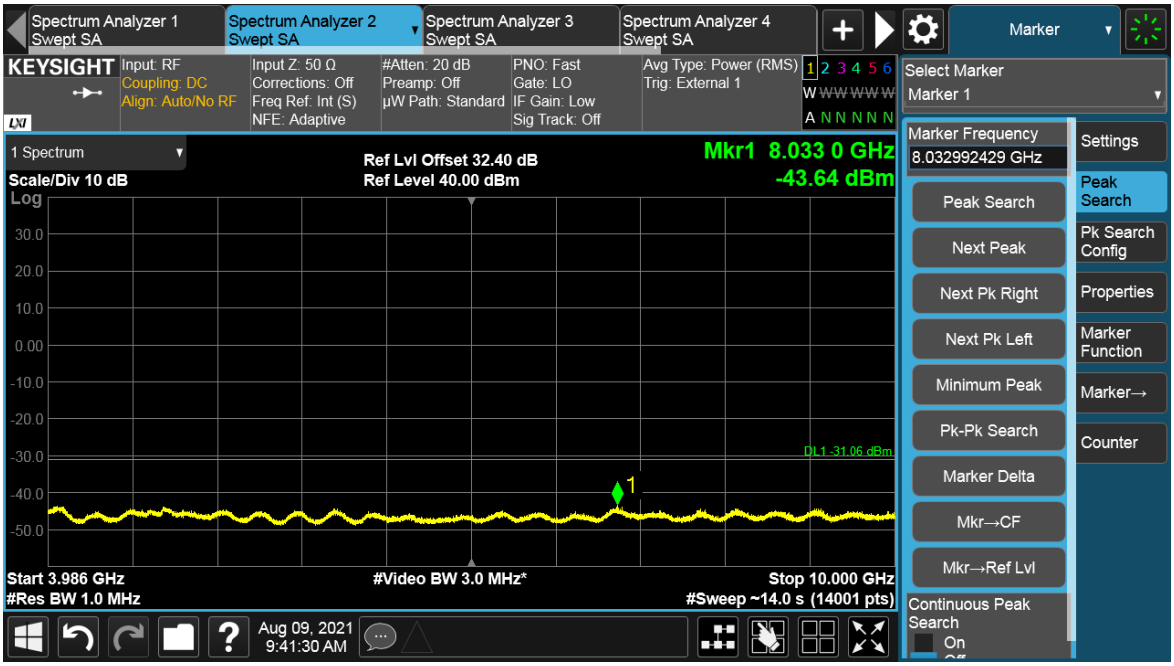
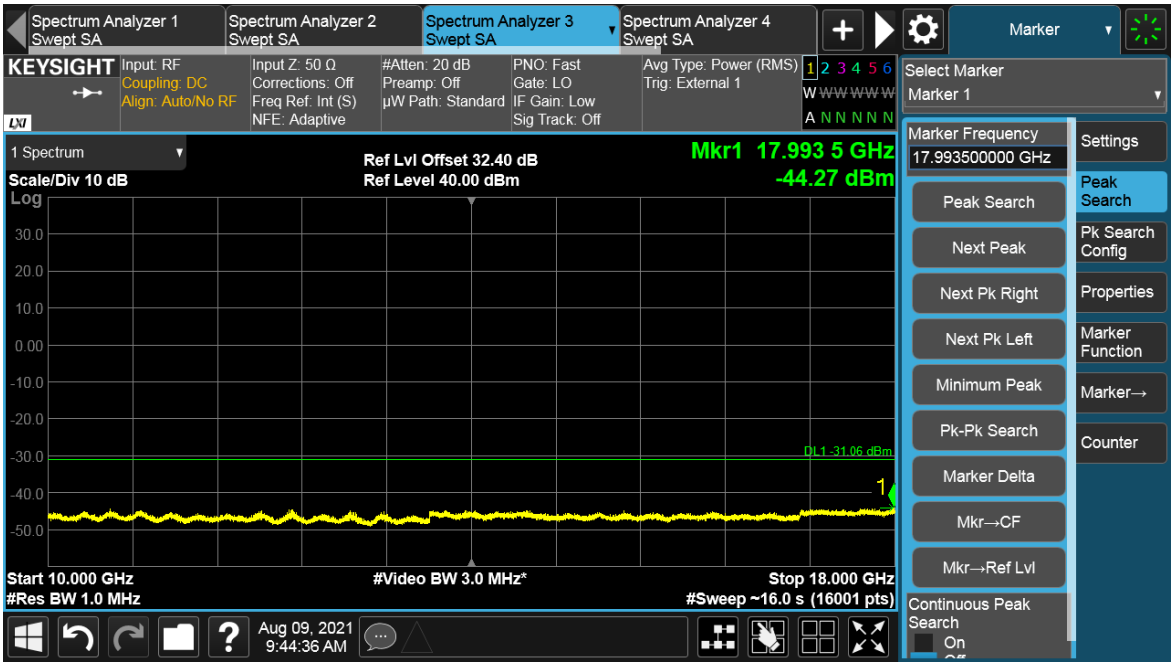
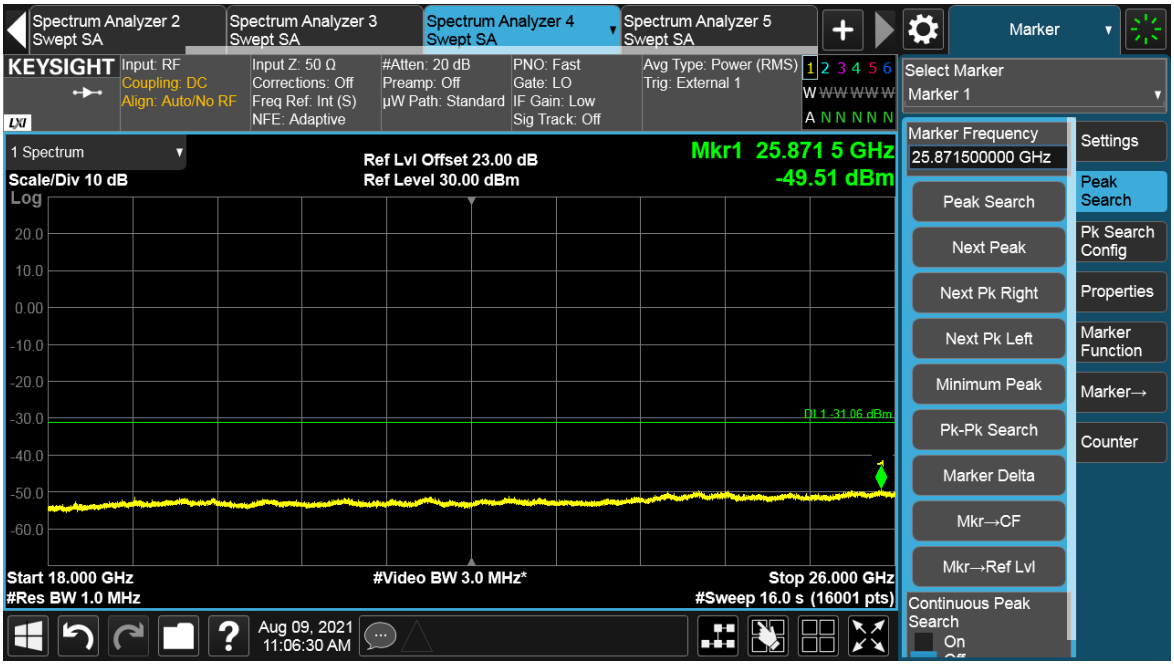
TEST REPORT

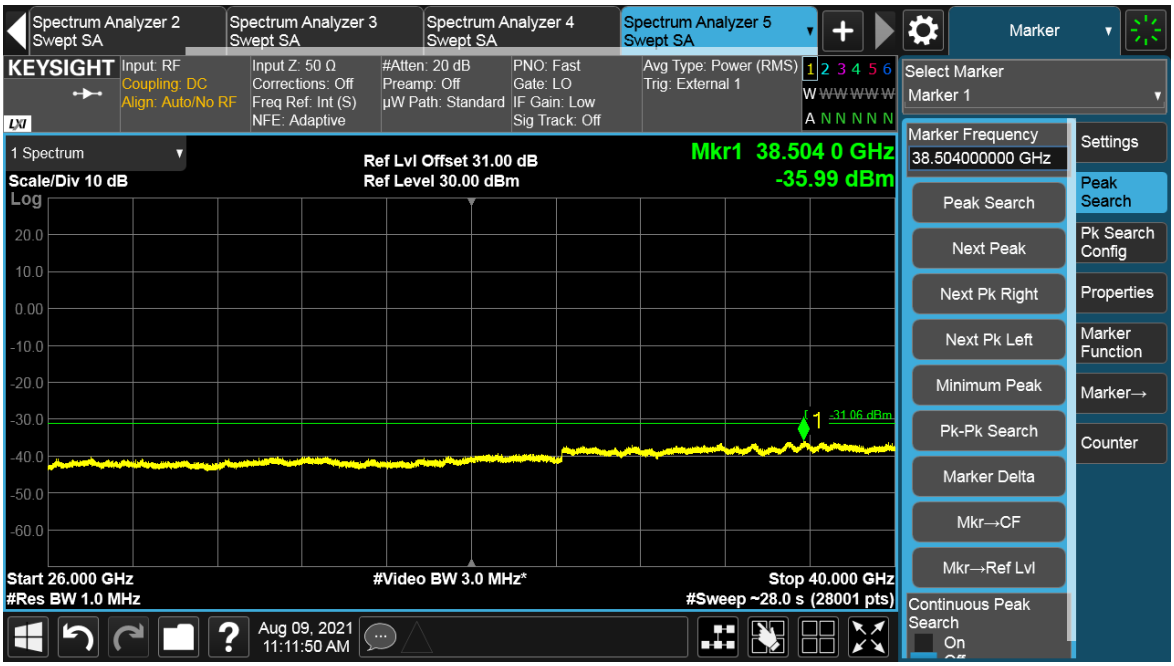

Spectrum Analyzer 1 Swept SA
Spectrum Analyzer 2 Swept SA
Spectrum Analyzer 3 Swept SA
Spectrum Analyzer 4 Swept SA
Marker
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto/No RF
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: LO
IF Gain: Low
Sig Track: Off
Avg Type: Power (RMS)
Trig: External 1
Select Marker
Marker 1
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 32.40 dB
Ref Level 40.00 dBm
Mkr1 8.033 0 GHz
-43.64 dBm
DL1 -31.06 dBm
Start 3.986 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz*
Stop 10.000 GHz
#Sweep ~14.0 s (14001 pts)
Marker Frequency
8.032992429 GHz
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
Aug 09, 2021
9:41:30 AM


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: External 1
Select Marker
Marker 1
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 32.40 dB
Ref Level 40.00 dBm
Mkr1 17.993 5 GHz
-44.27 dBm
DL1 -31.06 dBm
Start 10.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz*
Stop 18.000 GHz
#Sweep ~16.0 s (16001 pts)
Marker Frequency
17.993500000 GHz
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
Aug 09, 2021
9:44:36 AM

Total Quality. Assured.

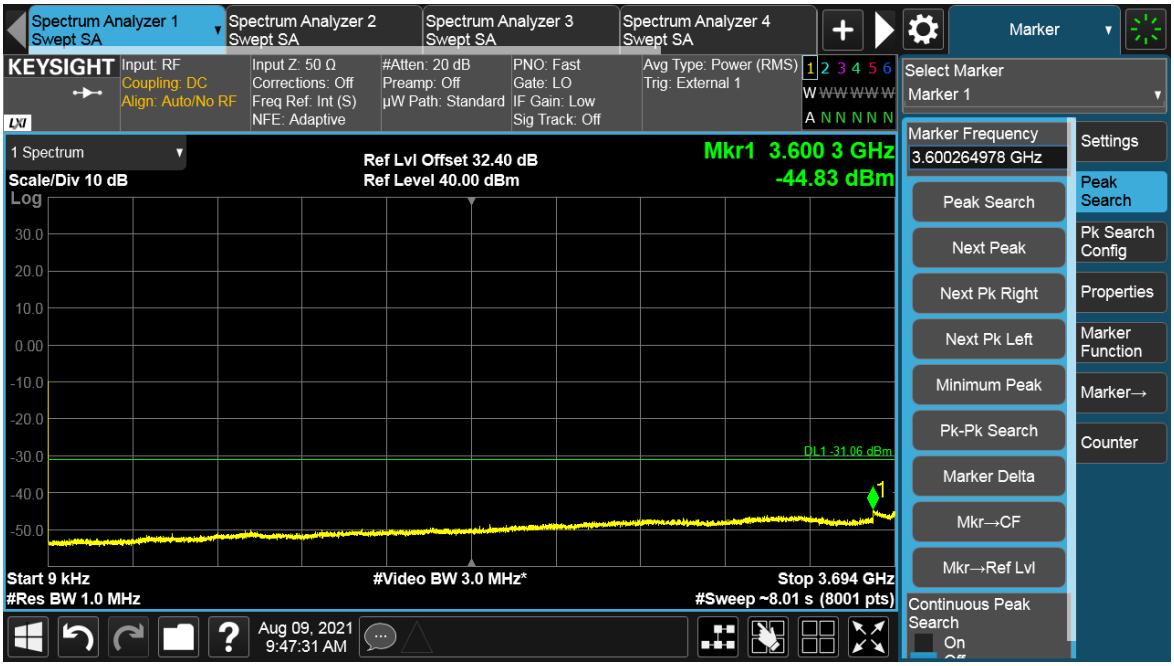
TEST REPORT

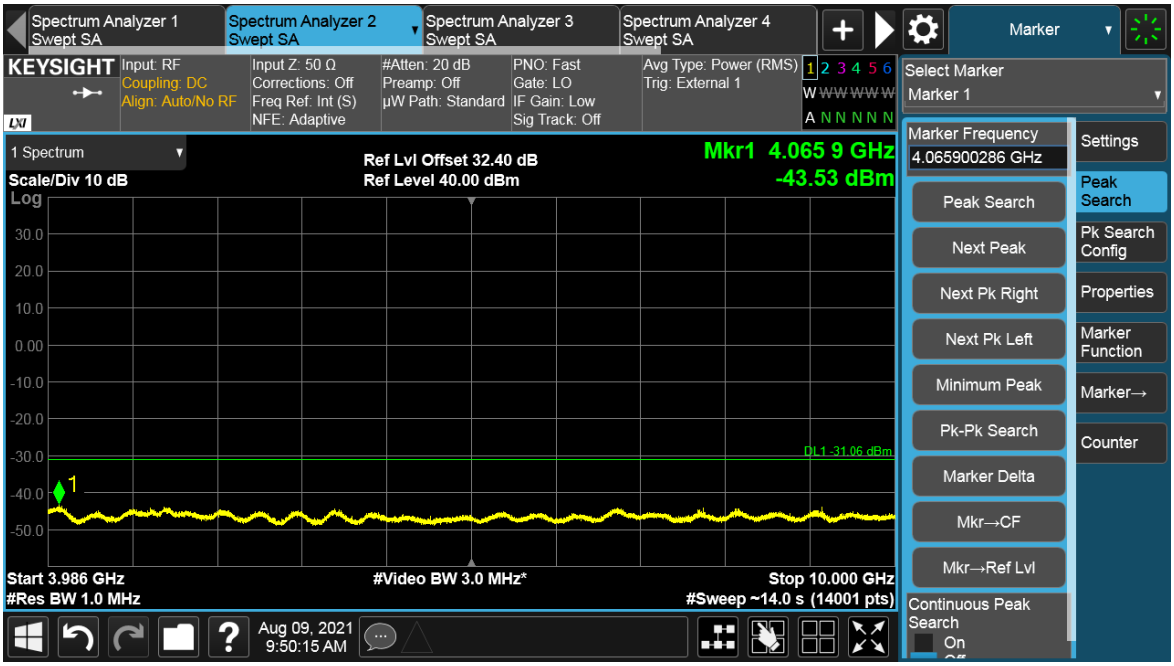




TEST REPORT

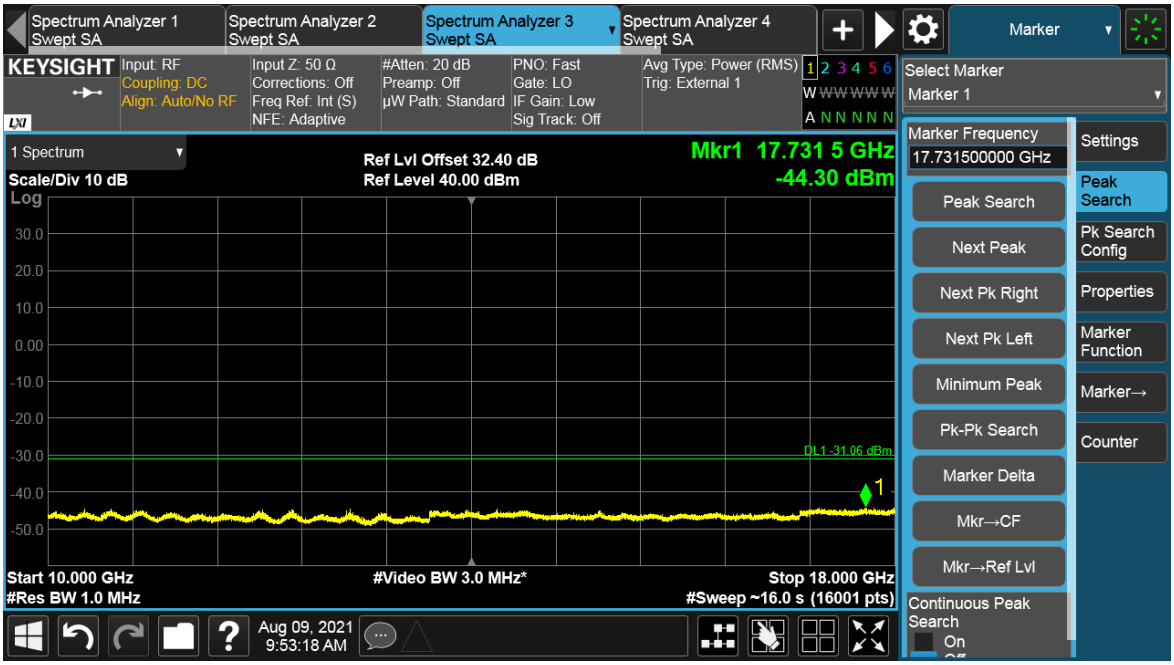
Channel Position T

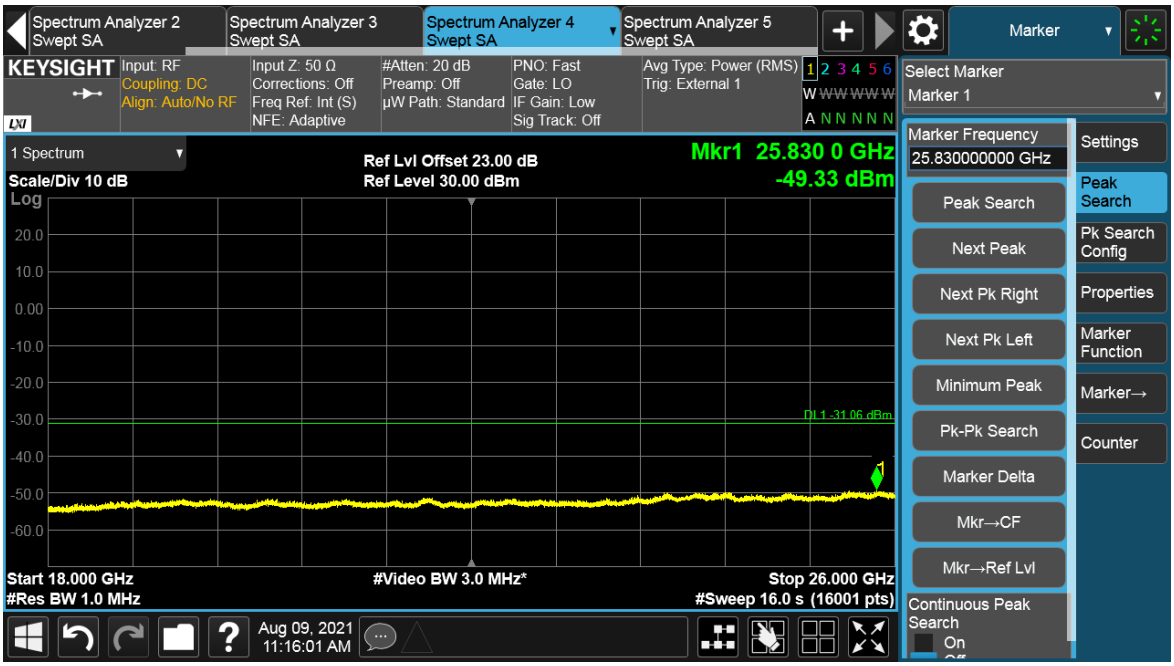




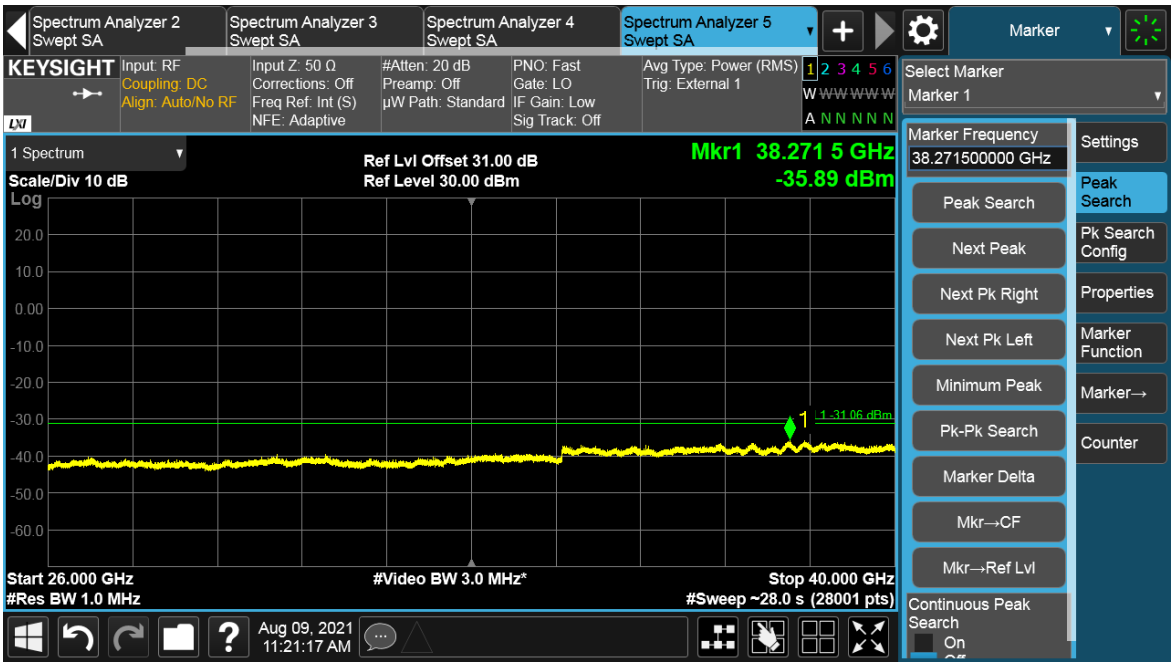
Total Quality. Assured.

TEST REPORT





TEST REPORT


Spectrum Analyzer 2
Swept SA
Spectrum Analyzer 3
Swept SA
Spectrum Analyzer 4
Swept SA
Spectrum Analyzer 5
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: External 1
Select Marker
Marker 1
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 31.00 dB
Ref Level 30.00 dBm
Mkr1 38.271 5 GHz
-35.89 dBm
Log
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
1 -31.06 dBm
Start 26.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz*
Stop 40.000 GHz
#Sweep ~28.0 s (28001 pts)
Marker Frequency
38.271500000 GHz
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
Aug 09, 2021
11:21:17 AM

7 Radiated Unwanted Emission

Test result: **NA**

7.1 Limit

The field strength of the carrier has been calculated assuming that the power is to be fed to a half-wave tuned dipoles as per 2.1053 (a).

$E(V/m) = (30 \times Gi \times Po)^{0.5} / d$

Where

Gi is the antenna gain of ideal half-wave dipoles,
Po is the power out of the transceiver in W,
d is the measurement distance in meter.

As per FCC Part 27, 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 43 + 10log(P) dB.
Therefore, the limit at 3m measurement distance is:
E(V/m) = 84.4 dBµV/m
These limits have been used to determine Pass or Fail for the harmonics measured and detailed in the following results.

7.2 Measurement Procedure

This measurement is carried out in semi-anechoic chamber.
A preliminary profile of the Spurious Radiated Emissions was obtained by operating the EUT on a remotely controlled turntable within the chamber. Measurements of emissions from the EUT were obtained with the measurement antenna in both horizontal and vertical polarizations.
Emissions identified within the range 30MHz to 40GHz were then formally measured using a peak detector as the worst case.
The limits for outside a licensee's frequency band(s) of operation the power of the spurious emissions have been calculated, as shown below using the following formula:

Field Strength of Carrier - (43 + 10Log (P)) dB

Where:

Field Strength is measured in dBµV/m
P is measured Transmitter Power in Watts

The EUT was measured with the antenna height varied between 1 and 4 m with the turntable rotated between 0 and 360 degrees. The emission of any outside a licensee's frequencies within 20dB of the limit were measured with the substitution method used according to the standard.
The measurements were performed at a 3m distance unless otherwise stated.

7.3 Measurement result

8 Frequency Stability

Test result: **NA**

8.1 Limit

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

8.2 Measurement Procedure

Temperature Variation
The EUT was tested over the temperature range -30°C to +50°C in 10°C steps with -48 VDC Power Supply. At each temperature step, the Base Station was configured to transmit at maximum power on the middle channel of the operating band.

Voltage Variation
The EUT was tested at the supplied voltages varied from 85 to 115 percent of the nominal values of -48 VDC. At +20°C, the Base Station was configured to transmit at maximum power on the middle channel of the frequency block.

8.3 Measurement result

********** END **********