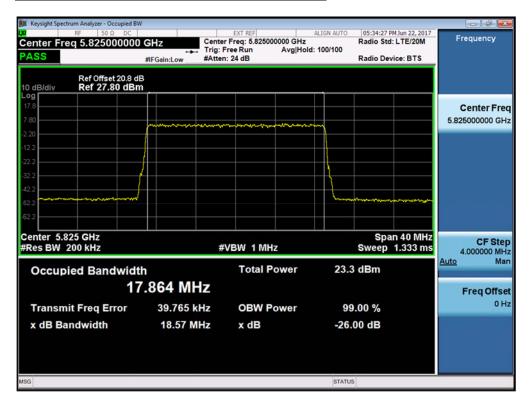


### Channel Position M - 256QAM / Bandwidth 20.0 MHz

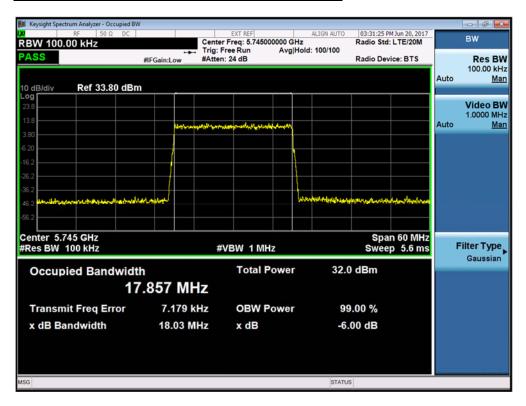


### Channel Position T - 256QAM / Bandwidth 20.0 MHz

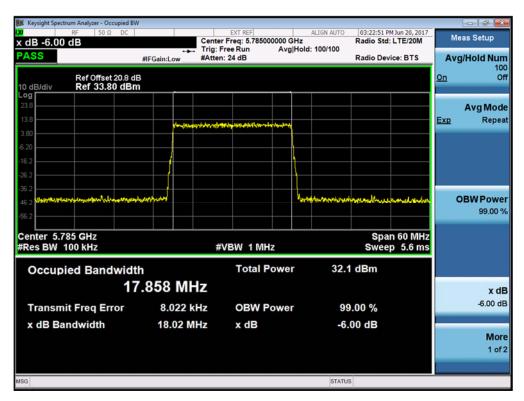




### Channel Position B - QPSK / -6dB Bandwidth 20.0 MHz

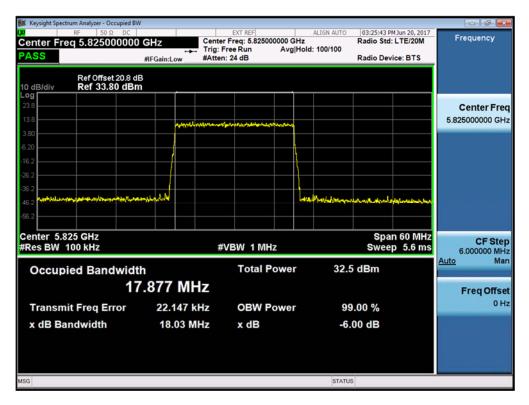


### Channel Position M - QPSK / -6dB Bandwidth 20.0 MHz

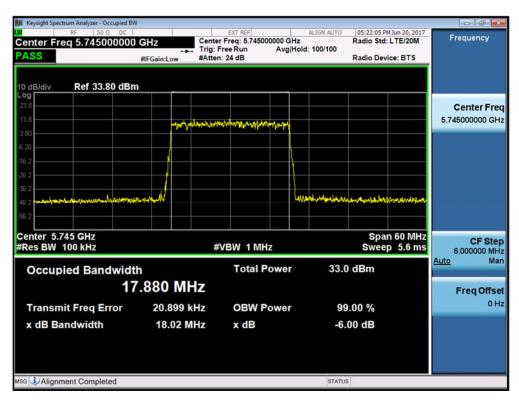




### Channel Position T - QPSK / -6dB Bandwidth 20.0 MHz

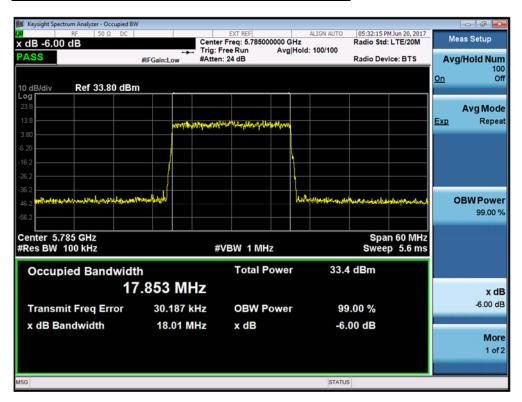


### Channel Position B - 16QAM / -6dB Bandwidth 20.0 MHz

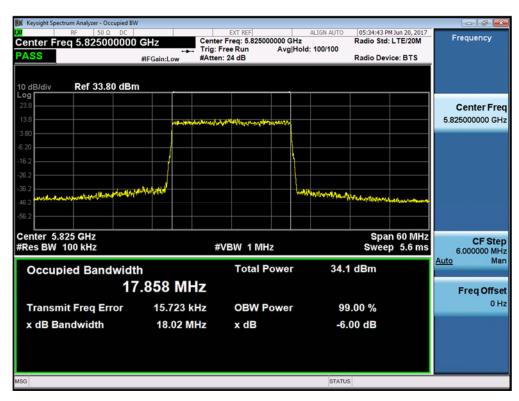




### Channel Position M - 16QAM / -6dB Bandwidth 20.0 MHz

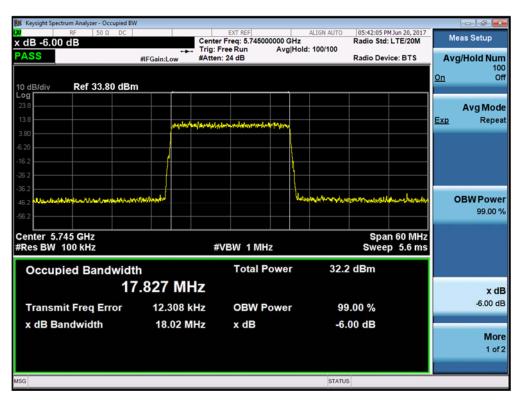


### Channel Position T - 16QAM / -6dB Bandwidth 20.0 MHz

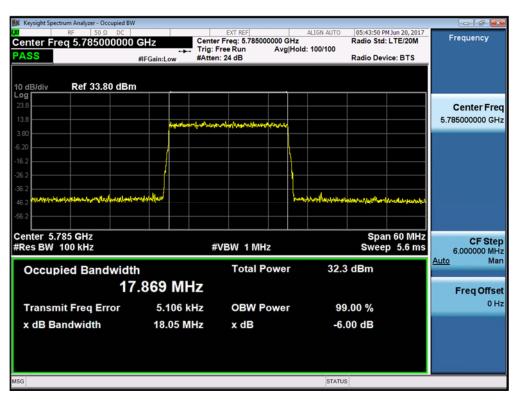




### Channel Position B - 64QAM / -6dB Bandwidth 20.0 MHz

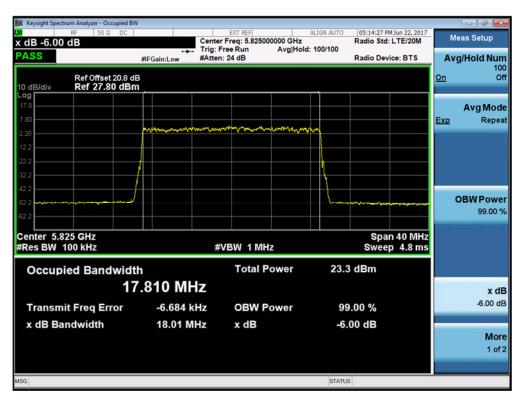


### Channel Position M - 64QAM / -6dB Bandwidth 20.0 MHz

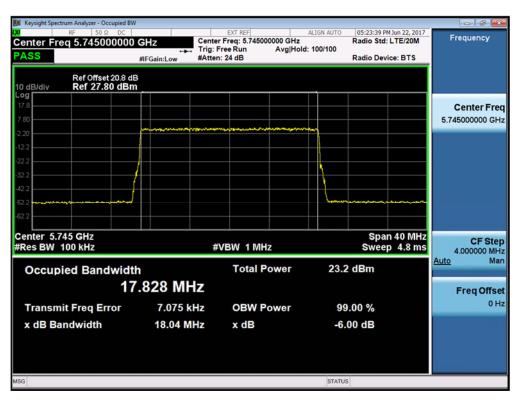




### Channel Position T - 64QAM / -6dB Bandwidth 20.0 MHz

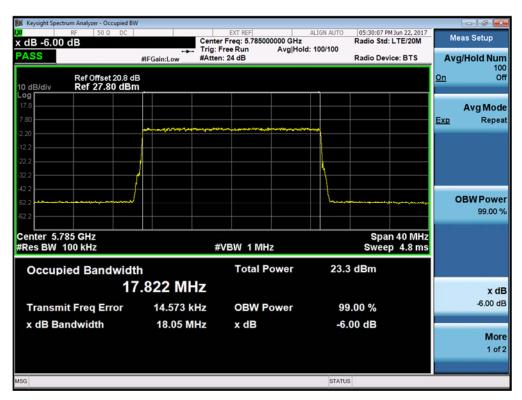


### Channel Position B - 256QAM / -6dB Bandwidth 20.0 MHz

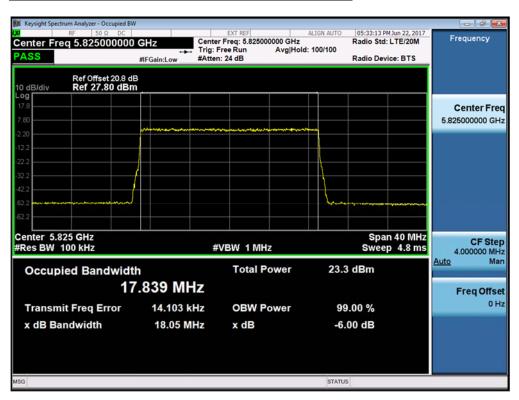




### Channel Position M - 256QAM / -6dB Bandwidth 20.0 MHz



### Channel Position T - 256QAM / -6dB Bandwidth 20.0 MHz





Limit	Within the 5.725–5.85 GHz band, the minimum 6 dB bandwidth of U–NII devices shall be at least 500 kHz.

# Remarks

The minimum 6 dB bandwidth was greater than 500 kHz.



#### 2.4 UNDESIRABLE EMISSION – CONDUCTED

#### 2.4.1 Specification Reference

FCC CFR 47 Part 2, Clause 2.1051 FCC CFR 47 Part 15, Clause 15.407 (b) FCC CFR 47 Part 15, Clause 15.209

#### 2.4.2 Equipment Under Test

Radio 2205 B46, KRC 161 609/1, S/N: D825784303

#### 2.4.3 Date of Test and Modification State

27 and 29 June 2017 - Modification State 0

#### 2.4.4 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 4.1.

#### 2.4.5 Environmental Conditions

Ambient Temperature 23.5 - 54.0°C Relative Humidity 22.0 - 57.0%

#### 2.4.6 Test Method

The test was applied in accordance with the test method requirements of FCC CFR 47 Part 15, clause 15.407 (b) and clause 15.209.

In accordance with FCC CFR 47 Part 15, Clause 15.407 (b), the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725–5.85 GHz band:
- (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
- (6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209.

The spurious emissions from the antenna terminal were measured. The transmitter output power was attenuated using an attenuator and the frequency spectrum investigated from 1MHz to 40GHz. The resolution bandwidth of 1MHz was employed for frequency band 1MHz to 40GHz. The spectrum analyzer was set to peak detection and max hold mode.

For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log2] by using the Measure and Add 10Log(N) dB technique according to FCC KDB 662911 D01



Multiple Transmitter Output v02r01 accounting for simultaneous transmission from antenna ports RF A and RF B.

The measurements were performed on the output connector RF A. Limited complementary measurement were done at output conector RF B to verify identical performance for both transmitter chains in MIMO mode.

The maximum path loss across the measurement band was used as the reference level offset to ensure worst case.

The worst results are shown in the plots below.



## 2.4.7 Test Results

# Configuration A1

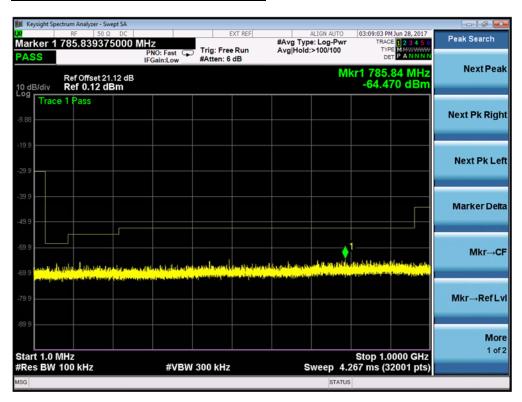
L-MIMO-SC

Maximum Output Power 20.5dBm per port

Channel Position	Bandwidth	Channel Frequency
Channel Position B	20.0MHz	5180.0MHz
Channel Position M	20.0MHz	5220.0MHz
Channel Position T	20.0MHz	5240.0MHz



### Channel Position B - QPSK - 1MHz - 1GHz

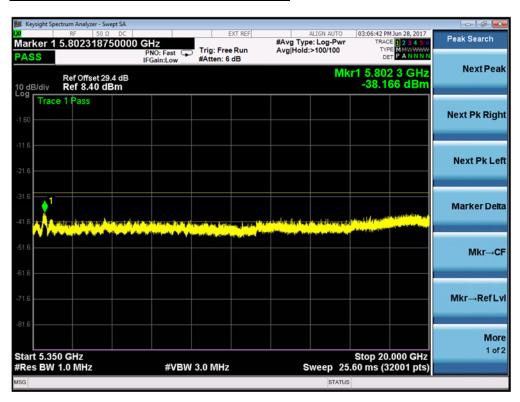


### Channel Position B - QPSK - 1GHz - 5.15GHz





### Channel Position B - QPSK - 5.35GHz - 20GHz



### Channel Position B - QPSK - 20GHz - 40GHz





### Channel Position M - QPSK - 1MHz - 1GHz

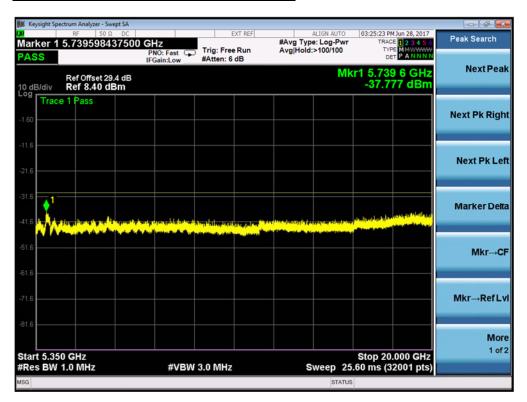


### Channel Position M - QPSK - 1GHz - 5.15GHz





### Channel Position M - QPSK - 5.35GHz - 20GHz



### Channel Position M - QPSK - 20GHz - 40GHz





## Channel Position T - QPSK - 1MHz - 1GHz

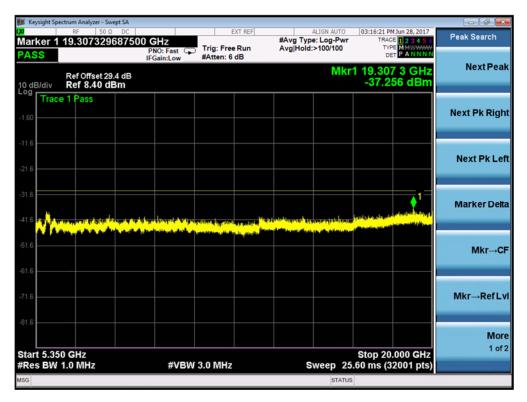


### Channel Position T - QPSK - 1GHz - 5.15GHz





## Channel Position T - QPSK - 5.35GHz - 20GHz



### Channel Position T - QPSK - 20GHz - 40GHz





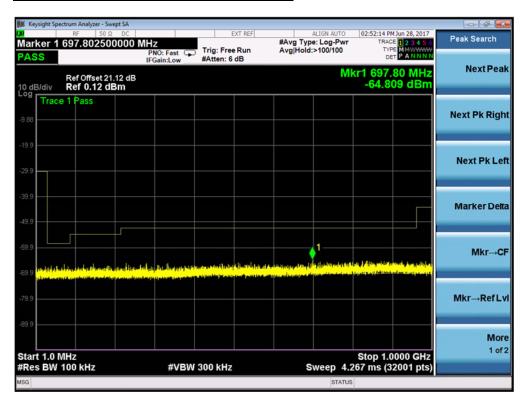
# L-MIMO-MC 1 (2C)

# Maximum Output Power 20.5dBm per port

Channel Position	Bandwidth	Channel Frequency
Channel Position B <sub>RFBW</sub>	20 MHz	5180.0MHz + 5220.0MHz
Channel Position M <sub>RFBW</sub>	20 MHz	-
Channel Position T <sub>RFBW</sub>	20 MHz	5200.0MHz + 5240.0MHz



### Channel Position B<sub>RFBW</sub> - QPSK - 1MHz - 1GHz

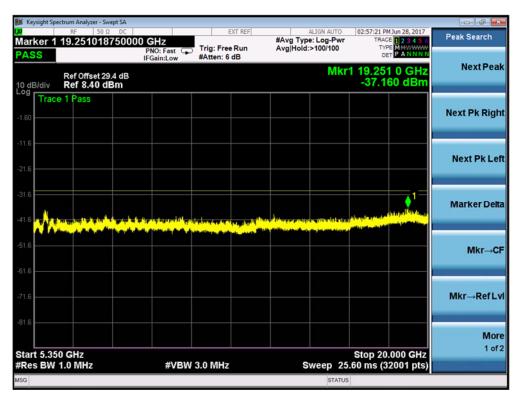


### Channel Position BRFBW - QPSK - 1GHz - 5.15GHz

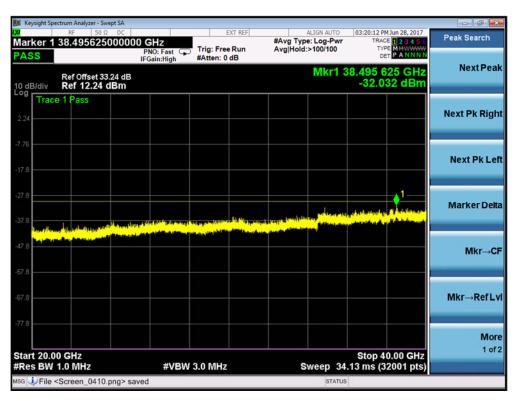




## Channel Position B<sub>RFBW</sub> - QPSK - 5.35GHz - 20GHz

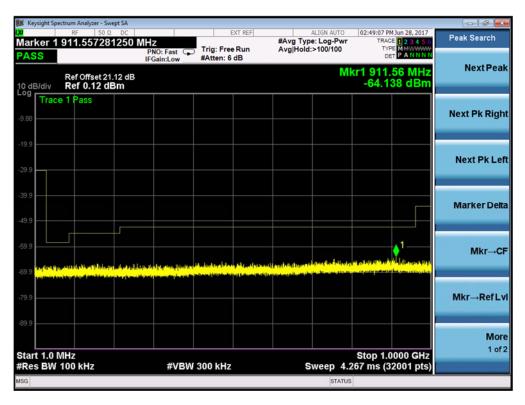


### Channel Position BRFBW - QPSK - 20GHz - 40GHz





### Channel Position T<sub>RFBW</sub> - QPSK - 1MHz - 1GHz

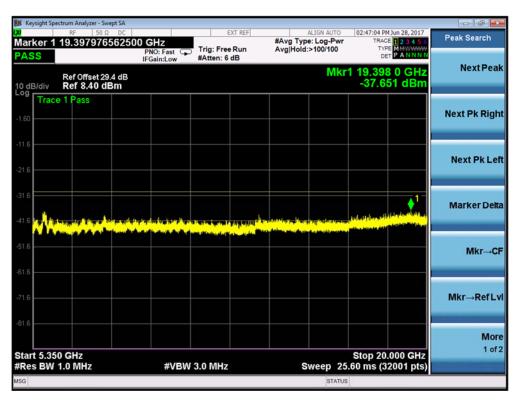


### Channel Position TRFBW - QPSK - 1GHz - 5.15GHz





### Channel Position T<sub>RFBW</sub> - QPSK - 5.35GHz - 20GHz



## Channel Position TRFBW - QPSK - 20GHz - 40GHz





# L-MIMO-MC 2 (3C)

# Maximum Output Power 20.5dBm per port

Channel Position	Bandwidth	Channel Frequency
Channel Position B <sub>RFBW</sub>	20 MHz	5180.0MHz + 5200.0MHz + 5220.0MHz
Channel Position M <sub>RFBW</sub>	20 MHz	-
Channel Position T <sub>RFBW</sub>	20 MHz	5200.0MHz + 5220.0MHz + 5240.0MHz



### Channel Position B<sub>RFBW</sub> - QPSK - 1MHz - 1GHz

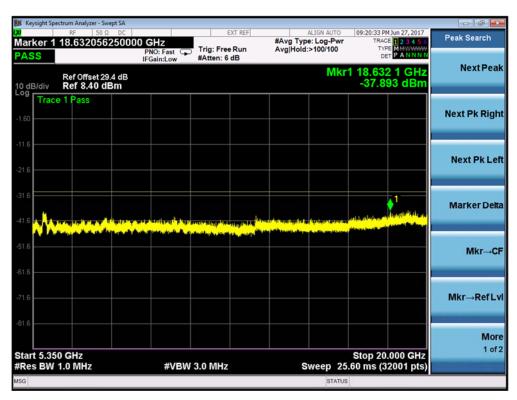


### Channel Position BRFBW - QPSK - 1GHz - 5.15GHz

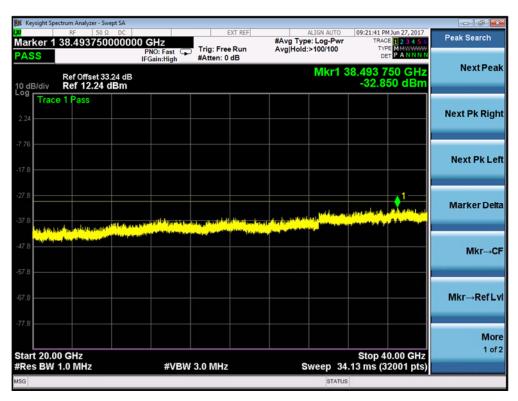




### Channel Position B<sub>RFBW</sub> - QPSK - 5.35GHz - 20GHz



### Channel Position BRFBW - QPSK - 20GHz - 40GHz





### Channel Position T<sub>RFBW</sub> - QPSK - 1MHz - 1GHz

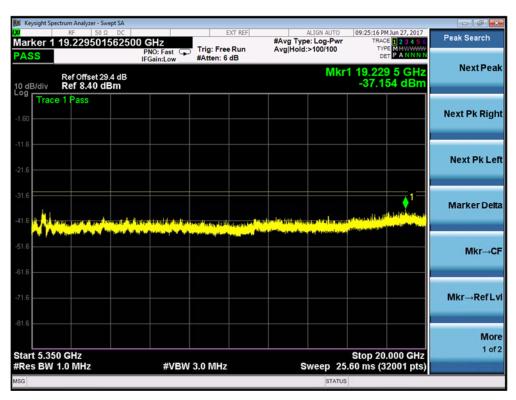


### Channel Position TRFBW - QPSK - 1GHz - 5.15GHz





### Channel Position T<sub>RFBW</sub> - QPSK - 5.35GHz - 20GHz



### Channel Position TRFBW - QPSK - 20GHz - 40GHz





# Configuration A2

## L-MIMO-SC

# Maximum Output Power 20.5dBm per port

Channel Position	Bandwidth	Channel Frequency
Channel Position B	20.0MHz	5745.0MHz
Channel Position M	20.0MHz	5785.0MHz
Channel Position T	20.0MHz	5825.0MHz



### Channel Position B - QPSK - 1MHz - 1GHz

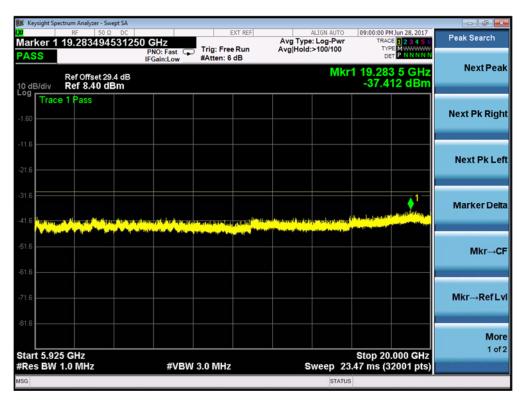


### Channel Position B - QPSK - 1GHz - 5.650GHz





### Channel Position B - QPSK - 5.925GHz - 20GHz

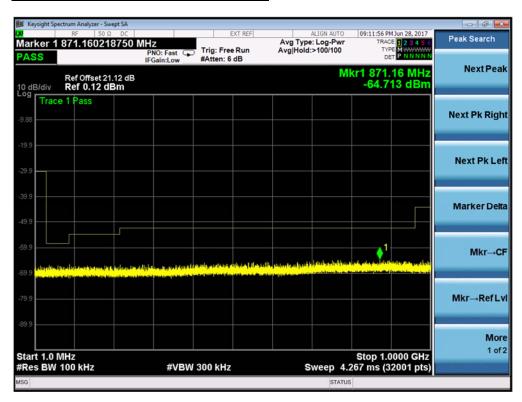


### Channel Position B - QPSK - 20GHz - 40GHz





### Channel Position M - QPSK - 1MHz - 1GHz

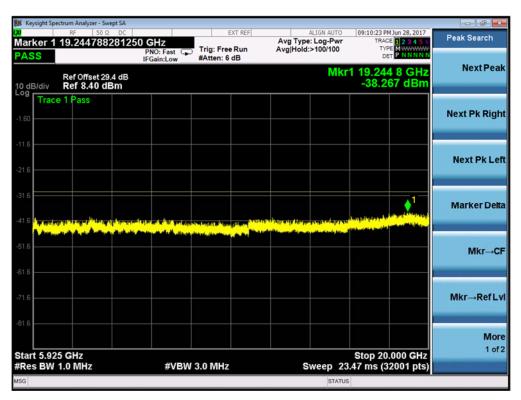


## Channel Position M - QPSK - 1GHz - 5.650GHz





### Channel Position M - QPSK - 5.925GHz - 20GHz



### Channel Position M - QPSK - 20GHz - 40GHz

