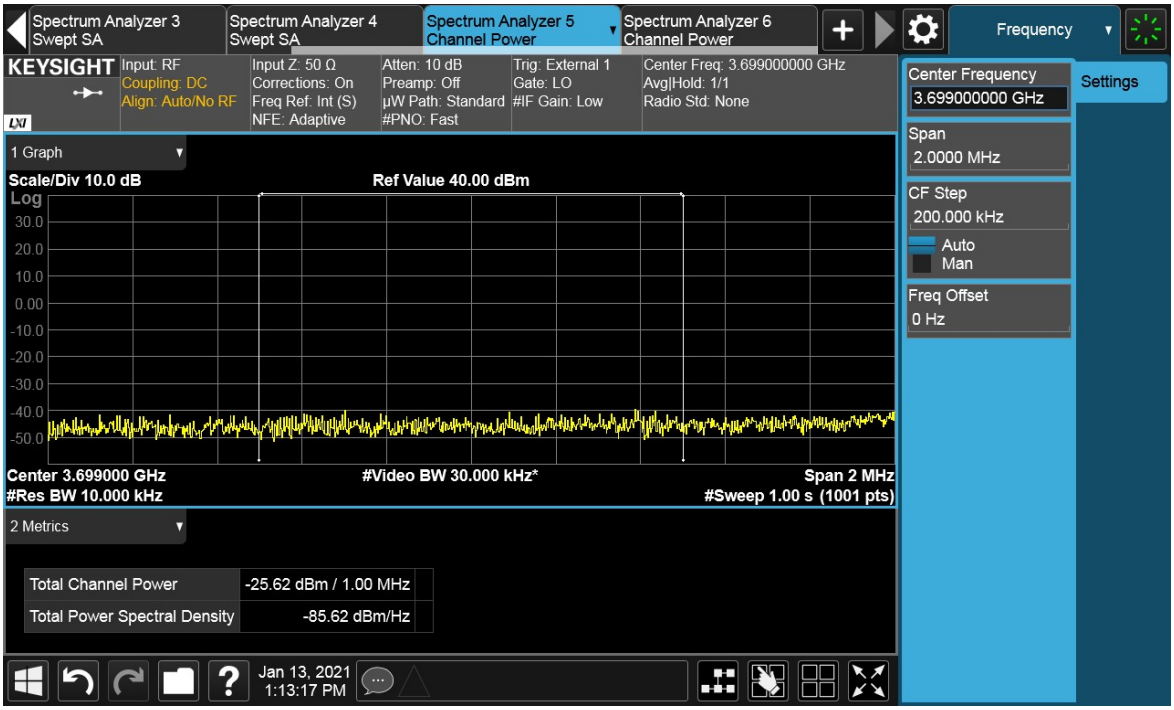
				1000	-22.03

Channel Position B

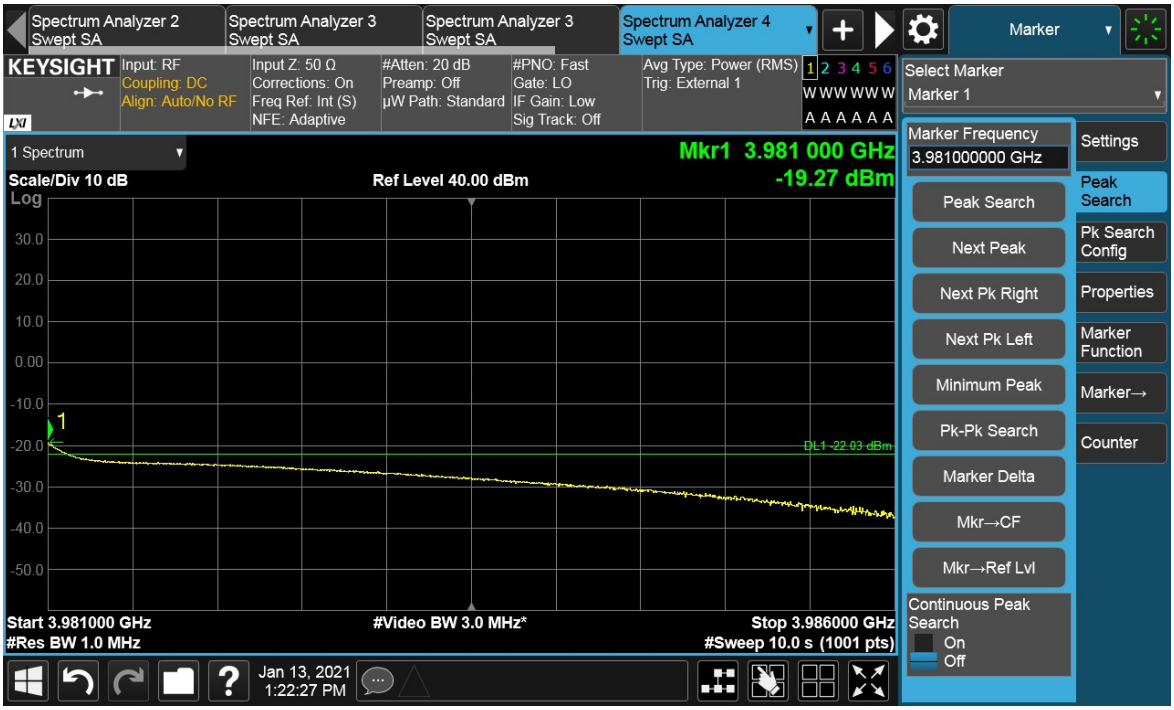
Total Quality. Assured.

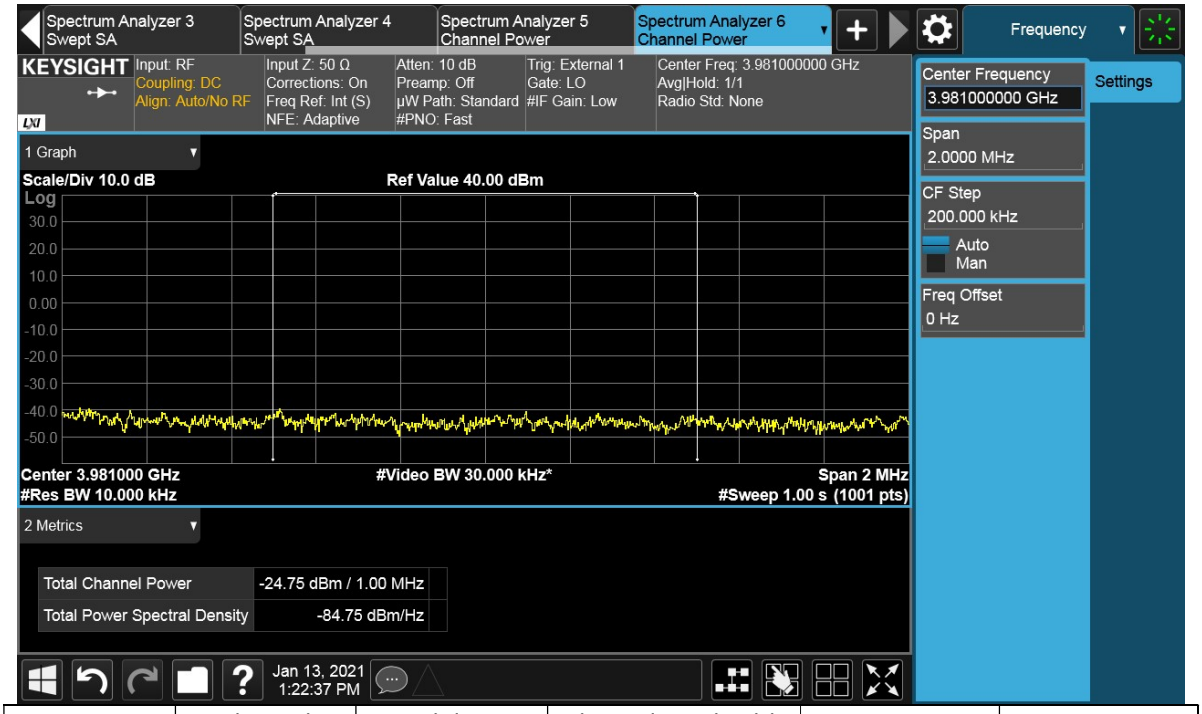
TEST REPORT



Channel Position T

TEST REPORT



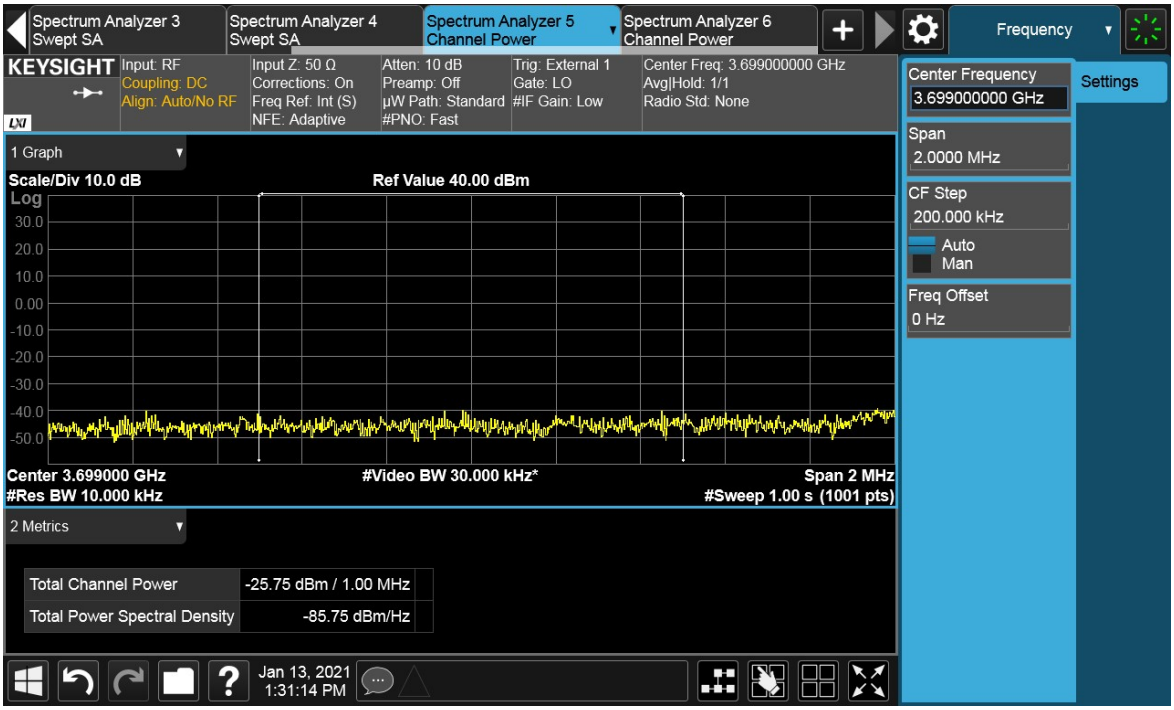


Antenna Port	Channel Position	Modulation	Channel Bandwidth (MHz)	RBW (kHz)	Limit (dBm)
E	B	16QAM	15	150	-22.03
				1000	-22.03
E	T	16QAM	15	150	-22.03
				1000	-22.03

TEST REPORT

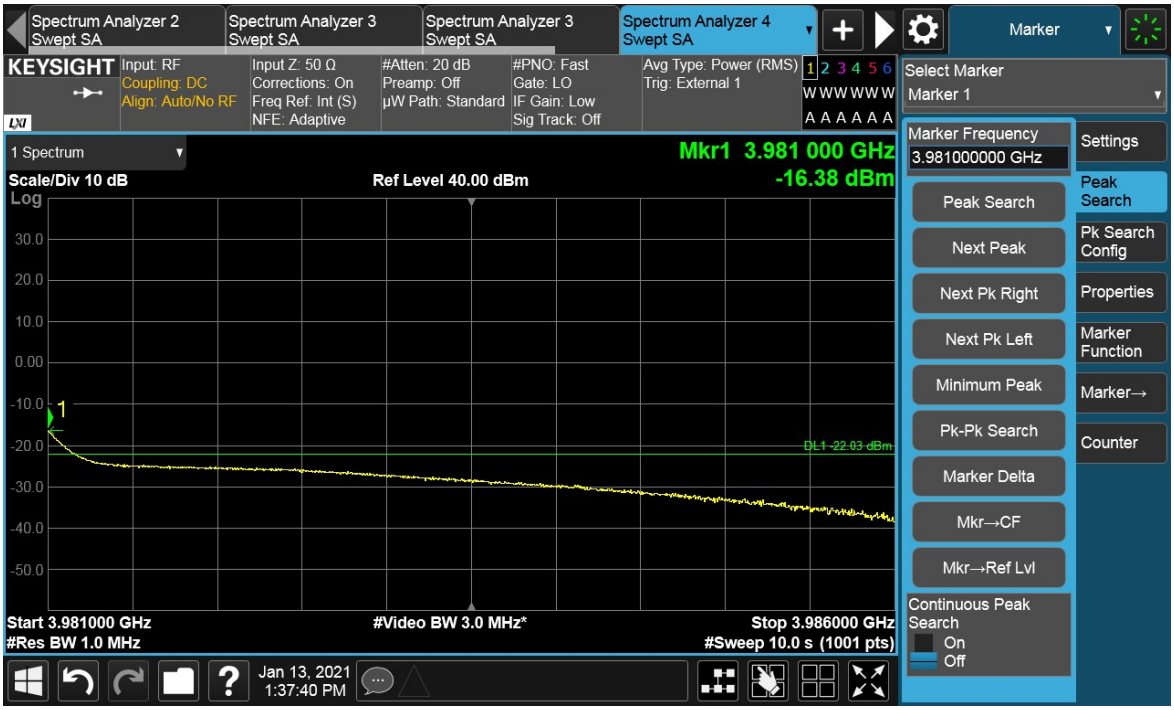
Channel Position B

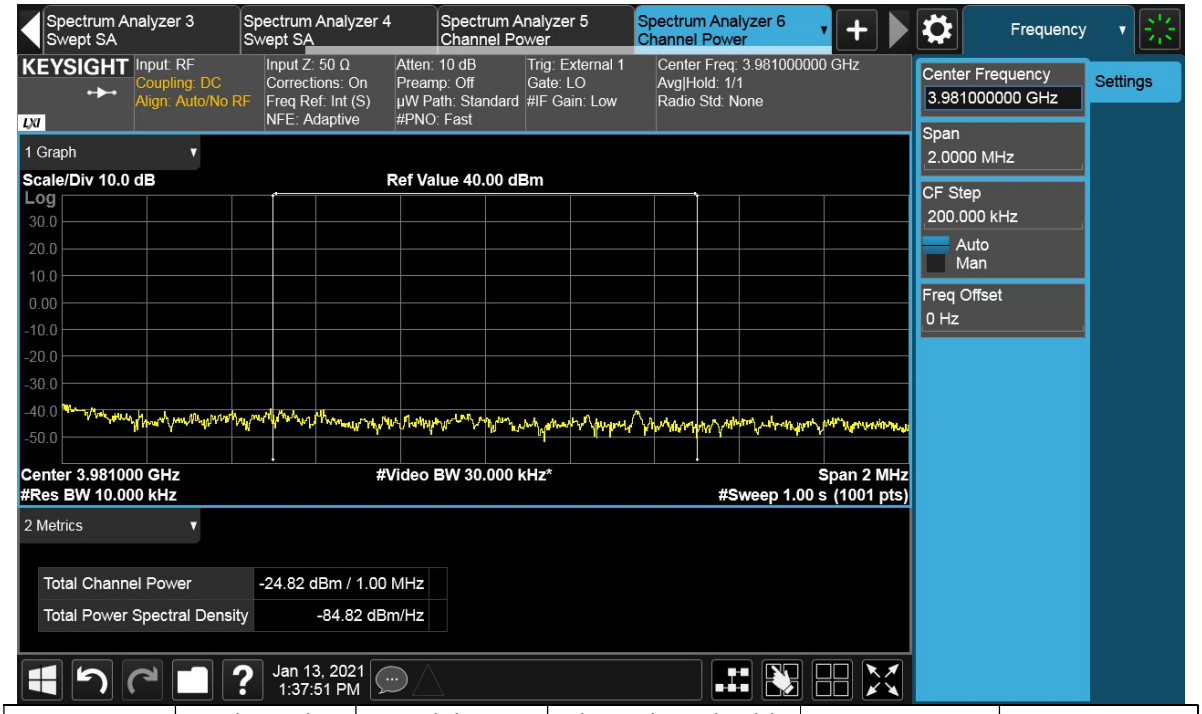
TEST REPORT



Channel Position T

TEST REPORT





Antenna Port	Channel Position	Modulation	Channel Bandwidth (MHz)	RBW (kHz)	Limit (dBm)
E	B	16QAM	50	510	-22.03
				1000	-22.03
E	T	16QAM	50	510	-22.03
				1000	-22.03

TEST REPORT

Channel Position B

TEST REPORT

Channel Position T

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 43 + 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 43 + 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 40GHz. The resolution bandwidth of 1MHz was employed for frequency band 9kHz to 40GHz. The spectrum analyzer detector was set to RMS.

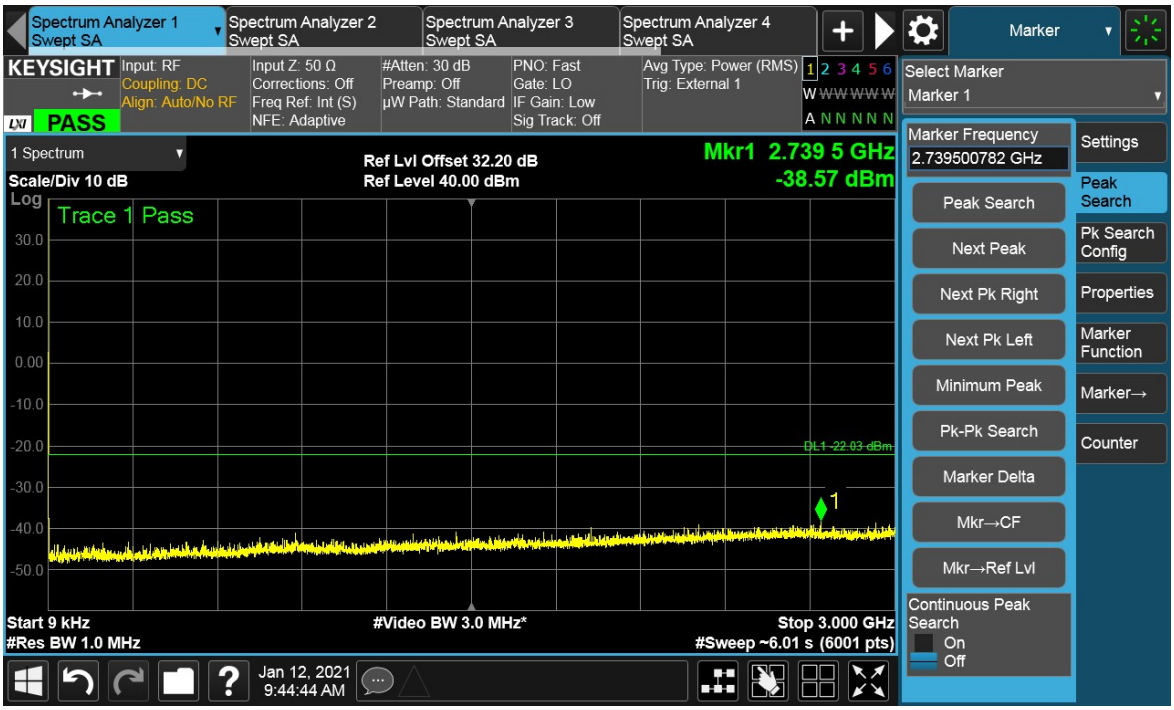
For MIMO mode configurations, the limit was adjusted with a correction of -9.03dB [10Log(1/8)] by using the Measure and Add 10Log(N) dB technique according to KDB 662911 D01 Multiple Transmitter Output accounting for simultaneous transmission from antenna ports. Then the limit was adjusted to -22.03dBm.

6.3 Measurement result

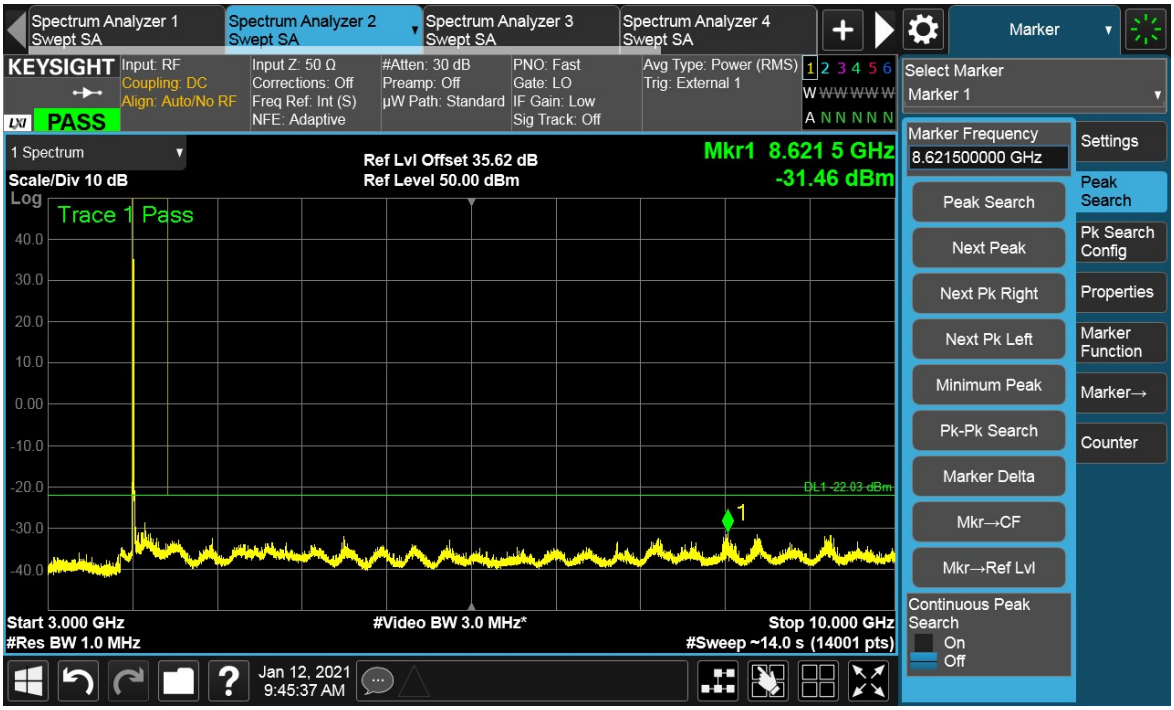
NR-MIMO-1C

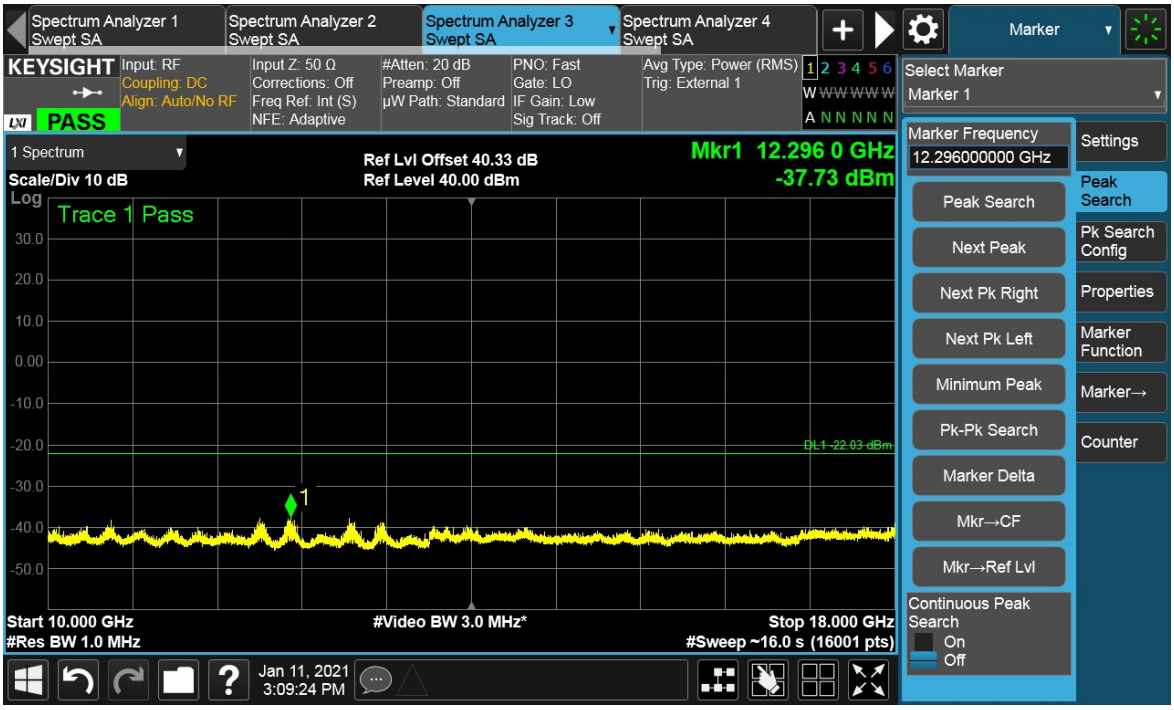
Antenna Port	Channel Position	Modulation	Channel Bandwidth (MHz)	RBW (kHz)	Limit (dBm)
E	B	16QAM	10	1000	-22.03
E	M	16QAM	10	1000	-22.03
E	T	16QAM	10	1000	-22.03

Channel Position B

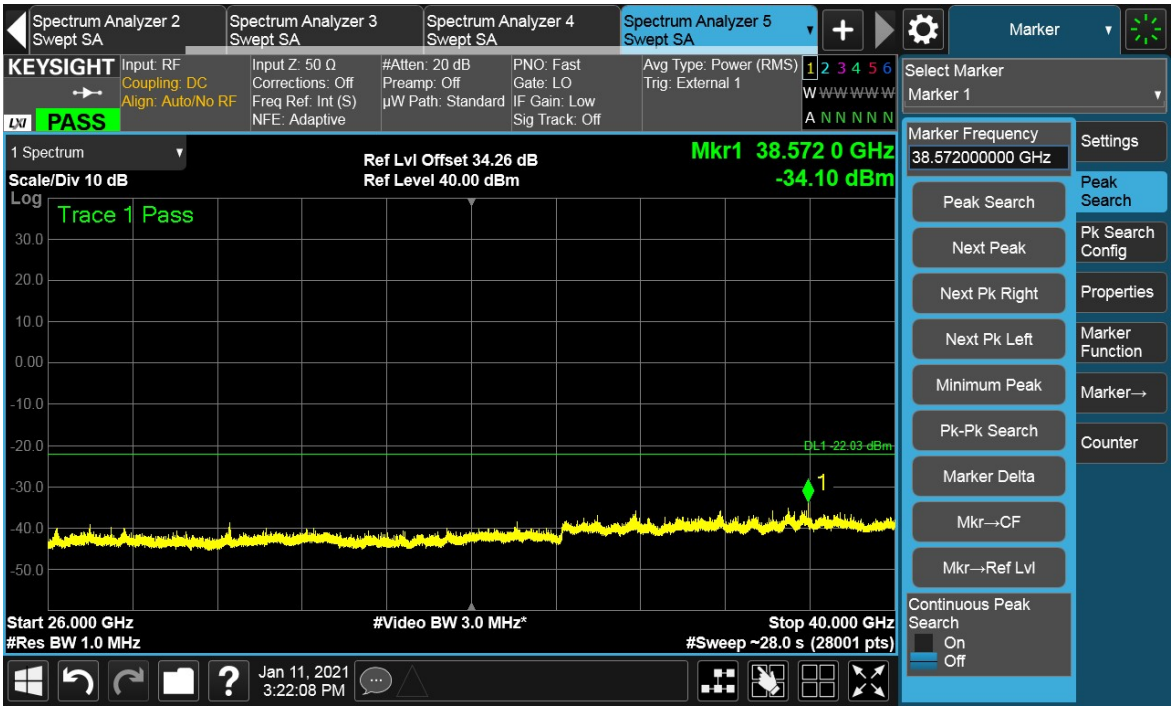


TEST REPORT

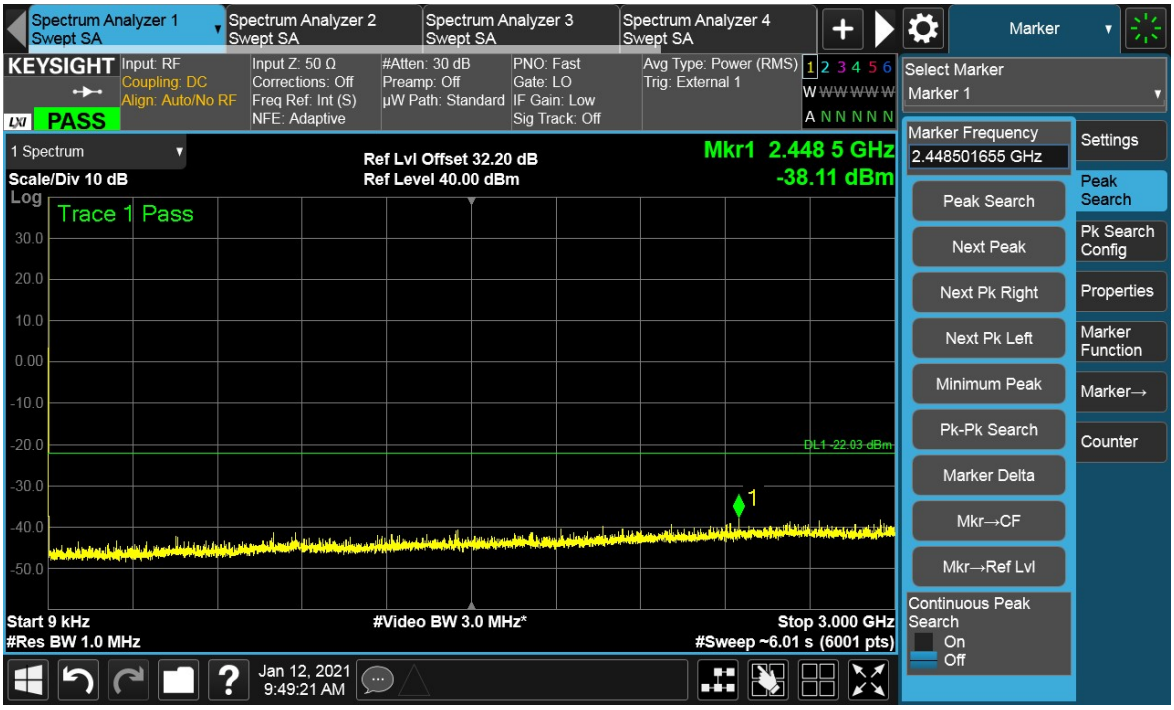

Spectrum Analyzer 1 Swept SA
Spectrum Analyzer 2 Swept SA
Spectrum Analyzer 3 Swept SA
Spectrum Analyzer 4 Swept SA
Marker
KEYSIGHT
PASS
Input: RF
Coupling: DC
Align: Auto/No RF
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 30 dB
Preamp: Off
μW Path: Standard
PNO: Fast
Gate: 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 35.62 dB
Ref Level 50.00 dBm
Mkr1 8.621 5 GHz
-31.46 dBm
Log
Trace 1 Pass
DL1 -22.03 dBm
Start 3.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz*
Stop 10.000 GHz
#Sweep ~14.0 s (14001 pts)
Marker Frequency
8.621500000 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
Off
Settings
Peak Search
Pk Search Config
Properties
Marker Function
Marker→
Counter
Jan 12, 2021
9:45:37 AM


Spectrum Analyzer 1 Swept SA
Spectrum Analyzer 2 Swept SA
Spectrum Analyzer 3 Swept SA
Spectrum Analyzer 4 Swept SA
Marker
KEYSIGHT
PASS
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 40.33 dB
Ref Level 40.00 dBm
Mkr1 12.296 0 GHz
-37.73 dBm
Log
Trace 1 Pass
DL1 -22.03 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
12.296000000 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
Off
Settings
Peak Search
Pk Search Config
Properties
Marker Function
Marker→
Counter
Jan 11, 2021
3:09:24 PM

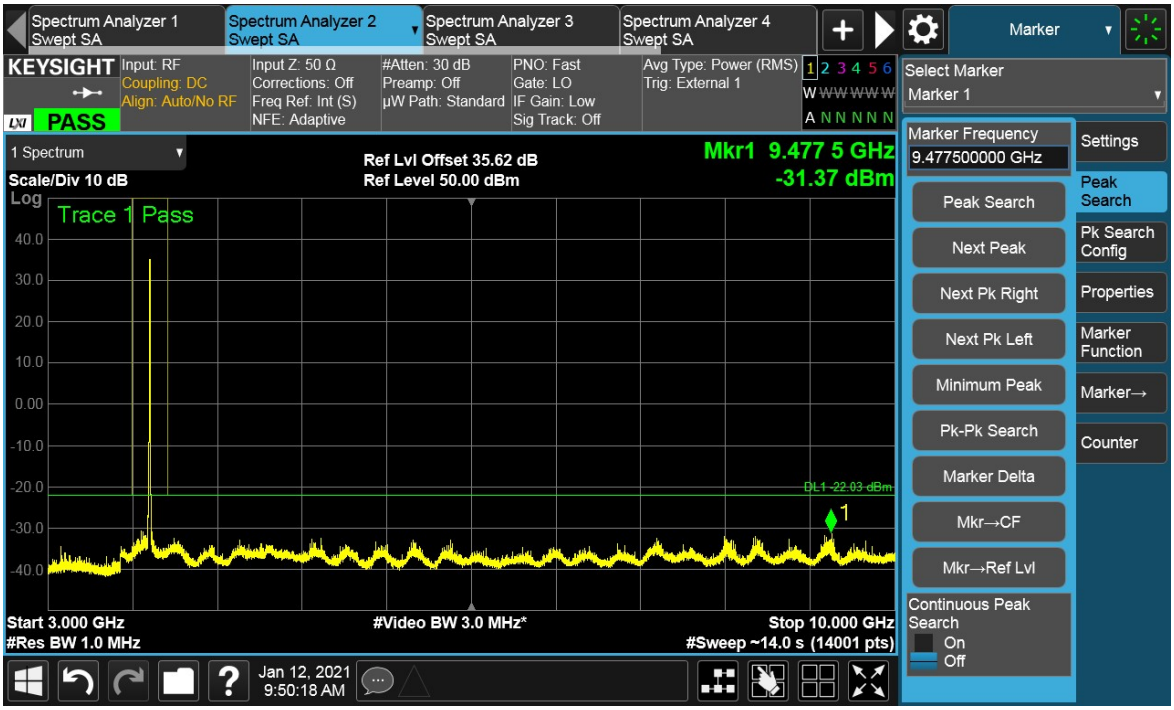
TEST REPORT

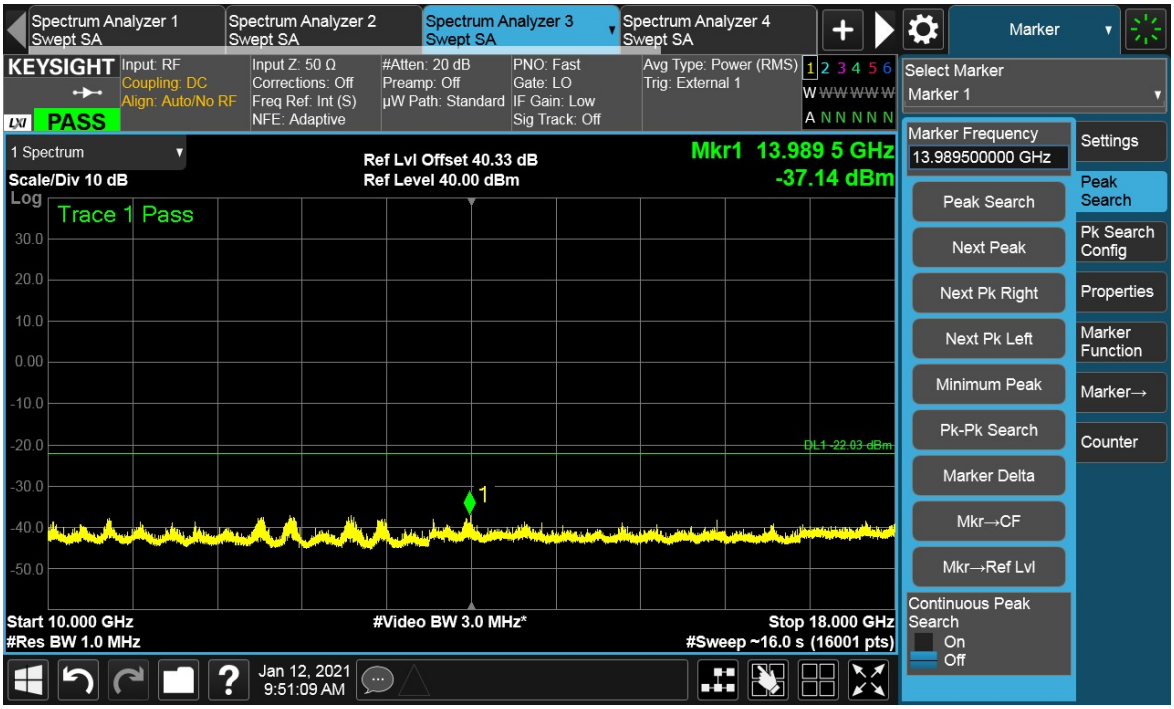


Channel Position M



TEST REPORT


Spectrum Analyzer 1 Swept SA
Spectrum Analyzer 2 Swept SA
Spectrum Analyzer 3 Swept SA
Spectrum Analyzer 4 Swept SA
Marker
KEYSIGHT
PASS
Input: RF
Coupling: DC
Align: Auto/No RF
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 30 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 35.62 dB
Ref Level 50.00 dBm
Mkr1 9.477 5 GHz
-31.37 dBm
Log
Trace 1 Pass
DL1 -22.03 dBm
Start 3.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz*
Stop 10.000 GHz
#Sweep ~14.0 s (14001 pts)
Marker Frequency
9.477500000 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
Off
Settings
Peak Search
Pk Search Config
Properties
Marker Function
Marker→
Counter
Jan 12, 2021
9:50:18 AM


Spectrum Analyzer 1 Swept SA
Spectrum Analyzer 2 Swept SA
Spectrum Analyzer 3 Swept SA
Spectrum Analyzer 4 Swept SA
Marker
KEYSIGHT
PASS
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 40.33 dB
Ref Level 40.00 dBm
Mkr1 13.989 5 GHz
-37.14 dBm
Log
Trace 1 Pass
DL1 -22.03 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
13.989500000 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
Off
Settings
Peak Search
Pk Search Config
Properties
Marker Function
Marker→
Counter
Jan 12, 2021
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