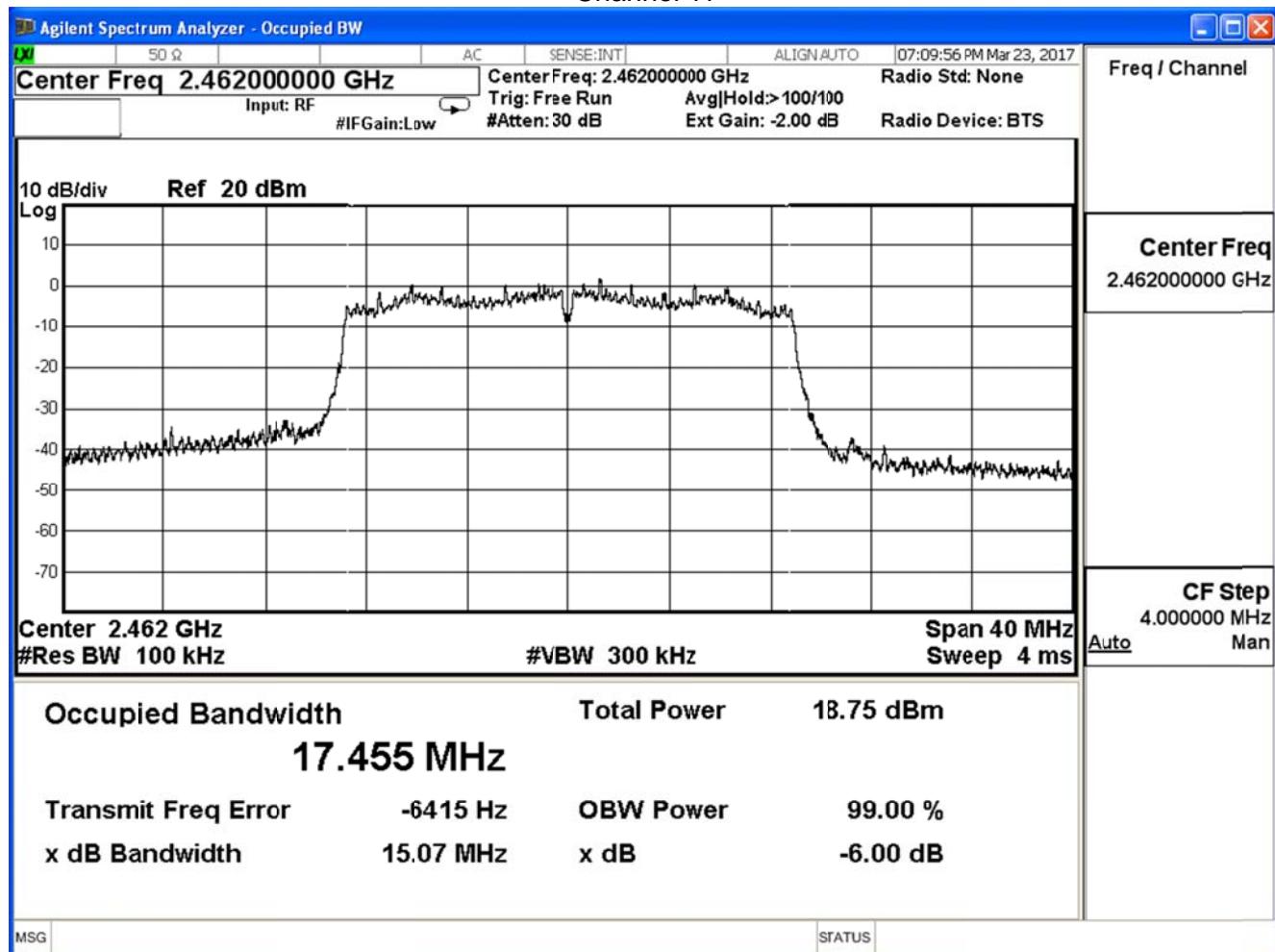


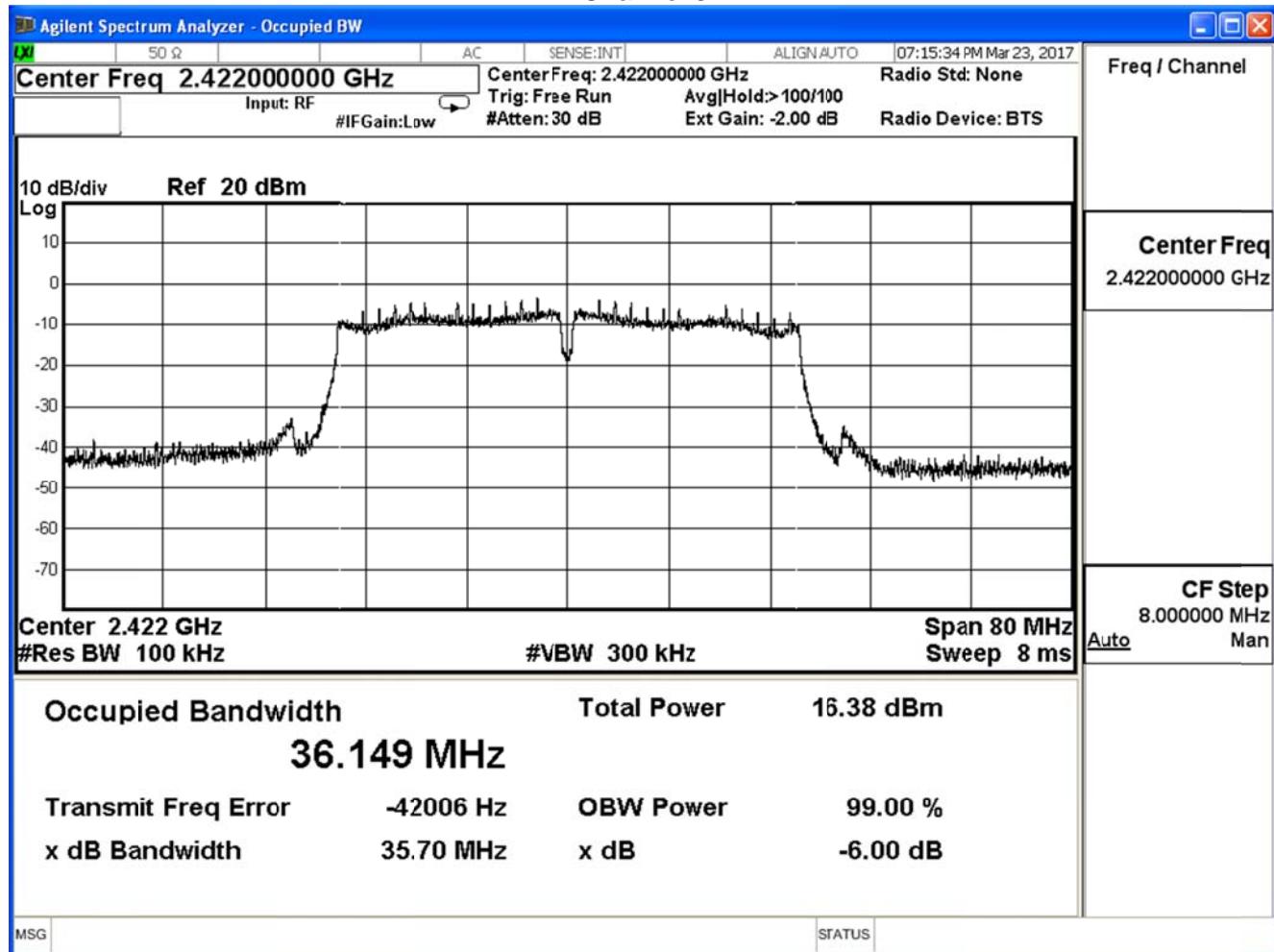
Channel 11



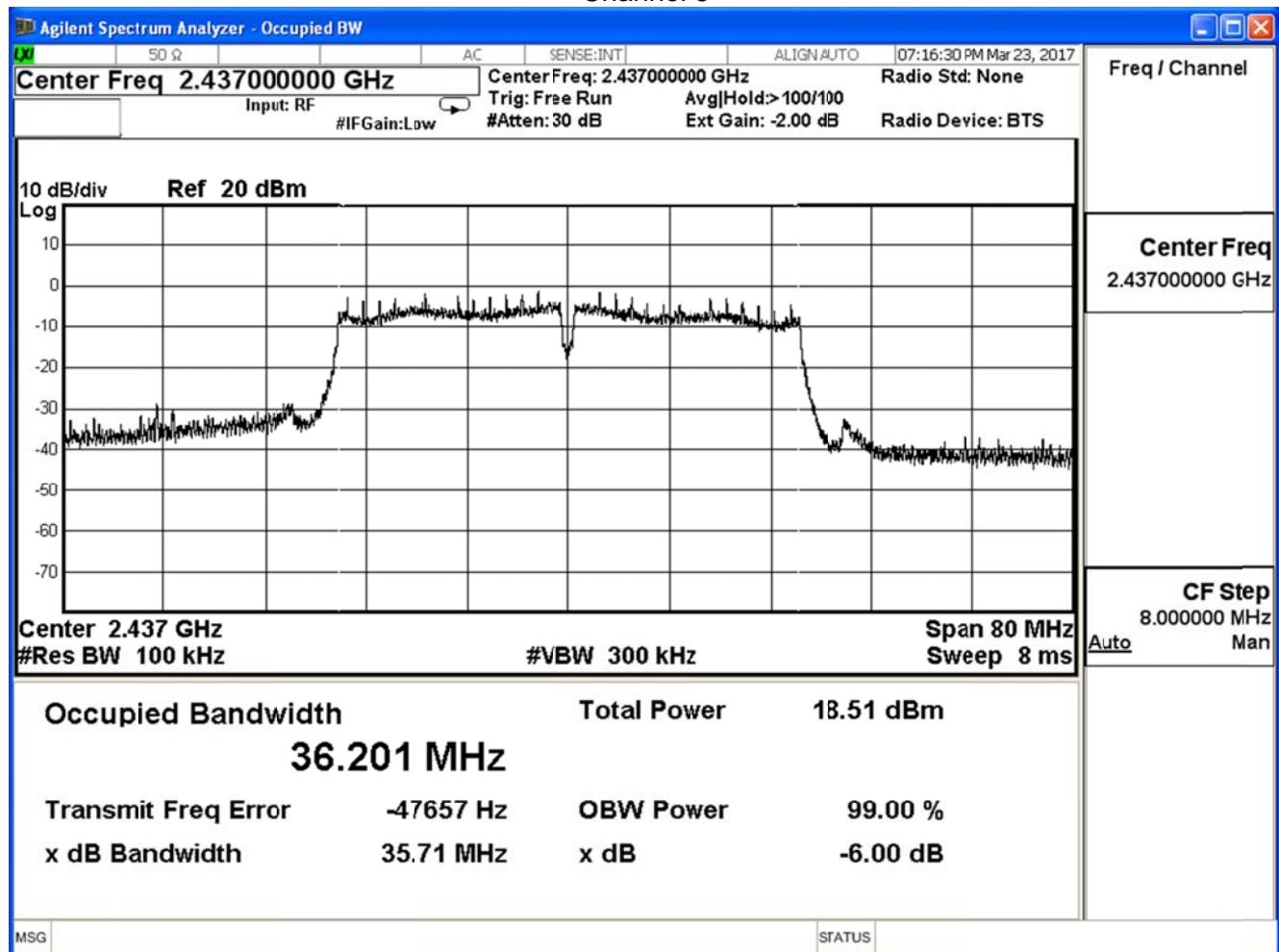
| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | DTS Bandwidth | | |
| Test Mode | Mode 2: Tx_MIMO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

| IEEE 802.11n_40M (ANT 0) | | | | |
|--------------------------|-----------------|---------------------|-------------|--------|
| Channel No. | Frequency (MHz) | Measure Level (MHz) | Limit (MHz) | Result |
| 3 | 2422 | 35.700 | ≥0.5 | Pass |
| 6 | 2437 | 35.710 | ≥0.5 | Pass |
| 9 | 2452 | 35.730 | ≥0.5 | Pass |

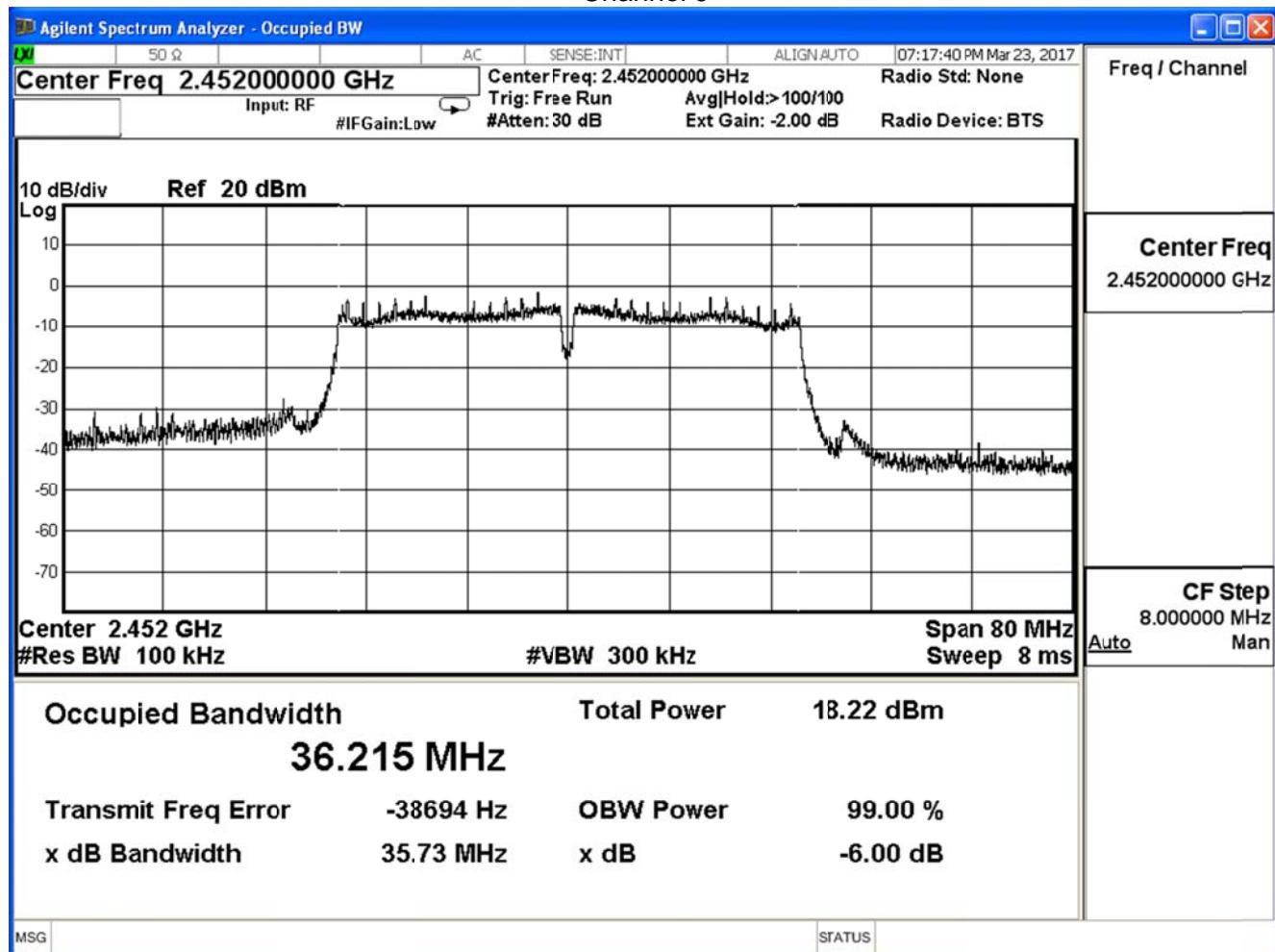
Channel 3



Channel 6



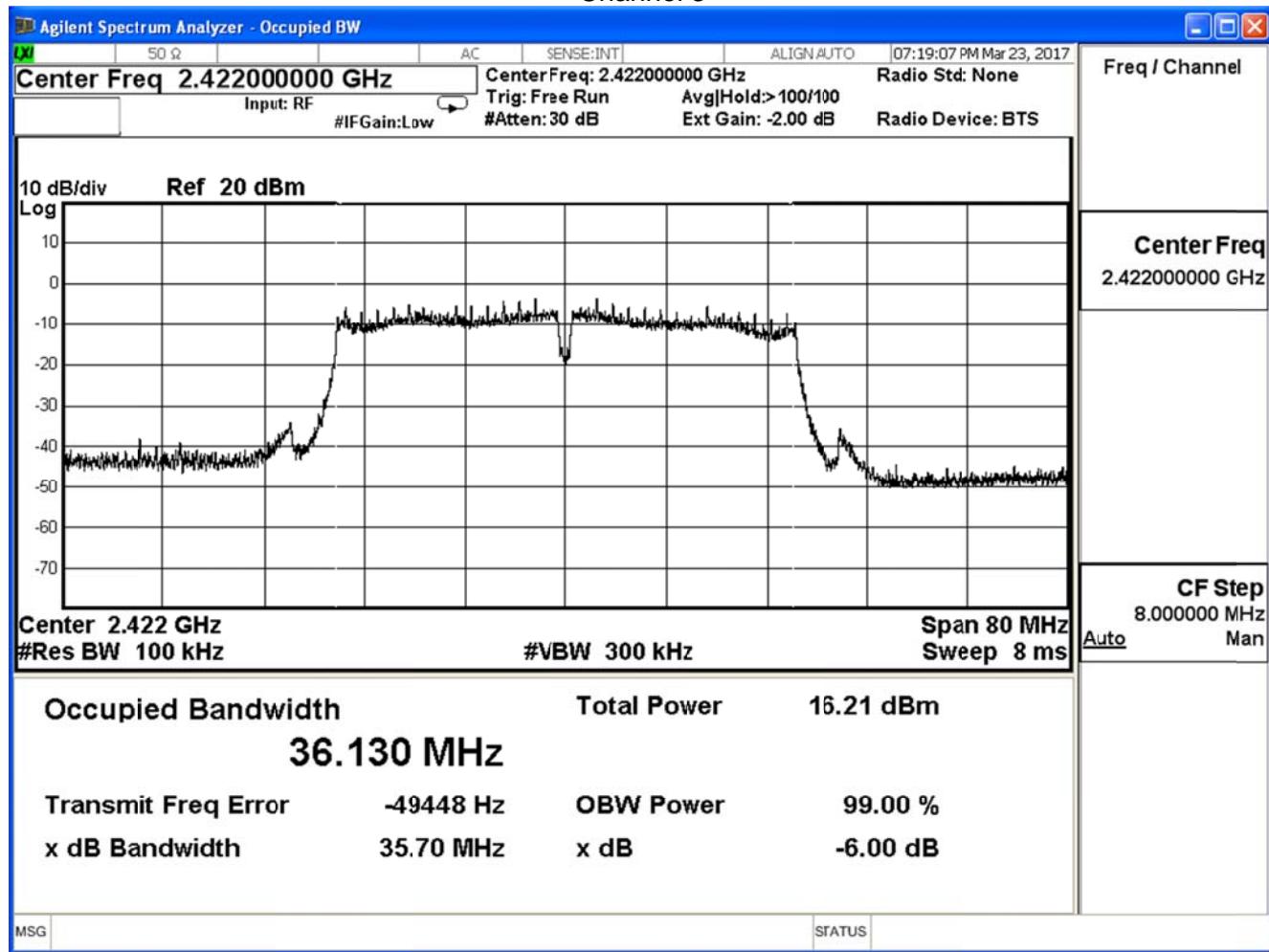
Channel 9



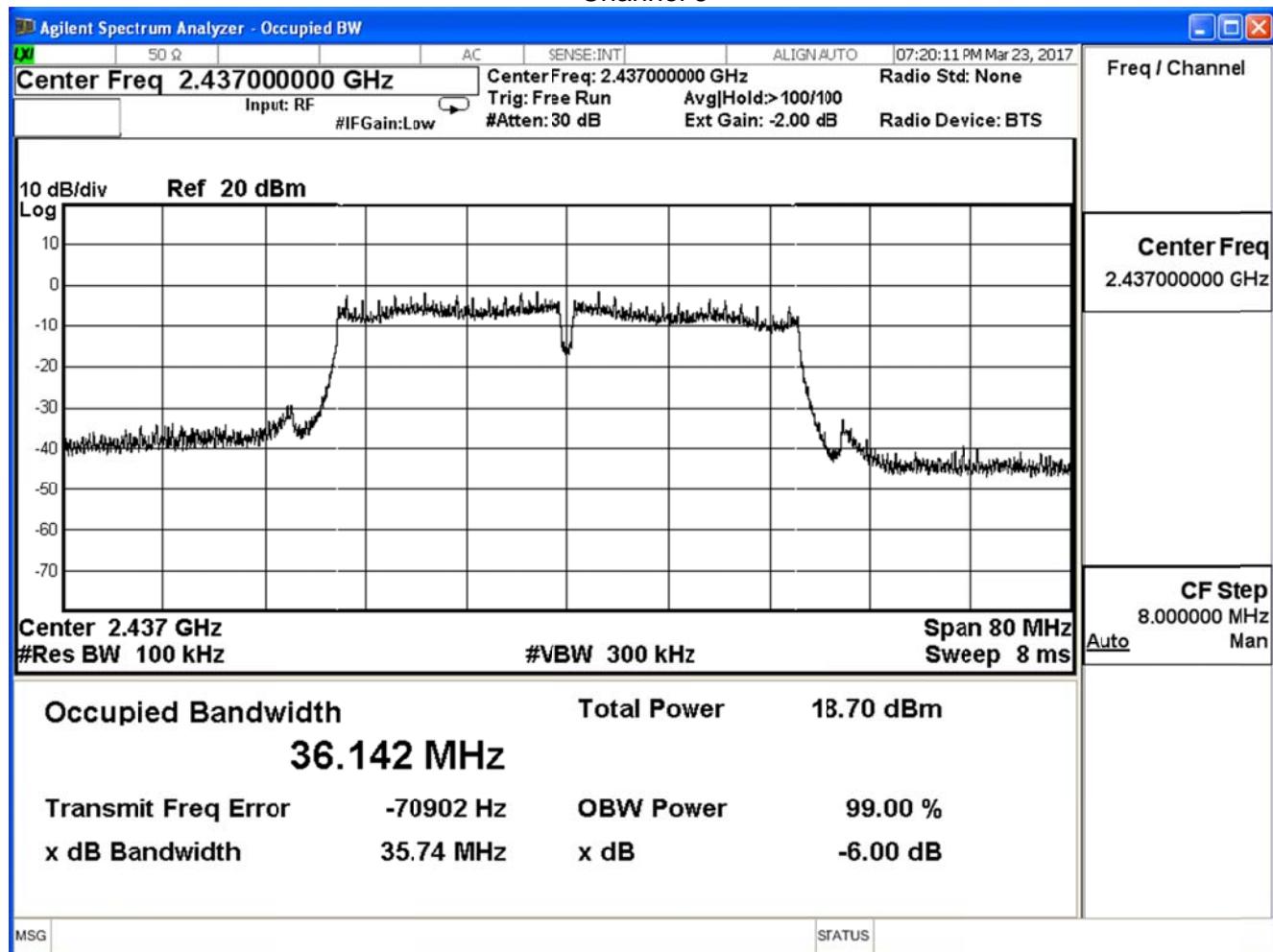
| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | DTS Bandwidth | | |
| Test Mode | Mode 2: Tx_MIMO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

| IEEE 802.11n_40M (ANT 1) | | | | |
|--------------------------|-----------------|---------------------|-------------|--------|
| Channel No. | Frequency (MHz) | Measure Level (MHz) | Limit (MHz) | Result |
| 3 | 2422 | 35.700 | ≥ 0.5 | Pass |
| 6 | 2437 | 35.740 | ≥ 0.5 | Pass |
| 9 | 2452 | 36.340 | ≥ 0.5 | Pass |

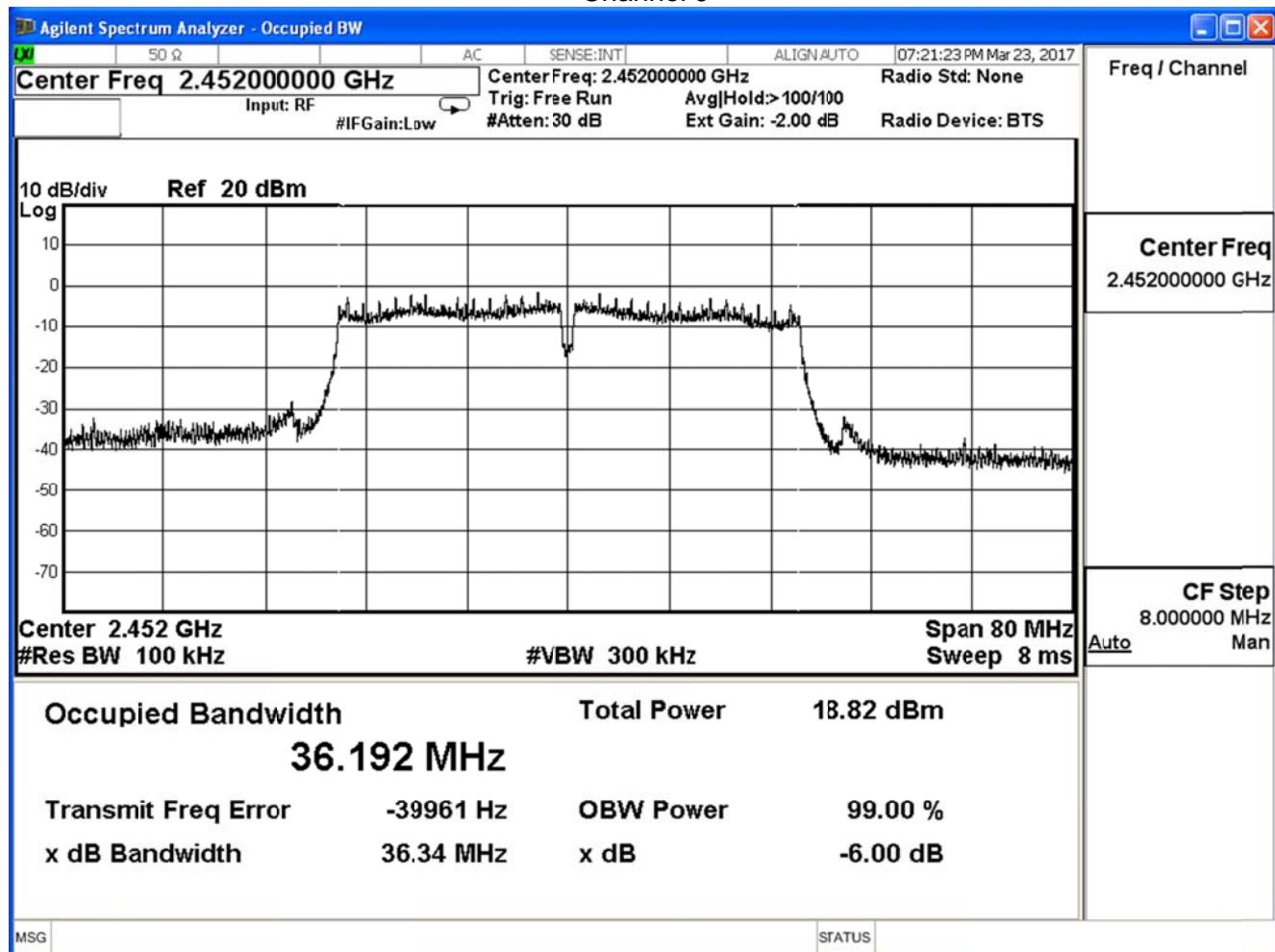
Channel 3



Channel 6



Channel 9



8. Occupied Bandwidth

8.1. Test Equipment

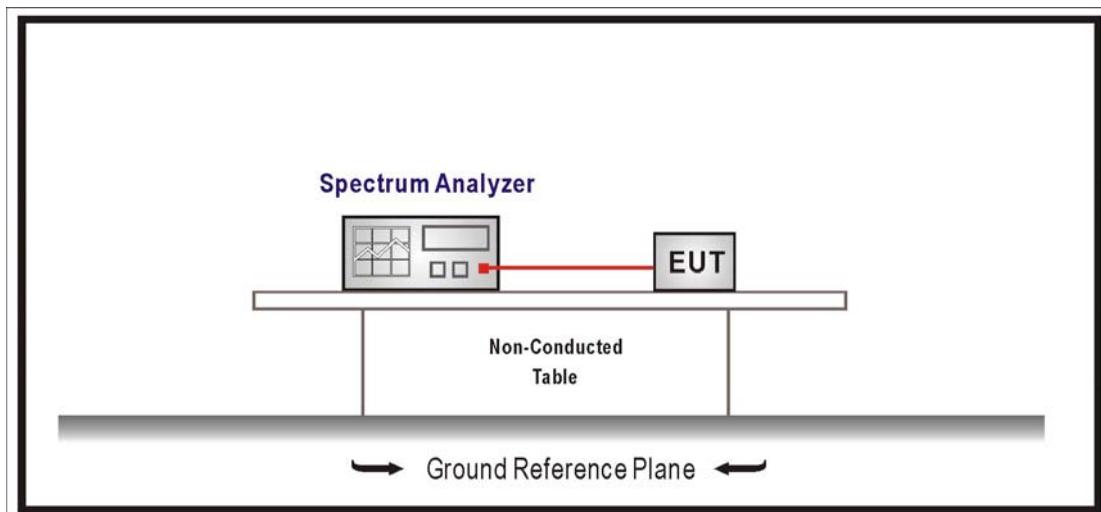
The following test equipments are used during the test:

Occupied Bandwidth / SR10-H

| Instrument | Manufacturer | Model No. | Serial No | Next Cal. Date |
|-------------------|--------------|-----------|------------|----------------|
| Spectrum Analyzer | Agilent | N9010A | US47140172 | 2017/08/08 |

Note: All equipments that need to calibrate are with calibration period of 1 year.

8.2. Test Setup



8.3. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure of KDB558074 v03r05for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 1-5% of the OBW, Set the VBW \geq 3xRBW, Sweep Time=Auto.

8.4. Limits

NA

8.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

8.6. Uncertainty

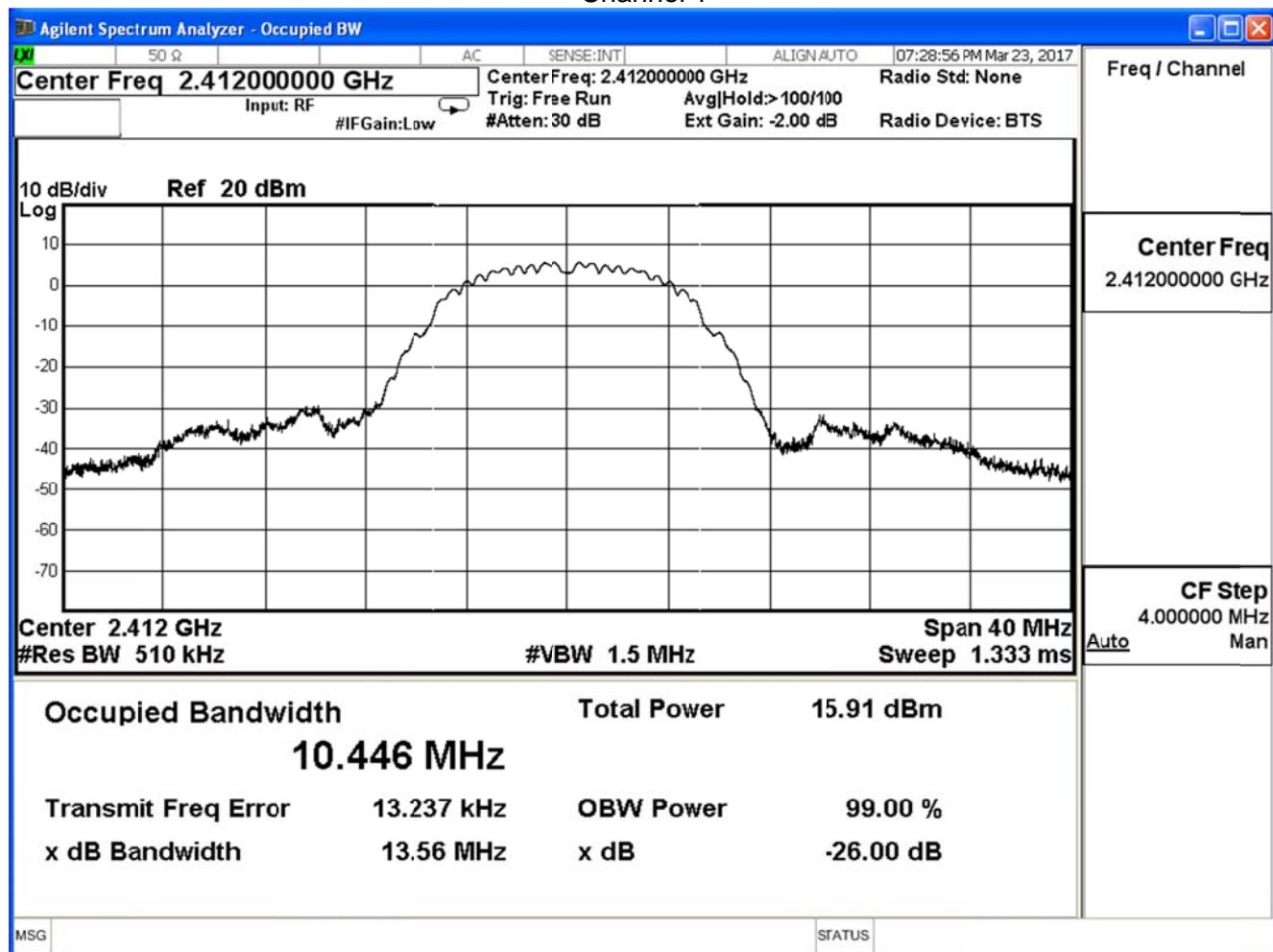
The measurement uncertainty is defined as $\pm 150\text{Hz}$

8.7. Test Result

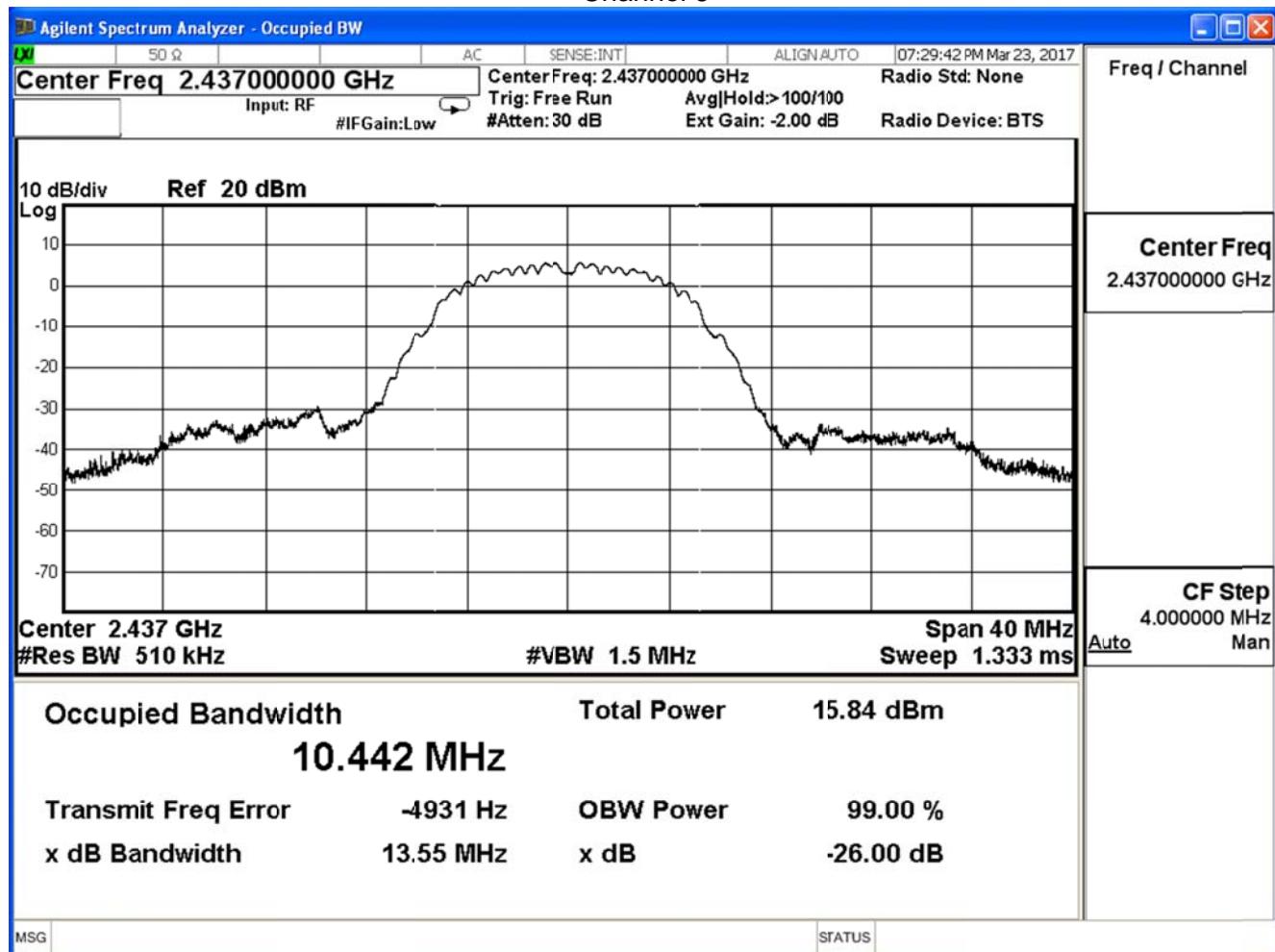
| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Occupied Bandwidth | | |
| Test Mode | Mode 1: Tx_SISO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

| 802.11 b (ANT 0) | | | | |
|------------------|-----------------|--------------------|-------------|--------|
| Channel No. | Frequency (MHz) | Measure Level(MHz) | Limit (MHz) | Result |
| 1 | 2412 | 10.446 | -- | Pass |
| 6 | 2437 | 10.442 | -- | Pass |
| 11 | 2462 | 10.454 | -- | Pass |

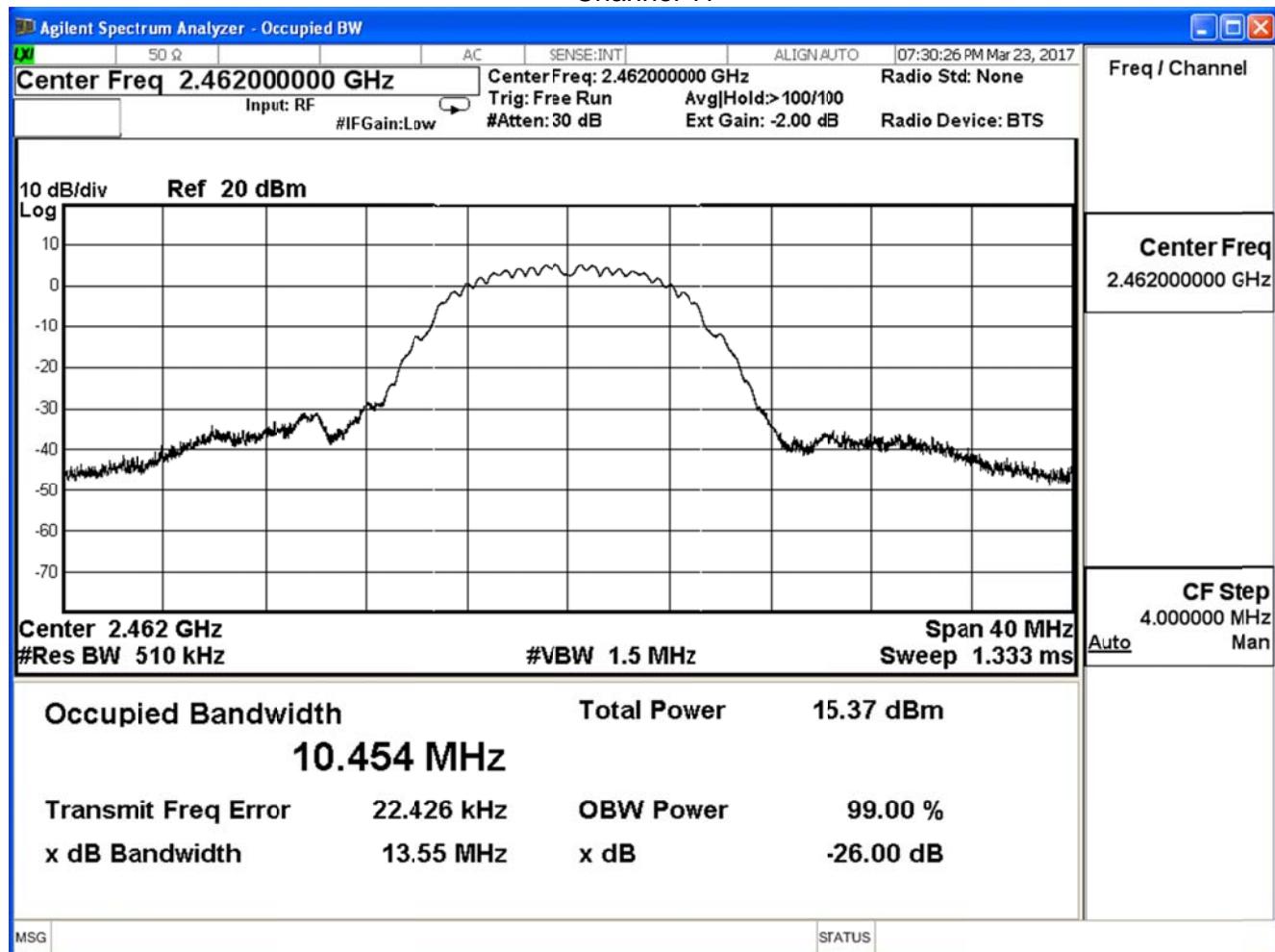
Channel 1



Channel 6



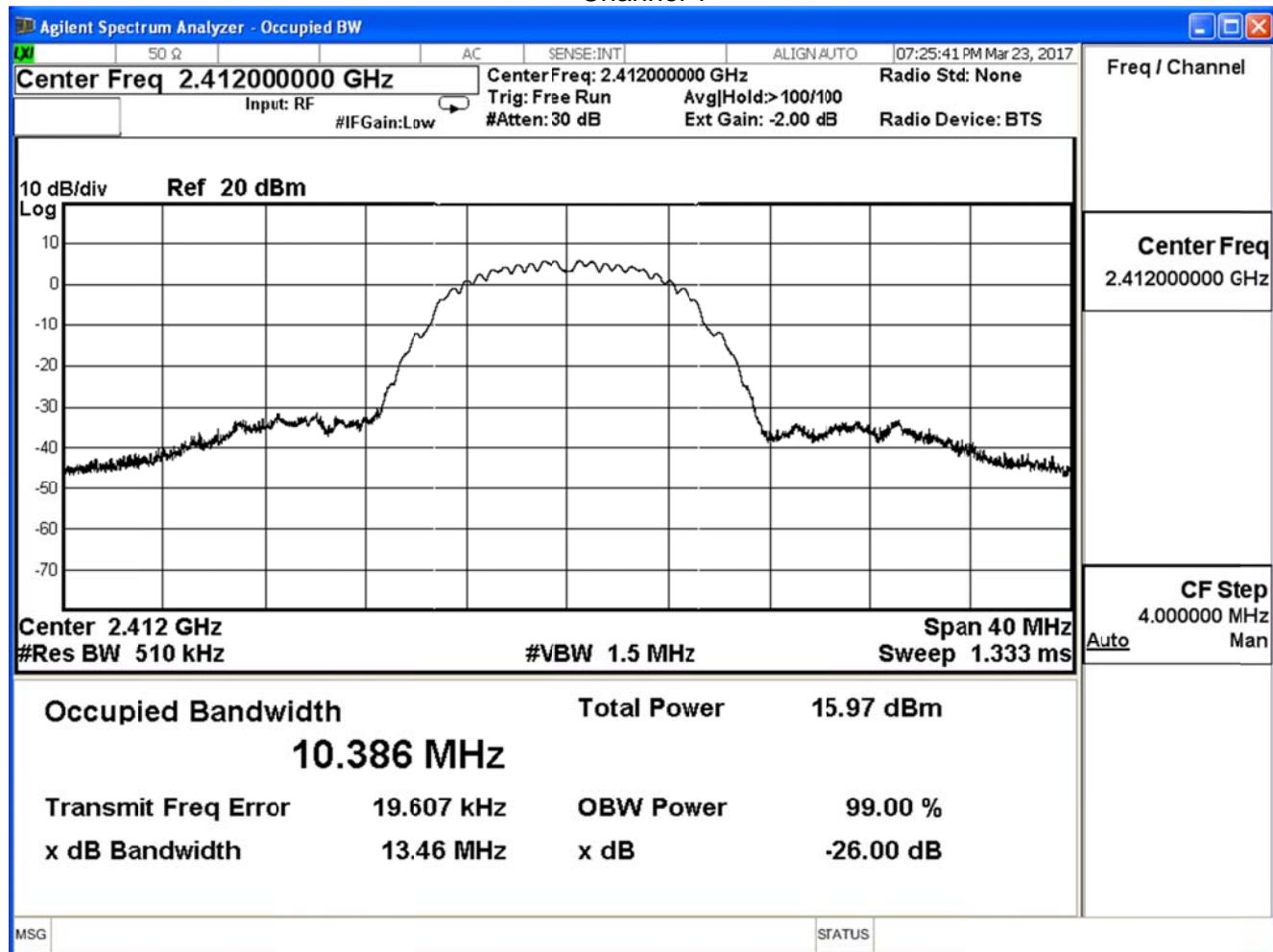
Channel 11



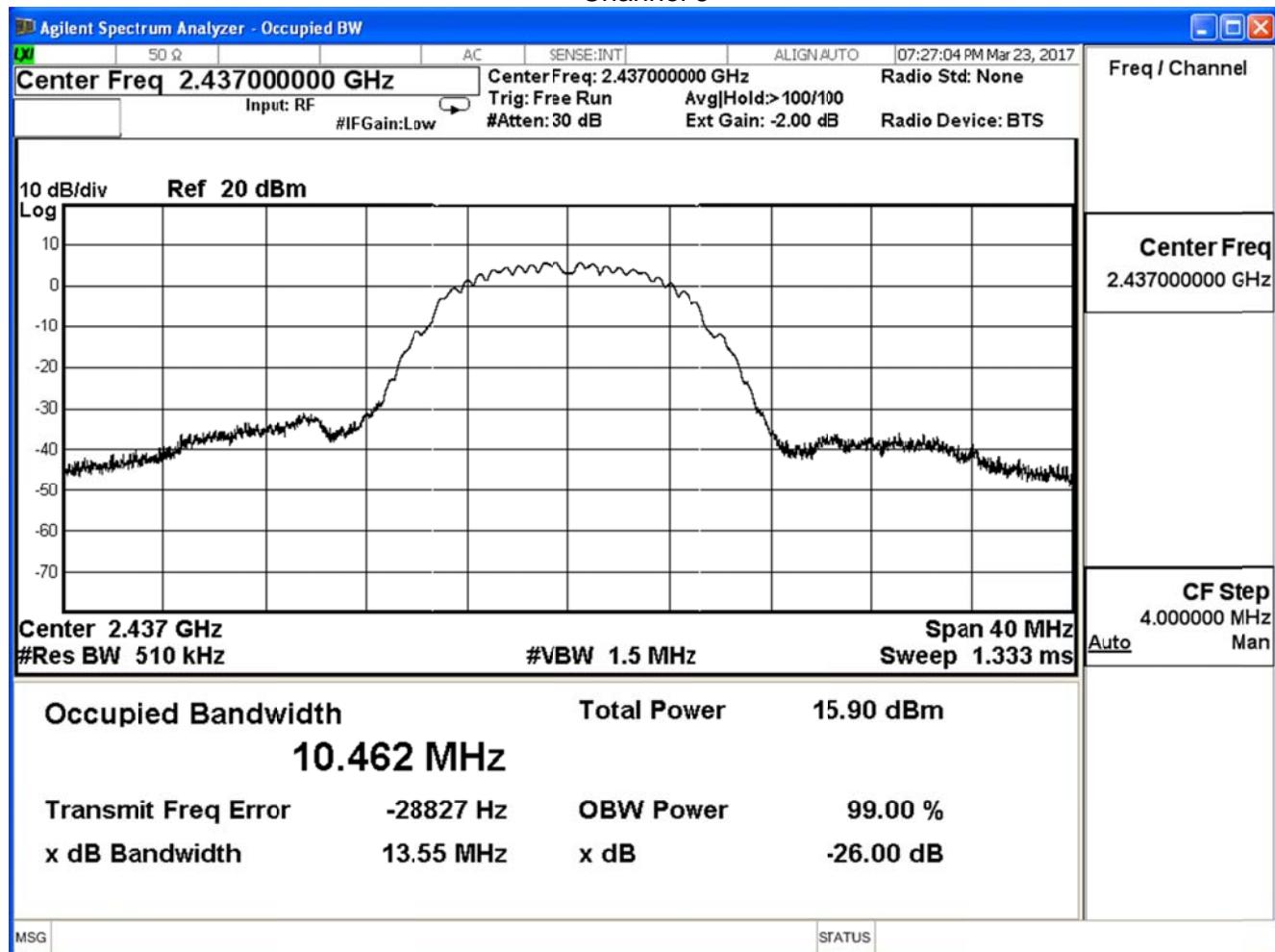
| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Occupied Bandwidth | | |
| Test Mode | Mode 1: Tx_SISO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

| 802.11 b (ANT 1) | | | | |
|------------------|-----------------|--------------------|-------------|--------|
| Channel No. | Frequency (MHz) | Measure Level(MHz) | Limit (MHz) | Result |
| 1 | 2412 | 10.386 | -- | Pass |
| 6 | 2437 | 10.462 | -- | Pass |
| 11 | 2462 | 10.468 | -- | Pass |

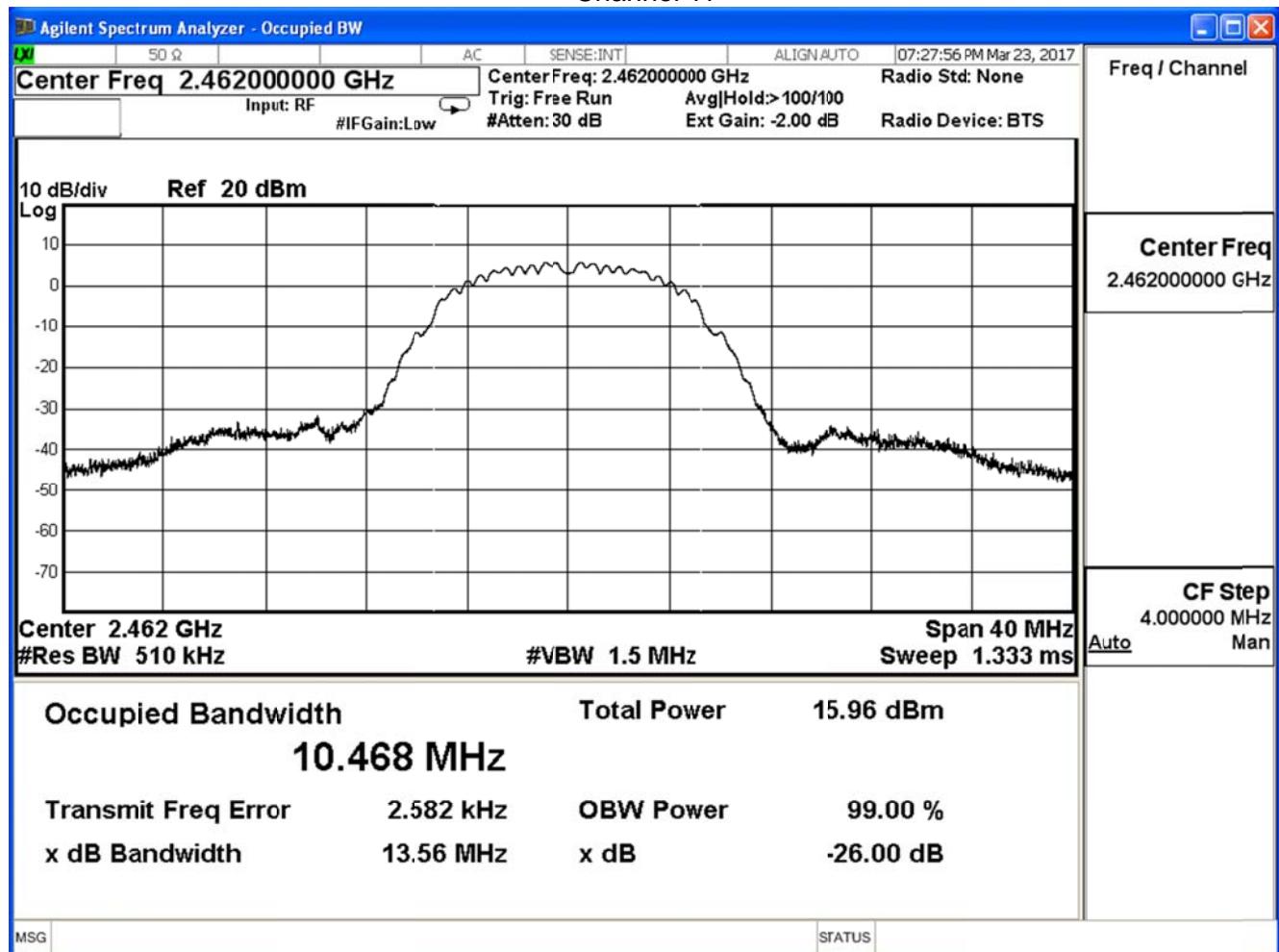
Channel 1



Channel 6



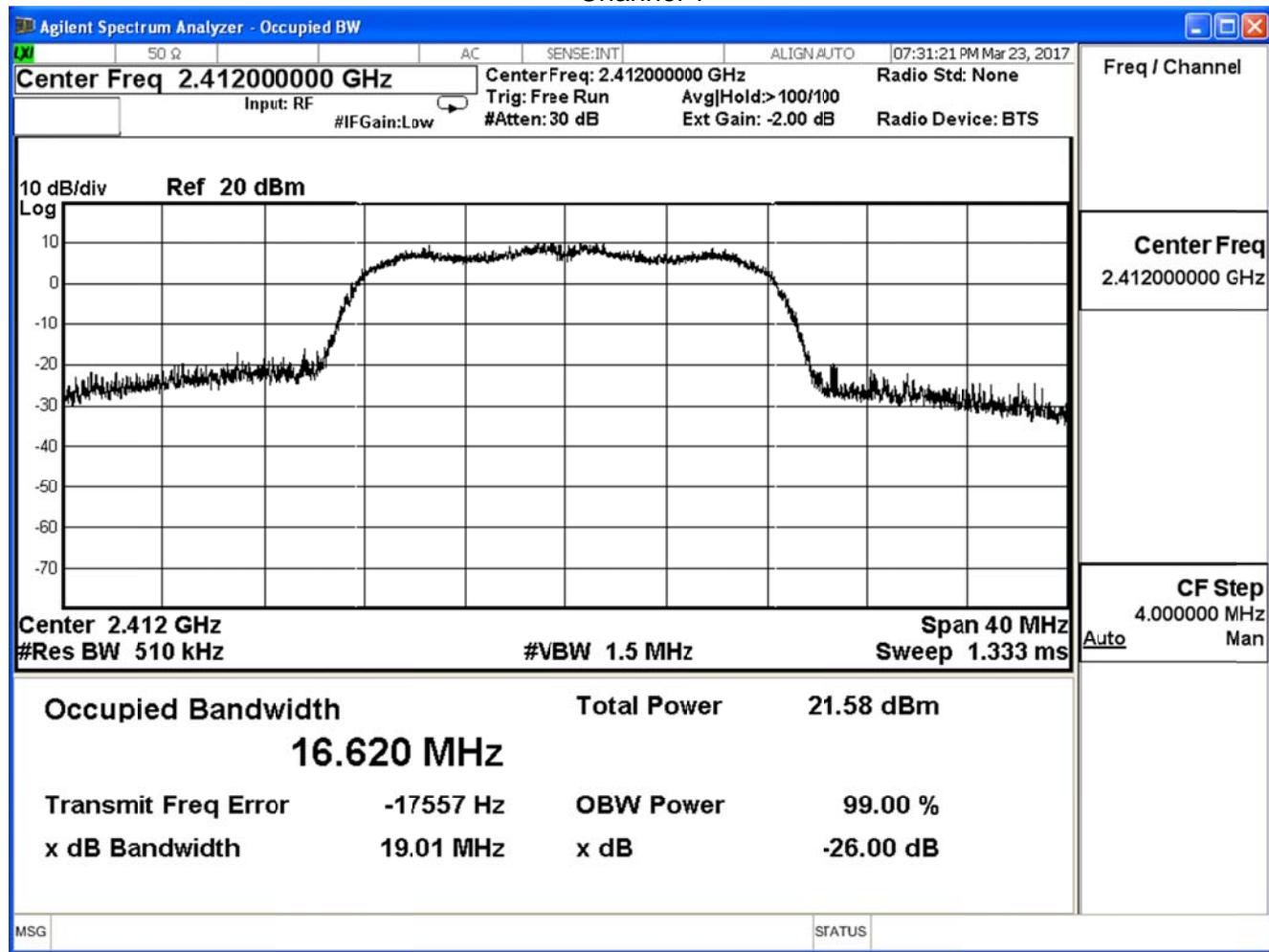
Channel 11



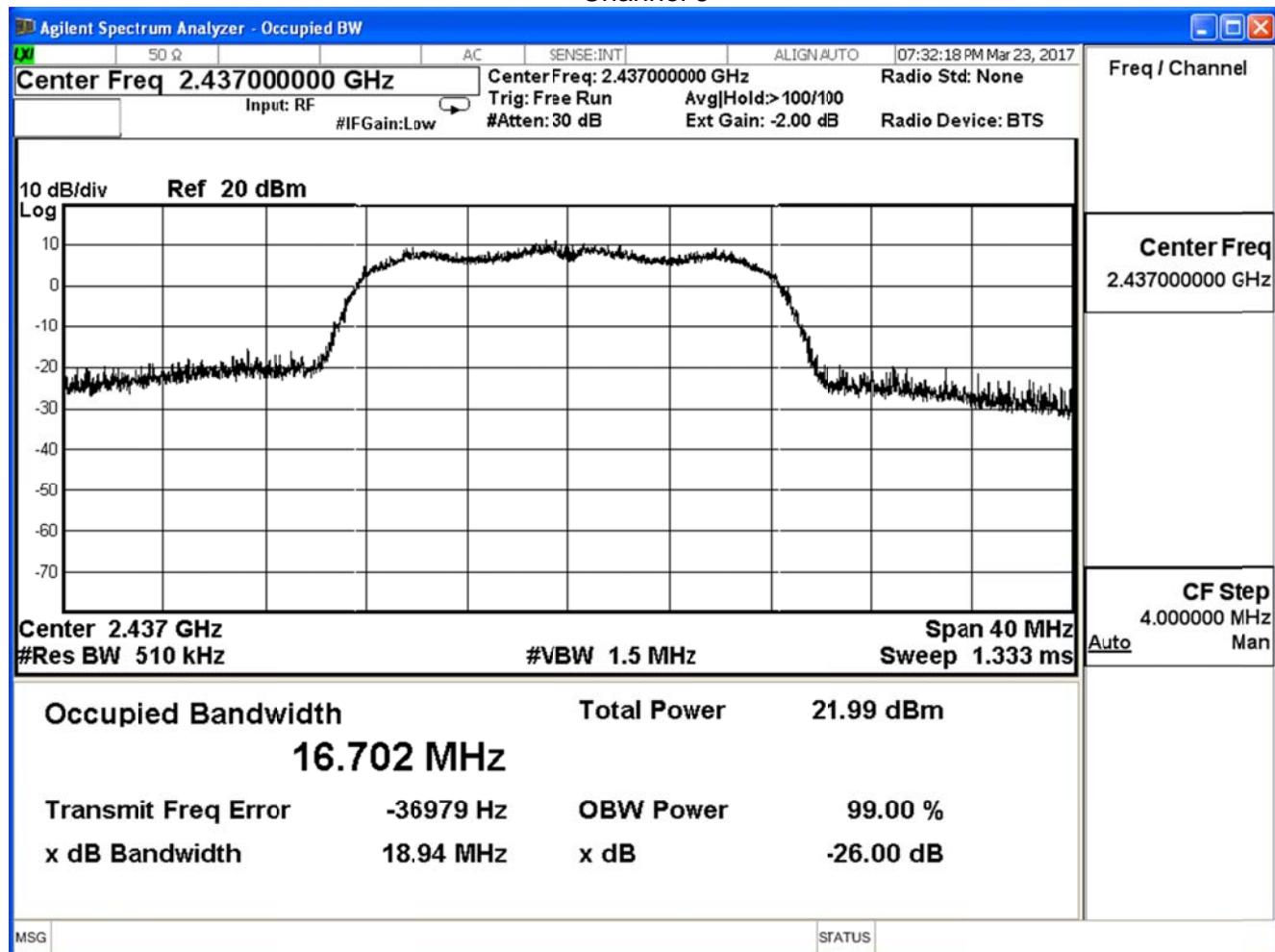
| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Occupied Bandwidth | | |
| Test Mode | Mode 1: Tx_SISO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

| 802.11 g (ANT 0) | | | | |
|------------------|-----------------|--------------------|-------------|--------|
| Channel No. | Frequency (MHz) | Measure Level(MHz) | Limit (MHz) | Result |
| 1 | 2412 | 16.620 | -- | Pass |
| 6 | 2437 | 16.702 | -- | Pass |
| 11 | 2462 | 16.734 | -- | Pass |

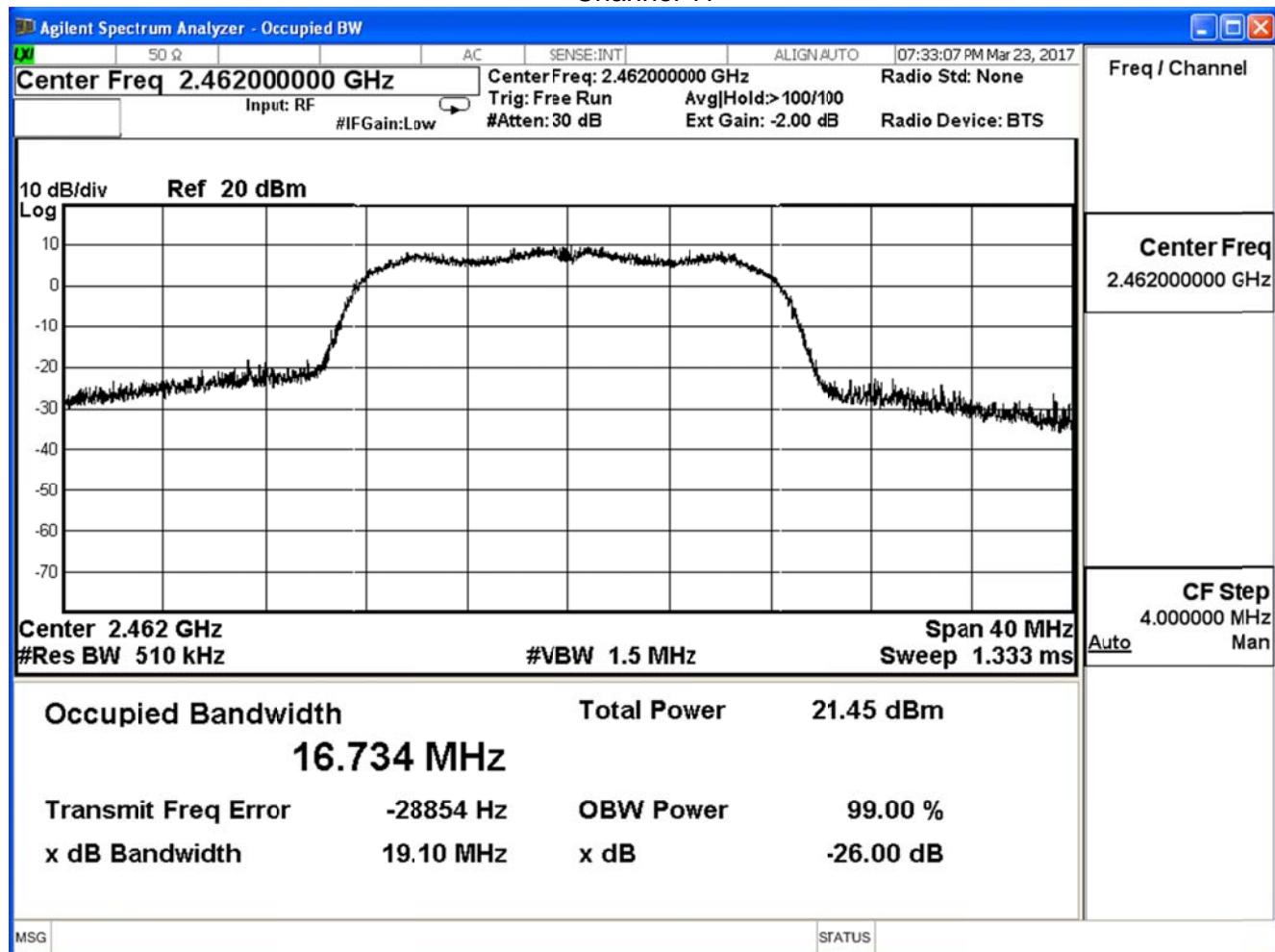
Channel 1



Channel 6



Channel 11

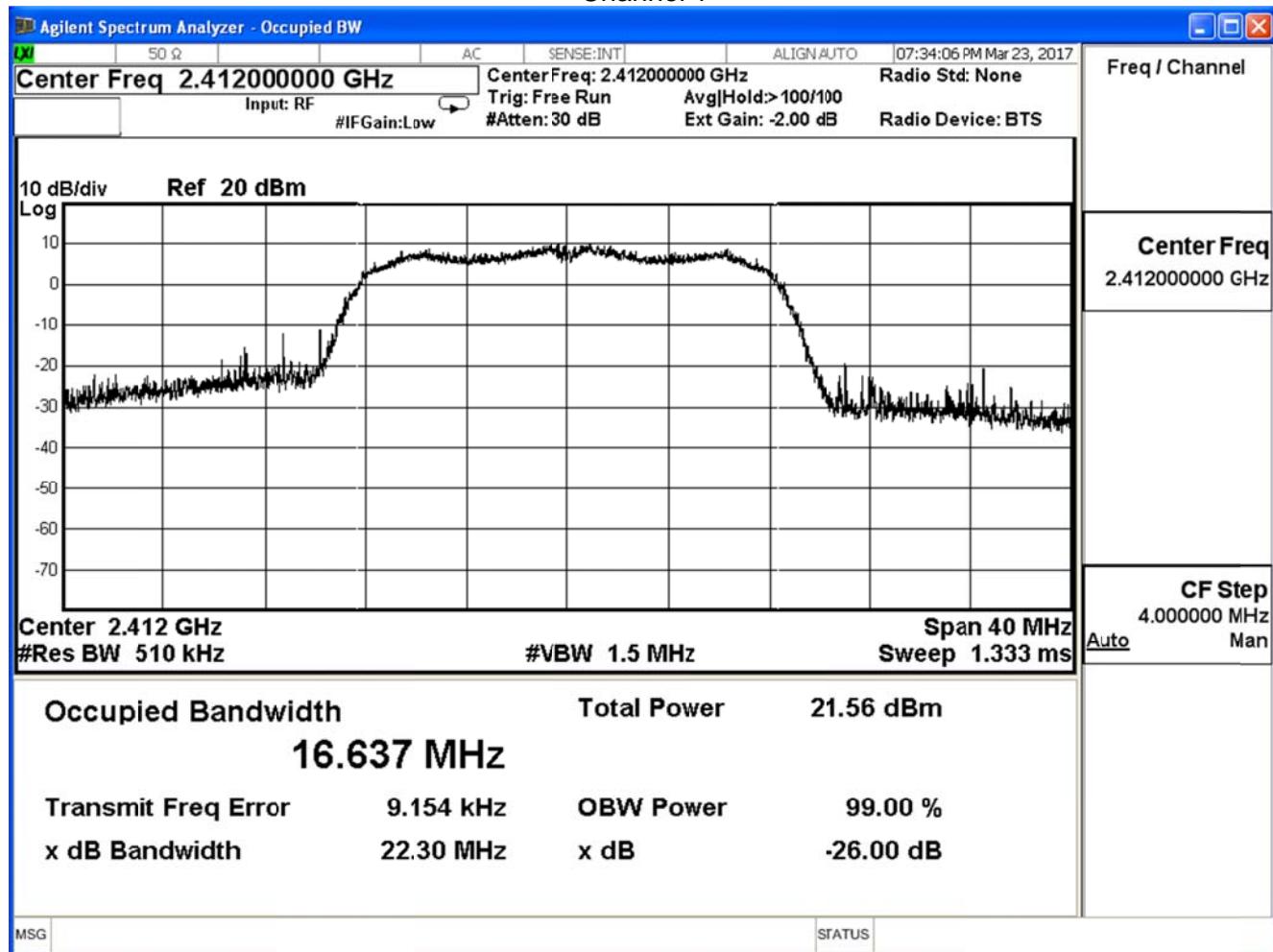


| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Occupied Bandwidth | | |
| Test Mode | Mode 1: Tx_SISO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

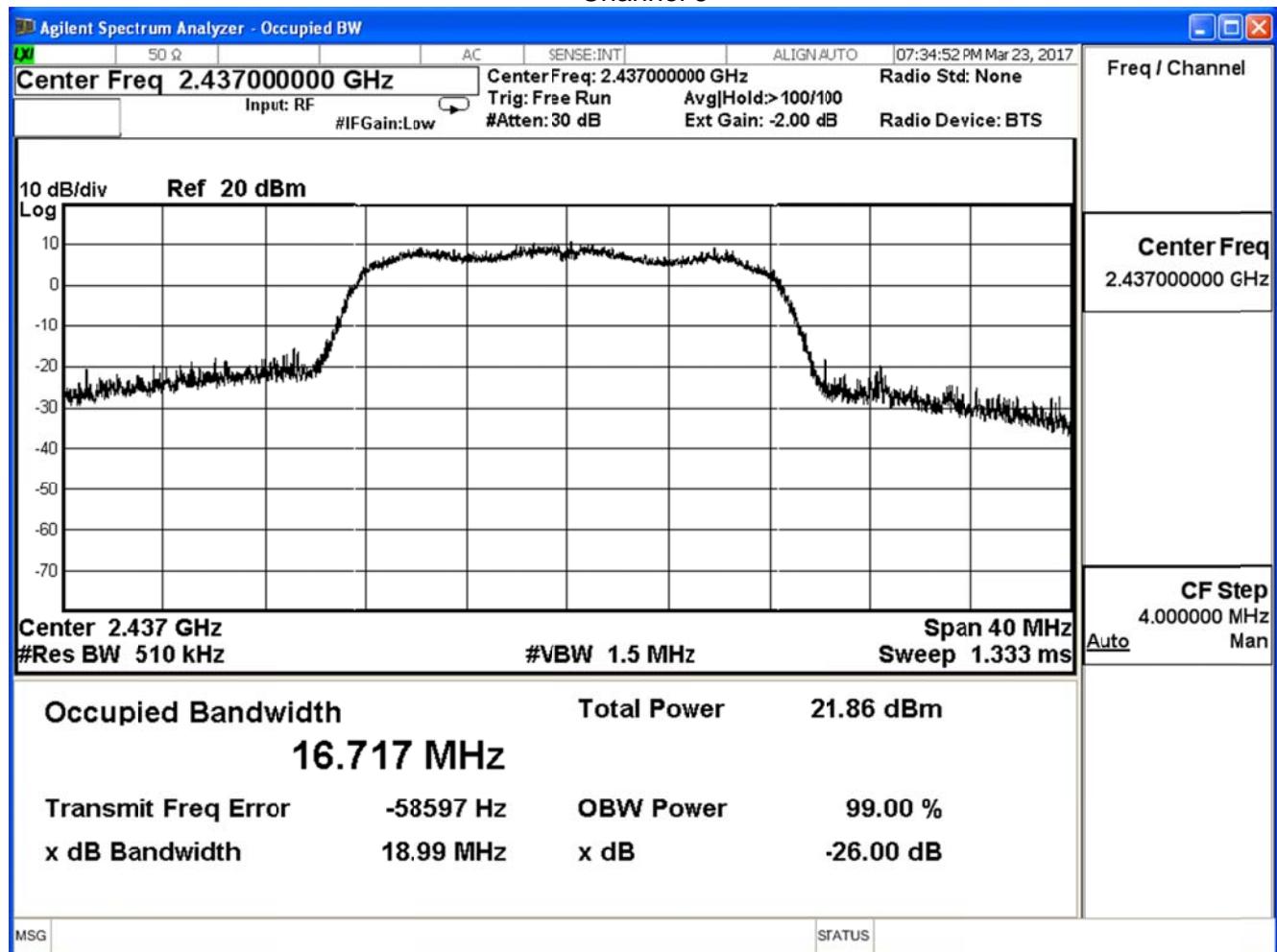
802.11 g (ANT 1)

| Channel No. | Frequency (MHz) | Measure Level(MHz) | Limit (MHz) | Result |
|-------------|-----------------|--------------------|-------------|--------|
| 1 | 2412 | 16.637 | -- | Pass |
| 6 | 2437 | 16.717 | -- | Pass |
| 11 | 2462 | 16.678 | -- | Pass |

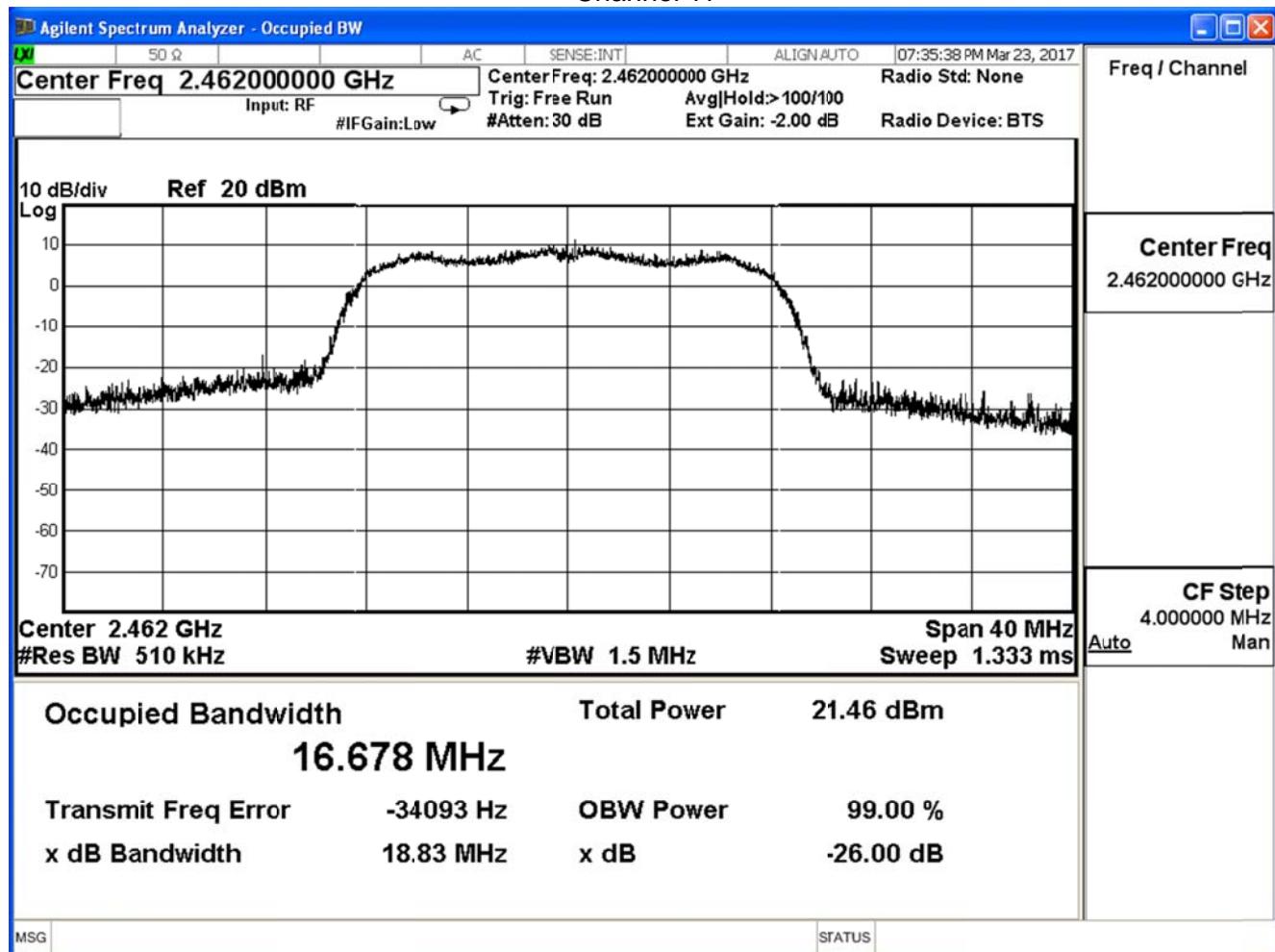
Channel 1



Channel 6



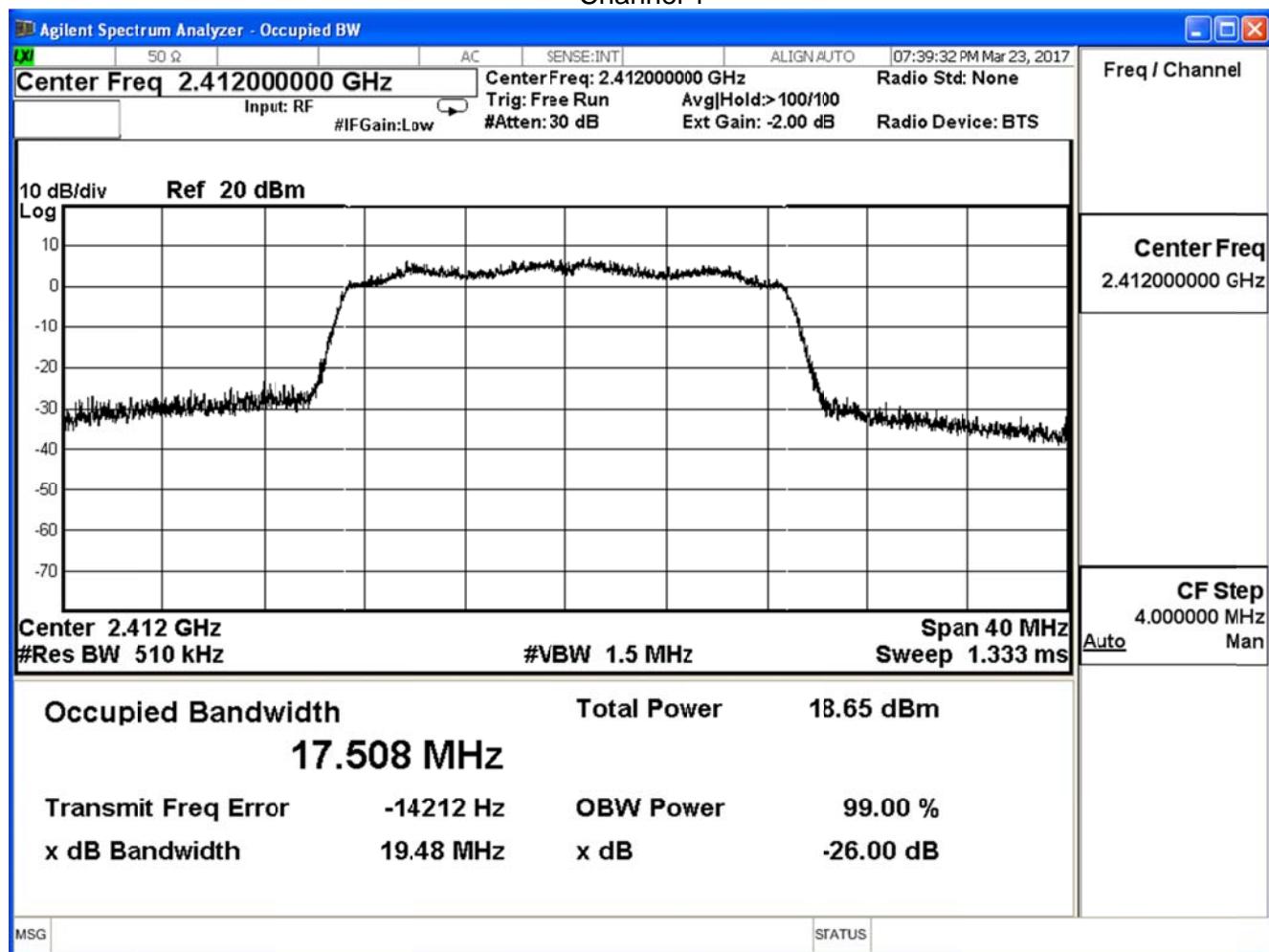
Channel 11



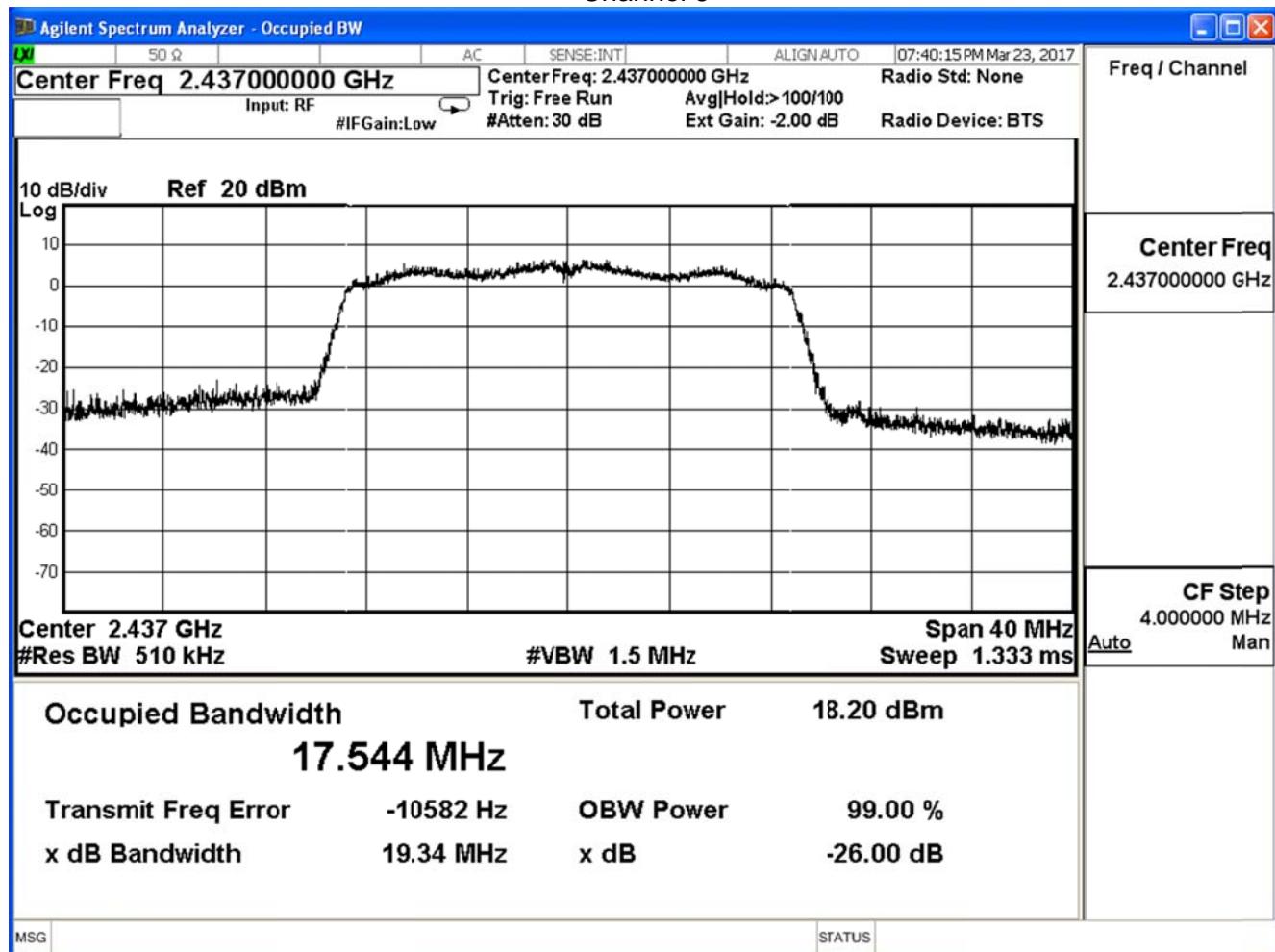
| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Occupied Bandwidth | | |
| Test Mode | Mode 2: Tx_MIMO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

| IEEE802.11n 20MHz (ANT 0) | | | | |
|---------------------------|-----------------|--------------------|-------------|--------|
| Channel No. | Frequency (MHz) | Measure Level(MHz) | Limit (MHz) | Result |
| 1 | 2412 | 17.508 | -- | Pass |
| 6 | 2437 | 17.544 | -- | Pass |
| 11 | 2462 | 17.511 | -- | Pass |

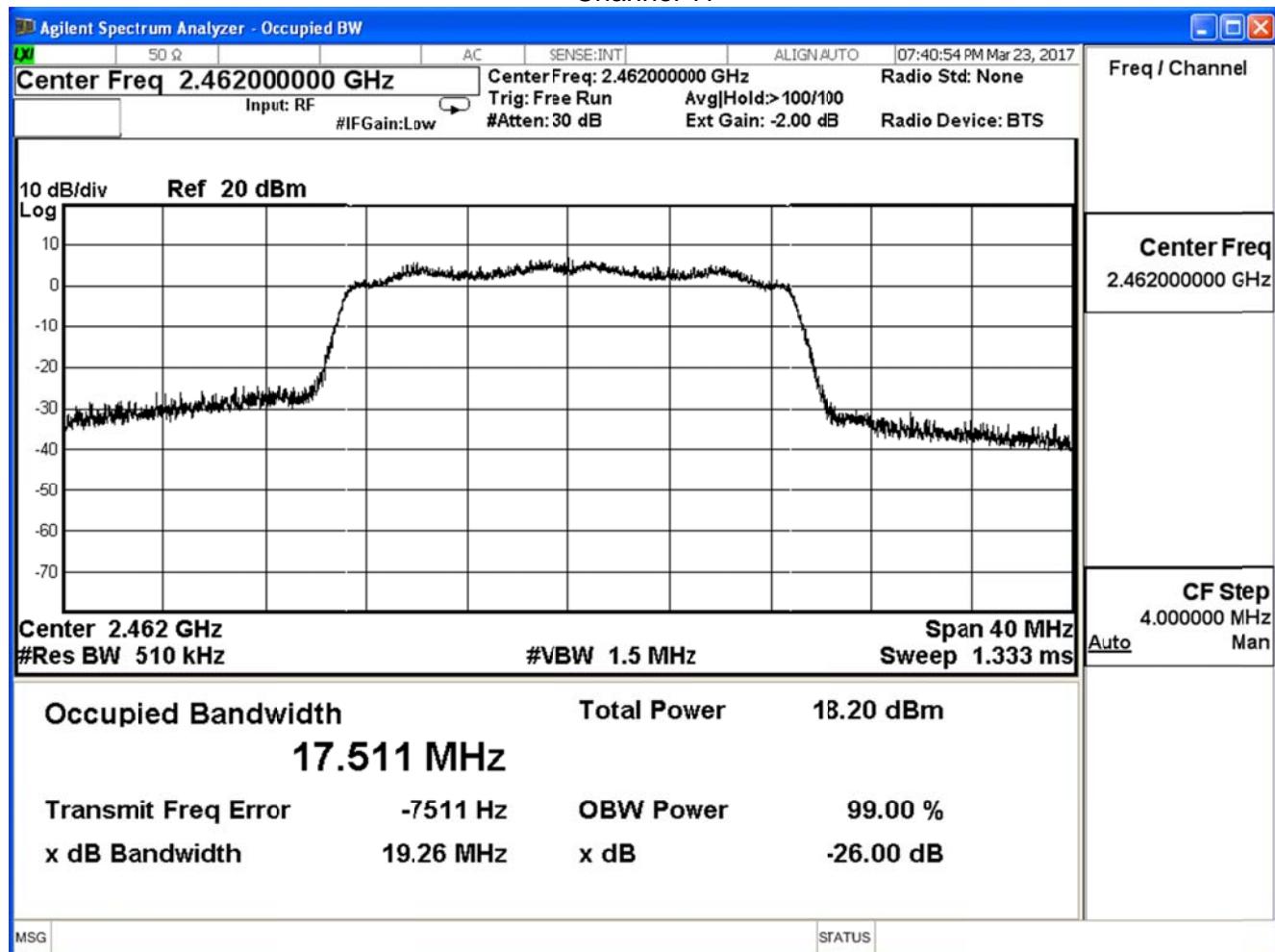
Channel 1



Channel 6



Channel 11

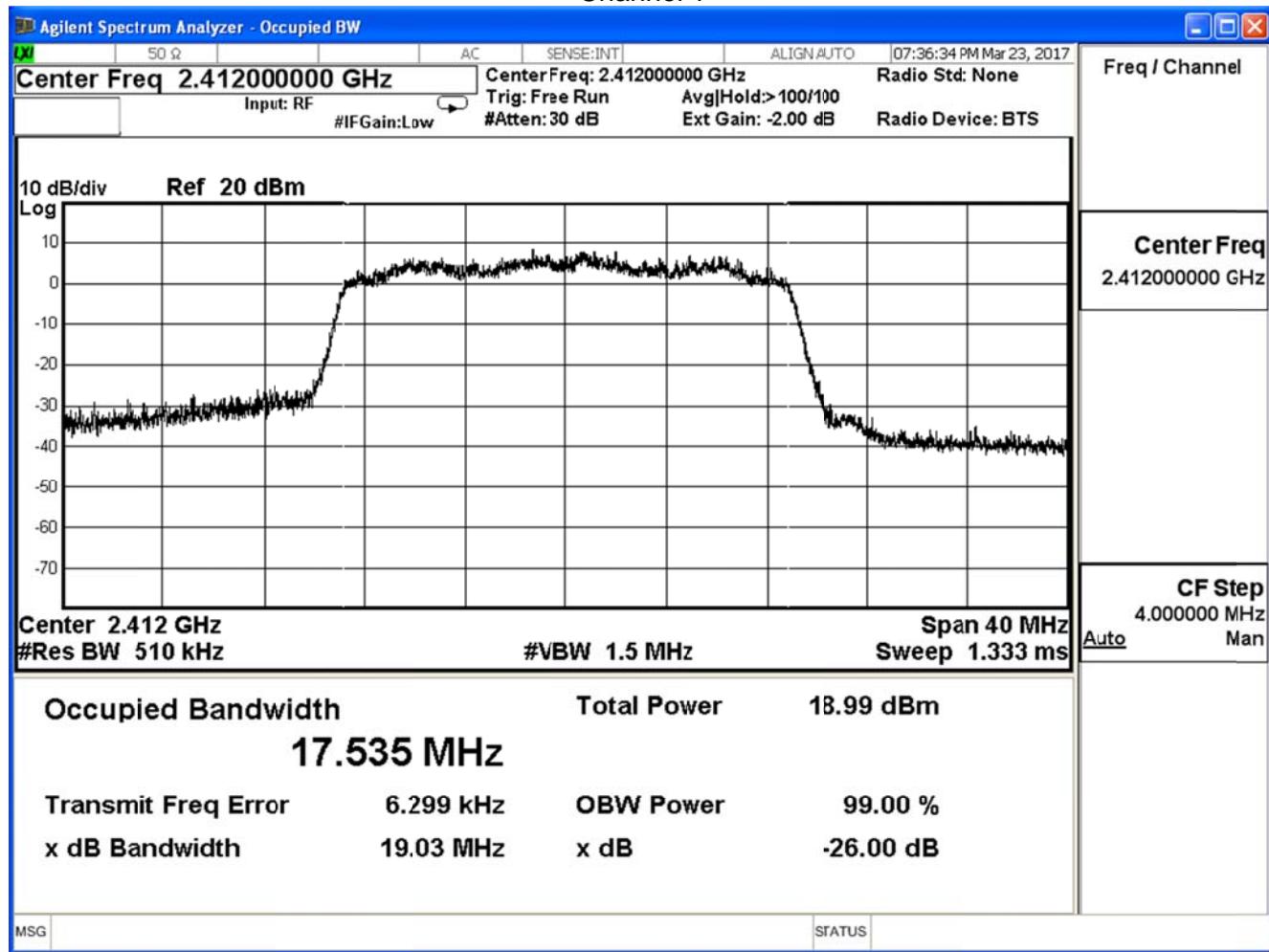


| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Occupied Bandwidth | | |
| Test Mode | Mode 2: Tx_MIMO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

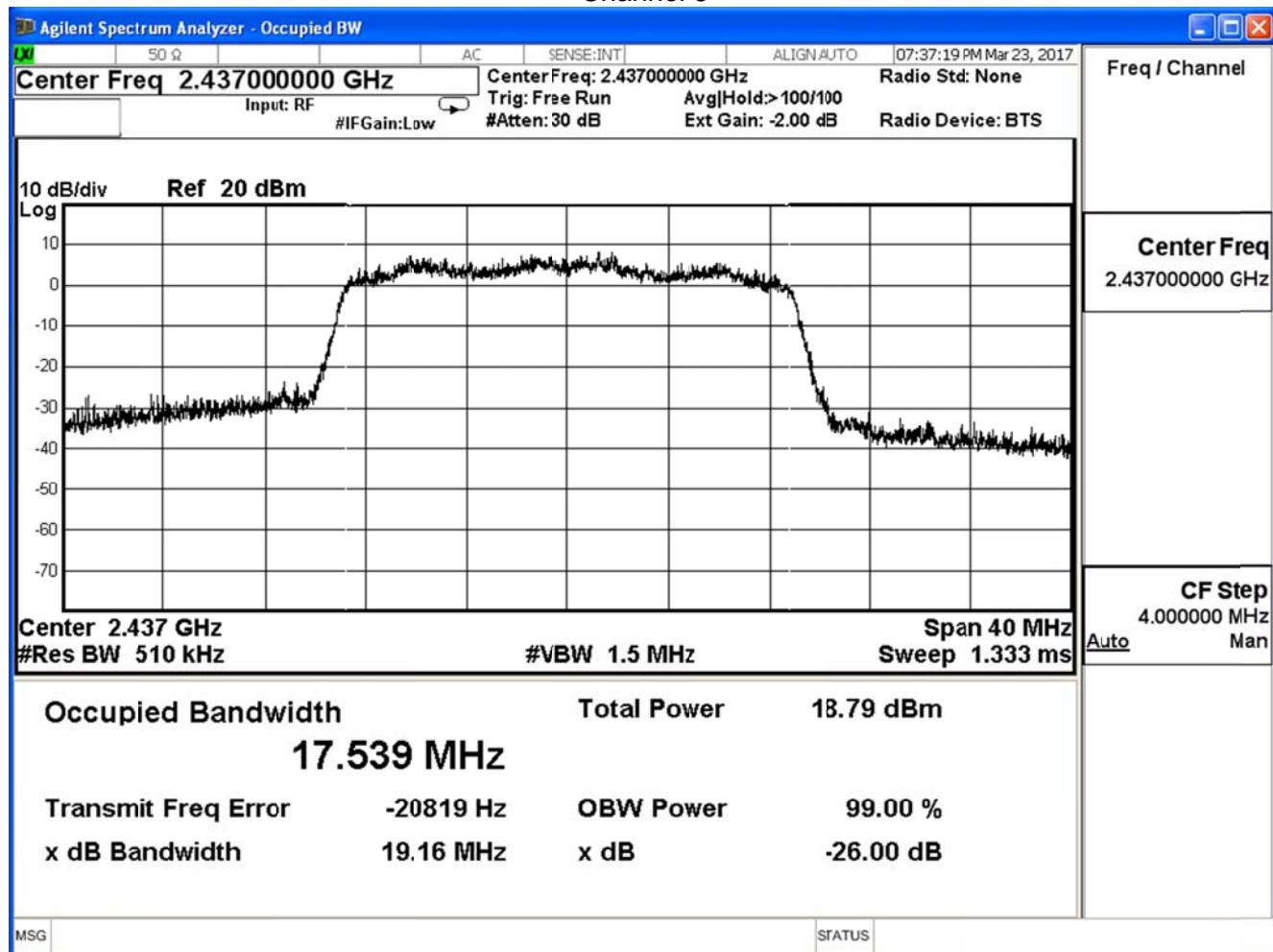
IEEE802.11n 20MHz (ANT 1)

| Channel No. | Frequency (MHz) | Measure Level (MHz) | Limit (MHz) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 1 | 2412 | 17.535 | -- | Pass |
| 6 | 2437 | 17.539 | -- | Pass |
| 11 | 2462 | 17.529 | -- | Pass |

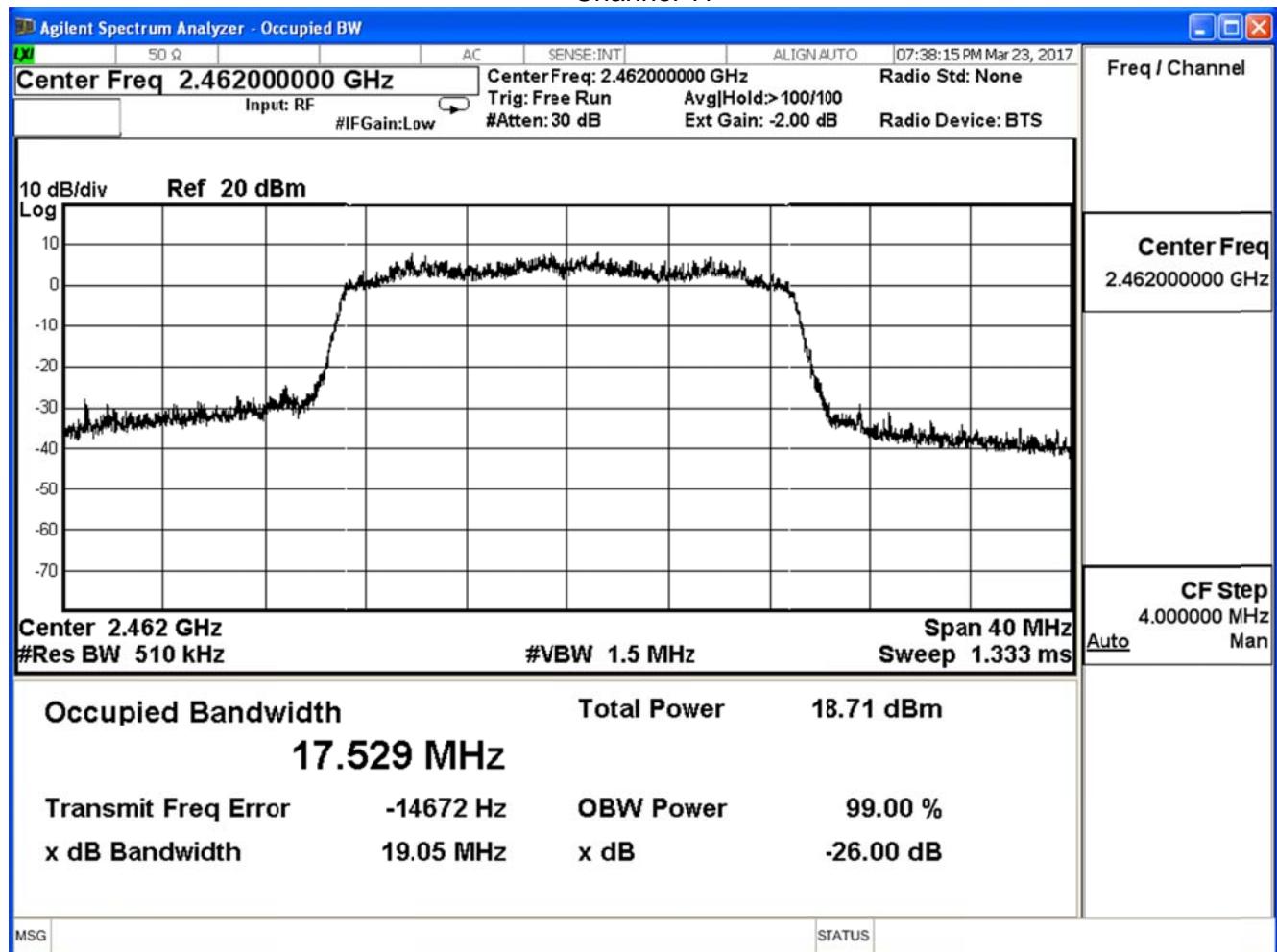
Channel 1



Channel 6



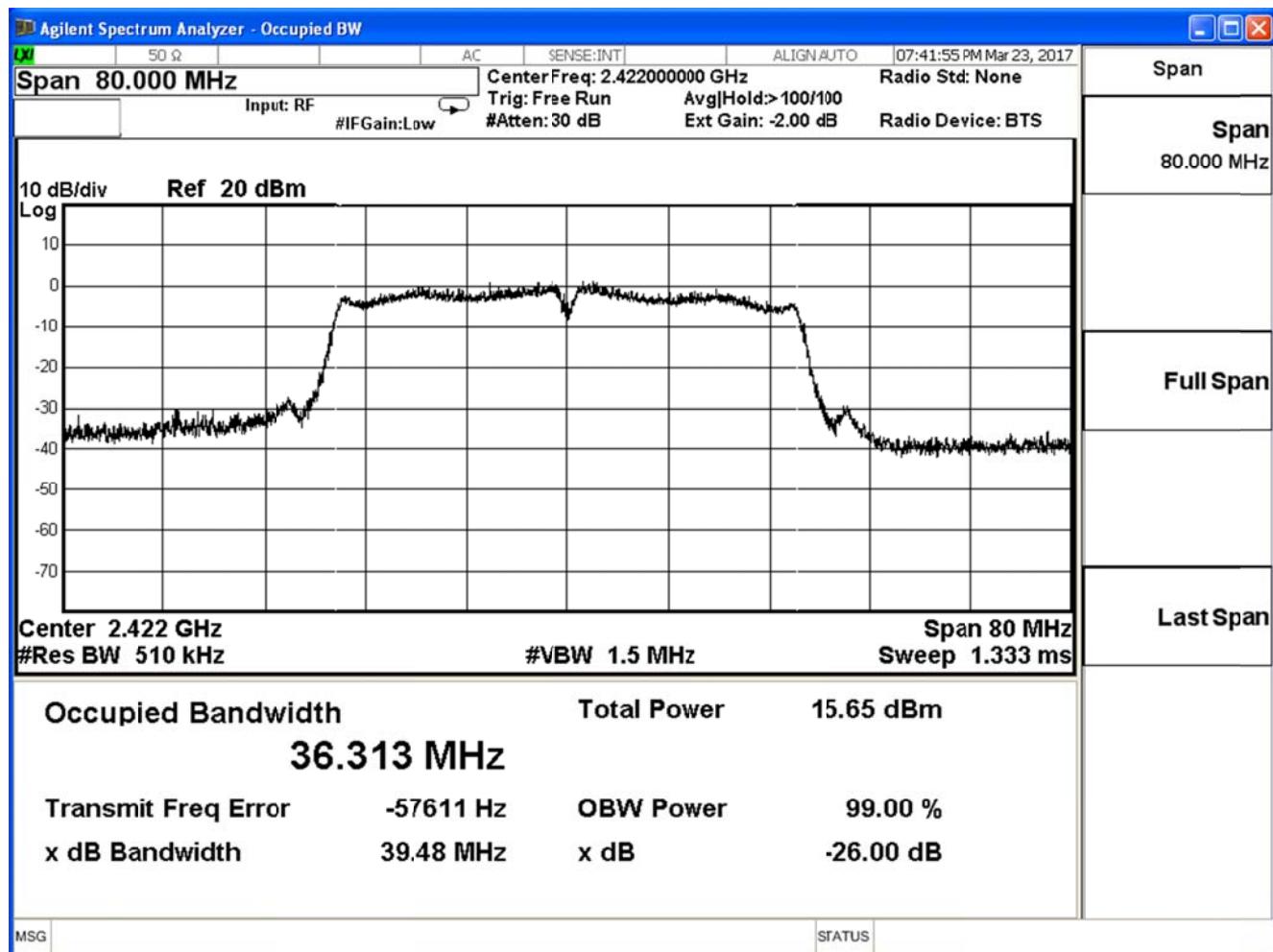
Channel 11



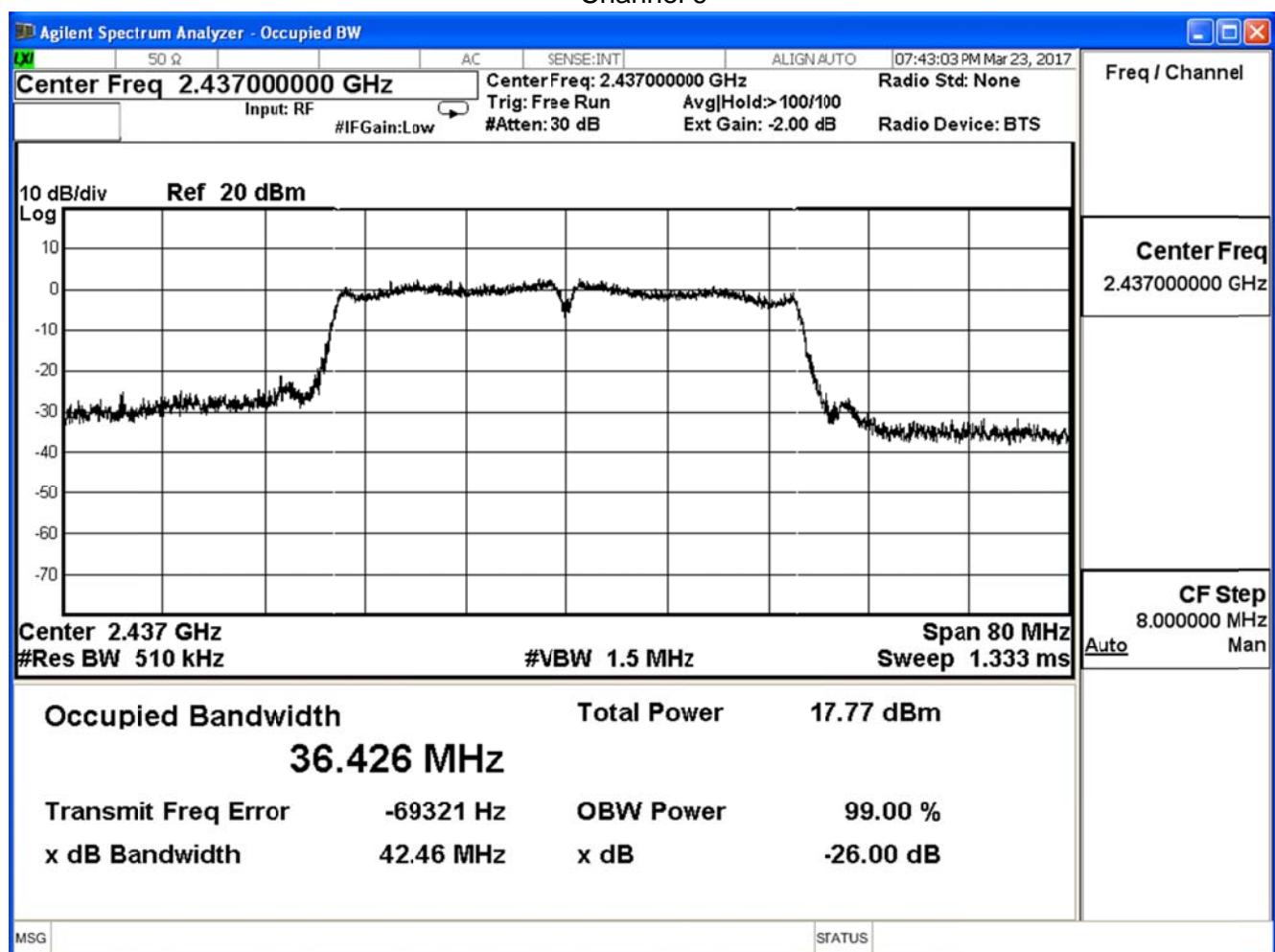
| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Occupied Bandwidth | | |
| Test Mode | Mode 2: Tx_MIMO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

| IEEE802.11n 40MHz (ANT 0) | | | | |
|---------------------------|-----------------|---------------------|-------------|--------|
| Channel No. | Frequency (MHz) | Measure Level (MHz) | Limit (MHz) | Result |
| 3 | 2422 | 36.313 | -- | Pass |
| 6 | 2437 | 36.426 | -- | Pass |
| 9 | 2452 | 36.511 | -- | Pass |

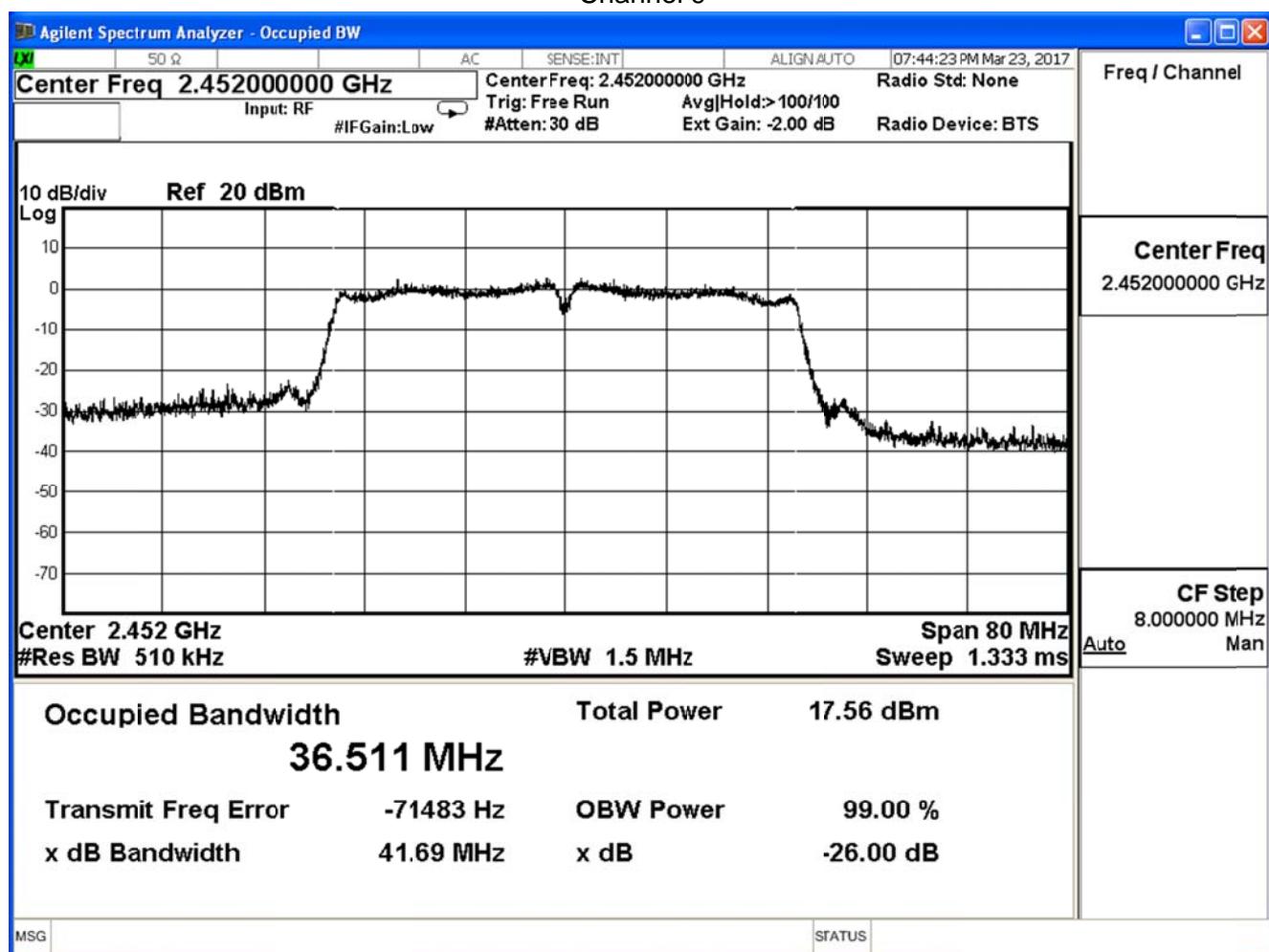
Channel 3



Channel 6



Channel 9

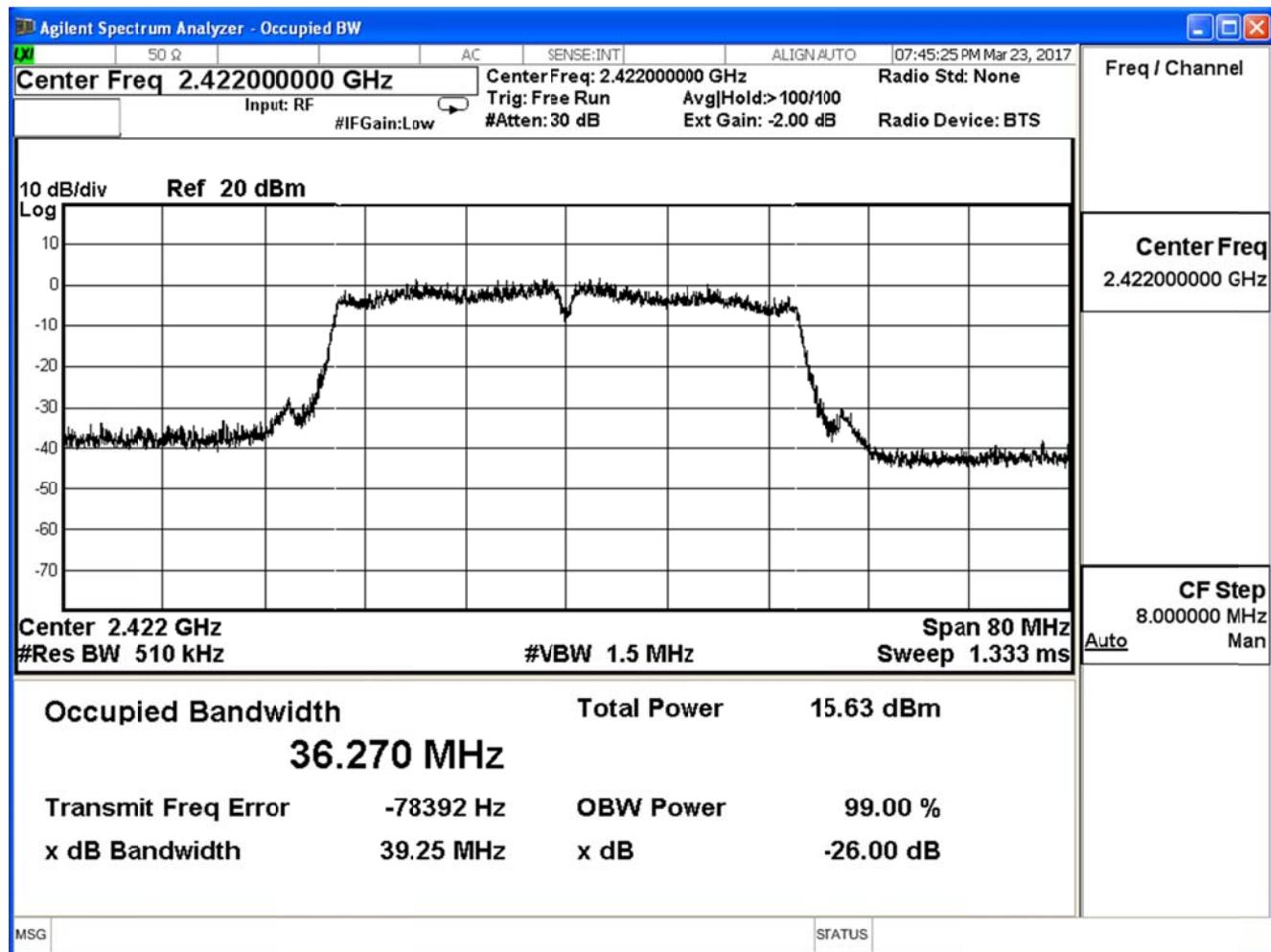


| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Occupied Bandwidth | | |
| Test Mode | Mode 2: Tx_MIMO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

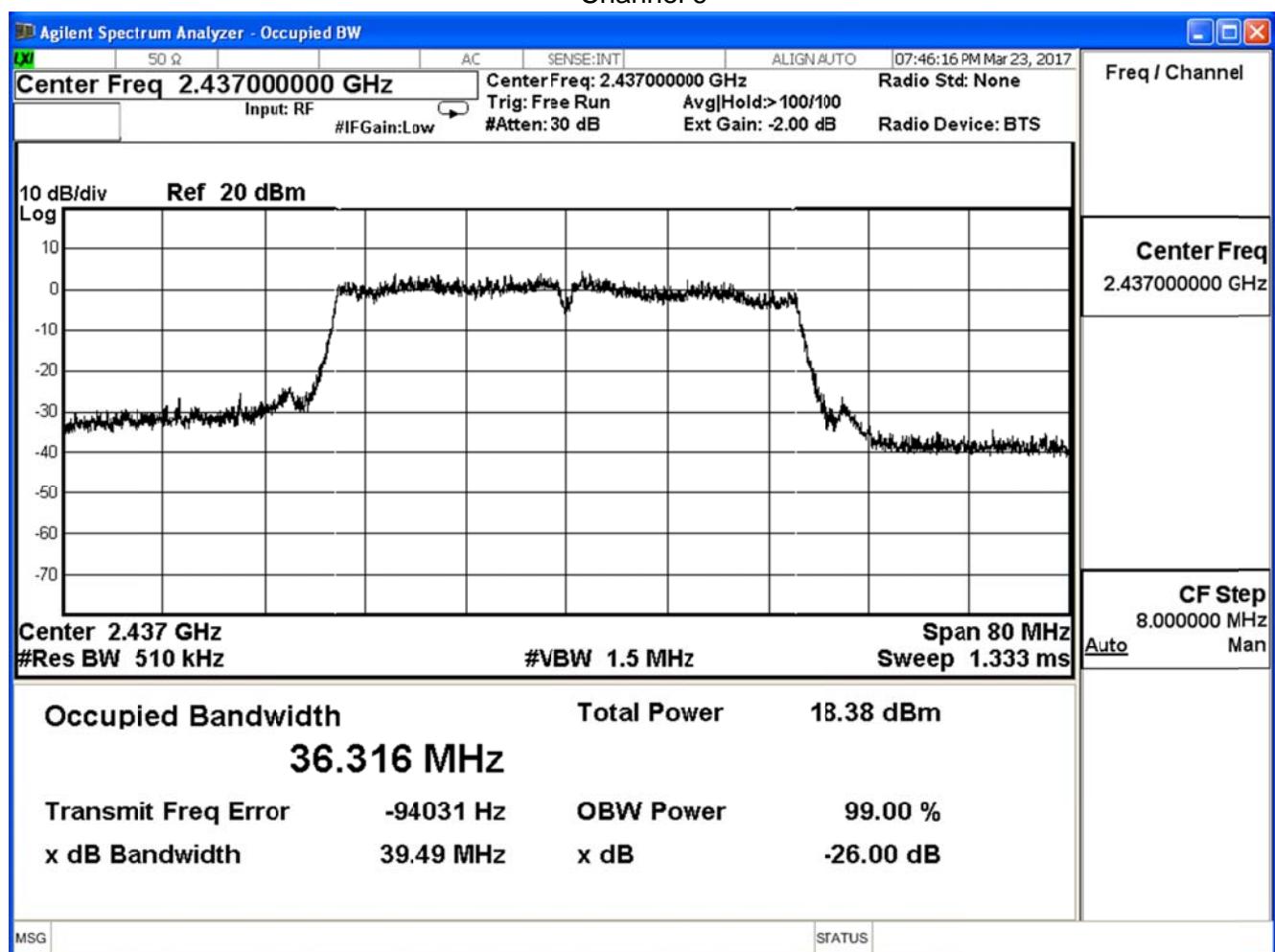
IEEE802.11n 40MHz (ANT 1)

| Channel No. | Frequency (MHz) | Measure Level (MHz) | Limit (MHz) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 3 | 2422 | 36.270 | -- | Pass |
| 6 | 2437 | 36.316 | -- | Pass |
| 9 | 2452 | 36.396 | -- | Pass |

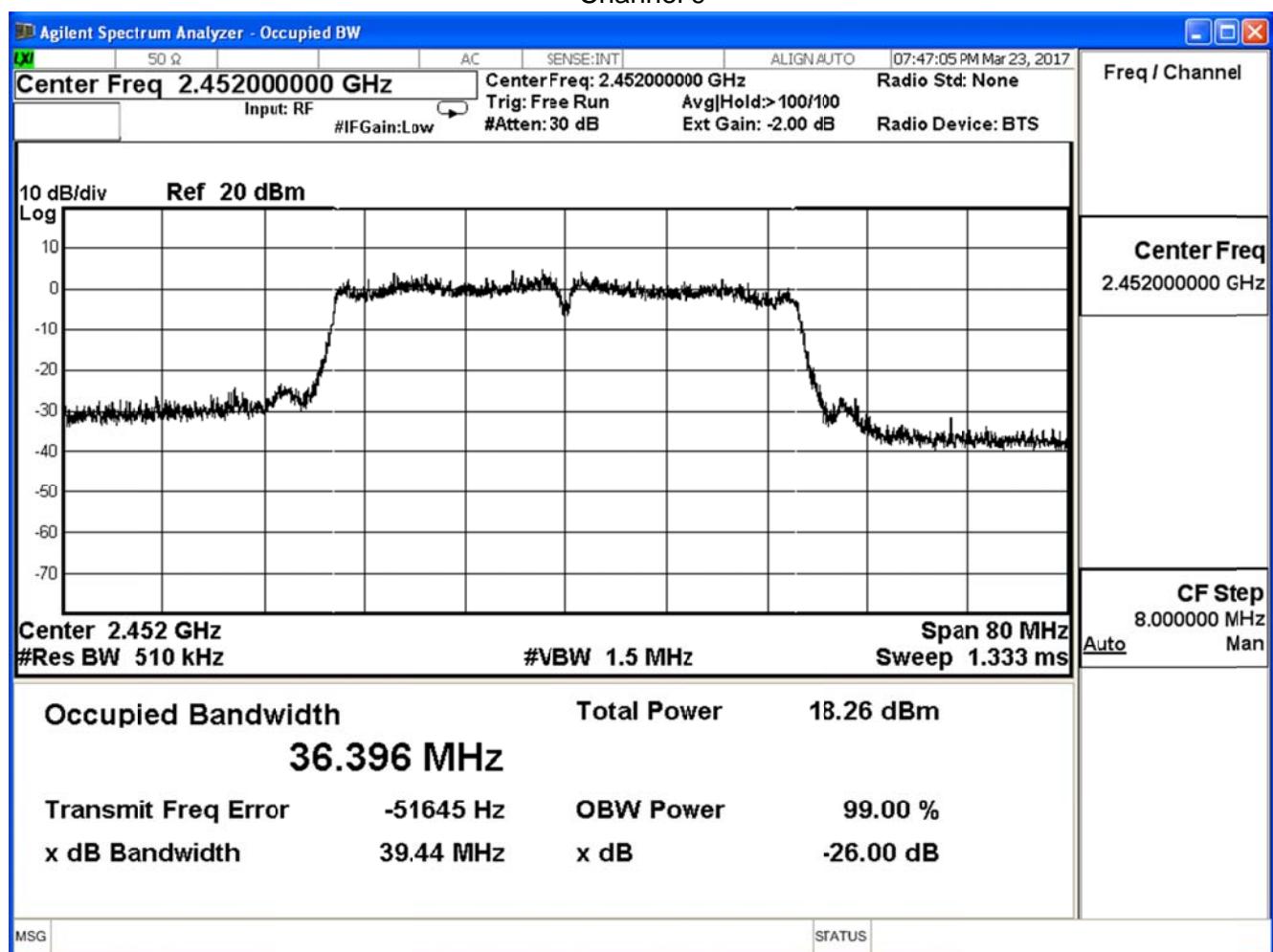
Channel 3



Channel 6



Channel 9



9. Power Density

9.1. Test Equipment

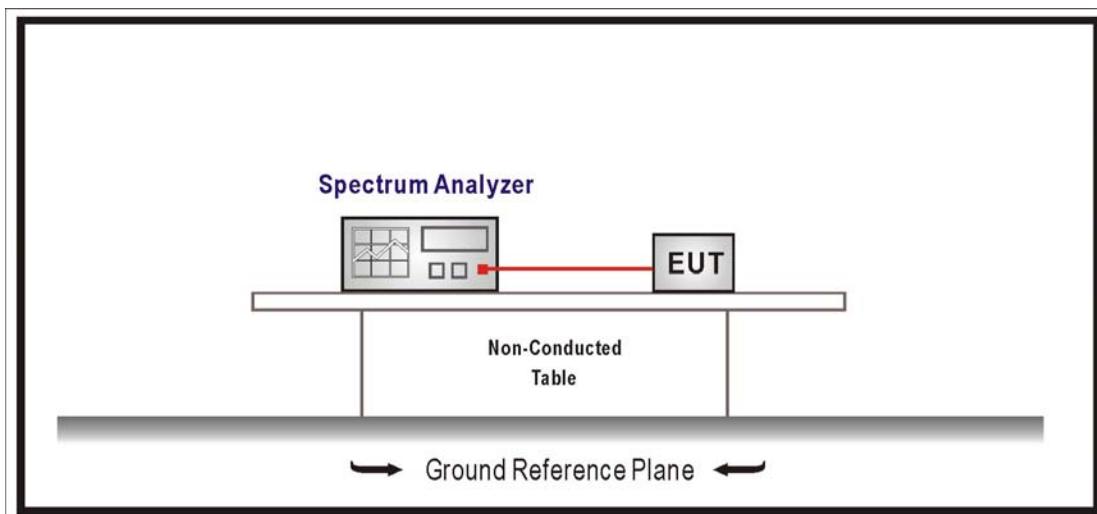
The following test equipment is used during the test:

Power Density / SR10-H

| Instrument | Manufacturer | Model No. | Serial No | Next Cal. Date |
|-------------------|--------------|-----------|------------|----------------|
| Spectrum Analyzer | Agilent | N9010A | US47140172 | 2017/08/08 |

Note: All equipments that need to calibrate are with calibration period of 1 year.

9.2. Test Setup



9.3. Limits

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

9.4. Test Procedures

The EUT was setup according to ANSI C63.10: 2013; tested according to DTS test procedure section 10.2 of KDB558074v03r05for compliance to FCC 47CFR 15.247 requirements.
Set 3KHz \leq RBW \leq 100 kHz, Set VBW \geq 3xRBW, Sweep time=Auto, Set Peak detector.

9.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2015

9.6. Uncertainty

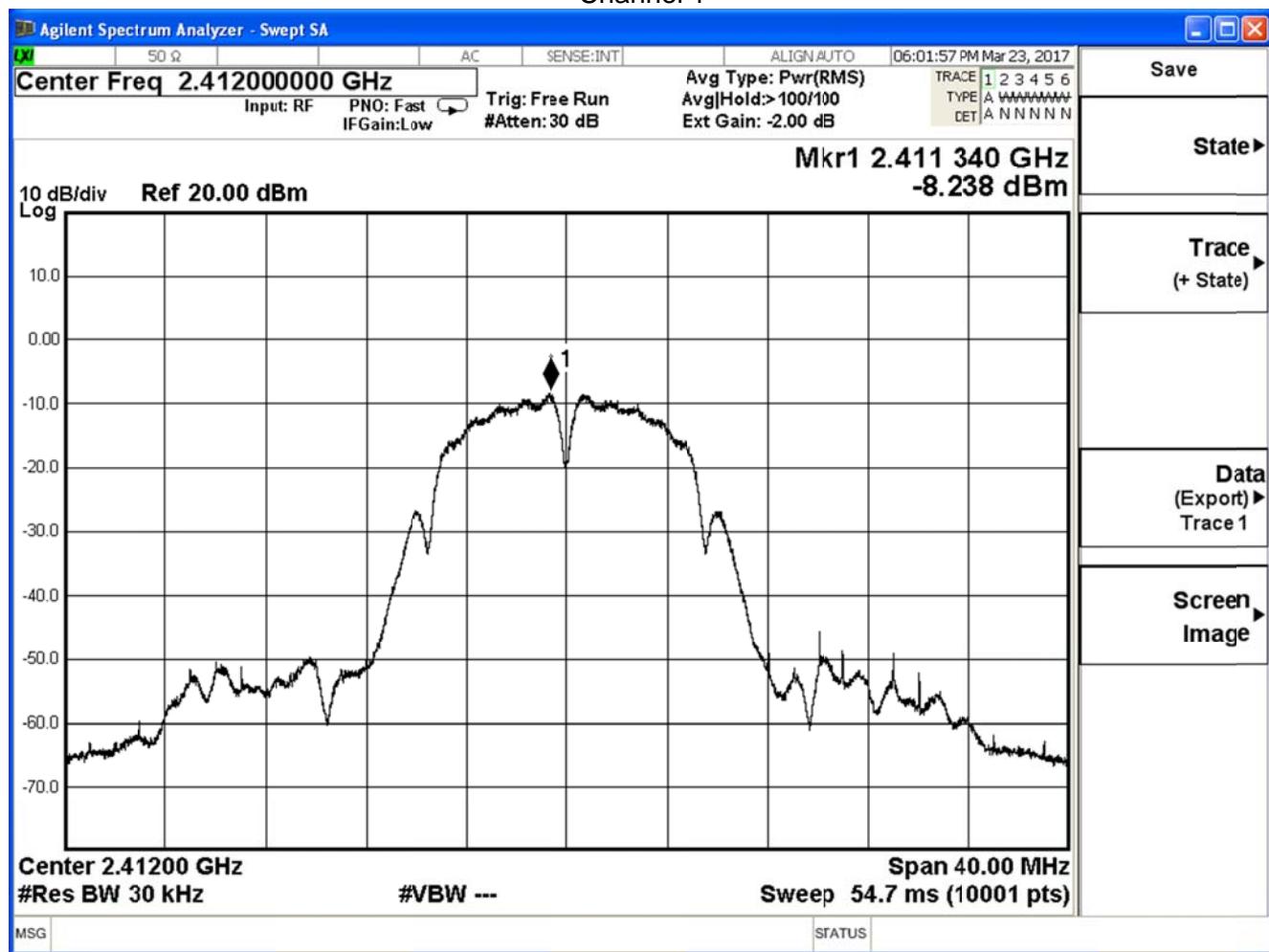
The measurement uncertainty is defined as ± 1.27 dB.

9.7. Test Result

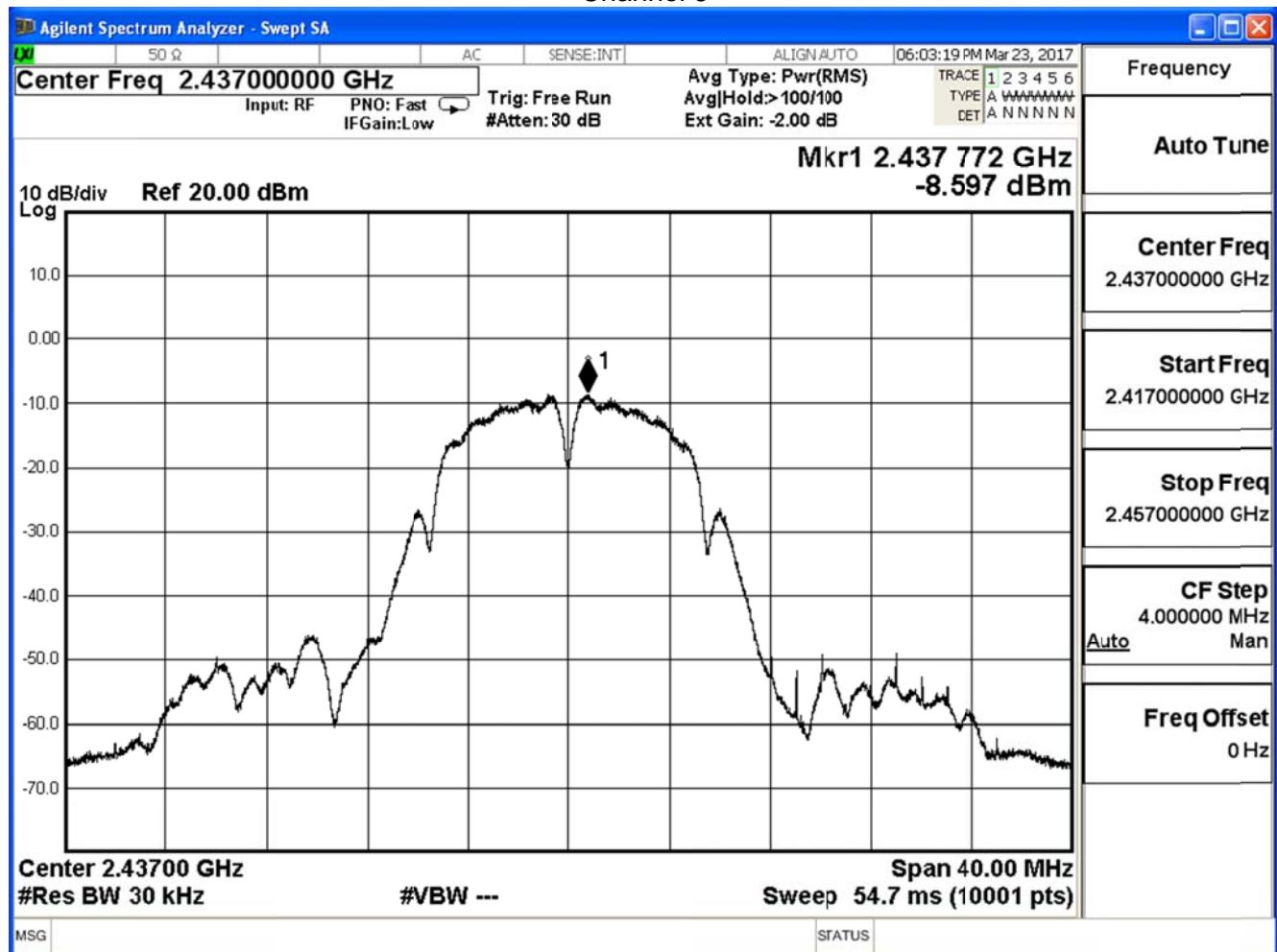
| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Power Density | | |
| Test Mode | Mode 1: Tx_SISO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

| IEEE 802.11b (ANT 0) | | | | |
|----------------------|-----------------|---------------------|-------------|--------|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 1 | 2412 | -8.238 | ≤8 | Pass |
| 6 | 2437 | -8.597 | ≤8 | Pass |
| 11 | 2462 | -8.665 | ≤8 | Pass |

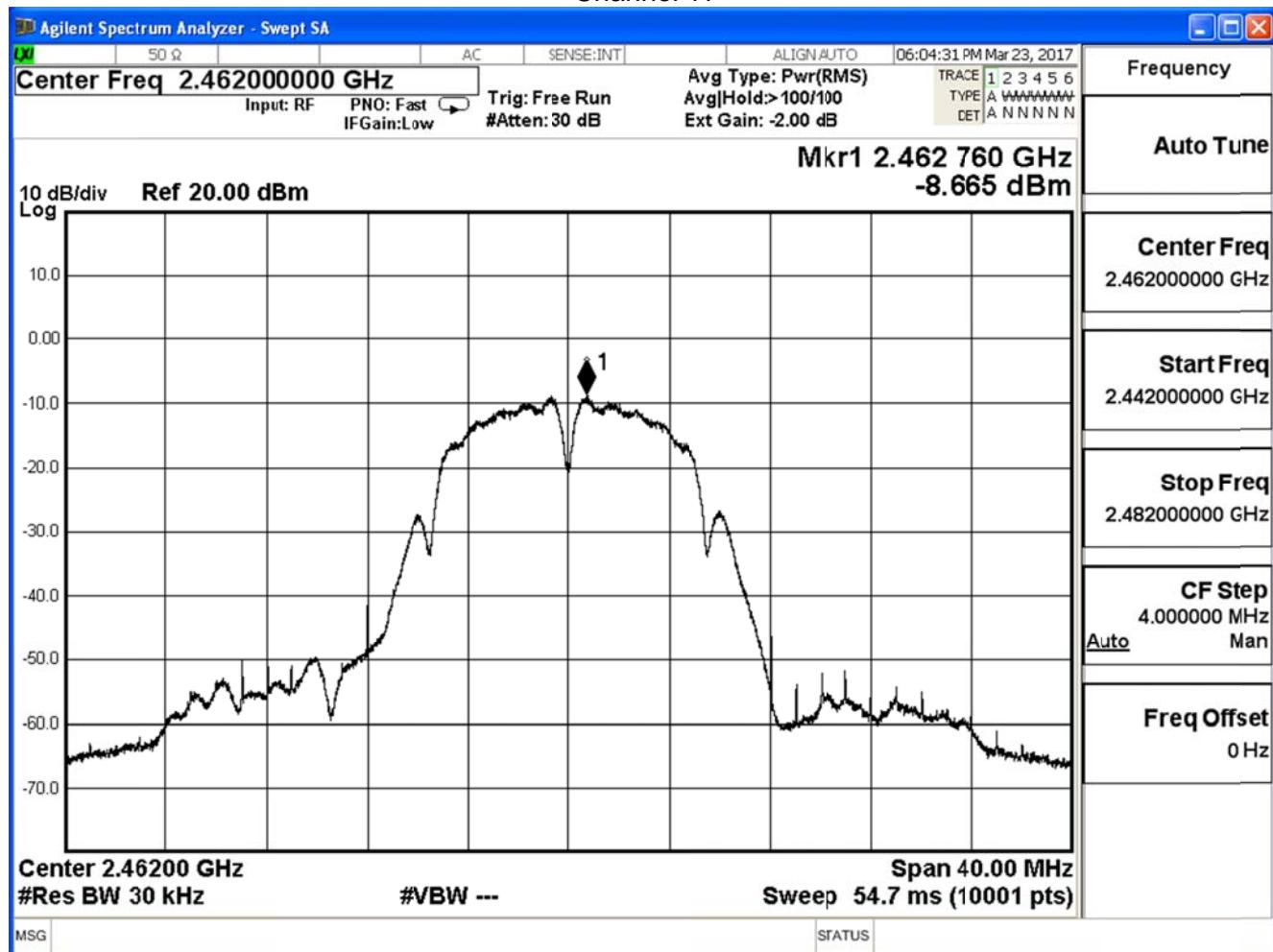
Channel 1



Channel 6

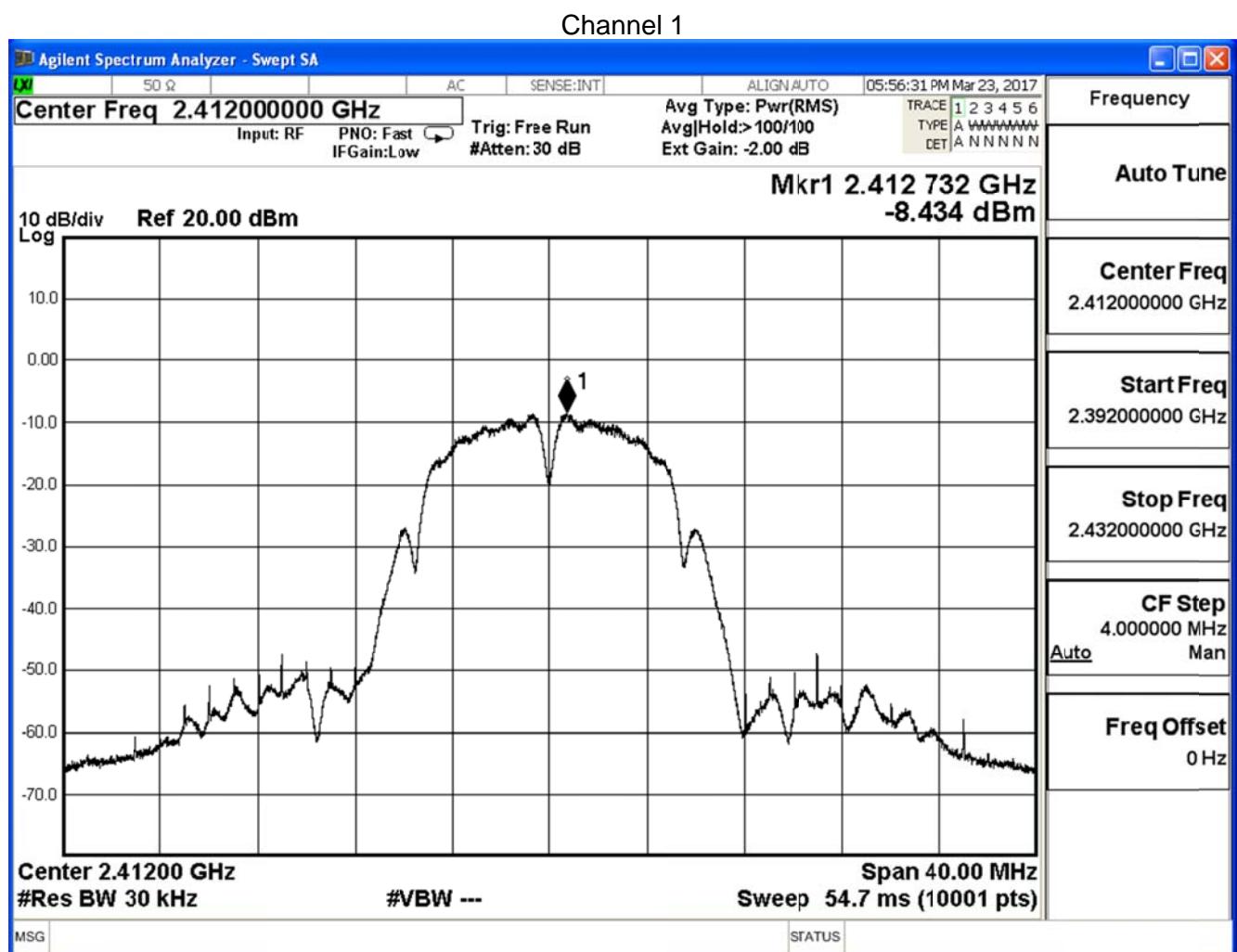


Channel 11

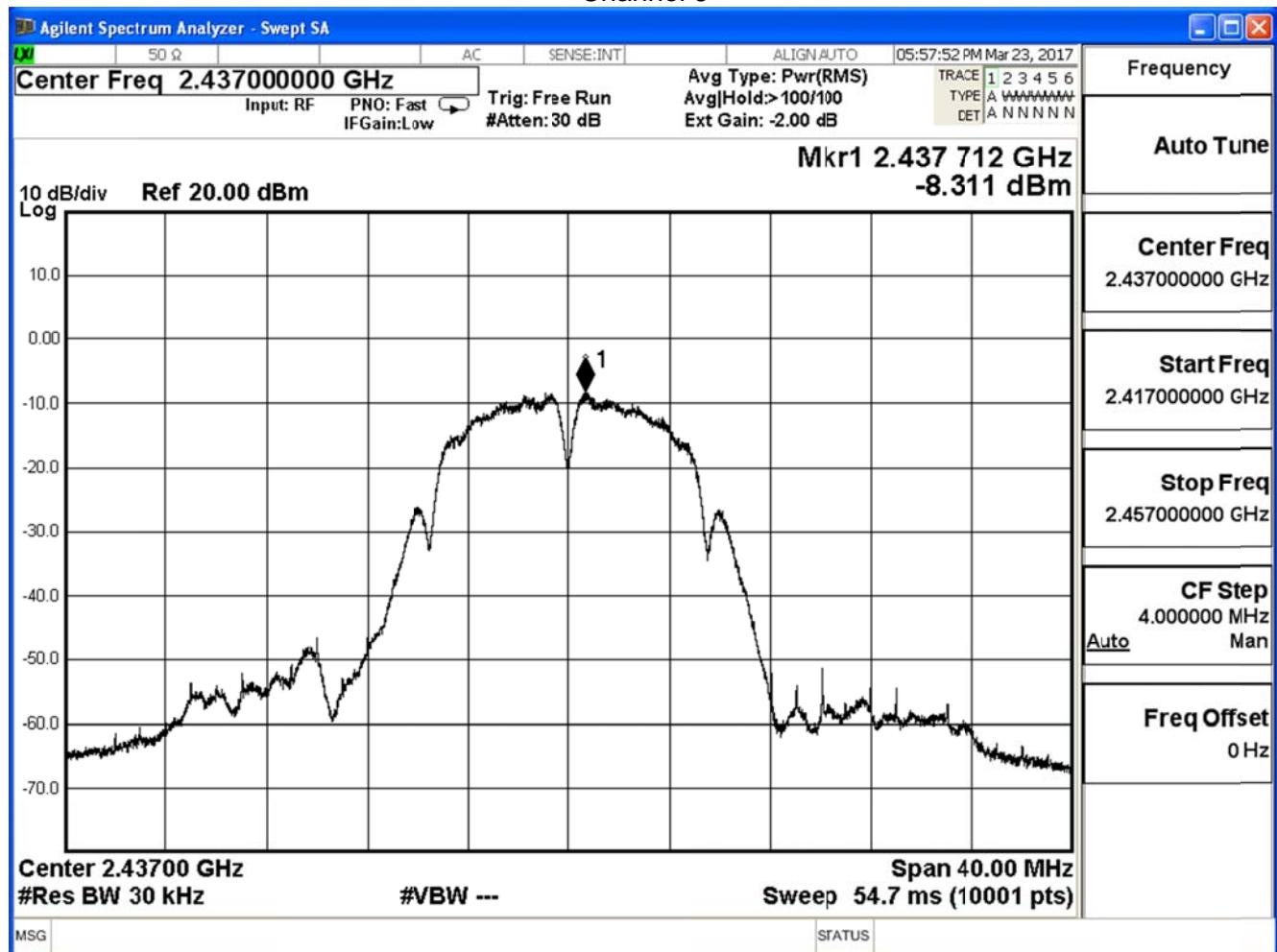


| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Power Density | | |
| Test Mode | Mode 1: Tx_SISO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

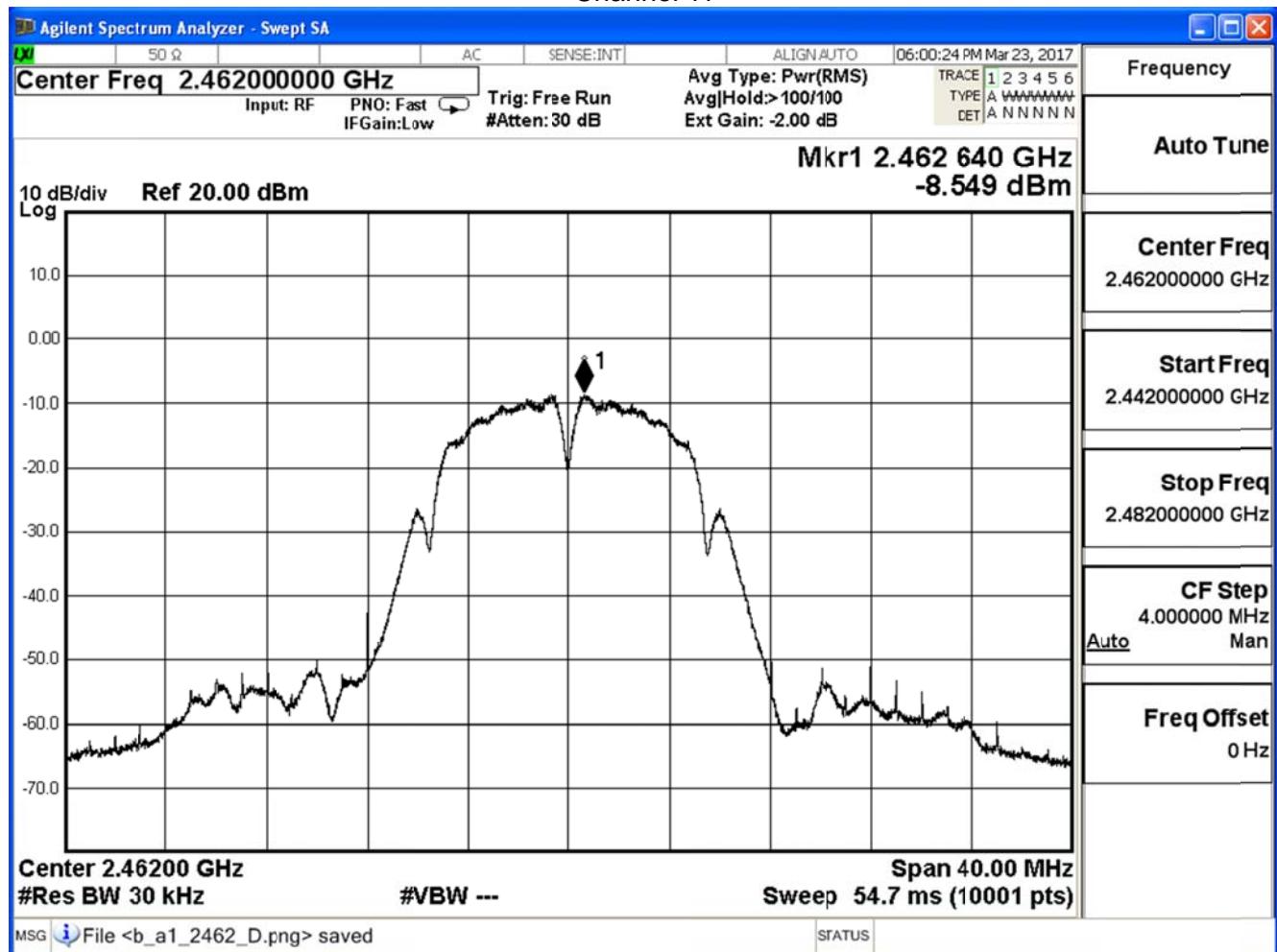
| IEEE 802.11b (ANT 1) | | | | |
|----------------------|-----------------|---------------------|-------------|--------|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 1 | 2412 | -8.434 | ≤8 | Pass |
| 6 | 2437 | -8.311 | ≤8 | Pass |
| 11 | 2462 | -8.549 | ≤8 | Pass |



Channel 6



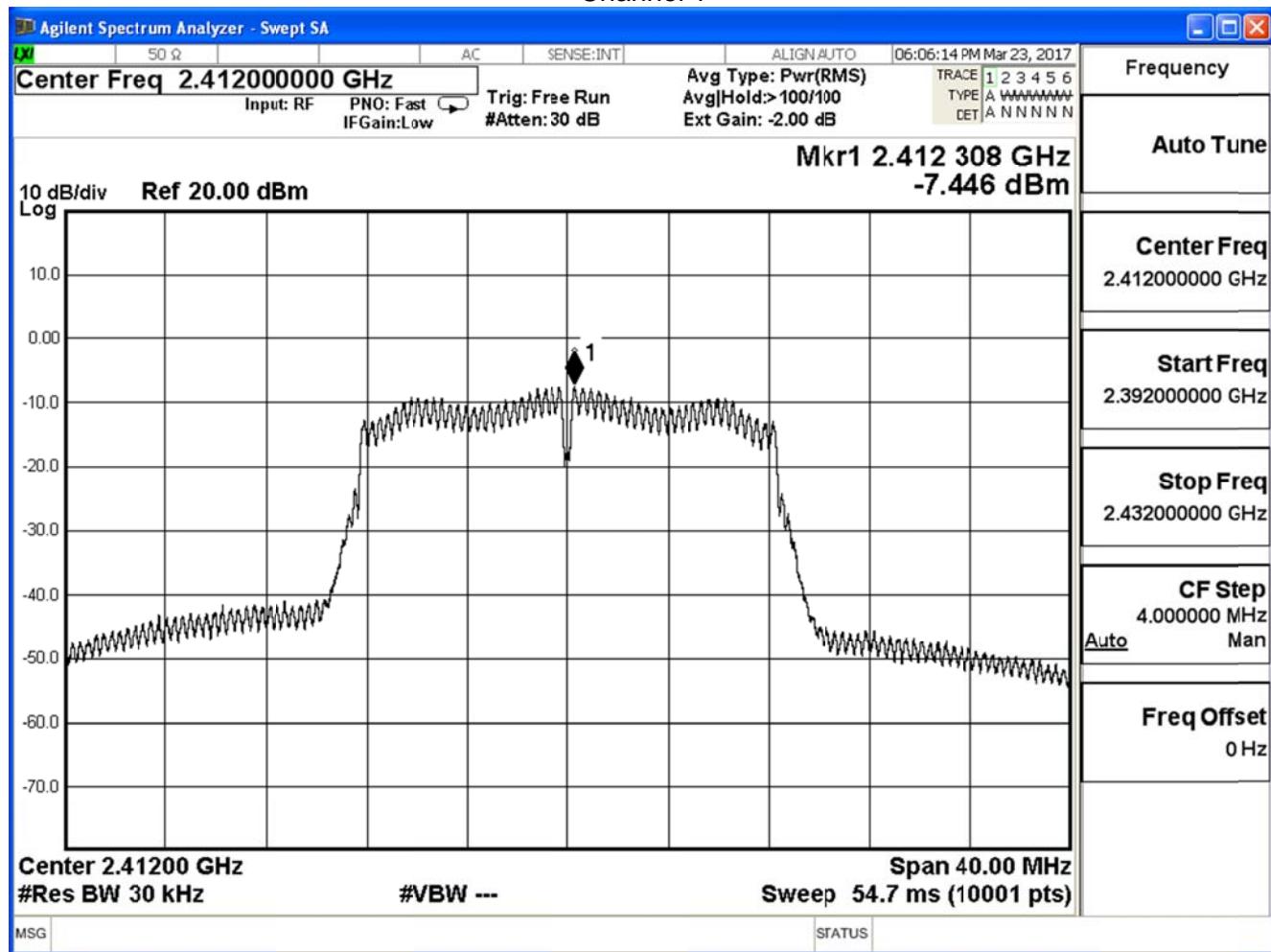
Channel 11



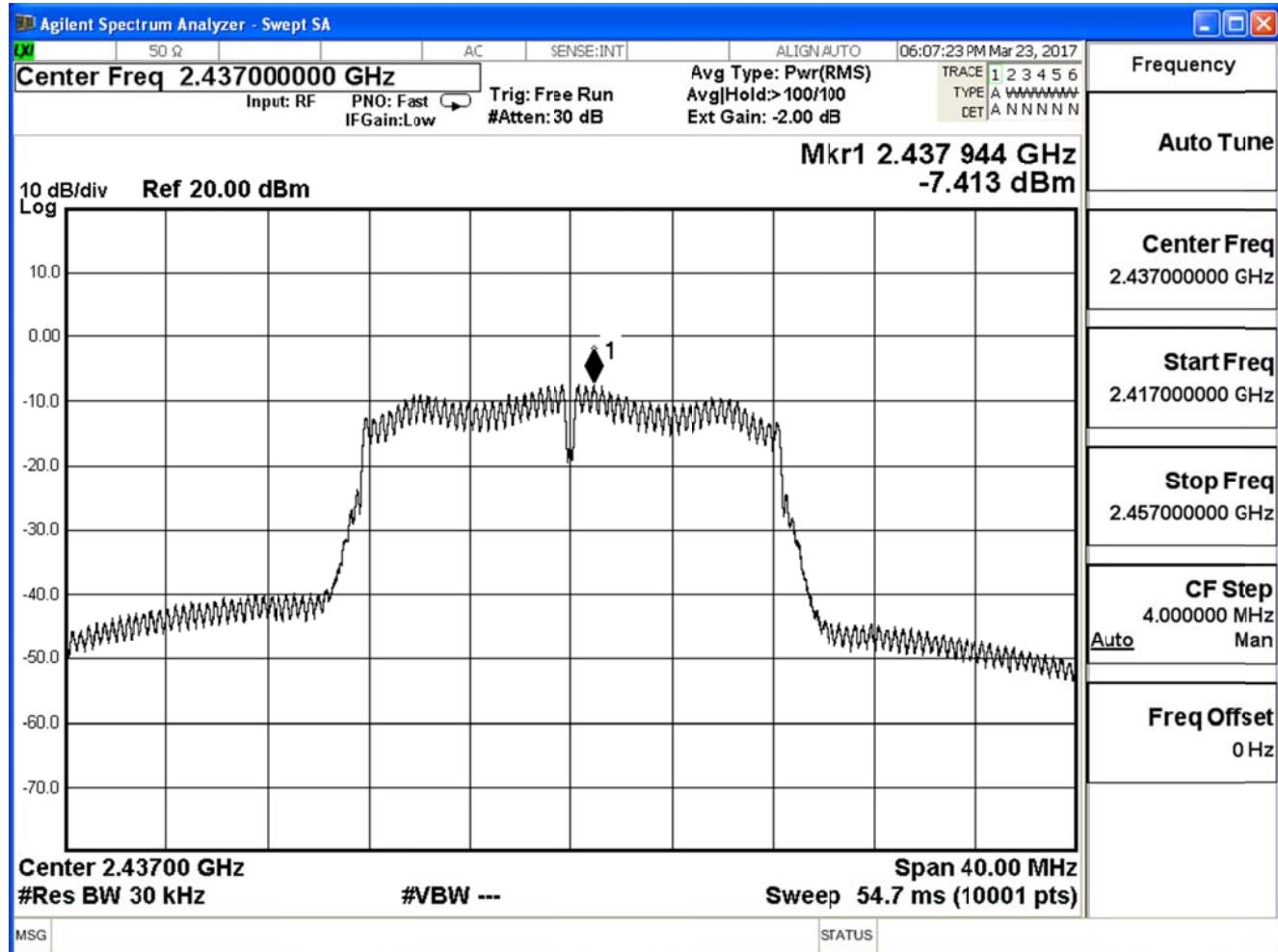
| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Power Density | | |
| Test Mode | Mode 1: Tx_SISO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

| IEEE 802.11g (ANT 0) | | | | |
|----------------------|--------------------|------------------------|----------------|--------|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 1 | 2412 | -7.446 | ≤8 | Pass |
| 6 | 2437 | -7.413 | ≤8 | Pass |
| 11 | 2462 | -7.813 | ≤8 | Pass |

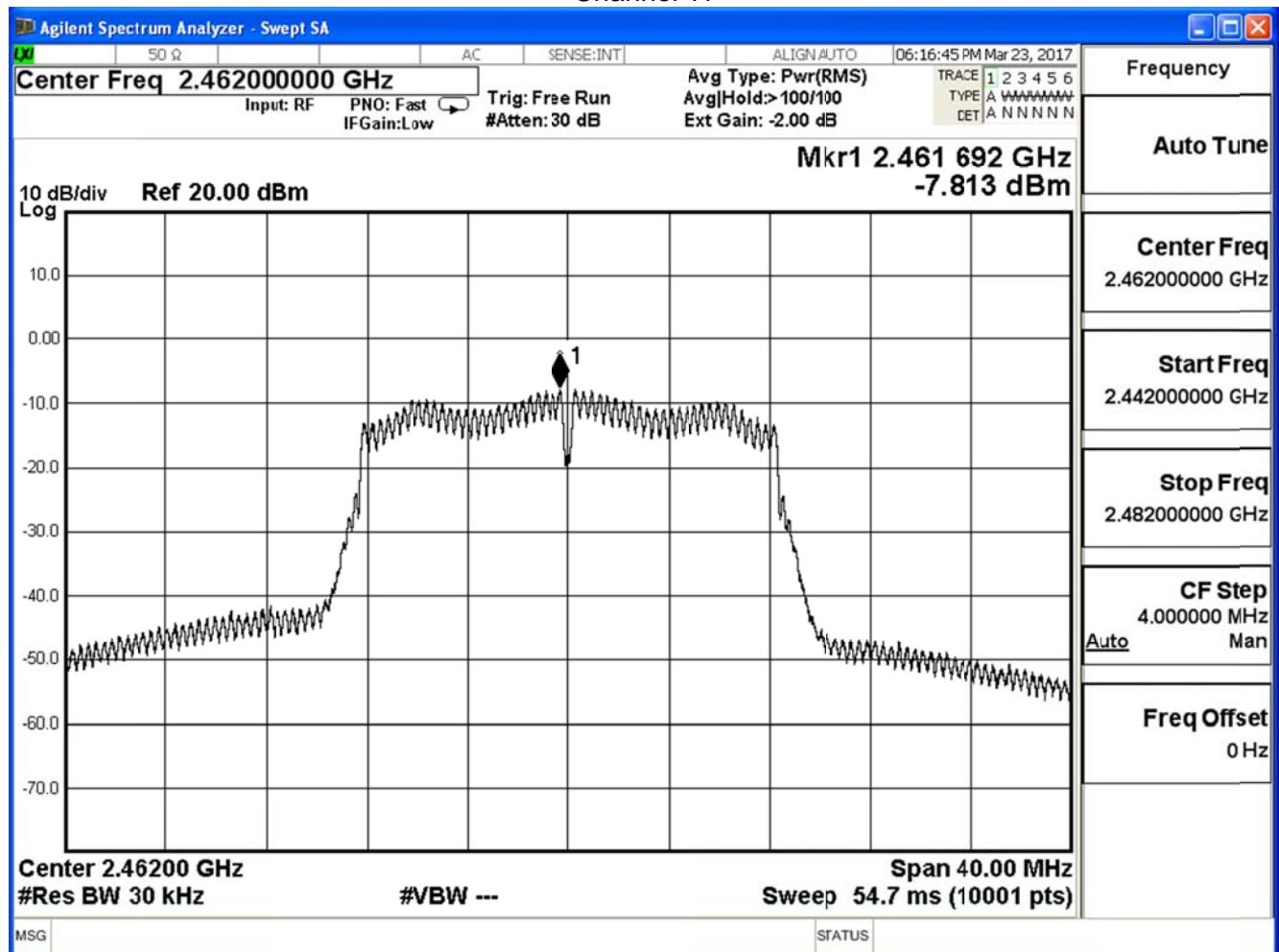
Channel 1



Channel 6



Channel 11

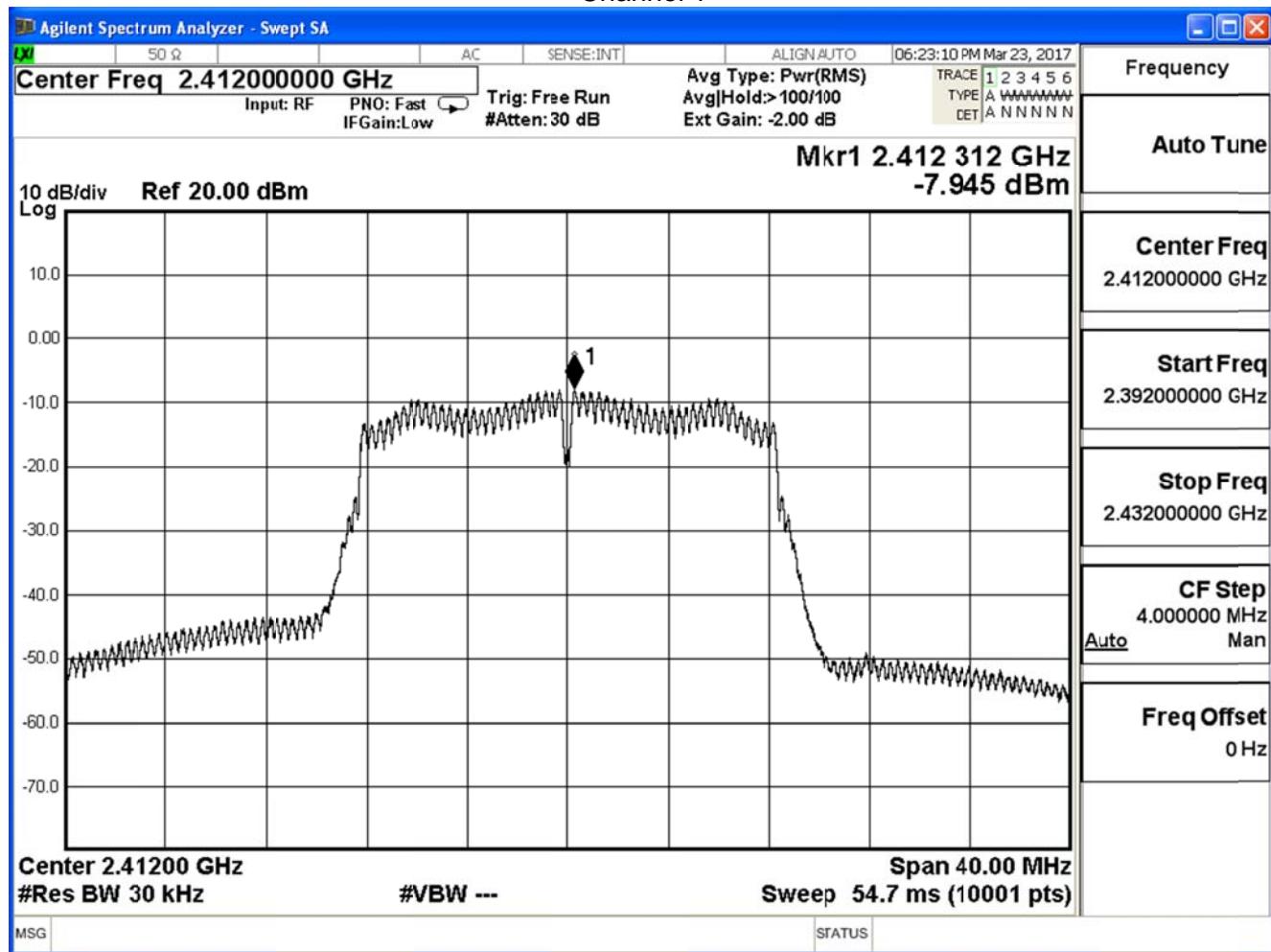


| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Power Density | | |
| Test Mode | Mode 1: Tx_SISO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

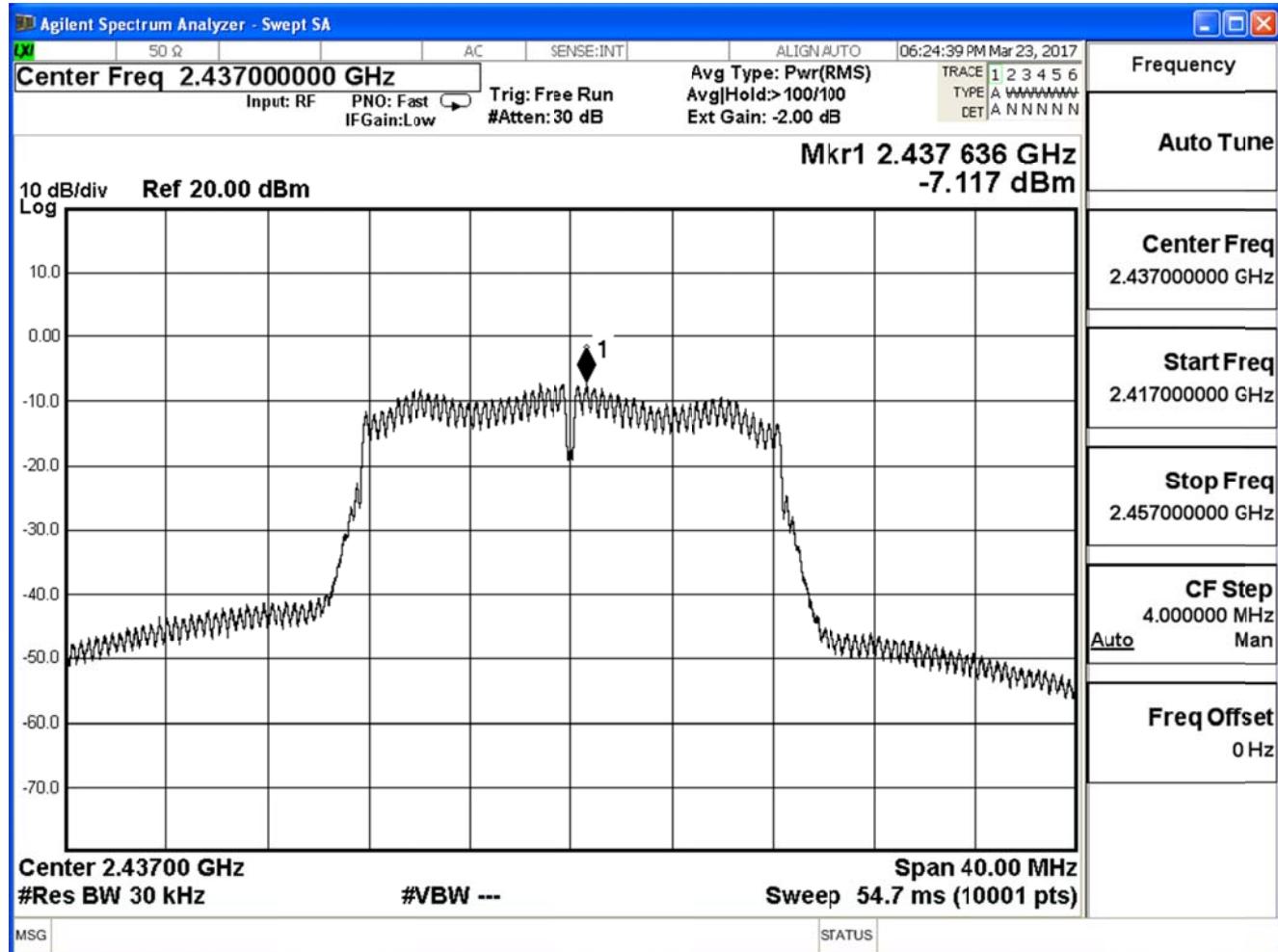
IEEE 802.11g (ANT 1)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 1 | 2412 | -7.945 | ≤8 | Pass |
| 6 | 2437 | -7.117 | ≤8 | Pass |
| 11 | 2462 | -7.859 | ≤8 | Pass |

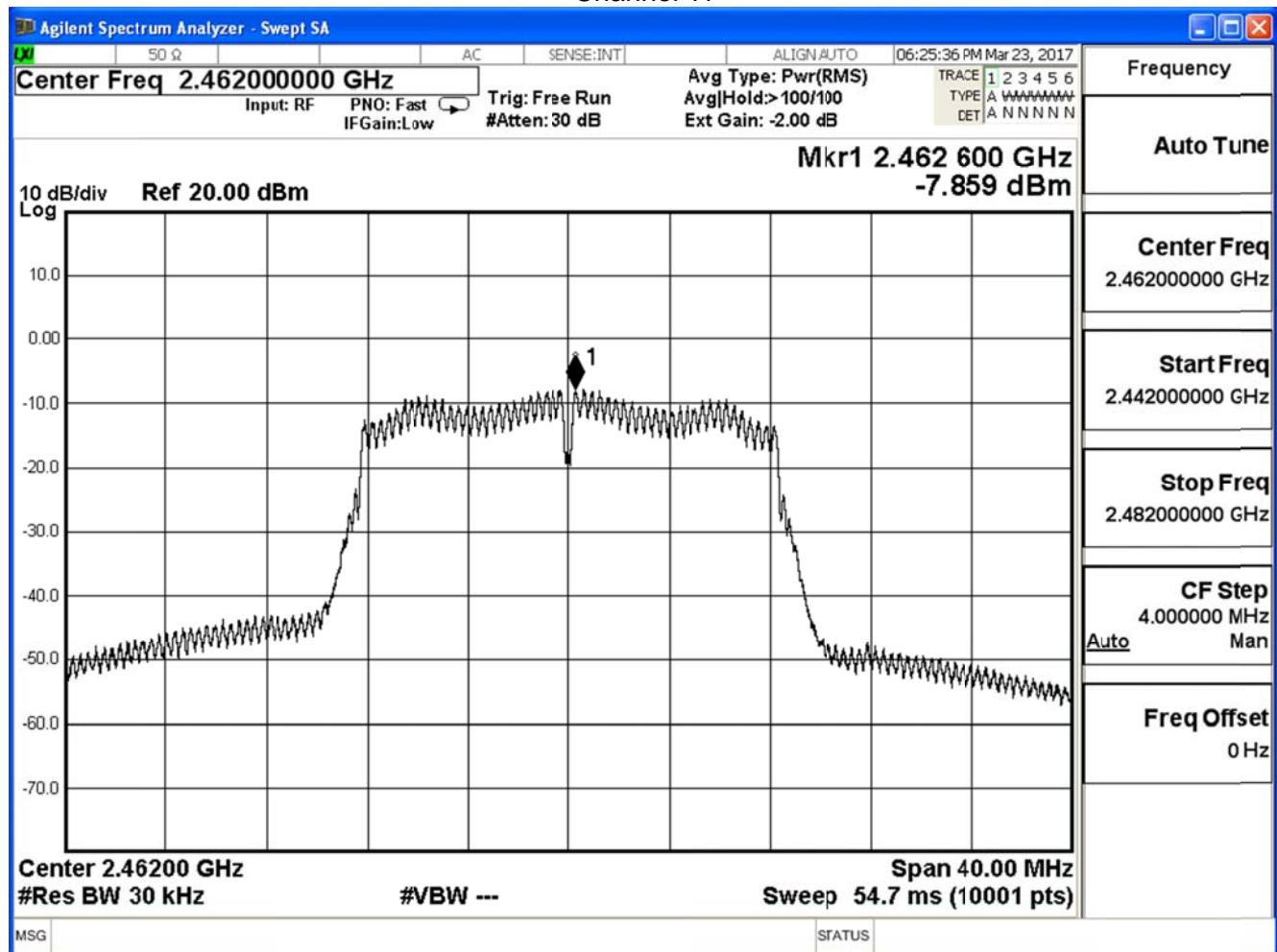
Channel 1



Channel 6



Channel 11



| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Power Density | | |
| Test Mode | Mode 2: Tx_MIMO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

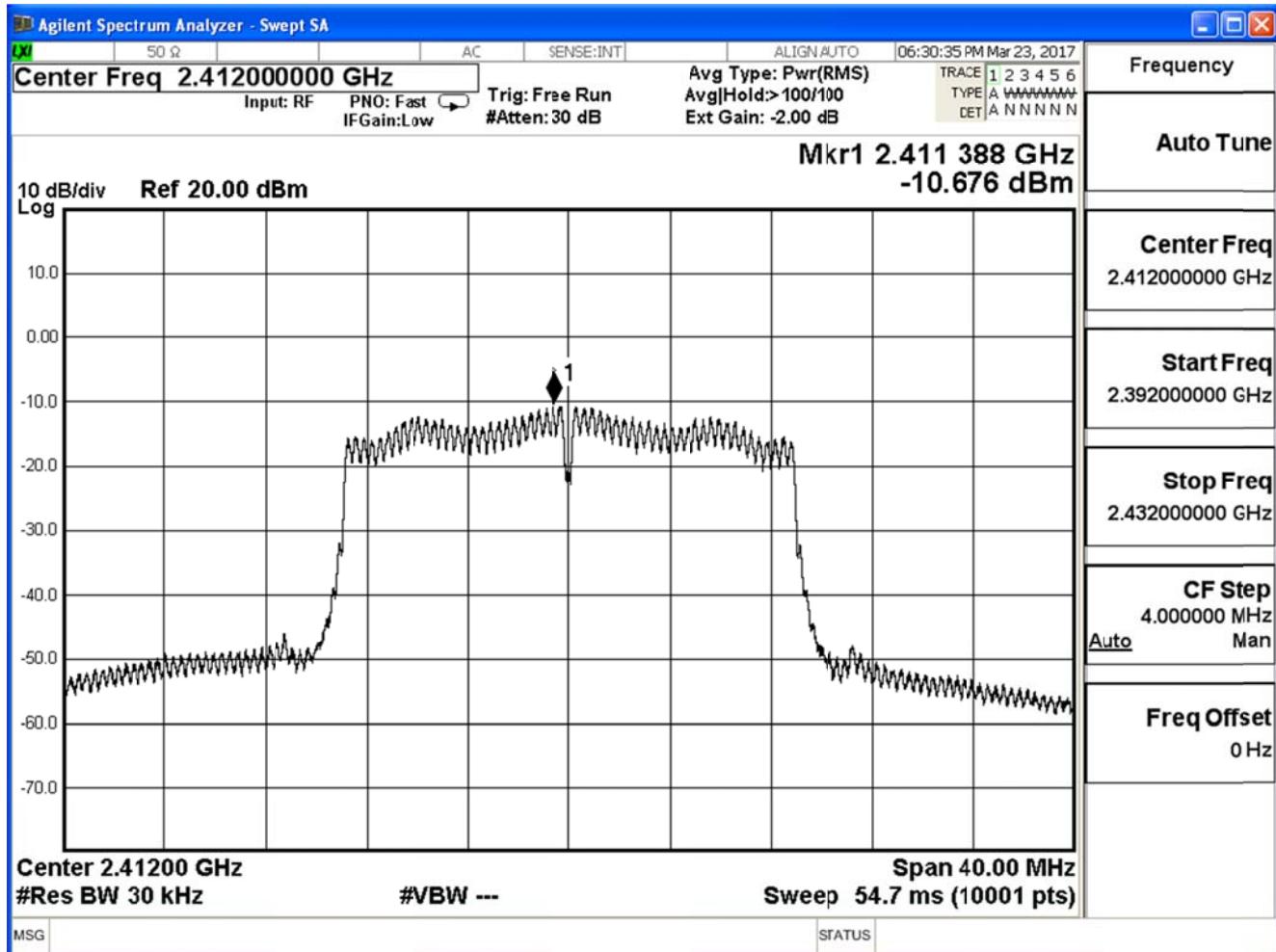
IEEE802.11n 20MHz (ANT 0)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 1 | 2412 | -10.676 | ≤ 6.49 | Pass |
| 6 | 2437 | -10.557 | ≤ 6.49 | Pass |
| 11 | 2462 | -10.771 | ≤ 6.49 | Pass |

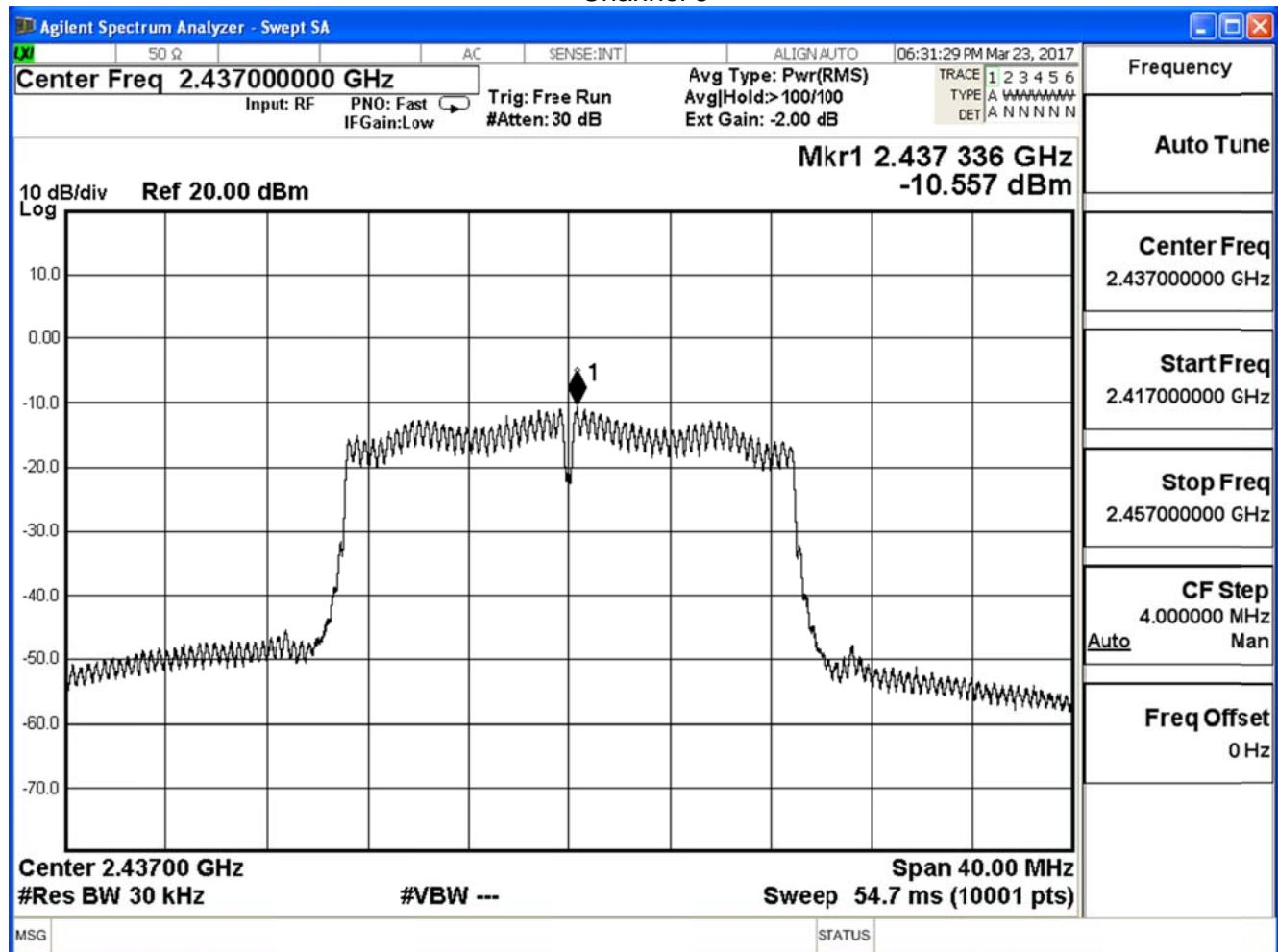
Direction antenna = $4.5 + 10\log(2) = 4.5 + 3.01 = 7.51$ dB

Limit = 8 dBm - (7.51-6) = 6.49 dBm

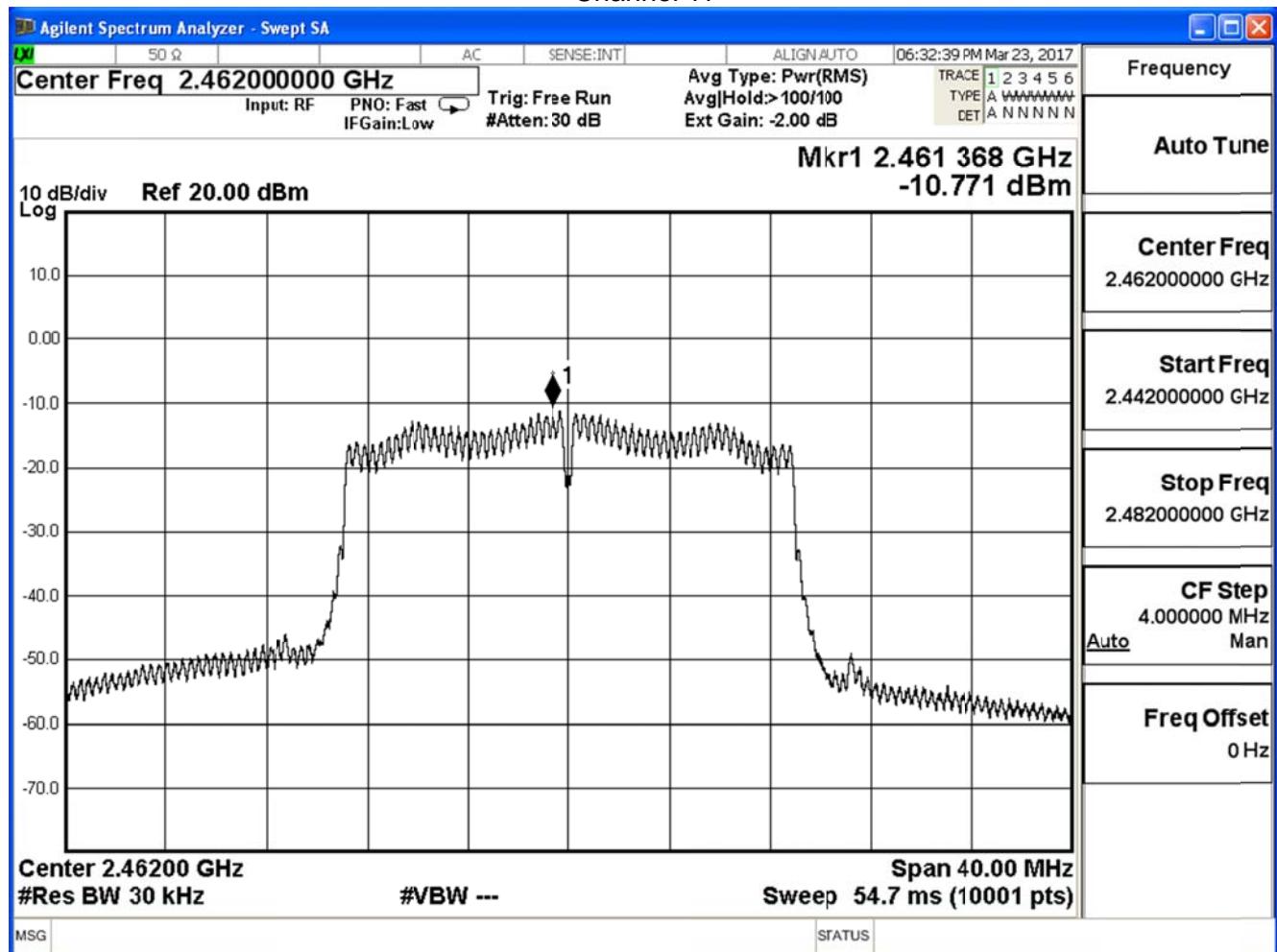
Channel 1



Channel 6



Channel 11



| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Power Density | | |
| Test Mode | Mode 2: Tx_MIMO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

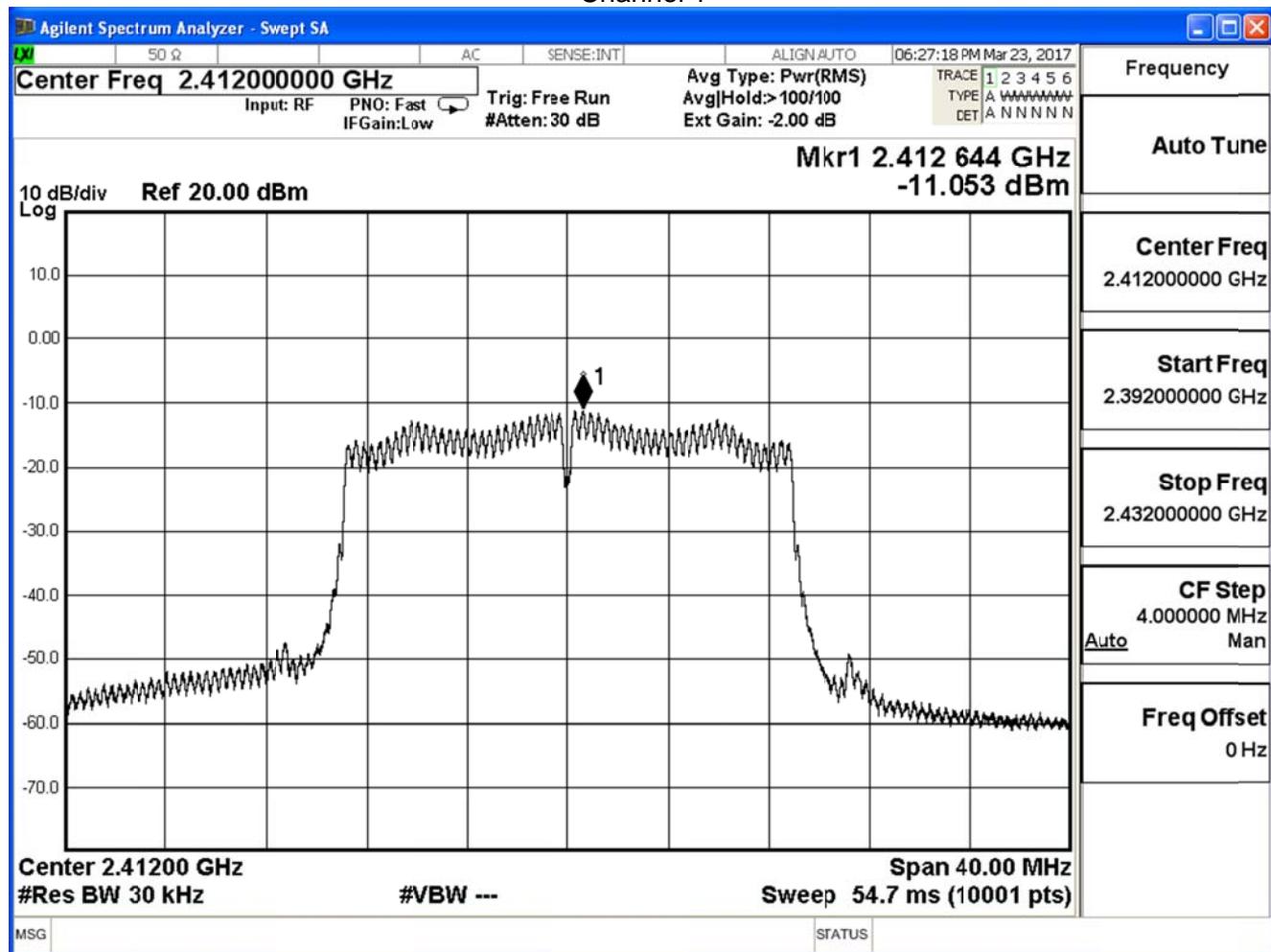
IEEE802.11n 20MHz (ANT 1)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 1 | 2412 | -11.053 | ≤ 6.49 | Pass |
| 6 | 2437 | -11.130 | ≤ 6.49 | Pass |
| 11 | 2462 | -11.286 | ≤ 6.49 | Pass |

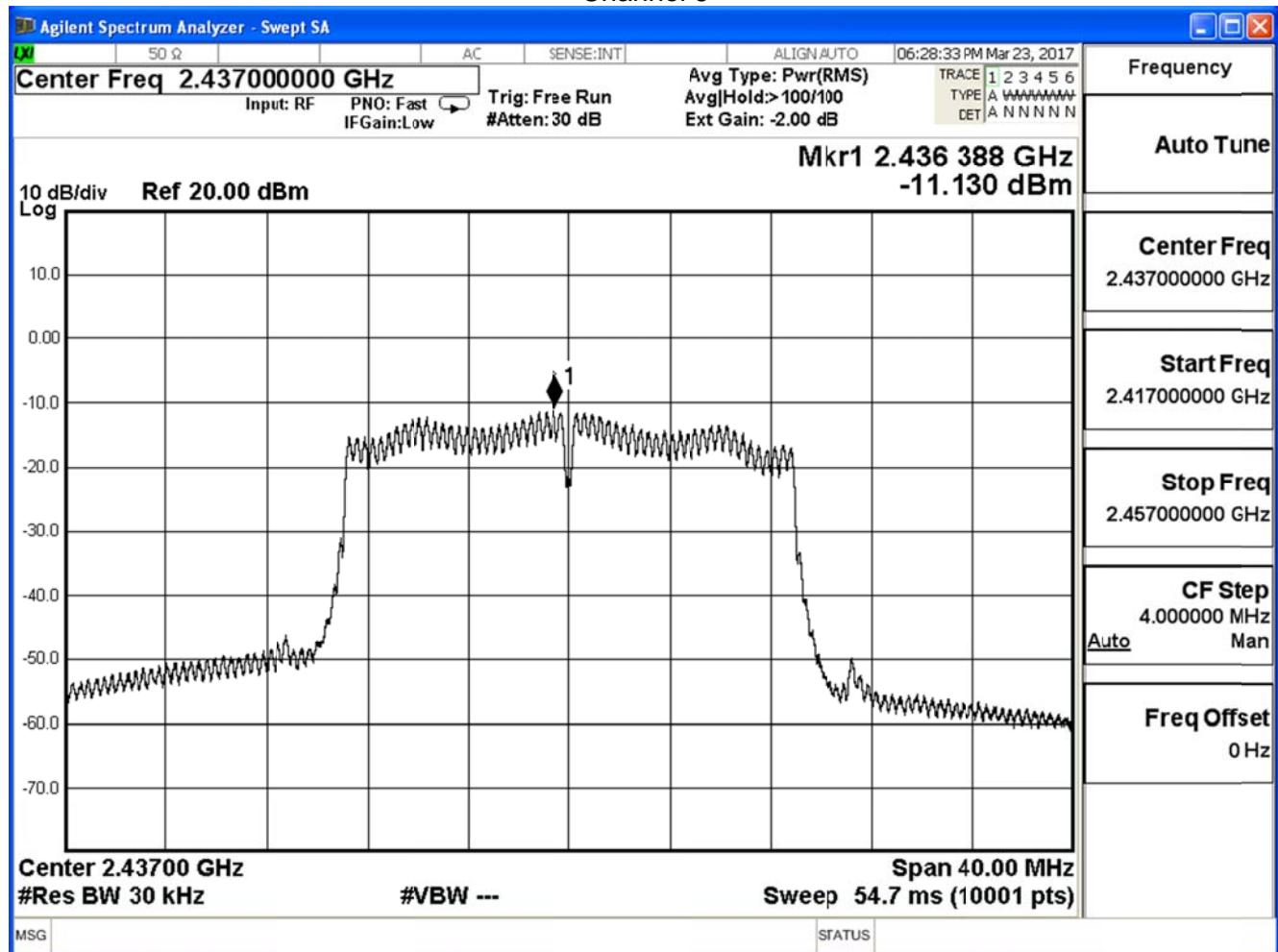
Direction antenna = $4.5 + 10\log(2) = 4.5 + 3.01 = 7.51$ dB

Limit = 8 dBm -(7.51-6) = 6.49 dBm

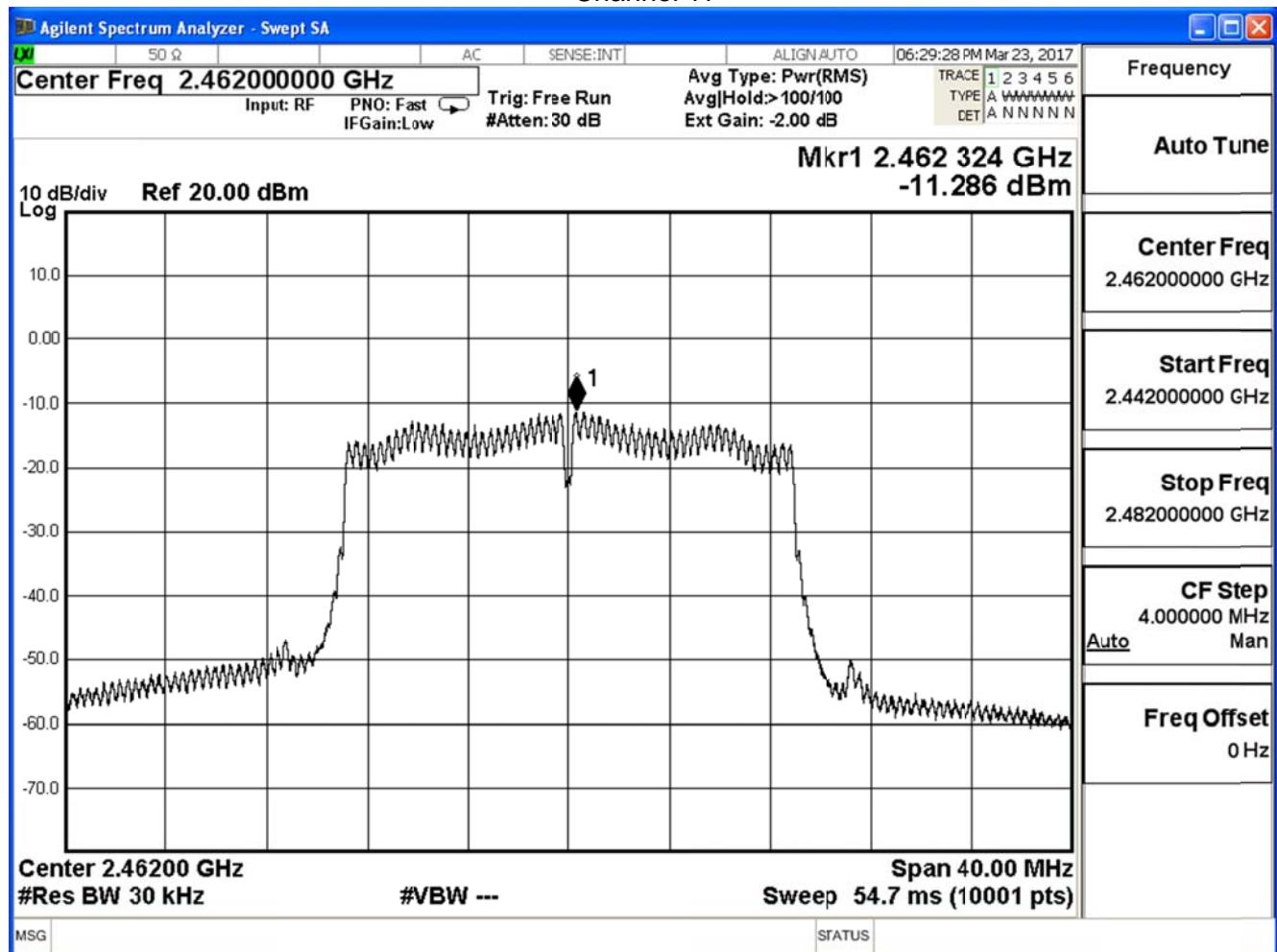
Channel 1



Channel 6



Channel 11



| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Power Density | | |
| Test Mode | Mode 2: Tx_MIMO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

| IEEE802.11n 20MHz (ANT 0+1) | | | | |
|-----------------------------|-----------------|---------------------|-------------|--------|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 1 | 2412 | -7.850 | ≤6.49 | Pass |
| 6 | 2437 | -7.824 | ≤6.49 | Pass |
| 11 | 2462 | -8.011 | ≤6.49 | Pass |

Direction antenna = $4.5 + 10\log(2) = 4.5 + 3.01 = 7.51$ dB_i

Limit = 8 dBm -(7.51-6)= 6.49 dBm

| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Power Density | | |
| Test Mode | Mode 2: Tx_MIMO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

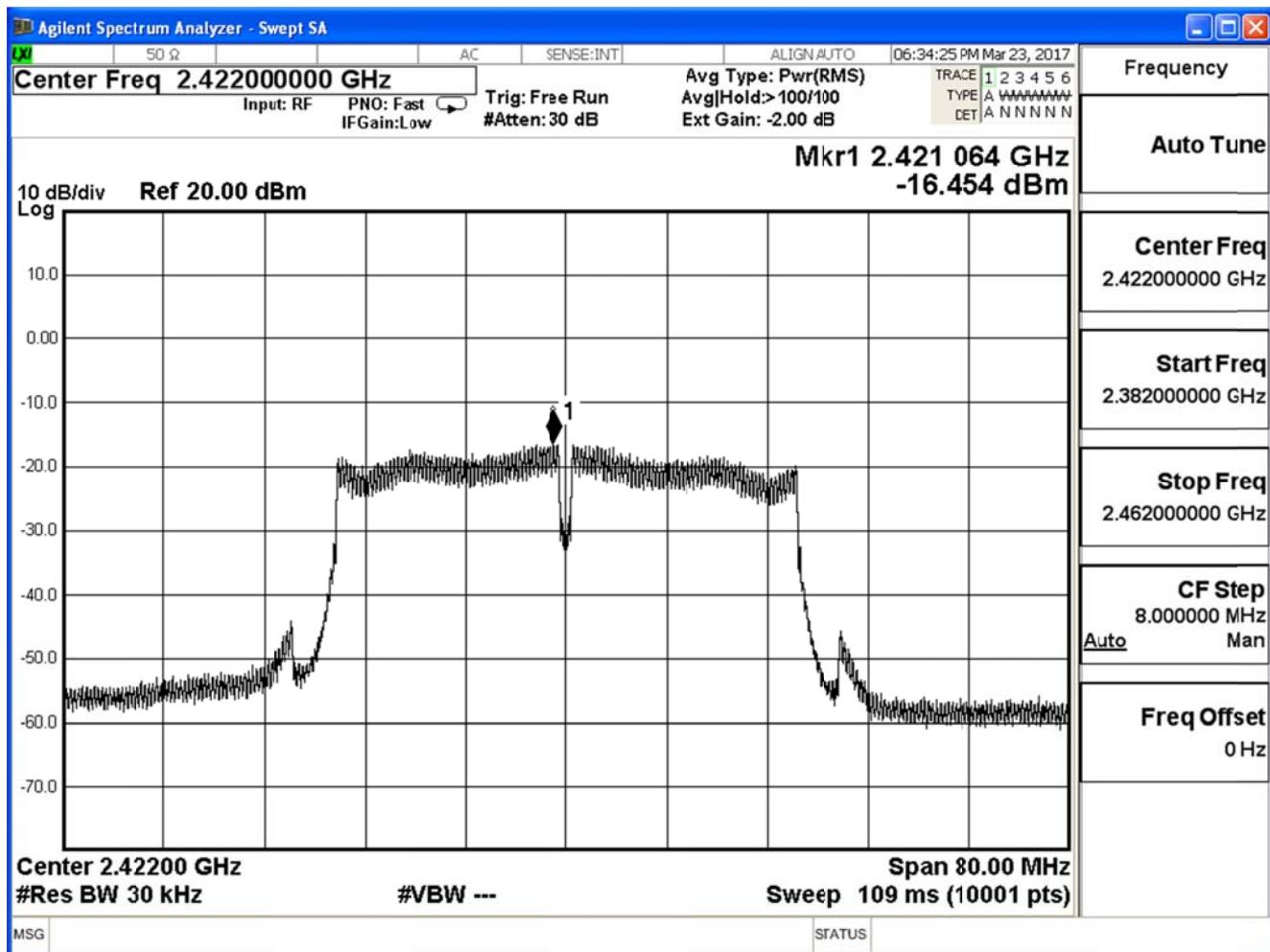
IEEE802.11n 40MHz (ANT 0)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 3 | 2422 | -16.454 | ≤ 6.49 | Pass |
| 6 | 2437 | -14.711 | ≤ 6.49 | Pass |
| 9 | 2452 | -15.156 | ≤ 6.49 | Pass |

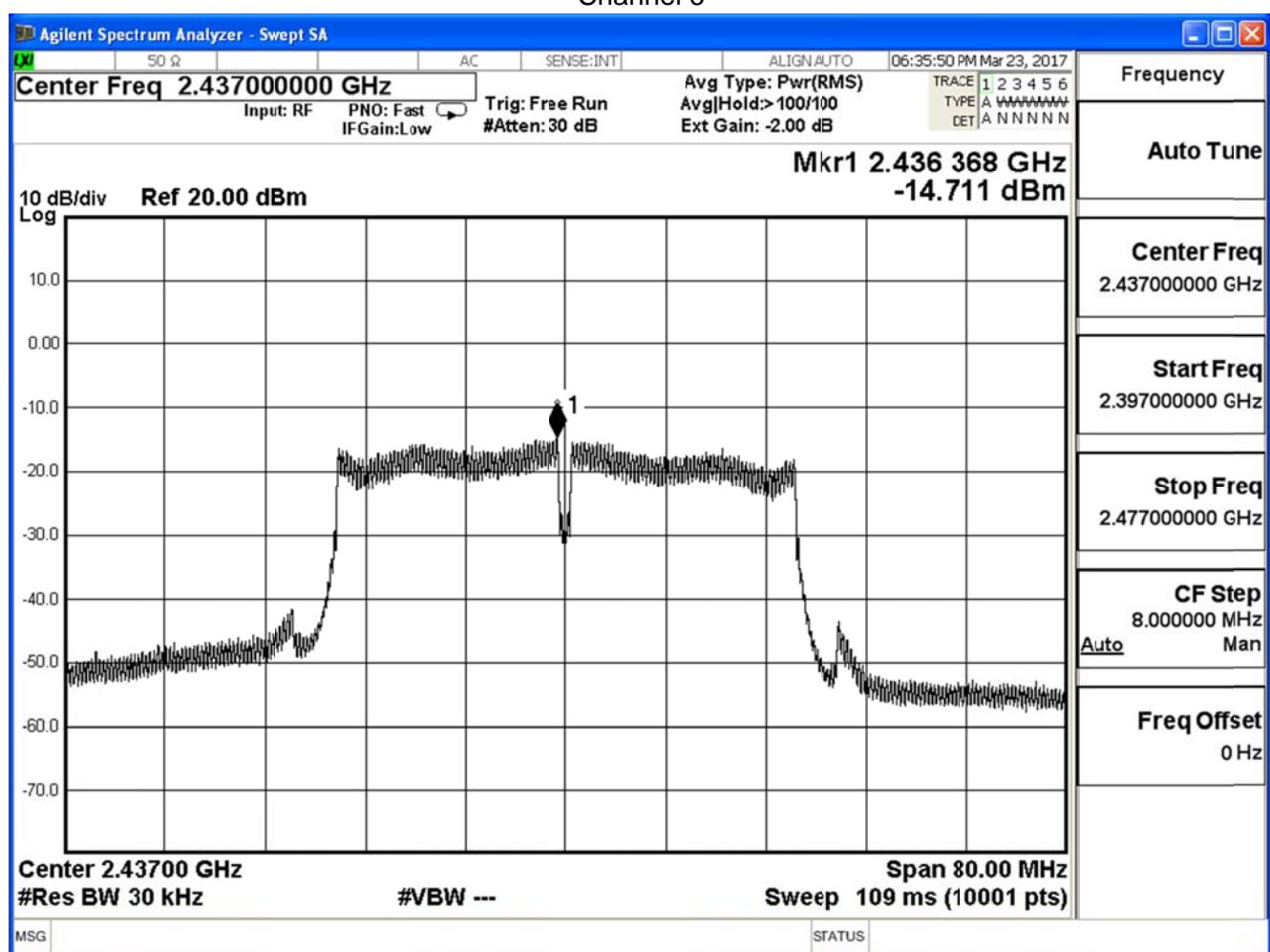
Direction antenna = $4.5 + 10\log(2) = 4.5 + 3.01 = 7.51$ dB

Limit = 8 dBm - (7.51-6) = 6.49 dBm

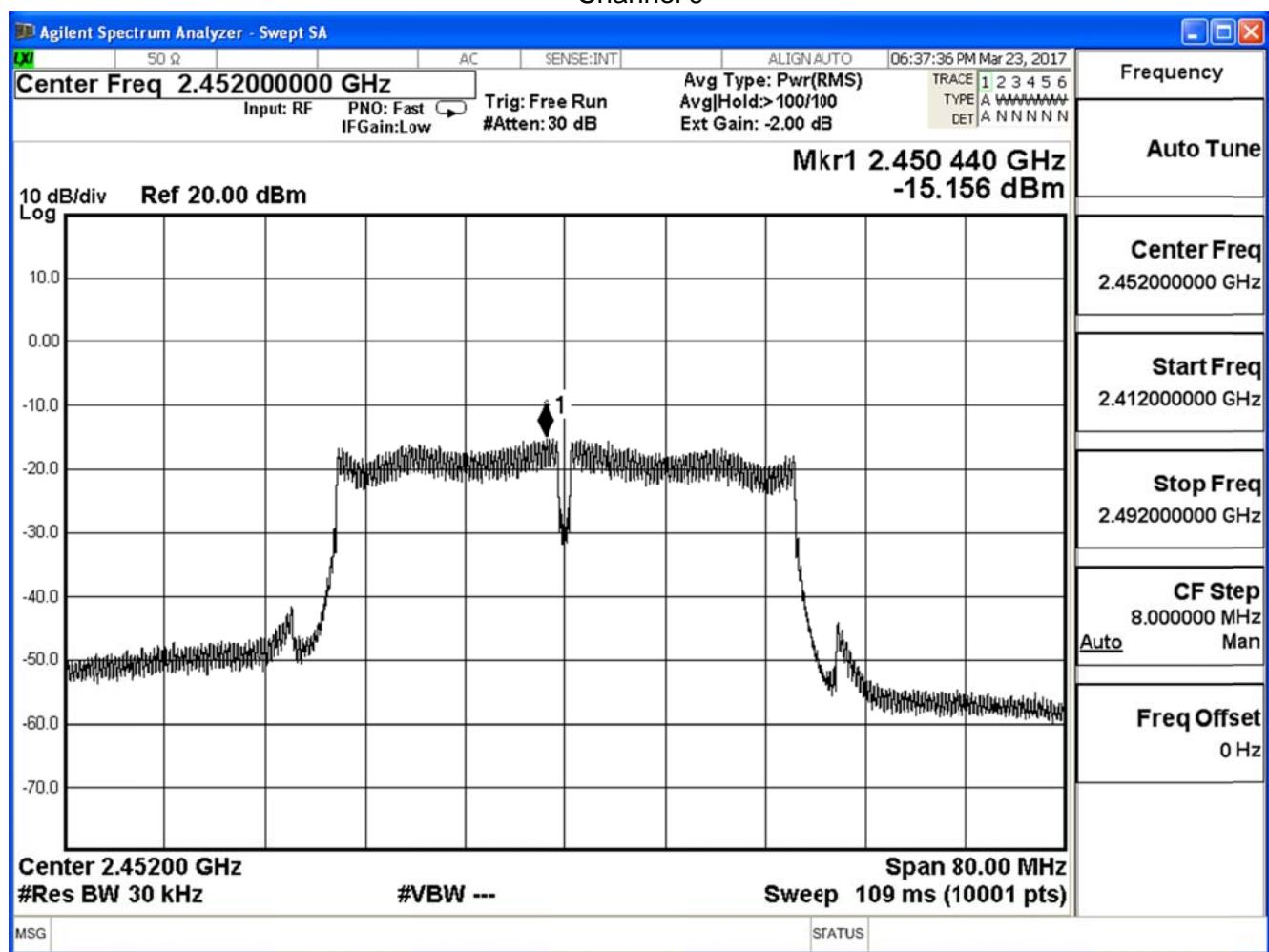
Channel 3



Channel 6



Channel 9



| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Power Density | | |
| Test Mode | Mode 2: Tx_MIMO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

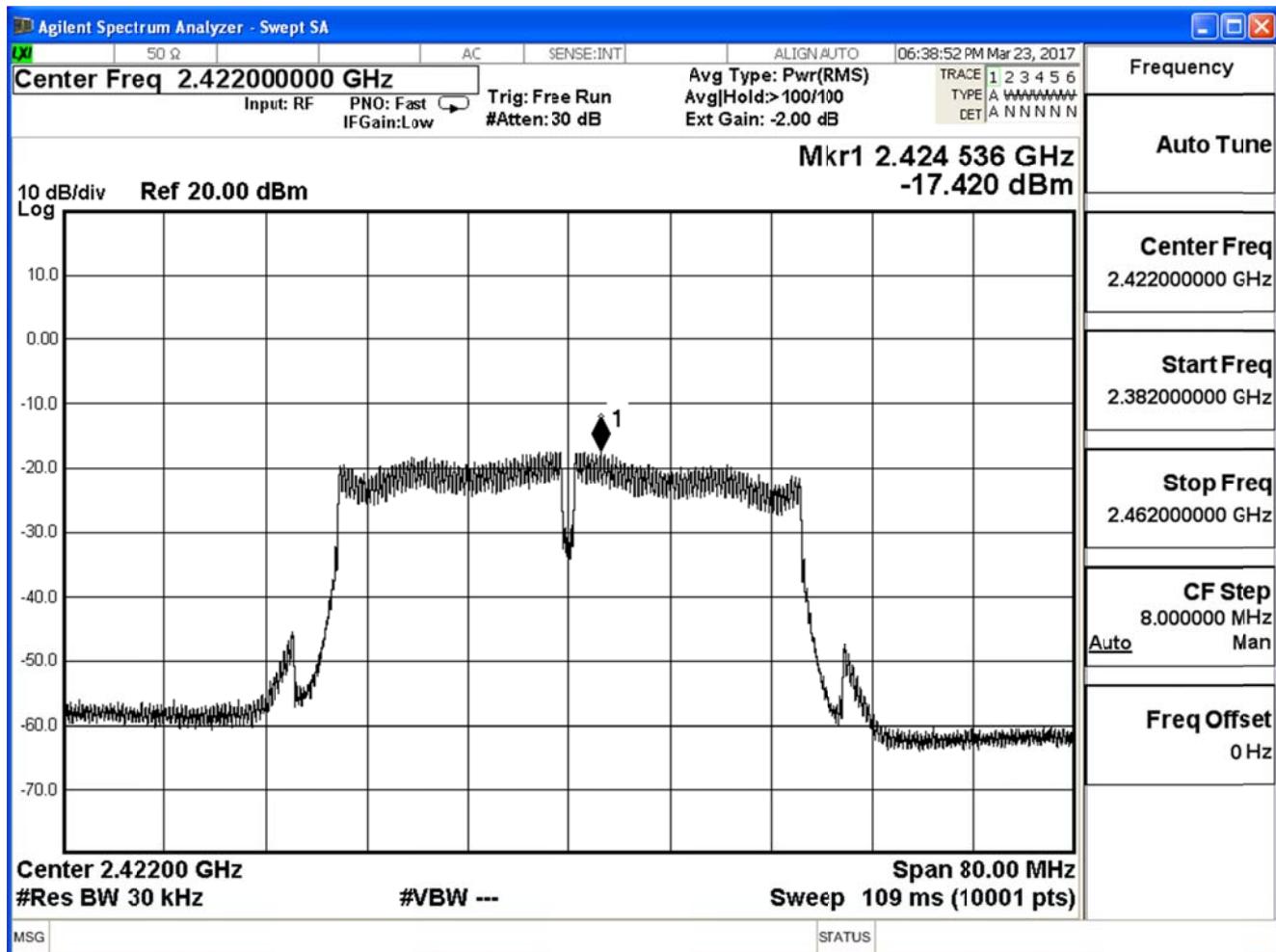
IEEE802.11n 40MHz (ANT 1)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 3 | 2422 | -17.420 | ≤ 6.49 | Pass |
| 6 | 2437 | -14.691 | ≤ 6.49 | Pass |
| 9 | 2452 | -15.102 | ≤ 6.49 | Pass |

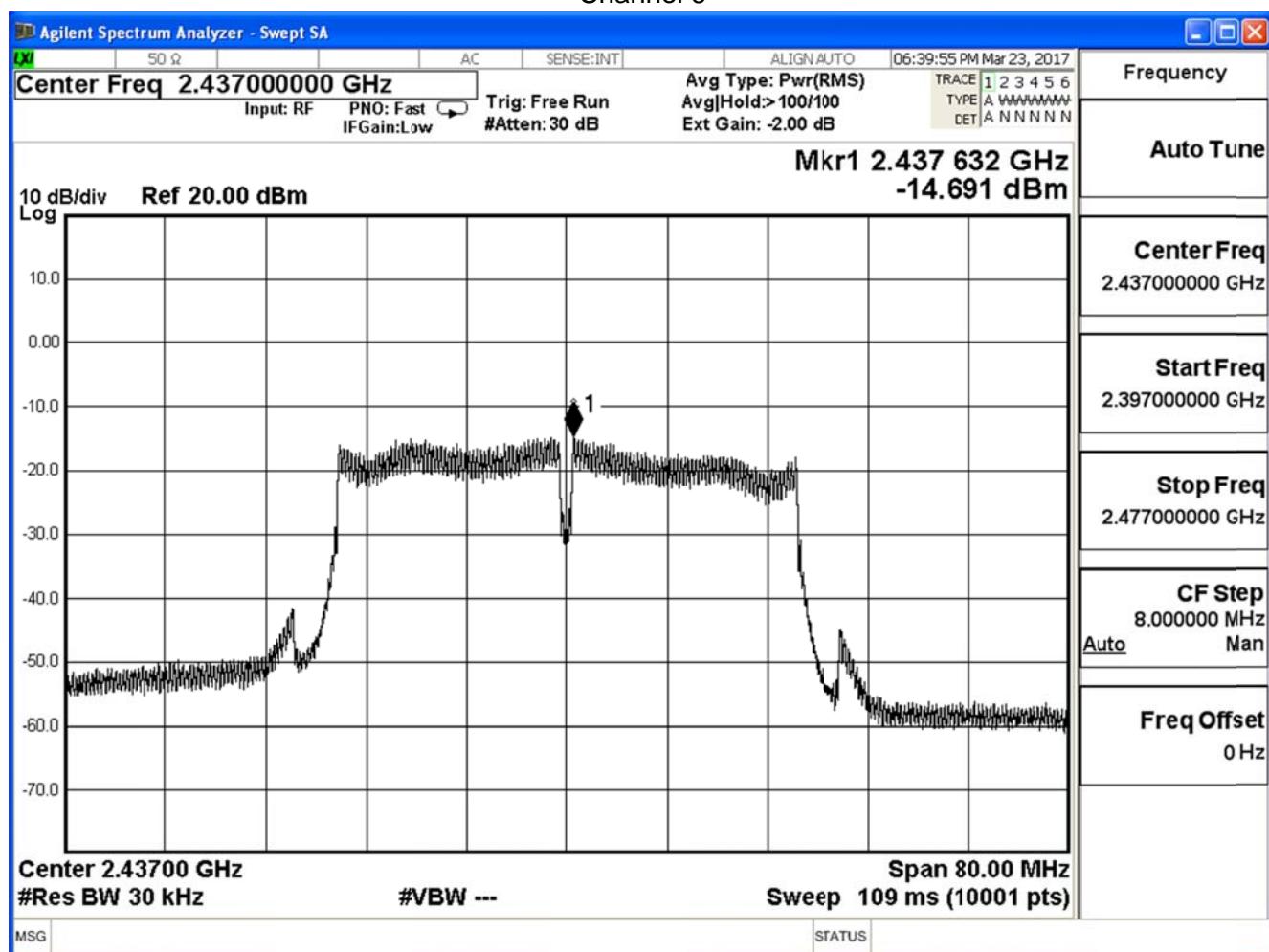
Direction antenna = $4.5 + 10\log(2) = 4.5 + 3.01 = 7.51$ dB

Limit = 8 dBm -(7.51-6) = 6.49 dBm

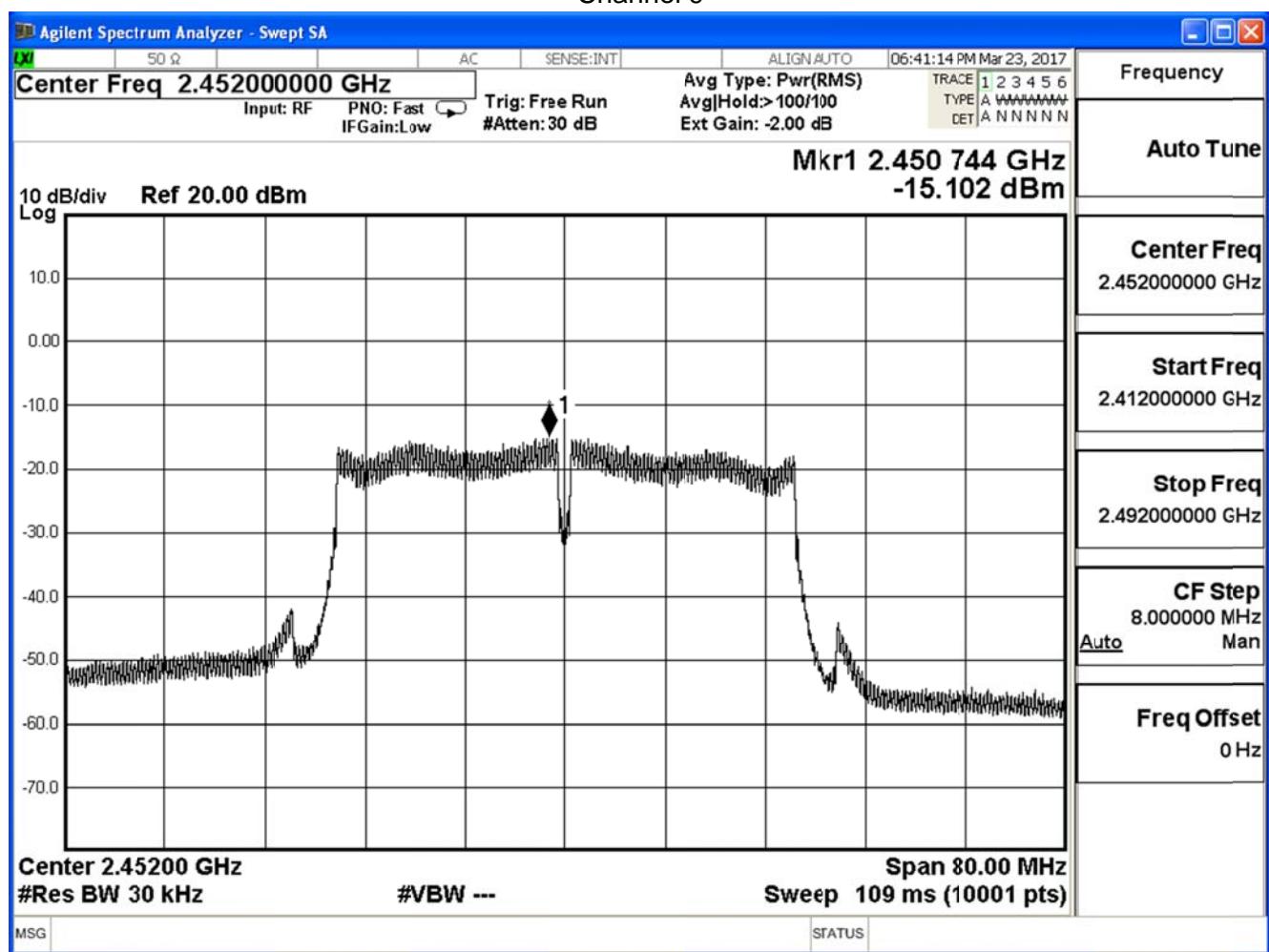
Channel 3



Channel 6



Channel 9



| | | | |
|--------------|----------------------|-----------|--------|
| Product | UHD551-L | | |
| Test Item | Power Density | | |
| Test Mode | Mode 2: Tx_MIMO Mode | | |
| Date of Test | 2017/03/23 | Test Site | SR10-H |

| IEEE802.11n 40MHz (ANT 0+1) | | | | |
|-----------------------------|-----------------|---------------------|-------------|--------|
| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
| 3 | 2422 | -13.900 | ≤6.49 | Pass |
| 6 | 2437 | -11.691 | ≤6.49 | Pass |
| 9 | 2452 | -12.119 | ≤6.49 | Pass |

Direction antenna = $4.5 + 10\log(2) = 4.5 + 3.01 = 7.51$ dB_i

Limit = 8 dBm -(7.51-6)= 6.49 dBm