

# Configuration G-MC 1 (2C)

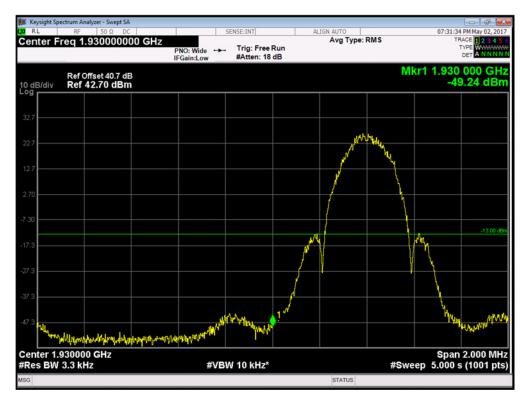
Maximum Output Power 46.0dBm per port

| Band Edge<br>Frequency                           | Channel<br>Bandwidth | Edge Test with modulation AQPSK<br>Channel Frequencies | RBW (kHz) | Limit (dBm) |
|--|----------------------|--|-----------|-------------|
| Channel Position<br>B <sub>RFBW</sub> 1930.0 MHz | 250 kHz              | 1930.4MHz + 1932.0MHz                                  | 3.3       | -13.00      |
| Channel Position<br>T <sub>RFBW</sub> 1990.0 MHz | 250 kHz              | 1988.0MHz + 1989.6MHz                                  | 3.3       | -13.00      |

Note: The channels shown in the table above are the minimum and maximum channels that can be used in the authorised frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be made available to the end user.



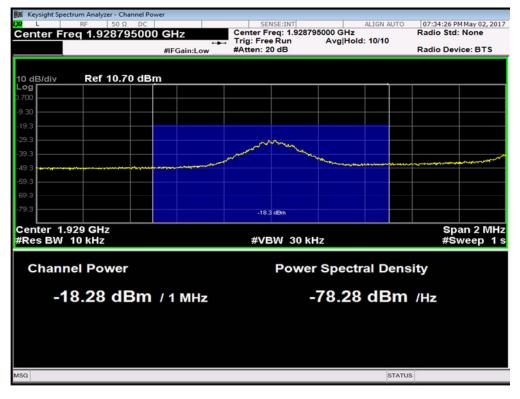
Channel Position BRFBW - AQPSK



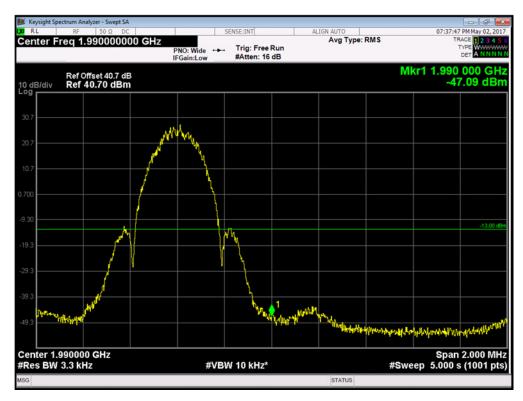
| R L                | RF 50 Q DC                          |                                  | SENSE:INT                | ALIGN AUTO                     | 07:31:50 PM May 02, 20                      |
|--------------------|-------------------------------------|----------------------------------|--------------------------|--------------------------------|---|
|                    | req 1.92650000                      | 0 GHz<br>PNO: Wide<br>IFGain:Low |                          | Avg Type: RMS<br>Avg Hold: 1/1 | TRACE 12 3 4 9<br>TYPE A WWWW<br>DET A NN N |
| dB/div             | Ref Offset 40.7 dB<br>Ref 18.99 dBm |                                  |                          |                                | Mkr1 1.928 795 GH<br>-23.463 dB             |
| .99                |                                     |                                  |                          |                                |   |
| D1                 |                                     |                                  |                          |                                |   |
| .0                 |                                     |                                  |                          |                                |   |
| .0                 |                                     |                                  |                          |                                | 1<br>                                       |
| .0                 |                                     |                                  |                          |                                |   |
| .0                 | ·····                               | an and the second                | we have a set of the set |                                | *******                                     |
| .0                 |                                     |                                  |                          |                                |   |
| .0                 |                                     |                                  |                          |                                |   |
|                    |                                     |                                  |                          |                                | 0 m o m 6 000 11                            |
| enter 1.<br>Res BW | 926500 GHz<br>51 kHz                | #                                | VBW 150 kHz*             |                                | Span 5.000 Mi<br>#Sweep 5.000 s (1001 pt    |
| 3                  |                                     |                                  |                          | STATUS                         |   |



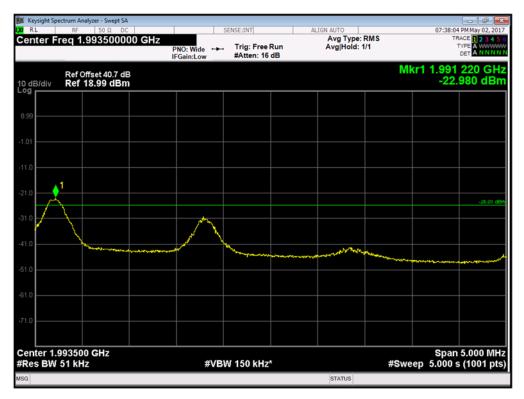
The channel power of 1MHz for 1928.795MHz is -18.28dBm, which is within the limit of -13dBm.



Channel Position TRFBW - AQPSK







The channel power of 1MHz for 1991.220MHz is -17.45dBm, which is within the limit of -13dBm.





Configuration G-MC 2 (3C)

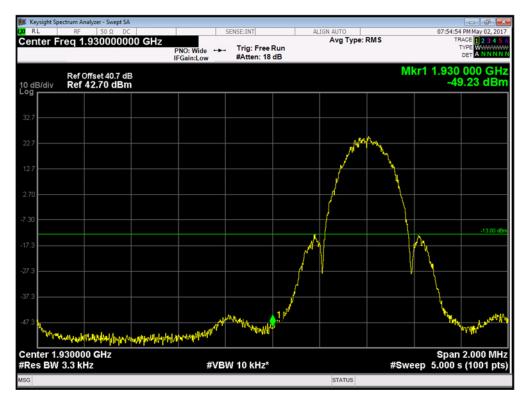
Maximum Output Power 47.8dBm per port

| Band Edge<br>Frequency                           | Channel<br>Bandwidth | Edge Test with modulation AQPSK<br>Channel Frequencies | RBW (kHz) | Limit (dBm) |
|--|----------------------|--|-----------|-------------|
| Channel Position<br>B <sub>RFBW</sub> 1930.0 MHz | 250 kHz              | 1930.4MHz + 1932.0MHz + 1933.6MHz                      | 3.3       | -13.00      |
| Channel Position<br>T <sub>RFBW</sub> 1990.0 MHz | 250 kHz              | 1986.4MHz + 1988.0MHz + 1989.6MHz                      | 3.3       | -13.00      |

Note: The channels shown in the table above are the minimum and maximum channels that can be used in the authorised frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be made available to the end user.



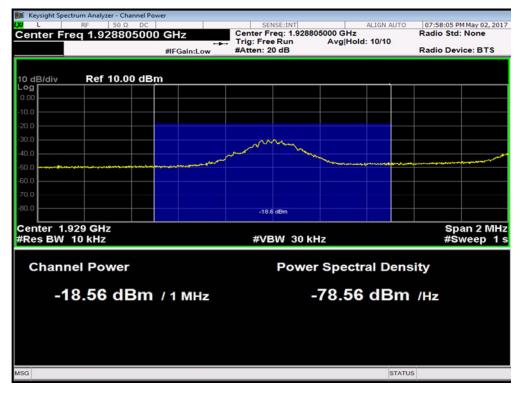
Channel Position BRFBW - AQPSK



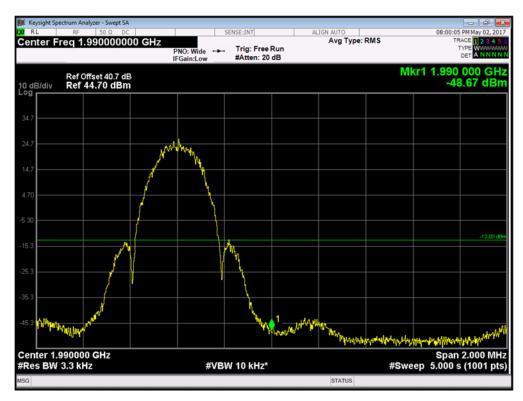
| R L      | RF 50 Q DC                          |                                | cruce aut                                    |  | 07:55:07 PM May 02, 20   |
|----------|-------------------------------------|--------------------------------|--|--|--|
|          | req 1.926500000                     | GHz<br>PNO: Wide<br>IFGain:Low | SENSE:INT<br>Trig: Free Run<br>#Atten: 20 dB | ALIGN AUTO<br>Avg Type: RMS<br>Avg Hold: 1/1 | 07:55:07 PM May 02, 20<br>TRACE 2 3 4 3<br>TYPE A WWWW<br>DET A NNIN   |
| ) dB/div | Ref Offset 40.7 dB<br>Ref 18.99 dBm |                                |  |  | Mkr1 1.928 805 GH<br>-24.022 dB  |
| .99      |                                     |                                |  |  |  |
| 01       |                                     |                                |  |  |  |
| .0       |                                     |                                |  |  |  |
| .0       |                                     |                                |  |  |  |
|          |                                     | $\sim$                         |  | m  |  |
| .0       | *****                               | warden Marco                   | **************************************       |  | and the stand and the standard and the s |
| .0       |                                     |                                |  |  |  |
| .0       |                                     |                                |  |  |  |
|          | 926500 GHz<br>51 kHz                | #VE                            | 3W 150 kHz*                                  |  | Span 5.000 Mi<br>#Sweep 5.000 s (1001 pi   |
| G        |                                     |                                |  | STATUS                                       |  |



The channel power of 1MHz for 1928.805MHz is -18.56dBm, which is within the limit of -13dBm.



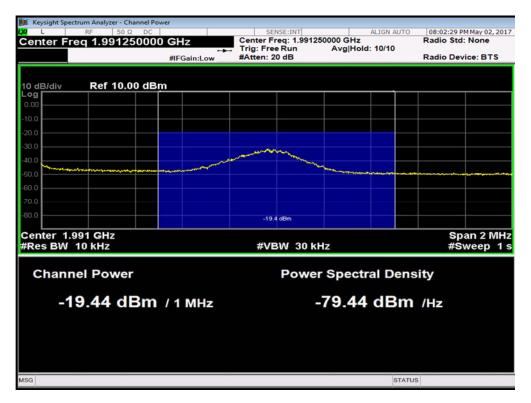
Channel Position T<sub>RFBW</sub> - AQPSK







The channel power of 1MHz for 1991.250MHz is -19.44dBm, which is within the limit of -13dBm.





# Configuration W-SC

Maximum Output Power 49.0dBm per port

| Band Edge<br>Frequency           | Channel<br>Bandwidth | Edge Test with modulation QPSK<br>Channel Frequencies | RBW (kHz) | Limit (dBm) |
|----------------------------------|----------------------|---|-----------|-------------|
| Channel Position B<br>1930.0 MHz | 5.0 MHz              | 1932.4MHz   | 30        | -15.22      |
| Channel Position T<br>1990.0 MHz | 5.0 MHz              | 1987.6MHz   | 30        | -15.22      |

Note 1: For the measurement adjacent to the frequency band edge, a resolution bandwidth of 30kHz was used, and 30kHz is < 50kHz (1% of nominal bandwidth). To compensate for the reduced measurement bandwidth, the limit was adjusted with a correction of -2.22dB [10Log(30/50)] to -13dBm.The test results should be compared to a limit of -15.22dBm.

Note 2: The channels shown in the table above are the minimum and maximum channels that can be used in the authorised frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.



Keysight S RL ALIGN AU 09:14:43 PM Apr 26, 2017 Avg Type: RMS TRACE 2 3 4 TYPE WHITE DET ANNN Display Line -15.22 dBm Trig: Free Run #Atten: 22 dB PNO: Wide ----IFGain:Low Mkr1 1.930 000 GHz -18.38 dBm Ref Offset 40.7 dB Ref 46.70 dBm 10 dB/div Center 1.930000 GHz #Res BW 30 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 91 kHz\* STATUS SG

Channel Position B - QPSK / Bandwidth 5.0 MHz





Keysight ! RL ALIGN AU 09:19:09 PM Apr 26, 2017 Avg Type: RMS TRACE 2 3 4 TYPE WHITE DET ANNN Display Line -15.22 dBm Trig: Free Run #Atten: 24 dB PNO: Wide +++ Mkr1 1.990 000 GHz -17.80 dBm Ref Offset 40.7 dB Ref 48.26 dBm 10 dB/div -15.22 d Center 1.990000 GHz #Res BW 30 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 91 kHz\* STATUS 202

Channel Position T - QPSK / Bandwidth 5.0 MHz





Configuration W-MC 1 (2C)

Maximum Output Power 49.0dBm per port

| Band Edge<br>Frequency                           | Channel<br>Bandwidth | Edge Test with modulation QPSK<br>Channel Frequencies | RBW (kHz) | Limit (dBm) |
|--|----------------------|---|-----------|-------------|
| Channel Position<br>B <sub>RFBW</sub> 1930.0 MHz | 5.0 MHz              | 1932.4MHz + 1937.4MHz                                 | 51        | -13.0       |
| Channel Position<br>T <sub>RFBW</sub> 1990.0 MHz | 5.0 MHz              | 1982.6MHz + 1987.6MHz                                 | 51        | -13.0       |

Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorised frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be made available to the end user.



|                     | ectrum Analyzer - Swept SA          |           |                              |    |              |        | - 6                                   |
|---------------------|-------------------------------------|-----------|------------------------------|----|--------------|--------|---------------------------------------|
| RL                  | RF 50 Ω DC                          |           | SENSE:INT                    | AL | IGN AUTO     |        | 01:46:05 PM May 02, 20                |
| BW 51 I             | kHz                                 | PNO: Wide | . Trig: Free F<br>#Atten: 22 |    | Avg Type: RM |        | TRACE 2 3 4<br>TYPE WWWWW<br>DET ANNN |
| dB/div              | Ref Offset 40.7 dB<br>Ref 46.70 dBm |           |                              |    |              | Mkr1   | 1.930 000 GH<br>-14.98 dB             |
| 6.7                 |                                     |           |                              |    |              |        |                                       |
| 5.7                 |                                     |           |                              |    |              |        |                                       |
| 6.7                 |                                     |           |                              |    |              |        |                                       |
| 70                  |                                     |           |                              |    |              |        |                                       |
| 30                  |                                     |           |                              |    |              |        |                                       |
| 3.3                 |                                     |           |                              | /  |              |        | -13.00 d                              |
| .3                  |                                     |           |                              |    |              |        |                                       |
| 3.3                 |                                     |           |                              |    |              |        |                                       |
| 3.3                 |                                     |           |                              |    |              |        |                                       |
|                     |                                     |           |                              |    |              |        |                                       |
| enter 1.9<br>Res BW | 930000 GHz<br>51 kHz                | #VE       | SW 150 kHz*                  |    |              | #Sweep | Span 2.000 MH<br>5.000 s (1001 pt     |
| G                   |                                     |           |                              |    | STATUS       |        |                                       |

Channel Position BRFBW - QPSK / Bandwidth 5.0 MHz

| Keysight Spi<br>RL  | RF 50 Q DC                          |       | ENSE:INT                        | ALIGN AUTO                    |          | 01:46:27 PM May 02, 20                     |
|---------------------|-------------------------------------|-------|---------------------------------|-------------------------------|----------|--|
|                     | req 1.926500000 GH                  |       | Trig: Free Run<br>#Atten: 24 dB | Avg Type: RI<br>Avg Hold: 1/1 |          | TRACE 1 2 3 4<br>TYPE A WWW<br>DET A N N N |
| 0 dB/div            | Ref Offset 40.7 dB<br>Ref 18.99 dBm |       |                                 |                               | Mkr1 1   | .928 605 GH<br>-33.754 dB                  |
|                     |                                     |       |                                 |                               |          |  |
| .99                 |                                     |       |                                 |                               |          |  |
| .01                 |                                     |       |                                 |                               |          |  |
| 1.0                 |                                     |       |                                 |                               |          |  |
| 1.0                 |                                     |       |                                 |                               |          |  |
|                     |                                     |       |                                 |                               |          | -26.01                                     |
|                     |                                     |       |                                 |                               |          |  |
| .0                  |                                     |       |                                 |                               |          |  |
| .0                  |                                     |       |                                 |                               |          |  |
|                     |                                     |       |                                 |                               |          |  |
|                     |                                     |       |                                 |                               |          |  |
| 1.0                 |                                     |       |                                 |                               |          |  |
| enter 1.9<br>Res BW | 926500 GHz                          | #\/B\ | V 150 kHz*                      |                               | #Swoon 5 | Span 5.000 M<br>.000 s (1001 p             |
| G                   | 5 T KHZ                             | #VBV  | V 150 KH2                       | STATUS                        | #Sweep 5 | .000 S (1001 p                             |



| RL RL               | RF 50 Q DC                          |           | CENCE ANT                      |         | IGN AUTO    |       | 01:51:58 PM May             | 67 201    |
|---------------------|-------------------------------------|-----------|--------------------------------|---------|-------------|-------|-----------------------------|-----------|
|                     |                                     |           | SENSE:INT                      | AL      | Avg Type: F | MS    | U1:51:58 PM May<br>TRACE    |           |
| deo BV              | V 150 kHz                           | PNO: Wide | Trig: Free Ru<br>#Atten: 24 dl | un<br>B | Avg Type. P | in s  | TYPE W                      | *****     |
| dB/div              | Ref Offset 40.7 dB<br>Ref 48.26 dBm |           |                                |         |             | Mk    | r1 1.990 000<br>-14.95      | GH<br>dBi |
|                     |                                     |           |                                |         |             |       |                             |           |
| 3.3                 |                                     |           |                                |         |             |       |                             |           |
| 3.3                 |                                     |           |                                |         |             |       |                             |           |
| 3.3                 |                                     |           |                                |         |             |       |                             |           |
| 26                  |                                     |           |                                |         |             |       |                             |           |
| 74                  |                                     |           | $ \rightarrow $                |         |             |       |                             |           |
| .7                  |                                     |           |                                | 1       |             |       |                             | 13.00 d   |
| .7                  |                                     |           | Ň                              |         |             |       |                             |           |
|                     |                                     |           | ,                              |         |             |       |                             |           |
| .7                  |                                     |           |                                |         |             |       |                             | *******   |
| .7                  |                                     |           |                                |         |             |       |                             |           |
| enter 1.9<br>Res BW | 990000 GHz                          | #VB       | W 150 kHz*                     |         |             | #Swee | Span 2.00<br>p 5.000 s (100 | 0 MH      |
| CO DVV              | ST KILZ                             | # V D     | 100 KHZ                        |         | STATUS      | #OWCC | p 0.000 3 (100              | - pt      |

Channel Position T<sub>RFBW</sub> – QPSK / Bandwidth 5.0 MHz





## Configuration W-MIMO-SC

#### Maximum Output Power 47.0dBm per port

| Band Edge<br>Frequency           | Channel<br>Bandwidth | Edge Test with modulation 16QAM<br>Channel Frequencies | RBW (kHz) | Limit (dBm) |
|----------------------------------|----------------------|--|-----------|-------------|
| Channel Position B<br>1930.0 MHz | 5.0 MHz              | 1932.4MHz  | 30        | -18.23      |
| Channel Position T<br>1990.0 MHz | 5.0 MHz              | 1987.6MHz  | 30        | -18.23      |

| Band Edge<br>Frequency           | Channel<br>Bandwidth | Edge Test with modulation 64QAM<br>Channel Frequencies | RBW (kHz) | Limit (dBm) |
|----------------------------------|----------------------|--|-----------|-------------|
| Channel Position B<br>1930.0 MHz | 5.0 MHz              | 1932.4MHz  | 30        | -18.23      |
| Channel Position T<br>1990.0 MHz | 5.0 MHz              | 1987.6MHz  | 30        | -18.23      |

Note 1: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to -13dBm. For the measurement adjacent to the frequency band edge, a resolution bandwidth of 30kHz was used, and 30kHz is < 50kHz (1% of nominal bandwidth). To compensate for the reduced measurement bandwidth, the limit was adjusted with a correction of -2.22dB [10Log(30/50)] to -16.01dBm.

Note 2: The channels shown in the table above are the minimum and maximum channels that can be used in the authorised frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.



| RL               | RF 50 Q DC         |               | SENSE:INT  | AL | IGN AUTO    |         | 02:07:01 PM Apr 27, 201 |
|------------------|--------------------|---------------|--|----|-------------|---------|-------------------------|
|                  | ine -18.23 dBm     |               |  |    | Avg Type: F | MS      | TRACE 1 2 3 4 5         |
| opicy            |                    | PNO: Wide ++- | Trig: Free R   |    |             |         | TYPE WWWWW              |
|                  |                    | IFGain:Low    | #Atten: 22 d   | B  |             |         | DETANNN                 |
|                  |                    |               |  |    |             | Mkr     | 1 1.930 000 GH          |
|                  | Ref Offset 40.7 dB |               |  |    |             | I VIIKI | -20.01 dBr              |
| dB/div           | Ref 46.70 dBm      |               |  |    |             |         | -20.01 061              |
| <sup>′′°</sup> Г |                    |               |  |    |             |         |                         |
|                  |                    |               |  |    |             |         |                         |
| 5.7              |                    |               |  |    |             |         |                         |
|                  |                    |               |  |    |             |         |                         |
|                  |                    |               |  |    |             |         |                         |
| 6.7              |                    |               |  |    |             |         |                         |
|                  |                    |               |  |    |             |         |                         |
|                  |                    |               |  |    |             |         |                         |
| 6.7              |                    |               |  |    |             |         |                         |
|                  |                    |               |  |    |             |         |                         |
| .70              |                    |               |  |    |             |         |                         |
|                  |                    |               |  |    |             |         |                         |
|                  |                    |               |  |    |             |         |                         |
| 30               |                    |               |  | _/ |             |         |                         |
|                  |                    |               |  | /  |             |         |                         |
|                  |                    |               |  | /  |             |         |                         |
| 3.3              |                    |               |  | 1  |             |         |                         |
|                  |                    |               |  | ·  |             |         | -18.23 d                |
| 3.3              |                    |               | /  |    |             |         |                         |
|                  |                    |               | /  |    |             |         |                         |
|                  |                    |               | /  |    |             |         |                         |
| 3.3              |                    |               | and the second s |    |             |         |                         |
|                  |                    |               |  |    |             |         |                         |
|                  |                    |               |  |    |             |         |                         |
| 3.3              |                    |               |  |    |             |         |                         |
|                  |                    |               |  |    |             |         |                         |
|                  |                    |               |  |    |             |         |                         |
| enter 1.         | 930000 GHz         |               |  |    |             |         | Span 2.000 MH           |
| les BW           |                    | #VB           | W 91 kHz*  |    |             | #Sweer  | 5.000 s (1001 pt        |
|                  |                    |               |  |    |             |         | (iter pt                |

Channel Position B - 16QAM / Bandwidth 5.0 MHz

| R L      | RF 50 Ω DC                          | S                            | ENSE:INT                        | ALIGN AUTO                    | 02:07  | 18 PM Apr 27, 201                     |
|----------|-------------------------------------|------------------------------|---------------------------------|-------------------------------|--|---------------------------------------|
| enter F  | req 1.926500000 GH                  | Z<br>PNO: Wide<br>IFGain:Low | Trig: Free Run<br>#Atten: 24 dB | Avg Type: RN<br>Avg Hold: 1/1 |  | TRACE 2345<br>TYPE A WWW<br>DET A NNN |
| ) dB/div | Ref Offset 40.7 dB<br>Ref 15.98 dBm |                              |                                 |                               | Mkr1 1.92<br>-3  | 28 795 GH<br>2.575 dBi                |
|          |                                     |                              |                                 |                               |  |                                       |
| .98      |                                     |                              |                                 |                               |  |                                       |
| .02      |                                     |                              |                                 |                               |  |                                       |
| 4.0      |                                     |                              |                                 |                               |  |                                       |
| 4.0      |                                     |                              |                                 |                               |  |                                       |
|          |                                     |                              |                                 |                               |  |                                       |
| 4.0      |                                     |                              |                                 |                               | A CARGE CONTRACTOR OF CONTRACT |                                       |
| 1.0      |                                     |                              |                                 |                               |  |                                       |
| 4.0      |                                     |                              |                                 |                               |  |                                       |
| 4.0      |                                     |                              |                                 |                               |  |                                       |
|          |                                     |                              |                                 |                               |  |                                       |
| 4.0      |                                     |                              |                                 |                               |  |                                       |
|          | 926500 GHz                          |                              |                                 |                               | Spa<br>#Sweep 5.000  | in 5.000 MI                           |
| Res BW   | 51 KHZ                              | #VBV                         | V 150 kHz*                      | STATUS                        | #Sweep 5.000   | ) s (1001 pi                          |



Keysight S ctrum Analyzer - Swept SA 02:25:15 PM Apr 27, 2017 RL SENSE:INT ALIGN AUT Avg Type: RMS Avg|Hold: 1/1 TRACE 1 2 3 4 TYPE A WWW DET A NNN Display Line -18.23 dBm PNO: Wide ---- Trig: Free Run IFGain:Low #Atten: 24 dB Mkr1 1.990 000 GHz -19.643 dBm Ref Offset 40.7 dB Ref 48.28 dBm 10 dB/div 1 -18.23 dE Center 1.990000 GHz #Res BW 30 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 91 kHz\* STATUS 202

Channel Position T - 16QAM / Bandwidth 5.0 MHz

| Keysight Spectrum Analyzer - Swept SA<br>RL RF 50 Ω DC | SENSE:INT     | ALIGN AUTO                         | 02:25:31 PM Apr 27, 2017                             |
|--|---------------|------------------------------------|--|
| Center Freq 1.993500000 GH                             |               | Avg Type: RMS<br>Run Avg Hold: 1/1 | TRACE 2 3 4 5<br>TYPE A WWWW<br>DET A NNNN           |
| Ref Offset 40.7 dB<br>0 dB/div Ref 15.98 dBm           |               |                                    | Mkr1 1.991 010 GH<br>-30.453 dBr                     |
| 5.98   |               |                                    |  |
| 4.02   |               |                                    |  |
| 14.0   |               |                                    |  |
| 24.0   |               |                                    |  |
| 34.0   |               |                                    | -29.02 dd  |
| 44.0   |               | water and a strawners              | an ingen palan manager and a surround and a surround |
| 54.0   |               |                                    |  |
| 54.0   |               |                                    |  |
| 74.0   |               |                                    |  |
| Center 1.993500 GHz                                    |               |                                    | Span 5.000 MH  |
| Res BW 51 kHz  | #VBW 150 kHz* |                                    | Span 5.000 MH<br>#Sweep 5.000 s (1001 pt             |



Keysight S m Analyzer - Swept SA 02:37:26 PM Apr 27, 2017 TRACE 2 3 4 5 ( TYPE DET A N N N N RL ALIGN AU Avg Type: RMS Display Line -18.23 dBm PNO: Wide Trig: Free Run IFGain:Low #Atten: 24 dB Mkr1 1.930 000 GHz -19.76 dBm Ref Offset 40.7 dB Ref 48.12 dBm 10 dB/div 1 Center 1.930000 GHz #Res BW 30 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 91 kHz\* STATUS 202

Channel Position B - 64QAM / Bandwidth 5.0 MHz

| ISG                 |  |   |                                 | STATUS                       |                                  |                              |
|---------------------|--|---|---------------------------------|------------------------------|----------------------------------|------------------------------|
| Center 1.<br>Res BW | 926500 GHz<br>51 kHz   | #VBV  | V 150 kHz*                      |                              | Spa<br>#Sweep 5.000              | in 5.000 MH<br>) s (1001 pts |
|                     |  |   |                                 |                              |                                  |                              |
| 74.0                |  |   |                                 |                              |                                  |                              |
| 64.0                |  |   |                                 |                              |                                  |                              |
| 54.0                |  |   |                                 |                              |                                  |                              |
| 44.0                | and the second | hall have a shere and a shere a |                                 |                              |                                  |                              |
| 34.0                |  |   |                                 | wannen                       | and a construction of the second |                              |
| 24.0                |  |   |                                 |                              |                                  | -29.02 c                     |
|                     |  |   |                                 |                              |                                  |                              |
| 14.0                |  |   |                                 |                              |                                  |                              |
| 1.02                |  |   |                                 |                              |                                  |                              |
| 5.98                |  |   |                                 |                              |                                  |                              |
| 0 dB/div            | Ref 15.98 dBm  |   |                                 |                              | -3                               | 2.456 dBi                    |
|                     | Ref Offset 40.7 dB   | IFGain:Low  | #Atten: 20 dB                   |                              | Mkr1 1.92<br>-3                  |                              |
| enter F             | req 1.926500000 GH   | PNO: Wide   | Trig: Free Run<br>#Atten: 20 dB | Avg Type: R<br>Avg Hold: 1/1 | MS                               | TYPE A                       |
| RL                  | RF 50 Ω DC   |   | ENSE:INT                        | ALIGN AUTO                   | 02:37                            | :44 PM Apr 27, 20            |



02:51:35 PM Apr 27, 2017 TRACE 2 2 3 4 5 0 TYPE A um Analyzer - Swept SA Keysight S RL ALIGN AU Avg Type: RMS Avg|Hold: 1/1 Display Line -18.23 dBm PNO: Wide Trig: Free Run IFGain:Low #Atten: 24 dB Mkr1 1.990 000 GHz -19.888 dBm Ref Offset 40.7 dB Ref 48.39 dBm 10 dB/div 1 Center 1.990000 GHz #Res BW 30 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 91 kHz\* STATUS 202

Channel Position T - 64QAM / Bandwidth 5.0 MHz

| Keysight Spectrum Analyzer - Swept SA         | CEN       | SE:INT                          | ALIGN AUTO                     | 02-52-43               | PM Apr 27, 2017                             |
|---|-----------|---------------------------------|--------------------------------|------------------------|---|
| nput Mech Atten 20 dB                         | PNO: Wide | Trig: Free Run<br>#Atten: 20 dB | Avg Type: RMS<br>Avg Hold: 1/1 | TF                     | RACE 1 2 3 4 5<br>TYPE A WWWW<br>DET A NNNN |
| Ref Offset 40.7 dB<br>10 dB/div Ref 15.98 dBm |           |                                 |                                | Mkr1 1.991<br>-30.     | 005 GH<br>283 dBn                           |
| 5.98  |           |                                 |                                |                        |   |
| 4.02  |           |                                 |                                |                        |   |
| 14.0  |           |                                 |                                |                        |   |
| 24.0  |           |                                 |                                |                        | -29.02 dt                                   |
| 34.0  |           | - to a the second               | munite                         |                        |   |
| 14.0  |           |                                 |                                |                        | -tioniningen kangka                         |
| 54.0  |           |                                 |                                |                        |   |
| 74.0  |           |                                 |                                |                        |   |
| enter 1.993500 GHz                            |           |                                 |                                | Span<br>#Sweep 5.000 s | 5.000 MH                                    |
| Res BW 51 kHz                                 | #VBW      | 150 kHz*                        | STATUS                         | #Sweep 5.000 s         | s (1001 pt                                  |



# Configuration W-MIMO-MC 1 (2C)

#### Maximum Output Power 49.0dBm per port

| Band Edge<br>Frequency                              | •       |                       | RBW (kHz) | Limit (dBm) |
|---|---------|-----------------------|-----------|-------------|
| Channel Position<br>B <sub>RFBW</sub><br>1930.0 MHz | 5.0 MHz | 1932.4MHz + 1937.4MHz | 30        | -18.23      |
| Channel Position<br>T <sub>RFBW</sub><br>1990.0 MHz | 5.0 MHz | 1982.6MHz + 1987.6MHz | 30        | -18.23      |

| Band Edge<br>Frequency                           | Channel<br>Bandwidth | Edge Test with modulation 64QAM<br>Channel Frequencies | RBW (kHz) | Limit (dBm) |
|--|----------------------|--|-----------|-------------|
| Channel Position<br>B <sub>RFBW</sub> 1930.0 MHz | 5.0 MHz              | 1932.4MHz + 1937.4MHz                                  | 30        | -18.23      |
| Channel Position<br>T <sub>RFBW</sub> 1990.0 MHz | 5.0 MHz              | 1982.6MHz + 1987.6MHz                                  | 30        | -18.23      |

Note 1: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to -13dBm. For the measurement adjacent to the frequency band edge, a resolution bandwidth of 30kHz was used, and 30kHz is < 50kHz (1% of nominal bandwidth). To compensate for the reduced measurement bandwidth, the limit was adjusted with a correction of -2.22dB [10Log(30/50)] to -16.01dBm.

Note 2: The channels shown in the table above are the minimum and maximum channels that can be used in the authorised frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.



| RL RL    | ectrum Analyzer - Swept SA<br>RF 50 Ω DC |             | SENSE:INT     |      | IGN AUTO    |        | 01:57:01 PM May 02, 2       |
|----------|--|-------------|---------------|------|-------------|--------|-----------------------------|
|          |  | 3           | SENAGEINI     | AL   | Avg Type: R | MS     | TRACE 1 2 3 4               |
| isplay I | Line -18.23 dBm                          | PNO: Wide 🔸 | Trig: Free Ru | un . | Ang Type. R |        | TYPE WWWWW                  |
|          |  | IFGain:Low  | #Atten: 22 dl |      |             |        | DET A N N N                 |
|          |  | il Galileon |               |      |             |        | 4 000 000 01                |
|          | Ref Offset 40.7 dB                       |             |               |      |             | INIKE  | 1 1.930 000 GI              |
| dB/div   | Ref Offset 40.7 dB<br>Ref 46.70 dBm      |             |               |      |             |        | 1 1.930 000 GI<br>-21.59 dB |
| g        |  |             |               |      |             |        |                             |
|          |  |             |               |      |             |        |                             |
|          |  |             |               |      |             |        |                             |
| 6.7      |  |             |               |      |             |        |                             |
|          |  |             |               |      |             |        |                             |
| 6.7      |  |             |               |      |             |        |                             |
|          |  |             |               |      |             |        |                             |
|          |  |             |               |      |             |        |                             |
| 6.7      |  |             |               |      |             |        |                             |
|          |  |             |               |      |             |        |                             |
|          |  |             |               |      |             |        |                             |
| .70      |  |             |               |      |             |        |                             |
|          |  |             |               | 1    |             |        |                             |
| .30      |  |             |               | /    |             |        |                             |
|          |  |             |               | /    |             |        |                             |
|          |  |             |               | 1    |             |        |                             |
| 3.3      |  |             |               | {    |             |        |                             |
|          |  |             | ł             | 1    |             |        | -18.23                      |
|          |  |             |               |      |             |        |                             |
| 3.3      |  |             | f             |      |             |        |                             |
|          |  |             | }             |      |             |        |                             |
|          |  |             |               |      |             |        |                             |
| 3.3      |  |             | mont          |      |             |        |                             |
| under a  |  |             |               |      |             |        |                             |
| 3.3      |  |             |               |      |             |        |                             |
|          |  |             |               |      |             |        |                             |
|          |  |             |               |      |             |        |                             |
|          |  |             |               |      |             |        | 0                           |
|          | 930000 GHz                               |             |               |      |             |        | Span 2.000 M                |
| Res BW   | 30 kHz                                   | #VB\        | № 91 kHz*     |      |             | #Sweep | 5.000 s (1001 p             |
| G        |  |             |               |      | STATUS      |        |                             |

Channel Position BRFBW - 16QAM / Bandwidth 5.0 MHz

| Keysight Spi<br>RL | ectrum Analyzer - Swept SA<br>RF 50 Ω DC |       | NSE:INT                         | ALIGN AUTO                     | 01.4  | 57:18 PM May 02, 201              |
|--------------------|--|-------|---------------------------------|--------------------------------|---|-----------------------------------|
|                    | req 1.926500000 Gł                       |       | Trig: Free Run<br>#Atten: 24 dB | Avg Type: RMS<br>Avg Hold: 1/1 |   | TRACE 1 2 3 4 5<br>TYPE A WINN OF |
| 0 dB/div<br>og     | Ref Offset 40.7 dB<br>Ref 15.98 dBm      |       |                                 |                                | Mkr1 1.9                                    | 28 960 GH<br>34.548 dBi           |
| 5.98               |  |       |                                 |                                |   |                                   |
| .02                |  |       |                                 |                                |   |                                   |
| 4.0                |  |       |                                 |                                |   |                                   |
| 4.0                |  |       |                                 |                                |   |                                   |
| 4.0                |  |       |                                 |                                | ىلىلىرى<br>ئەلىدۇنا بەلچەر بىر يەسىم بەلھۇر | -29.02                            |
| .0                 |  |       |                                 |                                |   |                                   |
|                    |  |       |                                 |                                |   |                                   |
|                    |  |       |                                 |                                |   |                                   |
|                    |  |       |                                 |                                |   |                                   |
|                    | 926500 GHz                               | #)/P) |                                 |                                | Sp  | an 5.000 M                        |
| Res BW             | 51 KHZ                                   | #VBM  | 150 kHz*                        | STATUS                         | #Sweep 5.00                                 | u s (1001 pi                      |



|                     | ectrum Analyzer - Swept SA          |              |                                   |  |                    |                                |
|---------------------|-------------------------------------|--------------|-----------------------------------|--|--------------------|--------------------------------|
| RL                  | RF 50 Ω DC                          |              | SENSE:INT                         | ALIGN AUTO   |                    | 2:02:50 PM May 02, 201         |
| isplay L            | .ine -18.23 dBm                     | PNO: Wide ++ | . Trig: Free Run<br>#Atten: 24 dB | Avg Type: RI   | is                 | TRACE 1 2 3 4 5<br>TYPE WHAT   |
| dB/div              | Ref Offset 40.7 dB<br>Ref 48.15 dBm |              |                                   |  | Mkr1 1.            | 990 000 GH<br>-20.58 dBi       |
| 3.2                 |                                     |              |                                   |  |                    |                                |
| 3.2                 |                                     |              |                                   |  |                    |                                |
| 3.2                 |                                     |              |                                   |  |                    |                                |
| 15                  |                                     |              |                                   |  |                    |                                |
| 85                  |                                     |              |                                   |  |                    |                                |
| .9                  |                                     |              |                                   |  |                    |                                |
| .9                  |                                     |              | 1                                 |  |                    | -18.23 d                       |
|                     |                                     |              |                                   |  |                    |                                |
| .9                  |                                     |              |                                   | and the second | - and a street was | 1.44y                          |
| .9                  |                                     |              |                                   |  |                    |                                |
| enter 1.9<br>Res BW | 990000 GHz<br>30 kHz                | #VB          | W 91 kHz*                         |  | Sweep 5.0          | pan 2.000 MH<br>000 s (1001 pt |
|                     |                                     |              |                                   | STATUS   |                    |                                |

Channel Position T<sub>RFBW</sub> - 16QAM / Bandwidth 5.0 MHz

| Keysight Spectrum   |   |      |                                 |                                      |            |                       |  |
|---------------------|---|------|---------------------------------|--------------------------------------|------------|-----------------------|--|
| RL RF               | 1.993500000 GH  |      | Trig: Free Run<br>#Atten: 24 dB | ALIGN AUTO<br>Avg Type:<br>Avg Hold: | RMS<br>1/1 | 02:03:                | 10 PM May 02, 201<br>TRACE 2 3 4 5<br>TYPE A WWWW<br>DET A N N N N |
| Ref<br>0 dB/div Rel | Offset 40.7 dB<br>15.98 dBm   |      |                                 |                                      | N          | /kr1 1.99<br>-31      | 1 085 GH<br>.494 dBr   |
| 5.98                |   |      |                                 |                                      |            |                       |  |
| 4.02                |   |      |                                 |                                      |            |                       |  |
| 4.0                 |   |      |                                 |                                      |            |                       |  |
| 4.0                 |   |      |                                 |                                      |            |                       | -29.02 0   |
| 4.0                 | and an address of the stand of |      |                                 | and the second second second         |            | and an and the second |  |
| 4.0                 |   |      |                                 |                                      |            |                       |  |
| 1.0                 |   |      |                                 |                                      |            |                       |  |
| 4.0                 |   |      |                                 |                                      |            |                       |  |
| enter 1.9935        | 00 GHz  |      |                                 |                                      |            | Spa                   | n 5.000 MI   |
| Res BW 51 k         |   | #VBV | V 150 kHz*                      |                                      | #Sw        | Spa<br>veep 5.000     | s (1001 pt   |



|                     | ectrum Analyzer - Swept SA          |        |                                |               |  |
|---------------------|-------------------------------------|--------|--------------------------------|---------------|--|
| RL                  | RF 50 Ω DC                          | SENS   | E:INT                          | ALIGN AUTO    | 02:07:59 PM May 02, 20:                    |
| isplay L            | .ine -18.23 dBm                     |        | Trig: Free Run<br>Atten: 22 dB | Avg Type: RMS | TRACE 2 3 4 5<br>TYPE WWWWW<br>DET A N N N |
| dB/div              | Ref Offset 40.7 dB<br>Ref 46.70 dBm |        |                                |               | Mkr1 1.930 000 GH<br>-21.12 dB             |
| 6.7                 |                                     |        |                                |               |  |
|                     |                                     |        |                                |               |  |
| 5.7                 |                                     |        |                                |               |  |
| 5.7                 |                                     |        |                                |               |  |
| 30                  |                                     |        |                                |               |  |
| .3                  |                                     |        |                                |               |  |
| .3                  |                                     |        | <sup>1</sup>                   |               | -18.23 d                                   |
| 3.3                 |                                     |        |                                |               |  |
|                     | ******                              |        | and the second                 |               |  |
| 3.3                 |                                     |        |                                |               |  |
| enter 1.9<br>Res BW | 930000 GHz<br>30 kHz                | #VBW 9 | 01 kHz*                        |               | Span 2.000 MH<br>#Sweep 5.000 s (1001 pt   |
|                     |                                     |        |                                |               |  |

Channel Position BRFBW - 64QAM / Bandwidth 5.0 MHz

|                     | ectrum Analyzer - Swept SA             |      |                                 |  |            |  | - 6  |
|---------------------|--|------|---------------------------------|--|------------|--|--|
|                     | RF 50 Ω DC<br>req 1.926500000 GHz      |      | Trig: Free Run<br>#Atten: 24 dB | ALIGN AUTO<br>Avg Type:<br>Avg Hold:   | RMS<br>1/1 | 02:08:1<br>T   | 17 PM May 02, 201<br>TRACE 1 2 3 4 5<br>TYPE A WWWW<br>DET A N N N N |
| 0 dB/div<br>og      | Ref Offset 40.7 dB<br>Ref 15.98 dBm    |      |                                 |  | N          | 4kr1 1.928<br>-33  | 8 985 GH<br>957 dBr  |
| 5.98                |  |      |                                 |  |            |  |  |
| 1.02                |  |      |                                 |  |            |  |  |
| 4.0                 |  |      |                                 |  |            |  |  |
| 4.0                 |  |      |                                 |  |            |  |  |
| 4.0                 |  |      |                                 | and the state of t |            | 1-10 <sup>-10</sup> -10-10-10-10-10-10-10-10-10-10-10-10-10- | -29.02   |
|                     | ************************************** |      |                                 |  |            |  |  |
| 4.0                 |  |      |                                 |  |            |  |  |
| 4.0                 |  |      |                                 |  |            |  |  |
| i.0                 |  |      |                                 |  |            |  |  |
| enter 1.9<br>Res BW | 926500 GHz<br>51 kHz                   | #VBV | √ 150 kHz*                      |  | #Sv        | Spar<br>weep 5.000   | n 5.000 M  |
| G                   |  |      |                                 | STATUS   |            | 100p-0.000   | o (noon pi   |



|                     | ectrum Analyzer - Swept SA          |                            |                                |  |            |      |                    |                                       |
|---------------------|-------------------------------------|----------------------------|--------------------------------|--|------------|------|--------------------|---------------------------------------|
| RL                  | RF 50 Ω DC                          |                            | SENSE:INT                      |  | ALIGN AUTO |      |                    | PM May 02, 20                         |
| isplay L            | ine -18.23 dBm                      | PNO: Wide ++<br>IFGain:Low | Trig: Free Ru<br>#Atten: 24 dB | n  | Avg Type:  |      | т                  | ACE 1 2 3 4 5<br>YPE WWWW<br>DET ANNN |
| ) dB/div            | Ref Offset 40.7 dB<br>Ref 48.09 dBm |                            |                                |  |            | M    | kr1 1.990<br>-20   | 000 GH<br>).79 dBr                    |
|                     |                                     |                            |                                |  |            |      |                    |                                       |
| 3.1                 |                                     |                            |                                |  |            |      |                    |                                       |
| 3.1                 |                                     |                            |                                |  |            |      |                    |                                       |
| 3,1                 |                                     |                            |                                |  |            |      |                    |                                       |
| 09                  |                                     |                            |                                |  |            |      |                    |                                       |
| 91                  |                                     |                            |                                |  |            |      |                    |                                       |
| .9                  |                                     |                            |                                |  |            |      |                    |                                       |
| .9                  |                                     |                            | 1                              |  |            |      |                    | -18.23 d                              |
|                     |                                     |                            |                                |  |            |      |                    |                                       |
| .9                  |                                     |                            |                                | 1994 - Contra - Contr |            |      | *******            |                                       |
| .9                  |                                     |                            |                                |  |            |      |                    |                                       |
| enter 1.9<br>Res BW | 990000 GHz<br>30 kHz                | #VE                        | W 91 kHz*                      |  |            | #Swe | Span<br>ep 5.000 s | 2.000 MH<br>(1001 pt                  |
|                     |                                     |                            |                                |  | STATUS     |      |                    |                                       |

Channel Position T<sub>RFBW</sub> - 64QAM / Bandwidth 5.0 MHz

| RL RF 50 ହ DC<br>enter Freq 1.993500000 GHz  |      | Trig: Free Run<br>#Atten: 24 dB | ALIGN AUTO<br>Avg Type:<br>Avg Hold:  | RMS<br>1/1 | 02:11:             | 50 PM May 02, 201<br>TRACE 2 3 4 5<br>TYPE A WWWW<br>DET A NNNN |
|--|------|---------------------------------|---------------------------------------|------------|--------------------|---|
| Ref Offset 40.7 dB<br>0 dB/div Ref 15.98 dBm |      |                                 |                                       |            | 4 Wkr1 1.99<br>-31 | 1 095 GH<br>.374 dBr  |
| - 3  |      |                                 |                                       |            |                    |   |
| .02  |      |                                 |                                       |            |                    |   |
| 4.0  |      |                                 |                                       |            |                    |   |
| 24.0   |      |                                 |                                       |            |                    | -29.02 d  |
| 4.0  | **** |                                 | And an along Algor and an altra and a |            | ******             |   |
| 4.0  |      |                                 |                                       |            |                    |   |
| 4.0  |      |                                 |                                       |            |                    |   |
| 4.0  |      |                                 |                                       |            |                    |   |
|  |      |                                 |                                       |            |                    |   |
| enter 1.993500 GHz<br>Res BW 51 kHz          | #VBV | ∜ 150 kHz*                      |                                       | #Sv        | Spai<br>weep 5.000 | n 5.000 MH<br>s (1001 pt  |



# Configuration L-MIMO-SC

## Maximum Output Power 43.0dBm per port for 1.4MHz and 3.0MHz bandwidth. Maximum Output Power 49.0dBm per port for 5.0MHz to 20.0MHz bandwidth.

| Band Edge<br>Frequency           | Channel<br>Bandwidth | Edge Test with modulation QPSK<br>Channel Frequencies | RBW (kHz) | Limit (dBm) |
|----------------------------------|----------------------|---|-----------|-------------|
|                                  | 1.4 MHz              | 1930.7MHz   | 13        | -16.01      |
|                                  | 3.0 MHz              | 1931.5MHz   | 30        | -16.01      |
| Channel Position B<br>1930.0 MHz | 5.0 MHz              | 1932.5MHz   | 51        | -16.01      |
|                                  | 10.0 MHz             | 1935.0MHz   | 100       | -16.01      |
|                                  | 15.0 MHz             | 1937.5MHz   | 200       | -16.01      |
|                                  | 20.0 MHz             | 1940.0MHz   | 200       | -16.01      |
|                                  | 1.4 MHz              | 1989.3MHz   | 13        | -16.01      |
|                                  | 3.0 MHz              | 1988.5MHz   | 30        | -16.01      |
| Channel Position T               | 5.0 MHz              | 1987.5MHz   | 51        | -16.01      |
| 1990.0 MHz                       | 10.0 MHz             | 1985.0MHz   | 100       | -16.01      |
|                                  | 15.0 MHz             | 1982.5MHz   | 200       | -16.01      |
|                                  | 20.0 MHz             | 1980.0MHz   | 200       | -16.01      |

Note 1: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to -13dBm. The test results should be compare to a limit of -16.01dBm.

Note 2: The channels shown in the table above are the minimum and maximum channels that can be used in the authorised frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be made available to the end user.



alvzer - Swept SA 03:17:08 PM Apr 27, 2017 TRACE 1 2 3 4 5 TYPE DET A NNNN RL ALIGN AU Avg Type: RMS Center Freq 1.930000000 GHz Trig: Free Run #Atten: 16 dB PNO: Wide +++ IFGain:Low Mkr1 1.930 000 GHz -24.76 dBm Ref Offset 40.7 dB Ref 40.70 dBm 10 dB/div  $\mathcal{N}$ Center 1.930000 GHz #Res BW 13 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 39 kHz\* STATUS ŝ

Channel Position B - QPSK / Bandwidth 1.4 MHz

|  | ALIGN AUTO                         | 03:17:21 PM Apr 27, 201   |
|--|------------------------------------|---|
| PNO: Wide Trig: Free Run<br>IFGain:Low #Atten: 16 dB   | Avg Type: RMS<br>Avg Hold: 1/1     | TRACE 2 3 4 5<br>TYPE A WWW<br>DET A NNNN   |
|  |                                    | Mkr1 1.928 975 GH<br>-37.884 dBr  |
|  |                                    |   |
|  |                                    |   |
|  |                                    |   |
|  |                                    |   |
|  |                                    |   |
|  |                                    |   |
|  |                                    |   |
|  |                                    |   |
|  |                                    | -29.02 d  |
|  |                                    |   |
|  |                                    | and the second |
| and the set of the set | and you and a second second second | and - low production  |
|  |                                    |   |
|  |                                    |   |
|  |                                    |   |
|  |                                    |   |
|  |                                    |   |
|  |                                    |   |
|  |                                    |   |
| #\/B\M/ 150 kH-*   |                                    | Span 5.000 Mł<br>#Sweep 5.000 s (1001 pt  |
| #VBW 150 KH2*  | STATUS                             | #Sweep 5.000 \$ (1001 pt  |
|  | IFGain:Low #Atten: 16 dB           | IZ PNO: Wide → Trig: Free Run #Atten: 16 dB Avg Type: RMS Avg Hold: 1/1 PNO: Wide → Trig: Free Run #Atten: 16 dB Avg Hold: 1/1  |



alvzer - Swent SA 05:06:30 PM Apr 27, 2017 RI ALIGN AUT Avg Type: RMS TRACE 1 2 3 4 TYPE WWWW DET A N N N Center Freq 1.990000000 GHz PNO: Wide ---- Trig: Free Run IFGain:Low #Atten: 16 dB Mkr1 1.990 000 GHz -24.98 dBm Ref Offset 40.7 dB Ref 40.70 dBm 10 dB/div 1 Center 1.990000 GHz #Res BW 13 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 39 kHz\* STATUS

Channel Position T - QPSK / Bandwidth 1.4 MHz

| Keysight Sp<br>RL | ectrum Analyzer - Swept SA<br>RF 50 Ω DC |  | SENSE:INT  | ALIGN AUTO                     | 05:06:43 PM Apr 27, 2017                     |
|-------------------|--|--|--|--------------------------------|--|
|                   | req 1.993500000 GH                       |  | Trig: Free Run<br>#Atten: 20 dB  | Avg Type: RMS<br>Avg Hold: 1/1 | TRACE 1 2 3 4 5<br>TYPE A WWWW<br>DET A NNNN |
| 0 dB/div          | Ref Offset 40.7 dB<br>Ref 15.98 dBm      |  |  |                                | Mkr1 1.991 080 GH<br>-35.947 dBr             |
| 5.98              |  |  |  |                                |  |
|                   |  |  |  |                                |  |
| 4.02              |  |  |  |                                |  |
| 4.0               |  |  |  |                                |  |
| 24.0              |  |  |  |                                | -29.02 d                                     |
| 4.0               |  |  |  |                                |  |
| 4.0               |  | and the second s | and the second | *****                          |  |
| 4.0               |  |  |  |                                |  |
| 4.0               |  |  |  |                                |  |
| 4.0               |  |  |  |                                |  |
|                   | 993500 GHz                               |  |  |                                | Span 5.000 MH<br>Sweep 5.000 s (1001 pt      |
| Res BW            | 51 kHz                                   | #VB  | W 150 kHz*   | #                              | Sweep 5.000 s (1001 pt                       |



Keysig Analyzer - Swept SA 08:44:09 PM Apr 27, 2017 TRACE 1 2 3 4 5 TYPE DET A N N N N RL ALIGN AU Avg Type: RMS Center Freq 1.930000000 GHz Trig: Free Run #Atten: 18 dB PNO: Wide ++-IFGain:Low Mkr1 1.930 000 GHz -20.77 dBm Ref Offset 40.7 dB Ref 42.70 dBm 10 dB/div -16.01 dB Center 1.930000 GHz #Res BW 30 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 91 kHz\* STATUS 202

Channel Position B - QPSK / Bandwidth 3.0 MHz

| Keysight Spectrum Analyzer - Swept SA         | SENSE:INT  | ALIGN AUTO   | 08:44:22 PM Apr 27, 2017                   |
|---|--|--|--|
| Center Freq 1.926500000 G                     |  | Avg Type: RMS<br>Avg Hold: 1/1   | TRACE 2 3 4 5<br>TYPE A WWWW<br>DET A NNNN |
| Ref Offset 40.7 dB<br>10 dB/div Ref 15.98 dBm |  | M  | kr1 1.928 990 GH<br>-37.620 dBn            |
| 5.98  |  |  |  |
| 4.02  |  |  |  |
| 14.0  |  |  |  |
| 24.0  |  |  | -29.02 df                                  |
| 34.0  |  |  |  |
| 44.0  | and a second | and and a second s |  |
| 54.0  |  |  |  |
| 74.0  |  |  |  |
| Center 1.926500 GHz                           |  |  | Spap 5 000 MH                              |
| Res BW 51 kHz                                 | #VBW 150 kHz*  | #Sw  | Span 5.000 MH<br>eep 5.000 s (1001 pts     |



Analyzer - Swept SA Ke 08:49:04 PM Apr 27, 2017 TRACE 2 3 4 5 TYPE DET A NNNN RL ALIGN AU Avg Type: RMS Center Freq 1.990000000 GHz Trig: Free Run #Atten: 16 dB PNO: Wide ++-IFGain:Low Mkr1 1.990 000 GHz -20.48 dBm Ref Offset 40.7 dB Ref 40.70 dBm 10 dB/div Center 1.990000 GHz #Res BW 30 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 91 kHz\* STATUS sa

Channel Position T - QPSK / Bandwidth 3.0 MHz

| Keysight Spectrum Analy     |                         |                              |                                   |                                |                          |                        |
|-----------------------------|-------------------------|------------------------------|-----------------------------------|--------------------------------|--------------------------|------------------------|
| RL RF                       | 50 Ω DC                 |                              | SENSE:INT                         | ALIGN AUTO                     |                          | 17 PM Apr 27, 2017     |
| enter Freq 1.9              | 93500000 GH             | Z<br>PNO: Wide<br>IFGain:Low | . Trig: Free Run<br>#Atten: 16 dB | Avg Type: RMS<br>Avg Hold: 1/1 |                          | TYPE A                 |
| Ref Offs<br>0 dB/div Ref 15 | set 40.7 dB<br>5.98 dBm |                              |                                   |                                | Mkr1 1.99<br>-36         | 1 015 GH:<br>6.850 dBn |
|                             |                         |                              |                                   |                                |                          |                        |
| .98                         |                         |                              |                                   |                                |                          |                        |
|                             |                         |                              |                                   |                                |                          |                        |
| .02                         |                         |                              |                                   |                                |                          |                        |
|                             |                         |                              |                                   |                                |                          |                        |
| 14.0                        |                         |                              |                                   |                                |                          |                        |
|                             |                         |                              |                                   |                                |                          |                        |
| 24.0                        |                         |                              |                                   |                                |                          | -29 02 dt              |
| 34.0 1                      |                         |                              |                                   |                                |                          |                        |
| -                           |                         |                              |                                   |                                |                          |                        |
| 44.0                        | and a second second     | remandamente                 | -                                 |                                |                          |                        |
|                             |                         |                              |                                   | consideration and the second   | any managed and a second | manumen                |
| 54.0                        |                         |                              |                                   |                                |                          |                        |
|                             |                         |                              |                                   |                                |                          |                        |
| 64.0                        |                         |                              |                                   |                                |                          |                        |
|                             |                         |                              |                                   |                                |                          |                        |
| 74.0                        |                         |                              |                                   |                                |                          |                        |
|                             |                         |                              |                                   |                                |                          |                        |
| enter 1.993500              | GHz                     |                              | W 450 kH=t                        |                                | Spa<br>#Sweep 5.000      | n 5.000 MH             |
| Res BW 51 kHz               |                         | #VE                          | W 150 kHz*                        |                                | #Sweep 5.000             | s (1001 pts            |



02:17:26 PM May 11, 2017 TRACE 2 34 5 0 TYPE DET A NNN N Analyzer - Swept SA Keysig RL ALIGN AU Avg Type: RMS Center Freq 1.930000000 GHz Trig: Free Run #Atten: 24 dB PNO: Wide ++-IFGain:Low Mkr1 1.930 000 GHz -24.45 dBm Ref Offset 40.7 dB Ref 48.12 dBm 10 dB/div Center 1.930000 GHz #Res BW 51 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 160 kHz\* STATUS SG

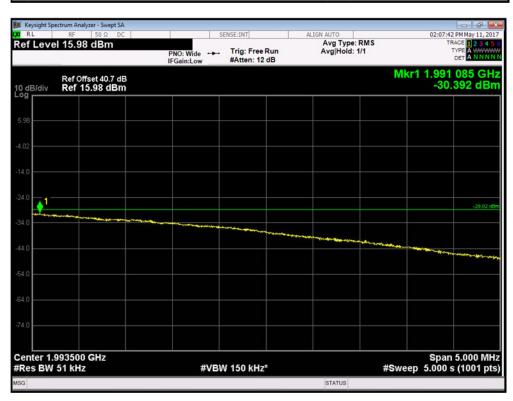
Channel Position B - QPSK / Bandwidth 5.0 MHz

| Keysight Spectrum Analyzer - Sv     |   |                 |                                 |                            |  | - 6   |
|-------------------------------------|---|-----------------|---------------------------------|----------------------------|--|---|
|                                     | 2 DC  | SEN             | VSE:INT                         | ALIGN AUTO                 |  | 02:17:38 PM May 11, 20                      |
| enter Freq 1.9265                   | 00000 GHz<br>PNO:<br>IFGair   | Wide ↔<br>n:Low | Trig: Free Run<br>#Atten: 24 dB | Avg Type:  <br>Avg Hold: 1 | /1   | TRACE 1 2 3 4 9<br>TYPE A WWWW<br>DET A NNN |
| Ref Offset 40<br>dB/div Ref 15.98   |   |                 |                                 |                            | Mkr1   | 1.928 950 GH<br>-31.360 dBr                 |
|                                     |   |                 |                                 |                            |  |   |
| .98                                 |   |                 |                                 |                            |  |   |
| 02                                  |   |                 |                                 |                            |  |   |
|                                     |   |                 |                                 |                            |  |   |
| .0                                  |   |                 |                                 |                            |  |   |
| .0                                  |   |                 |                                 |                            |  |   |
|                                     |   |                 |                                 |                            |  | -29.02 0                                    |
| 0.0                                 | when the second s |                 | -                               | warter and the mast and    | and the second s |   |
| .0                                  |   |                 |                                 |                            |  |   |
| .0                                  |   |                 |                                 |                            |  |   |
|                                     |   |                 |                                 |                            |  |   |
| .0                                  |   |                 |                                 |                            |  |   |
| 4.0                                 |   |                 |                                 |                            |  |   |
|                                     |   |                 |                                 |                            |  |   |
| enter 1.926500 GHz<br>Res BW 51 kHz |   | #\/B\/          | 150 kHz*                        |                            | #Sween   | Span 5.000 Mi<br>5.000 s (1001 pt           |
|                                     |   | #VDVV           | 150 KH2                         | STATUS                     | #oweeh   | 5.000 S (1001 pt                            |



Keysig - Swent SI 02:06:50 PM May 11, 2017 RL ALIGN AU Avg Type: RMS TRACE 1 2 3 4 1 TYPE WINNIN DET A N N N Center Freq 1.990000000 GHz Trig: Free Run #Atten: 24 dB PNO: Wide +++ Mkr1 1.990 000 GHz -22.54 dBm Ref Offset 40.7 dB Ref 48.35 dBm 10 dB/div -16.01 d Center 1.990000 GHz #Res BW 51 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 160 kHz\* STATUS 202

Channel Position T - QPSK / Bandwidth 5.0 MHz





Ke Analyzer - Swept SA 08:14:29 PM Apr 27, 2017 RL ALIGN AU Avg Type: RMS TRACE 2 3 4 TYPE Center Freq 1.930000000 GHz Trig: Free Run #Atten: 22 dB PNO: Wide ++-IFGain:Low Mkr1 1.930 000 GHz -23.95 dBm Ref Offset 40.7 dB Ref 46.70 dBm 10 dB/div Center 1.930000 GHz #Res BW 100 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 300 kHz\* STATUS sa

Channel Position B - QPSK / Bandwidth 10.0 MHz

| SG                 |                                     |           |                | STATUS                                   |      |                      |   |
|--------------------|-------------------------------------|-----------|----------------|--|------|----------------------|---|
| enter 1.<br>Res BW | 926500 GHz<br>51 kHz                | #VBV      | V 150 kHz*     |  | #Swe | Span :<br>ep 5.000 s | 5.000 MH<br>(1001 pt                      |
|                    |                                     |           |                |  |      |                      |   |
| 74.0               |                                     |           |                |  |      |                      |   |
| 54.0               |                                     |           |                |  |      |                      |   |
| 54.0               |                                     |           |                |  |      |                      |   |
| 4.0                |                                     |           |                |  |      |                      |   |
| 14.U               |                                     |           |                |  |      |                      |   |
| 4.0                |                                     |           |                |  |      |                      | -29.02                                    |
| 4.0                |                                     |           |                |  |      |                      |   |
| 4.0                |                                     |           |                |  |      |                      |   |
| .02                |                                     |           |                |  |      |                      |   |
| 5.98               |                                     |           |                |  |      |                      |   |
|                    |                                     |           |                |  |      |                      |   |
| ) dB/div           | Ref Offset 40.7 dB<br>Ref 15.98 dBm |           |                |  | IVIK | r1 1.928<br>-33.2    | 285 dB                                    |
|                    |                                     | PNO: Wide | #Atten: 24 dB  | Avg Hold: 1                              |      | 0                    |   |
| RL<br>enter F      | RF 50 Ω DC<br>req 1.926500000 GH    | z         | Trig: Free Run | ALIGN AUTO<br>Avg Type: I<br>Avg Hold: 1 | RMS  | TRA                  | PM Apr 27, 20<br>CE 1 2 3 4<br>(PE A 4444 |
|                    | ectrum Analyzer - Swept SA          |           |                |  |      |                      |   |



n Analyzer - Swept SA Keysig 08:18:51 PM Apr 27, 2017 TRACE 2 3 4 5 TYPE DET A NNNN RL ALIGN AU Avg Type: RMS Center Freq 1.990000000 GHz Trig: Free Run #Atten: 24 dB PNO: Wide ++-IFGain:Low Mkr1 1.990 000 GHz -22.69 dBm Ref Offset 40.7 dB Ref 48.22 dBm 10 dB/div Center 1.990000 GHz #Res BW 100 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 300 kHz\* STATUS sa

## Channel Position T - QPSK / Bandwidth 10.0 MHz

| R L                 | RF 50 Ω DC                          | s         | ENSE:INT                        | ALIGN AUTO                            |            | 08:19:03             | PM Apr 27, 201                            |
|---------------------|-------------------------------------|-----------|---------------------------------|---------------------------------------|------------|----------------------|---|
| enter Fr            | req 1.993500000 GH                  | PNO: Wide | Trig: Free Run<br>#Atten: 24 dB | Avg Type:<br>Avg Hold:                | 1/1        | T                    | ACE 1 2 3 4 5<br>YPE A WINN<br>DET A NNNN |
| 0 dB/div            | Ref Offset 40.7 dB<br>Ref 15.98 dBm |           |                                 |                                       | M          | (r1 1.991<br>-30.0   | 100 GH<br>605 dBr                         |
| ~a                  |                                     |           |                                 |                                       |            |                      |   |
| 5.98                |                                     |           |                                 |                                       |            |                      |   |
| .02                 |                                     |           |                                 |                                       |            |                      |   |
|                     |                                     |           |                                 |                                       |            |                      |   |
| 4.0                 |                                     |           |                                 |                                       |            |                      |   |
|                     |                                     |           |                                 |                                       |            |                      | -29.02                                    |
| 4.0                 |                                     | -         |                                 |                                       |            |                      | -28.02                                    |
|                     |                                     |           |                                 | 64,11-17-17-page-series-per-re-series | - Mapeling |                      | -   |
|                     |                                     |           |                                 |                                       |            |                      |   |
| 4.0                 |                                     |           |                                 |                                       |            |                      |   |
|                     |                                     |           |                                 |                                       |            |                      |   |
| 4.0                 |                                     |           |                                 |                                       |            |                      |   |
| 4.0                 |                                     |           |                                 |                                       |            |                      |   |
|                     |                                     |           |                                 |                                       |            |                      |   |
| enter 1.9<br>Res BW | 993500 GHz<br>51 kHz                | #VBV      | V 150 kHz*                      |                                       | #Swe       | Span :<br>ep 5.000 s | 5.000 MI<br>(1001 pi                      |
| G                   |                                     |           |                                 | STATUS                                |            |                      |   |



Keysig alvzer - Swent Sk 08:35:17 PM Apr 27, 2017 RL Avg Type: RMS TYPE WWWWWW Center Freq 1.930000000 GHz Trig: Free Run #Atten: 22 dB PNO: Wide +++ Mkr1 1.930 000 GHz -26.72 dBm Ref Offset 40.7 dB Ref 46.70 dBm 10 dB/div 1 Center 1.930000 GHz #Res BW 150 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 470 kHz\* STATUS 202

Channel Position B - QPSK / Bandwidth 15.0 MHz





Analyzer - Swept SA Keysig 08:31:07 PM Apr 27, 2017 TRACE 2 3 4 5 TYPE DET A NNNN RL ALIGN AU Avg Type: RMS Center Freq 1.990000000 GHz Trig: Free Run #Atten: 24 dB PNO: Wide ++-IFGain:Low Mkr1 1.990 000 GHz -24.66 dBm Ref Offset 40.7 dB Ref 48.19 dBm 10 dB/div 1 Center 1.990000 GHz #Res BW 150 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 470 kHz\* STATUS sa

Channel Position T - QPSK / Bandwidth 15.0 MHz

| Keysight Sp<br>R L | ectrum Analyzer - Swept SA<br>RF 50 Ω DC |                              | SENSE:INT    |                                      |                             | 00.01.1             | 9 PM Apr 27, 201                      |
|--------------------|--|------------------------------|--------------|--------------------------------------|-----------------------------|---------------------|---------------------------------------|
|                    | req 1.993500000 GH                       | Z<br>PNO: Wide<br>IFGain:Low | Tio Free Day | ALIGN AUTO<br>Avg Type:<br>Avg Hold: | 1/1                         | т                   | RACE 12345<br>TYPE A WWW<br>DET A NNN |
| dB/div             | Ref Offset 40.7 dB<br>Ref 15.98 dBm      |                              |              |                                      | M                           | kr1 1.991<br>-32    | 060 GH<br>291 dB                      |
| .98                |  |                              |              |                                      |                             |                     |                                       |
| 02                 |  |                              |              |                                      |                             |                     |                                       |
| .0                 |  |                              |              |                                      |                             |                     |                                       |
|                    |  |                              |              |                                      |                             |                     |                                       |
| .0 <b>•</b> 1      |  |                              |              |                                      |                             |                     | -29.02                                |
| .0                 |  |                              |              |                                      | when all approximation pro- |                     |                                       |
| .0                 |  |                              |              |                                      |                             |                     |                                       |
| .0                 |  |                              |              |                                      |                             |                     |                                       |
| .0                 |  |                              |              |                                      |                             |                     |                                       |
|                    |  |                              |              |                                      |                             |                     |                                       |
| enter 1.9          | 993500 GHz<br>51 kHz                     | #VE                          | 3W 150 kHz*  |                                      | #Sw                         | Span<br>eep 5.000 s | 5.000 MI                              |
| 3                  |  |                              |              | STATUS                               | <i>"</i>                    |                     | , note i pi                           |



Ke Analyzer - Swept SA 05:38:07 PM Apr 27, 2017 TRACE 2 3 4 5 TYPE DET A NNNN RL ALIGN AU Avg Type: RMS Center Freq 1.930000000 GHz Trig: Free Run #Atten: 24 dB PNO: Wide ++-IFGain:Low Mkr1 1.930 000 GHz -27.35 dBm Ref Offset 40.7 dB Ref 48.03 dBm 10 dB/div Center 1.930000 GHz #Res BW 200 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 620 kHz\* STATUS sa

## Channel Position B - QPSK / Bandwidth 20.0 MHz

| Keysight Sp<br>RL  | ectrum Analyzer - Swept SA<br>RF 50 Ω DC | l s  | ENSE:INT                        | ALIGN AUTO                    |        | 05:38:22 PM Apr 27, 201              |
|--------------------|--|------|---------------------------------|-------------------------------|--------|--------------------------------------|
|                    | req 1.926500000 GH                       |      | Trig: Free Run<br>#Atten: 24 dB | Avg Type: RM<br>Avg Hold: 1/1 | NS     | TRACE 1 2 3 4<br>TYPE A<br>DET A NNN |
| 0 dB/div           | Ref Offset 40.7 dB<br>Ref 15.98 dBm      |      |                                 |                               | Mkr1   | 1.928 855 GH<br>-37.248 dB           |
|                    |  |      |                                 |                               |        |                                      |
| .98                |  |      |                                 |                               |        |                                      |
| 02                 |  |      |                                 |                               |        |                                      |
| .0                 |  |      |                                 |                               |        |                                      |
|                    |  |      |                                 |                               |        |                                      |
|                    |  |      |                                 |                               |        | -29.02                               |
| .0                 |  |      |                                 |                               |        |                                      |
|                    |  |      |                                 |                               |        |                                      |
|                    |  |      |                                 |                               |        |                                      |
|                    |  |      |                                 |                               |        |                                      |
| .0                 |  |      |                                 |                               |        |                                      |
|                    |  |      |                                 |                               |        |                                      |
|                    |  |      |                                 |                               |        |                                      |
| enter 1.<br>Res BW | 926500 GHz<br>51 kHz                     | #VBV | V 150 kHz*                      |                               | #Sweep | Span 5.000 Mi<br>5.000 s (1001 pi    |
| G                  |  |      |                                 | STATUS                        |        |                                      |



alyzer - Swept SA 05:46:17 PM Apr 27, 2017 RL ALIGN AU Avg Type: RMS TRACE 2 3 4 TYPE Center Freq 1.990000000 GHz Trig: Free Run #Atten: 24 dB PNO: Wide ++-IFGain:Low Mkr1 1.990 000 GHz -25.72 dBm Ref Offset 40.7 dB Ref 48.21 dBm 10 dB/div Center 1.990000 GHz #Res BW 200 kHz Span 2.000 MHz #Sweep 5.000 s (1001 pts) #VBW 620 kHz\* STATUS sa

## Channel Position T - QPSK / Bandwidth 20.0 MHz

| Keysight Spi<br>RL  | ectrum Analyzer - Swept SA<br>RF 50 Ω DC |         | ENSE:INT                        | ALIGN AUTO               |  | 05:46:29 PM Apr 27, 20  |
|---------------------|--|---------|---------------------------------|--------------------------|--|---|
|                     | req 1.993500000 GH                       |         | Trig: Free Run<br>#Atten: 24 dB | Avg Type:<br>Avg Hold: 1 | /1                                     | TRACE 2 3 4<br>TYPE A WWWW<br>DET A NNN   |
| 0 dB/div            | Ref Offset 40.7 dB<br>Ref 15.98 dBm      |         |                                 |                          | Mk                                     | r1 1.991 000 GH<br>-34.415 dB   |
|                     |  |         |                                 |                          |  |   |
| 5.98                |  |         |                                 |                          |  |   |
| .02                 |  |         |                                 |                          |  |   |
|                     |  |         |                                 |                          |  |   |
|                     |  |         |                                 |                          |  |   |
| 1.0                 |  |         |                                 |                          |  | -29.02 0  |
| 1.0                 |  |         |                                 |                          |  |   |
| 4.0                 |  |         |                                 |                          | ************************************** | and have a set of the |
|                     |  |         |                                 |                          |  |   |
| 4.0                 |  |         |                                 |                          |  |   |
| 4.0                 |  |         |                                 |                          |  |   |
| 4.0                 |  |         |                                 |                          |  |   |
|                     |  |         |                                 |                          |  |   |
| enter 1.9<br>Res BW | 993500 GHz                               | #VBV    | V 150 kHz*                      |                          | #Swee                                  | Span 5.000 Mi<br>p 5.000 s (1001 pi   |
| G                   | 51 KHZ                                   | # V B V | 150 KHZ                         | STATUS                   | #GWee                                  |   |



# Configuration L-MIMO-MC 1 (2C)

# Maximum Output Power 46.0dBm per port for 1.4MHz and 3.0MHz bandwidth. Maximum Output Power 49.0dBm per port for 5.0MHz to 20.0MHz bandwidth.

| Band Edge<br>Frequency       | Channel<br>Bandwidth | Edge Test with modulation QPSK<br>Channel Frequencies | RBW (kHz) | Limit (dBm) |
|------------------------------|----------------------|---|-----------|-------------|
|                              | 1.4 MHz              | 1930.7MHz + 1932.1MHz                                 | 13        | -16.01      |
|                              | 3.0 MHz              | 1931.5MHz + 1934.5MHz                                 | 30        | -16.01      |
| Channel Position             | 5.0 MHz              | 1932.5MHz + 1937.5MHz                                 | 51        | -16.01      |
| B <sub>RFBW</sub> 1930.0 MHz | 10.0 MHz             | 1935.0MHz + 1945.0MHz                                 | 100       | -16.01      |
|                              | 15.0 MHz             | 1937.5MHz + 1952.5MHz                                 | 150       | -16.01      |
|                              | 20.0 MHz             | 1940.0MHz + 1960.0MHz                                 | 200       | -16.01      |
|                              | 1.4 MHz              | 1987.9MHz + 1989.3MHz                                 | 13        | -16.01      |
|                              | 3.0 MHz              | 1988.5MHz + 1988.5MHz                                 | 30        | -16.01      |
| Channel Position             | 5.0 MHz              | 1982.5MHz + 1987.5MHz                                 | 51        | -16.01      |
| T <sub>RFBW</sub> 1990.0 MHz | 10.0 MHz             | 1975.0MHz + 1985.0MHz                                 | 100       | -16.01      |
|                              | 15.0 MHz             | 1967.5MHz + 1982.5MHz                                 | 150       | -16.01      |
|                              | 20.0 MHz             | 1960.0MHz + 1980.0MHz                                 | 200       | -16.01      |

Note 1: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to -13dBm.

Note 2: The channels shown in the table above are the minimum and maximum channels that can be used in the authorised frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.



| Ref Offset 40.7 dB       Avg Type: RMS       TRACE 12         Offset 40.7 dB       Mkr1 1.930 000 (<br>-25.38 c         Offset 40.7 dB       Offset 40.7 dB         Set 47.99 dBm | RL      | ectrum Analyzer - Swept SA<br>RF 50 Ω DC |                 |                | SENSE:INT   | A   | IGN AUTO |      | 05:28:27        | PM Apr 28, 201     |
|---|---------|--|-----------------|----------------|-------------|-----|----------|------|-----------------|--------------------|
| Ref 47.99 dBm       -25.38 d         9  |         |  | 00 GHz          | PNO: Wide 🔸    | Trig: Free  | Run |          | RMS  | TR              | ACE 2345           |
|   | dB/div  | Ref Offset 40.7 dE<br>Ref 47.99 dBm      | 3               |                |             |     |          | M    | kr1 1.930<br>-2 | 000 GH<br>5.38 dBr |
|   |         |  |                 |                |             |     |          |      |                 |                    |
|   |         |  |                 |                |             |     |          |      |                 |                    |
|   | 3.0     |  |                 |                |             | ~   |          |      |                 |                    |
|   | 3.0     |  |                 |                |             |     |          |      | V               |                    |
|   | 99      |  |                 |                |             |     |          |      |                 |                    |
|   | 01      |  |                 |                |             |     |          |      |                 |                    |
|   | 2.0     |  |                 |                |             | /   |          |      |                 | -16.01 d           |
|   | 2.0     |  |                 |                |             | 1   |          |      |                 |                    |
|   | 2.0     |  |                 | المعادمة وحراف | and a start |     |          |      |                 |                    |
| enter 1.930000 GHz Span 2.000   | 2.0     | **************************************   | - market of the |                |             |     |          |      |                 |                    |
| Spail 2.000   | enter 1 | 930000 GHz                               |                 |                |             |     |          |      | Snan            | 2 000 ML           |
| tes BW 13 kHz #VBW 39 kHz* #Sweep 5.000 s (1001   |         |  |                 | #VB            | W 39 kHz*   |     |          | #Swe | ep 5.000 s      | 5 (1001 pt         |

Channel Position BRFBW - QPSK / Bandwidth 1.4 MHz

| Keysight Spi<br>RL  | ectrum Analyzer - Swept SA   |   |                                 |                                      |  |                    | - 6  |
|---------------------|--|---|---------------------------------|--------------------------------------|--|--------------------|--|
|                     | RF 50 Ω DC<br>req 1.926500000 GHz  |   | Trig: Free Run<br>#Atten: 20 dB | ALIGN AUTO<br>Avg Type:<br>Avg Hold: | RMS<br>1/1   | TR                 | 0 PM Apr 28, 2011<br>RACE 1 2 3 4 5<br>TYPE A WWWW<br>DET A NNNN |
| 0 dB/div            | Ref Offset 40.7 dB<br>Ref 15.98 dBm  |   |                                 |                                      | MI   | kr1 1.928<br>-32.  | 990 GH<br>020 dBr  |
| 5.98                |  |   |                                 |                                      |  |                    |  |
| 1.02                |  |   |                                 |                                      |  |                    |  |
| 4.0                 |  |   |                                 |                                      |  |                    |  |
| 4.0                 |  |   |                                 |                                      |  |                    | -29.02   |
| 4.0                 |  |   |                                 |                                      |  | A supply and       | -28/02 0   |
| 4.0 <b>consubs</b>  | Lauran in programme in the second | James and a state of the state |                                 |                                      | - And a state of the state of t |                    |  |
| 4.0                 |  |   |                                 |                                      |  |                    |  |
| 4.0                 |  |   |                                 |                                      |  |                    |  |
| 4.0                 |  |   |                                 |                                      |  |                    |  |
| enter 1.9<br>Res BW | 926500 GHz<br>51 kHz   | #VBV  | V 150 kHz*                      |                                      | #Swe   | Span<br>ep 5.000 s | 5.000 Mi   |
| G                   |  | <i>"</i> <b>1</b> -1  |                                 | STATUS                               |  |                    |  |



| SENSE:INT    | Run          | LIGN AUTO |                       | TYPE                              |   |
|--------------|--------------|-----------|-----------------------|-----------------------------------|---|
|              |              |           |                       | TYPE<br>DET                       |   |
|              |              |           | Mł                    | <pre>xr1 1.990 00     -25.3</pre> | IO GH   |
|              |              |           |                       |                                   |   |
|              |              |           |                       |                                   |   |
|              |              |           |                       |                                   |   |
|              |              |           |                       |                                   |   |
|              |              |           |                       |                                   |   |
|              |              |           |                       |                                   |   |
|              |              |           |                       |                                   |   |
|              |              |           |                       |                                   |   |
|              |              |           |                       |                                   |   |
|              | 4            |           |                       |                                   | -16.01 d  |
|              | <u></u>      |           |                       |                                   |   |
|              | harry        | Anna an   |                       |                                   |   |
|              |              |           | and the second second | an production and                 | - AND - A |
|              |              |           |                       |                                   |   |
|              |              |           |                       |                                   |   |
| #VBW 39 kHz* |              |           | #Swe                  | Span 2.0<br>ep 5.000 s (1)        | 000 MH<br>001 pt  |
|              | #VBW 39 kHz* |           |                       | #VBW 39 kHz* #Swe                 | #VBW 39 kHz* #Sweep 5.000 s (1  |

Channel Position T<sub>RFBW</sub> - QPSK / Bandwidth 1.4 MHz

| Keysight Spe<br>R L | RF 50 Q DC                          |                   | ENSE:INT                        | ALIGN AUTO                                |           | 05:30:18 PM Apr 28, 20                   |  |
|---------------------|-------------------------------------|-------------------|---------------------------------|---|-----------|--|--|
|                     | req 1.993500000 GH                  |                   | Trig: Free Run<br>#Atten: 24 dB | Avg Type: I<br>Avg Hold: 1                | RMS<br>/1 | TRACE 1 2 3 4<br>TYPE A WWW<br>DET A NNN |  |
| ) dB/div            | Ref Offset 40.7 dB<br>Ref 15.98 dBm |                   |                                 |   | Mkr1      | 1.991 095 GH<br>-30.789 dB               |  |
|                     |                                     |                   |                                 |   |           |  |  |
| 98                  |                                     |                   |                                 |   |           |  |  |
| 12                  |                                     |                   |                                 |   |           |  |  |
| .0                  |                                     |                   |                                 |   |           |  |  |
| .0                  |                                     |                   |                                 |   |           |  |  |
| <b>•</b>            |                                     |                   |                                 |   |           | -29.02                                   |  |
| .0                  |                                     |                   | me where he have a party of     | en and an and a star and an and an an and |           |  |  |
| .0                  |                                     |                   |                                 |   |           |  |  |
| .0                  |                                     |                   |                                 |   |           |  |  |
| .0                  |                                     |                   |                                 |   |           |  |  |
|                     |                                     |                   |                                 |   |           |  |  |
| 1.0                 |                                     |                   |                                 |   |           |  |  |
| enter 1.9<br>Res BW | 993500 GHz                          | #\/B\             |                                 |   | #Swoon    | Span 5.000 M<br>5.000 s (1001 p          |  |
| G G G G G           | 51 KH2                              | #VBW 150 kHz* #St |                                 |   | #Sweep    | weep 5.000 s (1001 p                     |  |