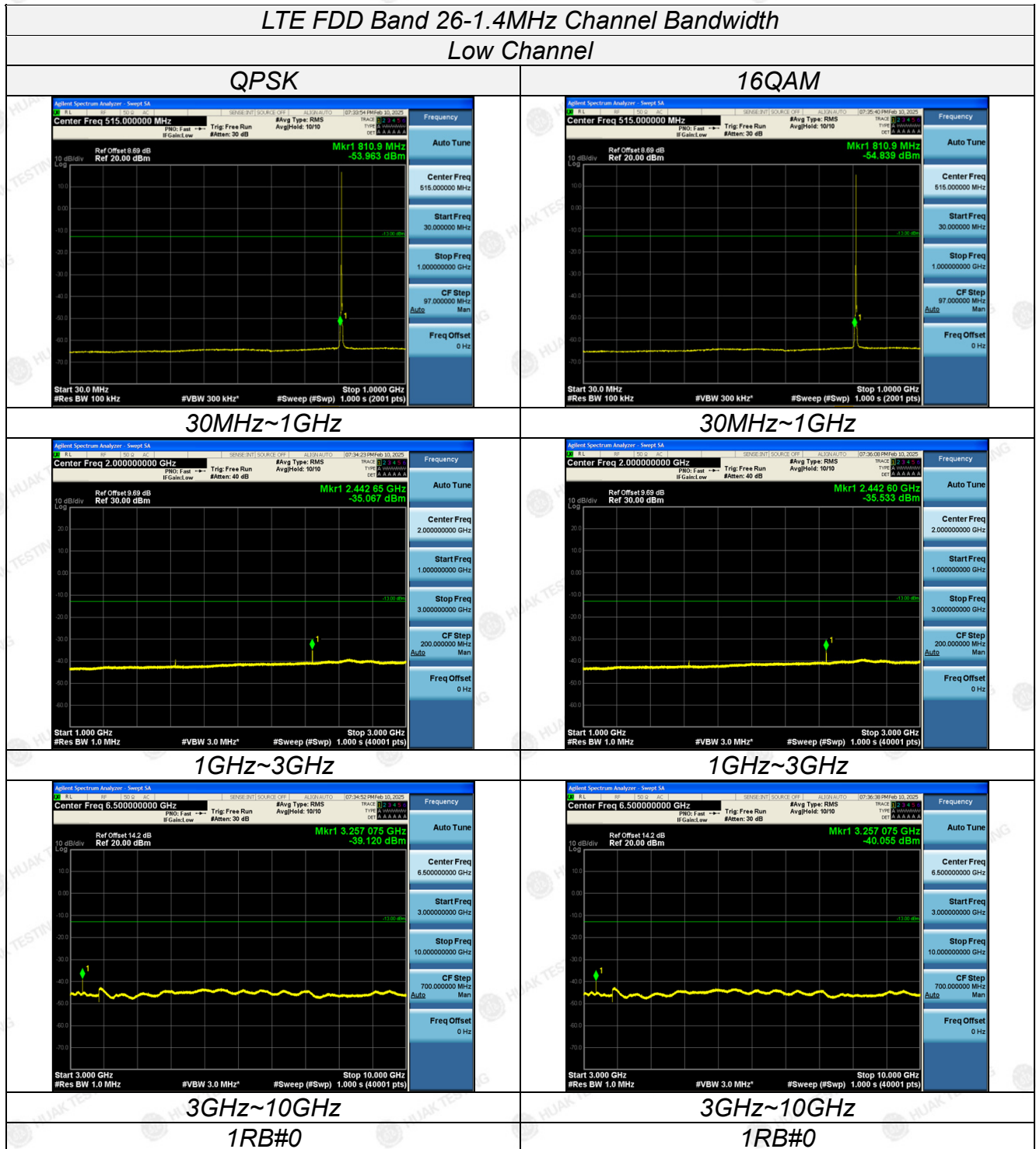




Conducted Measurement:

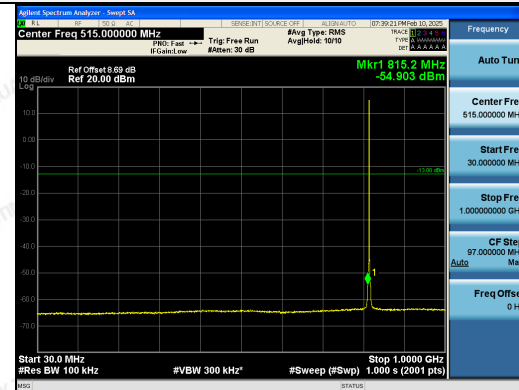
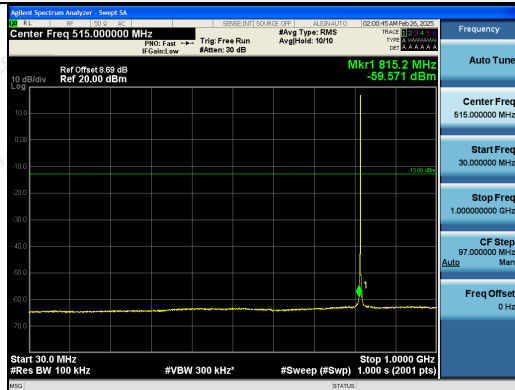




LTE FDD Band 26-1.4MHz Channel Bandwidth
Middle Channel

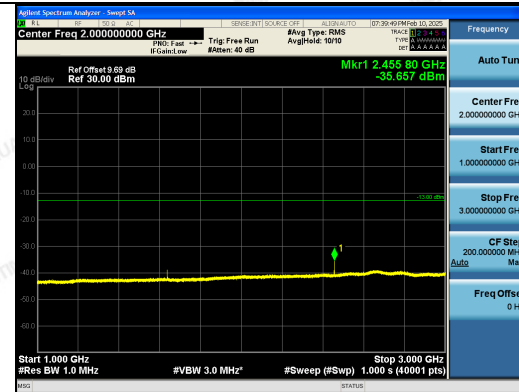
QPSK

16QAM



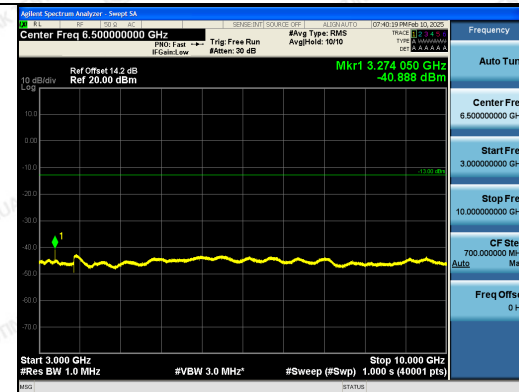
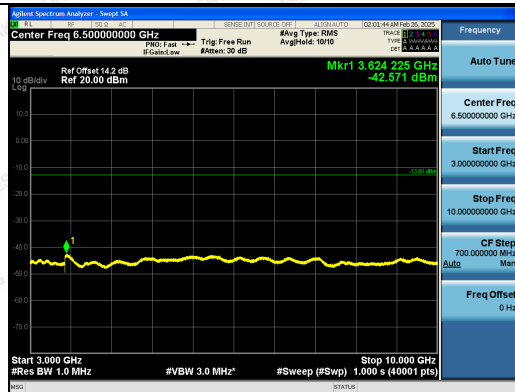
30MHz~1GHz

30MHz~1GHz



1GHz~3GHz

1GHz~3GHz

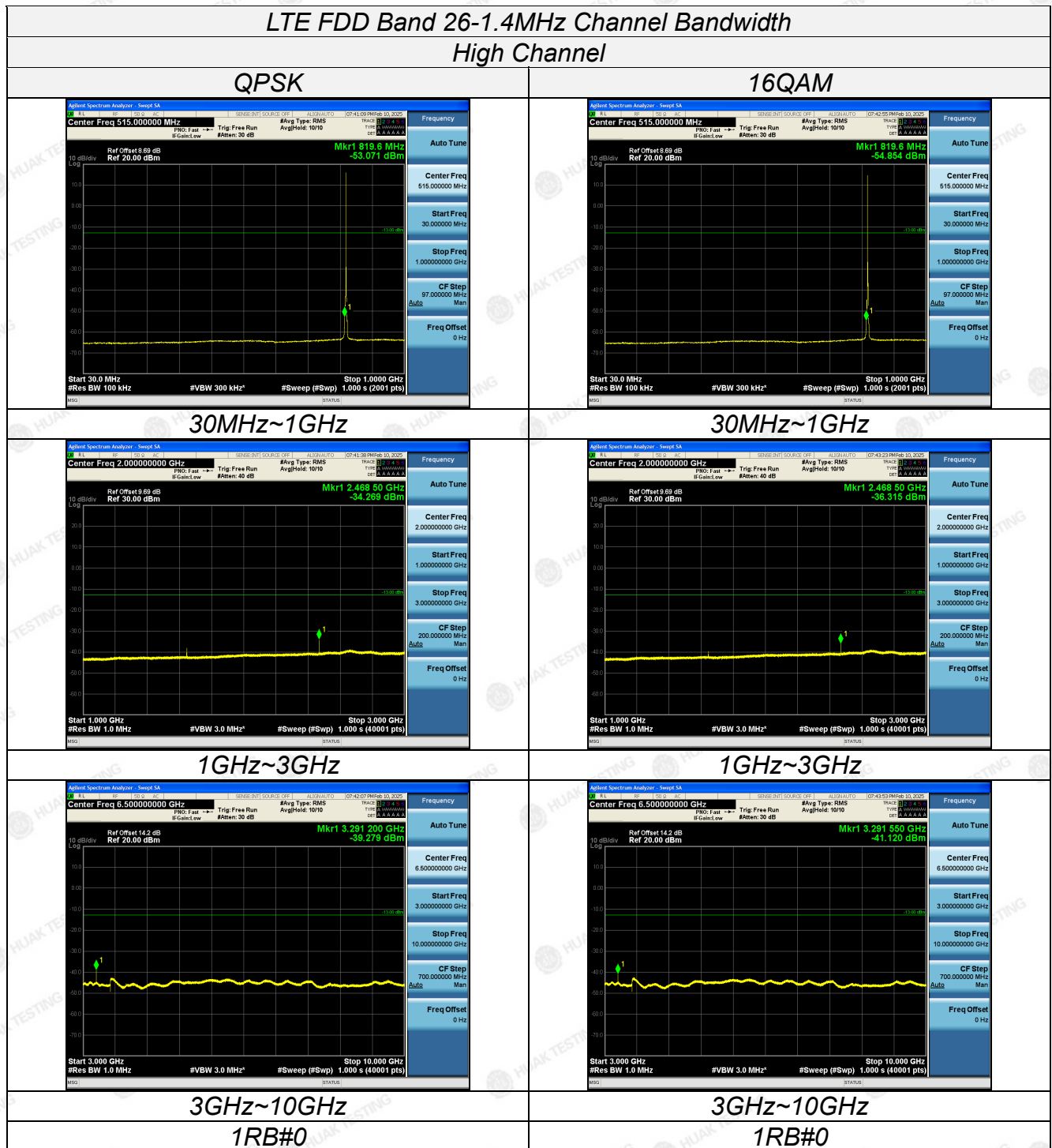


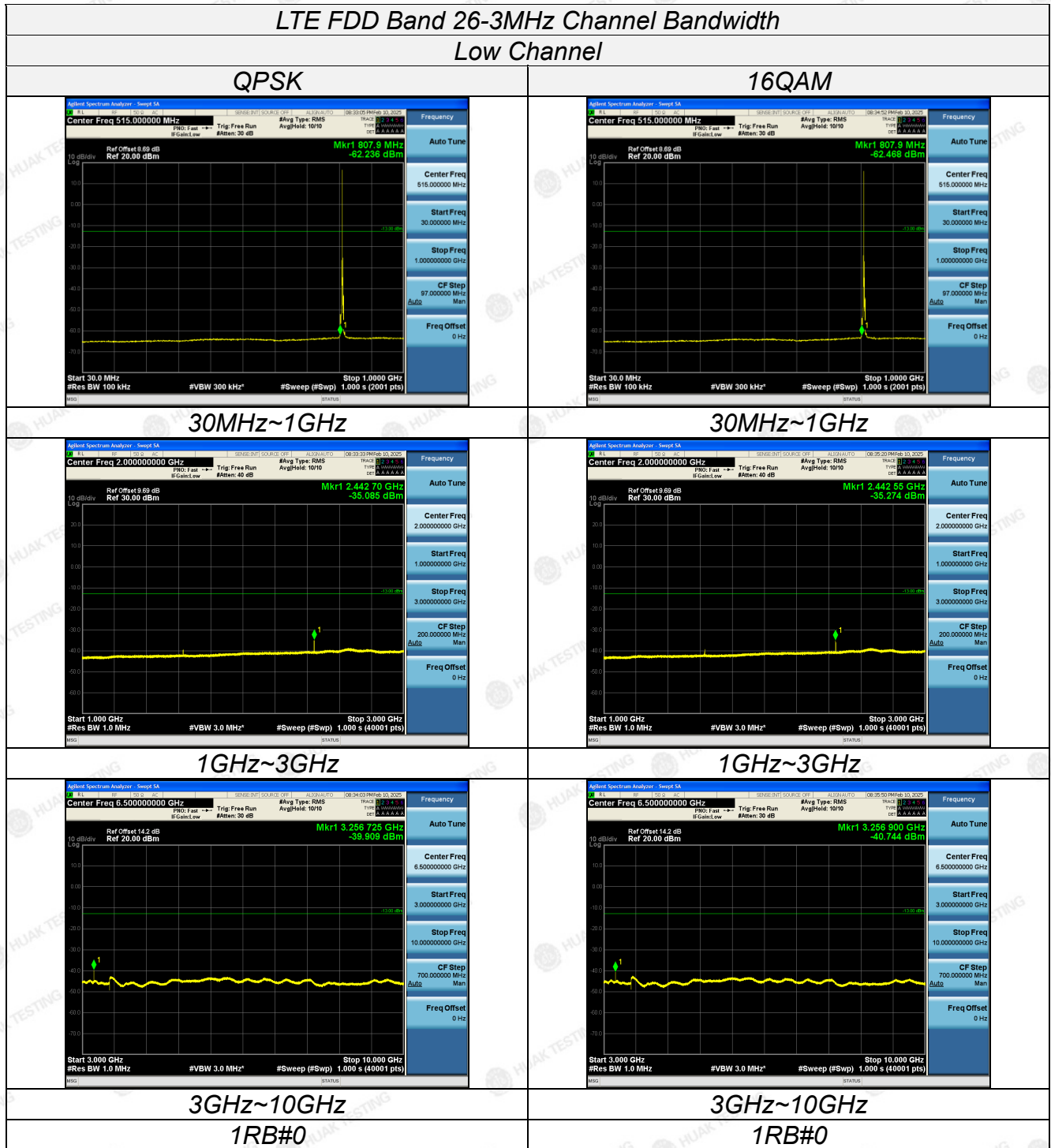
3GHz~10GHz

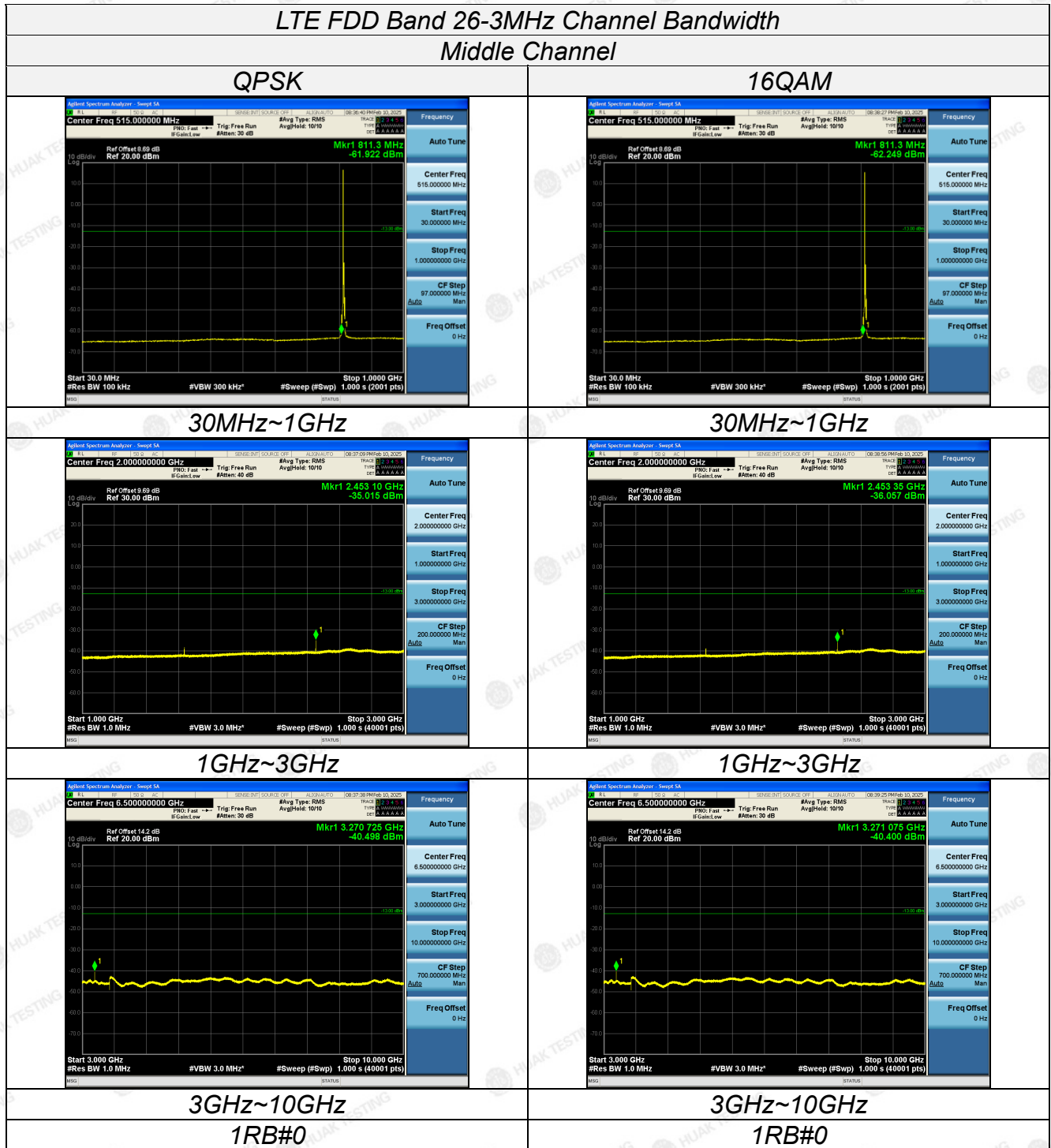
3GHz~10GHz

1RB#0

1RB#0



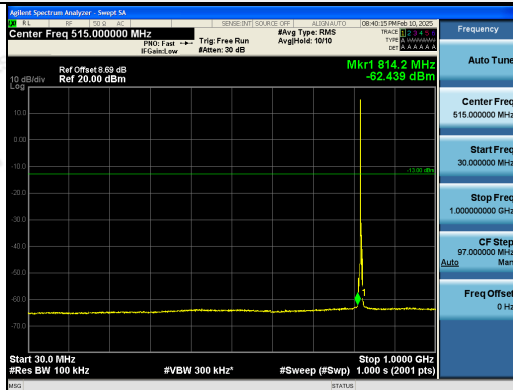




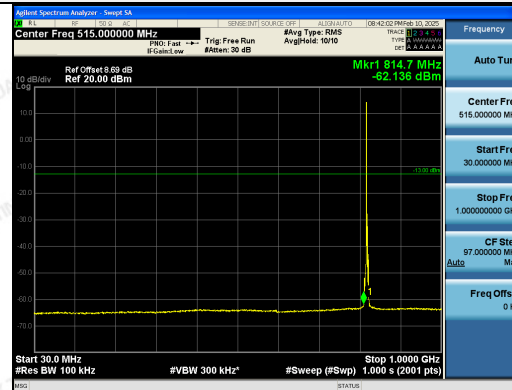


LTE FDD Band 26-3MHz Channel Bandwidth High Channel

QPSK



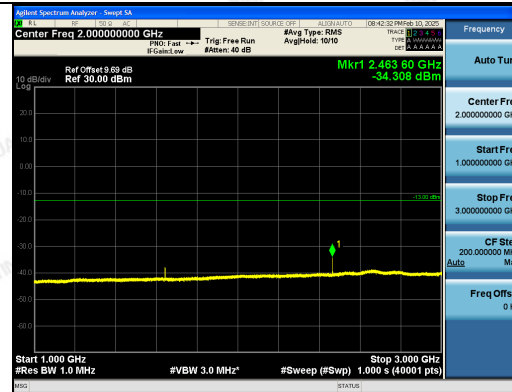
16QAM



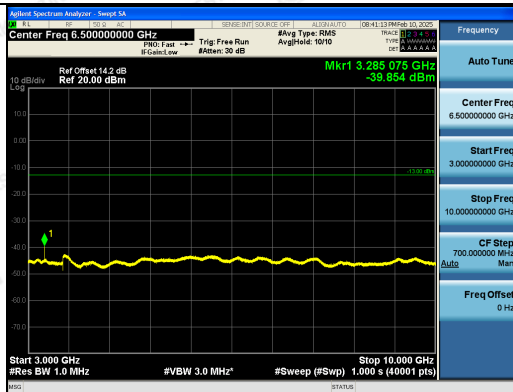
30MHz~1GHz



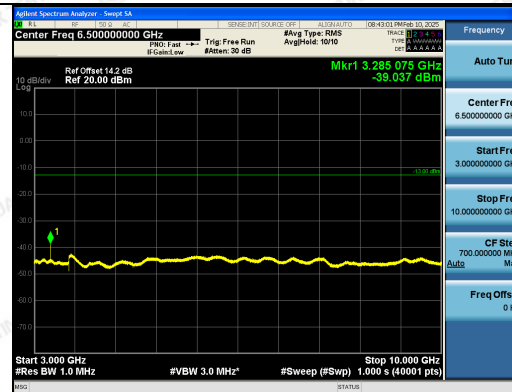
30MHz~1GHz



1GHz~3GHz



1GHz~3GHz

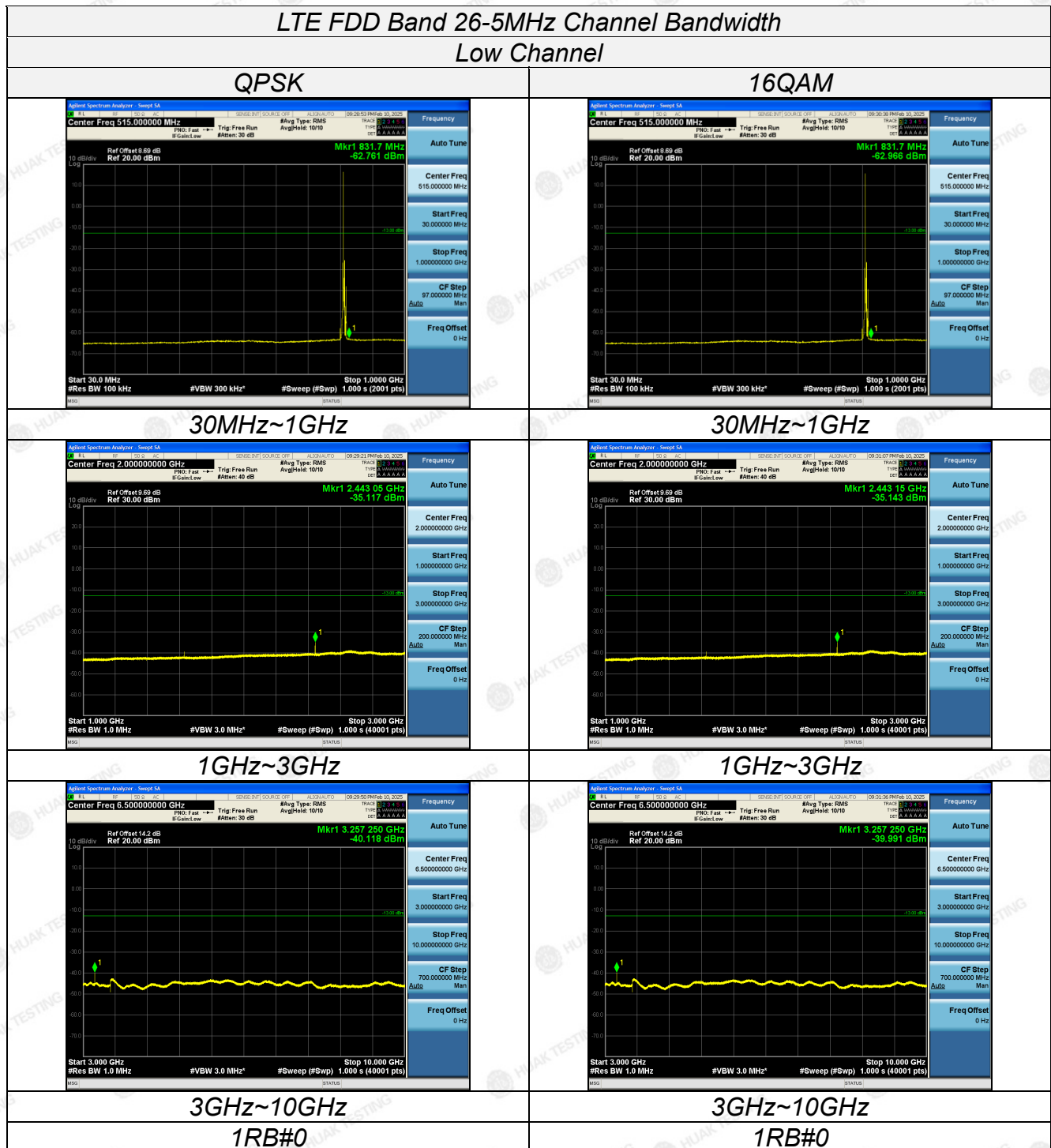


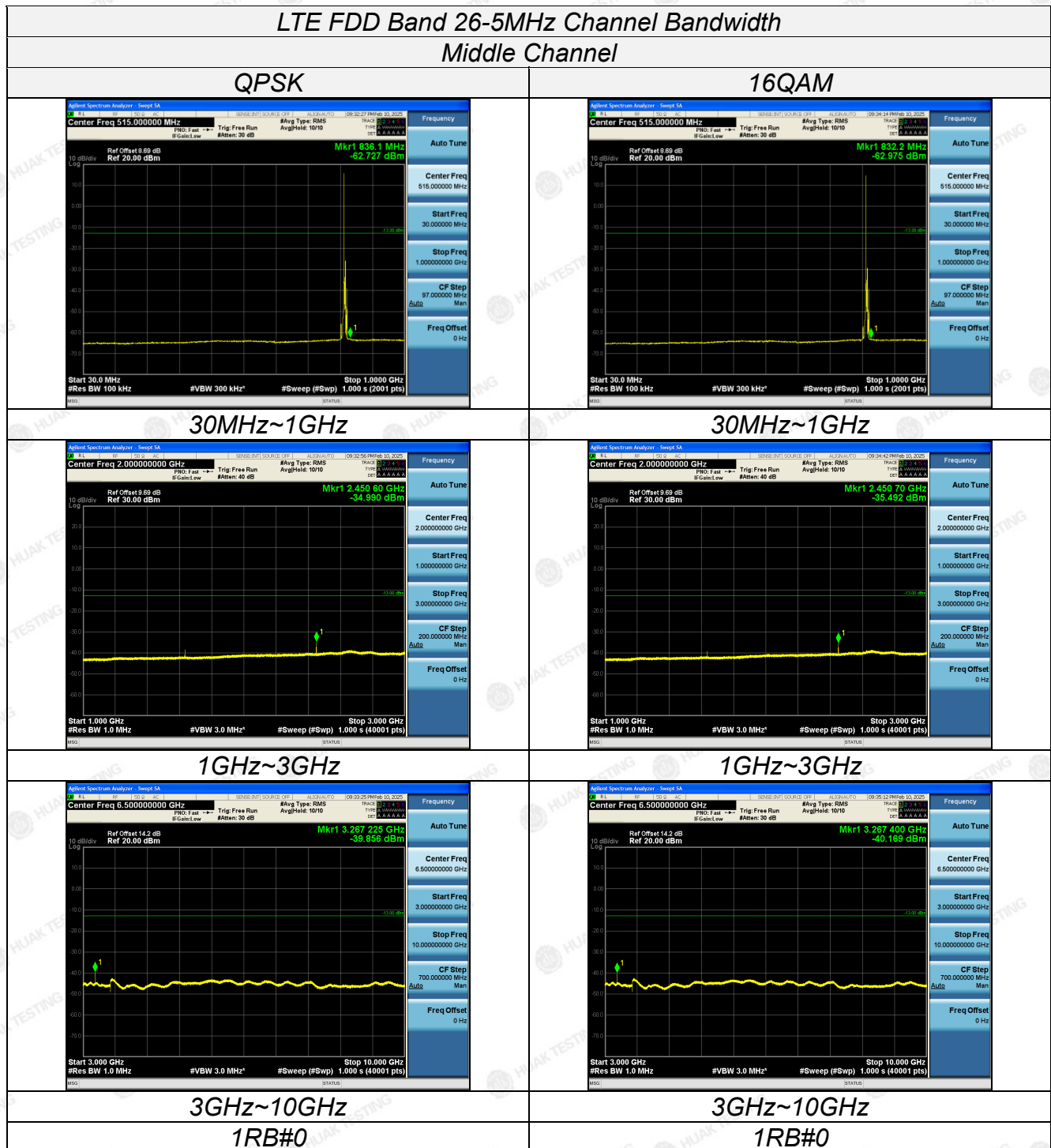
3GHz~10GHz

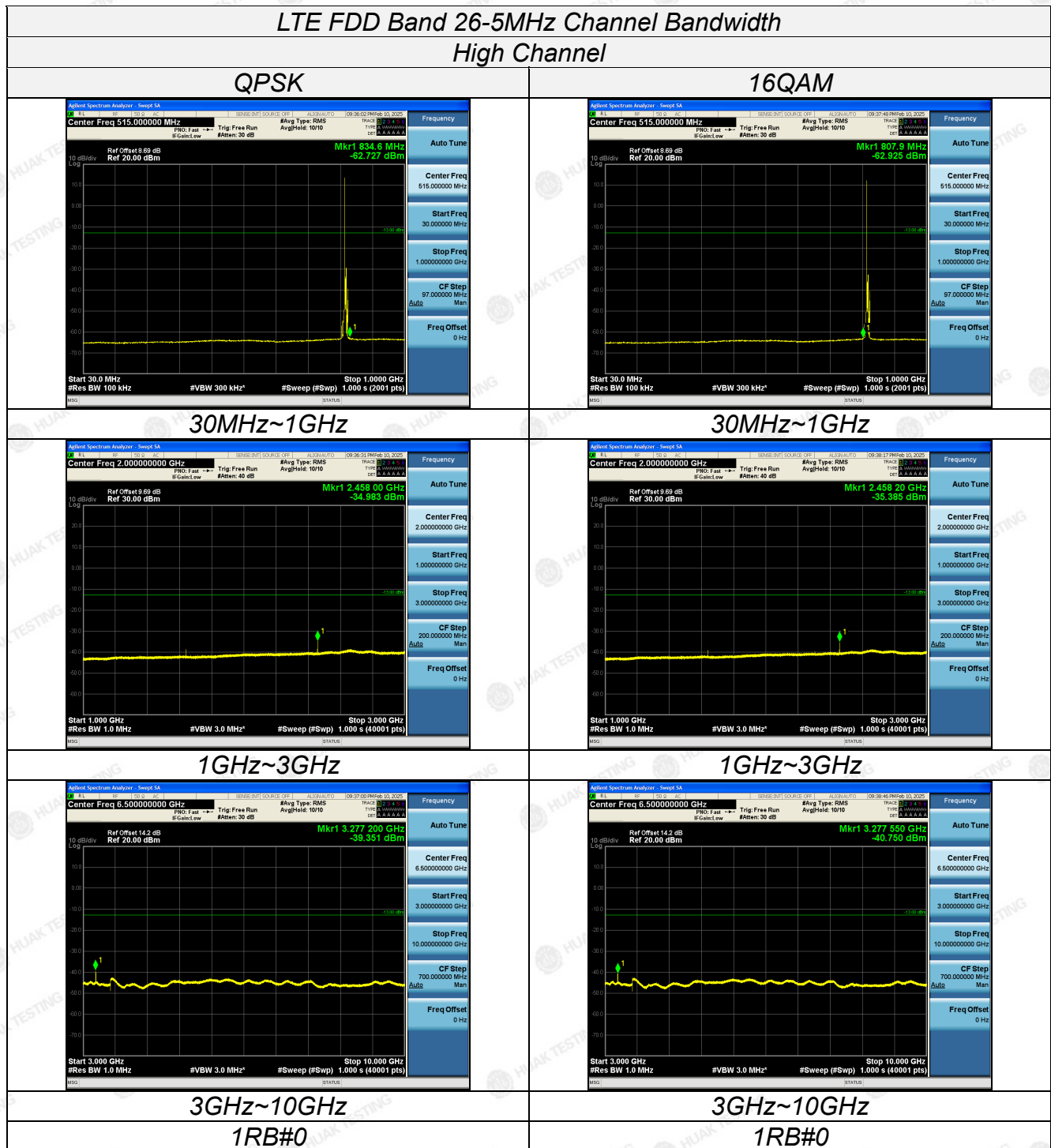
1RB#0

3GHz~10GHz

1RB#0



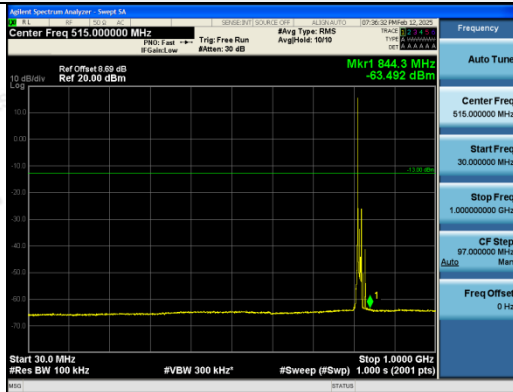




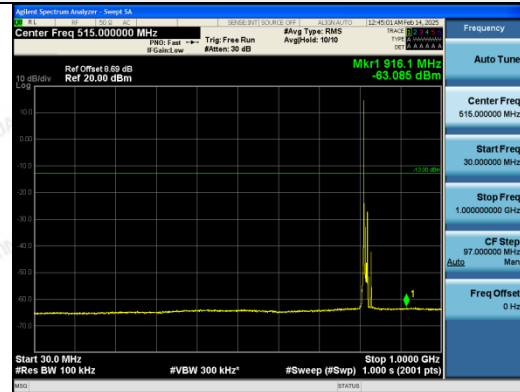


LTE FDD Band 26-10MHz Channel Bandwidth

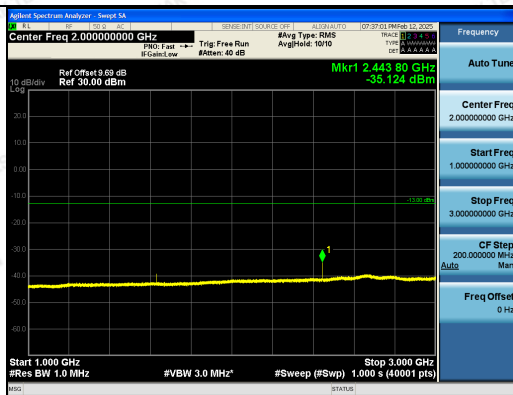
QPSK



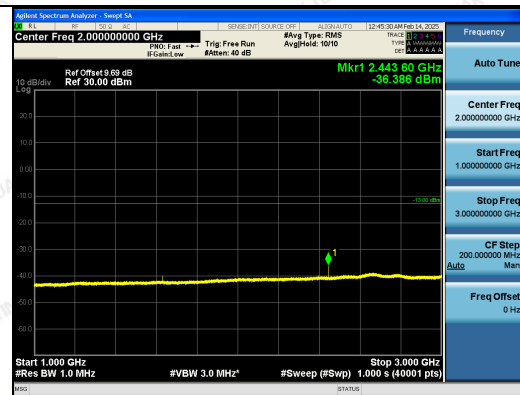
16QAM



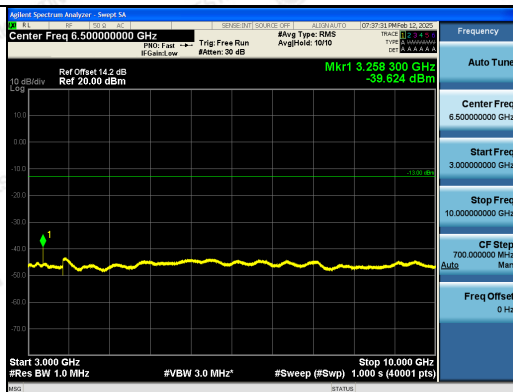
30MHz~1GHz



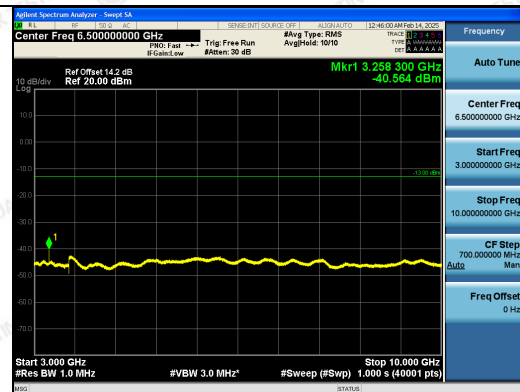
30MHz~1GHz



1GHz~3GHz



1GHz~3GHz



3GHz~10GHz

1RB#0

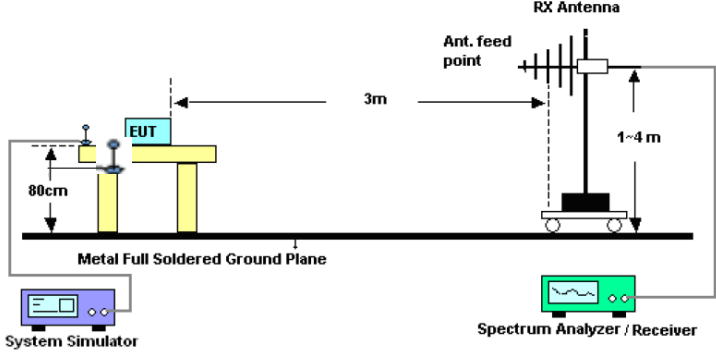
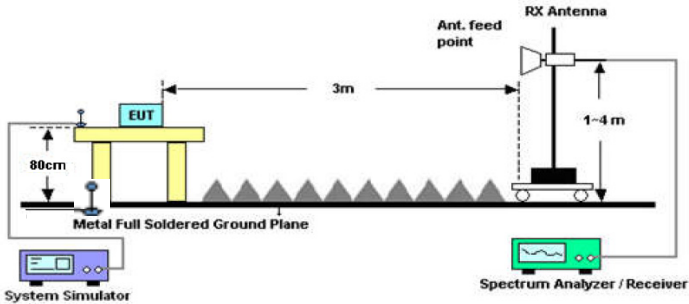
3GHz~10GHz

1RB#0



5.6. Field Strength of Spurious Radiation Measurement

5.6.1. Test Specification

Test Requirement:	FCC part90.691
Test Method:	FCC part 2.1053
Limit:	30MHz~20GHz -13dBm
Test setup:	From 30MHz to 1GHz  Above 1GHz 
Test Procedure:	1. The testing follows FCC KDB 971168 D01v03 Section 5.8 and ANSI / TIA-603-D-2010Section 2.2.12. 2. The EUT was placed on a rotatable wooden table 0.8 meters above the ground. 3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower. 4. The table was rotated 360 degrees to determine the position of the highest spurious emission. 5. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.



	6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission. 7. A horn antenna was substituted in place of the EUT and was driven by a signal generator. 8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission. 9. Taking the record of output power at antenna port. 10. Repeat step 7 to step 8 for another polarization. 11. $EIRP(dBm) = S.G. Power - Tx Cable Loss + Tx Antenna Gain$ 12. $ERP(dBm) = EIRP - 2.15$ 13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
Test results:	PASS

Radiated Measurement:

Remark:

1. We were tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 26; recorded worst case for each Channel Bandwidth of LTE FDD Band 26.
2. $EIRP = P_{Mea}(dBm) - P_{cl}(dB) + G_a(dBi)$
3. We were not recorded other points as values lower than limits.
4. $Margin = Limit - EIRP$

LTE FDD Band 26_Channel Bandwidth 1.4MHz_QPSK_Low Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1629.4	-35.67	2.86	3.00	7.25	-33.43	-13.00	20.43	H
2444.1	-43.37	2.94	3.00	9.53	-38.93	-13.00	25.93	H
1629.4	-43.71	2.86	3.00	7.25	-41.47	-13.00	28.47	V
2444.1	-47.68	2.94	3.00	9.53	-43.24	-13.00	30.24	V

LTE FDD Band 26_Channel Bandwidth 1.4MHz_QPSK_Middle Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1638	-35.5	2.86	3.00	7.25	-33.26	-13.00	20.26	H
2457	-43.19	2.94	3.00	9.53	-38.75	-13.00	25.75	H
1638	-44.16	2.86	3.00	7.25	-41.92	-13.00	28.92	V
2457	-46.98	2.94	3.00	9.53	-42.54	-13.00	29.54	V

**LTE FDD Band 26_Channel Bandwidth 1.4MHz_QPSK_High Channel**

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1646.6	-45.51	2.86	3.00	7.82	-40.55	-13.00	27.55	H
2469.9	-46.64	2.94	3.00	9.35	-40.23	-13.00	27.23	H
1646.6	-45.28	2.86	3.00	7.82	-40.32	-13.00	27.32	V
2469.9	-48.33	2.94	3.00	9.35	-41.92	-13.00	28.92	V

LTE FDD Band 26_Channel Bandwidth 3MHz_QPSK_Low Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1631	-46.54	2.86	3.00	7.25	-44.3	-13.00	31.3	H
2446.5	-43.84	2.94	3.00	9.53	-39.4	-13.00	26.4	H
1631	-46.13	2.86	3.00	7.25	-43.89	-13.00	30.89	V
2446.5	-47.62	2.94	3.00	9.53	-43.18	-13.00	30.18	V

LTE FDD Band 26_Channel Bandwidth 3MHz_QPSK_Middle Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1638	-45.09	2.86	3.00	7.25	-42.85	-13.00	29.85	H
2457	-43.73	2.94	3.00	9.53	-39.29	-13.00	26.29	H
1638	-47.16	2.86	3.00	7.25	-44.92	-13.00	31.92	V
2457	-48.11	2.94	3.00	9.53	-43.67	-13.00	30.67	V

LTE FDD Band 26_Channel Bandwidth 3MHz_QPSK_High Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1645	-45.48	2.86	3.00	7.82	-40.52	-13.00	27.52	H
2467.5	-46.32	2.94	3.00	9.35	-39.91	-13.00	26.91	H
1645	-45.72	2.86	3.00	7.82	-40.76	-13.00	27.76	V
2467.5	-47.9	2.94	3.00	9.35	-41.49	-13.00	28.49	V

LTE FDD Band 26_Channel Bandwidth 5MHz_QPSK_Low Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1633	-45.2	2.86	3.00	7.25	-42.96	-13.00	29.96	H
2449.5	-45.39	2.94	3.00	9.53	-40.95	-13.00	27.95	H
1633	-45.37	2.86	3.00	7.25	-43.13	-13.00	30.13	V
2449.5	-47.53	2.94	3.00	9.53	-43.09	-13.00	30.09	V

*LTE FDD Band 26_Channel Bandwidth 5MHz_QPSK_Middle Channel*

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1638	-46.33	2.86	3.00	7.25	-44.09	-13.00	31.09	H
2457	-45.56	2.94	3.00	9.53	-41.12	-13.00	28.12	H
1638	-45.25	2.86	3.00	7.25	-43.01	-13.00	30.01	V
2457	-47.25	2.94	3.00	9.53	-42.81	-13.00	29.81	V

LTE FDD Band 26_Channel Bandwidth 5MHz_QPSK_High Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1643	-47.22	2.86	3.00	7.82	-42.26	-13.00	29.26	H
2464.5	-44.34	2.94	3.00	9.35	-37.93	-13.00	24.93	H
1643	-46.71	2.86	3.00	7.82	-41.75	-13.00	28.75	V
2464.5	-48.1	2.94	3.00	9.35	-41.69	-13.00	28.69	V

LTE FDD Band 26_Channel Bandwidth 10MHz_QPSK

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1638	-44.98	2.86	3.00	7.25	-42.74	-13.00	29.74	H
2457	-46.12	2.94	3.00	9.53	-41.68	-13.00	28.68	H
1638	-46.05	2.86	3.00	7.25	-43.81	-13.00	30.81	V
2457	-46.95	2.94	3.00	9.53	-42.51	-13.00	29.51	V

**LTE FDD Band 26_Channel Bandwidth 1.4MHz_16QAM_Low Channel**

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1629.4	-44.98	2.86	3.00	7.25	-42.74	-13.00	29.74	H
2444.1	-44.03	2.94	3.00	9.53	-39.59	-13.00	26.59	H
1629.4	-45.1	2.86	3.00	7.25	-42.86	-13.00	29.86	V
2444.1	-49.59	2.94	3.00	9.53	-45.15	-13.00	32.15	V

LTE FDD Band 26_Channel Bandwidth 1.4MHz_16QAM_Middle Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1638	-45.72	2.86	3.00	7.25	-43.48	-13.00	30.48	H
2457	-45.6	2.94	3.00	9.53	-41.16	-13.00	28.16	H
1638	-46.95	2.86	3.00	7.25	-44.71	-13.00	31.71	V
2457	-47.65	2.94	3.00	9.53	-43.21	-13.00	30.21	V

LTE FDD Band 26_Channel Bandwidth 1.4MHz_16QAM_High Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1646.6	-44.94	2.86	3.00	7.82	-39.98	-13.00	26.98	H
2469.9	-46.53	2.94	3.00	9.35	-40.12	-13.00	27.12	H
1646.6	-45.66	2.86	3.00	7.82	-40.7	-13.00	27.7	V
2469.9	-49.87	2.94	3.00	9.35	-43.46	-13.00	30.46	V

LTE FDD Band 26_Channel Bandwidth 3MHz_16QAM_Low Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1631	-45.84	2.86	3.00	7.25	-43.6	-13.00	30.6	H
2446.5	-43.47	2.94	3.00	9.53	-39.03	-13.00	26.03	H
1631	-47.57	2.86	3.00	7.25	-45.33	-13.00	32.33	V
2446.5	-47.84	2.94	3.00	9.53	-43.4	-13.00	30.4	V

LTE FDD Band 26_Channel Bandwidth 3MHz_16QAM_Middle Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1638	-46.33	2.86	3.00	7.25	-44.09	-13.00	31.09	H
2457	-45.99	2.94	3.00	9.53	-41.55	-13.00	28.55	H
1638	-46.39	2.86	3.00	7.25	-44.15	-13.00	31.15	V
2457	-47.58	2.94	3.00	9.53	-43.14	-13.00	30.14	V

**LTE FDD Band 26_Channel Bandwidth 3MHz_16QAM_High Channel**

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1645	-44.95	2.86	3.00	7.82	-39.99	-13.00	26.99	H
2467.5	-46.16	2.94	3.00	9.35	-39.75	-13.00	26.75	H
1645	-45.34	2.86	3.00	7.82	-40.38	-13.00	27.38	V
2467.5	-50.32	2.94	3.00	9.35	-43.91	-13.00	30.91	V

LTE FDD Band 26_Channel Bandwidth 5MHz_16QAM_Low Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1633	-45.74	2.86	3.00	7.25	-43.5	-13.00	30.5	H
2449.5	-44.87	2.94	3.00	9.53	-40.43	-13.00	27.43	H
1633	-46.9	2.86	3.00	7.25	-44.66	-13.00	31.66	V
2449.5	-48.39	2.94	3.00	9.53	-43.95	-13.00	30.95	V

LTE FDD Band 26_Channel Bandwidth 5MHz_16QAM_Middle Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1638	-44.93	2.86	3.00	7.25	-42.69	-13.00	29.69	H
2457	-46.64	2.94	3.00	9.53	-42.2	-13.00	29.2	H
1638	-44.77	2.86	3.00	7.25	-42.53	-13.00	29.53	V
2457	-47.62	2.94	3.00	9.53	-43.18	-13.00	30.18	V

LTE FDD Band 26_Channel Bandwidth 5MHz_16QAM_High Channel

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1643	-45.06	2.86	3.00	7.82	-40.1	-13.00	27.1	H
2464.5	-45.62	2.94	3.00	9.35	-39.21	-13.00	26.21	H
1643	-47.45	2.86	3.00	7.82	-42.49	-13.00	29.49	V
2464.5	-49.28	2.94	3.00	9.35	-42.87	-13.00	29.87	V

LTE FDD Band 26_Channel Bandwidth 10MHz_16QAM

Frequency (MHz)	P _{Mea} (dBm)	P _{cl} (dB)	Diatance	G _a Antenna Gain(dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1638	-45.05	2.86	3.00	7.25	-42.81	-13.00	29.81	H
2457	-45.42	2.94	3.00	9.53	-40.98	-13.00	27.98	H
1638	-46.66	2.86	3.00	7.25	-44.42	-13.00	31.42	V
2457	-49.09	2.94	3.00	9.53	-44.65	-13.00	31.65	V



5.7. Frequency Stability Measurement

5.7.1. Test Specification

Test Requirement:	FCC part 90.213
Test Method:	FCC Part 2.1055
Limit:	± 2.5 ppm
Test Setup:	 The diagram shows a 'System Simulator' connected by a line to a 'Thermal Chamber'. Inside the thermal chamber is the 'EUT' (Equipment Under Test).
Test Procedure:	Test Procedures for Temperature Variation 1. The testing follows FCC KDB 971168 D01v03 Section 9.0. 2. The EUT was set up in the thermal chamber and connected with the system simulator. 3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute. 4. With power OFF, the temperature was raised in 10°C steps up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute. Test Procedures for Voltage Variation 1. The testing follows FCC KDB 971168 D01v03 Section 9.0. 2. The EUT was placed in a temperature chamber at $25 \pm 5^{\circ}\text{C}$ and connected with the system simulator. 3. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT. 4. The variation in frequency was measured for the worst case.
Test Result:	PASS

**TEST RESULTS**

Remark:

1. We tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 26; recorded worst case.

LTE Band 26, 1.4MHz bandwidth (worst case of all bandwidths)

Frequency Error vs Voltage

Voltage (V)	Frequency error (Hz)		Frequency error (ppm)		Limit (ppm)
	QPSK	16QAM	QPSK	16QAM	
4.25	2.50	-2.98	0.003069	-0.003658	2.50
5.0	2.15	-1.93	0.002639	-0.002369	2.50
5.75	1.32	-3.83	0.001620	-0.004701	2.50

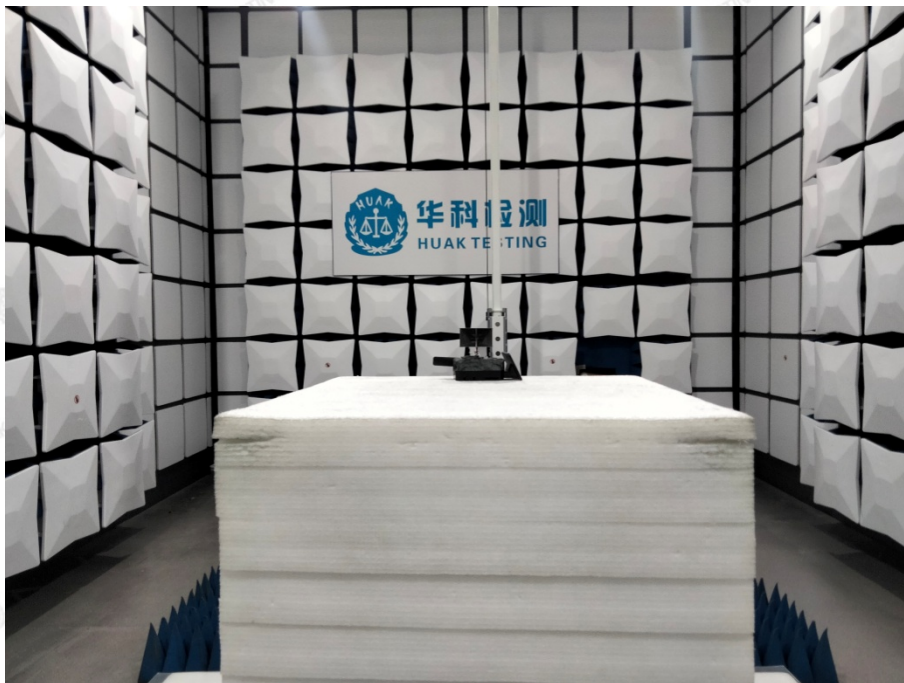
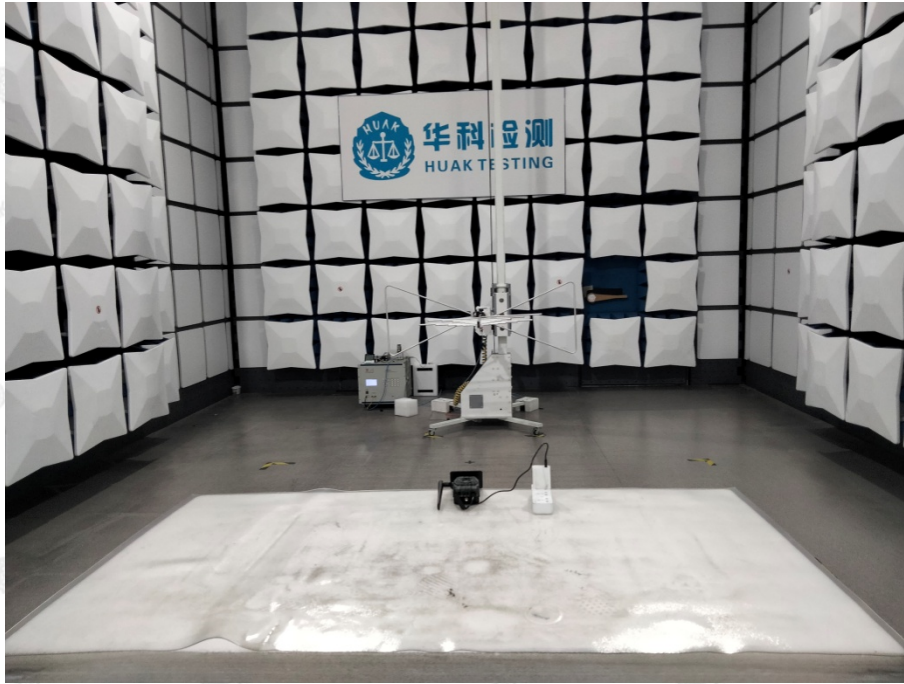
Frequency Error vs Temperature

Temperature (°C)	Frequency error (Hz)		Frequency error (ppm)		Limit (ppm)
	QPSK	16QAM	QPSK	16QAM	
-30°	-2.95	-4.13	-0.003602	-0.005043	2.50
-20°	-1.36	-2.07	-0.001661	-0.002527	2.50
-10°	-2.15	-2.43	-0.002625	-0.002967	2.50
0°	1.50	-1.67	0.001832	-0.002039	2.50
10°	-3.30	-2.79	-0.004029	-0.003407	2.50
20°	-3.36	-4.59	-0.004103	-0.005604	2.50
30°	-2.76	-4.39	-0.003370	-0.005360	2.50
40°	-2.70	-3.65	-0.003297	-0.004457	2.50
50°	-2.46	-2.86	-0.003004	-0.003492	2.50



6. Photographs of Test Setup

Radiated Emission



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by HUAKE, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.cer-mark.com>.

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7. Photographs of EUT

Refer to test report ANNEX A of external photos and ANNEX B of internal photos

.....**End of Report**.....