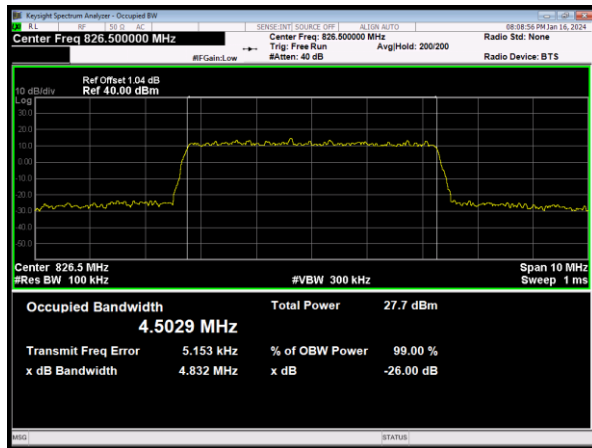
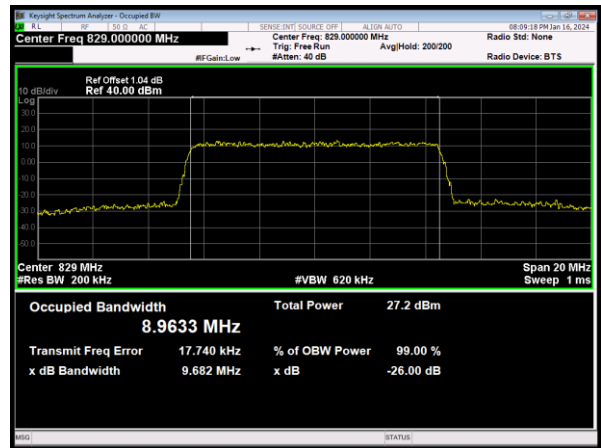


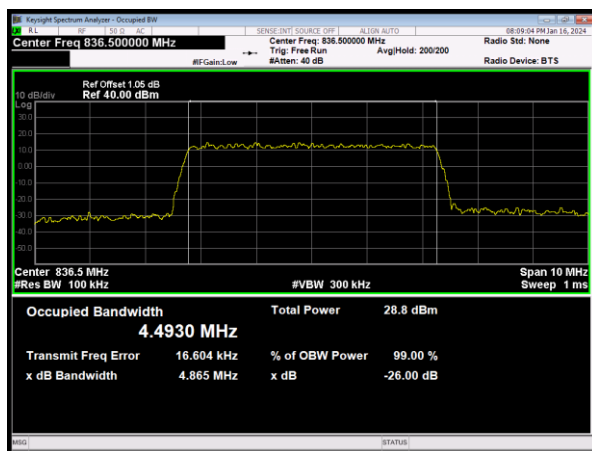
LTE Band 5 16QAM 5MHz CH-Low



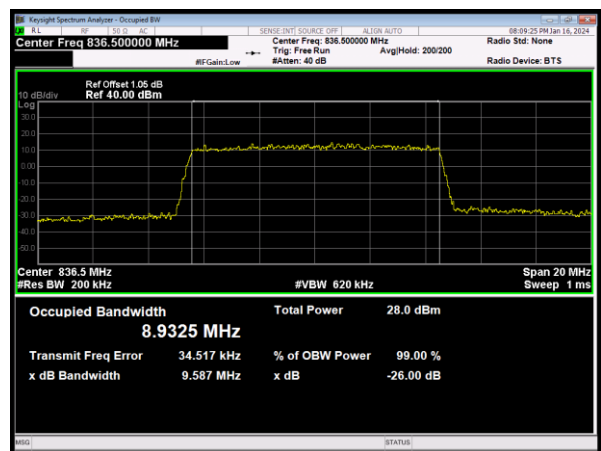
LTE Band 5 16QAM 10MHz CH-Low



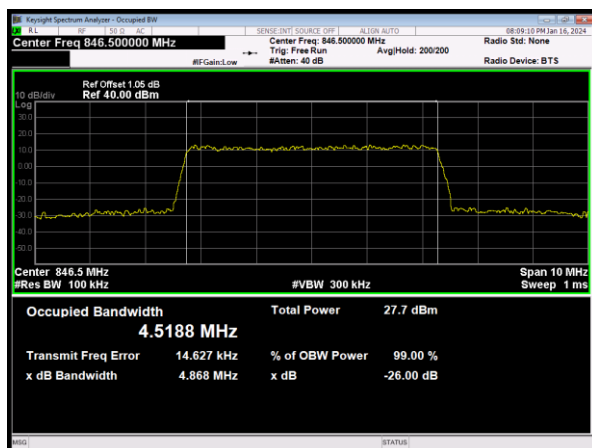
LTE Band 5 16QAM 5MHz CH-Middle



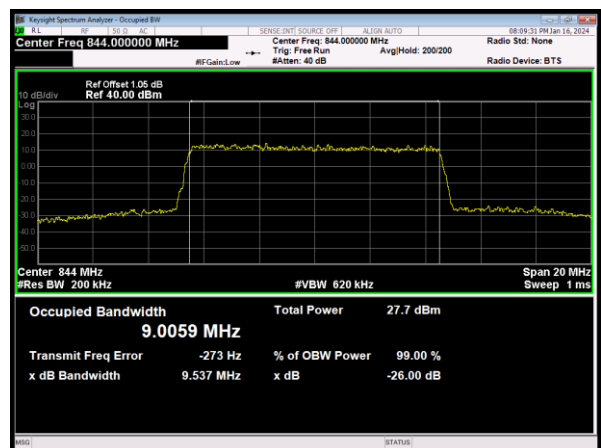
LTE Band 5 16QAM 10MHz CH-Middle



LTE Band 5 16QAM 5MHz CH-High

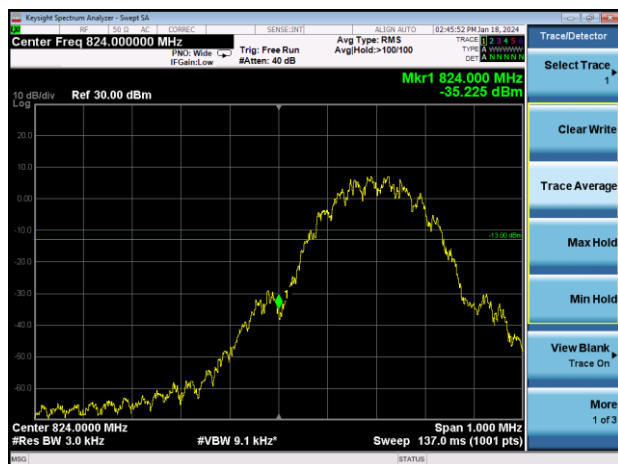


LTE Band 5 16QAM 10MHz CH-High

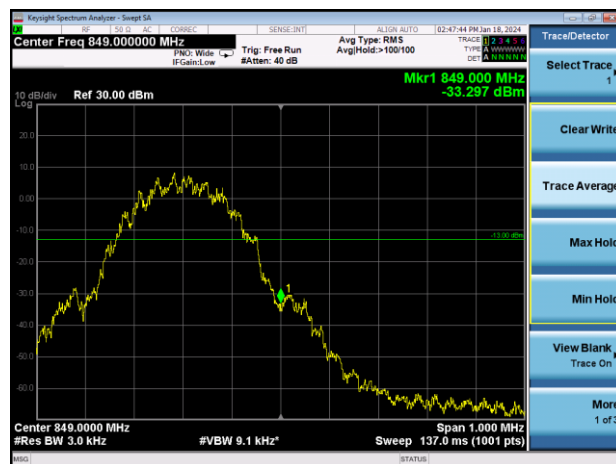


6.3. Band Edge Compliance

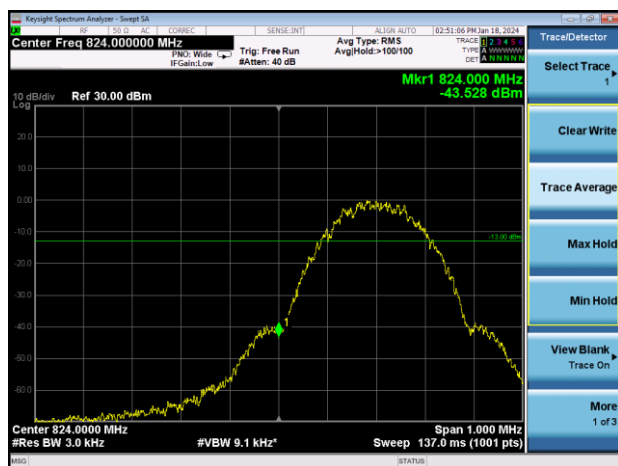
GSM 850 GPRS CH-Low



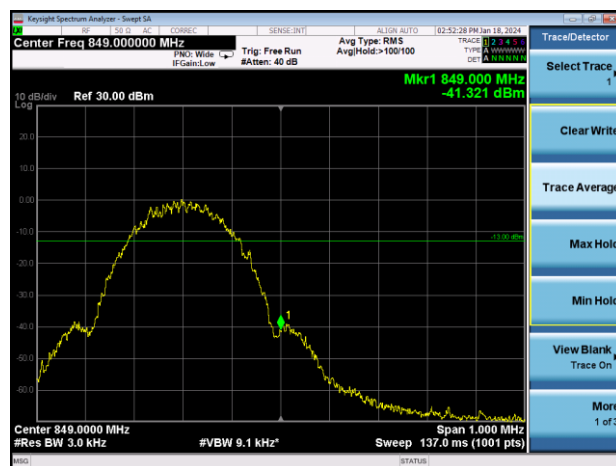
GSM 850 GPRS CH-High



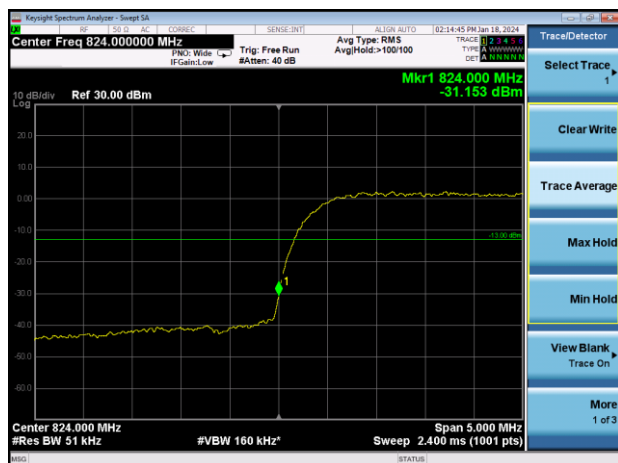
GSM 850 EGPRS CH-Low



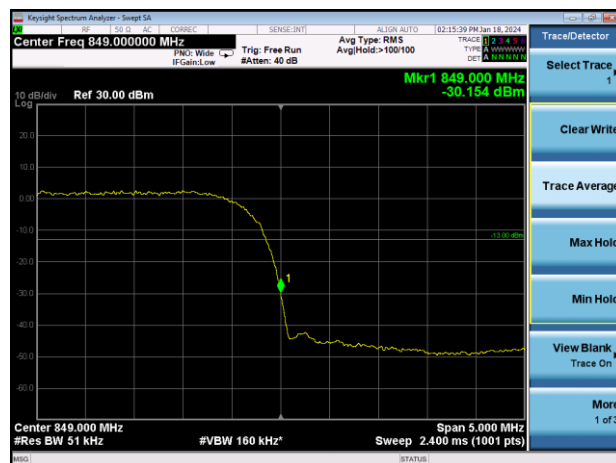
GSM 850 EGPRS CH-High



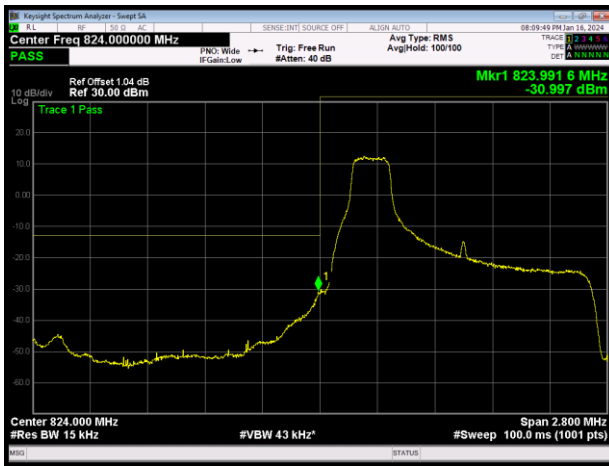
WCDMA Band V CH-Low



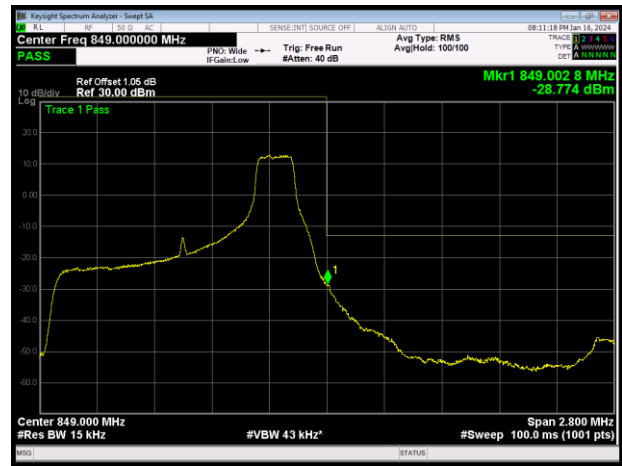
WCDMA Band V CH-High



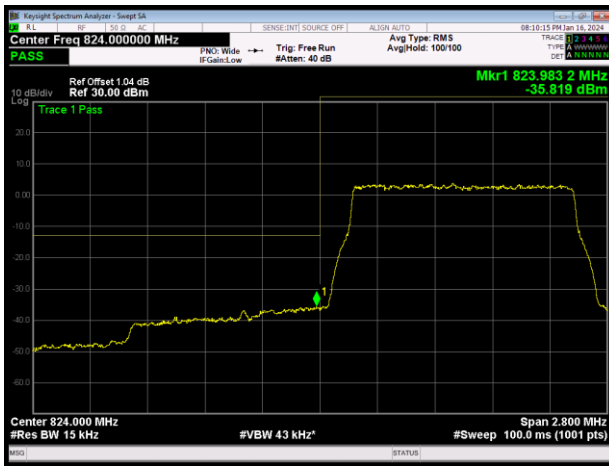
LTE Band 5 QPSK 1.4MHz CH-Low 1RB



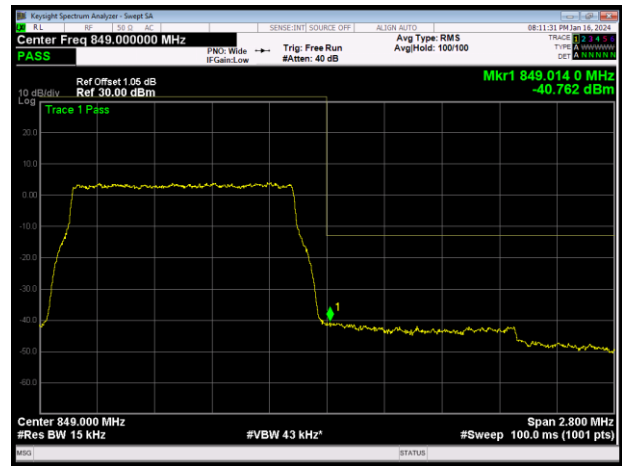
LTE Band 5 QPSK 1.4MHz CH-High 1RB



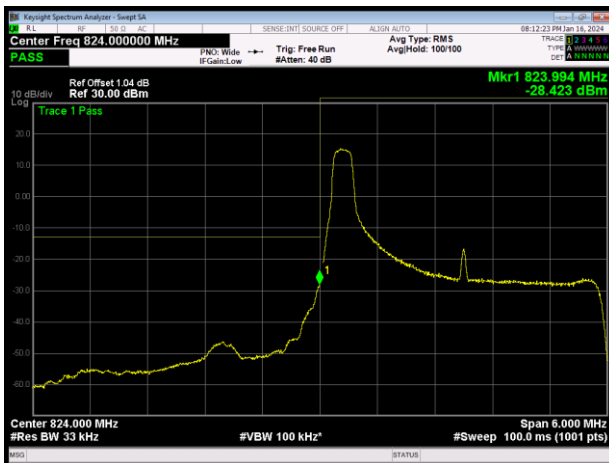
LTE Band 5 QPSK 1.4MHz CH-Low 100%RB



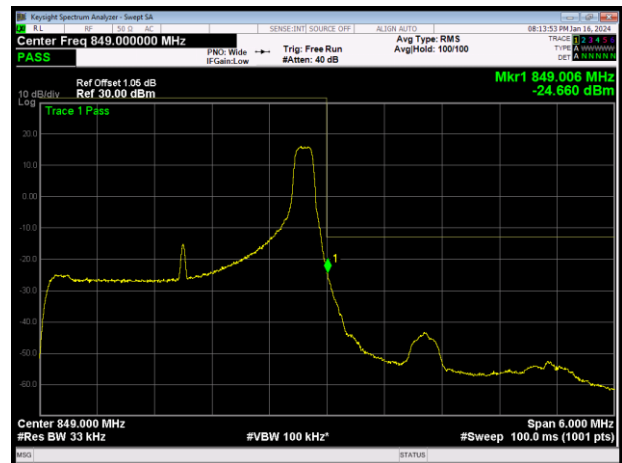
LTE Band 5 QPSK 1.4MHz CH-High 100%RB



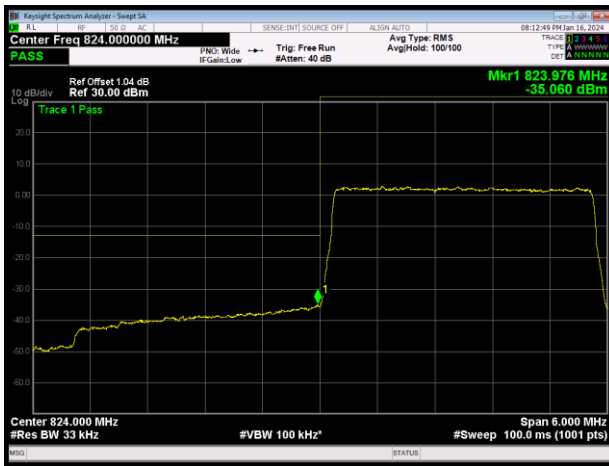
LTE Band 5 QPSK 3MHz CH-Low 1RB



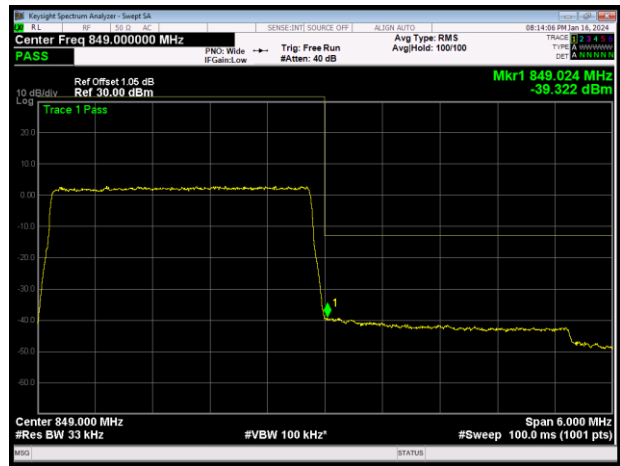
LTE Band 5 QPSK 3MHz CH-High 1RB



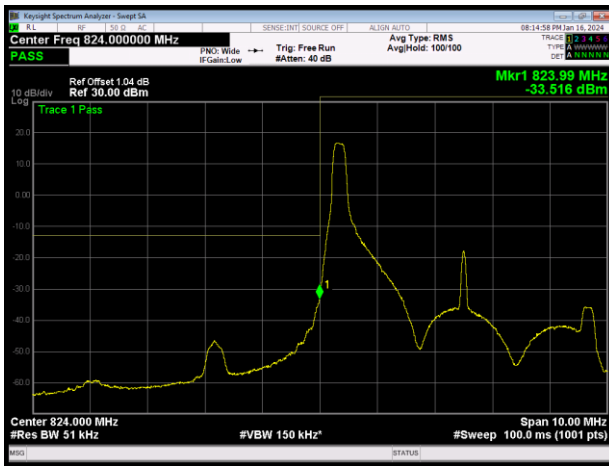
LTE Band 5 QPSK 3MHz CH-Low 100%RB



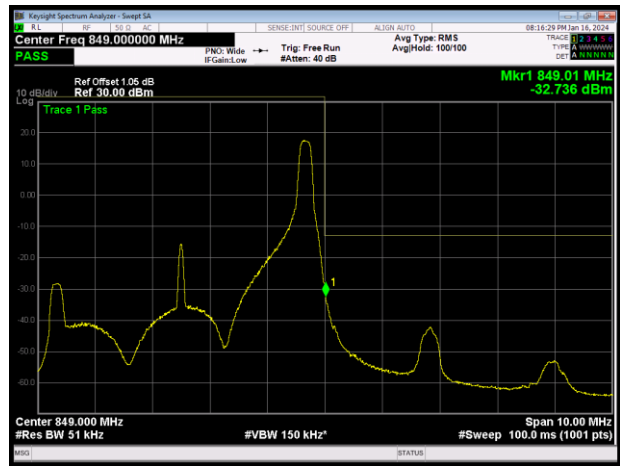
LTE Band 5 QPSK 3MHz CH-High 100%RB



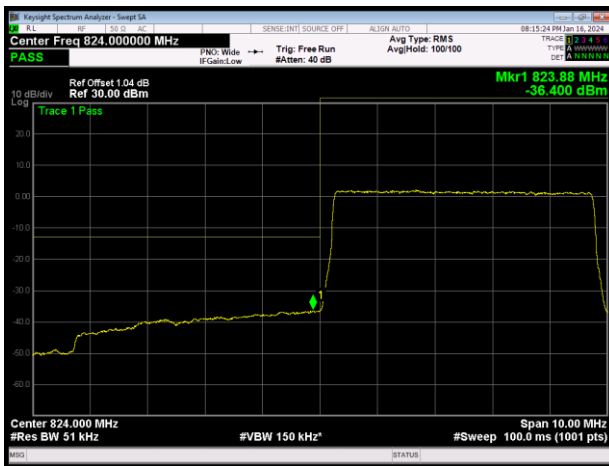
LTE Band 5 QPSK 5MHz CH-Low 1RB



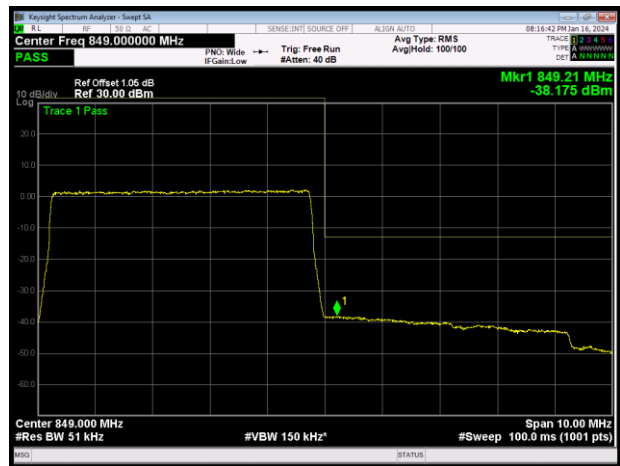
LTE Band 5 QPSK 5MHz CH-High 1RB



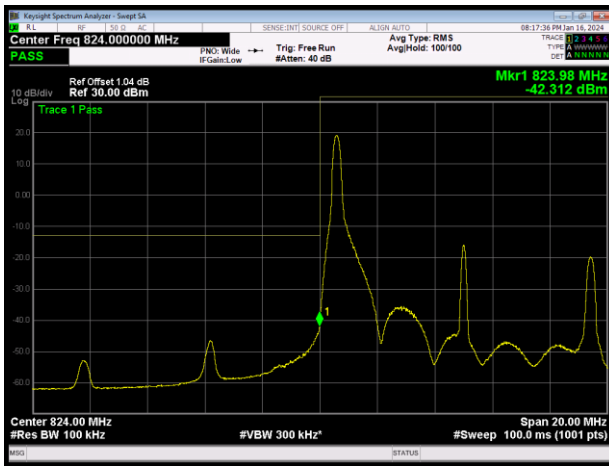
LTE Band 5 QPSK 5MHz CH-Low 100%RB



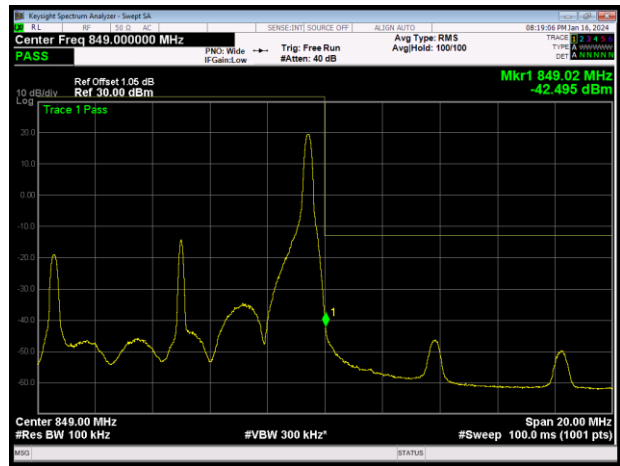
LTE Band 5 QPSK 5MHz CH-High 100%RB



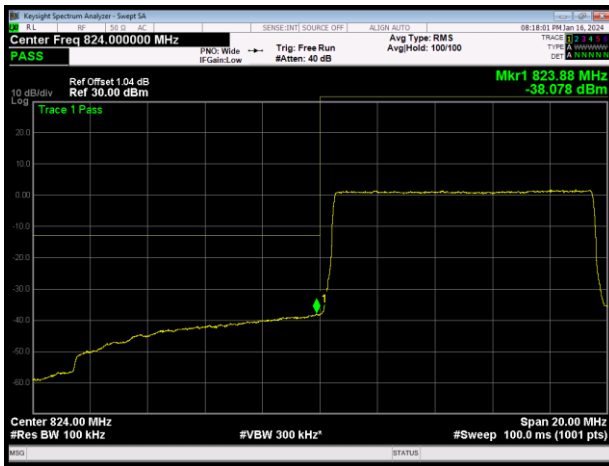
LTE Band 5 QPSK 10MHz CH-Low 1RB



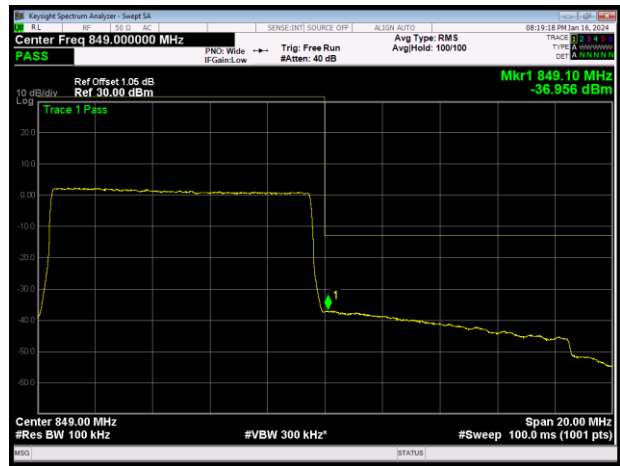
LTE Band 5 QPSK 10MHz CH-High 1RB



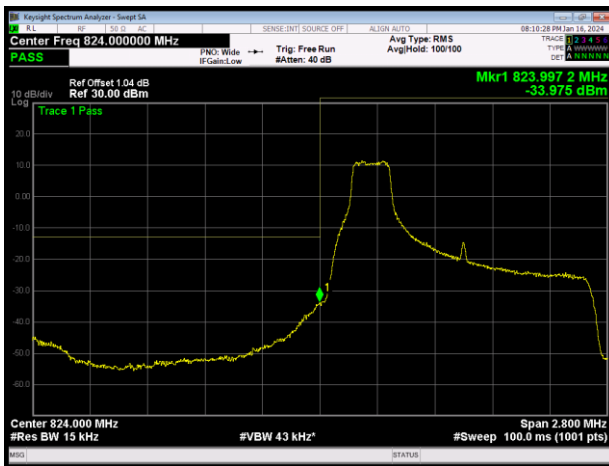
LTE Band 5 QPSK 10MHz CH-Low 100%RB



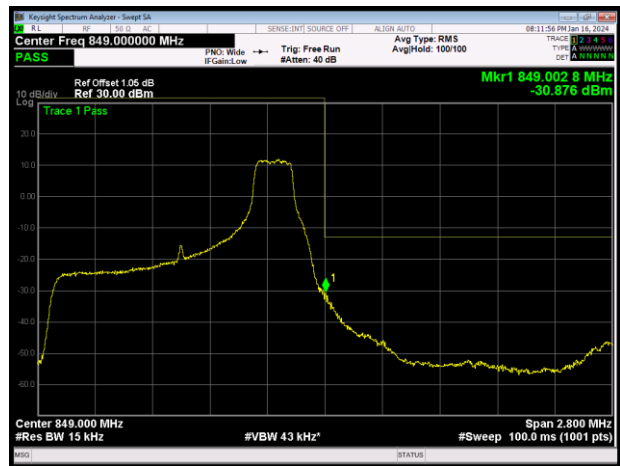
LTE Band 5 QPSK 10MHz CH-High 100%RB



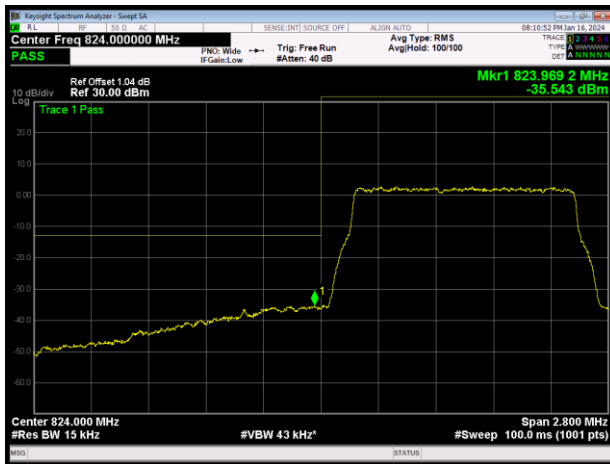
LTE Band 5 16QAM 1.4MHz CH-Low 1RB



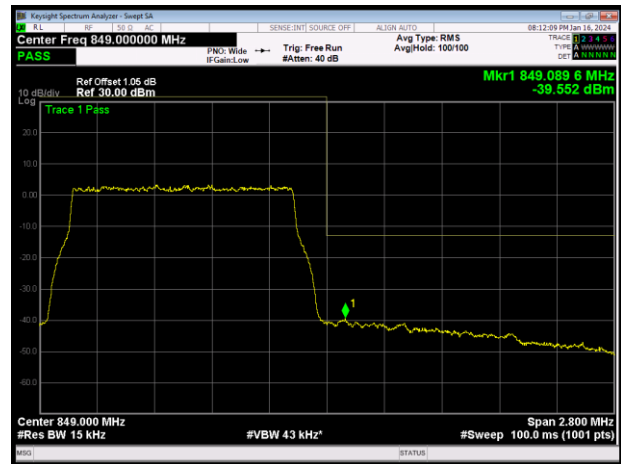
LTE Band 5 16QAM 1.4MHz CH-High 1RB



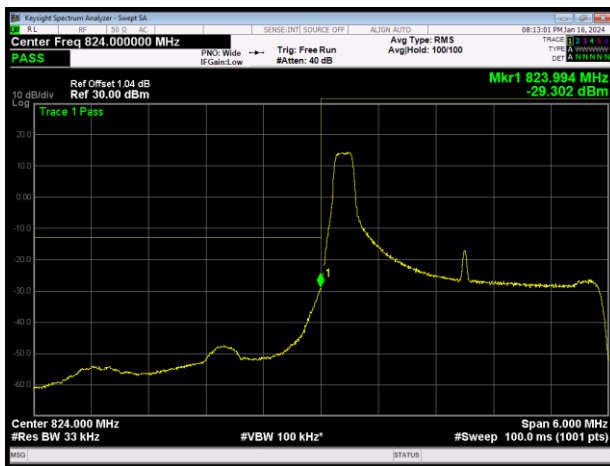
LTE Band 5 16QAM 1.4MHz CH-Low 100%RB



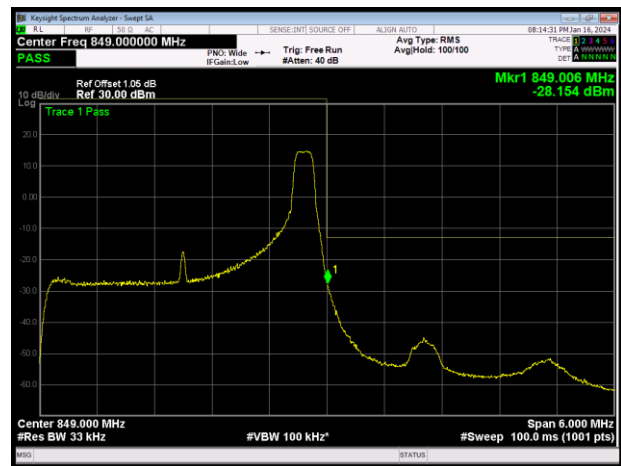
LTE Band 5 16QAM 1.4MHz CH-High 100%RB



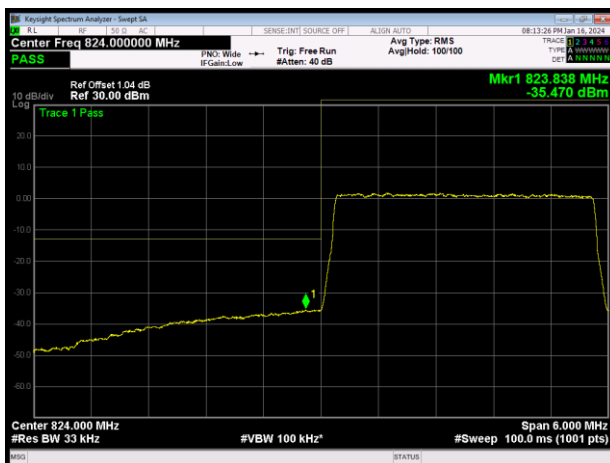
LTE Band 5 16QAM 3MHz CH-Low 1RB



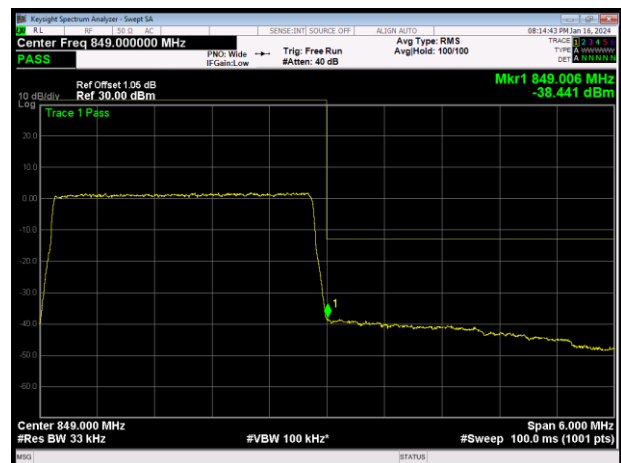
LTE Band 5 16QAM 3MHz CH-High 1RB



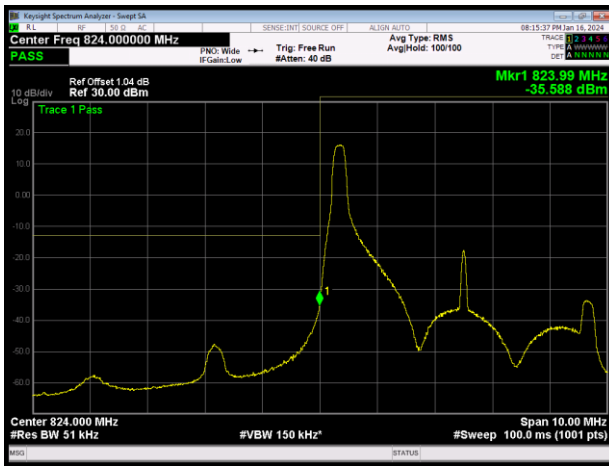
LTE Band 5 16QAM 3MHz CH-Low 100%RB



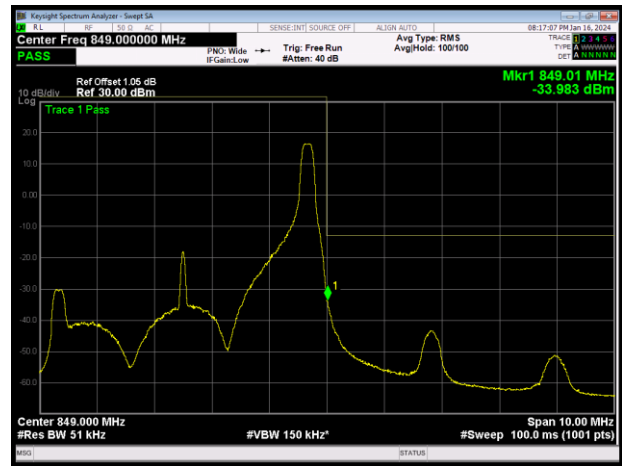
LTE Band 5 16QAM 3MHz CH-High 100%RB



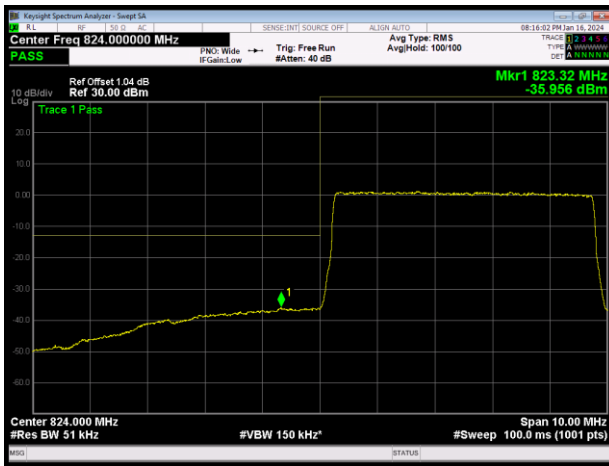
LTE Band 5 16QAM 5MHz CH-Low 1RB



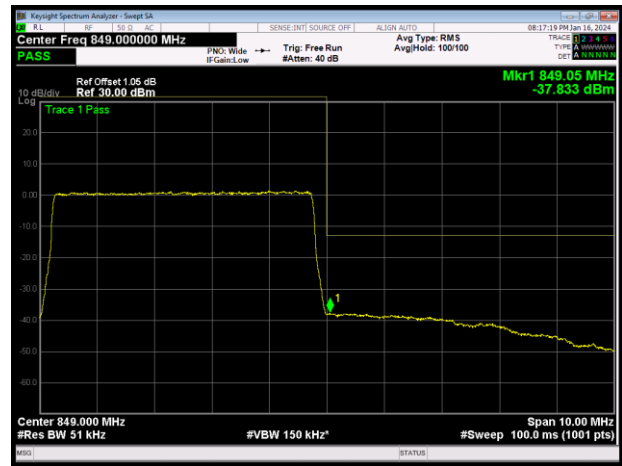
LTE Band 5 16QAM 5MHz CH-High 1RB



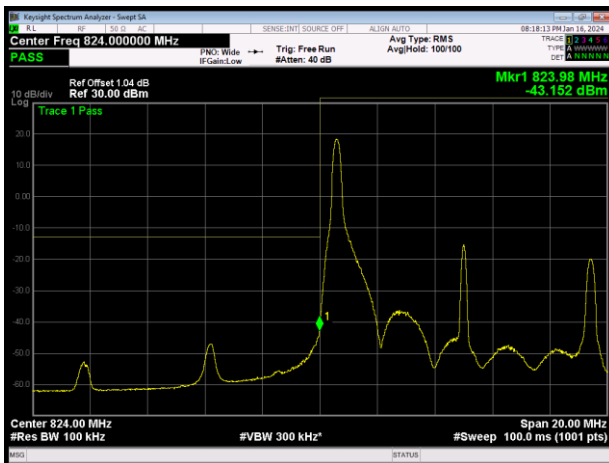
LTE Band 5 16QAM 5MHz CH-Low 100%RB



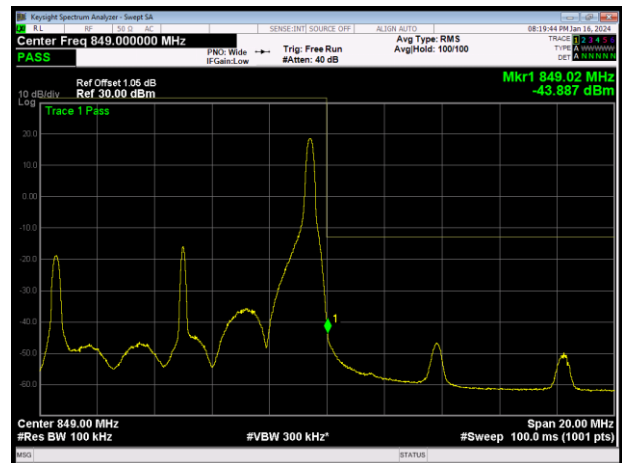
LTE Band 5 16QAM 5MHz CH-High 100%RB



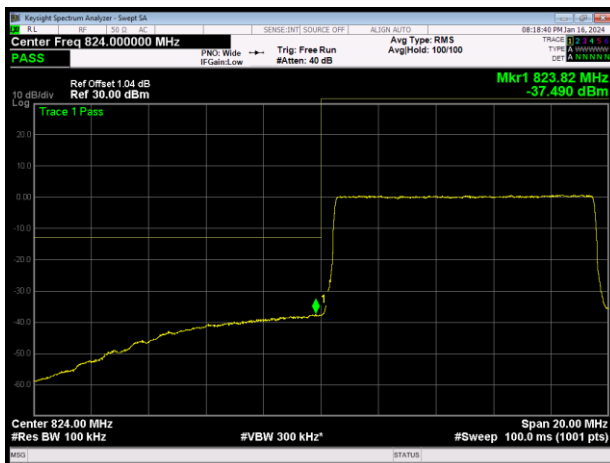
LTE Band 5 16QAM 10MHz CH-Low 1RB



LTE Band 5 16QAM 10MHz CH-High 1RB



LTE Band 5 16QAM 10MHz CH-Low 100%RB



LTE Band 5 16QAM 10MHz CH-High 100%RB



6.4. Peak-to-Average Power Ratio (PAPR)

Mode	Channel	Frequency (MHz)	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
GPRS 850 (GMSK)	128	824.2	30.98	28.25	2.73	≤13	PASS
	190	836.6	30.98	28.28	2.70	≤13	PASS
	251	848.8	30.75	28.08	2.67	≤13	PASS
EGPRS 850 (8PSK)	128	824.2	27.26	21.52	5.74	≤13	PASS
	190	836.6	27.53	21.74	5.79	≤13	PASS
	251	848.8	27.51	21.67	5.84	≤13	PASS
WCDMA Band V (RMC)	4132	826.4	22.91	19.85	3.06	≤13	PASS
	4183	836.6	23.84	20.84	3.00	≤13	PASS
	4233	846.6	23.24	20.18	3.06	≤13	PASS

LTE Band 5							
Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
1.4	20407	6	#0	QPSK	5.67	≤13	PASS
1.4	20407	6	#0	16QAM	6.31	≤13	PASS
1.4	20525	6	#0	QPSK	5.35	≤13	PASS
1.4	20525	6	#0	16QAM	6.36	≤13	PASS
1.4	20643	6	#0	QPSK	5.94	≤13	PASS
1.4	20643	6	#0	16QAM	6.63	≤13	PASS
3	20415	15	#0	QPSK	5.81	≤13	PASS
3	20415	15	#0	16QAM	6.52	≤13	PASS
3	20525	15	#0	QPSK	5.43	≤13	PASS
3	20525	15	#0	16QAM	6.25	≤13	PASS
3	20635	15	#0	QPSK	6.14	≤13	PASS
3	20635	15	#0	16QAM	6.86	≤13	PASS
5	20425	25	#0	QPSK	5.88	≤13	PASS
5	20425	25	#0	16QAM	6.49	≤13	PASS
5	20525	25	#0	QPSK	5.51	≤13	PASS
5	20525	25	#0	16QAM	6.23	≤13	PASS
5	20625	25	#0	QPSK	6.16	≤13	PASS
5	20625	25	#0	16QAM	6.84	≤13	PASS
10	20450	50	#0	QPSK	5.97	≤13	PASS
10	20450	50	#0	16QAM	6.62	≤13	PASS
10	20525	50	#0	QPSK	5.55	≤13	PASS
10	20525	50	#0	16QAM	6.34	≤13	PASS
10	20600	50	#0	QPSK	5.88	≤13	PASS
10	20600	50	#0	16QAM	6.58	≤13	PASS

6.5. Frequency Stability

GSM 850						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
Temperature	Voltage	GMSK	8PSK	GMSK	8PSK	
Normal (25℃)	Normal	2.18	8.12	0.00261	0.00971	PASS
Extreme (50℃)		6.81	14.25	0.00814	0.01703	PASS
Extreme (40℃)		10.05	2.10	0.01201	0.00251	PASS
Extreme (30℃)		15.02	8.68	0.01795	0.01038	PASS
Extreme (20℃)		10.20	5.73	0.01220	0.00685	PASS
Extreme (10℃)		4.16	3.09	0.00498	0.00369	PASS
Extreme (0℃)		6.85	13.31	0.00819	0.01591	PASS
Extreme (-10℃)		16.60	15.16	0.01984	0.01812	PASS
Extreme (-20℃)		15.58	1.73	0.01863	0.00206	PASS
Extreme (-30℃)		6.72	15.01	0.00804	0.01794	PASS
25℃	LV	9.84	2.56	0.01176	0.00306	PASS
	HV	15.32	5.17	0.01831	0.00618	PASS

WCDMA Band V						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
Temperature	Voltage	BPSK	QPSK	BPSK	QPSK	
Normal (25℃)	Normal	8.47	9.92	0.01013	0.01186	PASS
Extreme (50℃)		2.67	5.84	0.00319	0.00698	PASS
Extreme (40℃)		5.34	6.80	0.00638	0.00812	PASS
Extreme (30℃)		1.86	9.83	0.00223	0.01175	PASS
Extreme (20℃)		16.26	15.62	0.01944	0.01866	PASS
Extreme (10℃)		15.60	15.81	0.01864	0.01890	PASS
Extreme (0℃)		14.72	8.67	0.01760	0.01037	PASS
Extreme (-10℃)		7.93	1.53	0.00948	0.00183	PASS
Extreme (-20℃)		3.53	17.46	0.00422	0.02086	PASS
Extreme (-30℃)		9.74	1.71	0.01164	0.00204	PASS
25℃	LV	2.16	11.83	0.00259	0.01414	PASS
	HV	7.04	15.80	0.00841	0.01889	PASS

LTE Band5						
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	1.4MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	9.13	4.24	0.01092	0.00507	PASS
Extreme (50℃)		9.49	8.61	0.01134	0.01029	PASS
Extreme (40℃)		3.57	1.89	0.00426	0.00226	PASS
Extreme (30℃)		6.03	2.86	0.00720	0.00342	PASS
Extreme (20℃)		4.60	3.19	0.00549	0.00381	PASS
Extreme (10℃)		15.18	8.05	0.01815	0.00962	PASS
Extreme (0℃)		7.26	3.58	0.00868	0.00428	PASS
Extreme (-10℃)		10.50	15.97	0.01255	0.01909	PASS
Extreme (-20℃)		4.60	8.80	0.00549	0.01052	PASS
Extreme (-30℃)		3.80	3.50	0.00454	0.00418	PASS
25℃	LV	12.63	5.45	0.01510	0.00651	PASS
	HV	12.40	4.96	0.01482	0.00593	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	3MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	5.09	10.77	0.00609	0.01288	PASS
Extreme (50℃)		6.21	13.66	0.00742	0.01633	PASS
Extreme (40℃)		16.16	17.12	0.01932	0.02046	PASS
Extreme (30℃)		16.83	12.51	0.02012	0.01495	PASS
Extreme (20℃)		7.20	14.09	0.00860	0.01684	PASS
Extreme (10℃)		11.69	2.26	0.01397	0.00271	PASS
Extreme (0℃)		2.31	6.99	0.00276	0.00836	PASS
Extreme (-10℃)		12.29	6.50	0.01470	0.00777	PASS
Extreme (-20℃)		10.37	11.14	0.01240	0.01332	PASS
Extreme (-30℃)		2.94	8.34	0.00351	0.00997	PASS
25℃	LV	17.17	13.61	0.02052	0.01627	PASS
	HV	17.00	5.95	0.02032	0.00711	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	5MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	9.32	4.93	0.01114	0.00589	PASS
Extreme (50℃)		9.25	3.54	0.01105	0.00424	PASS
Extreme (40℃)		8.74	17.33	0.01044	0.02071	PASS

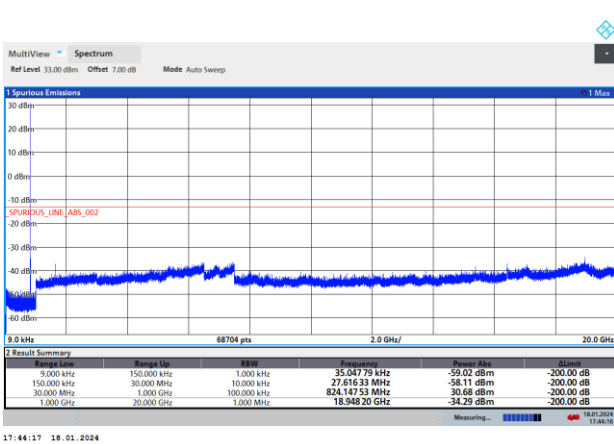
Extreme (30℃)		7.34	7.84	0.00877	0.00937	PASS
Extreme (20℃)		7.46	1.95	0.00892	0.00233	PASS
Extreme (10℃)		17.69	16.63	0.02114	0.01988	PASS
Extreme (0℃)		3.06	11.41	0.00365	0.01364	PASS
Extreme (-10℃)		10.50	6.81	0.01255	0.00814	PASS
Extreme (-20℃)		1.45	9.73	0.00173	0.01163	PASS
Extreme (-30℃)		5.75	17.20	0.00688	0.02056	PASS
25℃	LV	10.19	2.11	0.01218	0.00253	PASS
	HV	4.83	15.19	0.00577	0.01815	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability (ppm)	Frequency Stability (ppm)	Verdict
BANDWIDTH	10MHz					
Temperature	Voltage	16QAM	QPSK	16QAM	QPSK	
Normal (25℃)	Normal	4.15	3.79	0.00497	0.00453	PASS
Extreme (50℃)		15.55	8.99	0.01859	0.01075	PASS
Extreme (40℃)		14.77	13.52	0.01765	0.01617	PASS
Extreme (30℃)		3.74	17.64	0.00447	0.02109	PASS
Extreme (20℃)		3.75	6.51	0.00448	0.00778	PASS
Extreme (10℃)		17.62	2.11	0.02106	0.00252	PASS
Extreme (0℃)		4.47	5.33	0.00535	0.00637	PASS
Extreme (-10℃)		1.91	14.93	0.00228	0.01784	PASS
Extreme (-20℃)		16.83	11.23	0.02012	0.01342	PASS
Extreme (-30℃)		16.81	7.60	0.02009	0.00909	PASS
25℃	LV	13.64	12.57	0.01630	0.01503	PASS
	HV	7.10	17.32	0.00849	0.02071	PASS

6.6. Spurious Emissions at Antenna Terminals

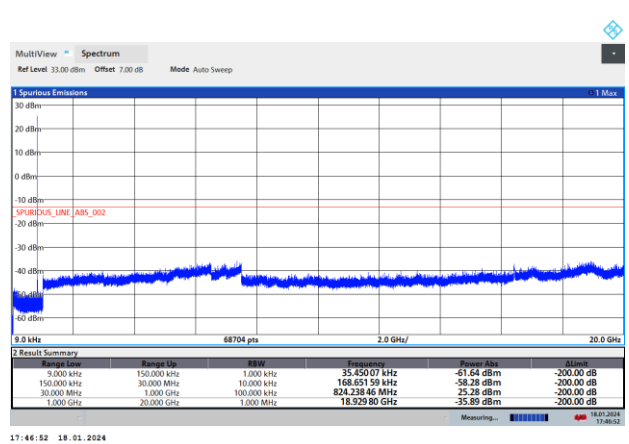
Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions more than 20 dB below the limit are not reported.

The signal beyond the limit is carrier.

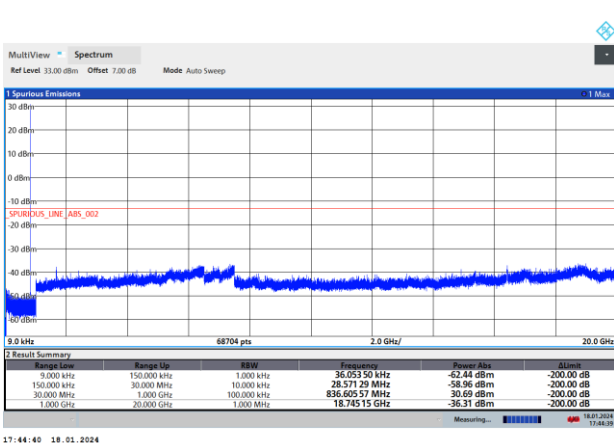
GPRS 850 CH-Low 9kHz ~ 20GHz



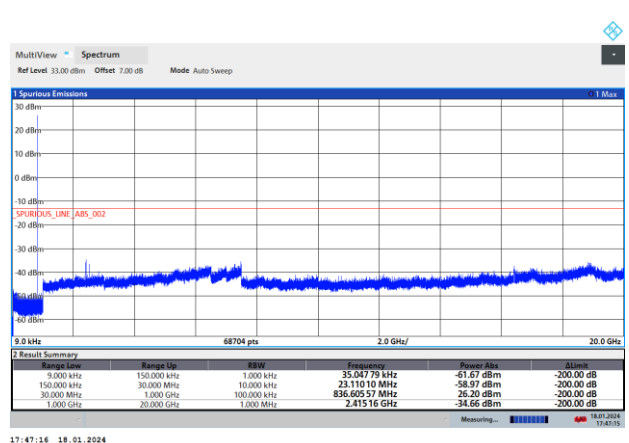
EGPRS 850 CH-Low 9kHz ~ 20GHz



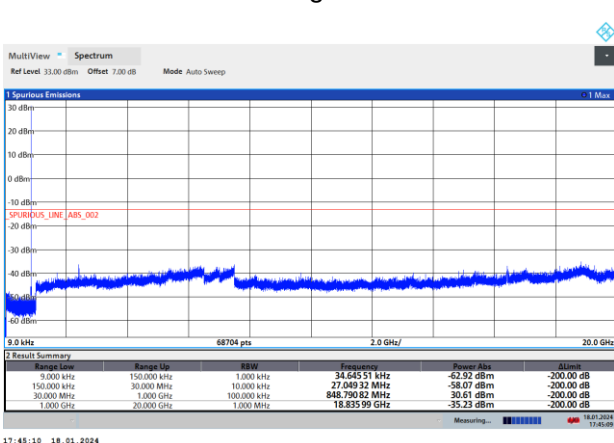
GPRS 850 CH-Middle 9kHz ~ 20GHz



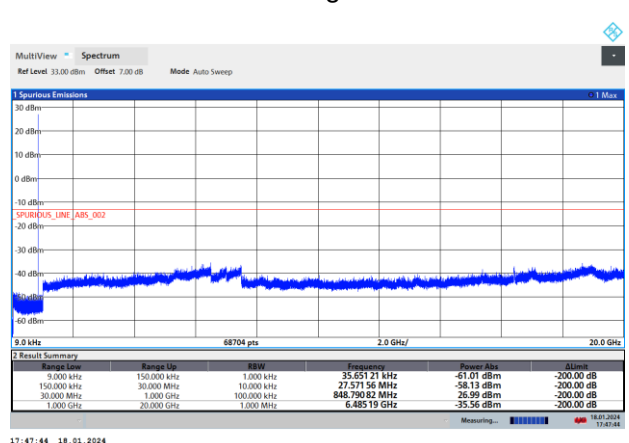
EGPRS 850 CH-Middle 9kHz ~ 20GHz



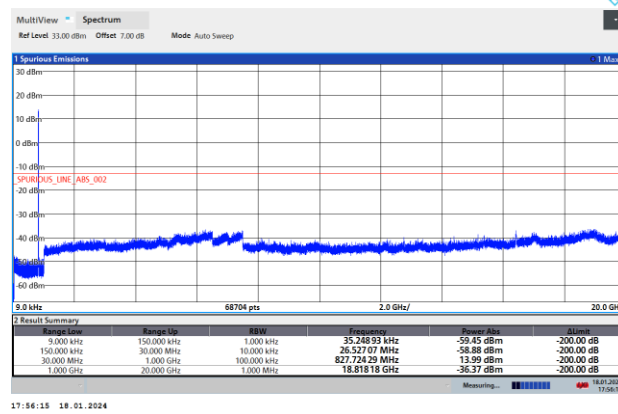
GPRS 850 CH-High 9kHz ~ 20GHz



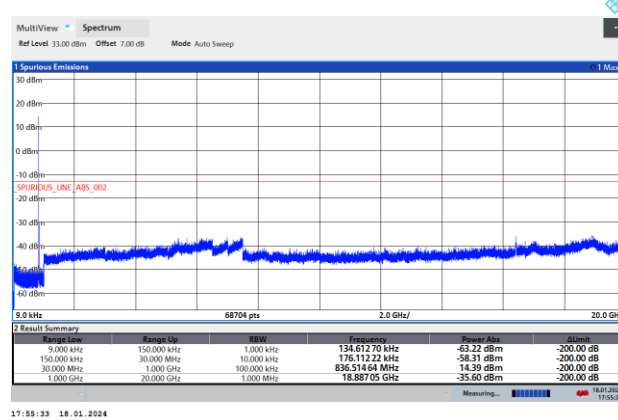
EGPRS 850 CH-High 9kHz ~ 20GHz



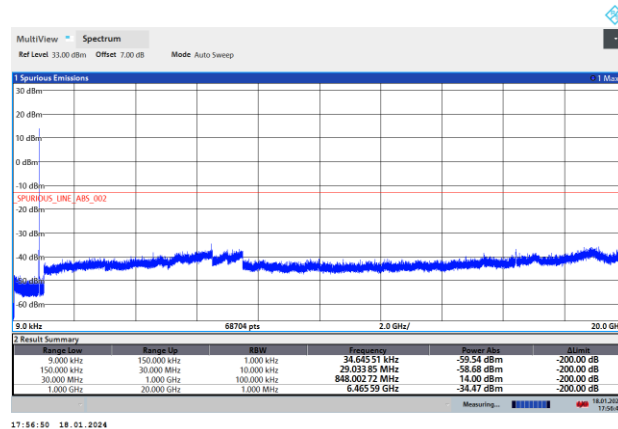
WCDMA BAND V CH-Low 9kHz ~ 20GHz



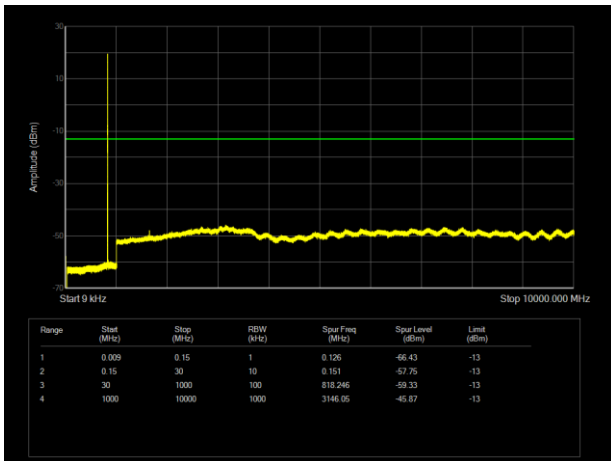
WCDMA BAND V CH-Middle 9kHz ~ 20GHz



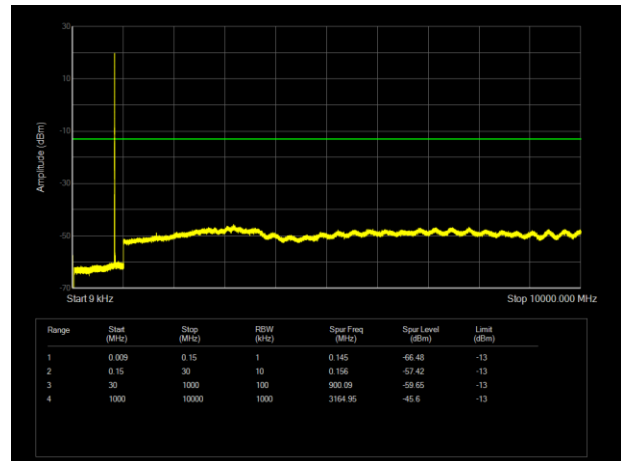
WCDMA BAND V CH-High 9kHz ~ 20GHz



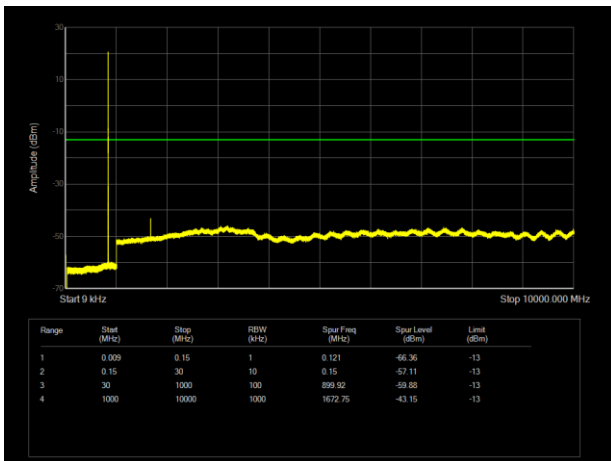
LTE Band 5 1.4MHz CH-Low 9kHz~10GHz



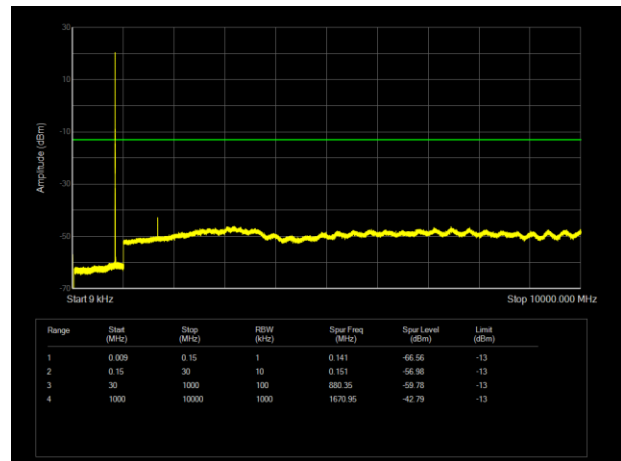
LTE Band 5 3MHz CH-Low 9kHz~10GHz



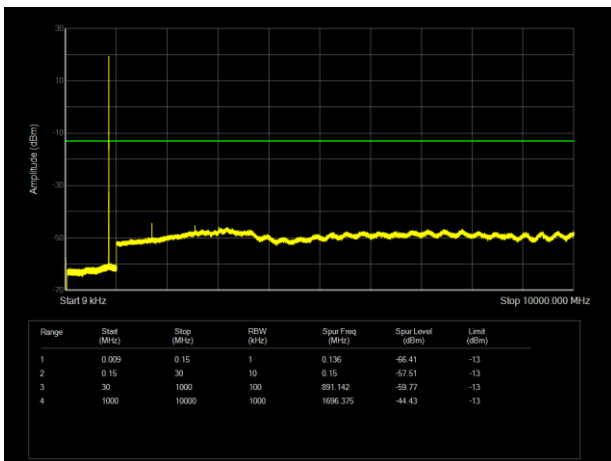
LTE Band 5 1.4MHz CH-Middle 9kHz~10GHz



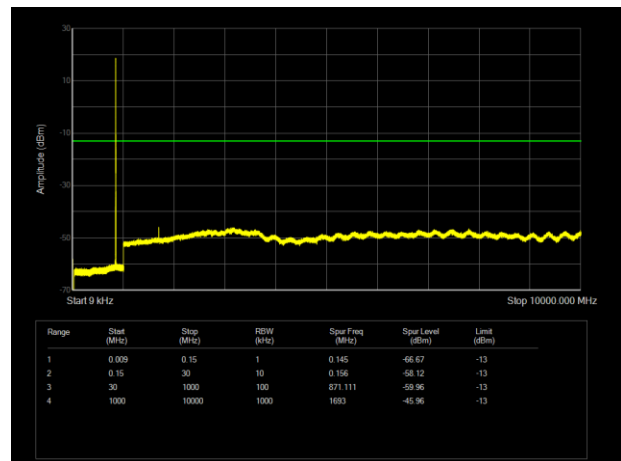
LTE Band 5 3MHz CH-Middle 9kHz~10GHz



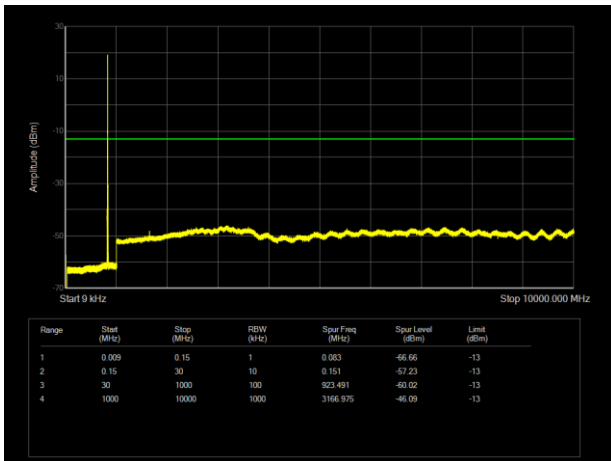
LTE Band 5 1.4MHz CH-High 9kHz~10GHz



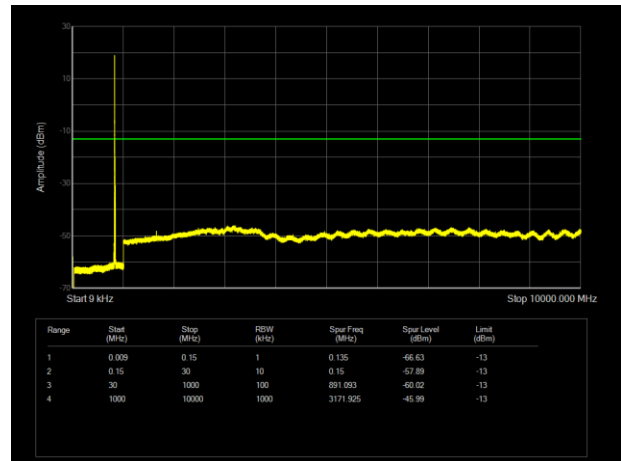
LTE Band 5 3MHz CH-High 9kHz~10GHz



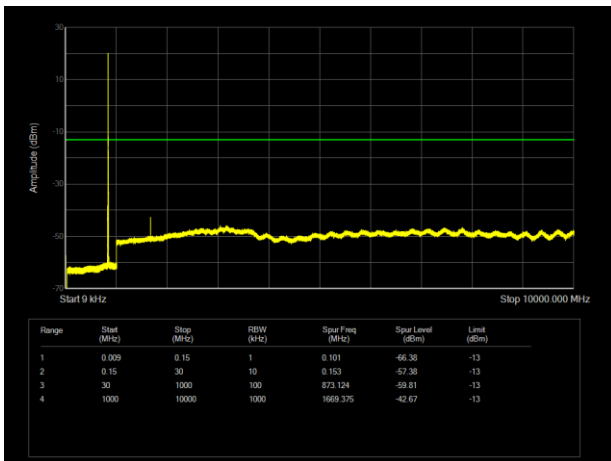
LTE Band 5 5MHz CH-Low 9kHz~10GHz



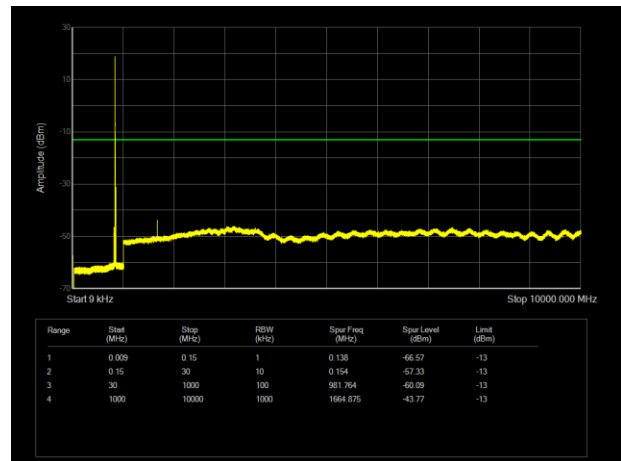
LTE Band 5 10MHz CH-Low 9kHz~10GHz



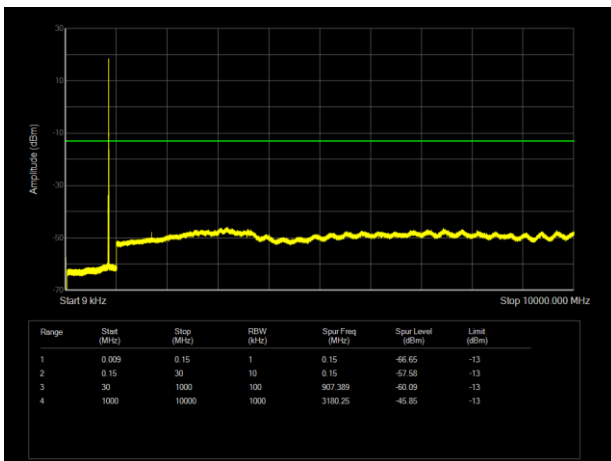
LTE Band 5 5MHz CH-Middle 9kHz~10GHz



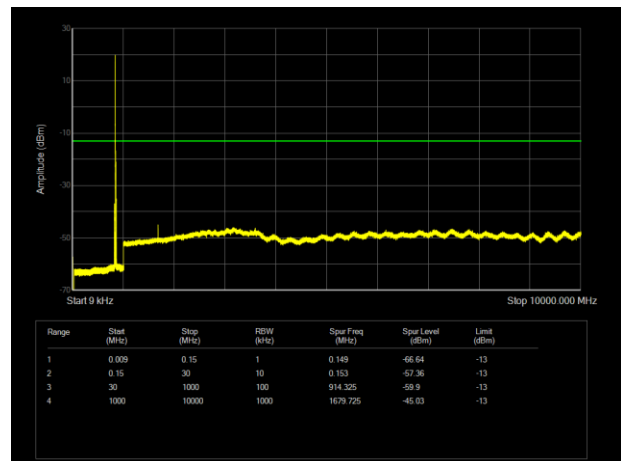
LTE Band 5 10MHz CH-Middle 9kHz~10GHz



LTE Band 5 5MHz CH-High 9kHz~10GHz



LTE Band 5 10MHz CH-High 9kHz~10GHz



6.7. Radiated Spurious Emission

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in the report.

GSM 850 CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.00	-39.56	1.70	8.70	Horizontal	-34.71	-13.00	21.71	18
3	2509.73	-54.47	2.30	12.00	Horizontal	-46.92	-13.00	33.92	241
4	3346.40	-57.15	2.70	12.70	Horizontal	-49.30	-13.00	36.30	174
5	4183.00	-57.89	3.00	12.50	Horizontal	-50.54	-13.00	37.54	285
6	5019.60	-56.07	3.40	12.50	Horizontal	-49.12	-13.00	36.12	22
7	5856.20	-60.29	3.40	12.80	Horizontal	-53.04	-13.00	40.04	36
8	6692.80	-56.45	4.10	11.50	Horizontal	-51.20	-13.00	38.20	175
9	7529.40	-56.44	4.20	12.20	Horizontal	-50.59	-13.00	37.59	2
10	8366.00	-53.95	4.30	12.50	Horizontal	-47.90	-13.00	34.90	85
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.									

WCDMA Band V CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1671.20	-55.06	1.70	8.70	Horizontal	-50.21	-13.00	37.21	85
3	2510.40	-64.87	2.30	12.00	Horizontal	-57.32	-13.00	44.32	14
4	3346.40	-65.51	2.70	12.70	Horizontal	-57.66	-13.00	44.66	142
5	4183.00	-62.74	3.00	12.50	Horizontal	-55.39	-13.00	42.39	25
6	5019.60	-61.43	3.40	12.50	Horizontal	-54.48	-13.00	41.48	17
7	5856.20	-59.89	3.40	12.80	Horizontal	-52.64	-13.00	39.64	89
8	6692.80	-57.60	4.10	11.50	Horizontal	-52.35	-13.00	39.35	38
9	7529.40	-56.14	4.20	12.20	Horizontal	-50.29	-13.00	37.29	45
10	8366.00	-55.09	4.30	12.50	Horizontal	-49.04	-13.00	36.04	0
Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor. 2. The worst emission was found in the antenna is Horizontal position.									

LTE Band 5 1.4MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1673.00	-47.09	1.70	8.70	Vertical	-42.24	-13.00	29.24	46
3	2509.50	-61.19	2.30	12.00	Vertical	-53.64	-13.00	40.64	228
4	3346.00	-65.22	2.70	12.70	Vertical	-57.37	-13.00	44.37	168
5	4182.50	-63.33	3.00	12.50	Vertical	-55.98	-13.00	42.98	89
6	5019.00	-61.27	3.40	12.50	Vertical	-54.32	-13.00	41.32	76
7	5855.50	-60.32	3.40	12.80	Vertical	-53.07	-13.00	40.07	22
8	6692.00	-57.54	4.10	11.50	Vertical	-52.29	-13.00	39.29	176
9	7528.50	-56.51	4.20	12.20	Vertical	-50.66	-13.00	37.66	38
10	8365.00	-54.97	4.30	12.50	Vertical	-48.92	-13.00	35.92	25

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.
2. The worst emission was found in the antenna is Vertical position.

LTE Band 5 5MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1668.60	-47.08	1.70	8.70	Vertical	-42.23	-13.00	29.23	168
3	2503.30	-62.33	2.30	12.00	Vertical	-54.78	-13.00	41.78	38
4	3337.50	-64.34	2.70	12.70	Vertical	-56.49	-13.00	43.49	66
5	4171.88	-62.97	3.00	12.50	Vertical	-55.62	-13.00	42.62	25
6	5006.25	-60.90	3.40	12.50	Vertical	-53.95	-13.00	40.95	117
7	5840.63	-60.26	3.40	12.80	Vertical	-53.01	-13.00	40.01	25
8	6675.00	-56.91	4.10	11.50	Vertical	-51.66	-13.00	38.66	38
9	7509.38	-55.98	4.20	12.20	Vertical	-50.13	-13.00	37.13	98
10	8343.75	-54.97	4.30	12.50	Vertical	-48.92	-13.00	35.92	17

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.
2. The worst emission was found in the antenna is Vertical position.

LTE Band 5 10MHz CH-Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1664.40	-46.78	1.70	8.70	Vertical	-41.93	-13.00	28.93	49
3	2496.60	-57.96	2.30	12.00	Vertical	-50.41	-13.00	37.41	25
4	3326.00	-65.77	2.70	12.70	Vertical	-57.92	-13.00	44.92	28
5	4157.50	-62.63	3.00	12.50	Vertical	-55.28	-13.00	42.28	68
6	4989.00	-61.81	3.40	12.50	Vertical	-54.86	-13.00	41.86	147
7	5820.50	-61.01	3.40	12.80	Vertical	-53.76	-13.00	40.76	46
8	6652.00	-57.99	4.10	11.50	Vertical	-52.74	-13.00	39.74	38
9	7483.50	-56.11	4.20	12.20	Vertical	-50.26	-13.00	37.26	41
10	8315.00	-55.21	4.30	12.50	Vertical	-49.16	-13.00	36.16	11

Note: 1. The other Spurious RF Radiated emissions level is no more than noise floor.

2. The worst emission was found in the antenna is Vertical position.

7. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Wireless Communication Tester	R&S	CMW500	150415	2023-05-12	2024-05-11
Spectrum Analyzer	Keysight	N9020A	MY50510203	2023-05-12	2024-05-11
Spectrum Analyzer	R&S	FSV30	103591	2023-05-12	2024-05-11
Wireless Communication Tester	Agilent	E5515C	MY48367192	2023-05-12	2024-05-11
Radiated Spurious Emission					
Spectrum Analyzer	R&S	FSV30	100815	2023-12-05	2024-12-04
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2023-04-16	2026-04-15
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	391	2022-09-29	2025-09-28
Horn Antenna	SCHWARZBECK	BBHA 9120D	1594	2023-12-05	2026-12-04
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
Software	R&S	EMC32	10.35.10	/	/

ANNEX A: The EUT Appearance

The EUT Appearance is submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos is submitted separately.

***** END OF REPORT *****