

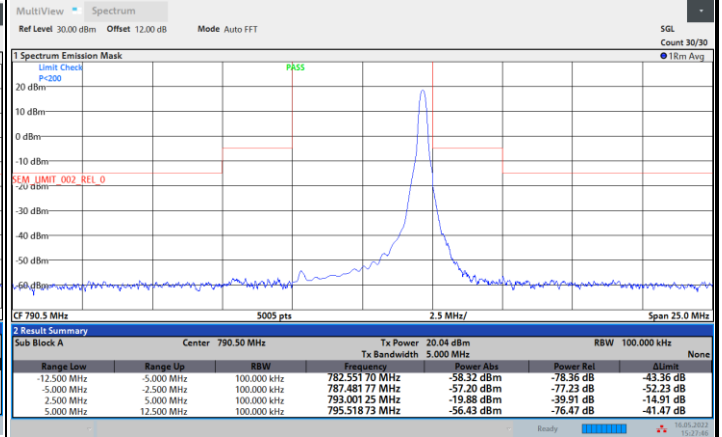
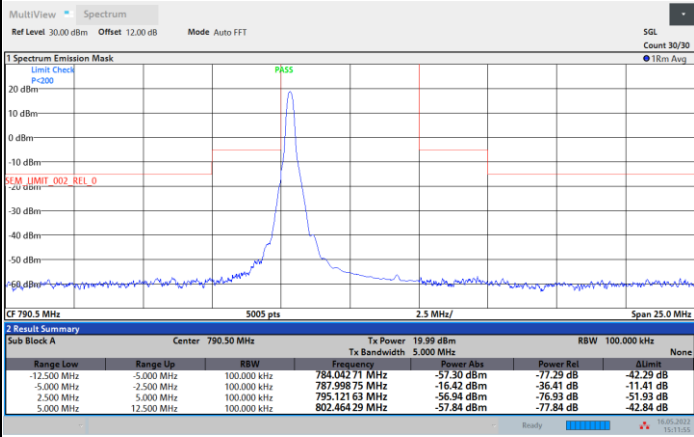


FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

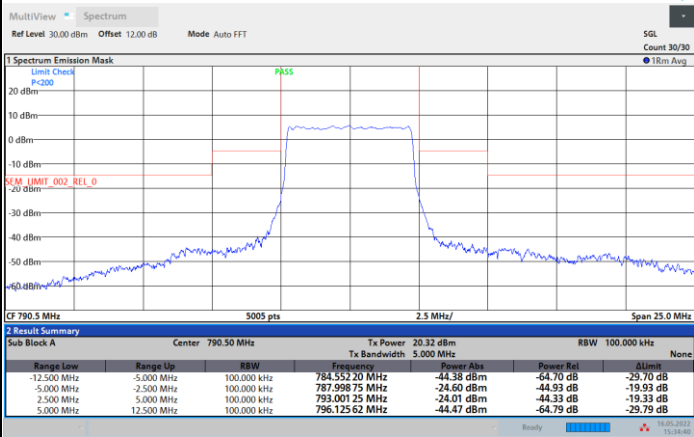
Lowest Channel

1RB0

1RBmax



Full RB



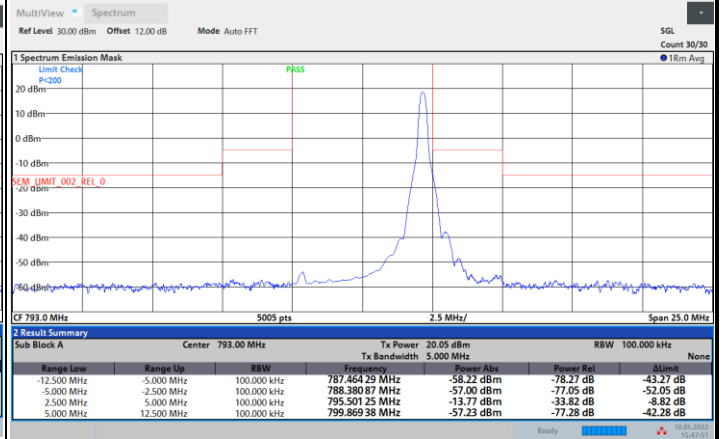
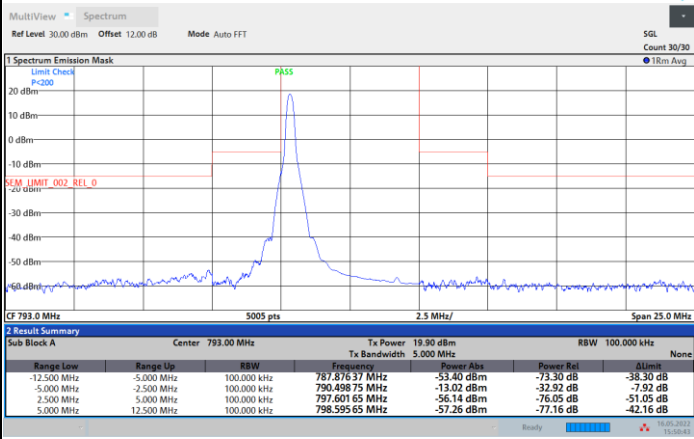


FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

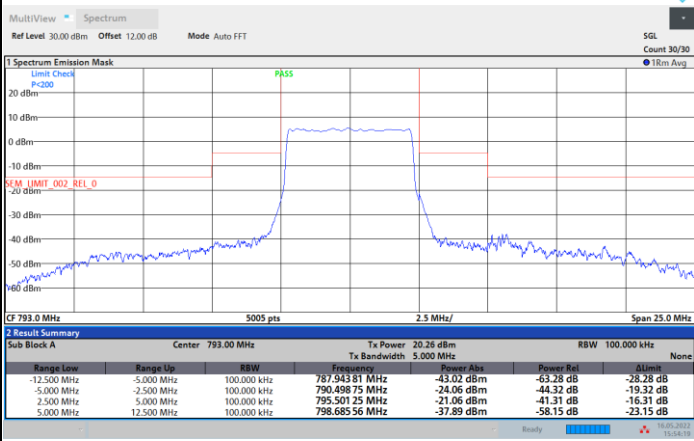
Middle Channel

1RB0

1RBmax



Full RB



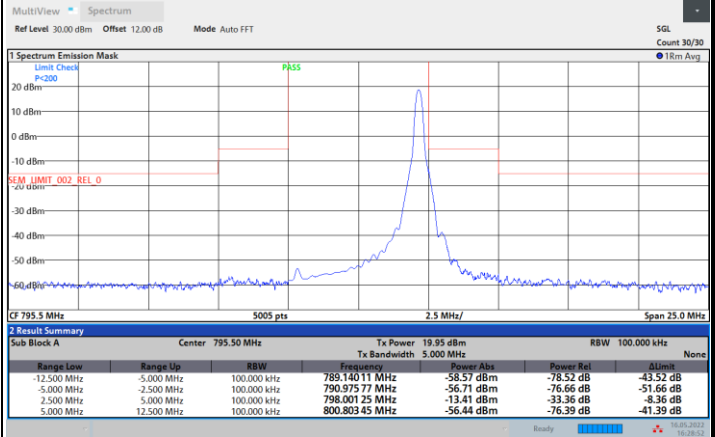
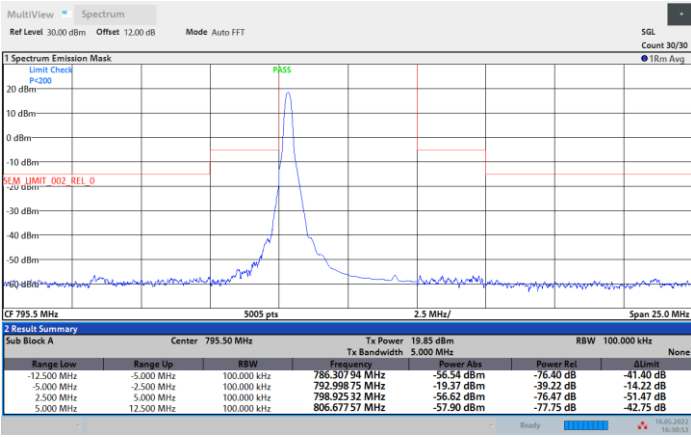


FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

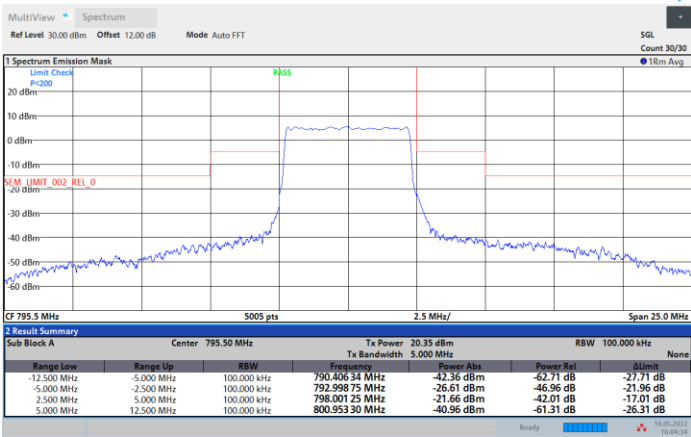
Highest Channel

1RB0

1RBmax



Full RB



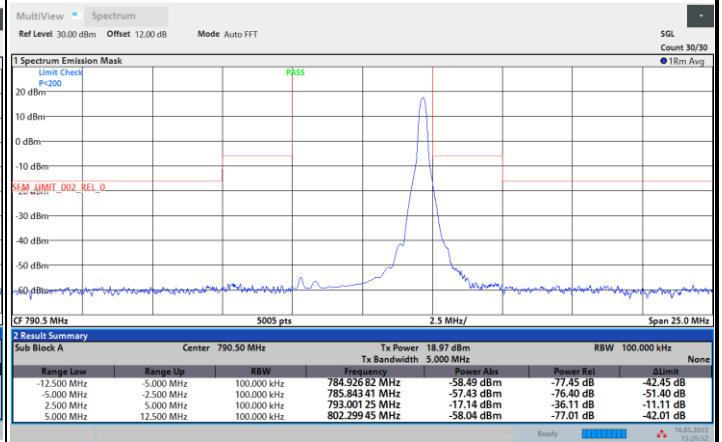
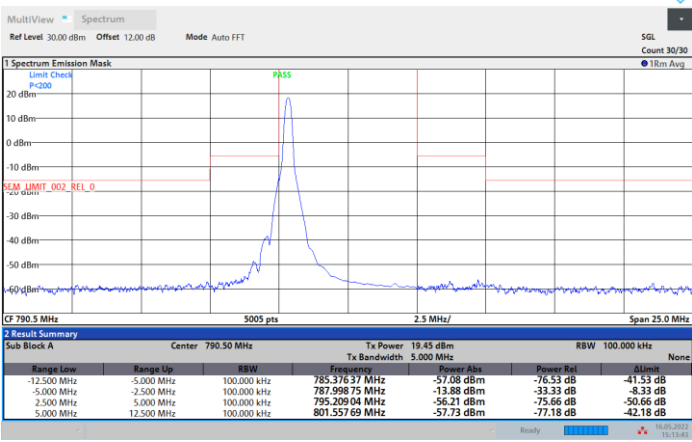


FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

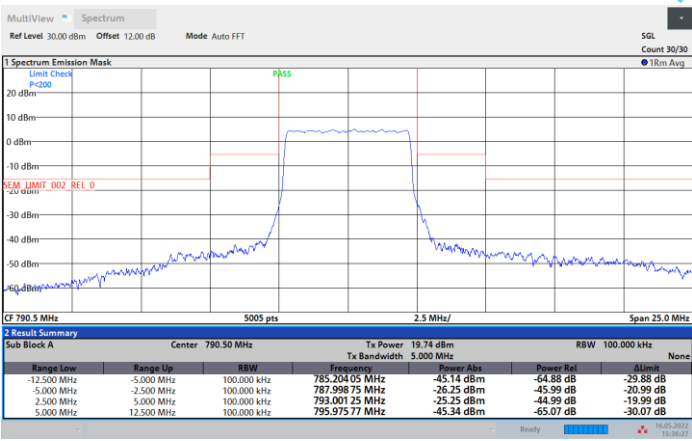
Lowest Channel

1RB0

1RBmax



Full RB



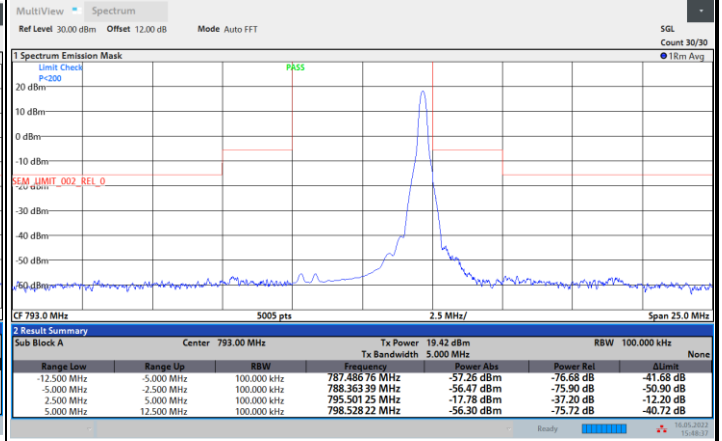
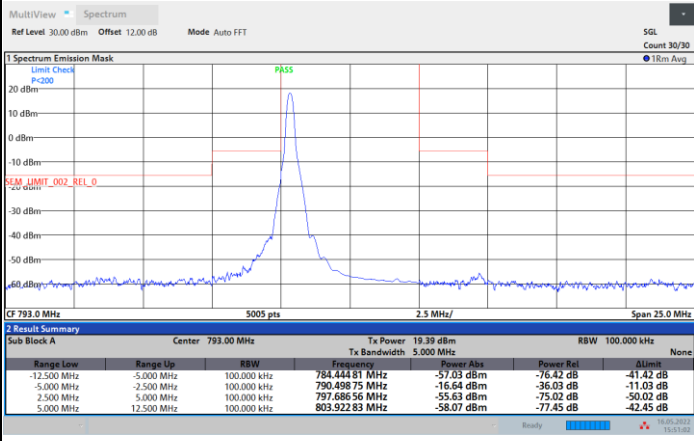


FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

Middle Channel

1RB0

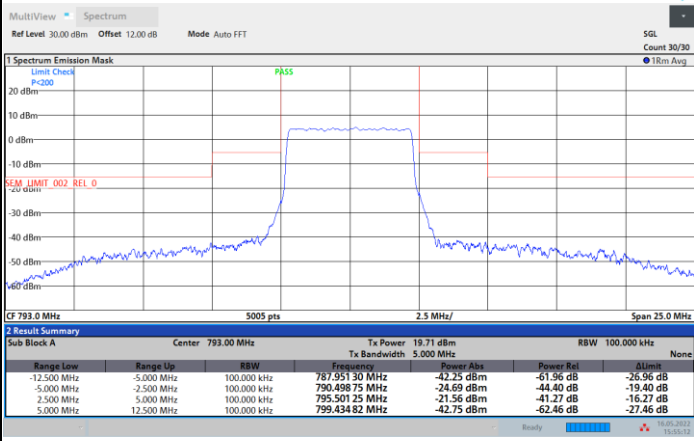
1RBmax



15:51:02 16.05.2022

15:48:37 16.05.2022

Full RB



15:55:13 16.05.2022

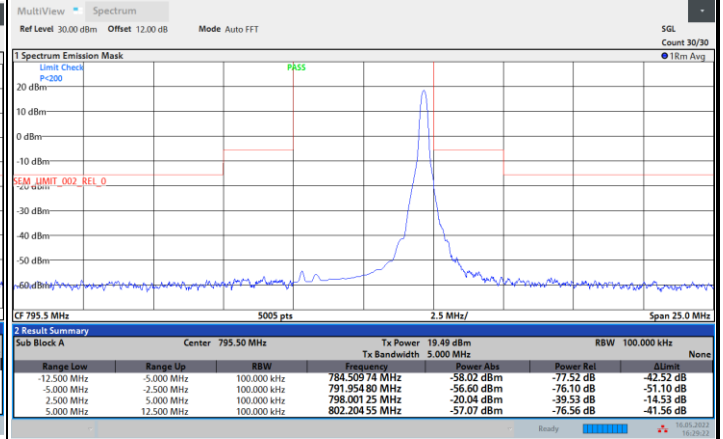
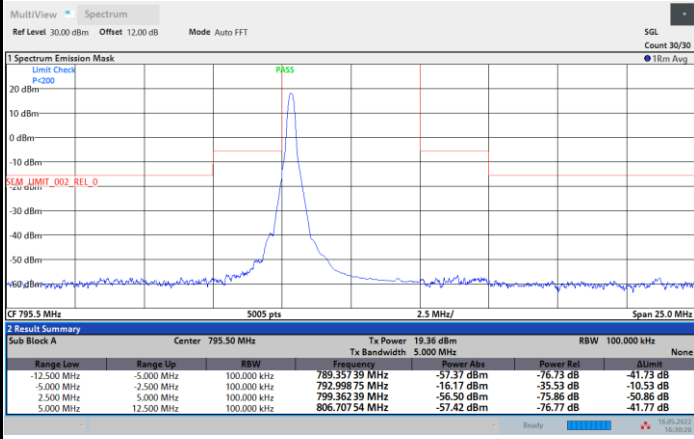


FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

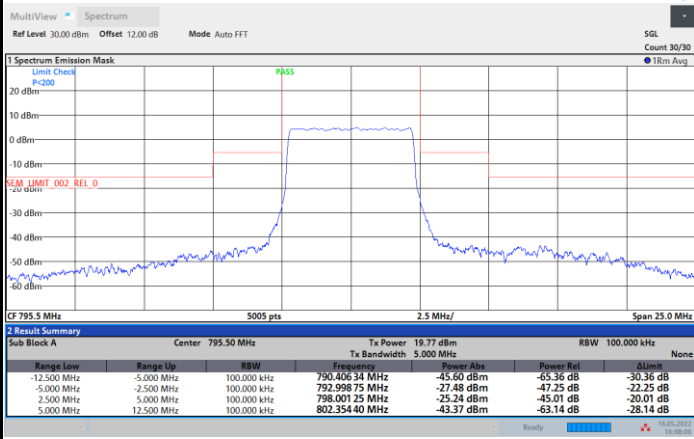
Highest Channel

1RB0

1RBmax



Full RB



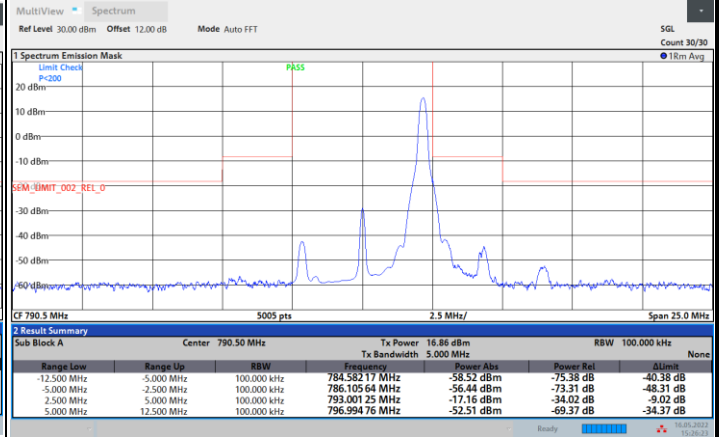
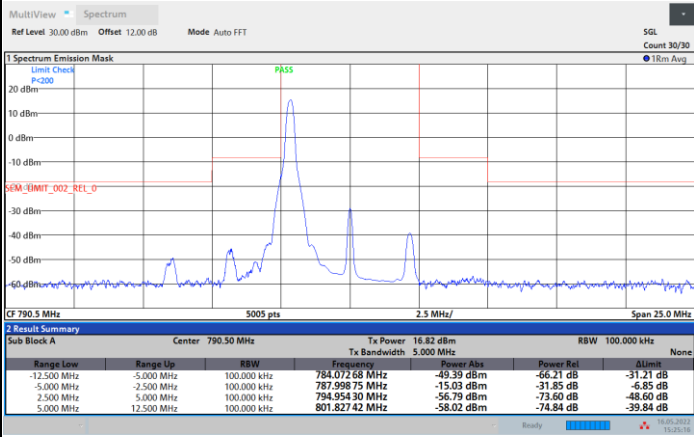


FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

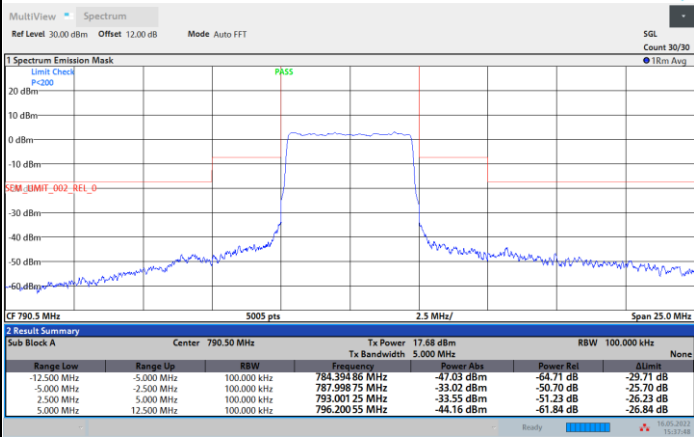
Lowest Channel

1RB0

1RBmax



Full RB



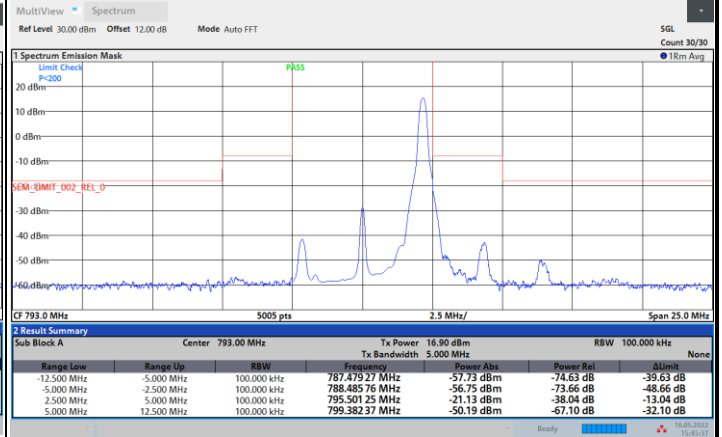
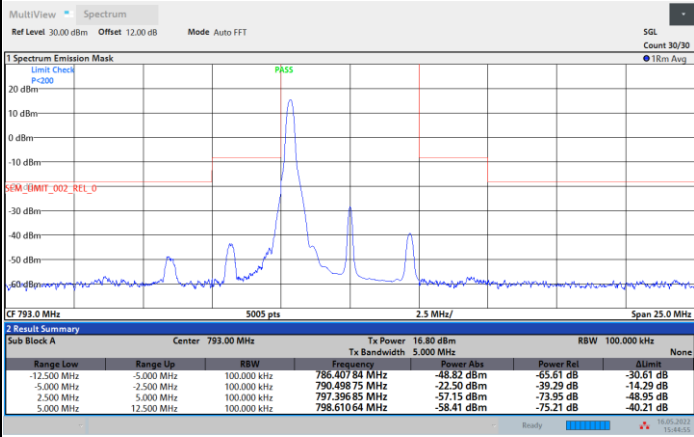


FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

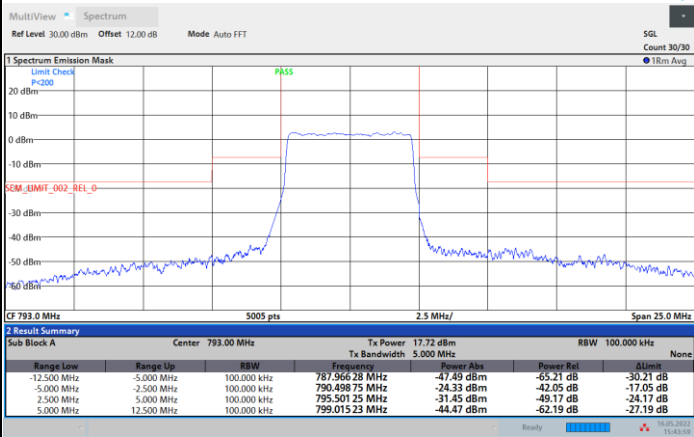
Middle Channel

1RB0

1RBmax



Full RB



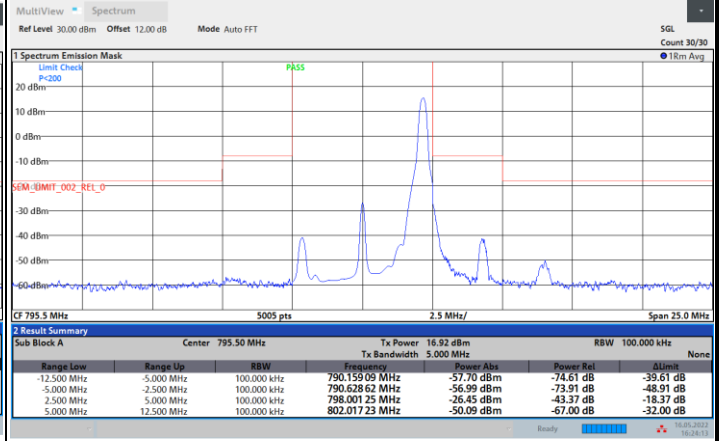
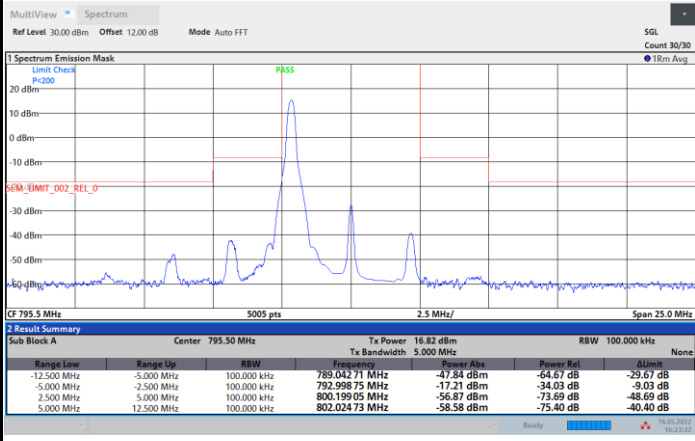


FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

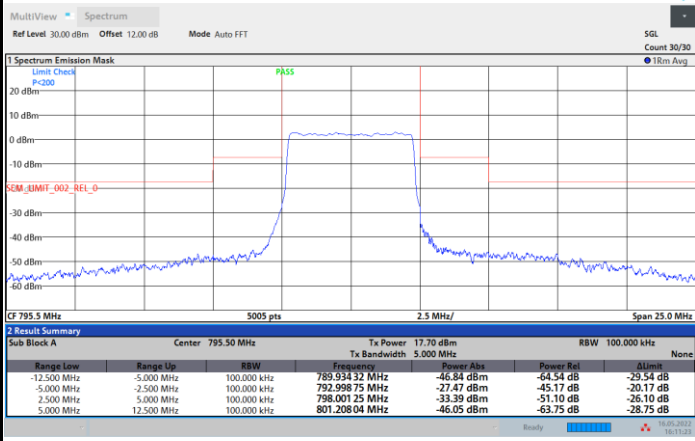
Highest Channel

1RB0

1RBmax



Full RB

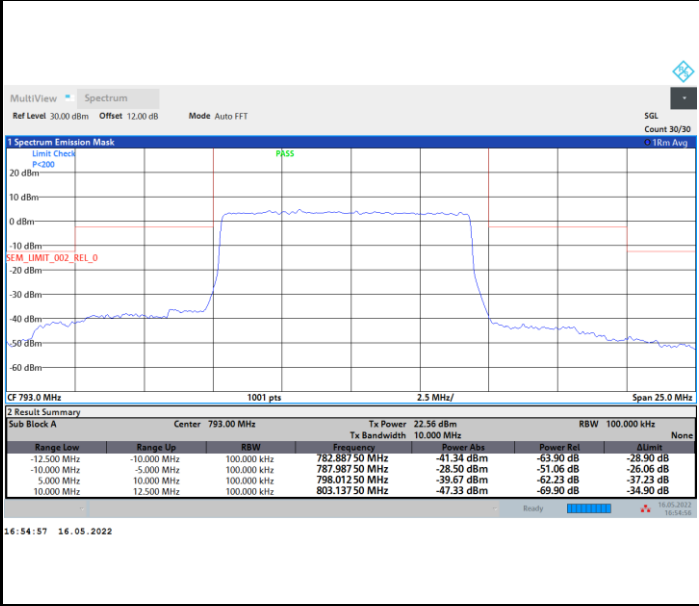




FR1 n14 / 10MHz / DFT-S OFDM / BPSK

Middle Channel

Full RB

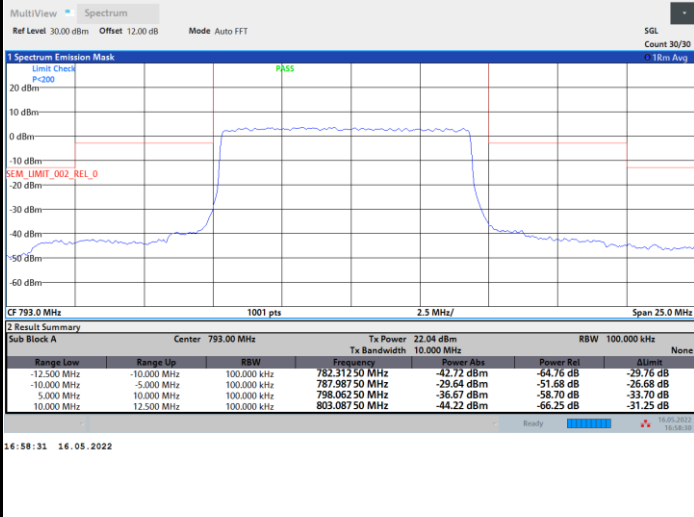




FR1 n14 / 10MHz / DFT-S OFDM / QPSK

Middle Channel

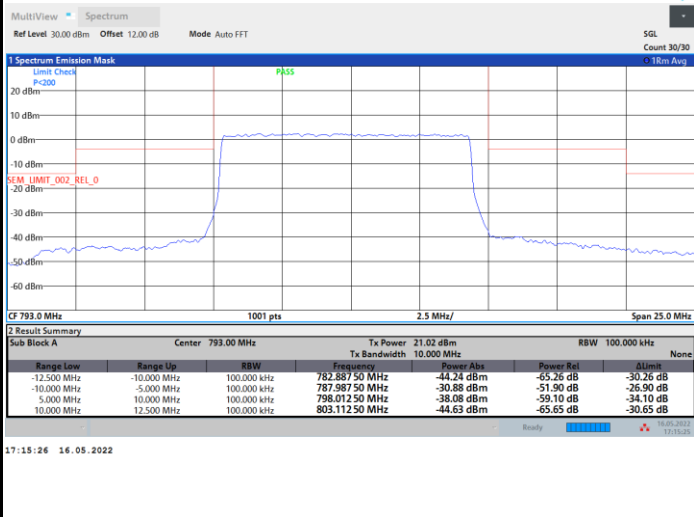
Full RB

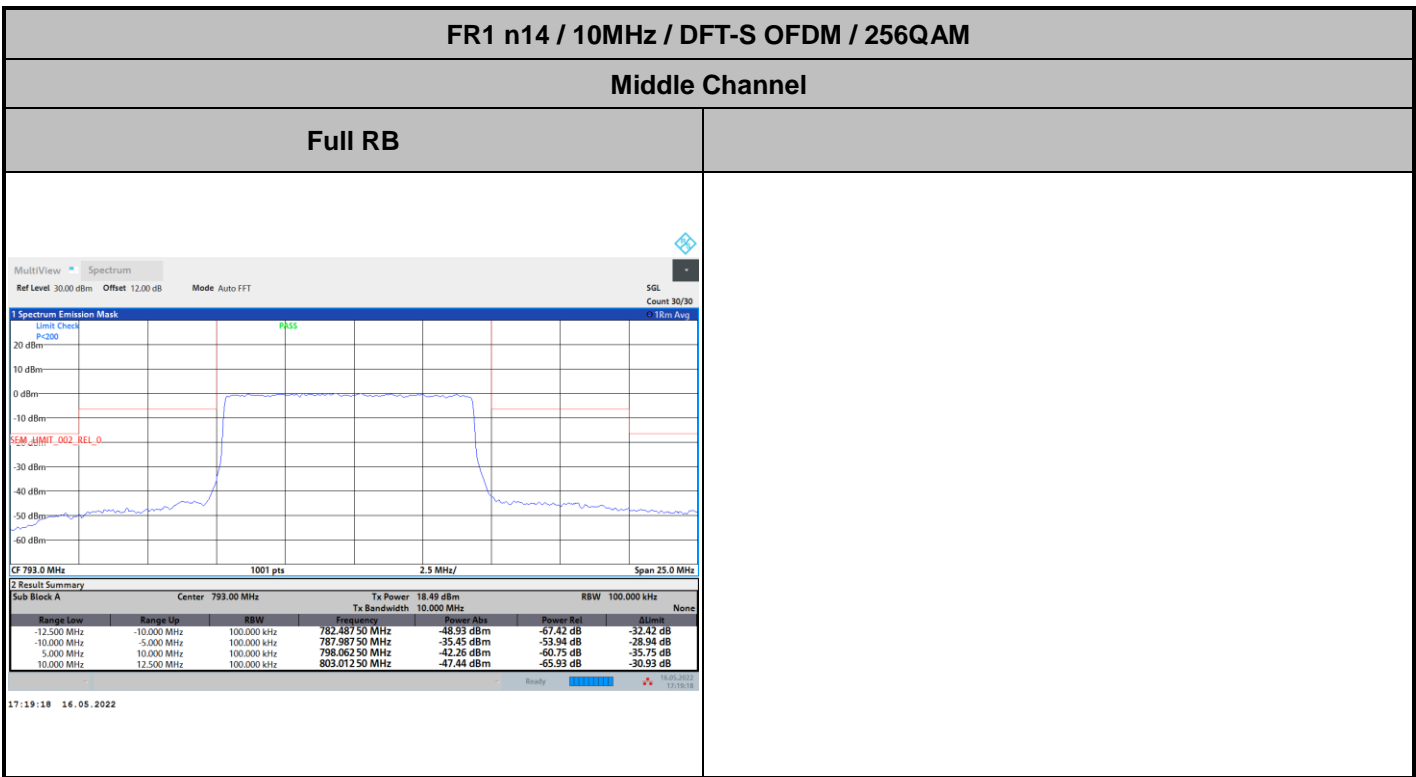
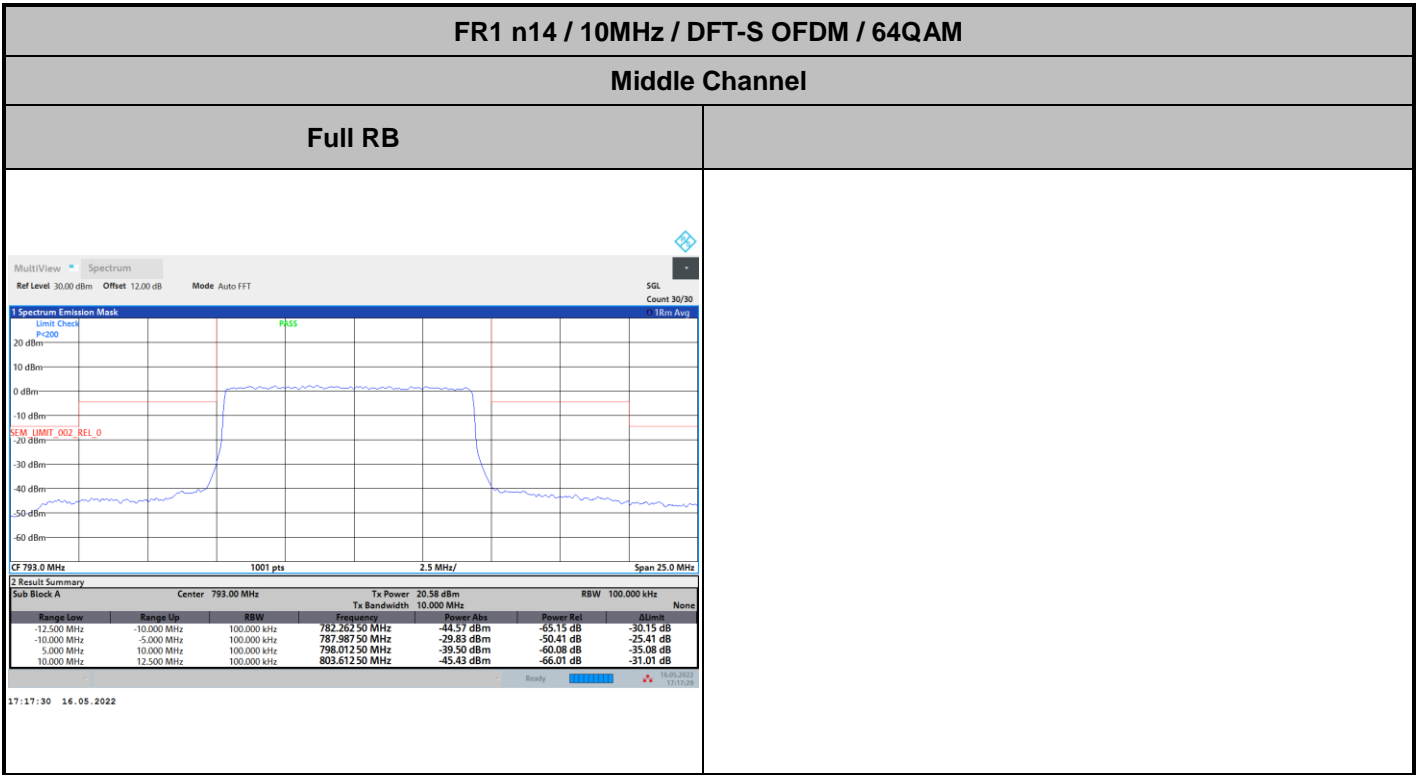


FR1 n14 / 10MHz / DFT-S OFDM / 16QAM

Middle Channel

Full RB

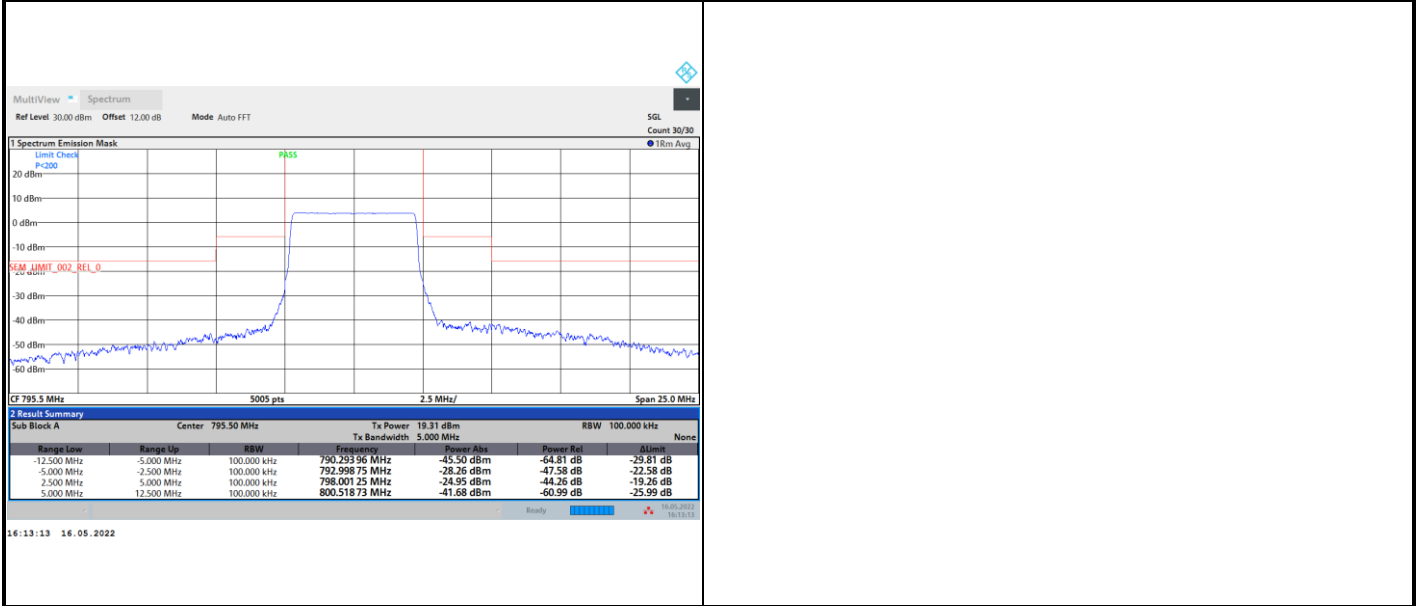






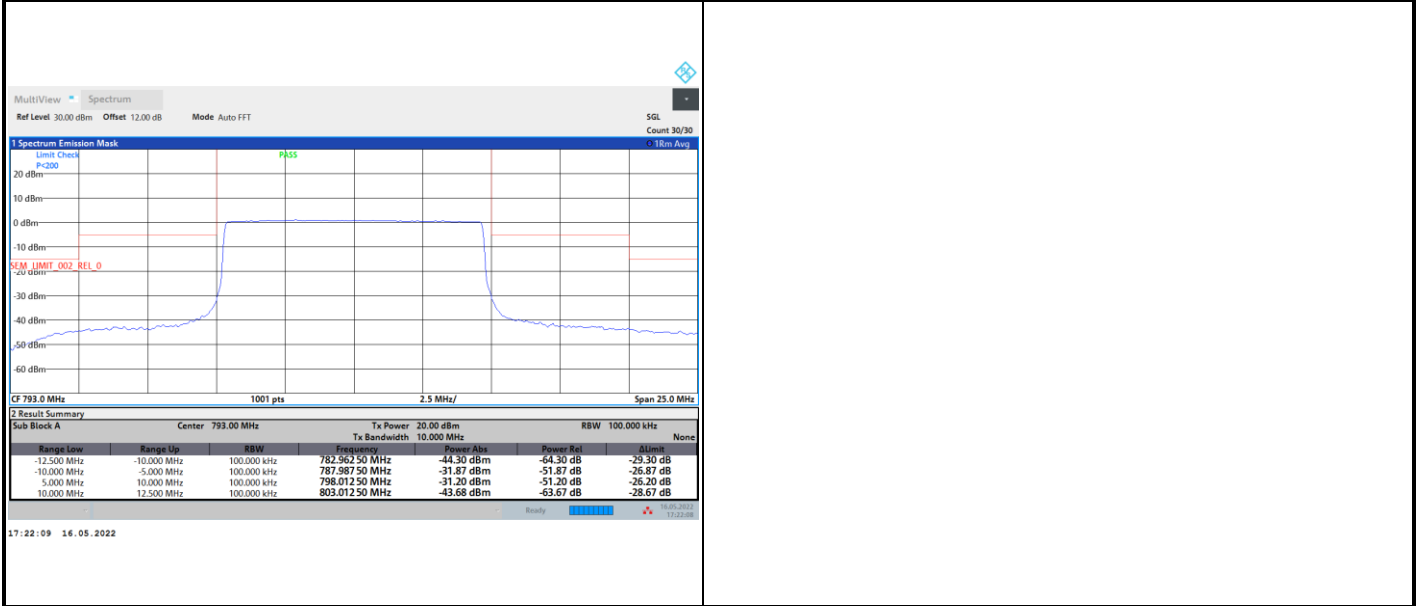
FR1 n14 / 5MHz / CP OFDM / QPSK / Full RB

Highest Channel



FR1 n14 / 10MHz / CP OFDM / QPSK / Full RB

Middle Channel

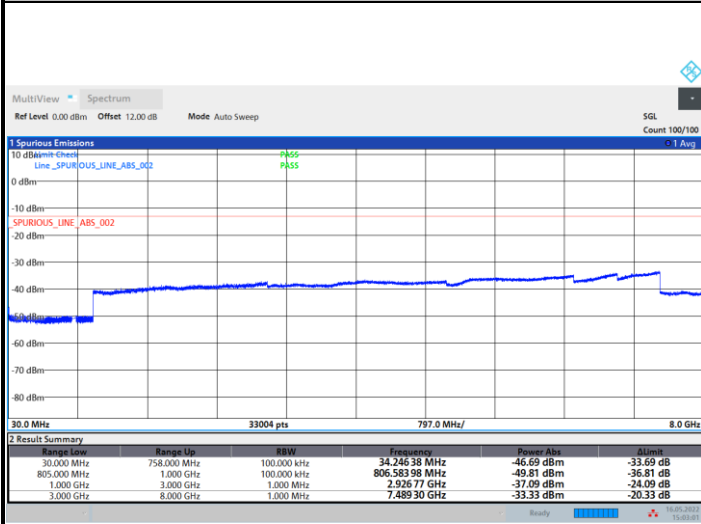




Conducted Spurious Emission

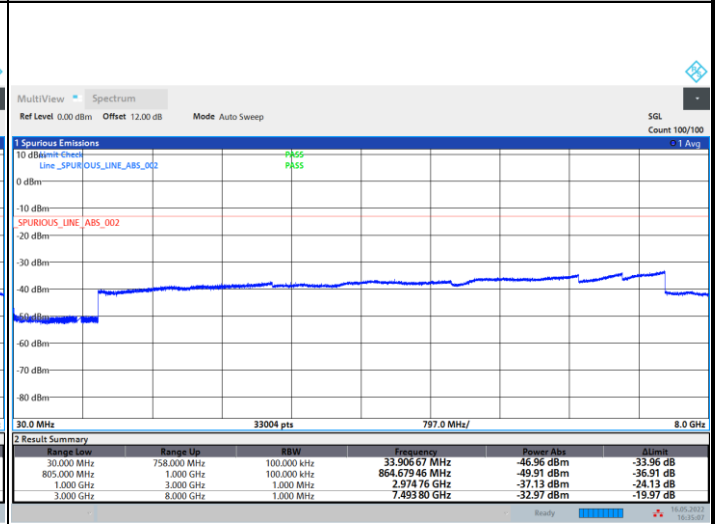
FR1 n14 / 5MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel



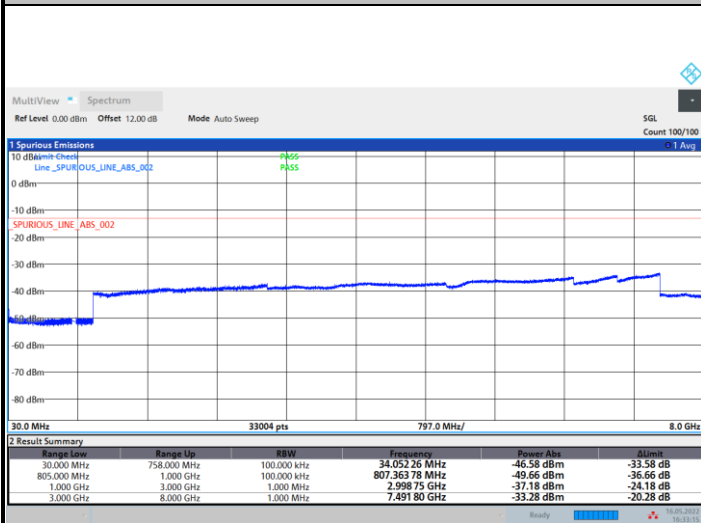
15:03:02 16.05.2022

Middle Channel



16:35:08 16.05.2022

Highest Channel



16:33:16 16.05.2022



Frequency Stability

Test Conditions		FR1 n14 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0009	PASS
40	Normal Voltage	0.0049	
30	Normal Voltage	0.0055	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0047	
0	Normal Voltage	0.0035	
-10	Normal Voltage	0.0009	
-20	Normal Voltage	0.0045	
-30	Normal Voltage	0.0050	
20	Maximum Voltage	0.0047	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0032	

Note:

- 1. Normal Voltage = 3.85 V. ; Battery End Point (BEP) = 3.30 V. ; Maximum Voltage = 4.25 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

5G NR n14

5G NR n14 / 10MHz / PI/2 BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1576	-63.96	-42.15	-21.81	-75.28	-65.95	0.95	5.09	H
	2364	-60.40	-13	-47.40	-77.14	-61.99	1.25	4.99	H
	3152	-58.83	-13	-45.83	-77.47	-61.65	1.50	6.47	H
									H
									H
									H
									H
	1576	-63.05	-42.15	-20.90	-74.87	-65.04	0.95	5.09	V
	2364	-59.70	-13	-46.70	-76.85	-61.29	1.25	4.99	V
	3152	-58.27	-13	-45.27	-77.55	-61.09	1.50	6.47	V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



5G NR n14 / 5MHz / PI/2 BPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1576	-63.79	-42.15	-21.64	-75.11	-65.78	0.95	5.09	H
	2364	-59.86	-13	-46.86	-76.6	-61.45	1.25	4.99	H
	3152	-58.75	-13	-45.75	-77.39	-61.57	1.50	6.47	H
									H
									H
									H
									H
	1576	-63.20	-42.15	-21.05	-75.02	-65.19	0.95	5.09	V
	2364	-59.54	-13	-46.54	-76.69	-61.13	1.25	4.99	V
	3152	-58.11	-13	-45.11	-77.39	-60.93	1.50	6.47	V
									V
									V
									V
									V
Middle	1584	-64.05	-42.15	-21.90	-75.36	-66.02	0.95	5.06	H
	2373	-60.35	-13	-47.35	-77.17	-61.97	1.25	5.02	H
	3164	-58.56	-13	-45.56	-77.19	-61.43	1.50	6.52	H
									H
									H
									H
									H
	1584	-63.29	-42.15	-21.14	-75.1	-65.26	0.95	5.06	V
	2373	-59.80	-13	-46.80	-77.03	-61.42	1.25	5.02	V
	3164	-58.15	-13	-45.15	-77.42	-61.02	1.50	6.52	V
									V
									V
									V
									V
								V	



Highest	1584	-64.08	-42.15	-21.93	-75.39	-66.05	0.95	5.06	H
	2376	-60.38	-13	-47.38	-77.18	-62.01	1.25	5.03	H
	3176	-58.51	-13	-45.51	-77.13	-61.43	1.50	6.57	H
									H
									H
									H
									H
	1584	-63.65	-42.15	-21.50	-75.48	-65.62	0.95	5.06	V
	2376	-59.89	-13	-46.89	-77.1	-61.52	1.25	5.03	V
	3176	-58.14	-13	-45.14	-77.45	-61.06	1.50	6.57	V
									V
									V
									V
									V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Appendix C. Setup Photographs

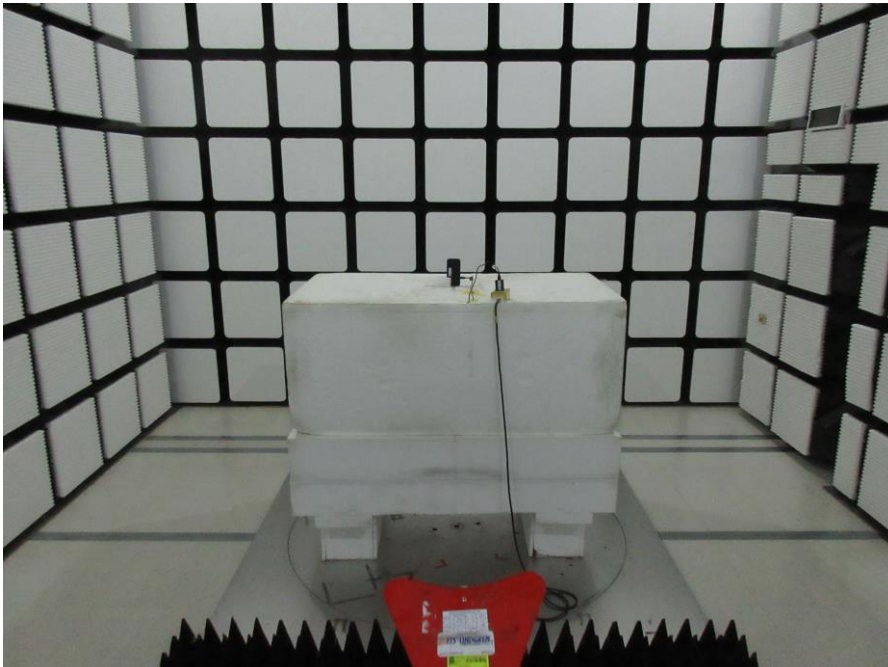
<Radiated Emission>

Z Plane

LF



HF



—————THE END—————