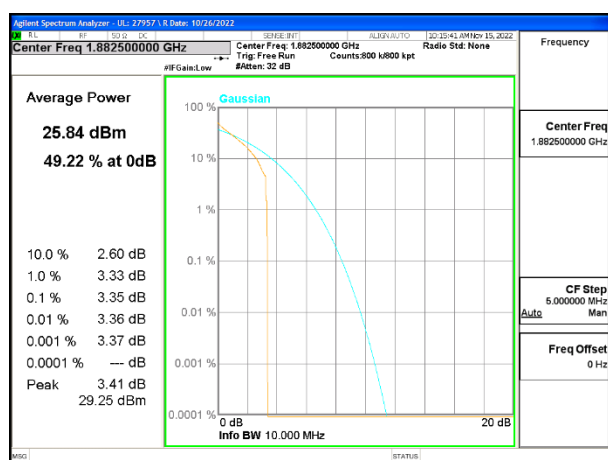


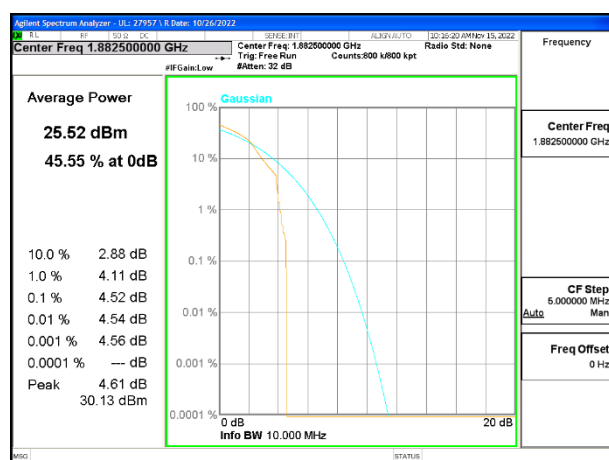
LTE B25 10MHz QPSK Middle Channel



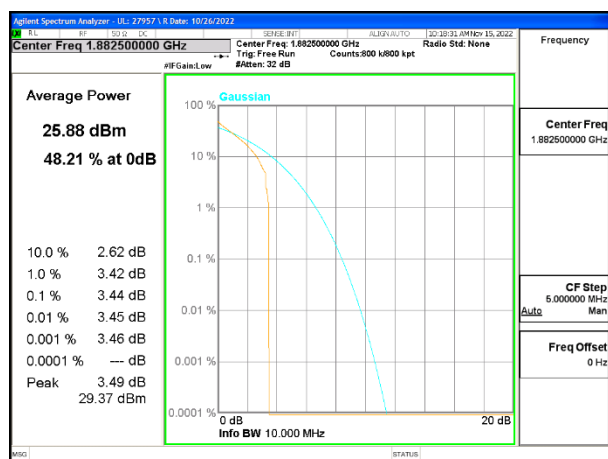
LTE B25 10MHz 16QAM Middle Channel



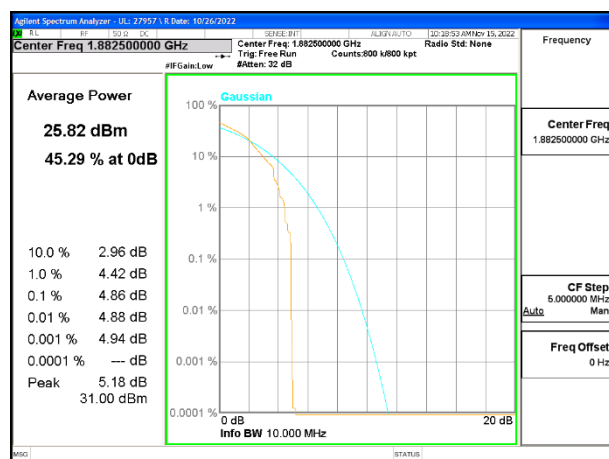
LTE B25 15MHz QPSK Middle Channel



LTE B25 15MHz 16QAM Middle Channel



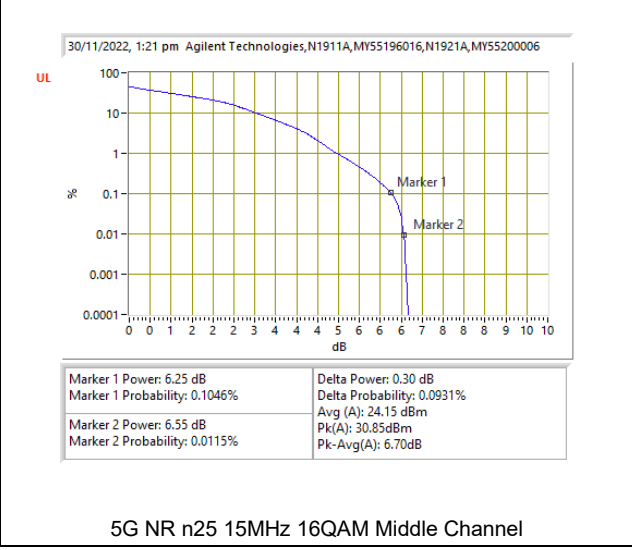
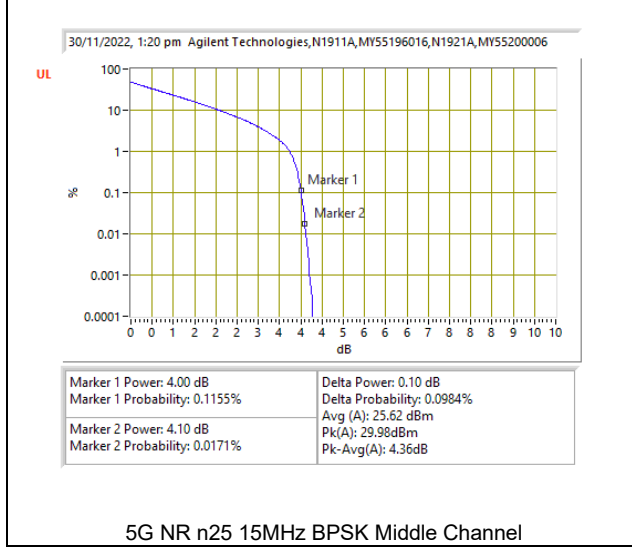
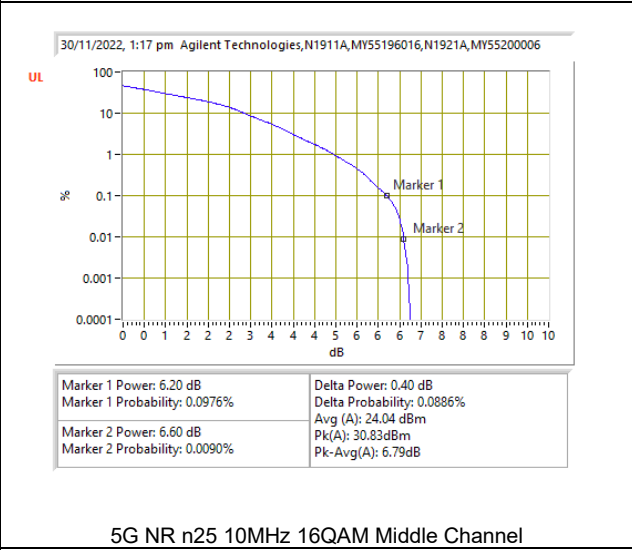
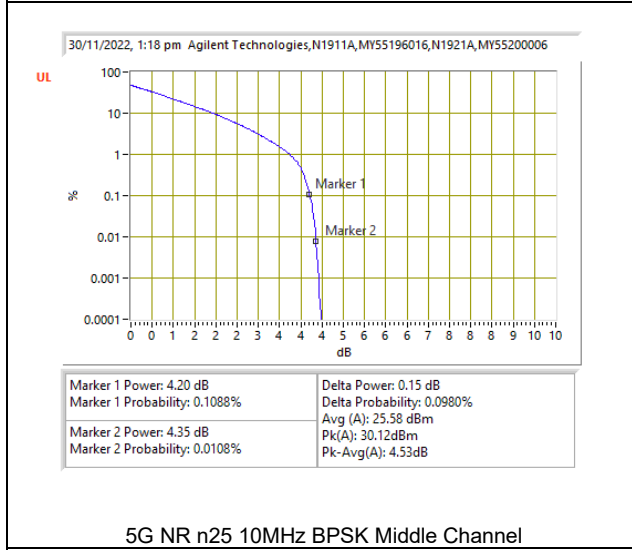
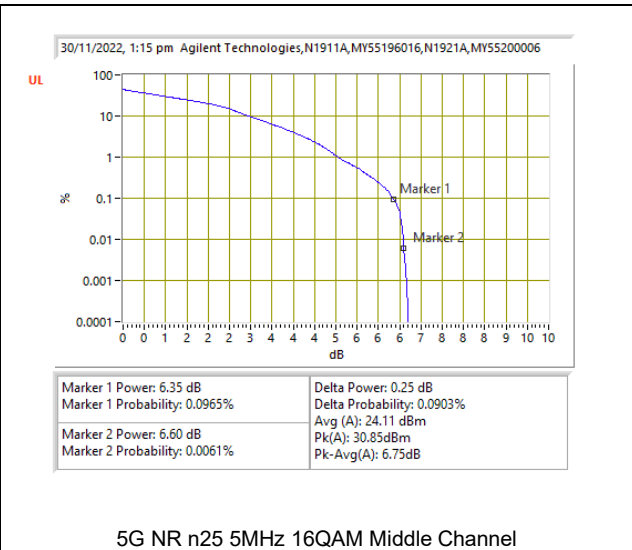
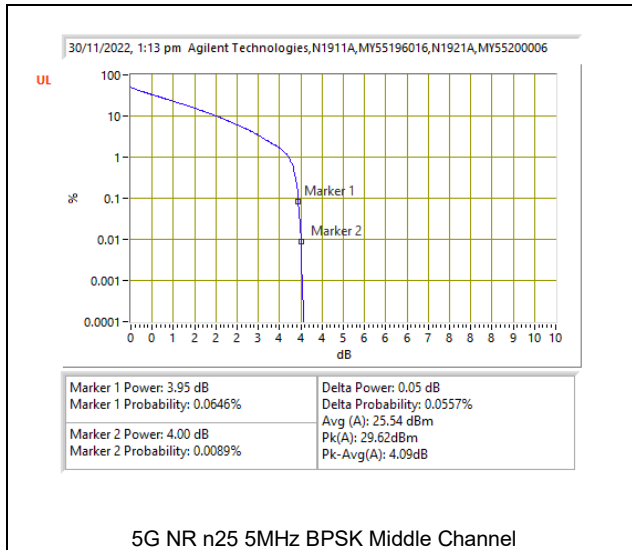
LTE B25 20MHz QPSK Middle Channel

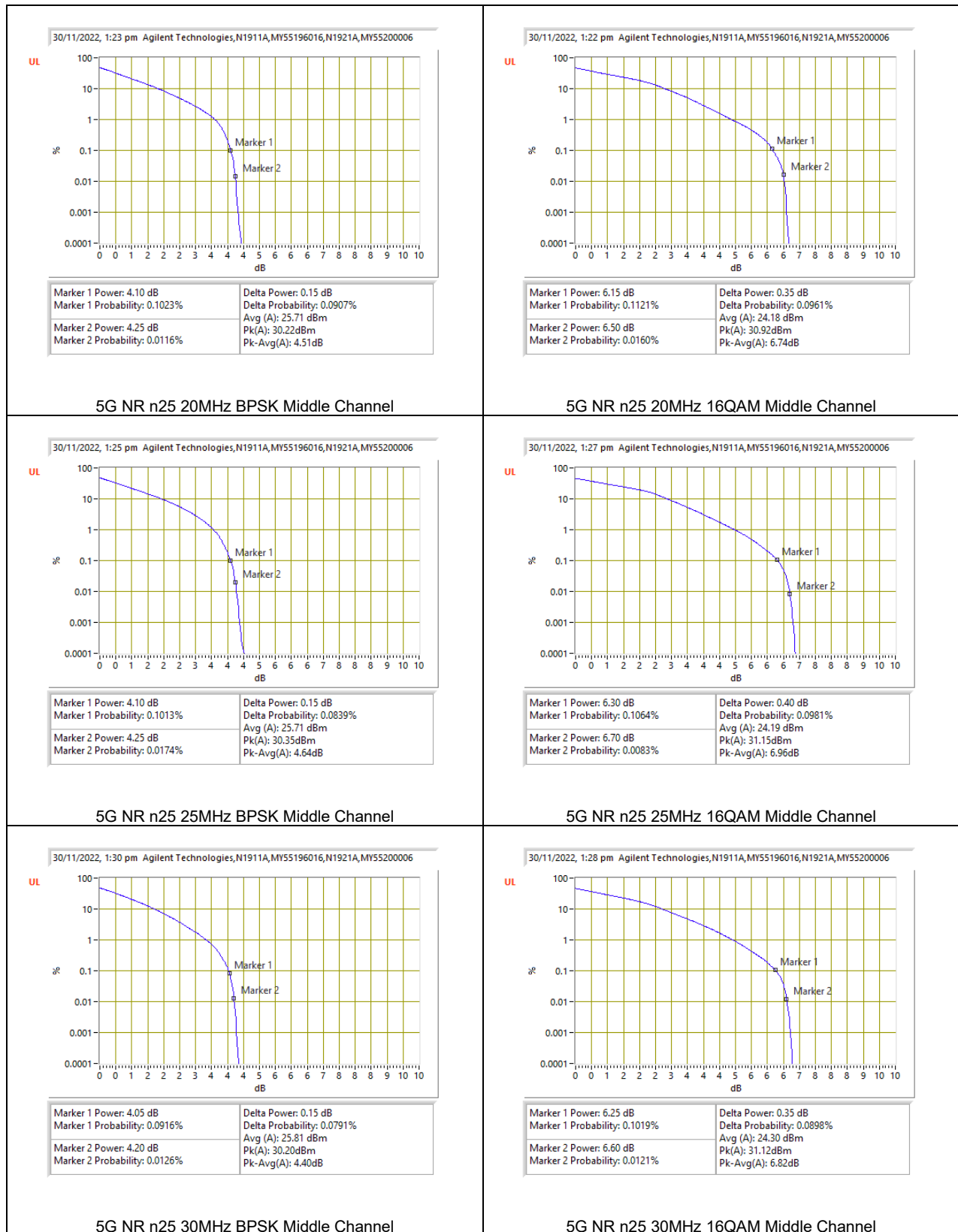


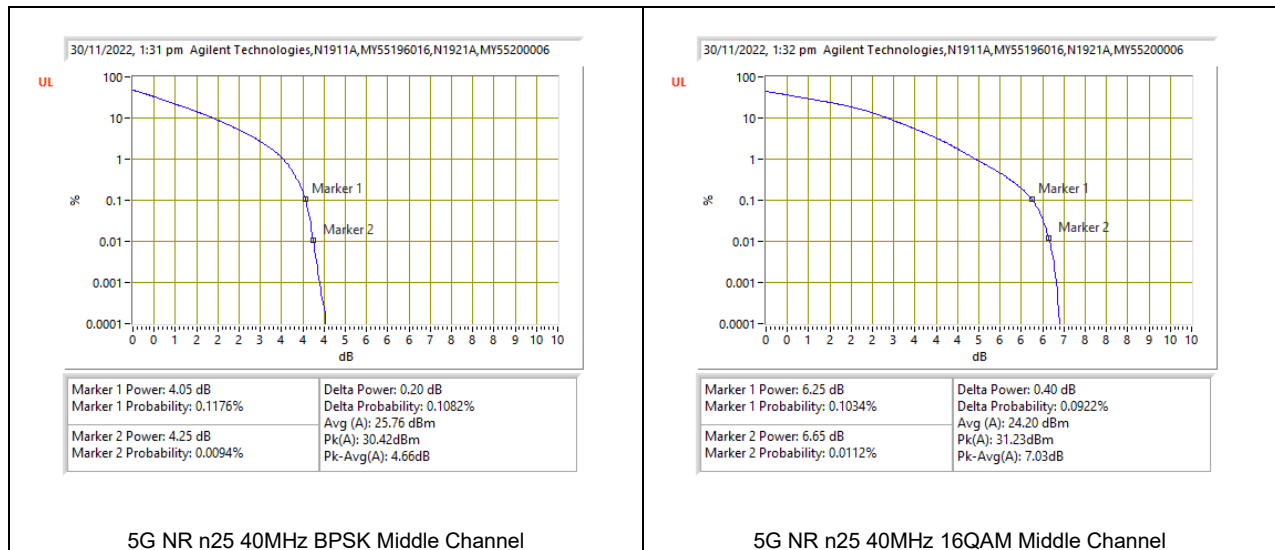
LTE B25 20MHz 16QAM Middle Channel

5G NR n25

Test Engineer ID:	27342	Test Date:	11/30/2022
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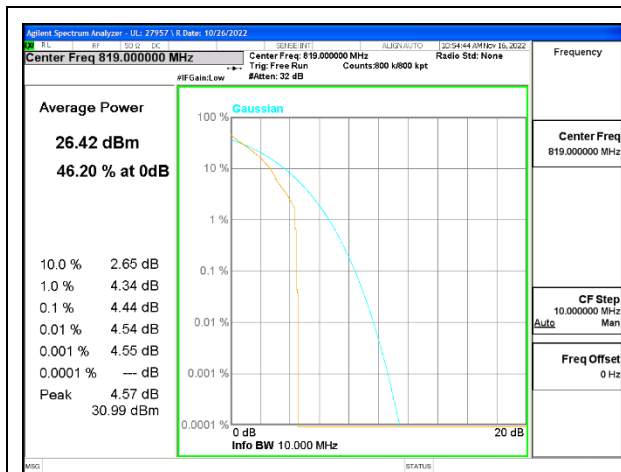




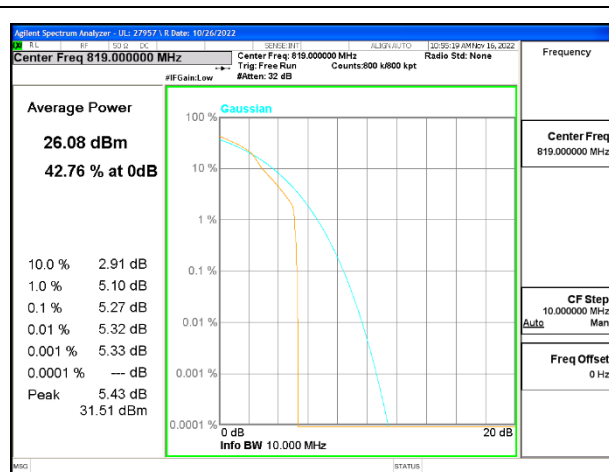


9.5.7. LTE BAND 26 AND 5G NR n26 (PART 90S)

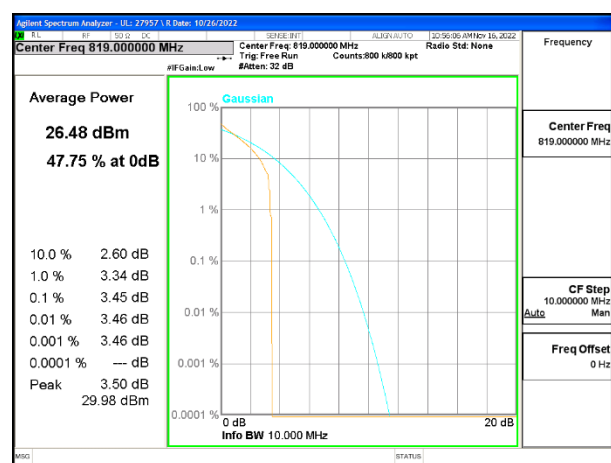
LTE BAND 26



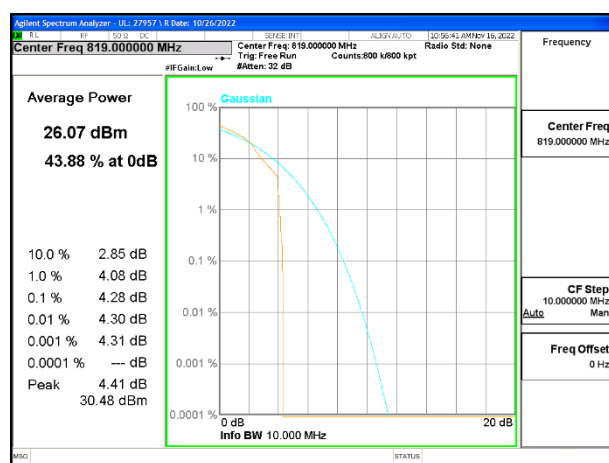
LTE B26 1.4MHz QPSK Middle Channel



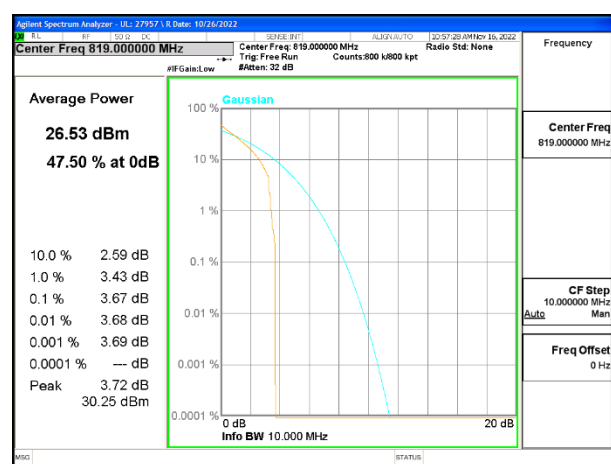
LTE B26 1.4MHz 16QAM Middle Channel



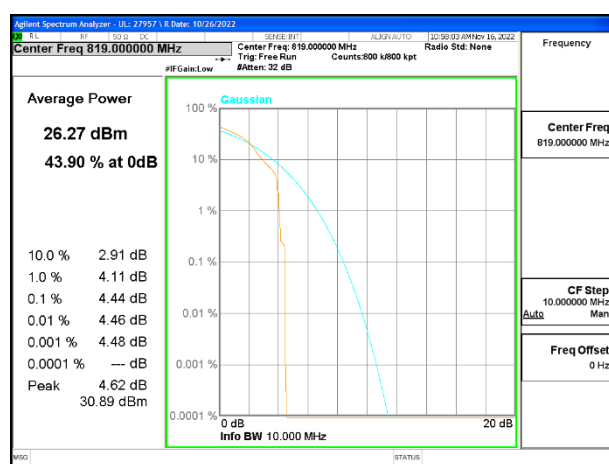
LTE B26 3MHz QPSK Middle Channel



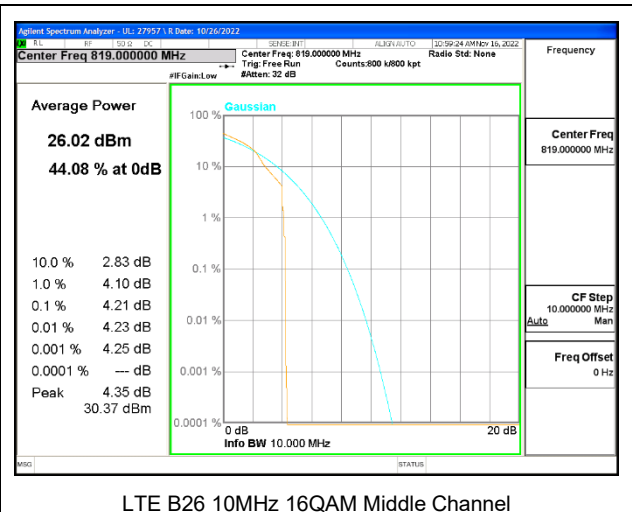
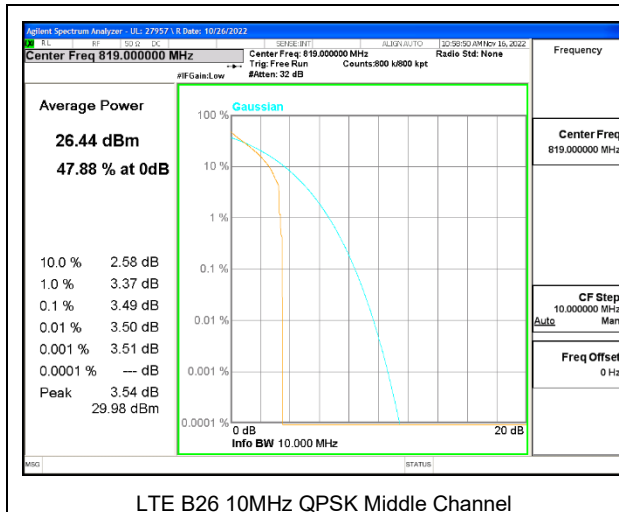
LTE B26 3MHz 16QAM Middle Channel



LTE B26 5MHz QPSK Middle Channel



LTE B26 5MHz 16QAM Middle Channel



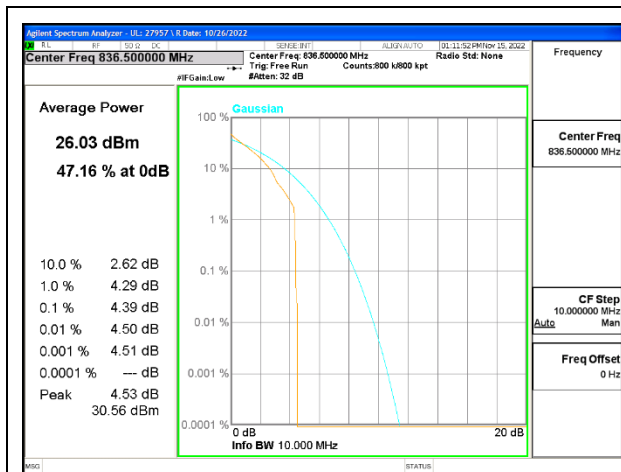
5G NR n26

Test Engineer ID:	27342	Test Date:	11/30/2022
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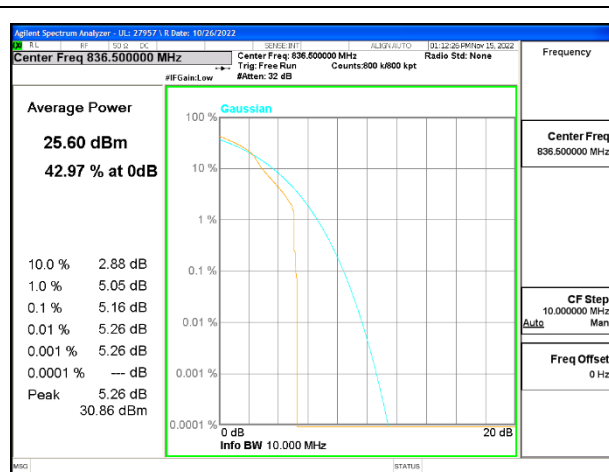


9.5.8. LTE BAND 26 AND 5G NR n26 (PART 22)

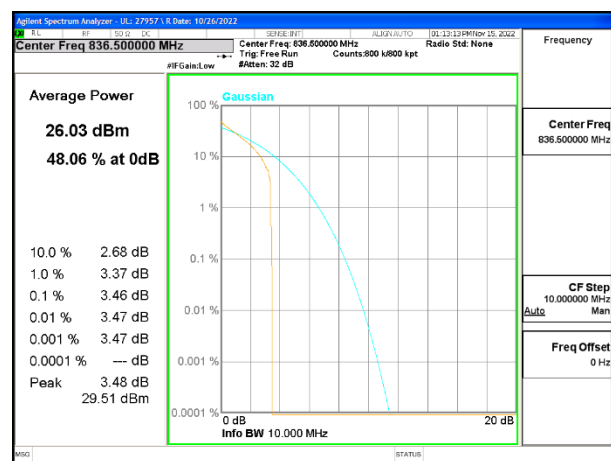
LTE BAND 26



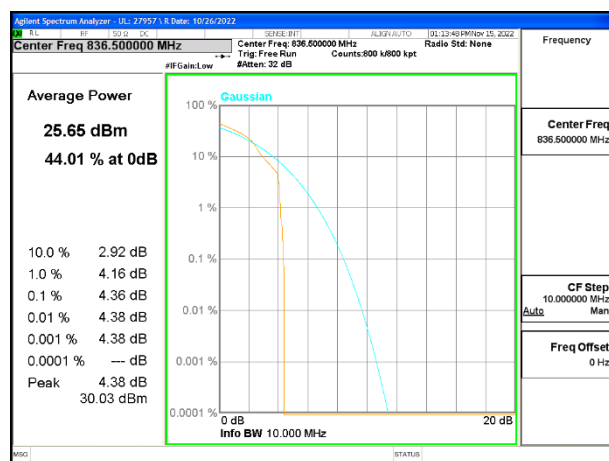
LTE B26 1.4MHz QPSK Middle Channel



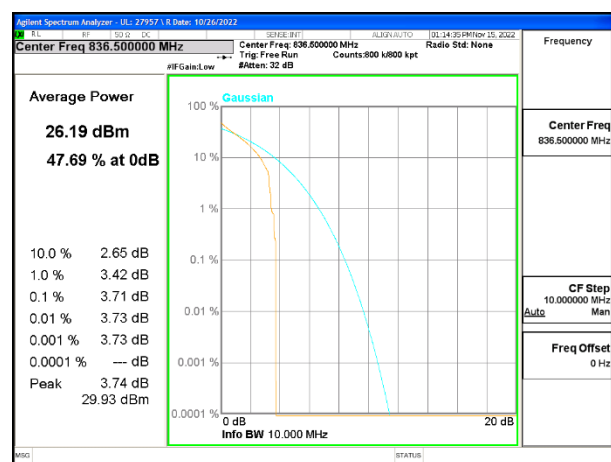
LTE B26 1.4MHz 16QAM Middle Channel



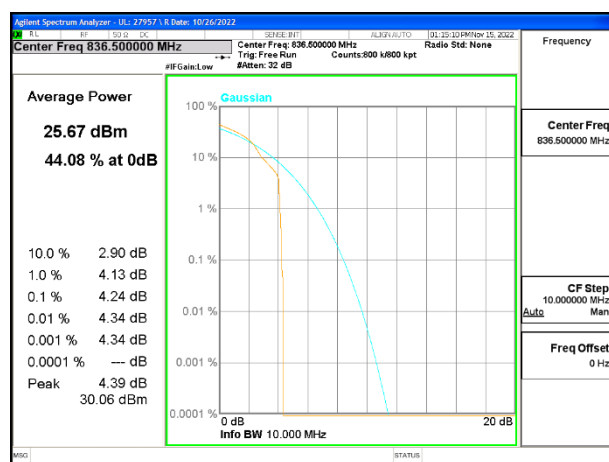
LTE B26 3MHz QPSK Middle Channel



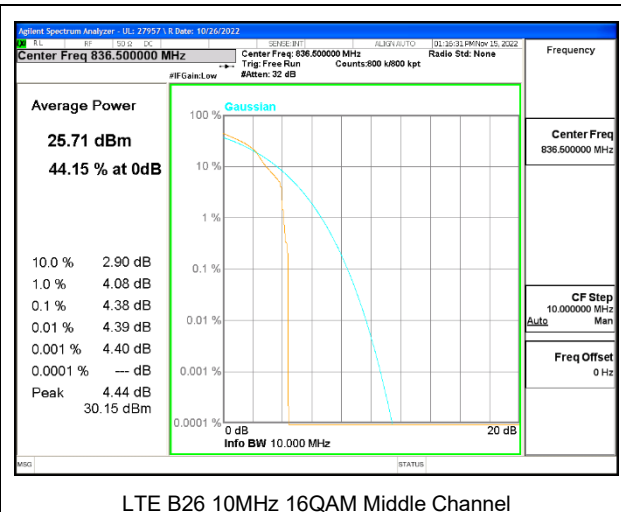
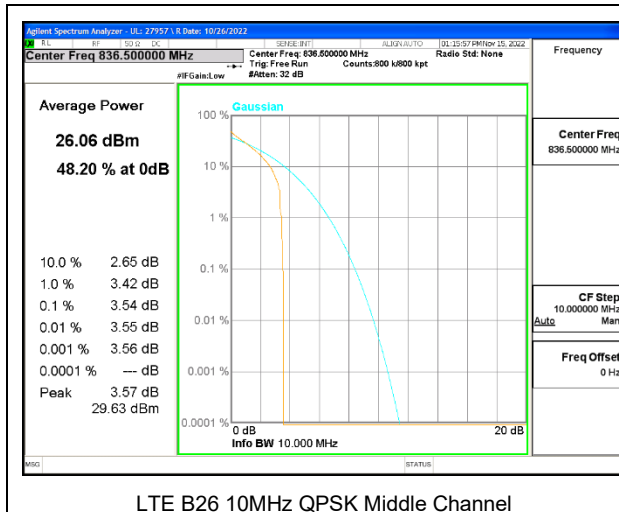
LTE B26 3MHz 16QAM Middle Channel



LTE B26 5MHz QPSK Middle Channel

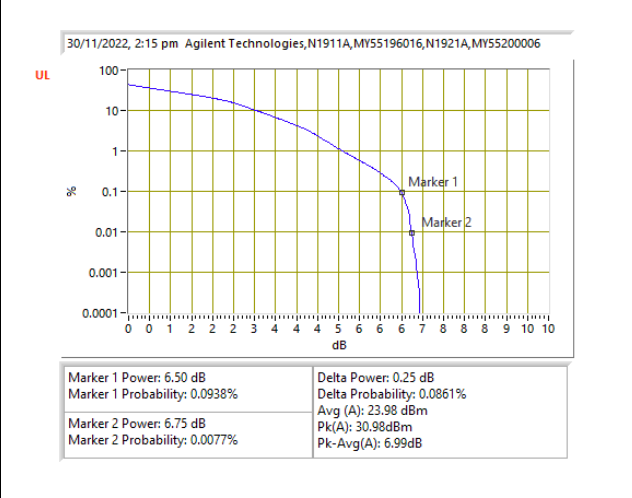
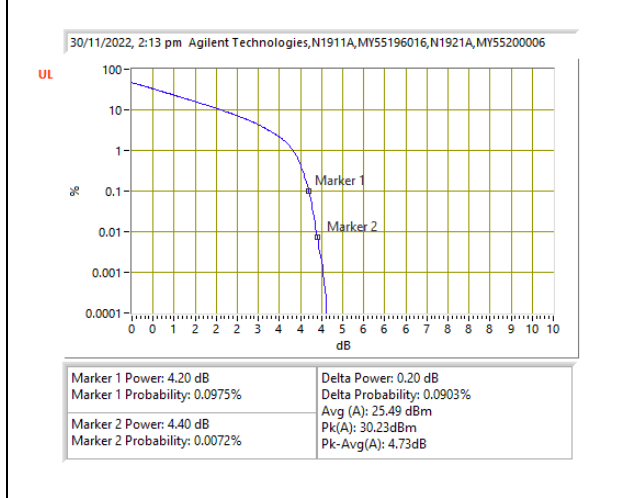
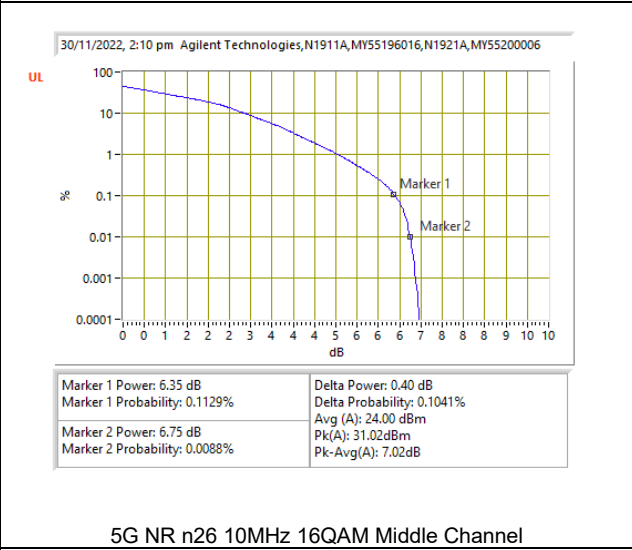
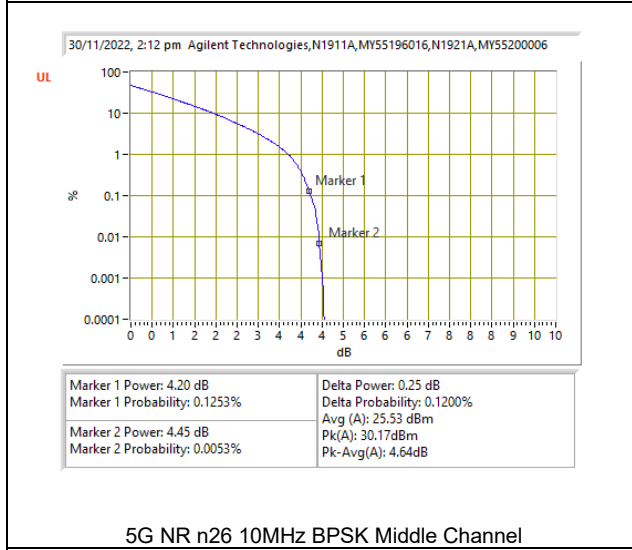
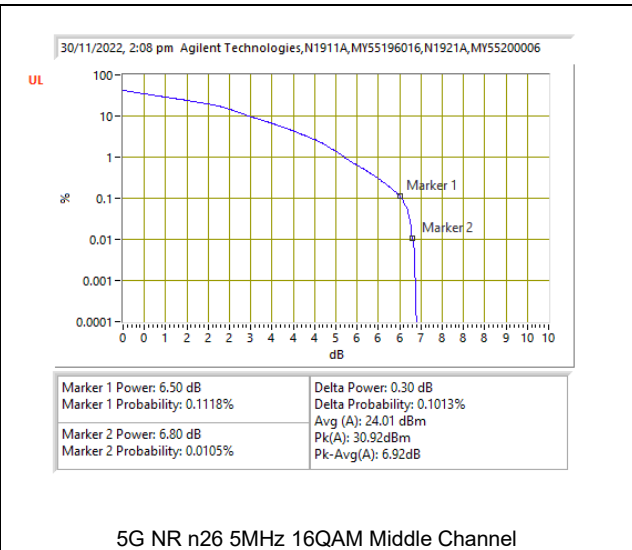
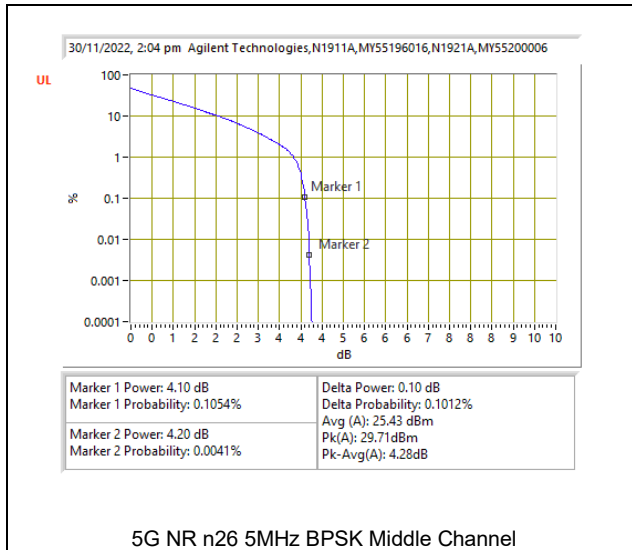


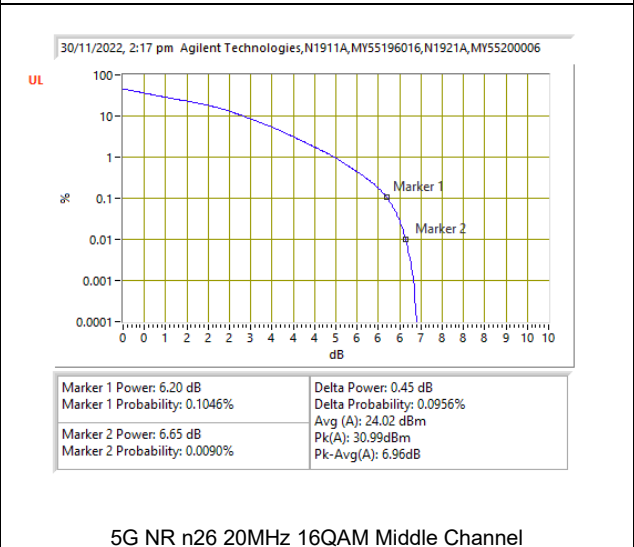
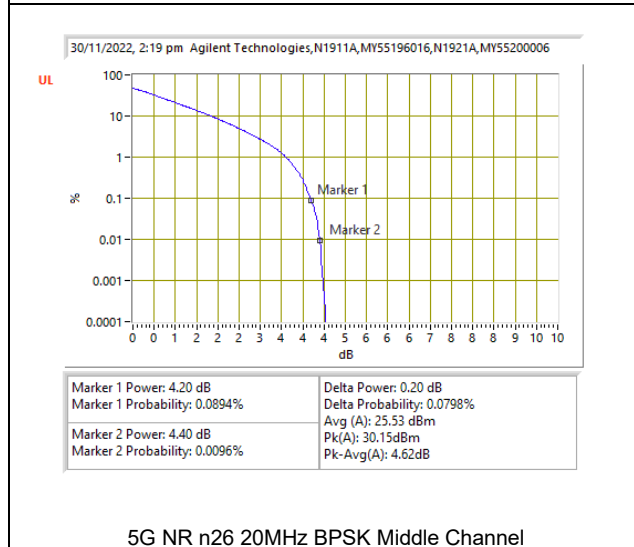
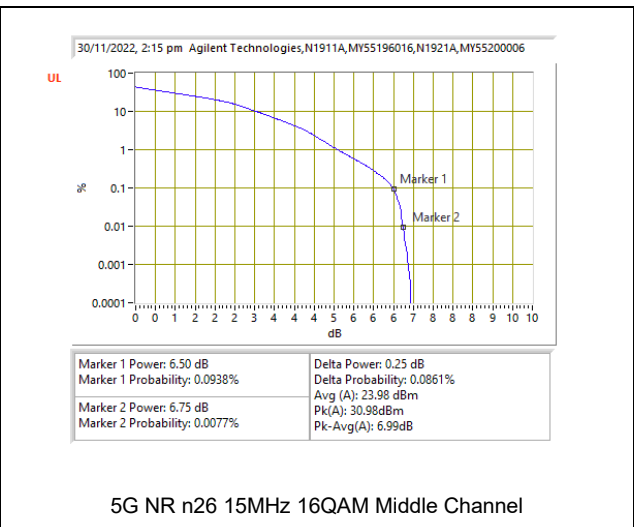
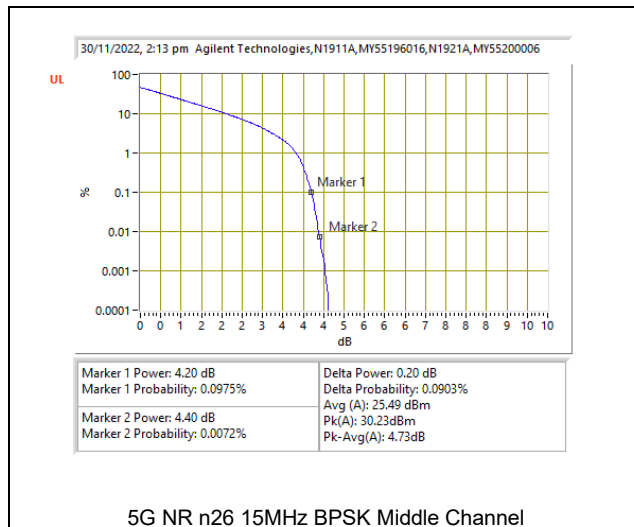
LTE B26 5MHz 16QAM Middle Channel



5G NR n26

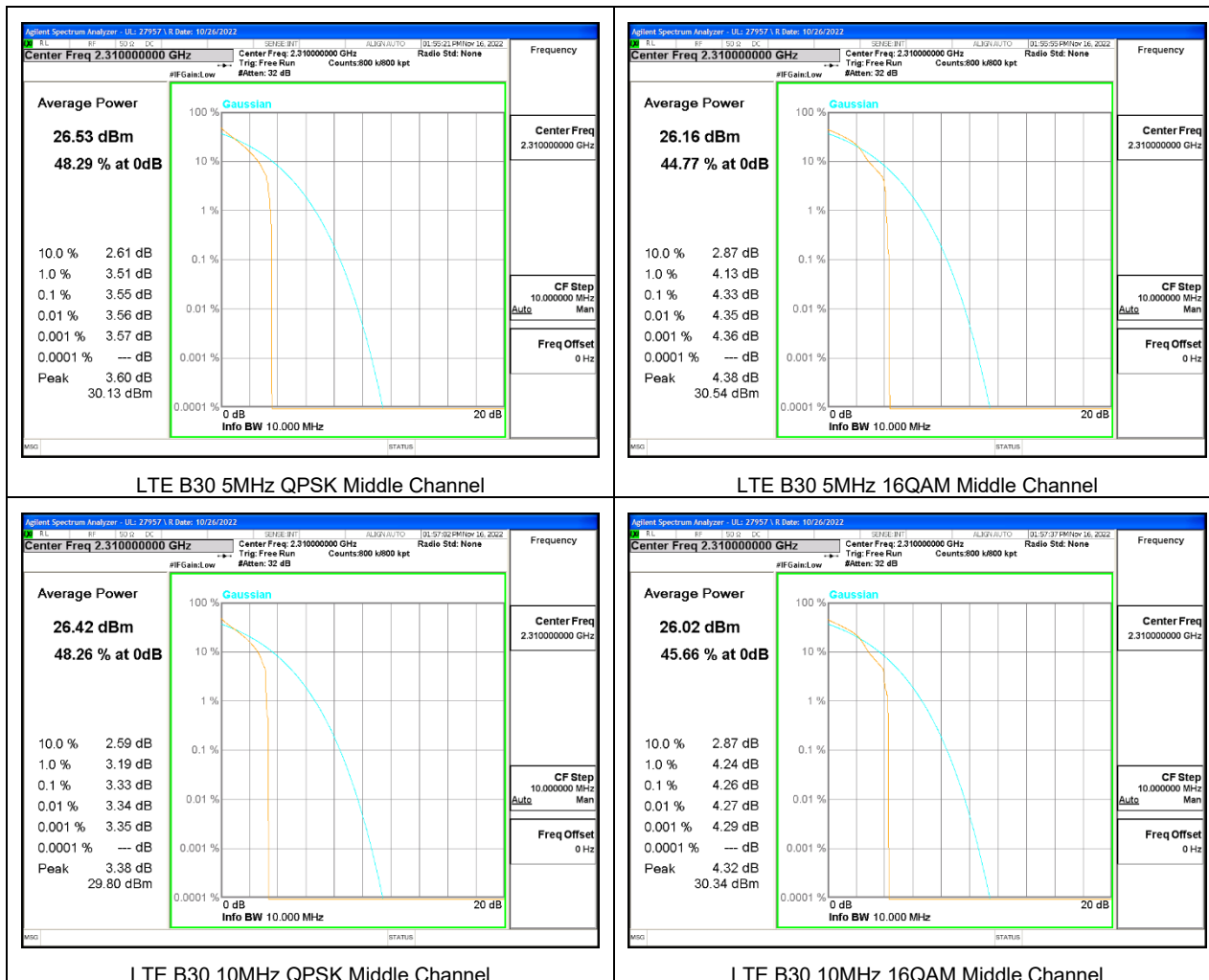
Test Engineer ID:	27432	Test Date:	11/30/2022
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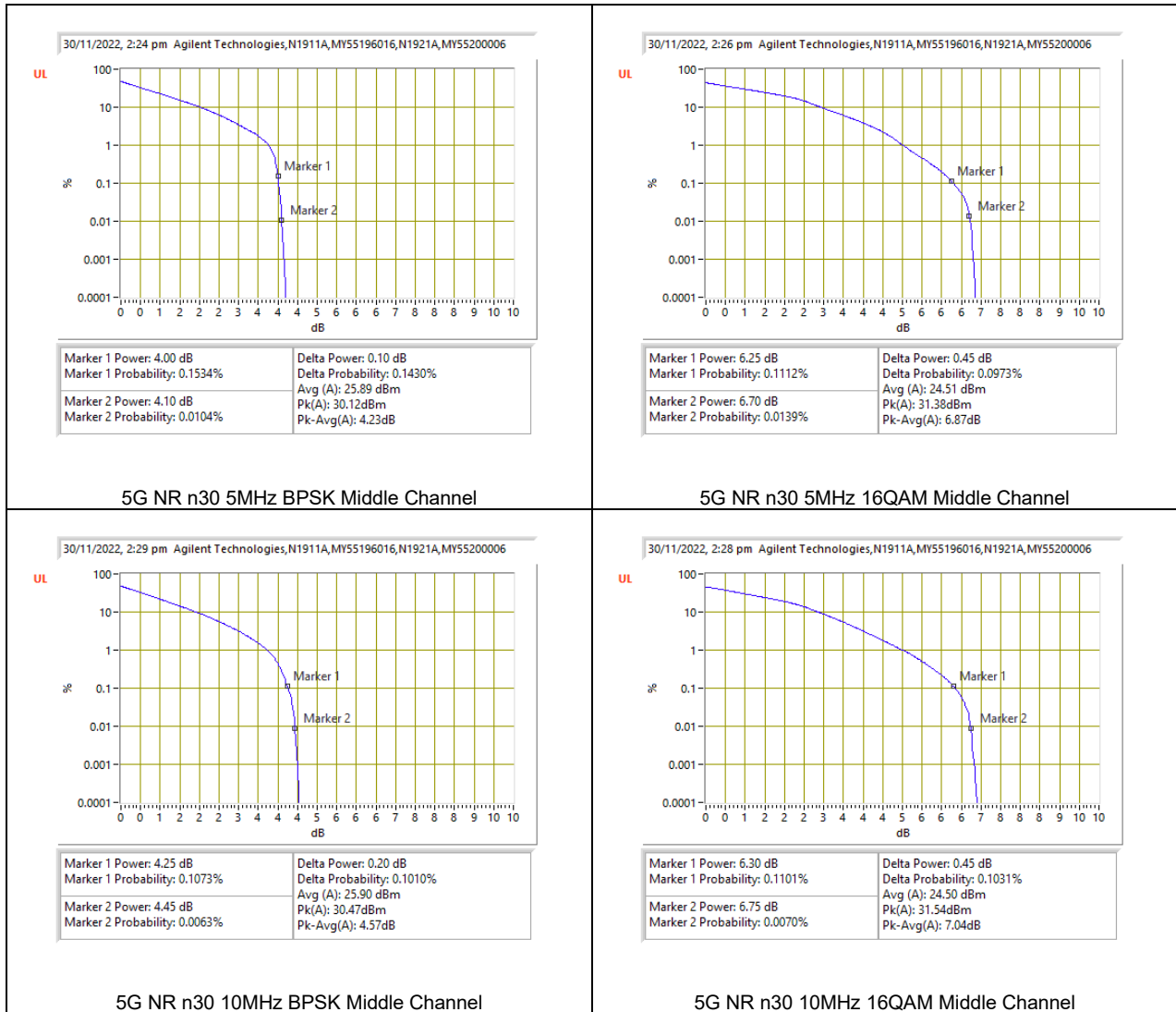
9.5.9. LTE BAND 30 AND 5G NR n30

LTE BAND 30



5G NR n30

Test Engineer ID:	27342	Test Date:	11/30/2022
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9.5.10. LTE BAND 41 AND 5G NR n41

Test Engineer ID:	27957	Test Date:	11/16/2022
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Band	Bandwidth (MHz)	Frequency (MHz)	RB Allocation	RB OffSet	Modulation	Conducted Power (dBm)		Peak-to-Average Power Ratio (dB)
						Peak	Average	
Band 41	5MHz	2593.0	25	0	QPSK	32.21	21.54	*3.68
					16QAM	33.25	20.6	*5.66
	10MHz		50	0	QPSK	33.22	21.56	*4.67
					16QAM	33.40	20.6	*5.81
	15MHz		75	0	QPSK	33.25	21.49	*4.77
					16QAM	33.29	20.51	*5.79
20MHz	100	0	QPSK	33.19	21.44	*4.76		
			16QAM	33.24	20.48	*5.77		
5G NR Band n41	10MHz	2593.0	24	0	BPSK	32.43	28.87	3.56
					16QAM	33.13	27.38	5.75
	15MHz		36	0	BPSK	32.51	29.08	3.43
					16QAM	41.63	34.9	6.73
	20MHz		50	0	BPSK	32.47	28.96	3.51
					16QAM	33.51	27.96	5.55
	30MHz		75	0	BPSK	32.17	28.64	3.53
					16QAM	33.15	27.35	5.80
	40MHz		100	0	BPSK	32.81	29.6	3.21
					16QAM	33.16	27.57	5.59
	50MHz		128	0	BPSK	32.63	29.36	3.27
					16QAM	33.26	27.79	5.47
	60MHz		162	0	BPSK	33.34	29.96	3.38
					16QAM	33.36	28.02	5.34
	70MHz		180	0	BPSK	32.56	28.93	3.63
					16QAM	33.15	27.35	5.80
	80MHz		216	0	BPSK	32.23	28.9	3.33
					16QAM	33.17	27.63	5.54
90MHz	243	0	BPSK	32.60	29.38	3.22		
			16QAM	32.77	27.24	5.53		
100MHz	270	0	BPSK	32.00	28.8	3.20		
			16QAM	32.77	27.31	5.46		

Duty Cycle Correction Factor (dB) = 6.99
 Peak-to-Average Power Ratio= Peak Reading - Average Reading - Duty Cycle Correction Factor

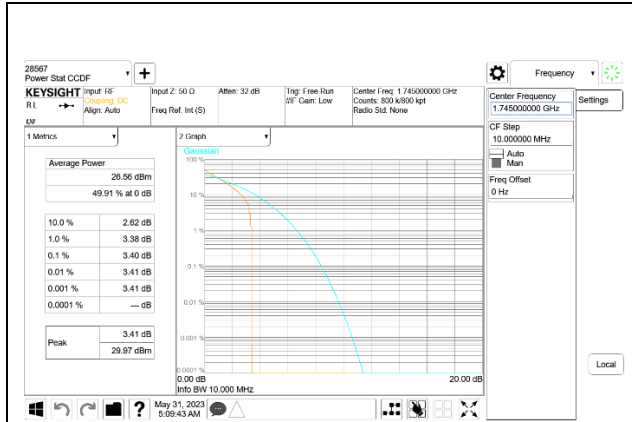
9.5.11. LTE BAND 48 AND 5G NR n48

Test Engineer ID:	28567	Test Date:	5/30/2023
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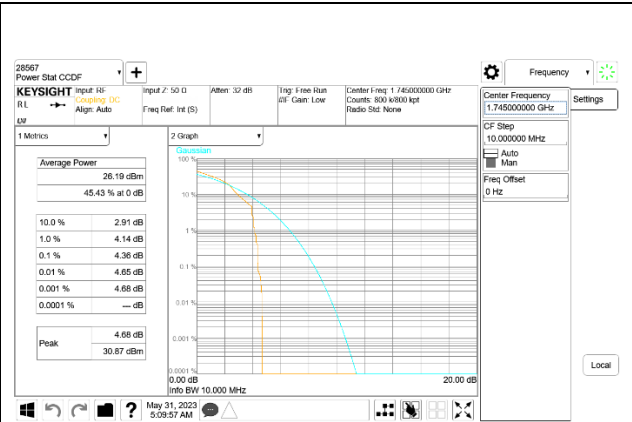
Band	Bandwidth (MHz)	Frequency (MHz)	RB Allocation	RB OffSet	Modulation	Conducted Power (dBm)		Peak-to-Average Power Ratio (dB)		
						Peak	Average			
Band 48	5MHz	3625.0	25	0	QPSK	29.56	19.00	*3.57		
					16QAM	30.43	18.9	*4.54		
	10MHz		50	0	QPSK	29.75	19.09	*3.67		
					16QAM	30.50	18.98	*4.53		
	15MHz		75	0	QPSK	29.51	18.84	*3.68		
					16QAM	30.28	18.75	*4.54		
	20MHz		100	0	QPSK	29.40	18.84	*3.57		
					16QAM	30.00	18.72	*4.29		
5G NR n48	10MHz	3625.0	24	0	BPSK	30.75	26.26	4.49		
					16QAM	31.38	24.7	6.68		
	15MHz		36	0	BPSK	30.34	25.97	4.37		
					16QAM	31.64	24.99	6.65		
	20MHz		50	0	BPSK	30.61	26.28	4.33		
					16QAM	31.51	24.82	6.69		
	30MHz		75	0	BPSK	30.61	26.44	4.17		
					16QAM	31.63	24.96	6.67		
	40MHz		100	0	BPSK	30.46	26.36	4.10		
					16QAM	31.54	24.92	6.62		
	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

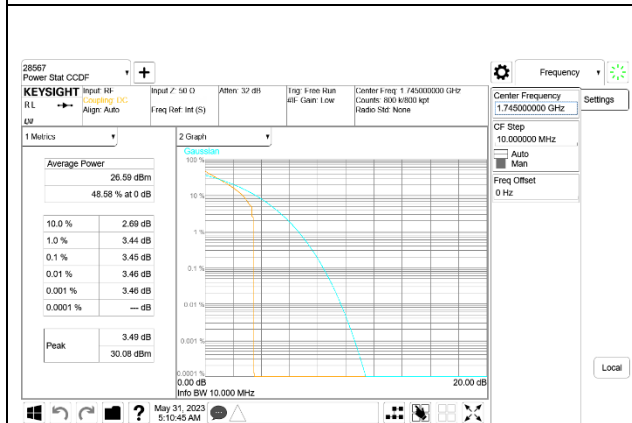
LTE BAND 66



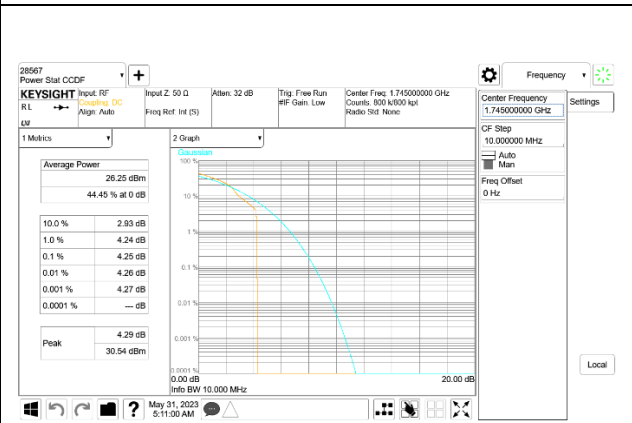
LTE B66 1.4MHz QPSK Middle Channel



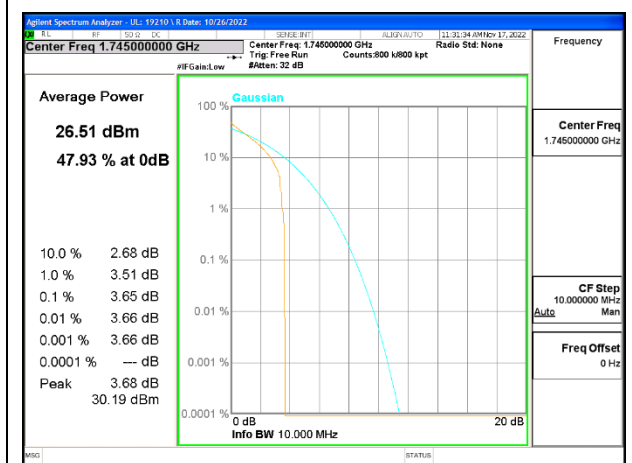
LTE B66 1.4MHz 16QAM Middle Channel



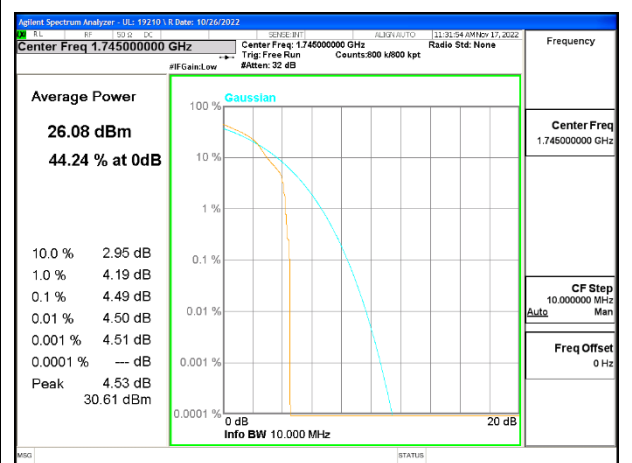
LTE B66 3MHz QPSK Middle Channel



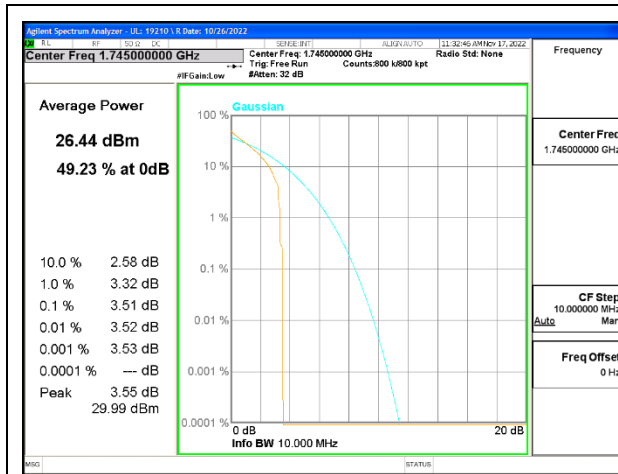
LTE B66 3MHz 16QAM Middle Channel



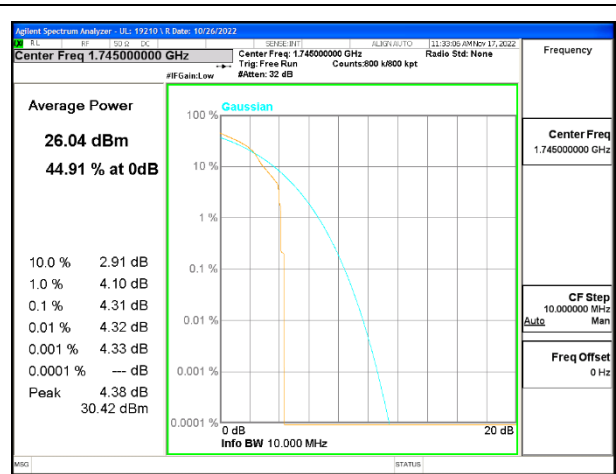
LTE B66 5MHz QPSK Middle Channel



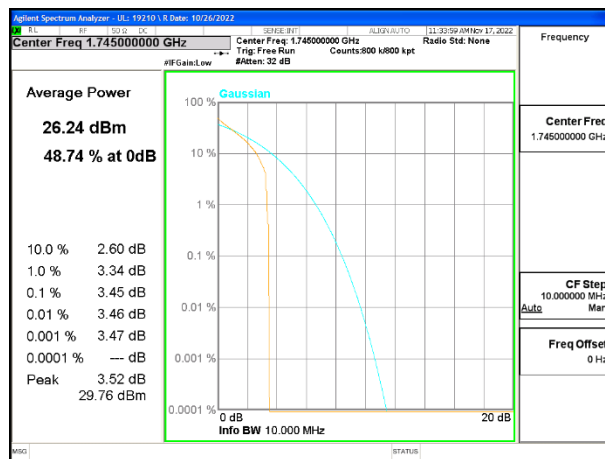
LTE B66 5MHz 16QAM Middle Channel



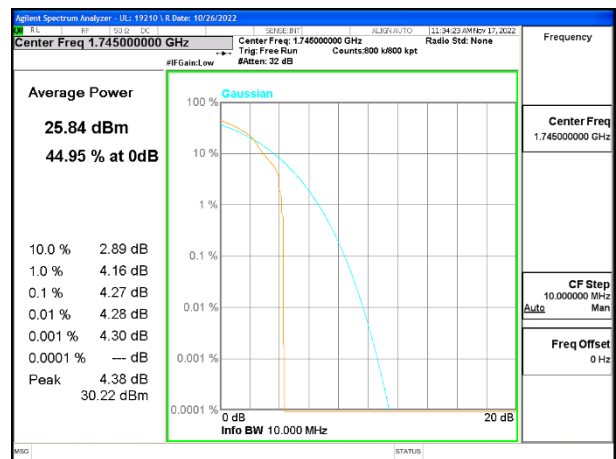
LTE B66 10MHz QPSK Middle Channel



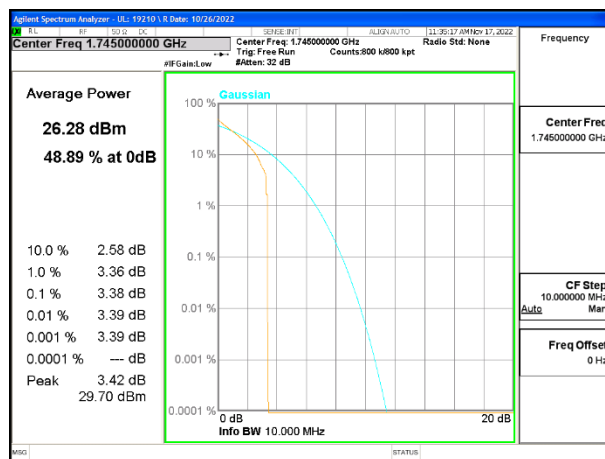
LTE B66 10MHz 16QAM Middle Channel



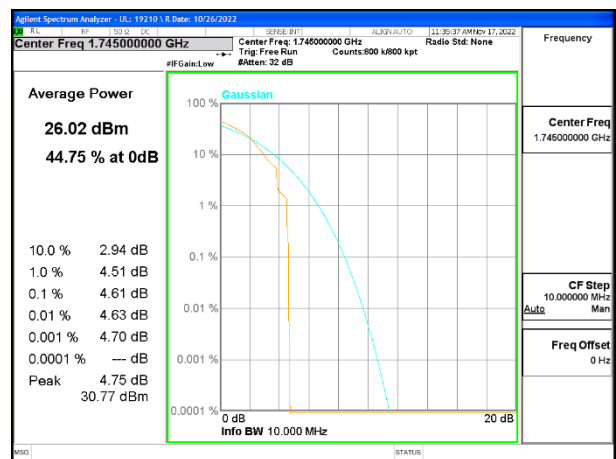
LTE B66 15MHz QPSK Middle Channel



LTE B66 15MHz 16QAM Middle Channel



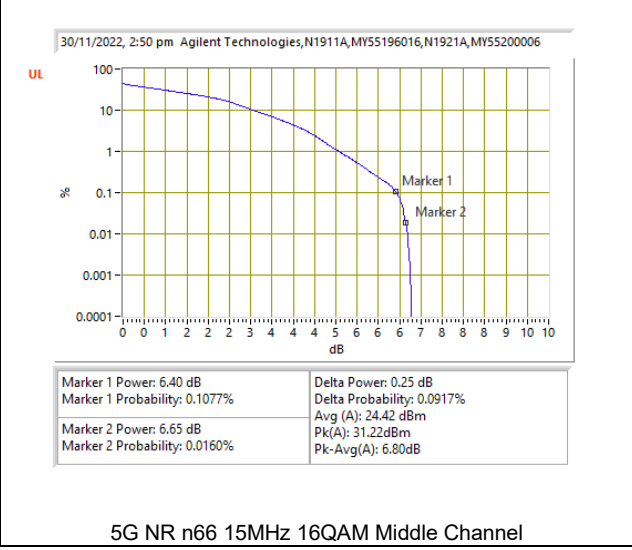
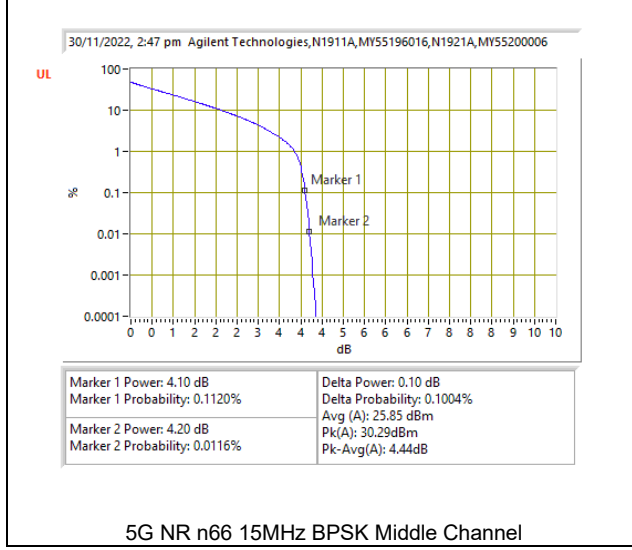
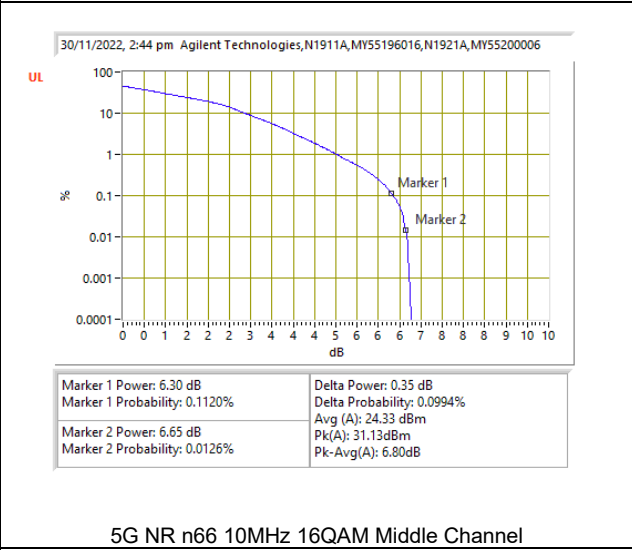
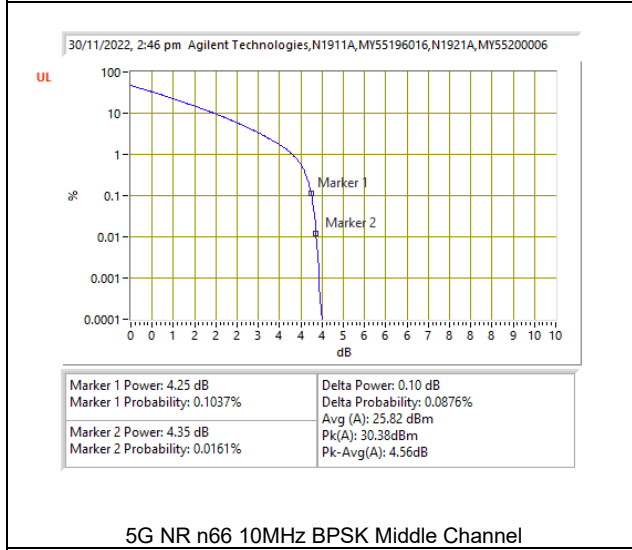
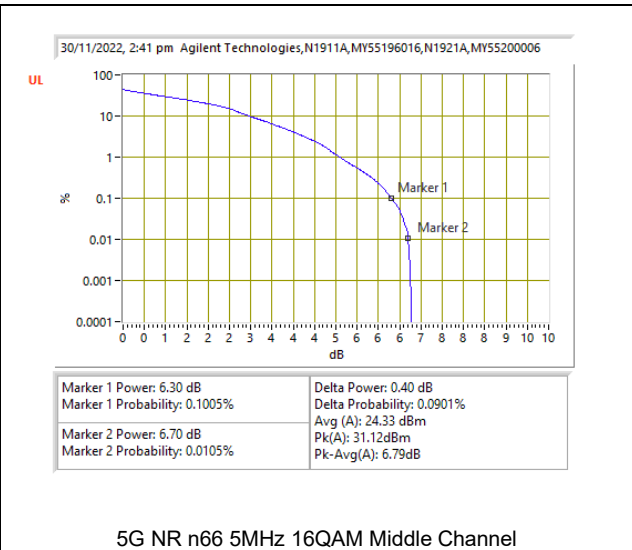
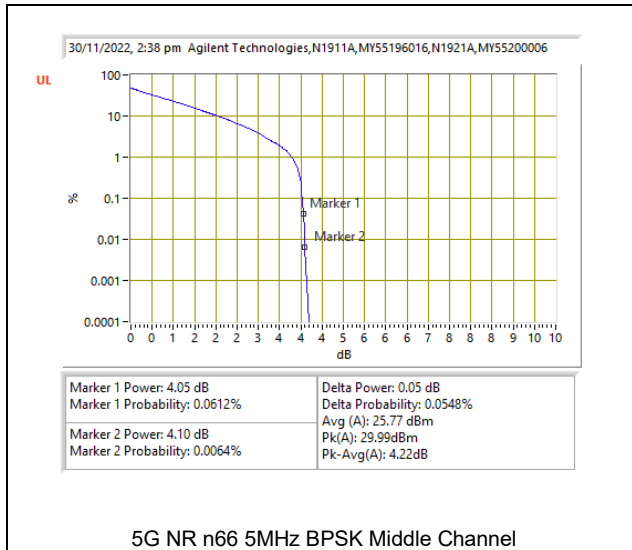
LTE B66 20MHz QPSK Middle Channel

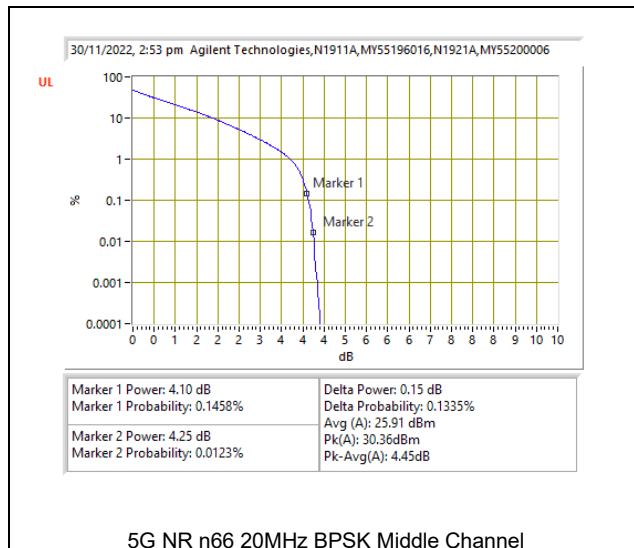


LTE B66 20MHz 16QAM Middle Channel

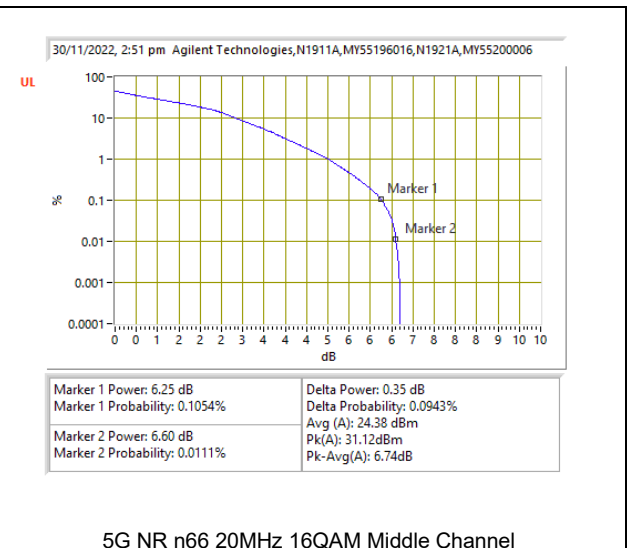
5G NR n66

Test Engineer ID:	28774	Test Date:	2/5/2023
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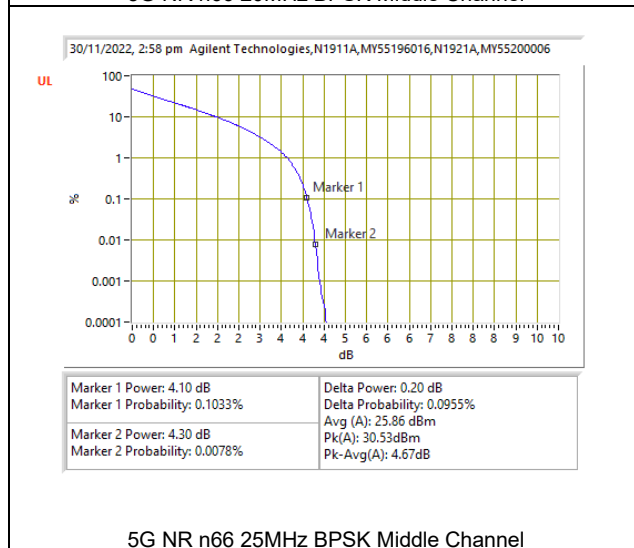




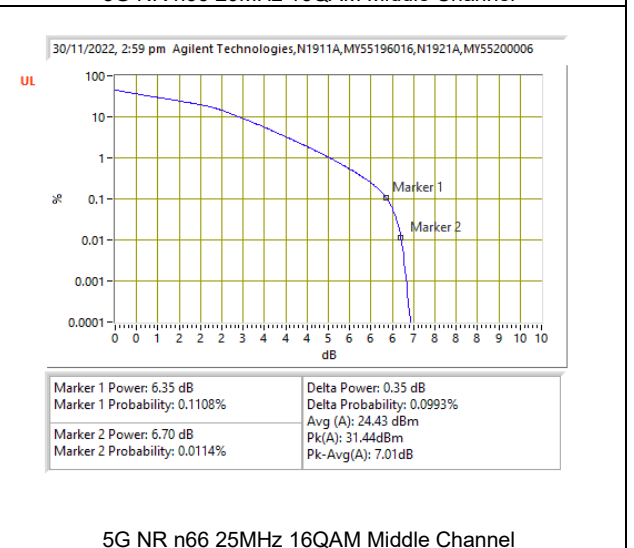
5G NR n66 20MHz BPSK Middle Channel



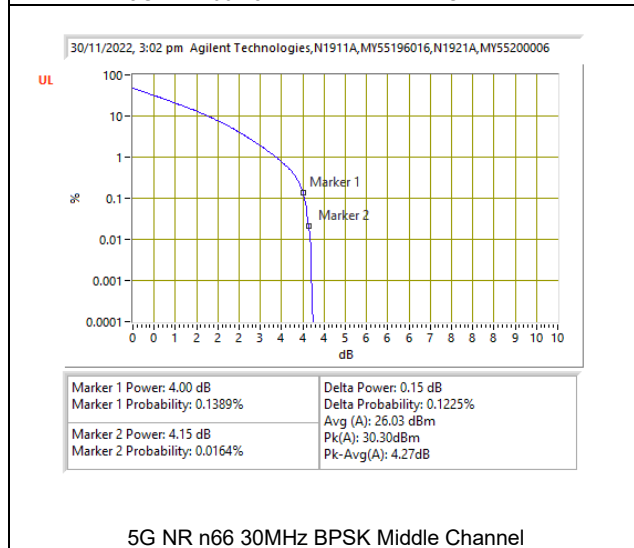
5G NR n66 20MHz 16QAM Middle Channel



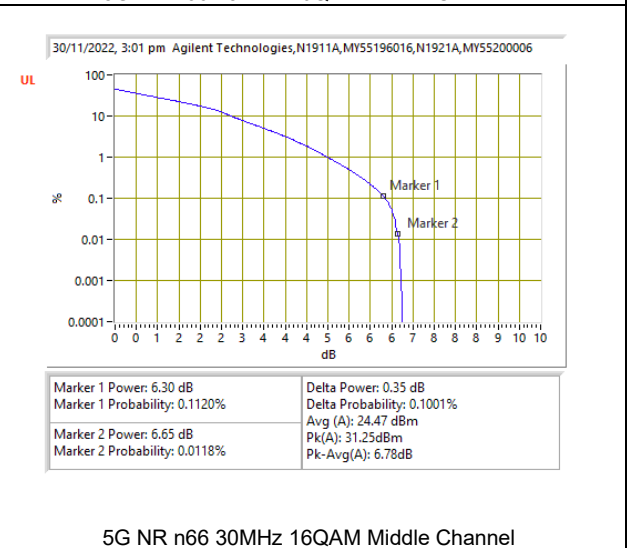
5G NR n66 25MHz BPSK Middle Channel



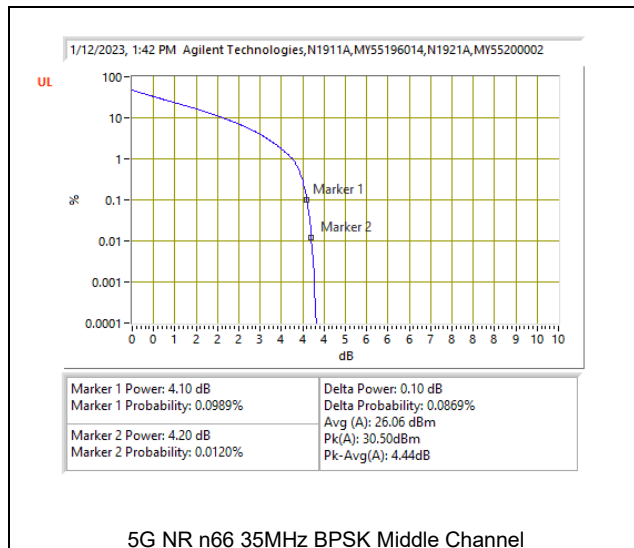
5G NR n66 25MHz 16QAM Middle Channel



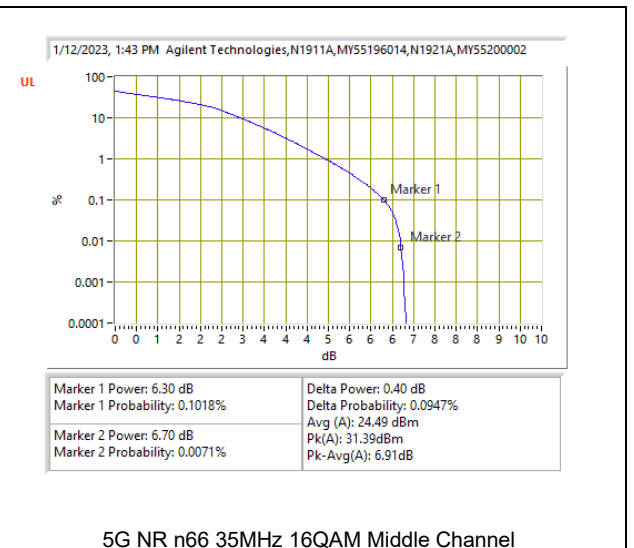
5G NR n66 30MHz BPSK Middle Channel



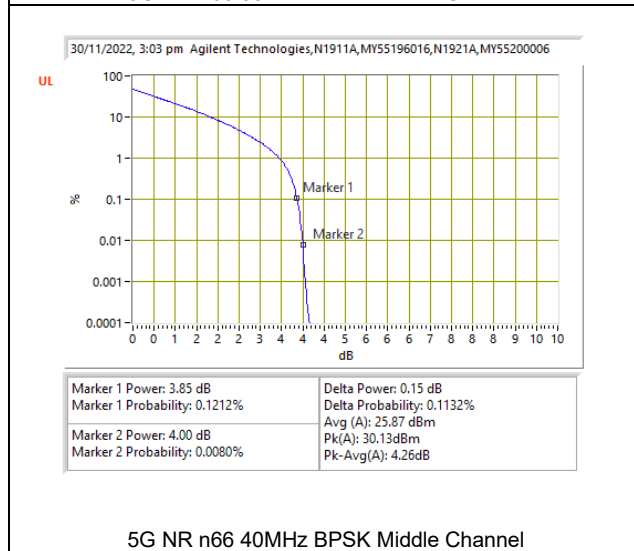
5G NR n66 30MHz 16QAM Middle Channel



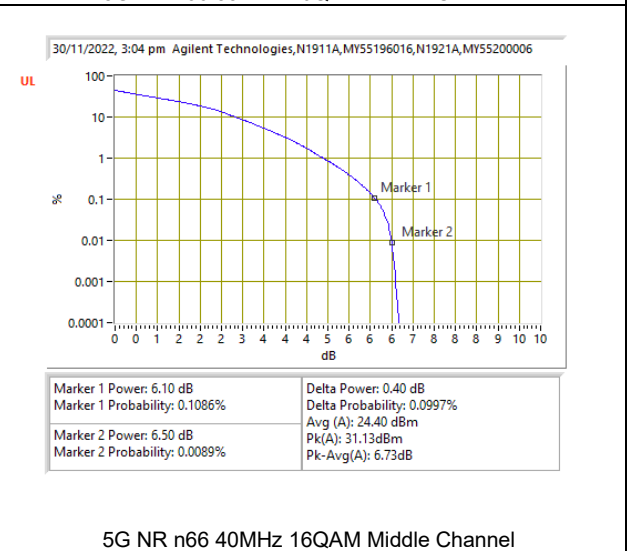
5G NR n66 35MHz BPSK Middle Channel



5G NR n66 35MHz 16QAM Middle Channel



5G NR n66 40MHz BPSK Middle Channel



5G NR n66 40MHz 16QAM Middle Channel

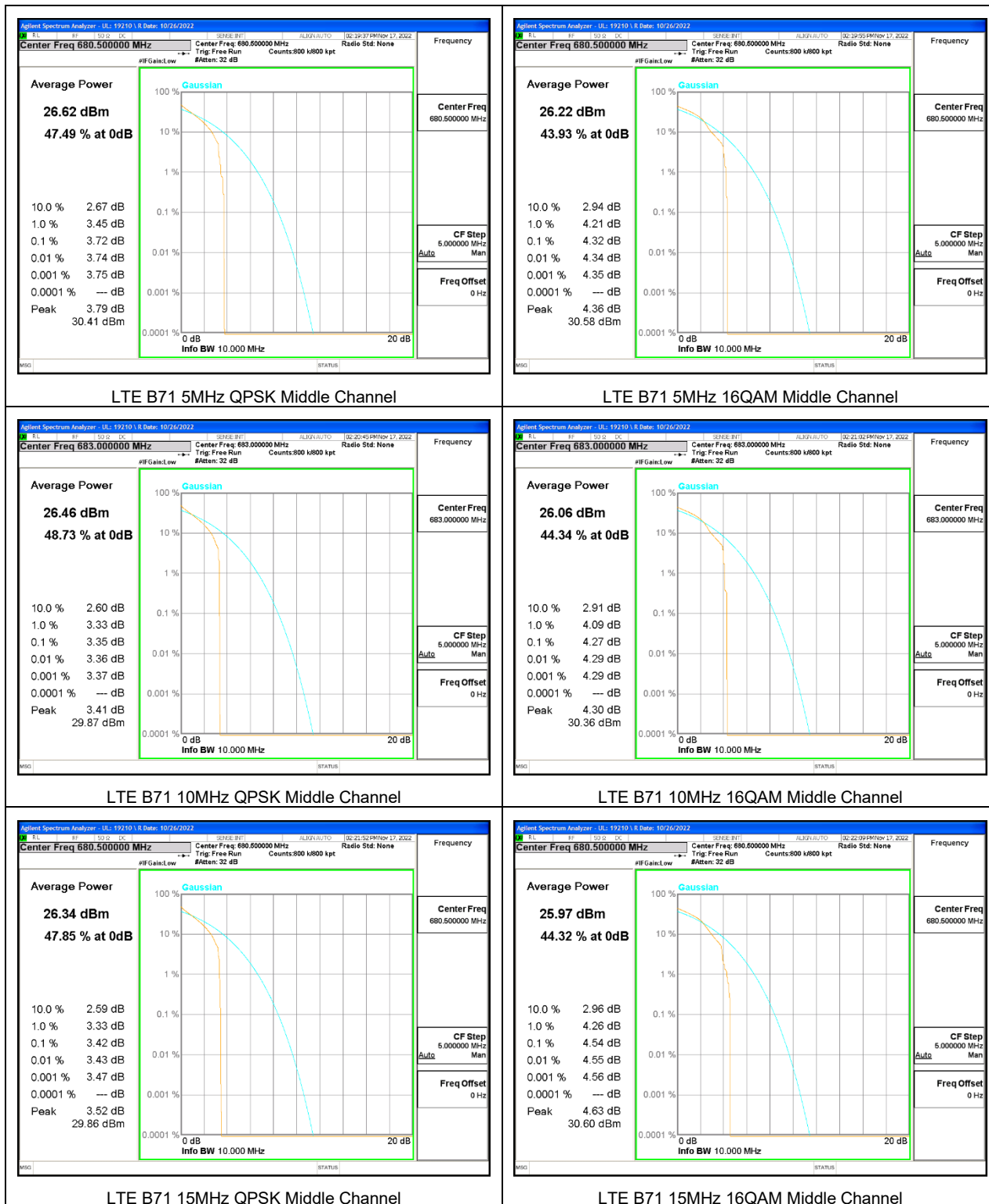
9.5.13. 5G NR n70

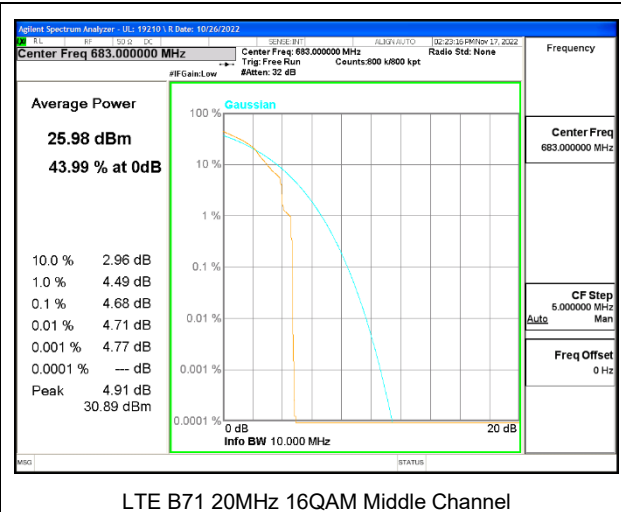
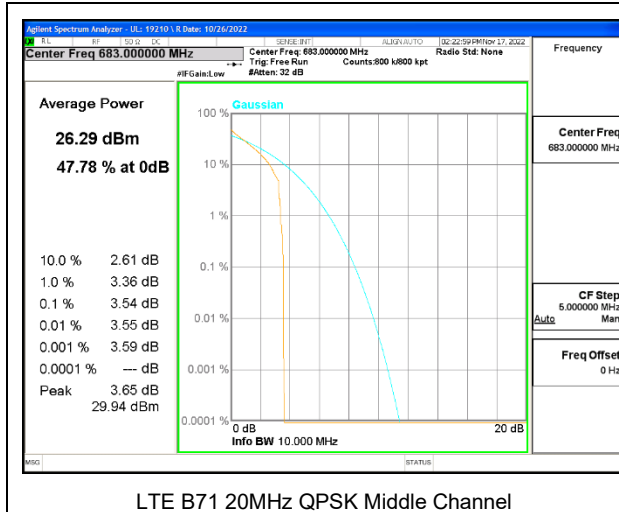
5G NR n70



9.5.14. LTE BAND 71 AND 5G NR n71

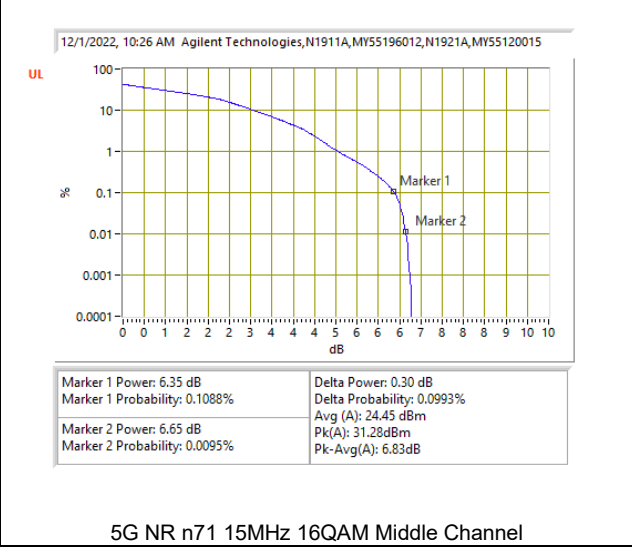
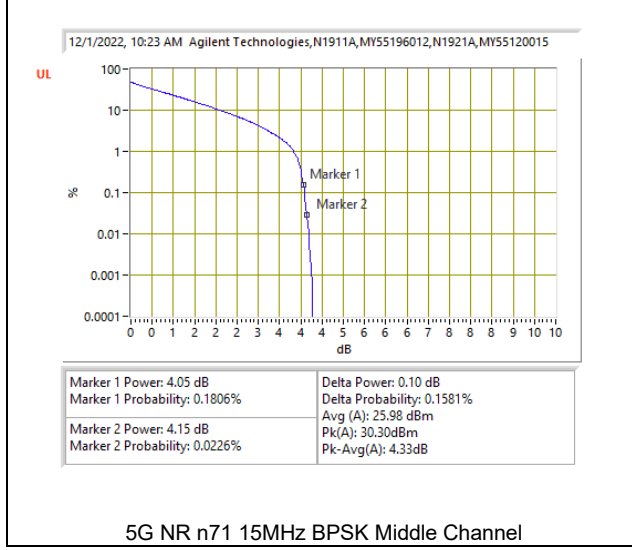
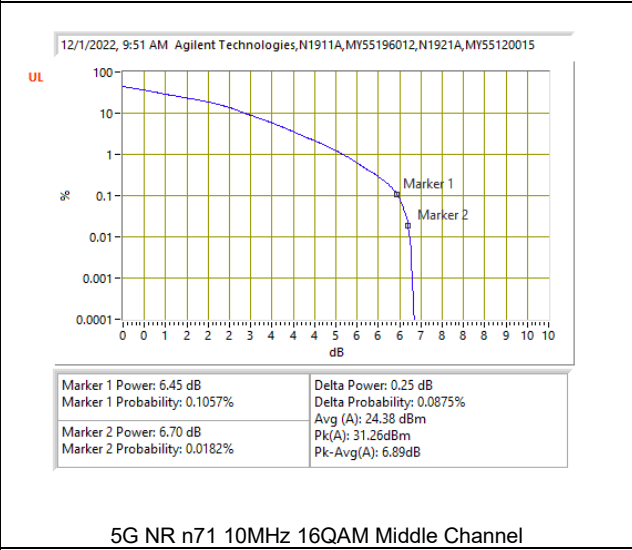
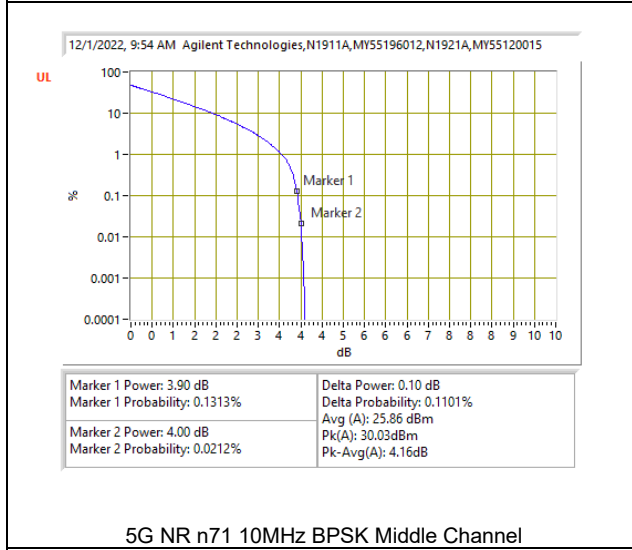
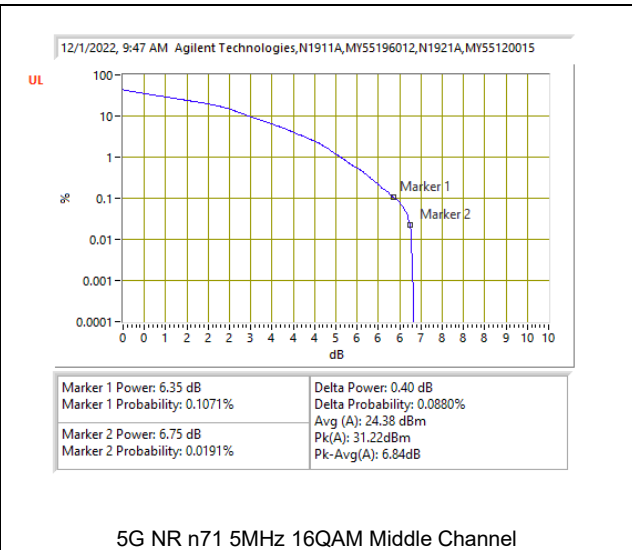
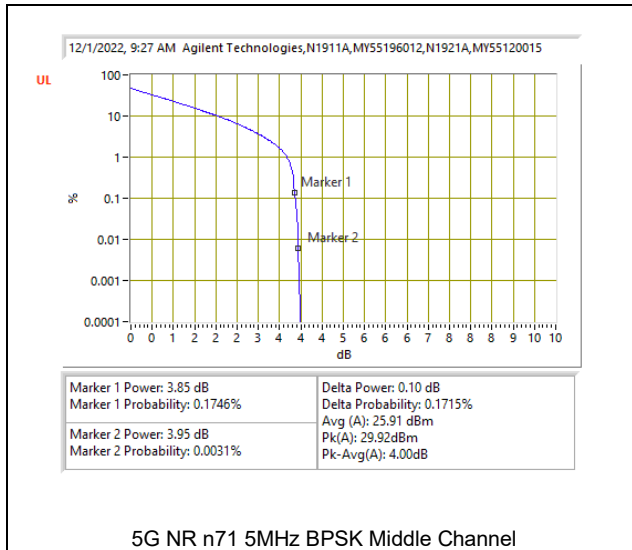
LTE BAND 71

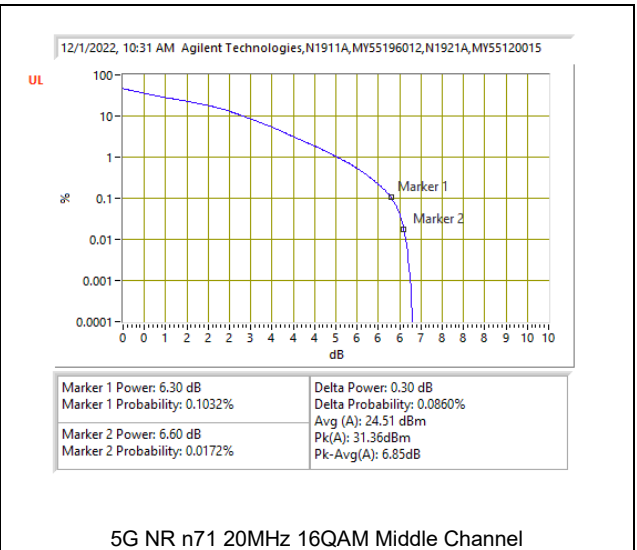
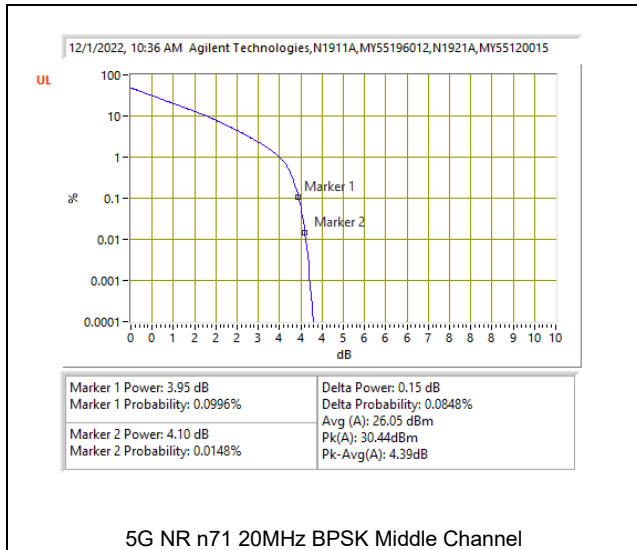




5G NR n71

Test Engineer ID:	29435	Test Date:	12/1/2022
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9.5.15. 5G NR n77 (Part 27 3450-3550MHz)

Test Engineer ID:	29435	Test Date:	12/2/2022
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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	33.54	29.15	4.39
					16QAM	34.36	27.51	6.85
	15MHz		36	0	BPSK	33.54	29.18	4.36
					16QAM	34.34	27.6	6.74
	20MHz		50	0	BPSK	33.73	29.46	4.27
					16QAM	34.56	27.8	6.76
	30MHz		75	0	BPSK	33.96	29.58	4.38
					16QAM	34.62	27.77	6.85
	40MHz		100	0	BPSK	33.52	29.47	4.05
					16QAM	34.58	27.93	6.65
	50MHz		128	0	BPSK	32.99	29.27	3.72
					16QAM	34.14	27.79	6.35
	60MHz		162	0	BPSK	33.11	29.19	3.92
					16QAM	33.96	27.67	6.29
	70MHz		180	0	BPSK	33.18	29.26	3.92
					16QAM	34.13	27.62	6.51
	80MHz		216	0	BPSK	32.77	29.35	3.42
					16QAM	33.59	27.67	5.92
	90MHz		243	0	BPSK	32.65	29.25	3.40
					16QAM	33.47	27.54	5.93
100MHz	270	0	BPSK	32.14	29.09	3.05		
			16QAM	33.10	27.39	5.71		
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 (Part 27 3700-3980MHz)

Test Engineer ID:	29435	Test Date:	12/5/2022
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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	33.38	28.91	4.47
					16QAM	33.39	26.58	6.81
	15MHz		36	0	BPSK	33.57	29.03	4.54
					16QAM	33.56	26.67	6.89
	20MHz		50	0	BPSK	33.58	29.17	4.41
					16QAM	33.64	26.64	7.00
	30MHz		75	0	BPSK	33.91	28.75	5.16
					16QAM	34.33	26.88	7.45
	40MHz		100	0	BPSK	34.29	29.23	5.06
					16QAM	34.69	27.03	7.66
	50MHz		128	0	BPSK	34.26	29.03	5.23
					16QAM	34.21	27.24	6.97
	60MHz		162	0	BPSK	33.23	29.45	3.78
					16QAM	34.05	27.72	6.33
	70MHz		180	0	BPSK	34.12	28.9	5.22
					16QAM	34.77	27.29	7.48
	80MHz		216	0	BPSK	33.62	29.12	4.50
					16QAM	33.88	27.19	6.69
	90MHz		243	0	BPSK	40.84	35.97	4.87
					16QAM	33.97	27.28	6.69
100MHz	270	0	BPSK	32.73	28.87	3.86		
			16QAM	33.78	27.31	6.47		
Duty Cycle Correction Factor (dB) =			0.00					
Peak-to-Average Power Ratio= Peak Reading - Average Reading - Duty Cycle Correction Factor								

10. RADIATED TEST RESULTS

Radiated measurement using the Field Strength Method

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.

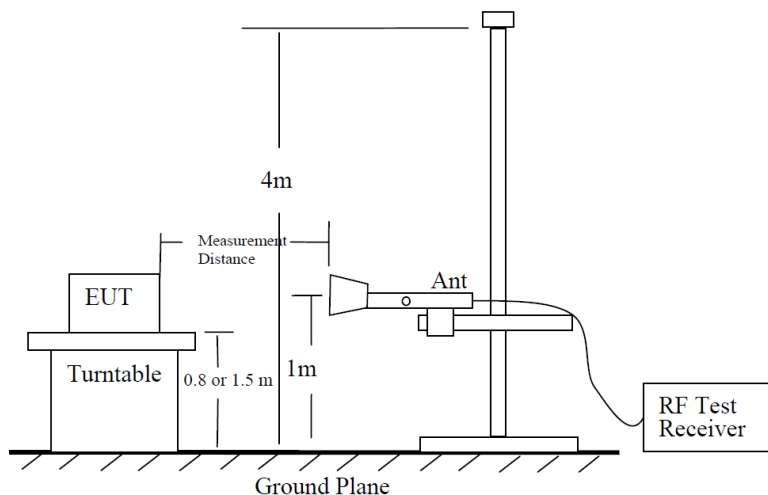


Figure 6—Test site-up for radiated ERP and/or EIRP measurements

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

- a) $E \text{ (dB}\mu\text{V/m)} = \text{Measured amplitude level (dB}\mu\text{V)} + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$.
- b) $E \text{ (dB}\mu\text{V/m)} = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$.
- c) $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20\log(D) + 104.8$; where D is the measurement distance (in the far field region) in m.
- d) $\text{EIRP (dBm)} = E \text{ (dB}\mu\text{V/m)} + 20\log(D) - 104.8$; where D is the measurement distance (in the far field region) in m.

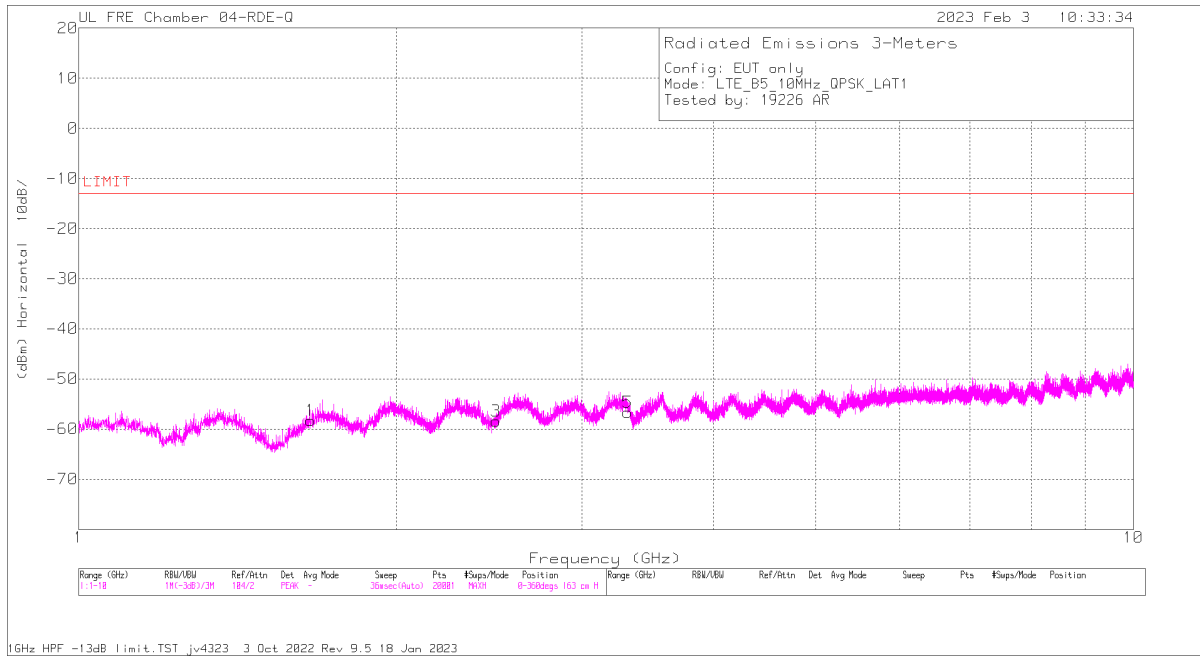
So, from d)

The measuring distance is usually at 3m, then $20 \cdot \log(3) = 9.5424$

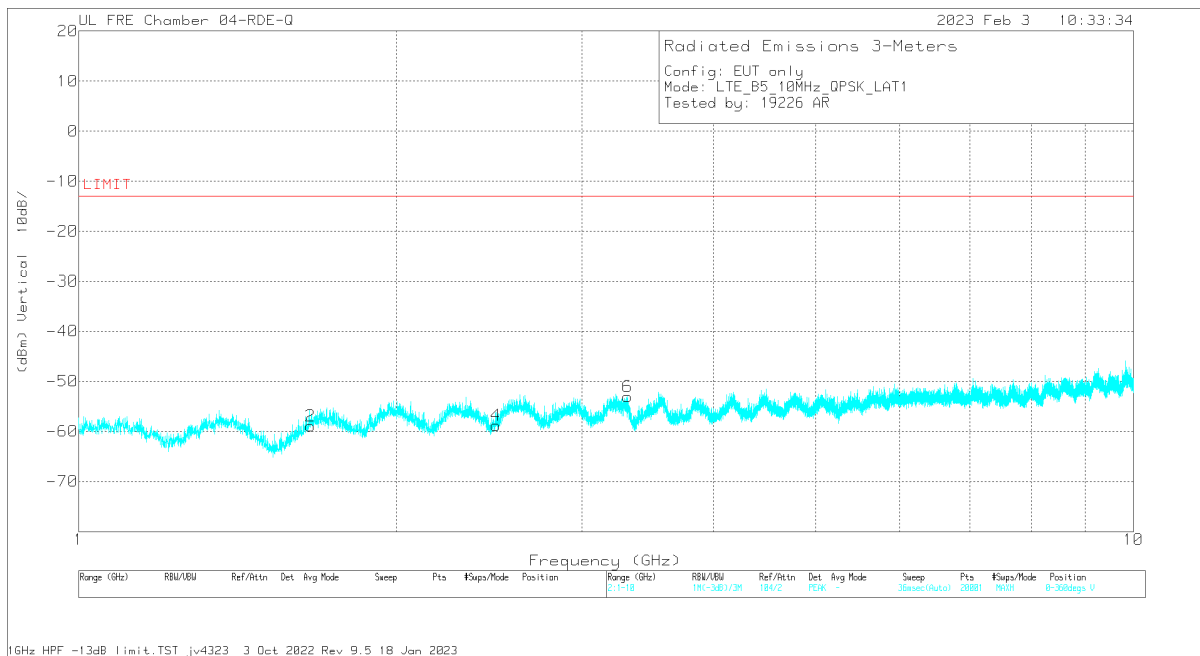
Then, $\text{EIRP (dBm)} = E \text{ (dB}\mu\text{V/m)} + 9.5424 - 104.8 = E \text{ (dB}\mu\text{V/m)} - 95.2576$

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



Horizontal Polarity



Vertical Polarity

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
1	1.65835	56.15	Pk	28.9	-95.2	-48.14	-58.29	-13	-45.29	H
2	1.65835	55.57	Pk	28.9	-95.2	-48.14	-58.87	-13	-45.87	V
3	2.48725	52.78	Pk	32.2	-95.2	-48.19	-58.41	-13	-45.41	H
4	2.48725	52.42	Pk	32.2	-95.2	-48.19	-58.77	-13	-45.77	V
5	3.31615	52.23	Pk	32.8	-95.2	-46.45	-56.62	-13	-43.62	H
6	3.31615	55.78	Pk	32.8	-95.2	-46.45	-53.07	-13	-40.07	V

Pk - Peak detector

Radiated Emissions

10.1. FIELD STRENGTH OF SPURIOUS RADIATION, ANT1

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r02

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

RESULTS

10.1.1. 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 #:	4790592260
Date:	2/4/2023
Test Engineer:	31300
Configuration:	EUT Only
Mode	LTE B7 20MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2510MHz									
5.020605	56.92	Pk	34.3	-95.2	-46.82	-50.80	-25	-25.80	H
5.022514	57.07	Pk	34.3	-95.2	-46.70	-50.53	-25	-25.53	V
7.531616	55.37	Pk	35.5	-95.2	-44.52	-48.85	-25	-23.85	H
7.532261	56.16	Pk	35.5	-95.2	-44.52	-48.06	-25	-23.06	V
10.039393	55.78	Pk	37.1	-95.2	-44.38	-46.70	-25	-21.70	H
10.041117	55.4	Pk	37.1	-95.2	-44.37	-47.07	-25	-22.07	V
Mid Channel, 2535MHz									
5.071181	57.22	Pk	34.3	-95.2	-46.61	-50.29	-25	-25.29	H
5.071234	57.19	Pk	34.3	-95.2	-46.61	-50.32	-25	-25.32	V
7.606104	54.22	Pk	35.5	-95.2	-44.60	-50.08	-25	-25.08	H
7.608896	54.69	Pk	35.5	-95.2	-44.60	-49.61	-25	-24.61	V
10.142179	57.32	Pk	37.2	-95.2	-44.42	-45.10	-25	-20.10	H
10.141813	57.42	Pk	37.2	-95.2	-44.42	-45.00	-25	-20.00	V
High Channel, 2560MHz									
5.120926	56.63	Pk	34.2	-95.2	-46.71	-51.08	-25	-26.08	H
5.120868	57.23	Pk	34.2	-95.2	-46.71	-50.48	-25	-25.48	V
7.679267	56.15	Pk	35.6	-95.2	-44.77	-48.22	-25	-23.22	H
7.682787	56.29	Pk	35.6	-95.2	-44.74	-48.05	-25	-23.05	V
10.242298	55.93	Pk	37.3	-95.2	-44.21	-46.18	-25	-21.18	H
10.243445	56.47	Pk	37.3	-95.2	-44.21	-45.64	-25	-20.64	V

BPSK 5G NR n7 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/13/2023
Test Engineer:	27611
Configuration:	EUT Only
Mode	FR1 N7 40MHz BPSK
Chamber #:	01-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2520MHz										
5.095078	39.64	Pk	34.4	.8	-95.2	-30.71	-51.07	-25	-26.07	H
5.085938	39.05	Pk	34.3	.8	-95.2	-30.71	-51.76	-25	-26.76	V
7.511250	36.35	Pk	36	.3	-95.2	-26.95	-49.50	-25	-24.50	H
7.478438	35.71	Pk	36	.3	-95.2	-26.85	-50.04	-25	-25.04	V
10.841250	34.6	Pk	37.8	.3	-95.2	-24.16	-46.66	-25	-21.66	H
10.875938	33.12	Pk	37.8	.4	-95.2	-24.02	-47.90	-25	-22.90	V
Mid Channel, 2535MHz										
5.045625	39.89	Pk	34.1	.6	-95.2	-30.99	-51.60	-25	-26.6	H
5.048906	40.37	Pk	34.1	.6	-95.2	-31.07	-51.20	-25	-26.20	V
7.664063	36.21	Pk	35.9	.3	-95.2	-26.92	-49.71	-25	-24.71	H
7.701094	35.14	Pk	36	.5	-95.2	-26.87	-50.43	-25	-25.43	V
10.115156	35.11	Pk	37.5	.7	-95.2	-25.01	-46.90	-25	-21.90	H
10.163438	34.07	Pk	37.5	.5	-95.2	-25.20	-48.33	-25	-23.33	V
High Channel, 2550MHz										
5.089688	38.77	Pk	34.4	.8	-95.2	-30.66	-51.89	-25	-26.89	H
5.045156	39.2	Pk	34.1	.6	-95.2	-31.00	-52.30	-25	-27.30	V
7.701563	36.31	Pk	36	.5	-95.2	-26.89	-49.28	-25	-24.28	H
7.713750	35.74	Pk	36	.4	-95.2	-26.82	-49.88	-25	-24.88	V
11.205469	33.33	Pk	37.9	.7	-95.2	-23.00	-46.27	-25	-21.27	H
11.262188	32.91	Pk	37.8	1	-95.2	-22.77	-46.26	-25	-21.26	V

10.1.2. 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 #:	4790592260
Date:	2/3/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	LTE B12 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 704MHz									
1.399183	68.38	Pk	28.6	-95.2	-47.39	-45.61	-13	-32.61	H
1.399140	68.86	Pk	28.6	-95.2	-47.39	-45.13	-13	-32.13	V
2.113343	56.11	Pk	31.2	-95.2	-47.58	-55.47	-13	-42.47	H
2.120984	56.62	Pk	31.2	-95.2	-47.52	-54.90	-13	-41.90	V
2.817511	56.56	Pk	32.2	-95.2	-47.22	-53.66	-13	-40.66	H
2.820326	56.76	Pk	32.2	-95.2	-47.30	-53.54	-13	-40.54	V
Mid Channel, 707.5MHz									
1.406187	70.59	Pk	28.5	-95.2	-47.38	-43.49	-13	-30.49	H
1.406263	71.52	Pk	28.5	-95.2	-47.38	-42.56	-13	-29.56	V
2.121448	55.99	Pk	31.2	-95.2	-47.55	-55.56	-13	-42.56	H
2.120984	56.62	Pk	31.2	-95.2	-47.52	-54.90	-13	-41.90	V
2.830125	56.5	Pk	32.2	-95.2	-47.32	-53.82	-13	-40.82	H
2.829273	56.65	Pk	32.2	-95.2	-47.26	-53.61	-13	-40.61	V
High Channel, 711MHz									
1.413115	69.8	Pk	28.4	-95.2	-47.44	-44.44	-13	-31.44	H
1.413200	71.78	Pk	28.4	-95.2	-47.43	-42.45	-13	-29.45	V
2.132457	56.24	Pk	31.2	-95.2	-47.60	-55.36	-13	-42.36	H
2.132590	56.41	Pk	31.2	-95.2	-47.60	-55.19	-13	-42.19	V
2.842020	56.6	Pk	32.1	-95.2	-47.00	-53.50	-13	-40.50	H
2.844077	57.33	Pk	32.1	-95.2	-46.98	-52.75	-13	-39.75	V

BPSK 5G NR n12 (15.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/23/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	FR1 N12 15MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 706.5MHz									
1.395100	59.23	Pk	28.8	-95.2	-49.57	-56.74	-13	-43.74	H
1.388800	59.15	Pk	28.8	-95.2	-49.59	-56.84	-13	-43.84	V
2.098742	69.21	Pk	31.7	-95.2	-49.69	-43.98	-13	-30.98	H
2.098450	59.82	Pk	31.7	-95.2	-49.68	-53.36	-13	-40.36	V
2.795500	58.03	Pk	32.3	-95.2	-48.99	-53.86	-13	-40.86	H
2.796400	57.83	Pk	32.3	-95.2	-48.99	-54.06	-13	-41.06	V
Mid Channel, 707.5MHz									
1.4216500	57.59	Pk	28.4	-95.2	-49.69	-58.90	-13	-45.90	H
1.409050	57.97	Pk	28.6	-95.2	-49.63	-58.26	-13	-45.26	V
2.101945	72.5	Pk	31.7	-95.2	-49.64	-40.64	-13	-27.64	H
2.101842	67.04	Pk	31.7	-95.2	-49.64	-46.10	-13	-33.10	V
2.830150	59.45	Pk	32.4	-95.2	-48.67	-52.02	-13	-39.02	H
2.825650	58.31	Pk	32.4	-95.2	-48.76	-53.25	-13	-40.25	V
High Channel, 708.5MHz									
1.423450	57.27	Pk	28.4	-95.2	-49.67	-59.20	-13	-46.20	H
1.423900	57.76	Pk	28.4	-95.2	-49.66	-58.70	-13	-45.70	V
2.104867	64.87	Pk	31.7	-95.2	-49.60	-48.23	-13	-35.23	H
2.104716	64.78	Pk	31.7	-95.2	-49.61	-48.33	-13	-35.33	V
2.837350	60.15	Pk	32.4	-95.2	-48.65	-51.30	-13	-38.30	H
2.831050	58.62	Pk	32.4	-95.2	-48.65	-52.83	-13	-39.83	V

10.1.3. 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 #:	4790592260
Date:	2/6/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	LTE B13 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 782MHz									
1.570245	56.23	Pk	27.8	-95.2	-47.95	-59.12	-40	-19.12	H
1.566737	56.5	Pk	27.7	-95.2	-47.81	-58.81	-40	-18.81	V
2.347190	58.43	Pk	31.5	-95.2	-48.23	-53.50	-13	-40.50	H
2.345275	58.6	Pk	31.5	-95.2	-48.28	-53.38	-13	-40.38	V
3.128891	56.19	Pk	32.9	-95.2	-46.54	-52.65	-13	-39.65	H
3.131951	55.39	Pk	32.9	-95.2	-46.82	-53.73	-13	-40.73	V

* Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

10.1.4. 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 #:	4790592260
Date:	2/6/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	LTE B14 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 793MHz									
1.576749	68.09	Pk	27.3	-95.2	-49.80	-49.61	-40	-9.61	H
1.576753	69.3	Pk	27.3	-95.2	-49.80	-48.40	-40	-8.40	V
2.365254	66.96	Pk	32.3	-95.2	-50.07	-46.01	-13	-33.01	H
2.365205	66.71	Pk	32.3	-95.2	-50.08	-46.27	-13	-33.27	V
3.171758	57.05	Pk	33.1	-95.2	-47.45	-52.50	-13	-39.50	H
3.178430	56.6	Pk	33	-95.2	-47.51	-53.11	-13	-40.11	V

* Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

BPSK 5G NR n14 (10.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/24/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N14 10MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 782MHz									
1.583880	57.59	Pk	27.8	-95.2	-47.81	-57.62	-40	-17.62	H
1.590821	57.43	Pk	27.9	-95.2	-47.78	-57.65	-40	-17.65	V
2.384687	58.29	Pk	31.7	-95.2	-47.62	-52.83	-13	-39.83	H
2.379339	57.81	Pk	31.7	-95.2	-47.67	-53.36	-13	-40.36	V
3.173423	56.57	Pk	32.9	-95.2	-46.76	-52.49	-13	-39.49	H
3.170225	56.96	Pk	33	-95.2	-46.37	-51.61	-13	-38.61	V

* Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

10.1.5. 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 #:	4790592260
Date:	2/6/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	LTE B17 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 709MHz									
1.419687	57.96	Pk	28.4	-95.2	-47.47	-56.31	-13	-43.31	H
1.422924	58.06	Pk	28.3	-95.2	-47.41	-56.25	-13	-43.25	V
2.125926	57.12	Pk	31.2	-95.2	-47.49	-54.37	-13	-41.37	H
2.125607	57.13	Pk	31.2	-95.2	-47.51	-54.38	-13	-41.38	V
2.837993	56.4	Pk	32.2	-95.2	-47.21	-53.81	-13	-40.81	H
2.838741	56.62	Pk	32.1	-95.2	-47.23	-53.71	-13	-40.71	V
Mid Channel, 710MHz									
1.418015	57.95	Pk	28.4	-95.2	-47.40	-56.25	-13	-43.25	H
1.419205	58.03	Pk	28.4	-95.2	-47.44	-56.21	-13	-43.21	V
2.130270	56.9	Pk	31.2	-95.2	-47.49	-54.59	-13	-41.59	H
2.130972	57.36	Pk	31.2	-95.2	-47.55	-54.19	-13	-41.19	V
2.836730	56.79	Pk	32.2	-95.2	-47.09	-53.3	-13	-40.30	V
2.838998	57.05	Pk	32.1	-95.2	-47.24	-53.29	-13	-40.29	H
High Channel, 711MHz									
1.422550	55.41	Pk	28.4	-95.2	-48.31	-59.7	-13	-46.70	H
1.422550	57.03	Pk	28.4	-95.2	-48.31	-58.08	-13	-45.08	V
2.134000	54.19	Pk	31.2	-95.2	-49.00	-58.81	-13	-45.81	H
2.134000	52.74	Pk	31.2	-95.2	-49.00	-60.26	-13	-47.26	V
2.844550	53.94	Pk	32.1	-95.2	-48.08	-57.24	-13	-44.24	H
2.844550	53.69	Pk	32.1	-95.2	-48.08	-57.49	-13	-44.49	V

10.1.6. 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 #:	4790592260
Date:	3/16/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B25 20MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1860MHz									
3.726500	53.84	Pk	32.8	-95.2	-44.63	-53.19	-13	-40.19	H
3.738000	54.02	Pk	32.8	-95.2	-44.87	-53.25	-13	-40.25	V
5.592500	53.66	Pk	34.7	-95.2	-43.81	-50.65	-13	-37.65	H
5.607000	54.71	Pk	34.7	-95.2	-43.87	-49.66	-13	-36.66	V
7.435000	50.32	Pk	35.4	-95.2	-42.31	-51.79	-13	-38.79	H
7.434000	50.58	Pk	35.4	-95.2	-42.30	-51.52	-13	-38.52	V
Mid Channel, 1882.5MHz									
3.779000	55.02	Pk	32.8	-95.2	-44.93	-52.31	-13	-39.31	H
3.787000	55.34	Pk	32.8	-95.2	-44.87	-51.93	-13	-38.93	V
5.569500	55.24	Pk	34.7	-95.2	-43.93	-49.19	-13	-36.19	H
5.642000	54.81	Pk	34.6	-95.2	-44.10	-49.89	-13	-36.89	V
7.510500	50.56	Pk	35.5	-95.2	-42.28	-51.42	-13	-38.42	H
7.540500	50.5	Pk	35.5	-95.2	-42.16	-51.36	-13	-38.36	V
High Channel, 1905MHz									
3.835000	55.38	Pk	32.9	-95.2	-44.90	-51.82	-13	-38.82	H
3.789000	56.08	Pk	32.8	-95.2	-44.82	-51.14	-13	-38.14	V
5.739500	54.48	Pk	34.9	-95.2	-43.64	-49.46	-13	-36.46	H
5.731500	54.26	Pk	34.9	-95.2	-43.67	-49.71	-13	-36.71	V
7.646500	51.40	Pk	35.6	-95.2	-41.94	-50.14	-13	-37.14	H
7.629500	51.27	Pk	35.6	-95.2	-41.97	-50.30	-13	-37.30	V

BPSK 5G NR n25 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/14/2023
Test Engineer:	27661
Configuration:	EUT Only
Mode	FR1 N25 40MHz BPSK
Chamber #:	01-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1870MHz									
3.702188	41.70	Pk	33	-95.2	-32.47	-52.97	-13	-39.97	H
3.683438	40.35	Pk	33.2	-95.2	-32.45	-54.10	-13	-41.10	V
5.691563	38.46	Pk	34.8	-95.2	-29.69	-51.63	-13	-38.63	H
5.713594	39.07	Pk	34.9	-95.2	-29.17	-50.40	-13	-37.40	V
7.493438	36.20	Pk	36	-95.2	-26.27	-49.27	-13	-36.27	H
7.458750	35.01	Pk	36	-95.2	-26.21	-50.40	-13	-37.40	V
Mid Channel, 1882.5MHz									
3.797344	41.00	Pk	33.5	-95.2	-31.95	-52.65	-13	-39.65	H
3.785625	40.4	Pk	33.3	-95.2	-31.94	-53.44	-13	-40.44	V
5.647031	38.29	Pk	34.7	-95.2	-30.06	-52.27	-13	-39.27	H
5.656875	38.97	Pk	34.7	-95.2	-29.95	-51.48	-13	-38.48	V
7.554375	35.96	Pk	36	-95.2	-26.10	-49.34	-13	-36.34	H
7.579219	35.08	Pk	36	-95.2	-26.32	-50.44	-13	-37.44	V
High Channel, 1895MHz									
3.801094	40.92	Pk	33.5	-95.2	-31.95	-52.73	-13	-39.73	H
3.787031	41.11	Pk	33.3	-95.2	-31.97	-52.76	-13	-39.76	V
5.694375	38.52	Pk	34.8	-95.2	-29.54	-51.42	-13	-38.42	H
5.693438	38.34	Pk	34.8	-95.2	-29.56	-51.62	-13	-38.62	V
7.605000	36.07	Pk	35.9	-95.2	-26.65	-49.88	-13	-36.88	H
7.580156	36.02	Pk	36	-95.2	-26.31	-49.49	-13	-36.49	V

10.1.7. LTE BAND 26 AND 5G NR n26 (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 #:	4790592260
Date:	3/16/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B26 90S 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 819MHz									
1.646650	57.66	Pk	28.7	-95.2	-46.44	-55.28	-13	-42.28	H
1.643950	57.27	Pk	28.6	-95.2	-46.49	-55.82	-13	-42.82	V
2.470150	56.74	Pk	32.1	-95.2	-46.20	-52.56	-13	-39.56	H
2.469250	55.35	Pk	32.1	-95.2	-46.18	-53.93	-13	-40.93	V
3.279250	53.76	Pk	32.9	-95.2	-44.95	-53.49	-13	-40.49	H
3.263050	54.39	Pk	32.9	-95.2	-45.05	-52.96	-13	-39.96	V

BPSK 5G NR n26 (10.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/24/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N26 90S 10MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 819MHz									
1.628852	68.25	Pk	27.8	-95.2	-49.76	-48.91	-13	-35.91	H
1.628715	73.08	Pk	27.8	-95.2	-49.75	-44.07	-13	-31.07	V
2.443334	68.95	Pk	32.4	-95.2	-49.57	-43.42	-13	-30.42	H
2.443007	65.44	Pk	32.4	-95.2	-49.56	-46.92	-13	-33.92	V
3.276933	57.71	Pk	32.9	-95.2	-47.12	-51.71	-13	-38.71	H
3.275856	57.81	Pk	32.9	-95.2	-47.16	-51.65	-13	-38.65	V

10.1.8. LTE BAND 26 AND 5G NR n26 (PART 22)

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 26 (15.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	3/16/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B26 22H 15MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 831.5MHz									
1.669600	58.1	Pk	29.1	-95.2	-46.47	-54.47	-13	-41.47	H
1.675900	57.87	Pk	29.2	-95.2	-46.61	-54.74	-13	-41.74	V
2.506600	54.98	Pk	32.2	-95.2	-46.05	-54.07	-13	-41.07	H
2.504800	55.21	Pk	32.2	-95.2	-46.01	-53.80	-13	-40.80	V
3.332350	53.17	Pk	32.8	-95.2	-44.87	-54.10	-13	-41.10	H
3.329650	52.23	Pk	32.8	-95.2	-44.83	-55.00	-13	-42.00	V
Mid Channel, 826.5MHz									
1.684900	57.89	Pk	29.3	-95.2	-46.46	-54.47	-13	-41.47	H
1.684000	57.33	Pk	29.3	-95.2	-46.52	-55.09	-13	-42.09	V
2.515600	56.65	Pk	32.2	-95.2	-46.25	-52.60	-13	-39.60	H
2.496250	56.65	Pk	32.2	-95.2	-45.93	-52.28	-13	-39.28	V
3.340900	52.96	Pk	32.8	-95.2	-45.00	-54.44	-13	-41.44	H
3.334150	53.35	Pk	32.8	-95.2	-44.98	-54.03	-13	-41.03	V
High Channel, 841.4MHz									
1.681750	57.93	Pk	29.3	-95.2	-46.54	-54.51	-13	-41.51	H
1.691200	58.53	Pk	29.5	-95.2	-46.56	-53.73	-13	-40.73	V
2.530000	55.78	Pk	32.3	-95.2	-46.56	-53.68	-13	-40.68	H
2.535400	56.64	Pk	32.3	-95.2	-46.59	-52.85	-13	-39.85	V
3.371500	52.37	Pk	32.8	-95.2	-45.16	-55.19	-13	-42.19	H
3.371050	52.13	Pk	32.8	-95.2	-45.11	-55.38	-13	-42.38	V

BPSK 5G NR n26 (20.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/24/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N26 22H 20MHz BPSK
Chamber #:	04-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 829MHz									
1.648541	66.35	Pk	28	-95.2	-49.78	-50.63	-13	-37.63	H
1.648807	70.64	Pk	28	-95.2	-49.79	-46.35	-13	-33.35	V
2.473245	65.94	Pk	32.4	-95.2	-49.17	-46.03	-13	-33.03	H
2.473359	60.46	Pk	32.4	-95.2	-49.17	-51.51	-13	-38.51	V
3.315478	57.45	Pk	32.9	-95.2	-47.12	-51.97	-13	-38.97	H
3.315558	57.37	Pk	32.9	-95.2	-47.11	-52.04	-13	-39.04	V
Mid Channel, 836.5MHz									
1.663895	67.53	Pk	28.3	-95.2	-49.70	-49.07	-13	-36.07	H
1.663809	70.12	Pk	28.3	-95.2	-49.70	-46.48	-13	-33.48	V
2.495696	72.49	Pk	32.6	-95.2	-49.01	-39.12	-13	-26.12	H
2.495628	64.36	Pk	32.6	-95.2	-49.01	-47.25	-13	-34.25	V
3.346214	56.67	Pk	32.9	-95.2	-46.79	-52.42	-13	-39.42	H
3.345164	56.3	Pk	32.9	-95.2	-46.84	-52.84	-13	-39.84	V
High Channel, 844MHz									
1.869617	65.6	Pk	31.2	-95.2	-49.79	-48.19	-13	-35.19	H
1.868514	62.55	Pk	31.2	-95.2	-49.85	-51.30	-13	-38.30	V
2.51815	61.88	Pk	32.6	-95.2	-48.99	-49.71	-13	-36.71	H
2.518095	61.73	Pk	32.6	-95.2	-48.99	-49.86	-13	-36.86	V
3.377949	56.9	Pk	32.8	-95.2	-47.09	-52.59	-13	-39.59	H
3.376061	57.11	Pk	32.8	-95.2	-47.01	-52.30	-13	-39.30	V

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 #:	4790592260
Date:	3/16/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B30 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.613215	43.96	RMS	34.1	-95.2	-46.81	-63.95	-40	-23.95	H
4.608802	43.89	RMS	34.1	-95.2	-46.79	-64.00	-40	-24.00	V
6.915771	42.28	RMS	35.5	-95.2	-45.09	-62.51	-40	-22.51	H
6.915771	42.28	RMS	35.5	-95.2	-45.09	-62.51	-40	-22.51	V
9.220289	43.29	RMS	36.4	-95.2	-43.87	-59.38	-40	-19.38	H
9.220780	43.20	RMS	36.3	-95.2	-43.88	-59.58	-40	-19.58	V

BPSK 5G NR n30 (10.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	5/23/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N30 10MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2310MHz									
4.620455	45.18	RMS	34.3	-95.2	-47.88	-63.60	-40	-23.60	H
4.620455	45.19	RMS	34.3	-95.2	-47.88	-63.59	-40	-23.59	V
6.930856	43.39	RMS	35.7	-95.2	-46.10	-62.21	-40	-22.21	H
6.930856	43.40	RMS	35.7	-95.2	-46.10	-62.20	-40	-22.20	V
9.240244	42.78	RMS	36.4	-95.2	-44.65	-60.67	-40	-20.67	H
9.240244	42.77	RMS	36.4	-95.2	-44.65	-60.68	-40	-20.68	V

10.1.10. 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 #:	4790592260
Date:	3/16/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B41 FCC 20MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2506MHz									
5.029000	54.29	Pk	34.3	-95.2	-45.51	-52.12	-25	-27.12	H
5.033000	54.56	Pk	34.3	-95.2	-45.55	-51.89	-25	-26.89	V
7.533500	53.55	Pk	35.5	-95.2	-42.73	-48.88	-25	-23.88	H
7.532500	52.70	Pk	35.5	-95.2	-42.72	-49.72	-25	-24.72	V
10.008000	50.65	Pk	37.1	-95.2	-41.41	-48.86	-25	-23.86	H
10.006500	50.46	Pk	37.1	-95.2	-41.36	-49.00	-25	-24.00	V
Mid Channel, 2593MHz									
5.198000	54.43	Pk	34.2	-95.2	-45.07	-51.64	-25	-26.64	H
5.199000	54.10	Pk	34.2	-95.2	-45.04	-51.94	-25	-26.94	V
7.777500	54.47	Pk	35.6	-95.2	-42.39	-47.52	-25	-22.52	H
7.771000	53.08	Pk	35.6	-95.2	-42.40	-48.92	-25	-23.92	V
10.403500	49.57	Pk	37.5	-95.2	-40.82	-48.95	-25	-23.95	H
10.394000	49.45	Pk	37.5	-95.2	-40.40	-48.65	-25	-23.65	V
High Channel, 2680MHz									
5.369000	54.94	Pk	34.2	-95.2	-44.52	-50.58	-25	-25.58	H
5.374500	54.3	Pk	34.2	-95.2	-44.48	-51.18	-25	-26.18	V
8.029500	53.98	Pk	35.7	-95.2	-41.92	-47.44	-25	-22.44	H
8.024000	53.19	Pk	35.7	-95.2	-41.81	-48.12	-25	-23.12	V
10.731500	52.06	Pk	37.7	-95.2	-40.39	-45.83	-25	-20.83	H
10.714500	51.99	Pk	37.7	-95.2	-39.88	-45.39	-25	-20.39	V

BPSK 5G NR n41 (100.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	5/31/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N41 FCC 100MHz BPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2546MHz									
5.092218	58.87	Pk	34.5	-95.2	-46.39	-48.22	-25	-23.22	H
5.093957	59.68	Pk	34.5	-95.2	-46.31	-47.33	-25	-22.33	V
7.640065	56.92	Pk	35.7	-95.2	-44.71	-47.29	-25	-22.29	H
7.640312	56.61	Pk	35.7	-95.2	-44.71	-47.60	-25	-22.60	V
10.182656	57.04	Pk	37.5	-95.2	-44.19	-44.85	-25	-19.85	H
10.184444	57.26	Pk	37.5	-95.2	-44.17	-44.61	-25	-19.61	V
Mid Channel, 2593MHz									
5.184887	57.91	Pk	34.5	-95.2	-46.45	-49.24	-25	-24.24	V
5.185833	57.61	Pk	34.5	-95.2	-46.43	-49.52	-25	-24.52	H
7.630132	57.18	Pk	35.7	-95.2	-44.68	-47.00	-25	-22.00	H
7.631073	56.55	Pk	35.7	-95.2	-44.69	-47.64	-25	-22.64	V
10.373226	56.85	Pk	37.6	-95.2	-44.22	-44.97	-25	-19.97	V
10.373935	56.92	Pk	37.6	-95.2	-44.17	-44.85	-25	-19.85	H
High Channel, 2640MHz									
5.181923	66.74	Pk	34.5	-95.2	-46.38	-40.34	-25	-15.34	H
5.181961	67.42	Pk	34.5	-95.2	-46.38	-39.66	-25	-14.66	V
7.772993	60.07	Pk	35.8	-95.2	-44.44	-43.77	-25	-18.77	V
7.773196	58.35	Pk	35.8	-95.2	-44.45	-45.50	-25	-20.50	H
10.558205	57.2	Pk	37.9	-95.2	-44.89	-44.99	-25	-19.99	V
10.558749	57.15	Pk	37.9	-95.2	-44.89	-45.04	-25	-20.04	H

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 #:	4790592260
Date:	3/16/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B66 20MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1720MHz									
3.452500	54.97	Pk	32.9	-95.2	-44.70	-52.03	-13	-39.03	H
3.469000	54.5	Pk	32.9	-95.2	-44.84	-52.64	-13	-39.64	V
5.162000	54.55	Pk	34.2	-95.2	-45.18	-51.63	-13	-38.63	H
5.159000	54.42	Pk	34.2	-95.2	-45.05	-51.63	-13	-38.63	V
6.888000	51.45	Pk	35.5	-95.2	-42.83	-51.08	-13	-38.08	H
6.870500	51.72	Pk	35.5	-95.2	-42.86	-50.84	-13	-37.84	V
Mid Channel, 1745MHz									
3.521000	55.53	Pk	32.9	-95.2	-44.89	-51.66	-13	-38.66	H
3.480.500	55.82	Pk	32.9	-95.2	-44.94	-51.42	-13	-38.42	V
5.211500	53.26	Pk	34.2	-95.2	-44.95	-52.69	-13	-39.69	H
5.219000	53.05	Pk	34.1	-95.2	-44.92	-52.97	-13	-39.97	V
7.009000	51.04	Pk	35.5	-95.2	-42.61	-51.27	-13	-38.27	H
6.969000	50.91	Pk	35.5	-95.2	-42.87	-51.66	-13	-38.66	V
High Channel, 1770MHz									
3.566000	56.5	Pk	32.9	-95.2	-44.80	-50.60	-13	-37.60	H
3.561500	57.05	Pk	32.9	-95.2	-44.82	-50.07	-13	-37.07	V
5.315000	53.91	Pk	34.2	-95.2	-44.82	-51.91	-13	-38.91	H
5.322000	54.12	Pk	34.2	-95.2	-44.78	-51.66	-13	-38.66	V
7.091000	51.54	Pk	35.6	-95.2	-42.60	-50.66	-13	-37.66	H
7.069000	51.15	Pk	35.6	-95.2	-42.48	-50.93	-13	-37.93	V

BPSK 5G NR n66 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/27/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N66 40MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1730MHz									
3.460619	57.1	Pk	32.9	-95.2	-47.48	-52.68	-13	-39.68	H
3.460750	57.42	Pk	32.9	-95.2	-47.48	-52.36	-13	-39.36	V
5.131915	59.15	Pk	34.5	-95.2	-48.62	-50.17	-13	-37.17	H
5.131850	62.7	Pk	34.5	-95.2	-48.63	-46.63	-13	-33.63	V
6.920140	56.42	Pk	35.7	-95.2	-46.69	-49.77	-13	-36.77	H
6.918668	56.64	Pk	35.7	-95.2	-46.68	-49.54	-13	-36.54	V
Mid Channel, 1745MHz									
3.490811	57.73	Pk	33	-95.2	-47.57	-52.04	-13	-39.04	H
3.491500	58.12	Pk	33	-95.2	-47.59	-51.67	-13	-38.67	V
5.177067	60.65	Pk	34.5	-95.2	-48.34	-48.39	-13	-35.39	H
5.176849	58.24	Pk	34.5	-95.2	-48.35	-50.81	-13	-37.81	V
6.980185	56.2	Pk	35.8	-95.2	-46.98	-50.18	-13	-37.18	H
6.981071	56.53	Pk	35.8	-95.2	-47.00	-49.87	-13	-36.87	V
High Channel, 1760MHz									
3.523524	57.36	Pk	32.9	-95.2	-47.19	-52.13	-13	-39.13	H
3.522060	57.29	Pk	32.9	-95.2	-47.19	-52.2	-13	-39.2	V
5.280066	57.77	Pk	34.6	-95.2	-48.10	-50.93	-13	-37.93	H
5.281695	59.07	Pk	34.6	-95.2	-48.12	-49.65	-13	-36.65	V
7.042824	56.34	Pk	35.9	-95.2	-47.14	-50.10	-13	-37.10	H
7.041082	57.04	Pk	35.9	-95.2	-47.18	-49.44	-13	-36.44	V

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 #:	4790592260
Date:	2/27/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N70 15MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1702.5MHz									
3.410561	56.92	Pk	32.8	-95.2	-47.19	-52.67	-13	-39.67	H
3.405243	56.81	Pk	32.8	-95.2	-47.10	-52.69	-13	-39.69	V
5.103295	58.66	Pk	34.5	-95.2	-48.84	-50.88	-13	-37.88	H
5.106059	58.84	Pk	34.5	-95.2	-48.75	-50.61	-13	-37.61	V
6.811433	56.91	Pk	35.7	-95.2	-46.64	-49.23	-13	-36.23	H
6.808170	56.25	Pk	35.7	-95.2	-46.70	-49.95	-13	-36.95	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 #:	4790592260
Date:	3/16/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B71 20MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 673MHz									
1.335250	57.46	Pk	29	-95.2	-46.24	-54.98	-13	-41.98	H
1.342900	57.29	Pk	29	-95.2	-46.22	-55.13	-13	-42.13	V
2.011600	57.77	Pk	31	-95.2	-46.55	-52.98	-13	-39.98	H
2.011600	57.81	Pk	31	-95.2	-46.55	-52.94	-13	-39.94	V
2.689300	54.71	Pk	32.5	-95.2	-46.26	-54.25	-13	-41.25	H
2.691100	55.1	Pk	32.4	-95.2	-46.37	-54.07	-13	-41.07	V
Mid Channel, 683MHz									
1.356400	58.2	Pk	28.9	-95.2	-46.16	-54.26	-13	-41.26	H
1.459450	55.68	Pk	28	-95.2	-46.11	-57.63	-13	-44.63	V
2.061550	56.9	Pk	31.1	-95.2	-46.60	-53.80	-13	-40.80	H
2.031850	56.35	Pk	31	-95.2	-46.40	-54.25	-13	-41.25	V
2.722150	54.59	Pk	32.4	-95.2	-46.65	-54.86	-13	-41.86	H
2.742400	52.92	Pk	32.4	-95.2	-46.39	-56.27	-13	-43.27	V
High Channel, 688MHz									
1.385200	58.37	Pk	28.7	-95.2	-46.10	-54.23	-13	-41.23	H
1.378900	57.44	Pk	28.8	-95.2	-46.09	-55.05	-13	-42.05	V
2.057500	57.18	Pk	31.1	-95.2	-46.70	-53.62	-13	-40.62	H
2.064250	57.05	Pk	31.1	-95.2	-46.79	-53.84	-13	-40.84	V
2.763100	53.38	Pk	32.3	-95.2	-46.30	-55.82	-13	-42.82	H
2.749600	53.52	Pk	32.4	-95.2	-46.37	-55.65	-13	-42.65	V

BPSK 5G NR n71 (20.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/23/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	FR1 N71 20MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 673MHz									
1.342900	59.72	Pk	29.2	-95.2	-49.63	-55.91	-13	-42.91	H
1.341550	60.31	Pk	29.3	-95.2	-49.62	-55.21	-13	-42.21	V
1.991134	67.75	Pk	31.4	-95.2	-50.24	-46.29	-13	-33.29	H
1.990894	66.36	Pk	31.4	-95.2	-50.24	-47.68	-13	-34.68	V
2.693350	57.35	Pk	32.1	-95.2	-48.38	-54.13	-13	-41.13	H
2.693350	57.54	Pk	32.1	-95.2	-48.38	-53.94	-13	-40.94	V
Mid Channel, 683MHz									
1.342000	59.79	Pk	29.3	-95.2	-49.61	-55.72	-13	-42.72	H
1.342450	59.51	Pk	29.3	-95.2	-49.62	-56.01	-13	-43.01	V
2.011150	59.77	Pk	31.4	-95.2	-50.15	-54.18	-13	-41.18	H
2.013400	62.63	Pk	31.5	-95.2	-50.09	-51.16	-13	-38.16	V
2.696500	57.95	Pk	32.1	-95.2	-48.35	-53.50	-13	-40.50	H
2.685250	57.29	Pk	32.1	-95.2	-48.38	-54.19	-13	-41.19	V
High Channel, 688MHz									
1.384750	58.01	Pk	28.8	-95.2	-49.62	-58.01	-13	-45.01	H
1.389250	59.6	Pk	28.8	-95.2	-49.58	-56.38	-13	-43.38	V
2.036034	65.78	Pk	31.6	-95.2	-50.01	-47.83	-13	-34.83	H
2.036161	66.01	Pk	31.6	-95.2	-50.01	-47.60	-13	-34.60	V
2.759050	57.08	Pk	32.2	-95.2	-48.73	-54.65	-13	-41.65	H
2.773000	56.66	Pk	32.2	-95.2	-49.03	-55.37	-13	-42.37	V

10.2. FIELD STRENGTH OF SPURIOUS RADIATION, ANT2

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r02

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

RESULTS

10.2.1. 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 #:	4790592260
Date:	5/31/2023
Test Engineer:	32186
Configuration:	EUT Only
Mode	LTE B7 20MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2510MHz									
4.998855	55.66	Pk	34.3	-95.2	-46.54	-51.78	-25	-26.78	H
5.001830	55.54	Pk	34.3	-95.2	-46.64	-52.00	-25	-27.00	V
7.500046	53.86	Pk	35.5	-95.2	-44.88	-50.72	-25	-25.72	H
7.501437	54.25	Pk	35.5	-95.2	-44.89	-50.34	-25	-25.34	V
10.002169	55.37	Pk	37.1	-95.2	-44.01	-46.74	-25	-21.74	H
10.000402	55.2	Pk	37.1	-95.2	-44.03	-46.93	-25	-21.93	V
Mid Channel, 2535MHz									
5.050515	56.09	Pk	34.3	-95.2	-46.60	-51.41	-25	-26.41	H
5.048248	55.71	Pk	34.3	-95.2	-46.70	-51.89	-25	-26.89	V
7.575360	54.25	Pk	35.5	-95.2	-44.45	-49.90	-25	-24.90	H
7.574652	54.34	Pk	35.5	-95.2	-44.44	-49.80	-25	-24.80	V
10.101178	55.26	Pk	37.2	-95.2	-44.38	-47.12	-25	-22.12	H
10.102568	54.69	Pk	37.2	-95.2	-44.36	-47.67	-25	-22.67	V
High Channel, 2560MHz									
5.099504	55.58	Pk	34.2	-95.2	-46.37	-51.79	-25	-26.79	H
5.101720	55.8	Pk	34.2	-95.2	-46.48	-51.68	-25	-26.68	V
6.329930	54.59	Pk	35.6	-95.2	-44.69	-49.70	-25	-24.70	H
6.328178	54.59	Pk	35.6	-95.2	-44.72	-49.73	-25	-24.73	V
7.650492	54.25	Pk	35.6	-95.2	-44.54	-49.89	-25	-24.89	H
7.650516	53.95	Pk	35.6	-95.2	-44.54	-50.19	-25	-25.19	V

BPSK 5G NR n7 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/20/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N7 40MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2520MHz									
5.040925	59.21	Pk	34.4	-95.2	-48.76	-50.35	-25	-25.35	H
5.040097	58.58	Pk	34.4	-95.2	-48.81	-51.03	-25	-26.03	V
7.560042	56.47	Pk	35.8	-95.2	-46.98	-49.91	-25	-24.91	H
7.558932	56.51	Pk	35.8	-95.2	-46.96	-49.85	-25	-24.85	V
10.081806	57.56	Pk	37.4	-95.2	-47.03	-47.27	-25	-22.27	H
10.081587	57.7	Pk	37.4	-95.2	-47.03	-47.13	-25	-22.13	V
Mid Channel, 2535MHz									
5.071487	58.58	Pk	34.5	-95.2	-48.83	-50.95	-25	-25.95	H
5.071223	58.62	Pk	34.5	-95.2	-48.83	-50.91	-25	-25.91	V
7.606312	56.9	Pk	35.7	-95.2	-47.15	-49.75	-25	-24.75	H
7.604748	56.57	Pk	35.7	-95.2	-47.13	-50.06	-25	-25.06	V
10.141641	57.52	Pk	37.5	-95.2	-46.73	-46.91	-25	-21.91	H
10.139784	58.31	Pk	37.5	-95.2	-46.75	-46.14	-25	-21.14	V
High Channel, 2550MHz									
5.102380	58.64	Pk	34.5	-95.2	-48.88	-50.94	-25	-25.94	H
5.099948	58.67	Pk	34.5	-95.2	-48.87	-50.90	-25	-25.90	V
7.651595	56.27	Pk	35.7	-95.2	-46.77	-50.00	-25	-25.00	H
7.648962	56.4	Pk	35.7	-95.2	-46.8	-49.90	-25	-24.90	V
10.201788	57.33	Pk	37.5	-95.2	-46.55	-46.92	-25	-21.92	H
10.200412	57.5	Pk	37.5	-95.2	-46.56	-46.76	-25	-21.76	V

10.2.2. 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 #:	4790592260
Date:	3/16/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B12 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 704MHz									
1.395550	57.96	Pk	28.6	-95.2	-46.08	-54.72	-13	-41.72	H
1.405450	58.22	Pk	28.5	-95.2	-46.06	-54.54	-13	-41.54	V
2.118700	55.45	Pk	31.2	-95.2	-46.54	-55.09	-13	-42.09	H
2.109700	55.18	Pk	31.1	-95.2	-46.71	-55.63	-13	-42.63	V
2.834200	54.4	Pk	32.2	-95.2	-45.90	-54.50	-13	-41.50	H
2.807200	52.88	Pk	32.2	-95.2	-45.89	-56.01	-13	-43.01	V
Mid Channel, 707.5MHz									
1.410400	56.36	Pk	28.5	-95.2	-46.07	-56.41	-13	-43.41	H
1.407700	57.73	Pk	28.5	-95.2	-46.09	-55.06	-13	-42.06	V
2.110600	54.77	Pk	31.1	-95.2	-46.70	-56.03	-13	-43.03	H
2.126350	54.53	Pk	31.2	-95.2	-46.50	-55.97	-13	-42.97	V
2.820250	55.22	Pk	32.2	-95.2	-45.87	-53.65	-13	-40.65	H
2.816650	53.53	Pk	32.2	-95.2	-45.94	-55.41	-13	-42.41	V
High Channel, 711MHz									
1.420750	56.28	Pk	28.4	-95.2	-46.08	-56.60	-13	-43.6	H
1.421650	56.58	Pk	28.4	-95.2	-46.09	-56.31	-13	-43.31	V
2.138500	54.5	Pk	31.2	-95.2	-46.16	-55.66	-13	-42.66	H
2.136700	55.23	Pk	31.2	-95.2	-46.13	-54.90	-13	-41.90	V
2.841400	54.23	Pk	32.1	-95.2	-45.94	-54.81	-13	-41.81	H
2.838250	53.69	Pk	32.2	-95.2	-46.11	-55.42	-13	-42.42	V

BPSK 5G NR n12 (15.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/21/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N12 15MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 706.5MHz									
1.413827	57.88	Pk	28.5	-95.2	-49.71	-58.53	-13	-45.53	H
1.415253	58.93	Pk	28.5	-95.2	-49.68	-57.45	-13	-44.45	V
2.120553	60.61	Pk	31.6	-95.2	-49.71	-52.70	-13	-39.70	H
2.118636	59.86	Pk	31.6	-95.2	-49.72	-53.46	-13	-40.46	V
2.826033	60.77	Pk	32.4	-95.2	-48.78	-50.81	-13	-37.81	H
2.824858	59.59	Pk	32.4	-95.2	-48.74	-51.95	-13	-38.95	V
Mid Channel, 707.5MHz									
1.415554	58.5	Pk	28.5	-95.2	-49.67	-57.87	-13	-44.87	H
1.417176	58.96	Pk	28.5	-95.2	-49.68	-57.42	-13	-44.42	V
2.123129	59.93	Pk	31.6	-95.2	-49.67	-53.34	-13	-40.34	H
2.123543	59.88	Pk	31.6	-95.2	-49.69	-53.41	-13	-40.41	V
2.830877	60.26	Pk	32.4	-95.2	-48.65	-51.19	-13	-38.19	H
2.831108	59.59	Pk	32.4	-95.2	-48.65	-51.86	-13	-38.86	V
High Channel, 708.5MHz									
1.418387	58.32	Pk	28.4	-95.2	-49.67	-58.15	-13	-45.15	H
1.417805	58.8	Pk	28.4	-95.2	-49.67	-57.67	-13	-44.67	V
2.124773	58.94	Pk	31.6	-95.2	-49.71	-54.37	-13	-41.37	H
2.125414	59.33	Pk	31.6	-95.2	-49.73	-54.00	-13	-41.00	V
2.836109	60.09	Pk	32.4	-95.2	-48.69	-51.40	-13	-38.40	H
2.832836	60.33	Pk	32.4	-95.2	-48.64	-51.11	-13	-38.11	V

10.2.3. 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 #:	4790592260
Date:	3/16/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B13 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 782MHz									
1.568800	53.85	Pk	27.8	-95.2	-46.45	-60.00	-40	-20.00	H
1.578250	54.15	Pk	27.8	-95.2	-46.38	-59.63	-40	-19.38	V
2.356300	57.02	Pk	31.6	-95.2	-46.57	-53.15	-13	-40.15	H
2.351800	57.73	Pk	31.5	-95.2	-46.38	-52.35	-13	-39.35	V
3.124900	52.06	Pk	32.9	-95.2	-45.29	-55.53	-13	-42.53	H
3.121750	52.31	Pk	32.9	-95.2	-45.46	-55.45	-13	-42.45	V

* Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

10.2.4. 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 #:	4790592260
Date:	3/16/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B14 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 793MHz									
1.598050	56.12	Pk	28	-95.2	-46.43	-57.51	-40	-17.51	H
1.581400	55.49	Pk	27.8	-95.2	-46.4	-58.31	-40	-18.31	V
2.373850	56.77	Pk	31.6	-95.2	-46.72	-53.55	-13	-40.55	H
2.372500	57.56	Pk	31.6	-95.2	-46.77	-52.81	-13	-39.81	V
3.182050	54.18	Pk	33	-95.2	-45.44	-53.46	-13	-40.46	H
3.179800	55	Pk	32.9	-95.2	-45.26	-52.56	-13	-39.56	V

* Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

BPSK 5G NR n14 (10.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/21/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N14 10MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 793MHz									
1.585598	61	Pk	27.3	-95.2	-49.79	-56.69	-40	-16.69	H
1.588099	59.93	Pk	27.3	-95.2	-49.79	-57.76	-40	-17.76	V
2.411883	60.86	Pk	32.5	-95.2	-50.00	-51.84	-13	-38.84	H
2.414718	61.43	Pk	32.5	-95.2	-49.98	-51.25	-13	-38.25	V
3.172839	57.35	Pk	33.1	-95.2	-47.48	-52.23	-13	-39.23	H
3.174210	56.82	Pk	33	-95.2	-47.41	-52.79	-13	-39.79	V

* Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

10.2.5. 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 #:	4790592260
Date:	5/22/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B17 10MHz QPSK
Chamber #:	04-RDE-P

Frequency (GHz)	Meter Reading (dBUV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 709MHz									
1.418500	55.92	Pk	28.4	-95.2	-48.31	-59.19	-13	-46.19	H
1.418500	56.14	Pk	28.4	-95.2	-48.31	-58.97	-13	-45.97	V
2.127700	53.85	Pk	31.2	-95.2	-48.89	-59.04	-13	-46.04	H
2.127700	52.83	Pk	31.2	-95.2	-48.89	-60.06	-13	-47.06	V
2.836450	54.46	Pk	32.2	-95.2	-48.1	-56.64	-13	-43.64	H
2.836450	53.92	Pk	32.2	-95.2	-48.1	-57.18	-13	-44.18	V
Mid Channel, 710MHz									
1.420300	55.13	Pk	28.4	-95.2	-48.28	-59.95	-13	-46.95	H
1.420300	55.65	Pk	28.4	-95.2	-48.28	-59.43	-13	-46.43	V
2.130850	53.97	Pk	31.2	-95.2	-49.09	-59.12	-13	-46.12	H
2.130850	55.36	Pk	31.2	-95.2	-49.09	-57.73	-13	-44.73	V
2.840050	54.68	Pk	32.1	-95.2	-48.3	-56.72	-13	-43.72	H
2.840050	54.92	Pk	32.1	-95.2	-48.3	-56.48	-13	-43.48	V
High Channel, 711MHz									
1.422550	54.46	Pk	28.4	-95.2	-48.31	-60.65	-13	-47.65	H
1.422550	55.86	Pk	28.4	-95.2	-48.31	-59.25	-13	-46.25	V
2.133550	54.05	Pk	31.2	-95.2	-49.04	-58.99	-13	-45.99	H
2.133550	55.41	Pk	31.2	-95.2	-49.04	-57.63	-13	-44.63	V
2.844550	55.16	Pk	32.1	-95.2	-48.08	-56.02	-13	-43.02	H
2.844550	54.18	Pk	32.1	-95.2	-48.08	-57.00	-13	-44.00	V

10.2.6. 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 #:	4790592260
Date:	2/14/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B25 20MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1860MHz									
3.723000	53.5	Pk	32.8	-95.2	-44.82	-53.72	-13	-40.72	H
3.710500	53.69	Pk	32.8	-95.2	-44.77	-53.48	-13	-40.48	V
5.591000	53.81	Pk	34.7	-95.2	-43.84	-50.53	-13	-37.53	H
5.589500	55.19	Pk	34.6	-95.2	-43.94	-49.35	-13	-36.35	V
7.450000	50.48	Pk	35.4	-95.2	-42.29	-51.61	-13	-38.61	H
7.471500	50.84	Pk	35.5	-95.2	-42.49	-51.35	-13	-38.35	V
Mid Channel, 1882.5MHz									
3.767500	55.54	Pk	32.7	-95.2	-44.99	-51.95	-13	-38.95	H
3.757000	54.27	Pk	32.7	-95.2	-44.71	-52.94	-13	-39.94	V
5.664500	54.69	Pk	34.7	-95.2	-43.85	-49.66	-13	-36.66	H
5.667500	54.34	Pk	34.7	-95.2	-43.74	-49.90	-13	-36.90	V
7.512000	50.21	Pk	35.5	-95.2	-42.27	-51.76	-13	-38.76	H
7.511500	51.45	Pk	35.5	-95.2	-42.28	-50.53	-13	-37.53	V
High Channel, 1905MHz									
3.832000	56.06	Pk	32.8	-95.2	-44.85	-51.19	-13	-38.19	H
3.832500	56.46	Pk	32.9	-95.2	-44.83	-50.67	-13	-37.67	V
5.689000	54.54	Pk	34.8	-95.2	-43.83	-49.69	-13	-36.69	H
5.710750	54.08	Pk	34.8	-95.2	-43.54	-49.86	-13	-36.86	V
7.644000	50.71	Pk	35.6	-95.2	-41.83	-50.72	-13	-37.72	H
7.619000	50.51	Pk	35.5	-95.2	-41.95	-51.14	-13	-38.14	V

BPSK 5G NR n25 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/20/2023

Test Engineer:	12501
Configuration:	EUT Only
Mode	FR1 N25 40MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1870MHz									
3.709000	56.13	Pk	33.3	-95.2	-47.73	-53.50	-13	-40.50	H
3.683000	57.23	Pk	33.1	-95.2	-47.71	-52.58	-13	-39.58	V
5.623500	56.18	Pk	34.8	-95.2	-47.85	-52.07	-13	-39.07	H
5.600000	56.12	Pk	34.8	-95.2	-47.80	-52.08	-13	-39.08	V
7.479500	55.32	Pk	35.8	-95.2	-47.24	-51.32	-13	-38.32	H
7.461500	55.75	Pk	35.8	-95.2	-47.30	-50.95	-13	-37.95	V
Mid Channel, 1882.5MHz									
3.769000	55.95	Pk	33.4	-95.2	-47.65	-53.50	-13	-40.50	H
3.740500	55.45	Pk	33.4	-95.2	-47.72	-54.07	-13	-41.07	V
5.659000	55.42	Pk	34.8	-95.2	-47.69	-52.67	-13	-39.67	H
5.640500	56.05	Pk	34.8	-95.2	-47.80	-52.15	-13	-39.15	V
7.535500	55.25	Pk	35.8	-95.2	-47.08	-51.23	-13	-38.23	H
7.525000	55.85	Pk	35.8	-95.2	-46.96	-50.51	-13	-37.51	V
High Channel, 1895MHz									
3.794000	56.16	Pk	33.5	-95.2	-47.58	-53.12	-13	-40.12	H
3.784000	55.61	Pk	33.5	-95.2	-47.62	-53.71	-13	-40.71	V
5.694500	55.49	Pk	34.8	-95.2	-47.52	-52.43	-13	-39.43	H
5.701500	55.42	Pk	34.8	-95.2	-47.43	-52.41	-13	-39.41	V
7.565500	55.25	Pk	35.8	-95.2	-47.03	-51.18	-13	-38.18	H
7.539000	55.22	Pk	35.8	-95.2	-47.05	-51.23	-13	-38.23	V

10.2.7. LTE BAND 26 AND 5G NR n26 (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 #:	4790592260
Date:	3/16/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B26 90S 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 819MHz									
1.639450	57.53	Pk	28.5	-95.2	-46.35	-55.52	-13	-42.52	H
1.645750	57.31	Pk	28.6	-95.2	-46.48	-55.77	-13	-42.77	V
2.462500	55.23	Pk	32	-95.2	-46.29	-54.26	-13	-41.26	H
2.463400	54.79	Pk	32	-95.2	-46.28	-54.69	-13	-41.69	V
3.266200	55.3	Pk	32.9	-95.2	-45.15	-52.15	-13	-39.15	H
3.270700	54.2	Pk	32.9	-95.2	-45.01	-53.11	-13	-40.11	V

BPSK 5G NR n26 (20.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/21/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N26 90S 10MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 819MHz									
1.637968	60.5	Pk	27.9	-95.2	-49.72	-56.52	-13	-43.52	H
1.639213	61.1	Pk	27.9	-95.2	-49.75	-55.95	-13	-42.95	V
2.411674	62.03	Pk	32.5	-95.2	-50.00	-50.67	-13	-37.67	H
2.411674	62.03	Pk	32.5	-95.2	-50.00	-50.67	-13	-37.67	H
3.275516	57.97	Pk	32.9	-95.2	-47.15	-51.48	-13	-38.48	H
3.276405	58.3	Pk	32.9	-95.2	-47.14	-51.14	-13	-38.14	V

10.2.8. LTE BAND 26 AND 5G NR n26 (PART 22)

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 26 (15.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/17/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	LTE B26 22H 15MHz
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 831.5MHz									
1.663705	59.56	Pk	28.3	-95.2	-49.69	-57.03	-13	-44.03	H
1.663668	60.68	Pk	28.2	-95.2	-49.69	-56.01	-13	-43.01	V
2.493691	59.61	Pk	32.5	-95.2	-49.04	-52.13	-13	-39.13	H
2.493108	59.35	Pk	32.5	-95.2	-49.04	-52.39	-13	-39.39	V
3.323787	57.17	Pk	32.9	-95.2	-47.08	-52.21	-13	-39.21	H
3.327024	57.04	Pk	32.9	-95.2	-47.00	-52.26	-13	-39.26	V
Mid Channel, 836.5MHz									
1.527685	60.88	Pk	27.4	-95.2	-49.55	-56.47	-13	-43.47	H
1.527322	60.17	Pk	27.4	-95.2	-49.55	-57.18	-13	-44.18	V
2.511147	59.74	Pk	32.6	-95.2	-49.08	-51.94	-13	-38.94	H
2.509323	59.24	Pk	32.6	-95.2	-49.1	-52.46	-13	-39.46	V
3.346250	56.53	Pk	32.9	-95.2	-46.79	-52.56	-13	-39.56	H
3.344127	56.48	Pk	32.9	-95.2	-46.86	-52.68	-13	-39.68	V
High Channel, 841.5MHz									
1.878934	63.53	Pk	31.2	-95.2	-49.71	-50.18	-13	-37.18	H
1.878466	62.12	Pk	31.2	-95.2	-49.72	-51.60	-13	-38.60	V
2.522970	58.6	Pk	32.6	-95.2	-48.94	-52.94	-13	-39.94	H
2.521916	59.13	Pk	32.6	-95.2	-48.92	-52.39	-13	-39.39	V
3.335819	57.42	Pk	32.9	-95.2	-46.88	-51.76	-13	-38.76	H
3.338286	56.73	Pk	32.9	-95.2	-46.81	-52.38	-13	-39.38	V

BPSK 5G NR n26 (20.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/21/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N26 22H 20MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 834MHz									
1.658587	59.33	Pk	28.2	-95.2	-49.71	-57.38	-13	-44.38	H
1.658434	60.06	Pk	28.2	-95.2	-49.72	-56.66	-13	-43.66	V
2.487985	59.74	Pk	32.5	-95.2	-49.1	-52.06	-13	-39.06	H
2.486131	59.37	Pk	32.5	-95.2	-49.09	-52.42	-13	-39.42	V
3.315529	57.35	Pk	32.9	-95.2	-47.11	-52.06	-13	-39.06	H
3.316395	57.43	Pk	32.9	-95.2	-47.1	-51.97	-13	-38.97	V
Mid Channel, 836.5MHz									
1.673476	59.79	Pk	28.4	-95.2	-49.69	-56.70	-13	-43.70	H
1.673930	60.24	Pk	28.4	-95.2	-49.7	-56.26	-13	-43.26	V
2.508647	59.54	Pk	32.6	-95.2	-49.11	-52.17	-13	-39.17	H
2.510532	59.38	Pk	32.6	-95.2	-49.09	-52.31	-13	-39.31	V
3.347319	56.06	Pk	32.9	-95.2	-46.79	-53.03	-13	-40.03	H
3.347847	56.43	Pk	32.9	-95.2	-46.8	-52.67	-13	-39.67	V
High Channel, 839MHz									
1.688505	60.92	Pk	28.6	-95.2	-49.69	-55.37	-13	-42.37	H
1.693377	60.26	Pk	28.7	-95.2	-49.71	-55.95	-13	-42.95	V
2.528694	59.1	Pk	32.6	-95.2	-48.98	-52.48	-13	-39.48	H
2.534254	58.94	Pk	32.5	-95.2	-49.07	-52.83	-13	-39.83	V
3.378762	56.63	Pk	32.8	-95.2	-47.14	-52.91	-13	-39.91	H
3.378750	56.39	Pk	32.8	-95.2	-47.13	-53.14	-13	-40.14	V

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 #:	4790592260
Date:	3/16/2023
Test Engineer:	27700
Configuration:	EUT Only
Mode	LTE B30 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.610763	43.93	RMS	34.1	-95.2	-46.77	-63.94	-40	-23.94	H
4.610273	43.93	RMS	34.1	-95.2	-46.76	-63.93	-40	-23.93	V
6.915281	42.32	RMS	35.5	-95.2	-45.10	-62.48	-40	-22.48	H
6.915281	42.31	RMS	35.5	-95.2	-45.10	-62.49	-40	-22.49	V
9.220289	43.3	RMS	36.4	-95.2	-43.87	-59.37	-40	-19.37	H
9.220289	43.26	RMS	36.4	-95.2	-43.87	-59.41	-40	-19.41	V

BPSK 5G NR n30 (10.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	5/24/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N30 10MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.620455	45.18	RMS	34.3	-95.2	-47.88	-63.60	-40	-23.60	H
4.620455	45.18	RMS	34.3	-95.2	-47.88	-63.60	-40	-23.60	V
6.930349	43.41	RMS	35.7	-95.2	-46.19	-62.28	-40	-22.28	H
6.930349	43.43	RMS	35.7	-95.2	-46.19	-62.26	-40	-22.26	V
9.240751	42.86	RMS	36.4	-95.2	-44.63	-60.57	-40	-20.57	H
9.240751	42.87	RMS	36.4	-95.2	-44.63	-60.56	-40	-20.56	V

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 #:	4790592260
Date:	2/14/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	LTE FCC B41 20MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2506MHz									
5.014125	55.58	Pk	34.3	-95.2	-46.59	-51.91	-25	-26.91	H
5.008523	56.48	Pk	34.3	-95.2	-46.71	-51.13	-25	-26.13	V
7.519931	53.98	Pk	35.5	-95.2	-44.69	-50.41	-25	-25.41	H
7.517474	54.25	Pk	35.5	-95.2	-44.77	-50.22	-25	-25.22	V
10.028080	54.55	Pk	37.1	-95.2	-44.43	-47.98	-25	-22.98	H
10.022500	54	Pk	37.1	-95.2	-44.52	-48.62	-25	-23.62	V
Mid Channel, 2593MHz									
5.191954	55.65	Pk	34.2	-95.2	-46.37	-51.72	-25	-26.72	H
5.188508	55.89	Pk	34.2	-95.2	-46.45	-51.56	-25	-26.56	V
7.771813	54.5	Pk	35.6	-95.2	-44.6	-49.70	-25	-24.70	H
7.758243	54.2	Pk	35.6	-95.2	-44.72	-50.12	-25	-25.12	V
10.378152	55.11	Pk	37.5	-95.2	-44.71	-47.30	-25	-22.30	H
10.374398	54.61	Pk	37.5	-95.2	-44.77	-47.86	-25	-22.86	V
High Channel, 2680MHz									
5.367573	56.05	Pk	34.2	-95.2	-46.39	-51.34	-25	-26.34	H
5.330473	55.91	Pk	34.2	-95.2	-46.54	-51.63	-25	-26.63	V
8.030338	54.83	Pk	35.7	-95.2	-44.51	-49.18	-25	-24.18	H
7.966519	55.96	Pk	35.7	-95.2	-44.61	-48.15	-25	-23.15	V
10.708479	56.72	Pk	37.7	-95.2	-44.91	-45.69	-25	-20.69	H
10.697573	56.35	Pk	37.7	-95.2	-45.05	-46.20	-25	-21.20	V

BPSK LTE BAND n41 (100.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/14/2023
Test Engineer:	27661
Configuration:	EUT Only
Mode	FR1 N41 100MHz BPSK
Chamber #:	01-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB) - 3mH	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2546MHz										
5.058750	39.2	Pk	34.2	.6	-95.2	-30.88	-52.08	-25	-27.08	H
5.078906	38.79	Pk	34.3	.7	-95.2	-30.75	-52.16	-25	-27.16	V
7.645313	36.89	Pk	35.9	.4	-95.2	-27.05	-49.06	-25	-24.06	H
7.651406	35.66	Pk	35.9	.3	-95.2	-27.03	-50.37	-25	-25.37	V
10.195781	35.11	Pk	37.6	.8	-95.2	-24.74	-46.43	-25	-21.43	H
10.235625	34.73	Pk	37.6	.8	-95.2	-25.07	-47.14	-25	-22.14	V
Mid Channel, 2593MHz										
5.118750	38.6	Pk	34.6	.8	-95.2	-30.78	-51.98	-25	-26.98	H
5.113125	39.57	Pk	34.5	.8	-95.2	-30.79	-51.12	-25	-26.12	V
7.690781	36.5	Pk	35.9	.5	-95.2	-26.92	-49.22	-25	-24.22	H
7.687500	35.66	Pk	35.9	.5	-95.2	-26.82	-49.96	-25	-24.96	V
10.197188	34.63	Pk	37.6	.8	-95.2	-24.63	-46.8	-25	-21.8	H
10.183594	34.99	Pk	37.6	.6	-95.2	-24.91	-46.92	-25	-21.92	V
High Channel, 2640MHz										
5.255156	39.55	Pk	34.6	.4	-95.2	-30.73	-51.38	-25	-26.38	H
5.256563	39.61	Pk	34.6	.4	-95.2	-30.81	-51.40	-25	-26.40	V
7.964063	36.39	Pk	35.8	.3	-95.2	-26.44	-49.15	-25	-24.15	H
7.929375	36.67	Pk	35.8	.1	-95.2	-26.74	-49.37	-25	-24.37	V
10.572656	34.34	Pk	37.5	.9	-95.2	-24.61	-47.07	-25	-22.07	H
10.611563	33.95	Pk	37.6	.7	-95.2	-24.47	-47.42	-25	-22.42	V

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 #:	4790592260
Date:	2/14/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	LTE B66 20MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1720MHz									
3.440581	55.56	Pk	32.9	-95.2	-46.20	-52.94	-13	-39.94	H
3.442108	55.95	Pk	32.9	-95.2	-46.12	-52.47	-13	-39.47	V
5.159892	56.09	Pk	34.2	-95.2	-46.45	-51.36	-13	-38.36	H
5.159699	56.12	Pk	34.2	-95.2	-46.44	-51.32	-13	-38.32	V
6.881575	54.23	Pk	35.5	-95.2	-44.42	-49.89	-13	-36.89	H
6.879497	54.2	Pk	35.5	-95.2	-44.38	-49.88	-13	-36.88	V
Mid Channel, 1745MHz									
3.491429	56.26	Pk	32.9	-95.2	-46.26	-52.30	-13	-39.30	H
3.492027	56.63	Pk	32.9	-95.2	-46.24	-51.91	-13	-38.91	V
5.235542	54.98	Pk	34.1	-95.2	-46.46	-52.58	-13	-39.58	H
5.234685	54.71	Pk	34.1	-95.2	-46.46	-52.85	-13	-39.85	V
6.981131	54.16	Pk	35.5	-95.2	-44.99	-50.53	-13	-37.53	H
6.980779	54.04	Pk	35.5	-95.2	-44.99	-50.65	-13	-37.65	V
High Channel, 1770MHz									
3.543176	57.44	Pk	32.9	-95.2	-46.47	-51.33	-13	-38.33	H
3.519237	57.13	Pk	32.9	-95.2	-46.42	-51.59	-13	-38.59	V
5.306765	56.02	Pk	34.2	-95.2	-46.29	-51.27	-13	-38.27	H
5.314814	55.76	Pk	34.2	-95.2	-46.23	-51.47	-13	-38.47	V
7.075982	55.05	Pk	35.6	-95.2	-44.6	-49.15	-13	-36.15	H
7.085552	55.04	Pk	35.6	-95.2	-44.64	-49.20	-13	-36.20	V

BPSK 5G NR n66 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/21/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	FR1 N66 40MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1730MHz									
3.450500	55.81	Pk	32.9	-95.2	-47.43	-53.92	-13	-40.92	H
3.427500	54.95	Pk	32.8	-95.2	-47.29	-54.74	-13	-41.74	V
5.178000	56.77	Pk	34.5	-95.2	-48.30	-52.23	-13	-39.23	H
5.163000	56.49	Pk	34.5	-95.2	-48.38	-52.59	-13	-39.59	V
6.922500	55.21	Pk	35.7	-95.2	-46.74	-51.03	-13	-38.03	H
6.955000	55.13	Pk	35.8	-95.2	-46.88	-51.15	-13	-38.15	V
Mid Channel, 1745MHz									
3.498000	56.49	Pk	33	-95.2	-47.51	-53.22	-13	-40.22	H
3.493500	56.48	Pk	33	-95.2	-47.53	-53.25	-13	-40.25	V
5.237500	55.83	Pk	34.5	-95.2	-48.21	-53.08	-13	-40.08	H
5.220500	55.92	Pk	34.5	-95.2	-48.15	-52.93	-13	-39.93	V
7.017000	54.6	Pk	35.8	-95.2	-47.06	-51.86	-13	-38.86	H
7.005500	55.64	Pk	35.8	-95.2	-47.07	-50.83	-13	-37.83	V
High Channel, 1760MHz									
3.522500	55.94	Pk	32.9	-95.2	-47.18	-53.54	-13	-40.54	H
3.511000	56.26	Pk	33	-95.2	-47.44	-53.38	-13	-40.38	V
5.281500	57.83	Pk	34.6	-95.2	-48.12	-50.89	-13	-37.89	H
5.286500	56.86	Pk	34.6	-95.2	-48.18	-51.92	-13	-38.92	V
7.035500	54.92	Pk	35.9	-95.2	-47.16	-51.54	-13	-38.54	H
7.009000	55.44	Pk	35.8	-95.2	-47.05	-51.01	-13	-38.01	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 #:	4790592260
Date:	2/23/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	FR1 N70 15MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 1702.5MHz									
3.406630	55.99	Pk	32.8	-95.2	-47.17	-53.58	-13	-40.58	H
3.403592	56.5	Pk	32.8	-95.2	-46.98	-52.88	-13	-39.88	V
5.086042	58.87	Pk	34.5	-95.2	-48.82	-50.65	-13	-37.65	H
5.086029	60.01	Pk	34.5	-95.2	-48.82	-49.51	-13	-36.51	V
6.809153	56.07	Pk	35.7	-95.2	-46.67	-50.10	-13	-37.10	H
6.809813	56.01	Pk	35.7	-95.2	-46.65	-50.14	-13	-37.14	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 #:	4790592260
Date:	2/17/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	LTE B71 20MHz QPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 673MHz									
1.345715	61.42	Pk	29.2	-95.2	-49.61	-54.19	-13	-41.19	H
1.345370	62.13	Pk	29.2	-95.2	-49.6	-53.47	-13	-40.47	V
2.016721	61.5	Pk	31.5	-95.2	-50.05	-52.25	-13	-39.25	H
2.021434	60.73	Pk	31.5	-95.2	-50.05	-53.02	-13	-40.02	V
2.694189	59.63	Pk	32.1	-95.2	-48.31	-51.78	-13	-38.78	H
2.695226	59.94	Pk	32.1	-95.2	-48.33	-51.49	-13	-38.49	V
Mid Channel, 683MHz									
1.357291	60.02	Pk	29	-95.2	-49.55	-55.73	-13	-42.73	H
1.363343	59.3	Pk	29	-95.2	-49.5	-56.40	-13	-43.40	V
2.040035	60.75	Pk	31.6	-95.2	-49.96	-52.81	-13	-39.81	H
2.043890	61.58	Pk	31.6	-95.2	-49.92	-51.94	-13	-38.94	V
2.723521	57.99	Pk	32.1	-95.2	-48.24	-53.35	-13	-40.35	H
2.724429	58.47	Pk	32.1	-95.2	-48.28	-52.91	-13	-39.91	V
High Channel, 688MHz									
1.381193	59.57	Pk	28.8	-95.2	-49.57	-56.40	-13	-43.40	H
1.381122	59.78	Pk	28.8	-95.2	-49.57	-56.19	-13	-43.19	V
2.061335	60.84	Pk	31.7	-95.2	-49.77	-52.43	-13	-39.43	H
2.060931	61.5	Pk	31.7	-95.2	-49.77	-51.77	-13	-38.77	V
2.753816	58.61	Pk	32.2	-95.2	-48.73	-53.12	-13	-40.12	H
2.753480	58.43	Pk	32.2	-95.2	-48.7	-53.27	-13	-40.27	V

BPSK 5G NR n71 (20.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	2/21/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	FR1 N71 20MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 673MHz									
1.350100	61.19	Pk	29.1	-95.2	-49.54	-54.45	-13	-41.45	H
1.346050	59.98	Pk	29.2	-95.2	-49.61	-55.63	-13	-42.63	V
2.017900	59.64	Pk	31.5	-95.2	-50.09	-54.15	-13	-41.15	H
2.008000	60.6	Pk	31.4	-95.2	-50.14	-53.34	-13	-40.34	V
2.694250	58.13	Pk	32.1	-95.2	-48.31	-53.28	-13	-40.28	H
2.694250	57.36	Pk	32.1	-95.2	-48.31	-54.05	-13	-41.05	V
Mid Channel, 683MHz									
1.357750	58.21	Pk	29	-95.2	-49.53	-57.52	-13	-44.52	H
1.353250	59.74	Pk	29.1	-95.2	-49.53	-55.89	-13	-42.89	V
2.050750	60.21	Pk	31.6	-95.2	-49.81	-53.20	-13	-40.20	H
2.053900	60.67	Pk	31.6	-95.2	-49.83	-52.76	-13	-39.76	V
2.722600	56.22	Pk	32.1	-95.2	-48.19	-55.07	-13	-42.07	H
2.711350	56.85	Pk	32.1	-95.2	-48.36	-54.61	-13	-41.61	V
High Channel, 688MHz									
1.380250	58.39	Pk	28.8	-95.2	-49.6	-57.61	-13	-44.61	H
1.388800	58.85	Pk	28.8	-95.2	-49.59	-57.14	-13	-44.14	H
2.053000	59.69	Pk	31.6	-95.2	-49.86	-53.77	-13	-40.77	H
2.062450	59.54	Pk	31.7	-95.2	-49.75	-53.71	-13	-40.71	H
2.753200	56.93	Pk	32.2	-95.2	-48.68	-54.75	-13	-41.75	H
2.753200	56.93	Pk	32.2	-95.2	-48.68	-54.75	-13	-41.75	H

10.3. FIELD STRENGTH OF SPURIOUS RADIATION, ANT3

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r02

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 #:	4790592260
Date:	2/9/2023
Test Engineer:	24943
Configuration:	EUT Only
Mode	LTE B7 20MHz QPSK
Chamber #:	05-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2510MHz										
5.061094	39.26	Pk	34.2	.6	-95.2	-30.89	-52.03	-25	-27.03	H
5.060625	39.68	Pk	34.2	.6	-95.2	-30.94	-51.66	-25	-26.66	V
7.502813	35.9	Pk	36	.3	-95.2	-26.95	-49.95	-25	-24.95	H
7.503281	36.87	Pk	36	.3	-95.2	-26.94	-48.97	-25	-23.97	V
10.034063	34.83	Pk	37.3	.7	-95.2	-25.10	-47.47	-25	-22.47	H
10.124063	35.33	Pk	37.5	.7	-95.2	-24.83	-46.50	-25	-21.50	V
Mid Channel, 2535MHz										
5.114063	40.5	Pk	34.5	.8	-95.2	-30.78	-50.18	-25	-25.18	H
5.115469	38.64	Pk	34.6	.8	-95.2	-30.79	-51.95	-25	-26.95	V
7.628438	36.03	Pk	35.9	.4	-95.2	-27.08	-49.95	-25	-24.95	H
7.713750	37.03	Pk	36	.4	-95.2	-26.82	-48.59	-25	-23.59	V
10.103438	35.45	Pk	37.5	.7	-95.2	-25.15	-46.70	-25	-21.70	H
10.322813	36.28	Pk	37.5	.6	-95.2	-25.06	-45.88	-25	-20.88	V
High Channel, 2560MHz										
5.130000	39.55	Pk	34.6	.8	-95.2	-30.69	-50.94	-25	-25.94	H
5.174063	39.78	Pk	34.7	.7	-95.2	-30.69	-50.71	-25	-25.71	V
7.673438	37.16	Pk	35.9	.4	-95.2	-27.02	-48.76	-25	-23.76	H
7.601719	37.5	Pk	35.9	.4	-95.2	-27.17	-48.57	-25	-23.57	V
10.202344	36.35	Pk	37.6	.8	-95.2	-24.73	-45.18	-25	-20.18	H
10.129219	36.62	Pk	37.5	.7	-95.2	-24.97	-45.35	-25	-20.35	V

BPSK 5G NR n7 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	05/30/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	n7 40MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2520MHz									
5.039224	58.41	Pk	34.4	-95.2	-47.68	-50.07	-25	-25.07	H
5.042018	58.71	Pk	34.4	-95.2	-47.66	-49.75	-25	-24.75	V
7.501869	57.12	Pk	35.8	-95.2	-45.75	-48.03	-25	-23.03	H
7.501538	56.92	Pk	35.8	-95.2	-45.77	-48.25	-25	-23.25	V
10.079691	56.59	Pk	37.5	-95.2	-45.43	-46.54	-25	-21.54	H
10.078614	56.96	Pk	37.5	-95.2	-45.36	-46.10	-25	-21.10	V
Mid Channel, 2535MHz									
5.070668	59.37	Pk	34.5	-95.2	-47.9	-49.23	-25	-24.23	H
5.071779	58.35	Pk	34.5	-95.2	-47.89	-50.24	-25	-25.24	V
7.546598	60.63	Pk	35.8	-95.2	-45.62	-44.39	-25	-19.39	H
7.546750	62.63	Pk	35.8	-95.2	-45.63	-42.40	-25	-17.40	V
10.142119	56.6	Pk	37.5	-95.2	-45.44	-46.54	-25	-21.54	H
10.142473	57	Pk	37.5	-95.2	-45.43	-46.13	-25	-21.13	V
High Channel, 2550MHz									
5.099702	58.21	Pk	34.5	-95.2	-47.75	-50.24	-25	-25.24	H
5.099028	58.85	Pk	34.5	-95.2	-47.66	-49.51	-25	-24.51	V
7.648510	55.64	Pk	35.7	-95.2	-45.49	-49.35	-25	-24.35	H
7.652307	56.4	Pk	35.7	-95.2	-45.37	-48.47	-25	-23.47	V
10.202712	56.4	Pk	37.5	-95.2	-45.28	-46.58	-25	-21.58	H
10.202971	55.9	Pk	37.5	-95.2	-45.21	-47.01	-25	-22.01	V

10.3.2. 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 #:	4790592260
Date:	5/25/2023
Test Engineer:	32981
Configuration:	EUT Only
Mode	LTE B12 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 704MHz									
1.399531	58.84	Pk	28.6	-95.2	-47.06	-54.82	-13	-41.82	H
1.399432	60.45	Pk	28.6	-95.2	-47.07	-53.22	-13	-40.22	V
2.098679	63.14	Pk	31.1	-95.2	-47.37	-48.33	-13	-35.33	H
2.100870	58.17	Pk	31.1	-95.2	-47.36	-53.29	-13	-40.29	V
2.780478	57.83	Pk	32.3	-95.2	-47.43	-52.50	-13	-39.50	H
2.784070	57.45	Pk	32.3	-95.2	-47.33	-52.78	-13	-39.78	V
Mid Channel, 707.5MHz									
1.406032	60.78	Pk	28.5	-95.2	-47.06	-52.98	-13	-39.98	H
1.406209	70.77	Pk	28.5	-95.2	-47.05	-42.98	-13	-29.98	V
2.109150	64.39	Pk	31.1	-95.2	-47.33	-47.04	-13	-34.04	H
2.110241	58.02	Pk	31.1	-95.2	-47.27	-53.35	-13	-40.35	V
3.702868	57.14	Pk	32.8	-95.2	-46.31	-51.57	-13	-38.57	H
3.702218	55.79	Pk	32.8	-95.2	-46.33	-52.94	-13	-39.94	V
High Channel, 711MHz									
1.413201	58.03	Pk	28.4	-95.2	-47.10	-55.87	-13	-42.87	H
1.413092	70.24	Pk	28.4	-95.2	-47.09	-43.65	-13	-30.65	V
2.119659	65.35	Pk	31.2	-95.2	-47.15	-45.8	-13	-32.8	H
2.119627	61.92	Pk	31.2	-95.2	-47.15	-49.23	-13	-36.23	V
2.823789	56.9	Pk	32.2	-95.2	-46.90	-53.00	-13	-40.00	H
2.822545	57.07	Pk	32.2	-95.2	-46.84	-52.77	-13	-39.77	V

BPSK 5G NR n12 (15.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	3/1/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	N12 15MHz
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 706.5MHz									
1.411068	58.85	Pk	28.6	-95.2	-49.65	-57.40	-13	-44.40	H
1.412931	59.7	Pk	28.5	-95.2	-49.69	-56.69	-13	-43.69	V
2.122220	60.56	Pk	31.6	-95.2	-49.71	-52.75	-13	-39.75	H
2.121823	59.95	Pk	31.6	-95.2	-49.72	-53.37	-13	-40.37	V
2.822883	59.85	Pk	32.4	-95.2	-48.71	-51.66	-13	-38.66	H
2.830526	60.11	Pk	32.4	-95.2	-48.66	-51.35	-13	-38.35	V
Mid Channel, 707.5MHz									
1.416120	59.17	Pk	28.5	-95.2	-49.65	-57.18	-13	-44.18	H
1.417645	59.03	Pk	28.5	-95.2	-49.67	-57.34	-13	-44.34	V
2.097317	60.87	Pk	31.7	-95.2	-49.66	-52.29	-13	-39.29	H
2.100668	61.05	Pk	31.7	-95.2	-49.66	-52.11	-13	-39.11	V
2.831640	59.89	Pk	32.4	-95.2	-48.63	-51.54	-13	-38.54	H
2.833237	60.35	Pk	32.4	-95.2	-48.64	-51.09	-13	-38.09	V
High Channel, 708.5MHz									
1.419492	58.89	Pk	28.4	-95.2	-49.66	-57.57	-13	-44.57	H
1.416153	58.42	Pk	28.5	-95.2	-49.65	-57.93	-13	-44.93	V
2.121904	59.2	Pk	31.6	-95.2	-49.72	-54.12	-13	-41.12	H
2.124636	59.48	Pk	31.6	-95.2	-49.71	-53.83	-13	-40.83	V
2.837141	60.27	Pk	32.4	-95.2	-48.66	-51.19	-13	-38.19	H
2.831414	60.23	Pk	32.4	-95.2	-48.64	-51.21	-13	-38.21	V

10.3.3. 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 #:	4790592260
Date:	5/31/2023
Test Engineer:	32186
Configuration:	EUT Only
Mode	LTE B13 10MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 782MHz									
1.568046	56.91	Pk	27.7	-95.2	-47.39	-57.98	-40	-17.98	H
1.570465	57.32	Pk	27.8	-95.2	-47.43	-57.51	-40	-17.51	V
2.332780	59.04	Pk	31.5	-95.2	-48.09	-52.75	-13	-39.75	H
2.331274	58.36	Pk	31.5	-95.2	-48.04	-53.38	-13	-40.38	V
3.106708	56.72	Pk	32.9	-95.2	-46.81	-52.39	-13	-39.39	H
3.108532	56.93	Pk	32.9	-95.2	-46.66	-52.03	-13	-39.03	V

* Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

10.3.4. 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 #:	4790592260
Date:	2/10/2023
Test Engineer:	24943
Configuration:	EUT Only
Mode	LTE B14 10MHz QPSK
Chamber #:	01-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	172654 HPF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 793MHz										
1.576933	46.42	Pk	28.1	.8	-95.2	-35.15	-55.03	-40	-15.03	H
1.577422	47.24	Pk	28.1	.8	-95.2	-35.23	-54.29	-40	-14.29	V
2.366000	50.02	Pk	32.2	.5	-95.2	-34.95	-47.43	-13	-34.43	H
2.366000	48.91	Pk	32.2	.5	-95.2	-34.95	-48.54	-13	-35.54	V
3.163378	42.7	Pk	33.2	.4	-95.2	-33.99	-52.89	-13	-39.89	H
3.153600	43.31	Pk	33.3	.5	-95.2	-34.07	-52.16	-13	-39.16	V

* Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

BPSK 5G NR n14 (10.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	5/26/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	n14 10MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 793MHz									
1.576900	57.31	Pk	27.8	-95.2	-47.48	-57.57	-40	-17.57	H
1.576450	61.76	Pk	27.8	-95.2	-47.45	-53.09	-40	-13.09	V
2.364850	57.21	Pk	31.6	-95.2	-47.72	-54.11	-13	-41.11	H
2.365300	57.05	Pk	31.6	-95.2	-47.72	-54.27	-13	-41.27	V
3.133450	54.6	Pk	32.9	-95.2	-46.35	-54.05	-13	-41.05	H
3.131650	55.41	Pk	32.9	-95.2	-46.46	-53.35	-13	-40.35	V

* Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

10.3.5. 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 #:	4790592260
Date:	02/10/2023
Test Engineer:	24943
Configuration:	EUT Only
Mode	LTE B17 10MHz QPSK
Chamber #:	01-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	172654 HPF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 709MHz										
1.408756	43.44	Pk	28.2	1	-95.2	-35.24	-57.80	-13	-44.80	H
1.386756	42.58	Pk	28.4	1	-95.2	-35.18	-58.40	-13	-45.40	V
2.113734	46.72	Pk	31.8	.6	-95.2	-35.04	-51.12	-13	-38.12	H
2.051645	44.18	Pk	31.9	.6	-95.2	-34.97	-53.49	-13	-40.49	V
2.805511	42.57	Pk	32.6	.5	-95.2	-34.66	-54.19	-13	-41.19	H
2.763467	43.19	Pk	32.5	.5	-95.2	-34.68	-53.69	-13	-40.69	V
Mid Channel, 710MHz										
1.410711	43.85	Pk	28.2	1	-95.2	-35.18	-57.33	-13	-44.33	H
1.411689	43.47	Pk	28.2	1	-95.2	-35.23	-57.76	-13	-44.76	V
2.117156	47.47	Pk	31.8	.5	-95.2	-35.00	-50.43	-13	-37.43	H
2.085867	43.89	Pk	32.1	.6	-95.2	-35.06	-53.67	-13	-40.67	V
2.864178	42.97	Pk	32.6	.5	-95.2	-34.44	-53.57	-13	-40.57	H
2.901334	42.86	Pk	32.5	.6	-95.2	-34.36	-53.60	-13	-40.60	V
High Channel, 711MHz										
1.475245	43.02	Pk	28.1	.8	-95.2	-35.11	-58.39	-13	-45.39	H
1.485511	42.28	Pk	28.1	.8	-95.2	-35.11	-59.13	-13	-46.13	V
2.120089	46.64	Pk	31.7	.5	-95.2	-35.05	-51.41	-13	-38.41	H
2.119600	44.53	Pk	31.7	.5	-95.2	-34.99	-53.46	-13	-40.46	V
2.878845	43.22	Pk	32.5	.5	-95.2	-34.54	-53.52	-13	-40.52	H
2.876400	42.21	Pk	32.6	.5	-95.2	-34.57	-54.46	-13	-41.46	V

10.3.6. 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 #:	4790592260
Date:	02/09/2023
Test Engineer:	24943
Configuration:	EUT Only
Mode	LTE B25 20MHz QPSK
Chamber #:	01-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1860MHz									
3.803438	41.46	Pk	33.5	-95.2	-31.96	-52.20	-13	-39.20	H
3.853125	41	Pk	33.8	-95.2	-31.77	-52.17	-13	-39.17	V
5.452031	39.93	Pk	34.8	-95.2	-29.65	-50.12	-13	-37.12	H
5.312813	39.23	Pk	34.4	-95.2	-29.96	-51.53	-13	-38.53	V
7.485469	36.94	Pk	36	-95.2	-26.25	-48.51	-13	-35.51	H
7.559531	36.77	Pk	36	-95.2	-26.12	-48.55	-13	-35.55	V
Mid Channel, 1882.5MHz									
3.704531	40.86	Pk	33	-95.2	-32.38	-53.72	-13	-40.72	H
3.730781	41.11	Pk	32.9	-95.2	-32.19	-53.38	-13	-40.38	V
5.708906	38.54	Pk	34.9	-95.2	-29.25	-51.01	-13	-38.01	H
5.731406	38.95	Pk	34.9	-95.2	-28.91	-50.26	-13	-37.26	V
7.461094	36.61	Pk	36	-95.2	-26.34	-48.93	-13	-35.93	H
7.563750	36.87	Pk	36	-95.2	-26.21	-48.54	-13	-35.54	V
High Channel, 1905MHz									
3.787031	41.29	Pk	33.3	-95.2	-31.97	-52.58	-13	-39.58	H
3.851719	40.16	Pk	33.8	-95.2	-31.71	-52.95	-13	-39.95	V
5.760469	38.77	Pk	35	-95.2	-28.61	-50.04	-13	-37.04	H
5.673281	39.4	Pk	34.8	-95.2	-29.98	-50.98	-13	-37.98	V
7.713750	36	Pk	36	-95.2	-26.12	-49.32	-13	-36.32	H
7.741875	36.87	Pk	36	-95.2	-26.00	-48.33	-13	-35.33	V

BPSK 5G NR n25 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	03/02/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	n25 40MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1870MHz									
3.738698	57.3	Pk	33.4	-95.2	-47.74	-52.24	-13	-39.24	H
3.737421	57.57	Pk	33.4	-95.2	-47.72	-51.95	-13	-38.95	V
5.611595	58.27	Pk	34.8	-95.2	-47.82	-49.95	-13	-36.95	H
5.613431	57.44	Pk	34.8	-95.2	-47.87	-50.83	-13	-37.83	V
7.481729	56.83	Pk	35.8	-95.2	-47.18	-49.75	-13	-36.75	H
7.482126	56.36	Pk	35.8	-95.2	-47.17	-50.21	-13	-37.21	V
Mid Channel, 1882.5MHz									
3.766124	57.16	Pk	33.4	-95.2	-47.72	-52.36	-13	-39.36	H
3.765010	57.37	Pk	33.4	-95.2	-47.71	-52.14	-13	-39.14	V
5.650336	58.04	Pk	34.8	-95.2	-47.75	-50.11	-13	-37.11	H
5.648435	57.58	Pk	34.8	-95.2	-47.77	-50.59	-13	-37.59	V
7.535658	56.9	Pk	35.8	-95.2	-47.07	-49.57	-13	-36.57	H
7.532173	56.84	Pk	35.8	-95.2	-47.04	-49.60	-13	-36.60	V
High Channel, 1895MHz									
3.786663	57.55	Pk	33.5	-95.2	-47.64	-51.79	-13	-38.79	H
3.788626	57.53	Pk	33.5	-95.2	-47.62	-51.79	-13	-38.79	V
5.689815	56.59	Pk	34.8	-95.2	-47.53	-51.34	-13	-38.34	H
5.683366	57.34	Pk	34.8	-95.2	-47.58	-50.64	-13	-37.64	V
7.578288	56.45	Pk	35.8	-95.2	-47.13	-50.08	-13	-37.08	H
7.584491	57.18	Pk	35.7	-95.2	-47.16	-49.48	-13	-36.48	V

10.3.7. LTE BAND 26 AND 5G NR n26 (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 #:	4790592260
Date:	02/10/2023
Test Engineer:	24943
Configuration:	EUT Only
Mode	LTE B26 Part 90S 10MHz QPSK
Chamber #:	01-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	172654 HPF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 819MHz										
1.619467	43.24	Pk	28	.7	-95.2	-35.00	-58.26	-13	-45.26	H
1.635111	43.74	Pk	28.2	.7	-95.2	-35.14	-57.70	-13	-44.70	V
2.480889	48.75	Pk	32.6	.5	-95.2	-34.80	-48.15	-13	-35.15	H
2.481378	50.12	Pk	32.6	.5	-95.2	-34.82	-46.80	-13	-33.80	V
3.181956	42.27	Pk	33.2	.5	-95.2	-34.08	-53.31	-13	-40.31	H
3.139423	42.14	Pk	33.3	.5	-95.2	-34.15	-53.41	-13	-40.41	V

BPSK 5G NR n26 (10.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	03/02/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	n26 Part 90S 10MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 819MHz									
1.628796	61.67	Pk	27.8	-95.2	-49.75	-55.48	-13	-42.48	H
1.628704	69.93	Pk	27.8	-95.2	-49.75	-47.22	-13	-34.22	V
2.438325	60.74	Pk	32.4	-95.2	-49.67	-51.73	-13	-38.73	H
2.441058	60.54	Pk	32.4	-95.2	-49.57	-51.83	-13	-38.83	V
3.275054	58.34	Pk	32.9	-95.2	-47.14	-51.10	-13	-38.10	H
3.277229	58.05	Pk	32.9	-95.2	-47.14	-51.39	-13	-38.39	V

10.3.8. LTE BAND 26 AND 5G NR n26 (PART 22)

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 26 (15.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	02/10/2023
Test Engineer:	24943
Configuration:	EUT Only
Mode	LTE B26 Part 22H 15MHz QPSK
Chamber #:	01-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	172654 HPF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 831.5MHz										
1.641467	43.52	Pk	28.3	.7	-95.2	-35.17	-57.85	-13	-44.85	H
1.647822	42.68	Pk	28.4	.7	-95.2	-35.18	-58.60	-13	-45.60	V
2.492623	43.56	Pk	32.7	.5	-95.2	-34.93	-53.37	-13	-40.37	H
2.498489	43.08	Pk	32.7	.5	-95.2	-34.85	-53.77	-13	-40.77	V
3.323734	42.14	Pk	33.1	.5	-95.2	-33.94	-53.40	-13	-40.40	H
3.371156	41.83	Pk	33.1	.5	-95.2	-33.64	-53.41	-13	-40.41	V
Mid Channel, 836.5MHz										
1.629489	42.88	Pk	28.1	.7	-95.2	-35.16	-58.68	-13	-45.68	H
1.646845	42.8	Pk	28.3	.7	-95.2	-35.18	-58.58	-13	-45.58	V
2.506800	44.1	Pk	32.7	.5	-95.2	-34.90	-52.8	-13	-39.80	H
2.507778	43.14	Pk	32.7	.5	-95.2	-34.98	-53.84	-13	-40.84	V
3.357467	42.94	Pk	33.1	.5	-95.2	-33.76	-52.42	-13	-39.42	H
3.304178	42.37	Pk	33.2	.5	-95.2	-33.82	-52.95	-13	-39.95	V
High Channel, 841.5MHz										
1.678622	43.72	Pk	28.7	.7	-95.2	-35.08	-57.16	-13	-44.16	H
1.729467	43.85	Pk	29.7	.7	-95.2	-35.16	-56.11	-13	-43.11	V
2.528800	43.53	Pk	32.8	.5	-95.2	-34.87	-53.24	-13	-40.24	H
2.561067	43.72	Pk	32.8	.7	-95.2	-34.91	-52.89	-13	-39.89	V
3.339378	42.19	Pk	33.1	.5	-95.2	-33.85	-53.26	-13	-40.26	H
3.286578	42.06	Pk	33.2	.5	-95.2	-33.87	-53.31	-13	-40.31	V

BPSK 5G NR n26 (20.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	03/02/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	n26 Part 22H 20MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 834MHz									
1.648719	65.67	Pk	28	-95.2	-49.79	-51.32	-13	-38.32	H
1.648846	68.61	Pk	28	-95.2	-49.79	-48.38	-13	-35.38	V
2.486891	60.31	Pk	32.5	-95.2	-49.06	-51.45	-13	-38.45	H
2.485297	59.83	Pk	32.5	-95.2	-49.11	-51.98	-13	-38.98	V
3.316194	57.53	Pk	32.9	-95.2	-47.10	-51.87	-13	-38.87	H
3.316031	57.67	Pk	32.9	-95.2	-47.10	-51.73	-13	-38.73	V
Mid Channel, 836.5MHz									
1.663911	64.94	Pk	28.3	-95.2	-49.7	-51.66	-13	-38.66	H
1.663734	67.48	Pk	28.3	-95.2	-49.69	-49.11	-13	-36.11	V
2.494955	60.22	Pk	32.5	-95.2	-49.04	-51.52	-13	-38.52	H
2.491846	60.1	Pk	32.5	-95.2	-49.10	-51.70	-13	-38.70	V
3.347328	56.6	Pk	32.9	-95.2	-46.79	-52.49	-13	-39.49	H
3.348846	56.59	Pk	32.9	-95.2	-46.83	-52.54	-13	-39.54	V
High Channel, 839MHz									
1.678874	65.35	Pk	28.5	-95.2	-49.71	-51.06	-13	-38.06	H
1.678886	69.53	Pk	28.5	-95.2	-49.71	-46.88	-13	-33.88	V
2.518422	59.3	Pk	32.6	-95.2	-48.99	-52.29	-13	-39.29	H
2.518314	59.3	Pk	32.6	-95.2	-48.99	-52.29	-13	-39.29	V
3.378315	56.57	Pk	32.8	-95.2	-47.11	-52.94	-13	-39.94	H
3.376710	56.08	Pk	32.8	-95.2	-47.02	-53.34	-13	-40.34	V

10.3.9. 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 #:	4790592260
Date:	02/09/2023
Test Engineer:	24943
Configuration:	EUT Only
Mode	LTE B30 10MHz QPSK
Chamber #:	01-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.610273	43.90	RMS	34.1	-95.2	-46.76	-63.96	-40	-23.96	H
4.609292	43.88	RMS	34.1	-95.2	-46.77	-63.99	-40	-23.99	V
6.915771	42.29	RMS	35.5	-95.2	-45.09	-62.50	-40	-22.50	H
6.915281	42.28	RMS	35.5	-95.2	-45.1	-62.52	-40	-22.52	V
9.220289	43.27	RMS	36.4	-95.2	-43.87	-59.40	-40	-19.40	H
9.220289	43.22	RMS	36.4	-95.2	-43.87	-59.45	-40	-19.45	V

BPSK 5G NR n30 (10.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	06/12/2023
Test Engineer:	32901
Configuration:	EUT Only
Mode	n30 10MHz BPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.601447	43.94	RMS	34.1	-95.2	-46.87	-64.03	-40	-24.03	H
4.602918	43.99	RMS	34.1	-95.2	-46.8	-63.91	-40	-23.91	V
6.915281	42.42	RMS	35.5	-95.2	-45.1	-62.38	-40	-22.38	H
6.916262	42.43	RMS	35.5	-95.2	-45.09	-62.36	-40	-22.36	V
9.198715	43.05	RMS	36.4	-95.2	-43.8	-59.55	-40	-19.55	H
9.197244	42.91	RMS	36.4	-95.2	-43.79	-59.68	-40	-19.68	V

10.3.10. 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 #:	4790592260
Date:	02/09/2023
Test Engineer:	24943
Configuration:	EUT Only
Mode	LTE B41 FCC 20MHz QPSK
Chamber #:	01-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	BRF 2495-2690MHz T1790 1-18GHz	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2506MHz										
4.994063	40.29	Pk	34.1	.7	-95.2	-31.07	-51.18	-25	-26.18	H
5.109375	39.53	Pk	34.5	.8	-95.2	-30.95	-51.32	-25	-26.32	V
7.530938	36.02	Pk	36	.3	-95.2	-27.04	-49.92	-25	-24.92	H
7.492500	36.5	Pk	36	.3	-95.2	-26.84	-49.24	-25	-24.24	V
9.987656	35.75	Pk	37.3	.5	-95.2	-24.93	-46.58	-25	-21.58	H
10.191094	35.84	Pk	37.6	.7	-95.2	-24.72	-45.78	-25	-20.78	V
Mid Channel, 2593MHz										
5.375625	38.44	Pk	34.5	.6	-95.2	-30.42	-52.08	-25	-27.08	H
5.400469	37.92	Pk	34.6	.7	-95.2	-29.98	-51.96	-25	-26.96	V
8.096250	36.92	Pk	35.9	.3	-95.2	-26.41	-48.49	-25	-23.49	H
8.229375	36.82	Pk	36.1	.3	-95.2	-26.23	-48.21	-25	-23.21	V
10.099688	37.21	Pk	37.5	.7	-95.2	-25.21	-45.00	-25	-20.00	H
10.761563	34.66	Pk	37.7	.9	-95.2	-24.20	-46.14	-25	-21.14	V
High Channel, 2680MHz										
5.328281	38.8	Pk	34.4	.8	-95.2	-30.28	-51.48	-25	-26.48	H
5.193750	40.07	Pk	34.8	.8	-95.2	-30.60	-50.13	-25	-25.13	V
8.061563	36.22	Pk	35.8	.4	-95.2	-26.48	-49.26	-25	-24.26	H
8.255625	36.71	Pk	36.1	.3	-95.2	-26.23	-48.32	-25	-23.32	V
10.398281	35.34	Pk	37.4	.8	-95.2	-24.58	-46.24	-25	-21.24	H
10.824375	35.56	Pk	37.7	.5	-95.2	-24.05	-45.49	-25	-20.49	V

BPSK LTE BAND n41 (100.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	02/27/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	n41FCC 100MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2546MHz									
5.097000	56.69	Pk	34.5	-95.2	-48.78	-52.79	-25	-27.79	H
5.049000	58.36	Pk	34.4	-95.2	-48.88	-51.32	-25	-26.32	V
7.631000	55.22	Pk	35.7	-95.2	-46.94	-51.22	-25	-26.22	H
7.589000	55.63	Pk	35.7	-95.2	-47.23	-51.10	-25	-26.10	V
10.210000	55.12	Pk	37.5	-95.2	-46.61	-49.19	-25	-24.19	H
10.240500	55	Pk	37.5	-95.2	-46.39	-49.09	-25	-24.09	V
Mid Channel, 2593MHz									
5.182000	55.54	Pk	34.5	-95.2	-48.33	-53.49	-25	-28.49	H
5.162500	55.6	Pk	34.5	-95.2	-48.37	-53.47	-25	-28.47	V
7.760500	55.1	Pk	35.8	-95.2	-46.61	-50.91	-25	-25.91	H
7.721000	55.38	Pk	35.8	-95.2	-46.58	-50.60	-25	-25.60	V
10.385500	57.72	Pk	37.6	-95.2	-46.54	-46.42	-25	-21.42	H
10.382000	55.66	Pk	37.6	-95.2	-46.57	-48.51	-25	-23.51	V
High Channel, 2640MHz									
5.180729	57.02	Pk	34.1	-95.2	-47.7	-51.78	-25	-26.78	H
5.178924	57.24	Pk	34.1	-95.2	-47.67	-51.53	-25	-26.53	V
7.770028	55.49	Pk	35.7	-95.2	-46.2	-50.21	-25	-25.21	H
7.769974	55.45	Pk	35.7	-95.2	-46.2	-50.25	-25	-25.25	V
10.361576	55.54	Pk	37.3	-95.2	-45.78	-48.14	-25	-23.14	H
10.360194	55.67	Pk	37.3	-95.2	-45.74	-47.97	-25	-22.97	V

10.3.11. 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 #:	4790592260
Date:	03/08/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	LTE B66 20MHz QPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80404_ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1720MHz									
3.444500	53.21	Pk	33	-95.2	-44.81	-53.80	-13	-40.80	H
3.449500	53.37	Pk	33	-95.2	-44.97	-53.80	-13	-40.80	V
5.166500	53.52	Pk	34.3	-95.2	-45.14	-52.52	-13	-39.52	H
5.177000	54.12	Pk	34.4	-95.2	-45.19	-51.87	-13	-38.87	V
6.876500	52.09	Pk	36.1	-95.2	-42.91	-49.92	-13	-36.92	H
6.889500	51.81	Pk	36	-95.2	-42.83	-50.22	-13	-37.22	V
Mid Channel, 1745MHz									
3.502500	53.35	Pk	35	-95.2	-44.96	-51.81	-13	-38.81	H
3.498500	53.99	Pk	34.8	-95.2	-44.77	-51.18	-13	-38.18	V
5.226000	53.54	Pk	34.6	-95.2	-44.94	-52.00	-13	-39.00	H
5.215000	54.16	Pk	34.6	-95.2	-45.04	-51.48	-13	-38.48	V
6.972500	50.70	Pk	36	-95.2	-42.95	-51.45	-13	-38.45	H
6.975500	51.50	Pk	35.9	-95.2	-42.91	-50.71	-13	-37.71	V
High Channel, 1770MHz									
3.542500	53.21	Pk	33.1	-95.2	-44.79	-53.68	-13	-40.68	H
3.528500	53.90	Pk	33.1	-95.2	-44.87	-53.07	-13	-40.07	V
5.318500	52.90	Pk	34.5	-95.2	-44.71	-52.51	-13	-39.51	H
5.321000	53.59	Pk	34.5	-95.2	-44.78	-51.89	-13	-38.89	V
6.971500	51.68	Pk	36	-95.2	-42.95	-50.47	-13	-37.47	H
6.973500	51.39	Pk	36	-95.2	-42.94	-50.75	-13	-37.75	V

BPSK 5G NR n66 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	03/01/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	n66 40MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1730MHz									
3.4705000	54.88	Pk	32.9	-95.2	-46.72	-54.14	-13	-41.14	V
3.475500	55.37	Pk	32.9	-95.2	-46.85	-53.78	-13	-40.78	H
5.198500	55.03	Pk	34.7	-95.2	-47.22	-52.69	-13	-39.69	V
5.208000	54.94	Pk	34.7	-95.2	-46.79	-52.35	-13	-39.35	H
6.882500	54.11	Pk	35.8	-95.2	-45.16	-50.45	-13	-37.45	V
6.905500	54.59	Pk	35.8	-95.2	-45.41	-50.22	-13	-37.22	H
Mid Channel, 1745MHz									
3.483000	56.71	Pk	33	-95.2	-47.68	-53.17	-13	-40.17	V
3.508000	56.44	Pk	33	-95.2	-47.45	-53.21	-13	-40.21	H
5.176500	59.82	Pk	34.5	-95.2	-48.38	-49.26	-13	-36.26	H
5.177000	61.73	Pk	34.5	-95.2	-48.34	-47.31	-13	-34.31	V
6.938000	54.3	Pk	35.7	-95.2	-46.83	-52.03	-13	-39.03	V
6.956000	54.62	Pk	35.8	-95.2	-46.82	-51.6	-13	-38.60	H
High Channel, 1760MHz									
3.518000	56.63	Pk	32.9	-95.2	-47.27	-52.94	-13	-39.94	V
3.532000	56.42	Pk	32.9	-95.2	-47.11	-52.99	-13	-39.99	H
5.281000	56.9	Pk	34.6	-95.2	-48.1	-51.80	-13	-38.80	V
5.300500	56.04	Pk	34.6	-95.2	-48.23	-52.79	-13	-39.79	H
7.380500	54.8	Pk	35.8	-95.2	-47.14	-51.74	-13	-38.74	V
7.39200	55.56	Pk	35.8	-95.2	-47.11	-50.95	-13	-37.95	H

10.3.12. 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 #:	4790592260
Date:	06/04/2023
Test Engineer:	32186
Configuration:	EUT Only
Mode	n70 15MHz BPSK
Chamber #:	04-RDE-O

Frequency (GHz)	Meter Reading (dBuV)	Det	80404 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 1702.5MHz									
3.476000	54.64	Pk	33.1	-95.2	-44.87	-52.33	-13	-39.33	H
3.490500	53.92	Pk	33.7	-95.2	-44.8	-52.38	-13	-39.38	V
5.226500	52.34	Pk	34.6	-95.2	-44.95	-53.21	-13	-40.21	H
5.233000	52.69	Pk	34.7	-95.2	-44.9	-52.71	-13	-39.71	V
6.966500	51.95	Pk	35.9	-95.2	-42.79	-50.14	-13	-37.14	H
6.961500	51.23	Pk	36	-95.2	-42.84	-50.81	-13	-37.81	V

10.3.13. 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 #:	4790592260
Date:	03/06/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	LTE B71 20MHz QPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 673MHz									
1.345150	59.84	Pk	29.2	-95.2	-49.60	-55.76	-13	-42.76	H
1.340200	60.15	Pk	29.3	-95.2	-49.61	-55.36	-13	-42.36	V
2.013400	60.3	Pk	31.5	-95.2	-50.09	-53.49	-13	-40.49	H
2.008450	59.98	Pk	31.4	-95.2	-50.16	-53.98	-13	-40.98	V
2.684350	57.43	Pk	32.1	-95.2	-48.40	-54.07	-13	-41.07	H
2.687950	57.76	Pk	32.1	-95.2	-48.37	-53.71	-13	-40.71	V
Mid Channel, 680.5MHz									
1.353700	58.77	Pk	29.1	-95.2	-49.51	-56.84	-13	-43.84	H
1.348300	59.21	Pk	29.2	-95.2	-49.58	-56.37	-13	-43.37	V
2.039500	59.42	Pk	31.6	-95.2	-49.95	-54.13	-13	-41.13	H
2.043100	58.72	Pk	31.6	-95.2	-49.88	-54.76	-13	-41.76	V
2.714050	56.51	Pk	32.1	-95.2	-48.27	-54.86	-13	-41.86	H
2.714050	59	Pk	32.1	-95.2	-48.27	-52.37	-13	-39.37	V
High Channel, 688MHz									
1.379350	56.67	Pk	28.8	-95.2	-49.60	-59.33	-13	-46.33	H
1.367200	58.11	Pk	28.9	-95.2	-49.54	-57.73	-13	-44.73	V
2.064250	58.61	Pk	31.7	-95.2	-49.76	-54.65	-13	-41.65	H
2.053900	59.84	Pk	31.6	-95.2	-49.83	-53.59	-13	-40.59	V
2.759500	57	Pk	32.2	-95.2	-48.76	-54.76	-13	-41.76	H
2.742400	57.26	Pk	32.1	-95.2	-48.51	-54.35	-13	-41.35	V

BPSK 5G NR n71 (20.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	02/22/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	N71 20MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 673MHz									
1.346500	60.02	Pk	29.2	-95.2	-49.59	-55.57	-13	-42.57	H
1.350100	59.2	Pk	29.1	-95.2	-49.54	-56.44	-13	-43.44	V
2.002600	60.03	Pk	31.4	-95.2	-50.22	-53.99	-13	-40.99	H
1.986147	60.27	Pk	31.4	-95.2	-50.19	-53.72	-13	-40.72	V
2.689300	57.91	Pk	32.1	-95.2	-48.38	-53.57	-13	-40.57	H
2.681200	57.21	Pk	32.1	-95.2	-48.49	-54.38	-13	-41.38	V
Mid Channel, 680.5MHz									
1.351900	59.61	Pk	29.1	-95.2	-49.53	-56.02	-13	-43.02	H
1.346500	59.86	Pk	29.2	-95.2	-49.59	-55.73	-13	-42.73	V
2.046700	59.35	Pk	31.6	-95.2	-49.89	-54.14	-13	-41.14	H
2.033200	59.26	Pk	31.5	-95.2	-49.94	-54.38	-13	-41.38	V
2.722150	56.16	Pk	32.1	-95.2	-48.18	-55.12	-13	-42.12	H
2.715400	56.5	Pk	32.1	-95.2	-48.27	-54.87	-13	-41.87	V
High Channel, 688MHz									
1.383400	58.1	Pk	28.8	-95.2	-49.61	-57.91	-13	-44.91	H
1.387450	58.82	Pk	28.8	-95.2	-49.60	-57.18	-13	-44.18	V
2.066500	59.16	Pk	31.7	-95.2	-49.70	-54.04	-13	-41.04	H
2.068750	59.42	Pk	31.7	-95.2	-49.62	-53.70	-13	-40.70	V
2.747350	56.63	Pk	32.1	-95.2	-48.60	-55.07	-13	-42.07	H
2.744200	57.15	Pk	32.1	-95.2	-48.58	-54.53	-13	-41.53	V

10.4. FIELD STRENGTH OF SPURIOUS RADIATION, ANT 4

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r02

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 #:	4790592260
Date:	03/08/2023
Test Engineer:	31300
Configuration:	EUT Only
Mode	LTE B7 20MHz QPSK
Chamber #:	04-RDE-P

Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2510MHz									
5.019502	58.55	Pk	33.9	-95.2	-47.96	-50.71	-25	-25.71	H
5.020010	57.9	Pk	33.9	-95.2	-47.93	-51.33	-25	-26.33	V
7.529890	56.01	Pk	35.6	-95.2	-46.19	-49.78	-25	-24.78	H
7.530151	56.56	Pk	35.6	-95.2	-46.2	-49.24	-25	-24.24	V
10.039164	57.52	Pk	37.1	-95.2	-46.44	-47.02	-25	-22.02	H
10.041343	58.27	Pk	37.1	-95.2	-46.45	-46.28	-25	-21.28	V
Mid Channel, 2535MHz									
5.551125	56.7	Pk	34.4	-95.2	-47.12	-51.22	-25	-26.22	H
5.549851	56.75	Pk	34.4	-95.2	-47.19	-51.24	-25	-26.24	V
7.576057	55.76	Pk	35.6	-95.2	-46.29	-50.13	-25	-25.13	H
7.576932	55.83	Pk	35.6	-95.2	-46.32	-50.09	-25	-25.09	V
10.099503	58.37	Pk	37.1	-95.2	-46.45	-46.18	-25	-21.18	H
10.101908	57.82	Pk	37.1	-95.2	-46.4	-46.68	-25	-21.68	V
High Channel, 2560MHz									
5.121589	57.92	Pk	34	-95.2	-48.05	-51.33	-25	-26.33	H
5.121676	59	Pk	34	-95.2	-48.05	-50.25	-25	-25.25	V
7.681699	56.85	Pk	35.7	-95.2	-46.09	-48.74	-25	-23.74	H
7.679897	56.46	Pk	35.7	-95.2	-46.02	-49.06	-25	-24.06	V
10.240201	56.49	Pk	37.2	-95.2	-45.23	-46.74	-25	-21.74	H
10.240116	56.73	Pk	37.2	-95.2	-45.22	-46.49	-25	-21.49	V

BPSK 5G NR n7 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	05/30/2023
Test Engineer:	32186
Configuration:	EUT Only
Mode	n7 40MHz BPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2525MHz									
4.998768	55.79	Pk	34.3	-95.2	-46.53	-51.64	-25	-26.64	H
5.000838	55.92	Pk	34.3	-95.2	-46.61	-51.59	-25	-26.59	V
7.499154	54.28	Pk	35.5	-95.2	-44.88	-50.30	-25	-25.30	H
7.499141	54.02	Pk	35.5	-95.2	-44.88	-50.56	-25	-25.56	V
10.001500	54.8	Pk	37.1	-95.2	-44.01	-47.31	-25	-22.31	H
10.001640	54.7	Pk	37.1	-95.2	-44.01	-47.41	-25	-22.41	V
Mid Channel, 2535MHz									
5.029233	56.06	Pk	34.3	-95.2	-46.50	-51.34	-25	-26.34	H
5.031893	56.12	Pk	34.3	-95.2	-46.60	-51.38	-25	-26.38	V
7.546013	53.64	Pk	35.5	-95.2	-44.39	-50.45	-25	-25.45	H
7.546675	53.75	Pk	35.5	-95.2	-44.38	-50.33	-25	-25.33	V
10.061168	55.15	Pk	37.1	-95.2	-44.30	-47.25	-25	-22.25	H
10.062312	55.24	Pk	37.1	-95.2	-44.29	-47.15	-25	-22.15	V
High Channel, 2545MHz									
5.059995	55.76	Pk	34.3	-95.2	-46.6	-51.74	-25	-26.74	H
5.062372	55.87	Pk	34.3	-95.2	-46.63	-51.66	-25	-26.66	V
7.591468	53.98	Pk	35.5	-95.2	-44.55	-50.27	-25	-25.27	H
7.591713	54.15	Pk	35.5	-95.2	-44.54	-50.09	-25	-25.09	V
10.122371	55.52	Pk	37.2	-95.2	-44.13	-46.61	-25	-21.61	H
10.122298	55.56	Pk	37.2	-95.2	-44.13	-46.57	-25	-21.57	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 #:	4790592260
Date:	03/09/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	LTE B25 20MHz QPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1860MHz									
3.701000	53.15	Pk	32.8	-95.2	-45.89	-55.14	-13	-42.14	H
3.701000	51.49	Pk	32.8	-95.2	-45.89	-56.8	-13	-43.80	V
5.500500	52.24	Pk	34.5	-95.2	-45.80	-54.26	-13	-41.26	H
5.500500	52.31	Pk	34.5	-95.2	-45.80	-54.19	-13	-41.19	V
7.401000	51.73	Pk	35.4	-95.2	-44.47	-52.54	-13	-39.54	H
7.400500	51.97	Pk	35.4	-95.2	-44.47	-52.3	-13	-39.3	V
Mid Channel, 1882.5MHz									
3.745500	52.71	Pk	32.7	-95.2	-46.08	-55.87	-13	-42.87	H
3.745000	52.77	Pk	32.7	-95.2	-46.04	-55.77	-13	-42.77	V
5.617000	51.83	Pk	34.7	-95.2	-45.91	-54.58	-13	-41.58	H
5.617000	52.04	Pk	34.7	-95.2	-45.91	-54.37	-13	-41.37	V
7.490000	51.44	Pk	35.5	-95.2	-44.41	-52.67	-13	-39.67	H
7.490000	50.88	Pk	35.5	-95.2	-44.41	-53.23	-13	-40.23	V
High Channel, 1905MHz									
3.810500	54.32	Pk	33.5	-95.2	-47.54	-54.92	-13	-41.92	H
3.810500	53.71	Pk	33.5	-95.2	-47.54	-55.53	-13	-42.53	V
5.715500	54.87	Pk	34.8	-95.2	-47.28	-52.81	-13	-39.81	H
5.715500	54.16	Pk	34.8	-95.2	-47.28	-53.52	-13	-40.52	V
7.620500	53.77	Pk	35.8	-95.2	-47.03	-52.66	-13	-39.66	H
7.620500	53.82	Pk	35.8	-95.2	-47.03	-52.61	-13	-39.61	V

BPSK 5G NR n25 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	02/27/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	N25 40MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1870MHz									
3.738500	57.18	Pk	33.4	-95.2	-47.74	-52.36	-13	-39.36	H
3.724500	55.96	Pk	33.4	-95.2	-47.70	-53.54	-13	-40.54	V
5.600000	56.49	Pk	34.8	-95.2	-47.80	-51.71	-13	-38.71	H
5.589500	55.63	Pk	34.7	-95.2	-47.84	-52.71	-13	-39.71	V
7.481500	55.36	Pk	35.8	-95.2	-47.19	-51.23	-13	-38.23	H
7.481000	54.64	Pk	35.8	-95.2	-47.21	-51.97	-13	-38.97	V
Mid Channel, 1882.5MHz									
3.767000	55.49	Pk	33.4	-95.2	-47.70	-54.01	-13	-41.01	H
3.767000	55.34	Pk	33.4	-95.2	-47.70	-54.16	-13	-41.16	V
5.667500	56.46	Pk	34.8	-95.2	-47.75	-51.69	-13	-38.69	H
5.635000	56.57	Pk	34.8	-95.2	-47.80	-51.63	-13	-38.63	V
7.528000	55.08	Pk	35.8	-95.2	-47.01	-51.33	-13	-38.33	H
7.481500	55.8	Pk	35.8	-95.2	-47.19	-50.79	-13	-37.79	V
High Channel, 1995MHz									
3.783500	55.71	Pk	33.5	-95.2	-47.62	-53.61	-13	-40.61	H
3.769000	55.39	Pk	33.4	-95.2	-47.65	-54.06	-13	-41.06	V
5.676000	55.99	Pk	34.8	-95.2	-47.58	-51.99	-13	-38.99	H
5.667500	56.38	Pk	34.8	-95.2	-47.75	-51.77	-13	-38.77	V
7.591500	55.13	Pk	35.7	-95.2	-47.23	-51.60	-13	-38.60	H
7.572000	55.08	Pk	35.8	-95.2	-47.04	-51.36	-13	-38.36	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 #:	4790592260
Date:	03/08/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	LTE B30 10MHz QPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.619948	45.13	RMS	34.3	-95.2	-47.92	-63.69	-40	-23.69	H
4.619948	45.12	RMS	34.3	-95.2	-47.92	-63.70	-40	-23.70	V
6.930349	43.5	RMS	35.7	-95.2	-46.19	-62.19	-40	-22.19	H
6.930349	43.5	RMS	35.7	-95.2	-46.19	-62.19	-40	-22.19	V
9.240751	43.02	RMS	36.4	-95.2	-44.63	-60.41	-40	-20.41	H
9.240751	43.02	RMS	36.4	-95.2	-44.63	-60.41	-40	-20.41	V

BPSK 5G NR n30 (10.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	06/03/2023
Test Engineer:	32607
Configuration:	EUT Only
Mode	n30 10MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.619948	45.13	RMS	34.3	-95.2	-47.92	-63.69	-40	-23.69	H
4.619948	45.12	RMS	34.3	-95.2	-47.92	-63.70	-40	-23.70	V
6.930349	43.5	RMS	35.7	-95.2	-46.19	-62.19	-40	-22.19	H
6.930349	43.5	RMS	35.7	-95.2	-46.19	-62.19	-40	-22.19	V
9.240751	43.02	RMS	36.4	-95.2	-44.63	-60.41	-40	-20.41	H
9.240751	43.02	RMS	36.4	-95.2	-44.63	-60.41	-40	-20.41	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 (20.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	03/09/2023 / 5/24/2023
Test Engineer:	19226 / 32981
Configuration:	EUT Only
Mode	LTE B41FCC 20MHz QPSK
Chamber #:	05-RDE-D / 04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2506MHz									
5.097000	56.69	Pk	34.5	-95.2	-48.78	-52.79	-25	-27.79	H
5.049000	58.36	Pk	34.4	-95.2	-48.88	-51.32	-25	-26.32	V
7.631000	55.22	Pk	35.7	-95.2	-46.94	-51.22	-25	-26.22	H
7.589000	55.63	Pk	35.7	-95.2	-47.23	-51.10	-25	-26.10	V
10.210000	55.12	Pk	37.5	-95.2	-46.61	-49.19	-25	-24.19	H
10.240500	55	Pk	37.5	-95.2	-46.39	-49.09	-25	-24.09	V
Mid Channel, 2593MHz									
5.209000	55.7	Pk	34.5	-95.2	-48.09	-53.09	-25	-28.09	H
5.194000	55.28	Pk	34.5	-95.2	-48.22	-53.64	-25	-28.64	V
7.639000	56.85	Pk	35.7	-95.2	-46.93	-49.58	-25	-24.58	H
7.639000	58.06	Pk	35.7	-95.2	-46.93	-48.37	-25	-23.37	V
10.381000	55.97	Pk	37.6	-95.2	-46.57	-48.20	-25	-23.20	H
10.322000	55.86	Pk	37.6	-95.2	-46.61	-48.35	-25	-23.35	V
High Channel, 2680MHz									
5.180000	54.08	Pk	34.1	-95.2	-47.65	-54.67	-25	-29.67	H
5.178500	53.91	Pk	34.1	-95.2	-47.7	-54.89	-25	-29.89	V
7.771000	53.15	Pk	35.7	-95.2	-46.17	-52.52	-25	-27.52	H
7.771000	52.61	Pk	35.7	-95.2	-46.17	-53.06	-25	-28.06	V
10.360500	52.69	Pk	37.3	-95.2	-45.75	-50.96	-25	-25.96	H
10.360000	52.54	Pk	37.3	-95.2	-45.74	-51.10	-25	-26.10	V

BPSK 5G NR n41 (100.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	02/28/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	n41 FCC 100MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBUV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 2546MHz									
5.090500	57.58	Pk	34.5	-95.2	-48.84	-51.96	-25	-26.96	H
5.058000	57.38	Pk	34.5	-95.2	-48.87	-52.19	-25	-27.19	V
7.629500	54.69	Pk	35.7	-95.2	-46.94	-51.75	-25	-26.75	H
7.574500	54.95	Pk	35.8	-95.2	-47.10	-51.55	-25	-26.55	V
10.200500	55.25	Pk	37.5	-95.2	-46.56	-49.01	-25	-24.01	H
10.164500	55.09	Pk	37.5	-95.2	-46.82	-49.43	-25	-24.43	V
Mid Channel, 2593MHz									
5.111500	54.83	Pk	34.2	-95.2	-46.55	-52.72	-25	-27.72	H
5.114000	54.18	Pk	34.2	-95.2	-46.43	-53.25	-25	-28.25	V
7.622000	53.32	Pk	35.6	-95.2	-44.72	-51.00	-25	-26.00	H
7.622500	54.08	Pk	35.6	-95.2	-44.73	-50.25	-25	-25.25	V
10.170000	55.31	Pk	37.2	-95.2	-44.19	-46.88	-25	-21.88	H
10.170500	54.8	Pk	37.2	-95.2	-44.2	-47.4	-25	-22.4	V
High Channel, 2640MHz									
5.166000	54.35	Pk	34.2	-95.2	-46.51	-53.16	-25	-28.16	H
5.165000	54.22	Pk	34.2	-95.2	-46.51	-53.29	-25	-28.29	V
7.787000	52.1	Pk	35.6	-95.2	-44.35	-51.85	-25	-26.85	H
7.785500	52.74	Pk	35.6	-95.2	-44.35	-51.21	-25	-26.21	V
10.252000	54.49	Pk	37.3	-95.2	-44.23	-47.64	-25	-22.64	H
10.253000	53.32	Pk	37.3	-95.2	-44.22	-48.80	-25	-23.80	V

10.4.5. LTE BAND 48 AND 5G NR n48

LIMITS

FCC: §96.41

(b) 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 #:	4790592260
Date:	5/28/2023
Test Engineer:	32981
Configuration:	EUT Only
Mode	LTE B48 20Mhz QPSK
Chamber #:	05-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 3560MHz									
4.165200	45.05	RMS	33.5	-95.2	-45.39	-62.04	-40	-22.04	H
4.164734	44.8	RMS	33.5	-95.2	-45.39	-62.29	-40	-22.29	V
7.116869	42.49	RMS	35.6	-95.2	-44.87	-61.98	-40	-21.98	H
7.115469	42.5	RMS	35.6	-95.2	-44.92	-62.02	-40	-22.02	V
10.217404	43.59	RMS	37.3	-95.2	-44.17	-58.48	-40	-18.48	H
10.216938	43.65	RMS	37.3	-95.2	-44.16	-58.41	-40	-18.41	V
Mid Channel, 3625MHz									
6.678202	42.61	RMS	35.5	-95.2	-45.04	-62.13	-40	-22.13	H
6.676802	42.65	RMS	35.5	-95.2	-45.06	-62.11	-40	-22.11	V
9.922471	43.93	RMS	37	-95.2	-44.11	-58.38	-40	-18.38	H
9.921538	43.9	RMS	37	-95.2	-44.1	-58.40	-40	-18.40	V
12.032739	42.54	RMS	38.8	-95.2	-42.57	-56.43	-40	-16.43	H
12.030872	42.59	RMS	38.8	-95.2	-42.6	-56.41	-40	-16.41	V
High Channel, 3690MHz									
4.295400	44.52	RMS	33.7	-95.2	-46.19	-63.17	-40	-23.17	H
4.295400	44.4	RMS	33.7	-95.2	-46.19	-63.29	-40	-23.29	V
6.037468	43.03	RMS	35.4	-95.2	-45.33	-62.10	-40	-22.10	H
6.042602	43.01	RMS	35.4	-95.2	-45.3	-62.09	-40	-22.09	V
10.168404	43.78	RMS	37.2	-95.2	-44.31	-58.53	-40	-18.53	H
10.164204	43.76	RMS	37.2	-95.2	-44.43	-58.67	-40	-18.67	V

BPSK 5G NR n48 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	06/03/2023
Test Engineer:	32607
Configuration:	EUT Only
Mode	n48 40MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 3570MHz									
7.140929	43.52	RMS	35.8	-95.2	-45.75	-61.63	-40	-21.63	H
7.140929	43.51	RMS	35.8	-95.2	-45.75	-61.64	-40	-21.64	V
10.710701	42.98	RMS	37.9	-95.2	-44.23	-58.55	-40	-18.55	H
10.710701	43.06	RMS	37.9	-95.2	-44.23	-58.47	-40	-18.47	V
14.280473	43.14	RMS	39.2	-95.2	-43.67	-56.53	-40	-16.53	H
14.28001	43.2	RMS	39.2	-95.2	-43.82	-56.62	-40	-16.62	V
Mid Channel, 3625MHz									
7.210669	42.08	RMS	35.6	-95.2	-44.54	-62.06	-40	-22.06	H
7.210669	42.11	RMS	35.6	-95.2	-44.54	-62.03	-40	-22.03	V
10.815672	44.12	RMS	37.8	-95.2	-44.85	-58.13	-40	-18.13	H
10.816138	44.16	RMS	37.8	-95.2	-44.86	-58.1	-40	-18.10	V
14.420207	44.19	RMS	39.4	-95.2	-43.12	-54.73	-40	-14.73	H
14.420207	44.25	RMS	39.4	-95.2	-43.12	-54.67	-40	-14.67	V
High Channel, 3680MHz									
7.210202	42.12	RMS	35.6	-95.2	-44.53	-62.01	-40	-22.01	H
7.210669	42.12	RMS	35.6	-95.2	-44.54	-62.02	-40	-22.02	V
10.815205	44.15	RMS	37.8	-95.2	-44.84	-58.09	-40	-18.09	H
10.815205	44.16	RMS	37.8	-95.2	-44.84	-58.08	-40	-18.08	V
14.420674	44.24	RMS	39.4	-95.2	-43.13	-54.69	-40	-14.69	H
14.420207	44.29	RMS	39.4	-95.2	-43.12	-54.63	-40	-14.63	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 #:	4790592260
Date:	03/09/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	LTE B66 20MHz QPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1720MHz									
3.439117	57.2	Pk	32.9	-95.2	-47.34	-52.44	-13	-39.44	H
3.441603	57.63	Pk	32.9	-95.2	-47.37	-52.04	-13	-39.04	V
5.133236	60.61	Pk	34.5	-95.2	-48.56	-48.65	-13	-35.65	H
5.133874	58.83	Pk	34.5	-95.2	-48.56	-50.43	-13	-37.43	V
6.880760	56	Pk	35.7	-95.2	-46.31	-49.81	-13	-36.81	H
6.880551	56.4	Pk	35.7	-95.2	-46.3	-49.40	-13	-36.40	V
Mid Channel, 1745MHz									
3.473837	60.53	Pk	32.9	-95.2	-47.61	-49.38	-13	-36.38	H
3.472092	63.83	Pk	32.9	-95.2	-47.62	-46.09	-13	-33.09	V
5.235367	57.62	Pk	34.5	-95.2	-48.14	-51.22	-13	-38.22	H
5.234673	57.59	Pk	34.5	-95.2	-48.15	-51.26	-13	-38.26	V
6.976957	57.08	Pk	35.8	-95.2	-47.03	-49.35	-13	-36.35	H
6.979520	56.39	Pk	35.8	-95.2	-47	-50.01	-13	-37.01	V
High Channel, 1770MHz									
3.518985	57.88	Pk	32.9	-95.2	-47.25	-51.67	-13	-38.67	H
3.522016	57.72	Pk	32.9	-95.2	-47.19	-51.77	-13	-38.77	V
5.310691	58.37	Pk	34.7	-95.2	-48.22	-50.35	-13	-37.35	H
5.312010	58.26	Pk	34.7	-95.2	-48.26	-50.50	-13	-37.50	V
7.079839	56.89	Pk	35.9	-95.2	-47.05	-49.46	-13	-36.46	H
7.082328	56.73	Pk	35.9	-95.2	-47.11	-49.68	-13	-36.68	V

BPSK 5G NR n66 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	02/24/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	N66 40MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 1730MHz									
3.469219	35.96	Pk	32.5	-95.2	-25.24	-51.98	-13	-38.98	H
3.448125	35.37	Pk	32.5	-95.2	-25.51	-52.84	-13	-39.84	V
5.185313	35.77	Pk	34.5	-95.2	-23.06	-47.99	-13	-34.99	H
5.188125	34.46	Pk	34.5	-95.2	-23.04	-49.28	-13	-36.28	V
6.970781	33.71	Pk	35.4	-95.2	-19.25	-45.34	-13	-32.34	H
6.959063	33.85	Pk	35.4	-95.2	-19.25	-45.20	-13	-32.20	V
Mid Channel, 1745MHz									
3.497000	56.42	Pk	33	-95.2	-47.54	-53.32	-13	-40.32	H
3.487000	56.4	Pk	33	-95.2	-47.50	-53.30	-13	-40.30	V
5.250000	55.9	Pk	34.6	-95.2	-48.18	-52.88	-13	-39.88	H
5.177500	60.54	Pk	34.5	-95.2	-48.32	-48.48	-13	-35.48	V
6.984000	55.73	Pk	35.8	-95.2	-46.97	-50.64	-13	-37.64	H
6.944500	55.43	Pk	35.8	-95.2	-46.83	-50.80	-13	-37.80	V
High Channel, 1760MHz									
3.514000	57.28	Pk	33	-95.2	-47.36	-52.28	-13	-39.28	H
3.516000	55.9	Pk	33	-95.2	-47.26	-53.56	-13	-40.56	V
5.250000	56.1	Pk	34.6	-95.2	-48.18	-52.68	-13	-39.68	H
5.222000	59.61	Pk	34.5	-95.2	-48.11	-49.20	-13	-36.20	V
7.059500	55.86	Pk	35.9	-95.2	-47.12	-50.56	-13	-37.56	H
6.999000	54.71	Pk	35.8	-95.2	-47.02	-51.71	-13	-38.71	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 #:	4790592260
Date:	03/06/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	n70 15MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 1702.5MHz									
3.405361	56.38	Pk	32.8	-95.2	-47.11	-53.13	-13	-40.13	H
3.407458	56.69	Pk	32.8	-95.2	-47.18	-52.89	-13	-39.89	V
5.107747	58.55	Pk	34.5	-95.2	-48.72	-50.87	-13	-37.87	H
5.105695	58.52	Pk	34.5	-95.2	-48.77	-50.95	-13	-37.95	V
6.812878	56.49	Pk	35.7	-95.2	-46.64	-49.65	-13	-36.65	H
6.807900	56.53	Pk	35.7	-95.2	-46.70	-49.67	-13	-36.67	V

10.4.8. 5G NR n77 (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 #:	4790592260
Date:	5/31/2023
Test Engineer:	32186
Configuration:	EUT Only
Mode	n77a 100MHz BPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 3500MHz									
6.901292	54.82	Pk	35.5	-95.2	-44.37	-49.25	-13	-36.25	H
6.898985	54.3	Pk	35.5	-95.2	-44.32	-49.72	-13	-36.72	V
10.350143	55.38	Pk	37.4	-95.2	-44.40	-46.82	-13	-33.82	H
10.351791	55.68	Pk	37.4	-95.2	-44.44	-46.56	-13	-33.56	V
13.801875	55.2	Pk	39.3	-95.2	-43.38	-44.08	-13	-31.08	H
13.798715	55.81	Pk	39.3	-95.2	-43.30	-43.39	-13	-30.39	V

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

LIMITS

FCC: §27.53

(1) 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 #:	4790592260
Date:	03/02/2023
Test Engineer:	12501
Configuration:	EUT Only
Mode	n77c 100MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 3750MHz									
7.523035	55.51	Pk	35.8	-95.2	-47.28	-51.17	-13	-38.17	H
7.505110	56.6	Pk	35.8	-95.2	-47.44	-50.24	-13	-37.24	V
11.261391	53.72	Pk	38.1	-95.2	-45.42	-48.80	-13	-35.80	H
11.308792	54.11	Pk	38.1	-95.2	-45.42	-48.41	-13	-35.41	V
15.008111	55.13	Pk	39.8	-95.2	-45.09	-45.36	-13	-32.36	H
15.005721	53.6	Pk	39.8	-95.2	-45.07	-46.87	-13	-33.87	V
Mid Channel, 3840MHz									
7.691132	55.58	Pk	35.8	-95.2	-47.16	-50.98	-13	-37.98	H
7.679580	56.06	Pk	35.8	-95.2	-47.24	-50.58	-13	-37.58	V
11.516722	53.21	Pk	38.3	-95.2	-44.68	-48.37	-13	-35.37	H
11.488042	54.37	Pk	38.2	-95.2	-45.00	-47.63	-13	-34.63	V
15.261451	54.8	Pk	40	-95.2	-43.98	-44.38	-13	-31.38	H
15.261451	55.25	Pk	40	-95.2	-43.98	-43.93	-13	-30.93	V
High Channel, 3930MHz									
7.882730	55.29	Pk	35.7	-95.2	-47.01	-51.22	-13	-38.22	H
7.859228	55.36	Pk	35.7	-95.2	-47.00	-51.14	-13	-38.14	V
11.801929	53.18	Pk	38.5	-95.2	-45.19	-48.71	-13	-35.71	H
11.767672	54.5	Pk	38.4	-95.2	-45.12	-47.42	-13	-34.42	V
15.717542	53.5	Pk	40.6	-95.2	-44.45	-45.55	-13	-32.55	H
15.658190	54.56	Pk	40.6	-95.2	-44.77	-44.81	-13	-31.81	V

10.5. FIELD STRENGTH OF SPURIOUS RADIATION, ANT 7

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r02

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 AND 5G NR n48

LIMITS

FCC: §96.41

(c) 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 #:	4790592260
Date:	05/25/2023
Test Engineer:	32981
Configuration:	EUT Only
Mode	LTE B48 20MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 3560MHz									
4.165200	45.18	RMS	33.5	-95.2	-45.39	-61.91	-40	-21.91	H
4.165667	44.78	RMS	33.5	-95.2	-45.41	-62.33	-40	-22.33	V
7.102402	42.34	RMS	35.6	-95.2	-44.98	-62.24	-40	-22.24	H
7.101469	42.29	RMS	35.6	-95.2	-44.97	-62.28	-40	-22.28	V
10.650471	43.78	RMS	37.7	-95.2	-44.73	-58.45	-40	-18.45	H
10.650005	43.79	RMS	37.7	-95.2	-44.76	-58.47	-40	-18.47	V
Mid Channel, 3625MHz									
4.230067	43.32	RMS	33.5	-95.2	-45.48	-63.86	-40	-23.86	H
4.229600	43	RMS	33.5	-95.2	-45.47	-64.17	-40	-24.17	V
7.235402	41.94	RMS	35.6	-95.2	-44.60	-62.26	-40	-22.26	H
7.232136	41.98	RMS	35.6	-95.2	-44.61	-62.23	-40	-22.23	V
10.874005	43.74	RMS	37.7	-95.2	-44.75	-58.51	-40	-18.51	H
10.871672	43.88	RMS	37.7	-95.2	-44.73	-58.35	-40	-18.35	V
High Channel, 3690MHz									
4.295400	44.4	RMS	33.7	-95.2	-46.19	-63.29	-40	-23.29	H
4.294934	44.12	RMS	33.7	-95.2	-46.19	-63.57	-40	-23.57	V
6.617535	42.39	RMS	35.5	-95.2	-44.42	-61.73	-40	-21.73	H
6.618002	42.4	RMS	35.5	-95.2	-44.42	-61.72	-40	-21.72	V
11.105472	42.89	RMS	38	-95.2	-44.65	-58.96	-40	-18.96	H
11.104538	42.8	RMS	38	-95.2	-44.66	-59.06	-40	-19.06	V

BPSK 5G NR n48 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	06/01/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	n48 40MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 3570MHz									
7.140465	43.71	RMS	35.8	-95.2	-45.72	-61.41	-40	-21.41	H
7.140465	43.74	RMS	35.8	-95.2	-45.72	-61.38	-40	-21.38	V
10.710237	43.01	RMS	37.9	-95.2	-44.24	-58.53	-40	-18.53	H
10.710237	42.99	RMS	37.9	-95.2	-44.24	-58.55	-40	-18.55	V
14.280473	43.27	RMS	39.2	-95.2	-43.67	-56.40	-40	-16.40	H
14.280473	43.28	RMS	39.2	-95.2	-43.67	-56.39	-40	-16.39	V
Mid Channel, 3625MHz									
7.250354	44.17	RMS	35.8	-95.2	-46.04	-61.27	-40	-21.27	H
7.250354	44.2	RMS	35.8	-95.2	-46.04	-61.24	-40	-21.24	V
10.875767	42.75	RMS	37.9	-95.2	-44.26	-58.81	-40	-18.81	H
10.875767	42.76	RMS	37.9	-95.2	-44.26	-58.80	-40	-18.80	V
14.500715	43.54	RMS	39.5	-95.2	-43.51	-55.67	-40	-15.67	H
14.500715	43.51	RMS	39.5	-95.2	-43.51	-55.70	-40	-15.70	V
High Channel, 3680MHz									
7.360707	43.75	RMS	35.8	-95.2	-45.69	-61.34	-40	-21.34	H
7.360707	43.74	RMS	35.8	-95.2	-45.69	-61.35	-40	-21.35	V
11.040368	42.69	RMS	37.9	-95.2	-43.99	-58.60	-40	-18.60	H
11.040368	42.73	RMS	37.9	-95.2	-43.99	-58.56	-40	-18.56	V
14.720493	43.05	RMS	39.7	-95.2	-43.25	-55.70	-40	-15.70	H
14.720493	43.06	RMS	39.7	-95.2	-43.25	-55.69	-40	-15.69	V

10.5.2. 5G NR n77 (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 #:	4790592260
Date:	5/26/2023
Test Engineer:	19226
Configuration:	EUT Only
Mode	n77a 100MHz BPSK
Chamber #:	05-RDE-D

Frequency (GHz)	Meter Reading (dBuV)	Det	80402 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 3500MHz									
6.899697	54.04	Pk	35.5	-95.2	-44.35	-50.01	-13	-37.01	H
6.900567	54.53	Pk	35.5	-95.2	-44.36	-49.53	-13	-36.53	V
10.352234	55.6	Pk	37.4	-95.2	-44.44	-46.64	-13	-33.64	H
10.348078	55.56	Pk	37.4	-95.2	-44.41	-46.65	-13	-33.65	V
13.801076	55.25	Pk	39.3	-95.2	-43.36	-44.01	-13	-31.01	H
13.802176	55.47	Pk	39.3	-95.2	-43.38	-43.81	-13	-30.81	V

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

LIMITS

FCC: §27.53

(1) 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 #:	4790592260
Date:	02/20/2023
Test Engineer:	25196
Configuration:	EUT Only
Mode	n77c 100MHz BPSK
Chamber #:	01-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 3750MHz									
7.496500	32.88	Pk	36	-95.2	-26.85	-53.17	-13	-40.17	H
7.458000	32.68	Pk	36	-95.2	-26.65	-53.17	-13	-40.17	V
11.243000	30.37	Pk	37.9	-95.2	-22.63	-49.56	-13	-36.56	H
11.166000	31.38	Pk	37.9	-95.2	-22.66	-48.58	-13	-35.58	V
15.003000	32.23	Pk	39.8	-95.2	-19.15	-42.32	-13	-29.32	H
14.926000	30.59	Pk	39.8	-95.2	-18.61	-43.42	-13	-30.42	V
Mid Channel, 3840MHz									
7.692000	32.38	Pk	35.9	-95.2	-26.75	-53.67	-13	-40.67	H
7.639500	34.44	Pk	35.9	-95.2	-26.24	-51.10	-13	-38.10	V
11.576000	30.11	Pk	38.3	-95.2	-21.71	-48.50	-13	-35.50	H
11.556000	31.8	Pk	38.3	-95.2	-21.94	-47.04	-13	-34.04	V
15.342000	32.11	Pk	39.9	-95.2	-19.48	-42.67	-13	-29.67	H
15.315500	30.09	Pk	39.8	-95.2	-19.55	-44.86	-13	-31.86	V
High Channel, 3930MHz									
7.865500	31.96	Pk	35.9	-95.2	-26.46	-53.80	-13	-40.80	H
7.852000	33.47	Pk	35.9	-95.2	-26.35	-52.18	-13	-39.18	V
11.776500	30.4	Pk	38.6	-95.2	-21.21	-47.41	-13	-34.41	H
11.675500	32.1	Pk	38.5	-95.2	-21.64	-46.24	-13	-33.24	V
15.742000	29.17	Pk	40.3	-95.2	-18.49	-44.22	-13	-31.22	H
15.661000	31.75	Pk	40.2	-95.2	-18.72	-41.97	-13	-28.97	V

10.6. FIELD STRENGTH OF SPURIOUS RADIATION, ANT 8

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r02

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

RESULTS

10.6.1. LTE BAND 48 AND 5G NR n48

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 #:	4790592260
Date:	05/26/2023
Test Engineer:	32981
Configuration:	EUT Only
Mode	LTE B48 20MHz QPSK
Chamber #:	B4 Chamber Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 3560MHz									
4.165200	44.82	RMS	33.5	-95.2	-45.39	-62.27	-40	-22.27	H
4.164734	44.88	RMS	33.5	-95.2	-45.39	-62.21	-40	-22.21	V
7.101936	42.42	RMS	35.6	-95.2	-44.98	-62.16	-40	-22.16	H
7.103336	42.44	RMS	35.6	-95.2	-44.98	-62.14	-40	-22.14	V
11.772339	42.64	RMS	38.7	-95.2	-42.91	-56.77	-40	-16.77	H
11.773272	42.68	RMS	38.7	-95.2	-42.91	-56.73	-40	-16.73	V
Mid Channel, 3625MHz									
4.230067	43	RMS	33.5	-95.2	-45.48	-64.18	-40	-24.18	H
4.230067	43.19	RMS	33.5	-95.2	-45.48	-63.99	-40	-23.99	V
7.231669	42.14	RMS	35.6	-95.2	-44.6	-62.06	-40	-22.06	H
7.229802	42.2	RMS	35.6	-95.2	-44.62	-62.02	-40	-22.02	V
10.374671	43.53	RMS	37.5	-95.2	-44.48	-58.65	-40	-18.65	H
10.374671	43.54	RMS	37.5	-95.2	-44.48	-58.64	-40	-18.64	V
High Channel, 3690MHz									
7.325936	42.5	RMS	35.5	-95.2	-44.88	-62.08	-40	-22.08	H
7.324069	42.51	RMS	35.5	-95.2	-44.91	-62.10	-40	-22.10	V
10.508605	44.03	RMS	37.6	-95.2	-44.78	-58.35	-40	-18.35	H
10.508138	44.01	RMS	37.6	-95.2	-44.78	-58.37	-40	-18.37	V
13.791140	43.33	RMS	39.3	-95.2	-43.23	-55.80	-40	-15.80	H
13.792074	43.33	RMS	39.3	-95.2	-43.24	-55.81	-40	-15.81	V

BPSK 5G NR n48 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	06/04/2023
Test Engineer:	32186
Configuration:	EUT Only
Mode	n48 40MHz BPSK
Chamber #:	04-RDE-P

Frequency (GHz)	Meter Reading (dBuV)	Det	222740 ACF(dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 3570MHz									
7.095869	42.84	RMS	35.6	-95.2	-45.32	-62.08	-40	-22.08	H
7.094936	42.86	RMS	35.6	-95.2	-45.32	-62.06	-40	-22.06	V
10.656538	42.36	RMS	37.4	-95.2	-43.95	-59.39	-40	-19.39	H
10.656071	42.44	RMS	37.4	-95.2	-43.94	-59.30	-40	-19.30	V
14.200407	41.91	RMS	38.8	-95.2	-42.89	-57.38	-40	-17.38	H
14.201341	41.83	RMS	38.8	-95.2	-42.92	-57.49	-40	-17.49	V
Mid Channel, 3625MHz									
7.210669	42.99	RMS	35.7	-95.2	-45.59	-62.10	-40	-22.10	H
7.210202	43.02	RMS	35.7	-95.2	-45.58	-62.06	-40	-22.06	V
10.818472	42	RMS	37.6	-95.2	-43.56	-59.16	-40	-19.16	H
10.818472	42.25	RMS	37.6	-95.2	-43.56	-58.91	-40	-18.91	V
14.420207	42.16	RMS	39.1	-95.2	-43.37	-57.31	-40	-17.31	H
14.420207	42.14	RMS	39.1	-95.2	-43.37	-57.33	-40	-17.33	V
High Channel, 3680MHz									
7.320336	43.31	RMS	35.7	-95.2	-45.89	-62.08	-40	-22.08	H
7.319869	43.32	RMS	35.7	-95.2	-45.90	-62.08	-40	-22.08	V
10.980872	41.31	RMS	37.6	-95.2	-42.94	-59.23	-40	-19.23	H
10.980405	41.32	RMS	37.6	-95.2	-42.95	-59.23	-40	-19.23	V
14.640008	42.46	RMS	39.3	-95.2	-43.00	-56.44	-40	-16.44	H
14.639541	42.28	RMS	39.3	-95.2	-42.98	-56.60	-40	-16.60	V

10.6.2. 5G NR n77 (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 #:	4790592260
Date:	5/31/2023
Test Engineer:	32186
Configuration:	EUT Only
Mode	n77a 100MHz BPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 3500MHz									
6.902464	54.27	Pk	35.5	-95.2	-44.4	-49.83	-13	-36.83	H
6.902618	55.03	Pk	35.5	-95.2	-44.4	-49.07	-13	-36.07	V
10.348953	55.69	Pk	37.4	-95.2	-44.42	-46.53	-13	-33.53	H
10.350964	55.73	Pk	37.4	-95.2	-44.44	-46.51	-13	-33.51	V
13.801324	55.65	Pk	39.3	-95.2	-43.37	-43.62	-13	-30.62	H
13.797684	55.68	Pk	39.3	-95.2	-43.28	-43.50	-13	-30.50	V

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

LIMITS

FCC: §27.53

(1) 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 #:	4790592260
Date:	02/20/2023
Test Engineer:	25196
Configuration:	EUT Only
Mode	n77c 100MHz BPSK
Chamber #:	01-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 3750MHz									
7.509000	34.33	Pk	36	-95.2	-26.88	-51.75	-13	-38.75	H
7.496500	34.48	Pk	36	-95.2	-26.85	-51.57	-13	-38.57	V
11.243000	29.98	Pk	37.9	-95.2	-22.63	-49.95	-13	-36.95	H
11.281500	30.03	Pk	37.8	-95.2	-22.21	-49.58	-13	-36.58	V
15.003000	30.41	Pk	39.8	-95.2	-19.15	-44.14	-13	-31.14	H
14.977500	30.85	Pk	39.8	-95.2	-19.05	-43.60	-13	-30.60	V
Mid Channel, 3840MHz									
7.692000	35.6	Pk	35.9	-95.2	-26.75	-50.45	-13	-37.45	H
7.665500	36.48	Pk	35.9	-95.2	-26.35	-49.17	-13	-36.17	V
11.516500	30.61	Pk	38.2	-95.2	-21.45	-47.84	-13	-34.84	H
11.496500	32.2	Pk	38.2	-95.2	-21.90	-46.70	-13	-33.70	V
15.368000	30.82	Pk	39.9	-95.2	-19.37	-43.85	-13	-30.85	H
15.342000	30.39	Pk	39.9	-95.2	-19.48	-44.39	-13	-31.39	V
High Channel, 3930MHz									
7.8520000	34.51	Pk	35.9	-95.2	-26.35	-51.14	-13	-38.14	H
7.838500	33.78	Pk	35.9	-95.2	-26.28	-51.80	-13	-38.80	V
11.756000	31.47	Pk	38.6	-95.2	-21.20	-46.33	-13	-33.33	H
11.736000	32.48	Pk	38.6	-95.2	-21.41	-45.53	-13	-32.53	V
15.715000	29.33	Pk	40.2	-95.2	-18.34	-44.01	-13	-31.01	H
15.607500	30.42	Pk	40.1	-95.2	-18.67	-43.35	-13	-30.35	V

10.7. FIELD STRENGTH OF SPURIOUS RADIATION, ANT 9

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r02

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 AND 5G NR n48

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 #:	4790592260
Date:	05/28/2023
Test Engineer:	32981
Configuration:	EUT Only
Mode	LTE B48 20MHz QPSK
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 3560MHz									
7.129469	42.45	RMS	35.5	-95.2	-44.91	-62.16	-40	-22.16	H
7.130869	42.48	RMS	35.5	-95.2	-44.88	-62.10	-40	-22.10	V
10.170271	43.75	RMS	37.2	-95.2	-44.29	-58.54	-40	-18.54	H
10.178204	43.75	RMS	37.2	-95.2	-44.33	-58.58	-40	-18.58	V
14.021207	44.18	RMS	39.4	-95.2	-43.57	-55.19	-40	-15.19	H
14.012340	44.17	RMS	39.4	-95.2	-43.51	-55.14	-40	-15.14	V
Mid Channel, 3625MHz									
6.875602	42.07	RMS	35.5	-95.2	-44.29	-61.92	-40	-21.92	H
6.877002	42.06	RMS	35.5	-95.2	-44.29	-61.93	-40	-21.93	V
9.199604	43.19	RMS	36.4	-95.2	-43.41	-59.02	-40	-19.02	H
9.200070	43.12	RMS	36.4	-95.2	-43.4	-59.08	-40	-19.08	V
11.971139	42.37	RMS	38.8	-95.2	-43.21	-57.24	-40	-17.24	H
11.968339	42.29	RMS	38.8	-95.2	-43.16	-57.27	-40	-17.27	V
High Channel, 3690MHz									
5.259068	43.69	RMS	34.1	-95.2	-46.23	-63.64	-40	-23.64	H
5.258134	43.7	RMS	34.1	-95.2	-46.27	-63.67	-40	-23.67	V
9.265404	43.1	RMS	36.4	-95.2	-43.45	-59.15	-40	-19.15	H
9.264470	43.06	RMS	36.4	-95.2	-43.46	-59.20	-40	-19.20	V
10.818938	44.4	RMS	37.8	-95.2	-44.82	-57.82	-40	-17.82	H
10.816605	44.36	RMS	37.8	-95.2	-44.85	-57.89	-40	-17.89	V

BPSK 5G NR n48 (40.0MHZ BANDWIDTH)

Project #:	4790592260
Date:	06/04/2023
Test Engineer:	32186
Configuration:	EUT Only
Mode	n48 40MHz BPSK
Chamber #:	04-RDE-P

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 3570MHz									
7.100103	42.68	RMS	35.6	-95.2	-45.34	-62.26	-40	-22.26	H
7.098669	42.68	RMS	35.6	-95.2	-45.4	-62.32	-40	-22.32	V
10.650005	42.6	RMS	37.4	-95.2	-43.73	-58.93	-40	-18.93	H
10.648605	42.59	RMS	37.4	-95.2	-43.8	-59.01	-40	-19.01	V
14.200407	42.01	RMS	38.8	-95.2	-42.89	-57.28	-40	-17.28	H
14.200407	41.99	RMS	38.8	-95.2	-42.89	-57.3	-40	-17.3	V
Mid Channel, 3625MHz									
7.210669	42.12	RMS	35.6	-95.2	-44.54	-62.02	-40	-22.02	H
7.210202	42.13	RMS	35.6	-95.2	-44.53	-62	-40	-22.00	V
10.815205	44.16	RMS	37.8	-95.2	-44.84	-58.08	-40	-18.08	H
10.815672	44.14	RMS	37.8	-95.2	-44.85	-58.11	-40	-18.11	V
14.420674	44.28	RMS	39.4	-95.2	-43.13	-54.65	-40	-14.65	H
14.420674	44.33	RMS	39.4	-95.2	-43.13	-54.6	-40	-14.60	V
High Channel, 3680MHz									
7.320336	43.23	RMS	35.7	-95.2	-45.89	-62.16	-40	-22.16	H
7.315202	43.08	RMS	35.7	-95.2	-45.79	-62.21	-40	-22.21	V
10.980405	41.38	RMS	37.6	-95.2	-42.95	-59.17	-40	-19.17	H
10.979938	41.41	RMS	37.6	-95.2	-42.95	-59.14	-40	-19.14	V
14.640474	42.29	RMS	39.3	-95.2	-43.01	-56.62	-40	-16.62	H
14.639074	42.28	RMS	39.3	-95.2	-42.96	-56.58	-40	-16.58	V

10.7.2. 5G NR n77 (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 #:	4790592260
Date:	5/31/2023
Test Engineer:	32186
Configuration:	EUT only
Mode	n77a BPSK 100MHz
Chamber #:	04-RDE-Q

Frequency (GHz)	Meter Reading (dBuV)	Det	84796 ACF (dB) - 3mH	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Mid Channel, 3500MHz									
6.901532	54.47	Pk	35.5	-95.2	-44.38	-49.61	-13	-36.61	H
6.898375	54.18	Pk	35.5	-95.2	-44.29	-49.81	-13	-36.81	V
10.353053	58.09	Pk	37.4	-95.2	-44.43	-44.14	-13	-31.14	H
10.354836	55.61	Pk	37.4	-95.2	-44.43	-46.62	-13	-33.62	V
13.798886	55.17	Pk	39.3	-95.2	-43.31	-44.04	-13	-31.04	H
13.801736	55.25	Pk	39.3	-95.2	-43.37	-44.02	-13	-31.02	V

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

LIMITS

FCC: §27.53

(1) 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 #:	4790592260
Date:	02/20/2023
Test Engineer:	25196
Configuration:	EUT only
Mode	n77c BPSK 100MHz
Chamber #:	01-RDE-B

Frequency (GHz)	Meter Reading (dBuV)	Det	81886 ACF (dB)	EIRP CF	Gain/Loss (dB)	Corrected Reading (dBm)	LIMIT	Margin (dB)	Polarity
Low Channel, 3750MHz									
7.496500	32.97	Pk	36	-95.2	-26.85	-53.08	-13	-40.08	H
7.470500	32.8	Pk	36.1	-95.2	-26.82	-53.12	-13	-40.12	V
11.262000	30.85	Pk	37.8	-95.2	-22.48	-49.03	-13	-36.03	H
11.262000	30.48	Pk	37.8	-95.2	-22.48	-49.40	-13	-36.40	V
15.003000	31.46	Pk	39.8	-95.2	-19.15	-43.09	-13	-30.09	H
15.029000	30.54	Pk	39.8	-95.2	-19.30	-44.16	-13	-31.16	V
Mid Channel, 3840MHz									
7.679000	34.41	Pk	35.9	-95.2	-26.58	-51.47	-13	-38.47	H
7.626000	32.98	Pk	35.9	-95.2	-25.97	-52.29	-13	-39.29	V
11.536000	31.47	Pk	38.3	-95.2	-21.69	-47.12	-13	-34.12	H
11.496500	30.5	Pk	38.2	-95.2	-21.90	-48.40	-13	-35.40	V
15.315500	30.61	Pk	39.8	-95.2	-19.55	-44.34	-13	-31.34	H
15.342000	30.15	Pk	39.9	-95.2	-19.48	-44.63	-13	-31.63	V
High Channel, 3930MHz									
7.852000	32.66	Pk	35.9	-95.2	-26.35	-52.99	-13	-39.99	H
7.852000	33.15	Pk	35.9	-95.2	-26.35	-52.50	-13	-39.50	V
11.796500	30.64	Pk	38.6	-95.2	-21.41	-47.37	-13	-34.37	H
11.796500	30.31	Pk	38.6	-95.2	-21.41	-47.70	-13	-34.70	V
15.715000	29.41	Pk	40.2	-95.2	-18.34	-43.93	-13	-30.93	H
15.850500	30.24	Pk	40.3	-95.2	-18.77	-43.43	-13	-30.43	V

11. SETUP PHOTOS

Please refer to 14523740-EP1V1 for Setup Photo Report for setup photos.

END OF REPORT