

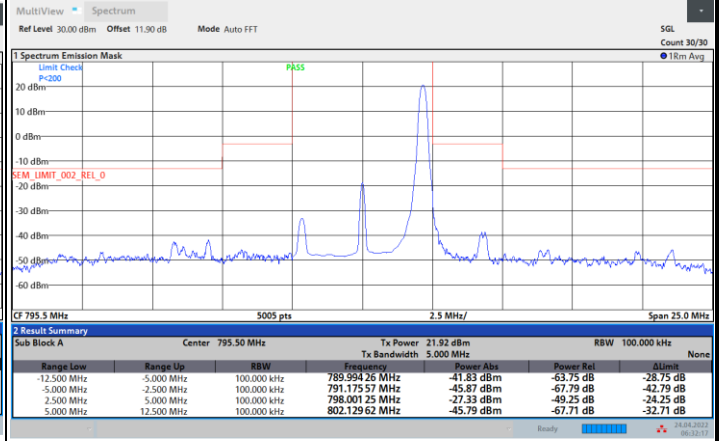
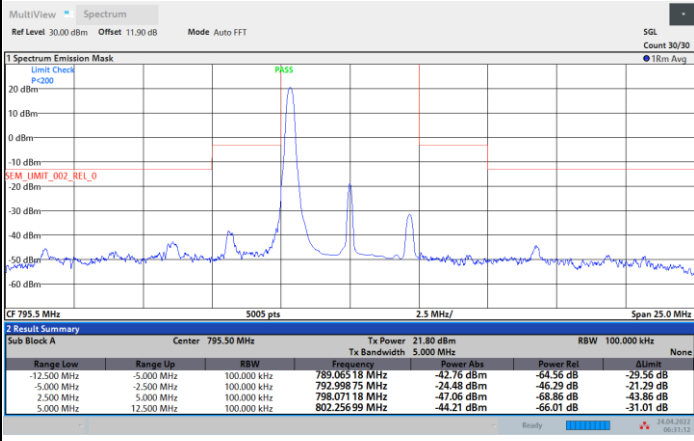


FR1 n14 / 5MHz / DFT-S OFDM / QPSK

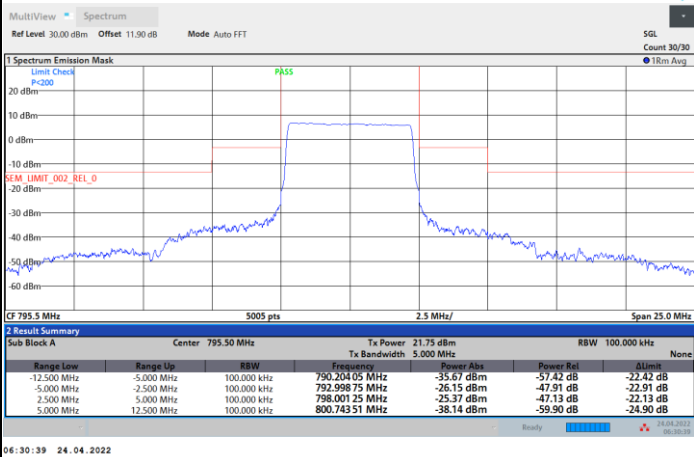
Highest Channel

1RB0

1RBmax



Full RB



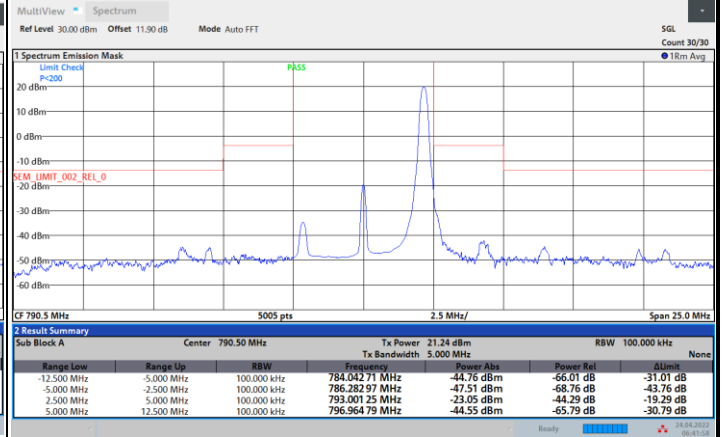
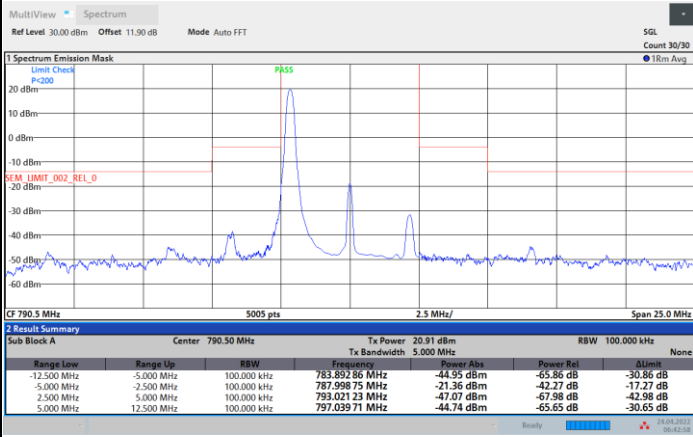


FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

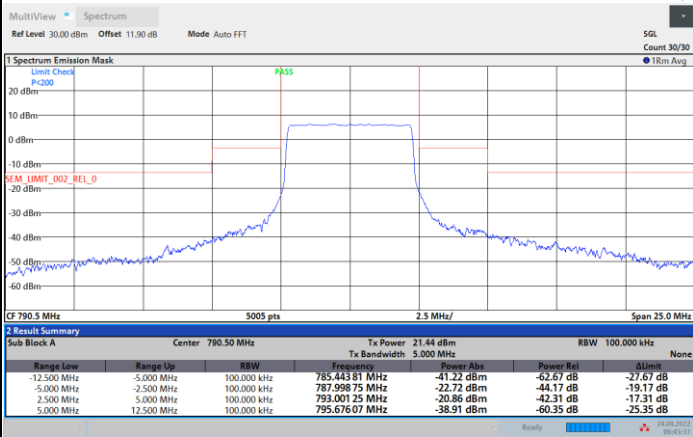
Lowest Channel

1RB0

1RBmax



Full RB



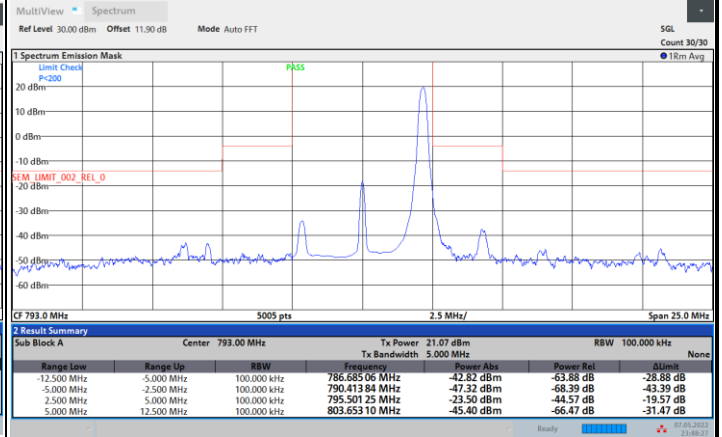
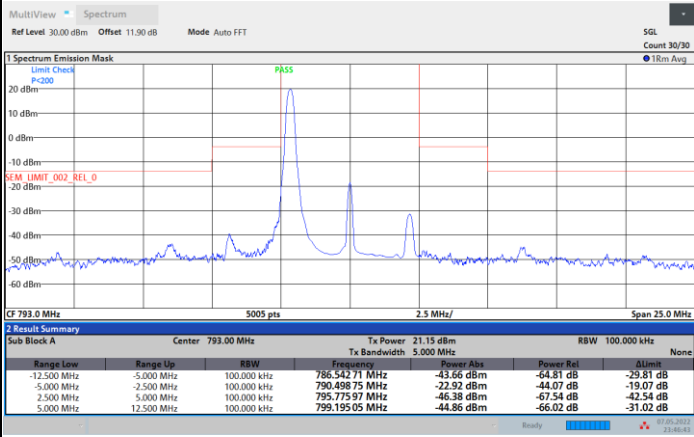


FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

Middle Channel

1RB0

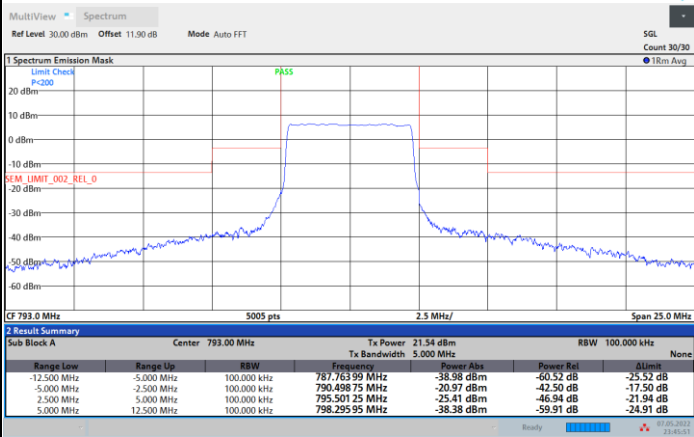
1RBmax



23:46:44 07.05.2022

23:48:28 07.05.2022

Full RB



23:45:51 07.05.2022

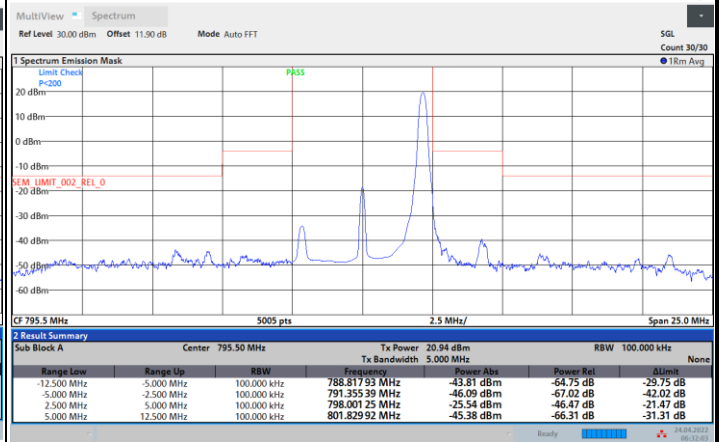
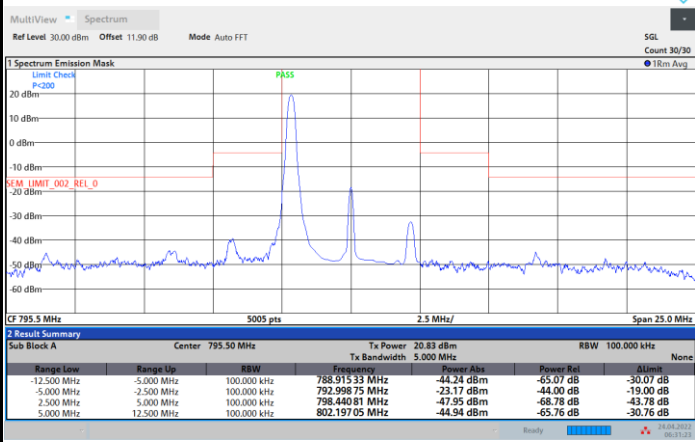


FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

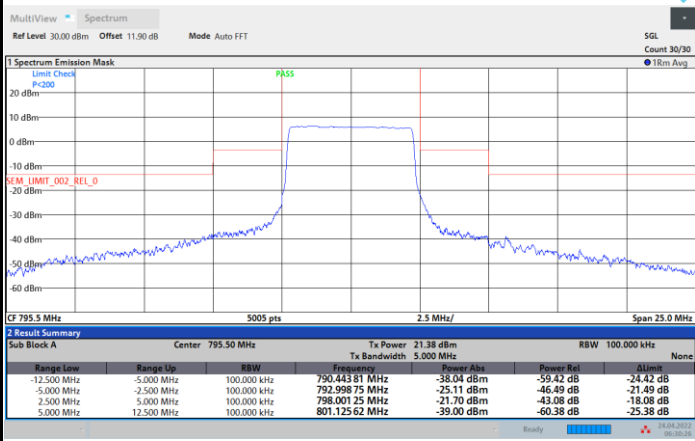
Highest Channel

1RB0

1RBmax



Full RB



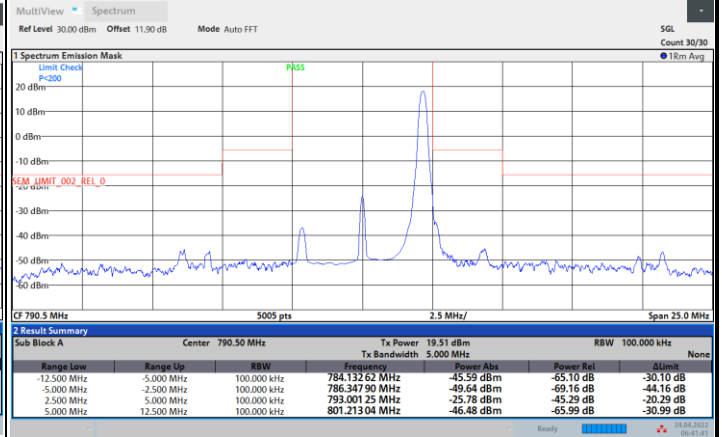
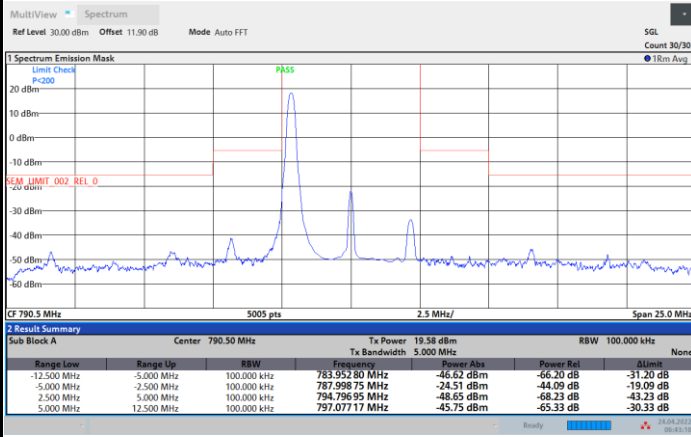


FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

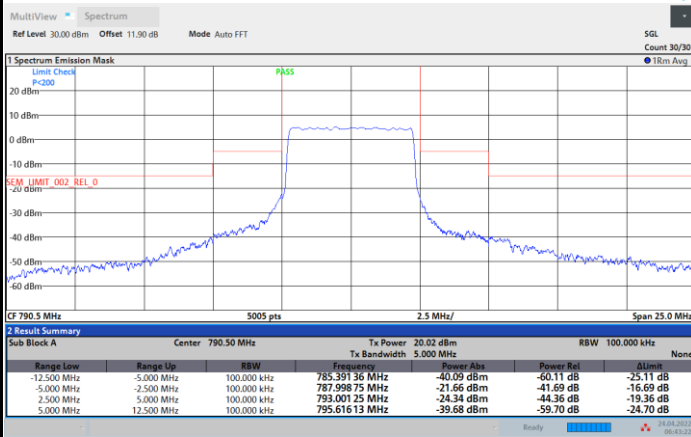
Lowest Channel

1RB0

1RBmax



Full RB



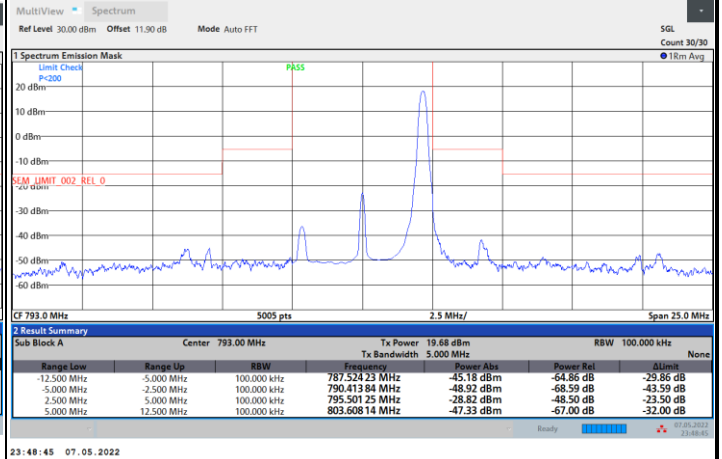
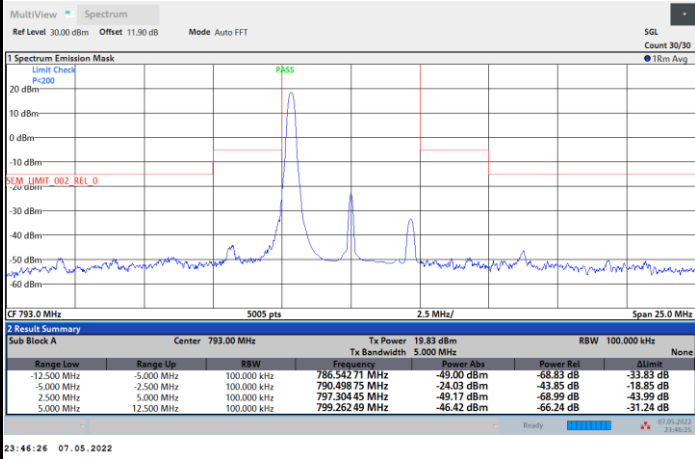


FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

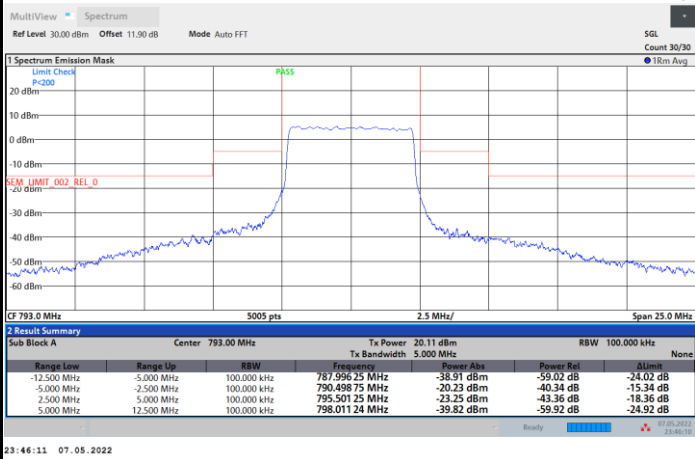
Middle Channel

1RB0

1RBmax



Full RB



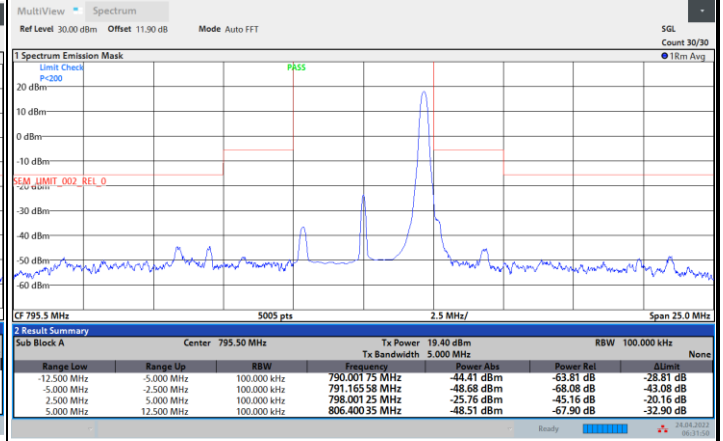
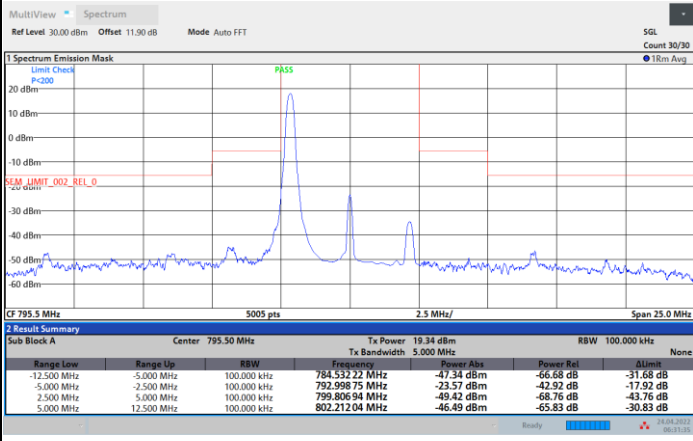


FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

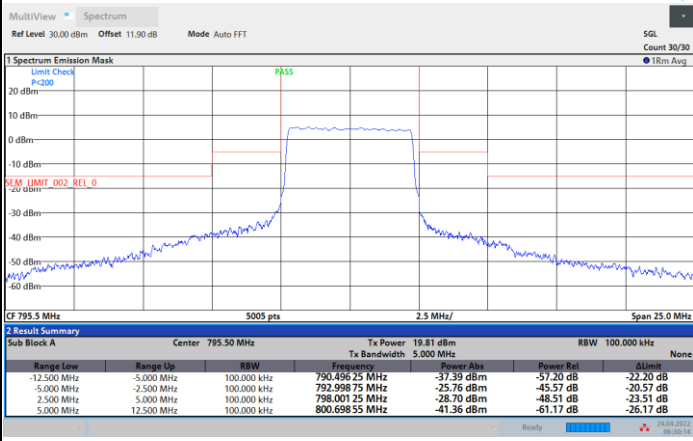
Highest Channel

1RB0

1RBmax



Full RB



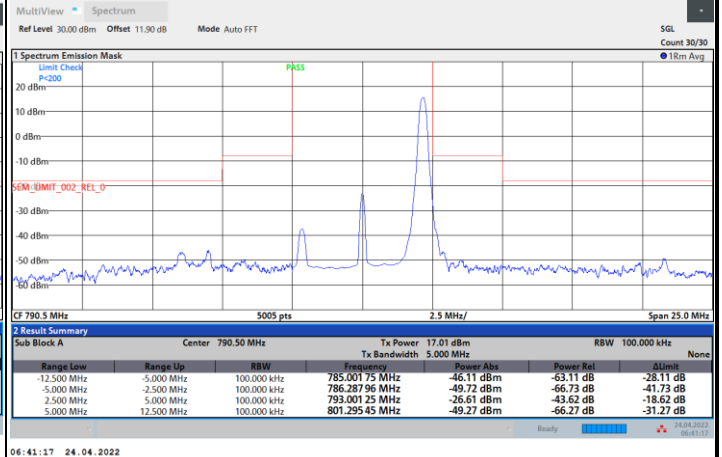
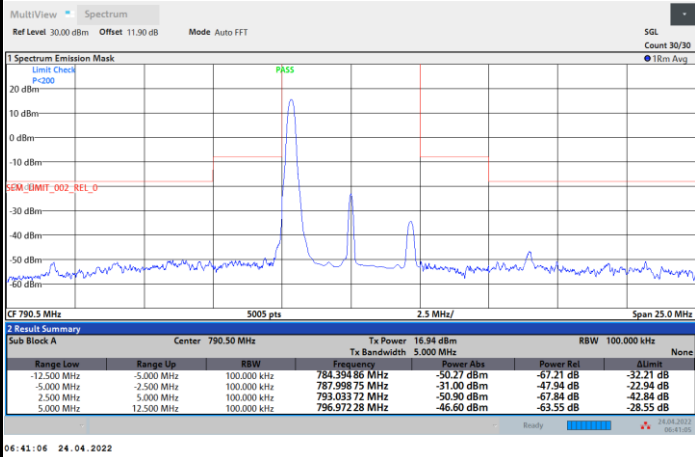


FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

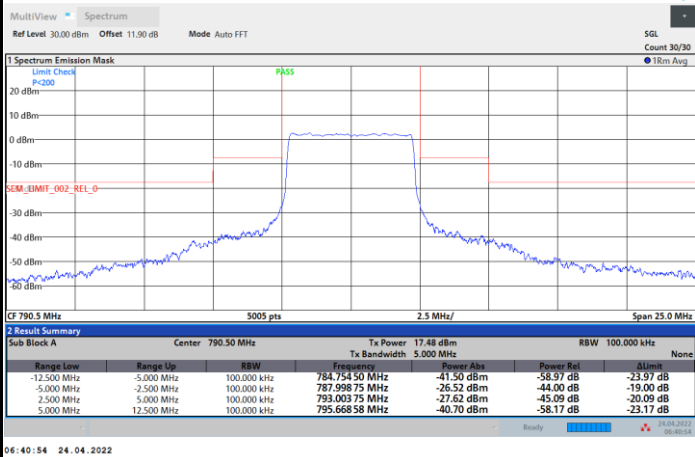
Lowest Channel

1RB0

1RBmax



Full RB



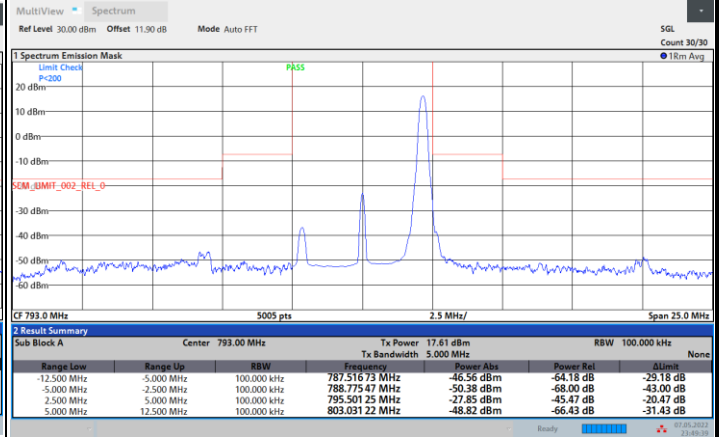
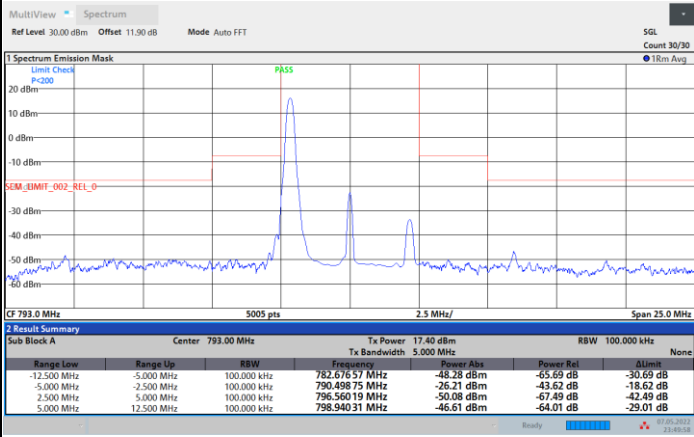


FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

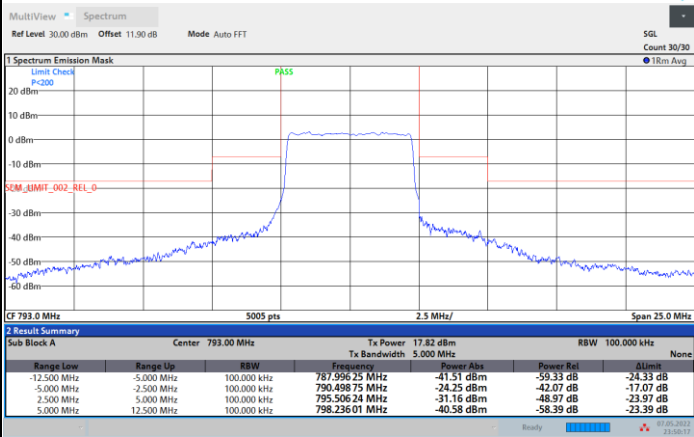
Middle Channel

1RB0

1RBmax



Full RB



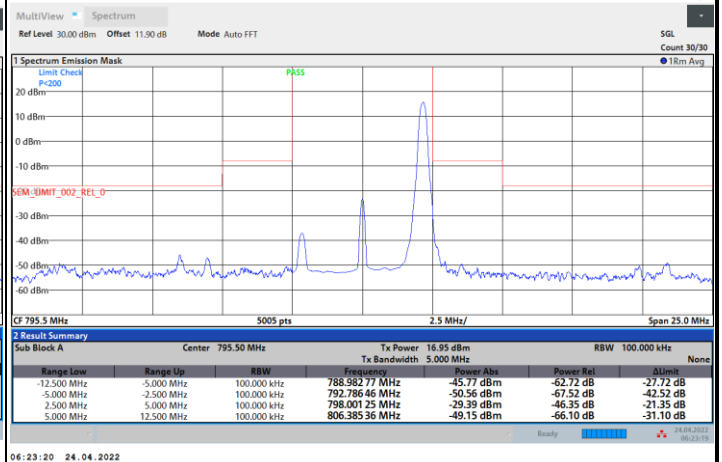
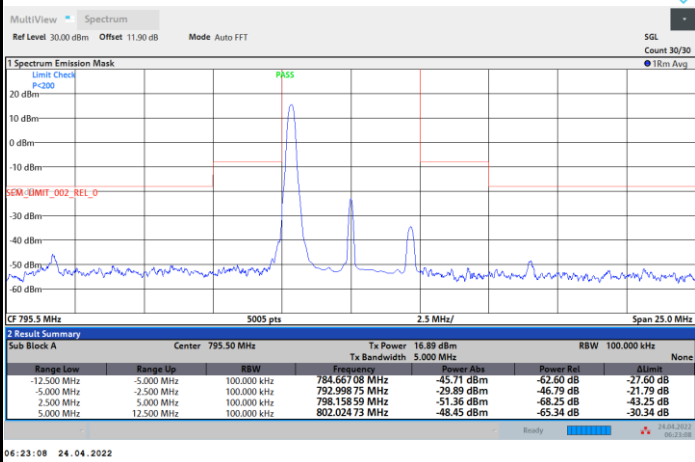


FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

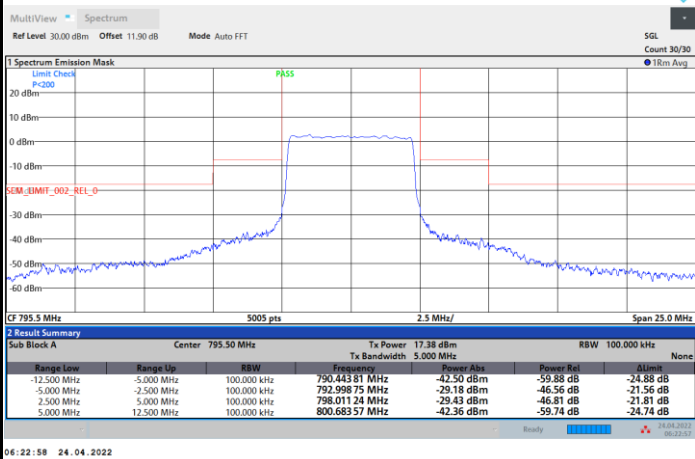
Highest Channel

1RB0

1RBmax



Full RB

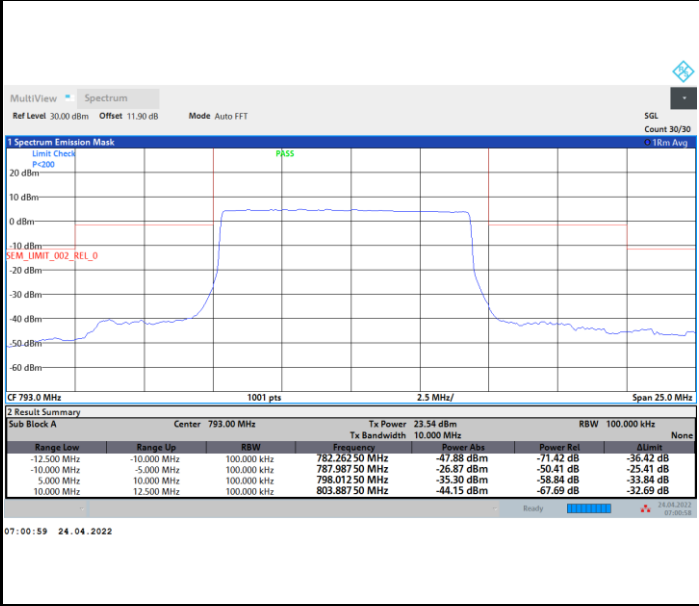




FR1 n14 / 10MHz / DFT-S OFDM / BPSK

Middle Channel

Full RB

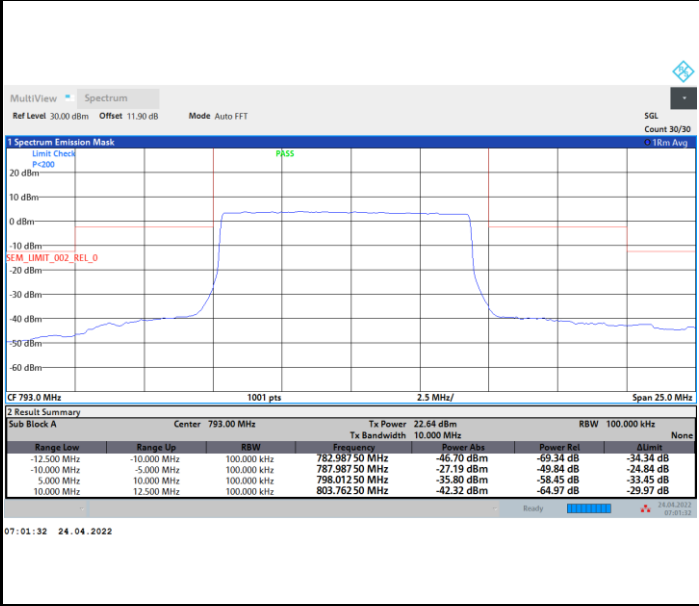




FR1 n14 / 10MHz / DFT-S OFDM / QPSK

Middle Channel

Full RB

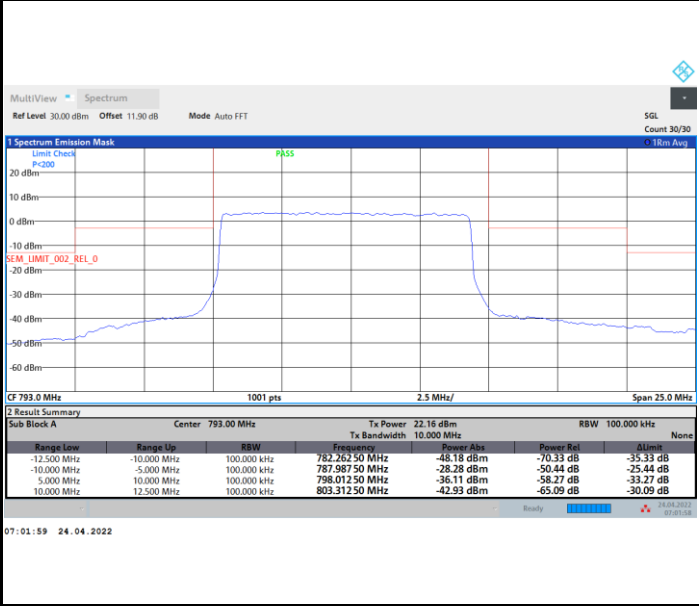




FR1 n14 / 10MHz / DFT-S OFDM / 16QAM

Middle Channel

Full RB

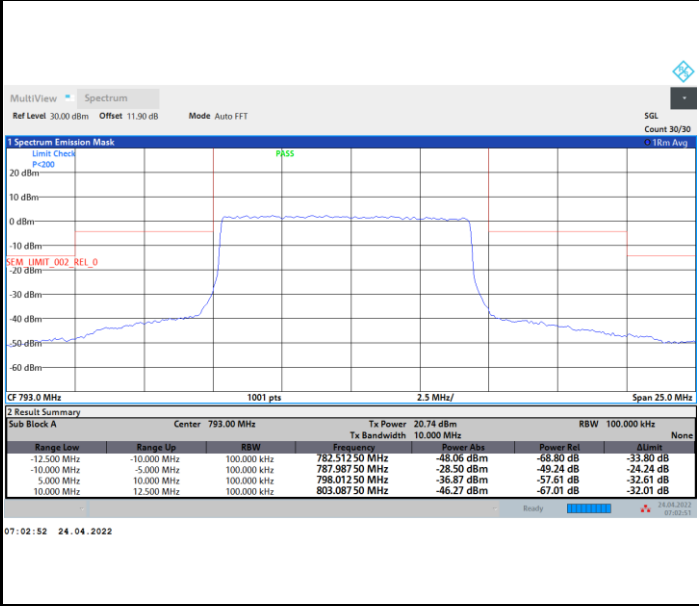




FR1 n14 / 10MHz / DFT-S OFDM / 64QAM

Middle Channel

Full RB

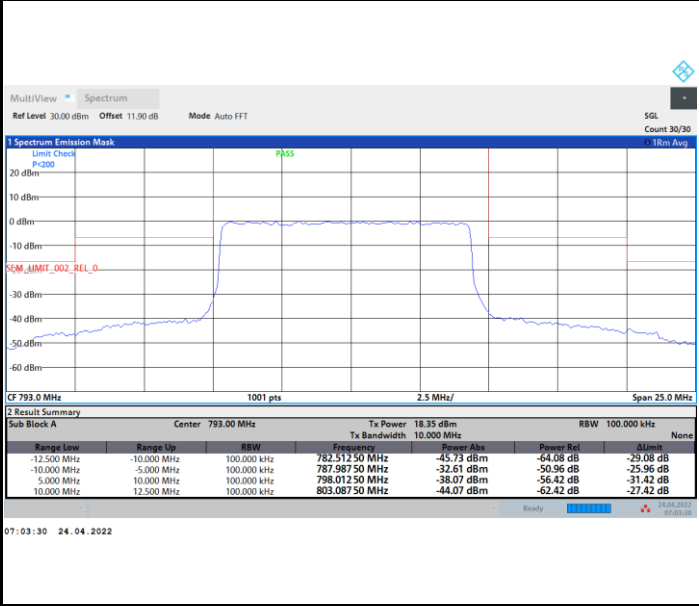




FR1 n14 / 10MHz / DFT-S OFDM / 256QAM

Middle Channel

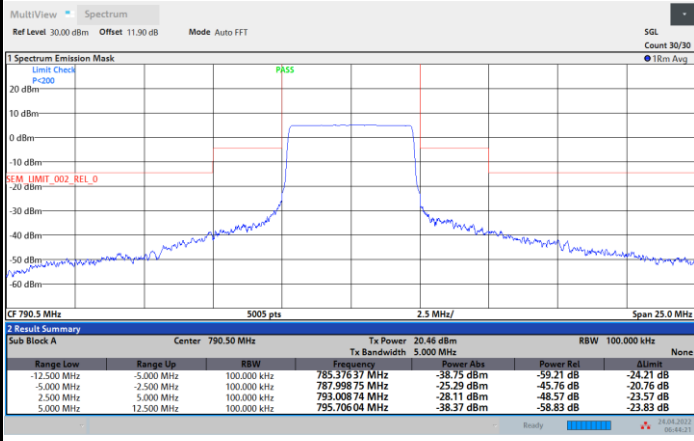
Full RB





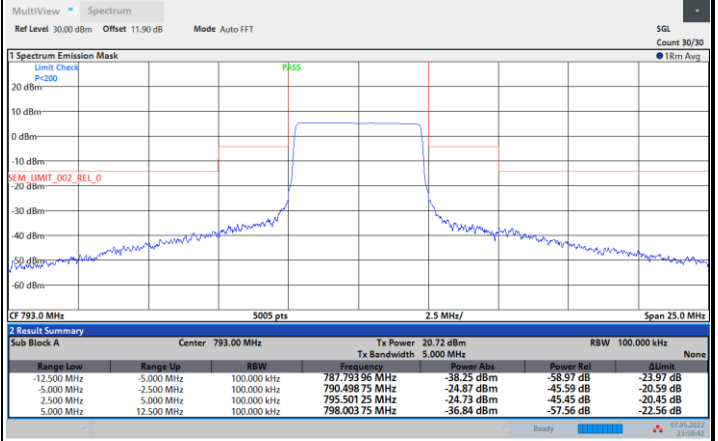
FR1 n14 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Channel



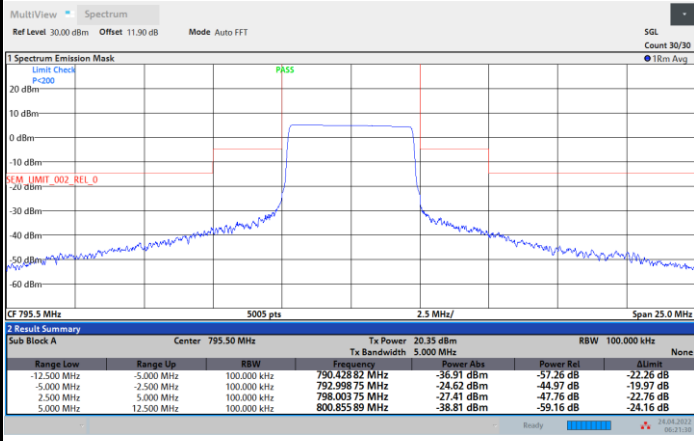
06:44:22 24.04.2022

Middle Channel



23:50:42 07.05.2022

Highest Channel

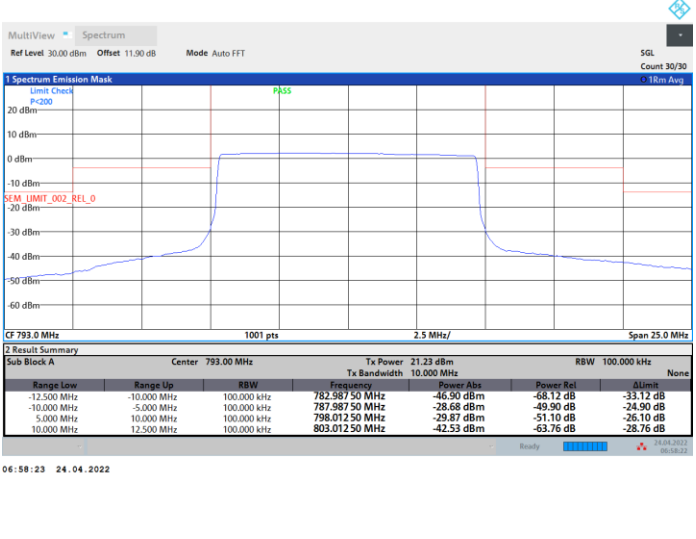


06:21:31 24.04.2022



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

Middle Channel

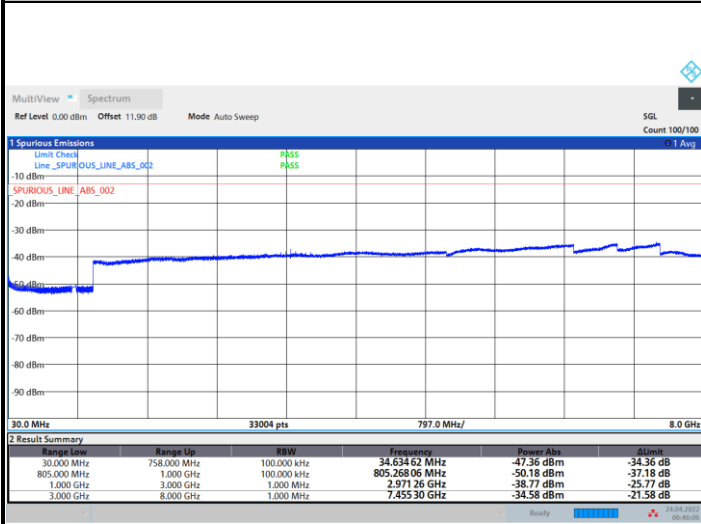




Conducted Spurious Emission

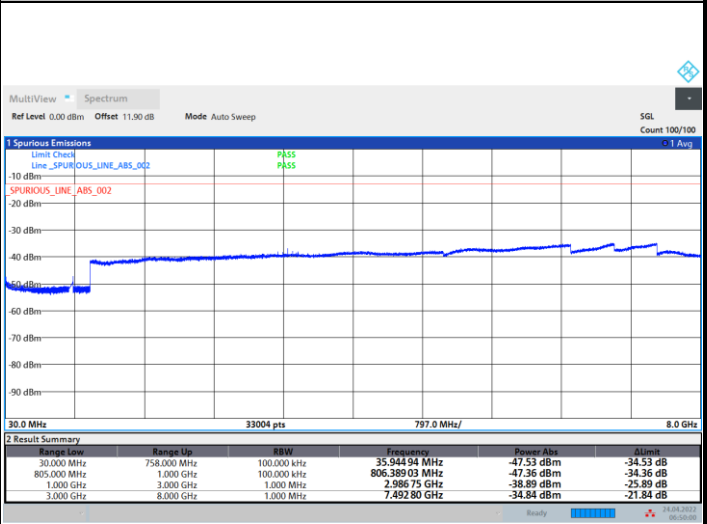
FR1 n14 / 5MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel



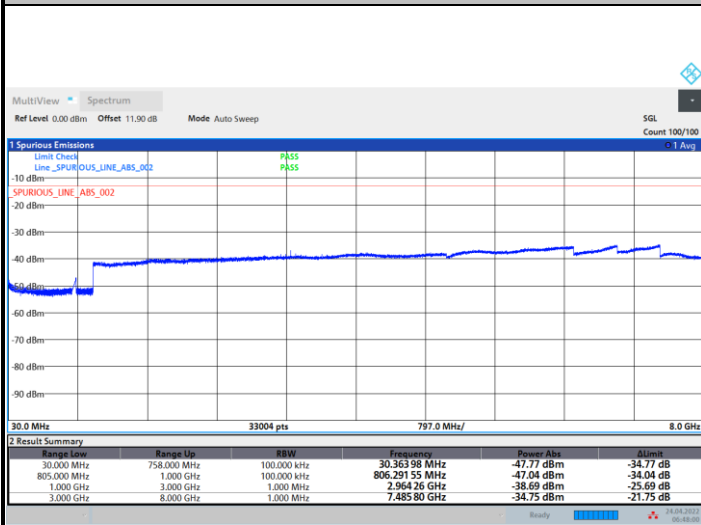
06:46:07 24.04.2022

Middle Channel



06:50:01 24.04.2022

Highest Channel



06:48:01 24.04.2022



Frequency Stability

Test Conditions		FR1 n14 (PI/BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0005	PASS
40	Normal Voltage	0.0102	
30	Normal Voltage	0.0185	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0067	
0	Normal Voltage	0.0045	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0067	
20	Maximum Voltage	0.0091	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0047	

Note:

1. Normal Voltage = 3.85 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.3 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

<Primary Antenna>

<Ant. 0>

5G NR n14

5G NR n14 / 5MHz / 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	-65.59	-42.15	-23.44	-72.14	-70.40	1.79	8.76	H
	2368	-49.61	-13	-36.61	-59.68	-55.24	2.20	9.98	H
	3154	-61.73	-13	-48.73	-74.32	-68.44	2.55	11.42	H
	3944	-50.48	-13	-37.48	-64.69	-57.99	2.83	12.49	H
									H
									H
	1577	-65.53	-42.15	-23.38	-72.35	-70.35	1.79	8.76	V
	2368	-48.55	-13	-35.55	-59.33	-54.18	2.20	9.98	V
	3154	-60.83	-13	-47.83	-73.92	-67.54	2.55	11.42	V
	3942	-59.64	-13	-46.64	-74.27	-67.15	2.83	12.48	V
									V
									V
Middle	1584	-65.67	-42.15	-23.52	-72.15	-70.53	1.80	8.80	H
	2376	-49.07	-13	-36.07	-59.15	-54.78	2.20	10.06	H
	3164	-61.86	-13	-48.86	-74.52	-68.61	2.56	11.46	H
									H
									H
									H
	1584	-64.69	-42.15	-22.54	-71.49	-69.55	1.80	8.80	V
	2376	-47.48	-13	-34.48	-58.27	-53.19	2.20	10.06	V
	3164	-61.23	-13	-48.23	-74.37	-67.98	2.56	11.46	V
									V
									V
									V



Highest	1584	-65.40	-42.15	-23.25	-71.88	-70.26	1.80	8.80	H
	2384	-51.52	-13	-38.52	-61.61	-57.30	2.21	10.14	H
	3174	-61.07	-13	-48.07	-73.79	-67.85	2.56	11.50	H
									H
									H
									H
	1584	-65.49	-42.15	-23.34	-72.29	-70.35	1.80	8.80	V
	2376	-49.86	-13	-36.86	-60.65	-55.57	2.20	10.06	V
	3174	-61.08	-13	-48.08	-74.27	-67.86	2.56	11.50	V
									V
									V
									V

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



5G NR n14 / 10MHz / 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	-65.55	-42.15	-23.40	-72.1	-70.36	1.79	8.76	H
	2368	-53.96	-13	-40.96	-64.03	-59.59	2.20	9.98	H
	3155	-61.38	-13	-48.38	-73.98	-68.10	2.55	11.42	H
									H
									H
									H
	1576	-65.46	-42.15	-23.31	-72.28	-70.27	1.79	8.76	V
	2368	-54.05	-13	-41.05	-64.83	-59.68	2.20	9.98	V
	3155	-60.98	-13	-47.98	-74.07	-67.70	2.55	11.42	V
									V
									V
									V

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



<ASDIV Antenna>

<Ant. 1>

5G NR n14

5G NR n14 / 5MHz / 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	-65.58	-42.15	-23.43	-72.13	-70.39	1.79	8.76	H
	2365	-62.73	-13	-49.73	-72.79	-68.33	2.20	9.95	H
	3154	-61.65	-13	-48.65	-74.24	-68.36	2.55	11.42	H
									H
									H
									H
	1576	-65.28	-42.15	-23.13	-72.10	-70.09	1.79	8.76	V
	2365	-62.71	-13	-49.71	-73.48	-68.31	2.20	9.95	V
	3154	-60.89	-13	-47.89	-73.98	-67.60	2.55	11.42	V
									V
									V
									V
Middle	1584	-65.84	-42.15	-23.69	-72.32	-70.70	1.80	8.80	H
	2373	-64.18	-13	-51.18	-74.25	-69.86	2.20	10.03	H
	3164	-61.70	-13	-48.70	-74.36	-68.45	2.56	11.46	H
									H
									H
									H
	1584	-65.42	-42.15	-23.27	-72.22	-70.28	1.80	8.80	V
	2373	-62.94	-13	-49.94	-73.73	-68.62	2.20	10.03	V
	3164	-61.24	-13	-48.24	-74.38	-67.99	2.56	11.46	V
									V
									V
									V



Highest	1584	-65.81	-42.15	-23.66	-72.29	-70.67	1.80	8.80	H
	2380	-63.90	-13	-50.90	-73.98	-69.65	2.20	10.10	H
	3174	-61.52	-13	-48.52	-74.24	-68.30	2.56	11.50	H
									H
									H
									H
	1584	-65.44	-42.15	-23.29	-72.24	-70.30	1.80	8.80	V
	2380	-62.96	-13	-49.96	-73.76	-68.71	2.20	10.10	V
	3174	-60.95	-13	-47.95	-74.14	-67.73	2.56	11.50	V
									V
									V
									V

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



5G NR n14 / 10MHz / 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	-66.01	-42.15	-23.86	-72.56	-70.82	1.79	8.76	H
	2366	-63.78	-13	-50.78	-73.84	-69.39	2.20	9.96	H
	3155	-61.34	-13	-48.34	-73.94	-68.06	2.55	11.42	H
									H
									H
									H
	1576	-65.48	-42.15	-23.33	-72.3	-70.29	1.79	8.76	V
	2366	-62.58	-13	-49.58	-73.35	-68.19	2.20	9.96	V
	3155	-60.93	-13	-47.93	-74.02	-67.65	2.55	11.42	V
									V
									V
									V

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

————THE END————