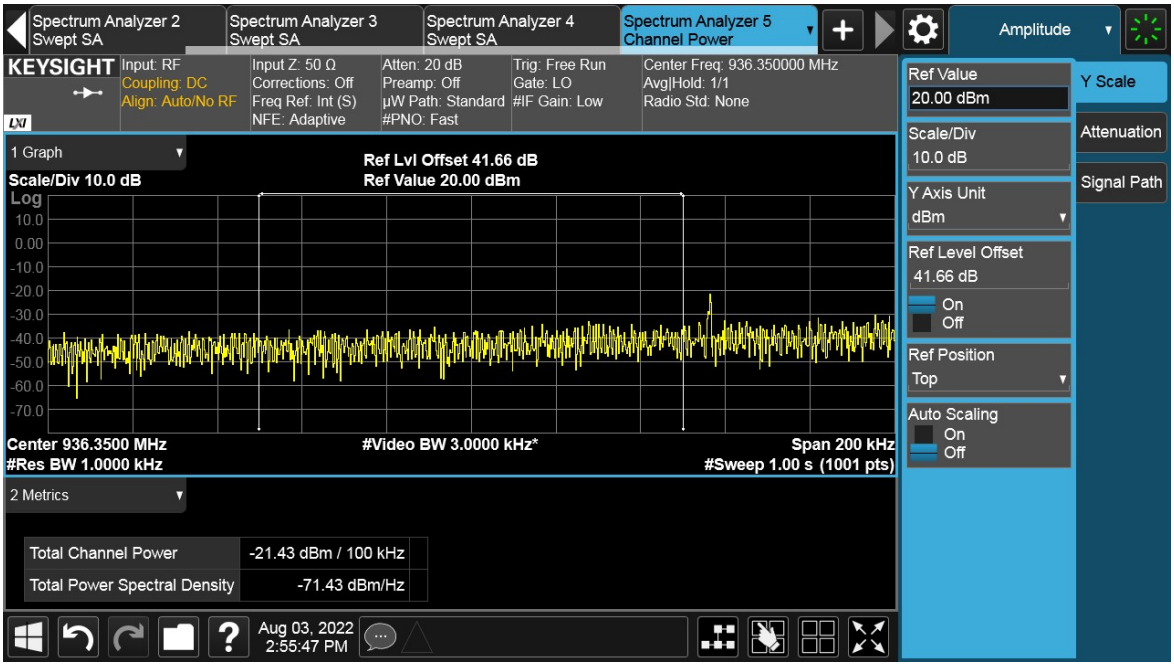
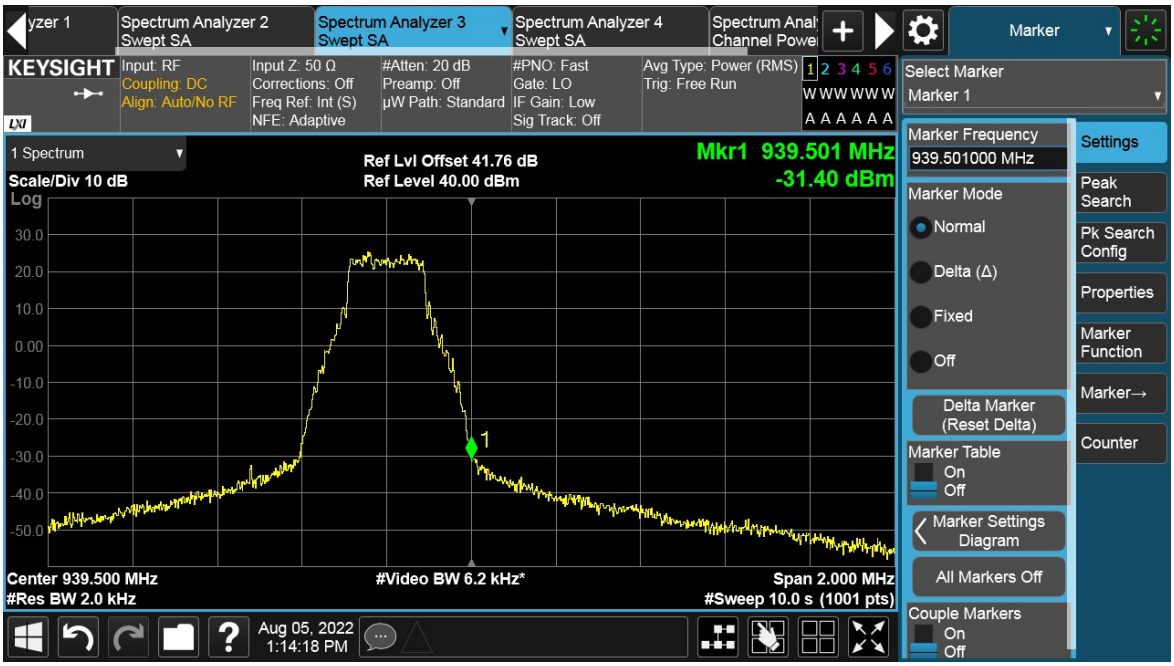
TEST REPORT

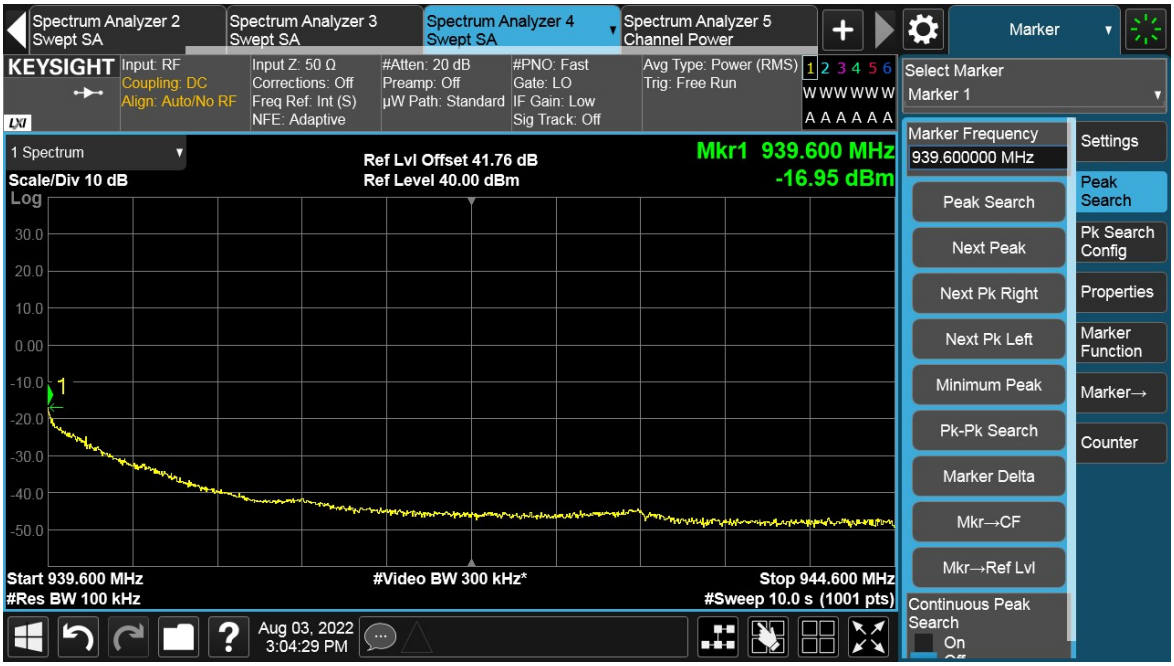

Spectrum Analyzer 1 Swept SA
Spectrum Analyzer 2 Swept SA
Spectrum Analyzer 3 Swept SA
Spectrum Analyzer 4 Swept SA
Marker
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto/No RF
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
#PNO: Fast
Gate: LO
IF Gain: Low
Sig Track: Off
Avg Type: Power (RMS)
Trig: Free Run
Select Marker
Marker 1
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 41.76 dB
Ref Level 40.00 dBm
Mkr1 936.400 MHz
-16.82 dBm
Log
30.0
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
Start 931.400 MHz
#Res BW 100 kHz
#Video BW 300 kHz*
Stop 936.400 MHz
#Sweep 10.0 s (1001 pts)
Aug 03, 2022
2:51:46 PM
Marker Frequency
936.400000 MHz
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Minimum Peak
Pk-Pk Search
Marker Delta
Mkr→CF
Mkr→Ref Lvl
Continuous Peak Search
On
Settings
Peak Search
Pk Search Config
Properties
Marker Function
Marker→
Counter


Spectrum Analyzer 2 Swept SA
Spectrum Analyzer 3 Swept SA
Spectrum Analyzer 4 Swept SA
Spectrum Analyzer 5 Channel Power
Amplitude
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto/No RF
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
Atten: 20 dB
Preamp: Off
µW Path: Standard
#PNO: Fast
Trig: Free Run
Gate: LO
#IF Gain: Low
Center Freq: 936.350000 MHz
Avg|Hold: 1/1
Radio Std: None
1 Graph
Scale/Div 10.0 dB
Ref Lvl Offset 41.66 dB
Ref Value 20.00 dBm
Log
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 936.3500 MHz
#Res BW 1.0000 kHz
#Video BW 3.0000 kHz*
Span 200 kHz
#Sweep 1.00 s (1001 pts)
2 Metrics
Total Channel Power
-21.43 dBm / 100 kHz
Total Power Spectral Density
-71.43 dBm/Hz
Aug 03, 2022
2:55:47 PM
Ref Value
20.00 dBm
Scale/Div
10.0 dB
Y Axis Unit
dBm
Ref Level Offset
41.66 dB
On
Off
Ref Position
Top
Auto Scaling
On
Off
Y Scale
Attenuation
Signal Path

TEST REPORT

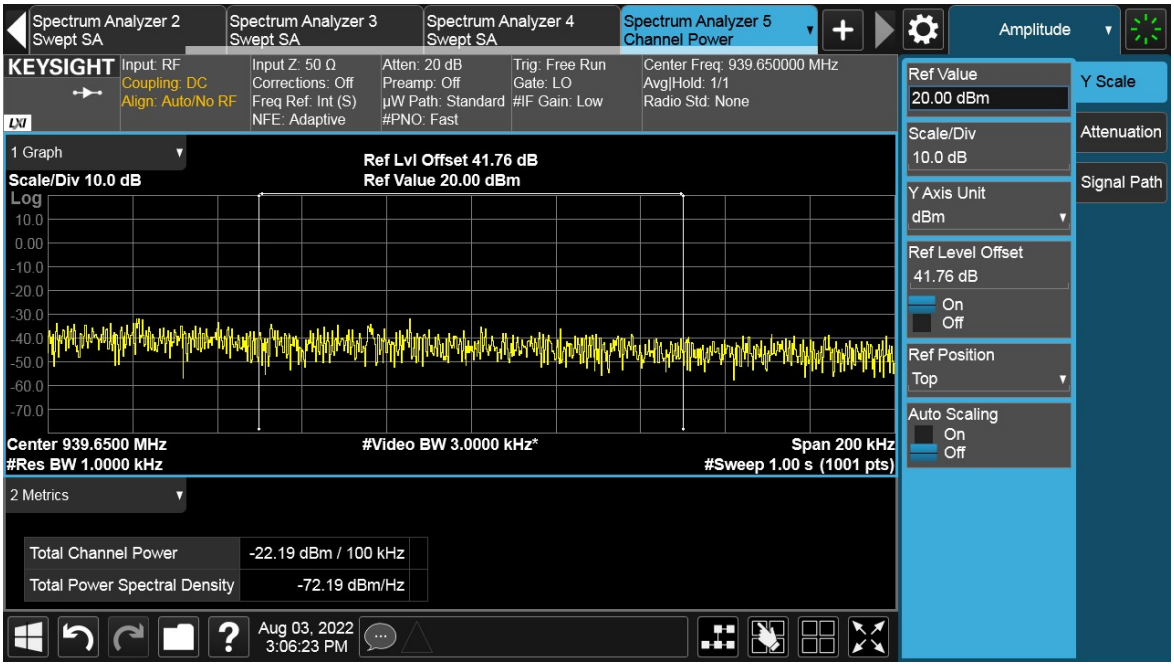
Channel Position T





Total Quality. Assured.

TEST REPORT



6 Conducted Unwanted Emission

Test result: **Pass**

6.1 Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 50 + 10log(P) dB.

6.2 Measurement Procedure

In accordance with FCC rules, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 50 + 10 log(P) dB.

The spurious emissions from the antenna terminal were measured. The transmitter output power was attenuated using an attenuator and the frequency spectrum investigated from 9kHz to 10GHz. The resolution bandwidth of 1MHz was employed for frequency band 9kHz to 10GHz. The spectrum analyzer detector was set to RMS.

For MIMO mode configurations, the limit was adjusted with a correction of -6.02dB [10Log(1/4)][1] by using the Measure and Add 10Log(N) dB technique according to KDB 662911 D01 Multiple Transmitter Output accounting for simultaneous transmission from antenna ports . Then the limit was adjusted to -26.02dBm.

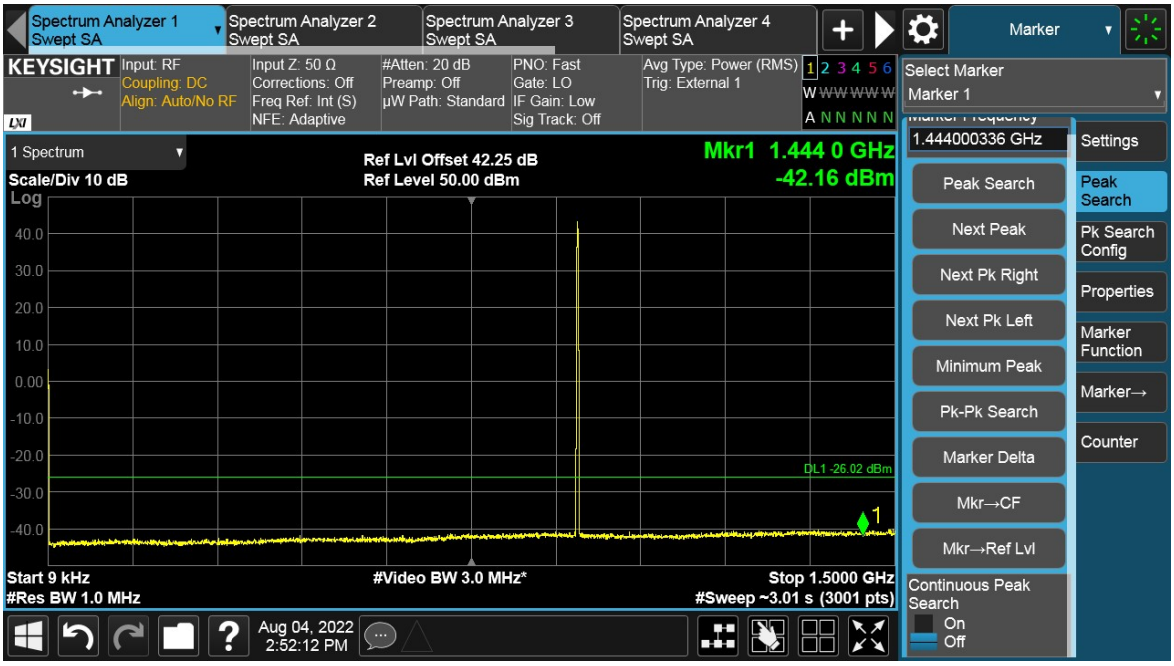
Note: For MIMO mode, -6.02dB [10Log(1/4)] is used as correction by manufactory’s requirement.

6.3 Measurement result

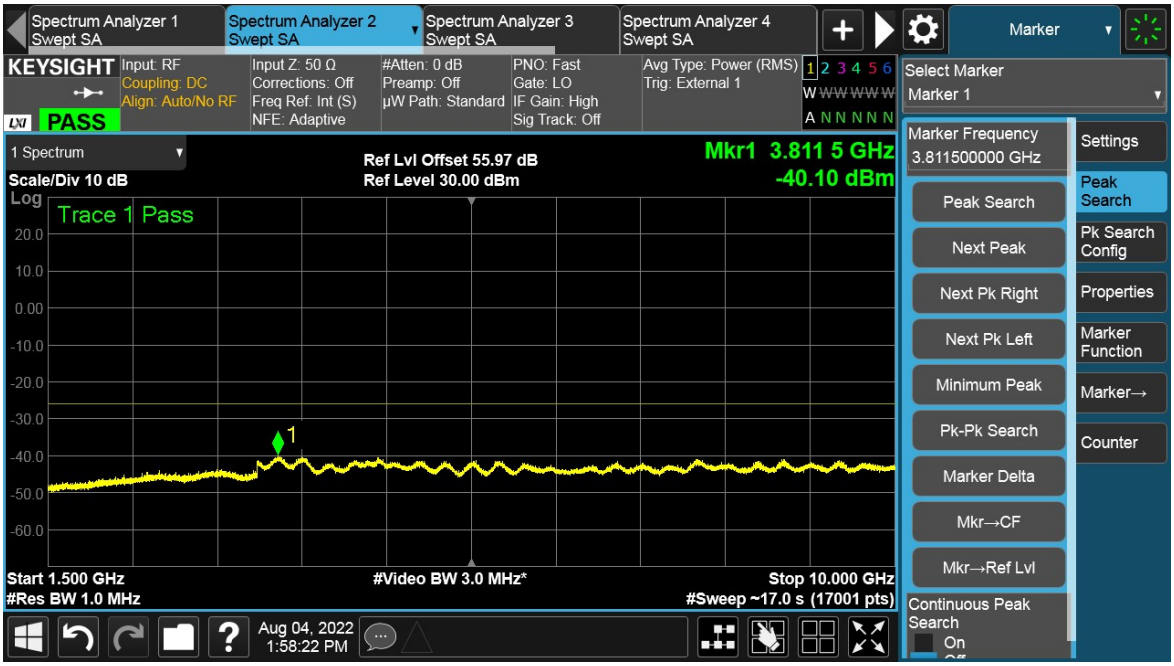
LTE-1C 20W with Filter Unit

Antenna Port	Channel Position	Modulation	Channel Bandwidth (MHz)	RBW (kHz)	Limit (dBm)
B	M	64QAM	1.4	1000	-26.02

Channel Position M



TEST REPORT



LTE-1C 60W with Filter Unit

Antenna Port	Channel Position	Modulation	Channel Bandwidth (MHz)	RBW (kHz)	Limit (dBm)
B	M	64QAM	3	1000	-26.02

Channel Position M