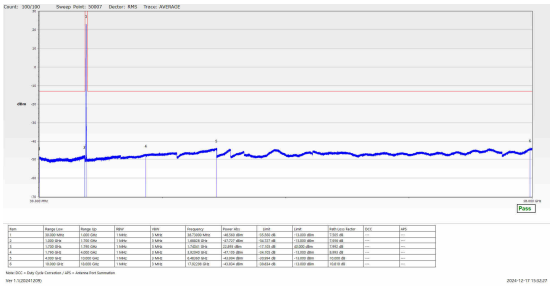
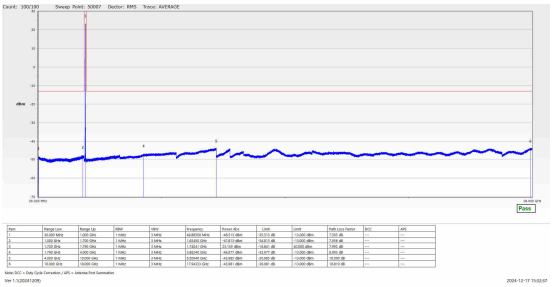
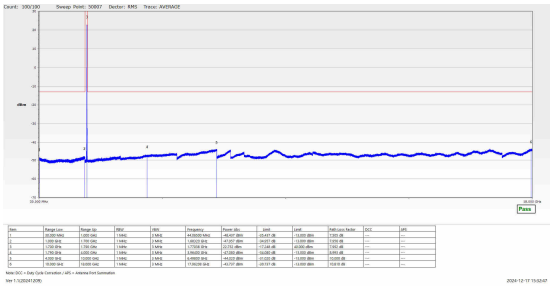
N66(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



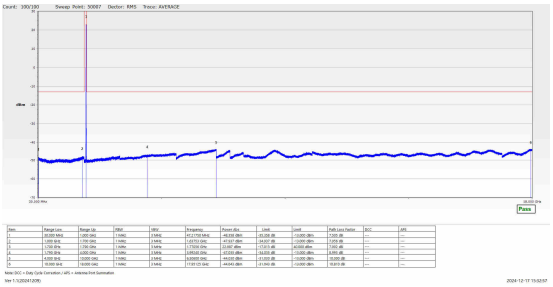
N66(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



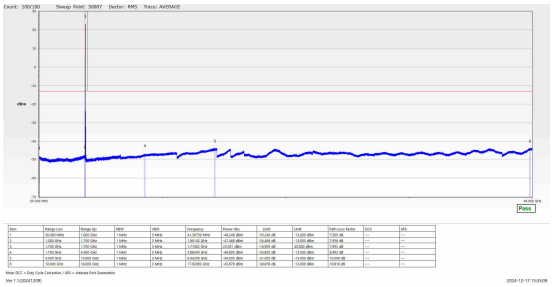
N66(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



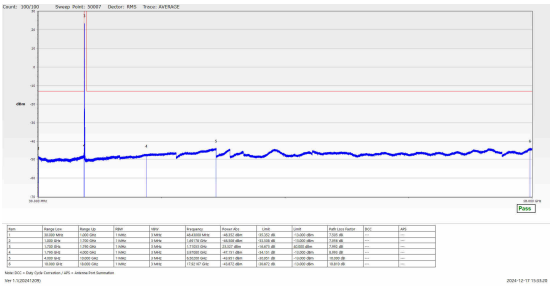
N66(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



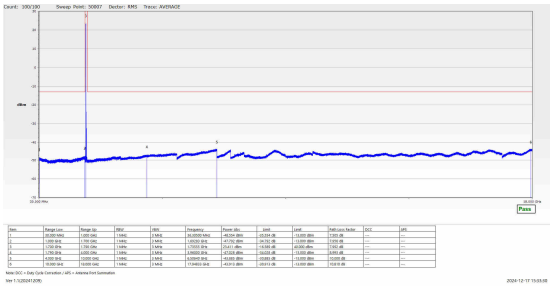
N66(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



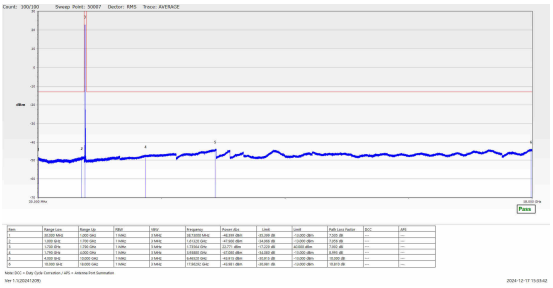
N66(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



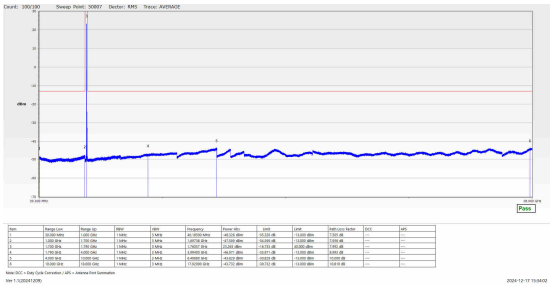
N66(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



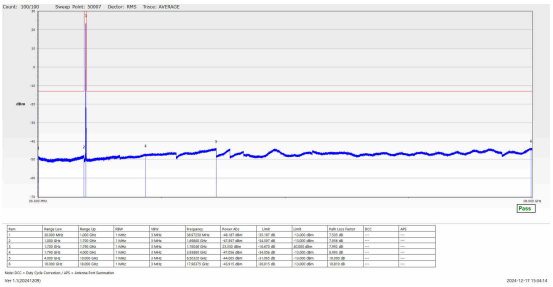
N66(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N66(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



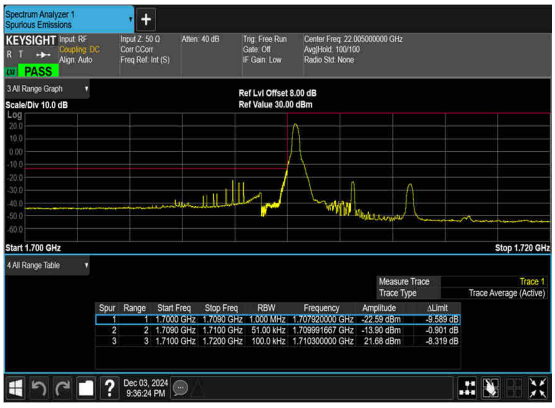
N66(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



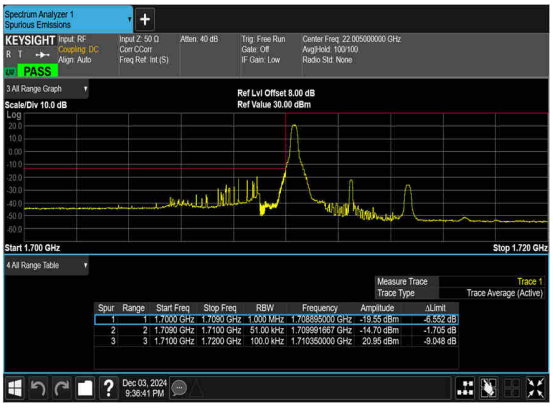
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
66	15	5	342500	1712.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	5	342500	1712.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	5	342500	1712.5	DFT-s-OFDM BPSK	25@0	see graph	**PASS**
66	15	5	342500	1712.5	DFT-s-OFDM QPSK	25@0	see graph	**PASS**
66	15	5	355500	1777.5	DFT-s-OFDM BPSK	1@24	see graph	**PASS**
66	15	5	355500	1777.5	DFT-s-OFDM QPSK	1@24	see graph	**PASS**
66	15	5	355500	1777.5	DFT-s-OFDM BPSK	25@0	see graph	**PASS**
66	15	5	355500	1777.5	DFT-s-OFDM QPSK	25@0	see graph	**PASS**
66	15	10	343000	1715.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	10	343000	1715.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	10	343000	1715.0	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
66	15	10	343000	1715.0	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
66	15	10	355000	1775.0	DFT-s-OFDM BPSK	1@51	see graph	**PASS**
66	15	10	355000	1775.0	DFT-s-OFDM QPSK	1@51	see graph	**PASS**
66	15	10	355000	1775.0	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
66	15	10	355000	1775.0	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
66	15	20	344000	1720.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	20	344000	1720.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	20	344000	1720.0	DFT-s-OFDM BPSK	100@0	see graph	**PASS**
66	15	20	344000	1720.0	DFT-s-OFDM QPSK	100@0	see graph	**PASS**
66	15	20	354000	1770.0	DFT-s-OFDM BPSK	1@105	see graph	**PASS**
66	15	20	354000	1770.0	DFT-s-OFDM QPSK	1@105	see graph	**PASS**
66	15	20	354000	1770.0	DFT-s-OFDM BPSK	100@0	see graph	**PASS**
66	15	20	354000	1770.0	DFT-s-OFDM QPSK	100@0	see graph	**PASS**

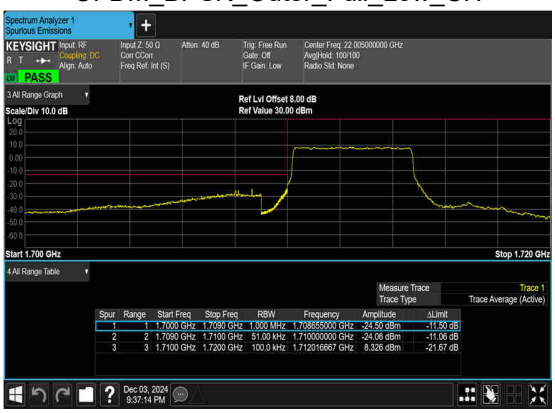
N66(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



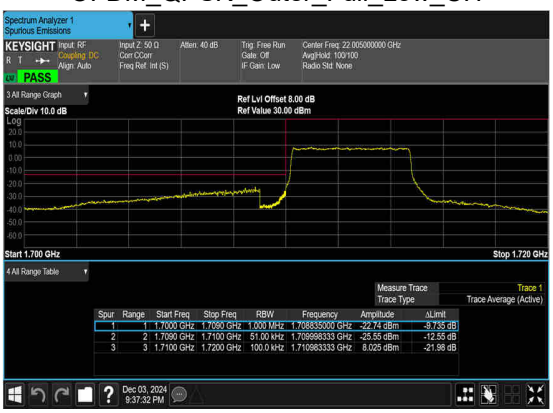
N66(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



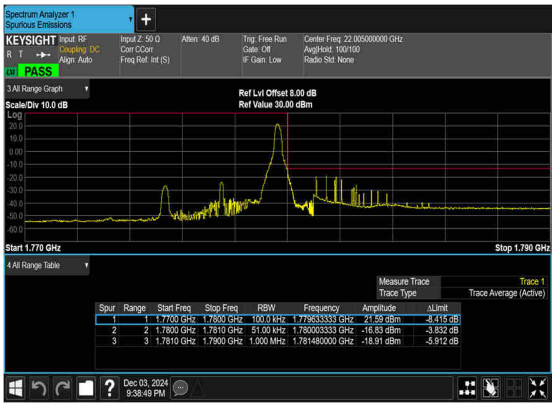
N66(5M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



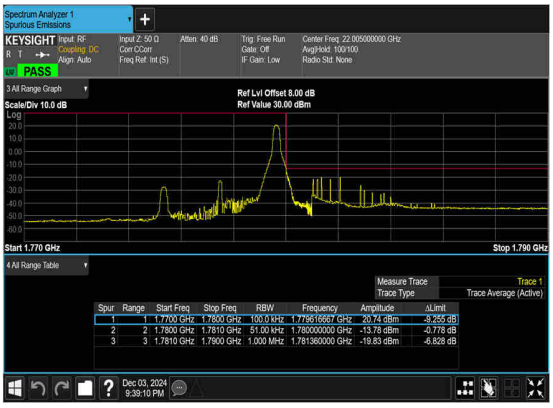
N66(5M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N66(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



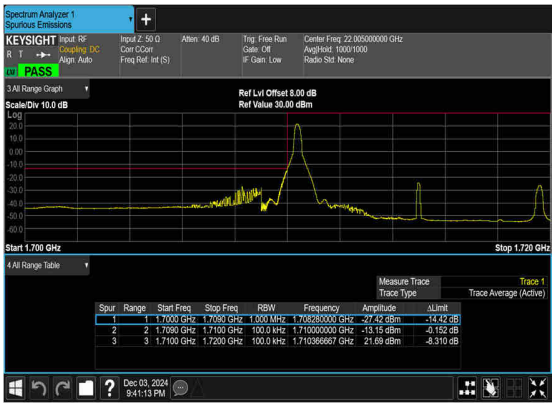
N66(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



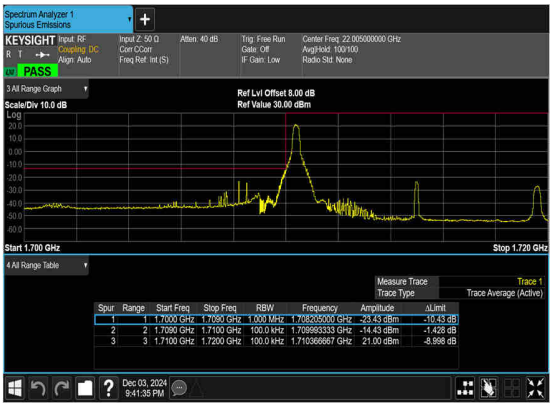
N66(5M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

N66(5M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH

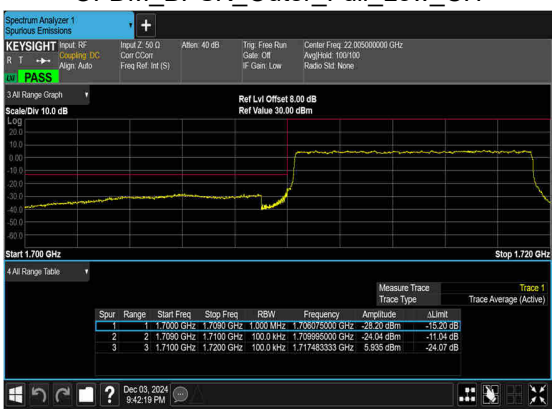
N66(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



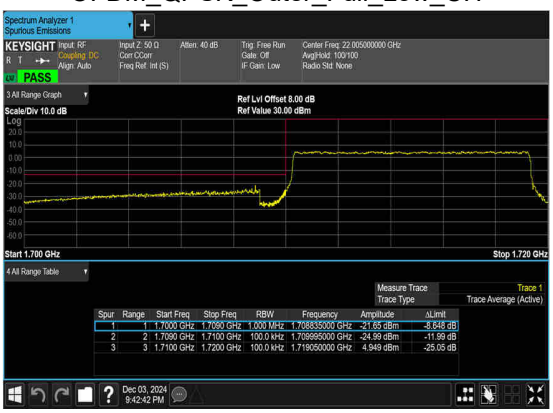
N66(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



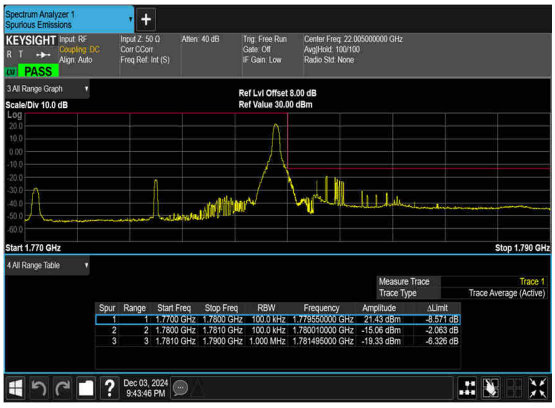
N66(10M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



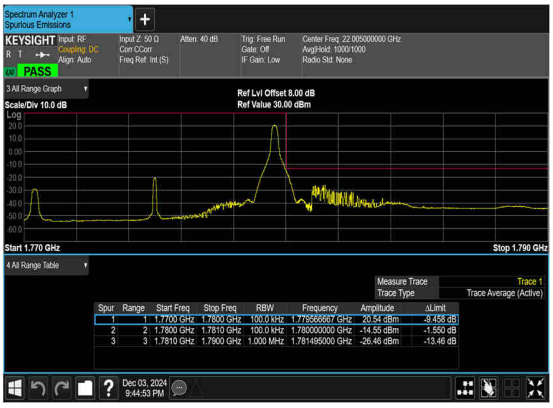
N66(10M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N66(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



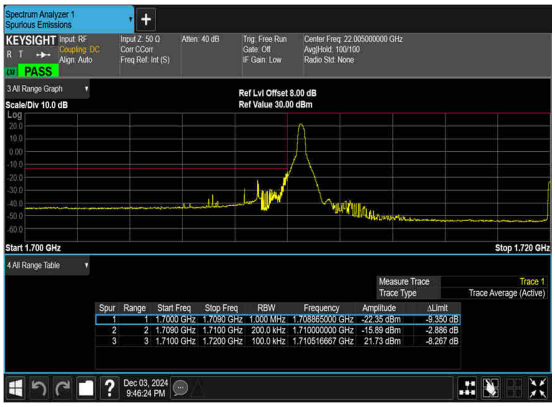
N66(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



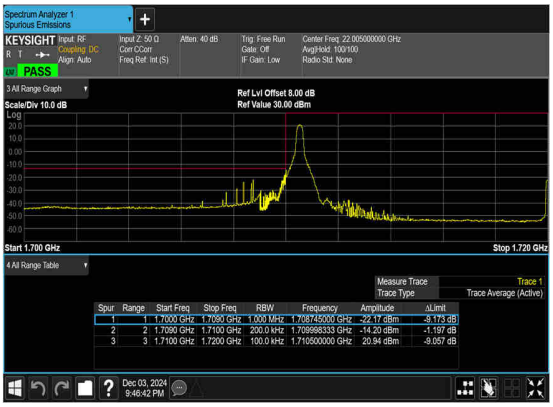
N66(10M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

N66(10M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH

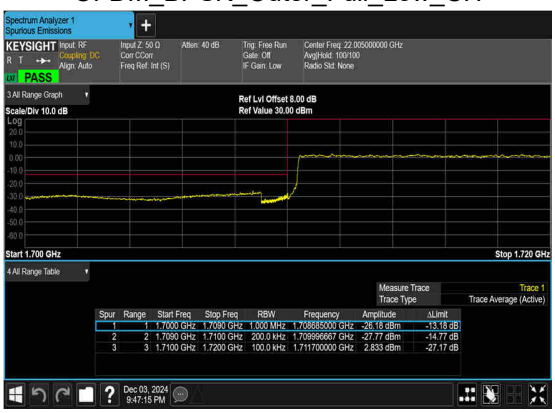
N66(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



N66(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

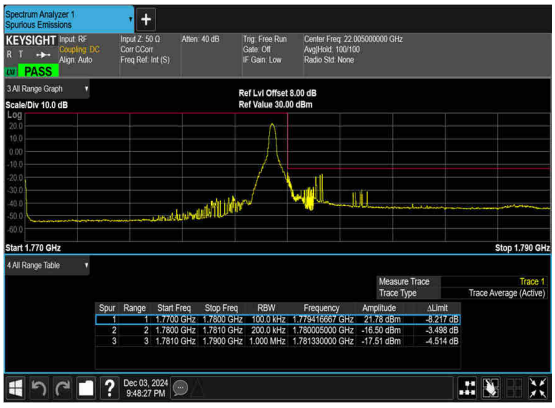


N66(20M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

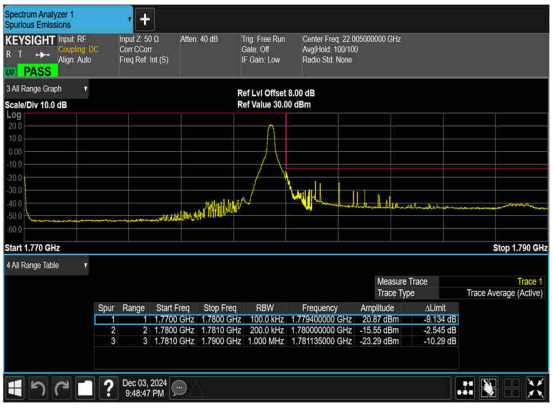


N66(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH

N66(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



N66(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



N66(20M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

N66(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Jake	Temperature :	23~25℃
		Relative Humidity :	51~53%

Note: Pre-scanned harmonic for the different antenna combinations, we choose the worst antenna mode to perform final test.

EN_DC_13A_n2A / LTE 10MHz + NR 20MHz / QPSK / ANT1 + 2								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3705	-55.45	-13	-42.45	-67.71	2.64	14.90	H
	5550	-54.34	-13	-41.34	-66.20	2.94	14.80	H
	7410	-52.13	-13	-39.13	-61.90	3.39	13.16	H
	3705	-55.10	-13	-42.10	-67.36	2.64	14.90	V
	5550	-53.47	-13	-40.47	-65.33	2.94	14.80	V
	7410	-52.33	-13	-39.33	-62.10	3.39	13.16	V
Middle	3735	-55.55	-13	-42.55	-67.81	2.64	14.90	H
	5610	-54.17	-13	-41.17	-66.03	2.94	14.80	H
	7485	-52.05	-13	-39.05	-61.82	3.39	13.16	H
	3735	-55.34	-13	-42.34	-67.60	2.64	14.90	V
	5610	-52.96	-13	-39.96	-64.82	2.94	14.80	V
	7485	-51.64	-13	-38.64	-61.41	3.39	13.16	V
Highest	3780	-55.64	-13	-42.64	-67.90	2.64	14.90	H
	5670	-54.07	-13	-41.07	-65.93	2.94	14.80	H
	7560	-51.99	-13	-38.99	-61.76	3.39	13.16	H
	3780	-55.46	-13	-42.46	-67.72	2.64	14.90	V
	5670	-53.40	-13	-40.40	-65.26	2.94	14.80	V
	7560	-51.94	-13	-38.94	-61.71	3.39	13.16	V

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

5G NR n5 SA / NR 20MHz / QPSK / ANT1								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1656	-61.98	-13	-48.98	-68.95	1.58	10.70	H
	2480	-58.70	-13	-45.70	-66.95	2.102	12.50	H
	3312	-57.20	-13	-44.20	-66.09	2.856	13.90	H
	1656	-61.05	-13	-48.05	-68.02	1.58	10.70	V
	2480	-56.80	-13	-43.80	-65.05	2.10	12.50	V
	3312	-57.03	-13	-44.03	-65.92	2.86	13.90	V
Middle	1656	-60.91	-13	-47.91	-67.88	1.58	10.70	H
	2480	-58.80	-13	-45.80	-67.05	2.102	12.50	H
	3312	-57.16	-13	-44.16	-66.05	2.856	13.90	H
	1656	-60.79	-13	-47.79	-67.76	1.58	10.70	V
	2480	-57.04	-13	-44.04	-65.29	2.10	12.50	V
	3312	-56.86	-13	-43.86	-65.75	2.86	13.90	V
Highest	1664	-62.23	-13	-49.23	-69.20	1.58	10.70	H
	2488	-58.94	-13	-45.94	-67.19	2.102	12.50	H
	3320	-57.02	-13	-44.02	-65.91	2.856	13.90	H
	1664	-61.28	-13	-48.28	-68.25	1.58	10.70	V
	2488	-56.65	-13	-43.65	-64.90	2.10	12.50	V
	3320	-57.59	-13	-44.59	-66.48	2.86	13.90	V

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

EN_DC_30A_n5A / LTE 10MHz + NR 20MHz / QPSK / ANT2 + 1								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-63.40	-13	-50.40	-70.37	1.58	10.70	H
	2472	-54.95	-13	-41.95	-63.20	2.102	12.50	H
	3304	-58.22	-13	-45.22	-67.11	2.856	13.90	H
	1648	-62.57	-13	-49.57	-69.54	1.58	10.70	V
	2472	-52.06	-13	-39.06	-60.31	2.10	12.50	V
	3304	-58.07	-13	-45.07	-66.96	2.86	13.90	V
Middle	1656	-63.03	-13	-50.03	-70.00	1.58	10.70	H
	2480	-53.06	-13	-40.06	-61.31	2.102	12.50	H
	3312	-58.29	-13	-45.29	-67.18	2.856	13.90	H
	1656	-62.29	-13	-49.29	-69.26	1.58	10.70	V
	2480	-49.23	-13	-36.23	-57.48	2.10	12.50	V
	3312	-58.41	-13	-45.41	-67.30	2.86	13.90	V
Highest	1656	-62.98	-13	-49.98	-69.95	1.58	10.70	H
	2488	-55.50	-13	-42.50	-63.75	2.102	12.50	H
	3320	-58.66	-13	-45.66	-67.55	2.856	13.90	H
	1656	-62.05	-13	-49.05	-69.02	1.58	10.70	V
	2488	-51.03	-13	-38.03	-59.28	2.10	12.50	V
	3320	-58.14	-13	-45.14	-67.03	2.86	13.90	V

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

5G NR n25 SA / NR 20MHz / QPSK / ANT1								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3705	-55.17	-13	-42.17	-67.43	2.64	14.90	H
	5550	-55.13	-13	-42.13	-66.99	2.94	14.80	H
	7410	-51.58	-13	-38.58	-61.35	3.39	13.16	H
	3705	-55.05	-13	-42.05	-67.31	2.64	14.90	V
	5550	-54.55	-13	-41.55	-66.41	2.94	14.80	V
	7410	-51.52	-13	-38.52	-61.29	3.39	13.16	V
Middle	3750	-55.12	-13	-42.12	-67.38	2.64	14.90	H
	5625	-47.28	-13	-34.28	-59.14	2.94	14.80	H
	7500	-51.30	-13	-38.30	-61.07	3.39	13.16	H
	3750	-54.63	-13	-41.63	-66.89	2.64	14.90	V
	5625	-43.06	-13	-30.06	-54.92	2.94	14.80	V
	7500	-51.49	-13	-38.49	-61.26	3.39	13.16	V
Highest	3795	-53.64	-13	-40.64	-65.90	2.64	14.90	H
	5685	-47.29	-13	-34.29	-59.15	2.94	14.80	H
	7590	-51.24	-13	-38.24	-61.01	3.39	13.16	H
	3795	-54.99	-13	-41.99	-67.25	2.64	14.90	V
	5685	-42.73	-13	-29.73	-54.59	2.94	14.80	V
	7590	-50.88	-13	-37.88	-60.65	3.39	13.16	V

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

5G NR n26 SA / NR 20MHz / QPSK / ANT1								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1656	-62.74	-13	-49.74	-69.71	1.58	10.70	H
	2480	-59.76	-13	-46.76	-68.01	2.102	12.50	H
	3312	-57.69	-13	-44.69	-66.58	2.856	13.90	H
	1656	-61.68	-13	-48.68	-68.65	1.58	10.70	V
	2480	-57.80	-13	-44.80	-66.05	2.10	12.50	V
	3312	-57.61	-13	-44.61	-66.50	2.86	13.90	V

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

5G NR n26 SA / NR 15MHz / QPSK / ANT1								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-66.58	-13	-53.58	-73.55	1.58	10.70	H
	2472	-61.78	-13	-48.78	-70.03	2.102	12.50	H
	3296	-60.68	-13	-47.68	-69.57	2.856	13.90	H
	1648	-62.94	-13	-49.94	-69.91	1.58	10.70	V
	2472	-59.63	-13	-46.63	-67.88	2.10	12.50	V
	3296	-60.33	-13	-47.33	-69.22	2.86	13.90	V
Middle	1656	-61.74	-13	-48.74	-68.71	1.58	10.70	H
	2488	-58.36	-13	-45.36	-66.61	2.102	12.50	H
	3320	-56.85	-13	-43.85	-65.74	2.856	13.90	H
	1656	-60.68	-13	-47.68	-67.65	1.58	10.70	V
	2488	-56.61	-13	-43.61	-64.86	2.10	12.50	V
	3320	-57.11	-13	-44.11	-66.00	2.86	13.90	V
Highest	1672	-62.93	-13	-49.93	-69.90	1.58	10.70	H
	2504	-60.30	-13	-47.30	-68.55	2.102	12.50	H
	3336	-59.33	-13	-46.33	-68.22	2.856	13.90	H
	1672	-63.85	-13	-50.85	-70.82	1.58	10.70	V
	2504	-58.82	-13	-45.82	-67.07	2.10	12.50	V
	3336	-60.31	-13	-47.31	-69.20	2.86	13.90	V

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

5G NR n66 SA / NR 20MHz / QPSK / ANT1								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-54.66	-13	-41.66	-65.40	2.604	13.34	H
	5130	-54.06	-13	-41.06	-64.57	3.011	13.52	H
	6840	-53.83	-13	-40.83	-64.03	3.271	13.47	H
	3420	-55.65	-13	-42.65	-66.39	2.604	13.34	V
	5130	-53.39	-13	-40.39	-63.90	3.011	13.52	V
	6840	-53.67	-13	-40.67	-63.87	3.271	13.47	V
Middle	3465	-56.19	-13	-43.19	-66.93	2.604	13.34	H
	5205	-54.11	-13	-41.11	-64.62	3.011	13.52	H
	6945	-53.18	-13	-40.18	-63.38	3.271	13.47	H
	3465	-57.20	-13	-44.20	-67.94	2.604	13.34	V
	5205	-52.90	-13	-39.90	-63.41	3.011	13.52	V
	6945	-53.49	-13	-40.49	-63.69	3.271	13.47	V
Highest	3525	-56.72	-13	-43.72	-67.46	2.604	13.34	H
	5280	-54.69	-13	-41.69	-65.20	3.011	13.52	H
	7050	-53.12	-13	-40.12	-63.32	3.271	13.47	H
	3525	-56.81	-13	-43.81	-67.55	2.604	13.34	V
	5280	-54.68	-13	-41.68	-65.19	3.011	13.52	V
	7050	-53.12	-13	-40.12	-63.32	3.271	13.47	V

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

EN_DC_13A_n66A / LTE 10MHz + NR 20MHz / QPSK / ANT1 + 2								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-56.59	-13	-43.59	-67.33	2.604	13.34	H
	5130	-47.94	-13	-34.94	-58.45	3.011	13.52	H
	6840	-53.69	-13	-40.69	-63.89	3.271	13.47	H
	3420	-56.84	-13	-43.84	-67.58	2.604	13.34	V
	5130	-52.02	-13	-39.02	-62.53	3.011	13.52	V
	6840	-54.25	-13	-41.25	-64.45	3.271	13.47	V
Middle	3465	-54.94	-13	-41.94	-65.68	2.604	13.34	H
	5205	-45.71	-13	-32.71	-56.22	3.011	13.52	H
	6945	-53.80	-13	-40.80	-64.00	3.271	13.47	H
	3465	-58.07	-13	-45.07	-68.81	2.604	13.34	V
	5205	-49.92	-13	-36.92	-60.43	3.011	13.52	V
	6945	-53.34	-13	-40.34	-63.54	3.271	13.47	V
Highest	3525	-57.37	-13	-44.37	-68.11	2.604	13.34	H
	5280	-49.83	-13	-36.83	-60.34	3.011	13.52	H
	7050	-53.11	-13	-40.11	-63.31	3.271	13.47	H
	3525	-57.79	-13	-44.79	-68.53	2.604	13.34	V
	5280	-51.62	-13	-38.62	-62.13	3.011	13.52	V
	7050	-53.19	-13	-40.19	-63.39	3.271	13.47	V

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