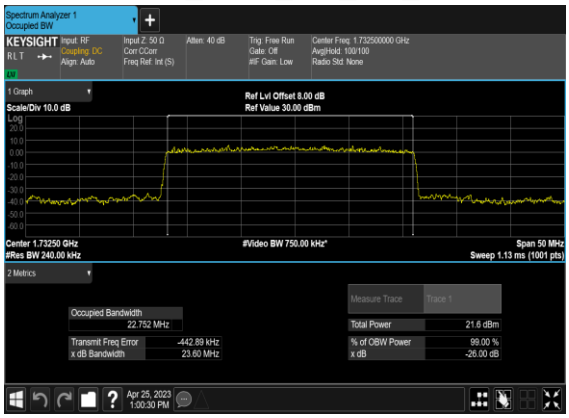
N66(25M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



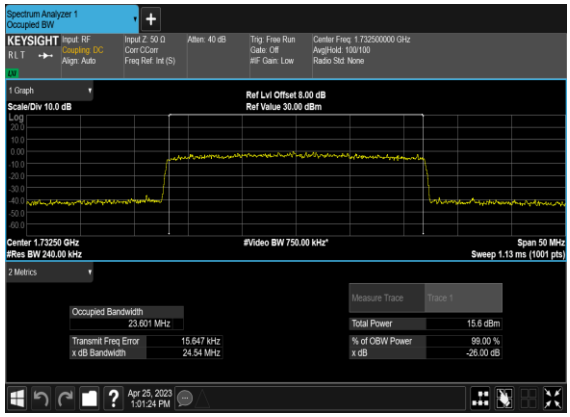
N66(25M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

N66(25M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

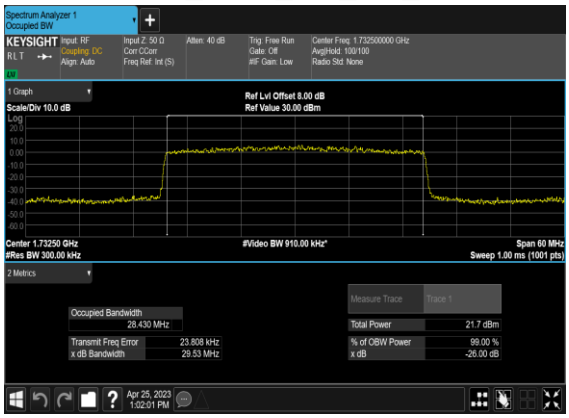
N66(25M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

N66(25M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N66(25M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



N66(30M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



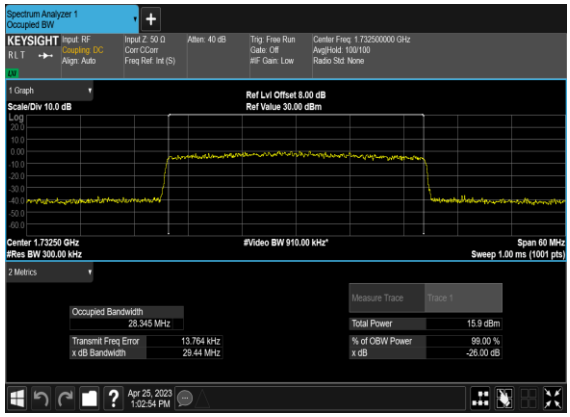
N66(30M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

N66(30M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

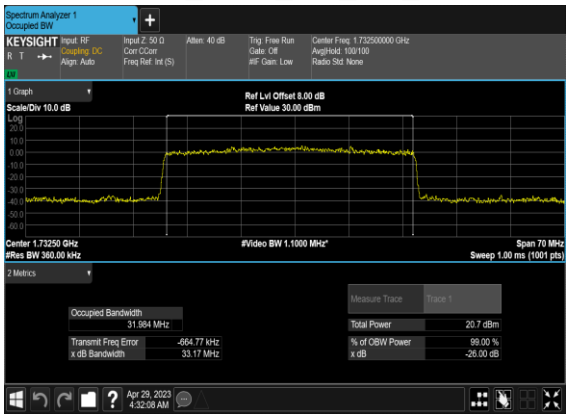
N66(30M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

N66(30M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

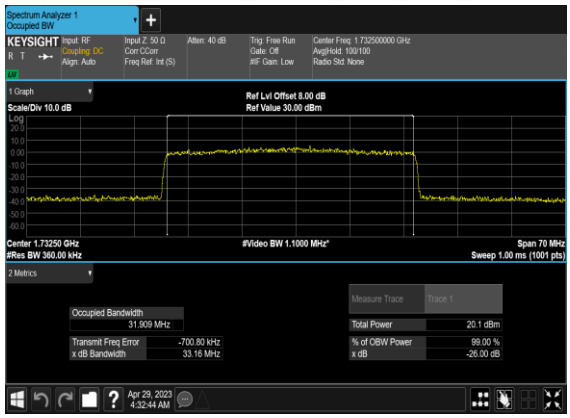
N66(30M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



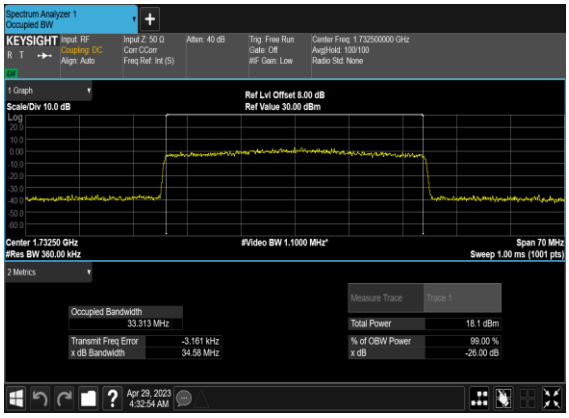
N66(35M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



N66(35M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



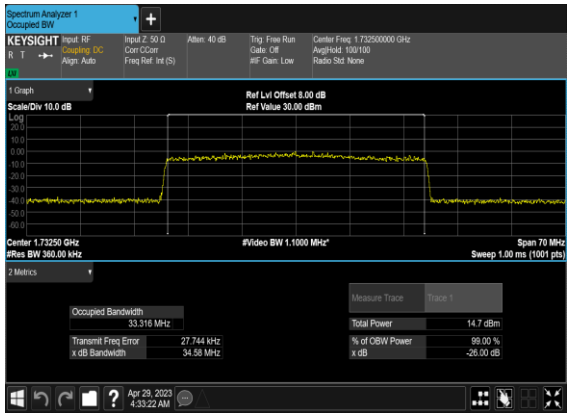
N66(35M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



N66(35M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH

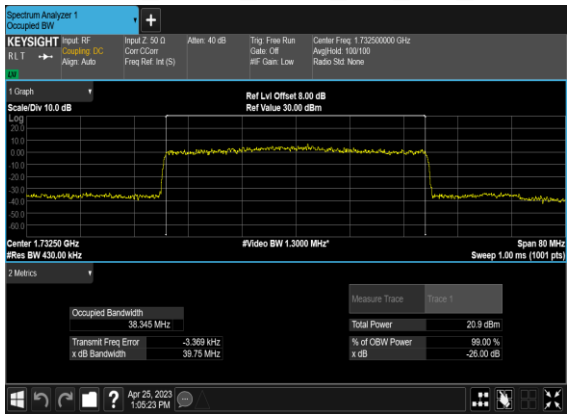
N66(35M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N66(35M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



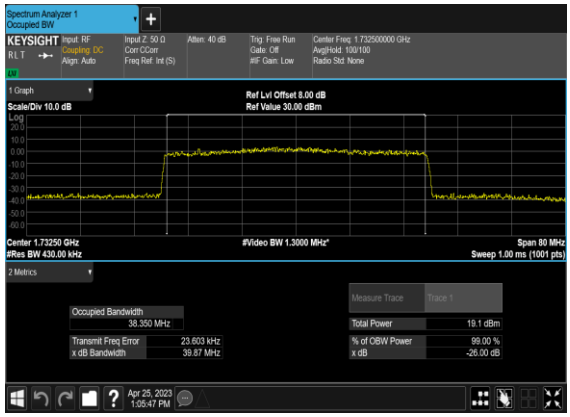
N66(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

N66(40M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

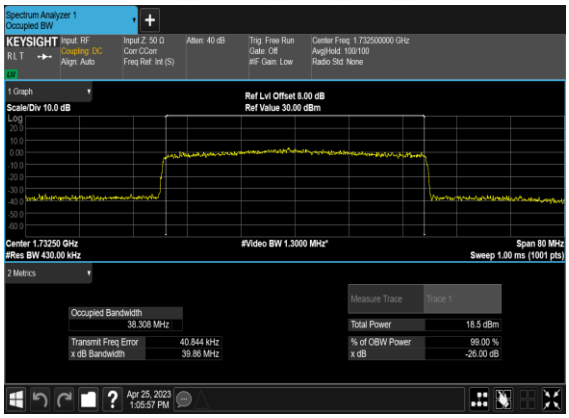


N66(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

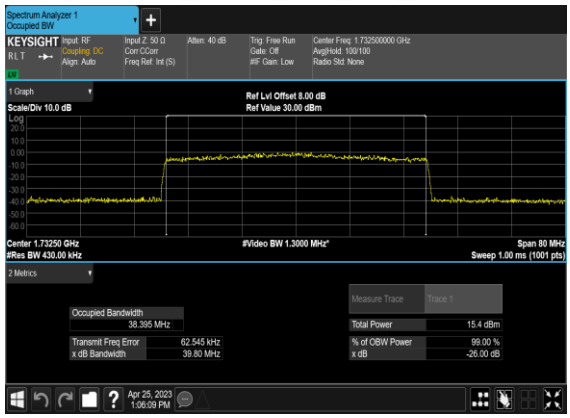
N66(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



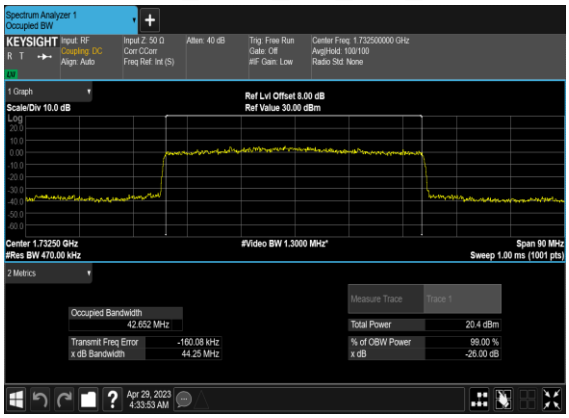
N66(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



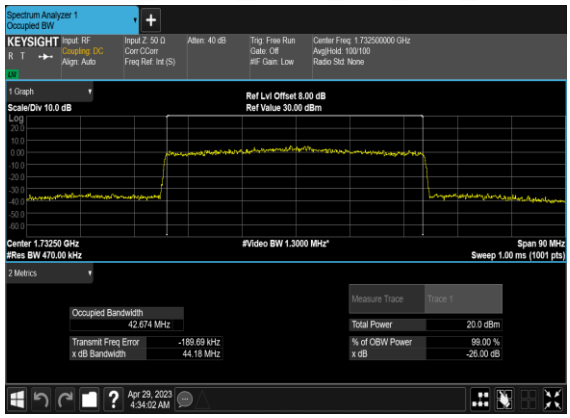
N66(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



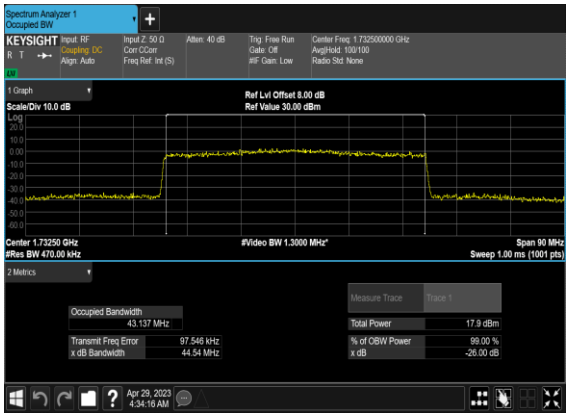
N66(45M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



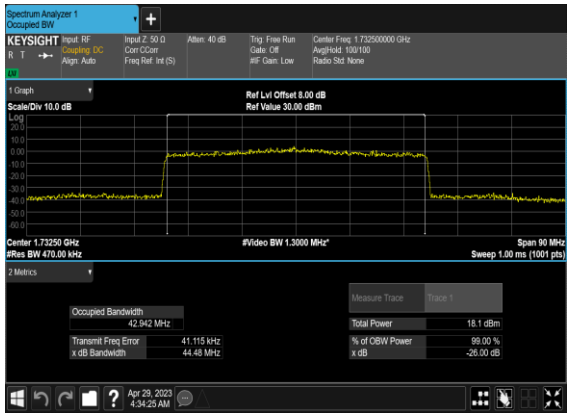
N66(45M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N66(45M)_CP-OFDM_QPSK_Outer_Full_Low_CH

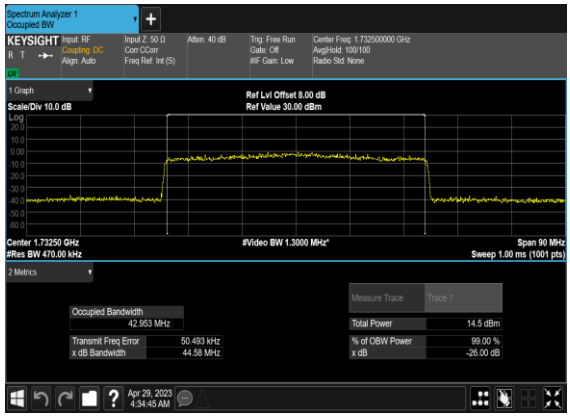


N66(45M)_CP-OFDM_16 QAM_Outer_Full_Low_CH



N66(45M)_CP-OFDM_64 QAM_Outer_Full_Low_CH

N66(45M)_CP-OFDM_256 QAM_Outer_Full_Low_CH

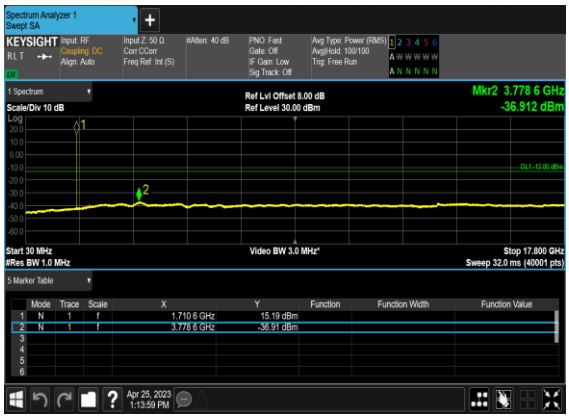


Conducted Spurious Emissions

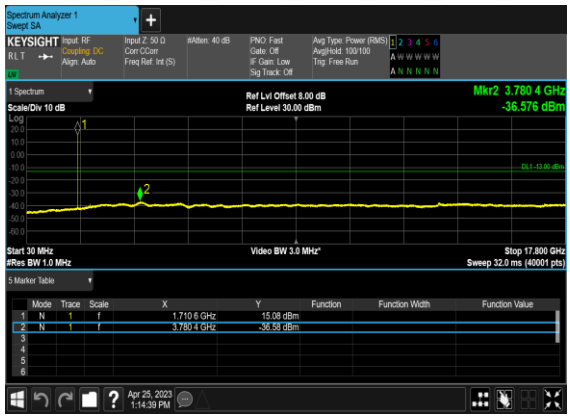
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
66	15	5	342500	1712.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	5	342500	1712.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	5	342500	1712.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	5	342500	1712.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	5	346500	1732.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	5	346500	1732.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	5	346500	1732.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	5	346500	1732.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	5	350500	1752.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	5	350500	1752.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	5	350500	1752.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	5	350500	1752.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	25	344500	1722.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	25	344500	1722.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	25	344500	1722.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	25	344500	1722.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	25	346500	1732.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	25	346500	1732.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	25	346500	1732.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	25	346500	1732.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	25	348500	1742.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	25	348500	1742.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**

66	15	25	348500	1742.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	25	348500	1742.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	45	346500	1732.5	DFT-s-OFDM BPSK	1@0	see graph	**---**
66	15	45	346500	1732.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	45	346500	1732.5	DFT-s-OFDM QPSK	1@0	see graph	**---**
66	15	45	346500	1732.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

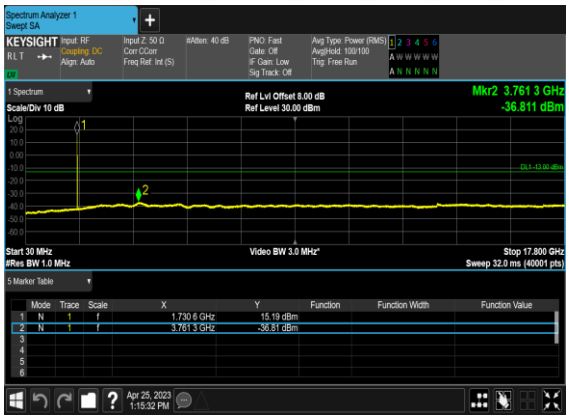
N66(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



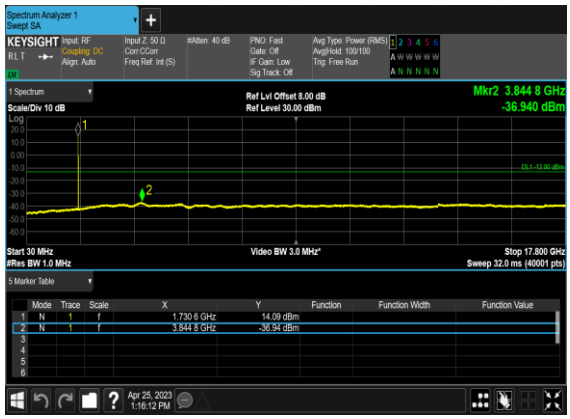
N66(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



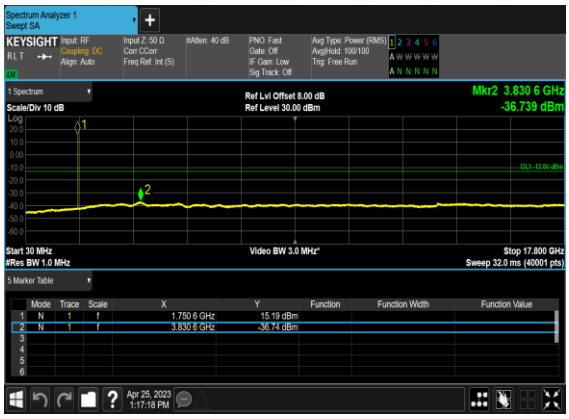
N66(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



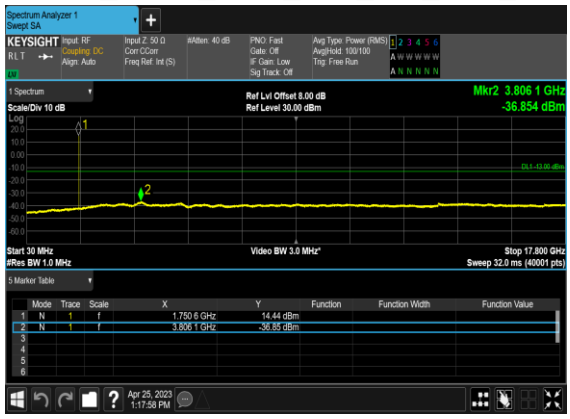
N66(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



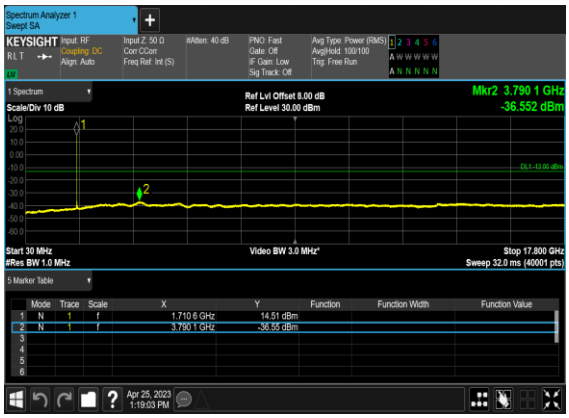
N66(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



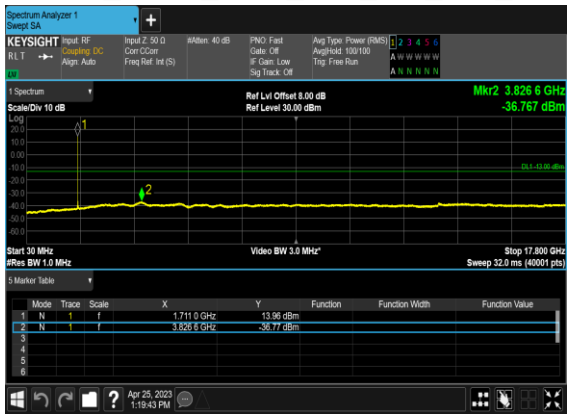
N66(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



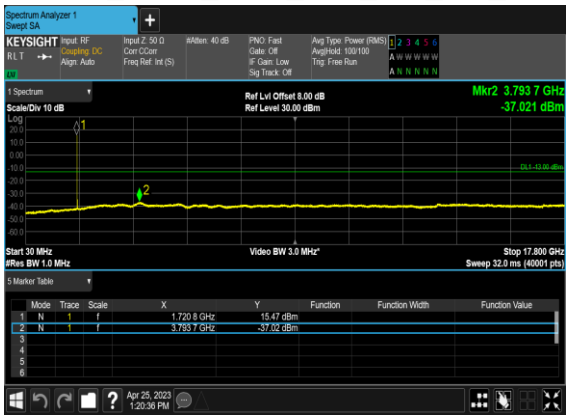
N66(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



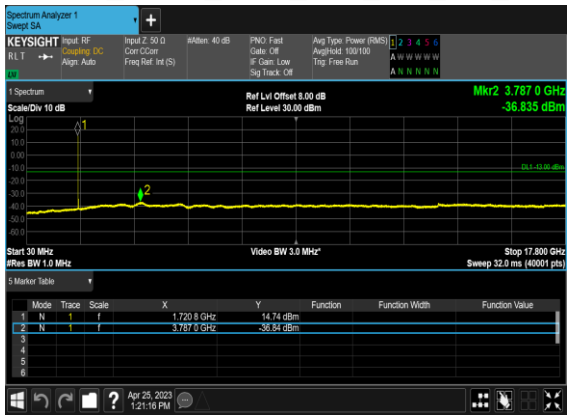
N66(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



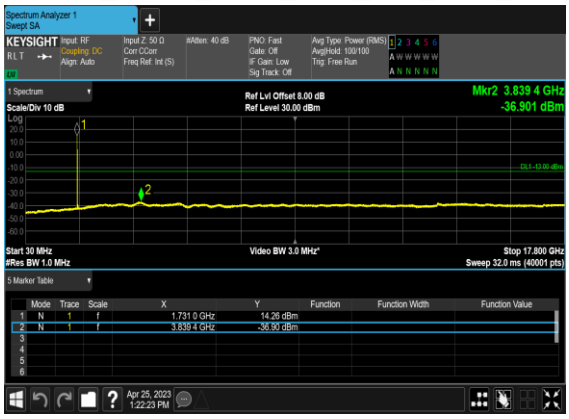
N66(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



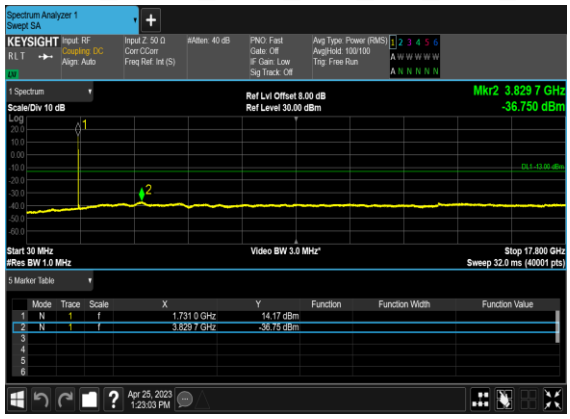
N66(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



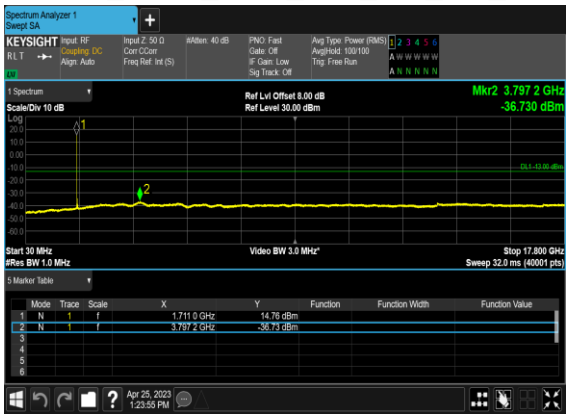
N66(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



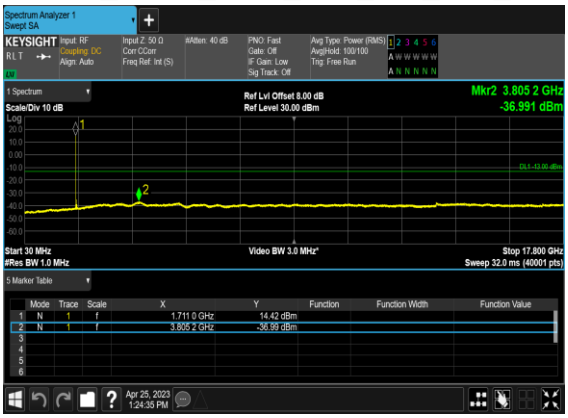
N66(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



N66(45M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



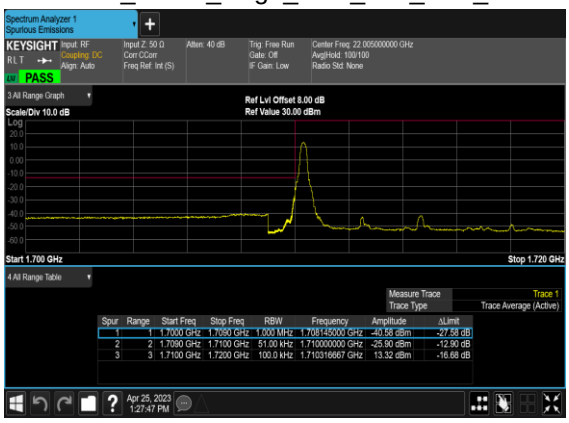
N66(45M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_ Mid_CH



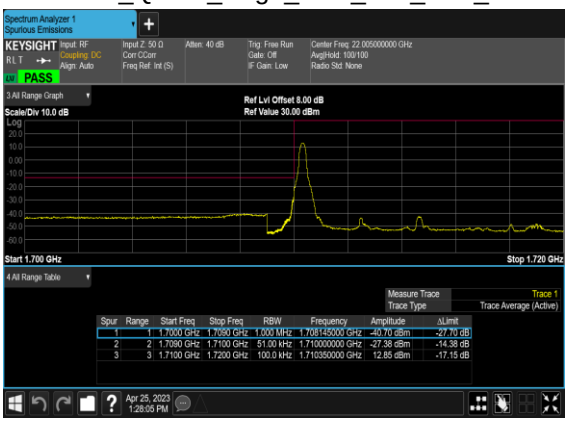
Conducted Band Edge

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	25	344500	1722.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	25	344500	1722.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	25	344500	1722.5	DFT-s-OFDM BPSK	128@0	see graph	**PASS**
66	15	25	344500	1722.5	DFT-s-OFDM QPSK	128@0	see graph	**PASS**
66	15	45	346500	1732.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
66	15	45	346500	1732.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
66	15	45	346500	1732.5	DFT-s-OFDM BPSK	1@241	see graph	**PASS**
66	15	45	346500	1732.5	DFT-s-OFDM QPSK	1@241	see graph	**PASS**
66	15	45	346500	1732.5	DFT-s-OFDM BPSK	240@0	see graph	**PASS**
66	15	45	346500	1732.5	DFT-s-OFDM QPSK	240@0	see graph	**PASS**

N66(5M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

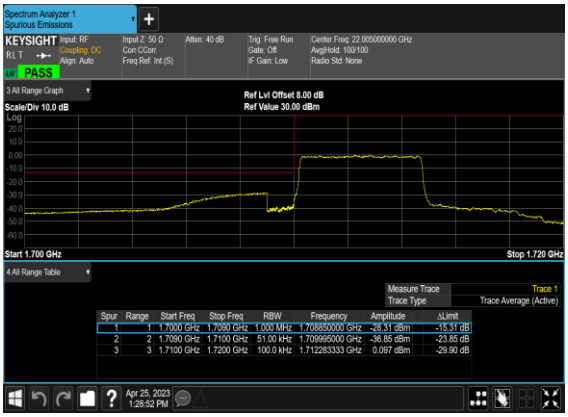


N66(5M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

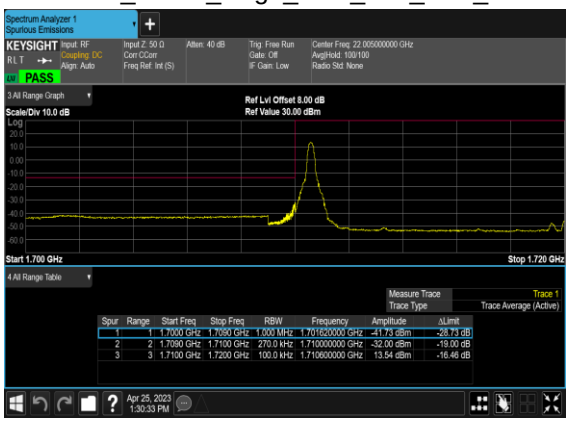


N66(5M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

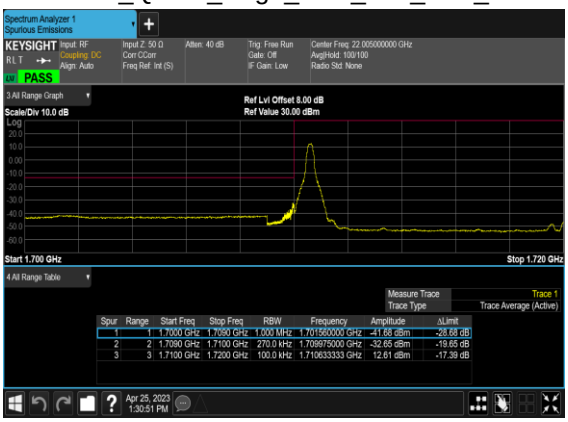
N66(5M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



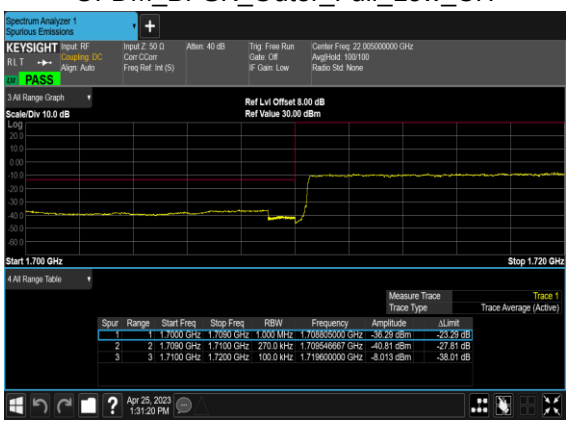
N66(25M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



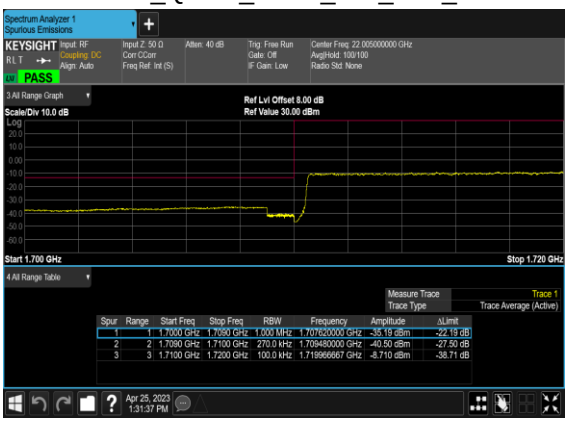
N66(25M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



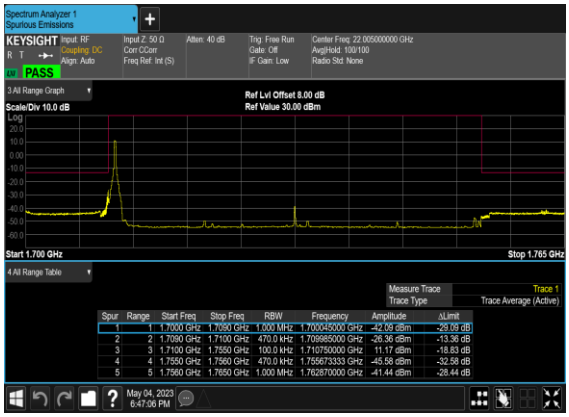
N66(25M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



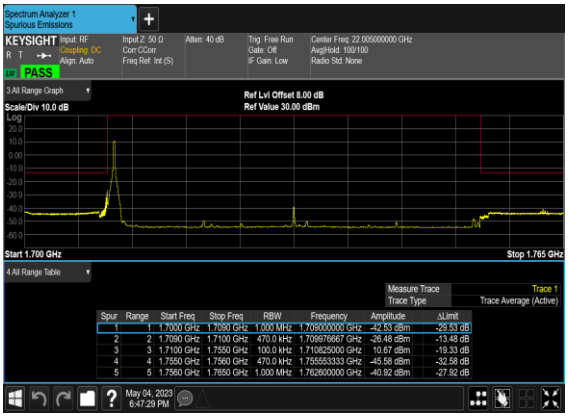
N66(25M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



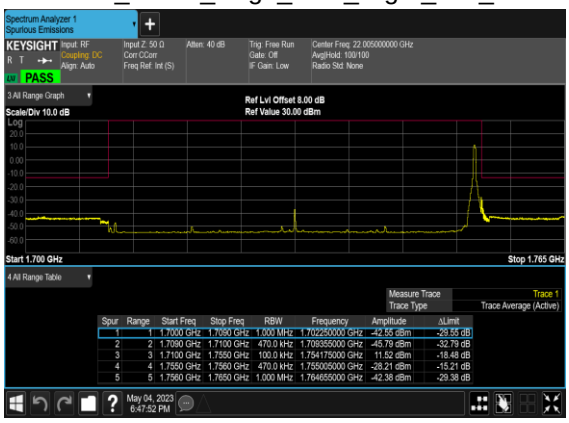
N66(45M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



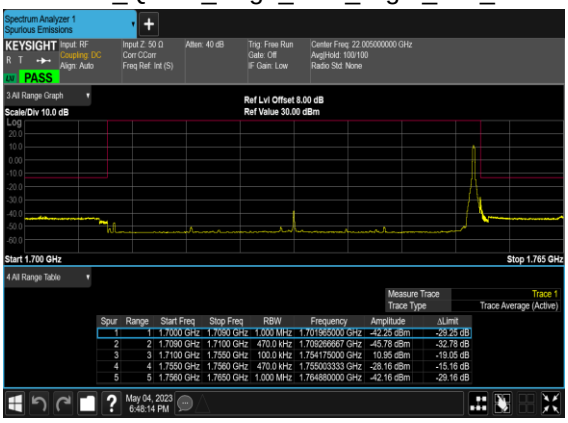
N66(45M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



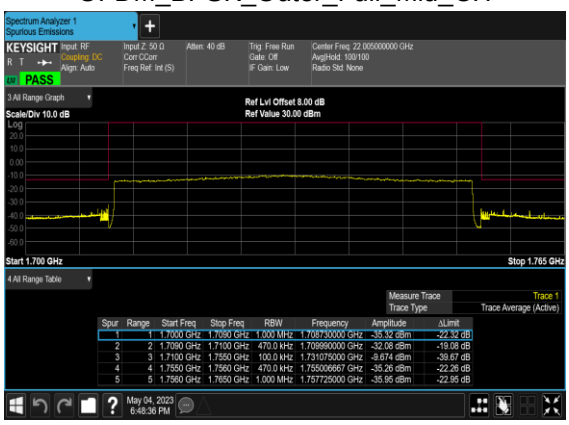
N66(45M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_Mid_CH



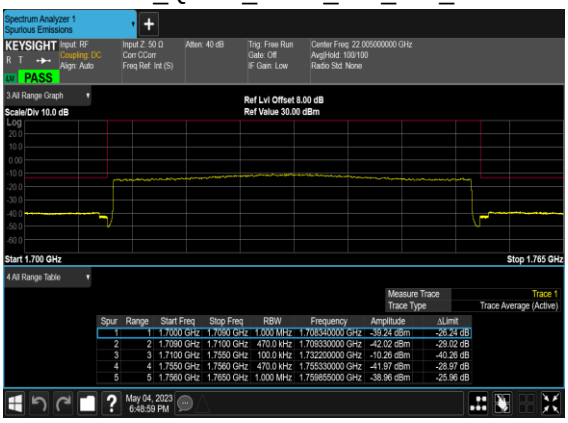
N66(45M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_Mid_CH



N66(45M)_DFT-s-OFDM_BPSK_Outer_Full_Mid_CH



N66(45M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Carl Ni	Temperature :	23~25℃
		Relative Humidity :	41~42%

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

SA n7 / 50MHz / QPSK / ANT0								
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)
Middle	5022	-45.10	-13	-32.10	-55.31	3.03	13.24	H
	7528	-38.05	-13	-25.05	-47.50	3.56	13.01	H
	10048	-37.74	-13	-24.74	-47.26	3.92	13.44	H
	12554	-48.55	-13	-35.55	-57.95	4.38	13.78	H
	5022	-44.85	-13	-31.85	-55.06	3.03	13.24	V
	7528	-38.42	-13	-25.42	-47.87	3.56	13.01	V
	10048	-50.40	-13	-37.40	-59.92	3.92	13.44	V
	12554	-55.51	-13	-42.51	-64.91	4.38	13.78	V

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

EN-DC_5A_n7A / LTE 10MHz + NR 50MHz / QPSK / ANT4(LTE) & ANT1(NR)								
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)
Middle	5022	-35.98	-13	-22.98	-46.19	3.03	13.24	H
	7528	-37.49	-13	-24.49	-46.94	3.56	13.01	H
	10048	-47.83	-13	-34.83	-57.35	3.92	13.44	H
	5022	-37.97	-13	-24.97	-48.18	3.03	13.24	V
	7528	-42.62	-13	-29.62	-52.07	3.56	13.01	V
	10048	-56.10	-13	-43.10	-65.62	3.92	13.44	V

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

SA n12 / 15MHz / QPSK / ANT4								
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	1400	-39.12	-13	-26.12	-46.09	1.58	10.70	H
	2102	-52.12	-13	-39.12	-60.37	2.102	12.50	H
	2803	-55.72	-13	-42.72	-64.61	2.856	13.90	H
	1400	-43.45	-13	-30.45	-50.42	1.58	10.70	V
	2102	-49.20	-13	-36.20	-57.45	2.10	12.50	V
	2803	-57.91	-13	-44.91	-66.80	2.86	13.90	V

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

EN-DC_2A_n12A / LTE 10MHz + NR 15MHz / QPSK / ANT0(LTE) & ANT5(NR)								
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	1400	-63.02	-13	-50.02	-69.99	1.58	10.70	H
	2104	-62.36	-13	-49.36	-70.61	2.102	12.50	H
	2800	-45.83	-13	-32.83	-54.72	2.856	13.90	H
	1400	-63.57	-13	-50.57	-70.54	1.58	10.70	V
	2104	-61.98	-13	-48.98	-70.23	2.10	12.50	V
	2800	-54.85	-13	-41.85	-63.74	2.86	13.90	V

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

SA n41 / 100MHz / 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)
Middle	5092	-30.80	-13	-17.80	-41.01	3.03	13.24	H
	7640	-32.85	-13	-19.85	-42.30	3.56	13.01	H
	10174	-55.10	-13	-42.10	-64.62	3.92	13.44	H
	12722	-42.13	-13	-29.13	-51.53	4.38	13.78	H
	5092	-37.17	-13	-24.17	-47.38	3.03	13.24	V
	7640	-40.29	-13	-27.29	-49.74	3.56	13.01	V
	10174	-56.62	-13	-43.62	-66.14	3.92	13.44	V
	12722	-53.18	-13	-40.18	-62.58	4.38	13.78	V

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

EN-DC_5A_n41A / LTE 10MHz + NR 100MHz / QPSK / ANT4(LTE) & ANT1(NR)								
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)
Middle	5092	-33.00	-13	-20.00	-43.21	3.03	13.24	H
	7626	-41.35	-13	-28.35	-50.80	3.56	13.01	H
	10174	-49.44	-13	-36.44	-58.96	3.92	13.44	H
	5092	-38.43	-13	-25.43	-48.64	3.03	13.24	V
	7626	-43.00	-13	-30.00	-52.45	3.56	13.01	V
	10174	-53.09	-13	-40.09	-62.61	3.92	13.44	V

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

EN-DC_41A_n41A / LTE 10MHz + NR 100MHz / QPSK / ANT0(LTE) & ANT1(NR)								
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)
Middle	5092	-43.12	-13	-30.12	-53.33	3.03	13.24	H
	7654	-55.70	-13	-42.70	-65.15	3.56	13.01	H
	10188	-53.26	-13	-40.26	-62.78	3.92	13.44	H
	5092	-53.02	-13	-40.02	-63.23	3.03	13.24	V
	7654	-59.17	-13	-46.17	-68.62	3.56	13.01	V
	10188	-55.68	-13	-42.68	-65.20	3.92	13.44	V

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

SA n41 UL MIMO / 100MHz / QPSK / ANT0+1								
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)
Middle	5092	-36.31	-13	-23.31	-46.52	3.03	13.24	H
	7640	-43.55	-13	-30.55	-53.00	3.56	13.01	H
	10174	-45.99	-13	-32.99	-55.51	3.92	13.44	H
	12722	-47.01	-13	-34.01	-56.41	4.38	13.78	H
	5092	-42.43	-13	-29.43	-52.64	3.03	13.24	V
	7640	-51.28	-13	-38.28	-60.73	3.56	13.01	V
	10174	-52.32	-13	-39.32	-61.84	3.92	13.44	V
	12722	-56.54	-13	-43.54	-65.94	4.38	13.78	V

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

EN-DC_n41AA / LTE 20MHz + NR 100MHz / QPSK / ANT0(LTE) & ANT1(NR)								
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)
Middle	5064	-59.34	-13	-46.34	-69.55	3.03	13.24	H
	7612	-57.26	-13	-44.26	-66.71	3.56	13.01	H
	10146	-60.75	-13	-47.75	-70.27	3.92	13.44	H
	5064	-61.70	-13	-48.70	-71.91	3.03	13.24	V
	7612	-58.53	-13	-45.53	-67.98	3.56	13.01	V
	10146	-61.64	-13	-48.64	-71.16	3.92	13.44	V

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

CA_n41C / NR 100+90MHz / QPSK / ANT1(NR) for 1RB0								
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)
Middle	4994	-45.44	-13	-32.44	-55.65	3.03	13.24	H
	7500	-54.44	-13	-41.44	-63.89	3.56	13.01	H
	10006	-61.6	-13	-48.60	-71.12	3.92	13.44	H
	4994	-51.47	-13	-38.47	-61.68	3.03	13.24	V
	7500	-59.13	-13	-46.13	-68.58	3.56	13.01	V
	10006	-61.77	-13	-48.77	-71.29	3.92	13.44	V

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

CA_n41C / NR 100+90MHz / QPSK / ANT1(NR) for 1RBMax								
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)
Middle	5190	-62.57	-13	-49.57	-72.78	3.03	13.24	H
	7794	-61.53	-13	-48.53	-70.98	3.56	13.01	H
	10398	-61.14	-13	-48.14	-70.66	3.92	13.44	H
	5190	-62.49	-13	-49.49	-72.70	3.03	13.24	V
	7794	-61.43	-13	-48.43	-70.88	3.56	13.01	V
	10398	-61.3	-13	-48.30	-70.82	3.92	13.44	V

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

SA n66 / 45MHz / 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)
Middle	3450	-52.81	-13	-39.81	-63.55	2.60	13.34	H
	5175	-54.07	-13	-41.07	-64.58	3.01	13.52	H
	6900	-48.53	-13	-35.53	-58.73	3.27	13.47	H
	3450	-55.45	-13	-42.45	-66.19	2.60	13.34	V
	5175	-55.17	-13	-42.17	-65.68	3.01	13.52	V
	6900	-53.15	-13	-40.15	-63.35	3.27	13.47	V

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

EN-DC_48A_n66A / LTE 10MHz + NR 45MHz / QPSK / ANT1(LTE) & ANT0(NR)								
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)
Middle	3450	-55.64	-13	-42.64	-66.38	2.60	13.34	H
	5175	-55.09	-13	-42.09	-65.60	3.01	13.52	H
	6900	-53.64	-13	-40.64	-63.84	3.27	13.47	H
	3450	-55.68	-13	-42.68	-66.42	2.60	13.34	V
	5175	-55.35	-13	-42.35	-65.86	3.01	13.52	V
	6900	-54.54	-13	-41.54	-64.74	3.27	13.47	V

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