.9	.8	-95.2	-45.34	-40	-5.34	H
Mid Channel, 3625MHz										
7.2457	33.41	RMS	35.6	-26.7	.6	-95.2	-52.29	-40	-12.29	H
7.2562	32.74	RMS	35.6	-26.8	.6	-95.2	-53.06	-40	-13.06	V
10.8870	32.2	RMS	38.0	-23.9	.5	-95.2	-48.40	-40	-8.40	H
10.9037	30.85	RMS	37.9	-23.7	.6	-95.2	-49.55	-40	-9.55	V
14.5151	30.62	RMS	39.6	-19.9	.8	-95.2	-44.08	-40	-4.08	H
14.5292	30.23	RMS	39.6	-19.8	.8	-95.2	-44.37	-40	-4.37	V
High Channel, 3690MHz										
7.402088	33.19	RMS	35.7	-26.8	.6	-95.2	-52.51	-40	-12.51	H
7.406053	31.87	RMS	35.7	-26.8	.6	-95.2	-53.83	-40	-13.83	V
11.061478	31.47	RMS	37.9	-23.4	.6	-95.2	-48.63	-40	-8.63	V
11.078222	31.34	RMS	37.8	-23.4	.7	-95.2	-48.76	-40	-8.76	H
14.750391	30.68	RMS	39.7	-20.1	.8	-95.2	-44.12	-40	-4.12	H
14.788725	30.32	RMS	39.7	-19.9	.9	-95.2	-44.18	-40	-4.18	V

10.6.2. 5G NR n77 (FCC Part 27 3450-3550MHz)

LIMITS

FCC: §27.53
Emission limits
(n) 3.45 GHz Service. The following emission limits apply to stations transmitting in the 3450-3550 MHz band:
(2) For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.

BPSK 5G NR n77 (100.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N77 BPSK 100MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	208398 3400-3800MHz BRF	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 3500MHz										
6.9958	28.71	RMS	35.7	-27.3	.5	-95.2	-57.59	-13	-44.59	H
6.9958	28.47	RMS	35.7	-27.3	.5	-95.2	-57.83	-13	-44.83	V
10.449	26.82	RMS	37.7	-24.5	.6	-95.2	-54.58	-13	-41.58	H
10.5261	26.98	RMS	37.8	-24.3	.6	-95.2	-54.12	-13	-41.12	V
14.0599	24.52	RMS	38.6	-20.2	.8	-95.2	-51.48	-13	-38.48	V
14.1331	24.00	RMS	38.7	-19.5	.8	-95.2	-51.20	-13	-38.20	H

10.6.3. 5G NR n77 (FCC Part 27 3700-3980MHz)

LIMITS

FCC: §27.53
(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.

BPSK 5G NR n77 (100.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	N77 BPSK 100MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 3750MHz									
7.3650	35.53	Pk	35.7	-25.6	-95.2	-49.57	-13	-36.57	V
7.4630	37.07	Pk	35.8	-26.8	-95.2	-49.13	-13	-36.13	H
11.048	35.23	Pk	37.9	-22.9	-95.2	-44.97	-13	-31.97	H
11.1180	36.01	Pk	37.9	-22.7	-95.2	-43.99	-13	-30.99	V
15.0730	33.39	Pk	39.7	-19.5	-95.2	-41.61	-13	-28.61	V
15.1140	33.84	Pk	39.7	-19.3	-95.2	-40.96	-13	-27.96	H
Mid Channel, 3840MHz									
7.5990	35.63	Pk	35.8	-26.1	-95.2	-49.87	-13	-36.87	V
7.6450	36.1	Pk	35.8	-26.3	-95.2	-49.6	-13	-36.60	H
11.4630	35.57	Pk	38.2	-22.4	-95.2	-43.83	-13	-30.83	H
11.5360	34.24	Pk	38.3	-22.0	-95.2	-44.66	-13	-31.66	V
15.4525	33.59	Pk	40.4	-18.5	-95.2	-39.71	-13	-26.71	H
15.5275	32.75	Pk	40.5	-17.5	-95.2	-39.45	-13	-26.45	V
High Channel, 3930MHz									
7.7620	37.6	Pk	35.9	-26.7	-95.2	-48.4	-13	-35.40	V
7.7625	37.29	Pk	35.9	-26.7	-95.2	-48.71	-13	-35.71	H
11.8555	33.4	Pk	38.5	-21.3	-95.2	-44.6	-13	-31.6	V
11.8850	34.03	Pk	38.5	-21.6	-95.2	-44.27	-13	-31.27	H
15.5080	33.43	Pk	40.5	-17.5	-95.2	-38.77	-13	-25.77	H
15.5265	32.03	Pk	40.5	-17.5	-95.2	-40.17	-13	-27.17	V

10.7. FIELD STRENGTH OF SPURIOUS RADIATION, ANT 9

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r01

All tests above 1GHz were done with a Resolution Bandwidth of 1MHz, and a Video Bandwidth of 3MHz.

RESULTS

10.7.1. LTE BAND 48

LIMITS

FCC: §96.41

(b) 3.5 GHz Emissions and Interference Limits—(2) Additional protection levels. Notwithstanding paragraph (d)(1) ofthis section, the conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed −40dBm/MHz.

QPSK LTE BAND 48 (20.0MHZ BANDWIDTH)

Project #:	14040863
Date:	5/26/2022
Test Engineer:	27661
Configuration:	EUT only
Mode	LTE48 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	208398 3400-3800MHz BRF	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 3560MHz										
7.1263	34.05	RMS	35.6	-26.9	.5	-95.2	-51.95	-40	-11.95	V
7.1298	34.66	RMS	35.6	-27.0	.5	-95.2	-51.44	-40	-11.44	H
10.6847	32.18	RMS	38.0	-24.3	.6	-95.2	-48.72	-40	-8.72	H
10.6861	31.81	RMS	37.9	-24.3	.6	-95.2	-49.19	-40	-9.19	V
14.2485	30.79	RMS	39.0	-20.2	.8	-95.2	-44.81	-40	-4.81	H
14.2503	29.96	RMS	39.0	-20.1	.8	-95.2	-45.54	-40	-5.54	V
Mid Channel, 3625MHz										
7.274306	35.18	RMS	35.6	-26.7	.5	-95.2	-50.62	-40	-10.62	H
7.295897	32.4	RMS	35.7	-26.4	.6	-95.2	-52.9	-40	-12.9	V
10.850419	31.36	RMS	38	-23.6	.5	-95.2	-48.94	-40	-8.94	V
10.860994	31.39	RMS	37.9	-23.8	.4	-95.2	-49.31	-40	-9.31	H
14.500997	30.3	RMS	39.5	-20.1	.8	-95.2	-44.7	-40	-4.7	H
14.599256	29.68	RMS	39.8	-19.6	.9	-95.2	-44.42	-40	-4.42	V
High Channel, 3690MHz										
7.3580	32.52	RMS	35.7	-26.7	.7	-95.2	-52.98	-40	-12.98	H
7.3607	32.69	RMS	35.7	-26.7	.7	-95.2	-52.81	-40	-12.81	V
11.0650	32.20	RMS	37.9	-23.5	.6	-95.2	-48	-40	-8.00	H
11.0694	31.71	RMS	37.9	-23.5	.6	-95.2	-48.49	-40	-8.49	V
14.7345	29.29	RMS	39.8	-19.7	.9	-95.2	-44.91	-40	-4.91	V
14.7464	30.40	RMS	39.7	-20.0	.8	-95.2	-44.30	-40	-4.30	H

10.7.2. 5G NR n77 (FCC Part 27 3450-3550MHz)

LIMITS

FCC: §27.53
Emission limits
(n) 3.45 GHz Service. The following emission limits apply to stations transmitting in the 3450-3550 MHz band:
(2) For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.

BPSK 5G NR n77 (100.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	n77 BPSK 100MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB	208398 3400-3800MHz BRF	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 3500MHz										
6.8628	28.14	RMS	35.8	-26.9	.6	-95.2	-57.56	-13	-44.56	H
6.9469	28.98	RMS	35.7	-27.2	.5	-95.2	-57.22	-13	-44.22	V
10.6015	26.74	RMS	37.9	-24.2	.6	-95.2	-54.16	-13	-41.16	V
10.6728	26.95	RMS	37.9	-24.1	.6	-95.2	-53.85	-13	-40.85	H
14.1370	23.70	RMS	38.7	-19.4	.8	-95.2	-51.4	-13	-38.4	H
14.1639	24.03	RMS	38.8	-19.9	.7	-95.2	-51.57	-13	-38.57	V

10.7.3. 5G NR n77 (FCC Part 27 3700-3980MHz)

LIMITS

FCC: §27.53
(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.

BPSK 5G NR n77 (100.0MHZ BANDWIDTH)

Project #:	14040863
Date:	3/1/2022
Test Engineer:	24943
Configuration:	EUT only
Mode	n77 BPSK 100MHz
Chamber #:	Chamber A

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 3750MHz									
7.5720	36.47	Pk	35.8	-26.4	-95.2	-49.33	-13	-36.33	H
7.5865	35.86	Pk	35.7	-26.2	-95.2	-49.84	-13	-36.84	V
11.1375	34.77	Pk	37.9	-22.5	-95.2	-45.03	-13	-32.03	H
11.1485	33.71	Pk	37.9	-22.7	-95.2	-46.29	-13	-33.29	V
14.9760	33.57	Pk	39.7	-19.1	-95.2	-41.03	-13	-28.03	V
15.0010	32.86	Pk	39.7	-19.3	-95.2	-41.94	-13	-28.94	H
Mid Channel, 3840MHz									
7.7745	37.40	Pk	35.8	-26.6	-95.2	-48.60	-13	-35.60	H
7.8435	36.23	Pk	35.8	-26.4	-95.2	-49.57	-13	-36.57	V
11.1000	34.93	Pk	37.9	-23.1	-95.2	-45.47	-13	-32.47	V
11.2105	34.64	Pk	37.9	-22.1	-95.2	-44.76	-13	-31.76	H
15.5000	33.17	Pk	40.5	-17.7	-95.2	-39.23	-13	-26.23	H
15.5205	33.01	Pk	40.5	-17.5	-95.2	-39.19	-13	-26.19	V
High Channel, 3930MHz									
7.834	35.94	Pk	35.9	-26.4	-95.2	-49.76	-13	-36.76	V
7.8885	37.23	Pk	35.9	-26.2	-95.2	-48.27	-13	-35.27	H
11.1275	34.14	Pk	37.9	-22.5	-95.2	-45.66	-13	-32.66	V
11.1355	35.28	Pk	37.9	-22.5	-95.2	-44.52	-13	-31.52	H
15.508	33.01	Pk	40.5	-17.5	-95.2	-39.19	-13	-26.19	H
15.5405	32.07	Pk	40.5	-17.8	-95.2	-40.43	-13	-27.43	V

11. SETUP PHOTOS

Please refer to 14040863-EP1V1 for setup photos.

END OF REPORT